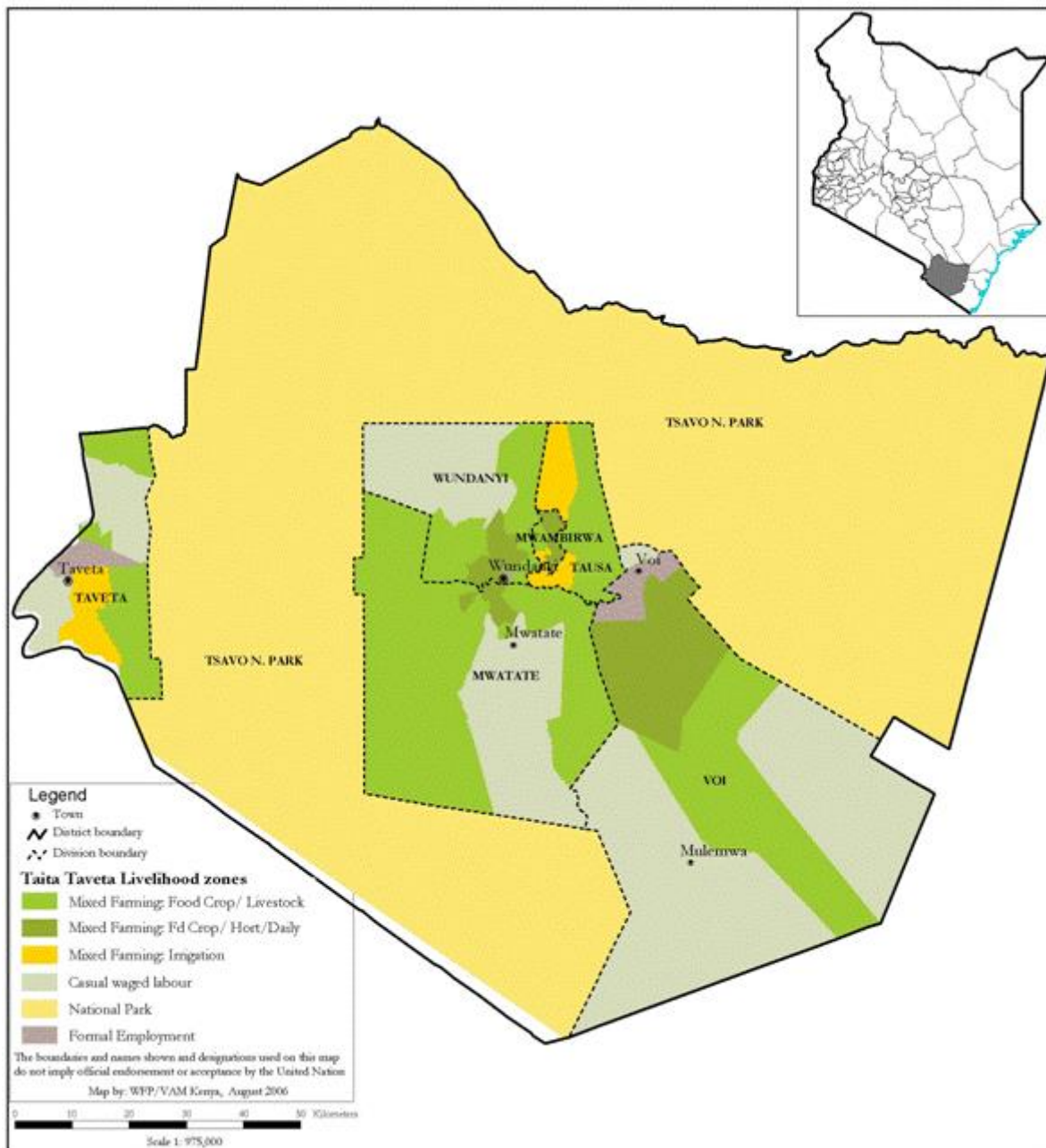


**TAITA TAVETA COUNTY  
2016 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT**



**A Joint Report by the Kenya Food Security Steering Group<sup>1</sup> (KFSSG) and Technical  
County Steering Group, Taita Taveta County**

**February, 2017**

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## **EXECUTIVE SUMMARY**

The county is currently classified in phase 2 stressed food insecurity phase. The livelihood zones have minimally adequate food consumption but are unable to afford some essential non-food expenditures without engaging in irreversible coping strategies. The current proportion of population who are having poor food consumption score is 20 percent while 46 percent are having borderline food consumption scores and 34 acceptable food consumption scores. The statistics point to a deterioration from the food security situation in July 2016 when seven percent of the population was having poor food consumption score, 34 percent borderline and 59 percent acceptable. Most households are accessing food from the markets since the household stocks are below the long term average. The terms of trade are favorable to the livestock farmers since households are able to purchase 116 kilograms of maize with the sale of one medium-sized goat as compared to 81 kilograms

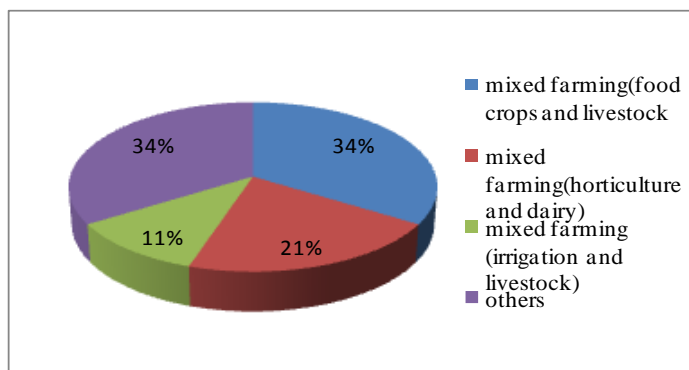
Water availability and accessibility have severely been affected in the mixed farming food crop and livestock zones. The coping strategy index is currently 22 compared to 16 for July 2016, an indication of a worsening situation. The main drivers of food and nutrition security in the county are mainly poor crop and pasture production resulting from below average performance of the 2016 short rains season and human wildlife conflicts in competition for water and pasture. A large proportion of the population (66 percent) depends on rainfall either for crop production or for livestock rearing. With the inadequate performance of the short rains, crop failure has been witnessed especially in the mixed farming-food crop livestock livelihood zones. However the rains received though depressed enabled regeneration of pasture stabilizing the pasture condition for a while. Households are expected to continue accessing staple foods from the markets whereby supply to these markets is expected to remain stable. Pasture condition will improve late march to early April after the onset of the rains while the impact of crop production is expected to be felt as from June, hence improving availability and access of household to food.

