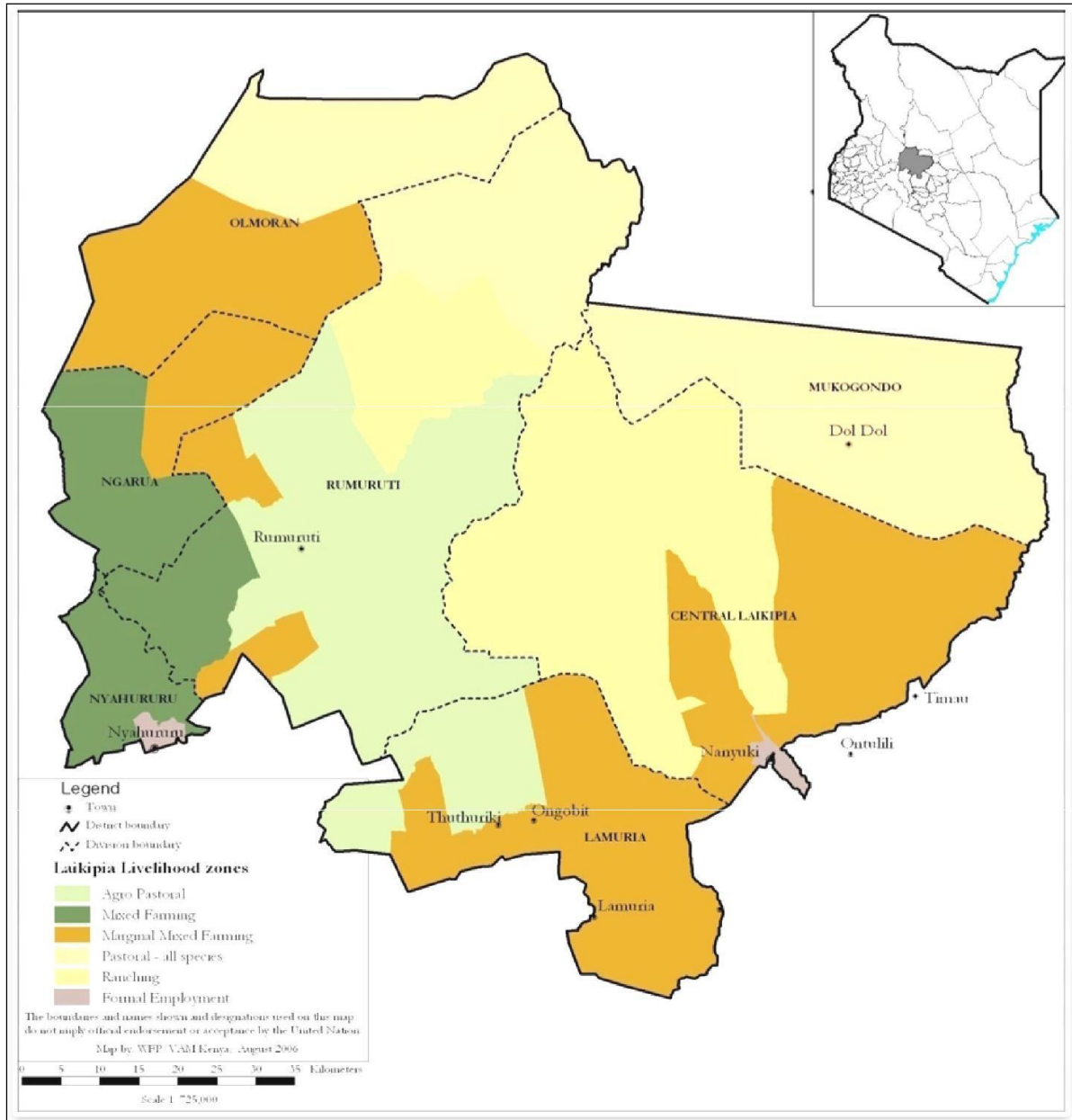


# LAIKIPIA COUNTY 2016 LONG RAINS FOOD SECURITY ASSESSMENT REPORT



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

**August 2016**

<sup>1</sup>Stanley Mutua (State Department of Livestock) and Philip Looniyo (World Food Programme) and Laikipia Technical County Steering Group (CSG)

## 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.....	7
Major sources of water.....	7
3.4 Market and Trade .....	8
3.5 Health and Nutrition .....	9
Coping Mechanism .....	12
<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) ....	13
<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.....	14
<b>6.0 ANNEXES .....</b>	<b>14</b>
6.1 On-going Interventions by Sector .....	14
6.1.1 Food Interventions .....	14
6.1.2 Non-Food Interventions .....	14
6.2 Proposed Intervention .....	15
6.2.1 Food Intervention Required .....	15
6.2.2 Non-food Interventions .....	16

## 1.0 INTRODUCTION

### 1.1 County Background

Laikipia County consists of three administrative sub-counties namely: Laikipia East, Laikipia North, and Laikipia West. It covers an area of 9,462 square kilometers and supports a population of 399,227 people (KNBS, 2009 census). The county has four main livelihood zones: Mixed farming (MF), Marginal mixed farming (MMF), Formal employment and Business & Trade, and Pastoral (Figure 1).

