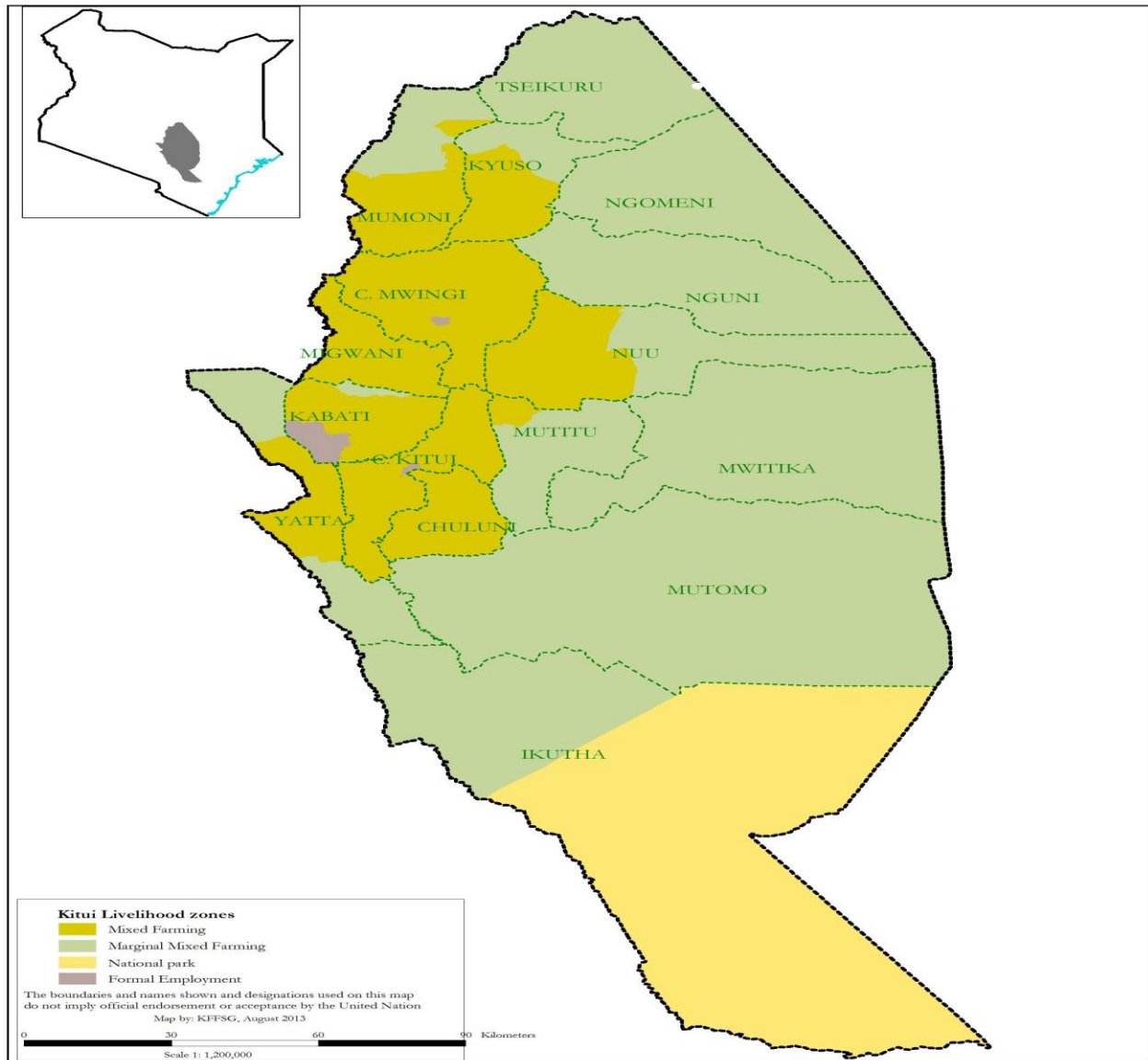


**KITUI COUNTY**  
**2016 LONG RAINS FOOD SECURITY ASSESSMENT REPORT**



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

**August 2016**

<sup>1</sup> Samuel Murage (Ministry of Health), Charles Chebarwett (WVK) and Joseph Chege (USAID)

## TABLE OF CONTENTS

<b>1.0 INTRODUCTION.....</b>	<b>2</b>
1.1 County Background .....	2
<b>2.0 COUNTY FOOD SECURITY SITUATION .....</b>	<b>2</b>
2.1 Current Food Security Situation .....	2
2.2 Food Security Trends .....	3
2.3 Rainfall Performance .....	3
<b>3.0 IMPACT OF RAINFALL PERFORMANCE, SHOCKS AND HAZARDS .....</b>	<b>4</b>
3.1 Crop Production .....	4
3.2 Livestock Production .....	5
3.3 Water and Sanitation.....	8
3.4 Markets and Trade .....	9
3.5. Health and Nutrition .....	10
<b>4.0 FOOD SECURITY PROGNOSIS.....</b>	<b>12</b>
4.1 Prognosis Assumptions.....	12
4.2 Food Security Outcomes in the next three months (August, September, October) .....	12
4.3 Food Security Outcomes for the last three months (November, December, January) ..	12
<b>5.0 CONCLUSION AND RECOMMENDATIONS.....</b>	<b>13</b>
5.1 Conclusion .....	13
5.2 Summary of Recommendations.....	13
5.3 Sub-County Ranking.....	13
<b>6.0 ANNEXES .....</b>	<b>14</b>
6.1 On-going Interventions by Sector .....	14
6.2 Proposed Intervention .....	15

## 1.0 INTRODUCTION

### 1.1 County Background

Kitui County has eight sub-counties namely; Kitui Central, Kitui South, Kitui East, Kitui Rural, Kitui West, Mwingi North, Mwingi West and Mwingi Central. There are three livelihood zones in the County: marginal mixed farming, mixed farming livelihood zone and formal employment. (Figure 1). The County has a population of 1,012,710 people<sup>2</sup> and covers an area of 30,570 square kilometers, of which 6,370 square kilometers is covered by Tsavo national park.

