

National Drought Management Authority

TAITA TAVETA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR MARCH 2020



A Vision 2030 Flagship Project



MARCH 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	236	80 – 120
VCI-3Month	105.7	35 –50
Production indicators	Value	Normal
Crop Condition(maize)	Planting	Planting
Livestock Body Condition for cattle	Good	Good
Milk Production per HH/ day	3.6Litres	2.9Litres
Livestock Migration Pattern	Normal	Normal
Access Indicators	Value	Normal
Terms of Trade (Maize price vs Goat price)	125.9	127
Milk Consumption per HH/ day	1.2Litres	0.9Litres
Return HHs distance to water sources	2.1km	2.6Km
Water source return distance from grazing areas	2.1km	4.6Km
Cost of water (20 litres)	Kshs 3.00	< Kshs 5.00
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0.0	2.1

Drought Situation & EW Phase Classification

Biophysical Indicators

- The County registered early onset of the long rains on the first week compared to normal of third week of March.
- The rains were above normal and well distributed in time and space.
- The county vegetation greenness condition was above the normal range (3 Months VCI 105.7).

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Farmers were busy planting maize, beans, green grams and cowpeas while early planted crop was at various stages from germination to knee high.
- 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 above normal.
- Return distances to water sources were below 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

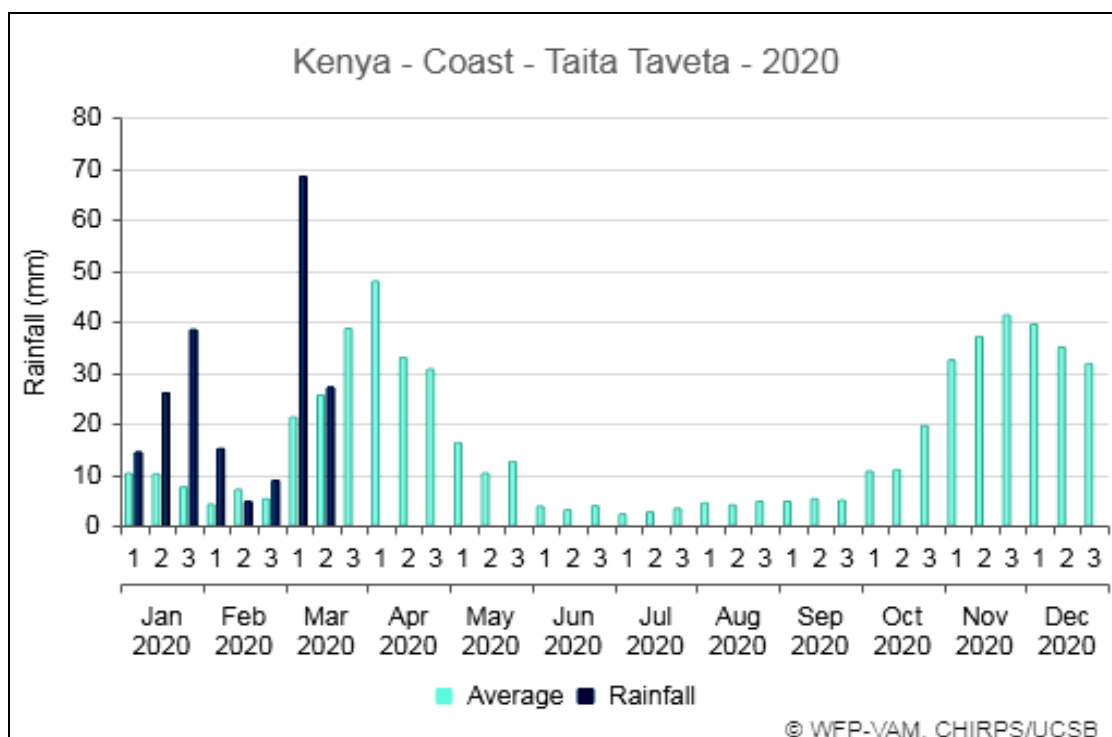
- The county registered early onset of long rains in the first week of March instead of normal third week and the rains were characterized by good temporal distribution and even spatial distribution. Rainfall amounts are shown in the table below;

Kenya Meteorological Department Rainfall Data

No.	Rainfall Station	Livelihood Zone	Wet Days	Amount (mm)
1.	Ngerenyi	Mixed farming: horticulture/dairy	6	187.6
2.	Wumingu	Mixed farming: horticulture/dairy	11	118.2
3.	Maungu	Mixed Farming: food crop/livestock	7	126.7
4.	Kasigau	Mixed Farming: food crop/livestock	8	153.0
5.	Mlughu	Mixed Farming: food crop/livestock	13	207.0
6.	Voi Meteorology Station	Mixed Farming: food crop/livestock	9	100.5

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 236 percent.
- The estimated total precipitation for dekad one and two of the month was 95.3 mm and above the LTM by 104 percent as indicated in the chart below;

