

National Drought Management Authority

MERU COUNTY

DROUGHT EARLY WARNING BULLETIN FOR APRIL 2020



A Vision 2030 Flagship Project



APRIL 2020 EW PHASE

Drought Status: **NORMAL**



Shughuli za kawaida

Drought Situation & EW Phase Classification

Biophysical Indicators

Rainfall: The onset of the long rains season was timely in the third dekad of the March. During the reporting month, above average rains were recorded with even temporal and spatial distribution

Vegetation condition: above normal greenness condition was recorded across all livelihood zones. Pasture and browse condition was good across all the livelihood zones.

Socio Economic Indicators (Impact Indicators)

Production Indicators: farmers were engaged in long rains weeding. Rain- fed crops are at knee high/ flowering stage. Livestock body condition was good for all species. Cases of LSD 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 remained stable while terms of Trade slightly decreased.

Utilization Indicators: Milk consumption per HH per day remained stable; the proportion of children at risk of malnutrition remained stable. The household coping strategy index also remained stable.

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)	214	80 - 120
VCI-3Month	85.35	35 - 50
Production indicators	Value	Normal
Maize Crop Condition	Good	Good
Livestock Body Condition for cattle	Good	Good
Milk Production per HH/ day	2	1-2Litres
Livestock Migration Pattern	Normal	Normal
Access Indicators	Value	Normal
Terms of Trade (ToT)	130.4	75
Milk Consumption per HH/ day	1.2	1.6 Litres
Return HHs distance to water sources	3.9	6. Km
Water source return distance from grazing areas	4.4	8.5 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	<20.0
Coping strategy Index(CSI)	4	1-5

<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

- According to WFP-VAM, above normal rainfall was received across the livelihood zones during the month under review. The County experienced below normal rainfall in the first dekad of the month while above normal rainfall was received during the second dekad of the month.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The County received an average of 146.76 mm of rainfall in the Month of April compared to normal average amount of 68.45 mm for the same period.
- The rainfall was evenly distributed in terms of time and space.

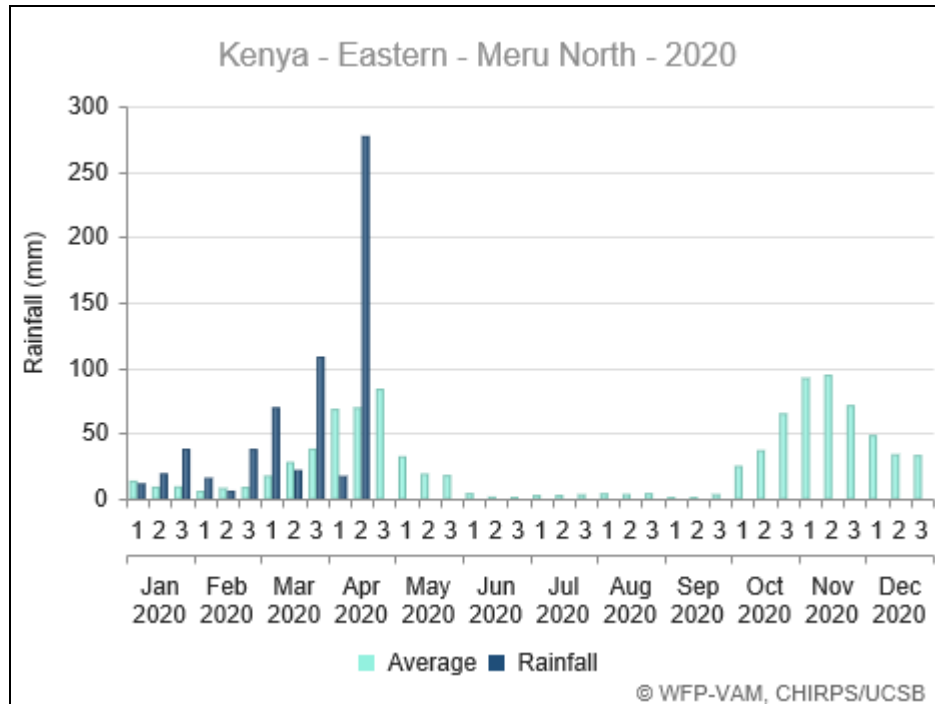


Figure 1: Rainfall estimates in Meru North

2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The County vegetation condition in the month under review was 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) remained stable at 85.35
- The 3-monthly vegetation condition index for Meru Igembe Central was at 82.13, Igembe North at 80.13, Tingania East at 82.6 while that of Tingania West was at 99.46