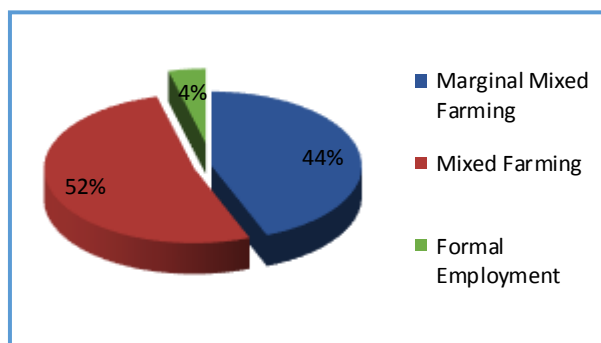


Figure 1: Population distribution by livelihood zone

## 2.0 COUNTY FOOD SECURITY SITUATION

### 2.1 Current Food Security Situation

The County is currently classified in None/Minimal (IPC Phase 1) except part of marginal mixed farming (Kitui South sub-county) which is in Stressed (IPC Phase 2). The projected maize crop production in Kitui East and Kitui South counties is 1000 bags and zero compared to the LTA of 9,000 and 10,200 bags respectively. In spite of the county receiving normal to above normal rains and good temporal distribution, the spatial distribution was uneven.

County wide, the maize stocks at household level stands at 125 percent above the LTA, mainly in the mixed farming (MF) livelihood zone, while in marginal mixed farming (MMF) livelihood zone of Kitui East and Kitui South, households are holding approximately 42 percent of the LTA. The maize prices remained stable and currently 81% of the LTA, while the terms of Trade (TOT) were favourable at 104 Kilograms (Kgs) of maize from sale of a goat which favoured households in the marginal mixed farming zones who rely on markets. The pasture and browse condition was good to fair in all livelihood zones except pockets of marginal mixed farming (Sosoma, Ukasi, Kaningo, Ngomeni, Nu, Ikutha, Mutha and Kanyangi) which was fair to poor.

Livestock body condition was good to fair across both mixed farming and marginal mixed farming. Food consumption score improved in the households with 91 percent of the households having an acceptable food consumption score compared to 73 percent in same period 2015. Meal frequency in mixed farming livelihood zone is normal at 2-3 meals per day while in marginal mixed farming livelihood zone the frequency is 1-2 meals per day against a normal of 2-3 meals per day. The dietary diversity consists of cereals and occasionally consumed with pulses across the two livelihood zones. The mean coping strategy index (CSI) reduced from 20 in May 2015, to 13 in May 2016, implying households were employing less severe coping mechanisms. No unusual mortalities and outbreak of diseases were reported in the County.

---

<sup>2</sup> KNBS 2009

## 2.2 Food Security Trends

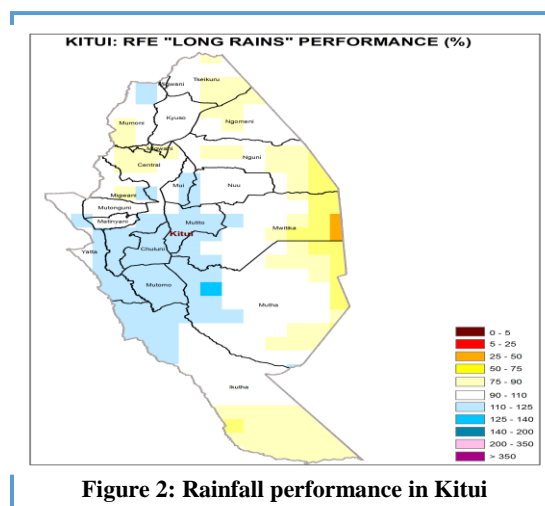
The table below summarizes the food security trends in the County.

**Table 1: Food security trends**

Indicator	Current situation	Previous season
Food insecurity phase	None/Minimal (IPC Phase 1) except part of MMF (Kitui South sub-county) which is in Stressed (IPC Phase 2).	None/Minimal (IPC Phase 1) All zones
Household food stocks (90kg-bag)	102,278	28,070
Livestock body condition	MF = good MMF = good to fair	MF = good MMF = good to fair
Household water consumption (MMF)	10 liters pppd	20 liters pppd
Household water consumption (MF)	20 liters pppd	30 litres pppd
Terms of trade (ToT)	104 (June 2016)	95 (January 2016)
CSI	13 (May 2016)	20 (December 2015)
FCS	Acceptable (91.1%) Borderline (7.9%) Poor (1%)	Acceptable (73%) Borderline (21%) Poor (6%)
Children at risk malnutrition (MUAC <135 millimeters)	6.8 %	5.1 %

## 2.3 Rainfall Performance

The onset of long rains was late during the first dekad of April as opposed to the normal 3<sup>rd</sup> dekad of March. Mixed farming livelihood zone recorded 110 -125 per cent of the normal while marginal mixed farming livelihood zone recorded 50-90 per cent of the normal. Most rainfall stations in the County reported an average of 119 mm of rains cumulatively since the start of the season with exemption of south eastern part of the county. The rainfall was characterized by good temporal distribution and uneven spatial distribution. The cessation was early in the first dekad of May compared to the normal third dekad of May.



