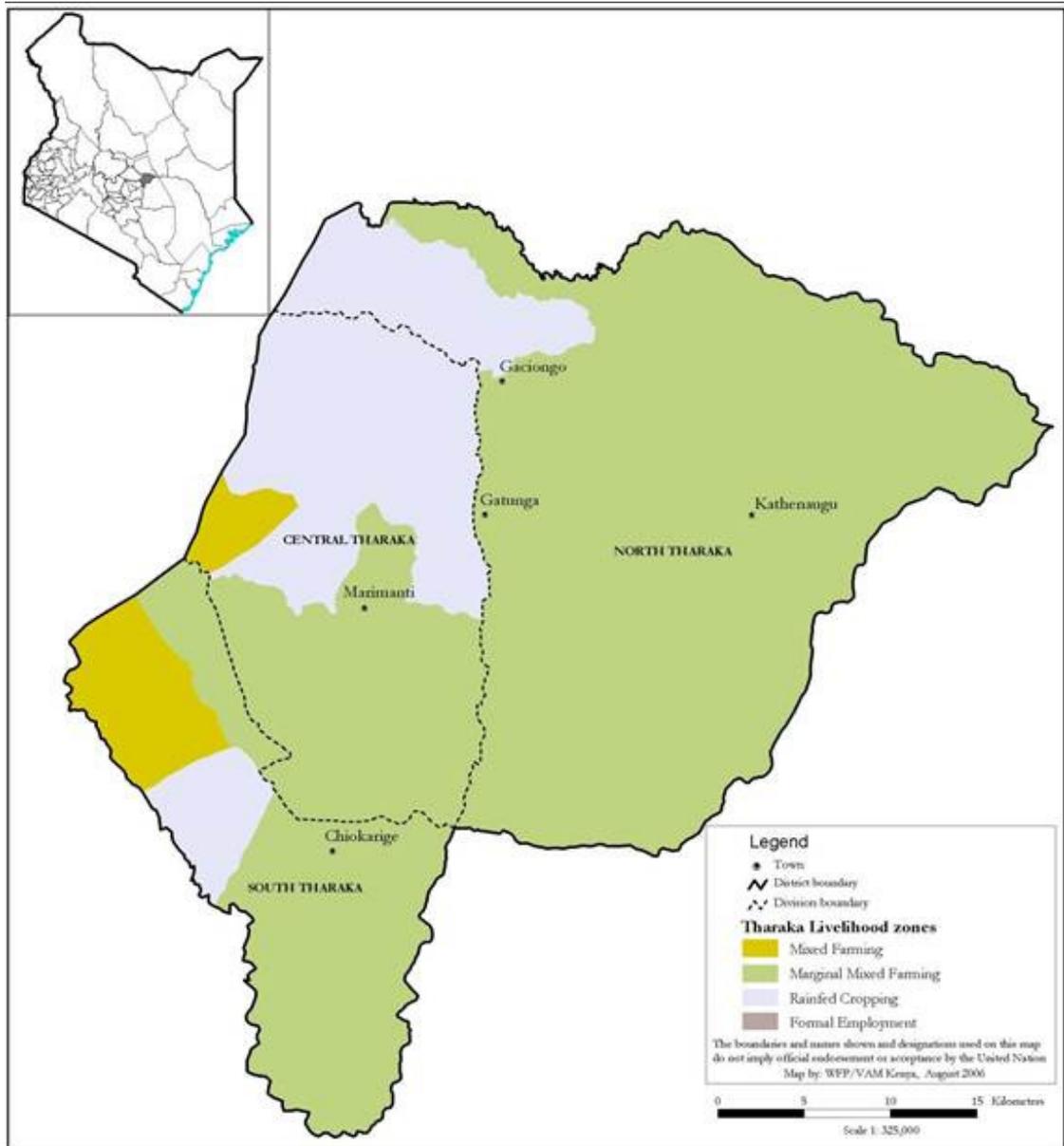


**THARAKA NITHI COUNTY**  
**2013 LONG RAINS FOOD SECURITY ASSESSMENT REPORT**  
**5<sup>TH</sup> – 9<sup>TH</sup> AUGUST 2013**



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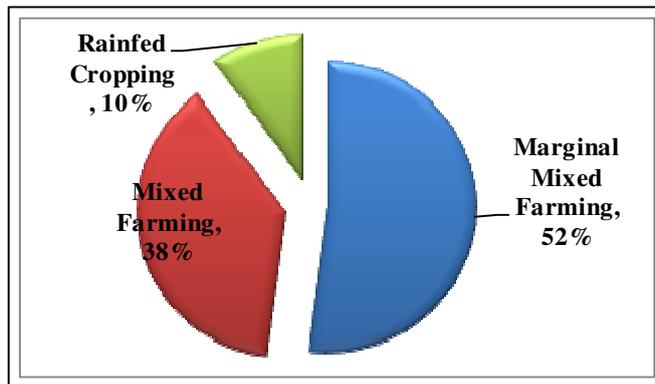
## TABLE OF CONTENTS

