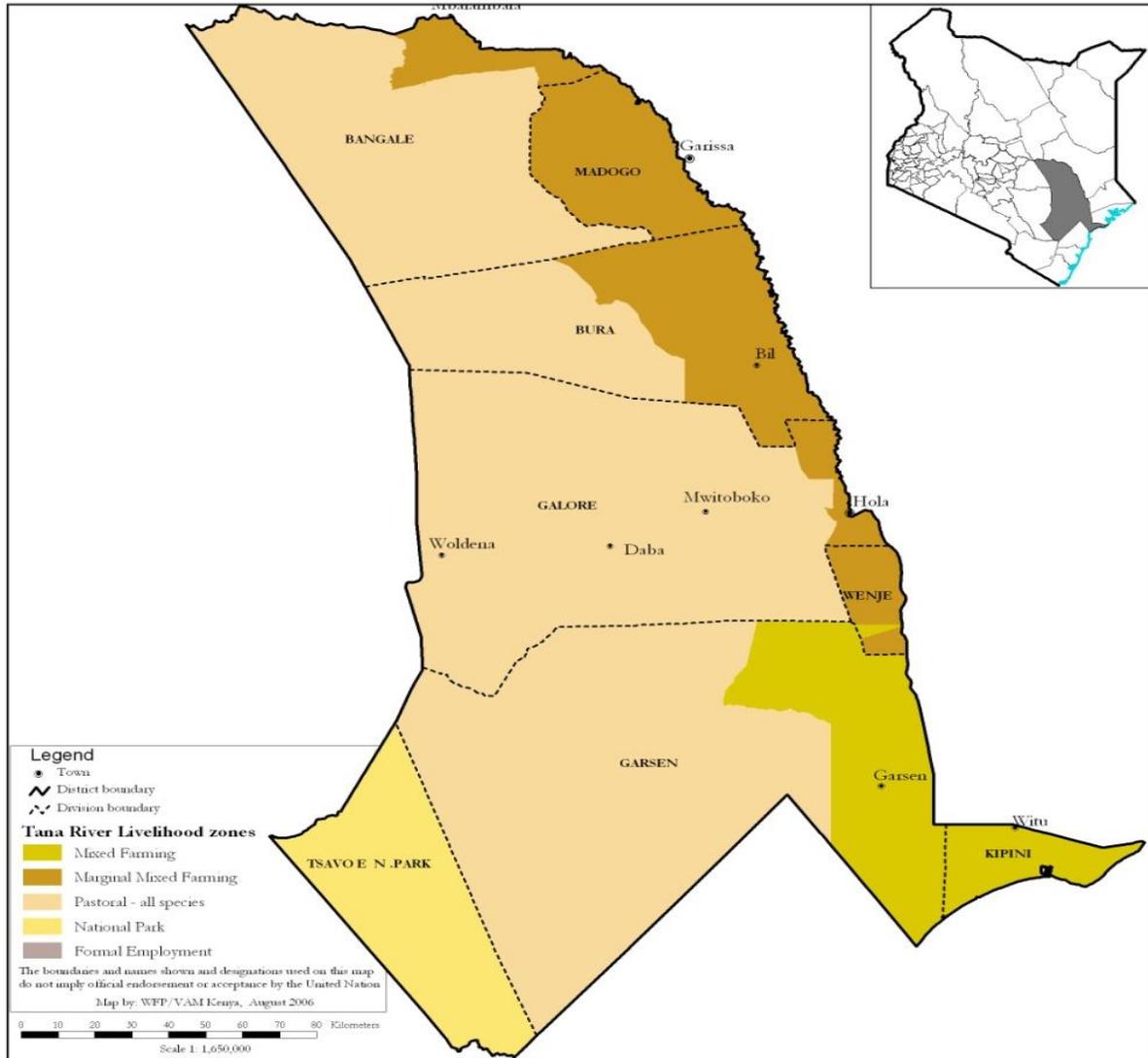


# TANA RIVER COUNTY 2014 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



**A Joint Report by the Kenya Food Security Steering Group<sup>1</sup> and the Tana River County Steering Group (CSG)**

**February 2015**

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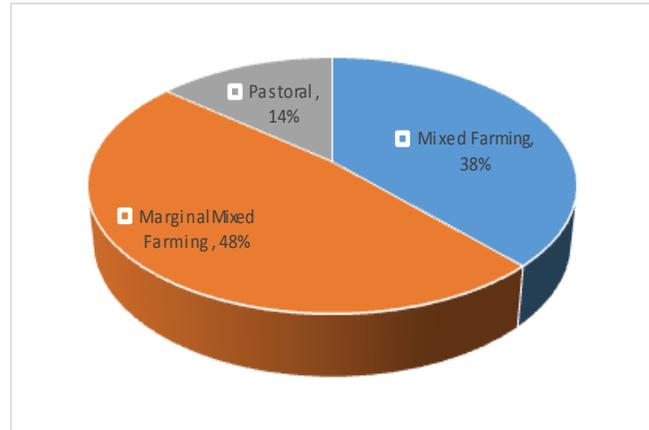
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## 1.0 Introduction

