

# National Drought Management Authority

## TAITA TAVETA COUNTY

### DROUGHT EARLY WARNING BULLETIN FOR FEBRUARY 2018



A Vision 2030 Flagship Project



#### FEBRUARY 2018 EW PHASE

**Drought Status: ALERT**



**Maandalizi ya mapema**

#### Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming: Food Crops/ Livestock	Alert	Worsening
Mixed Farming: Food Crops/ Horticulture/Dairy	Alert	Stable
Mixed Farming: Irrigated Cropping/ Livestock/Food Crops	Alert	Stable
Casual Waged Labour: Sisal Farms	Alert	Stable
National Park	Alert	Stable
Trade/Business	Normal	Stable
County	Alert	Worsening
Biophysical Indicators	Value	Normal Range/ Value
Rainfall (% of Normal)	69	80 - 120
VCI-3Month	23.06	35-50
Production indicators	Value	Normal
Maize Crop Condition	Ploughing	Ploughing
Livestock Body Condition for cattle	Fair	Good
Milk Production per HH/ day	2.7	3.0 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	119.1	81.3
Milk Consumption per HH/ day	1.2	0.8Litres
Return distance to water sources	2.50	3.4 Km
Return distance to grazing areas	5.80	4.0 Km
Cost of water (20 litres)	5.00	< Kshs 5.00
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	2.50	<3.20

#### **Drought Situation & EW Phase Classification**

##### Biophysical Indicators

- The county received minimal rains in the month under review.
- The rains were experienced in the Tsavo West National Park.
- The pasture and browse condition is good to fair and on a deteriorating trend.
- County vegetation condition index is below normal depicting moderate vegetation deficit. Taveta Sub County is in the severe deficit band.

##### Socio Economic Indicators (Impact Indicators)

##### Production Indicators

- Farmers were busy ploughing and other harvesting maize.
- Sheep and goats body condition remained good while that of cattle was fair.
- Milk production per HH per day was below normal.
- Livestock migration patterns were normal.

##### Access Indicators

- Terms of Trade were favourable and above the normal range.
- Milk consumption per HH per day was above normal.
- Distance to water source was below the normal range.
- Livestock grazing distances were above the normal range.

##### Utilization Indicators

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

#### Seasonal Calendar

<ul style="list-style-type: none"> <li>▪ Short rains harvests</li> <li>▪ Increased HH Food Stocks</li> <li>▪ Short dry spell</li> <li>▪ Reduced milk yields</li> <li>▪ Land preparation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Planting/Weeding</li> <li>▪ Long rains</li> <li>▪ High Calving Rate</li> <li>▪ Milk Yields Increase</li> </ul>	<ul style="list-style-type: none"> <li>▪ Long rains harvests</li> <li>▪ Increased HH Food</li> <li>▪ A long dry spell</li> <li>▪ Land preparation</li> <li>▪ Kidding (Sept)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Short rains</li> <li>▪ Planting/weeding</li> </ul>								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

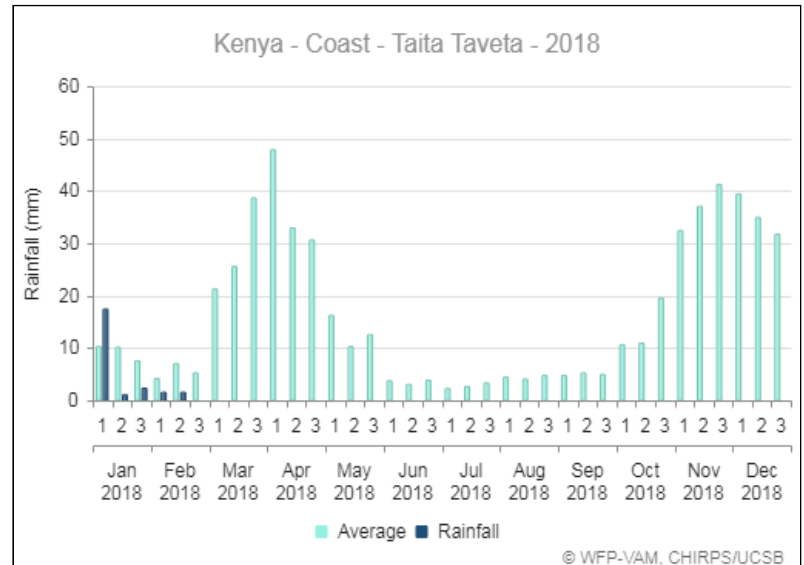
# 1. CLIMATIC CONDITIONS

## 1.1 RAINFALL PERFORMANCE

- The county remained dry except for the park that received intermittent showers during the month under review.

## 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 for dekad one was at 80% and dekad two 69%.
- Dekad one and two recorded 1.5 mm each which was below the long term average.
- The county experienced high temperatures both in the highlands and the lowlands.

