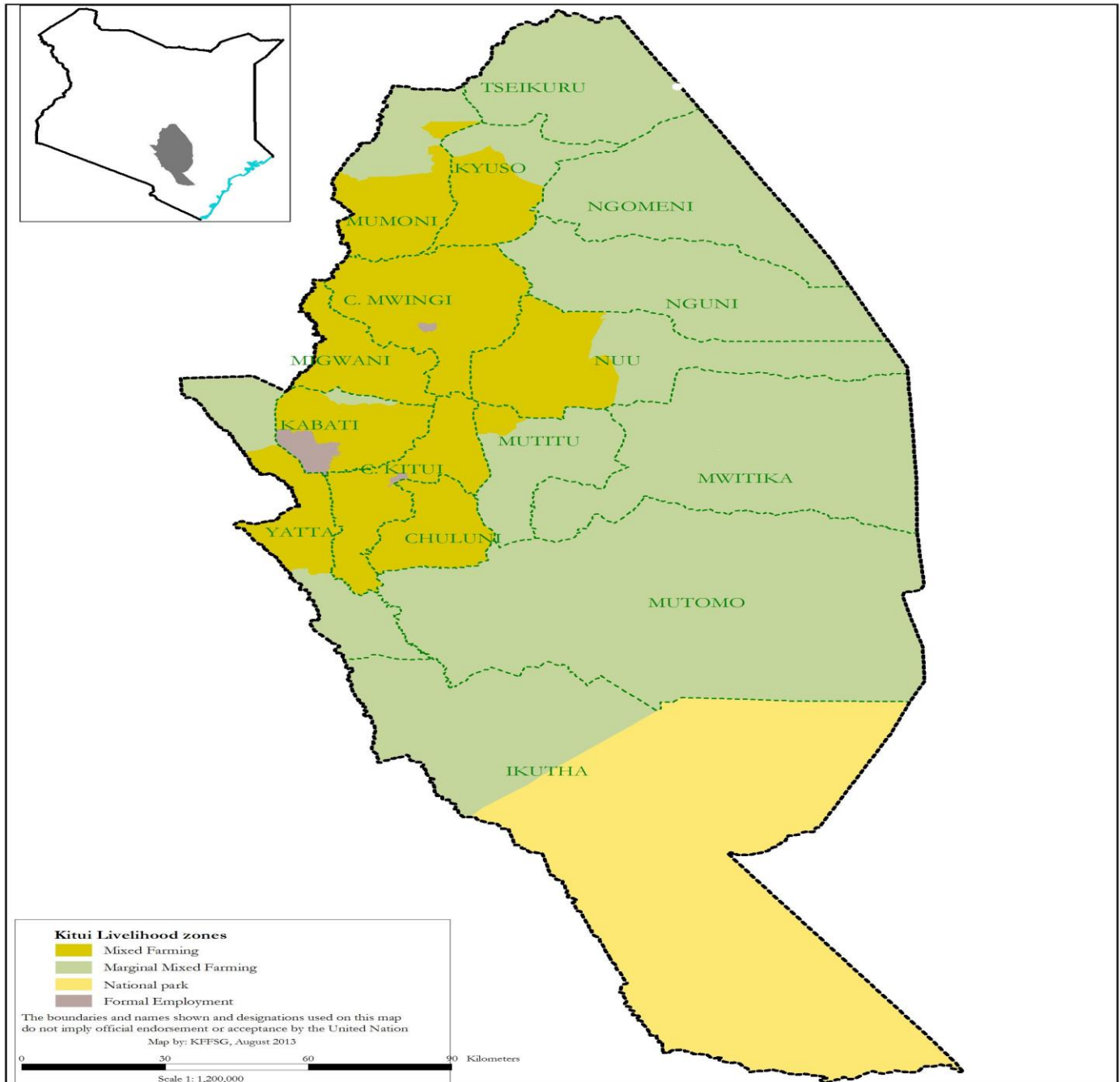


# KITUI COUNTY 2017 LONG RAINS FOOD SECURITY ASSESSMENT REPORT



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

**July 2017**

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## Executive Summary

The food security phase classification for Marginal Farming Livelihood zones and some parts of mixed farming livelihood zone in Kitui County is **Stressed (IPC Phase 2)** while a few areas in mixed farming livelihood are in **Minimal (IPC Phase 1)**. About 63 percent of households in marginal mixed farming livelihood zones had poor food consumption score while in mixed farming livelihood zones, 34 percent of the households had poor food consumption scores.

On average 7.9, 18.3 and 73.9 percent of the households had poor, borderline and acceptable food consumptions scores respectively. Coping Strategy Index (CSI) remained stable between 7.6 and 8.5 with a slight increase during the month of March. As such most households especially in the marginal mixed farming livelihood zone were employing insurance coping strategies that included relying on less preferred food, reducing the number of meals, and reducing food portions. Nutrition status of Children under the age of five years is still stable and is still within the seasonal normal range. Efforts on open defecation saw latrine coverage increase from 89 percent in 2016 to 97 percent in 2017. Most households were employing insurance coping strategies to cope with the food consumption gaps. Water consumption in the mixed farming livelihood zone averaged at 10 litres per day compared to the normal 20 litres. In Parts of the marginal mixed farming livelihood zone water consumption reduced from the normal of 10 - 15 litres to five to 10 litres.

Food availability was low due to below normal rainfall performance in both the livelihood zone in, where expected production for green grams, maize and cowpeas was 45, 41 and 38 percent of LTA respectively. Similarly, production of irrigated crops was also affected by low water recharge levels. Decreased milk production at the household level coupled with increased milk prices at households and markets limited food availability, consumption and dietary diversity in both the livelihood zones.

Major markets in the county were functioning normally and provisioned with staple food commodities except maize floor which resulted in increase in maize prices at a time goat prices were declining. Therefore Terms of trade were not favourable in both the livelihood zones.

Distances to water points increased significantly as a result of drying up of most surface water sources, this resulted into increased waiting times at water point which compromised water hygiene and resulted in increased water-borne diseases cases in the general population.

The major drivers of food and nutrition insecurity in the County were; poor rainfall performance (25-50) percent of the LTA) in most parts of the County, Insecurity and resource based conflicts due to in- migration of livestock from neighboring counties of Isiolo and Laikipia and high prices to the staple food commodities.

## 1.0 INTRODUCTION

### 1.1 County background

Kitui County is located in the lower eastern region of Kenya. The county has eight sub-counties namely; Kitui Central, Kitui South, Kitui East, Kitui Rural, Kitui West, Mwingi North, Mwingi West And Mwingi Central. The County has a population of approximately **1,012,710** people (KNBS, 2009) and covers an area of 30,570 square kilometres, of which 6,370 square kilometres is covered by Tsavo National Park. There are two main livelihood zones in the county; namely the Marginal Mixed Farming Zone and Mixed Farming Livelihood Zone comprising 44 and 52 percent of the population respectively. The Formal Employment Livelihood Zone comprises about 4 percent of the population (Figure 1).