### 1.1 County Background

Tana River County has three sub-counties namely; Tana North, Tana River and Tana Delta. These are further divided into eight administrative divisions namely; Galole, Bura, Bangale, Madogo, Wenje, Garsen, Tarasaa and Kipini. The County borders Garissa to the North East, Isiolo to the North, Ijara to the East, Mwingi to the West, Lamu to the South East and the Indian Ocean to the South. The County covers an area of 38,782 square kilometers (km<sup>2</sup>) with an estimated population of 240,070 persons (Kenya National Bureau of Statistics 2009 Census). 48 percent of total population occupies the marginal mixed farming livelihood zone, 38 percent in the mixed farming livelihood zone and 14 percent in the pastoralist livelihood zone as shown in **Figure 1**.



**Figure 1: Population by Livelihood Zone**

The county normally experiences a bimodal pattern of rainfall with the long rains between April and June while the short rains are experienced between October and December. The mean annual rainfall ranges between 220 millimeters (mm) and 500 mm with the exception of the mixed farming livelihood zone where rainfall ranges between 750 mm and 1250 mm. Temperatures range between 21°C and 38°C. Short rains are more reliable in the mixed farming livelihood zone while the other two zones rely mostly on the long rains.

### 1.2 Current Factors Affecting Food Security

The current factors that affect food security in Tana River County include;

- Deteriorating pasture and browse condition
- Livestock diseases
- Diminishing water sources for both livestock and domestic use
- Human wildlife conflicts
- Poor rainfall performance
- High food prices
- Influx of livestock migrating into the county
- Sea water intrusion along the Delta
- Change of Tana river course
- Effects of conflicts in Tana Delta
- Damming activities upstream is affecting flood water availability downstream

## 2.0 County Food Security Situation

### 2.1 Current Food Security Situation

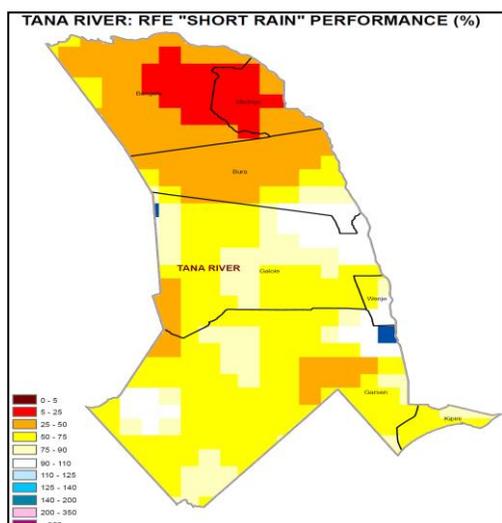
The County is currently in “Stressed” phase. The mixed farming livelihood zone is long rains dependent while marginal mixed farming livelihood zone and pastoral livelihood zone is short rains dependent and though the short rains did not perform well, most indicators show a normal

situation compared to the Long Term Average (LTA) due to the previous fair performance of the 2014 long rain season. Terms of trade are favorable as households are able to purchase 96 Kilograms of maize with sale of a goat across all livelihoods, as compared to 89 kg of maize normally. The percentage of children with Mid Upper Arm Circumference (MUAC) levels of less than 135 mm was 10.9 percent in January 2015 as compared to LTA of 11.4 percent. Water consumption per person per litre day (lppd) is 10 – 15 lppd in mixed farming and marginal mixed farming and 5-10 lppd in pastoral livelihood zone as compared to a normal of 15 lppd. Pasture and browse condition is fair to good in mixed and marginal mixed livelihood zone while fair and deteriorating in pastoral livelihood zone especially in areas of Bangale. The body condition for cattle, sheep and goats is good across all livelihood zones. Milk production ranges from one to two litres per day and households are consuming 2 – 3 meals per day, which is normal at this time of the year. No unusual or severe coping mechanisms are being employed by households apart from the normal insurance coping mechanisms.

## 2.2 Food Security Trend

The county was classified under ‘Stressed’ (IPC phase 2) food insecurity phase after the 2014 Long Rain Assessment. The county remains under “Stressed” food insecurity phase. Pasture and browse conditions are fair as compared to six months ago when it was good. Livestock body condition remains as good as it was six months ago. Since the long rain assessment in July 2014, water consumption has reduced from 10-15lppd to 5-10 lppd in pastoral livelihood zone and from 15-20 lppd to 10-15 lppd in mixed farming livelihood zones as compared to normal of 15lppd across the livelihoods. The Terms of trade (TOT) has improved by 47 percent compared to the last six months when households were able to purchase 65 kg of maize from the sale of a goat, as compared to 96 kg in January 2015. The proportion of children at risk of malnutrition as measured by MUAC < 135mm reduced by four percent as compared to six months ago from 11.4 percent in July 2014 to 10.9 percent in January 2015. The Global Acute Malnutrition (GAM) and Severe Acute Malnutrition (SAM) levels slightly increased in February 2015 compared to June 2014 from 7.5 to 9.9 percent and 0.9 to 1.0 percent respectively in June 2014. Coping strategy index (CSI) for non-beneficiaries was 27 in December 2014 as compared to 20 in September 2014 implying that more coping mechanisms were being employed by households.