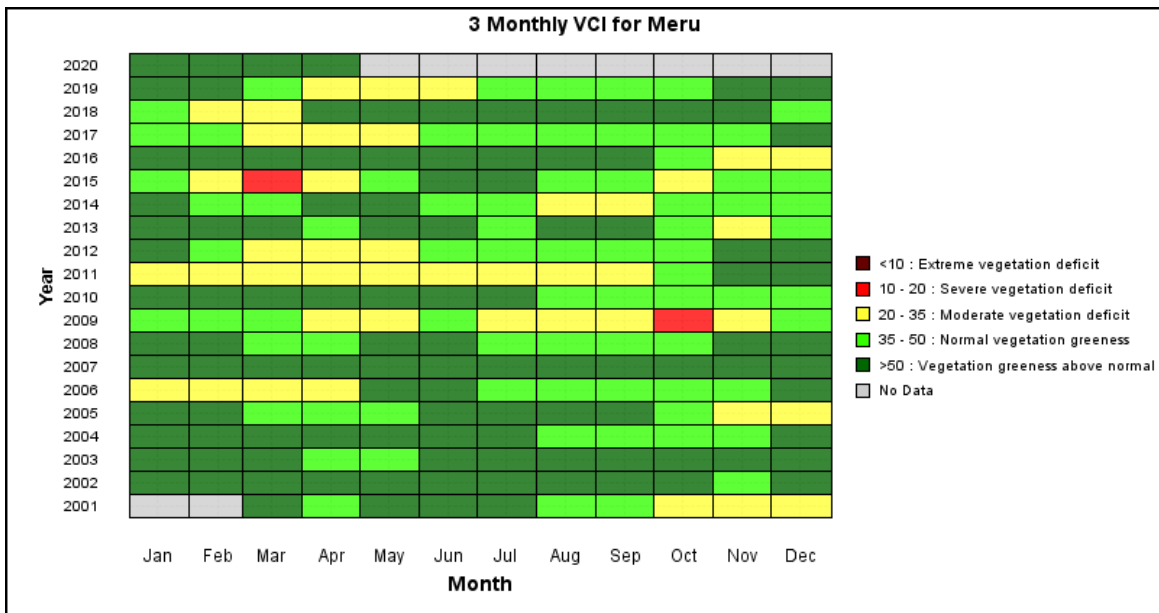


Figure 2: Three-monthly VCI for Meru County [Source: MODIS Data]

2.1.2 Pasture Condition

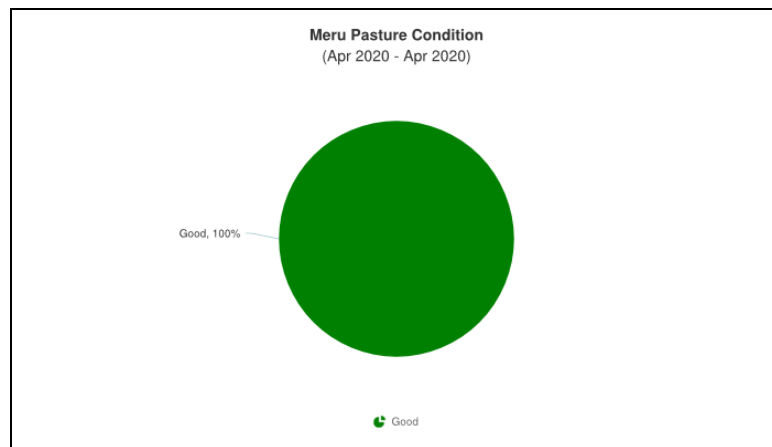


Figure 3: Pasture condition in Meru County

- The pasture condition was good across all the livelihood zones. This is attributed to high regeneration occasioned by the ongoing long rains.
- The pasture condition is normal at this time of the year.

