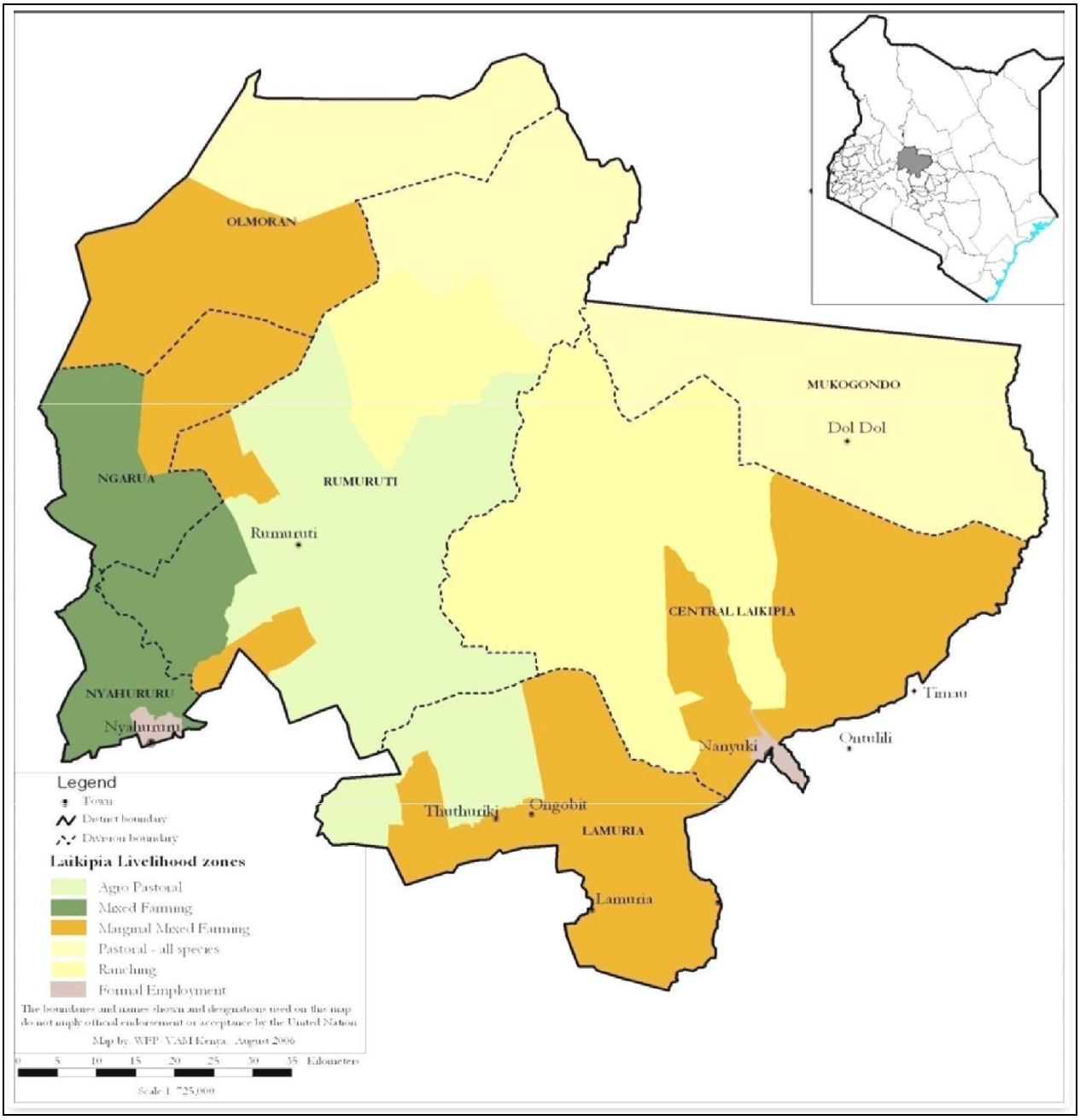
LAIKIPIA COUNTY 2014 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



A Joint Report by Kenya Food Security Steering Group (KFSSG)[1] and the Laikipia County Steering Group (CSG).