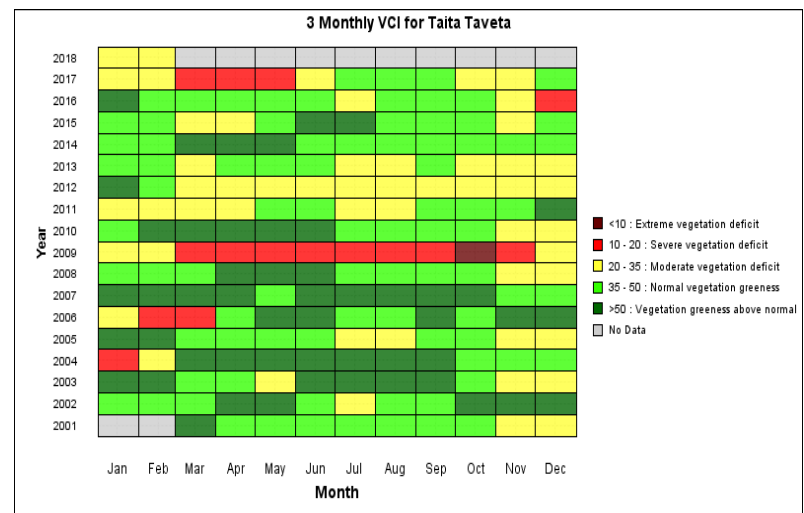


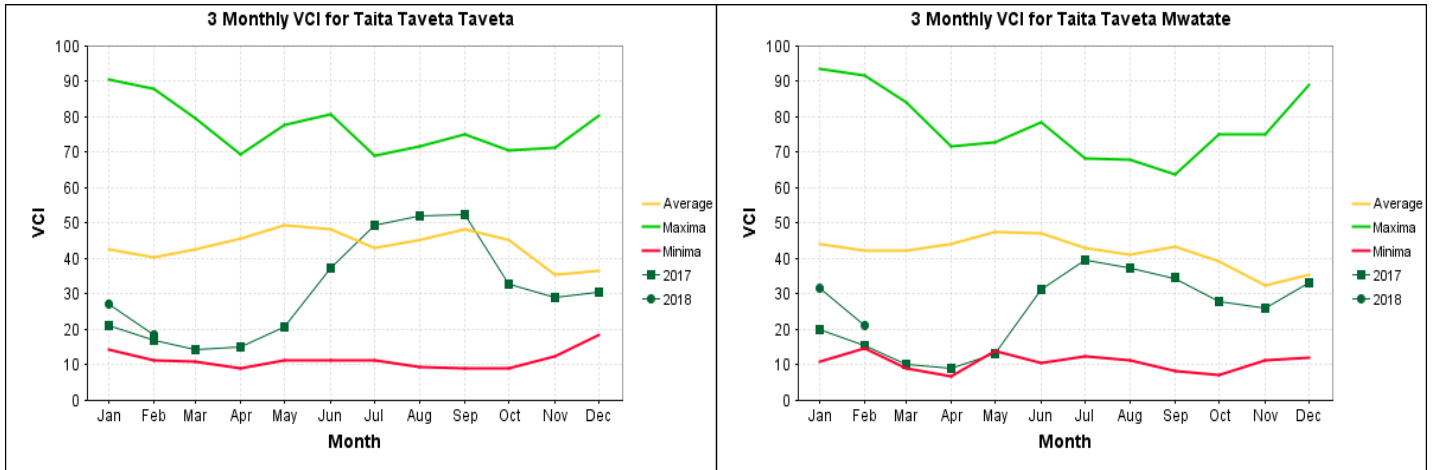
# 2. IMPACTS ON VEGETATION AND WATER

## 2.1 VEGETATION CONDITION

### 2.1.1 Vegetation Condition Index (VCI)

- The county vegetation greenness remained in the deficit category.
- The county recorded VCI value of 23.06 depicting moderate vegetation deficit.
- The situation is similar to the previous year.
- All Sub Counties depict vegetation deficit. Worst hit is Taveta Sub County which is in the severe deficit band. The trend is downwards compared to previous month.
- This is shown in figure 1 where Taveta and Mwatate Sub Counties recorded the lowest VCI of 18.49 and 21.06 respectively.