## 2.3 Rainfall performance



**Figure 1 : Rainfall performance as a percent of normal**

Onset of short rains 2014 was in the first dekad of October conforming to the norm. The rainfall was inadequate and poorly distributed across all livelihood zones in both space and time. The amount of rainfall was 23.5 mm in October, 50 mm in November and 14.6 mm in December. Bangale and Madogo received between 5-50 percent of normal while Bura received 25-50 percent of normal rainfall. Galole and Garsen received 50-110 percent of normal rainfall. Most parts of the Tana Delta (Garsen and Kipini) received 50-110 percent of normal rainfall with the northern part of Garsen receiving 140-200 percent of normal rainfall. The county had uneven spatial distribution of the rainfall as shown in figure 2. Cessation was normal in the last week of December.

## 2.4 Current Shocks and Hazards

Current shocks and hazards affecting food security in the county are; ongoing tension after the ethnic clashes in Tana Delta, endemic livestock diseases such as Contagious Caprine Pleuro-Pneumonia (CCPP), Contagious Bovine Pleuropneumonia (CBPP) and Trypanosomiasis. Human wildlife conflicts due to closure of national parks and reserves, incidence of pests, the change of course of river Tana depriving farmers utilization of their productive arable lands, intrusion of salt water into their fields and in migration of livestock from neighboring counties.

## 3.0 Impact of Rainfall Performance, Shocks and Hazards

### 3.1 Crop Production

Mixed farming livelihood zone is dependent on long rains while the marginal mixed farming and pastoral all species livelihood zones are short rain dependent. The main crops grown in the County are maize, green grams and cowpeas. Other crops include rice, tomatoes, kales, bananas, onions and mangoes. In the marginal mixed farming livelihood zone, maize contributes 30 and 50 percent to cash income and food respectively while green grams contributes 10 percent to cash income and food. Mangoes also contribute to 10 percent for cash income and food. In the mixed farming livelihood zone, maize, green grams, mangoes and bananas contributes one, four, 37, and 10 percent for cash income respectively while they contribute to 41, eight, three, and 20 percent for food respectively. Tomatoes contribute 20 percent for cash income in the mixed farming livelihood zone. Rain-fed crop production is practiced more in the mixed farming livelihood zone while flood receding irrigation is practiced in floods prone areas along the Tana River flood basin.

### Rain-fed Crop Production

During the 2014 short rains season the area under maize, green grams and cowpeas production reduced by 43.1, 39.1 and 22.7 percent respectively as compared to the Long - Term Average (LTA).

**Table 1: Rain-fed Agriculture**

Crop	Area planted during 2014 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2014 Short rains season production (90 kg bags) Projected/Actual	Long Term Average production during the Short rains season (90 kg bags)
1.Maize	1,575	2,351	18,900	28,212
2.Green Grams	284	466	1,988	3,728
3.Cowpeas	368	476	2576	3,808

Production decreased by 33.1, 46.7, 32.4 percent for maize, green grams and cowpeas respectively as compared to LTA. The decline in production was attributed to erratic rainfall and lack of floods along the flood plains because farmers normally plant after flooding has taken place, if there are no floods, little planting takes place.

### Irrigated Crop Production

Farmers in Tana River County practice on-farm irrigation due to presence of flood water. The area under irrigation increased by 13 percent for maize and decreased by 58.1 and 62.7 percent for green grams and cowpeas respectively, resulting to increase in maize production by 13 percent and reduction in production of green grams and cowpeas by 58.1 and 52.7 percent

respectively as shown in **table 2**. The increase in maize production was due to provision of seed, credit by Agricultural Finance Corporation and an assured market by the County Government.

**Table 2: Irrigated Agriculture**

Crop	Area planted during the 2014 Short rains season (ha)	Short Term Average (3 years) area planted during Short rains season (ha)	2014 Short rains season production (90 kg bags) Projected/actual	Short Term Average (3 years) production during 2014 Short rains season (90 kg bags)
1.Maize	2,400	2,118	55,200	48,714
2.Green Grams	507	1,209	4,563	10,881
3.Cowpeas	115	308	1,035	2,772

### Maize stocks

The overall maize stocks decreased by 40.6 percent of the LTA as a result of poor performance of short rains. At the household level, stocks decreased by 64.1 percent of the LTA, attributed to poor performance of short rains. The traders stocks have decreased by 6 percent of LTA due to increased demand by households who depend on markets for their food needs.

