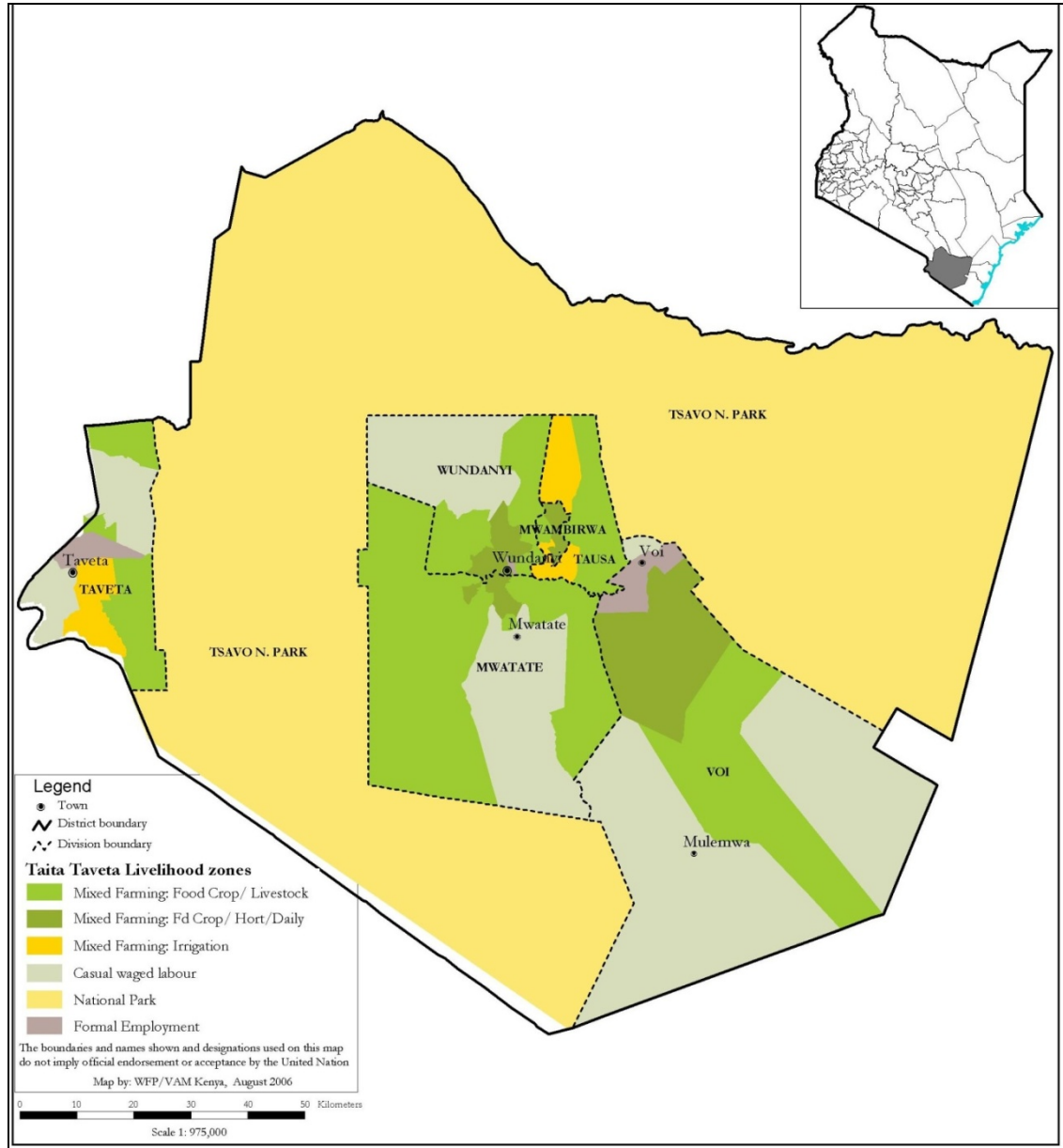


# TAITA TAVETA COUNTY 2016 LONG RAINS FOOD SECURITY ASSESSMENT REPORT



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

**August, 2016**

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# 1 INTRODUCTION

## 1.1 County Background

Taita Taveta County has a total of four sub-counties namely: Wundanyi, Voi, Mwatate and Taveta. It has a total area of 17,083.9 square kilometres whereby Tsavo East and Tsavo West national parks make up 62 percent, range land 24 percent and land suitable for rain-fed agriculture 12 percent of the total area. It has a population of 284,657 (KNBS, 2009). The county

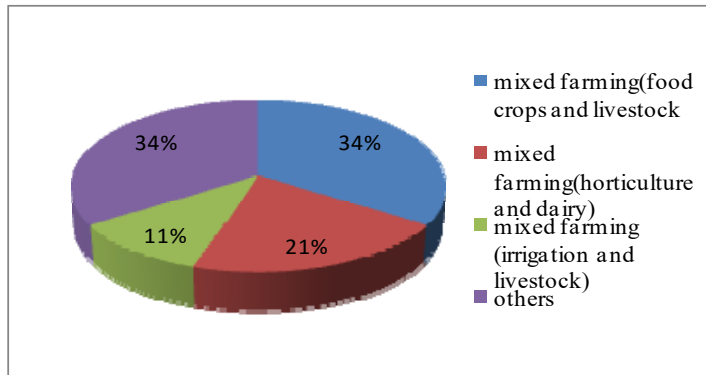


Figure 1: Proportion of population by livelihood

has three major livelihood zones namely; mixed farming (food crops and livestock) 34 percent of the total population, mixed farming (horticulture and dairy) 21 percent, mixed farming (irrigation and livestock) 11 percent and the other livelihoods which make up the remaining 34 percent include business (13 percent), Casual waged labour (20 percent) and Formal employment (one percent) (Figure 1).