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1.0 INTRODUCTION

1.1 County Background

Laikipia County is located to the North West of Mount Kenya within the Great Rift Valley. The County borders Samburu to the North, Isiolo to the North East, Meru to the South, Nyandarua, Nyeri and Nakuru Counties to the South West and Baringo County to the west. The County covers an area of 9,462 square kilometers and has a population of 399,227 (2009 National Census, Kenya National Bureau of Statistics). Laikipia is classified into three main sub-counties namely: Laikipia West, North and East.

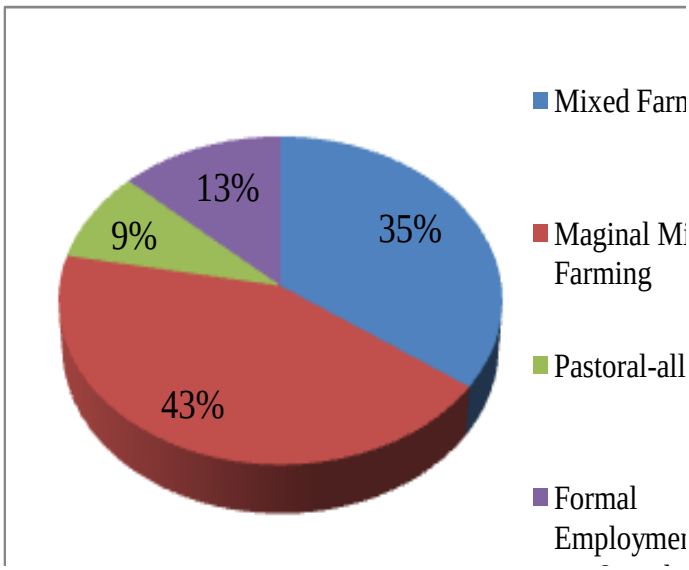

Figure 1: Population Proportion by Livelihood

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 (MF), Marginal Mixed Farming (MMF), Pastoral and Formal employment. Population distribution by livelihood zone is as illustrated in figure 1.

1.2 Current Factors Affecting Food Security

- Influx of livestock migrating into the county.
- Erratic and poorly distributed rainfall.
- Conflicts and insecurity in livestock grazing convergence zones
- Incidences of frost bite
- Human wildlife conflicts
- Cattle rustling incidents
- Maize Lethal Necrotic Disease

2.0 COUNTY FOOD SECURITY SITUATION

2.1 Current Food Security Situation

The County is generally classified as “Stressed” (Phase 2) according the Integrated Food Security Phase Classification (IPC). Mixed Farming livelihood zone is classified as “None or Minimal” (Phase 1) while the Pastoral-all species and Marginal Mixed Farming (MMF)

livelihood zones are in Stressed (IPC Phase 2). Current terms of trade were better as the sale of one goat can be exchanged for 83 kilograms of maize compared to the long term average (LTA) where the sale of one goat is exchanged with 76 kilograms of maize. Household water consumption is 30 litres per person per day in mixed farming zones, 20 litres in marginal mixed and 10 litres in the pastoral livelihood zones. The coping strategy index (CSI) for non-beneficiary households was 21 in Dec 2014 compared to 25 during the same period in 2013. The percentage of children 'at risk' of malnutrition measured by Mid Upper Arm Circumference (MUAC) < 135 mm was at 2.7 percent in Dec 2014 and is below the long term average of 8.5 percent.

2.2 Food Security Trends

Most indicators show a deteriorating situation compared to the previous assessment (August 2014) due to ongoing dry spell. Milk consumption has slightly declined across all the livelihoods compared to last assessment and is expected to decrease further in Pastoral areas due to migration and competition for pasture with livestock coming from outside the county. Current terms of trade are better than in August 2014 but expected to decline as body condition of livestock deteriorates due to long distance to water and pasture sources. Household water consumption is 30 litres per person per day in mixed farming livelihood zones while in marginal mixed and pastoral-all species livelihood zones it ranges between 20 litres and 10 litres per person per day respectively, the consumption rates are slightly better compared to the previous assessment. The percentage of children "at risk" of malnutrition indicates a generally worse situation compared to August 2014 although it is lower than the long term average. Immunization coverage has declined from 78.5 percent in August 2014 to 55 percent in December 2014 due to lack of health outreaches.

