

National Drought Management Authority

TAITA TAVETA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JUNE 2017



A Vision 2030 Flagship Project



June EW PHASE

Drought Status: ALERT



Maandalizi ya mapema

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming: Food Crops/ Livestock	Alert	Improving
Mixed Farming: Food Crops/ Horticulture/Dairy	Alert	Improving
Mixed Farming: Irrigated Cropping/ Livestock/Food Crops	Alert	Improving
Casual Waged Labour: Sisal Farms	Alert	Improving
National Park	Alert	Improving
Trade/Business	Alert	Improving
County	Alert	Improving
Biophysical Indicators	Value	Normal Range/ Value
Rainfall (% of Normal)	103	80 - 120
SPI-3Month (TAMSAT)	-0.04	-1.0 to 1.0
VCI-3Month	31.08	35-50
Production indicators	Value	Normal
Maize Crop Condition	Dried up	Grain filling
Livestock Body Condition	Fair	Good
Milk Production	73	80 Litres
Livestock Migration Pattern	Ranches	Ranches
Livestock deaths (drought)	None	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	85.5	83
Milk Consumption	17.6	18 litres
Return distance to water sources	3.00	<5 Km
Return distance to grazing areas	3.15	<6 Km
Cost of water (20 litres)	8	< Kshs 5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	4.6	<6.6

Drought Situation & EW Phase Classification

Biophysical Indicators

- The highlands of the county received light showers in the month under review.
- The long rains season was depressed, erratic and characterized by poor distribution in terms of time and space.
- The rains supported pulses production, water recharge and pasture regeneration.
- Vegetation condition index stood at 31.08 i.e. moderate vegetation deficit showing improvement from severe in May.

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Most maize crop died up due to moisture stress.
- Livestock body condition was fair to good especially for cattle.
- Milk production improved but still below normal.

Access Indicators

- Most open water sources were replenished.
- There were reduced cases reported of human wildlife conflict.
- Terms of Trade remained favorable.

Utilization Indicators

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

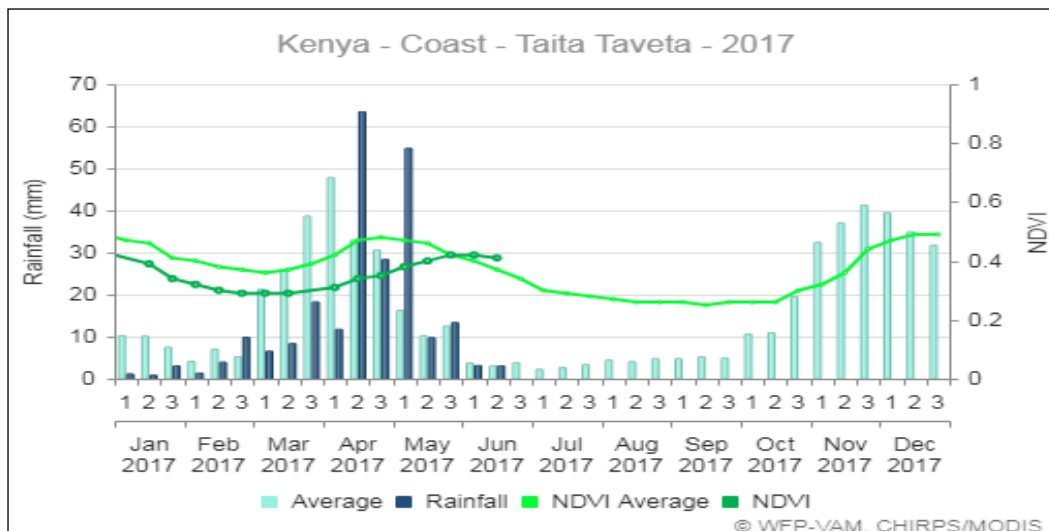
Seasonal Calendar

<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 	<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 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- The highlands of the county received light showers in the month under review.
- Highlands of Taita Sub County areas of Mwarungu recorded one day rainfall of 2mm.
- The diagram below shows current rainfall performance and (NDVI) normalized differential vegetation index.
- NDVI values are both above long term average i.e. 0.41 against 0.37 while RFE is at 3mm for both current and LTM.
- June rainfall anomaly was above normal at 110% while the three month rainfall anomaly was at 105%.