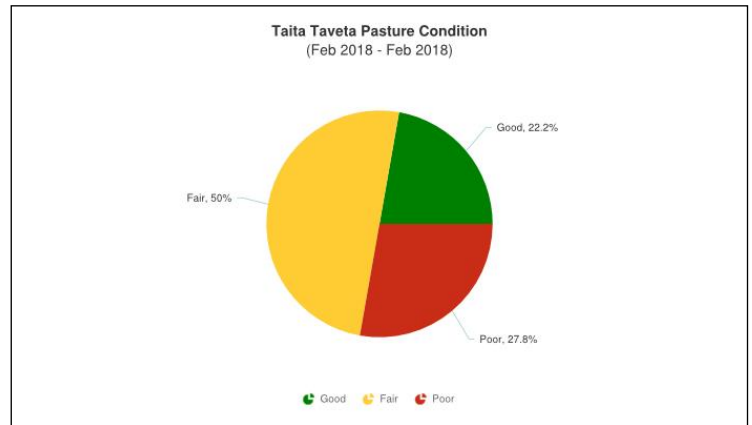




**Figure 1: Three months Vegetation Condition Index**

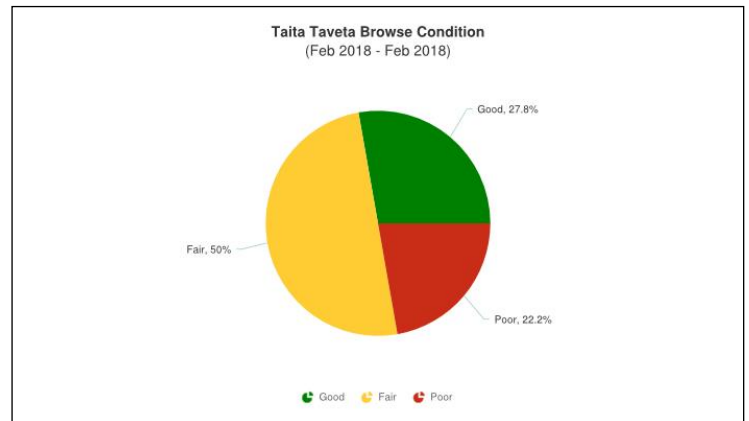
**2.1.2 Pasture**

- Based on community interviews conducted pasture condition was varied.
- Out of these interviews 22.2%, 50% and 27.8% indicated pasture condition was good, fair and poor respectively compared to 55%, 30% and 15% respectively in the previous month.
- This shows deterioration in quality and quantity condition of pasture.
- Pasture condition is below normal for this time of the year.
- Available pasture is expected to last for the next one month.
- Relatively, pasture stress is evident in areas of Kishushe in Wumingu Ward, Marungu Ward, Mbulia in Ngolia Ward, Mahandakini in Challa Ward and Orkung in Mata Ward.



**2.1.3 Browse**

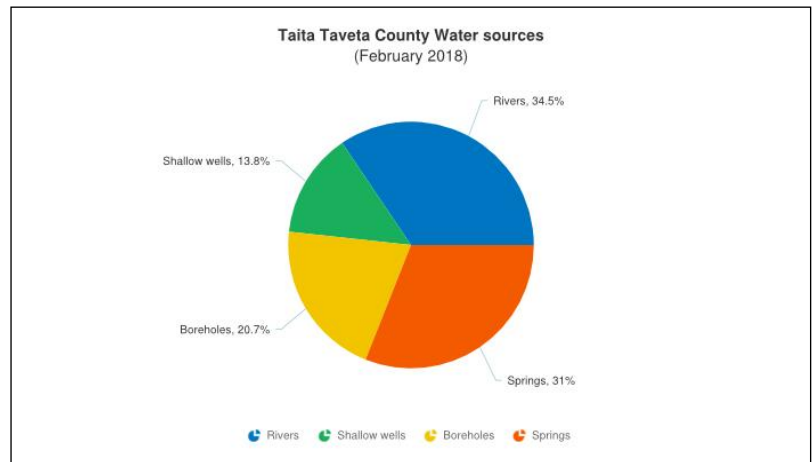
- The browse condition ranged from good to fair.
- In regard to proportions during community interviews 27.8%, 50% and 22.2% indicated browse condition was good, fair and poor respectively compared to 50%, 35% and 15% respectively in the previous month.
- This shows a downward trend and this is below normal for this time of the year.
- The available browse is expected to last for at least two months.
- No constraints were observed in accessing browse in the month under review.