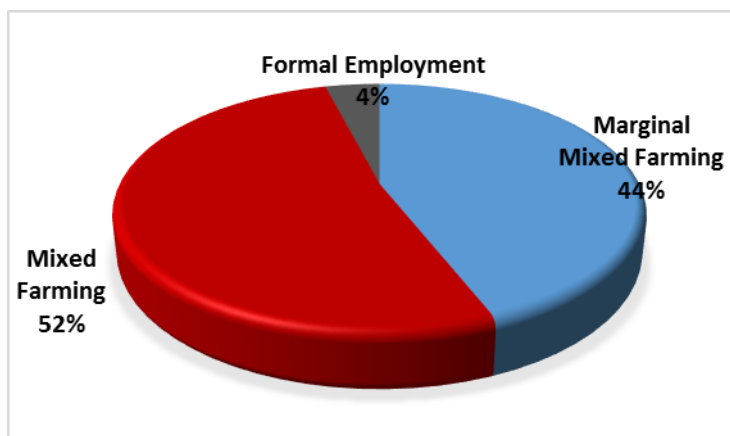


Figure 1 Population proportion by livelihood zone

The main economic activities in the Marginal Mixed Farming Livelihood Zone are Livestock and Crop production which contributes 43 and 20 percent of cash income respectively. Other minor economic activities include charcoal burning and small businesses. Crop production is the main economic activity in the Mixed Farming Livelihood Zone contributing 35 percent of cash income. Other minor economic activities are livestock production, petty trade and business.

### 1.2 Objectives and approach

The overall objective of the assessment was to assess the impact of the 2017 long rains season on the various sectors and food security in Kitui County.

#### Specific objectives

- To assess the current factors affecting food security in Kitui County following the long rains.
- Determine the current food security situation in the county
- To give immediate, medium term and long term recommendations to address food security issues in the county

### 1.3 Methodology and approach

The assessment was conducted between 3<sup>rd</sup> and 8<sup>th</sup> July, 2017 using multi-sectoral approach, through analysis of various indicators in the agriculture, livestock, markets, and water, health, security and education sectors. Data was collected through use of checklists, secondary data, a transect drive and focused group discussions. After analysis of the data, food security classification for the county was determined through use of the Integrated Food Security Phase Classification (IPC) system. The preliminary findings were presented to the County Steering Group (CSG) during a debriefing for their review and input. The final draft assessment report was then compiled by incorporating the input from the CSG.

## 2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

### 2.1 Rainfall Performance

The long rains performed poorly across the County. Onset of the rains was late in the first dekad of April compared to the first dekad of March in a normal season. Most parts of the County received 50-75 percent of normal rainfall except parts of Kitui South including Ikutha, Mutomo, Muthaa and Ikanga and parts of Mwingi North sub-County that received 75-90 percent of normal rainfall. Parts of Kitui East (Endau and Malalani) and Mwingi Central (Nuu, Muii and Waiti) received 25-50 percent of normal rainfall. Temporal distribution of the rains was poor across the county. Cessation was normal in the 3<sup>rd</sup> dekad of May (figure 2).

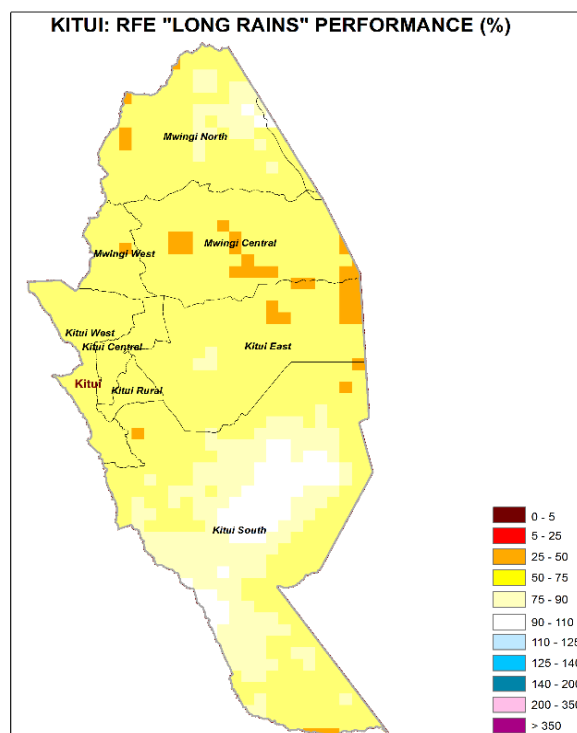


Figure 2 : Long rains rainfall performance

### 2.2 Conflicts and insecurity

Following the in - migration of livestock from the neighbouring counties of Garissa and Tana River, conflicts and tensions were reported in Mandogoi area within Ngomeni ward which disrupted crop production, and Mutha Ward Kitui South which disrupted livestock markets. Conflicts were also reported in Ikime Ward.

## 3.0 IMPACTS OF DRIVERS ON ACUTE FOOD AND NUTRITION SECURITY

### 3.1 Availability

Food availability in the county is from both crop production and livestock keeping in all the livelihood zones, there was general decline in production for the major crops by 55- 60 percent of the LTA while milk production and availability at households declined from 4 to 2 litres across all the livelihood zones. Food stocks held by households reduced by about 96 percent at a time traders were only holding 40 percent of the LTA and NCPB stores were provisioned with stocks to bridge the gap. Therefore there was reduced food availability at households across and major markets across all the livelihood zones.

#### 3.1.1 Crops Production

The long rains season contributes about 40 percent of annual production in the county. The three main crops grown during the long rains are green grams, maize and cowpeas. Other minor crops grown include sorghum, millet, pigeon peas and cassava. Table 1 indicates contribution of the main crops to food and income. Maize contributes 60 and 20 percent to food and cash income in the mixed farming livelihood zone while it contributes to 50 and 25 percent to food and cash income in the marginal mixed farming zones respectively. Green grams contribute 40 and 5 percent to food and cash income in the marginal mixed livelihood zone.

### Rain fed crop production

The area under green grams was 20 percent above the Long Term Average (LTA) mainly attributed to increased usage of the crop as cash crop and its markets availability while the area under cowpeas was about 80 percent of LTA as more land was allocated to green grams while there was no significant change in the area under maize. Crop production was adversely affected by poor rainfall performance resulting to decline in production for green grams, maize and cowpeas by 45, 41 and 38 percent of LTA respectively (table 1). The most affected areas were those within the Marginal Mixed Livelihood zone. Total crop failure was experienced in parts of some sub-counties including Mwingi Central (Ukasi and Sosoma) and parts of Nuu Ward, Mwingi North in parts of Ngomeni Ward (Mitamisyi, Kavaani and Kimela), Kitui Rural in parts of Kanyangi Ward (Kiseuni), Yatta/Kwa Vonza Ward (Tanganyika and Nthongoni) and in the entire Endau/Malalani ward in Kitui East.

