

National Drought Management Authority

TAITA TAVETA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR MAY 2020



A Vision 2030 Flagship Project



MAY 2020 EW PHASE

Drought Status: **NORMAL**



Shughuli za kawaida

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming: Food Crops/ Livestock	Normal	Stable
Mixed Farming: Food Crops/ Horticulture/Dairy	Normal	Stable
Mixed Farming: Irrigated Cropping/ Livestock/Food Crops	Normal	Stable
National Park	Normal	Stable
County	Normal	Stable
Biophysical Indicators	Value	Normal Range/ Value
Rainfall 3 Months Anomaly	114	80 – 120
VCI-3Month	95.4	35 –50
Production indicators	Value	Normal
Crop Condition(maize)	Grain filling	Grain filling
Livestock Body Condition for cattle	Good	Good
Milk Production per HH/ day	3.5 Litres	3.3 Litres
Livestock Migration Pattern	Normal	Normal
Access Indicators	Value	Normal
Terms of Trade (Maize price vs Goat price)	135.3	115.3
Milk Consumption per HH/ day	1.2 Litres	1.3 Litres
Return HHs distance to water sources	2.2 km	1.9 Km
Water source return distance from grazing areas	2.3 km	3.6 Km
Cost of water (20 litres)	Kshs 3.00	< Kshs 5.00
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0.0	1.7

Drought Situation & EW Phase Classification

Biophysical Indicators

- The County received rains that were within the normal range and characterized by poor temporal and uneven spatial distribution.
- The county vegetation greenness condition was above the normal range (3 Months VCI; 95.4).

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Crop condition was good for all crops (maize, beans, green grams and cowpeas).
- However, maize planted in February was at grain filling stage while late planted maize was withering at tasseling stage due to moisture stress.
- Livestock body condition was good for all species across all livelihood zones and no migration was reported.
- Average milk production per HH per day was above normal.

Access Indicators

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

Utilization Indicators

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

Seasonal Calendar

<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 Flash 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 Flash floods - Taveta 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

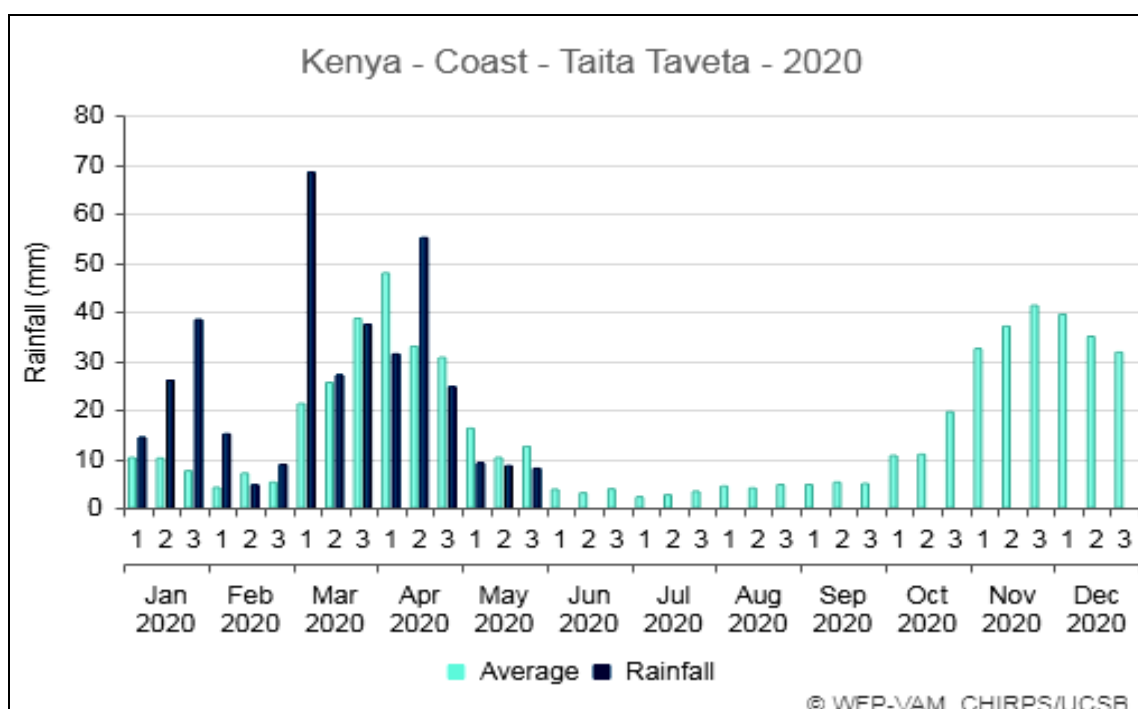
- The county registered near normal rainfall amounts that were characterized by poor temporal distribution and uneven spatial distribution. The table below show rainfall precipitation at various stations;

Kenya Meteorological Department Rainfall Data

No.	Rainfall Station	Livelihood Zone	Wet Days	Amount (mm)
1.	Mghange	Mixed farming: horticulture/dairy	6	86.0
2.	Ngerenyi	Mixed farming: horticulture/dairy	4	45.4
3.	Wundanyi	Mixed farming: horticulture/dairy	3	39.5
4.	Shigharo	Mixed farming: horticulture/dairy	2	29.3
5.	Wumingu	Mixed farming: horticulture/dairy	2	21.8
6.	Rukanga	Mixed Farming: food crop/livestock	2	43.0
7.	Mwatate Livestock Farm	Mixed Farming: food crop/livestock	1	17.9
8.	Marungu	Mixed Farming: food crop/livestock	1	10.0
9.	Voi Meteorology Station	Mixed Farming: food crop/livestock	1	1.5

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 114 percent.
- The estimated total precipitation for the month under review was 25.6 mm and lower than the LTM by 34 percent as indicated in the chart below;

