

National Drought Management Authority

TAITA TAVETA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR APRIL 2020



A Vision 2030 Flagship Project



APRIL 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	126	80 – 120
VCI-3Month	107.94	35 –50
Production indicators	Value	Normal
Crop Condition(maize)	Knee high	Knee high
Livestock Body Condition for cattle	Good	Good
Milk Production per HH/ day	3.6Litres	3.1Litres
Livestock Migration Pattern	Normal	Normal
Access Indicators	Value	Normal
Terms of Trade (Maize price vs Goat price)	131.4	118.8
Milk Consumption per HH/ day	1.2Litres	1.2Litres
Return HHs distance to water sources	2.1km	2.1Km
Water source return distance from grazing areas	2.1km	4.3Km
Cost of water (20 litres)	Kshs 3.00	< Kshs 5.00
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0.0	1.9

Drought Situation & EW Phase Classification

Biophysical Indicators

- The County received above normal rains that were characterized by good temporal and even spatial distribution.
- The county vegetation greenness condition was above the normal range (3 Months VCI 107.94).

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Crop condition was good for all crops (maize, beans, green grams and cowpeas) planted during the season.
- Early planted maize was at flowering stage while others were at knee high stage.
- 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 within 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

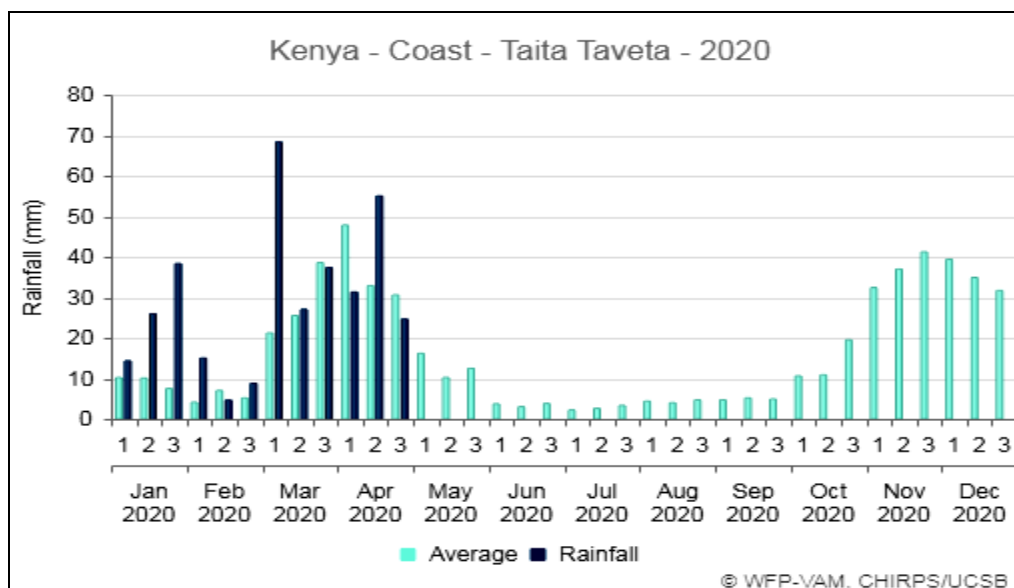
- The county registered above normal rainfall characterized by good temporal distribution and even spatial distribution as indicated in the table below;

Kenya Meteorological Department Rainfall Data

No.	Rainfall Station	Livelihood Zone	Wet Days	Amount (mm)
1.	Wundanyi Chief's office	Mixed farming: horticulture/dairy	11	401.5
2.	Ngerenyi FTC	Mixed farming: horticulture/dairy	13	342.4
3.	Wumingu	Mixed farming: horticulture/dairy	12	144.8
4.	Mghange	Mixed farming: horticulture/dairy	11	232.6
5.	Kasigau	Mixed Farming: food crop/livestock	10	202.0
6.	Mwatate Livestock Farm	Mixed Farming: food crop/livestock	9	103.0
7.	Voi Meteorology Station	Mixed Farming: food crop/livestock	9	111.4

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 126 percent.
- The estimated total precipitation for the month under review was 110.9 mm and relatively same with the LTM (111.3 mm) as indicated in the chart below;



