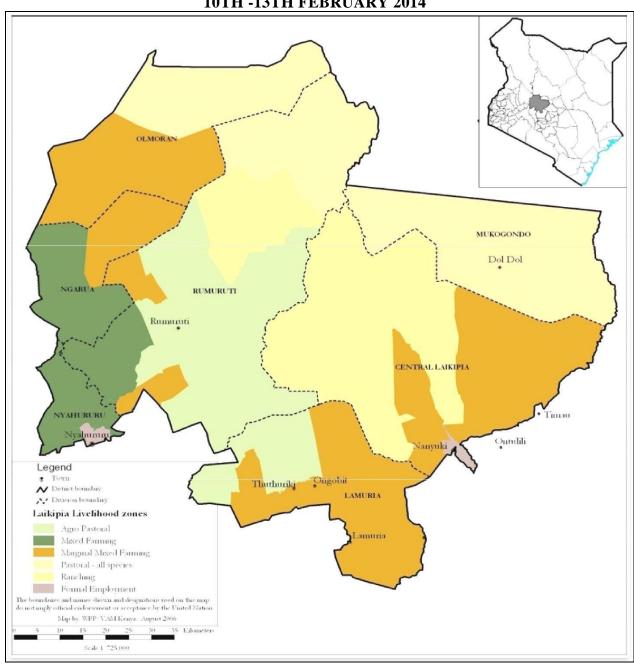
## LAIKIPIA COUNTY 2014 2014 SHORT RAINS FOOD SECURITYASSESSMENT REPORT 10TH -13TH FEBRUARY 2014



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# **Table of Contents**

1.0 IN	TRODUCTION	1
1.1	County Background	1
1.2	Current Factors Affecting Food Security	1
2.0	COUNTY FOOD SECURITY SITUATION	1
2.1	Current Food Security situation	1
2.2	Food Security Trends	2
2.3	Rainfall Performance	3
2.4	Current Shocks and Hazards	3
3.0	IMPACT OF RAINFALL PERFOMANCE, SHOCKS AND HAZARDS $\dots$	3
3.1	Crop Production	3
3.2	Livestock production	5
3.3	Water and sanitation	7
3.4	Market and trade	8
3.5	Health and nutrition	9
3.6	Education	10
3.7	Coping mechanism	10
3.8	Ongoing interventions	11
4.0	FOOD SECURITY PROGNOSIS	13
4.1	Prognosis Assumptions	13
4.2	Food Security Outcomes	14
5.0	CONCLUSION AND RECOMMENDATIONS	14
5.1	Conclusion	14
5.1	Summary of Recommendations (food and non-food)	15
6.0	ANNEXES	15

#### 1.0 INTRODUCTION

### 1.1 County Background

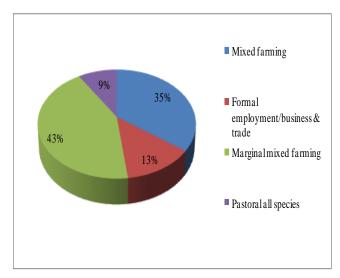


Figure 1: Population distribution by livelihood zone

Laikipia County is located to the North West of Mount Kenya within the Great Rift Valley. The County borders Samburu County to the North, Isiolo to the North East, Meru County to the South, Nyandarua, Nyeri and Nakuru Counties to the South West and Baringo County to the west. The County covers an estimated area of 9,693 square kilometers with a population of 440,781 people as per KNBS 2009 National Census. Laikipia is classified into three main sub-counties namely: Laikipia West, North and East and five administrative districts: Laikipia East, Laikipia West, Laikipia North, Laikipia Central and Nyahururu. The County is physically diverse, covered by open grasslands, basalt hills, and dense

cedar forests, fed by the Ewaso Nyiro and Ewaso Narok rivers. It is home to ethnically diverse communities including the Maasai, Kikuyu, and Meru, who live side by side, Turkana, Samburu and Pokot. Crop farming, cattle rearing on large commercial ranches, community owned rangelands is the life line of the communities, with 65 percent of the Pastoral Livelihood zone under ranching. The County has four main livelihood zones namely: Mixed Farming, Marginal Mixed Farming, Pastoral and Formal employment. (Figure 1)

#### 1.2 Current Factors Affecting Food Security

- Human wildlife conflict
- Outbreak of contagious and trade sensitive livestock diseases especially foot and mouth disease (FMD).
- Uncontrolled in migrations of livestock from neighboring counties especially Samburu
- Erratic poorly distributed rainfall.
- Risks of conflicts and insecurity in livestock grazing convergence zones
- Frequent occurrence of frost bite