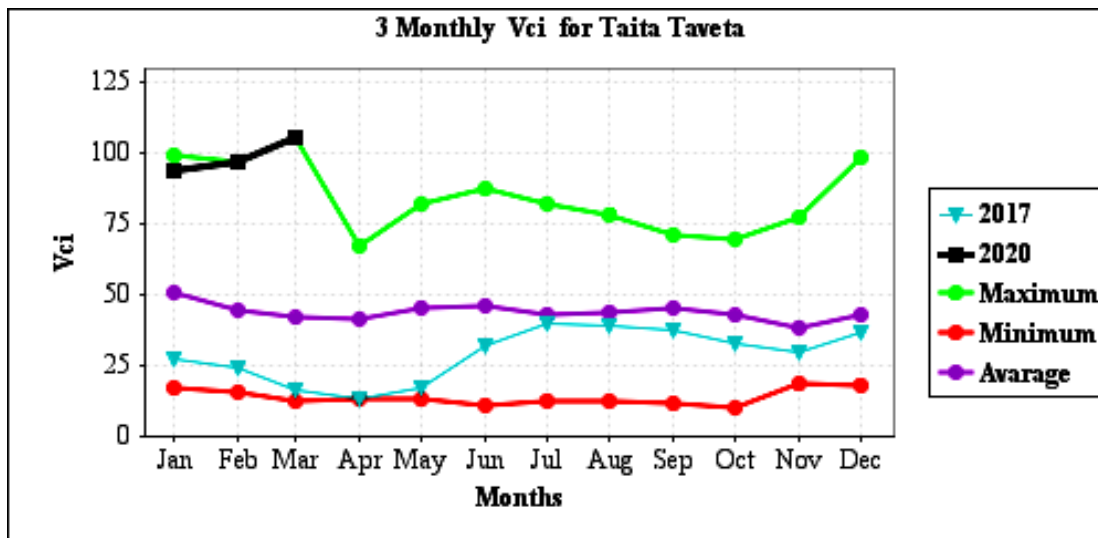
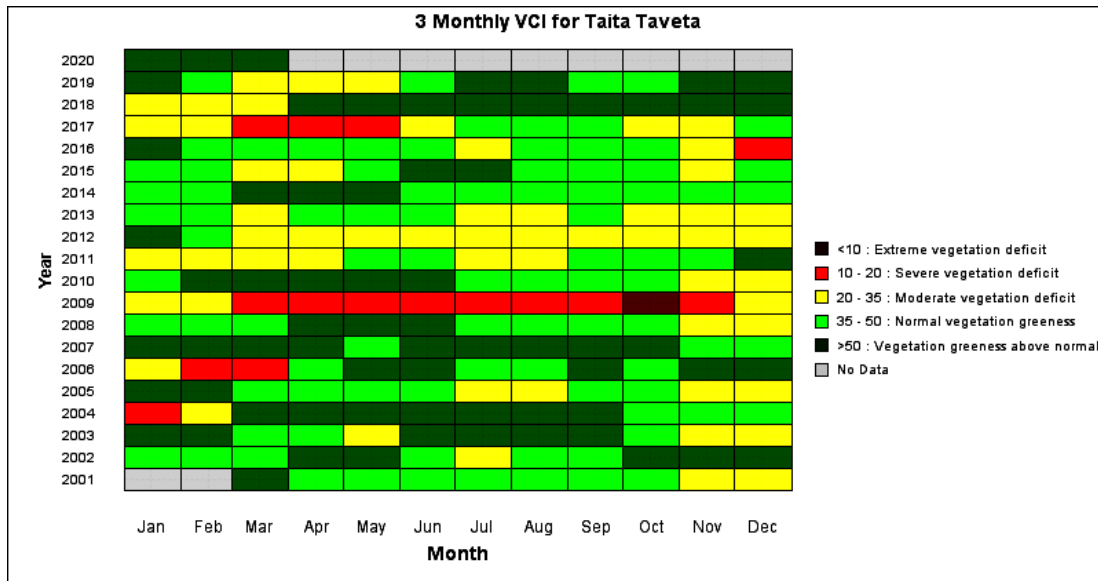


2. IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

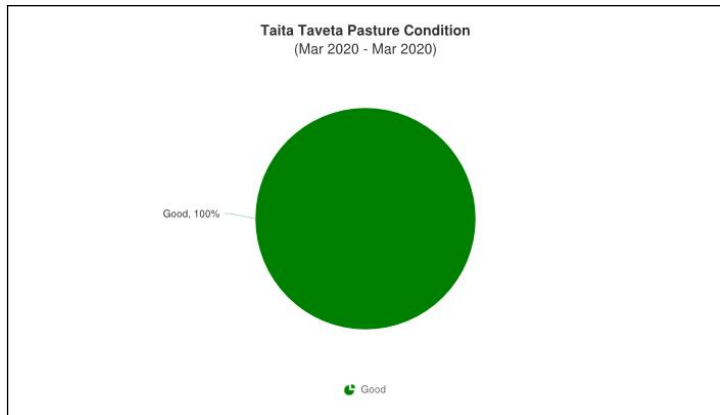
2.1.1 Vegetation Condition Index (VCI)

- The vegetation greenness condition in the county was above the normal range as depicted by a three months vegetation condition index (3M - VCI) of 105.7 (Figure below).
- All livelihood zones depicted vegetation greenness above normal.



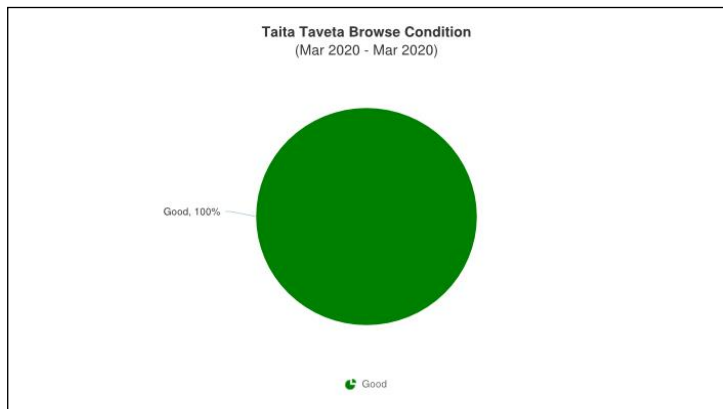
2.1.2 Pasture

- 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

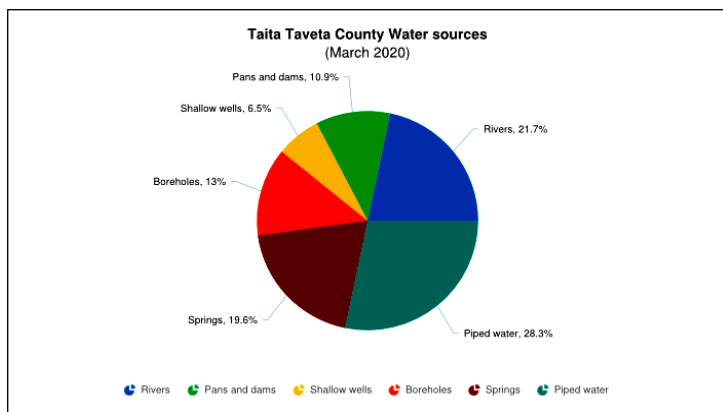
- From community interviews 100 percent of the respondents reported browse condition was good and above normal.
- Compared to the previous month, the browse condition remained good.
- Available browse is expected to cater for livestock for the next four to five months.