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

#### 3.1 Crop Production

The County is mainly dependent on short rains for crop production, with long rains accounting for about 40 percent of total annual crop production. The main crops grown are maize, green grams, cowpeas, sorghum and millet. Other crops that are grown in the county include cassava, pigeon peas, pumpkins and sweet potatoes (Table 2).

**Table 2: Contribution of crops to cash and food income**

Main Crops	Mixed farming zone		Marginal mixed farming zone	
	% contribute to cash income	% contribute to food income	% contribute to cash income	% contribute to food income
Maize	25	60	20	50
Beans	23	15	7	10
Green grams	0	0	40	5

#### Rain fed Crop production

The total acreage under maize was 77 percent of LTA, while area under green grams and cowpeas increased by 11 and six percent respectively compared to the LTA (Table 3). The decrease in area under maize cultivation can be attributed to farmers being sensitized to plant more of drought resistant crops (DTC) like pigeon peas, millet and cowpeas. Uneven rainfall distribution coupled with anticipated high market prices for legumes led to the decrease in area planted for maize. The crop yields were affected by the late onset and early cessation of rains with maize, green grams and cowpeas likely to record 35, 30 and 36 percent of the LTA. Marginal mixed farming areas of Kitui East and Kitui South sub-counties were majorly affected by poor rains which resulted to about 90 and 100 percent maize crop loss respectively. Green grams production was also affected in these two sub-counties with a crop loss of 88 and 99 percent in Kitui East and Kitui South sub-counties respectively.

**Table 3: Rain fed Production**

Crop	Area planted during 2016 Long rains season (Ha)	Long Term Average area planted during the Long rains season (Ha)	2016 Long rains season production (90 kg bags) Projected/Actual	Long Term Average production during the Long rains season (90 kg bags)
1.Maize	33,440	43,405	68,100	194,095
2.Green grams	37,820	33,820	43,878	146,760
3.Cowpeas	23,460	22,100	31,800	87,600

#### Irrigated Crop

Area under production for tomatoes, kales and watermelons increased by 17, 25 and 72 percent respectively (Table 4). The increase was attributed to many farmers venturing into irrigated farming after the county set up infrastructures to encourage targeted farm groups on irrigation as an alternative source of food production. There was also good market for horticultural crops and favourable incentives for farmers. The production for tomatoes and kales were 48 and 25 percent below the LTA, while for watermelons was 85 percent above LTA. The below production for tomatoes and kales was majorly attributed to increased prevalence of diseases and pests due to prolonged dry spell unlike water melon which was minimally affected. Other contributing factors include poor agronomic practices and mechanical failure of water pumps.

**Table 4: Irrigated Crops Production**

Crop	Area planted during 2016 Long rains season (Ha)	Long Term Average area planted during the Long rains season (Ha)	2016 Long rains season production (90 kg bags) Actual	Long Term Average production during the Long rains season (90 kg bags)
1. Tomatoes	314	268	3002	5825
2. Kales	284	228	5590	7458
3. Watermelon	50	29	500	270

### Maize stocks

The stocks held by the household in the county are 125 percent above the LTA which is accumulated stocks from the bumper harvest of the short rains (Table 5). However, this stocks are majorly held in mixed farming livelihood zones of Kitui Central, Kitui Rural and Kitui West sub-counties. Most farmers in mixed farming livelihood zones are currently harvesting their maize crop hence household stocks are expected to increase as harvesting progresses. The stocks are expected to last through October in mixed farming livelihood zones while in the marginal mixed farming households will have to purchase maize in local markets in order to sustain themselves. Traders stocks are at 76 percent of the LTA as a result of a decline of maize prices. Millers stock increased by 15 percent above the LTA due to increased purchase from farmers who had above normal production. Stocks at national cereals and produce board depot are currently at nine percent of the LTA as most farmers retained stocks at household level.

**Table 5: Maize Stocks in the County**

Maize stocks held by	Quantities of maize held (90-kg bags)	Long Term Average quantities held (90-kg bags) at similar time of the year
House Holds	102,278	45,390
Traders	129,622	170,624
Millers	20,500	17,750
NCPB	922	9,960
<b>Total</b>	<b>253,322</b>	<b>243,724</b>

### 3.2 Livestock Production

The major livestock in the county are cattle, goats and sheep. Other species include chicken and bee keeping. In mixed farming livelihood zone chicken, cattle and goats contribute to 50, 20 and 15 percent to cash income respectively while chicken, cattle and goats contribute 50, 20 and 20 to food income respectively. In the marginal mixed farming livelihood zone goats, cattle and bee keeping contributes 45, 25 and 15 percent to cash income respectively while cattle, goat and chicken contribute 44, 30 and 20 percent to food income respectively.