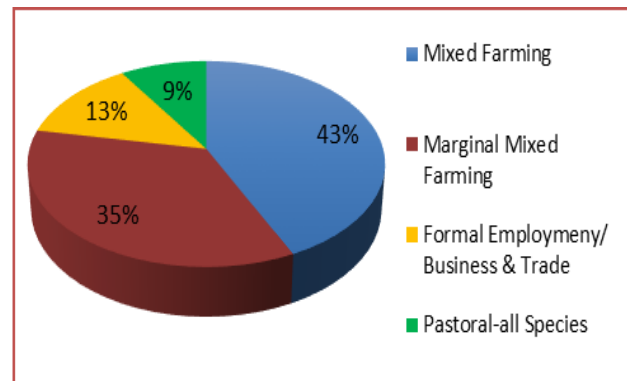


Figure 1: Population distribution by livelihood

## 2.0 COUNTY FOOD SECURITY SITUATION

### 2.1 Current Food Security Situation

The county is generally in the “None or Minimal” food insecurity classification phase (IPC Phase 1) except parts of pastoral livelihood zone which are in “Stressed” phase (IPC Phase 2). The current factors affecting food security include: late onset and early cessation of rains affecting crop production in MF, MMF livelihood zones, frost bite destroying crops in parts of MMF zone, high cost of farm inputs, livestock pests and diseases, human wildlife and Agro pastoralists conflicts and in-migration of livestock from other counties, poor road and water infrastructure.

Food consumption has generally improved with proportion of households with acceptable food consumption score (FCS) increasing to 91 percent in MF and MMF and 62 percent in pastoral livelihood zone. This improvement is attributed to increased food production in MF and MMF zones, combined with inflow from main import markets that has sustained food supply and continued to stabilize market prices. Water availability and access is currently stable and adequate for both livestock and domestic use (at least 15litres/person/day). Dietary diversity is good in MF and MMF as households are consuming 2-3 meals per day comprising 4-5 food groups mainly cereals, legumes, milk, vegetable and fruits. However, households in the pastoral livelihood zones have inadequate dietary diversity with households consuming 1-2 meals per day consisting of 2-3 food groups. Coping strategy index (CSI) has reduced in MF and MMF from 27 in May 2015 to 15 in May 2016, indicating improved household access to food. Conversely in the pastoral zone, CSI has increased from 18 in May 2015 to 21 in May 2016, signifying increased household stress due to limited access to food.

The nutritional status is stable with 2.2 percent of children under five years being at risk of malnutrition. Prevalence of underweight for children 0-59 months has remained stable at 6.2 percent, which is below the long term mean of 8.2 percent. Improved nutritional status is attributed to ongoing nutrition interventions and improved food consumption. Crude mortality rate (CMR) and under-fives mortality rate (U5DR) is 0.36/10,000/day and 0.48/10,000/day, which is below the alert cut offs of CMR: 0.5/10,000/day and U5DR: 1/10,000/day respectively.

## 2.2 Food Security Trends

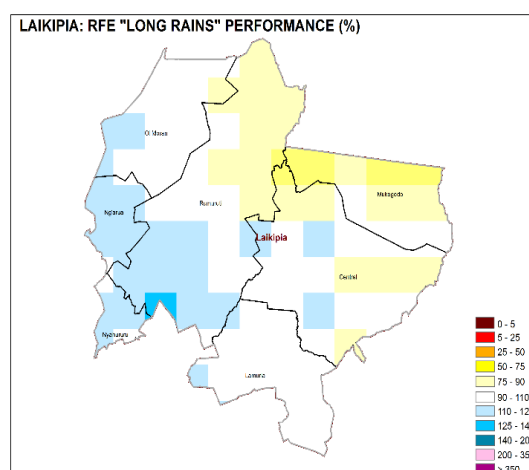
The county was classified as ‘None or Minimal’ (IPC Phase 1) in the mixed farming and marginal mixed farming livelihood zones and “ Stressed” (IPC Phase 2) in the pastoral livelihood zone during the short rains assessment of February 2016 and has remained the same in the current assessment. Household maize stocks has increased by three folds compared to last season attributed to good rains, increased area planted and improved agronomic practices. Terms of trade (ToT) declined due to a reduction in goat prices since February 2016 although the trend remains favourable to livestock producers. The CSI in MF and MMF is lower than December 2015, signifying an improved access to food by households. However, in the pastoral zone, CSI has increased, signifying increased household stress due to limited access to food. The proportion of households with acceptable FCS has increased significantly compared to the last season indicating improved household dietary diversity and food frequency which has resulted from increased food production and favourable market prices of food commodities (Table 1).

**Table 1: Food security trends**

Indicator	Long rains assessment, July 2016	Short rains assessment, Feb 2016
Food security phase	None or Minimal, pastoral stressed	None or Minimal, pastoral stressed
Household food stocks	154,720 bags (74 % of LTA)	42,694 bags (34 % of LTA)
Livestock body condition	Good	Good
Household water consumption, MF and MMF livelihood zone	30-40 lpppd	35-45 lpppd
Household water consumption, pastoral livelihood zone	15-20 lpppd	20-25lpppd
Terms of trade	83 (June 2016)	95 (January 2016)
Coping strategy index	MF & MMF: 15 (May 2016) Pastoral: 21 (May 2016)	MF & MMF: 25 (December 2015) Pastoral: 19 (December 2015)
Food consumption score	MF & MMF: Poor 1.3%; moderate 8%; acceptable 90.7% Pastoral: Poor 12.5%; moderate 25.7%; acceptable 61.8%	MF & MMF: Poor 8%; moderate 23%; acceptable 69% Pastoral: Poor 8%; moderate 56%; acceptable 36%
Children at risk of malnutrition	2.2%	2.7%

## 2.3 Rainfall Performance

The onset of long rains was late during the first dekad of April compared to the normal first dekad of March. The rainfall amounts were generally normal to above normal across all livelihood zones. Spatial distribution was even with amounts varying between 50-75 percent in northern parts of Mugogodo; 75-90 percent in southern part of Mugogodo, Sosian and Umande; 90-110 in Segera, and Tigithi and 110-125 in Kinamba, Rumuruti, Marmanet and Igwamiti (Figure 2). The temporal distribution was good. Cessation was early in the second dekad of May compared to the normal first dekad of June. The mixed farming livelihood zone, which comprises areas neighboring Aberdare Ranges and Mt. Kenya, form an exception



**Figure 2: Rainfall Performance**

to this pattern as they received conventional rainfall from the second dekad of June which is expected to continue up to August.