1.1 OTHER EVENTS

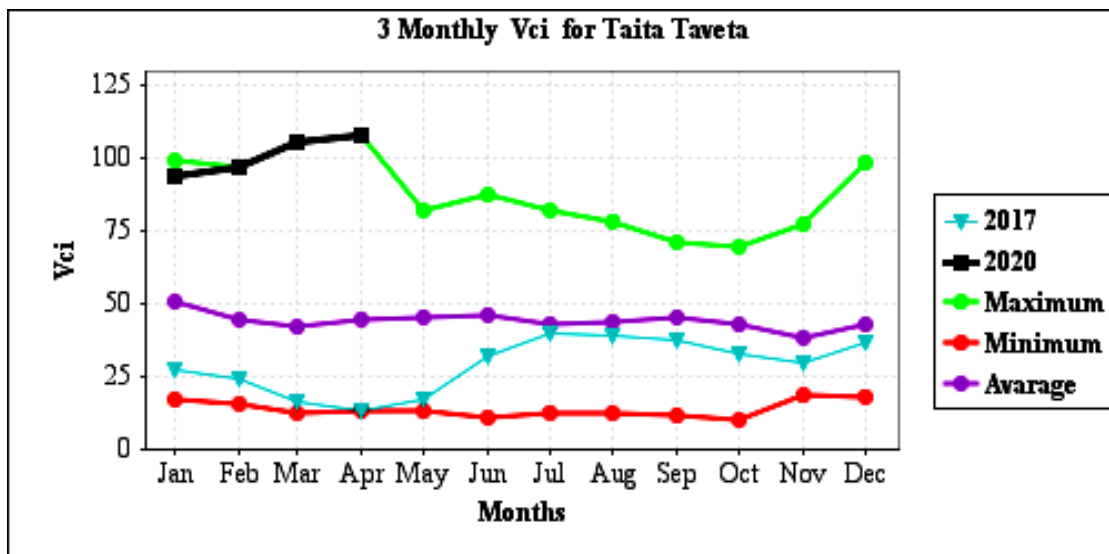
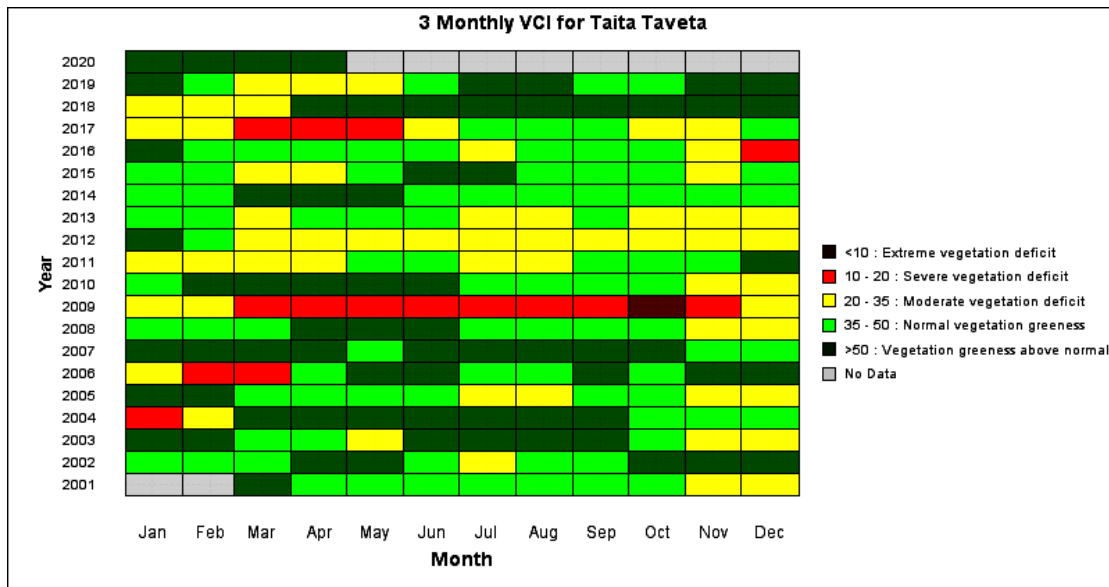
- Heavy rains in Taita Sub County caused landslides in Mogho and Sagha in Mbale; Kitukunyi and Ng'onda in Mteni and Kesse in Werugha where 45 households were adversely affected. All the 45 households were evacuated to alternative shelter while others moved to their relatives.

2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

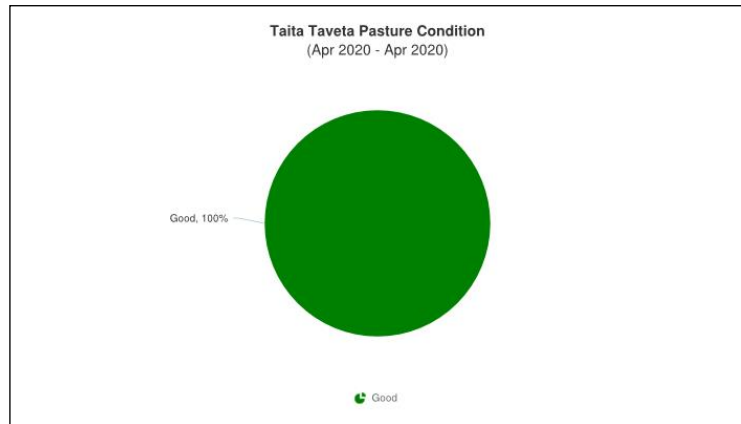
2.1.1 Vegetation Condition Index (VCI)

- The vegetation greenness condition in the county was above the normal range as depicted by a three months vegetation condition index (3M - VCI) of 107.9 (Figure below).
- All livelihood zones depicted vegetation greenness above normal.



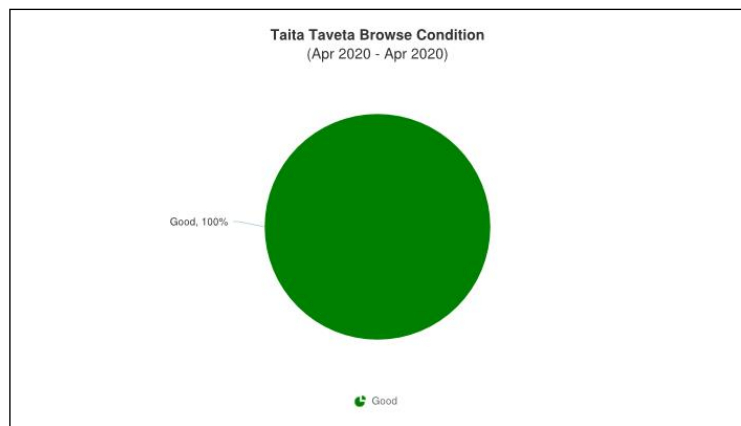
2.1.2 Pasture

- 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 to four months.



2.1.3 Browse

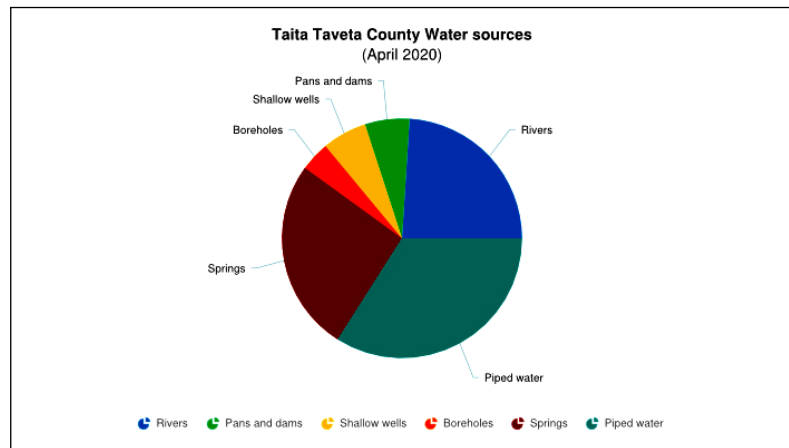
- From community interviews 100 percent of the respondents reported browse condition was good and above normal.
- Compared to the previous month, the browse condition remained good.
- Available browse is expected to cater for livestock for the next four to five months.