2.1.3 Browse

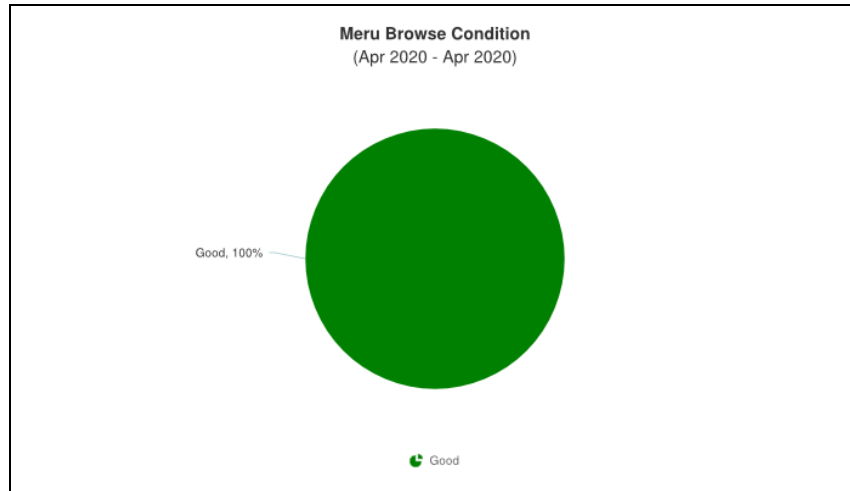


Figure 4: Browse condition in Meru County

- The browse condition was good across all the livelihood zones.
- The browse situation has improved compared to previous month attributable to fast regeneration owing to the ongoing long rains.
- The browse condition is normal at this time of the year.

2.2 WATER RESOURCE

2.2.1 Sources

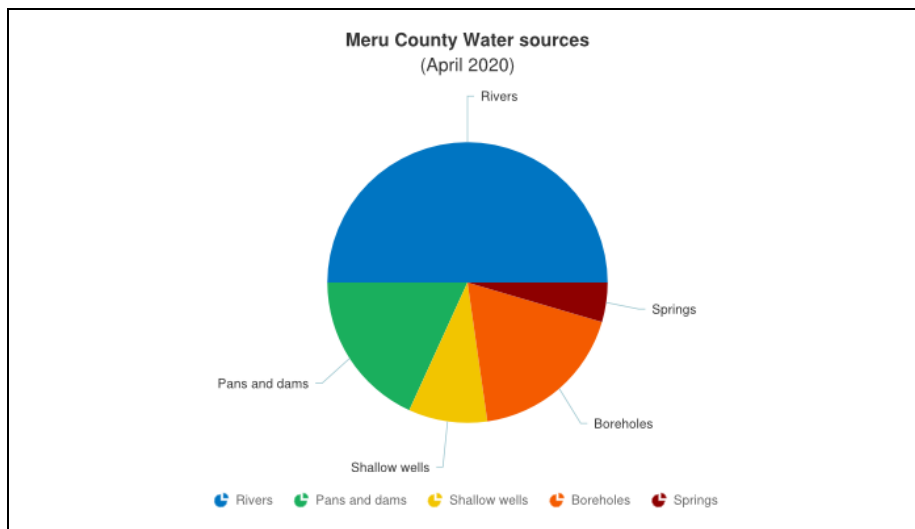


Figure 5: Water sources for Meru County

- The three main sources of water within the period under review were; rivers, boreholes and pans & dams. Other sources included; springs, shallow wells and roof catchment which was also relied upon as a major water source during the review period.
- The County government during the year 2019 – 2020 drilled additional boreholes in most of the wards which has greatly contributed to water availability.
- 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