## 2 CURRENT FOOD SECURITY SITUATION

The county is classified as being in the ‘None’ or ‘Minimal’ (IPC Phase I) phase across all livelihood zones except for some areas in the mixed farming (food crops, livestock) zone of Mwatate Sub county which are in the ‘Stressed’ (IPC Phase 2) phase. The performance of the long rains was near normal, though characterised by poor temporal and uneven spatial distribution. According to the Food Security Outcome Monitoring (FSOM) done in May 2016, 6.3, 26.2 and 67.4 percent of households had poor, borderline and acceptable food consumption scores respectively. The coping strategy index (CSI) in May 2016 stood at 18 compared with 16 in May 2015, implying that the proportion of households engaging in food consumption-related coping strategies was slightly higher than the same time last year. The main coping mechanisms employed included a reduction in the number of meals consumed per day (employed by 73 percent), a reduction in the portion size of meals (68 percent), and borrowing food or seeking help from a friend or relative (67 percent). The nutrition status of children under five was poor as the global acute malnutrition (GAM) rate was 5.6 percent, based on a survey done in March 2016, while mortality remained below the emergency thresholds for both children under-five and the general population. The current factors affecting food security include human-wildlife conflict that led to the destruction of 2,500 hectares of crop and affected 2,700 households especially in the mixed farming (food crops and livestock) livelihood zone, coupled with poor distribution of rainfall both in time and space.

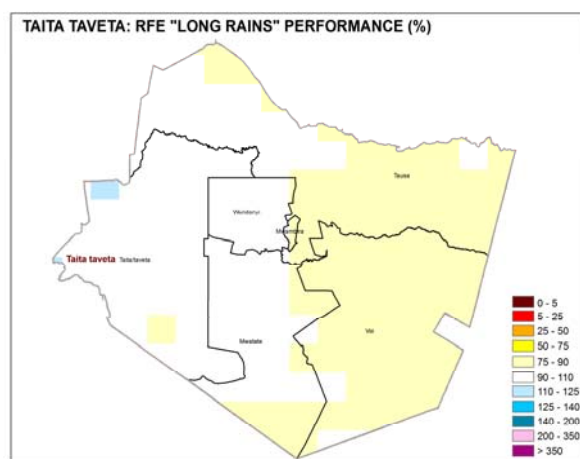
## 2.1 Food Security Trends

Taita Taveta County is currently in the None or Minimal phase classification (IPC Phase 1) across the livelihood zones, just as it was after the short rains assessments of February 2016. Table 1 shows the different indicators and how they have evolved over the last six months.

**Table 1: Food Security trends for Taita Taveta County**

| Indicator  | Long Rains Assessment, July 2016   | Short Rains Assessment, Feb 2016   |
|--|------------------------------------|------------------------------------|
| Food insecurity phase (All livelihood zones)   | None or Minimal                    | None or Minimal                    |
| Household food stocks (Mixed farming (horticulture and dairy) and irrigated zones)       | 53 percent of LTA                  | 47 percent of LTA                  |
| Livestock body condition Mixed farming (horticulture and dairy) & irrigated zones        | Good                               | Good                               |
| Livestock body condition Mixed farming (food crop and livestock)                         | Good to fair                       | Good to fair                       |
| Milk production Mixed farming (horticulture and dairy)                                   | 6-7 litres                         | Comparable                         |
| Mixed farming (food crop and livestock)  | 0.5-1 litre                        | Comparable                         |
| Household water consumption (Mixed farming (horticulture and dairy) and irrigated zones) | 20 litres per person per day       | 20 litres per person per day       |
| Mixed farming (food crop and livestock)  | 5-10 litres per person per day     | 15-20 litres per person per day    |
| Terms of trade as at June 2016   | Stable and above long term average | Stable and above long term average |
| Coping strategy index  | Within seasonal norms(18)          | Within seasonal norms (16)         |

## 2.2 Rainfall Performance



**Figure 2: Rainfall as a percent of normal**

The onset of the long rains across the livelihood zones was late in the first dekad of April as opposed to the normal first dekad of March. The county as a whole received between 75 and 110 percent of normal rainfall. The eastern part of the county received 75-90 percent of normal rains while the western part received 90-110 percent of normal (Figure 2). The temporal distribution was poor, marked by a dry period in the second and third dekad of May while spatial distribution was uneven. Cessation was early in the first dekad of May compared to the first dekad of June normally.

### 3 IMPACT OF RAINFALL PERFORMANCE, SHOCKS AND HAZARDS

#### 3.1 Crop Production

The county is short rains dependent for crop production, although the long rains contribute 20 percent of food requirements. The major crops grown under rain-fed production are maize, beans and green grams. Maize contributes 30 percent and two percent to food and cash income respectively in the mixed farming (food crops and livestock) livelihood zone. In the mixed farming (horticulture and dairy) and mixed farming (irrigation and livestock) livelihood zones, maize contributes to 35 and 17 percent food respectively. Green grams are mainly grown for cash income and contribute 90 percent to cash income and 10 percent to food.

**Table 2: Rain fed Crop production in Taita Taveta County**

| Crop        | Area planted during 2016 Long rains season (Ha) | Long Term Average area planted during the Long rains season (Ha) | 2016 Long rains season production (90 kg bags) Projected | Long Term Average production during the Long rains season (90 kg bags) |
|-------------|---|--|--|--|
| Maize       | 4,303   | 7,480  | 13,890   | 25,670   |
| Beans       | 966   | 1,707  | 4,721  | 11,707   |
| Green Grams | 1,024   | 1,681  | 4,474  | 8,955  |

Area planted for maize and beans each reduced by 43 percent while that of green grams reduced by 39 percent compared to the LTA (Table 2). The drop in acreage for the three major crops was mainly attributed to the disruption of land preparation caused by offseason rainfall occurring in the months of January and February 2016. Projected production of maize reduced by 46 percent, although harvesting is not yet complete. Production of beans and green grams reduced by 40 and 50 percent respectively of the LTA. The poor distribution of rainfall and the early cessation of the rains, coupled with the wildlife menace that destroyed about 2,500 hectares of crops, were major contributing factors to the expected poor crop yield.

#### Irrigated Crop

Irrigated crops are bananas, maize and tomatoes in order of importance and are largely grown in the mixed farming (irrigation and livestock) livelihood zone. Bananas contribute 20 percent to cash income and a similar 20 percent to food. Maize and tomatoes each contribute 17 percent to food.