2.2 WATER RESOURCE

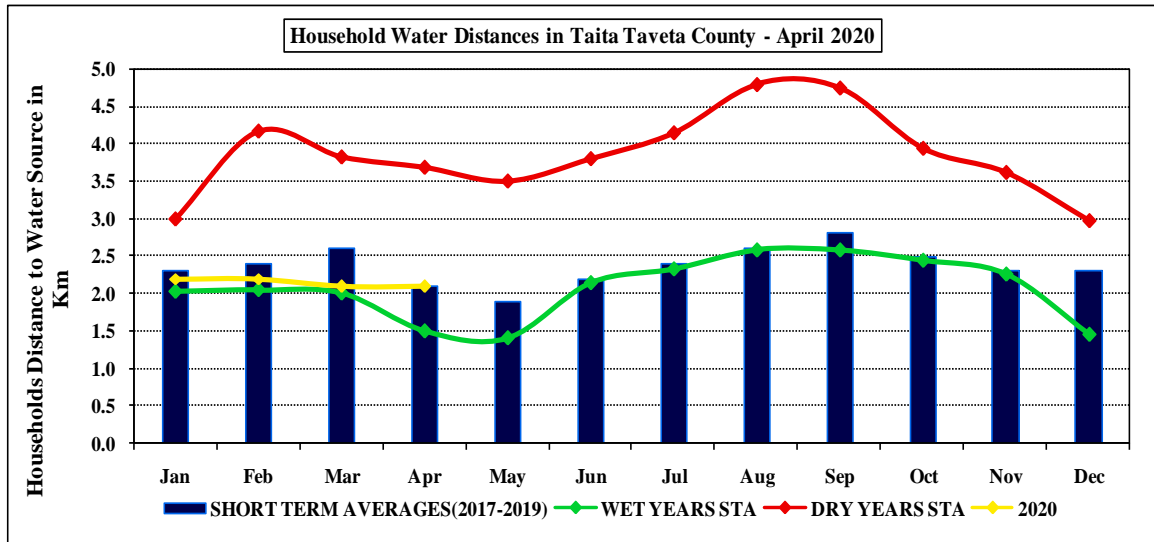
2.2.1 Sources

- 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 34, 26, 24, 6, 6 and four percent of the households respectively.
- In comparison to previous month, proportion that relied on piped water system increased by six percent while borehole dropped by nine percent.
- In all livelihood zones water from the main sources is expected to cater for households for the next three to four months.



2.2.2 Household Access and Utilization of Water

- The average return distance from households to main water sources remained stable at 2.1 km compared to the previous month and same as the short term average as indicated in the graph below. The short distance reported was due to recharge of water sources from rains being experienced in the county.

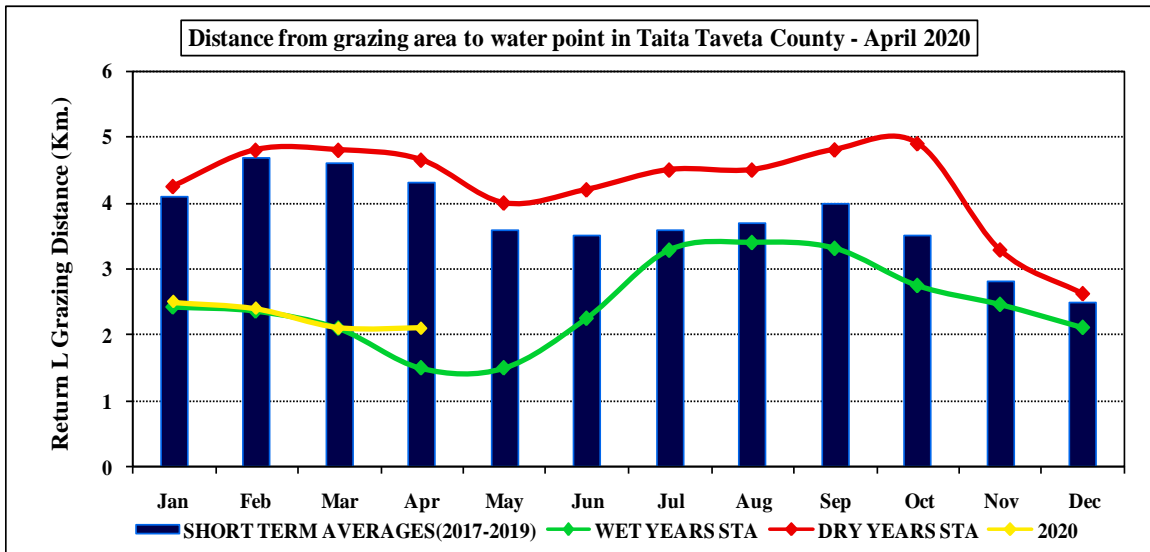


n=21 Key Informants

- The county average water consumption per person per day (pppd) remained stable at 18 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 16.8 litres pppd in mixed farming: food crops/ livestock livelihood zone.
- Water retailed at Kshs 2 per 20 litre jerry can at source and approximately 51 percent of the households purchased water down from 65 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 remained at 17 percent, same as the previous month. The main treatment methods were application of chemicals, filtration and boiling and were practised by 92, 5 and 3 percent respectively of the households treating drinking water.
- Relatively, in the irrigated cropping/ livestock zone all households surveyed treated water before drinking compared to 11 percent in food crop/ livestock zone and eight 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 2.1 km same as the previous month and below the short term average by 51 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=21 Key Informants