## 1.0. INTRODUCTION

### 1.1 County background

Taita Taveta County is in the coast region and borders Tana River, Kitui and Makueni Counties to the North, Kwale and Kilifi Counties to the East, Kajiado County to the Northwest and the Republic of Tanzania to the South and Southwest. The County is administratively sub-divided into four sub counties namely; Mwatate, Taita, Taveta and Voi.

The County covers an estimated area of 17,128.3 Km<sup>2</sup> of which 62 percent is occupied by Tsavo East and West National Parks; 24 percent is range land suitable for ranching and dry land farming, while 12 percent is available for rain-fed agriculture. Taita Taveta has a population of 358,173 people (Projected KNBS 2017). The County has three major livelihoods zones namely mixed farming-food crops and Livestock constituting 34 percent of the population, Mixed farming-Horticulture and Dairy with 21 percent, Mixed farming Irrigation and Livestock 11 percent while the others constitute 34 percent.



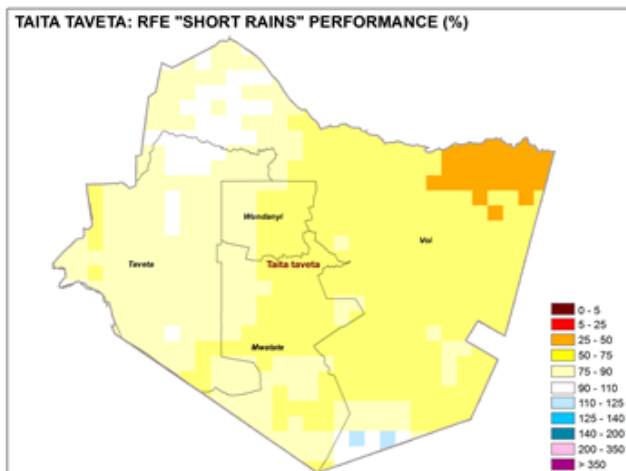
**Figure 1: Proportion of population by livelihood**

### 1.2 Objectives and approach

The objective of this assessment was to develop an objective, evidence-based and transparent food security situation analysis following the Short Rains Season of 2016 taking into account the cumulative effect of previous seasons, and to provide recommendations for possible response options based on the situation analysis. The short rains 2016 long rains assessment methodology involved checklist administration by county sector heads followed by initial briefings by the county food security group (CSG) and Kenya Food Security Steering group representatives. The CSG and KFSSG embarked on two day transect drive to validate the initial briefing findings considering in mind coverage of the major livelihood zones. The team went through all the sub counties covering the major livelihood zones. Community, household and market interviews were conducted. The team jointly reviewed the data and reports provided earlier enriched with field interviews to come with report presented before the CSG for validation and approval.

## 2.0 DRIVERS OF FOOD AND NUTRITION SECURITY.

The main drivers of food and insecurity in the county are poor rainfall performance and human-wildlife conflicts. The mixed farming zones of food crops and livestock and some sections of the irrigated as well as the dairy and horticulture zones depend on rainfall for cultivation of their crops. The livestock zones also depend on rainfall for pasture regeneration. Human wildlife conflict is a perennial problem that limits both availability and accessibility to food through destruction of food crops in the farms.



**Figure1. Rainfall Performance**

### 2.1. Rainfall Performance

The onset of the short rains was late across all livelihood zones with rains starting in the last week of October as compared to the first week of October normally. The eastern part of the county (Voi) received between 50-75 percent of normal rainfall while western part (Taveta) received between 75-110 percent of normal rainfall. Temporal distribution was poor with un-even spatial distribution. Cessation was normal in the last week of December. The depressed rains had negative impact on various sectors.

### 2.2 Human wildlife conflict

The county has Tsavo East and West national parks which border crop growing areas where there have been cases of conflicts between the crop farmers particularly in mixed farming where wildlife destroyed the farms produce greatly affecting the expected seasons produce.. This problem is perennial and was more amplified during the October- November December season when most of the crops in the farms were destroyed by wildlife due to their increased activity in search of water.

## 3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

### 3.1 Availability

#### 3.1.1. Crops Production

The County is short rains season dependant for crop production .The main food crops grown in the county are maize, cowpeas, and green grams. Different crops contribute differently to the households’ food and cash income across the livelihoods as summarized in table one below.

**Table 1: Crop production contribution to food and cash income**

Livelihoods	Food crops/Livestock		Horticulture/diary		Irrigation /livestock	
	Contribution to Food	Contribution to Cash income	Contribution to Food	Contribution to Income	Contribution to Food	Contribution to Cash income
Maize	30%	2%	35%	17%	35%	17%
green grams	10%	90%	10%	90%	10%	90%
Cow peas	12%	10%	12%	10%	12%	10%

### Rain-fed Crop Production

The area planted under maize and green grams reduced by seven and 16 percent respectively while area planted under cowpeas declined by 12 percent as compared to long term average (LTA). Reduction in area planted was as result of anticipated poor performance of short rains after metrological forecast. Crop Production decreased by 92, 81 and 79 percent for maize, green grams and cowpeas respectively as compared to LTA. Poor crop production was as result of poor performance of the short rains. The reduced production as a result of the failed season negatively affected food availability at household.