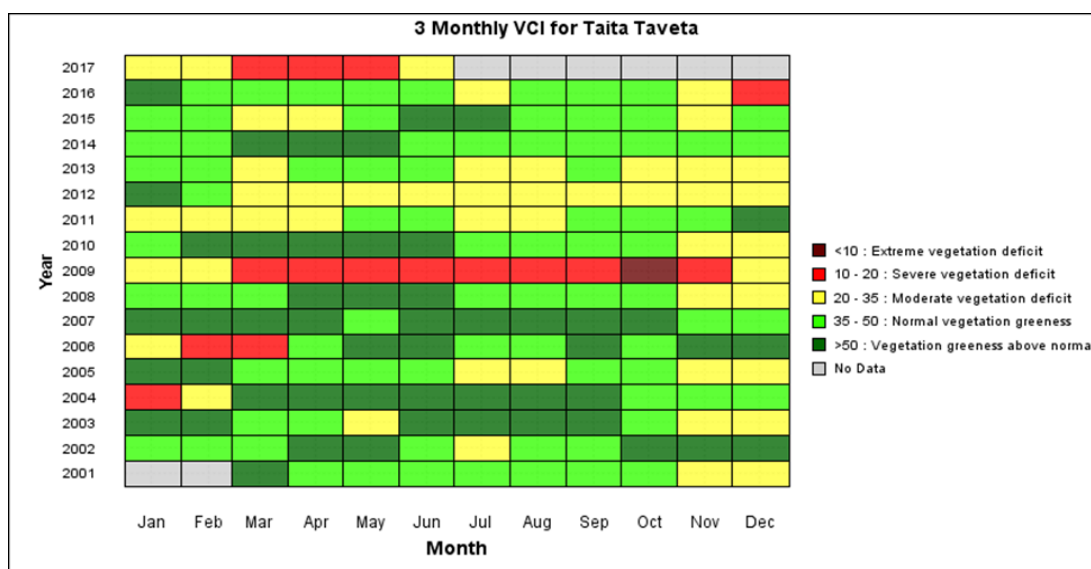


2. IMPACTS ON VEGETATION AND WATER

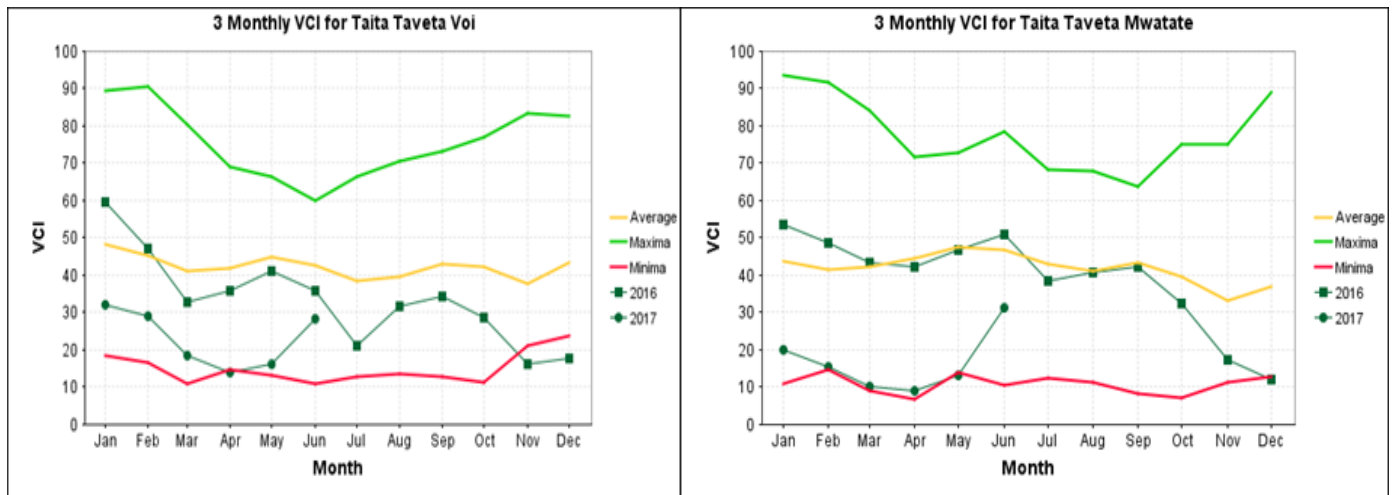
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The VCI matrix below, which is a comparison of long term averages (15 years) show the county is at severe vegetation deficit with an aggregate VCI of 31.08



- The VCI graphs below show Mwatate and Voi Sub Counties recorded moderate vegetation deficit of 31.01 and 28.28 respectively. Compared to the previous month the trend is improving.



2.1.2 Pasture

- Generally pasture condition in regard to quality and quantity was good in the county.
- Pasture condition in the mixed farming: food crop/ livestock livelihood zone was fair to good.
- In the mixed farming: irrigated cropping/ livestock/ food crops and horticulture/ dairy zones pasture condition was good.
- Areas experiencing pasture stress are in the mixed farming: food crop/ livestock livelihood zone i.e. Kasigau Ward, Mbulia, lower Sagalla, Jipe, Mahoo and Mata wards, Mgeno, Mwakitau, Msorongo, Mwachabo, Kishushe, Sangenyi and Mwaroko.
- Others are ranches found in Voi and Mwatate Sub Counties.

2.1.3 Browse

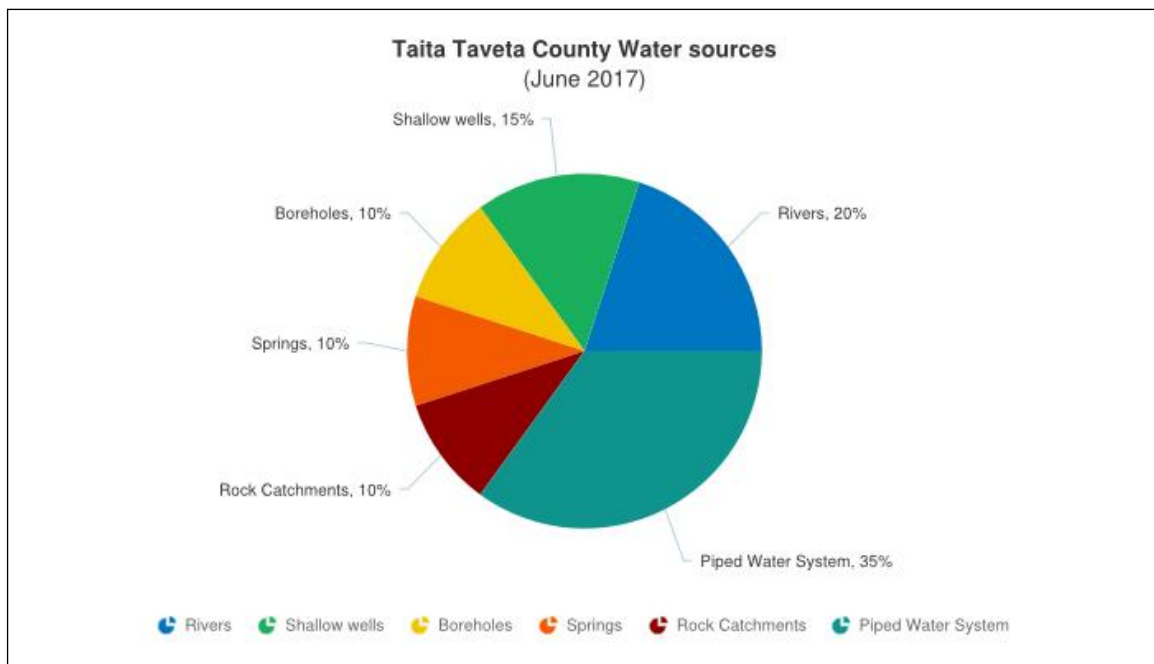
- Browse condition in terms of quality and quantity was good in the county.
- In the mixed farming: food crop/ livestock livelihood zone browse condition was fair to good.
- In the mixed farming: horticulture/ dairy and mixed farming: irrigated cropping/ livestock/ food crops livelihood zones browse condition was good.
- No constraints were observed in accessing browse in the month under review.