3. PRODUCTION INDICATORS

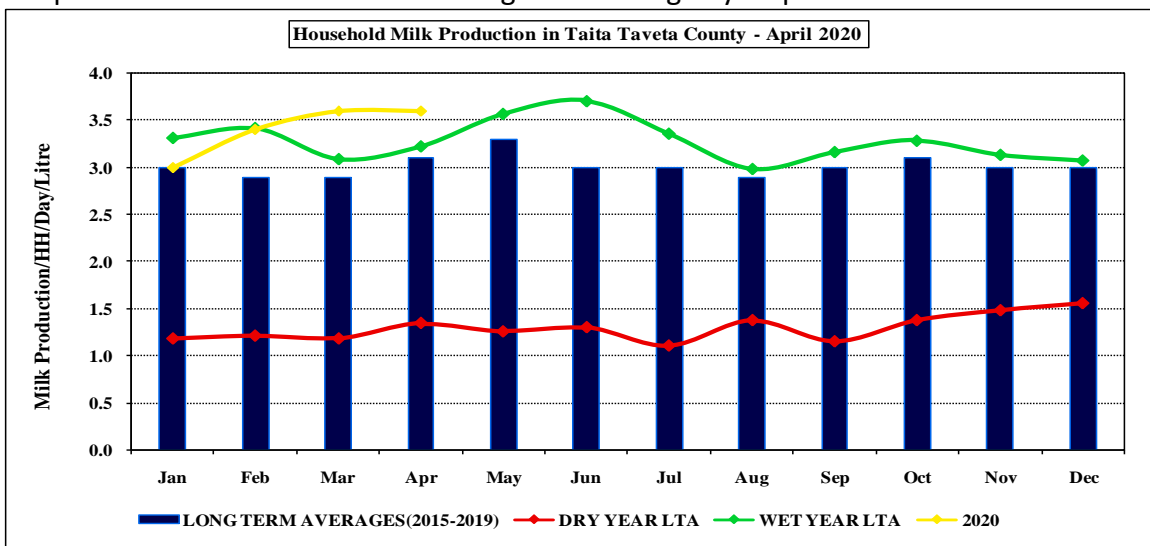
3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

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

3.1.2 Milk Production

- The average milk production (cow) per household remained stable at 3.6 litres same as the previous month and above the long term average by 16 percent.



n=210 HHs

- Mixed farming: horticulture/ dairy livelihood zone milk production was at 7.1 litres, in the mixed farming: irrigated cropping/ livestock livelihood zone at 3.5 litres and lowest at 2.2 litres in the mixed farming: food crop/ livestock livelihood zone.

3.2 RAIN-FED CROP PRODUCTION

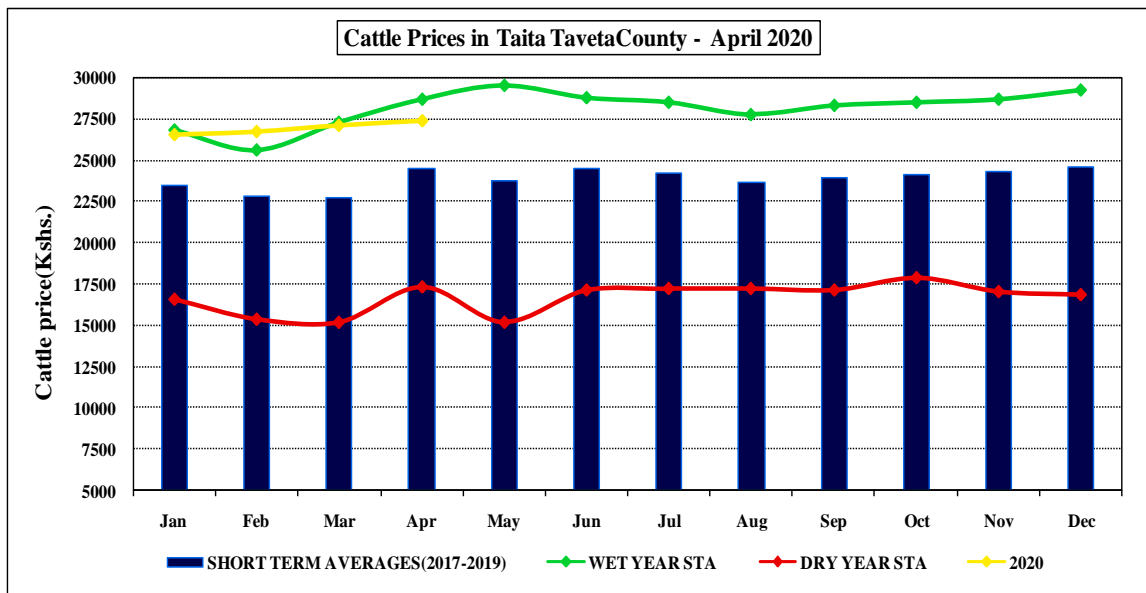
3.2.1 Stage and Condition of food Crops

- Crops planted i.e. maize, beans, green grams and cowpeas were in good condition and at various stages of growth.
- Early planted maize was at flowering stage while others were at the knee high stage and pulses were at the flowering stage.