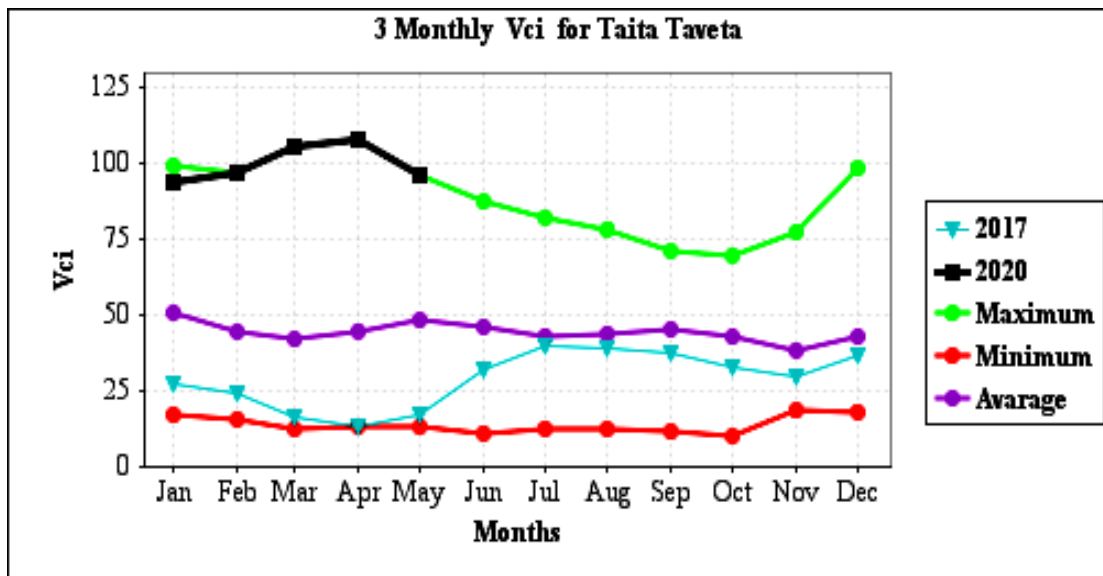
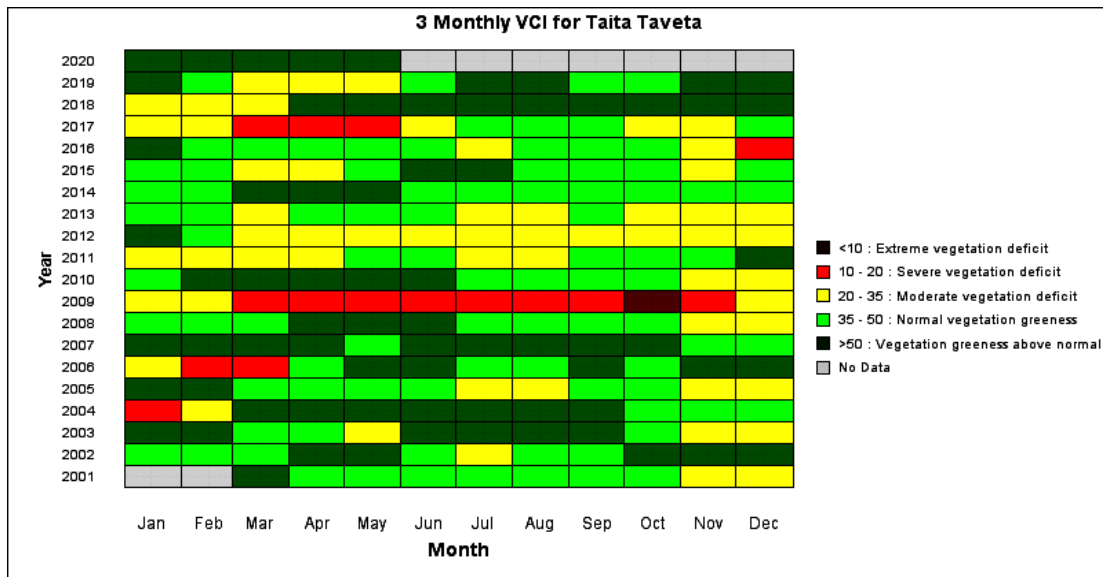


2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

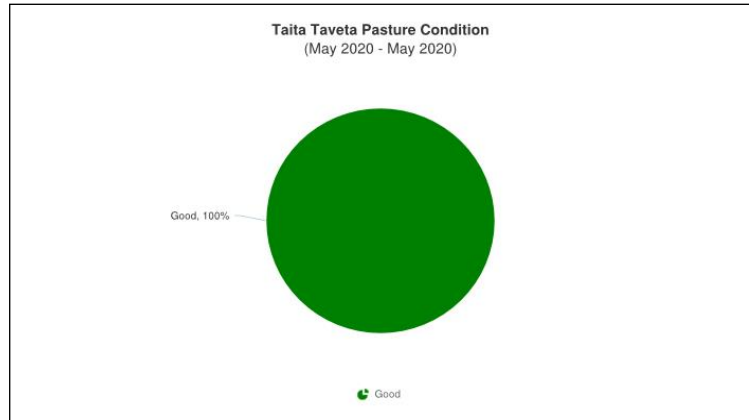
2.1.1 Vegetation Condition Index (VCI)

- The vegetation greenness condition in the county was above the normal range as depicted by a three months vegetation condition index (3M - VCI) of 95.4 (Figure below).
- All livelihood zones depicted vegetation greenness above normal.



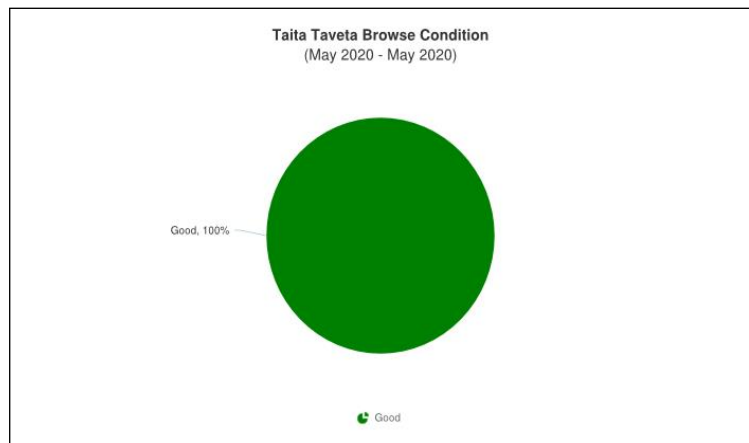
2.1.2 Pasture

- From community interviews all respondents reported pasture condition was good as a result of the rains and the pasture condition was above normal.
- In comparison to the previous month, pasture condition remained good.
- Available pasture is expected to cater for livestock for the next three months.