**Table 3: Irrigated Crop production**

| Crop     | Area planted during 2016 Long rains season (Ha) | Short Term Average (3 years) area planted during Short rains season (ha) | 2015 Short rains season production (90 kg bags) Projected | Short Term Average (3 years) production during 2015 Short rains season (90 kg bags) |
|----------|---|--|---|---|
| Bananas  | 2,160   | 1,989  | 75,600(Tons)  | 69,615(Tons)  |
| Maize    | 1,183   | 1,268  | 29,442  | 31,554  |
| Tomatoes | 25  | 34   | 366   | 480   |

Acreage under bananas increased by nine percent compared with the LTA while the area under maize decreased marginally by seven percent (Table 3). The increase in the area under bananas is attributed to intensified campaigns and investment by the County Government as well as other development partners like United States Agency of International Development (USAID), Kenya Agricultural Value Chain Enterprises (KAVES), Agricultural Sector Development Support Programme (ASDSP), and Kenya Agricultural Productivity and Agribusiness Project (KAPAP)

through the value chain approach. Production of bananas increased by a similar margin of nine percent, largely due to the introduction of high-yield varieties and improved general husbandry practices and techniques. The seven percent decrease in the production of maize is attributed to insufficient water for irrigation. The area planted for tomatoes decreased by 26 percent resulting in a fall in production of 23 percent. The reduction in acreage for tomatoes was attributed to competition for cultivation of other horticultural crops, while production has also reduced due to insufficient water for irrigation.

## Maize stocks

**Table 4: Maize Stocks in the Taita Taveta County**

| Maize stocks held by | Quantities held currently (90-kg bags) | Long Term Average quantities held (90-kg bags) at similar time of the year |
|----------------------|--|--|
| House Holds          | 24,571                                 | 46,200   |
| Traders              | 31,320                                 | 36,690   |
| Millers              | 0                                      | 0  |
| NCPB                 | 10,723                                 | 500  |
| <b>Total</b>         | <b>66,614</b>                          | <b>83,390</b>  |

Total maize stocks held in the county were 80 percent of the LTA. The stocks held by households and traders were 53 and 85 percent of the LTA respectively. The National Cereals and Produce Board (NCPB) held about 20 times more stock than the LTA, 42 percent of which is for the Galana Project in Tana River County and the remaining 58 percent the strategic food reserve for the national government. (Table 4). The stocks at household level are largely held in the mixed farming (horticulture and dairy) and mixed farming (irrigation and livestock) livelihood zones and are expected to last for approximately 1.5 to 2.5 months compared with the normal three months. In the mixed farming (food crops and livestock) livelihood zone, about five percent of households have minimal stocks likely to last one month up to September; most are now dependent on the market for their food supplies which is normal at this time.

### 3.2 Livestock Production

The major livestock in the county are cattle, goats and sheep. In the mixed farming (food crops and livestock) livelihood zone, livestock production contributes 33 percent to cash income, while in both the mixed farming (horticulture and dairy) and mixed farming (irrigation and livestock) livelihood zones it contributes 20 percent to cash income. In the mixed farming (food crops and livestock) and mixed farming (irrigation and livestock) livelihood zones, goats account for 30 percent and 25 percent of cash income respectively.

#### Forage condition

Pasture is good in the mixed farming (horticulture and dairy) and mixed farming (irrigation and livestock) livelihood zones as a result of the near-normal rainfall received during the long rains season and are expected to last for more than three months up to November. Leftover dry crops as well as hay are also being used in the mixed farming (horticulture and dairy) livelihood zone which is normal at this time of the year. However, in the mixed farming (food crops and livestock) livelihood zone, pasture is below normal and deteriorating and estimated to last for only two months up to September. Pasture is currently accessible in all livelihood zones except in localised areas in Mlilo and Ngutini, where there is enhanced restriction to private farms that

were previously accessible. Browse is generally good across the livelihood zones and is expected to last for over three months up to November.

## Livestock Productivity

### Body condition

Table 5: Body condition of livestock in Taita Taveta County

| Livelihood zone                          | Cattle       |              | Sheep   |          | Goat    |          |
|--|--------------|--------------|---------|----------|---------|----------|
|  | Current      | Normally     | Current | Normally | Current | Normally |
| Mixed farming (food crops and livestock) | Good to Fair | Good to Fair | Good    | Good     | Good    | Good     |
| Mixed farming (horticulture and dairy)   | Good         | Good         | Good    | Good     | Good    | Good     |
| Mixed farming (irrigation and livestock) | Good         | Good         | Good    | Good     | Good    | Good     |

The good to fair body condition for cattle in the mixed farming (food crops and livestock) is because of the long trekking distances in search of pasture given the enhanced restrictions on grazing (Table 5). The body condition of goats and sheep is expected to remain stable over the next three months while that for cattle is expected to marginally deteriorate in the mixed farming (food crops and livestock) livelihood zone until the expected onset of the short rains in October, due to deteriorating pasture conditions in this zone.

## Milk Production, consumption and prices

Table 6: Milk production, consumption and prices in Taita Taveta County

| Livelihood zone                          | Milk Production (Litres)/Household |     | Milk consumption (Litres)per Household |     | Prices (Ksh)/Litre |     |
|--|------------------------------------|-----|--|-----|--------------------|-----|
|  | Current                            | LTA | Current                                | LTA | Current            | LTA |
| Mixed farming (food crops and livestock) | 0.5-1.0                            | 1   | 0.5                                    | 0.5 | 50                 | 50  |
| Mixed farming (horticulture and dairy)   | 5-7                                | 7   | 1                                      | 1   | 30                 | 30  |
| Mixed farming (irrigation and livestock) | 3-4                                | 3-4 | 0.5                                    | 0.5 | 40                 | 50  |

Most households in the mixed farming (food crops and livestock) and mixed farming (irrigation and livestock) livelihood zones consume the milk they produce, but in the mixed farming (horticulture and dairy) livelihood zone, milk production above the household consumption of one litre is sold (Table 6).

## Tropical livestock units (TLU) and Birth rates

Table 7: Tropical Livestock Units in Taita Taveta County

| Livelihood Zone                          | Tropical Livestock Units (TLUs) |               |                |
|--|---------------------------------|---------------|----------------|
|  | Poor Household                  | Middle Income | Rich Household |
| Mixed farming(food crops and livestock)  | 1-4                             | 5-7           | 10-15          |
| Mixed farming (irrigation and livestock) | 3-7                             | 10-20         | 30-50          |
| Mixed farming (horticulture and dairy)   | 1-4                             | 1-4           | 1-4            |

In all livelihood zones, the TLUs were normal (Table 7). The average TLUs for the poor and middle-income wealth groups in the mixed farming (irrigation and livestock) and mixed farming (food crops and livestock) livelihood zones decreased following poor seasons in 2009-2010 and have remained the same since then. In the mixed farming (horticulture and dairy) livelihood zone the TLUs have remained the same since the last good year due to small land holdings which cannot allow for expansive livestock -keeping. Birth rates for all species across the livelihood zones were near normal.