#### 2.0 COUNTY FOOD SECURITY SITUATION

#### 2.1 Current Food Security situation

The County is generally food secure except for a few pockets in Laikipia East, Laikipia North and Laikipia Central where food security situation is stressed at Phase 2. The Mixed Farming Livelihood zone is at Phase 1 as households have sufficient stock as a result of a bumper harvest from the 2013 long rains season. The available stock is expected to last for eight months. The situation remains stressed at phase 2 in Marginal Mixed Farming livelihood zone and the Pastoral Livelihood. Maize crop which is the major food staple contributing over 80 percent of

food in Marginal Mixed Farming was affected by poor short rains performance and frost bites causing 75 - 100 percent damage to the seasonal crop. As a result of the frequent frost bites, a decline in crop production especially maize is expected to be over 75 percent. In the Marginal Mixed Farming, the stocks households have is expected to last one month compared to the normal three months. The production of beans declined by 36 percent as a result of above normal rains at the start of the season and worm infestation.

The livestock sector is fairly stable, in the Mixed Farming zone with the livestock body condition being good. In the Pastoral and Marginal Mixed Farming zone, the productivity and livestock body conditions is good to fair but expected to decline due to the diminishing pasture and browse. Milk availability is decreasing as animals are migrating towards the forest in search of pasture. Due to declining supply, the price of milk has increased from the normal Ksh.30 to Ksh 50. In the Pastoral livelihood zone, milk production has declined due to decrease in livestock feed. Stable livestock body conditions and favorable market prices are likely to be negatively affected by reported outbreak of FMD if adequate control measures are not instituted. Livestock prices are noted to be on the decline due to increased sales and supplies to the markets. Water sector is stressed as some indicators are in a deteriorating trend. The water shortage is as a result of damage caused to the dams by heavy rains experienced during October - December rainfall season.

Nutrition status of children under the age of five years as measured by Mid Upper Arm Circumference (MUAC<135mm) has increased to 3.3 percent up from 3.1 percent in December 2013. The nutritional status of under-five is expected to decline due to deteriorating household food security and increase in infectious diseases. Mortality rates are stable, Crude Mortality Rates (CMR) at 0.24/10,000 per day while under-five mortality rates at 0.48/10,000 per day which is below emergency thresholds.

#### 2.2 Food Security Trends

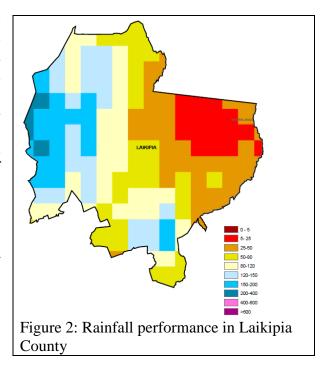
Food security in all livelihood zones remains stable with exception of pockets in Laikipia East, Laikipia North and Laikipia Central which fall stressed phase (IPC Phase 2). In the Marginal Mixed Farming zone which depends on the short rains season, the area planted under the three main staples namely maize, beans and potatoes decreased by 18.5 percent while production of the same decreased by 17 percent. In areas seriously affected by the erratic rainfall and frost bites, maize production declined by 75-100 percent while beans decreased by 36 percent. Maize stocks currently held at the household level stood at 647,597 compared to long term average of 753,350 bags, representing a shortfall of 105, 753 bags. Livestock body condition remains good to fair but with a deteriorating trend. A Foot and Mouth Disease out-break and the quarantine that has been imposed in major markets will have adverse effects on the pastoralists who depend on the sale of livestock for income to cater for food and other household needs. Milk production is expected to decline further due to declining quality and quantity of pasture, browse, water and increase in livestock migration.

The nutritional status of children under the age of five years with MUAC<135mm is on a worsening trend due to the worsening food security situation in some localized areas in Laikipia North. On average, water consumption per person per day (pppd) has decreased to 10 -15 litres pppd from the normal of 20-30 litres pppd in Pastoral and Marginal Mixed Farming zone. Cost of water is normal in MMF and Pastoral zones at Kshs. 2-5 per 20 litre jerry can. However, in

areas including Sipii, Lamuria and Olmoran, the cost has increased to Ksh.10-Ksh.20 per 20 litre jerry can.

#### 2.3 Rainfall Performance

Laikipia receives a bimodal rainfall. The long rains season is the most reliable season in the Mixed Farming zone but the Marginal Mixed Farming and Pastoral livelihood zones depend both on the long and short rains. The rainfall performance varied across all livelihoods. The onset was late in all zones beginning in the 4th dekad of October 2013. In the Marginal Mixed Farming and Pastoral zones, below 50 percent of expected rains was received as seen in figure 2. Above normal rainfall of over 120 percent was received in the Mixed Farming zone. The spatial and temporal distribution was poor except for the Mixed Farming zone, while cessation was earlier than normal in the third dekad of December 2013 except in the Mixed Farming zone.



#### 2.4 Current Shocks and Hazards

The county experienced some shocks and hazard over the season which includes, erratic rainfall, frost bites, drought and Foot and Mouth Disease (FMD) outbreak.