2.2 WATER RESOURCE

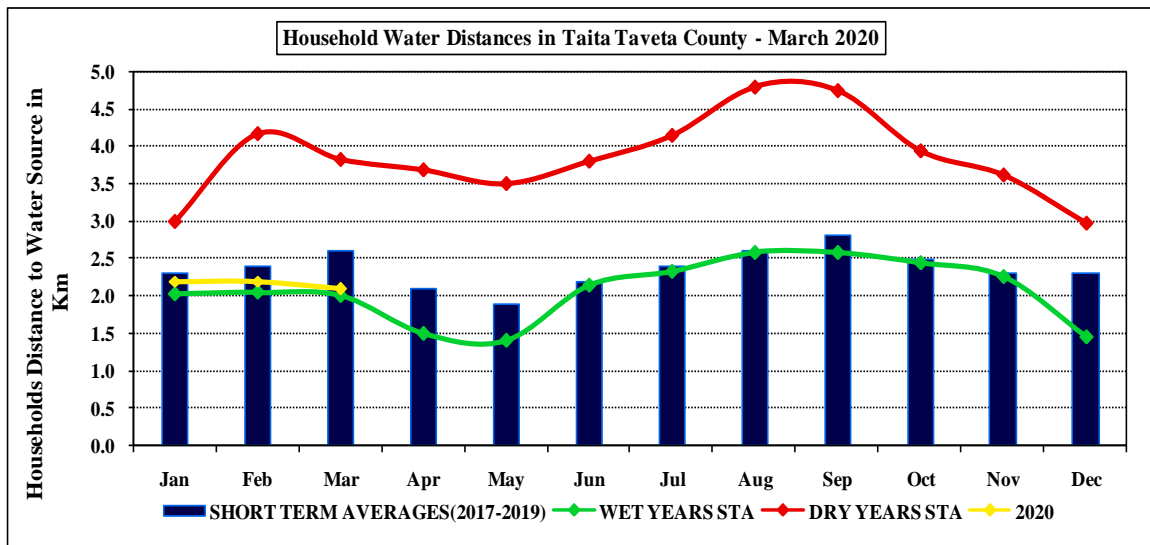
2.2.1 Sources

- The main sources of water currently in use by both human beings and livestock were piped water systems, rivers, boreholes, springs, pans and dams and shallow wells and were relied upon by 28.3, 21.7, 13, 19.6, 10.9 and 6.5 percent of the households respectively.
- In comparison to previous month, the proportions remained relatively the same.
- 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 below short term average by 19 percent as indicated in the graph below. The short distance reported was due to recharge of water sources from rains being experienced in the county.

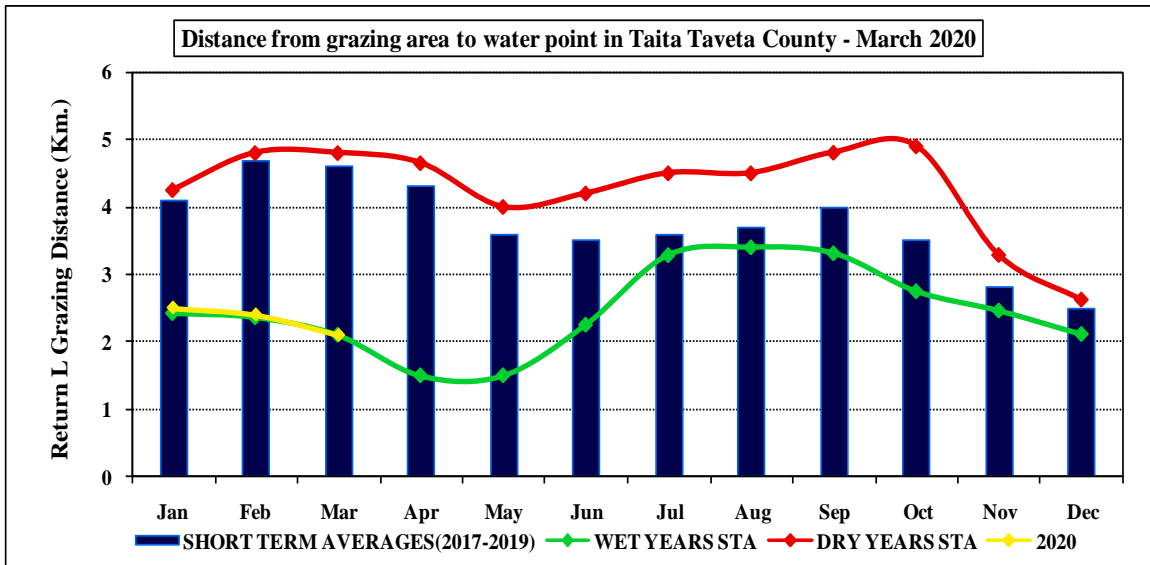


n=21 Key Informants

- The county average water consumption per person per day (pppd) remained stable at 17 litres and varied across livelihood zones with households in mixed farming: horticulture/ dairy livelihood zone and mixed farming: irrigated cropping/ livestock livelihood zone reporting 20 and 19.1 litres pppd respectively compared to 15.4 litres pppd in mixed farming: food crops/ livestock livelihood zone.
- Water retailed at Kshs 2 per 20 litre jerry can at source and approximately 65 percent of the households purchased water. Another estimated two percent of the household interviewed relied on vendors for water supply and price per jerry can ranged from Kshs 5-20 depending on distances and this was noted mainly in Bura Ward.
- 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 and boiling and were practised by 97 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 11.4 percent in food crop/ livestock zone and 2.9 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 compared to 2.4 km posted in the previous month and below the short term average by 54 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