### Forage condition

The pasture and browse condition was good to fair in all livelihood zones except pockets of marginal mixed farming (Sosoma, Ukasi, Kaningo, Ngomeni, Nuu, Ikutha, Mutha and Kanyangi) which was fair to poor. The fair pasture condition in parts of marginal mixed farming livelihood zone is as a result of poor rainfall distribution resulting to minimal regeneration of pasture (Table 6). However, crop residues will be used as livestock feeds.

Livelihood	Pasture condition	Browse condition
------------	-------------------	------------------

zone	Current	Normally	Projected Duration to last (Months)	Current	Normally	Projected Duration to last (Months)
Mixed farming	Good to fair	Good	2-3	Good to fair	Good	3-4
Marginal mixed farming	Fair to poor	Fair	1-2	Fair to poor	Fair	2

**Table 6: Pasture and browse conditions**

### Livestock Productivity

Livestock body conditions is good in mixed farming zones and good to fair in marginal mixed farming zones. Good livestock body condition in mixed farming zone is due to the current available browse, county disease mitigations and improved water supply (boreholes, earth dams, subsurface dams). In marginal mixed farming the body condition for cattle are expected to deteriorate in the next two months while shoats would remain stable. The projected decrease in cattle body condition is attributed to depleting forage, increased distances to water sources and access to resources in areas of conflict.

**Table 7: Livestock body condition**

Livelihood zone	Cattle		Sheep		Goat	
	Current	Normally	Current	Normally	Current	Normally
Marginal mixed farming	Good to Fair	Good	good to fair	Good	good to fair	Good
Mixed farming	Good	Good	Good	Good	Good	Good

### Milk Production, consumption and prices

Milk availability in all the livelihood zones is presently low compared to the LTA. Variation in production is as a result of late onset and early cessation of rain which resulted to fair regeneration of forage. As the lean season sets in, forage condition is expected to typically decline, and this will likely impact on household milk production and consumption. Current milk production and consumption remain below normal levels in both livelihood zones (Table 8). However, current milk prices are comparable to the long term averages.

**Table 8: Milk availability, consumption and prices**

Livelihood zone	Milk Production (Litres)/Household		Milk consumption (Litres) per Household		Prices (Ksh)/Litre	
	Current	LTA	Current	LTA	Current	LTA
Marginal mixed farming	2	3	0.5	1	40 - 50	50
Mixed farming	1	2	0.5	1	60 - 70	60

### **Tropical livestock units (Tropical Livestock Units)**

Currently across the two livelihoods zones, the TLU is normal for marginal mixed farming livelihood zone, at three and in the mixed farming livelihood zone, at six. Birth rates are normal for all species across the two livelihood zones.

### **Migration**

There were no out-migration from the County. However, in-migration from Tana River County were reported along the border line, which is bound to bring about resource based conflicts in Sosoma, Ngomeni, Mutha, Endau and Kaningo areas in sub-counties of Mwingi North, Kitui East and Kitui South.

### **Livestock Diseases and Mortalities**

In Mwingi North sub-county especially in Tseikuru ward, *Pests des Petits Ruminantis* (PPR), Contagious Caprine Pleuro- Pneumonia (CCPP), sheep and goat pox diseases were reported. In Kitui East in areas of Endau, Voo and Kyamatu, there were reported cases of CCPP. However, mass vaccination was carried out to contain the situation. . Reports of Newcastle diseases were reported across the County. The County department of livestock, up-scaled surveillance of the diseases. There were no unusual livestock mortalities reported.

### **Water for Livestock**

The main water sources for livestock are: piped water, shallow wells, boreholes, traditional river wells, rock catchments, water pans and dams. Average return trekking distances from grazing to watering points has increased to 6-10 km compared to normal of 4 – 7 km in the marginal mixed farming livelihood zones (Table 9). The increase can be attributed to breakdown of watering points like in Sosoma, Ukasi, Voo-Kyamatu and Ikutha. Watering frequency is daily in mixed farming livelihood zone and once every two days for marginal mixed farming livelihood zone.

**Table 9: Water for livestock**

Livelihood zone	Return trekking distances		Expected duration to last		Watering frequency	
	Current	Normal	Current	Normal	Current	Normal
Marginal mixed farming	6-10	4-7	1-2	1-2	Once in two days	Daily
Mixed farming	3-5	3-5	2-3	2-3	Once in a day	Daily



### 3.3 Water and Sanitation

#### Major sources of water

The major sources of water in the county for domestic use are; seasonal and permanent rivers, water pans, boreholes, earth dams, rock catchments, shallow wells, spring, pipeline system with treated water supplied and maintained by the Kitui water and sanitation company (KITWASCO) and Kiambere, Mwingi water and sanitation company (KIMWASCO).

#### Rainfall impact to water sources

Most open water sources in the marginal mixed farming livelihood zone recharge level was an average of 20 percent due to siltation and below normal rainfall experienced in the zone. For the mixed farming livelihood zone the recharge level was at 50 percent which is normal for this time of the year. Current open water sources are expected to last 1-2 months in marginal mixed farming and 5-6 months in mixed farming livelihood zone.

