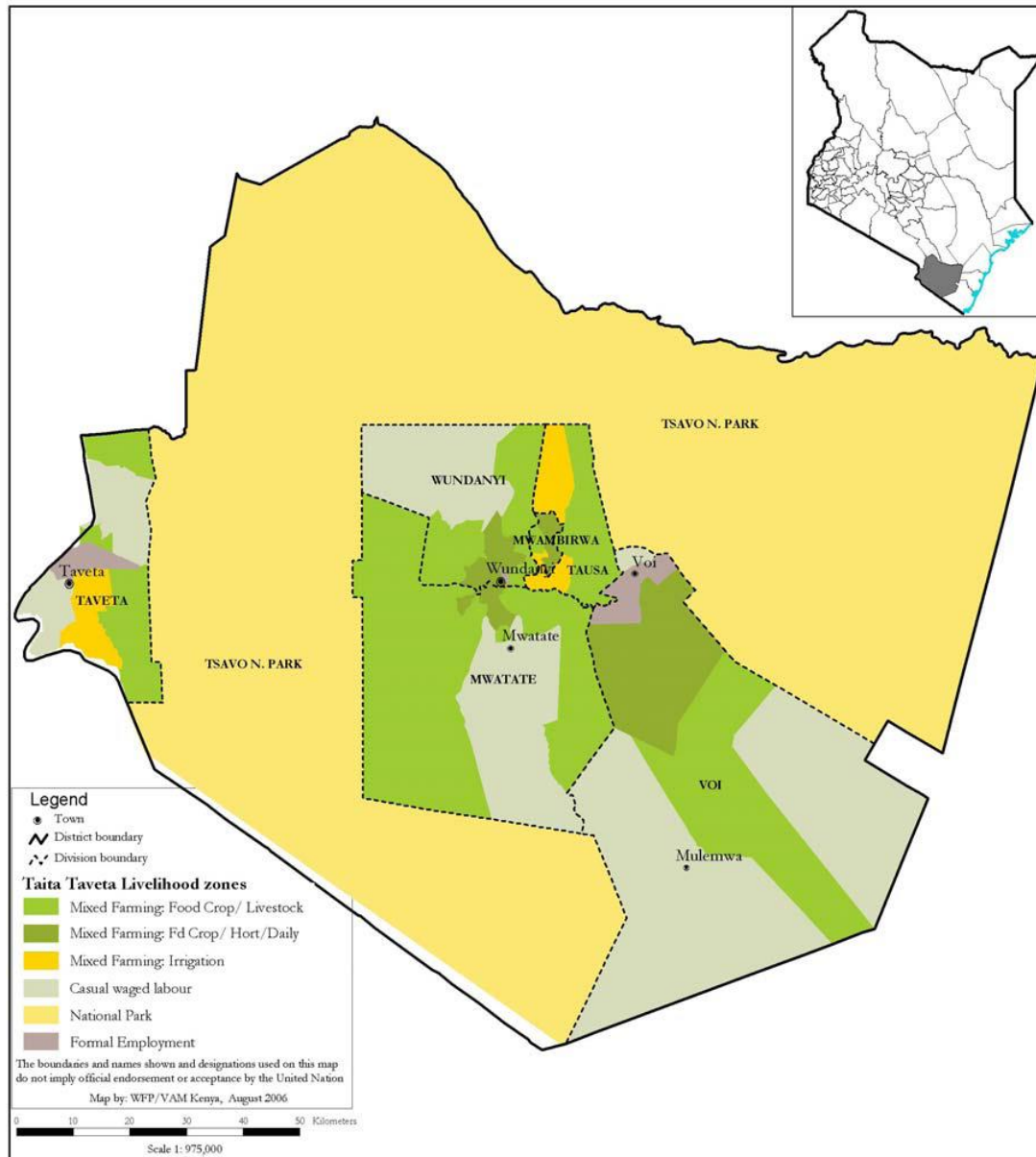


**TAITA TAVETA COUNTY**  
**2013 LONG RAINS FOOD SECURITY ASSESSMENT REPORT**  
**29<sup>th</sup> JULY 2013 – 2<sup>nd</sup> AUGUST 2013**



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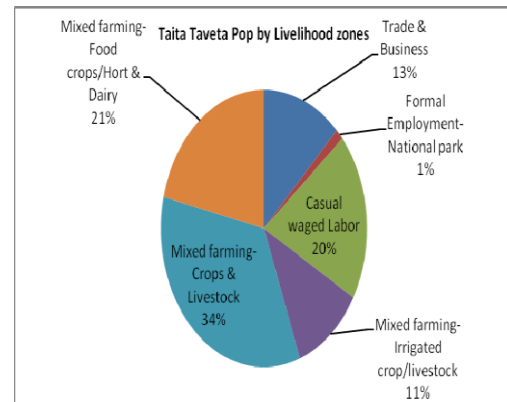
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## 1.0 INTRODUCTION

### 1.1 County background

Taita Taveta county is in coast province, bordering 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 and covers a total area of 17,128.3 square kilometers (sq. Km). The county is characterised by two national parks, Tsavo East and Tsavo West National Parks which occupy 11,000 sq. Km; ranches where both livestock rearing and dry land farming is practiced is 5,876sq. Km and 100 sq. Km. Human population according to the Kenya National Bureau of Statistics 2009 (KNBS, 2009) census is 284,657 people with women constituting 48.9 percent. An estimated 34 percent of population is engaged in mixed farming (food crops and livestock); while 21 percent are involved in mixed farming (horticulture, food crops, dairy) and 11 percent are engaged in mixed farming (irrigated crops, livestock and food crops). Only 19 percent are employed as casual waged labour and 13 percent are engaged in trade and business.