## 2.2 WATER RESOURCE

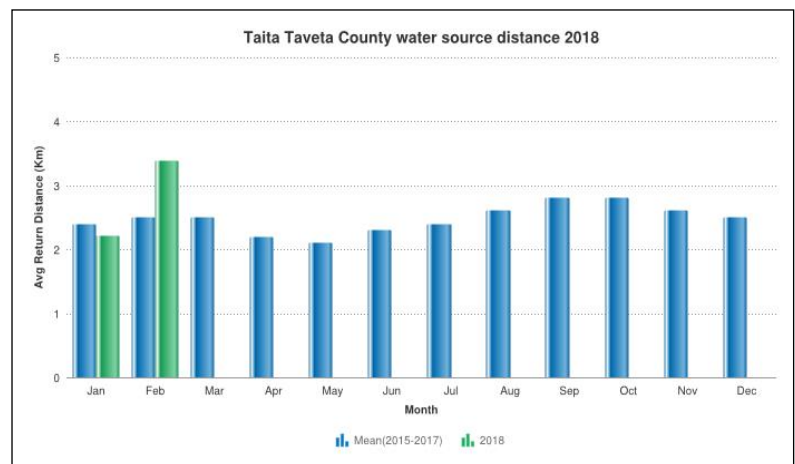
### 2.2.1 Sources

- The major sources of water were rivers, springs and shallow wells.
- Out of field observation open water sources capacity ranged between 40 and 50 percent with the exception of mixed farming: food crop/ livestock livelihood zone where some water pans have dried up due to evapotranspiration.
- Water in the open water sources is expected to last until the end of March.
- Strategic water sources like Mwatate dam and Manoa water pan water levels have dwindled to below normal at this time of the year. Ziwa La Ngo'mbe water pan has dried up.



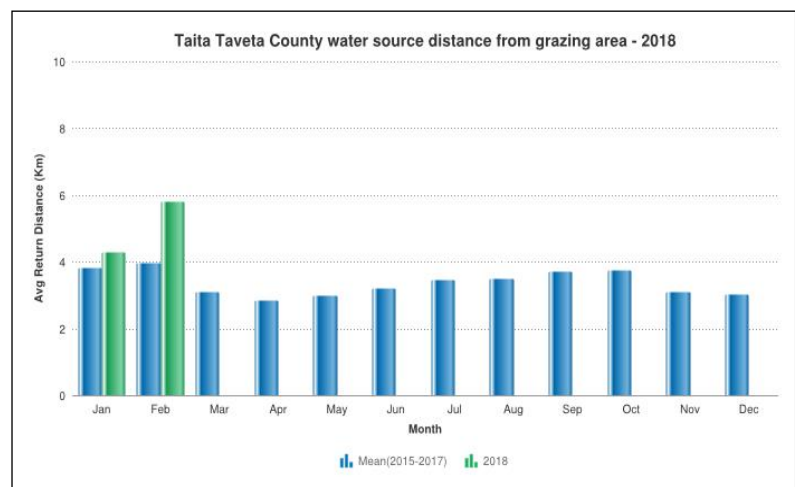
### 2.2.2 Household access to Water

- Return distances increased to 3.4 km from 2.9 km in the previous month. Indicative of 14.7% rise.
- The distance is longer by 26.5% compared to the long term average.
- The average cost of 20 litre jerry can was at Kshs 5 which is normal at this time of the year.
- Approximately, 61 percent of the households purchased water compared to 55 percent in the previous month.



### 2.2.3 Livestock Trekking distances to Grazing Areas

- Compared to previous month average return distance by livestock to grazing areas rose by 34%.
- The distance is longer by 35% compared to the long term average.
- Long trekking distances were reported in Ngolia, Kasigau and Challa Wards in the mixed farming: food crop/ livestock livelihood zone.
- In mixed farming: horticulture/ dairy and irrigated/ livestock livelihood zones livestock watering was twice per day which is normal at this time of the year.



### 3. PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

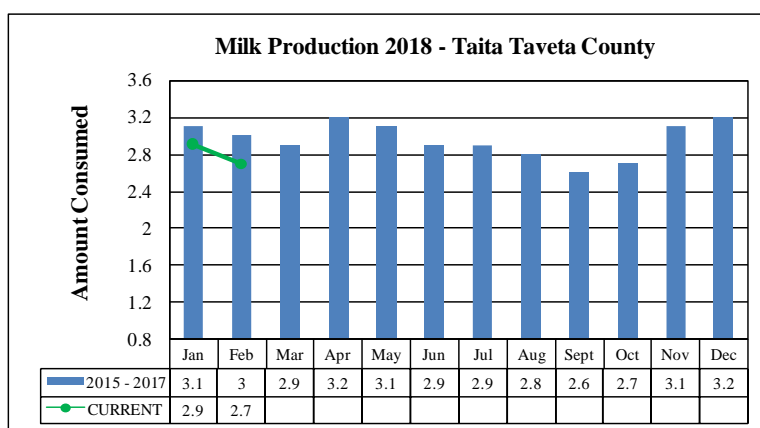
- In the mixed farming: horticulture/ dairy and mixed farming: irrigated cropping/ livestock livelihood zones cattle body condition was fair while that of goat was good.
- In the mixed farming: food crop/livestock livelihood zone the cattle body condition was categorized as good, fair and poor.
- Based on field visits, poor body condition especially for cattle was observed in Kishushe/Wumingu, Mata, Ngolia and Marungu Wards.

##### 3.1.2 Livestock Diseases

- No major cases of livestock diseases were reported.