#### Water availability and accessibility:

The table below summarizes the distance to water sources, cost of water, waiting time, and consumption for Kitui County:

**Table 10: Domestic water sources**

Division / livelihood zone	Distance to Water for Domestic Use (Km)		Cost of Water (Kshs./20litres)		Waiting Time at Water Source (Minutes)		Average HH Use (Litres/person/day)	
	Normal <sup>3</sup>	Current	Normal	Current	Normal	Current	Normal	Current
Kitui Central	2	2	2	2	20	20	30	25
Kitui west	2	3	2	4	20	20	25	20
Kitui rural	5	6	3	4	30	30	20	15
Kitui south	6	8	3	5	30	45	10	5
Kitui East	6	8	3	5	30	40	15	10
Mwingi West	3	5	3	5	30	40	20	15
Mwingi Central	4	6	2	5	20	30	20	15
Mwingi North	5	7	3	5	30	40	15	10

<sup>3</sup> Normal refers to same period in absence of a shock (what usually happens around that period).

### 3.4 Markets and Trade

#### Market Operations

The main markets in the County include; Tseikuru, Kaste, Kamuwongo, Nguni, Ukasi, Mwingi, Migwani in Mwingi region, and Kalundu (Kitui), Mutha, Mutomo, Ikutha, Zombe, Mbitini, Kisasi, Kanyangi and Kavisuni in Kitui region. There were no market disruptions as markets were functioning normally. The main staple food is maize which is normally sourced outside the County from Nakuru, Kitale and Voi which is normal for this time of the year.

#### Maize prices

The current maize prices have remained relatively stable which is 19 and 9 percent below LTA and 2015 prices respectively. This is attributed to availability of surplus stocks held at both household and market level (Figure 3). Prices have remained relatively stable for most part of the year, though they started gradually increasing from June, as stocks are drawn down.

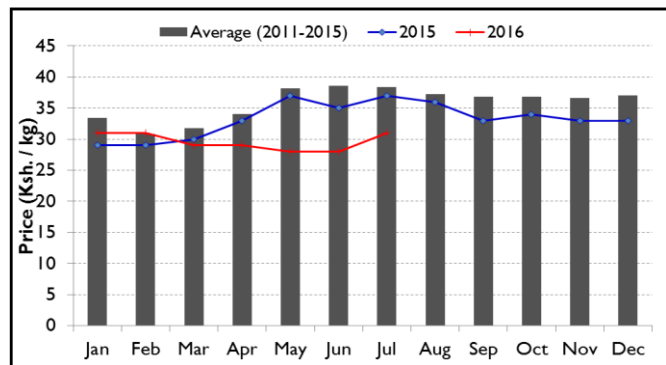


Figure 3 Maize prices

#### Goat price

The current goat prices are comparable to 2015 prices but above the LTA by 17 percent, attributed to good body conditions and reduced supply in the markets, as most farmers hold onto their livestock (Figure 4). For most parts of the year, the 2016 prices have remained above LTA and 2015 prices. Goat prices are expected to decrease due to deteriorating body condition attributed to depleting forage, increased distances to water sources and access to resources in areas of conflict.

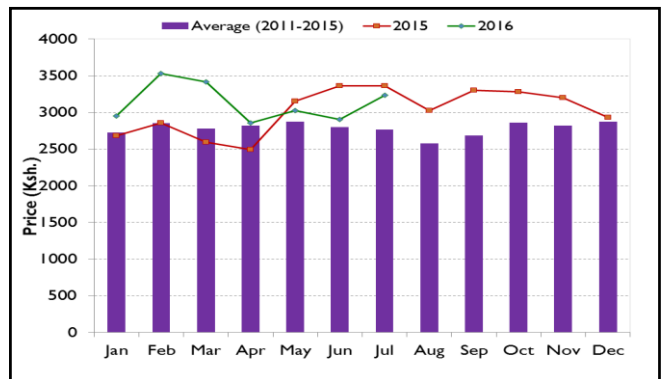


Figure 4 goat prices

#### Terms of Trade - (TOT)

Current terms of trade are better than both the LTA and last year (Figure 5). Decreased maize prices coupled with increased goat prices has resulted to favourable TOT for livestock farmers. Proceeds from sale of a goat can purchase 104 kg of maize which can sustain a household for 3 months thus improving food availability for households in marginal mixed farming zone who rely on markets. ToT are expected to deteriorate as maize price increases with decreasing goat price.

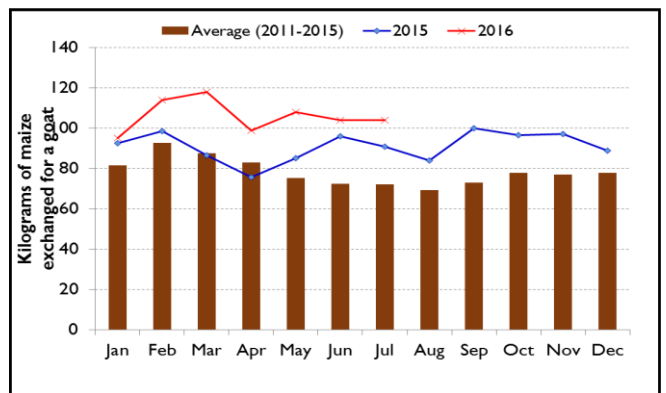


Figure 5 Terms of Trade

### 3.5. Health and Nutrition

#### Morbidity patterns

According to the district health information system (DHIS), the morbidity trends among the children under five years declined compared to same time last year with exception of skin diseases which increased slightly by 12 percent (Table 11). This decrease can be partly attributed to improved hygiene and sanitation practices by the community as result of community-led total sanitation programme being implemented (CLTS). However, among the general population, Skin diseases, Urinary Tract Infection (UTI) and arthritis had slightly increased while (URTI) cases reduced compared to those reported previous year. During the period there has been no unusual death reported for both children under 5 years and general population.