**Table 3: Maize Stocks**

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	11, 473	31,935
Traders	7,543	8,010
Millers	0	0
NCPB	4,593	7,791
<b>Total</b>	<b>23,609</b>	<b>47,736</b>

Low stocks could be attributed to current high prices being offered by the County Government for relief distribution. The National Cereals and Produce Board (NCPB) have decreased its stocks by 42 percent of the LTA (Table 3). The maize stocks mainly held by households in the mixed farming livelihood zones are expected to last for two months as compared to a normal of six months. In the pastoral and marginal mixed farming zones; stocks held at household level can last for less than a month. In a normal season in the pastoral livelihood zones, stocks would last between one to two months, three months for marginal mixed zones and at least four months for mixed farming zone.

## **3.2 Livestock Production**

### **Introduction**

The major livestock species in the county are goats, sheep, cattle and camel. Camel rearing is prevalent in Bangale but is also springing up in the pastoral livelihood zone of Titila and Waldena areas. Free range poultry is common among the marginal mixed farming livelihood zone. Livestock production contributes to 20, 15 and 68 percent of cash income in the marginal mixed, mixed farming and pastoral zone respectively. Goats and sheep are mainly sold for purchase of other food commodities as well as for meat and milk, while cattle are mainly for milk production and also for sale mainly to cater for other high budget expenditures in the family.

### **Pasture and Browse Condition**

The pasture and browse is currently fair to good in mixed and marginal mixed farming livelihood zone and fair in the pastoral livelihood zone particularly in Bangale. The pasture and browse condition is in a deteriorating trend which is normal for this time of the year and expected to last for 1.5 months in pastoral livelihood zone and two months in the mixed and marginal farming livelihood zone.

### **Livestock Productivity**

#### **Body Condition**

Livestock body condition is good across all livelihood zones which is normal at this period of the year. However, the body condition for cattle and shoats is expected to deteriorate in the next one month particularly in the pastoral livelihood zone due to deteriorating condition of pastures. Worsening condition of pasture and browse is expected to last until April when long rains start.

#### **Birth Rates**

Birth rates in all livestock types are currently at 30 percent across all livelihoods which is normal across all livelihood zones. The Lambing /kidding and calving season for sheep, goats and cattle respectively is normally between October to December and between March to May every year.

#### **Milk Availability**

The current milk production is mainly from goats, cattle and camel. Average milk production in the pastoral livelihood zone is 1 – 2 litres per household while in the mixed and marginal mixed livelihood zones it is less than one litre per household, which is normal at this time of the year..

#### **Milk Consumption**

The household consumption ranges from half a litre to one litre per household across the county. Milk for sale is available in the market across all livelihood zones especially in the pastoral zones. Average milk prices range from Ksh. 50 – 60 per litre in the mixed farming and Ksh. 40 per litre in the pastoral and marginal mixed farming livelihood zones. Milk prices are normal at this time of the year.

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

The average TLUs in pastoral zone is 28 TLUs (21 cattle, 28 goats and 21 sheep) while in marginal mixed farming zone, it is 8TLUs (3 cattle, 21 goats, 14 sheep). This is normal at this time of the year.

### **Water for Livestock**

The current sources of water for livestock are river Tana, small fresh water lakes, shallow wells, water pans, traditional watering holes along the laggas, water pans, and irrigation canals which is normal at this time of the year. Trekking distance to water points averages 1 – 8 kilometers in the marginal and mixed farming livelihood zones along Tana River and 5 – 15 Kilometers in the pastoral livelihood zone. The water situation for livestock is particularly poor in Bangale although distances to watering point are normal at this time of the year.

### **Livestock Movement and Migration**

Most of the animals are in their usual grazing fields except in the pastoral zones where animals have started moving towards the Tana Delta in search of pastures and water. Outward migration has been reported where animals have moved from Bangale to Mwingi County, this is normal at this time of the year. However in-migration is expected to increase in the next one month as cattle from Garissa county come in search of pasture which is normal at this period of the year.

### **Livestock Diseases and Mortalities**

There was no livestock disease outbreak reported however; endemic diseases such as Contagious Caprine Pleuro-pneumonia (CCPP), Contagious Bovine Pleuropneumonia (CBPP), Trypanosomiasis and worms infestation continued across all livelihood zones. Mortalities range from 1 – 2 percent for cattle, sheep and goats while for camel it was about one percent. All the indicated range of mortalities are within norm. Foot and mouth disease (FMD) was also reported, quarantine was imposed and treatment carried out which put the situation in control.

## **3.3 Water and Sanitation**

### **Water sources**

The major water sources in the county are river Tana, shallow wells, boreholes, pans, irrigation canals and pipeline in major towns. There are currently a total of over 67 water pans, 225 shallow wells and 21 boreholes across the county. The open water sources were recharged to 50-75 percent of their capacity across the county. About 78 percent of pans in Tana Delta and 63 percent of pans in Tana North have water and are expected to last for one to two months. Areas currently experiencing severe domestic water shortage but under water trucking are Bangale location, Gafuru (Galole), Waldena-Doke, Haroresa, Kalalani, Bulto-Mulitu (Wayu), Chifiri, Hakoka, kesi (Galole), Boji, Maroni and Hara (Wenje).