##### 3.1.3 Milk Production

- The average milk production per household per day was 2.7 litres.
- Milk production was high in the upper zone of Wumingu Ward since farmers are zero grazers while low production was reported in rain fed areas of Ngolia Ward where quality and quantity of pasture is below normal.
- Average milk price per litre at household level is at Ksh 42.00



#### 3.2 RAIN-FED CROP PRODUCTION

##### 3.2.1 Stage and Condition of food Crops

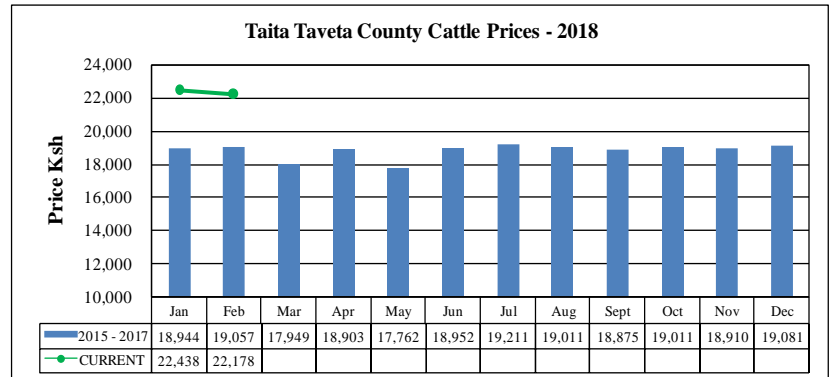
- In the mixed farming: food crop/ livestock livelihood zones a few farmers were harvesting maize while others were ploughing. Maize stovers were stocked for livestock feeding.
- In the mixed farming: horticulture/dairy livelihood zone farmers are harvesting maize and kales.
- In the mixed farming: Irrigated cropping/ livestock livelihood zone farmers are busy harvesting maize.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

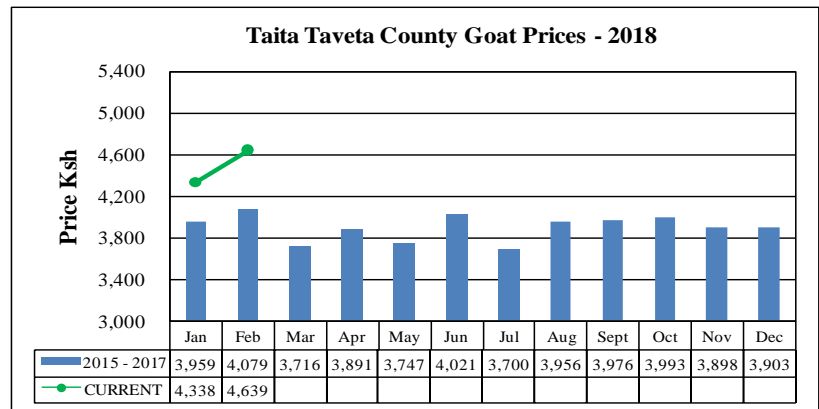
#### 4.1.1 Cattle Prices

- The average market price of a three year old bull decreased by 2 percent to Kshs 22,178 compared to the previous month.
- The price is above normal at this time of the year.
- This could be attributed to good to fair body condition of cattle.
- Compared to the long term mean, the average price was higher by 23%.



#### 4.1.2 Goat Prices

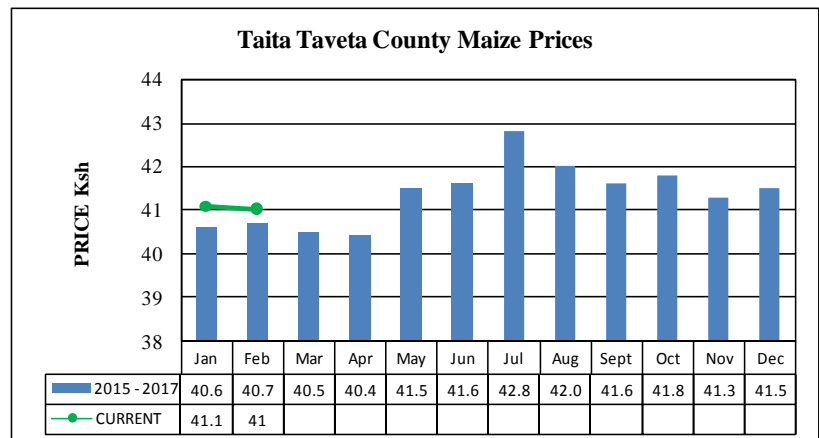
- The average market price of two year goat rose by 7 percent to Kshs 4,639 compared to the previous month.
- The price is above normal at this time of the year.
- This could be attributed to good body condition of goats in all livelihood zones.
- Compared to long term mean, the average price was higher by 13.7%.