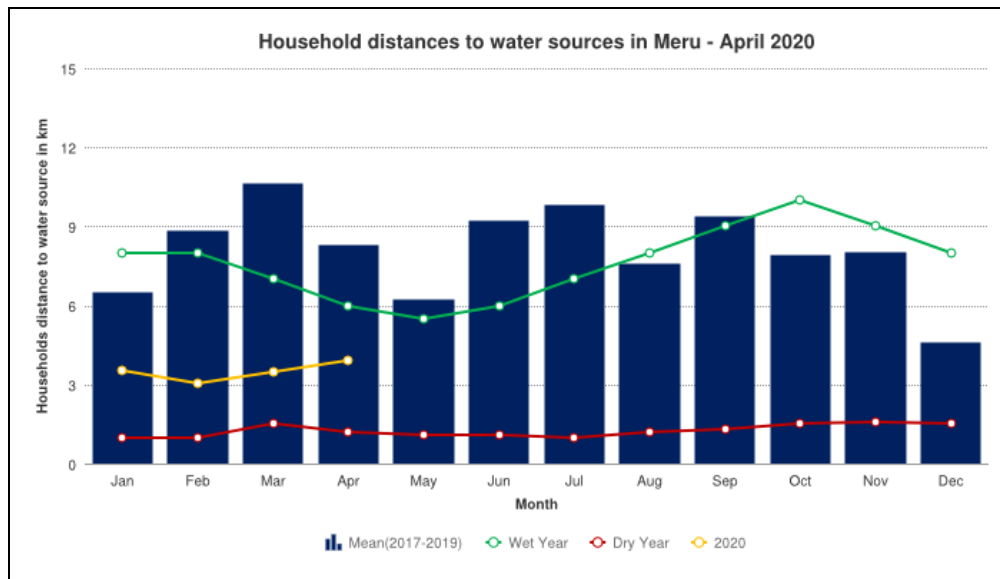


Figure 6: Household average distances to water sources

- The average return distances to household water sources remained stable at 3.9 km compared to previous month.
- The stability is due to increased recharge levels to all water sources, additional drilling of boreholes by the County government and reliance on roof catchment occasioned by the long rains.
- 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.
- The current average distance was 35 percent lower Compared to the long term average.
- Based on key informant interviews, 40 percent of households treat water.

2.2.3 Livestock Trekking Distance to Water Sources from Grazing Areas

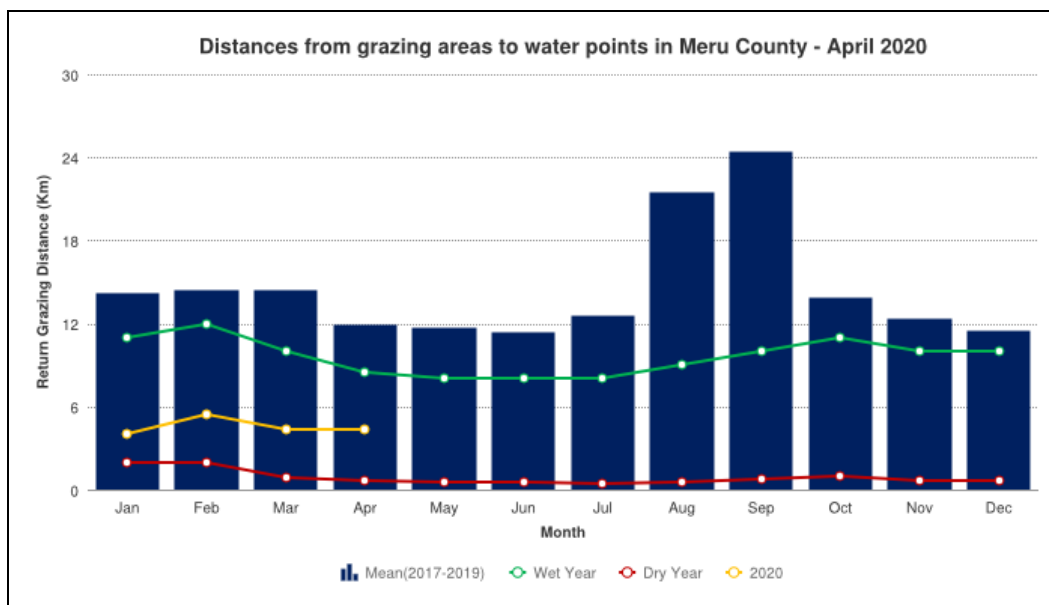


Figure 7: Livestock average return distances to water sources

- The average return distance to water source from grazing areas remained stable compared to previous month at 4.4Kms.
- The stability was due to improved pasture and browse condition and increased recharge levels for all water sources owing to the ongoing long rains.
- The watering frequency for livestock in both livelihood zones was on daily basis.
- The current average return distance to water sources was 48 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

- Livestock body condition was good for all species across all the livelihood zones
- The livestock body condition is normal at this time of the year.

3.1.2 Livestock Diseases

- There were reported cases of Lumpy skin diseases in Tigania East. Suspected cases of FMD were reported in Igembe North and routine surveillance is going on to assess the situation.
- Routine surveillance measures by the County government continued in the month under review

3.1.3 Milk Production

- The average daily milk production per household per day remained stable compared to previous month at 2.5 litres. The stability was attributed to availability of water and pasture at relatively shorter distance.
- Milk production was high in Mikinduri Ward where cattle practice zero grazing and are of good breed.
- 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