**Figure 1: Taita Taveta County Population Percentage by Livelihoods**

### 1.2 Current relief operations

From February after the short rains assessment, several relief programs have been running in Taita Taveta county. The main relief program is the Protracted Relief and Recovery Operation (PRRO) which has 43 project sites and targets 44,900 beneficiaries (15.7 percent of the population). The PRRO is being implemented in two modes, the Food for Assets (FFA) and Cash for Assets (CFA), both of which are sponsored by the World Food Programme (WFP) but implemented by World Vision (WV) as the partner organization. The PRRO programs beneficiaries are distributed across sub counties in the county with 5,500 in Tausa, 14,800 in Voi, 11,900 in Mwatate, 6,700 in Taveta, and 6,000 in Taita.

Besides the PRRO, other considerably significant relief programs include the Supplementary Feeding Program (SuFP) being implemented in 26 health facilities across the county by the WFP and Ministry of Health; and Home Grown Schools Meals Program (HGSM) implemented in 29 schools by the Ministry of Education. In addition, the government through Ministry of Devolution and Planning has also at times distributed maize, beans and cooking oils to vulnerable households in Mwatate and Voi sub-counties.

### 1.3 Food security trends

The short rains assessment in February 2013 placed Taita Taveta county in the Stressed (IPC Phase 2) phase and downscaled the population in need to 44,900 people from 76,000 people during the long rains assessment in 2012. The food security situation in February 2013 was based on the almost near average performance of the 2012 October to December short rains season. The 2013 August food security assessment places Taita Taveta county still in the Stressed (IPC Phase 2) based on the below average performance of the March to May 2013 long rains. Most affected areas include the mixed farming zone (crops/livestock) which due to failed long rains season and yields have been significantly poor.

#### **1.4 Current factors affecting food security**

Food security in the county is currently being affected by various factors, the main one being poor temporal and spatial distribution of rainfall. This is particularly important noting that the mixed farming livelihoods depend on rain fed agriculture. Secondly, interference by wildlife has caused losses of both human life and crops. However, Kenya Wildlife Service is trying to contain the problem.

#### **1.5 Summary of recommendations**

##### **1.5.1 Food interventions**

- Increase the current PRRO beneficiaries from 44,900 to 63,150 through Cash For Assets
- Continuation of SuFP and widening the coverage to areas not yet covered.
- Up-scaling of the HGSMF to cover all primary schools especially in Voi, Mwatate and introduction of the program in the lowlands of Taita Sub-county
- Prompt release of funds to schools benefiting under HGSMF.

##### **1.5.2 Non-Food interventions**

- Establish and manage strategic water points.
- Programs geared towards supporting prevention of increased exposure and susceptibility of new and re-emerging livestock diseases should be enhanced in areas of common free range grazing
- Provision of timely relief seeds and other farm inputs to the resource poor farmers
- Integrated pest management to reduce operation costs and improve crop quality.
- Promote effective management of wildlife and minimize human wildlife conflicts.
- Up scaling and promotion of irrigation farming through rehabilitation of irrigation schemes
- Intensified outreaches and disease surveillance (MoH) to improve Vitamin A coverage.
- Purchase of UPVC plastic water tanks for schools and health institutions
- Enhance hay production and conservation
- Conduct nutritional survey for the county

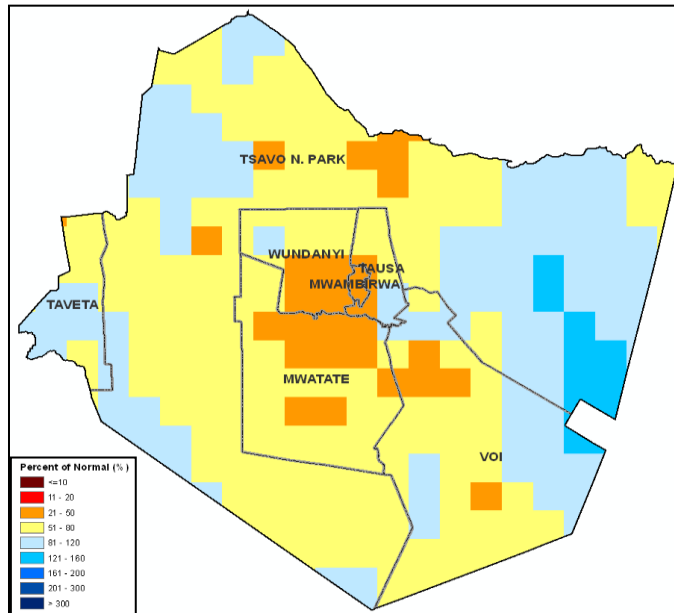
#### **2.0 COUNTY FOOD SECURITY SITUATION**

##### **2.1 Current food security situation**

The Taita Taveta county food security situation remains Stressed (IPC Phase 2) due to the mediocre performance of the March to May 2013 long rains. The yields of cereals realized are 80 percent of long term average but in much of the lowland mixed farming (crops and livestock) livelihood zone, maize failed completely. Only a few households managed to harvest the drought resistant pulses including pigeon peas and cowpeas. The household maize stocks are currently low compared to the five year average especially in the mixed crop and livestock farming livelihood zones. Rangeland conditions are fair and livestock conditions are stable. MUAC (2.4%) and CHANIS (5%) indicator levels however remain low in the county which is mainly attributed to current interventions in the sector. Households can however, manage to acquire the minimum dietary requirements from the little stocks available from harvests and market purchases.

##### **2.2 Current shocks and hazards**

###### **2.2.1 Rainfall performance**



**Figure 2: Taita Taveta spatial rainfall distribution**

The onset of the 2013 long rains was timely with rains being received in mid March as expected. However, spatial and temporal distributions were poor characterised by prolonged dry spells. The rainfall amounts were also lower than the long term average. Much of the Taita Taveta county received between 50 - 80 percent of the normal rainfall. The highland areas including Wundanyi and Mwambirwa received even less with between 20 and 50 percent of the normal long rains season. The cessation of the rains was early by almost two dekads.