## 4.2 CROP PRICES

### 4.2.1 Maize

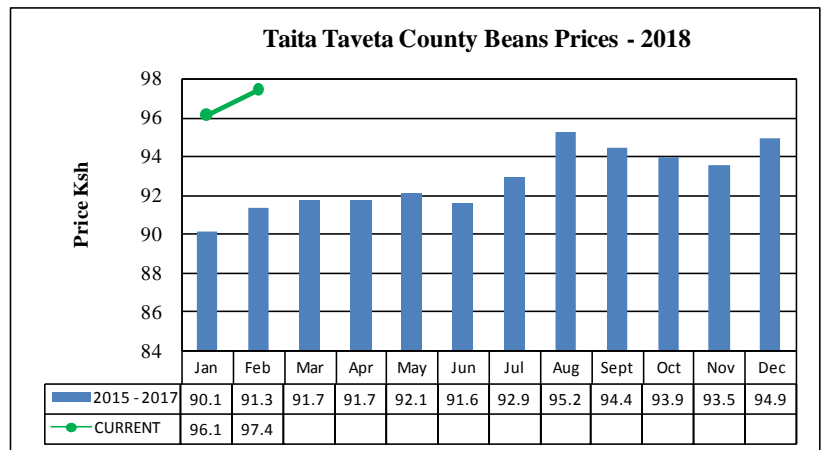
- The average market price of a kilo of maize remained stable at Kshs 41.00
- The prices ranged from Kshs 25.00 to Kshs 30.00 in the mixed farming: irrigated /livestock livelihood zone, areas of Challa and Eldoro in Taveta Sub County obtained through black market from Tanzania.
- Highest prices were recorded in the mixed farming: food crops/livestock livelihood zone, Mwakajo, Rukanga and Mwachawaza at Kshs 40.00 to Kshs 50.00 in Voi and Mwatate Sub Counties. High prices are due to poor harvests in these zones.





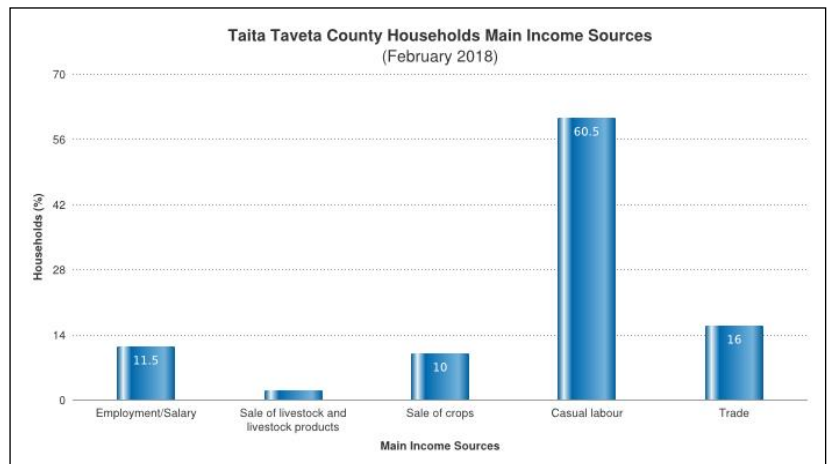
#### 4.2.2 Beans

- Average price of a kilo of beans rose to Kshs 97.40.
- This is due to low harvest experienced and had no positive impact on market price.
- Most supplies in the market are from Uganda.
- Lowest prices were recorded in mixed farming: irrigated cropping/livestock livelihood zone; Challa at Kshs80 - 90 due to harvests from irrigation schemes, while high prices were recorded in the mixed farming: food crops/livestock livelihood zone of Kshs 100 to 120 in Mwakajo, Mwachawaza and Rukanga markets.
- Compared to the long term mean the price was higher by 6.7%.



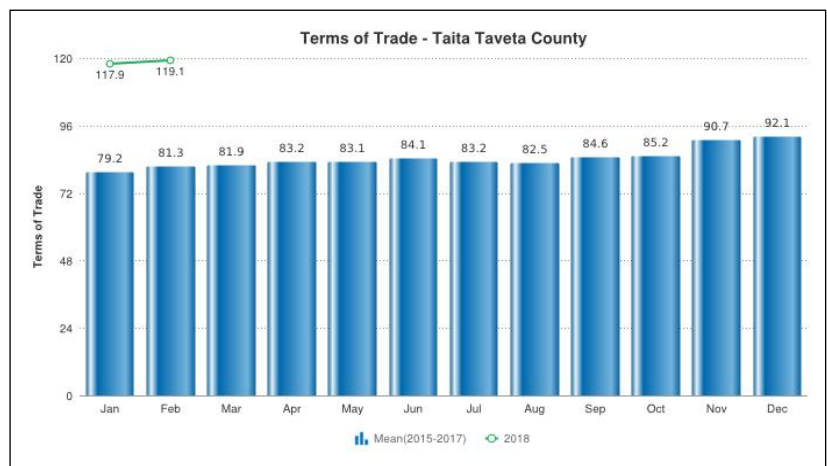
#### 4.3 INCOME

- Household main sources of income were casual labour and trade. Others were sale of crops, employment and sale of livestock products at lower proportions.
- Sources of income compared to previous month remained stable.
- Casual labour opportunities were available in the sisal and banana plantations, mining sector, irrigation schemes, ranches, building sites and town centres.