2.3 Rainfall Performance

The onset of the October-November-December rains came at the second dekad of October as expected. Temporal distribution of rainfall was fair in Laikipia West, poor in Laikipia East and North while spatial distribution was uneven across the livelihood zones (Figure 2). Most parts of Laikipia West Sub-County and parts of Laikipia East received 90 - 125 percent of the normal rainfall while Lonyek, Olmoran and Mwenje received 125 - 140 percent of the normal. Localized areas of Laikipia North and Lamuria area of Laikipia East received 25 - 50 percent of the normal whereas Ethi and Sangaa areas received 5 - 25 percent. The rains ceased

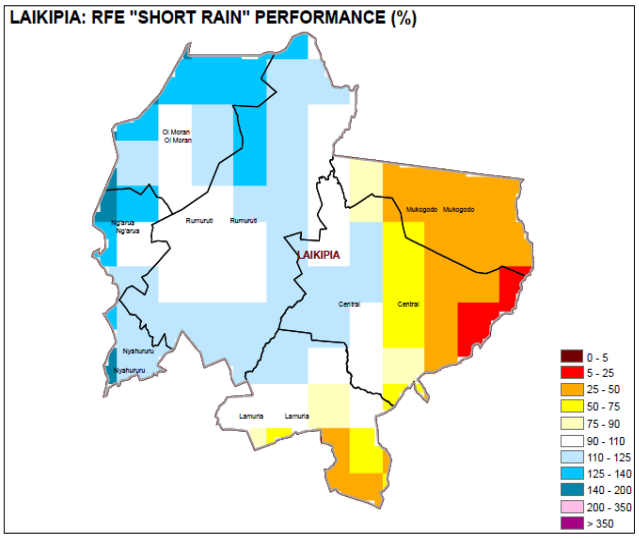

Figure 2:Rainfall performance as a percent of normal

early in the first dekad of December compared to the normal of third dekad of December

2.4 Current Shocks and Hazards

Current shocks and hazards affecting food security in the county are erratic rainfall, Maize Lethal Necrotic Disease (MLND), human/wildlife conflicts, frost bites, insecurity, (livestock rustling) conflicts over pasture and drought.

3 .0 IMPACT OF RAINFALL PERFOMANCE, SHOCKS AND HAZARDS

3.1 Crop Production

Introduction

Marginal Mixed Farming and pastoral livelihood zones are short rains dependent while the mixed farming livelihood zone is long rains dependent. Maize, beans and potatoes are the main crops planted during the season; in the marginal mixed farming zone, maize contributes 12 and 66 percent to cash income and food respectively, while beans contribute 40 and 11 percent to income and food respectively. In the mixed farming livelihood zone, maize contributes 55 and 65 percent while beans contribute to eight and 15 percent for both cash income and food respectively.

Rain fed Crop Performance

Laikipia West which is considered the grain basket for the county is long rains dependent. There was little harvest realized for Laikipia West during the long rains due to erratic rainfall and Maize Lethal Necrosis Disease. Laikipia North which is largely pastoral and Laikipia East which is short rains dependent for crop production. Acreage under maize during the season increased by four percent of the Long Term Average LTA (4,200 Ha) while acreage under beans and potatoes decreased by 16 and 17 percent compared to the LTA respectively. Increase in acreage under maize was attributed to the projected normal to above normal rainfall.

Production for maize declined by 75 percent of the LTA despite the increase in area cultivated while that of beans and potatoes decreased by 40 and 93 percent of the LTA respectively (Table 1). Decrease in production of potatoes and beans was attributed to the use of uncertified seeds, millipede attack, blight, frost bite and moisture stress at critical stages of flowering. Reduced production for maize was attributed to inadequate moisture at critical levels of germination and tasseling compounded by Maize Lethal Necrosis Disease.