1.0	INTRODUCTION .....	1
1.1	County Background.....	1
1.2	Current Relief Operations .....	1
1.3	Food Security Trends .....	1
1.4	Current Factors Affecting Food Security .....	2
1.5	Summary of Recommendations.....	2
2.0	COUNTY FOOD SECURITY SITUATION .....	2
2.1	Current Food Security Situation .....	2
2.2	Rainfall Performance .....	3
2.3	Other Shock and Hazards .....	3
3.0	IMPACT OF SHOCKS AND HAZARDS .....	3
3.1	Crop Production .....	3
3.2	Livestock Production.....	5
3.3	Water and Sanitation .....	6
3.4	Markets and Trade .....	7
3.5	Health and Nutrition .....	9
3.6	Education.....	10
3.7	Coping Mechanisms .....	11
3.8	Food Security Prognosis.....	11
3.9	Ongoing Interventions .....	11
3.10	Divisional Food Security Ranking.....	12
4.0	RECOMMENDATIONS .....	12
4.1	Monitoring Required .....	12
4.2	Food Recommendations .....	13
4.3	Non-Food Interventions .....	13

## 1.0 INTRODUCTION

### 1.1 County Background

Tharaka-Nithi County borders the Counties of Embu to the South and South West, Meru to the North and North East, Kirinyiga and Nyeri to the West and Kitui to the East and South East. The County lies between latitude 00<sup>o</sup> 07' and 00<sup>o</sup> 26' South and between longitudes 37<sup>o</sup> 19' and 37<sup>o</sup> 46' East. The total area of the County is 2,662.1 square kilometres, including Mt Kenya forest



**Figure 1: Population by Livelihood Zone**

which is estimated at 360 square kilometres. The County is divided into four administrative Sub Counties namely Tharaka North, Tharaka South, Meru South and Maara. The lower altitude is classified as semi-arid. In Tharaka constituency, which lies in the lower side, experiences temperature of up to as 40<sup>o</sup> Centigrade at certain periods. Tharakanithi constituency is traversed by several rivers, which originate from both the Mt. Kenya and Nyambene Hills, flowing eastwards as tributaries of Tana River. This includes

Mutonga, Thingithu, Kathita, Thanantu, Thangatha and Kithinu. The rivers provide water for irrigation in the moderately densely populated locations in some parts of Tharaka. The region comprises of low, hilly, stony and sandy marginal lowlands with fair forest cover. Tharaka constituency comprises of two administrative districts; Tharaka North and Tharaka South, covering an area of 1,569 square kilometres with a total population of 130,098 people (2009 census). The constituency borders Meru North to the North, Mwingi/Kyuso to the East, Meru/Imenti Central to the West and Meru South and Mbeere to the South. It has three Livelihood zones; Mixed Farming (Irrigated cropping), Marginal Mixed Farming and Rain-fed Cropping. Marginal Mixed Farming represents 52 percent of the total population while 38 percent and 10 percent represents Rain-fed cropping and Mixed Farming livelihood zones respectively as illustrated in the Figure 1 above.

### 1.2 Current Relief Operations

The PRRO 200294 phase was implemented from May 2012 to April 2013 after recommendations of the short rains food assessment report done during the month of February 2013. There are 41 schools under the Home Grown School Meals (HGSM) under food interventions.

### 1.3 Food Security Trends

The current food security in the County is stressed with worsening trend, after total maize crop failure especially in the Marginal Mixed farming of the County. The performance of the long rains of 2013 was below normal across the livelihoods resulting in deterioration of crop and livestock production, poor recharge of water sources, declining terms of trade and compromised health and nutrition status. Although, the acreage of land increased by 34 percent as compared to short rains 2013, the long rains production was 46 percent lower as compared to long term average.

The distances to water sources for livestock have increased across the livelihood with the most affected being the marginal mixed farming zone. Terms of trade are fairly stable where 90 kilograms (Kg) of maize can be purchased from the sale of one goat, representing a 30 percent decrease from the long term mean.

#### **1.4 Current Factors Affecting Food Security**

The factors currently affecting food security in the County include increasing food prices, poor marketing of green grams, milk and sorghum and communal land tenure system. Other important factors include poor infrastructure and untapped irrigation potential.

#### **1.5 Summary of Recommendations**

- Initiating irrigation schemes to boost crop production.
- Health and sanitation programme establishment.
- Training for value addition of produce in Tharaka Nithi area.
- Training on water harvesting and soil conservation.
- Training of farmers to establish sustainable market linkages.
- Livestock vaccination and pasture conservation training at the community level.
- Surveillance on the disease outbreaks and availing supplements to malnourished under-five years children.
- Strengthening integrated livestock production and diversification
- Community resilience through crop dynamics, training on post-harvest management of produce and natural resources conservation.
- Promotion of natural resource management to boost tourism.

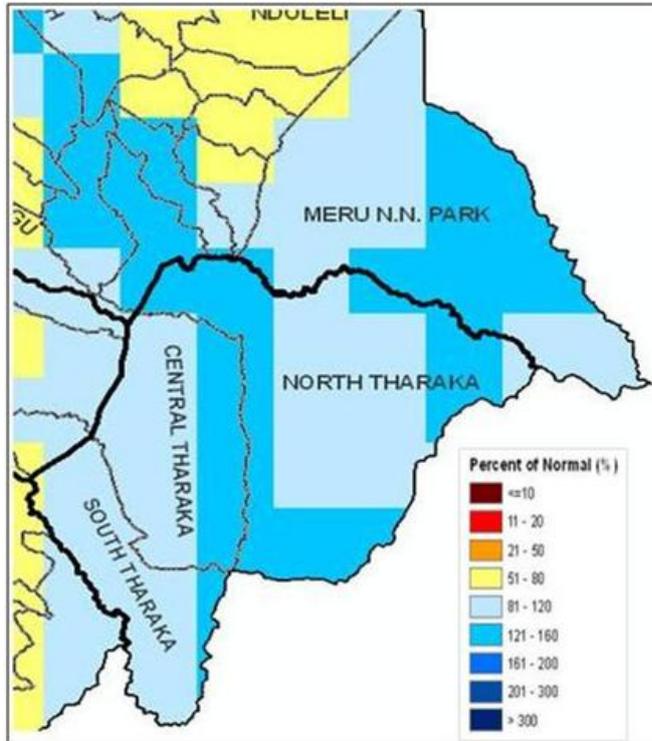
### **2.0 COUNTY FOOD SECURITY SITUATION**