2.2 WATER RESOURCE

2.2.1 Sources

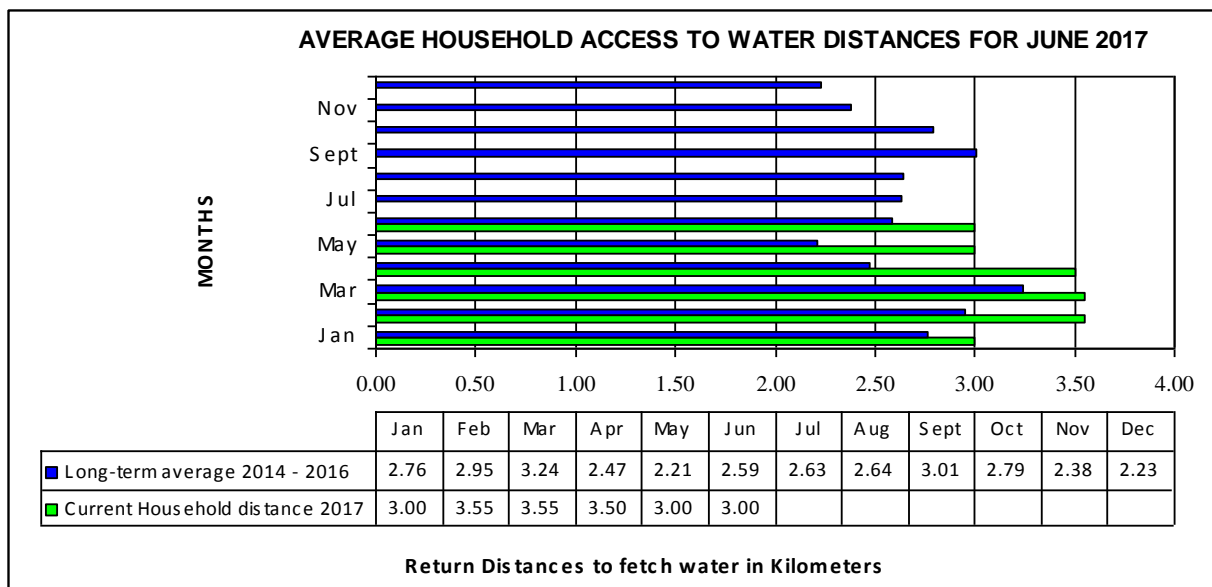
- The diagram below show percentage use of various water sources in the month under review. Out of the 210 household sampled usages of piped water system, rivers, shallow wells, bore holes, springs, and rock catchments was at 35.0%, 20.0%, 15.0%, 10.0%, 10.0% and 10.0% respectively.
- Most strategic water sources were well replenished.

- Areas that experienced water stress in the month under review were Lessesia, Malukiloriti, Ndara, Rahasi, Kajire, Kisimenyi, Rukanga, Jora, Zungulukani, Mgeno, Mwakitau, Mwachabo, Mwaroko, Sangenyi, Kishushe, Paranga, Mlilo, Ngongodinyi and Mbulia.



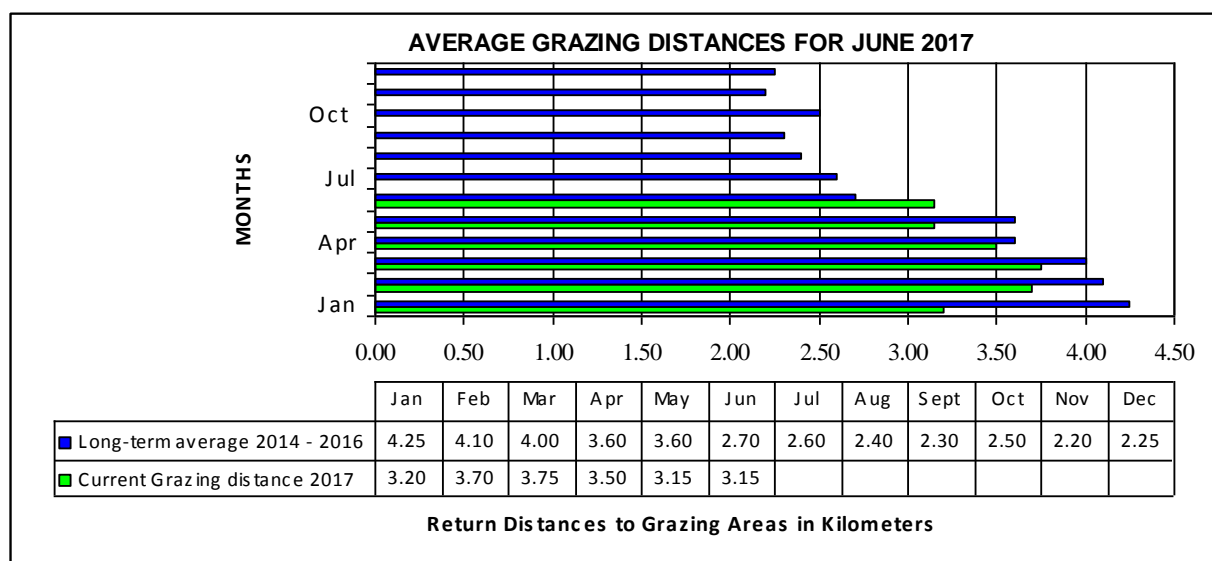
2.2.2 Household access to Water

- In the month under review, out of 210 sampled households analyzed, household distance to fetch water remained the same at 3.0km. The distance recorded was longer than the LTA by 16%.
- The waiting time at water points remained at 2 hours. However, this is not normal given that at this time of the year waiting time at water source is usually 30 – 60 minutes.
- These areas were Kishushe, Mlilo, Kasigau Ward, Mwachabo, Mwakitau, Mbulia and lower Sagalla.
- The average cost of 20 litre jerrican in the mixed farming: food crop/ livestock livelihood zone was recorded at Kshs 5.
- However, in areas that received minimal rains the cost is at Kshs 8 - 20.
- Areas that are yet to normalize water situation are Ndara, Rahasi, Kajire, Kisimenyi, Rukanga, Jora, Zungulukani, Mgeno, Mwakitau, Mwachabo, Mwaroko, Sangenyi, Kishushe, Paranga, Mlilo, Ngongodinyi and Mbulia.