### Migration, Livestock Diseases and Mortalities

There is normal out-migration of livestock in search of pasture from Bomeni to Kibaoni in Tanzania, from Kitobo to Kilimanjaro Ndogo in Tanzania and to Rombo in Kajiado County. The livestock migrating include cattle, goats and sheep and are about 10 percent of the total herd structure. The out-migration is due to enhanced restrictions on grazing in both the national park or on private land. The migration is likely to have minimal impact on the environment and food security as households continue to access livestock products. In-migration is taking place from Kilango and Kidondoni areas in Tanzania to Njoro for watering. There was normal livestock in-migration from Tana River County and there is likely to be more livestock from Garissa County to the mixed farming (food crops and livestock) livelihood zone from August to October, as livestock will be coming for fattening in the various private ranches in the county. No major disease outbreaks were reported except for the few cases of endemic diseases which included tick-borne diseases, *Contagious Caprine Pleuro Pneumonia* (CCPP) and lumpy skin disease (LSD). Livestock mortalities were minimal at 1-1.5 percent for all livestock species.

### Water for Livestock

The current water sources in the mixed farming (horticulture and dairy) livelihood zone are springs, streams, and dams and piped water. In the mixed farming (irrigation and livestock) livelihood zone they are springs and rivers. The mixed farming (food crops and livestock) livelihood zone mainly relies on open sources which are pans and dams and sometimes boreholes. The average return trekking distances from grazing area to watering points in the mixed farming (food crops and livestock) and mixed farming (irrigation and livestock) livelihood zones have increased to 5 - 8 km compared with the normal 3 - 4 km. In the mixed farming (horticulture and dairy) livelihood zone, trekking distances have remained at the normal 0-1 km. The frequency of watering is once a day for all livestock species in the mixed farming (irrigation and livestock) and mixed farming (horticulture and dairy) livelihood zones and is normal, while in the mixed farming (food crops and livestock) livelihood zone all the livestock species are watering once every two days due to an increase in distances to pasture. The open water sources are expected to last for one to two months and this is normal.



### 3.3 Water and Sanitation

#### Major sources of water

The key water sources for domestic use in the county are piped water, springs, dams, water pans, shallow wells, boreholes, rivers, and streams. Water is more readily available and accessible in the mixed farming horticultural/dairy and irrigation/livestock livelihood zones compared with the crop/livestock livelihood zone. The long rains recharged the surface water sources to about 80 percent of their capacities, however, due to poor temporal distribution (late onset and early cessation), high surface temperature, seepage, competition from humans, livestock and wildlife, 60 percent of the pans in the mixed farming (food crops and livestock) livelihood zone have dried up, borehole yield is low, and the volume in springs and water levels in dams are below normal for the time of year. Waiting time, walking distances and the cost of water have all increased dramatically in some areas especially in the mixed farming (food crops and livestock) livelihood zone (Table 8). The areas affected include Mwakitau and Mwachabo in Mwatate Sub County, Kishushe in Taita Sub County and Kisimenyi in Voi Sub County where vendors are selling water at Ksh. 20-30 and the average waiting time in some of those areas has doubled to 240 minutes.

**Table 8: Water availability and access in Taita Taveta County**

| Division / livelihood zone | Main Water Sources         |                           | Distance to Water for Domestic Use (Km) |         | Cost of Water (Kshs./20litres) |         | Waiting Time at Water Source (Minutes) |        | Average HH Use (Litres/person/day) |        | Projected duration of water availability |
|----------------------------|----------------------------|---------------------------|---|---------|--------------------------------|---------|--|--------|------------------------------------|--------|--|
|                            | Normal                     | Current                   | Normal                                  | Current | Normal                         | Current | Current                                | Normal | Current                            | Normal |  |
| Food crop/livestock        | Pipeline , Bore-holes Pans | Pipeline, Bore-holes Pans | 2-10                                    | 2       | 5                              | 5       | 30                                     | 15     | 10-15                              | 20     | Pans will last 1-2 months                |
| Horticulture / dairy       | Springs Streams            | Springs Streams           | 0.5                                     | 0.2     | 5                              | 2       | 10                                     | 5      | 20-30                              | 20-30  | Over 3 months                            |
| Irrigation/ livestock      | Springs Streams Dams       | Springs Streams Dams      | 0.3                                     | 0.3     | 5                              | 3       | 20                                     | 10     | 20                                 | 20     | Over 3 months                            |

Household consumption of water is stable except in the mixed farming (food crops and livestock) livelihood zone where households are consuming 10-15 litres per person per day. In Kisimenyi some households are consuming 5–10 litres per person per day.

### 3.4 Markets and Trade

#### Market operations

The main markets in the county for both food and livestock are Mwatate, Voi, Wundanyi, Chumvini and Taveta. Markets are well provisioned and operating normally across all livelihood zones both for food and livestock. Most foodstuffs in the market are from local supplies, neighbouring counties, and Tanzania.

### Maize prices

Maize prices remained stable between June and July and within averages, but were generally above the LTA from January to April (Figure 3). Maize prices varied significantly across the county with the highest price recorded in the mixed farming (food crops/livestock) livelihood zone, in Mwakajo, Wongonyi, Teri and Mwachawaza, where prices increased by 12.5 percent of the LTA. The main driver of price stability is the availability of maize from Tanzania.