#### 4.4 TERMS OF TRADE

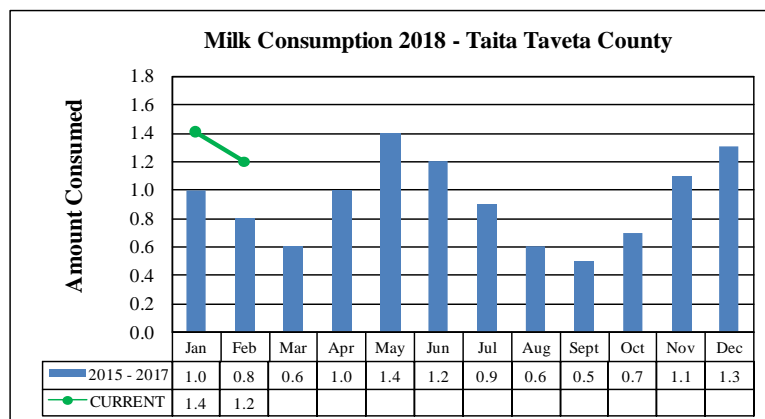
- Terms of trade were favourable and on an upward trend compared to the previous month.
- This is normal at this time of the year given that goat prices remain stable due to good body condition while those of maize are declining.
- Proceeds of sale of goat purchased 119.10 kg of maize.
- Terms of Trade were above the LTM by 46.5%.



## 5. FOOD CONSUMPTION AND NUTRITION STATUS

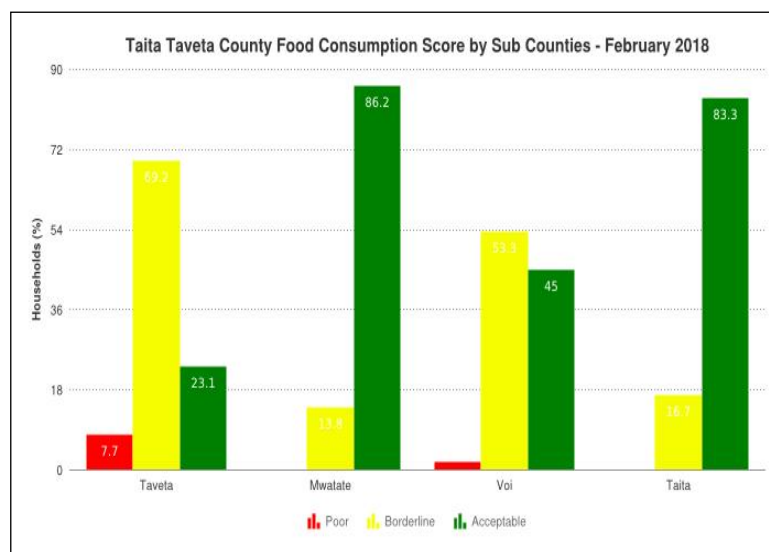
### 5.1 MILK CONSUMPTION

- The milk consumption per household per day has decreased 1.2 litres from 1.4 litres recorded previous month.
- Milk consumption was high by 50 percent compared to LTM.
- The quantity of milk consumed was high in mixed farming: horticulture/dairy livelihood zone Wumingu Ward, while low consumption was recorded in the mixed farming: food crops/livestock livelihood zone Ngolia, Wusi, Kasigau and Challa Wards.



### 5.2 FOOD CONSUMPTION SCORE

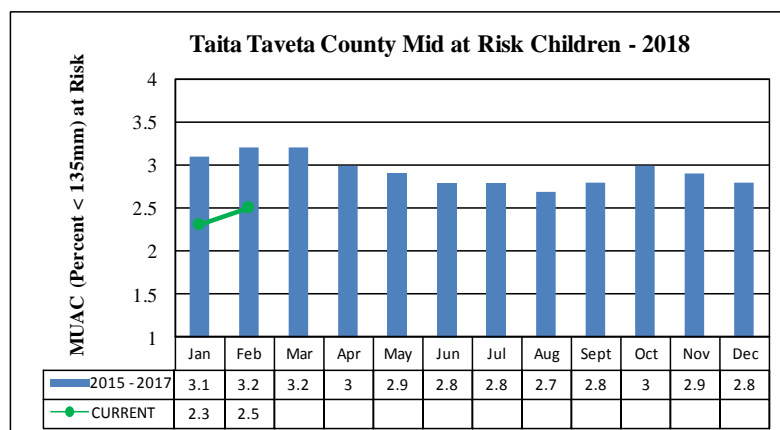
- Approximately 57 percent were in the acceptable food consumption category indicating that they were consuming an acceptable diet in terms of meal frequency, dietary diversity, nutritional value and amount. The proportions of households under borderline and poor food consumption category were 40.5 percent and 2.5 percent respectively.
- Food consumption remained stable compared to previous month, where 59 percent of households had acceptable food consumption and 37 percent were in borderline food consumption category.