## 2.3 Other shocks and hazards

### 2.3.1 Human-wildlife conflict

Human – wildlife conflicts were reported mainly in the areas bordering the national park in both the mixed farming (food crops/livestock) zone and the mixed farming (irrigation/livestock) zone.

### 2.3.2 Flooding

Flooding was experienced in the county in April and mainly affected the mixed farming zone (irrigation/livestock) in Taveta sub-county. Around 200 ha of cropped land was affected, and roads linking farms to the markets were also damaged affecting the transportation of produce.

## 3.0 IMPACTS OF SHOCKS AND HAZARDS

### 3.1 Crop production

The three major crops grown under rain fed agriculture in the lower zones (mixed farming- food crops and livestock livelihood zones) are maize, green grams and cow peas, for both subsistence and sale while those grown in the upper zone (mixed farming food crops, horticulture and dairy) under rain fed are maize, beans mainly for subsistence and horticultural crops (french beans) both for subsistence and sale. Meanwhile under irrigation, in the lowlands, maize, bananas, Beans and horticultural crops are grown while in the highlands, kales, cabbages, tomatoes french beans and snow peas are grown.

#### 3.1.1 Hectarage and quantities achieved

The area of crops planted for rain fed agriculture under maize, green grams and cowpeas improved by over 70 percent in the whole county compared to the 5-year average. This was due to timely onset of the rains with promising initial amounts and provision of planting seeds by Ministry of Agriculture for bulking under traditional high value crops program. Production of both maize and legumes was low compared to long term average in the three sub counties of

Voi, Taita and Mwatate in the mixed farming zone(food crops/livestock) and mixed farming zone(food crops/hort./dairy). Below average production is attributed to the early cessation of rainfall and the prolonged dry spell within the season that resulted in withering of the crops.

**Table 1: Long rains crop production in comparison to 5-year average for rain fed (3 major crops)**

Crop	Area planted in LR (Ha)		LRA production (90-Kg bag)	
	2013	5-year average	2013	5-year average
Maize	6,274	3,710	36,777	46,790
Green grams	1,567	555.5	8,089	5,840
Cow peas	483	392.5	2,362	3,641
<b>Total</b>	<b>8,324</b>	<b>4,658</b>	<b>47,228</b>	<b>56,271</b>

The area planted for both lowland and upper zones improved and were considerably higher compared to the long term average because of timely onset of rains and availability of planting seeds. However, the production was lower than the long term average due to poor distribution of rainfall.

In the mixed farming zone (irrigation/ livestock) the area planted for all the crops increased and was higher compared to long term averages. This was mainly due to availability of water for irrigation and certified planting seeds. Production also improved compared to short term averages as a result of certified seeds provided to farmers by Ministry of Agriculture, improvement in use of fertilizers and availability of water for supplementary irrigation.

**Table 2: Long rains crop production in comparison with 5-year average for irrigation**

Crop	Area planted in LR (Ha)		LRA production (90-Kg bag)	
	2013	5-year average	Crop	5-year average
1.Maize	1,279	1,206	19,185	18,090
2.Bananas( Tons)	2,097	1,679	12,5820	100,740
3.Beans	418	190	3,780	2,280

### 3.1.2 Maize stocks

The total maize stocks in the county are almost 40 percent below long term average. Most households in the mixed farming zone (food crops/livestock) mainly in Mwatate, Voi and Taita have dwindling food stocks which are below the long term averages due to low stocks from the short rains 2013 and the current general poor crop performance. However, in the mixed farming zone (irrigation/livestock) mainly in Taveta sub-county the house hold stocks are above long term averages, mainly farmers harvested from both irrigated and rain fed fields.

**Table 3: Maize stock levels in the county**

Food stocks held by	Quantities of maize held (90-kg bags)	5-year Average quantities held (90-kg bags)
House Holds	503,72	92,890
Traders	14,042	24,197
Millers	554	211
NCPB	18,205	16,957
<b>Total</b>	<b>83,173</b>	<b>134,255</b>

Overall, the traders stocks are low compared to the 5-year average. Millers stocks are also above the normal range in the mixed farming zone (food crop/livestock) because of the increase in demand for maize. NCPB stock is also within the normal range. The stock held is for strategic reserves. The current household stocks in the mixed farming zone (food crops/livestock) are expected to last for a month compared to a normal of three months while stocks in the mixed farming zone (irrigation/livestock) are expected to last for 7 months.

### **3.2 Livestock production**

Livestock species kept in the county are cattle, goats, sheep, poultry, rabbits, pigs, donkeys and camels. Livestock is kept mainly for production of meat and milk, which is either consumed directly or converted into cash for income to support other household needs. However, in the horticulture livelihood zone, the practice is intensive with more commercialization. In terms of significance, livestock contributes between 20 to 35 percent of household cash income, and is therefore a major determinant of household food security.

#### **3.2.1 Pasture and browse condition**

Pasture and browse condition in mixed farming zone (food crops/livestock) is poor as most parts of the low land received little precipitation and this affected effective pasture and browse regeneration in terms of foliage and density. The current pasture and browse situation is generally below normal and its projected to last one month for pastures and two months for browse. The trend is declining for both pasture and browse.

In the mixed farming zone (horticulture/ dairy) in the upper zones, the precipitation was adequate for pasture and fodder regeneration. However, the early cessation has had an effect of fast deterioration of pasture and browse quality thus the current situation in this livelihood zone is generally fair and is projected to last for the next two months. Farmers in the zone are able to utilize crop residue, especially maize stalk and hay to sustain their dairy cattle until the onset of short rains

#### **3.2.2 Livestock productivity**

##### **Livestock body condition**

Livestock body condition of large stock in the mixed farming zone (food crops/livestock) is fair and good in the mixed farming zone (irrigated/livestock) and mixed farming zones (horticulture/dairy). The body condition of animals in the mixed farming zone (food crops/livestock) is likely to deteriorate from fair to poor between September and October. As a result of the rapid decline in rangeland conditions trekking distances to water and pasture is on the increase. Consequently, livestock body conditions are expected to worsen in Voi, Nyangala, Miasenyi, Rukanga (Voi sub-county) Jipe, Challa Mahandakini (Taveta sub-county) Mwatate,

Mgeno, Mwachabo, Maktau, Rong'e Nyika, (Mwatate sub-county) Kishushe, Ghazi, Paranga, Mwaroko (Taita sub-county).