### **Distances to water source**

The average distance to domestic water points currently ranges from 1 – 2 Kilometres in the mixed farming and between 1 – 3 Kilometres in pastoral and marginal mixed livelihood zone. Distances are normal at this time of the year.

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

The current waiting time is normal at less than 15 minutes across the county. Though 37 percent of pans in Tana North have dried up, most households are relying on shallow wells and river Tana where collection of water is open. Waiting time is expected to remain stable until April except in areas facing severe water shortage as mentioned above.

### Cost of water

Average cost of water is normal at the borehole at Ksh. 2 – 5 per 20 litre jerrican. However households near river Tana do not pay for water as they rely on the river, shallow wells, pans and dams. Private water vendors in the pastoral livelihood zones of Tana North-Bura, Madogo, Bangale and Mbalambala are selling water at Ksh. 20 – 30 per 20 litres jerrican.

### Water consumption

Average water consumption in litres per person per day (lppd) ranges between 15 - 20 in the marginal and mixed farming livelihood zones and 5-10 in pastoral livelihood zone as compared a normal of 15 lppd.

### Sanitation and Hygiene

Latrine coverage stands at 47 percent for the period July to December 2014 which is an increase from 45.7 percent recorded during the same period the previous year. Though no water borne disease outbreaks have been reported, minimal cases of diarrhoea, typhoid and malaria were noted across the county. Water borne diseases could be attributed to disposal of human waste in the open coupled with low level of water treatment across the county.

## 3.4 Markets and Trade

### Market Operations

The main livestock and food stuff markets in the County are Bura, Hola, Garsen, Mandingo, Waldena, Madogo, Bangale, and Hara. The livestock markets are operating normally without any interruptions since neither conflicts nor major disease outbreaks have been reported. Garsen market is mainly supplied with livestock from Tana Delta and Tana River Sub counties while Bura and Bangale markets are supplied with livestock from Tana North Sub County. The markets are currently experiencing increasing supply of animals but the demand is low.

### Market Prices

#### Maize Prices

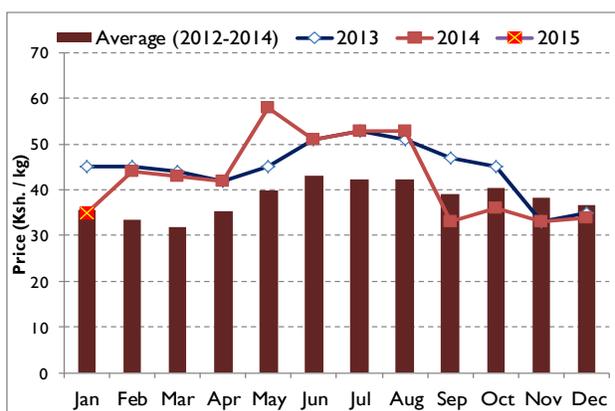


Figure 3: Maize prices in Tana River County

Average maize price in the county was Ksh. 35 per Kilogram in January 2015 which was the same as recorded in January 2014. The current maize price is three percent below the LTA of 36 shilling per kilogram. Price has been declining from August 2014 to December 2014 (Ksh. 34) but is expected to increase in the next two months as demand increases.

### Goat price

The price of an average goat in January 2015 was Ksh. 3371. Price of goat reduced by 16 percent compared to January 2014 but was seven percent above the LTA price of Ksh. 3,156 as shown in figure 4. Good prices of goat may be attributed to the good body condition of goats and is expected to remain stable in the next two months if long rains will be timely.