2.1.3 Browse

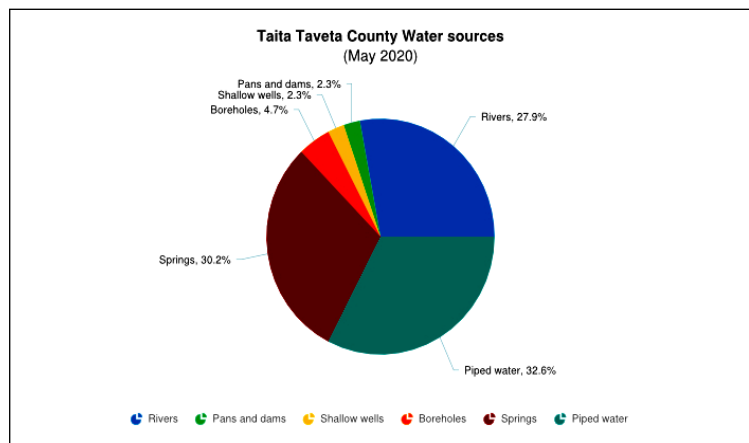
- From community interviews 100 percent of the respondents reported browse condition was good and above normal.
- Compared to the previous month, the browse condition remained good.
- Available browse is expected to cater for livestock for the next four months.



2.2 WATER RESOURCE

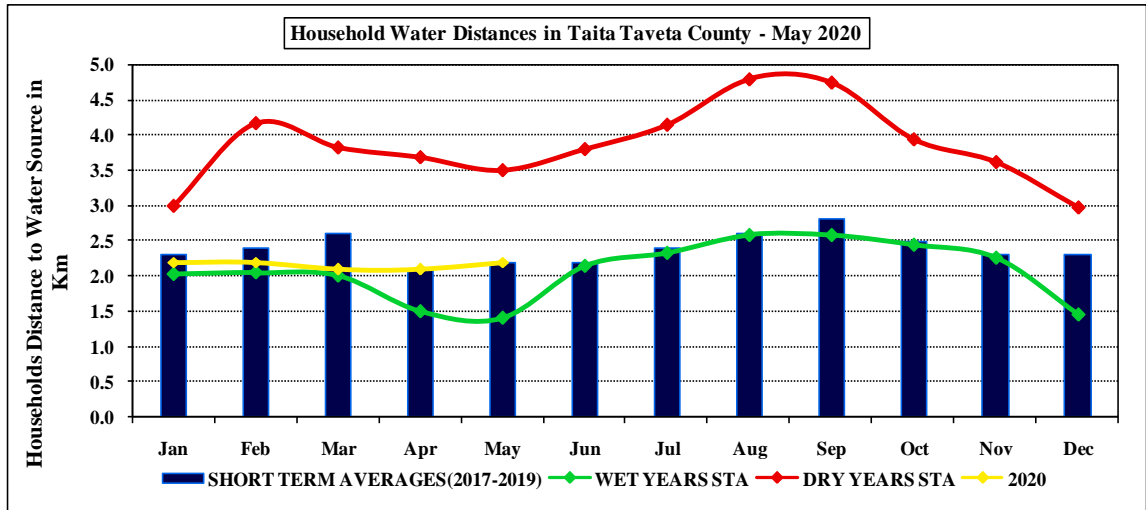
2.2.1 Sources

- The main sources of water currently in use by both human beings and livestock were piped water systems, springs, rivers, pans and dams, shallow wells and boreholes and were relied upon by 33, 30, 28, 2, 2 and 5 percent of the households respectively.
- In comparison to previous month, proportion that relied on the various water sources remained relatively the same.
- In all livelihood zones water from the main sources is expected to cater for households for the next two to three months.



2.2.2 Household Access and Utilization of Water

- The average return distance from households to main water sources remained stable at 2.2 km compared to 2.1 km recorded in the previous month and above the short term average by 16 percent as indicated in the graph below. The flattened curve is due to recharge of water sources from intermittent rains (January and February) and the long rains season.

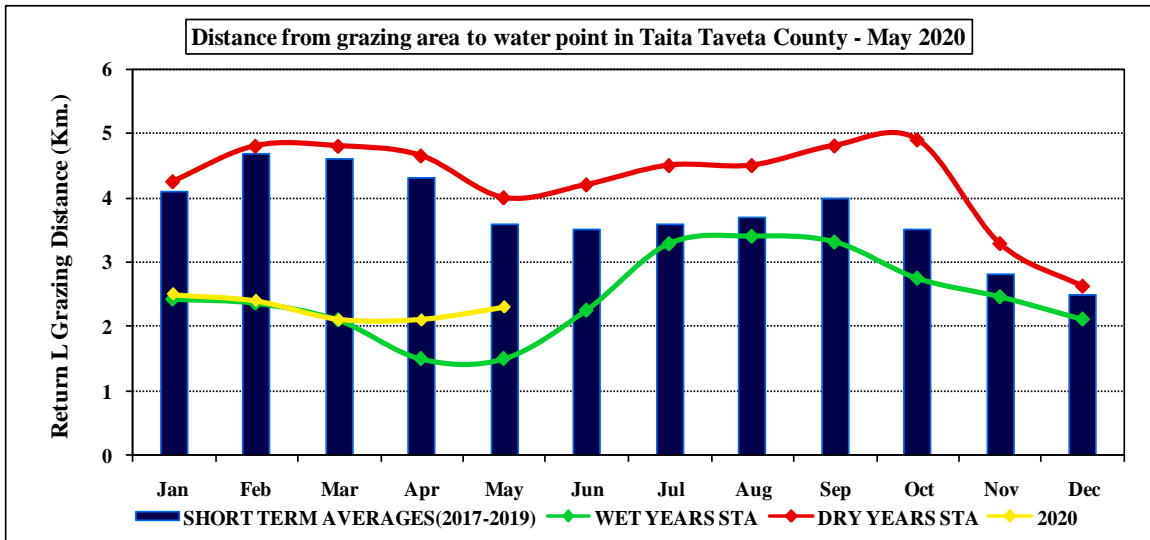


n=21 Key Informants

- The county average water consumption per person per day (pppd) remained stable at 16 litres and varied across livelihood zones with households in mixed farming: horticulture/ dairy livelihood zone and mixed farming: irrigated cropping/ livestock livelihood zone reporting 18 and 17 litres pppd respectively compared to 16 litres pppd in mixed farming: food crops/ livestock livelihood zone.
- Water retailed at Kshs 2 per 20 litre jerry can at source and approximately 48 percent of the households purchased water down from 51 percent posted in the previous month. Price per jerry can at the water point ranged from Kshs 3 - 5.
- Overall, the number of households treating drinking water dropped to 16 percent compared to 17 percent posted in previous month. The main treatment methods for drinking water were; application of chemicals and filtration and were practised by 94 and six percent of the households respectively.
- Relatively, in the irrigated cropping/ livestock zone all households surveyed treated water before drinking compared to two percent in food crop/ livestock zone and three percent in horticulture/ dairy zone.