### **Birth rate and tropical livestock units (TLU)**

There was no significant change in the birth rates through the March-May long rains. The current livestock units are three to five TLUs in the mixed farming food crop/livestock and horticulture/dairy livelihood zones. For middle income households the TLU is between 10 and 15 in the mixed farming zone (food crop/livestock).

### **Milk availability and consumption**

Milk production in the mixed farming (horticulture/dairy) livelihood zone is normal at an average of 7-8 litres per day per cow. In the food crop/livestock mixed farming zone where the practice is free range grazing production is about two litres per day per cow compared to a normal of three litres. As much as standing hay provides feed in most areas, inadequate water supply adversely affects milk production in these areas. Milk consumption per household in the mixed farming (horticulture/dairy) zone is one litre while in the mixed farming zone (crops/livestock) it is half a litre. This status is however expected to decline in the next one month due to increasing trekking distances to access water and pasture. Meanwhile, 80% of the milk is destined for the market. Average farm gate price of milk is Ksh. 30 per litre in the horticulture/dairy zone which is normal while in the lowlands food crops/livestock zone it is Ksh. 40 and retailing at Ksh 60-70 per litre.

#### **3.2.3 Water for livestock**

The main sources of water for livestock are springs, streams, water pans, dams and boreholes. The water sources dependent on run off recharged 20 – 30% in areas which received higher amounts of rainfall. Over 70 percent of the water pans are dry due to low water holding capacity and insufficient rainfall amounts in those areas. Livestock especially in the lowlands are stressed due to increased trekking distances to watering points of up to 8 km. Frequency of watering has also reduced to once every other day. This is likely to affect animal body condition and milk production thus impacting negatively on household incomes and food security.

#### **3.2.4 Migration**

There was increased surveillance and animal movements were restricted in the ranches. Meanwhile illegal grazers who were the main holders of large numbers of flock in the lower zone were forcefully moved out. The migration has reduced conflict arising from pressure on common resource use such as pastures and water in the mixed farming zone (crop /livestock).

#### **3.2.5 Livestock diseases and mortalities**

There were no cases of outbreaks of notifiable diseases reported in all the livelihood zones and animal health concerns were restricted to cases of helminthiasis, and tick borne diseases. There has been ongoing vaccination to contain incidence of outbreaks of foot and mouth diseases, lumpy skin disease and contagious caprine pleura-pneumonia. Threats of higher temperatures in hot spots can increase transmission rates of disease pathogens and increase the habitat suitable for parasites. Flagged areas include Jipe, Challa, Mwatate, Nyangalla, Kishushe, and Maktau.

### **3.3 Water and sanitation**

The main water sources for domestic and livestock use in Taita-Taveta county are piped water sources, dams/pans, shallow wells, boreholes, rivers, springs and roof catchments. The 2013 long rains replenished between 10-20% of the surface water sources in areas that received



rainfall and less than 2-5% in areas where rains did not result into meaningful runoff. The highlands receive fairly good rainfall compared to the lowlands hence highly populated. Currently most of the water sources have registered reduced flows. The lowlands are not densely populated a situation associated with lack of enough water. Majority of piped water schemes are concentrated in the highlands and are the same ones serving the adjacent lowlands. Generally, water flows especially from springs/streams and rivers have diminished due to the poor rainfall received in the county and others due to interference of water sources within the catchment area. Water flows especially from springs/streams and rivers have been diminished due to erratic and unreliable rainfall in the county over the years. The long rains did not replenish the water sources satisfactorily more so in the lowlands, hence water stress is being experienced in some areas and is expected to be serious between September and October.

### **3.3.1 Distance to water sources**

Currently, the distance to water for both domestic use and livestock in the mixed farming zone (horticulture/dairy) ranges between 2-5 km compared to 5-10 km in the mixed farming zone (food crops/livestock) and this is normal for this time of the year. There are also few areas with ranges above normal including Kishushe, Paranga, Jipe, Mata, Mbulia, Kangemi, Mwachabo, Maktau, Zungulukani, Marungu, Sasenyi and Bughuta.

### **3.3.2 Waiting time at the source**

On average, time taken to fetch water remained less than an hour due to availability of water at short distances in the mixed farming zone (horticulture/dairy). However, in the mixed farming zone (food crops /livestock) which rely on surface water sources, households are taking more than an hour. These areas include Kishushe, Paranga, Jipe, Mata, Mbulia, Kangemi, Mwachabo, Marungu, Zungulukani, Sasenyi and Buguta.

### **3.3.3 Cost of water**

Some of the water sources/ facilities for domestic purposes rely on pumping systems that use electricity or diesel to power them. Due to cost of operating these schemes, the management committees have challenges in providing a continuous supply of water. In the upper zone, the cost of a 20-litre jerry can is Kshs 2 which is normal at this time of the year. However, in areas where vendors supply water, the cost of a 20-litre jerry can is selling at an average of Kshs 40. Such areas include: Paranga, Kishushe, Mbulia, Kangemi, Mwachabo, Maktau, Zungulukani, Maungu, Sasenyi, Jipe, Mata, Kitondoni, Salaita, Buguta, Riata and Nakurato. The high cost of water may lead to possible consumption of poor quality water which may increase households' vulnerability to water borne diseases.