**Table 1: Rain fed crop production**

Crop	Area planted during 2017 Long rains season (Ha)	LTA (5 year) area planted during the Long rains season (Ha)	2017 Long rains season production (90 kg bags) Projected	LTA (5 year) production during the Long rains season 90 kg bags)
Green Grams	39,953	33,433	71,178	158,813
Maize	30,304	30,086	52,037	128,233
Cow peas	28,789	35,472	84,600	222,124

### Irrigated crop production

The main crops grown under irrigation are tomatoes, kales and water melons. Irrigation is mainly done along river banks. The total area planted was 11, 22 and 29 percent above the LTA for tomatoes, kales and water melons respectively a situation that was attributed to promotion of irrigated horticultural production. Despite the increases in acreages there was a decline in production due to reduction in water for irrigation following poor rainfall performance which resulted to reduced yields by 52 and 45 percent of LTA that respective crop. However, production of water melons was 11 percent above LTA due to increased area (table 2).

**Table 2: Irrigated crop production**

Crop	Area planted during the 2017 Long rains season (ha)	LTA (3 years) area planted during Long rains season (ha)	2017 Long rains production (MT) Projected.	LTA (3 years) production during 2017 Long rains season (MT)
Tomatoes	300	270	3,000	5,800
Kales	280	230	3,350	7,500
Water Melons	80	35	1,200	300

### Cereal stocks

The households and traders held about four and 40 percent of LTA of the maize stocks which was attributed to low maize availability across the country and depressed production in the grain baskets following three successive poor seasons since 2016. Increase in maize stocks held by NCPB was due to government interventions to improve maize availability through

supply of maize to NCPB depots. Additionally, households' stocks of sorghum and millets were 90 percent and 10 percent of LTA respectively.

However, most households in the marginal mixed farming livelihood zones had no maize stocks. Maize stocks held in the Mixed Farming Livelihood Zone were expected to last for about one month compared to the normal three to four months. The main staple foods consumed across the livelihood zones are maize and beans. Other food commodities consumed to a limited extent are wheat products and rice.

**Table 3: Quantities of food stocks held in the County**

	Period	Farmers	Traders	Millers	NCPB	TOTAL
Commodity						
Maize	Current	7,630	134,895	8,140	4,970	155,635
	LTA	184,605	183,880	5500	4000	377,985
Rice	Current	0	222,177	0	4,000	226,177
	LTA	0	484,572	0	2,328	486,900
Sorghum	Current	29,291	12,009	0	0	41,300
	LTA	31,877	21,120	0	0	52,997
Millet	Current	11,741	1,419	0	0	13,160
	LTA	111,010	8730	0	0	119,740

### 3.1.2 Livestock Production

The main species of livestock kept in the county are cattle, goats and indigenous chicken. Other minor livestock enterprises are keeping of sheep, beekeeping and rabbit keeping. In the Marginal Mixed Farming Livelihood Zone, livestock production contribute 43 percent to cash income while in the Mixed Farming Livelihood Zone, livestock production contribute about 15 percent.

#### Pasture and browse condition

Pasture was adversely affected by the poor rainfall performance across both livelihood zones as shown in Table 4. The worst affected areas were Nguni Ward, Kyuso Ward, and western part of Tsiekuru Ward. In Kitui East affected areas were the entire Zombe Kyamatu, Mutitu Kaliku and Endau Malalani wards. Browse condition were good across the livelihood zones but expected to deteriorate as the dry season progresses. Access to pasture and browse in Kaningo and Mandongoi wards in Mwingi North was affected by conflicts with pastoralist who had migrated into the County from Garissa County.

**Table 4: Pasture and browse situation**

Livelihood zone	Pasture				Browse			
	Condition		How long to last (months)		Condition		How long to last (months)	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Marginal mixed farming	Fair	Good	2	2.5	Good	Good	3	4
Mixed farming	poor	Good	3	3	Good	Good	3	3

### Water for Livestock

The main sources of water for livestock across the livelihood zones were boreholes and water ans. Water availability was mainly affected in marginal mixed farming zones where return trekking distance increased from three kilometres to seven kilometres. Where available water is expected to last for two months compared to the normal two to three months which were within normal ranges.

### Livestock Body Condition

Body condition of cattle was good to fair in both the livelihood zones compared to a normal of good at such time of the year, while body condition for sheep and goat was fair and good respectively compared to good body condition for each species at normal times. Overall livestock body condition was fair to good compared to good normally (Table 5). Body condition of livestock especially cattle is expected to deteriorate as the dry spell progresses. Despite the current poor body conditions, recovery is being expected from the month of November, 2018 after the onset of the long rains season.

**Table 5: Livestock body condition**

Livelihood zone	Cattle		Sheep		Goat	
	Current	Normal	Current	Normal	Current	Normal
Marginal Mixed Farming	Fair to good	Good	Fair	Good	Good	Good
Mixed Farming	Fair to good	Good	Fair	Good	Good	Good

### Milk availability and consumption

Milk production reduced across both the mixed farming livelihood zone to two litres per household per day compared to a normal of three to four litres .While in the marginal mixed farming livelihood zones it reduced to one litre per household per day from a normal of two as a result of reduced livestock productivity. Milk consumption ranged from a half litre to one litre per household per day compared to a normal range of one to two litres per household per day in both livelihood zones thereby causing increase in milk prices by 33 percent of the LTA (table 6).Decreased milk production at the household level coupled with increased milk prices at households and markets limited food availability, consumption and dietary diversity in both the livelihood zones.

**Table 6: Milk production and consumption**

Livelihood zone	Milk Production (Litres)/Household		Milk consumption (Litres) per Household		Prices/Litre (Ksh)	
	Current	LTA	Current	LTA	Current	LTA
Mixed farming	2	3.5	1	2	80	60
Marginal Mixed Farming	1	2	0.5	1.5	80	60

### Tropical Livestock Units

Tropical Livestock Units (TLU) in the marginal mixed farming livelihood zone was 2 for poor households and 3 for medium income household while in the mixed farming livelihood zones it was 1 for poor household and 2 for medium income households. The tropical



livestock units remained within normal ranges because there were no significant livestock mortalities or lambing or kidding which was normal at this time of the year.

### Livestock Migrations

In-migration of livestock from Tana River and Garissa Counties into Endau, Mutha Tseikuru and Nuu wards in were noted. However, this was normal at such a time of the year. Resource based tensions and conflicts were reported in Ngomeni and Ikime wards resulting into disruption of crop farming activities and livestock markets. The livestock that have migrated were expected to move back to normal their settlements from the month of November, 2017.