**Table 2: Area Planted and Production in the Rain-fed Crop farming**

Crop	Area planted during 2016 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2016 Short rains season production (90 kg bags) Projected/Actual	Long Term Average production during the Short rains season (90 kg bags)
1. Maize	9,629	10,345	4,614	61,125
2. Cowpeas	856	974	1,076	5,515
3. Green grams	884	950	905	4,230

### Irrigated Crop Production

The main crops grown under irrigation include French beans exclusively grown in Taita Sub-county, while maize and bananas are grown in Taveta sub-county. The area planted under irrigated maize reduced by 48 percent compared with the LTA and production was 32 percent below the LTA as in table 3 below. The area planted under French beans and bananas increased by six and 18 percent respectively making their production to increase by two and 18 percent respectively. Maize production declined because of reduction in area planted.

**Table 3: Area Planted and Production in the Irrigated Crop farming**

Crop	Area planted during the 2016 Short rains season (ha)	Long Term Average (3 years) area planted during Short rains season (ha)	2016 Short rains season production (90 kg bags) Projected/actual	Long Term Average (3 years) production during the Short rains season (90 kg bags)
1. French beans	205	193	10,754Tons	10,505 Tons
2. Green Maize	332	643	6,395	9,375
3. Bananas	2,147	1,823	37,695 (Tons)	32,165 (Tons)

### Maize stocks

Maize stocks currently being held by households across all livelihood zones are approximately 37 percent of the LTA (Table 4). Most of the stocks held in the county are with traders and National Cereals and Produce Board (NCPB). Traders have 47 percent of LTA while NCPB has 15 times higher than LTA since its being used as holding ground for maize produced from Gulana Kulalu scheme in Kilifi and Tana River counties. The stocks at household level were expected to last for one month as compared to 6 months normally. Currently, relief food being provided by County and National government.

**Table 4: Maize stocks held in the County**

Maize stocks held by	Quantities of maize held (90-kg bags)	Long Term Average quantities held (90-kg bags) at similar time of the year
House Holds	7,149	19,525
Traders	18,403	34,780
Millers	0	0
NCPB	7,611	500
<b>Total</b>	<b>33,163</b>	<b>54,805</b>

### 3.1.2 Livestock Production

The main livestock species in the county include cattle, goats, sheep and poultry. In the mixed farming (food crops, horticulture and dairy) livelihood zone, livestock production contributes 20

percent to household income while in the mixed farming (food crops and livestock) livelihood zone, it contributes 33 percent to household income.

### Livestock Productivity

The body condition for cattle, goats and sheep was good in Mixed farming (horticulture /diary and Mixed farming (irrigation and livestock) due to good forage conditions. The body condition for cattle was fair in Mixed farming (food crops and livestock) due to long trekking distance in search of water and pasture. Browsers body condition was still good in the livestock/crop livelihood zone as show in table 5. The body condition is below normal at this period of the year in mixed farming (crops/livestock) livelihood zone.

**Table 5: Livestock body condition**

Livelihood	Cattle		Goats		Sheep	
	Current	Normal	Current	Normal	Current	Normal
Mixed farming(Food crops and livestock)	Fair	Good	Good	Good	Fair	Good
Mixed farming (horticulture and diary)	Good	Good	Good	Good	Good	Good
Mixed farming(irrigation and livestock)	Good	Good	Good	Good	Good	Good

### Forage Condition

#### Pasture and Browse

The condition of pasture and browse is fair across all livelihood zones except mixed farming (Food crops and livestock) where it's fair to poor. Pasture and browse is expected to last between 2 - 3 months except Mixed farming (Crop/livestock) where it's expected to last for month due to the population of livestock within the livelihood zone (Table 6). The condition is below normal at this period of the year.

**Table 6: Forage stability**

Livelihood Zone	Pasture Condition		Browse Condition	
	Current	Projected duration	Current	Projected duration
Mixed farming(Food crops and livestock)	Fair to poor	1 Month	Good	1 Month
Mixed farming (horticulture and diary)	Fair	2 Months	Good	3 Months
Mixed farming(irrigation and livestock)	Fair	2 months	Good	3 months

### Milk availability and consumption

The average household milk production and consumption was below normal across all livelihood zones except mixed farming (irrigation) due to long trekking distance in search of pasture (Table 7). Milk availability and consumption is below normal in mixed farming (crops and livestock) livelihood zone.

**Table 7: Milk availability and consumption**

Livelihood zone	Milk production/litres per	Milk consumption /litres per household	Prices /kshs /litres

	household					
	Current	LTA	Current	LTA	Current	LTA
Mixed farming(Food crops and livestock)	0.5-1	2	0.5	1	50	40
Mixed farming (horticulture and diary)	3-5	6	2	2	40	30
Mixed farming(irrigation and livestock)	3-5	2	2	1	60	40

### **Tropical Livestock Unit (TLU) and birth rates**

The current tropical units (TLUs) as summarized in table 8 , are normal across all livelihood zones except mixed farming (crop/livestock) livelihood zone due to livestock deaths experienced in November as a result of lack of pasture and water. Livestock birth rate for all species was normal across all livelihood zones.

**Table 8: Tropical livestock units by livelihood zones**

Livelihood zone	Tropical livestock Units			
	Low income households		Middle income households	
	Current	Normal	Current	Normal
Mixed Farming( horticulture and diary)	0-1	2-3	2-3	4-6
Mixed Farming(Food crops and livestock)	0-3	2-5	3-5	5-10
Mixed farming(irrigation and livestock)	0-2	2-3	3-5	4- 8

### **Water for Livestock**

The current water source in the mixed farming (food crops/horticulture/dairy) livelihood zones and mixed farming (irrigation/livestock) and food crops livelihood zones were springs, streams, water pans and tap water. Households in the mixed farming (food crops/ livestock) livelihood zone mainly relied on open sources which included pans, boreholes and dams. The average return distance from grazing area to watering points was 2-5 kilometers. The trekking distances for all livelihood zones have maintained a constant trend. Watering frequency was once per day in all livelihood zones.