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

#### 3.1 Crop Production

#### 3.1.1 Introduction

The county largely depends on the March-May long rains for food crop production which is particularly so in the Mixed Farming Livelihood zone of Laikipia west comprising Nyahururu, Ngarua, Rumuruti divisions. The Marginal Mixed Farming and Pastoral livelihood zones depend on both the short and long rains seasons for crop and livestock production for purposes of replenishing food stocks, recharging water points for irrigated farming, water for livestock and rejuvenating pasture and browse.

The three main food crops under rain-fed cropping are maize, beans and irish potatoes while in irrigated agriculture, the main crops include tomatoes, french beans and cabbages. Other important crops grown in the county are wheat, snow peas, kales, and watermelons.

#### 3.1.2 Rain-fed crop production

Table 1: Rain-fed crop production

Стор	Area planted during 2014 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2014 Short rains season production (90 kg bags) Projected/Actual	Long Term Average production during the Short rains season (90 kg bags)
Maize	1469	1850	9214	11975
Beans	866	1020	2140	3360
Potatoes	981	1201	27610	31516
Total	3316	4071	38964	46851

A decline in hectarage under rain-fed crop production was observed during the short rain season. The hectarage under maize, beans and potatoes declined by 20 percent, 15 percent and 18 percent respectively. It was attributed to below average rainfall forecast and high cost of land preparation. The overall production of maize, beans and potatoes similarly declined by 23 percent, 36 percent and 12 percent respectively which was attributed to frost bite and poorly distributed erratic rainfall. In some areas of Laikipia East and Central, frost bite caused serious damage to the crops and a decline of 70 to 90 percent in maize production is expected.

#### 3.1.3 Irrigated crop production

**Table 2: Irrigated crop production** 

Стор	Area planted during the 2014 Short rains season (ha)	Short Term Average (3 years) area planted during Short rains season (ha)	2014 Short rains season production (90 kg bags) Projected/actual	Short Term Average (3 years) production during 2014 Short rains season (90 kg bags/Tons)
French beans	90	105	517	778.5
Tomatoes	207	204	1941	1839
Cabbages	164	155	2638	2710.5
Kales	58	90	232	480

Area under French beans and kales production declined by 14 percent and 35 percent respectively. The area under tomatoes and cabbage, as well as production remained within normal. Irrigation activities take place along river bottoms, pumped water from the community boreholes and dams. Due to frequent erratic rains during short rains season, households turn to irrigated crop production for income and food production.

Table 3: Maize stocks held in the County

Maize stocks held	Quantities held currently (90-kg bags)	Long Term Average quantities held (90-kg bags) at similar time of the year
House Holds	647,597	753,350
Traders	106,259	100,270
Millers	32,388	38,200
NCPB	32,873	39,400
Total	818,142	931,220

As illustrated in table 3 above, there was a short fall of total stocks by 113,078 bags, (12 percent) with households having the highest deficit of 105,753 bags (19 percent). The decline is as a result of excessive rains in Laikipia West and parts of Nyahururu, and poorly distributed rainfall in the other parts of the County. Household stocks in the Mixed Farming livelihood zone are higher than normal as a result of the recent good harvests. Stocks currently held by millers are normal compared to same time last year. Stocks with households and traders are generally low in the Mixed Marginal and Pastoral zones. The stocks held by households in Nyahururu and Laikipia West will last for eight months compared to the normal of 10-12 months. In Laikipia Central and East sub counties, stocks will last for two to three months which is below the normal of four months.

#### 3.2 Livestock production

#### 3.2.1 Introduction

Livestock accounts for about 60 percent, 30 percent and 90 percent of cash incomes for Marginal Mixed Farming, Mixed Farming and the Pastoral livelihood zones respectively. The main livestock types in the county are cattle, sheep, goats and camels.

#### 3.2.2 Pasture and browse condition

In the Pastoral livelihood zone, the condition of pasture and browse is below normal and worse off compared to a similar period in 2013. Pastures are in dry standing hay form and fast deteriorating in terms of quality and quantity. Forage on an offer to demand ratio is unfavorable and is likely to deteriorate further if the weather condition does not improve. Quality and quantity of both browse and pastures is low and is likely to last one month if there are no inmigrations of livestock from the neighboring counties. In the Marginal Mixed Farming livelihood zone, the biting frost that was experienced in January and the intense heat being experienced in February have negatively affected the quality of fodder. Pastures and browse are in fair to good condition and are likely to last between one and two months if there are no inmigrations of livestock and supplementation from other farm residues. In the Mixed Farming livelihood zone, the pasture, fodder and browse condition is good and adequate. Forage is being supplemented by abundant farm by-products such as maize stovers. Forage on an offer to demand ratio is favourable and likely to remain so for 2-3 months.