2.2.3 Livestock Trekking Distance to Water Sources from Grazing Areas

- The average livestock trekking return distance from grazing areas to main water sources was recorded at 2.3 km compared to 2.1 km posted in the previous month and below the short term average by 36 percent as indicated in the graph below. Distance below long term mean was due to availability of water near grazing areas.
- In all livelihood zones, frequency of watering livestock remained normal; once per day in the lowlands and twice per day in the highlands.



n=21Key Informants

3. PRODUCTION INDICATORS

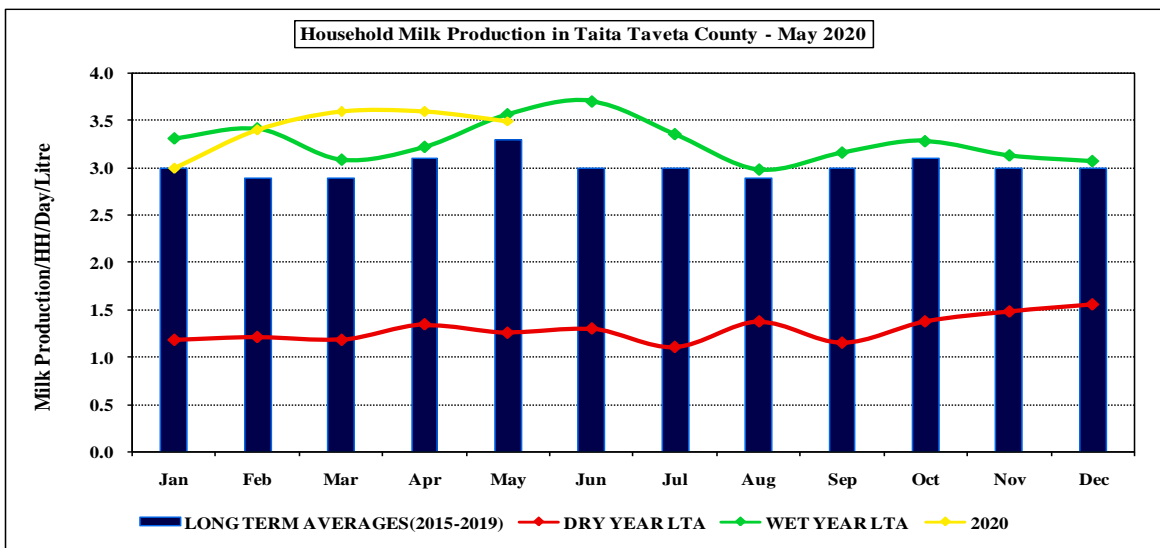
3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body condition for all species was good across all livelihood zones and similar as previous month.
- Good livestock body condition is projected to remain good for the next three months due to the availability of forage.

3.1.2 Milk Production

- The average milk production (cow) per household decreased slightly to 3.5 litres compared to 3.6 litres recorded in the previous month and above the long term average by six percent.



n=210 HHS

- Mixed farming: horticulture/ dairy livelihood zone milk production was at 7.5 litres, in the mixed farming: irrigated cropping/ livestock livelihood zone at 3.6 litres and lowest at 2.1 litres in the mixed farming: food crop/ livestock livelihood zone.

3.2 RAIN-FED CROP PRODUCTION

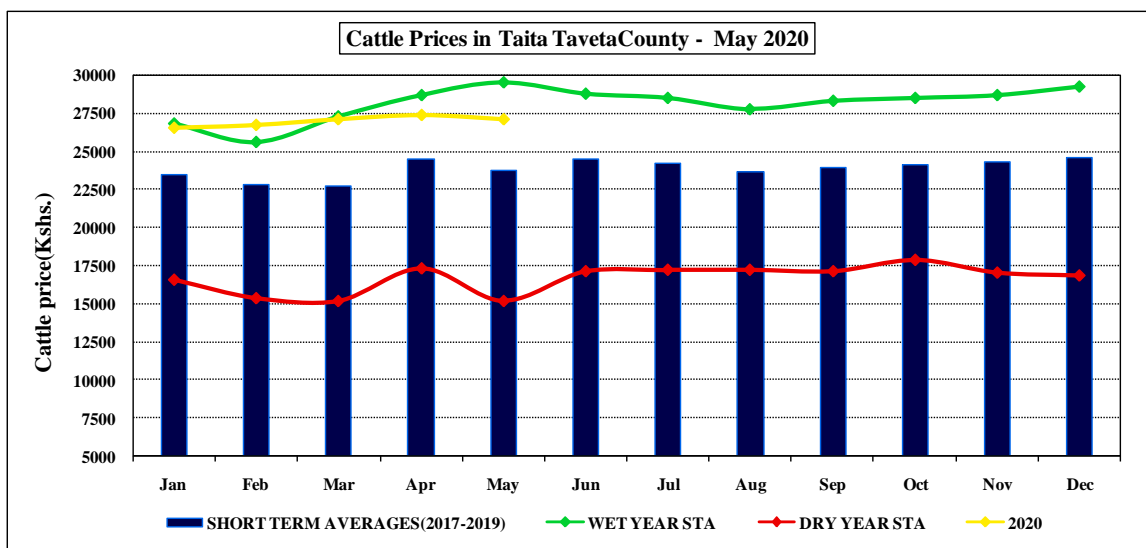
3.2.1 Stage and Condition of food Crops

- Crops planted i.e. maize, beans, green grams and cowpeas were in good condition and at various stages of growth.
- In the rain fed lowlands of the county, maize planted in February was at the grain filling stage while maize planted in March was withering at the tasseling stage due to moisture stress. In the highlands maize crop was at the maturity stage.
- Beans, green grams and cowpeas were at the maturity stage.