**Table 9: Water access distances**

Livelihood zone	Sources		Return trekking distance		Expected duration to last(months)		Water Frequency	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Mixed Farming( horticulture and diary)	Streams and piped water	Streams, Piped water	0.5-2km	0.5-2km	2-3	3	daily	daily
Mixed Farming (Food crops and livestock)	Pans, Piped water, Boreholes	Streams, Pans,Boreholes, Ponds Piped water	3-7km	2-4	1	3	every 2 days	daily
Mixed farming(irrigation and livestock)	Streams,Boreholes, Springs	Streams,Springs, Piped water,waterpans	0.5-1km	0.5-1	1	3	After 2 days	Once daily

### Migrations, Livestock Diseases and Mortality

Migration of livestock was reported in the county and the species that have been affected are cattle, goats, sheep and donkeys. They were estimated to be about three percent of the total herd structure in the county. The four main migration routes were; Kajiado toEmali to Loitokitok toTaveta to Mwatate and Voi and Kishushe to Voi and finally from the Park to the ranches/farms in search of water.

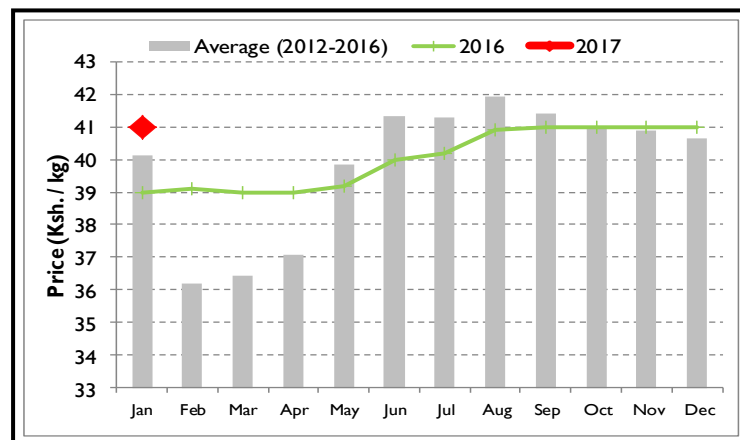
Reported cases of livestock disease outbreaks during the season in the mixed farming (food crops/livestock) livelihood zones included Foot and Mouth diseases (FMD), Anthrax and lumpy skin disease. The situation has been controlled through vaccinations that have been conducted across the county. Livestock mortality due to dehydration and starvation was up to seven percent in some areas.

## 3.2 ACCESS

### 3.2.1 Markets

#### Market operations

The major markets in the county for both livestock and food commodities were; Wundanyi, Mwatate, Voi, Chumvini and Taveta. Markets were accessible and were functioning normally across all livelihood zones both for food and livestock hence no market disruptions were reported. Most food stuffs in the market were mainly from local supplies and cross border inflows from Tanzania especially in Taveta sub county.



**Figure 4. Maize prices**

### Maize price

The average price of maize in the county was Ksh. 41 slightly above the long term price of Ksh. 40 per kilogram as shown in figure 4. The field interviews conducted across the livelihood zones indicated that the average price for a kilogram of maize

ranged from Kshs 40 - 45 across all livelihood zones with mixed farming (crop/livestock) recording the highest price. Maize prices were within the normal range thus giving farmers good purchasing powers. Prices are expected to increase steadily until the next harvest.

### Goat prices

The average market price for a medium-sized goat was Ksh. 4,757 approximately 46 percent above the long term average of Ksh. 3,253 (Figure 5). There was no major variation in price across the livelihood zones. Livestock prices are currently good and have increased the purchasing powers of livestock farmers. Prices are expected to remain stable in all livelihood zones except mixed farming (crop/livestock) where animals are already trekking long distances in search of pasture and water.

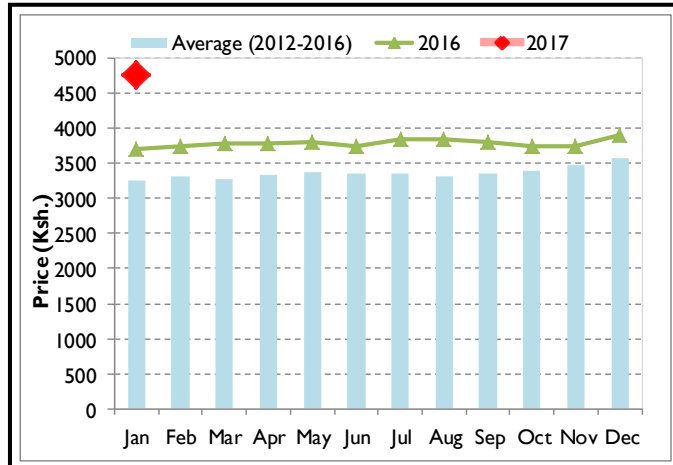


Figure 5. Goat prices

### 3.2.2 Terms of trade

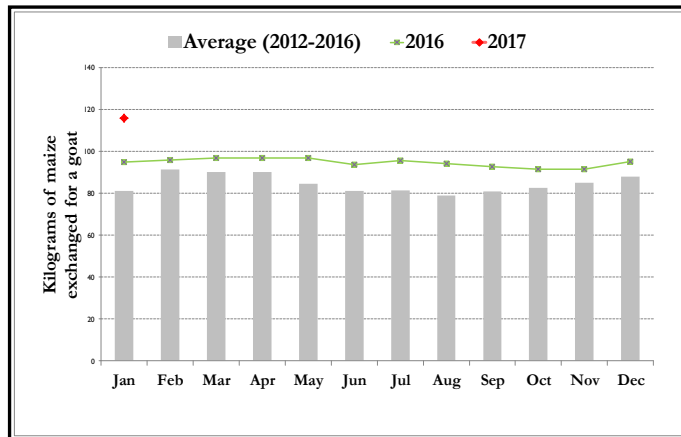


Figure 6. Terms of trade

Terms of trade were favorable in January 2016 since households were able to purchase 116 kilograms of maize with the sale of one medium-sized goat as compared to 81 kilograms Normally (Figure 6).