## 3.2 Access

### 3.2.1 Markets and trade

The main markets in the county include Kalundu, Mutha, Ikutha, Zombe, Mwingi, Tseikuru, Nguni, Endau, Malalani Kisasi, Kabati, Migwani Nuu, Mutomo, Kamuwongo and Katse. The main livestock types traded in livestock markets were cattle, sheep, goats and chicken mainly sourced from farmers. There were no market disruptions reported during the period except in Mutha where there were tensions following conflicts between pastoralists from neighboring counties and the local farming communities. The main food commodities traded were maize, beans, cowpeas, green grams and vegetables. In the Mixed Farming Livelihood Zone, about 100 percent of maize was sourced from external sources compared to normal when about 80 percent comes from external sources. In the Marginal Mixed Farming Livelihood zone, 100 percent of maize was from external sources compared to 95 percent under normal circumstances. The government subsidized flour was only available in the major supermarkets and whole sales stores of Kitui and Mwingi towns but at low volumes and supply was inconsistent.

### Maize prices

Maize prices have been on an upward trend since January, 2017. In January, maize prices were just five percent above the LTA. By June, 2017 prices had increased to Ksh. 58 which is 67 percent above the LTA (figure 3). The sharp and steady increase in prices was attributed to poor performance of the rains and infestation of maize by the Fall Armyworm in the main maize growing areas

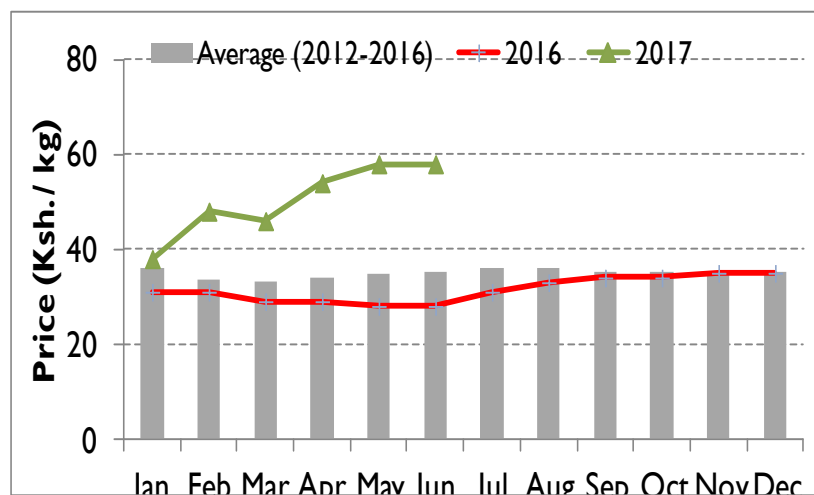


Figure 3: Maize price trends

across the country which depressed production and consequently market supplies. Maize stocks and supplies within the county were also affected by consecutive poor seasons which reduced carryover stocks available in markets and households. Maize prices are expected to remain high in the county until early January to February, 2018 when harvests from the short rains season are expected.

### Beans prices

Prices of beans were higher than both the LTA and that of 2016. Higher prices were attributed to low production. Prices as at June, 2017 were 10 percent above the LTA. Harvesting of fresh beans from month of May led to a marginal reduction in prices. Prices are expected to remain above the LTA until January, 2018.

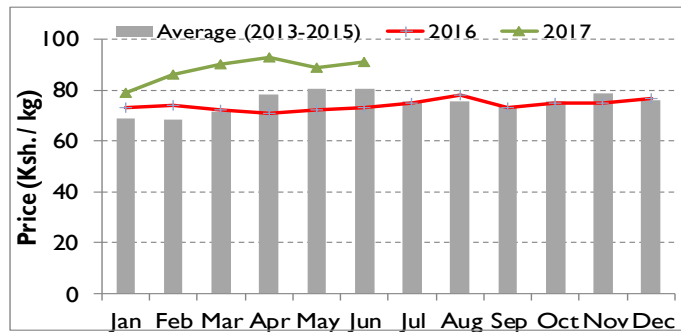


Figure 4: Beans price trends

### Goat prices

Goat prices declined sharply between the month of January 2017 and March, 2017. From the month of March, 2017 prices remained generally stable but slightly above the LTA. A decline in prices may be experienced in the next three months due to deterioration of body condition and more goats being brought into markets for sale to access food. It is expected that goat prices may start increasing

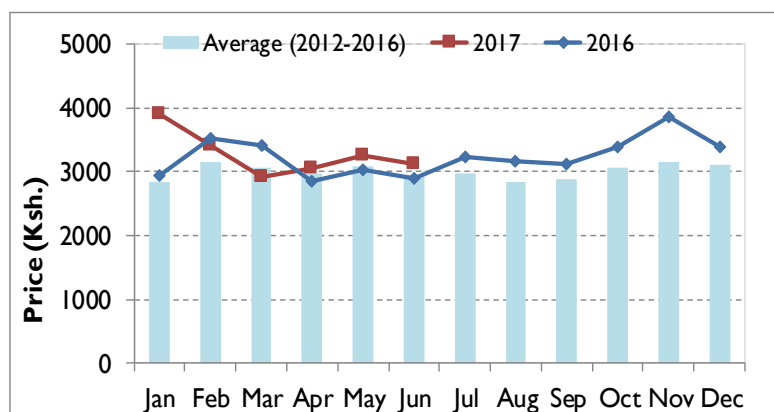


Figure 5: Goats price trends

from the month of November, 2017 after onset of the short rains. Further increase in prices may be witnessed from January and February, 2018 when harvest of the short rains crops is expected. Sale of goats by households to access food is expected to reduce during the period thus reducing market supplies. Figure 5 indicates trends in the prices of goats.

### 3.2.2 Terms of trade

There was a drastic and steady deterioration of the TOT from the month of January compared to the LTA and the previous year as indicated in Figure 6. In January, 2016 households could access 103 kg of maize from the sale of a goat. By the month of June, 2017 the sale of one goat could only fetch 54 kg of

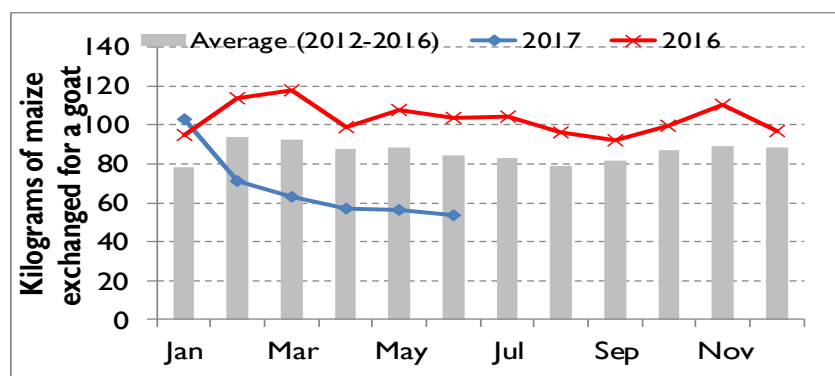


Figure 6: Trends in terms of trade

maize representing a deterioration of about 80 percent of the LTA compared to the previous year, when the TOT deteriorated by about 37 percent only sharp and steady increase in maize prices caused this decline in ToT and its further expected deteriorate at time there is marginal

decline in goat prices until January, 2018 when maize prices are expected to reduce when harvesting of short rains maize starts.