#### **2.1 Current Food Security Situation**

The crop performance in the Mixed farming zones was poor, where maize production decreased by 46 percent of the LTA. This was attributed to the early cessation and poor distribution of the long rains, despite a 34 percent increase in acreage. There was 49 percent reduction of maize stocks at household level. The current pasture conditions in Marginal Mixed farming are poor and fair in the Mixed and Rain fed farming zones; browse condition is good across all livelihood zones. The body condition of cattle is fair, while goats and sheep are good in the Marginal Mixed farming zone. In the Mixed and Rain fed livelihood zones, the body condition of all livestock species is good. Most of the water sources for livestock especially in the marginal mixed farming have dried up. Household access to milk has reduced especially in the Marginal Mixed farming zones which is generally below half a litre. Distances to water sources for domestic consumption increased by 20 percent and 50 percent in Marginal mixed farming and the mixed farming zones respectively; meanwhile in the rain fed zone, the distance has increased from one to two kilometres. The waiting time at the source in the marginal mixed farming zone is about two hours while in the mixed and rain fed zones, it ranges between 20-30 minutes.

The cost of water increased by Ksh 5, but in some areas of the marginal mixed zones, it went up by Ksh. 15. Malnutrition cases are on the increase, and the highest proportion of children at risk was recorded in the marginal mixed farming at 17.7 percent while mixed farming livelihood zone at 3.4 percent.

## 2.2 Rainfall Performance



The onset long rains of 2013 was normal in the first dekad of April. The rains were evenly distributed in space, but poor in temporal distribution especially in the marginal mixed farming zone. Marginal mixed farming received 81-120 percent of normal rains while most of the Rain fed and mixed farming received 121-160 percent of normal rains. The rains ceased in the first dekad of May, which is normal for the County.

## 2.3 Other Shock and Hazards

Human and wildlife conflicts are being experienced in Marginal Mixed farming livelihood zone near Meru National Park. This is likely to increase in the next two months as pasture and browse continue to deteriorate because farmers are looking for grazing lands.

## 3.0 IMPACT OF SHOCKS AND HAZARDS

### 3.1 Crop Production

The long rain season is less reliable than the short rains season in terms of food production in the County. The current season harvest was generally poor. Millet, sorghum and green grams are the major crops grown in Marginal Mixed Farming Livelihood Zone, while maize, cowpeas and green grams are grown in the Mixed Farming and Rain-fed Cropping Livelihood Zone. Green grams are a main source of income in all the livelihoods while millet and maize are the major food crops.

#### 3.1.1 Crop Performance

Green grams are largely produced for sale and contribute about nine percent to households food needs. The hectareage increased as farmers had expected higher rains. More than 60 percent of potential land for rain-fed agriculture has not been exploited whereas less than 10 percent of the irrigable land is under irrigation despite great effort in improving this sector of crop production.

**Table 1: .Rain-fed Crop Production**

Crop	Area Planted (Ha)		Production (90 Kg bags)	
	Achieved	LTA	Achieved	LTA
Maize	9,660	7,200	53,360	99,600
Green grams	16,815	12,245	37,680	26,240
Sorghum	12,800	7,600	62,400	120,390

Source: Ministry of Agriculture-Tharaka County, 2013

There was 34 percent increase in the hectareage under maize as farmers anticipated normal rains. The long rains production was 46 percent lower in comparison to the long term, and this is attributed to early cessation and poor distribution of the rains.

**Table 2: Irrigated Crop Production**

Crop	Area Planted (Ha)		Production (90 Kg bags)	
	Achieved	LTA	Achieved	LTA
Maize	140	60	,	1,100
Cowpeas	105	70	780	440
Greengrams	45	25	300	240

Source: Ministry of Agriculture-Tharaka County, 2013

There was an increase in acreage under irrigation by 133 percent this is due to expansion of irrigation schemes Kithigiri-Kamatungu irrigation scheme, Buffalo irrigation scheme and rehabilitation of Ngongo-aka irrigation scheme. The long rains production recorded an increase of 81 percent in comparison to the long term average

**Table 3: Maize Stocks**

Maize stocks held by	Quantities of maize held (90-kg bags)	Long Term Average quantities held (90-kg bags)
House Holds	44,163	86,169
Traders	12,050	4,300
Millers	0	0
NCPB	0	0
Total	56,213	90,469

Source: Ministry of Agriculture-Tharaka County, 2013

There was 49 percent decrease in household maize stocks, and this is attributed to poor harvest experienced. The quantities of maize sourced from outside the County increased by 180 percent this is due to the traders anticipating rise in maize price. In the Marginal Mixed Farming zone produce is usually purchased from the Mixed Farming zone where household stocks are normally higher comparatively. In the Mixed Farming zone the produce is likely to last two to three months while in the Marginal Mixed Farming it is expected to last for less than one month.