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

#### 3.1 Crop Production

The county mainly depends on the long rains for crop production. The main crops grown for both food and income are maize, beans, irish potatoes and wheat (Table 2).

**Table 2: Crop contribution to food and income**

Main Crops	Mixed Farming		Marginal Mixed Farming	
	Contribution to food	Contribution to income	Contribution to food	Contribution to income
Maize	65%	55%	66%	12%
Beans	15%	8%	11%	40%
Irish potatoes	10%	4%	8%	24%
Wheat	1%	20%	4%	6%

#### Rain fed Crop Production

The area under maize and potatoes decreased by eight and 18 percent respectively compared with the LTA, due to late onset and early cessation of rains and the earlier advisories by the meteorological department of an impending “la Nina” phenomenon which resulted in delayed planting and reduction in acreage planted. Similarly the area planted under wheat decreased by 27 percent due to declining wheat prices and high cost of inputs which discouraged wheat farmers, but beans acreage increased by 9 percent compared with the LTA as a result of promotions conducted by the County Government which distributed a new high yielding bean variety to farmers. Overall, production decreased by 31, 34, 18 and 12 percent for maize, beans, potatoes and wheat respectively compared with LTA (Table 3). The decline was occasioned by the late onset and early cessation of the long rains which were largely inadequate as well as losses from frost. The crop production figures recorded are projections since harvesting is on-going.

**Table 3: Rain fed Crop 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)	Long term average production during the long rains season (90 kg bags)
Maize	27,660	30,000	1,244,700	1,800,000
Beans	20,601	25,000	164,808	250,000
Potatoes	2,180	2,000	163,500*	200,000*
Wheat	3,303	4,500	99,090	112,500

\*Potatoes in tons

#### Irrigated Crop Production

The area under irrigation decreased by 10, 25 and 14 percent for tomatoes, cabbages and onions respectively compared with the LTA. The production decreased by 30, 30, and 14 percent for tomatoes, cabbages and onions respectively compared with LTA (Table 4). Enhanced 2016 short

rains and March harvests resulted in reduced areas under irrigated crops and hence the decline in yields.

**Table 4: Irrigated Crop Production**

Crop	Area planted during the 2016 long rains season (ha)	Short term average (3 years) area planted during long rains season (ha)	2016 long rains season production (90 kg bags)	Short term average (3 years) production during 2016 long rains season (90g bags)
Tomatoes	140	155	1,344MT	1,920MT
Cabbages	105	140	6,300MT	9,000MT
Onions	90	105	720MT	840MT

### Maize Stocks

The current stocks held by households, traders, millers and the NCPB decreased by 26, 20, 29 and 33 percent respectively compared with the LTA (Table 5). Most farmers in the MF and MMF zones are preparing to harvest hence the decline in stocks held. The on-going crop harvesting is expected to boost household stocks in the MF livelihood zone. Households in the MMF and pastoral areas have no stocks and are relying on markets, which is normal.

**Table 5: 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
Households	154,720	210,000
Traders	57,123	72,000
Millers	42,516	60,000
NCPB	100,000	150,000
<b>Total</b>	<b>354,359</b>	<b>492,000</b>

### 3.2 Livestock Production

The major livestock in the county are cattle, goats, sheep, camel and poultry. The contribution of livestock production to cash income in the MF, MMF and pastoral livelihood zones is 30, 52 and 90 percent respectively. Pasture and browse are good in the MF and MMF areas but fair in the pastoral livelihood zone and is expected to last for 3-4 and 2-3 months respectively which is normal for the season (Table 6). Livestock in-migration from Samburu, West Pokot, Baringo and Isiolo has increased pressure on the already diminishing forage thus triggering conflicts which eventually limits access to grazing areas, affects milk production and disrupts markets.

**Table 6: Pasture and browse situation**

Livelihood zone	Current	Normal	Duration	Accessibility factors
Mixed Farming	Good	Good	3-4 months	None
Marginal Mixed Farming	Good	Good	3-4 months	None
Pastoral	Fair	Fair	2-3 months	In-migration

### Livestock Productivity

The body condition of cattle, goats, sheep and camel was good across all the livelihood zones (Table 7). Pasture and browse are good in the MF and MMF areas but fair in the pastoral livelihood zone and is expected to last for 3-4 and 2-3 months respectively. The long rains season is usually the lean season for lambing and kidding across all livelihood zones and limited calving, which is currently the case. The impact of the season on births is best captured by conception rates per every 10 females, as births generally occur after the season. Conception rates are at an average of 6 per 10 sheep and goats and 4 per 10 cows, which is normal.

**Table 7: Livestock body condition**

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normally	Current	Normally	Current	Normally	Current	Normally
MF	Good	Good	Good	Good	Good	Good	Good	Good
MMF	Good	Good	Good	Good	Good	Good	Good	Good
Pastoral	Good	Good	Good	Good	Good	Good	Good	Good

### Milk Production, consumption and prices

Households across all the livelihood zones are relying on milk from cows, goats, sheep and camel which are currently grazing within the proximity of homesteads since pasture, browse and water are available and accessible. The average milk production per household per day has remained stable for the last three rain seasons. Milk consumption is within the LTA and the retail prices are within the normal range for this season (Table 8). The average Tropical Livestock Unit (TLU) stands at three in MF and MMF zones which is normal for the season. However in the pastoral livelihood zone the average TLU is six compared to LTA of 10.