4. MARKET PERFORMANCE

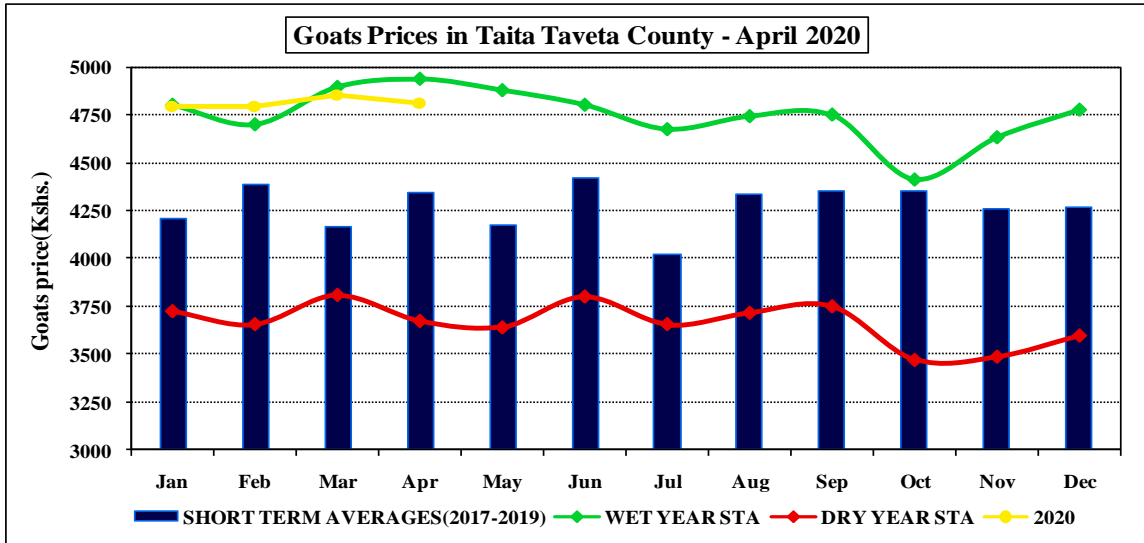
4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices



- The average market price of a three year old bull was Kshs 27,381, a slight increase compared to Kshs 27,143 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 26,600 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 12 percent.

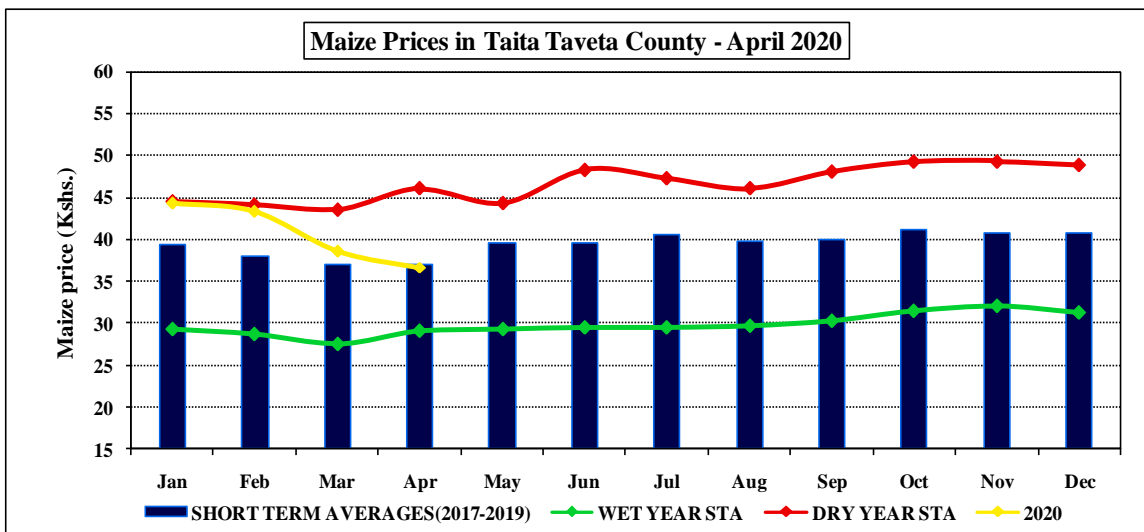
4.1.2 Goat Prices



- 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 6,000 where farmers keep a few animals for special events while lower prices of Kshs 4,700 and Kshs 4,600 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 11 percent.

4.2 CROP PRICES

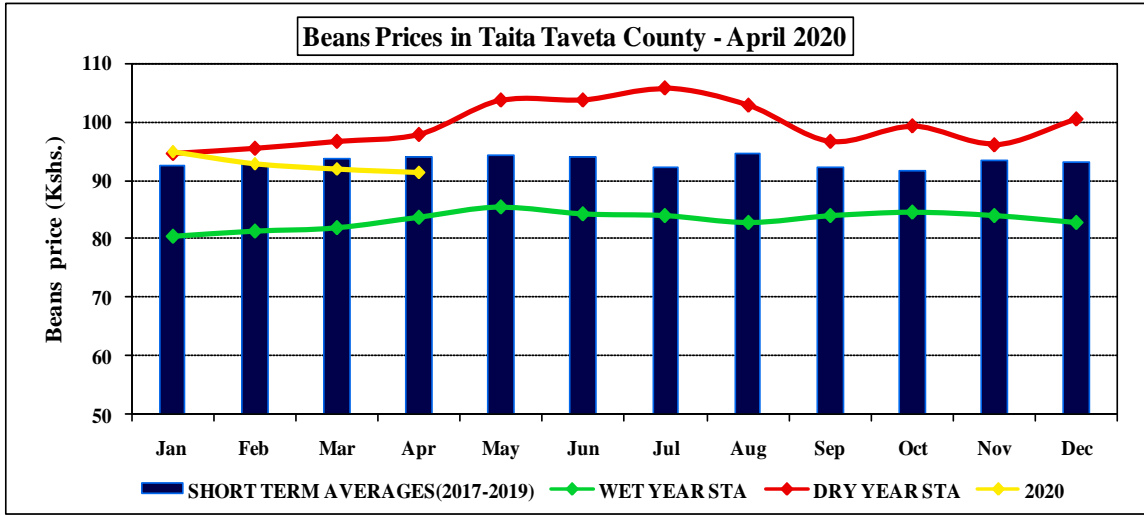
4.2.1 Maize



- The average market price of a kilo of maize dropped to Kshs 36.7 from Kshs 38.6 posted in the previous month and above the short term average by one 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.