### **3.2 Livestock Production**

Livestock provide up to 95 percent role in provision of food and income in the marginal mixed farming zone. In the rain fed, livestock contributes 50 percent to food and income. Most of the livestock species kept in these zones are goats, sheep, cattle and poultry.

#### **3.2.1 Pasture and Browse**

Currently, pasture and browse situation is fair to poor in marginal mixed farming zone and fair in rain fed and mixed farming zones. The pasture and browse conditions are normal at this time of the year. Available pasture is likely to last a month while browses expected to last for two months. Increased acreage on crop farming and high populations has greatly reduced the grazing fields and pasture lands. Livestock owners in the marginal mixed farming are accessing pasture in Meru National Park where they are charged Ksh. 100 for cattle and Ksh. 40 for small stock in a month. In addition, livestock have utilized crop residues in the mixed farming zone while in the marginal mixed farming zone, failed crops supplement available pasture.

#### **3.2.2 Livestock Productivity**

##### **Livestock Body Condition**

Livestock body condition in Marginal Mixed farming zone for cattle is fair, but good for goats and sheep. In the Mixed farming and Rain fed zones, the body condition of all livestock species is good but deteriorating.

##### **Birth Rate**

Currently, the birth rates are low, which is a normal situation at this time of the year. Kidding/calving/lambing season has not yet commenced and the same is expected to start and reach to its peak by mid-late August.

##### **Milk Availability and Consumption**

The milk availability at household is fairly low at 0.5 – 1 litre which is a normal situation at this time of the year especially in the marginal mixed farming zone. In the Mixed Farming livelihood zone it is about one litre while in the rain fed livelihood zone it is between one to one and a half liters. Most of the milk produced is consumed at household level, with insignificant.

##### **Average Milk Prices**

The price of milk has increased from Ksh. 40 to 50 per litre in Mixed farming and rain fed zones, but it has remained relatively stable at Ksh. 40 per litre Marginal mixed farming livelihood zone due to inaccessibility to market.

#### **3.2.3 Tropical Livestock Units (TLUs)**

Currently, the average TLUs for poor household is three while for middle income household it is four. The number for each livestock species has reduced by close to half since the last normal year as shown in table 4 below.

**Table 4: Tropical Livestock Units**

Type of livestock	Poor Class		Middle Class	
	2010	Current	2010	Current
Cattle	2	1	4	2
Goats	8	5	12	8
Sheep	2	1	5	3

Source: MoAL&F - Tharaka County, 2013

Reduced TLUs is reflected the decrease in productivity and low livestock volumes supplied to the market. Household's purchasing power has declined as a result of low income from sale of livestock especially in the marginal mixed farming zone.

### 3.2.4 Water for Livestock

The current water sources for livestock are permanent rivers, boreholes, water pans piped schemes and furrow water, which are normal sources at this time of the year. The current return, trekking distance is five kilometres in the Marginal Mixed farming zone, between one to two kilometres in the Mixed farming and two to three kilometres in the Rain fed farming zones. Current distances are same as long term averages at this time of the year, and to the previous season.

### 3.2.5 Migration

Currently there is no observed or reported incidence of livestock migration which is normal situation at this time of the year. However, in Marginal Mixed zone especially Kamanyaki and Kamarandi, cattle and sheep have started moving towards Chiakariga due to depletion of pasture.

### 3.2.6 Livestock Disease and Mortalities

Currently, there is no reported or detected outbreak of any disease, nor are there unusual livestock mortalities reported. The main endemic diseases in the two districts are Contagious Caprine Pleuropneumonia (CCPP), Trypanosomiasis and Heart Water disease which are commonly found in Marginal Mixed farming zones affecting mostly Cattle and Goats. Other common diseases are Helminthiasis, Pneumonia and Anaplasmosis. In poultry, the common diseases are Fowl typhoid and Infectious bronchitis.

### 3.3 Water and Sanitation

The current sources of water in Tharaka County for domestic use are permanent and seasonal rivers, shallow wells and piped water systems. Other sources of water include springs, dams, pans, sand dams and water harvested from rock and roof catchments. Permanent river levels currently are low at this time of the year especially in the Marginal mixed farming. Seasonal rivers have dried up, and they normally serve about 25 percent of households in Kathangachini, Maragwa, Kamararandi, Kamanyaki, Gituma, Gakurungu and parts of Kanjoro and Marimanti. Perennial rivers such as Mutonga, Thingithu, Kathita, Thanantu, Thangatha and Tana will have water throughout until the next rain season. Dams and water pans are expected to last for less than one month.

### **3.3.1 Distance to Water and Waiting Time**

Distances to water for domestic use have increased from five to six kilometres in the marginal mixed farming zone, while in the mixed farming, the distance has increased from two to three kilometres. In the rain fed zone, the distance has increased from one kilometer to two kilometres. Waiting time at the source is more than two hours especially in the marginal mixed farming while rain fed and mixed farming livelihood zone waiting time is about 30 minutes.

### **3.3.3 Cost of Water**

The current average cost of water per 20 litre jerrycan is Ksh. 25, which is higher compared to the normal Ksh. 20. In the marginal mixed farming zone, some households pay for life membership fee of Ksh. 5000 and monthly contribution Ksh. 500, but in case of any break down the households contribute Ksh.300. In the Mixed farming zone, water sells at about 5 shillings at the source, and KSh. 20 by vendors who normally sell it for Ksh.10.