### **3.3.4 Water consumption**

The fact that the long rains did not fully recharge most of water sources and that most of water sources are registering reduced levels have forced people to reduce usage of water to about 10litres per person/day against the normal quantity of 15 litres per person/day.

### **3.3.5 Hygiene and sanitation**

Most water sources have quite good quality water within the WHO drinking standards. However, in some areas consumers are advised to do partial treatment (chlorination) at household level by use of aqua tabs. Generally, the sanitation coverage in the county is good and stands at over 90% in most areas of the county. Handling of food in relation to hygiene practices is also good.

### 3.4 Markets and trade

#### 3.4.1 Market operations

Markets in Taita Taveta county are well replenished and the functions are normal. There are no barriers to market participation or access for traders. The main markets in the sub-county are Taveta, Voi, Mwatate and Wundanyi markets. The markets are operating normally and there have not been any disruptions or closures. Maize, beans, bananas, green grams, tomatoes, onions, oranges and vegetables are widely sold in the markets. During the month of July, or after the long rains, food supplies in the market originate from the farming households in the highland areas including Wundanyi and Taveta although some traders source maize from as far as Loitokitok in Kajiado County. A considerable percentage is also imported formally and informally through the Kenya-Tanzania border in Taveta. Demand is high for food commodities mainly cereals and vegetables as these constitute the main dietary items for the poor households. The demand for maize is high especially in the marginal lowlands because the long rains season failed and households did not harvest any maize. As a result, households have become market dependent a month earlier than normal. The demand for maize is also high for households along the Nairobi-Mombasa highway where households are concentrated around urban centres and are dependent on markets for their foods.

#### 3.4.2 Market prices

##### Maize prices

Maize prices continue to increase especially in the food crops/livestock zone and are expected to continue increasing through the August to October lean season as household deplete their stocks by September. The county realized below average maize harvests in July following poorly distributed March to May long rains. Although maize prices remained stable at Ksh. 41 per kilogram and lower than 2012 between May and June, they were more than 30 percent above the five year average (Figure 3).

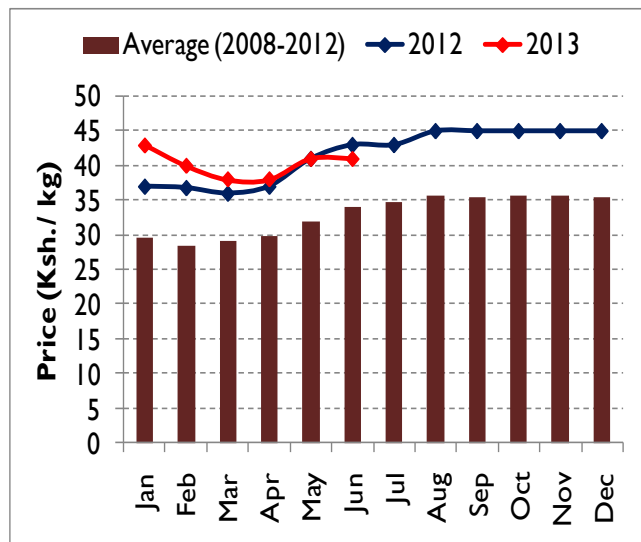
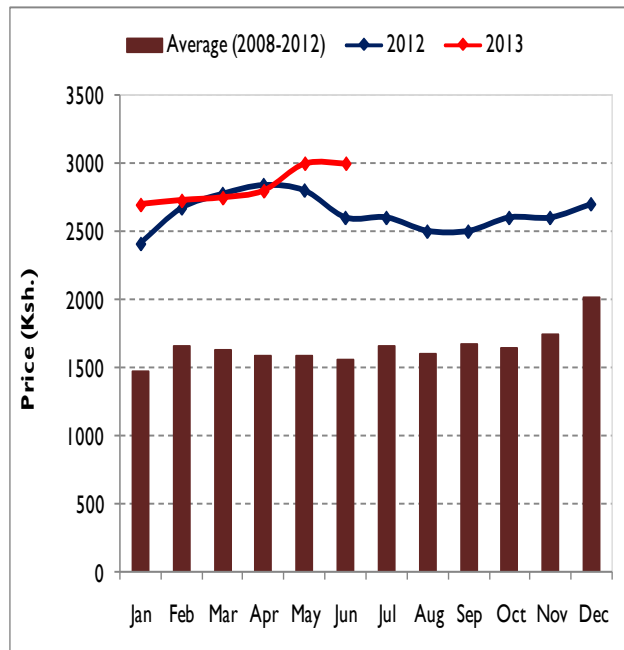


Figure 3: Average Maize Prices at Household compared to LTM

## Goat prices



**Figure 4: Average goat prices at household level**

mosquito nets distributed in 2012. A similar trend is also observed for pneumonia which has been going down since last year and is lower than the five-year average. This year it is not in the top 5, which can be attributed to the recently introduced pneumococcal vaccine being given to children under ones in the county.

No disease outbreak has been reported through the March to May long rains season and is normal as compared to the five-year average. No epidemic prone diseases have been reported between January and June 2013. This is similar compared to the same time last year as well as the five-year average. Although no recent survey has been done in 2013, the July 2011 survey indicates that the Crude Mortality Rate was 0.27/10,000/day, and Under 5 Mortality Rate was 0.30/10,000/day. The mortality rates remained below WHO emergency thresholds.

### 3.5.2 Immunization and vitamin A supplementation

The immunization coverage is at 71percent which is lower than 75 percent at a similar period in 2012 and lower than the national target of 80 percent. However, it is expected to increase in the current year because some facilities are carrying out outreach services to the hard to reach areas. The vitamin A supplementation coverage reduced from 64 percent the previous year to 50 percent currently, significantly lower than the national average of 80 percent. The country- wide strike of nurses early in 2013 and inappropriate timing of immunization days in some facilities to minimize wastage of vaccines contributed to reduced coverage for supplementation and immunization.