Table 1: Rain-fed Agriculture

Crop	Area planted during the 2015 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2015 Short rains season production (90 kg bags) Projected/Actual	Average production during the Short rains season (90 kg bags)
Maize	4,365	4,200	22,725	92,000
Beans	1,930	2,288	9,922	16,540
Potatoes	1,436	1,735	4,359	60,900

Crop Performance- Irrigated Crop

There was a decrease in area planted under irrigation by 14 and 31 percent of LTA for tomatoes and cabbages respectively attributed to minimal amount of water for irrigation while the acreage for onions increased by 20 percent of LTA because part of the area for snow peas production was converted to onions, which is hardier. Production declined by 39 and 24 percent of LTA for tomatoes and cabbage respectively whereas there was an increase by 20 percent of LTA for onions (Table 2).

Table 2: Irrigated Agriculture

Crop	Area planted during the 2015 short rains season (Ha)	Long Term Average area planted during the Short Rains (Ha)	2015 Short rains production Projected/Actual	Long Term Average production during Short rains season
1. Tomatoes	176	205	1650 Tonnes	2710 Tonnes
2. Cabbages	55	80	1260 Tonnes	1650 Tonnes
3. Onions	24	20	60 Tonnes	50 Tonnes

Maize Stocks in the County

Maize stock held at county was 30 percent of the Long Term Average (LTA). Stocks at household declined by 71 percent compared to the LTA of 318,300 - 90Kg bags attributed to erratic performance of rains, and Maize Lethal Necrosis (MLN) in mixed farming and marginal mixed Farming. Harvest is always expected to be highest during this season because long rains and short rain crops are harvested. Community interviews in Ngarua, Sipili, Rumuruti and Olmoran which are long rains dependent indicated that more than 50 percent of the farmers had nothing to harvest; this combined with the failed crops in Laikipia East and North led to low stocks. Stocks held by traders and millers reduced by 70 and 77 percent of the LTA respectively. Stock held by NCPB decreased by 25 percent of the long term average of 33,550 bags (Table 3).

Table 3: Maize stocks

Maize stocks held by	Quantities of maize held (90-kg bags)	Long Term Average quantities held (90-kg bags) at similar time of the year
House Holds	93,320	318,300
Traders	47,369	160,150
Millers	32,263	141,045
NCPB	25,235	33,550
Total	198,197	653,045

The available household stocks were projected to last one month in mixed farming and marginal mixed farming against the normal range of four to five months. However, in pastoral and some pockets of marginal mixed farming, the stocks were depleted and now they rely on markets.

3.2 LIVESTOCK PRODUCTION

Introduction

Livestock contributes about 50 - 60 percent and 90 percent to cash income in marginal mixed farming and pastoral livelihood zone respectively and 30 percent cash income in mixed farming zone. The main livestock species in the county are cattle, sheep, goats and camels.

Pasture and Browse

Pasture condition was good in the mixed farming livelihood and is expected to last three months due to availability of crop residue which is normal. In marginal mixed farming and pastoral livelihood; pasture was fair but below normal. Influx of livestock from neighboring counties of Baringo, Isiolo and Samburu and erratic rainfall has increased pressure on pasture and is expected to last for 1 - 2 months in the marginal mixed farming and pastoral livelihood compared to the normal of 2 - 3 months. Browse condition was good across the livelihood zones and expected to last three months in mixed farming and marginal mixed farming which is normal. In the pastoral livelihood, browse is expected to last two months compared to the normal three months.

Livestock Productivity

Livestock body condition

The current livestock body condition in pastoral livelihood was fair for cattle and good for sheep, goats and camels. In the marginal farming and mixed farming livelihood the condition for cattle, sheep and goats was good. Body condition for all species was normal compared to same season last year. Body conditions for both cattle in pastoral and marginal mixed zone is projected to decline due to the increasing distances to pasture and water points while goat, sheep and camel are likely to show gradual decline as available pasture and browse get depleted due to influx of livestock from neighboring counties.