### 3.2.3 Income sources

Due to poor crop performance sale of farm produce as a source of income is minimal. The current sources of income include sale of firewood and charcoal, casual labour, sale of livestock especially goats and chicken, petty trade and remittances. There is some minimal sale of farm produce such as green grams and cowpeas in parts of the Mixed Livelihood Zone in Kitui West and Kitui Central.

### 3.2.5 Food Consumption

The food consumption scores for the county are 7.9, 18.3 and 73.9 percent poor, borderline and acceptable respectively. The percentage of households with poor food consumption and borderline food consumption are expected to increase as the dry spell progress and as the price of main staples escalate further with a consequent deterioration in terms of trade. Most households in the marginal mixed farming livelihood zone were consuming one to two meals per day comprising mainly two food groups (cereals and legumes) compared to the normal two to three meals. In the mixed farming livelihood zone, households consumed two to three meals per day which was normal. Meal composition was mainly maize, legumes and vegetables.

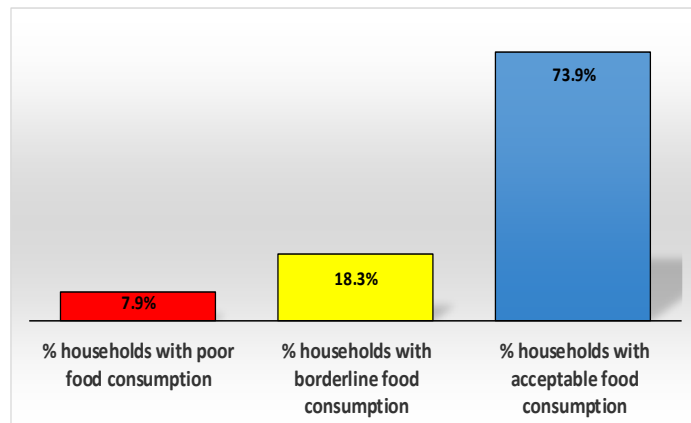


Figure 7: Food consumption scores

### 3.2.6 Coping strategy

The Coping Strategy Index (CSI) increased slightly from the month of March, 2017 but generally remained stable at between 7.6 and 8.5. Most households especially in the marginal mixed farming livelihood zone were employing insurance coping strategies that included relying on less preferred food, reducing the number of meals, and reducing food portions. Figure 8 indicates trends in the CSI between the month of January and June, 2017.

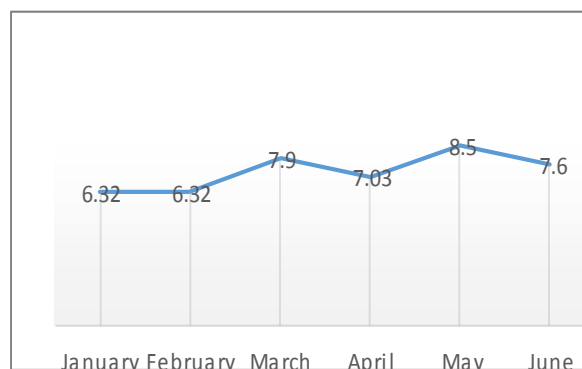


Figure 8: Trends in coping strategy index (NDMA)

### 3.3 Utilization

#### 3.3.1. Nutritional status

##### Morbidity

The leading diseases in the county are upper respiratory tract infection (URTI), Malaria and Diarrhea. URTI cases between January and June 2017 increased in compared to the same period last year due to changing weather patterns. Malaria cases for the general population increased in 2017 compared to 2016. However, Malaria cases for children under five were on a downward trend attributable to distribution and increased use of mosquito nets for pregnant women and children under

one year. A decline in diarrheal cases was observed in the general population as a result of the Community Led Total Sanitation program being implemented countywide. A marginal increase in diarrhea cases was however noted in children below five years largely attributable to poor hygiene and other childcare practices. Figure

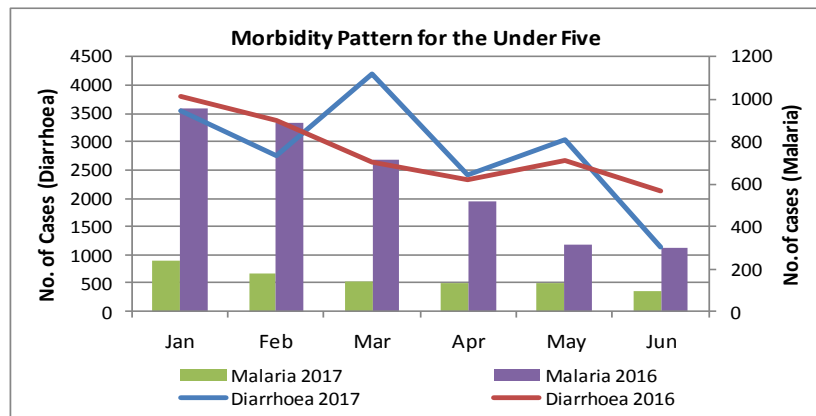


Figure 9: Morbidity Patterns for the under five

9 above shows morbidity trends for children under five years between January and June, 2017.

##### Immunization and Vitamin A Supplementation

The proportion of fully immunized children (FIC) between January and May dropped to 60.9 percent 2017 compared to 67.1 percent during the same period in 2016. The percentage was below the national target of 80 percent due to stock outs of antigens, frequent breakdown of cold chain equipment in the health facilities and inadequate outreach services. Vitamin A supplementation for children less than five years marginally improved to 50 percent between January and May 2017 as compared to 48 percent in 2016. The improvement is attributed to efforts put in place during *Malezi bora* month which included supplementation in ECD centers.

## Nutrition Status and Dietary Diversity

The nutrition status of Children under the age of five years is currently stable and within the seasonal norm attributable to the various Health and Nutrition interventions such as Community nutrition and resilience building programs in addition to the availability of little harvests in some areas that received some rains (figure 10). It is however important to note that with the below normal performance of the long rains season, the reported stability in nutrition status may be temporary and the situation could rapidly deteriorate in a month's time especially in the hotspot areas.