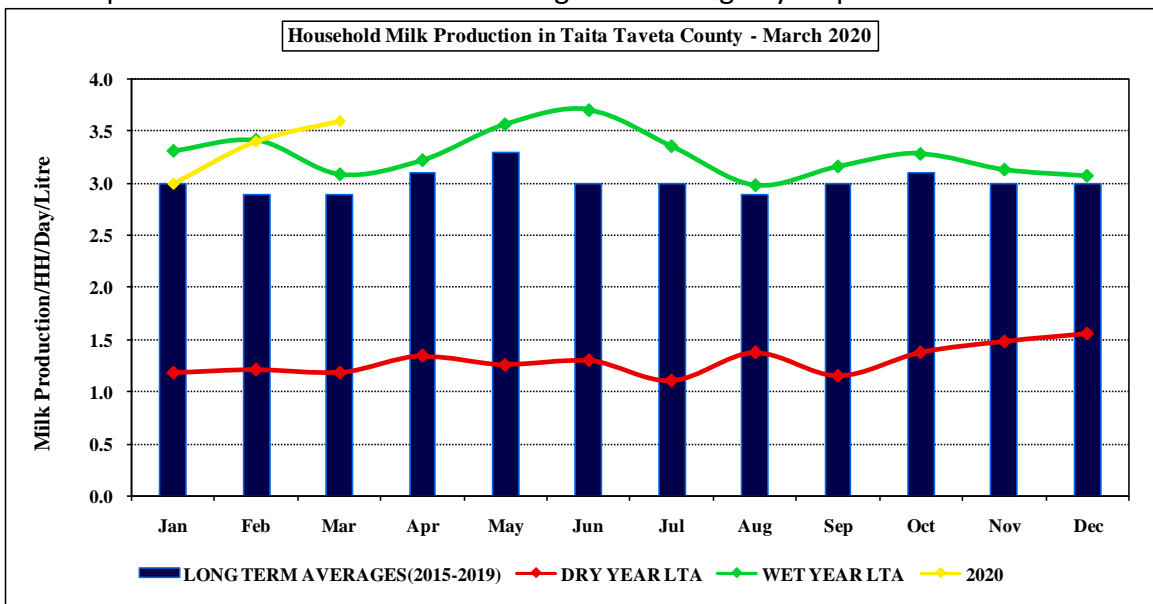
3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body condition for all species was good across all livelihood zones and 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 increased slightly to 3.6 litres from 3.4 litres in previous month and above the long term average by 24 percent.



n=210 HHs

- Mixed farming: horticulture/ dairy livelihood zone milk production was at 7.2 litres, in the mixed farming: irrigated cropping/ livestock livelihood zone at 3.6 litres and lowest at 1.9 litres in the mixed farming: food crop/ livestock livelihood zone.

3.2 RAIN-FED CROP PRODUCTION

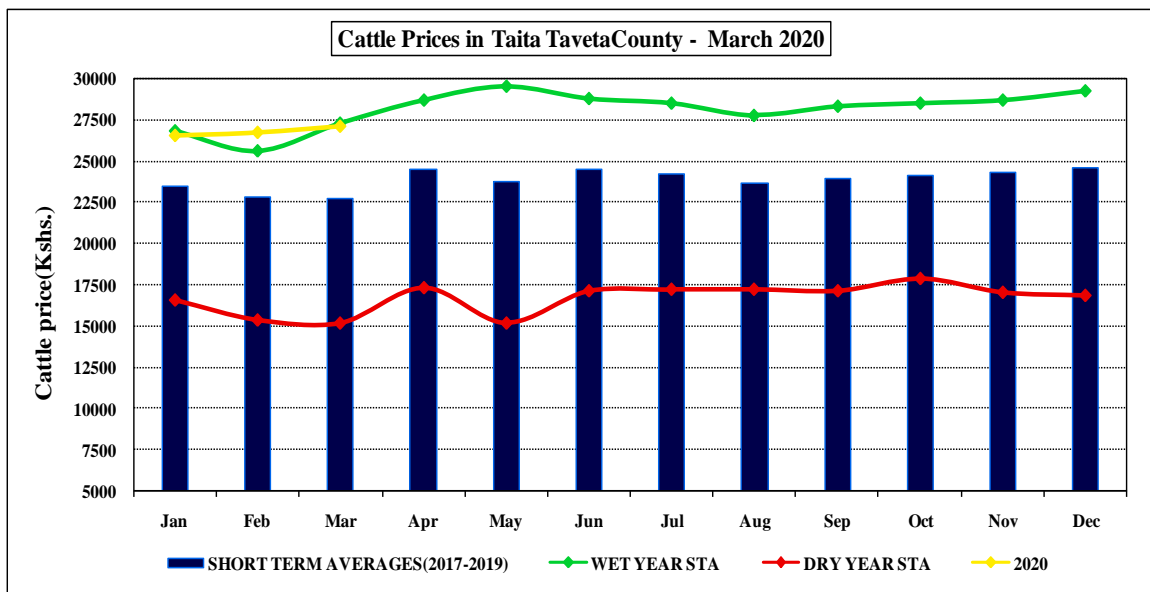
3.2.1 Stage and Condition of food Crops

- Farmers were busy planting and others preparing their farms.
- In some areas early planted crops (maize, green grams, cowpeas and beans) were already at the germination and some maize was at knee high stage.
- The crop condition was good.