2.2.3 Livestock Access

- The graph below show average grazing distances out of 210 households sampled. Average return distance by livestock to grazing areas remained at 3.15 km realized in the previous month.
- The drop in distance could be attributed to improving pasture quality and quantity condition in most parts of the county.
- Compared to the LTA the distance recorded to grazing areas was shorter by 16.7%.
- In the mixed farming: food crop/ livestock livelihood zone, return distance ranged between 1km to 5km.
- In the mixed farming: food crop/ livestock and horticulture/ dairy livelihood zones livestock watering was normal twice per day.
- Longer distances to water points were observed in Kasigau, Buguta, Zungulukani, Mwachabo, Mwakitau, Mgeno, Mwaroko, Sangenyi, Kishushe and lower Sagalla.



3. PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

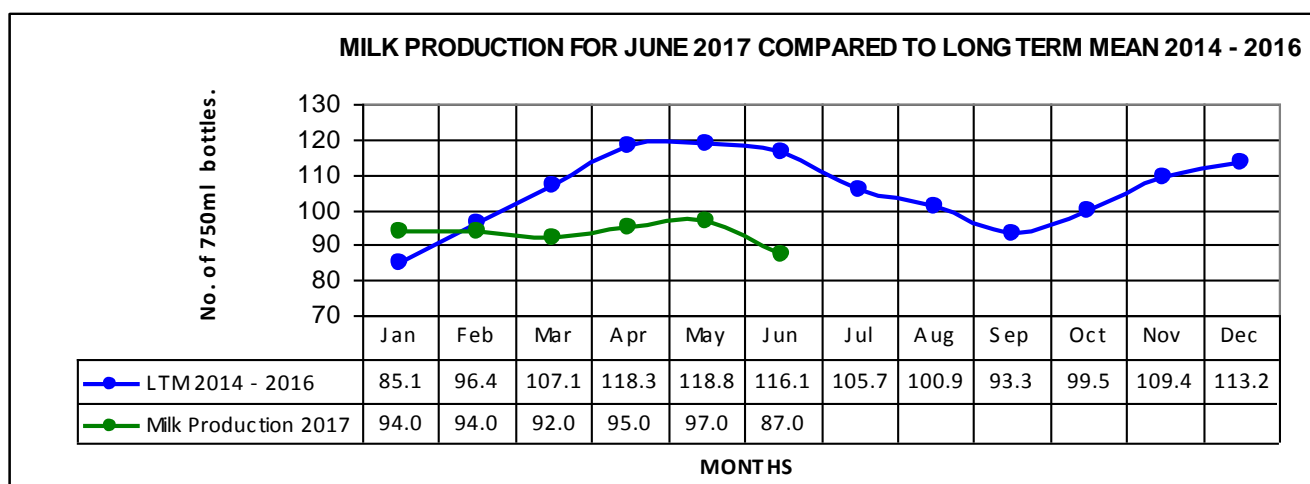
- Cattle body condition was fair to good while for goats and sheep body condition was good.
- Livestock body condition improved due to availability of pasture and water at shorter distances.
- Kishushe NDMA livestock stabilization centres is ongoing improving health condition of emaciated livestock.
- Areas that had not received good rains and require close monitoring in regard to cattle body condition are Voi Sub County: Makwasinyi, Miasenyi, Buguta, Bungule, Kisimenyi and Rukanga; Mwatate Sub County: Mramba community grazers, Kamtonga, Mwakitau, Landi and Mwachabo; Taita Sub County: Sangenyi, Mwaroko, Mlilo, Paranga and Kishushe; Taveta Sub County: Challa (Mahandakini, Chumvini, Kidong and Kasokoni), Mata Ward and Mahoo (Kitondonyi, Lessesia and Malukiloriti).

3.1.2 Livestock Diseases

- No major cases of livestock diseases were reported.

3.1.3 Milk Production

- Average milk production per day from 210 sampled households decreased from 97 litres to 87 litres recorded in the previous month.
- In the highlands of Taita Sub County, farmers in the dairy zone areas of Wumingu Ward registered near normal milk production.
- Mixed farming: horticulture/food crops/dairy livelihood zone registered 58.4% situated on the hill masses, mixed farming: food crops/livestock livelihood zone 27.9% and casual waged labour: sisal 13.7% found in the rain fed lowlands.
- Average milk price per litre at household level increased to Kshs 50.00



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

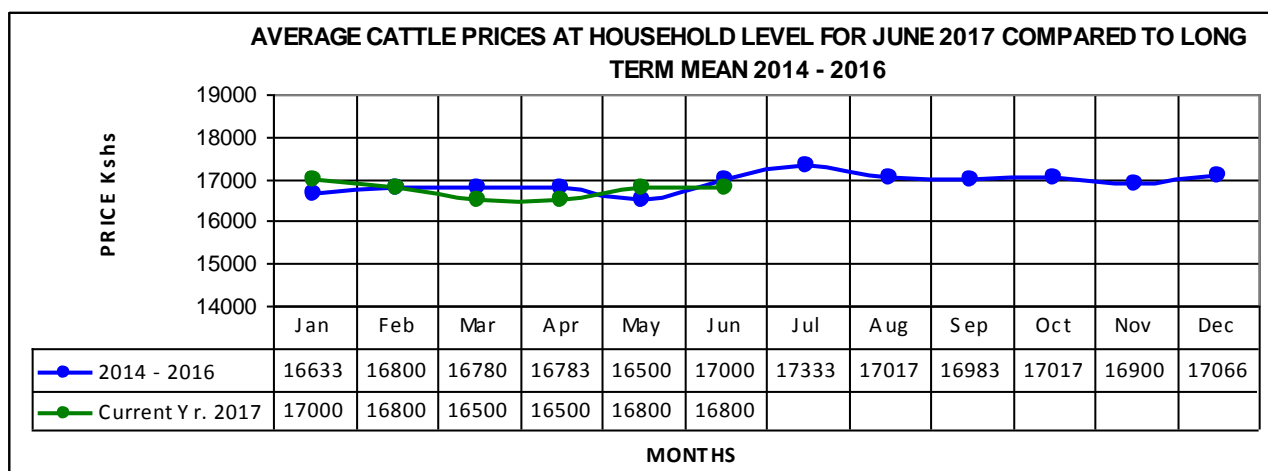
- In the mixed farming: food crops/livestock livelihood zone most maize crop dried up at various stages ranging from knee high level to tasseling.
- In this zone pulses performed better than maize and farmers are expecting to harvest.
- In the mixed farming: Irrigation livelihood zone maize crop was at the grain filling stage.
- In the mixed farming: Horticulture/ Dairy livelihood zone maize crop was at the cob forming stage.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