**Table 11: Morbidity cases for children under five and general population**

Reported Morbidity cases for children under five				Reported Morbidity cases for General Population			
Disease	Jan-June 2015	Jan-June 2016	% Change	Disease	Jan-June 2015	Jan-June 2016	% Change
URTI	114845	103908	-10%	URTI	230361	172755	-25%
Diarrhoea	20372	16942	-17%	Skin Disease	65829	72098	10%
Skin Disease	19352	21608	12%	UTI	23124	24610	6%
Intestinal worms	9926	8622	-13%	Diarrhoea	22874	20622	-10%
Confirmed Malaria	4975	3696	-26%	Arthritis (Joints pain)	20356	21736	7%

#### Epidemic prone diseases

There were no reported deaths of epidemic prone diseases. Notifiable diseases were dysentery malaria, typhoid and measles reported under the integrated disease surveillance and response (IDSR). The cases were well contained (Table11).

**Table 12: Epidemic prone diseases**

Epidemic	January –June 2015		January –June 2016	
	No of cases	Reported Deaths	No of cases	Reported Deaths
Measles	2	-	10	-
Cholera	-	-	-	-
Dysentery	15	-	33	-
Diarrhoea	-	-	-	-
Malaria	1658	-	1753	-
Typhoid	143	-	250	-

#### Immunization Coverage

Fully Immunized Child (FIC) coverage decreased to 63 percent from 75 percent (Table 13) which is below the recommended national target of 80 percent. The decrease has been occasioned by cold chain breakdown in some of government immunizing health facilities, close down of some health facilities and section of a religious sects (*kavonokia*) who do not believe in modern medicine. Kitui East and Kitui South sub-counties reported below 50 percent immunization coverage.

**Table 13: Immunization coverage**

Year	Percentage of fully immunized children in the district (Source DHIS MOH 710 Vaccines and Immunizations)	Percentage of children immunized against the mentioned diseases in the district Source Nutrition survey
January to June 2016	63%	OPV 1 64% OPV 3 61% Measles 70%
January to June 2015	75%	OPV 1 80% OPV 3 74% Measles 85%

**Vitamin A Coverage**

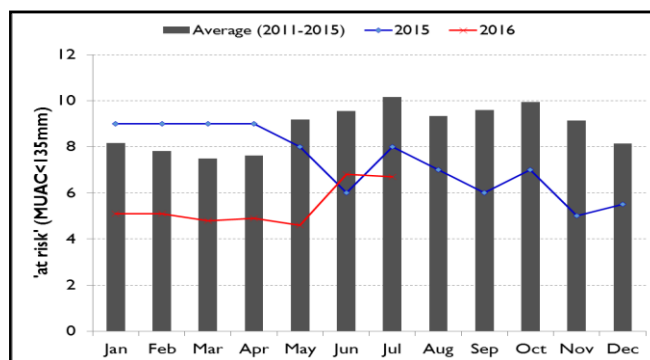
Vitamin A coverage for children 6-59 months has improved to 51 percent from 48 percent largely due to the integration in the ECDs during Malezi bora in May 2016 (Table 14).

**Table 14: Vitamin A Coverage**

% Children < 6-11 months who received Vit A (DHIS 710)		% Children 12 to 59 months old who received Vit A (DHIS 710)		% Children 6- 59months Ones (DHIS)	
Jan –June 2015	Jan –June 2016	Jan –June 2015	Jan –June 2016	Jan –June 2015	Jan –June 2016
45	46%	48	52 %	48%	51%

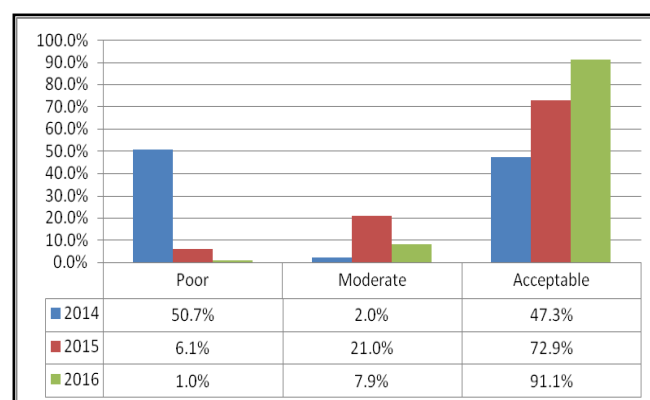
**Nutrition Status and Dietary Diversity**

The proportion of children at risk of malnutrition by mid upper arm circumference (<135 mm) remained 34 percent below LTA. At risk levels however showed increasing trend from June, attributed to typical diminishing food consumption at household level. This trend is likely to continue as household stocks diminish and setting in of the lean season.



**Figure 6: Proportion of children at risk of malnutrition**

Food consumption score has improved, with 91 percent of households having acceptable food consumption score compared to 73 percent same time in 2015 signifying improved household dietary diversity and food frequency that has resulted from increased food production in the mixed farming zone and favourable market prices of food commodities. Currently in the marginal mixed farming livelihood zone, meal frequency is one to two compared to two to three normally.