4. MARKET PERFORMANCE

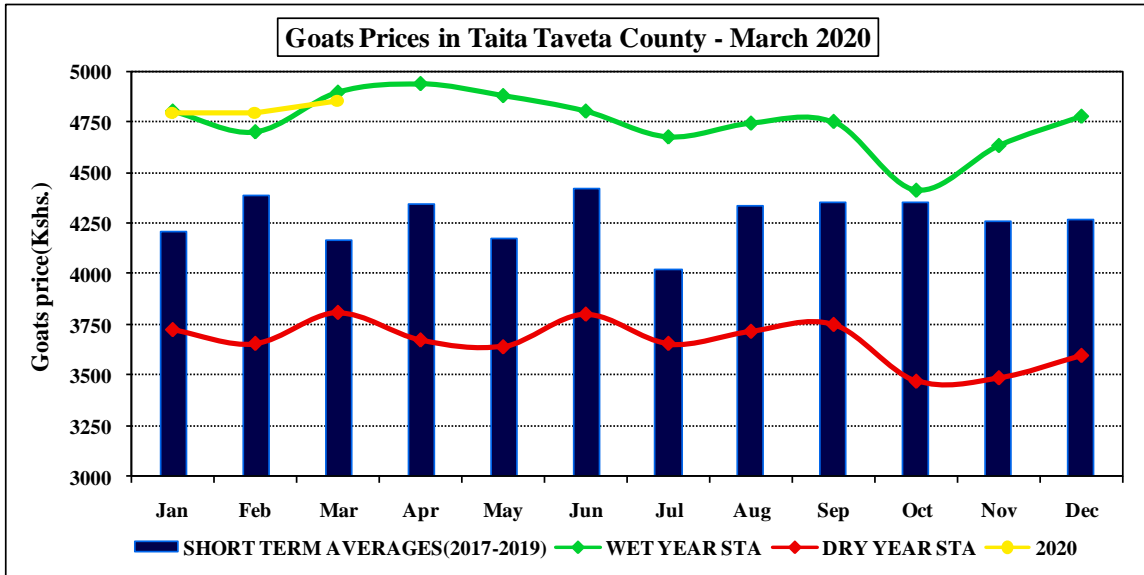
4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices



- The average market price of a three-year-old bull was Kshs 27,143, a slight increase compared to Kshs 26,762 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.
- 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 22,000.
- Compared to the short term Average, the county average price was higher by 19 percent.

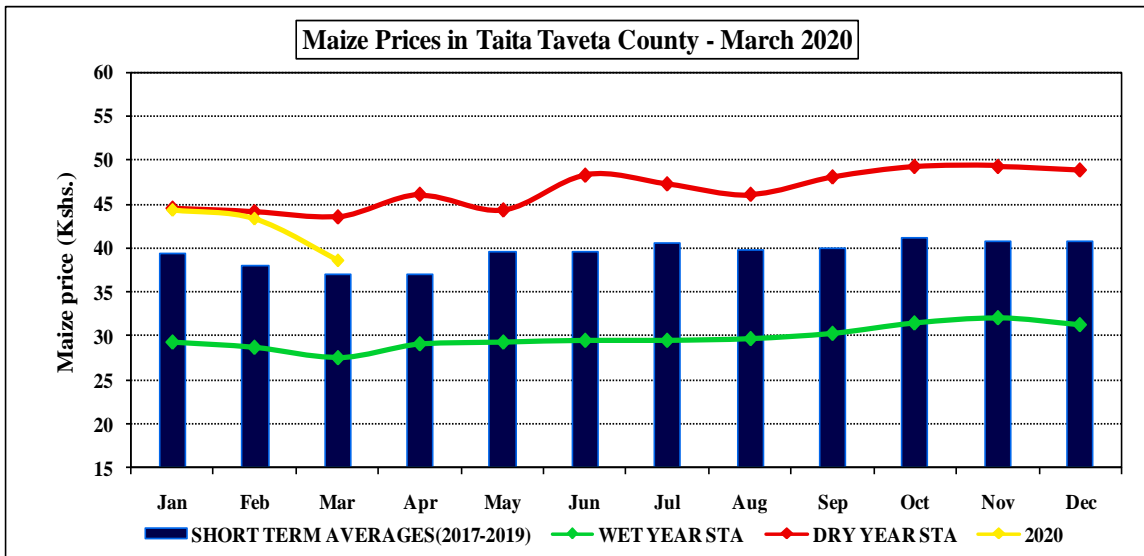
4.1.2 Goat Prices



- The county average market price of a two-year-old goat remained stable at Kshs 4,800.
- 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 4,000 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 17 percent.

4.2 CROP PRICES

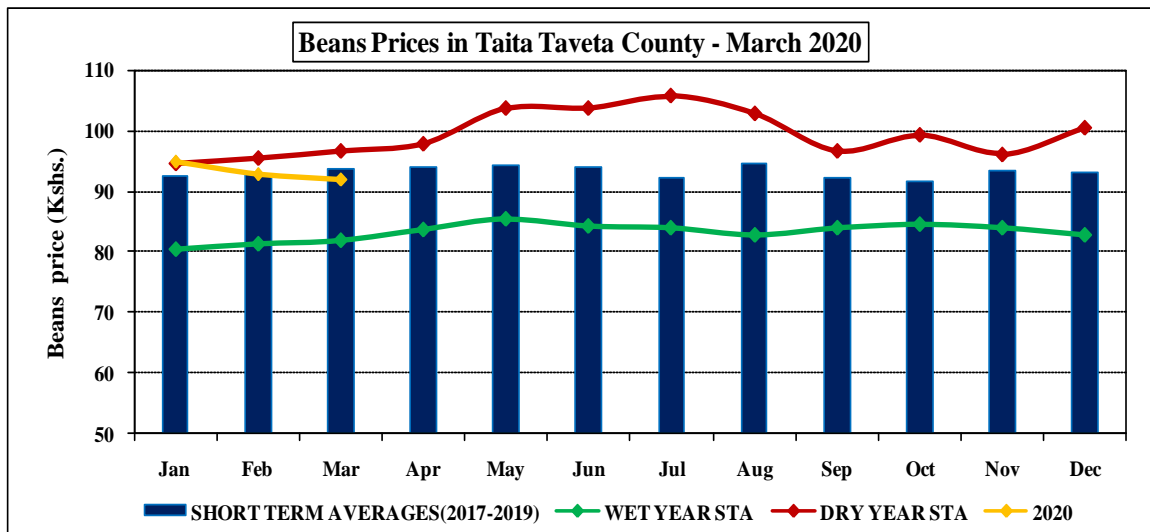
4.2.1 Maize



- The average market price of a kilo of maize dropped to Kshs 38.6 from Kshs 43.3 posted in the previous month and above the short term average by four percent.
- The drop in maize price was due to increased supplies of maize in the market from recent 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.