4. MARKET PERFORMANCE

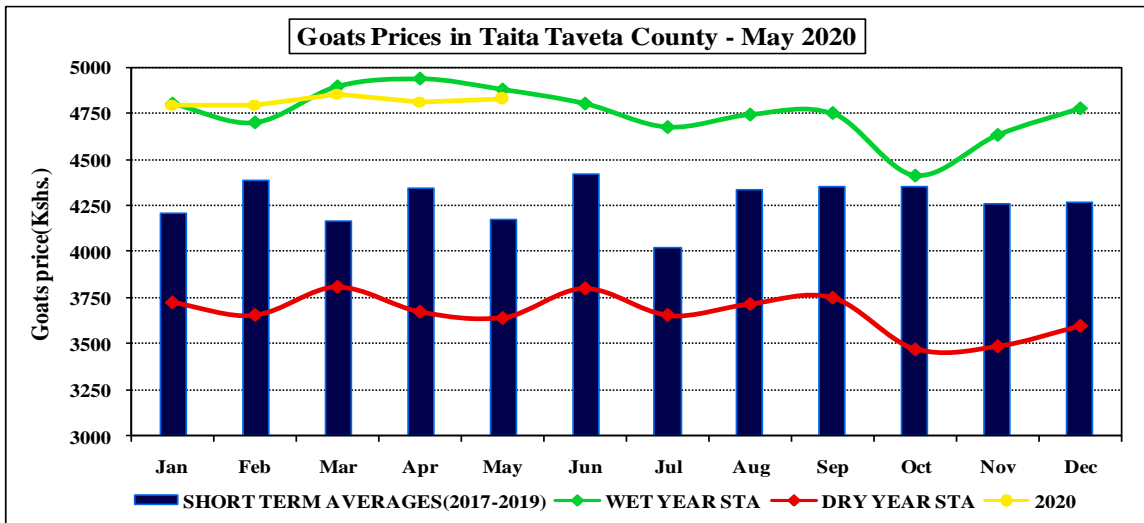
4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices



- The average market price of a three year old bull was recorded at Kshs 27,095, compared to Kshs 27,381 posted in the previous month. Prevailing high price as illustrated in the graph above is due to good body condition of cattle promoted by forage availability at short distances. However, prices are expected to fall due to increase in supply after closure of livestock markets and restaurants/eateries in the county in adherence to the health directive to curb COVID-19 pandemic.
- The highest prices were reported in the mixed farming: horticulture/ dairy at Kshs 35,000 and Kshs 27,533 in mixed farming/: food crop/livestock livelihood zone while lower prices were also reported in mixed farming: irrigated/livestock livelihood at Kshs 24,000.
- Compared to the short term Average, the county average price was higher by 18 percent.

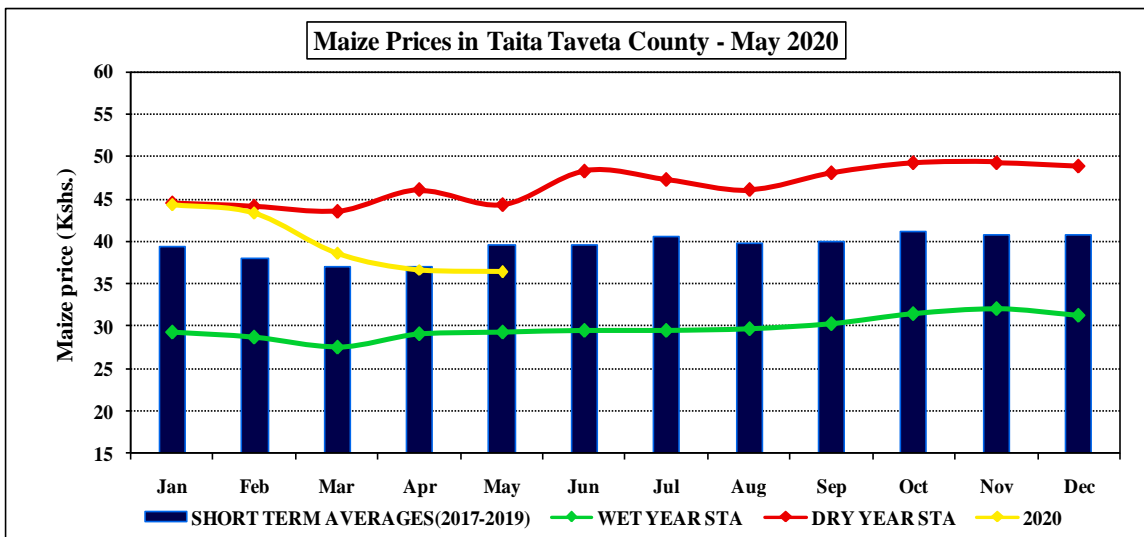
4.1.2 Goat Prices



- The county average market price of a two year old goat remained stable at Kshs 4,800. However, prices are expected to fall due to increase in supply after closure of livestock markets and restaurants/eateries in the county in adherence to the health directive to curb COVID-19 pandemic.
- The highest prices were reported in the mixed farming: horticulture/ dairy livelihood zone of Kshs 6,500 where farmers keep a few animals for special events while lower prices of Kshs 4,700 and Kshs 4,500 were reported in mixed farming: food crop/ livestock livelihood zone and mixed farming: irrigated/livestock livelihood zone.
- Compared to short term average, the price was higher by 18 percent.

4.2 CROP PRICES

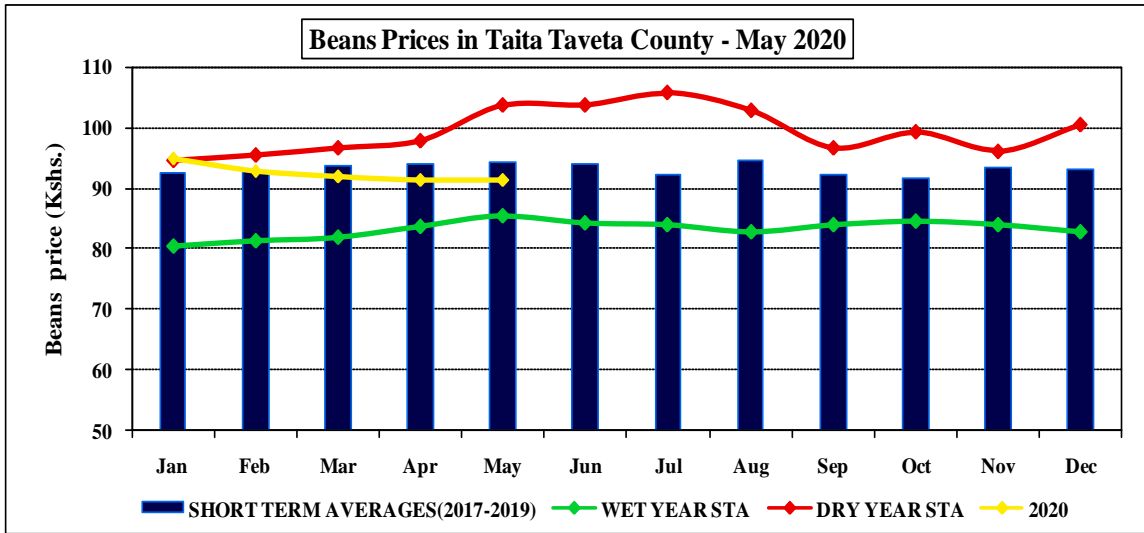
4.2.1 Maize



- The average market price of a kilo of maize was recorded at Kshs 36.4 compared to Kshs 36.7 posted in the previous month and below the short term average by eight percent.
- The drop in maize price was due to increased supplies of maize in the market from previous season harvests.
- Across the livelihood zones the prices were recorded in the mixed farming; food crops/ livestock livelihood zone (Ghazi, Bura, Rukanga, Mwatate and Chumvini markets) at Kshs