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

Livelihood zone	Milk production (litres)/household		Milk consumption (litres) per household		Prices (Ksh/litre)	
	Current	LTA	Current	LTA	Current	LTA
Mixed farming	6-10	6-8	2-3	1-3	25-30	25-30
Marginal mixed farming	4-7	5-6	2-3	1-3	30-40	30-40
Pastoral	1-3	1-3	1-2	1-2	30-50	30-50

### Migration

Internally, livestock in parts of the pastoral livelihood zone (Ewaso, Ilmotiok, Tura, Ilpolei, Seek, Mumonyot and Kurikuri) have migrated towards Segera, Mugogodo Forest, Suguta, Roy-Samba and Rumuruti in search of pasture thus limiting availability of milk at households. In-migration of livestock from the neighbouring counties of Samburu, Baringo and Isiolo into the MF and MMF livelihood zones is expected to limit pasture access and reduce availability by 1-2 months.

### Livestock Diseases and Mortalities

Incidences of Lumpy Skin Disease (LSD) were reported in parts of MF and MMF livelihood zones of Laikipia West (Salama) while unconfirmed cases of LSD and Foot and Mouth Disease (FMD) were also reported in the MMF and pastoral zones of Laikipia North (Ilingwesi and Sosian). Current mortality rates for all livestock species across the county are within normal ranges. A county wide mass vaccination against Black Quarter, Anthrax, FMD and LSD was conducted in May 2016.

### Water for Livestock

Common livestock water sources include water pans, dams, springs, rivers and boreholes. The recharge rate for open water sources is 80-100 percent. Water is available and accessible for livestock across all livelihood zones. Return trekking distances to water sources are within seasonal ranges (Table 9) except for some parts of pastoral livelihood zone (Mugogodo) where return trekking distances to water sources for livestock was 4-5 kilometers. The frequency of watering is daily for all livestock species across all livelihood zones (Table 9).

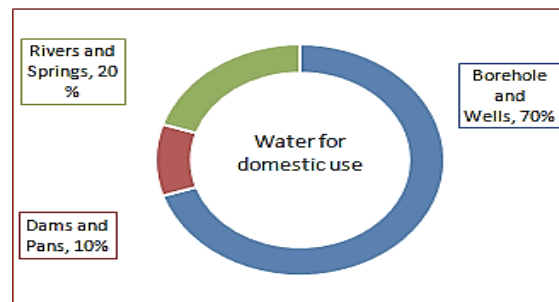
**Table 9: Water for livestock**

Livelihood zone	Return trekking distances (km)		Expected duration to last (Months)		Watering frequency	
	Current	Normal	Current	Normal	Current	Normal
MF	1-2	1-2	5-6	5-6	Daily	Daily
MMF	1-2	1-2	5-6	5-6	Daily	Daily
Pastoral	1-3	1-3	3-4	3-4	Daily	Daily

### 3.3 Water Availability and Access

#### Major sources of water

The major sources of water in Laikipia County are rivers, springs, borehole, shallow wells, dams and pans (Figure 3). Recharge rate for open water sources is 80-100 percent, which is normal for the season.



**Figure 3: Common water sources**

#### Distance to water sources

Distance to water sources for domestic use is within the normal range in all livelihood zones except in some parts of the pastoral zone (Doldol, Ipolei, Imotiok, Kurikuri and Mumonyot) where the current distance is 8-10 km (Table 10). This is due to silting and destruction of spill-ways of dams and pans as well as breakdown of boreholes.

#### Cost of water and waiting time at the source

The cost of water has remained stable at Ksh 3-5 for a 20 litre jericin in all livelihood zones over the last three rain seasons. However, due to mechanical breakdown of community owned water pumps in some parts of MMF zone (Kinamba), residents buy water at Ksh 10 per 20 litres jericin from vendors (Table 10). Nonetheless, a significant proportion of population rely on free water from earth pans, shallow wells and roof catchments. Current waiting time at water source is less than 30 minutes across all livelihood zones, which is normal and is expected to remain stable for the next 4-6 months.



## Water consumption

Water consumption per person per day is within the sphere standards in all livelihood zones, which is normal at this time of the year. In the pastoral livelihood zone, water consumption has increased by 30 percent compared to the same period in 2015 (Table 10). This is due to improved availability as there are more operational water sources across the livelihood zones.

**Table 10: Water situation**

Sub county/ livelihood zone	Distance to Water for Domestic Use (km)		Cost of Water (Kshs./20litres)		Waiting Time at Water Source (Minutes)		Average HH Use (lts/person/day)		Projected duration availability
	Normal	Current	Normal	Current	Normal	Current	Normal	Current	
MF	0.5	0.5	5	5	5	5	30-40	30-40	6 months
MMF	0.7	0.7	3	3	25	25	30-40	30-40	6 months
Pastoral	4	4	3	3	30	30	15-20	15-20	4 months

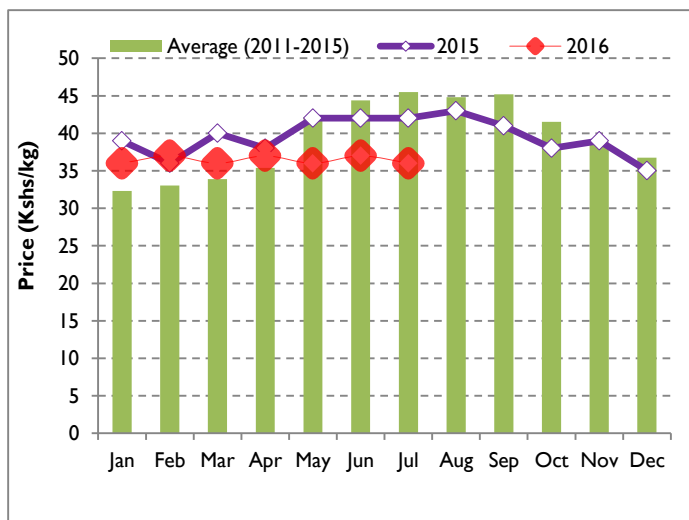
## 3.4 Market and Trade

### Market Operations

Most trading activities are concentrated in the main livestock and foodstuffs markets in the county which include; Nyahururu, Sipili, Ol-Moran, Nanyuki, Doldol, Kimanjo, Chumvi and Rumuruti. All markets were operational with free access and flow of commodities into and out of the county. The main products traded in the markets were livestock and livestock products, crop produce and other household items sourced locally and from the neighboring Nyandarua, Nyeri, Meru and Nakuru counties. Traded volumes were normal for the season.