Terms of Trade were favorable due to stable maize prices attributed to availability of maize from relief food being distributed by the government and the current good body condition for livestock. The favourable terms of trade have boosted livestock farmer's purchasing powers.

### 3.2.3 Income sources

The main sources of income in the county are varied in the different livelihood zones. They include sale of livestock and livestock products, crop production sale of firewood and casual labour among others. Table 10 below summarizes the main sources of income for the main livelihood zones.

Table 10: Main Sources of Income

Livelihood zone	Income sources		
	Livestock Production	Crop production	Others
mixed farming food crop and livestock	33%	12 percent	Firewood collection/charcoal burning -10 percent
Mixed Farming/Horticulture and Dairy	20 percent	43 percent	Formal waged labour and businesses- 22 percent
mixed farming /irrigation and livestock	20 percent	60 percent	Petty Trading 5 percent

### 3.2.4. Water access and availability

The major water sources for domestic use in Taita Taveta County are piped water schemes, springs, dams and pans, shallow wells, boreholes, rivers/ streams, rock and roof catchments. The short rains recharged the open water sources to 60 percent of their storage capacities. Currently, most households are relying on boreholes and piped schemes from springs as compared to normal when a majority of the open water sources have water.

**Table 11: Access to water**

Subcounty / livelihood zone	Distance to Water for Domestic Use (Km)		Cost of Water (Kshs./20litres)		Waiting Time at Water Source - Minutes		Average HH Use (Litres/person/day)		Status of Two Major Water Sources				Projected duration of water availability in current water sources (months)
	N	C	N	C	N	C	N	C	Current Operational		Normal Operational		
									Source	No	Source	No	
Food crop/livestock	2	10	5	30	15	180	20	15	Pipeline Boreholes	1238	Pipeline Boreholes	1240	T-out
Horticulture/Dairy	0.2	0.5	2	5	5	10	25	20	Springs Streams	724	Springs Streams	1104	1212
Irrigation/Livestock	0.3	0.3	3	5	5	10	30	30	Springs Streams Dams	211	Springs Streams Dams	211	T-out1212

N= Normal C= Current T-out= Through out

Distances to water sources increased from a normal 2 - 3kilometres to 7 – 10 kilometres in areas of Zungulukani, Kisimenyi, Mkamenyi, Mbulia , parts of Mbololo, Mwachabo, Rukangs Mwakitau, Mata-Jipe and Nakruto in the food crop /livestock zone, occasioned by water rationing as some piped schemes were closed and drying of water pans. Each household was allowed only 3-20 litre jerrican per day.

The waiting time in the food crop/ livestock zone was 2 - 6 hours due to high concentration at the available water sources coupled with reduced discharge. The normal waiting time in was less than 30 minutes

Water vendors in areas of Kamtonga, Mgeno, Zungulukani, Kishushe, Kisimenyi others are selling at Ksh. 50 as they are the available sources due to increased distances.

### **3.2.5 Food Consumption**

Most households in the mixed farming food crop and livestock livelihood zones were consuming 1 - 2 meals per day compared to the normal three. In the other livelihood zones, the meal frequency was 2 - 3 compared to the normal three. The most consumed foods were; *posho*, *githeri* and vegetables. The food consumption score as at January 2017 was 20 percent for the poor, 46 percent borderline and 34 percent acceptable compared (59, 34 and 7) percent acceptable, borderline and poor food consumption score for December 2015. Indicating a worsening food security situation

### **3.2.6 Coping strategy**

Most households in the mixed farming - food crop and livestock zone have been more affected than the other two livelihood zones. Among the strategies that these households are employing include reduced meals portions, charcoal burning and eating of less preferred meals and children taking preference for food. The coping strategy index has increased to 22 from 16 in July 2016, an indication of a worsening situation through increased severity of coping mechanisms.

### **3.3 Utilization**

In the mixed farming food crop/ livestock livelihood zone, the average water consumption has reduced from the normal 15-20litres per person per day to 10-15 liter per person per day, while in horticulture / dairy zone it has reduced from 25litres to 20 liters per person per day. This has affected utilization in terms of reduced water for cooking, drinking as well as other household uses including bathing and hygiene.

#### **3.3.1 Health and Nutrition**

##### **Morbidity and mortality patterns**

The most prevalent diseases for the general population from July to December 2016 are diseases of the respiratory system, diseases of the skin, malaria, pneumonia, eye infections and diarrhoeal diseases. For the children under five years of age, diseases of the respiratory system, diseases of the skin, diarrhoea, Malaria and pneumonia for were most prevalent diseases similar to the same period in 2016. There was an increase in the number of diarrhoeal cases reported in October and November especially in Voi, Mwatate and Taveta sub counties as a result of the dry spell and water shortage experienced in the county. Arthritis, Diarrhoea Urinary Tract Infections and Hypertension respectively are emerging diseases in the county and were on the rise for the general population.. There was a general decline of malaria cases in all the sub counties attributed to intervention like issuance of nets for under one year and pregnant mothers and a mass net distribution conducted in 2015, among other interventions towards malaria control. No epidemic prone diseases were reported between July to December 2016.

The average distance to the nearest health facility is approximately 5km with an exception of Bagau, Mole and Kironge where the distance range between 20 - 30 kilometres with the closest facility being Mwambirwa Sub County Hospital

##### **Immunization and Vitamin A supplementation**

The percentage of fully Immunized child (FIC) as at December 2016 was 70 percent compared to 85.5 percent for the same period in 2015. The decline was attributed to the health workers strike experienced in December, where most children due for immunization in December were never immunized and are currently receiving vaccination this month.