**Figure 7: Food consumption score trends**

## Coping Mechanisms

Currently the coping strategy index has reduced to 13 compared to 20 in May 2015, implying that there was improved food security as a result of good harvest from the previous short rains season.

**Table 12: Coping mechanisms**

Coping strategy Index (May 2015)	Coping strategy Index (May 2016)	Most utilized coping strategy
20	13	Consumption: Reduce number of meals, sacrifice adult consumption instead of children, selling of small livestock, charcoal burning, and casual labour, sand harvesting.

## Sanitation and Hygiene

There were few cases of water borne diseases reported in most of the areas where main source of supply is earth dams and scooped wells along river beds. Water treatment (filtration, boiling and chlorination) were available in the County although their usage at household level is low. The latrine coverage is stable at 84 percent for the period under review.

## 4.0 FOOD SECURITY PROGNOSIS

### 4.1 Prognosis Assumptions

- Forecasted 2016 short rains are expected to be below normal, driven in part by La Nina conditions.
- The likelihood of increased incidences of livestock diseases as the dry spell continues and more livestock migrate into the County from other pastoral areas.
- Malnutrition levels are expected to typically increase as the food stocks and milk availability decreases, as the lean season sets in.

### 4.2 Food Security Outcomes in the next three months (August, September, October)

Food security is likely to typically decline as the lean season progresses. Livestock body condition will deteriorate especially in the marginal mixed farming livelihood zone. Distances to water sources are expected to increase as open water sources get depleted during the dry season. Nutrition status of children under five is anticipated to deteriorate due to reduction of livestock production as well as the depleted food stocks. Majority of households are expected to remain in 'None/Minimal' (IPC Phase 1) through October. However, localized households in the marginal mixed farming are likely to move to Stressed (IPC Phase 2).

### 4.3 Food Security Outcomes for the Last Three Months (November, December, January)

The short rains are expected to perform below normal as a result of La Nina effects. Livestock productivity is also expected to remain low due to poor pasture and browse conditions which is likely to regenerate below normal levels. Casual labour which is a major source of income will be affected by the expected below average short rains performance since land preparation, planting and weeding will be below normal. Reduced household incomes is likely to constrain access of food from the markets, compounded by the depleted household food stocks. Pulses that are normally available in early December are likely to be unavailable, further compromising household food consumption. Households are likely to employ more coping mechanisms to bridge the food income gaps.

## 5.0 CONCLUSION AND RECOMMENDATIONS

### 5.1 Conclusion

The County is currently classified in None/Minimal (IPC Phase 1) except part of marginal mixed farming (Kitui South sub-county) which is in Stressed (IPC Phase 2). Factors to monitor are in-migration of livestock from Tana River County, livestock resource based conflicts, livestock and crop disease outbreaks, pasture and browse condition, water availability, market trends, health and nutrition status.

### 5.2 Summary of Recommendations

- Pasture improvement and strategic feed reserve.
- Reseeding of denuded areas and upscaling seed bulking for seed availability
- Training and promotion of water harvesting technologies.
- Vaccination (PPR and CCPP).
- Water supply system construction and rehabilitation
- Borehole drilling & equipping
- De-silting & rehabilitation of earth dams
- High Impact Nutrition Intervention(HINI)
- Funding of Supplementary Feeding Program (SFP)
- Rehabilitation and repair of cold chain in Health Facilities.
- Capacity building of Health Workers
- Expansion of eight HGSP to cover all hotspot areas (Nzambani, 56 Public schools in Tseikuru and all public schools in Kisasi)
- Timely provision of funds for HGSMP

### 5.3 Sub-County Ranking

**Table 15: Sub County food security ranking (worst to best)**

Sub County	Food security rank (1-10)	Main food security threat (if any)
Kitui South	1	Cumulative effect of previous poor rain seasons in pockets of Mutha, Kasaalani. There was 98 and 100 percent for green gram and maize crop failure respectively, water scarcity, low household stocks, frequent drought, disease prevalence, poor rainfall to support regeneration of pasture and browse.
Kitui East	2	Poor pasture and browse conditions, there was 88 and 90 percent for green gram and maize crop failure respectively Poor rainfall, low household stocks, frequent drought, poor rainfall to support regeneration of pasture and browse,
Mwingi Central	3	Water scarcity, resource based conflicts
Mwingi North	4	Prevalence of livestock diseases
Mwingi West	5	Poor spatial distribution of rain, livestock diseases
Kitui West	6	Poor spatial distribution of rain, Newcastle disease
Kitui Rural	7	Poor spatial distribution of rain
Kitui Central	8	Urban area, no significant crop farming.