- Rain fed crops was at knee high/ flowering stage of development across all the livelihood zones. The crop condition was good in both livelihood zones.
- Cases of fall armyworms (FAW) infestation were reported across the County but farmers continued spraying to minimize loses.
- In Igembe Central areas of; Kangeta, Kaliambene and mariara there were invasion of desert locust which had insignificant destruction of crops, but surveillance of the swarms is ongoing.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

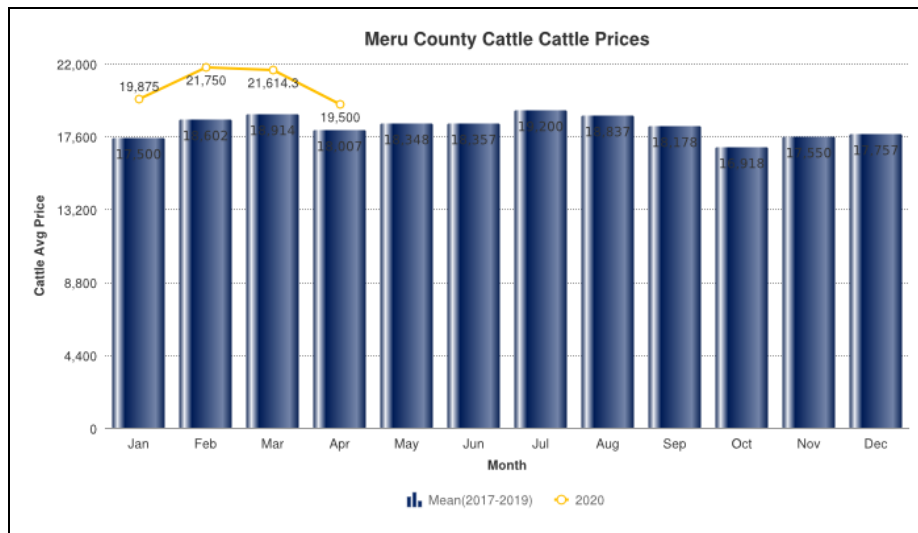


Figure 9: Average Market prices for cattle in Meru County

- The average market price of a three-year-old bull decreased to Ksh 19,500 compared to Ksh. 21,614 recorded previous month.
- The decrease was attributed to market disruption due to quarantine imposed due to outbreak of the Corona Virus (COVID-19) across the whole Country. The demand for the cattle is low at the market.
- The average market price was 8 percent higher compared to long term average at this time of the year.

4.1.2 Goat Prices

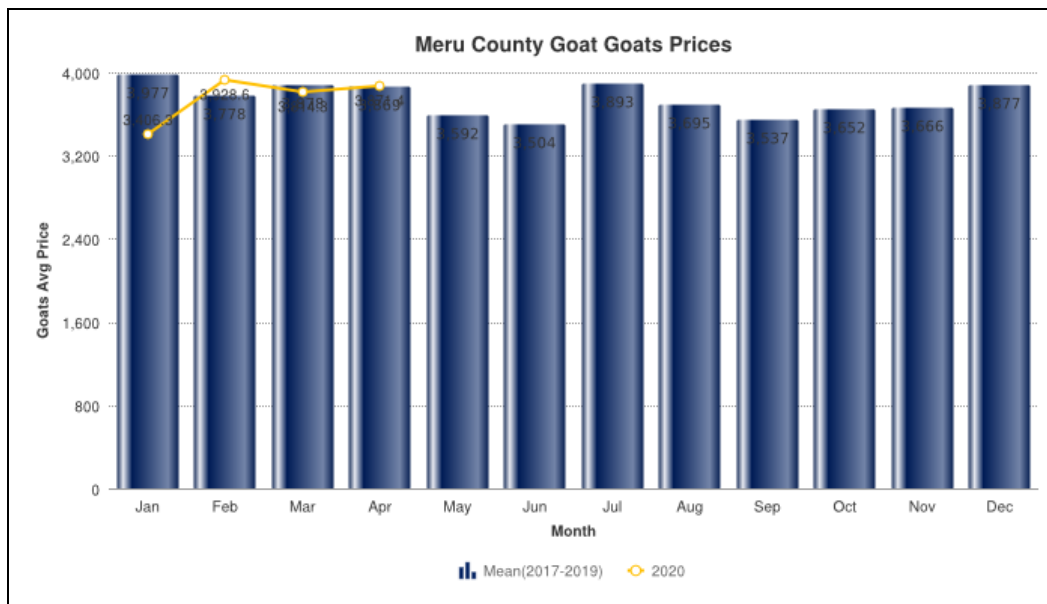


Figure 10: Average market prices for goats in Meru County

- The average market price of a two-year goat remains stable at Kshs 3,871.
- The stability was attributed to good body condition, and low supply at the market due to market disruption owing to quarantine imposed due to outbreak of the Corona Virus (COVID-19) across the whole Country. The households have also replenished household stocks hence no distress sale to cater for food.
- The current average market price was within the long term average at this time of the year.