The Vitamin A coverage from June –December 2016 was at 47.5 percent compared to 50.5 percent for the same period in 2015 and also below the national target of 80 targets. The drop can be attributed to late disbursement of Vitamin A supplements as well as early closure of schools in October making the early childhood development vitamin A supplementation (ECD VAS) strategy difficult to implement in some areas. Vitamin A 6-11 month was 60 percent and for children 12 – 59 months was at 35percent. Efforts are underway to conduct VAS in the ECD centres.

### Nutritional Status

Exclusive breastfeeding rate of the county is at 80.5 percent above both national (61percent) and an increment from the previous survey of year which reported 72 percent. Timely initiation to breastfeeding (those fed on breast milk within 1 hour of birth) was at 73.5percent and continued breastfeeding at one and two years recorded 84.4 and 61.1 percent respectively. The proportion of children who are at risk of malnutrition based on Mid Upper Arm Circumference (MUAC <135mm) is 3.1 percent, which is slightly above the LTA of 2.7 but within the same range for the same period in 2015.The most probable cause of malnutrition in the county is to lack of optimal nutrition intake or/and morbidity (increased diarrhea cases).

### 3.3.2 Sanitation and Hygiene

The County’s latrine coverage has decreased from 98 percent in 2015 to 91 percent 2016.Food handling practices are fairly good with hand washing at about 30-40 percent. There were reported cases of water contamination in Challa Primary school Timbila Primary school and Kitobo Springs. Chlorination of the affected sources was however done using aquatabs and chlorine powder at the source. In rural areas, where water treatment facilities are not available, community are advised to do partial treatment (aqua tabs) at household level or boil drinking water and to store water in clean household containers.

**Table 11: Food security trends in Taita Taveta County**

Indicator	Long rains assessment, July 2016	Short rains assessment, Jan 2017
% of maize stocks held by households (agro-pastoral)	47 percent of LTA	37 percent of LTA
Livestock body condition ;Mixed farming (horticulture and dairy) & irrigated zones	Good	good- fair
Livestock body condition ; Mixed farming (food crop and livestock)	Good to fair	Good - fair
Water consumption (lpppd)	Mixed farming (horticulture and dairy) & irrigated zones 20-30	Mixed Farming 20-30
	Mixed farming (food crop and livestock) 15-20	Livestock Farming10-15
Price of maize ( Ksh. per kg)	38	41
Terms of trade (pastoral zone)	116	81
Coping strategy index	16	22
Food consumption score	6.3%poor,26.2% Borderline 67.4 %Acceptable	20%poor,46% Borderline 34%Acceptable

### 3.4 Education

Home grown school meals programme (HGSMP) is currently operational in 44 primary schools across the county benefitting a total population of 8350 pupils Most schools in mixed farming (food crop and livestock) livelihood zone have limited access to water through water harvesting

and water trucking. However, a few challenges were noted whereby pupils whose parents are unable to contribute in the community school meals programme are not served with food in the schools. A few schools do not have access to water which predisposes the pupils to water borne diseases.

## **4.0 FOOD SECURITY PROGNOSIS**

### **4.1 Prognosis Assumptions**

- The long rains will be timely.
- The amounts will be normal to below normal.
- Distribution both in time and space will be poor and uneven respectively.
- Crop production is expected to be poor to good .
- The maize and livestock prices are expected to stabilize
- Milk availability will improve.
- Water availability and accessibility is expected to improve with the recharge of open water sources as well as reduced distances and waiting time at water sources.

### **4.2 Food Security Outcomes in the next three months (February – April)**

The food security situation is expected to worsen especially in parts of mixed farming (food crop and livestock) livelihood zone. Stocks at household level are minimal and are expected to be depleted. Pasture and browse condition is expected to sustain livestock for 2-3 months in the mixed farming (horticulture and dairy) & irrigated zones and be depleted in the mixed farming (food crop and livestock) livelihood zone. Livestock body condition is expected to remain stable in the mixed farming (horticulture and dairy) & irrigated zones but worsen in the mixed farming (food crop and livestock) livelihood zone after the depletion of pasture and browse. Milk availability is expected to reduce across the livelihood zones but faster in the crop/ livestock zones as pasture becomes scarce thereby affecting the nutrition status of children under five years. Milk prices are subsequently expected to continue on an upward trend. Livestock prices are expected to stabilize mixed farming (horticulture and dairy) & irrigated zones but decline in the other zone. Maize prices are expected to rise in all livelihood zones as household stocks are depleted and demand increases. Terms of trade are expected to decline slightly but remain above the LTA. No changes are expected in market operations.

### **4.3 Food Security Outcomes for the last three months (May- July)**

The food security situation is expected to improve from the month of May. Pasture and browse is expected to regenerate across all livelihood zones. Improved body condition is expected to lead to better livestock prices as a result of increased pasture and browse. The terms of trade are also expected to rise. However, maize prices are expected to continue on an upward trend as the rains are not expected to perform well. Milk availability and consumption at household level is expected to improve with improved body condition leading to an improvement the nutrition status of the under fives. Milk prices are also expected to drop making it more affordable. Improved water availability and accessibility will lead to better utilization at household level. No change is expected in market operations.