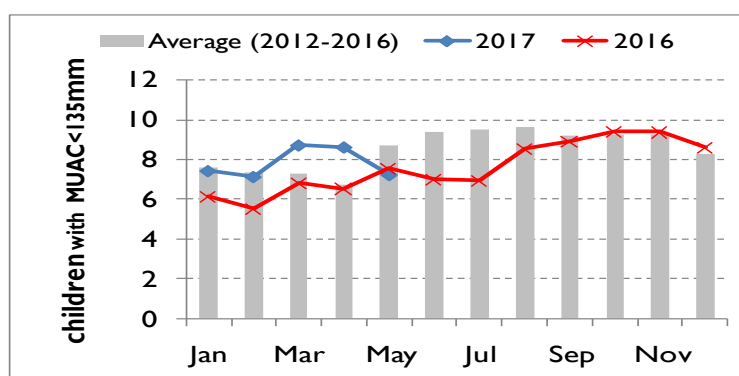


Figure 10: Children with MUAC less than 135mm

### 3.3.2 Sanitation and Hygiene

Latrine coverage improved from 89 percent in 2016 to 97 percent in 2017. The improvement is attributed to the efforts spearheaded by the Community Led Total Sanitation Open Defecation free (ODF) programme. Despite improvement in latrine coverage application of other hygiene practices such as hand washing during four critical times still remain low. Only 18.9 percent of the population do hand washing during the recommended four times.

### 3.3.3 Water access and availability

The major water sources in the County are piped water, boreholes, earth dams, traditional wells and shallow wells. The main water supply systems are Mwingi- Kitui and Kiambere-Mwingi pipeline systems which rely on Athi-River and Tana-river respectively. Most open water sources in marginal mixed farming livelihood zone had a recharge levels of between 20-50 percent with Nguni, Nuu, Ngomeni and Endau-Malalani wards being the most hardly hit. In the mixed farming livelihood zone, the recharge levels was between 50-70 percent except some parts of Chuluni, Nzambani, Mbitini, Kyangwithia West where recharge levels were lower at 20-50 percent.

### Distances to water sources and waiting time

The average distances to water points in marginal mixed farming livelihood zone increased from 2.5 km compared to the normal of 3.5 km (table 7). In worst hit areas such as Nguni, Ngomeni, Ikutha, Endau/Malalani and Nuu wards, distances increased to about 10 km and households were facing severe water stress. In the mixed farming livelihood zone the average distance to water for domestic was within the normal range. Average waiting time in mixed farming livelihood zone increased slightly while it doubled in marginal mixed farming livelihood zones as result of concentration at the water points and increasing distances as most of surface water sources dried up. Exceptional areas where with up to 6 hours waiting time noted in Ukasi and Sosoma areas in Nguni ward.

**Table 7: Distances to water Source, waiting time and consumption**

Livelihood Zone	Distance to water Source in km		Cost of water at source(Ksh)		Waiting time at source in minutes		Average consumption in litres/	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
<b>Mixed farming</b>	2.5	2	2-3	2-3	20-30	10-15	10-15	20-25
<b>Marginal mixed farming</b>	3.5	2.5	3-5	3-5	30-60	15-30	5-10	10-15

### **Cost of water and consumption**

The cost of water at source remained within the normal range across the livelihood zones. The cost of water from vendors however increased from Ksh.10 to Ksh.15 in areas where the water vendors are the main suppliers. Water consumption decreased across the livelihood zones with consumption per person per day in areas with severe water stress such as Nguni, Ngomeni, Ikutha, Endau/Malalani and Nuu wards in marginal mixed farming livelihood zone being a low as five litres per person day

### **3.4 Trends of key food security indicators**

Compares food security indicators during the currents assessment and the short rains assessment of conducted in February, 2017.

**Table 8: Food security trends in Kitui County**

Indicator	Livelihood Zone	Short rains assessment, Feb 2017	Long rains assessment, July 2017
% of maize stocks held by households	Mixed Farming Marginal Mixed Farming	30% of LTA	4% of LTA
Livestock body condition	Mixed Farming	Fair	Good to fair -Cattle Good-Sheep
	Marginal Mixed Farming	Fair	Fair to good Good-Sheep
Water consumption (litres per person per day)	Mixed Farming	10 litres per person per day	10-15 litre per persons per day
	Marginal Mixed Farming	15 liters per person per day	5-10 litre per persons per day
Price of maize (Ksh. per kg)	Average	35	58
Terms of Trade (ToT)	Average (NDMA data)	92	56
Coping Strategy Index (CSI)		6.34	7.6

### 3.5 Education

#### Enrolment

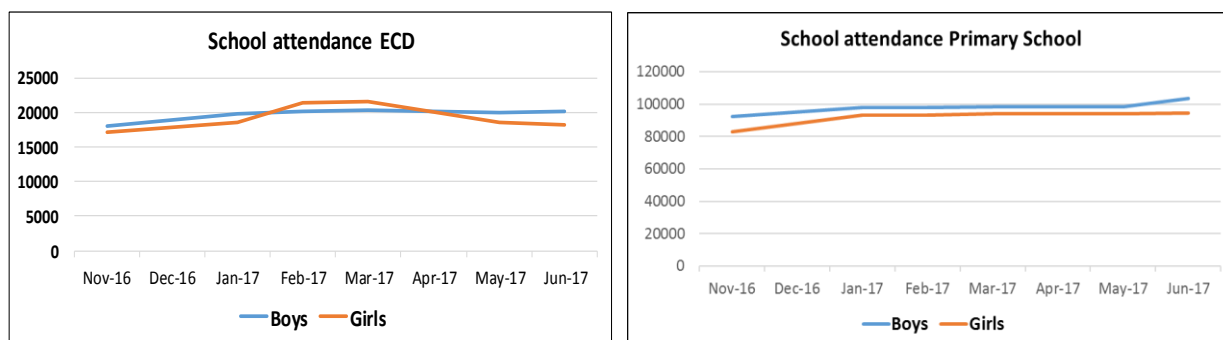
The county has a total of 415 secondary schools and 7,370 primary schools. A reduction in enrolment was observed in early childhood development centres (ECD) and primary schools between Term I and Term II. A ECD level, enrolment dropped by 3.4 percent, with the enrolment of boys at dropped by 2.8 percent and girls dropped by 3.9 percent in primary school, enrolment dropped by 0.3 percent with the enrolment of boys dropped by 0.4 percent and for girls by 0.1 percent. The main factor contributing to dropouts in ECDs was lack of feeding programmes in some schools. In secondary school, the enrolment of both and girls dropped by 3.9 percent. The main contributing factor was lack of school fees as food purchase was given first priority.

**Table 9: School Enrolment Trends**

Enrolment	Term I 2017			Term II 2017 (includes new students registered and drop-outs since Term I 2017)			Comments (reasons for increase or decrease)
	№ Boys	№ Girls	Total	№ Boys	№ Girls	Total	
ECD	32,992	31,199	64,191	32,055	29,979	62,034	Lack of feeding programme
Primary	152,794	145,963	298,757	152,153	145,795	297,948	Drought/
Secondary	39,546	42,733	82,278	38,013	41,052	79,065	Availability of relief food

#### School attendance

School attendance for both EDs and primary schools was generally regular except for a slight drop in attendance for girls in ECD from the month of May, 2017 (figure 11).