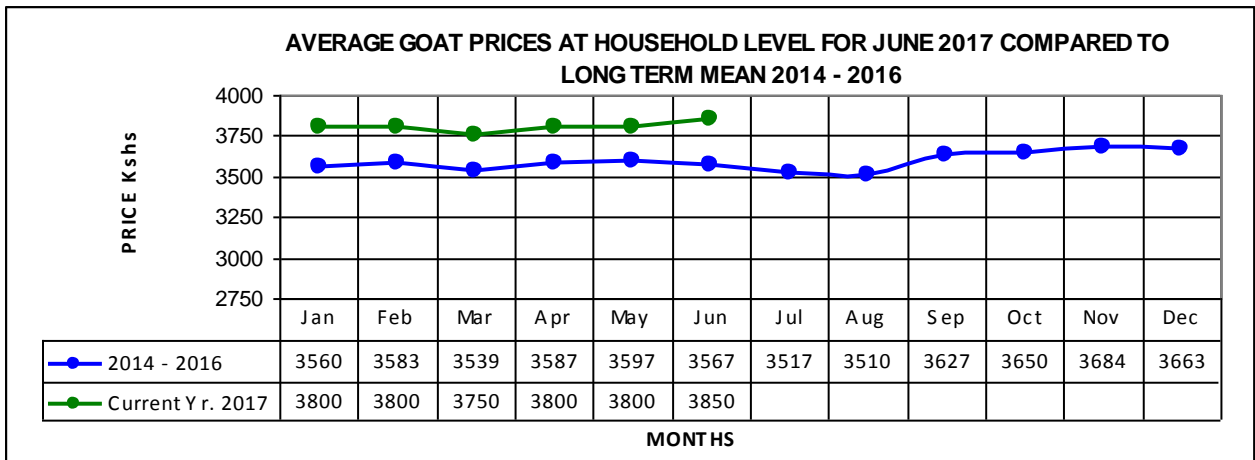
4.1.1 Cattle Prices

- The average price of a three year old bull from 210 sampled households remained the same at Kshs 16,800.
- The prevailing high price could be attributed to good cattle body condition.
- Compared to the long term mean, the average price was lower by 1.1%.
- Livelihood variations were notable, in the horticulture/dairy livelihood zone cattle prices ranged between Kshs 14,000 to Ksh 38,000 while in hotspot areas mainly in food crops/livestock livelihood zone prices ranged between Kshs 8,000 to Ksh 12,000.



4.1.2 Goat Prices

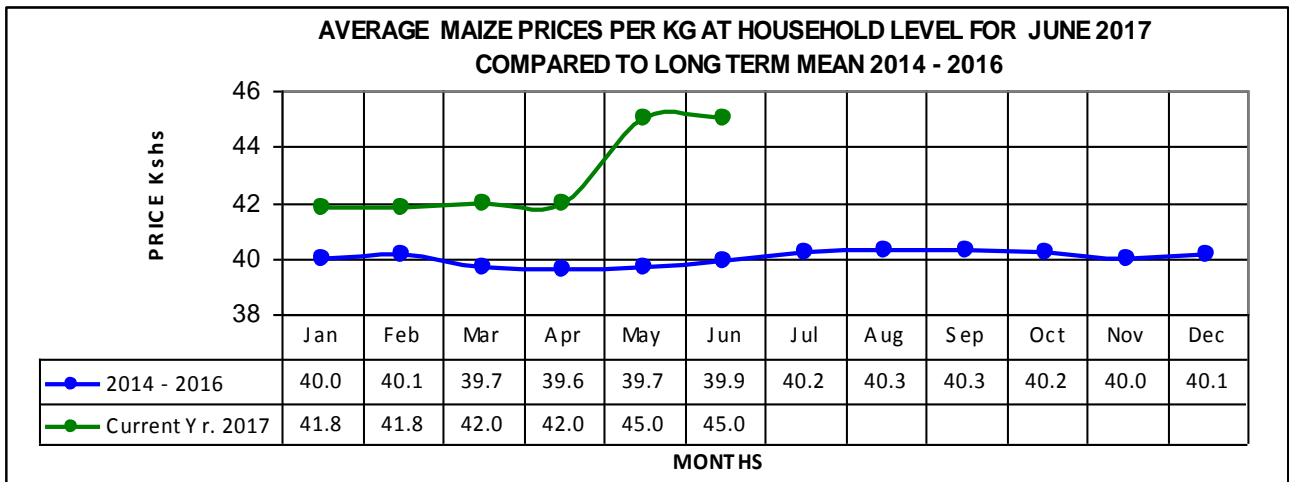
- The average price of a three year old goat from 210 sampled households slightly increased to Kshs 3,850 from Ksh 3,800 the previous month.
- The price is expected to remain the same or drop given that most farmers will be forced to sell goat to get income to purchase food like maize and pulses.
- Compared to long term mean, the average price was higher by 7.9%.
- No significant variations in prices of goats were observed across all livelihood zones.