Birth rate and Milk availability

Birth rates in the county were within normal range for all the livestock species. Milk production was mainly from cattle and camels with availability at household level being below normal across the livelihoods. Milk production was 10 - 15 litres in the mixed farming, 5 - 6 litres in marginal mixed farming and pastoral livelihood zones compared to the normal of 15 - 20, 12 - 14 and 6 - 7 litres in the mixed farming, marginal mixed farming and pastoral livelihood zones respectively.

Milk consumption

Milk consumption at household level across all the livelihoods was at 1 - 2 litres compared to the normal of 2 - 3 litres. Reduced consumption especially in pastoral areas was attributed to migration of cattle in search of water and pasture. Camel and goat milk was used to supplement the diet as these livestock were still within the households' reach. Milk prices was Ksh. 28, 30 and 40 in the mixed farming, marginal mixed farming and pastoral livelihoods respectively compared to the normal price of Ksh. 25, 22 and 30 per litre.

Tropical Livestock Units (TLU)
Households in the MMF livelihood zone had 2.4 TLUs compared to the normal of 4.2. In the mixed farming livelihood zone the TLU holding per household remained normal at 11.7 while for pastoral livelihood zone the TLU increased to 42.39 compared to the normal of 38.9.

Water for Livestock
The major water sources for livestock currently are water pans/dams, shallow wells and river beds. Water levels across the county are below normal attributed to inadequate recharge of sources and in-migration of livestock from Baringo, Isiolo and Samburu. Return trekking distance for livestock remained normal at 1 - 1.5 Km in mixed farming and 5 - 6 km in pastoral and marginal mixed farming with an exception of Olmoran and Kimanjo areas where livestock trek more than 10 kilometres. The frequency of watering was daily in the mixed farming and marginal mixed farming while in the pastoral zone they were watered on alternate days which is normal at this time of the year.

Migration
There was an estimated 40,000 - 50,000 cattle from neighboring counties of Baringo, Isiolo and Samburu into Laikipia county. Few cases of out-migration towards Mt. Kenya and Ndaragwa forest in search of pasture and water was reported and anticipated to increase in the course of the month due to pressure from in-coming livestock. Pastoral communities around ranches have been given a section in the ranch to graze their animals at a fee but due to pressure from in-migrating livestock, there have been reported cases of invasion of private ranches and conservancies especially at night. The current migration routes are: from Baringo to Laikipia (Churo to Ol Moran, Mochongoi to Ng'arua and Mochongoi to Marmanet and Rumuruti forests); From Samburu to Laikipia; From Isiolo to Mukogodo forest. Migration within the county is from Laikipia North Sub County to Laikipia East and towards Mt. Kenya. Current migration routes within the county and from other counties are normal.

Livestock Diseases and Mortalities
There were no reported cases of livestock disease outbreak because of enhanced vaccination and rehabilitation of cattle dips in the county, however, there is fear of disease outbreak due to the on-going migration of livestock. Current livestock mortality rates for cattle, goats and camels are normal across livelihood zones.

3.3 Water and Sanitation

Introduction
The main water sources in the county for both domestic and livestock use across all livelihood zones are rivers, streams, boreholes, piped water systems, dams/pans, shallow wells, springs, sub surface dams and sand dams which account for about 80 percent of water requirement. Other alternative sources are roof catchments for both mixed farming and marginal mixed farming livelihood zones. Localized percolation and inter basin water transfers assist in recharging of boreholes and shallow wells while surface run offs assists in recharging earth dams, pans and any other conservation structure.

Major Water Sources

In all livelihood zones, status of water sources were diminishing due to high evaporation resulting from poor performance of the short rains and the dry spell currently being experienced. Recharging of boreholes was low due to poor short rains. Areas with low water point concentrations are in the North Eastern, Central and North Western parts of pastoral zones in Mukogodo and few pockets of marginal mixed in Rumuruti and Olmoran attributed to breakdown of pumps and utilization by large numbers of livestock. In mixed farming areas, most sources are within normal except where degraded or broken down facilities are situated.