**Figure 11: School attendance trends for ECD and primary schools**

#### School feeding programmes

Out of the 1,370 primary schools in the county, only 298 are under a school various feeding programme with 116,612 beneficiaries. About 73,665 pupils were covered under home grown school meals programme (HGSM), 8,390 children fed under expanded school meals program (ESMP), 18,314 fed under regular school meals program (RSMP). Despite these efforts, the targeting was still limited and in some instances lack of water hindered preparation of meals for the learners.

## **4.0 FOOD SECURITY PROGNOSIS**

### **4.1 Prognosis assumptions**

- Households will most likely continue to relying on markets as source of food.
- Food prices are likely remaining high through to December 2018.
- Prices of livestock are expected to decline until November as households increasingly seek income from livestock sales leading to oversupply in the market further constraining household purchasing power and food access.
- The short rains will most likely to be above normal with a timely onset.
- Forage will likely deteriorate up to October and improve from November after onset of the above average short rains.
- Livestock migrations will most likely intensify from July through October
- . Conflict over water and forage is likely to intensify before onset of the short rains as pastoralist from neighboring Tana River and Garissa counties increases

### **4.2 Outlook for the next six months**

#### **Food security outcomes from August to October, 2017**

In the Marginal Mixed Farming Zone, pasture is poor or depleted while in the Mixed Farming Livelihood Zone, pasture is fair but is expected to deteriorate as the dry season progresses. Rangeland resources will therefore remain scarce through to October, 2017. Livestock body condition is expected to deteriorate further with a consequent reduction in milk production and further drop in livestock prices. Improvement in livestock body condition is expected from the month of November, 2017 after the onset of the short rains in October, 2017 with a consequent improvement in body condition and productivity. Livestock prices is expected to decline from July through October as livestock body condition deteriorates compounded by increased supplies into the market as households sell more livestock to access food. The declining livestock prices and increasing prices for food commodities is expected to cause further deterioration of TOT.

The proportion of households with poor food consumption is expected to increase in the period between August and October 2016, if no external food interventions are received. There is a likelihood of increase in the frequency and severity of use of coping mechanisms. The proportion of households employing insurance coping mechanisms such as relying on less expensive food, reducing meal frequency and limiting meals sizes at meal time is expected to increase during the period, so will the number of households applying stress coping strategies. Increased risk of child malnutrition may be witnessed during the period if no interventions are put in place. Food security related mortalities are however not expected.

#### **Food security outcomes from November, 2017 to January, 2018**

The current forecast indicates that short rains will be normal to above normal. Farmers are expected to utilize the rains to plant short season crops such as green grams, cowpeas, beans and early maturing maize varieties. Onset of the forecasted normal short rains is expected to support regeneration of rangeland resources and improve livestock body condition. The earliest harvest for short season crops and maize is expected from the month of January through to February, 2018. Improved food availability as a result of reduced food prices and improved livestock prices from January 2018 is expected to improve and TOT and access to food. Milk availability and consumption also expected to increase from November, 2017. Water stress is expected to reduce as water sources recharge after onset of the rains. The proportion of households employing either insurance or stress coping strategies is expected to reduce during the period. Consequently, food consumption and nutrition status in the households is expected to improve.



## **5.0 CONCLUSION AND INTERVENTIONS**

### **5.1 Conclusions**

#### **5.1.1 Phase classification**

Following the poor performance of the rainfall and its effects on the food security contributing factors and outcomes, the Marginal Farming Livelihood zones and some parts of mixed farming livelihood zone in the County are **Stressed Phase (IPC Phase 2)** while larger parts of mixed farming livelihood zones are in the *Minimal Phase (IPC Phase 1)*. In the marginal mixed farming zone which comprises 44 percent of the population in the county, percentage of households with poor food consumption was 63.3 percent while in the mixed farming zone it was 34 percent. The number of meals per day had reduced to one compared to the normal two to three meals with mainly two food groups being consumed. Most households were employing insurance coping strategies to cope with the food consumption gaps. Water consumption in the mixed farming livelihood zone was an average of 10 litres per day compared to the normal 20 litres. In Parts of the marginal mixed farming livelihood zone water consumption reduced from the normal 10 to 15 litres to five to 10 litres.

#### **5.1.2 Summary of findings**

The food security situation has deteriorated in most parts of the county following consecutive seasons of poor rainfall performance. The poor performance of the rains was compounded by escalating prices of major food staples such as maize and beans. The food security is expected to deteriorate further as the dry spell progresses. Improvement and rejuvenation of pastures and browse is expected in November after the onset of the short rains. The following were found to be the factors affecting food security in the county:-

- Poor performance of long rains season
- Crop failure/reduced crop production
- Domestic water stress in some areas
- Inadequate water/pastures for livestock
- Increasing food prices
- Conflicts in some areas

Meanwhile, the following factors will need to be monitored as the season progresses; performance of the October 2017 short rains and its impact on pastures and water sources, trends in prices of main food commodities, market operations in terms of stability and food supplies, livestock disease outbreaks, possible escalation of conflicts between pastoralists and crop farmers, risk of child malnutrition and outbreak of human diseases such as cholera.

### 5.1.3 Sub-county ranking

The sub -county ranking indicates the level of the severity of food security in various sub counties with the sub county ranked No. 1 having the most severe food security situation.

**Table 10: Sub County Ranking**

<b>Rank</b>	<b>Sub County</b>	<b>Situation of food security drivers, contributing factors and outcomes</b>
1.	Mwingi Central	<ul style="list-style-type: none"> <li>• Severe water stress( Nguni,Nuu,Muui)</li> <li>• Total crop failure</li> <li>• Depleted pastures and migration of livestock from normal settlements</li> <li>• Conflicts around Nguni</li> <li>• High school drop outs</li> </ul>
2.	Kitui South	<ul style="list-style-type: none"> <li>• Water stress</li> <li>• Poor/depleted pastures</li> <li>• Decline in crop production</li> <li>• Conflicts with pastoralists</li> <li>• In-migration of livestock from neighbouring counties</li> </ul>
3.	Kitui East	<ul style="list-style-type: none"> <li>• Poor rainfall performance</li> <li>• Poor pastures-Malalani,Zombe</li> <li>• Conflicts around Endau</li> <li>• Water stress due to low recharge levels</li> <li>• Opportunities for employment in areas neighbouring urban centers(Nzambani and Chuluni)</li> </ul>
4.	Mwingi North	<ul style="list-style-type: none"> <li>• Below normal rainfall performance</li> <li>• Decline in crop production</li> <li>• Poor/depleted pastures</li> <li>• Reduced milk production</li> <li>• In migration of livestock from Garissa and conflicts</li> <li>• Water stress-low recharge high costs</li> </ul>
5.	Kitui Rural	<ul style="list-style-type: none"> <li>• Poor rainfall performance</li> <li>• Poor pastures</li> <li>• Low crop production but some harvests expected in areas such as Kisasi,</li> </ul>
6.	Mwingi West	<ul style="list-style-type: none"> <li>• Pastures are fair to good</li> <li>• Some harvest expected in some areas</li> <li>• Water available in dams and rivers</li> </ul>
7	Kitui West	<ul style="list-style-type: none"> <li>• Some harvests of maize, beans and green grams expected but production below LTA</li> <li>• Crop residues available for feeding livestock</li> <li>• Pastures are fair and browse are in good condition</li> <li>• Piped water available</li> </ul>
8	Kitui Central	<ul style="list-style-type: none"> <li>• Urban and formal employment</li> <li>• Opportunities for casual labour in Kitui town</li> <li>• Highest rainfall received</li> </ul>