Goat prices continue to increase mainly attributed to good body condition and high demand for goat meat in and out of the county. Currently, a goat is retailing at Ksh. 3,000 compared to a long-term mean of Ksh. 1,323 (Figure 4).

## 3.5 Health and nutrition

### 3.5.1 Morbidity and mortality patterns

The top five diseases in the county for children under five years in order of prevalence were upper respiratory tract infection (URTI), skin infections diarrhea, clinical malaria, and eye infections. In the general population, they were URTI, skin infections, clinical malaria, rheumatism and diarrhea. The prevalence of malaria has however gone down as compared to last year as well as the five-year average, attributable to the various interventions going on to fight the disease e.g. the free treated

### 3.5.3 Nutrition status and dietary diversity

The rates of exclusive breastfeeding (EBF) have improved over the years as noted in the surveys conducted in the county. In 2009 the EBF rates were at 25 percent and in 2011 the rate had improved to 51 percent. This is expected to be even higher as advocacy to the community has been going on through the health workers and community health workers. The proportion of children underweight for the under five years of age is below average and lower than that of June 2012. Dietary frequency and diversity has however been poor due to low food availability following below average harvest. Below average availability of food has also resulted in consumption of one to two meals in a day compared to a normal of two to three meals especially for most communities in the mixed farming zones (food crop/livestock) of the county. Examples of affected areas include Marungu and Kishushe. The meals comprised of mostly maize, pulses (beans, green grams) and a variety of vegetables.

The number of underweight children is lower than the five-year average and the level of under weights in 2012 which can be attributed to the on going interventions on Infant and Young Child Feeding and Integrated Management of Acute Malnutrition. Based on the Mid Upper Arm Circumference (MUAC) less than 135mm for the children less than five years of age defined as 'at risk' of malnutrition, the malnutrition status is 2.6 percent and is below the five year average of 3.9 percent. The proportion of children at risk for malnutrition is lower than normal due to on-going interventions in nutrition such as the supplementary feeding program.

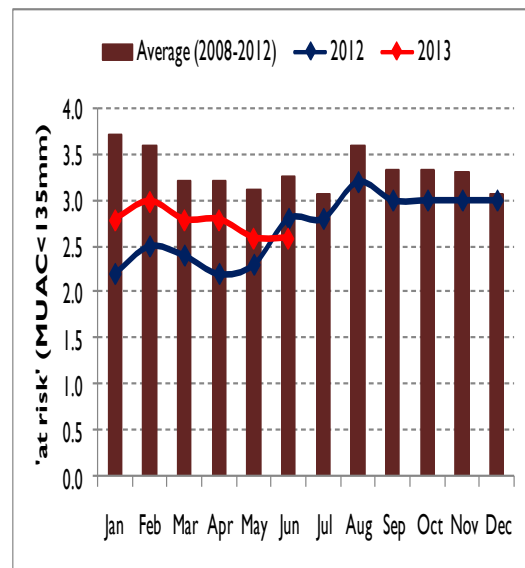


Figure 5: Average malnutrition status of children under 5 compared to LTM

## 3.6 EDUCATION

### 3.6.1 Enrolment

The enrolment of school children in the county has declined by 11 percent, with girls' enrolment being higher than that of the boys as indicated in the table below. Generally the causes for the downward trend include impact of high adoption of birth control methods by the communities. Attendance rates in schools were high in most parts of the county. However, in a number of schools in the mixed farming zone (food crops/livestock) the attendance is being hampered by lack of water and food and school children are forced to go for longer distances in search for water.

**Table 4: Trends of school enrolment, attendance and drop outs**

INDICATOR	TERM III 2012		(MAY) TERM II 2013	
	BOYS	GIRLS	BOYS	GIRLS
TOTAL SCHOOL ENROLMENT	44,263	42,135	3,5047	35,249
SCHOOL ATTENDANCE	95%	95%	97%	97%
SCHOOL DROP OUTS	0.46%	0.25%	0.2%	0.1%

**3.6.2 Drop out**

There has been a decline in the cases of dropouts since the last assessment. The dropout rates stand at very low percentages where the current reasons for drop outs for boys being family economic support as casual laborers, cattle herding at Kishushe, Mining at Mngama and selling of maize at Kitobo. Others are dropping out to become motorcycle 'boda boda' operators. For girls, early marriages are the main reason, as cited at Kishushe and Itinyi.

**3.6.3 Transition**

Transition rates from both Early Child Development Education (ECDE) to primary and primary to secondary has greatly improved at 90% and 95% respectively. This improvement is largely due to increased advocacy in ECDE and the opening of secondary schools closer to homesteads across the county.

**3.6.4 School meals programme**

The county is targeted under the HGSMMP which is implemented in 29 schools, i.e. 18 schools in Taveta and 11 schools in Mwatate (Rong'e Nyika only) targeting a total of 5,809 pupils. Schools in Voi were targeted in the programme only in 2011 while the programme has never been introduced in Taita Sub-county, though there is need in Kishushe, Mwaroko and Sangenyi areas. In Mwatate schools such as Mwakitutu, Mwatunge, Dembwa, Maili- Kumi, Maktau and Mwatate primary schools have initiated their own school meals programme.

**3.7 Coping mechanisms**

Some of the coping mechanisms being employed by households include, increased charcoal burning, quarrying, petty trade and casual labour, migration to sisal estates, irrigation and horticultural zones within the county.