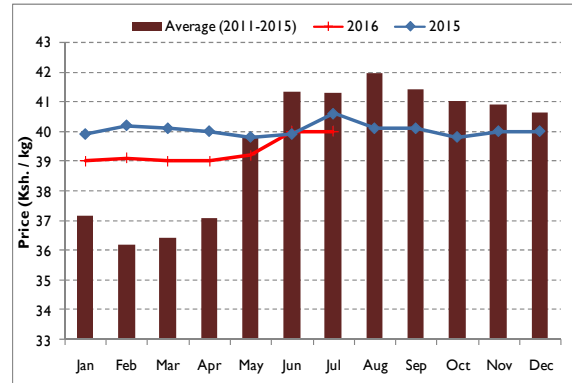


Figure 3 .Maize Prices

### Goat prices

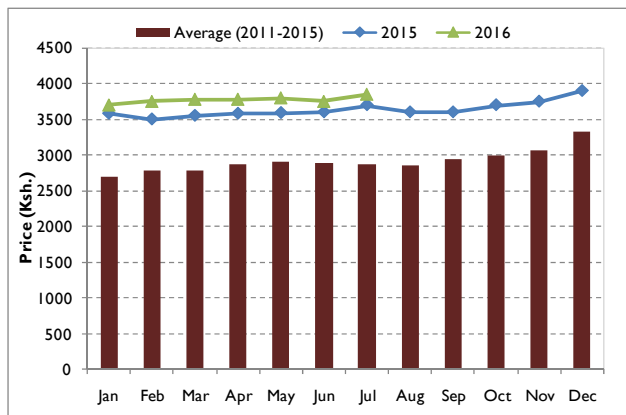


Figure 4 .Goat Prices

The goat prices for January to June, 2016 were above the LTA having increased by 34 percent. When compared to the same period in 2015, the current goat prices were above by 5-10 percent (Figure 4). The increased goat prices are attributed to good body condition of the goats following good performance of the consecutive two previous seasons. The prices are expected to remain stable across the livelihood zones in the county over the next three months.

### Terms of trade

Terms of trade were generally stable for the period January to July 2016 and above LTA by between 25-35 percent (Figure 5). When compared to the same period in 2015, the terms of trade were higher by eight percent. The stable terms of trade were mainly attributed to the above average prices for the goats and relatively stable maize prices over the reference period.

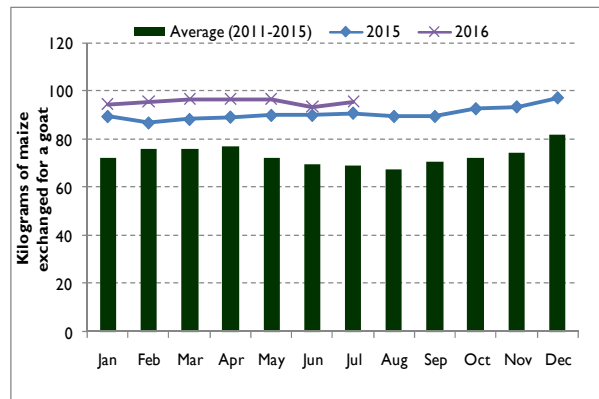


Figure 5. Terms of Trade

### 3.5 Health and Nutrition

#### Morbidity patterns

Table 9: Morbidity cases for children under five and general population

| Reported Morbidity cases for children under five |               |               |                | Reported Morbidity cases for General Population |               |               |                |
|--|---------------|---------------|----------------|---|---------------|---------------|----------------|
| Disease  | Jan-June 2015 | Jan-June 2016 | Percent Change | Disease   | Jan-June 2015 | Jan-June 2016 | Percent Change |
| URTI   | 43,903        | 35,330        | 20             | URTI  | 80,707        | 58,930        | 27.0           |
| Skin Infections                                  | 6477          | 5605          | 13             | Skin Disease                                    | 19,844        | 18,436        | 7.1            |
| Diarrhoea  | 6428          | 4402          | 32             | Arthritis                                       | 12,428        | 11,954        | 3.8            |
| Pneumonia  | 2521          | 1854          | 26             | Diarrhoea                                       | 6,625         | 4,627         | 30.2           |
| Malaria  | 772           | 251           | 67             | Malaria   | 2,793         | 818           | 70.7           |

Morbidity cases for the top five diseases affecting the under-fives and the general population all reduced (Table 9), with a significant reduction noted in malaria cases which is attributed to the mass distribution of long-lasting insecticide-treated nets between October and November 2015. The reduction in pneumonia among children under five is attributed to the introduction of pneumococcal vaccine. There was no outbreak reported of any of the key epidemic-prone diseases.

#### Immunization Coverage

The immunization coverage is above the national target of 80 percent as indicated by the results of the nutrition survey. However, DHIS records show a slight drop in immunization coverage in 2016 compared with the same period in 2015 (Figure 6), attributed to the breakdown of the cold chain in some health facilities and stock-outs of antigens between December 2015 and February 2016.

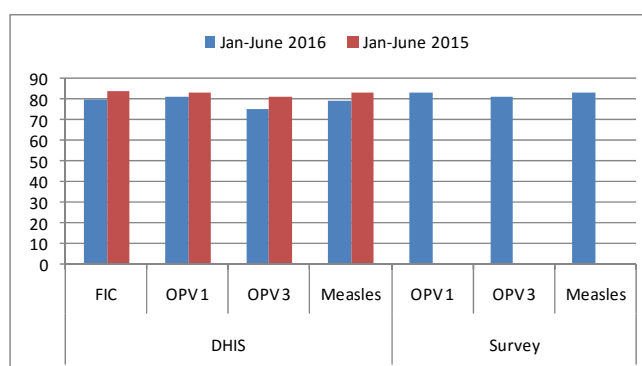


Figure 6. Immunization Coverage

#### Vitamin A Supplementation

The Vitamin A coverage in children below five years, as per the nutrition survey, is approximately 63 percent, which is below the national target of 80 percent (Figure 7). This is because children above one year do not attend growth monitoring and are therefore missing the opportunity to be supplemented. The DHIS data is lower since the Vitamin A supplementation carried out during Malezi Bora and other national immunisation campaigns is not uploaded into the DHIS.

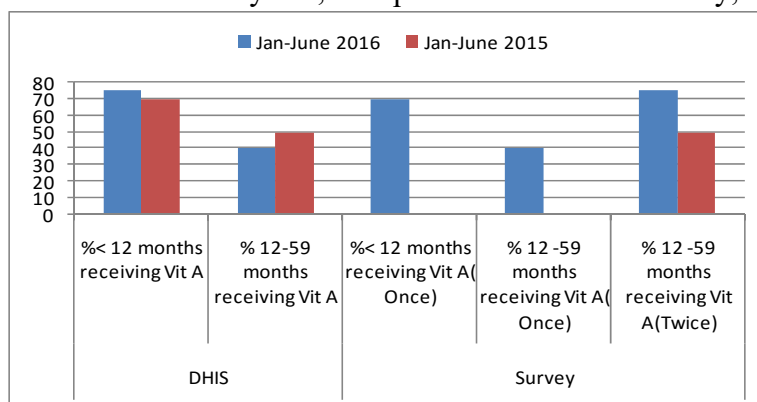


Figure 7. Vitamin A supplementation

### Nutrition Status and Dietary Diversity

The nutrition situation is poor, according to a survey done in March 2016 which revealed a global acute malnutrition (GAM) rate of 5.6 percent. The nutrition situation based on mid-upper-arm circumference (<135mm) was generally stable between January and June 2016 compared with the similar period in 2015, though the proportion of children at risk is slightly higher than the LTA. The nutrition survey of March 2016 showed that the rate of exclusive breastfeeding was 80.5 percent, with 61 percent of mothers continuing to breastfeed for two years. Medium dietary diversity was reported by 49.3 percent of households; however, only 43 percent of children aged 6 months to two years achieved minimum dietary diversity, indicating that most children had a poor diet (figure 8).