### **3.3.2 Water Consumption**

The current average water consumption is 15 liters/ person/day in the Marginal mixed farming which is below normal the normal 20 . In the Mixed farming zone consumption by person is 25 liters/person/day, while in the Rain fed zone it is 20 liters/person/day.

### **3.3.3 Sanitation and Hygiene**

Over 62 percent of households in marginal mixed farming zone have access to a pit latrine, which is an improvement from 56 percent in 2012. In the rain fed zone 73 percent have access to pit latrine giving an improvement from 68 percent in 2012. This gives a reflective increase of latrine coverage by six percent in the marginal mixed farming and five percent in the rain fed livelihood zones.

Approximately 30 percent of the household especially in the marginal mixed farming do not treat their water while in the mixed farming and rain fed less than 10 percent use untreated water. Common water treatment practices include aqua tabs at around 45 percent, boiling 5 percent and sand filters as an alternative method for water treatment at household level. Due to poor disposal of human waste, waterborne diseases are rampant. Approximately 40 percent of the households in the marginal mixed farming practice good food handling and hygiene practices such as hand washing, and this can be attributed to the introduction of school health programmes.

## **3.4 Markets and Trade**

### **3.4.1 Market Operations**

The main markets in the County are Gatunga, Marimanti, Kathangachini and Chiakariga which had normal operations. The main commodities being sold in the market are green grams, cowpeas millet, sorghum and pigeon peas. There are five livestock markets in the County, namely; Marimanti, Chiakariga, Gatunga, Kathangachini and Tunyai. Chiakariga, Gatunga, Kathangachini markets in marginal mixed farming zones for cattle, goats, sheep and poultry. Marimanti which is also in marginal mixed farming zone is for goats, sheep and poultry. Tunyai which is in mixed farming zone is for poultry only.

### 3.4.2 Market Supply and Traded Volumes

Supply for cowpeas is from local production in both Marginal Mixed farming and Mixed farming while maize in the Marginal Mixed farming is sourced from Mixed Farming zone and outside the County. Traded volumes for cereals are normally high during the harvest period. Traded volumes for livestock, in the next six months are expected to increase which will eventually decrease market prices. Supply of the livestock from farmers in the County to the markets is 80 percent and 20 percent from traders that buy from neighboring Sub-counties and on farm purchases.

### 3.4.3 Commodity Demand

The three commodities on high demand especially for livestock are goats, poultry and cattle in that order especially in the marginal mixed farming. Demand for maize is also high because it is sourced from other neighboring districts while green grams are for cash income. Over 90 percent of the household in the Marginal Mixed farming purchase food items from the sale of livestock or green grams.

### 3.4.4 Market Prices

#### Maize Price

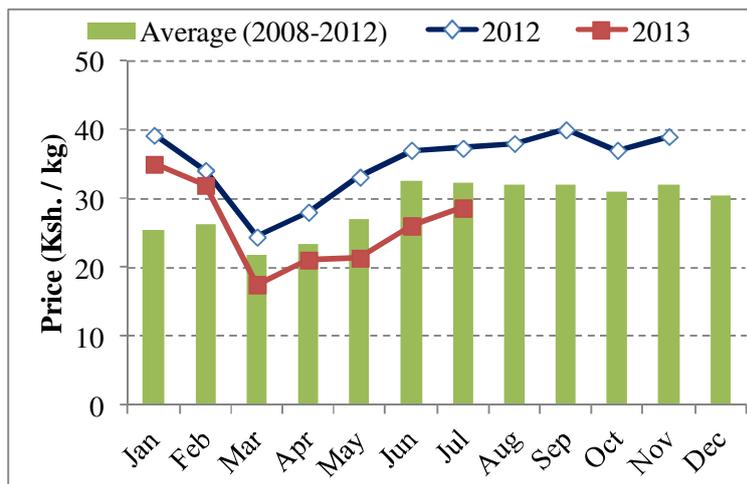


Figure 2: Maize Price Trends

The prices in the market are decreasing with time which is attributed to increase in food prices with the average price of goats as at July 2013 being Ksh. 2,500. Although the prices are decreasing, the 2013 goat prices are higher than long term averages, but lower than they were in 2012

There has a steady increase in the prices of maize as from the month of May, 2013 which may be as result of depletion of stocks, hence the demand increases. Current price of maize as at July, 2013 is Ksh. 30 per Kilogram which is slightly lower than the long term average of Ksh. 32. The prices are lower in 2013 than they were in 2012 prices.

#### Goat Price

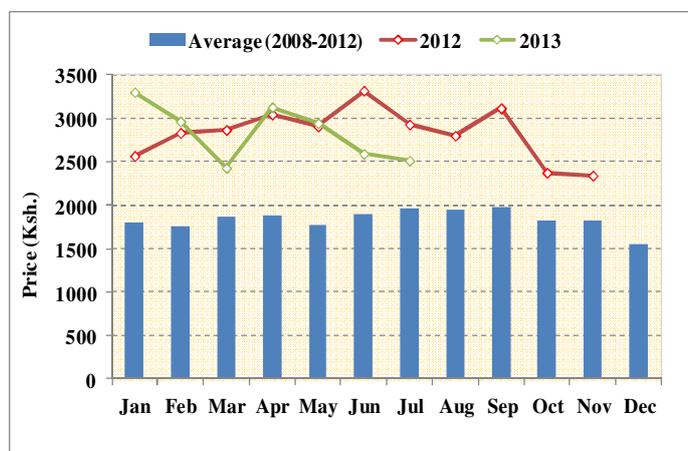
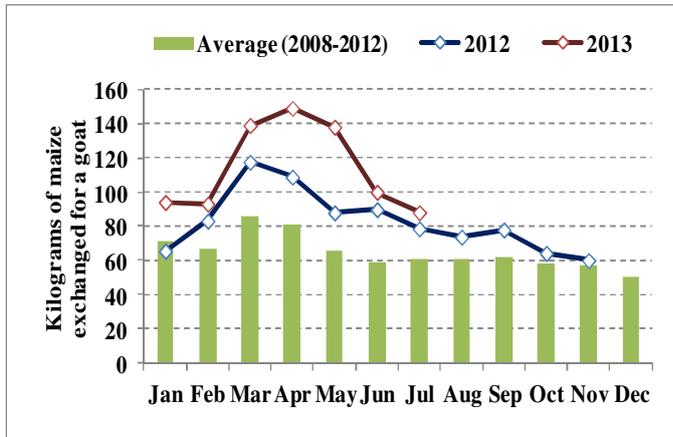