# 3.2.3 Livestock productivity Livestock body condition

The body condition for goats and camels is generally good but likely to decline as a result of inadequate pastures and long distances to water points between now and the onset of the March-May long rains. In the Marginal Mixed Farming livelihood zone the general body condition is fair for cattle but good for sheep and goats. The trend is showing a decline for large stock like cattle as a result of long distances to water and pastures. In the Mixed Farming Livelihood zones, the livestock body condition is good. Birth rates are normal across all livelihood zones.

#### Tropical livestock units (TLUs) per household

On average, each household in the Marginal Mixed Farming livelihood zone has 3.34 tropical livestock units (TLUs) compared to 4.20 in a normal year. In the Mixed Livelihood zone, the TLU holding per household remained normal at 11.71, while for the Pastoral Livelihood zone, the TLU declined to 30.39 compared to the normal of 38.93.

#### Milk availability

Milk availability at household level currently averages 15-20 litres in the Mixed Farming, 4-6 liters in the Marginal Mixed and 5-8 litres in the Pastoral Livelihood zones compared to the normal 15-20, 12-14 and 6-7 litres respectively.

#### Milk consumption

The current milk consumption per household was 1.5-3 liters compared to the normal 2 - 3.0 litres across the livelihood zones. The price of milk per litre varied between Ksh 30 to Kshs. 60. Average price is Kshs. 30 in the Mixed Farming, Kshs. 30 in the Marginal Mixed Farming livelihood zone and Kshs. 50 in the Pastoral livelihood zones compared to the normal Kshs. 22, Kshs. 25 and Kshs. 30 respectively.

#### Water availability and access

The main water sources for livestock in the county are water pans, dams, and shallow wells at river beds, rivers and boreholes across the livelihood zones. The return trekking distances generally increased compared to normal, and range between three to six kilometers throughout the whole County. In the Mixed Farming livelihood zone, the return trekking distance is between two to three kilometers which is normal. The watering interval for livestock was daily in Mixed and Marginal Mixed Farming livelihood zones while it was three days interval for the Pastoral one. In the Pastoral Livelihood zone which comprises the entire Laikipia North and Loniek in Laikipia West, the water level in 90 percent of dams is dead storage. The water is polluted and not fit for consumption. Sand dams are also drying up due to sand harvesting. Half of the strategic boreholes are broken down and there is a high concentration of livestock in the few that are still functional.

#### Migration

There is significant in-migration reported in Olmoran in Laikipia West and Doldol in Laikipia North sub-county particularly from Samburu and Isiolo counties. The uncontrolled movement of livestock is a big threat to the livestock sector due to risks of disease outbreaks. Currently, Foot and Mouth disease has been reported in many parts of the county.

#### Livestock diseases and mortalities

The most serious reported disease is FMD although there is no reported mortality associated with the disease.

#### 3.3 Water and sanitation

#### **Sources of water**

The main water sources for both livestock and domestic use in all livelihood zones are rivers, streams, boreholes, dams, pans, shallow wells, roof catchment, springs and sand dams. Water sources have declined significantly, six water pans and dam were damaged and embankment swept away during the short rains 2013. The most affected areas include: Lamuria and Munyaka. In areas such as Kimakandura, Rumuruti, Muturithia and Endana water pans and boreholes have already dried up.

#### **Distance to water sources**

The households' distances to water points have increased to 2-4 kilometres and 3-6 km when compared to normal distances of 0.5-2 km and three km in the Marginal Mixed Farming and Pastoral livelihood zones respectively. In the Mixed Farming livelihood zone, household distances to water sources have remained normal at 1-3 km. The trekking distances to water points for livestock especially in the Pastoral livelihood zones is largely influenced by availability of pasture and browse. The most affected areas are Waguthiru, Wamura and Naiperere where the current walking distance is 15km, 10km and five km respectively. The change in distance to water points is attributed to break-down of the boreholes and damaged earth dams where communities have to identify other alternative sources.

#### Waiting time at the source

The waiting time at the water source in the rural areas of the Marginal Mixed Farming livelihood zone is between 0 -30 minutes and 15-30 min for piped systems and boreholes respectively. In the Pastoral livelihood zones, the waiting time has increased significantly to more than one hour, compared to the normal duration of 30-40 min. The increase in waiting time is as a result of the reduced number of water sources filled with water available at the moment as result of the continuing dry conditions.

#### **Cost of water**

The current cost of water ranges between Ksh 2 to Kshs. 5 per 20 litre jerry can across all livelihoods. Few exceptions include Sipili, Kinamba, Ol moran and Lamuria in the Marginal Mixed Farming livelihood zone, Gituamba and Marmanet in the Mixed Farming livelihood zone and Pastoral livelihood zones where the cost of water is Kshs. 3-5, Kshs. 5-10 and Kshs 10-20 respectively.