4.2 CROP PRICES

4.2.1 Maize

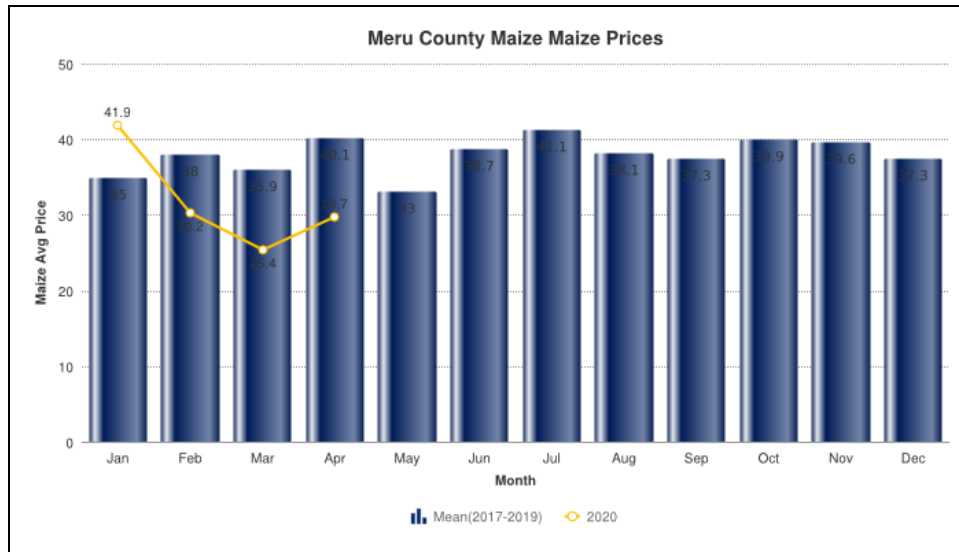


Figure 11: Average market prices for maize in Meru County

- The average market price of a kilo of maize remained stable at Kshs. 29 compared to previous month.
- The stability is attributed to harvests realised from short rains replenishing households' stocks and the surplus is traded at the markets increasing the supply.
- The average market price was 27.5 percent lower compared to long term average at this time of the year.

4.2.2 Beans Prices

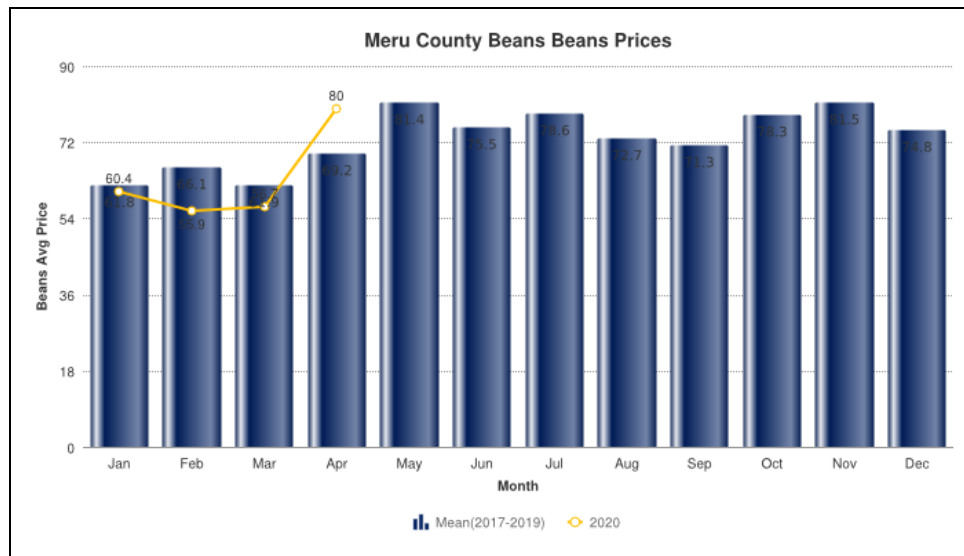


Figure 12: Average market prices for beans in Meru County

- Average market price of a kilo of beans significantly increased to Ksh. 80 compared to Kshs 61 recorded previous month.
- The increase is attributed to high demand of the commodity at the market level and depleted household stock. Majority of the farmers reported low harvests of legumes as majority of the crops were destroyed by the heavy rainfall received during the short rain season.
- The average market price for beans was 16 percent higher compared to long term average at this time of the year.