## 6.0 ANNEXES

### 6.1 On-going Interventions by Sector

Division	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame	Implementation Status (% of completion)
<b>Agriculture</b>								
County wide	Agricultural extension services on post-harvest management	County wide	All farmers	County Min. of agric. & stakeholders	Reduced food losses thus improved household food security	10M	FY 2016/17	Ongoing
County Wide	Cash for Assets (CFA)	County Wide	-	AAIK, MOAW&I and partners	Enhanced food production	Not known	FY 2016/2017	Ongoing
<b>Livestock</b>								
County wide	Mass vaccination	County wide	10,000 cattle 15,000 goat	DVS and County Govt	Increased income from sale of healthy animal	N/A	April-June 2017	Ongoing
County wide	Pasture Establishment	County wide	100 households	County Govt	Good body condition leading to high prices	N/A	FY 2016/17	Ongoing
County wide	Rehabilitation of cattle dips	County wide	300 households	County Govt	Reduced deaths from tick borne diseases	N/A	FY 2016/17	Ongoing
<b>Water</b>								
County wide	Water supply construction and rehabilitation	Athi, Mutomo, Migwani water supply	150000	County Govt, Samaritan Purse, ADRA, UNICEF world vision	improved access to adequate clean and safe water	1 billion	5 years	Ongoing
County wide	Borehole drilling and equipping	County wide	45000	County Govt, National government through Tana Athi (world bank funded), NGOs	Adequate water for domestic use, livestock and irrigated agriculture thus improved food availability, access and utilization.	90M	2 years	Ongoing
County wide	Construction and extension of pipelines	County wide	30000	County Govt, National government, World vision, ADRA	improved access to clean and safe water	19M	2 years	Ongoing
<b>Health</b>								

County wide	Scaling up High Impact Nutrition Intervention	All facilities	Under 5 years & PLW	MOH, UNICEF, WVK, IMC, - Caritas	18 million	Human resource, vehicles,	3 years (2016-2018)	County wide
County wide	Upscale outreach services in hard to reach areas	County wide	Under 5 years & PLW	MOH UNICEF, AMREF, WVK, WFP - Caritas	15.0M	Human resource, vehicles,	2017	County wide

### School Meals Programme

There are two main types of school feeding programs in the County: home grown school feeding programme (HGSMP) and community based school feeding programme (CSMP). About 474 schools are under HGSMP, beneficiaries 67,626 boys and 65,627 girls.

**Table 16: school meals programme**

Sub-County	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
Nzambani	Community based school feeding program	Ngungi, Kenze, Kanduti, Kyalele, Maluma, Kyanika,	16,711	Parents, DEO	Improve dietary intake for school going children	130M	1 year
Tseikuru	Provision of relief food	Tseikuru	10,000 students	The Presidency	Improve dietary intake for school going children	-	Adhoc intervention
Kisasi	Community mobilization for CSMP	All	474 schools	MOEST and the community	Enhancing access to education	-	Continuous

## 6.2 Proposed Intervention

### Food Intervention Required (Proposed population in need of assistance)

Sub County	Population in the sub county	Pop in need (% range min – max)	Proposed mode of intervention	Remarks (Wards/areas targeted)
Kitui South	166,050	20-25	CFA/FFA	Ikutha, Mutha, Athi
Kitui East	139,967	15-20	CFA/FFA	Mwitika, Voo, Kyamatu, Endau, Malalani,
Mwingi Central	103,774	10-15	CFA/FFA	Kivou, Nguni, Nuu, Sosoma, Ngomeni
Mwingi North	141,207	5-10	CFA/FFA	Kaningo, Tharaka, Kavaani
Mwingi West	103,443	5-10	CFA/FFA	
Kitui West	102,314	0-5	CFA/FFA	
Kitui Rural	123,239	0-5	CFA/FFA	Nzambia, Kanyangi
Kitui central	131,715	None		



### Non-food Interventions (by sector)

County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
<b>Agriculture</b>							
County Wide	Promotion of water harvesting technologies -Issuance of assorted certified seeds. Digging of water pans.	All	500HH	MOA, stakeholders and farmers	Labour, construction materials and capital	Unskilled labour and Extension officers	July,2016 to June, 2017
County Wide	Promotion of irrigated farming	Along River beds	100 Groups	County Govt, Development partners	Officers, Facilitation	Land Man power	July,2016 to June, 2017
County Wide	THVCs & Droughty tolerant seeds provision	All farmers	All farmers	County Govt & others stakeholders	15M	Land Man Power	Continuous
County Wide	Food for assets (FFA) To the vulnerable	All	20000	National and County Govt & partners	43m	Resource persons	July,2016 to June, 2017
<b>Livestock</b>							
County Wide	Provision of water (Water pan)	County wide	All households	County Govt & National Govt	Excavator & fuel	natural water lagoon & local labour, existing	July to November 2016/17
County Wide	Mass vaccination , Pour-on& deworming	County wide	All households	County Govt or any NGO or donor	Vaccines, fuels , per diem	Human resource	August – December 2016/17
County Wide	Disease control and surveillance	County Wide	All households	Vet department	DSAs, fuels	Technical staff	Ongoing
<b>Water</b>							
MMF (coffee/dairy)	Fuel /Electricity subsidy/Minor repairs of the pumping sets	Piped Schemes (6)	1,500	County Govt, Partners	3M	To be sourced	12 months
MF (crop/livestock) and MMF	Subsidized water trucking to Schools, water trucking centers and Health Centers	Designated areas in Zone II & III	3,000	CGoK, Line Ministries, Development partners	4.5M	To be sourced	3months (once per week) s to 20 No. institutions
<b>Health</b>							
County wide	Scaling up High Impact Nutrition Intervention and capacity building of health workers	All facilities	Under 5 years & PLW,	MOH UNICEF, WVK,IMC, - Caritas	18 M	Human resource, vehicles,	3 years (2016-2018)
County wide	Upscale outreach services in hard to reach areas	County wide	Under 5 years & PLW.	MOH, AMREF, WVK, Caritas	15.0M	Human resource, vehicles,	2017