### Maize prices

The price of maize has remained stable over the last six months and is currently 22 percent below the LTA (Figure 5). The highest price was Kshs 45 in the pastoral livelihood zone and the lowest price was Kshs 26 in the mixed farming zone. Prices are projected to remain stable until the next season due to adequate maize stock within the county, increased yields expected in the MF and MMF zones and inflow from neighboring counties of Nyandarua, Nakuru, Meru and Embu as well as stocks available from own farm production.



### Goat prices

The current goat price is 14 percent above the LTA. The high price is attributed to the current good body condition of goats at this time and the gradual scarcity occasioned by farmers holding on to livestock during good seasons. The price is expected to remain stable for the next 3-4 months.

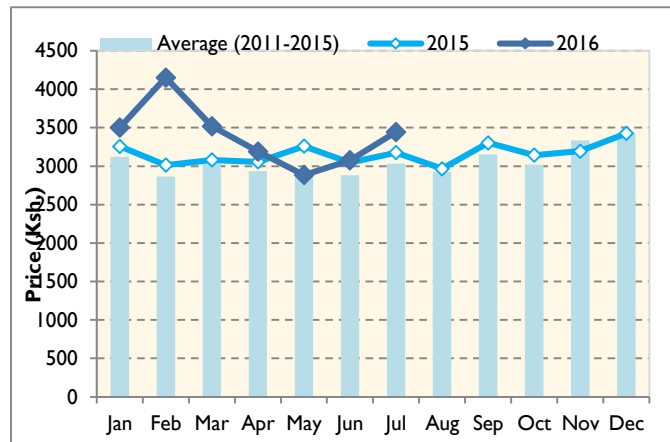


Figure 6. Goat Prices

### Terms of Trade

Livestock to cereal terms of trade (ToT) improved in the past six months and is currently 43 percent above LTA. The improvement was due to increase and stabilization in goat prices while maize prices remained low and stable. Proceeds from sale of a goat can purchase 83 kg of maize which can sustain a household for two months thus improving food availability for the MMF and pastoralists households who rely on markets. The ToT is expected to remain favourable for the next 3 months.

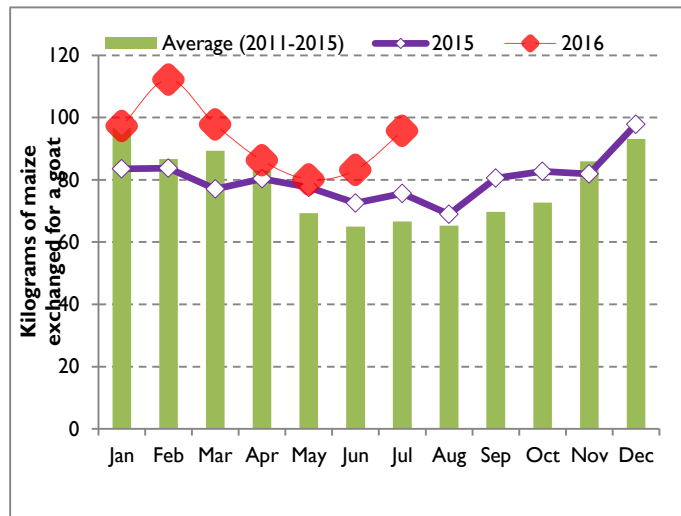


Figure 7. Terms of Trade

## 3.5 Health and Nutrition

### Morbidity Patterns

Morbidity cases are averagely on normal trends since 2014 and there has been no upsurge of any disease during the long rains period. Upper respiratory tract infections (URTI), Diarrhea, Skin diseases and Pneumonia remain the leading causes of morbidity for under five and the general

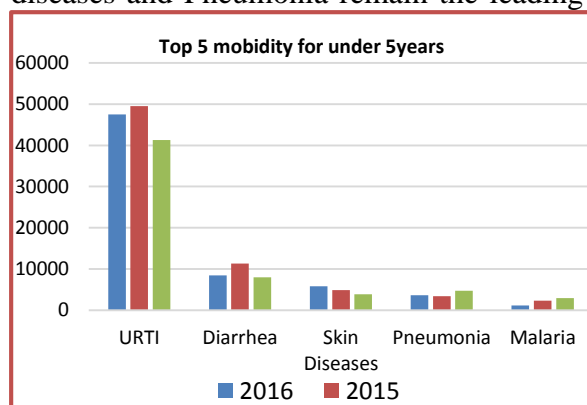


Figure 8: Morbidity patterns for the under 5

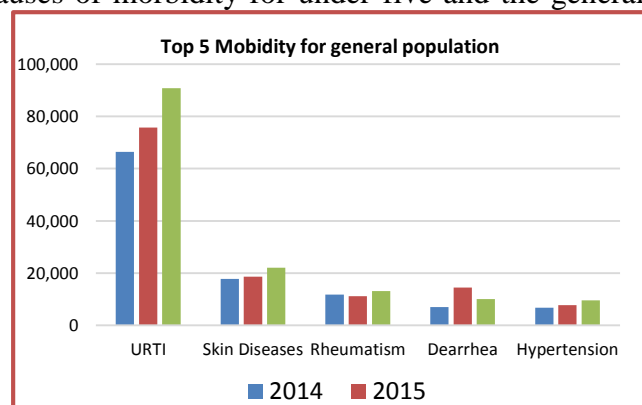


Figure 9: Morbidity patterns for the general population

population due to climatic changes as well as poor sanitation and hygiene conditions (Figure 8 and 9). Hypertension is emerging as one of the top five diseases for the general population especially in the MF zone. Between January-June 2014 and January-June 2016, hypertension cases increased by 42 percent (Figure 9) and this could be attributed to lifestyle changes. Crude mortality rate (CDR) is 0.36/10,000/day and under-fives mortality rate (U5DR) is 0.48/10,000/day which is below the alert cut offs.