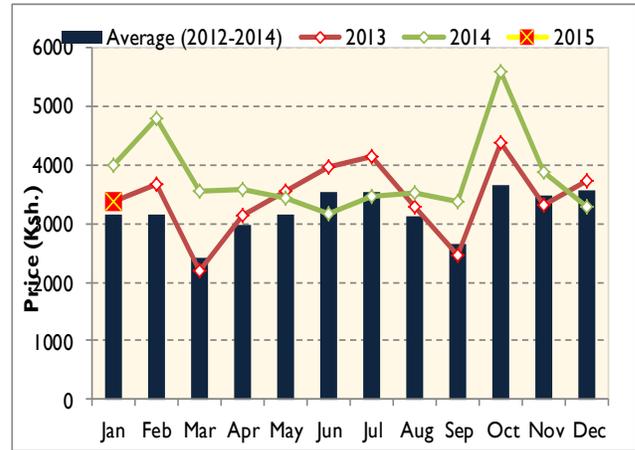


Figure 4: Goat prices in Tana River County

### Terms of Trade

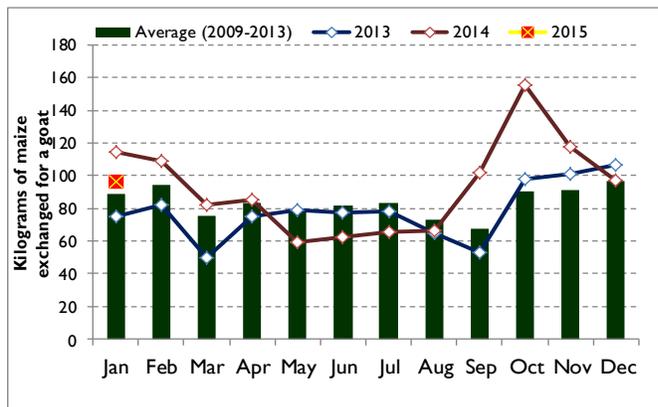


Figure 5: Terms of Trade in Tana River County

Terms of trade were favourable to the livestock keepers as a household was able to purchase 96 kilograms of maize with sale of a goat across in January 2015. ToT was eight percent above the LTA of 89 Kilograms of maize but 16 percent lower than in December 2014 where a goat exchanged with 114 Kilograms of maize as shown in figure 5.

## 3.5 Health and Nutrition

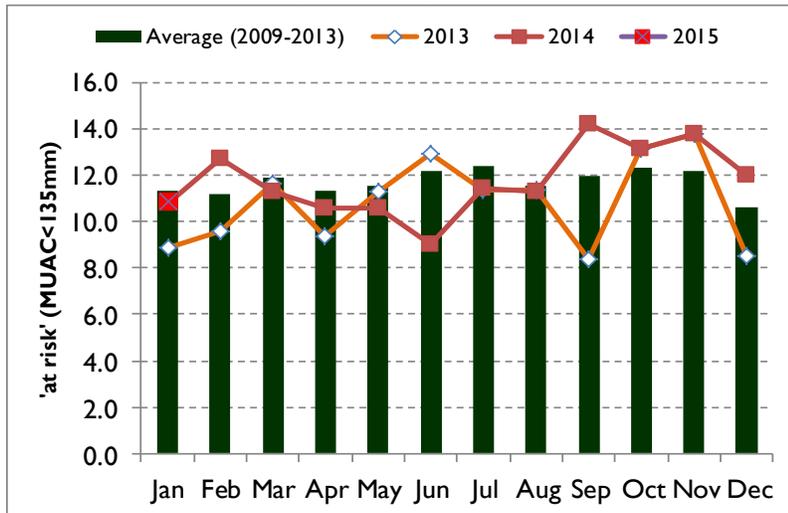
### Morbidity and mortality patterns

The top five diseases affecting the general and under-five population are Respiratory Tract Infection (RTI), malaria, diarrhea, diseases of the skin, and pneumonia. Malaria illnesses decreased attributed to increased distribution and usage of long lasting insecticides treated nets (LLITNs). The under-five mortality rate is at 1.30 deaths per 10,000 persons per day while the crude mortality rate is at 0.70 deaths per 10,000 persons per day below alert thresholds of 2 deaths per 10,000 persons per day and 1 death per 10,000 persons per day.

### Immunization and Vitamin A supplementation

The coverage of fully immunized child (FIC) remained stable at 25.1 percent in the period between July to December 2014, compared to 28 percent in 2013 the same period. Vitamin A supplementation coverage decreased from 63 percent in July to December, 2013 compared to 48 percent in 2014 same period.

## Nutrition and Dietary Diversity



**Figure 6: children at risk of malnutrition (MUAC <135 mm)**

World Health Organization (WHO) for acute malnutrition classification. The percentage of under-five at risk of malnutrition (MUAC<135mm) was at 10.9 percent in the month of January 2015 below the LTA of 11.4 percent as seen figure 6.

The Global Acute Malnutrition (GAM) and severe acute malnutrition (SAM) in February, 2015 was at 9.9 percent (5.8-16.3 95% C.I) and 1.0 percent (0.2-4.3 95% C.I) respectively. Areas with high acute malnutrition rates are; Tana North and Tana River (Bargesa, Madogo B, Chewani, Kone and California). The GAM and SAM levels slightly increased when compared to 7.5 percent (5.4-10.5 95% C.I) and 0.9 percent respectively in June 2014 however not significant. The GAM levels remained at poor levels of

### 3.6 Education

#### Enrollment Rates

The County has a total of 160 public primary schools with a total enrolment of 70,640 inclusive of the Early Childhood Development Centre and Education (ECDE). From July to December 2014 the primary schools enrolment generally increased by 0.95 percent (0.56 and 1.36 percent for boys and girls respectively). Previously, enrollment and participation was adversely affected by conflict in Tana Delta but there are some of the hot spots in Tana Delta which are yet to fully recover and not all children have returned back to their respective schools. Gender parity is at 53 percent for boys and 47 percent for girls.