4.2 CROP PRICES

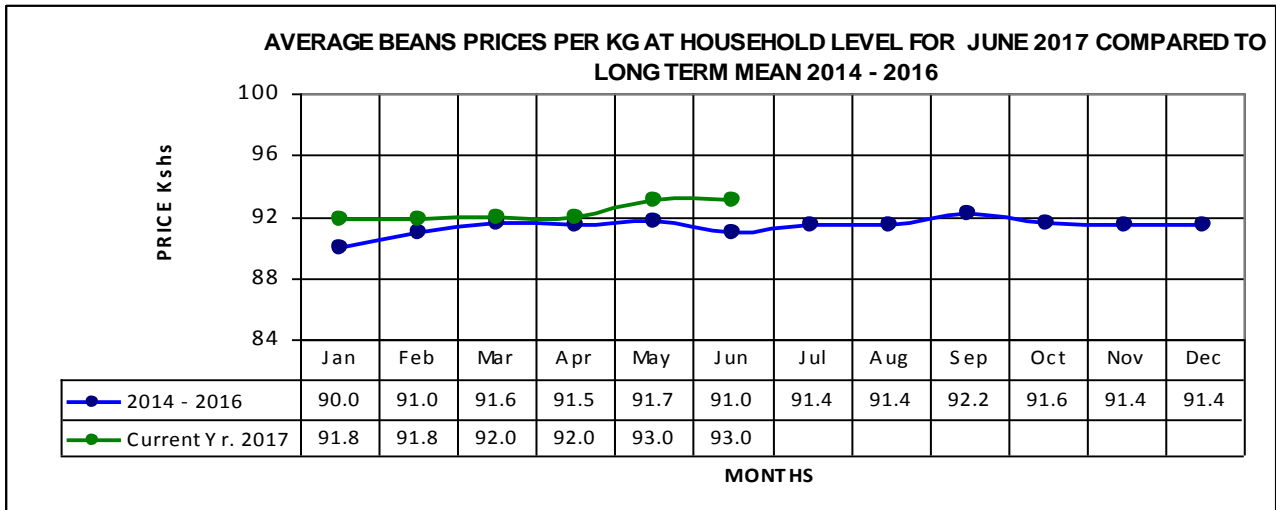
4.2.1 Maize

- Compared to the previous month, average price of maize per kg at household level remained at Kshs 45.00. High prices were due to shortage of maize.
- Lowest prices ranged from Kshs 38 to Kshs 42 in the mixed farming: irrigated cropping/livestock livelihood zone, areas of Challa and Eldoro in Taveta Sub County.
- Highest prices were recorded in the mixed farming: food crops/livestock livelihood zone, Mghange Dawida, Mwakajo, Rukanga and Mwachawaza at Kshs 48.00 to Kshs 75.00 in Taita, Voi and Mwatate Sub Counties.
- Compared to the long term mean the price was higher by 13.1%.



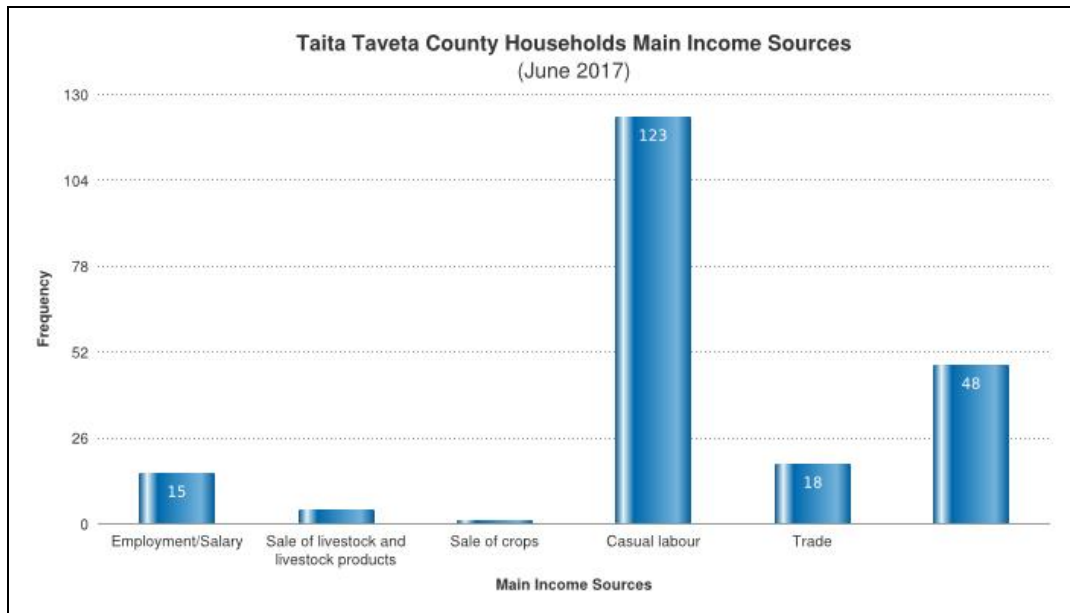
4.2.2 Beans

- Average price of beans per kg at household level remained at Kshs 93.00 as compared to the previous month.
- Lowest prices were recorded in mixed farming: irrigated cropping/livestock/food crops livelihood zone; Challa at Kshs 65 - 78 due to harvests from irrigation schemes, while high prices in the mixed farming: food crops/livestock livelihood zone Mwakajo, Mwachawaza and Rukanga at Kshs 90 to Kshs 120.
- Compared to the long term mean the price was higher by 1.4%.



4.3 INCOME

- The diagram below show analyzed income from 210 households sampled. Compared to the previous month percentage of income sources remained the same.
- Casual labour, remittances, Trade and formal employment at 58.9%, 22.9%, 8.6% and 7.8% respectively.
- Consecutive failure of rainfall seasons contribute to high rates of casual labourers and remittances.
- Others were sale of livestock products and sale of crops at 1.9% and 0.5% respectively.