**3.8 Food security prognosis**

Food security is likely to deteriorate from September through to December. Already households food stocks are below five year average and majority of households will have depleted their stocks by end of September and will be increasingly relying on market purchases. The demand for cereals is likely to continue increasing through October as households deplete current stocks. Market dependency will be high at a time when food prices are likely to be high making it difficult for households to access food from the markets. The pasture and browse situation in the lowlands is also expected to worsen during the August to November dry season with water stress increasing resulting in reduction in the availability of milk. Households are expected to increase employment of coping mechanisms including charcoal burning and petty trading. The onset of the short rains in October is expected to be normal although performance is likely to be average to below average. Although, rangeland conditions are expected to improve and enhance milk production from livestock, agricultural activities including land preparation, planting, and weeding that create increase in demand for casual labour are likely to be below average resulting

in constrained household income for the poor households. Slight improvement in maize supplies is not expected until after the short rains harvest in January/February 2014 based on the performance of the short rains from October to December. As a result, the Stressed (IPC Phase 2) is likely to evolve into Crisis (IPC Phase 3) with food gaps from September through December especially in the rain fed lowlands mainly in the mixed farming (food crop/livestock) zone including Taveta, Tausa, Tsavo National Park, Voi, and Mwatate. A reprieve that will alleviate likely food gaps is expected from mid-December once households start consuming early green harvests from drought resistant legumes.

### **3.9 On-going interventions**

#### **3.9.1 Food interventions**

- Protracted Relief and Recovery Operation (PRRO): The program currently targets 44,900 beneficiaries under Cash for Assets modality. The beneficiaries are implementing soil and water conservation, agro-forestry, water, irrigation and road infrastructure developments projects.
- Supplementary Feeding Program and Out Patient Therapeutic Programme: Supplementary Feeding Programme (SuFP), under the Ministry of Health is ongoing in 26 health facilities. The program is targeting 1,500 beneficiaries (malnourished children under five years old and pregnant and lactating mothers).
- Office of the President: The Ministry of Devolution and Planning currently distributes maize and beans in Mwatate and Voi sub-counties.
- Home Grown School Meals Program (HGSMP): The HGSMP implemented by the Ministry of Education is targeting 5,709 pupils in 29 primary schools.

### **4.0 RECOMMENDATIONS**

#### **4.1 Monitoring required**

- Food prices especially for the staple maize.
- Livestock and human diseases
- Human-wildlife conflicts incidences, particularly in Chunga Unga, Mgeno, Mwakitau in Mwatate sub-county and Marapu and Wongonyi in Voi sub-county and irrigation schemes in Challa division, Taveta sub-county.

#### **4.2 Food intervention required**

- Humanitarian assistance-food distribution, cash for assets or food for assets interventions. For these programs, the population in need is estimated to range between 55-65,000 (Table 6) based on the divisional ranking in Appendix 1.

**Table 6: Population in need**

Division	Population	Est. Pop. In need (%)	Proposed Pop. In need	Ration Scale	Modality
Voi	71,291	20%	14,258	50	CFA
Tausa	21,828	25%	5,457	50	CFA
Mwatate	60,698		0	-	CFA
Taita	56,021		0	-	CFA
Taveta	67,665		0	-	CFA
Mwambirwa +National Park	7,154		0	-	-
<b>Total</b>	<b>284,657</b>		<b>19,715</b>		

**APPENDIX 1: DIVISIONAL RANKING**

Rank	Division	Reasons
1	Voi (especially Nyangala)	Poor performance of previous seasons, erratic and poor performance of rains, lack of water high food prices, over-reliance on rain-fed agriculture, human-wildlife conflict. Most affected areas: Nyangalla
2	Tausa	Poor performance of previous seasons, erratic and poor performance of rains, lack of water, poor market and road networks, over-reliance on rain-fed agriculture, human-wildlife conflict. Most affected areas: Ngolia, Ghazi locations
3	Mwatate	Erratic and poor performance of rains, low land fertility verses high cost of inputs (fertilizers), lack of water land tenure issues, over-reliance on rain fed agriculture, human-wildlife conflict. Most affected areas: Chakaleri, Alia, Mzwanenyi, Rong'e Nyika
4	Taita	Poor performance of previous seasons, erratic and poor performance of rains, human - wildlife conflict, lack of water. Most affected areas: Kishushe, Sangenyi, Waroko and Paranga
5	Taveta	Erratic and poor performance of rains, human - wildlife conflict, poor market and road networks. Most affected areas: Jipe, Challa(Mahandakini), Lessessia
6	Mwambirwa	Small land holding size, poor market and road network, human-wildlife conflicts

**APPENDIX 2: ON-GOING INTERVENTIONS**

Division	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
<b>Agriculture</b>							
Voi, Mwatate, Taveta	Promotion of DTCs (sorghum, beans, green grams) for bulking	Sub-county wide	2,300	MoA, farmers	Improved food stocks	7.6M	2013
			2,600		Availability of planting seeds for the farming community.		
			384		Improved nutrition for the community		
Taveta	Provision of relief seeds	Sub-county wide	2,000	MoA, Farmers	Improve food stocks, nutrition and income for the community	0.7 M	2013
Voi	Rain water harvesting for crop production (water pans / dams)	Sub-county wide	3,200	MoA, farmers	Improved food stocks and nutrition, income	2.5M	2013
Mwatate		Mwambirwa	2,890	MoA, farmers	Clean water for households, livestock and farming	2.5M	
Taveta		Jipe	1,500	MOA, Farmer groups		2.5. M	
Taveta	Rice promotion	Bomeni	1,000	MoA, Farmers	Improve food stocks, nutrition and income for the community  Improve food stocks	1.6 M	2012-2013



Division	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
					Improve nutrition for the community Avail seeds for planting		
Taita, Taveta, Voi, Mwatate	Micro water harvesting structures	Sub-county wide	7,000	MoA, World vision, farmers	Harness water for crop production  Increased yields	1.5M	2013
County wide	Post-harvest handling and storage trainings and barazas	County wide	10,000	MOA	Reduce losses of harvested produce.	2.0M.	2013
<b>Livestock</b>							
Voi	Construction of feedlot. Purchase of machinery	Nyangala Bachuma	Livestock keepers	MOLD	Improved quality of finished animals for market.	9 million disbursed	2014
Voi,Mwatate	Construction of DFZ labs and offices	Mwatate, Voi	Livestock keepers	MOLD	Improved quality of animal and its product.	22 million	2014
Taita,Mwatate	Intensive capacity building on dairy value chain	Taita, Mwatate	Dairy farmers	MOLD	Increased income of dairy farmers	2M	On going
<b>Health and Nutrition</b>							
Taita/Taveta	Supplementary feeding programme	To improve management of malnutrition	1500( 26 health facilities)	MOH/WFP	Reduction in malnutrition rates		August 2009 to date
Taita/Taveta	Outpatient therapeutic programme	To improve management of malnutrition	100	MOH/UNICEF	Reduction in malnutrition rates		2011 to date