## 5.3 HEALTH AND NUTRITION STATUS

### 5.3.1 Nutrition Status

- Mid Upper Arm Circumference (MUAC) measurement for children below five years indicated 2.5 percent were at risk of malnutrition which is a slight increase from the previous month and below the long term average by 22 percent.
- Compared to long term mean the trend is normal.



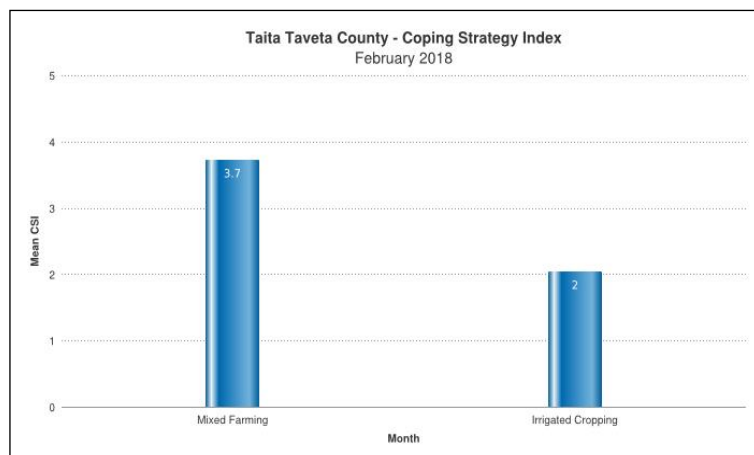


### 5.3.2 Health

- Cases of fever with chills like malaria were at 6.8% compared to 6.4% that was posted in the previous month.

### 5.3.3 Coping Strategies

- The CSI for the month under review was recorded at 3.54 compared to 4.56 posted in the previous month.
- This change was indicating households employed less coping strategies.
- This could be attributed to harvest experienced in varied livelihood zones.
- Households engaged in various coping strategies including charcoal burning, petty trade and casual waged labour.



## 6.0 CURRENT INTERVENTION MEASURES (ACTION)

### 6.1 FOOD AND NON FOOD INTERVENTIONS

#### 6.1.1 Sectoral

Intervention	Activities
<b>Social Protection</b>	
Asset Creation Program	<ul style="list-style-type: none"> <li>• CFA program was ongoing during the lean months</li> </ul>
Multi - Sectoral	<ul style="list-style-type: none"> <li>• Mainstreaming EDE to CIDP II plus integrated planning with other stakeholders in the county</li> </ul>

## 7.0 EMERGING ISSUES

### 7.1 HOTSPOTS

- Areas that experienced long dry spell since December 2016 plus minimal rains during the short rains 2017 and require constant food or non food assistance are Kishushe, Mwaroko, Sangenyi and Mlilo in Werugha Ward, Mbulia in Ngolia Ward, Marungu Ward, Mgeno in Mwatate Ward and Mahandakini in Challa Ward and Mata Ward.

### 7.2 MIGRATION

- Herders in Taveta Sub County have moved to the park in search of pasture.

### 7.3 CONFLICT

- Elephant menace continued to be reported in areas bordering the park.

### 7.4 FOOD SECURITY PROGNOSIS

- In the next one month food security situation is expected to improve given that the county is projected experience off season rains according to the Kenya Meteorological Department forecast released on February 27, 2018.

- Heavy downpours are expected to be realized from March 01 – 04.
- Farmers are expected to start planting and those who dry planted would have an added advantage.
- The rains are expected to promote production of short term maturing crops e.g. green leafy vegetables.
- Quality and quantity of pasture and browse expected to improve in most areas due to off season rains.
- The rains are expected to recharge open water sources and support replenishment of springs and shallow wells for domestic, livestock and wildlife use.
- Trekking distances are projected to shorten due to availability of water.
- Cattle body condition will improve and enhance milk production.
- Milk production will in the long run impact positively on utilization of children less than five years.

## **8. RECOMMENDATIONS**

### **Agriculture and Livestock Sector**

- Provision of post harvest management services.
- Crop protection especially in irrigated zone.
- Pasture conservation where pasture condition is good.
- Provision of supplementary livestock feeds in hot spot areas.

### **Water and Irrigation Sector**

- Provision of water treatment tabs mainly in rain fed lowlands.
- Purchase of water storage tanks.

### **Health and Nutrition**

- Strengthen malnutrition screening and active case search and integrated management of acute malnutrition especially in the lowlands of the county.