## 5.3 Recommended Interventions

### 5.3.1 Food interventions

**Table 11: Proposed percentage of population in need of assistance**

	Sub County	Ward	Proposed range of population in need of food assistance
1.	Mwingi Central	Nguni	35-40
		Mui	30-35
		Nuu	30-35
		Waita	15-20
		Central	5-10
		Kivou	15-20
2.	Kitui South	Ikanga/Kyatune	15-20
		Mutomo	15-20
		Mutha	25-30
		Kanziko	25-30
		Ikutha	25-30
		Athi	20-25
3.	Kitui East	Zombe/Mwitika	25-30
		Nzambani	5-10
		Kyuluni	5-10
		Voo/Kyamatu	30-35
		Endau/Malalani	35-40
		Mutitu Kaliku	20-25
4.	Mwingi North	Ngomeni	35-40
		Tseikuru	30-35
		Kyuso	30-35
		Mumoni	20-25
		Tharaka	20-25
5.	Kitui Rural	Kisasi	5-20
		Mbitini	5-10
		Kwa vonza/Yatta	20-25
		Kanyangi	25-30
6.	Mwingi West	Kyome/Thaana	20-25
		Kyomo/Kyethani	25-30
		Nguutani	25-30
		Migwani	5-10
7.	Kitui West	Mutonguni	5-10
		Kauwi	25-30
		Matinyani	5-10
		Kwa-mutonga/Kithumula	10-15
8.	Kitui Central.	Miambani	5-10
		Township	2-5
		Kyangwithya West	15-20
		Kyangwithya East	5-10
		Mulango	10-15

### 5.3.2 Non-food interventions

**Table 12: Non food interventions**

Sub - County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
<b>LIVESTOCK</b>							
Countywide	Upscaling beekeeping, local chicken improvement and meat goats	All	1000	CGOK, NGOs and GK	10M	Expertise	3years
Countywide	Pasture establishment	All	2000	GGOK/FAO/Any other stakeholder	19M	Grass seeds-700,000 Kshs CGOK FAO-1M(2016)	3 years
<b>AGRICULTURE</b>							
Countywide	Provision and distribution of high quality sorghum and millets value addition utilization disc mills.	39 wards.	Over 104,000 farmers	County government, National government and other partners.	15M	Human, Land and capital	From October 2017.
Countywide	Provision and installation of open drip irrigation for food security and nutrition.	40 wards.	Over 3600 Farmers.	County government, National government and other partners.	40M	Human, and Land	July 2017.
Countywide	Provision and distribution of fruit tree nurseries materials	40 wards	800 Farmers.	County government, National government and other	40M	Human, and Land	July 2017.

Sub - County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
	and equipment			partners.			
<b>WATER</b>							
Mwingi Central, Mwingi West, Mwingi North East, Kitui Central and Kitui Rural.	Water Trucking	Nguni, Nu u, Endau/ Malalani, Ngomeni	30000	CGOK/N DMA/NG O/GOK	14M	3M	August to December 2017
All sub counties	Repair, Rehabilitation and servicing of boreholes and Dams	Countywide	251,600	CGOK/N DMA/NG O/GOK	30M	9M	August to December 2017.
All sub counties	Fuel /Electricity subsidy for 120 water supply Community schemes.	Countywide	125000	CGOK/N DMA/NG O/GOK	60M	30M	August to December 2017
<b>HEALTH</b>							
All sub counties	Hotspot screening for malnutrition and provision of supplementary	Nguni, Nu u, Mui, Endau/Malalani Zomba/Mwitika, Voo/Kyamatu, Mutha, Kanziku,	5,000	CGOK and Partners.	49.5M	0	4 months.

Sub - County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
	feeding.	Ikutha, Ngomeni					
All sub counties	Integrated disease and Nutrition Surveillance	Countywide	1,180,307	CGOK and Partners.	1.8M	0	6 Months
All sub counties	Improving Vitamin A supplementation to Children Under five years	Countywide	247 villages (1,180,307)	CGOK and Partners.	16M	0	1 Year.
All sub counties	CLTS- Post ODF activities	Countywide	247 villages (1,180,307)	CGOK and Partners.	12M	0	1 Year
<b>EDUCATION</b>							
All sub counties	Expansion of HGSMP, ESMP, RSMP to more schools	Countywide	5110	MoE.	50M	Facilities e.g. kitchen	Annually

## ANNEXES

**Table 13: Non-food interventions**

Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impact on food security	COST	Time Frame
Livestock.							
	Livestock Feed	All	1000	CGOK, NGOs and GK	Boost Animal Health	879.9M	3years
Agriculture							
	Promotion of Climate resilient agriculture for increased income.	All wards in the 6 sub-counties.	8064HHs	CARITAS AND COUNTY Government	Increase community resilience to drought.	90M	Continuous.
	Promotion of small scale production, aggregation and marketing of drought tolerant crops	40 wards.	62,600HHs	CEFA, SASOL and FAO and County government.	Improved Food security at HH level.	1Billion.	Ongoing till 2020.
	Mwingi North and Mwingi Central.	1500 HHs out of which 26 are lined.	NDMA, WFP, ACTION AID AND COUNTY Government.	Improved Food security at HH level.	20M	Ongoing	
	Excavation and lining of farm ponds for water harvesting in crop production	Mwingi North and Mwingi Central.	1500 HHs out of which 26 are lined.	NDMA, WFP, ACTION AID AND COUNTY Government.	Improved Food security at HH level.	20M	Ongoing
	Equipping and Rehabilitation of boreholes	County wide	54,000HHs	CGOK/NDMA / NGO/GOK	Improve water accessibility.	141M	Ongoing.
	Water Trucking to	County wide	20,000 HHs	CGOK/NDMA /NGO/GOK	Improved water accessibility.	14M	Ongoing

Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impact on food security	COST	Time Frame
	schools						
	Supply of 248 water Tanks to schools.	County wide.	50,000HHs	CGOK/NDMA /NGO/GOK	Improved water accessibility.	25M	Ongoing till October 2017.
Health							
All sub counties	Community Led Total Sanitation Program	All sub counties	1,180,307	CGOK, Unicef,	Improved sanitation and food utilization	120 m	Two years
Mwingi North and Kitui South	Maternal Child Nutrition Program	Mwingi North and Kitui South	374,835	MOH, IMC, PS Kenya, CISP	Improved child nutrition	19m	Two years