### Immunization and vitamin A Coverage

Fully immunized child (FIC) coverage is below the national target of 80 percent and has reduced by 7.4 percent when compared to the same period in 2015. Oral Polio and Measles vaccination coverage also reduced in 2016 as compared to 2015 (Table 11). The reduction in coverage is attributed to scaling down of outreach activities due to inadequate resources.

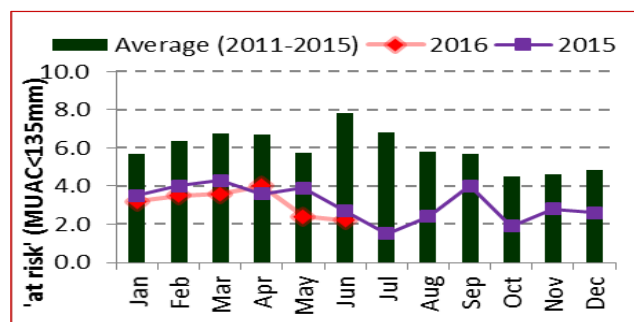
**Table 11: Immunization and vitamin A coverage**

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 (DHIS)	Vitamin A supplementation for Children less than one year old (DHIS)	Vitamin A supplementation for children 1 to 5 years old (DHIS)
January to June 2016	63%	1. OPV 1 _____ 69.5% 2. OPV 3 _____ 65.3% 3. Measles _____ 63%	99%	85%
January to June 2015	70.7%	1. OPV 1 _____ 70.3% 2. OPV 3 _____ 68.9% 3. Measles _____ 70.2%	79%	65%

Vitamin A supplementation for both children under 12 months and children one to five years old increased by 20 percent in the period January to June 2016 as compared to the same period in 2015. The high Vitamin A coverage in 2016, which is above the national target of 80 percent, is attributed to a county wide vitamin A supplementation campaign carried out in May 2016.

### Nutrition Status and Dietary Diversity

The nutritional status is stable with 2.2 percent of children under five years being at risk of malnutrition (Figure 10). Prevalence of underweight for children 0-59 months has remained stable at 6.2 percent, which is below the long term mean of 8.2 percent. Improved nutritional status is attributed to ongoing nutrition interventions and improved food consumption.



**Figure 10: Proportion of children at risk of malnutrition**

### Food consumption score

Food consumption has generally improved with the proportion of households with an acceptable food consumption score (FCS) increasing to 91 percent in MF and MMF and 62 percent in the pastoral livelihood zone (Figure 11). The significant shift of households from poor and borderline to acceptable FCS is indicative of an improvement in household dietary diversity and food frequency which has resulted from increased food production and favourable market prices of food commodities over the last three seasons. Dietary diversity is good in MF and MMF areas as households are consuming 2-3 meals per day comprising 4-5 food groups mainly cereals, legumes, milk, vegetable and fruits. However, households in the pastoral livelihood zone have dietary diversity deficits with households consuming 1-2 meals per day consisting of 2-3 food groups.

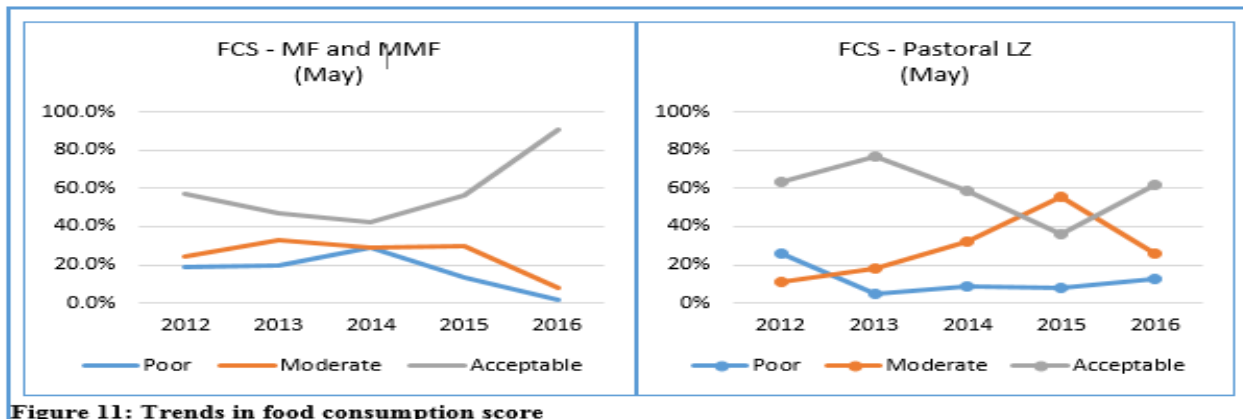


Figure 11: Trends in food consumption score

### Sanitation and Hygiene

Water sources are not protected and are mainly contaminated through surface run-off washing away agro-chemicals, human waste and refuse, polluting water sources. Most rural households are not treating water, according to information obtained from community interviews.

The average latrine coverage in the county has increased from 77 percent in 2015 to 82 percent as a result of increased health promotion through community units (Figure 4). However, coverage and utilization is low in the pastoral areas due to low sensitization, nomadic lifestyle and cultural beliefs. Low latrine coverage poses high risk of direct exposure to excreta and high chances of contamination of water sources leading to diseases.