Distance to water sources

Distances to water sources remained within normal ranges across all livelihood zones. In the MF, the distances vary from 1.5 - 2.5 kilometres while in the MMF areas the distances range from 1 - 2 kilometres which are also within normal range. In pastoral livelihood zones walking distance of four kilometers is within normal consideration. Water trucking was being done to primary schools and health facilities in pastoral livelihood zones.

Waiting time at the source

Waiting time at water points in the urban settlement ranges from 0 - 15 minutes. In the MMF zones waiting time at the source is between 0 - 20 minutes for piped water systems and 15 - 20 minutes for boreholes while for rivers/ streams, dams and pans have free water access and hence no waiting time. In the pastoral livelihood zones waiting time at source is 30 - 45 minutes which is slightly higher compared to normal which is 30 - 40 minutes.

Cost of Water

The cost of 20 litres jerrican of water is Kshs.3 across the livelihood zones except in some parts of Sipili, Kinamba and Ol Moran in marginal mixed farming that goes for Kshs.3 - 5 and Kshs.5 - 10 in areas of Gituamba, Nyahururu and Marmanet all in mixed farming livelihood zones compared to normal Ksh.2. In Doldol which is under pastoral livelihood zone a 20 litres jerrican costs Kshs. 20 - 25 compared to normal Ksh. 2 - 3 and this is due to declining water levels in available water pans and breakdown of boreholes.

Water consumption

Household water consumption is about 30 litres per person per day in mixed farming livelihood zone and 20 liters per person per day in the marginal mixed farming, and 10 litres per person per day in the pastoral livelihood zone. The average consumption is expected to continue declining until onset of long rains.

Sanitation and Hygiene

The possible water contamination sources are illegal irrigation chemicals and animal sprays upstream of dams and other sources. The average latrine coverage in the county is 77 percent against the target of 100 percent. This is an increase of 10 percent compared to the same period

the previous year. The increase is due to establishment of Community Led Total Sanitation (CLTS) activities and community health strategy in the county. Low coverage is common in pastoral areas due to construction cost, nomadic lifestyle of most households and cultural beliefs.

Solid waste management is mainly done through refuse pits and crude dumping. Disposal of liquid waste in urban population is done through soak pits and septic tanks but are limited to about five to eight percent due to the prohibitive construction costs. General hygiene including washing of hands after visiting the toilet is low in most of Ol moran areas. Community interviews revealed that open defecation attributed to retrogressive cultural practices has led to an increase in diarrhea cases. Latrine utilization at Maudumere and Olmoran was 50 and 40percent respectively.

Water borne diseases could be attributed to open defecation in the bushes coupled with low level of water treatment across the county as noted in Kimanjo during the transect drive. Chemicals for water treatment although acceptable, are not available across all livelihood zones except in urban areas. Approximately 50 percent of the households boil water for drinking, as was noted in areas of Matanya, Olmoran, Githuma, Maudumere , Ilpolei, Doldol during the community interviews.

3.4 Markets and Trade

The main livestock and commodity markets in the county are Nyahururu, Nanyuki and Rumuruti. Other small markets are spread across the county and were found to be functional during the assessment period. Supply of animals for sale has increased due to the in migrating livestock leading to low livestock prices. Cereal prices are stable across the livelihood zones but expected to increase due to diminishing stocks in the county.

Market Operations

Maize price

The average price for maize in the county in January was Ksh.39 which is 26 percent higher than the LTA and 11 percent higher than the same period in 2014. High price is attributed to declining stocks in the county following poor harvest. Prices are expected to increase further as noticed during the market visits in the pastoral livelihood where maize was selling at Ksh. 50 per kilogram. Throughout 2014 the price was consistent with the long term average trends as shown in Figure 3.