40 while horticulture/dairy livelihood zone (Mghambonyi market) and mixed farming: irrigated/livestock livelihood zone (Taveta Town) at Kshs 25.

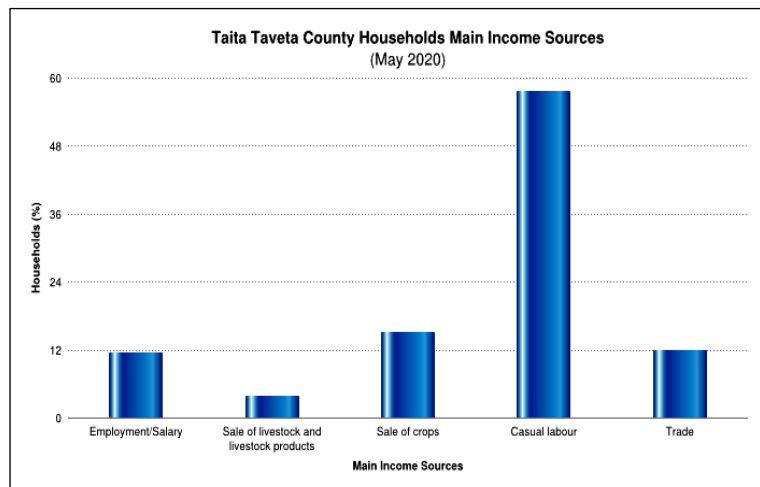
4.2.2 Beans



- The average market price of a kilo of beans remained stable at Kshs.91.4 similar to the previous month and below the short term average by three percent. The stable prices were reported due to households holding stocks from the previous harvest.
- Across the livelihood zones the price varied with the mixed farming: food crop/ livestock livelihood zone recording a price of Kshs 94 while mixed farming: irrigated/ livestock livelihood zone and mixed farming: horticulture/dairy livelihood zone both recorded a price of Kshs 90.

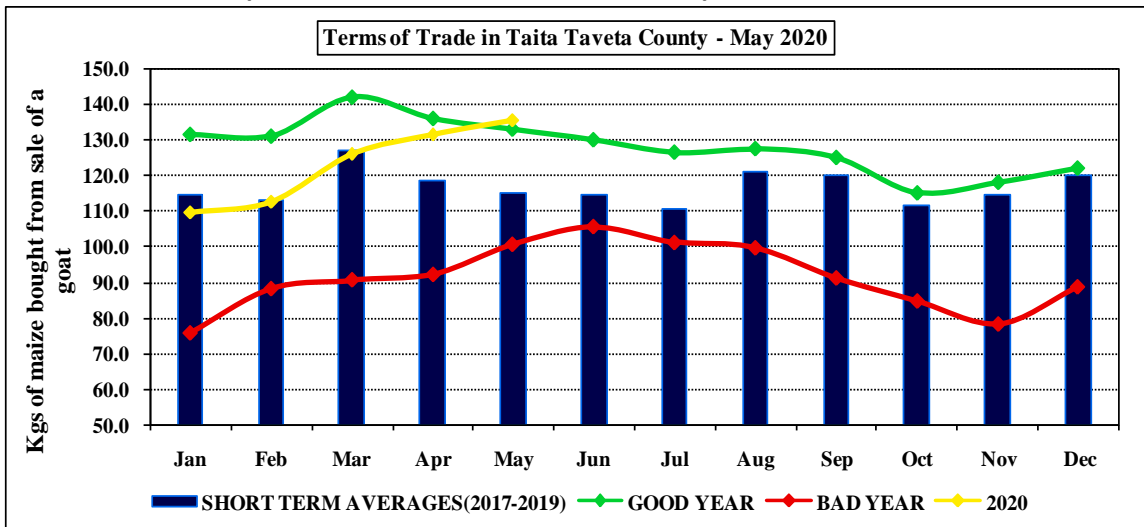
4.3 INCOME

- The main source of income was casual labour. Others included; trade, employment, and sale of livestock and livestock products and sale of crops at lower proportions. The average casual labour wage for the county for the month under review was Kshs 3,200 similar to that posted in the previous month.



- Compared to previous month sources of income remained relatively stable.
- Casual labour opportunities in the rural areas were available in the sisal and banana plantations, irrigation schemes, herding and ranches while in the urban areas opportunities were in the construction sites and cleaning services in towns.
- Restriction measures to curb spread of COVID-19 led to closure of various businesses adversely affecting sources of income for many households.