4.4 TERMS OF TRADE

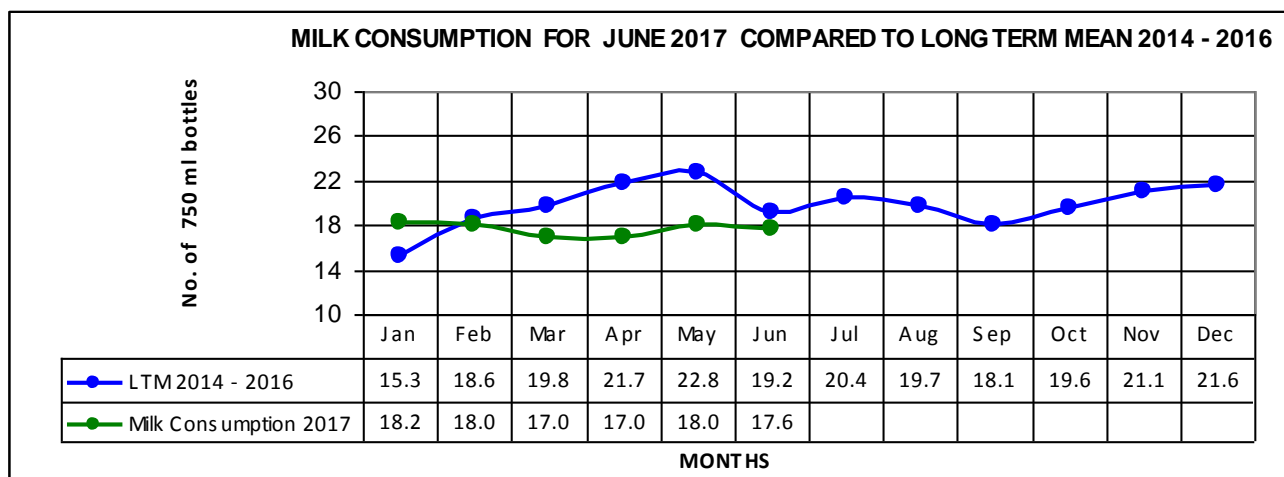
- Terms of trade remained favourable from households sampled in the month under review.
- The sale of 1 goat at Kshs 3,850 resulted to purchase of 85.5 kg of maize at Kshs 45.00 per kg. This indicated a drop compared to 84.4 kg posted in the previous month.

- ToT trend declined due to scarcity of maize in the country due to poor harvest experienced during the short rain season.
- The situation is expected to worsen if prices of goat decrease while those of maize continue to escalate.

5. FOOD CONSUMPTION AND NUTRITION STATUS

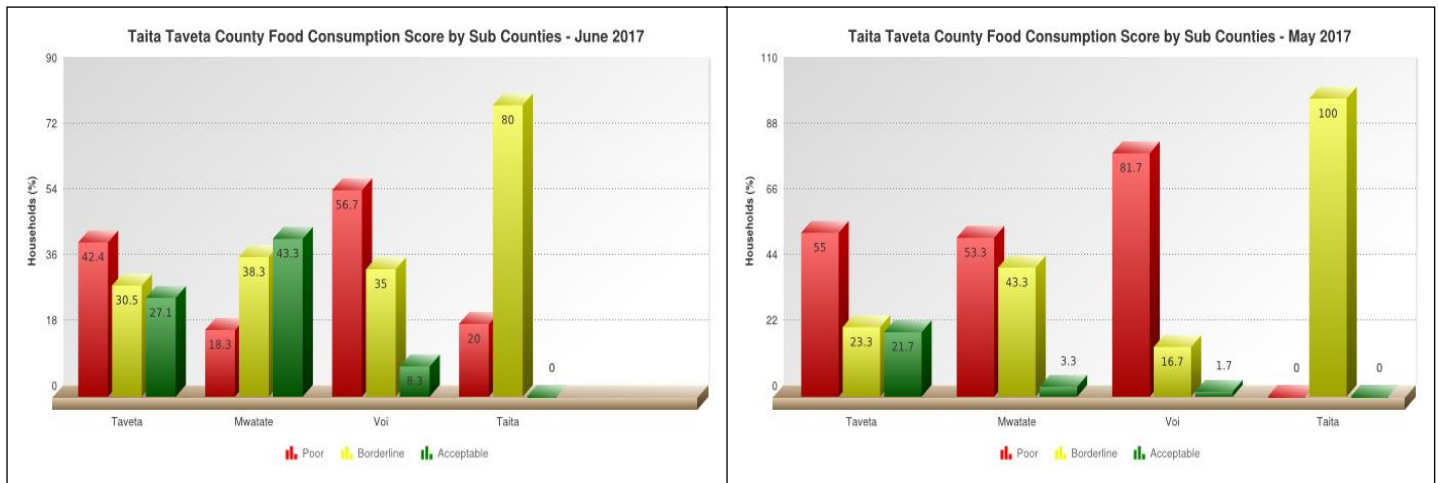
5.1 MILK CONSUMPTION

- Out of the 210 households sampled milk consumption per day decreased from 18.0 litres to 17.60 litres as posted in the previous month.
- In the month under review the average milk consumption per household per day ranged between 0.5 – 1 litre from the normal of 1 – 2 litres per day.
- Generally most household members consumed approximately 19.4% of the total milk produced. The rest was sold to raise income.
- Compared to the long term mean, milk consumption was lower by 8.3%.



5.2 FOOD CONSUMPTION SCORE

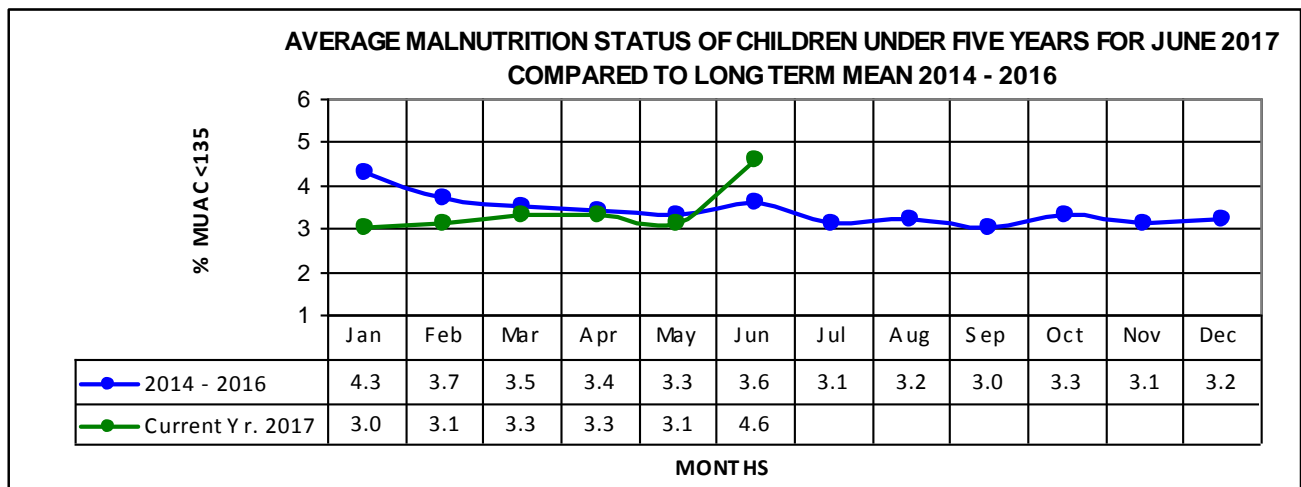
- The diagrams below show comparison of two months food consumption scores from 210 households sampled.
- Compared to the previous month food consumption score improved across all the Sub Counties.
- However, Voi Sub County depicted poor food consumption score with those in poor category at 56.7%, borderline at 35.0% and acceptable at 8.3%.
- These households are mainly in the rain fed lowlands where harvests are yet to be realized for numerous consecutive seasons.
- Main meals consumed were two food groups that are ugali and vegetables.
- Reduction of meals and poor dietary diversity might result to high levels of malnutrition like those that were reported in Marungu Ward in the month of May.