Figure 3: Goat Prices Trends

### 3.4.5 Terms of Trade



The current terms of trade are higher than normal, where one goat can exchange for 88 Kg of maize which is 44 percent increase against LTM especially for July, 2013. The trend is decreasing as result of on-going dry spell, but the terms of trade have improved from what they were last year and also compared to the long term.

## 3.5 Health and Nutrition

### 3.5.1 Morbidity and Mortality Patterns

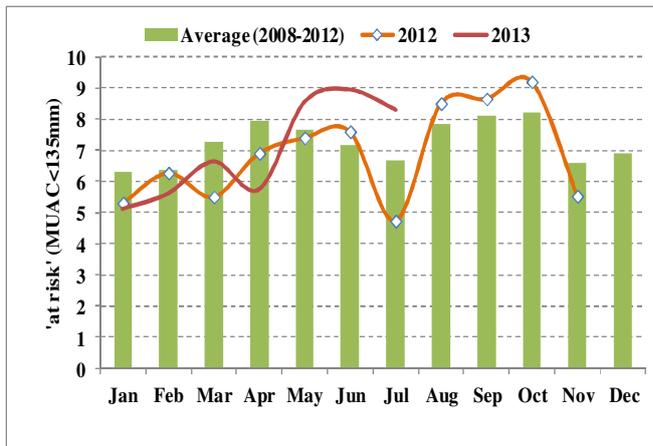
The five top common diseases affecting the general population are Malaria, Upper Respiratory Tract Infections (URTI), Pneumonia Intestinal Worms and Skin Infections across the livelihood zones. Rheumatism and joint pains are also affecting adults, and important to note is that there were five confirmed cases of measles in Kathangachini location. The above diseases are endemic in the County as indicated in the health records system throughout the year. Malaria patients have slightly decreased which could be attributed to use of Long Lasting Insecticides Treated Nets (LLITNs) and Indoor Residual Spraying (IRS). There has been slight decrease in malaria cases by 24 percent for January 2013 as compared to January 2012. In general malaria cases have reduced, and this is attributed to earlier on increase in distribution and use of LLITNs.

### 3.5.2 Immunization and Vitamin A supplementation

The fully immunized children were 23 percent in the period between January to June 2012, compared to 16 percent in same period this year. In 2013 there was 24 percent decrease in the number of children under one year supplemented with vitamin A in comparison to 2012, and this could be attributed to poor health seeking behavior, retrogressive cultural beliefs and traditions and long distances to health facilities.

### 3.5.3 Nutrition Status and Dietary Diversity

Nutrition status for children under five years in the County is compromised by decrease in food accessibility and high prevalence of diseases like intestinal worms and diarrhea. Other factors include severe coping strategies such as skipping of meals, inadequate nutrition education and poor hygiene and sanitation. The proportion of children at risk of malnutrition was 8.3 percent in the month of July 2013 compared to 5 percent in June 2012 based on MUAC measurement. The highest proportion of children at risk was recorded in the Marginal Mixed farming at 17.7 percent while Mixed Farming livelihood zone at 3.4 percent.



**Figure 4: MUAC Trends**

feeds especially tea, porridge and honey before the child is six months.

### 3.6 Education

#### 3.6.1 Enrolment

Gender parity is observed in enrolment across the three livelihood zones, as opposed to slightly higher enrolment of girls in previous years. Awareness on the importance of educating the girl child was supported by donors. The enrolment is slightly increasing as compared to last years at a rate of three percent, and all school age children are attending school. This has been attributed to availability of meals in schools.

Transfers to schools within the County were highly noted especially during drought periods where learners moved to schools under Home Grown programme (HGSM) Though the attendance rate was high at 73 percent most pupils missing classes were reportedly in search of casual labor, sand harvesting, crop harvesting domestic chores and petty trade.

#### 3.6.2 Drop Out Rates

There was a general increase in dropout rates in June 2013 compared February 2013, and the increase can be attributed to the repeated drought, lack of school fees and in some cases, retrogressive religious practices especially as noted in Gatue and Kanjoro locations. Drop out of girls is higher as compared to boys especially in Gituma, Kamanyaki, Kamarandi, Kanjoro and Kathangachini locations. Drop out cases were reported mainly in mixed farming zones attributed to the increase in demand for casual labor along the irrigation schemes. Drugs and substance abuse have had an impact in the increase in the dropout rates especially for the boy child, where they participate in the making and consumption of alcohol.