#### Water consumption

Water consumption for the Pastoral livelihood zones is between 10 litres pppd while in the Marginal Mixed Farming and Mixed Farming livelihood zones, the consumption is at 20 and 25 litres pppd respectively. Declining water sources and increased distances to water points has led to the reduced consumption of water at household level.

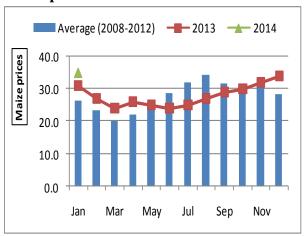
#### **Hygiene and Sanitation**

Across all livelihood zones approximately 33 percent of households lack access to latrines and employ alternative means to dispose human waste such as visiting a nearby bush or using open defecation zones. Laikipia North has the lowest latrine coverage with 55 percent of the households practicing disposal of human waste in the open fields and bushes. High incidences of water borne illnesses are common in the general population and among under-fives. Approximately 21.4 percent do not practice basic hygienic practices such as hand washing at critical times.

#### 3.4 Market and trade

The main markets in the County include Rumuruti, Sipili, Ol moran and Nyahururu. Livestock market has been greatly affected by outbreak of foot and mouth disease. Marked decrease in supply of major food commodity as many households have limited stocks as results of poor seasonal harvests.

#### Market Operations Maize prices



Maize prices remained stable at an average price of Ksh. 34.9 per kilogram in January 2014 compared to December 2013 where average price was Ksh.34.7, above the long term mean of Ksh.26.4. (Figure 2)

Figure 2: Average maize prices in Laikipia County

#### Goat prices

Goat prices have stabilized to Ksh 3,481 between December 2013 and January 2014, above the long term mean (LTM) of Ksh 1,712 for the same period. (Figure 3) The goat prices are expected to decline attributed to diminishing browse and pasture and outbreak of foot and mouth disease.

#### Terms of trade

Terms of trade are currently favorable for livestock keepers since one goat is sold to purchase 97.3 kg of maize compared to the LTA of 73kgs. Better terms of trade results into increased purchasing power for the livestock keepers.

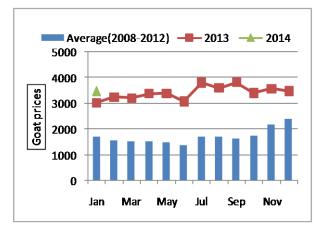


Figure 3: Average goat prices in Laikipia County

#### 3.5 Health and nutrition

#### Morbidity and mortality patterns

The five major diseases among under-fives and general population are upper respiratory tract infections (URTIs), diarrhea, skin diseases, clinical malaria, and eye infection. Increased incidence rates of all diseases for both under-fives and general population was observed in the month of July to December 2013 when compared to 2012 same period. Reported cases of measles have declined from 121 cases in July to December 2012 compared to 33 cases in 2013 same period. The crude death rate (CDR) and under-five death rate (U5DR) were 0.24 and 0.48 per 10,000 persons per day respectively. Both CDR and U5DR rates are below the alert thresholds (Integrated nutrition survey, 2012). The prevalence of human immune-deficiency virus (HIV) in the County is 5.7 percent slightly higher than national average of 5.6 percent.

### Immunization and vitamin A supplementation

Immunization coverage for the fully immunized child (FIC) in July to December 2013 was 76.6 percent; a slight decline from 79.8 percent in the same period in 2012. The immunization coverage for oral polio vaccine (OPV) 1, OPV 3 and measles in July to December 2013 was 97.7, 93.7 and 85 percent respectively. Vitamin A supplementation for children aged six to 11 months, 12 to 59 months was 115 and 81 percent respectively during the month of July to December 2013. Immunization coverage and Vitamin A supplementation are above national target of 80 percent.

#### **Nutrition and dietary diversity**

The proportion of under-five at risk of malnutrition by Mid Upper Arm Circumference (MUAC) has slightly increased from 3.1 percent in December 2013 to 3.3 percent in January 2014 although it was lower than the long term mean (LTM) of 7.4 percent. (Figure 5) Malnutrition rates among under-fives might worsen attributed to insufficient dietary intake and high incidences of childhood illnesses reported. The most affected sentinel site as indicated in the month of January 2014 is Magadi (Olmoran) with under-five less than 135 mm by MUAC at 23.4 percent. The meal frequency varies across the livelihood

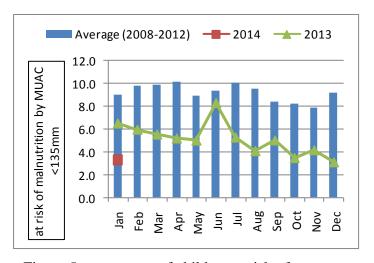


Figure 5: percentage of children at risk of malnutrition in Laikipia County

zones, with children consuming two to three meals per day which is lower compared to the normal number of three to four meals per day. In Pastoral areas where livestock migrated in search of pasture and water, meal frequency has reduced significantly among adults from normal of three meals to two meals per day. The main food group consumed in the Marginal Mixed and Pastoral livelihood zones is cereals "*Ugali*" and beverage (strong tea), an indication of scarcity of milk and other preferred foods when compared to a normal season.