4.2 INCOME

- Households main source of income were; casual labour, sale of crops, sale of livestock and livestock products, employment/salary and trade.
- Households who depended on sale of 'Miraa' for household income were affected as the business was banned due to quarantine imposed as a result of outbreak of the Corona Virus (COVID-19).
- Casual labour opportunities were available due to agricultural activity related to weeding.

4.4 TERMS OF TRADE

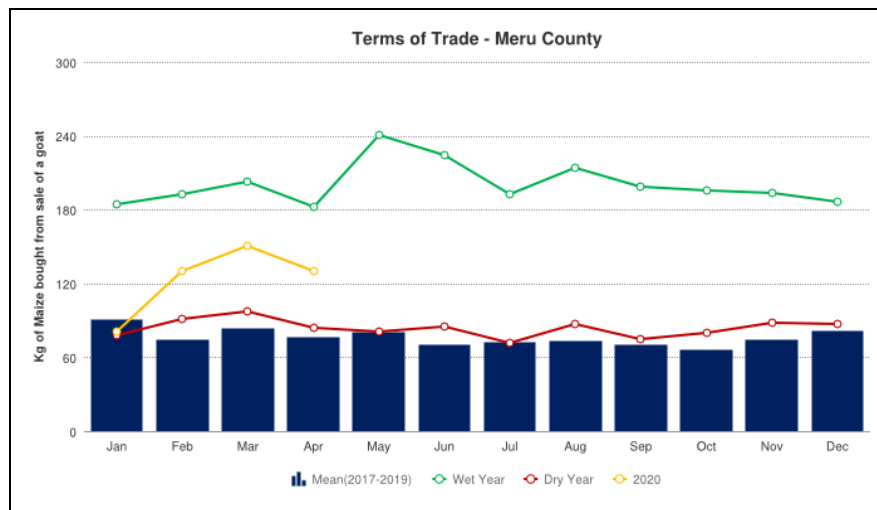


Figure 14: Terms of trade in Meru County

- The Terms of trade slightly decreased to 130 kilograms of maize realised from a sale of goat compared to 150 kilograms recorded previous month.
- The decrease is attributed to stability of goat price as maize price stably increased.
- The Terms of Trade was 72 percent higher than the long term average.

5. FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption per household per day remained stable at 1.2 litres compared to previous month.
- The stability is attributed to good body condition occasioned by availability of pasture and reduced distances to water sources.
- 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

- From the key informant interviews, majority of the households averagely 85 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, 15 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

- Based on the key informant interviews, children below five years at risk of malnutrition were on decreasing trend.
- The decrease is attributed to realised harvests from the short rains and increased milk consumption at household level.

5.3.2 Human Health

- Outbreak of Corona Virus (COVID-19) as 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.
- County Department of Public Health and Sanitation continue with routine disease surveillance.

5.4 Coping Strategy Index

- From the key informant interviews, the mean coping strategy index trend remains stable.
- The stability is attributed to harvests realised from the short rains replenishing household stocks.

6.0 Emerging issues

- The outbreak of Corona Virus (COVID-19) has negatively affected livelihoods in the County. This is because majority of the business people relied on as source of income has been closed i.e, sale of Miraa, closure of bars and restaurants and the curfew imposed from 7PM to 5AM.

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 since The available replenished household food stocks is expected to sustain the households for the next 2-3 months.
- Quality and quantity of pasture and browse is expected to remain good for the next three months owing to regeneration from the ongoing long rains.
- Livestock production and productivity is expected to increase in the next two months due to availability pasture and water at shorter distances with time.
- Food commodity prices are expected to decrease due to decrease in demand occasioned by replenished household stocks.
- The terms of trade are also expected to be affected by the ongoing outbreak of Corona Virus (COVID-19) as market prices for the livestock is expected to fluctuate due to demand and supply.
- The proportion of children at risk of malnutrition is likely to reduce due to replenishment of household stocks from short rains harvest and favorable 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"> Distribution of inputs such as fertilizer 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 during the Long rain season 	<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>