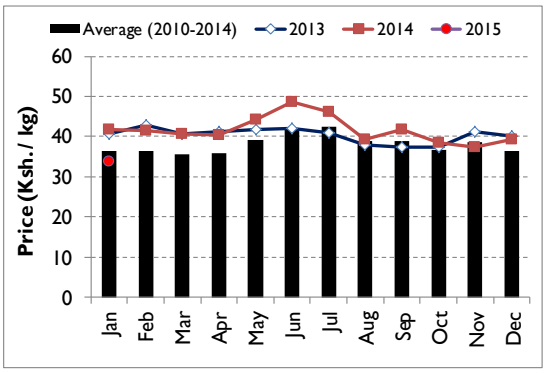

Figure 3: Maize prices in Laikipia County

Goat Prices

Goat prices vary across the livelihood zones with prices ranging between Ksh. 3,000 - 4,000 noted during the community interview. Current goat price was Ksh. 3,256, which is 39 percent above the LTA but lower than 2014 as indicated in Figure 4. Prices are expected to reduce as the dry spell continues, this will affect the body condition of livestock. Due to high prices of maize, the farmers will sell more of their small stock (goats) to buy food.

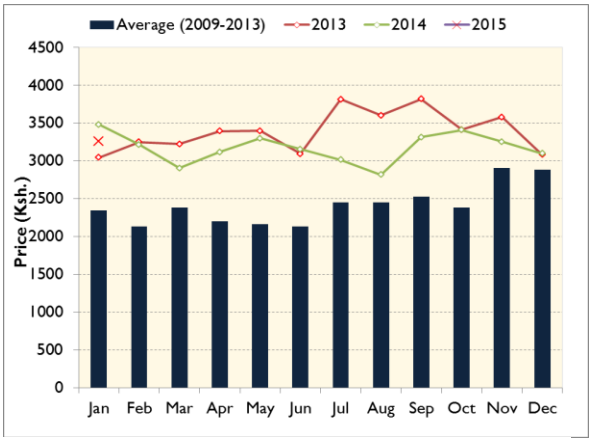

Figure 4: Goat Prices

Terms of Trade

In January 2015 the sale of one goat exchanged for 83 kilograms of maize indicating better terms of trade compared to the LTA of 76 kilograms. Terms of trade in 2014 was consistently above the LTA but below what was recorded in 2013 as shown in Figure 5. Trend is expected to reverse from Feb 2015 due to the diminishing pasture and browse together with high number of livestock being offloaded to the market from migrating pastoralists.

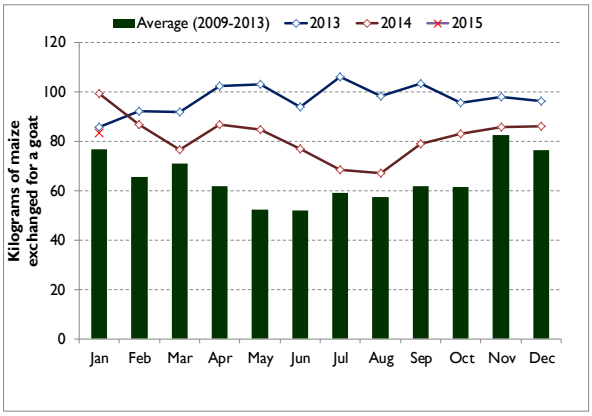

Figure 5: Terms of Trade

3.5 Health and Nutrition

Morbidity and mortality patterns

The major causes of morbidity and mortality among under-fives and general population are upper respiratory tract infections (URTIs), diarrheal diseases, skin diseases, clinical malaria, and eye infection. Generally there was down ward trend for under five population in all diseases except diarrheal diseases, skin and eye infection showing slight increase. This was due to lack of integrated outreaches and supportive supervision across the county by both County Health Management Team (CHMT) and Sub County Management Team (SCMT). Reported cases of measles have increased from 33 cases in July to December 2013 compared to 97 cases in 2014 same period. Dysentery cases also increased from 50 to 90 in the same period. Typhoid cases

declined from 141 cases reported in July to December 2013 compared to 81 cases in 2014 same period.

The Crude Mortality Rate (CMR) stood at 0.24 per 10,000 persons per day and the Under Five Mortality Rate (U5MR) stood at 0.48 per 10,000 persons per day which is below the alert levels of one person per 10,000 persons per day according to Integrated Health and Nutrition Survey of August 2012. No recent survey has been conducted.