#### 3.6 Education

#### **Enrolment and dropout**

The County has 262 primary schools with a total of 104,854 pupils; 51,002 and 53,852 are girls and boys respectively. It has 106 secondary schools with 25,313 students whereby 13,106 and 12,207 are boys and girls respectively. Primary and secondary school enrolment rate is at 81.2 and 47.2 percent respectively. The low enrolment in secondary schools is attributed to high costs required during admissions especially in boarding schools. Dropout rates for boys and girls are at 1.5 and 1.2 percent respectively. The high dropout rate is attributed to lack of water, lack of school feeding programs and forced marriages among girls. Despite the harsh weather conditions the attendance rate at primary schools is fairly good at 87 percent. Completion rate from primary to secondary schools is at 79 percent however, the transition rate from primary to secondary school is below minimum targets of 70 percent at 64 percent.

#### **Transition**

The transition rate from early child development (ECD) to primary school is fairly good across the County. Transition rate from primary to secondary schools is at 64 percent, below the national minimum target of 70 percent. Girls have a lower transition rate at 61 percent when compared to boys at 77.8 percent attributed to negative cultural practices such as early marriages, female genital mutilation and increased household poverty level.

#### **School Meals Programme**

Currently, 110 out of 262 schools in the County are under Home Grown School Meals Programme (HGSMP) covering only 31,786 pupils. In schools where HGSMP are existence, there is increased enrolment and attendance rates as compared to schools with no HGSMP.

#### 3.7 Coping mechanism

In the Mixed Farming Zone, the food security situation is stable and a high proportion of households reported that all members took normal and adequate three meals per day and are not engaging in any extreme coping mechanisms. In some pockets of the Pastoral zone such as Doldol, Tura, Makurian, Ilpolei, Kirimon, Ilmotiok, Ilpolei and Lamuria where food insecurity has already set in, households are employing increased coping mechanisms which include borrowing from friends, sharing food, relying on less preferred and less expensive foods and skipping meals. In the Marginal Mixed Farming zone, where farmers experienced total crop loss, households are coping by engaging in casual labour, micro-irrigation at river valley bottoms, petty trading in the rural shopping centers, charcoal burning and remittances from relatives. Out of 56, the current Coping Strategic Index (CSI) is 15 up from 12 in September 2013.

# 3.8 Ongoing interventions

# **Food interventions**

Interventio n	Objective	Specific Location	Activity target	Cost	No. of beneficiar ies	Implementat ion time frame	Implementat ion stakeholder
School Meals	Providing school lunch	Marmane t	Provision of Lunch	1.25 m	11 schools	Termly	MOE
	to vulnerable pupils	Daiga, Ngobit Sirima, Tigithi	Providing lunch	3.2m	7048	Jan to Mar 2014	МОЕ
Food relief	Food provision to families affected by drought	Laikipia North, Munyaka IDP camp	food distribution	3.5m	15,000	Logistic being finalized for immediate distribution	GOK
IMAM(OTP &SFP)	Treatment malnutrition in children	All three sub Counties	Treatment of severely and moderately malnourishe d children		12.8 percent of under- fives with GAM	January to June 2014	MOH and NSO

# **Non- food interventions**

Interventio n	Objective	Specific Location	Activity target	Cost	No. of beneficiari es	Implement ation Time Frame	Implementation stakeholders
Agriculture							
Post-Harvest Management	Reduce losses of stored produce	All Districts in Laikipia West	Training and demonstr ation	120,0 00	11,500 farm families	Oct 2013- March 2014	GOK MOAL&F
Irrigation	Increase irrigated area	Gatitu, Muthaiga	Construct ion of irrigation infrastruc ture	15m	252 farm families	Oct 2013- Oct 2015	GOK, JICA
Water Pan	Improve water availabilit y for irrigation	Muhotetu	Excavati on and cattle trough Construct ion	2.5m	2000 farmers	done	MOAL&F
NMK	Poverty and	Mokogodo	Provision of	600,0 00	200 farmers	Continuous	MOAL&F