#### 3.6.3 Transition Rates

Transition rates from early childhood development and education (ECDE) to Primary are at 98 percent, while from primary school to secondary school is at 70 percent, which is an increase from the previous 65 percent due to the establishment of day secondary schools within the County.

In some parts of the Marginal Mixed Farming livelihood zone as Gituma, Kamanyaki, Kamarandi and Kanjoro, transition rates are between 45-50 percent owing to inability to afford school fees, low entry marks for secondary school, ignorance, dropouts in search for labor, early marriages in the case of girl child, poor guidance from parents, lack of role-models and retrogressive religious practices.

### 3.6.4 School Meals Programme

There are 41 out of the total 158 public primary schools which are on the HGSM feeding and four schools under the Njaa Marufuku programme. The programmes have improved on access and retention of pupils in the targeted schools. Delays in funds disbursements by Ministry of Education, has also affected the supply of food by the suppliers and challenges in hiring cooks has led to the pupil untimely missing the meals. Lack of water at schools has also contributed to pupils missing of meals which are common in Gituma, Maragwa and parts of Ntugi locations. The influx of pupils from schools not targeted leads to food running out earlier

### 3.7 Coping Mechanisms

The households in the marginal mixed farming are consuming fewer meals, increased charcoal burning and engaging in casual labour especially in mixed farming zones. There is some increase in purchase of household items on credit especially in the marginal mixed farming zones. The locations with increased coping strategies listed are Gituma, Ntugi, Kamanyaki, Kamarandi, Kanjoro, Gatue, Maragwa and Kathangachini.

### 3.8 Food Security Prognosis

The food security situation is expected to decline across all the livelihood zones in the next two to three months. Terms of trade are expected to decline as livestock body condition is projected to deteriorate for all species while pasture and browse availability expected to last one month in the marginal mixed farming while in the mixed farming and rain fed livelihood zone is expected to last for one to two months. Distances and waiting time at water sources are expected to increase. The nutrition status of children under five years old is expected to decline due to inadequacy in food stocks at the household levels.

### 3.9 Ongoing Interventions

#### 3.9.1 Non- Food Interventions

**Table 5: Non-Food Interventions**

Division	Intervention	Location	No. of Bens	Implementers	Impact in terms of food security	Cost	Time Frame	Implementation Status
<b>Water</b>								
Gatue	Construction of 4Km pipeline, Construction of 50m <sup>3</sup> tank, sinking and equipping one. shallow well	Gatue	1,400	Ministry Water and Irrigation, Tana Water Service Board	Save time in search of water	16.5M	June / July	73%

Division	Intervention	Location	No. of Bens	Implementers	Impact in terms of food security	Cost	Time Frame	Implementation Status
South	Construction of masonry tank of 225m <sup>3</sup> capacity	Nkarini	1,000	Ministry of Environment and Natural Resources	Save time in search of water	3M	June / July	80%

### Agriculture

Tharaka North	Water harvesting	Khangachini	600	Ministry of Agriculture	The water will be used for small micro irrigation, livestock use hence saving on time utilized in search of the same	2.5M	1 year	
Tharaka North	Grain Storage Structure	Gikingo	6,200	Ministry of Agriculture	This will curb down the rampant selling of produce during harvest time	2.0M	2 year	
Tharaka Central	Water pan	Ntugi	1,020	Ministry of Agriculture	Crop production demos done to impart crop-water relations and husbandry for improved crop production	2.5 M	6 months	

### 3.10 Divisional Food Security Ranking

**Table 6: Divisional Food Security Ranking**

Division	Ranking	Food Security Threats
Tharaka North	1	More prone to shocks and hazards, crops failure, depleting pasture and browse, minimal household food stock
Tharaka South	2	Depleting pasture and browse, minimal household food stock
Tharaka Central	3	Over reliance on Rain fed agriculture, minimal sale of cereals stocks

## 4.0 RECOMMENDATIONS

### 4.1 Monitoring Required

As the County is experiencing stressed food security phase classification, several indicators need to be closely monitored. They include food stocks, prices of food and livestock, supplies in the market and cost of water at kiosks. In the marginal mixed farming key indicators are livestock body conditions, pasture and browse condition, cases of conflicts, migration routes and distances to water sources for both human and livestock. Other indicators include disease outbreaks especially in children and nutritional status of under-five and general population.

## 4.2 Food Recommendations

**Table 7: Proposed Population in Need of Food Assistance**

Division	Population	Pop. in need (% range Min-Max)	Modality	Remarks
Tharaka North	49,976	35-45	C/FFA	Maragwa Kathangachini Kamarandi, Kanjoro, Gatue, Ntoroni
Tharaka South	34,679	30-34	C/FFA	Chiakariga, Gakurungu Nkarini, Kamanyaki,
Tharaka Central	45,443	25-29	C/FFA	Matakiri, Turima, Ntoroni, Nkondi, Marimanti, Gituma, Ntuge