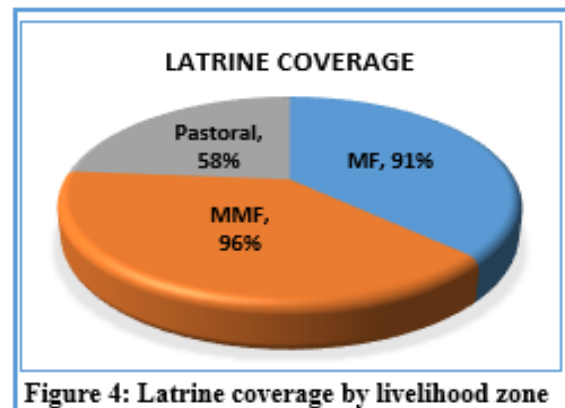


Figure 4: Latrine coverage by livelihood zone

## Coping Mechanisms

The CSI for MF and MMF livelihood zones has reduced as compared to the same period in 2015 (Figure 12), implying that households are less frequently engaging in consumption-based coping strategies and the coping strategies are less severe. However, in the pastoral livelihood zone the CSI has increased to 21 signifying increased household stress due to limited access to food. Most common consumption related coping strategies employed by households were; relying on less preferred and less expensive food (82.7 percent) and limiting portion size at mealtime (87 percent), which are less severe forms of coping to deal with food shortage.

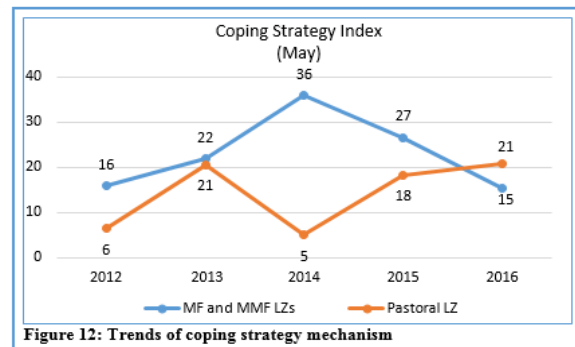


Figure 12: Trends of coping strategy mechanism

## 4.0 FOOD SECURITY PROGNOSIS

### 4.1 Prognosis Assumptions

Laikipia County food security prognosis for the next six months is based on the following assumptions:

- Short rains of 2016 are expected to be near normal to normal due to the anticipated La-Nina effect.
- Price of maize crop will remain stable and available stock at household will improve after the expected harvest in September
- Water availability and accessibility is expected to remain stable except for a slight decline in the volume of water in open water sources
- Livestock in-migration from Samburu, Isiolo and Baringo is likely to increase thus putting pressure on the forage and water in northern part of the county.
- Forage is expected to deteriorate from September and then improve with onset of short rains by October.
- Production and consumption of milk will remain stable.
- Livestock prices are expected to remain stable and thereafter increase between October and December 2016.
- No extreme coping mechanisms are expected to be employed by households.

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

The overall food security situation across the county is expected to remain stable over the next three months. The expected harvest will increase the maize stocks available and continue to stabilize maize price in the market. Forage is expected to deteriorate due to high land surface temperature and pressure from livestock that are migrating into the county. Thereafter, forage regeneration is expected following the start of the short rains season in October. Livestock body condition is expected to remain stable across all livelihood zones except for cattle in the pastoral livelihood zone whose condition is expected to deteriorate. Terms of trade are expected to remain stable and in favour of livestock keepers. The nutrition status of children under five is expected to remain stable across the county. Food consumption patterns will also remain stable except in pastoral areas where milk availability is expected to decline and hence decreased household consumption. Frequency of meal consumption is expected to remain the same in all livelihood

zones. Mortality rates for both children under five and the general population are expected to remain below the alert cut off points.

#### **4.3 Food Security Outcomes for the last three months (November, December, January)**

With the projected near normal performance of the short rains, full rejuvenation of pasture and browse is expected across all livelihood zones and thus body condition of livestock is expected to improve. Supply of maize in markets will increase leading to a reduction in the price of maize. At the same time, goat prices will increase steadily until end of December but are likely to decline in January 2017 due to the high number of goats presented in market as livestock keepers will be searching for school fees. Therefore the terms of trade will still be favourable to the livestock keepers but likely to decline slightly by January 2017. Water sources are expected to recharge by over 80 percent leading to improved water availability and accessibility. Increased milk production is expected to improve the nutrition status of the children under-five years.

### **5.0 CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Conclusion**

The county is in the “None or Minimal” food insecurity phase classification (IPC Phase 1) except for the pastoral livelihood zone which is in the “Stressed” phase (IPC Phase 2). The situation is expected to remain stable up to the next season. However, key factors that need close monitoring for the next six months; especially in the marginal mixed farming and pastoral areas, include stocks of staples, pasture and browse situation, livestock body condition, human and livestock diseases, livestock and food prices, under-five nutritional status, distances to water sources, availability and access to forage and water, resource-based conflicts and insecurity.