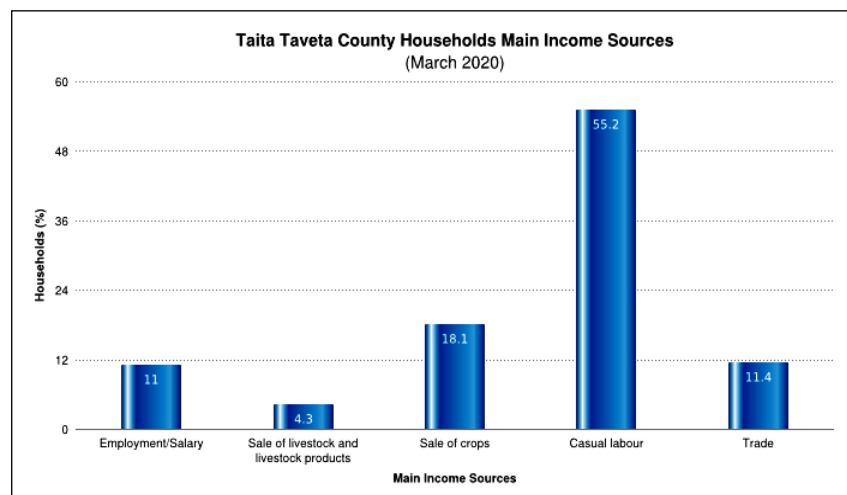
4.2.2 Beans



- 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 the highest price of Kshs 100 while mixed farming: food crop/ livestock livelihood zone and mixed farming: horticulture/dairy livelihood zone recorded a price of Kshs 91 and Kshs 90 respectively.

4.3 INCOME

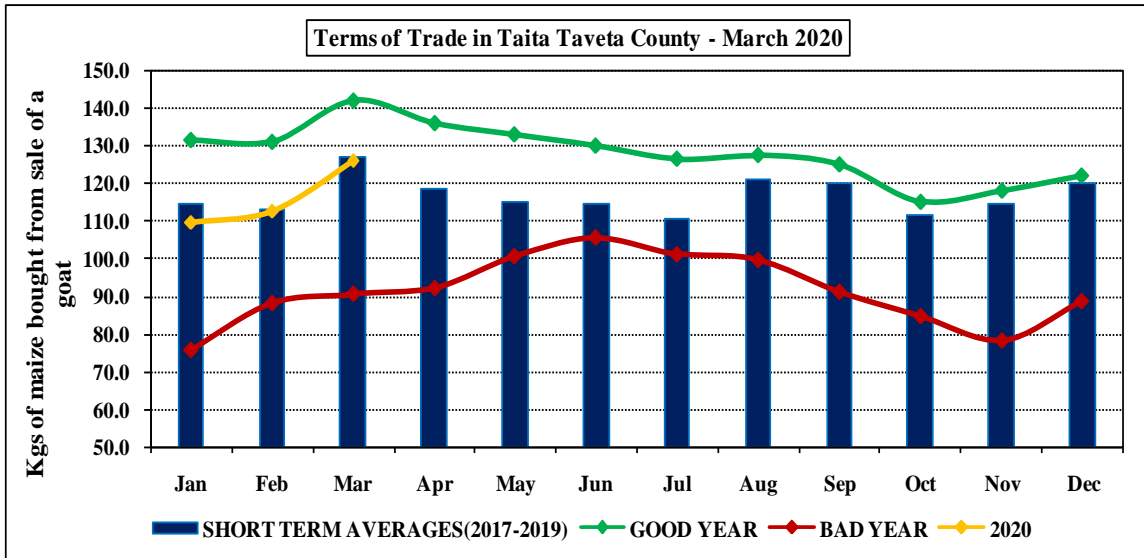
The main source of income was casual labour. Others included; trade, employment, and sale of livestock and livestock products and sale of crops at lower proportions. The average casual labour wage for the county for the month under review was Kshs 3,200.



- 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 building sites and bush clearing on road reserves. To combat COVID-19 all social places like restaurants were closed and workers rendered jobless.