Division	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
Taita Taveta	Vitamin A Supplementation	Reduction in child morbidity	50,306	MOH/MI	Reduction in child morbidity		continuous
Taita/Taveta	Zinc Supplementation	Improvement on management of diarrhoea	50,306	MOH	Improvement on management of diarrhoea		continuous
Taita/Taveta	IYCN Interventions (EBF and Timely Intro of complementary Foods)	Reduction in child mortality and morbidity	10,217	MOH/WVK/APHIA PLUS	Reduction in child mortality and morbidity		2003 to date
Taita/Taveta	Iron Folate Supplementation among Pregnant Women	Improved pregnancy outcome	10,698	MOH/UNICEF	Improved pregnancy outcome		2012 to date
Taita/Taveta	Deworming	Reduction in malnutrition	67,386	MOH	Reduction in malnutrition		Feb-13

#### Water

Intervention description/type	Location	No of beneficiaries		Cost in Ksh.	Implementers/actors	Remarks * Implement ation status (ongoing, completed, not completed) *% completion status
		Male	Female			

Division	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
Water trucking	Kasigau	3,800	5,000	2.6M	MOW & I CWSB NDMA & World vision	Stalled due to lack of funds	
Water trucking	Maktau	4,200	6,550	3.0M	MOW & I CWSB NDMA & World vision	Stalled due to lack of funds	
Water trucking	Kishushe	3,200	4,300	2.3M	MOW & I CWSB NDMA & World vision	Stalled due to lack of funds	
Water trucking	Njukini	2,100	2,000	1.6M	MOW & I CWSB NDMA & World vision	Stalled due to lack of funds	
Borehole drilling	Kamtonga, Mwachabo, Mwandambogo	3,500	5,600	10.0M	World Vision & MoW	Hydrological surveys already done	

### APPENDIX 3: NON FOOD INTERVENTIONS REQUIRED

Division	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
<b>Agriculture</b>							
Voi, Mwatate, Taita, Taveta	Rain water harvesting (Excavation of water pans)	County wide	10,000	MoA, farmers	16,000,000	Personnel, Transport, Land	2012/13
Voi, Mwatate, Taita, Taveta	Provision of drought tolerant crop seeds	County wide	10,000	MoA, farmers	10,000,000	Personnel, Transport, Land	2012/13
Voi, Mwatate, Taita, Taveta	Farmers trainings on post-harvest management	County wide	6,000	MoA, farmers	2,400,000	Personnel, Transport	2012/13
							<b>Livestock</b>

Voi, Mwatate,	Desilting of existing water pans	Mwatate, Nyangala,	500	MOLD	4,000,000	labour	2013-2015
Mwatate, Voi, Taita, Taveta	Promotion and training on adoption of technologies on good livestock husbandry practices.	Mwatate, Tausa, Kitobu, Jipe	5,000	MOLD	2,000,000	Technical staff	2013-2016
Voi, Mwatate, Taita	Increased acreage on pasture conservation in form of standing hay.	Mwatate, Nyangala, Wundanyi	800	MOLD	2,000,000	Land, technical staff	2013-14
Voi, Mwatate, Taita, Taveta	Disease prevention and control	All divisions	1,400	MOLD	4,000,000	Technical staff	2013-14
<b>Health and Nutrition</b>							
Taita Taveta County	Conduct a health and Nutrition Survey	Health and nutrition information update	284,657	MOH	1,500,000	Health Personnel	August 2013-December 2013
Taita Taveta County	Scale up of SFP	To improve management of malnutrition	1,000	MOH/WFP	1,000,000	Trained Health workers	August 2013-December 2013
Taita Taveta county	Strengthen Disease surveillance	To monitor disease trends	284,657	MOH	66,000	Personnel	6 months
Taita, Mwatate, Voi, Taveta	Strengthen Outreach services	Improve access to health services	50,000	MOH	150,000	Personnel & commodities	6 months
Taita, Mwatate, Voi, Taveta-	CHW Training	To improve community involvement in management of their health	485	MOH	885,700	Personnel	Continuous
Taita Taveta county	Water testing	To ensure continuous monitoring of water quality	284,657	MOH	110,000	Personnel, paqua lab	Continuous
<b>Water</b>							
Voi, Taita, Taveta, Mwatate	Purchase of 4 No. Water bowsers (16m <sup>3</sup> each)	To improve water access in the County as available tanker is old	150,000	WFP, MoWI, NDMA, County Govt.	48,000,000	Personnel	
Taita	Rehabilitation and extension of Daku Mbulia water project	To improve water supply and extend pipeline to villages that are far from water points	2,500	NDMA, MoWI	2,000,000	Personnel	

Taita, Taveta, Mwatate, Voi	Desilting of 8No. Waterpans	To increase water storage capacity for livestock		NDMA, WV, MoWI	3,200,000	Personnel	
Taveta - Kitobo	Rehabilitation of Kitobo water project	To extend water supply to Riata and Lotima	1,800	NDMA, MoWI	2,000,000	Personnel	
Mwatate	Drilling and Equiping of 3No. Boreholes	To alleviate the water situation in Kamtonga, Mwachabo and Modambogho areas	9,100	NDMA, WV, MoWI	12,000,000	Personnel	