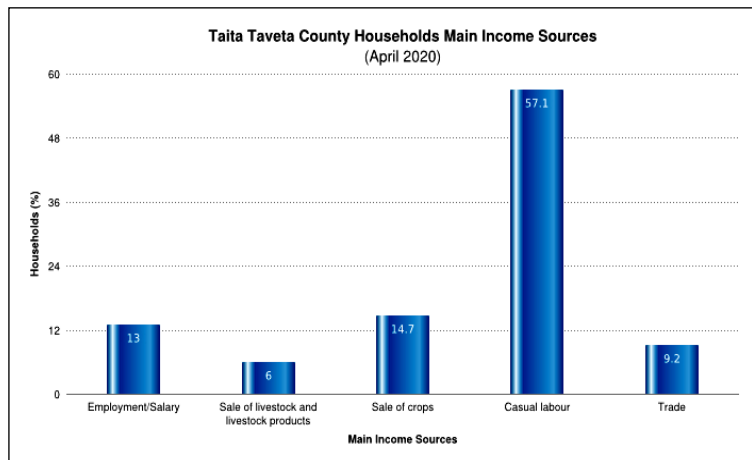
4.2.2 Beans



- The average market price of a kilo of beans decreased to Kshs 91.9 compared to Kshs 92.9 recorded in the previous month and below the short term average by two percent. The drop in beans price was attributed to drop in demand for beans in the market due to ongoing harvests across the county.
- Across the livelihood zones the price varied with the mixed farming: irrigated/ livestock livelihood zone recording a price of Kshs 92 while mixed farming: food crop/ livestock livelihood zone and mixed farming: horticulture/dairy livelihood zone both recorded a price of Kshs 90.

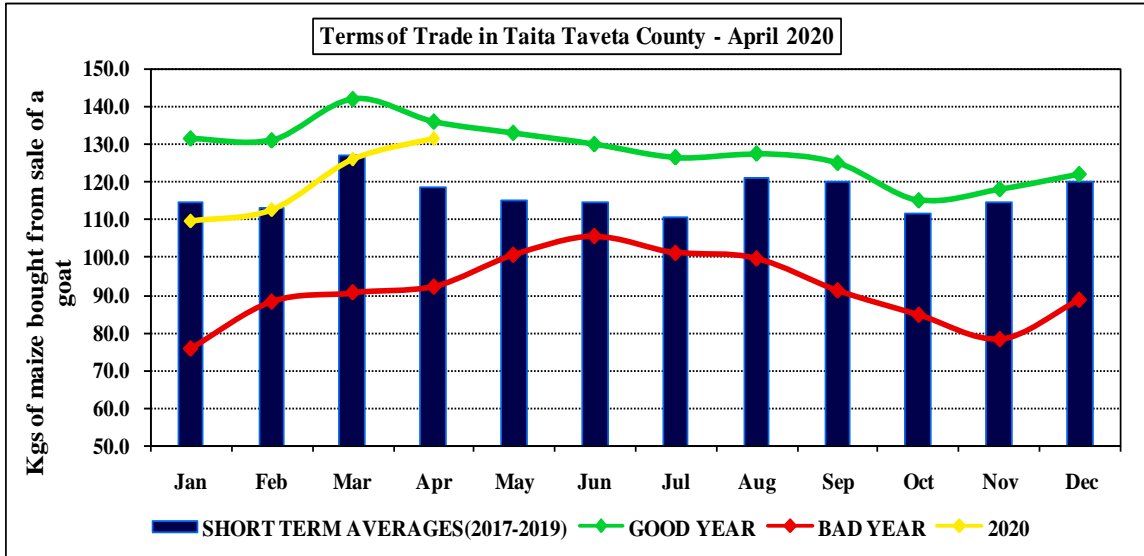
4.3 INCOME

- 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.



- 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.
- Incomes dwindled in households that relied on businesses that operate at night and those that were closed in order to curb spread of COVID-19 like restaurants/eateries, salons, barber shops and pubs.

4.4 TERMS OF TRADE (GOAT PRICE VERSUS MAIZE PRICE)

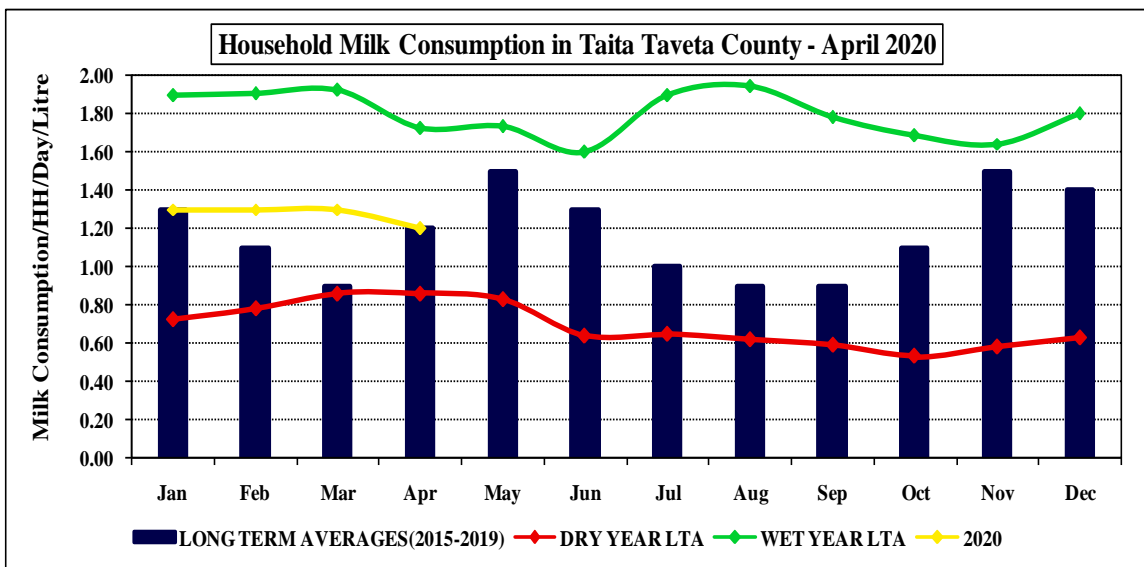


- Terms of trade (ToT) were favourable and proceeds of sale of goat could purchase 147.3 kilograms of maize compared to 125.9 posted in the previous month and above the short term average by 11 percent.
- ToT ratios by livelihood zone were as follows; mixed farming: horticulture/ dairy livelihood zone at 163.6, mixed farming: food crops/livestock livelihood zone at 122.7 and mixed farming: irrigated cropping/livestock livelihood zone recorded at 155.6.

5. FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- The average milk consumption per household per day dropped slightly to 1.2 litres from 1.3 litres posted in the previous month and similar to the long term mean.

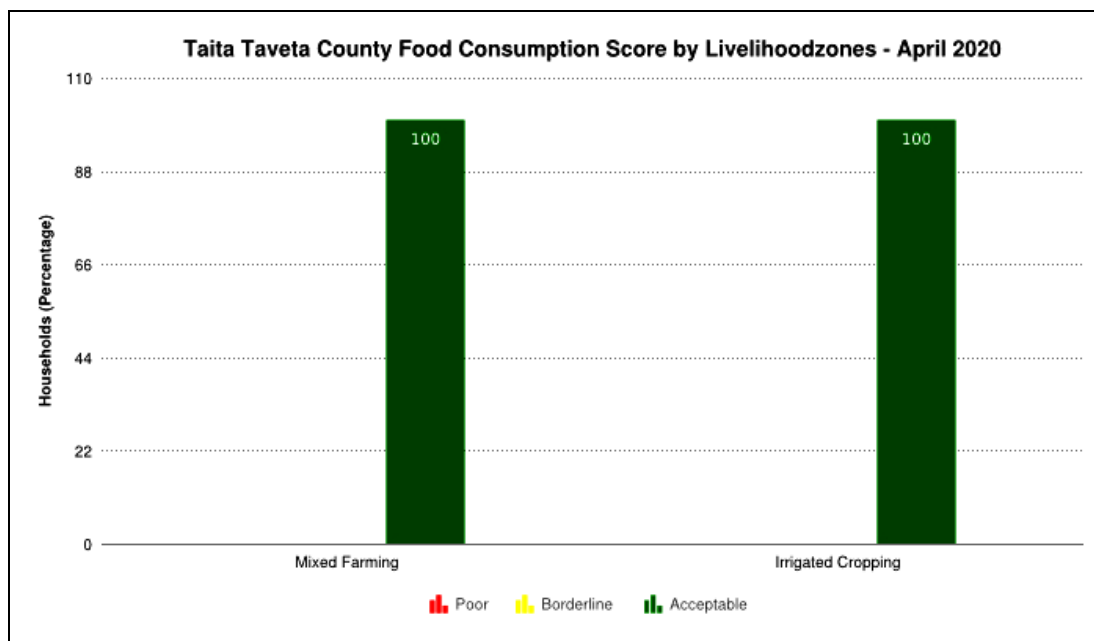


n=210 HHs

- 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

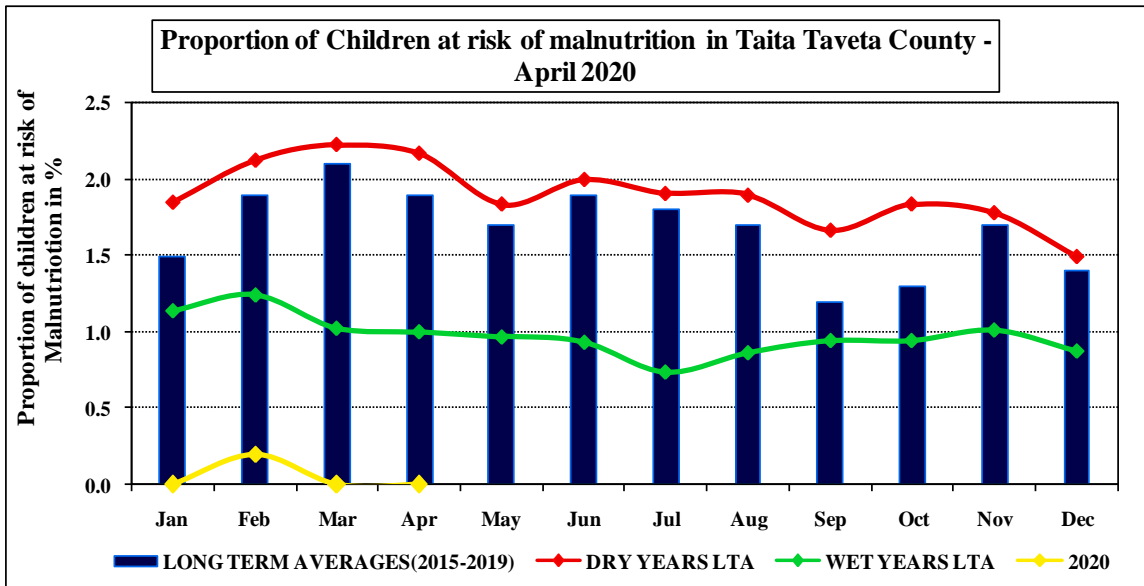
- All households remained in the acceptable food consumption score (FCS) due to the previous season harvests realized in the county.
- Compared to a similar period in 2019 where prevalence was at 81 and 19 percent for acceptable and borderline FCS respectively, household consumption for the month under 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 90 followed by mixed farming: horticulture/dairy livelihood zone at 76 and mixed farming; food crop/livestock livelihood zone at 60. In all the zones, households consumed three food groups i.e. maize, pulses and vegetables and in addition meat served was obtained from fish and beef where 67 percent of the households interviewed consumed 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.