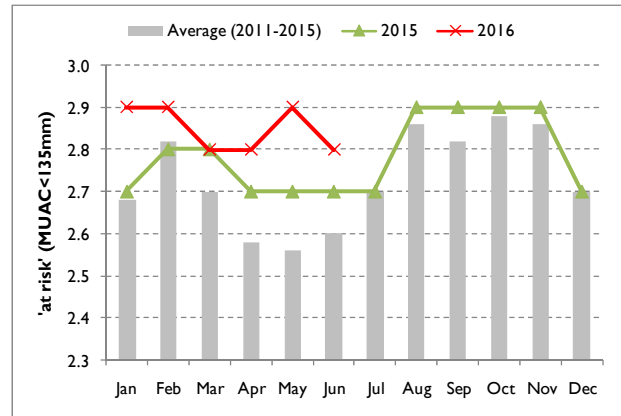


Figure 8. Children at risk of malnutrition (MUAC<135mm)

The percent of children aged 9-23 months who were receiving meals more than three times (9- 23) and were breastfeeding were 82 percent. According to Food Security Outcome Monitoring (FSOM), there has been an improvement over time in dietary diversity and food frequency, as indicated by the reduction in the population with a poor food consumption score and the increase in those having acceptable diets (figure 9).

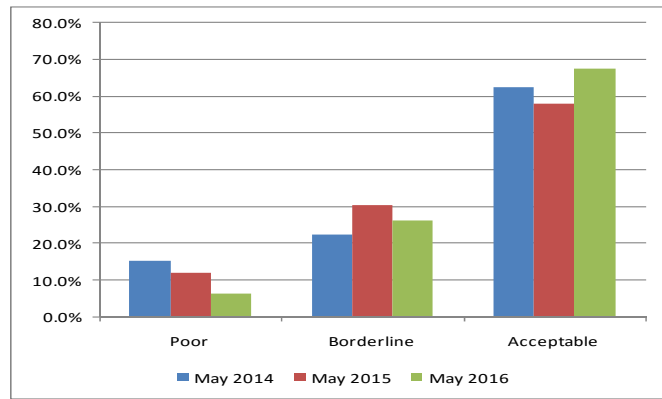


Figure 9. Food Consumption Scores

### Coping Mechanisms

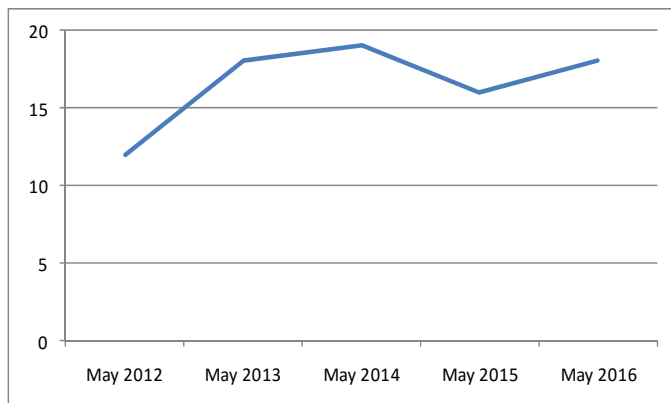


Figure 10. Coping Mechanisms

The coping strategy index is within the seasonal norm indicating no significant change households engaging in consumption-related coping strategies (Figure 10). The most common strategies included a reduction in the number of meals consumed per day (73 percent), a reduction in the portion size of meals (68 percent) and relying on borrowing food or seeking help from a friend or relative (67 percent).

## Sanitation and Hygiene

Water treatment at household level is 60.8 percent, according a survey done in March 2016, with 77.9 percent of the population having access to safe water. Hand-washing was being practised by 88.7 percent of households. Latrine coverage in the county averaged 85 percent and is ranging from 67 percent in Taveta sub-county to 97 percent in Mwatate sub-county. In Kishenyi, in Taita sub-county, the community has been advised not to use water from Kishenyi dam due to suspected poisoning after fish started dying. The samples have been taken for analysis, and water trucking is meanwhile being carried out in this area.

## 3.6 Education

There are 247 primary schools in the county 205 being public and 42 private with a total enrolment of 58,899 pupils. Early childhood development education (ECDE) centres are 584 of which 327 are public and 158 private with an enrolment of 14,718 pupils respectively (Table 10). There were more boys enrolled compared to girls in both primary and ECDE attributed to valuing boy child education more compared to girls.

Table 10: Enrolment in Taita Taveta County

| Level of education | Term II 2016 |        |        |
|--------------------|--------------|--------|--------|
|                    | Boys         | Girls  | Total  |
| Primary            | 29,926       | 28,973 | 58,899 |
| ECDE               | 7,483        | 7,235  | 14,718 |

The transition rate from ECD to primary is over 90 percent and from primary to secondary is at 80 percent. The high transition rate is from ECD to primary is attributed to employment of ECD by the County Government and enhanced supervision in all the education zones. The Home Grown School Meals Programme (HGSMP) targets 50 schools as follows: Taveta sub county (18 schools), Voi (21schools), and Mwatate (10 schools), covering a total of 13,120 pupils.