4.4 TERMS OF TRADE (GOAT PRICE VERSUS MAIZE PRICE)

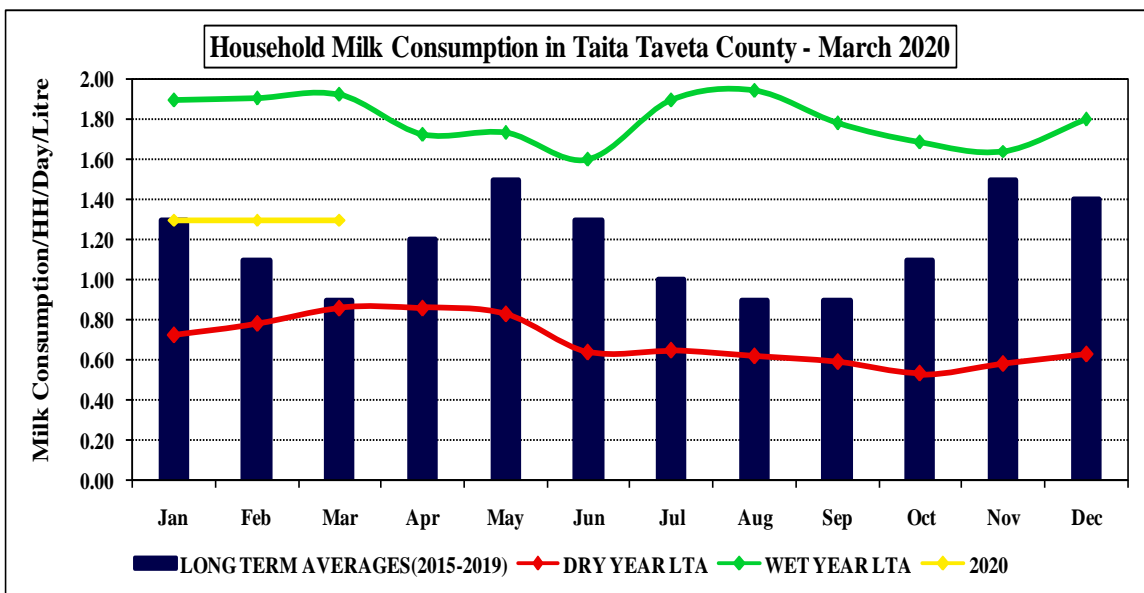


- Terms of trade (ToT) were favourable and proceeds of sale of goat could purchase 125.9 kilograms of maize compared to 112.1 posted in the previous month and similar to the short term average.
- ToT ratios by livelihood zone were as follows; mixed farming: horticulture/ dairy livelihood zone at 185.7, mixed farming: food crops/livestock livelihood zone at 116.3 and mixed farming: irrigated cropping/livestock livelihood zone recorded at 114.3.

5. FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- The average milk consumption per household per day remained stable at 1.3 litres as posted in the previous month and above the long term mean by 38 percent.

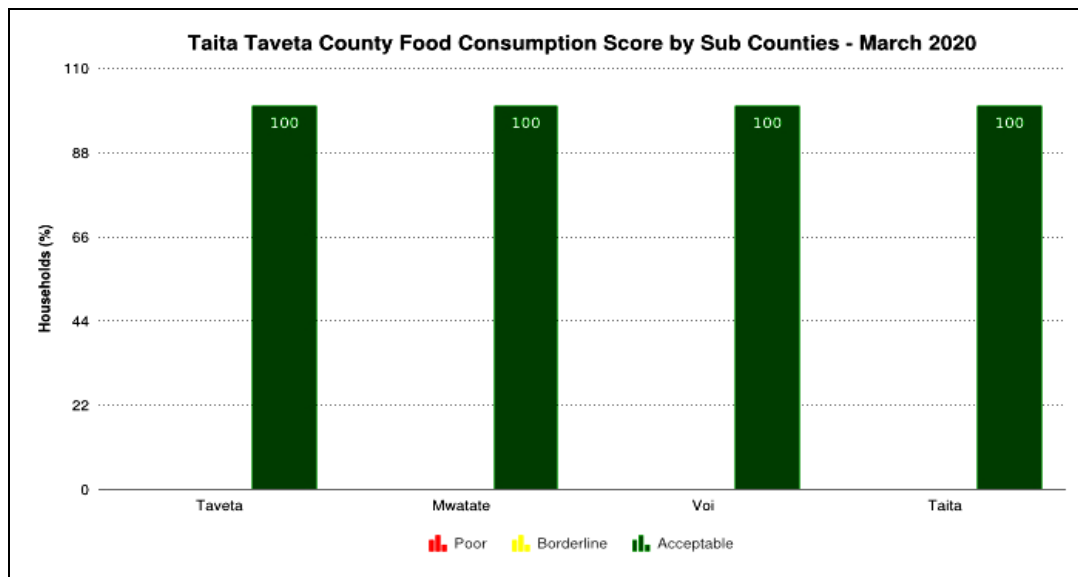


n=210 HHs

- Milk consumption per household per day in regard to livelihood zones; mixed farming: food crops/livestock (1.1 litres), mixed farming: horticulture/ dairy (1.4 litres) and mixed farming: irrigated cropping/livestock (1.1 litres).

5.2 FOOD CONSUMPTION SCORE

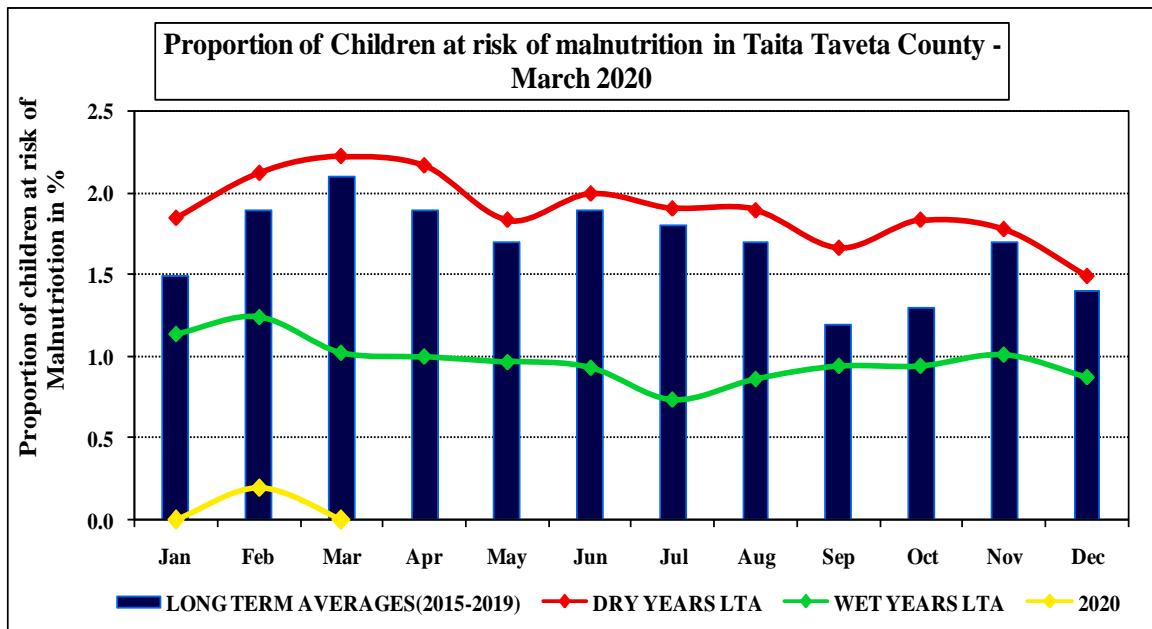
- All households remained in the acceptable food consumption score (FCS) due to harvests experienced in the county.
- Compared to a similar period in 2019 where prevalence was at 60 and 40 percent for acceptable and borderline FCS respectively, household consumption for the month under review was much better given that all households were in the acceptable food consumption category.
- The current mean food consumption score depicted an improving trend at 83 compared to 69 posted in the previous month.
- The mean FCS score was high in the mixed farming: irrigated cropping/ livestock livelihood zone recorded at 87 followed by mixed farming: Food crop/livestock zone at 83 and mixed farming; Horticulture/dairy livelihood zone at 81. 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 591 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