## **5.0.CONCLUSION AND INTERVENTIONS**

### **5.1 Conclusion**

Food security situation in the county is stable .However, the situation is worsening in the mixed farming food crop livestock zone due to inadequate pasture coupled with long distances to water

for livestock as well as several localized areas where water for domestic use is scarce. This has greatly affected utilization in those areas. The county is currently in the stressed food insecurity phase classification. In this regard; action is required for disaster risk reduction and to protect livelihoods

### 5.1.1 Phase classification

The county is currently in the stressed food insecurity phase classification (Phase 2), implying that even with any humanitarian assistance, household groups have minimally adequate food consumption but are unable to afford some essential nonfood expenditures without engaging in irreversible coping strategies. The food security situation is stable but on a declining trend. In this regard, action is required for disaster risk reduction and to protect livelihoods

### 5.1.2 Summary of the findings

The 2016 short rains were late and timely in terms of onset and cessation respectively. The distribution in time was poor and uneven in space and could only sustain pasture and browse regeneration. The remaining household stocks are 37 percent of the LTA. Over 90 percent of households in the mixed farming food crop and livestock farming zones are accessing food commodities from the markets. The terms of trade are fairly good. However, water for both domestic and livestock remains a challenge especially in the mixed farming food crop and livestock zones with a majority of water sources either dry or overstretched, thereby affecting availability, access and utilization. Pasture and browse is available but expected to diminish as the dry spell continues. Market operations are normal. Learning in schools has largely not been affected by the drought. Reduced meal frequency and dietary diversity has adversely affected the nutritional status of children under five years of age.

### 5.1.3 Sub-county ranking

**Table 12: Sub-county ranking**

Sub county	Rank	Sub county ranking(worst-best)
Voi	1	<ul style="list-style-type: none"> <li>• Erratic and poor performance of rains</li> <li>• Inadequate water sources</li> <li>• Livestock deaths</li> <li>• Human-wildlife conflict</li> <li>• In migration of livestock</li> </ul>
Mwatate	2	<ul style="list-style-type: none"> <li>• Erratic and poor performance of rains</li> <li>• Inadequate water sources</li> <li>• Human-wildlife conflict</li> <li>• In migration of livestock</li> </ul>
Taita	3	<ul style="list-style-type: none"> <li>• Erratic and poor performance of rains</li> <li>• Human-wildlife conflict</li> </ul>
Taveta	4	<ul style="list-style-type: none"> <li>• Erratic and poor performance of rains</li> <li>• Human-wildlife conflict</li> <li>• In migration of livestock (increased competition for resources, livestock diseases, conflict)</li> </ul>

## 5.2 Ongoing Interventions

### 5.2.1 Food interventions

Currently 71,212 people are under various forms of food assistance by national government, the county government, humanitarian agencies and or other nongovernmental organizations. Table 13 summarizes the ongoing food interventions by Sub County.

**Table 13.:Ongoing food interventions**

<b>Sub County</b>	<b>Total Population</b>	<b>Total Population in affected areas (under % poverty line</b>	<b>Estimated Population in need of Food Assistance</b>
<b>Voi</b>	87,803	55,837	29,284
<b>Mwatate</b>	73,168	43,320	26,953
<b>Taita</b>	56,021	29,213	10,121
<b>Taveta</b>	67,665	42,344	4,854
<b>Total</b>	<b>284,657</b>	<b>181,496</b>	<b>71,212</b>



## ANNEXES

### Annex 1: Ongoing Non-Food Interventions

County	Intervention	Sub County	No. of beneficiaries (HH)	Implementers	Impacts in terms of food security	Cost	Time Frame
Livestock sector medium term interventions							
Taita Taveta	Dairy Upgrading	Mwatate	100	CGTT, ILRI	Increased milk production	2 M	2016-2018
	Feed Improvement		200	CGTT, ILRI, ADS Pwani, NDMA, CFA Program	Increased milk and meat production	1M	2016-2018
	Feed Improvement Reseeding and bulking	Voi	100	CGTT, ILRI, ADS Pwani, NDMA	Increased milk and meat production	5 M	2016-2018
	Animal Health Improvement	Mwatate	300	CGTT,	Increased milk and meat production	4 M	2016-2018
	Livestock Marketing	All	2700	CGTT, ASDSP, Land 'O' Lakes, MTDC,	Streamlined marketing	130 M	2016-2020
<b>Water</b>							
County Wide	Water trucking	Kisimenyi, Buguta Mbulia Zungulukani Mata - Jipe, Njukini, Mwakitau, Ngambenyi Paranga	3800	Tavevo, County Government, NDMA	Increased access to clean safe drinking water	1.2M	3 months
Countywide	Installation of 16 No. 10m <sup>3</sup> plastic tanks and base	4 per sub county	8000	CGTT	Increased access to clean safe drinking water	3,256,000	1 month

County	Intervention	Sub County	No. of beneficiaries (HH)	Implementers	Impacts in terms of food security	Cost	Time Frame
Sagalla	Installation of Tanks and gutters	Sagalla	1000	NDMA	Availability of water at short distances	660,000	2 months
	Borehole drilling and equipping	Shelemba, Kisimenyi Ngambenyi Kiteghe Mwachabo	10,000	CGTT, CWSB	Availability of water at short distances	24,000,000	2 months
	Water pan excavation	Buguta	3000	CGTT	Availability of water at short distances	2,400,000	1 month
	Pipeline extension and Tank construction	Ndara	1000	CGTT	Increased access to clean safe drinking water	12,000,000	3 months
Kasigau, Mbololo	Borehole rehabilitation	Sasenyi, Ikanga,	4500	NDMA	Increased access water for domestic and livestock	2,500,000	2 months
<b>Health and Nutrition</b>							
Entire County	Micro Nutrient supplementation and deworming(Procurement, supply and distribution of micronutrients and dewormers, Vitamin A, MNPs and IFAs supplementation and dewormers in all the facilities to Children underfives and PLW(through facilities, ECDEs, Campaign and outreaches, Health education on micronutrient supplementation and deworming(	Entire County	34675 (Children 6 – 59 months) 56 health Facilities	TTCG/ UNICEF	Reduction in morbidity rates	1 million	Entire County