#### **5.2 Summary of Recommendations**

- Up scaling of drought escaping crops in marginal mixed farming livelihood zone
- Promotion of water harvesting for irrigation
- Range land rehabilitation
- Breed improvement
- Restocking in the pastoral livelihood
- Manage human-wildlife conflicts and Agro-pastoralists conflicts
- Increased livestock disease surveillance
- Repair & rehabilitation of non-functional water facilities.
- Upgrading of water facilities to be solar powered.
- Drilling of boreholes and excavation of water pans to increase access to water
- Provision of water treatment chemicals
- Scale up integrated outreaches in hard to reach areas to increase immunization coverage and ensure nutrition surveillance
- Increase the number of community units to improve nutrition program coverage

### 5.3 Sub-County Ranking

**Table 11: Sub County food security ranking (worst to best)**

Sub County	Food security rank (1-10)	Main food security threat (if any)
Laikipia North	1	<ul style="list-style-type: none"> <li>• Inadequate rainfall (60%)</li> <li>• Fair forage condition</li> <li>• Low milk consumption</li> <li>• High price of food crops</li> <li>• Poor infrastructure</li> </ul>
Laikipia East	2	<ul style="list-style-type: none"> <li>• Poor performance of crops</li> <li>• Inadequate rainfall (80%)</li> <li>• Good forage condition</li> <li>• Good milk consumption</li> <li>• Steady food supplies and stable market prices</li> <li>• Good infrastructure</li> </ul>
Laikipia West	3	<ul style="list-style-type: none"> <li>• Good rainfall</li> <li>• Good performance of crops</li> <li>• Good forage condition</li> <li>• Good milk consumption</li> <li>• Steady food supplies and stable market prices</li> <li>• Good infrastructure</li> </ul>

## 6.0 ANNEXES

### 6.1 On-going Interventions by Sector

#### 6.1.1 Food Interventions

There are currently no ongoing food assistance interventions in the county.

#### 6.1.2 Non-Food Interventions

**Table 12: Non-food interventions**

Sector	Intervention	Objective	Specific Location	Cost (KES)	No. of beneficiaries	Implementation Timeframe	Implementation Stakeholders
<b>Livestock</b>	Provision of milk coolers	Increased income	Laikipia West	10M	1,000 farmers	Jan – June 2016	County Govt. Cooperatives
	Bulking of indigenous pasture seeds	Promote indigenous pasture seeds	Laikipia North	1.5M	15000 livestock farmers	Jan – Dec 2016	Resilience Project
	Construction of hay sheds	Availability of hay during dry seasons	Laikipia North	4M	All livestock farmers	Jan – Dec 2016	Resilience Project
	Vaccination campaigns	To control livestock diseases	Laikipia East/North/West	12M	All livestock farmers	June – Dec 2016	County Govt. (Dept. of Livestock)
<b>Agriculture</b>	Training on diversification with other food crops	Change in eating habits	Laikipia East/North/West	0.5M	All Farmers	Continuous	Agriculture Department

Sector	Intervention	Objective	Specific Location	Cost (KES)	No. of beneficiaries	Implementation Timeframe	Implementation Stakeholders
	Water Harvesting for irrigation	Domestic /irrigation water	Laikipia East/North/West	2M	All Farmers	Continuous	Agriculture Department
	Fruit seedlings distribution	Alternative source of income	Laikipia East/North/West	0.5M	All Farmers	Continuous	Agriculture Department
	Promotion of Drought Escaping Crop		Laikipia East/West	2M	All Farmers	Continuous	Agriculture Department
<b>Health</b>	MIYCN Interventions	Optimal maternal, infant and young child feeding	Laikipia East/North/West		84,535 children 6 - 59 Months and 24,260 Women	Jan - Dec 2016	MOH and UNICEF
	Vitamin A, Iron and Zinc Supplementation	Prevention of micronutrient deficiency	Laikipia East/North/West		84,535 children 6 - 59 Months and 24,260 Women	Jan - Dec 2016	Ministry of Health and UNICEF
	Integrated Management of Acute Malnutrition	Management of malnutrition	Laikipia East/North/West		3,161 SFP, 4740 OTP and 15 SC	Jan - Dec 2016	Ministry of Health and UNICEF
	On Job on High Impact Nutrition Interventions (HINI)	Improved health care provision to the entire population.	Laikipia East/North/West	0.5M	All health workers in 89 facilities and 144 CHWs	Jan - Dec 2016	Ministry of Health and

## 6.2 Proposed Intervention

### 6.2.1 Food Intervention Required

**Table 13: Proposed population in need of food assistance**

Sub county	Population in the sub county (2009 Population Census)	Pop in need ( percent range min – max )	Proposed mode of intervention	Remarks
Laikipia North	32,762	5-10 percent	FFA	Poor pasture condition in some areas of pastoral livelihood
Laikipia East	Nil			
Laikipia West	Nil			



## 6.2.2 Non-food Interventions

**Table14: Proposed non-food interventions**

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
<b>Livestock Sector</b>							
Laikipia North, West and East	Strengthening livestock marketing infrastructures	Laikipia North/ East,	All market stakeholders	County Govt. (Dept. of Livestock)	Perimeter fences, sale yards	Community land,	Jan – Dec 2016
	Breeds improvement (cattle)	Laikipia North/East	500 livestock farmers	County Govt. (Dept. of Livestock)	40M		July 2016 – June 2017
	Livestock restocking	Laikipia North	500 livestock farmers	Dept. of Livestock	50M		July 2016 – June 2017
	Establishment of strategic feed reserves	Laikipia West	15,000 farmers	County Govt. (Dept. of Livestock)	20M	Community land	July 2016 – June 2017
	Manage human-wildlife	Laikipia West	15,000 farmers	Dept. of Livestock	3M		Continuous
<b>Agriculture Sector</b>							
Laikipia East, West	Promotion of Drought Escaping Crops	Laikipia East, West	7000 Farmers	County Govt. (Dept. of Agriculture)	10 M	Community land	Continuous
	Water Harvesting for irrigation	Laikipia East/North/West	All Farmers	County Govt. (Dept. of Agriculture)	2M	Community land	July 2016 – June 2017
<b>Health Sector</b>							
Laikipia East, West, North	Scale up integrated outreaches in hard to reach areas	Laikipia East, West, North	69,540 children under five years	Ministry Of Health	0.45M	Commodities, Health Workers	August 2016 to March 2017