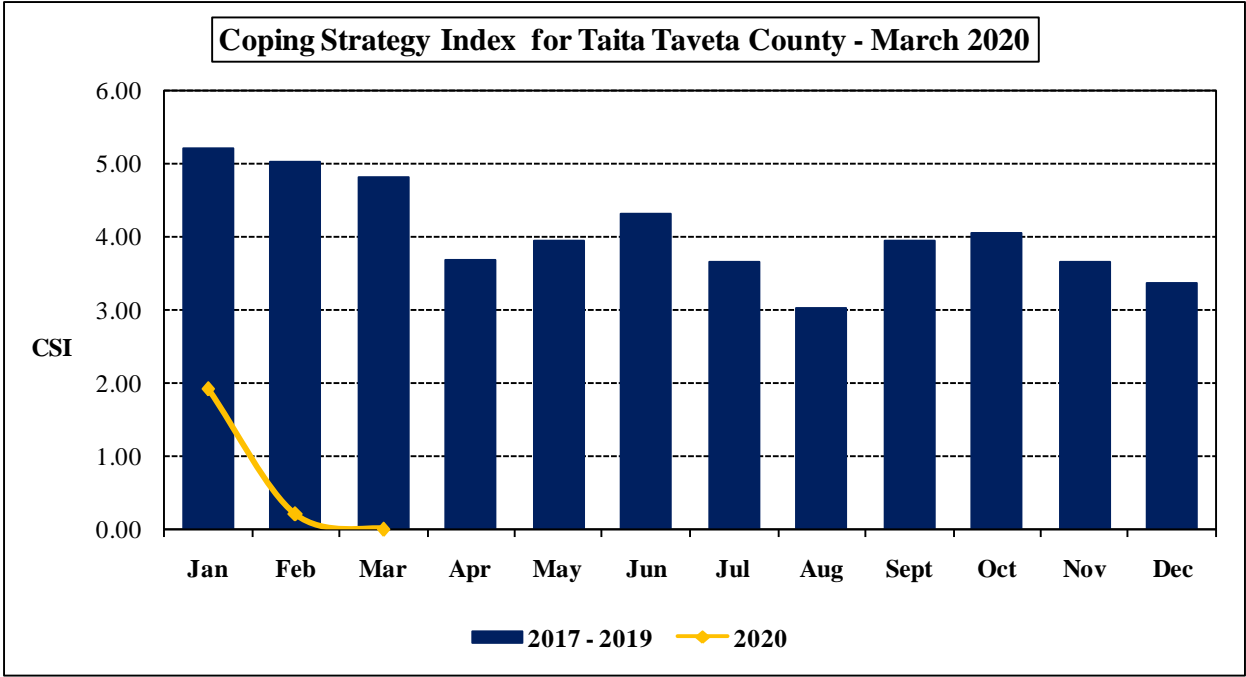
- There were no cases of children aged below five years with MUAC - at risk of malnutrition (125 – 134 mm) as shown in the graph above. The graph also indicates a slight decrease compared to the previous month where 0.2 percent cases were reported.
- No cases of GAM by MUAC (moderate 115-124mm) and (Severe<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 591 sampled children two 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 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 4.7.
- 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"> 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
	<ul style="list-style-type: none"> Construction of Nakruto water project 	CGTT and KRCS
Multi-Sectoral		
Provision of food and cash transfers to the affected urban population due to economic disruption led by outbreak of COVID-19	<ul style="list-style-type: none"> Planning phase where 17,034 persons will be targeted in the urban areas of Taveta, Voi, Mwatate and Wundanyi 	National and County Government
Livestock Sector		
Improving livestock husbandry	<ul style="list-style-type: none"> Capacity building on pasture and fodder conservation through trainings and field days 	Department of Livestock

7. EMERGING ISSUES

7.1 Insecurity/ Conflict/ Human Displacement

- Global outbreak of COVID-19 resulted to closure of major markets like Voi and cross border market of Taveta Sub County bordering Tanzania and most casual workers were rendered jobless.
- Enforcement of social distancing and countrywide 7:00 pm curfew resulted to multiple detrimental economic effects such as closure of small scale businesses where large proportion of the urban population generate income to purchase food and other expenses. This will also impact negatively on the mining sector.

7.2 Migration

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

7.3 FOOD SECURITY PROGNOSIS

- The above normal long rains are expected to support both cropping and forage growth.
- The food stocks are expected to provide farmers with food and income during the ongoing season.
- The urban population is expected to get supplies from the market from the county due to harvest experienced in the last season.
- Availability of milk is expected to improve nutrition of household members.
- Prices of all livestock species are projected to remain above normal due to good body condition.
- Water availability and accessibility is projected to be good and distances to remain below the long term average.
- Increased income from selling of farm produce will enable household members purchase other food groups with high value like milk, meat, eggs and fruits and hence promote nutritional levels.

8. RECOMMENDATIONS

Multi-Sectoral

- Sensitize all population on the COVID-19 pandemic and its prevention
- Provision of food assistance to the affected urban population
- Provision of PPE, sanitizers and health equipments to combat the COVID-19 pandemic

Agriculture and Livestock Sector

- Crop protection against pest and diseases
- Intensify campaigns on soil fertility management
- Sensitisation on flash flood management
- 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
- Promote roof water catchment through installation of gutters in all learning and health institutions