## 4 FOOD SECURITY PROGNOSIS

### 4.1 Prognosis Assumptions

The food security outcomes in the next six months are influenced by the following assumptions:

- According to the Famine and Early Warning Network (FEWSNET), the likelihood of a La Nina event occurring is 55 – 60 percent resulting in below average October-November-December 2016 short rains.
- Pasture is expected to deteriorate in the next two months in the mixed farming (food crops and livestock) zone before the onset of the short rains which are expected in mid-October. Browse is expected to remain stable across the livelihood zones.
- The prices of food commodities, especially maize, are expected to remain stable in the next three months and maize from across the border will continue to flow in.
- The terms of trade are expected to remain stable and above the LTA for 3-6 months across the livelihood zones.
- Available food stocks will remain stable at three months in the mixed farming (irrigation and livestock) and mixed farming (horticulture and dairy) livelihood zones as harvesting is ongoing. Thereafter they will decline.

## **4.2 Food Security Outcomes**

### **Food Security Outcomes from August to October**

The food security situation in the mixed farming (irrigation and livestock) and mixed farming (horticulture and dairy) livelihood zones is expected to be relatively stable, but to deteriorate in the mixed farming (food crop and livestock) livelihood zone over the next one to two months. Water availability and accessibility is expected to remain stable throughout the period in both the mixed farming (irrigation and livestock) and mixed farming (horticulture and dairy) livelihood zones, while water stress may be experienced in the mixed farming (food crops and livestock) livelihood zone. The prices of maize are likely to remain stable. No significant change is expected in the nutrition status of children under five across the livelihood zones, or in the mortality rates for both children under five and the general population. Households employing consumption-related coping strategies are expected to marginally increase in the mixed farming (food crops and livestock) livelihood zone. The overall food security situation is expected to remain stable as Minimal/None, IPC Phase 1, in the mixed farming (irrigation and livestock) and mixed farming (horticulture and dairy) livelihood zones for the next three months, while the mixed farming (food crops and livestock) livelihood zone may deteriorate to Stressed (IPC Phase 2).

### **Food Security Outcomes for November to January**

The below average short rains in October are expected to improve the forage conditions temporarily by November, and this will improve livestock body condition. Water availability and accessibility is expected to improve in this period across the livelihood zones though at below average levels. The prices of maize are likely to remain stable. No significant change is expected in the nutrition status of children under five across the livelihood zones and also no change in the mortality rates for both children under five and the general population. Households employing consumption-related coping strategies are expected to marginally increase in the mixed farming (food crops and livestock) livelihood zone. The overall food security situation is expected to remain stable in the 'Minimal/ None' (IPC Phase 1) phase, in the mixed farming (irrigation and livestock) and mixed farming (horticulture and dairy) livelihood zones, while the mixed farming (food crops and livestock) may remain in the 'Stressed' (IPC Phase 2) phase.

## **5 CONCLUSION AND RECOMMENDATIONS**

### **5.1 Conclusion**

Taita Taveta County is currently classified in the None/ Minimal (IPC Phase 1). The situation is expected to remain stable with significant changes expected in the month of September in the mixed farming (food crops and livestock) when it may deteriorate and lead to more households being food insecure. The factors to be monitored include; forage situation, distance to water sources, water availability and access, livestock body condition, food and livestock prices, human wildlife conflicts and nutrition status of the children under five years.

### **5.2 Summary of Recommendations**

- Promote feed conservation (hay baling and storage)
- Water harvesting for crop production
- Beehive fencing to protect farms from elephants
- On farm soil and water conservation
- Extension of pipeline in Kishushe

- Construction of water tanks and installation of pump in Godoma
- Borehole drilling and equipment in strategic areas in the county
- Scale up of supplementary Feeding Programme (SFP sites)
- Integrated outreach services

### 5.3 Sub-County Ranking

**Table 11. Sub County food security ranking (worst to best)**

| Sub County | Food security rank (1-10)<br>(from worst to best) | Justification   |
|------------|---|---|
| Mwatate    | 1   | Human wildlife conflict (58 percent crop destruction), 60 percent dry open water sources, in-migration (ranches)  |
| Voi        | 2   | Poor temporal and uneven spatial distribution (poor crop performance), human-wildlife conflict (20 percent), access to income from alternative livelihood, water availability |
| Taita      | 3   | Access to income through horticulture and dairy / alternative livelihood Highlands where people have stocks, water availability, springs, forests                             |
| Taveta     | 4   | Presence of irrigation schemes, water availability and accessibility and access to market- Tanzania thus food is available and prices are stable                              |

## 6 ANNEXES

### 6.1 On-going Interventions by Sector

**Table 12. On-going Interventions by Sector**

| Intervention   | Objective                                      | Specific Location  | Cost in Ksh. | No. of beneficiaries | Implementation Time Frame | Implementing Stakeholders               |
|--|--|--|--------------|----------------------|---------------------------|---|
| <b>AGRICULTURE</b>   |  |  |              |                      |                           |   |
| On farm soil and water conservation, Water harvesting,                                     | Increase vegetables production in the lowlands | Taveta<br>Taita<br>Taita /<br>Wundanyi                   | 6.3m         | 3,000                | April 2016 to date        | NDMA, World Vision, MoAL and F , (CGTT) |
| Pump fed irrigation , Construction and Desilting of drainage canals                        | Increased crop area                            | Taveta /<br>Mata   | 9.2 M        | 6,000                | July 2015 – June 2-016    | NDMA, World Vision, CGTT                |
| Distribution of drought tolerant crops seeds and Promotion of traditional high value crops | Increased production                           | Voi /<br>Ngolia and Tausa<br>Mwatate<br>(Sub County Wide |              | 3,100                | July 2015 – June 2016     | NDMA, CGTT and National Government      |
| Subsidized tractor services  | Increased production                           | county wide  | 6.0 M        | 2,000                | July 2015 - June 2016     | CGTT                                    |
| <b>LIVESTOCK SECTOR</b>  |  |  |              |                      |                           |   |