n=210HHs

5.3 HEALTH AND NUTRITION STATUS

- A total of 477 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

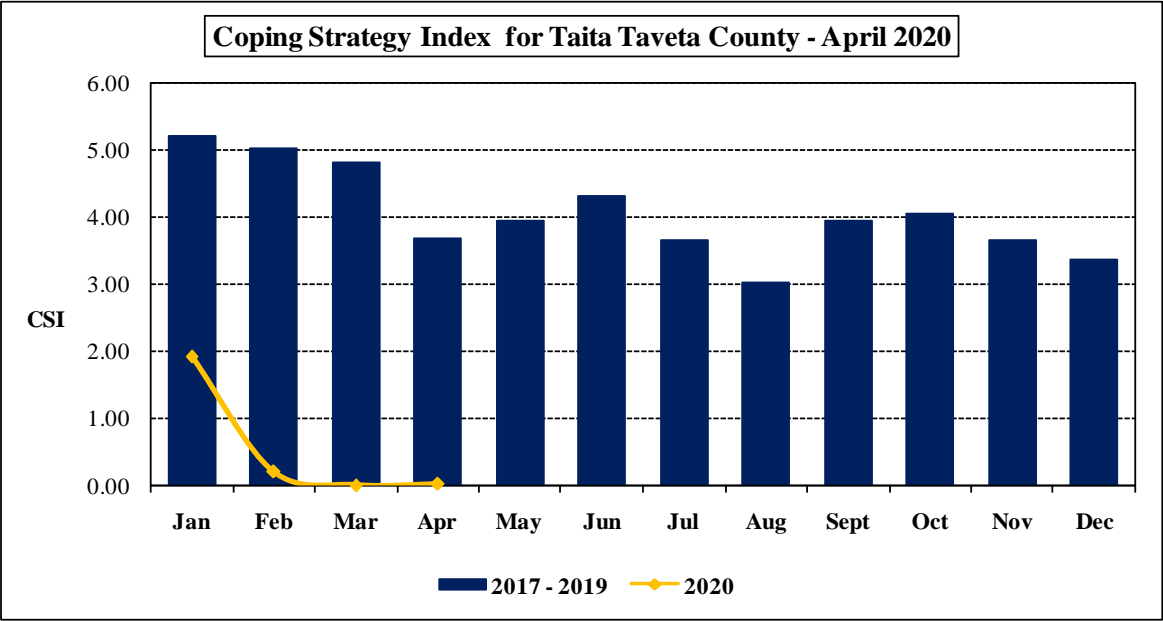
- In both the months of March and April, there were no cases of children aged below five years with MUAC - at risk of malnutrition (125 – 134 mm) as shown in the graph above.
- No cases of GAM by MUAC (moderate 115-124mm) and (Severe<115) were reported.
- Across all livelihood zones nutrition status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

5.3.2 Health

- Out of the 477 sampled children three percent were reported to be ailing from fever with chills like malaria.

5.4 COPING STRATEGIES

- There was no consumption based coping strategies employed from households interviewed in the month under review given that households were relying on food stocks from harvests experienced in the previous season. Also there was plenty of green leafy vegetables and low prices of food at 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 1.98.
- The graph below shows the 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"> • Purchased and installed 81No. 1,000 litres PVC tanks in all towns of the county to address the issue of COVID-19 pandemic 	County and National Government
Livestock Sector		
Improving livestock husbandry	<ul style="list-style-type: none"> • Vaccination of 339 animals against CBPP undertaken in Kabanga ranch 	Department of Veterinary Services
Multi-Sectoral		
Provision of relief food to households affected by flooding and effects of COVID-19	<ul style="list-style-type: none"> • 2200 bags of Rice and 80 cartons of vegetable oil • Food distributed equally to the four Sub Counties 	National Government
Provision of food and non food items to HHs affected by floods	<ul style="list-style-type: none"> • KRCS distributed standard HH kits NFIs while county government donated food items 	CG and KRCS

7. EMERGING ISSUES

7.1 Insecurity/ Conflict/ Human Displacement

- Several cases of Contagious Bovine Pleuro-Pneumonia (CBPP) were encountered in the county slaughterhouses during post-mortem inspection. Vaccination exercise is underway in the ranches (Amaka in Voi and Mramba in Mwatate) where these animals were sourced.
- Movement restrictions due to COVID-19 pandemic have had negative economic impact across all sectors and hard hit are the poor urban households that rely on casual labour or work in the informal sector majorly in towns. These households are facing most immediate decline in income and food access.
- Also, mass vaccination activities and livestock markets activities were 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 May forecast depicts below to near normal long rains in the month of May and likely characterised by poor temporal and uneven spatial distribution. Cessation projected in the second half of the month of May.
- Late planted maize might do poorly due to insufficient moisture levels, however pulses and early planted maize is expected to reach full maturity levels.
- 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 May due to stock being held at household level.
- Water availability and accessibility is projected to be good and distances to remain below the long term average.
- Livestock body condition is expected to be good due to availability of forage and water at shorter distances.
- Prices of all livestock species are projected to remain above normal due to good body condition.
- Availability of milk and other high value farm products like meat, eggs and fruits is expected to improve nutrition of household members.

8. RECOMMENDATIONS

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 and those affected by floods
- Provision of PPE, sanitizers and health equipments for healthcare workers to combat the COVID-19 pandemic
- Resettlement of homeless families due to floods

Agriculture and Livestock Sector

- Crop protection against pest and diseases
- Intensify campaigns on soil fertility management
- Capacity build farmers on post harvest management techniques and pasture and fodder conservation
- The Veterinary department to carry out surveillance for rift valley fever (RVF) following the forecast for enhanced rains

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

Health sector

- Conduct continuous disease surveillance in flood prone areas
- Hygiene and sanitation education and distribution of water purifiers in areas affected by floods