#### Transition and Dropout Rates

The cumulative dropout by December 2014 was 4,600 representing 6.5 percent of the total enrolment. The high dropout rate is attributed to early marriage and teen pregnancies among the girls and child labor among the boys (mangoes harvesting and herding livestock). Transition rate from ECD to primary improved which is attributed to employment of ECD teachers by the county government and implementation of Regular School Meals Programme (RSMP) in all schools in the County. The transition rate from primary to secondary school is approximately 63 percent; the low transition rate was attributed to high poverty levels, and long distances between schools.

### School Meals Programme

All the 160 primary schools in the County are under the Regular School Meals Programme (RSMP). Provision of meals in schools has contributed to improved participation and retention of pupils in schools while at the same time improving the nutritional status which enhances pupil's performance. All the 70,640 children enrolled are beneficiaries of the RSMP. The major challenges experienced in the implementation of the School Meal Program include delay in delivery and transportation and lack of clean water especially in the pastoral livelihood zone in Bengali Division

### 3.7 Coping mechanisms

The county had an average coping index of 27 in December 2014 compared to eight (December 2013) implying that more coping strategies are employed by the community. Some of the coping mechanisms being employed by the community include burning of charcoal and engagement to casual labour however no distress coping mechanisms are currently employed.

### 3.8 Ongoing Interventions

#### Food Interventions

Vitamin A and Zinc Supplementation targeting 46,807 children was done in the County. Timely introduction of complementary Foods (Iron Folate Supplementation) targeting about 10,248 pregnant women in order to reduce morbidity and mortality rates among the underfives.

#### Non Food Interventions

Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impacts in food security	Cost	Time Frame
<b>AGRICULTURE</b>							
Tana River	Promote DTC and certified seeds (Maize and Green grams)	All locations	4,120Hs	Department of Agriculture.	Improved production and food security.	8M	2014 - 2015
	Promote Mango Cooperative for Collective marketing	All locations	700Hs	MoA KAPAP, ASDSP,	Improved HH purchasing power.	2M	June 14 to March 2015
Tana River	Post-harvest losses of grains and fresh produce training.	All locations	2000H	MoA KAPAP	Reduced post-harvest losses	1M	Sept 2014 – Jan 2015
Tana North	Relief seeds	Bura and Madogo	200 farmer	MOA,	Improved maize production	0.4M	Sept 2014
Tana	SHEP UP through	Kipini,	400	JICA, SHEP	Access to	1.7M	2014/15

Delta	TEN model group empowerment	Garsen, Tarasaa	HHs	UP UNIT, MOA	markets, improved productivity		
	Climate adaptation strategies/options	Matomba ShirikishK izuliani	250 HHs,	KARI, MD, MOALW	Increased crop productivity	2M	2014/15
	TARDA – rice production project	Gamba	600 HHs	MOA/TAR DA	Improved production	13 M	June -14 to March 15
	Distribution of grafted cashewnut seedlings	All locations	500HH s	MOA /KARI/Community	Improved production	4M	June -14 to March 15
	Water harvesting	Matangen	200 HHs	KRCS	production	1.8M	June -14 to March 15
<b>Livestock</b>							
Tana River	Fodder production, conservation and hay store.	Dafoma, Chewani CDC, Bondeni	200 HHs	SNV, KLMC, Dept of Livestock	Improved milk production.	2.4M	August – December 2014
	Early warning systems and weather advisory	Gafuru, Daku, Koticha,	500 HHs	ASDSP, MoALF	Farmers Preparednes	1.3M	October - December 2014
	Promotion of indigenous chicken rearing as an alternative livelihood.	Rhoka Primary Lisa Primary Ndura Secondary Ujongosi Buthe	1,097 students  73 HHs	GAA MoALF  NMK, livestock	Improved nutrition for the school pupils Increased incomes and improved nutrition.	150,000  150,000	October 2013 to date  September 2014 to date.
Tana River	Promotion of honey value chain	locations in Tana River sub county	420 HHs	KAPAP, NDMA, Cooperatives	Improved income levels	3M	2010-2015
	Promotion of meat goat value chain	Koticha and Gafuru	240 HHs	KAPAP, Livestock	Improved income levels and nutrition	3.4M	April 2014 - April 2015
	Promotion of beef value chain	Galole and Wenje	4,000 HH	ASDSP, KLMC	Improved incomes	4.5 M	July 2014 – June 2015

Tana North	Camel milk, honey and goat meat value addition	Chewele, Madogo, Bura	1800 HH	KAPAP, MOLF		15M	5 Year
	Pasture production	Sala	600HHs	MOLF, NALEP, NSV		2.5M	June 14 – June 15
<b>HEALTH AND NUTRITION</b>							
	Vitamin A and Zinc Supplementation	Tana River County	46807	MOH/ UNICEF	Reduces morbidity mortality	2.2M	2014/15
	Management of Acute Malnutrition (IMAM)	Tana River County	3510	MOH KRC WFP	Reduce morbidity and mortality	3.7M	2014/15
	IYCN Iron Folate Supplementation	Tana River County	10248	MOH/ UNICEF	Reduce morbidity and mortality	1.6M	2014/15
	Deworming	Tana River County	46,807	MOH/ UNICEF	Reduce morbidity	1.3M	2014/15