	hunger alleviatio n		farming Grants				
Farmers Training	Improve crop and livestock productio n	Laikipia Central, Daiga	Training: crop and animal husbandr y, water harvestin g	200,0	3000farme rs	continuous	MOAL&F
Livestock							
Training and Demonstrati on in livestock production	Improve Househol d Livestock Productivi ty	Laikipia West	Training and Demonstr ations	149,0 00	22,483 Farm Families	Continuous	Livestock Department
Training of livestock officers	Improve extension skills	All Districts	Training and demonstr ation		132,635	Continuous	Livestock Department
Training of livestock officers	Improve extension skills	All Districts	Training and demonstr ation		132,635	Continuous	Livestock Department
Water	ı					1	
Construction , Rehabilitatio n, repair and Maintenance of Water points	Enhance availabilit y and access to water for HH needs, livestock and irrigation	Entire County	Construct ion works	66m	88,000peo ple	Continuous	GOK,NWSB, NWCPC, Communities, Partners
Health and Nu	utrition						
On Job Training on all HINI packages	Improved health care provision to the entire population	All three (3) sub counties	Trainings	2.4m	All health workers in 89 health facilities	Jan 2013— Dec 2014	MOH and NSO
OJT to Community health workers on HINI	Improved health care provision to the	Entire Laikipia County	Trainings	2.4m	144 CHWs attached to all health facilities	Jan 2013— Dec 2014	MOH and NSO

garden n   n	package, Kitchen garden	entire populatio						
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#### 3.9 Sub County food security ranking

Sub County	Food security rank (1- 10)	Main food security threat	Remarks
Laikipia	3-4	Crop failure, Frost bites, damaged dams and water	Food situation in alert stage and
Central/East		pans, diseases and pest, depleted stocks, declined	on deteriorating trend
		projected short rains production due to erratic	
		rainfall, livestock in-migration, FMD.	
Laikipia	5-6	High poverty, drought, outbreak of FMD, livestock	Food situation stressed and in a
North		migration, deteriorating pasture and browse,	deteriorating trend
		damaged water points (dams and water pans),	
		disrupted markets.	
Laikipia	7-8	Depleting food stocks, rising food prices, erratic	Food situation fairly stable
West		weather, poor road network,	
Nyahururu	7-8	FMD, rising food prices, poor road network	Situation fairly stable

#### 4.0 FOOD SECURITY PROGNOSIS

#### 4.1 Prognosis Assumptions

The weather forecast for the upcoming March-May long rains is expected to be normal. In the Mixed Farming Zones food security will remain normal for the next eight month owing to above average performance of the 2013 long rains. The zone mainly relies on the long rains for food production. Performance of the main food crops namely maize, beans, potatoes and pigeon peas was good and the household stocks are adequate and prices are expected to remain stable and within normal range. Livestock and pasture are in good condition hence milk availability and prices are likely to remain stable.

In the Marginal Mixed Farming zone, the situation is stressed and in a worsening trend for the next six months. About 75 percent of households are expecting a total crop failure due to the erratic weather and frequent frost bites. In addition, the previous long rains performed below average and presently, households have dwindling food stocks. The current household stocks can only last one month which implies that for the next five months when the earliest harvest is expected, the household situation will remain stressed to late alert. The other serious problem affecting the zone is the drying and damage of dams, water pans and breakdown of the existing boreholes. The water currently available is not adequate to sustain irrigation that take place during January to March dry spell. The pasture and browse has deteriorated at an alarming rate and currently the livestock body condition is fair but on a deteriorating trend until the next rainy season. Prices of milk have increased due to shortage as some animals are migrating. The outbreak of Foot and Mouth disease is a major setback to the livestock farmers as milk will continue to reduce and free sale of livestock prohibited. The water situation is stressed as dams and water collecting pans were severely damaged by the October to December short rains. If the water points are not repaired, water availability will continue to be a serious problem causing animals and farmers to trek longer distances. Some of the pockets seriously affected and where

food insecurity is at high alert include: Matanya, Wamura, Kimugandura, Segera, Ngare ngiro and at the Internally Displaced Persons (IDP) camp in Munyaka.

In the Pastoral zone, the food security situation is stressed and alarming particularly in Doldol, Tura, Makurian, Ilpolei, Ilmotiok, and Lamuria. Dry weather set in immediately after the early cessation of the October-December rain season. Due to the prolonged dry conditions, pasture and browse is deteriorating and already depleted in some cases. The livestock body condition is good to fair but worsening due to poor pasture and drying up of water points especially the dams and water pans. In the Pastoral Livelihood zone the body condition is fair to good but likely to deteriorate very fast if the current weather condition continues. Most boreholes that supply the area with water have broken down causing livestock to trek long distances, a situation that is likely to worsen in the next one month until the next rainy season in mid-March. Malnutrition in children under five is on the increase and is likely to worsen in the next two months due to reduced milk availability to the households. Livestock prices are on the decline due to oversupply in the market which has reduced and will continue to reduce income available to purchase food and meet other household needs.