| Intervention  | Objective   | Specific Location  | Cost in Ksh. | No. of beneficiaries                                   | Implementation Time Frame | Implementing Stakeholders          |
|---|---|--|--------------|--|---------------------------|------------------------------------|
| Dairy Upgrading and Animal Health Improvement   | Improve Livestock productivity                                | Entire county  | 15M          | 1,000  | 3 years                   | CGTT, ILRI, CGTT, ILRI, ADS Pwani, |
| Feed Improvement  | Improve Livestock productivity                                | Entire county  | 3M           | 500  | 3 year                    | CGTT, ILRI, ADS Pwani, NDMA        |
| Livestock Export Processing Zone and Livestock Marketing  | Improve Livestock productivity                                | Entire county  | 110M         | 7,000  | 5 years                   | CGTT, ASDSP, Land 'O' Lakes, MTDC  |
| <b>WATER SECTOR</b>   |   |  |              |  |                           |                                    |
| Water trucking  | Increased access to clean safe drinking water                 | Kisimenyi, Buguta, Mraru, Ghazi, Rukanga Njukini Paranga, Kishushe | 3.5M         | 17,350   | 3 months                  | CGTT                               |
| Bore hole equipping, Rehabilitation, Pipeline construction                                      | Increase availability and access to clean safe drinking water | Ilangenyi, Kwa Mnengwa Mwakitau/ Msorongu                          | 9M           | 10,750   | On going                  | CGTT                               |
| Expansion of Mraru irrigation scheme  | Increase access to clean safe drinking water                  | Mwarungu   | 1.4M         | 1500   | 3 months                  | CGTT                               |
| Installation of plastic tanks for institutions<br>Construction of storage tanks                 | Increase access to clean safe drinking water                  | Njukiini, Kasigau, Kishushe Paranga Mwachabo                       |              | 14 schools and 500 community members                   | By end of August 2016     | CGTT                               |
| <b>HEALTH SECTOR</b>  |   |  |              |  |                           |                                    |
| Micro Nutrient supplementation and deworming(dewormers, Vitamin A, MNPs and Iron-Folic tablets) | Reduction in morbidity rates                                  | Entire County  | 1m           | 34675 (Children 6 – 59 months)<br>56 health Facilities | On going                  | CGTT/ UNICEF                       |



| Intervention                                       | Objective                    | Specific Location    | Cost in Ksh. | No. of beneficiaries | Implementation Time Frame | Implementing Stakeholders |
|--|------------------------------|----------------------|--------------|----------------------|---------------------------|---------------------------|
| Integrated Management of Acute Malnutrition (IMAM) | Reduction in morbidity rates | 26 health facilities | 5m           | 1000                 | On going                  | CGTT / UNICEF/WFP         |

## 6.2 Proposed Interventions

**Table 13. Food Intervention Required (Proposed population in need of assistance)**

| Sub county | Proposed Percentage of people in need | Sub County Food Security Score | Remarks/ Modality |
|------------|---------------------------------------|--------------------------------|-------------------|
| Mwatate    | 20-25%                                | 1                              | CFA               |
| Voi        | 10-15%                                | 2                              | CFA               |
| Taita      | 5-10%                                 | 3                              | CFA               |
| Taveta     | 0-5%                                  | 4                              | CFA               |

## 6.3 Non-food Interventions by Sector

**Table 14. Non-food Interventions**

| Sub county                | Intervention                                     | Location                                    | No. of beneficiaries | Proposed Implementers                  | Required Resources | Available Resources | Time Frame                |
|---------------------------|--|---|----------------------|--|--------------------|---------------------|---------------------------|
| <b>AGRICULTURE SECTOR</b> |  |   |                      |  |                    |                     |                           |
| <b>Voi, Taita</b>         | Water harvesting for crop production             | Bughuta Miasenyi, Kishushe, Mgange/ Mwaroko | 1710                 | Min of Agric Partners , CGTT Community | 10 million         | Nil                 | FY 2016-2017              |
| <b>Voi</b>                | Bee hive fencing to protect farms from elephants | Ngolia Kajire Miasenyi Kasighau             | 1000                 | NDMA                                   |                    | Nil                 | FY 2016-2017              |
| Taveta                    | Drought tolerant seeds                           | All wards                                   | 3000                 | MoAL&F NDMA                            | 2,000,000          | Nil                 | September - October, 2016 |
| All sub counties          | Disease surveillance                             | All wards                                   | 3000                 | MoAL&F NDMA                            | 20,000             | Nil                 | All year                  |

| Sub county              | Intervention  | Location  | No. of beneficiaries | Proposed Implementers       | Required Resources | Available Resources | Time Frame                |
|-------------------------|---|---|----------------------|-----------------------------|--------------------|---------------------|---------------------------|
| <b>LIVESTOCK SECTOR</b> |   |   |                      |                             |                    |                     |                           |
| All sub counties        | Promote feed conservation (hay baling and storage)          | Countywide  | 240                  | MoALF, KAPAP, ADS Pwani     | 50M                | 2M                  | October to December, 2016 |
| All sub counties        | Construction of water pans and boreholes                    | Kishushe/ Paranga Ward, Rong'e Ward, Sagalla Ward, Maungu Ward          | 200                  | MoALF, KAPAP, World Vision, | 20M                | 1 M                 | October to December 2016  |
| <b>WATER SECTOR</b>     |   |   |                      |                             |                    |                     |                           |
| Voi                     | Pipeline extension and support Infrastructure               | Paranga, Kishushe   | 400 individuals      | Tavevo, County Government   | 2m                 |                     | 2 months                  |
| Mwatate                 | Construction of pipeline, tanks & surface pump installation | Godoma  | 3000                 | CWSB                        | 30m                | 30m                 | 3 months                  |
| Mwatate                 | Bore hole equipping   | Shelemba, Modambo gho   | 4000                 | CGTT                        | 14m                | 1,5m                |                           |
| Voi                     | Excavation/di-silting of dams/pans                          | Mbughuta water pan  | 350 individuals      | World vision Kenya          |                    |                     | By end of September 2016  |
| <b>HEALTH SECTOR</b>    |   |   |                      |                             |                    |                     |                           |
| Taita Taveta County     | Scale up of SFP in other sites without the programme        | Manoa, Kwamnengwa Msau, Kighombo Kishushe, Sangeroko Ndome, Mahandakini | 1000                 | TTCG/WFP                    | 1M                 |                     |                           |
| Taita Taveta County     | Strengthen integrated Outreach services                     | All sub counties  | 50,000               | MOH                         | 150,000            |                     |                           |

| <b>Sub county</b>         | <b>Intervention</b>                | <b>Location</b>     | <b>No. of beneficiaries</b> | <b>Proposed Implementers</b> | <b>Required Resources</b> | <b>Available Resources</b> | <b>Time Frame</b> |
|---------------------------|------------------------------------|---------------------|-----------------------------|------------------------------|---------------------------|----------------------------|-------------------|
| Taita<br>Taveta<br>County | Formation of<br>community<br>units | All sub<br>counties | 485                         | MOH                          | 885,700                   |                            |                   |