### 3.9 Sub-County ranking (From worst to best Sub County)

Sub County	Food security rank (1=Most food insecure, 3=Least food insecure)	Main food security threat
Tana North	1	Inadequate water and pasture, influx of animals from neighboring counties and closure of national parks and ranches
Tana River (Galole)	2	Insufficient rains, lack of floods
Tana Delta	3	Insufficient rains, influx of livestock

## **4.0 Food Security Prognosis**

### **4.1 Prognosis Assumptions**

- Food security will remain stable for the next one month
- Pasture, browse and water for both human and livestock will deteriorate until the onset of long rains
- Onset of rains in March will improve food security situation
- The percentage of children at risk of malnutrition will increase due to reduced dietary diversity
- Food stocks at household level will decrease owing to poor harvests

### **4.2 Food Security Outcomes for March to May**

Food consumption is expected to decline as food stock fall at the household level. Nutrition status is expected to deteriorate as less milk will be available for consumption. Due to poor quality of water, water borne diseases are expected to increase.

### **4.3 Food Security Outcomes from June to August**

Food consumption is expected to improve from June through August 2015 after the long rains season. Nutrition status is expected to remain stable since some crops will be ready for harvesting. Pasture and browse condition will improve leading to livestock body condition getting better. The mortality is expected to remain stable.

## **5.0 Conclusion and Recommendations**

### **5.1 Conclusion**

It is projected that food security may remain stable in the Mixed farming for the next two months and Marginal mixed and farming zones for the next one and a half months. However, Food security may deteriorate from the month of March in the pastoral livelihood zone since long rains are expected in April.

### **5.2 Summary of recommendation**

The following are activities that were recommended to mitigate the hazards and improve food security situation in the county:

- Provision of drought tolerant and early maturing seeds
- Promotion of agroforestry
- Rehabilitation and opening up of more area through irrigation
- Capacity building of farmers on climate change and marketing
- Livestock breed improvement, pasture production
- Promotion of honey value chain,
- Restocking in Tana Delta
- Integrated assessment and outreaches targeting children under five years with supplements

## 6.0 ANNEXES

### Annex 1. Food Intervention Required

**Table 4: Percentage Range of People in Need of Food Assistance**

Sub county	Ward	Proposed Population in need(percent)	Ration level(percent)	Proposed Intervention(FFA)
Tana North	Bangale	20-25	75%	GFD and FFA
	Madogo	20-25	50%	FFA
	Bura	10-15	50%	FFA
Tana River (Galole)	Galole	10-15	50%	FFA
	Wenje	10-15	50%	FFA
Tana Delta	Garseni	5-10	50%	FFA
	Tarasaa	5-10	70%	FFA
	Kipini	5-10	50%	FFA

### Annex II. Non-Food Interventions (By Sector)

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Time Frame
<b>AGRICULTURE</b>						
Tana River And North	Assorted relief seeds-Drought tolerant and early maturing	Tana River Bura, Madogo	5500 HHs	MoA, NGOs	14M	March – April 2015
	Assorted pesticides and tools	All locations in T river	2000 HHs	MoALD, NGOs	6M	March to Sept 2015
	Provision of portable water pump sets	All locations in Tana River And Delta	1200 HHs	MoA, NGOs	27M	April - Oct 2015
	Climate Change , Crop Production and marketing training	All locations in Tana River	3000 HHs	MoA NGOs	3M	March to Sept 2015
Tana North	Promote agroforestry and water provision	3 locations of Bura and Madogo	300 farmers	MoA KEFRI, NIB	13M	March – Sept 2015
Tana Delta	Relief Seed provision	All	12,650 HH	MOA and NGOs	6M	March – Sept 2015
	Revival of irrigation	Salama	1,200	MOA, NGOs	8M	2014-2015

<b>Livestock</b>						
Tana River	Breed improvement (bull camps)	Galole	3,000 HHs	TRCG, Livestock Veterinary	23 M	2015-2016
	Establishment of a local bee hives workshop	Galole	4,000 HHs	TRCG, NDMA, GAA, CDF	4M	2015-2016
	Processing of crop residues for livestock	Galole	1,000 HHs	NIB, TRCG, CDF Livestock	3M	Marc – June 2015
	Establishment of feed reserves	Galole	2,000 HHs	County Govt	4M	2015-2016
Tana North, Delta	Pasture production	Bangale, Madogo, Bura Tana Delta	24,000 HHs	County Govt	34M	March to Dec 2015
Tana Delta	Restocking	Entire Sub County	1000 HHs	County Govt	10M	March – June 2015
<b>HEALTH AND NUTRITION</b>						
County Wide	Rapid Assessment/ Integrated Outreaches	Tana River County	46,807 HHs	MOH/ND MA/IMC	900,000	March to Sept 2015
	Provision of food supplements	Whole County	3510 HHs	MOH/IM C/KRC/ WFP	900,000	March to Sept 2015