County	Intervention	Sub County	No. of beneficiaries (HH)	Implementers	Impacts in terms of food security	Cost	Time Frame
	Facilities, Community dialogues, house to house)						
Entire County	Supply of essential commodities for Integrated Management of Acute Malnutrition (IMAM) (Training and OJT of staff on quantification and forecasting of nutrition and health commodities, Procurement, supply and distribution of commodities, Data collection and reporting)	26 health facilities OTP Sites	1000	TTCG/ UNICEF/WFP	Proper management of acute malnutrition	5 million	Entire County
<b>Education</b>							
	HGMP	Ronge zone	10 schools				
Taita	Parents Provide food	Taita	All Pupils	parents	School attendance		3 Terms
Mwatate	HSGM	Mwambirwa	1173	GoK/WFP	School attendance		3 Terms
Taveta	HGSM	Challa	7334	GpK/WFP	School attendance		3 Terms
	NMK	Kimorigho	688	GoK	School attendance		3 Terms

### Annex 2. Recommended Food Interventions

Subcounty	Total Population	Pop. In need	Remarks
<b>Voi</b>	110,479	30 - 35'	CFA
<b>Mwatate</b>	92,065	30 - 35'	CFA
<b>Taita</b>	70,489	15 - 20'	CFA
<b>Taveta</b>	85,140	10 - 15'	CFA

### Annex 3: Recommended Non Food Interventions.

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
<b>Agriculture</b>							
<b>Immediate-Medium term interventions</b>							
Taita	Provision of Drought recovery seeds	Entire Sub County	5,000	CGTT Community	6 Million	Availability of Land	March 2017 - Sep 2017
Taveta	Drought tolerant seeds	All	3000	MoAL&F NDMA	2,000,000	Personnel	February to March 2017
Voi	Compensation Of farmers affected by wildlife menace	Whole Sub County	3061	Sub County Agric Office	Farmers are encouraged	Office space and stationery	All the cropping seasons
<b>Livestock sector</b>							
Mwatate	Feed Supplementatation	Subcountywise	1200	CGTT and other stakeholders	Feed stuff, storage and transport facilities	Personnel	February to April
Voi, Mwatate	Accelerated livestock off take	Voi &Mwatate	1600	CGTT and other stakeholders	Ksh 4M	personnel	Feb-March 2017
<b>Water</b>							
Mwatate, Voi &Taveta	Water trucking	Paranga, Kishushe, Msorong, Dighai, Zungulukani	3800	Tavevo, County Government	1,500,000	Water Bowser	3 months
	Installation of 16 No. 10m <sup>3</sup> plastic tanks and base	4 per sub county	8000	CGTT	5,000,000		2 months
County wide	Borehole rehabilitation	County wide	6000	County Government	17,000,000	Technical staff	2 months
Bura	Construction of pipeline, tanks & surface pump installation	Godoma	3000	CWSB	30m	30m	3 months

Mwatate	Borehole drilling and equipment	Modambogh o	2000	County Government	8m	Technical staff	1month
Ngolia	Water trucking	Ghazi	2500	Tavevo, County Government	0.7m	Water bowser	2 months
<b>Health and Nutrition</b>							
Taita Taveta County	Conduct a health and Nutrition Survey	To have upto date information on Health and nutrition status in the County for decision making	319141	TTCG/Partners	2.5M	Health Personnel	Feb 2017
Taita Taveta County	Conduct monthly CNTF	Improve coordination among partners	4 Subcounties	TTCG/Partners	100,000	Personnel	Jan 2017- July 2017
Taita Taveta county	Strengthen Disease surveillance	To monitor disease trends	319141	TTCG/Partners	DSA, Transport & air time (Ksh 66,000)	Personnel	Jan 2017- July 2017
<b>Taita Taveta-</b>	Strengthen Outreach services and malnutrition screening - ( Vighombonyi, Mwaroko, Paranga, Mlilo Sasenyi, Kale, Zungulukani, Msharinyi, Manyata, Maungu, Miasenyi. Kirutai, Gimba, Ndara, Kalambe , Eldoro, Mata, Salaita Kamtonga, Bura, Sisal)	Improve access to health services	50,000	TTCG/Partners	DSA, Transport (550,000)	Personnel & commodities	Jan 2017- July 2017

<b>Education</b>							
Taita	All schools to be included	Taita	All children	GoK	Water Tanks, Food funds		3 Terms
Mwatate	HGSM	Mwatate	1426	GoK/WFP	Food Funds		3 Terms

## **IMPLEMENTATION STATUS OF PROPOSED NON-FOOD INTERVENTIONS**

(September 2016 – February 2017)

Intervention description/type	Location	No of beneficiaries		Cost in Ksh.	Implementers /actors	Remarks ✓ Implementation status (ongoing, completed, not completed) ✓ % completion status
<b>Water and Sanitation</b>						
Water trucking	Kisimenyi, Buguta Mbulia Zungulukani Mata - Jipe, Njukini, Mwakitau, Ngambenyi			1,200,000	CGTT, TAVEVO, NDMA	Ongoing
Borehole drilling and equipping	Shelemba, Kisimenyi Ngambenyi Kiteghe			8,000,000	CGTT	Ongoing
<b>Agriculture</b>						
Provision of THVC seeds	Mwatate Sub County	164	196	450,000	CG Farmers	complete
Provision of subsidized tractor services		86	35	242,000	CG Farmers	Complete
Improvement of the Voi commodity market	Voi town	37000	39000	Kshs 800,000	County government of Taita Taveta	Not yet started.
Farmer Co-operatives and marketing groups	Voi Sub County	50000	80000	Kshs 500,000	Sub County Co-operative officer, Voi Sub County Agric. Staff	Common interest groups have been formed but are yet to graduate into Co-operatives.
<b>Livestock</b>						
Slaughter House improvement	County wide	40,000	0.3 M	CGTT - MoALF	Ongoing – 70%	Slaughter House improvement

Intervention description/type	Location	No of beneficiaries		Cost in Ksh.	Implementers /actors	Remarks ✓ Implementation status (ongoing, completed, not completed) ✓ % completion status
Supply of breeding stock and farm inputs	County wide	2000	0.8 M	CGTT - MoALF	Completed	Supply of breeding stock and farm inputs
AI improvement	County wide	3000	0.5 M	CGTT - MoALF	Completed	AI improvement