## 4.3 Non-Food Interventions

**Table 8: Non-Food Intervention**

Division	Intervention	Location	No. of Bens	Proposed Implementers	Required resources	Available resources	Time frame
<b>Education</b>							
All	School feeding programme	Kamanyaki and Kamarandi	16,000	GOK, County government, Ministry of Education, Plan International	74.8M	Community Labour	2013 / 2014
<b>Water</b>							
Gatue, South and Central	Pipeline extensions	Gatue	2,000	Ministry Water and Irrigation, Tana Water Service Board, County Government	5M	Community Land	2013 / 2014
	Repair 60 shallow wells	All	7,700		18M		2013 / 2014
	Rehabilitation of 2 water pans, Sink 2 shallow wells	Kathangachini	1,400		3M		2013 / 2014
Nkondi	Desilting of Nkondi Solar shallow well	Nkondi	500		2M		2013 / 2014
South	Training management of shallow wells on operation and maintenance	Kamarandi / Kamanyaki	2,000		1.5M		2013 / 2014
Central	Distribution line to Rukenya Dispensary, primary and the surrounding area	Ntugi	500		5M		2013 / 2014
South	Development of Kiaga Irrigation scheme	Marimanti	1269		100M		2013 / 2014
South	Expansion of Buffaloo Irrigation Scheme	Karocho	3,000		240M		2013 / 2014

Division	Intervention	Location	No. of Bens	Proposed Implementers	Required resources	Available resources	Time frame
<b>Agriculture</b>							
Tharaka North	NCPB store Construction	Mukothima	9,845	Agriculture, County government	40M	Capital, land, labour	2013 / 2014
Tharaka North and South	Irrigation	Gatue, Maragwa, Kanjoro, Kathangachini Kamarandi / Kamanyaki	8,000		420M		
Tharaka North and Central	Water harvesting	District wide	9,845		34M		
	Agroforestry	District wide	19,845		14M		
Tharaka North and Central	Fertilizer subsidy	District wide	13,090		57M		
Tharaka South and Central	Drought-tolerant seed provision	All locations	7,500	8.3M			
Tharaka Central	Storage structures constructed at location level for post-harvest technologies and grain storage demonstration purposes	All locations	45,000	Agriculture, NDMA, WFP and relevant collaborators, County government	21M		2013 / 2014
<b>Health and Nutrition</b>							
All	County nutritional survey	All	39,000	MOH/NDMA/CHILDFUND/PLAN/MOW(WATER) County Government	3.5M	Personnel, transport	2013 / 2014
All	Treatment of domestic water	All	56,000	MOH/NDMA/CHILDFUND/PLAN/MOW(WATER) County Government	0.3M	Aqua tabs technical know-how resource persons.	AUGUST-FEB.2014
ALL	Mobile outreaches	Hard to reach areas	30,000	MOH/PLAN/APHIAPLUSKAMILI/CHILDFUND, County Government	1.2M	Vaccines staff	
ALL	AFP surveillance	ALL-HIGH LOAD Health facilities, ECD Centers	15,000	Health, Education, County Government	0.13M	staff/vehicles	AUGUST-DEC-2013
ALL	Deworming	ECD, PRIMARY,	80,000	Health, Education, PLAN, APHIAPLUS	1.4M	staff/vehicles drugs	SEPT-DEC

Division	Intervention	Location	No. of Bens	Proposed Implementers	Required resources	Available resources	Time frame
ALL	Vitamin A Supplementation	ACADAMIES	50,000	KAMILI, CHILDFUND WHY UNITED, County government	1.4M	staff/vehicles	2013
ALL	Growth monitoring sites.	Community units	20,000		1.2M	staff/tools/vehicles	AUG-DEC
ALL	Promotion of breastfeeding and baby care	Locational level	25,000		0.65M	STAFF /IEC/BCC MATERIALS	
ALL	Introduction of PMTCT services at all health facilities	Facility level	40,000	MOH,PLAN, DREAM, NASCOP, County government	1.23M	staff/test kits/art	JULY-DEC 2013
ALL	PD HEARTH	Facility/community units	20,000	MOH, PLAN, NDMA County government	1.85M	staff/tools	AUG-DEC 2013
ALL	Community Led Total Sanitation	Community level	96,000	G.O.K, PLAN KENYA, County government	3.0M	staff/partner	1YR
ALL	Construction of new facility	Community level	50,000	G.O.K Partners County government	15M	capital land labour	5yrs
<b>Education</b>							
Tharaka South and North	School Feeding Programme	Kamanyaki and Kamarandi	16,000	GOK, County government, M.O.E Plan International	74.8M	Community Labour	2013/2014
Tharaka South and North	Infrastructure, construction of classrooms, administrative, primary	Tharaka South and North	39,000	GOK, County government, M.O.E	195M	Community Land,	2013/2014
	Construction of toilets and sanitary facilities		39,000		20.5M		2013/2014
Tharaka South and North	Construction of classrooms, Administration block and sanitary facilities in secondary schools	Tharaka South and North	4,324	GOK, County Government, M.O.E	390M	Community Land,	2013/2014
<b>Livestock</b>							
Tharaka North and South	Community Sensitization on the importance of fodder preservation and	All		Ministry of Agriculture Livestock and Fisheries, National Drought Management Authority	0.6M	Human resource (Personnel)	2013/2014

Division	Intervention	Location	No. of Bens	Proposed Implementers	Required resources	Available resources	Time frame
	controlled grazing			(NDMA) and County Government			
	Vaccination of Goats against Contagious Caprine Pleuro pneumonia (CCPP) Peste des petits Ruminants (PPR)	All			3.5M		
	Training on Poultry Disease control mainly vaccination against NCD, Gumboro and Fowl typhoid	All			0.12M		
	Upgrading for Meat and Milk in Cattle and Goats	All			3M		
	Sensitization of Farmers on better Livestock Husbandry	All			0.5M		
	Sensitization of Farmers on alternative livestock enterprise (poultry)	All			0.3M		
	Sensitization of Famers on Local poultry upgrading	All			0.6M		