5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- Compared to the previous month, Mid Upper Arm Circumference (MUAC) measurement for nutrition status of children below five years percentage of those rated as being at risk of malnutrition increased to 4.6 from 3.1 posted in the previous month.
- Out of 322 children under-five sampled in 7 sentinel sites, 30 were found with MUAC less than 135 mm. Out of this 15 were found to be at risk, 9 at mid risk, 4 at moderate and 2 at severe acute malnutrition.
- The increase could be attributed poor feeding habits due to poor harvests being experienced in the rain fed lowlands.
- Compared to long term mean, MUAC level is lower by 13.8%.



5.3.2 Health

- Serious cases of malnourishment for children <5 years were observed in Marungu Ward.
- An upsurge in cases of diseases of the respiratory system, diseases of the skin, diarrhoea, Malaria and pneumonia in most facilities mainly in the lowlands. These areas were Mwakitau, Mwachabo, Mgeno, Kishushe, Mwaroko, Miasenyi, Buguta, Kasigau, Mraru, Ghazi and Mbulia.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 FOOD AND NON FOOD INTERVENTIONS

6.1.1 Sectoral

Intervention	Achievements in June 2017
Livestock Sector	
Livestock supplementation feeds	1,450 range cubes received from National Government to be distributed by County Government
Social Protection	
General Food Distribution	Mwatate Sub County received 1,150 bags of beans (90kg), 50 cartons of vegetable oil and 50 bales of fortified food to be distributed to vulnerable groups
Chakula Kwa Jamii	National Government funded project is unconditional cash transfer programme targeting 10,325 vulnerable Households– Targeting and registration was undertaken and currently data cleaning is in progress

6.1.2 Multi Sectoral

- Ground patrol by KWS and Wildlife Works to monitor wildlife movement was being undertaken mainly in Voi Sub County.
- Opening up of feeder roads by County Government was ongoing in all Sub Counties.

7.0 EMERGING ISSUES

7.1 MIGRATION

- No major in or out migration was reported in the month under review.

7.2 CONFLICT

- Cases of human wildlife conflict have reduced due to recharge of water sources and regeneration of pasture and browse in the park.
- Predation of livestock by wild cats remain a challenge in areas of Ngolia Ward, Buguta, Sasenyi, Makwasinyi, Rukanga, Jora, Kajire, Kishamba, Ndara, Talio, Mazola, Marapu and Zongwani.

7.3 FOOD SECURITY PROGNOSIS

- The long rains improved food security in the county in terms of cropping, recharge of water sources and pasture regeneration.
- Due to depressed long rains the county remains in Alert Phase with high possibilities of sliding into Alarm phase.
- Inadequate rains adversely affected crop production especially maize. However, water and livestock sector in regard to pasture will be sustained for the next two months.
- Scarcity of maize grain and flour continues to adversely affect feeding habits.
- High prices of food stuffs have reduced household purchasing power.
- Pasture availability to reduce trekking distances improve livestock body condition.

- In areas that received good amounts of rainfall, livestock body condition has improved and this will ultimately enhance milk production and stabilize livestock prices.
- Drought response activities to continue mainly in areas that have not received rains like Mwaroko, Kishushe, Mlilo and Paranga.
- Early implementation of preparedness activities in the county will help address issues of drought given that we are heading to a long dry spell till onset of short rains in mid October.
- Overgrazing, human wildlife conflict and deforestation remains a threat to food security in the county.
- SRA 2017 population in need of food assistance was at 71,212 (2009 census KNBS).

8. RECOMMENDATIONS

Social Protection Sector

- Upscale CFA and General Food Distribution beneficiaries.

Agriculture and Livestock Sector

- Crop protection.
- Livestock disease surveillance and control to curb spread of livestock diseases.
- Provision of supplementary feed in areas experiencing pasture stress.
- Promotion of pasture and browse management through bailing.

Water and Irrigation Sector

- Provision of water treatment tabs mainly in rain fed lowlands.
- Promotion of water harvesting structures at household level.

Health and Nutrition

- Strengthen malnutrition screening and active case search and integrated management of acute malnutrition especially in the lowlands Voi, Mwatate and Taita Sub Counties.
- Incorporate 'Beyond Zero' facility during outreaches.
- Fortified food being distributed as relief food to be issued to facilities for distribution to avoid stigmatization and segregation of TB and HIV patients.
- Enhance disease and nutritional surveillance.

Education

- Upscale and expand School Meals Program especially in Taita Sub County.

Peace and Security Sector

- Peace and security meetings should be enhanced in community areas neighbouring the ranches and the parks.
- Strengthen EWS - Wildlife Monitors established by NDMA in conjunction with KWS funded by European Union.
- KWS to enhance surveillance and patrols to contain wildlife inside the park.

Multi Sectoral

- Fast track county drought preparedness and response activities to enhance resilience and reduce adverse effects of drought.