4.4 TERMS OF TRADE (GOAT PRICE VERSUS MAIZE PRICE)

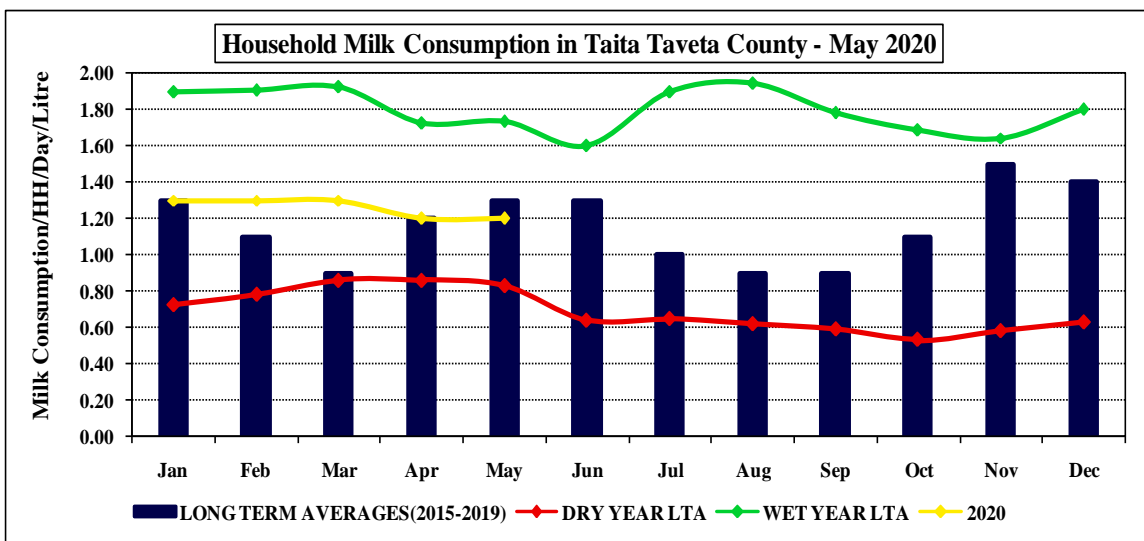


- Terms of trade (ToT) were favourable and proceeds of sale of goat could purchase 135.4 kilograms of maize compared to 131.4 posted in the previous month and above the short term average by 17 percent.
- ToT ratios by livelihood zone were as follows; mixed farming: horticulture/ dairy livelihood zone at 185.7, mixed farming: food crops/livestock livelihood zone at 124.7 and mixed farming: irrigated cropping/livestock livelihood zone recorded at 121.4.

5. FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- The average milk consumption per household per day remained stable at 1.2 litres as posted in the previous month and below the long term mean by eight percent.

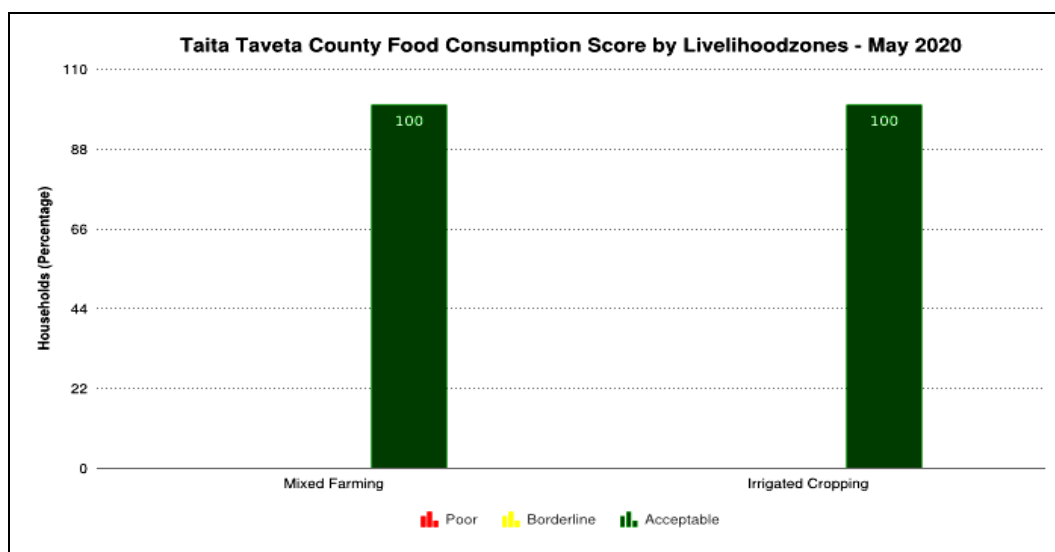


n=210 HHs

- Milk consumption per household per day in regard to livelihood zones; mixed farming: food crops/livestock (1.2 litres), mixed farming: horticulture/ dairy (1.3 litres) and mixed farming: irrigated cropping/livestock (one litre).

5.2 FOOD CONSUMPTION SCORE

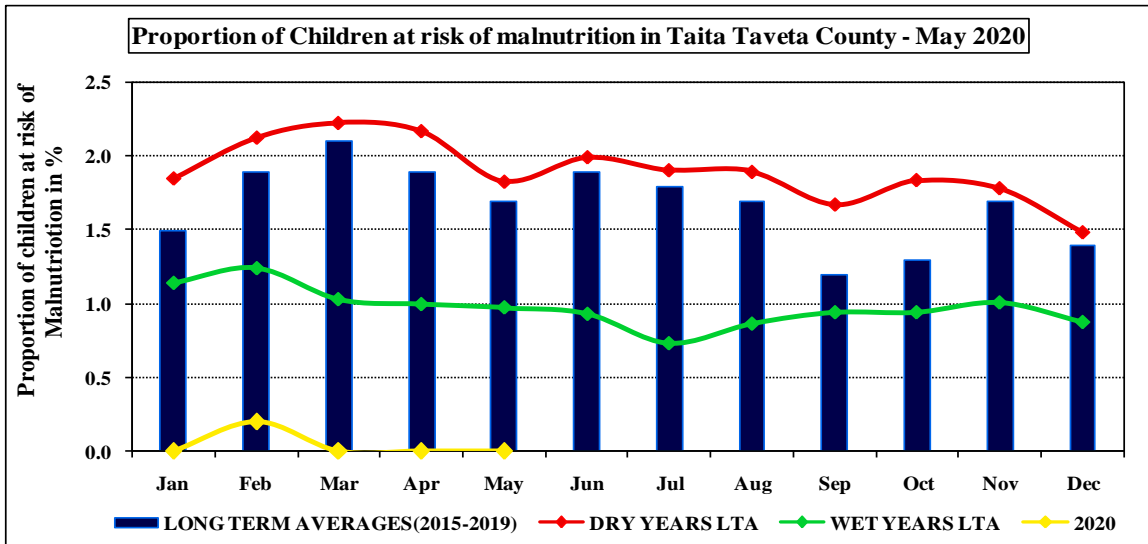
- All households remained in the acceptable food consumption score (FCS) due to availability and accessibility of food at household level. Sampled households indicated that 84 percent were still holding food stocks from the previous season.
- Compared to a similar period in 2019 where prevalence was at 84 and 16 percent for acceptable and borderline FCS respectively, household consumption for the month under review was much better given that all households were in the acceptable food consumption category.
- The current mean food consumption score depicted a dropping but stable trend at 75 compared to 83 posted in the previous month.
- The mean FCS score was high in the mixed farming: irrigated cropping/ livestock livelihood zone recorded at 91 followed by mixed farming: horticulture/dairy livelihood zone at 78.2 and mixed farming; food crop/livestock livelihood zone at 69. In all the zones, households consumed three food groups i.e. maize, pulses and vegetables and in addition 67 percent of the households interviewed consumed meat (fish/beef) at least once during the seven days recall period. Fish was served for three to five days in a week in households of Mboghoni and Challa wards in Taveta Sub County due to fishing activities in both Lake Challa and Lake Jipe. Other foods consumed were fruits and milk.



n=210HHs

5.3 HEALTH AND NUTRITION STATUS

- A total of 474 children below five years were sampled for MUAC measurement where proportion of male and female was at 56 and 44 percent respectively.