#### **4.2 Food Security Outcomes**

If the long rains come on time and are normal, the food security situation will improve in the next three months in the Pastoral zone due to availability of water and rejuvenated pasture and browse, which will in turn improve livestock prices and household incomes. In the Marginal Mixed Farming livelihood zone, the situation will also slightly improve due to increased availability of water and farm produce from the irrigated agriculture. However, the stocks will remain low until the next expected harvest in July to August. Food consumption will deteriorate in both the Marginal Mixed Farming and Pastoral zones although not so adversely to cause any livelihood change. The nutritional status particularly for the children under five and the elderly will be on a deteriorating trend particularly in the Marginal Mixed Farming and Pastoral Zone until positive effects of the long rains are realized. The effects of drought and outbreak of foot and mouth disease (FMD) may result to livestock deaths unless urgent attention is made toward the control and management of disease. The food security situation will remain stable and normal in the Mixed Farming zone in the next eight months.

#### 5.0 CONCLUSION AND RECOMMENDATIONS

#### 5.1 Conclusion

Overall, the food security situation is stressed and in a worsening trend both in the Marginal Mixed Farming and Pastoral zones, though expected to improve after the onset of the March-May long rains. Water availability is a serious problem due to damaged water pans and dams and broken down boreholes. In the Pastoral Zone, none of the boreholes is working. There is an urgent need to repair damaged water points to avert further stress to the communities. To ensure fodder availability in times of drought, farmers need to be trained on fodder conservation techniques. Foot and Mouth Disease is the next major threat to livestock production after unavailability of pasture and water. Urgent measures need to be put in place to manage the disease before irreversible damage is done. To improve food availability in the wake of frequent erratic weather, farmers need to also embrace cultivation of drought tolerant crops.

#### **5.1** Summary of Recommendations (food and non-food)

- 1. Up scaling of pasture & fodder production, conservation and utilization
- 2. Capacity building for better animal husbandry
- 3. Subsidized livestock off-take
- 4. Immediate vaccination against trade sensitive livestock diseases within the County
- 5. Scaling up of high impact nutrition interventions (Hindi)
- 6. A need for integrated SMART survey to monitor current trends in health and nutrition, water and sanitation.
- 7. Strengthen peace building as well as close monitoring of conflict prone areas especially Ol Moron in Laikipia West and all other entry points of livestock from other sub Counties
- 8. Enhance maintenance and servicing of key community water facilities
- 9. Promotion of drought tolerant crops and crop diversification
- 10. Promotion and up-scaling of micro-irrigation schemes
- 11. Water harvesting and large scale irrigation infrastructure
- 12. Introduce and strengthen community school feeding programmes
- 13. Construction of more public primary and secondary schools
- 14. Up scaling of outreach health services to contain increased cases of communicable diseases including URTIs, diarrhea and malaria among under-five and general population.
- 15. Strengthen efforts on promoting latrine coverage by supporting communities with available materials to construct of latrines

#### 6.0 ANNEXES

# Annex 1. Food Intervention Required Proposed population in need of food assistance

Sub County/Ward	Population (2013 projections)	Population in need % range (min- max)	Proportion of total population	Proposed mode of intervention
Laikipia East	128,775	14.5-24.5 %	19.5%	General Food Distribution
Laikipia West	227,355	8.5-16.5%	11%	General Food Distribution
Laikipia North	78,732	16.2-26.7%	21.7%	General Food Distribution
Total	434,862	11.9-22.3 %	17.3%+IDPs	

# **Annex II. Non-food Interventions**

Division/War d Name	Intervention	Location	No. of benefici aries	Proposed Implementers	Required Resources	Available Resource s	
Agriculture							
East(Central)	Drip irrigation adoption	All		MOA staff, farmers, Lengetia Farm and other stakeholders	Drip kits, fuel, training materials, man days, technical staff	Technical staff	Long term.
	Green houses adoption.	All		MOA staff, Syngenta, Amiran and other stakeholders	Green house construction materials, Capacity building materials, technical staff	Technical staff,	Long term.
	Conservatio n Agriculture adoption.	All		MOA staff, Lengetia Farm, farmers		Technical staff	Long term.
	Production of DECS.	All		MOA staff, farmers, Lengetia farm, KARI Machakos	Certified seeds/planting materials, Technical staff, land	Technical staff	Long term.
	THVC	All	300	County Govt.	Seeds funds personnel	Personal land	1 yr
	Water harvesting (pans)	County	10,000	County Govt.	Machinery Fuel Funds	Personal land	5 yr
	Agro- forestry	Whole	20,000	cc	Seedlings	Land	5 yr
Livestock							
Laikipia North	Promotion of storage of animal feed (hay)	Ilng'wesi , Makurian , Ilmotiok	6000	Livestock Production Department	Funds Seeds Transport Personnel	Personnel	September - December
	Better coordination of key stakeholders of beekeeping	Ilng'wesi , Makurian , Ilmotiok	6000	Livestock Production Department	Funds Transport Personnel	Personnel	February to September