5.3.1 Nutrition Status

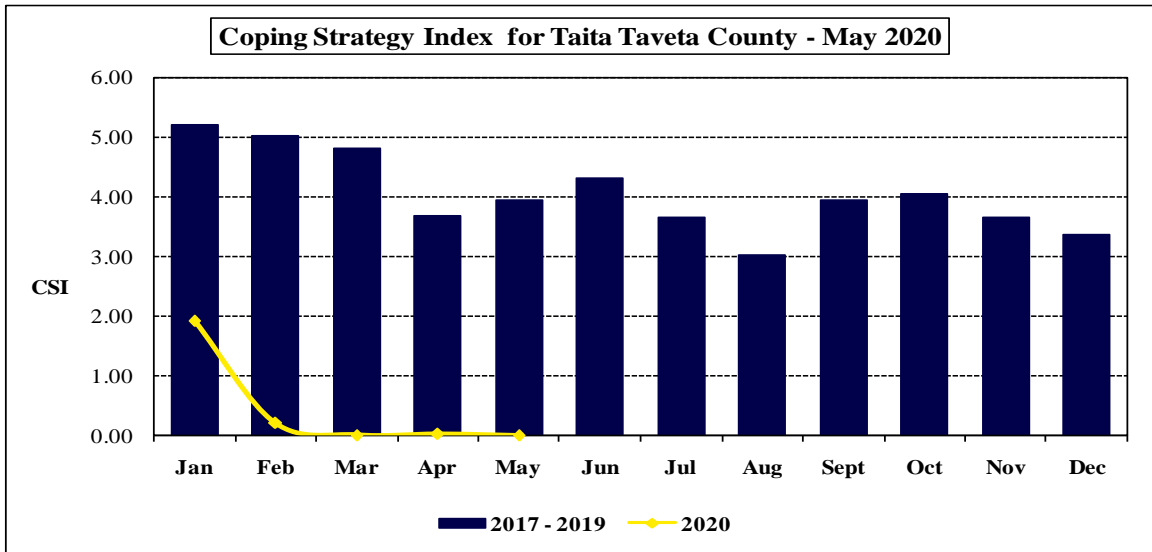
- In the month under review, there were no cases of children aged below five years with MUAC - at risk of malnutrition (125 – 134 mm) as shown in the graph above.
- No cases of GAM by MUAC (moderate 115-124mm) and (Severe<115) were reported.
- Across all livelihood zones nutrition status of children below five years remained good in the seven sampled sentinel sites.

5.3.2 Health

- Out of the 474 sampled children three percent were reported to be ailing from fever with chills like malaria.

5.4 COPING STRATEGIES

- There were no consumption based coping strategies employed from households interviewed in the month under review since households relied on previous season harvests (84 percent HHs holding stocks) and also prices were lower at the household level.
- The current Coping Strategy Index (CSI) indicates that the situation is much better compared to similar month last year where CSI was at 2.04.
- The graph below show trend of consumption based coping strategy index in the county.



n=210HHs

6. CURRENT INTERVENTION MEASURES (ACTION)

6.1 FOOD AND NON FOOD INTERVENTIONS

6.1.1 Sectoral

Intervention	Activities	Implementers
Health Sector		
Provision of health equipments	<ul style="list-style-type: none"> Purchase of personal protective equipment (PPEs), sanitizers, thermo guns, respirators, chlorine, overalls clothes, helmets and spraying pumps 	County Government Department of Health
Water Sector		
Provision of clean and safe drinking water	<ul style="list-style-type: none"> Continuous supply of adequate water and soap to all hand washing points to address the issue of COVID-19 pandemic 	County and National Government
Multi-Sectoral		
Coordination (COVID-19 Pandemic)	<ul style="list-style-type: none"> County Rapid Response meetings to address COVID-19 pandemic 	Department of Health, Ministry of Interior, Partners and Stakeholders

7. EMERGING ISSUES

7.1 Insecurity/ Conflict/ Human Displacement

- The county reported the first two positive cases of COVID-19 in Mwatate Sub County.
- Movement restrictions due to COVID-19 pandemic have had negative economic impact across all sectors and the hard hit populations are the urban poor who rely on casual labour or work in the informal sector majorly in towns. These households continued to experience decline in income and food access.
- Mass vaccination activities and livestock markets activities continued to be suspended in the county resulting to limited routine vaccination and livestock incomes.

7.2 Migration

- No cases of in or out migration were reported in the month under review.

7.3 FOOD SECURITY PROGNOSIS

- The month of June set the beginning of prolonged dry spell and the Meteorological department forecast show that the county will record low temperatures and this will favour the well developed forage.
- Maize production is expected to be below normal since late planted maize will not reach maturity level due to moisture stress. However, pulses production is expected to be normal in all livelihood zones.

- The food stocks from previous seasons will continue cushioning farmers until next harvest anticipated in the month of June and July.
- Food prices in the county are expected to remain stable in the month of June due to available food stocks at household level and awaiting harvest from the current season.
- Water availability and accessibility is projected to be good and distances to remain below the long term average and significant changes are expected in the month of August.
- Livestock body condition is expected to be good due to availability of forage and water at shorter distances.
- Prices of livestock species are projected to be on a downward trend due to closure of main livestock markets in the county.

8. RECOMMENDATIONS

Health sector

- Enhance preparedness measures after reports of positive cases of COVID-19 in Mwatate
- Provision of PPEs, sanitizers and health equipments for healthcare workers to combat the COVID-19 pandemic

Agriculture and Livestock Sector

- Crop protection against pest and diseases
- Capacity build farmers on post harvest management techniques and pasture and fodder conservation

Water Sector

- Promote water harvesting at household level to enhance water storage to be used for hand washing especially during this period of fighting COVID-19

Multi-Sectoral

- Sensitize all population on the COVID-19 pandemic and its prevention
- Provision of food assistance and cash transfers among the poor urban households