Immunization and vitamin A supplementation

Immunization coverage for the fully immunized child (FIC) in July to December 2014 was 55 percent compared to 76.6 percent in the same period in 2013, this was a significant decline due to lack of integrated health facility outreaches and supportive supervision across the county attributed to by a disconnect between the Health County team and Sub County teams due to transition process, this resulted to poor coordination of health activities. The immunization coverage for oral polio vaccine (OPV) 1 and (OPV) 3 in July to December 2014 was 112.3 and 86.7 percent respectively. Vitamin A supplementation for children aged between six to 59 months was above 89 percent during the month of July to December 2014 compared to 81 per cent in 2013 same period.

Nutrition and dietary diversity

Dietary diversity varied across the livelihood zones. Households in the marginal mixed farming and pastoral livelihood zones prefer *ugali*, githeri, rice, cabbage and milk which is normal. Exclusive breastfeeding stands at 67.8 percent which is below the national target of 80 percent. Breastfeeding practices differ by livelihood zones, in mixed farming and marginal mixed farming zones exclusive breastfeeding is well practiced however it is stopped before two years of age while in pastoralist zones exclusive breastfeeding is partially practiced and can continue up to two years of age. In the absence of exclusive breastfeeding, children are given porridge, mashed potatoes and bananas, milk and some fruit according to the seasonality and zone**.**

The percentage of children 'at risk' of malnutrition measured by Mid Upper Arm Circumference (MUAC) < 135 mm was at 3.5 percent in Jan 2015 and below the long term average of 8.3 percent as illustrated in Figure 6. The percentages indicate a generally stable nutrition status among the children under five.

Households are consuming 1 - 3 meals per day which is normal for this time of the year. Children under five years consume 2 - 3 meals per day which is lower than normal of 3 - 4 meals per day.

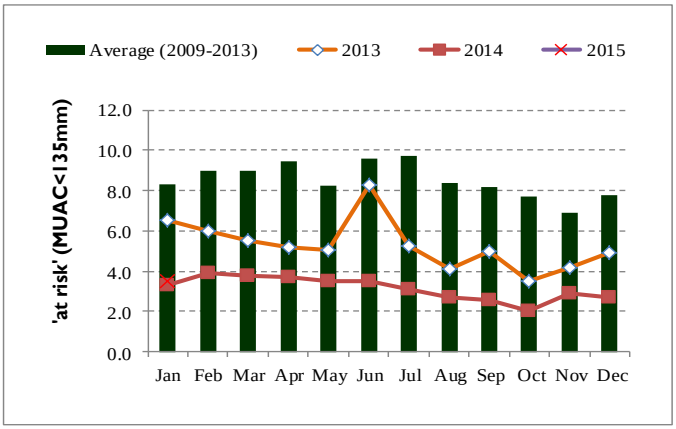

Figure 6: Children at risk of malnutrition based

Children 6 - 23 months are fed 3 - 4 times
per day which is normal. 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 1 - 2 meals per day.

3.6 Education

Enrolment and dropout

The County has 262 primary schools with a total of 104,854 pupils; 51,002 boys and 53,852 girls. It has 106 secondary schools with 25,313 students of which 13,106 and 12,207 are boys and girls respectively. Primary and secondary school enrolment rate is at 44.3 and 50.65 percent respectively. The difference between the boys and the girls is very insignificant but the rates are generally very low for the entire county. 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 1.1 and one percent respectively. The dropout rate is attributed to lack of water, lack of school feeding programs and forced early 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 for girls and 83 percent for boys.

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 65 percent, below the national minimum target of 70 percent. Girls have a lower transition rate at 61 percent when compared to boys at 67.77 percent attributed to retrogressive 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 there is HGSMP, there is increased enrolment and attendance rates as compared to schools with no HGSMP.

3.7 COPING MECHANISM

The coping strategies index (CSI) was at 23 for beneficiaries and 21 for non-beneficiaries which is a slight decrease compared to the previous of 24 and 25 for beneficiaries and non-beneficiaries respectively in 2013. In 2012 the CSI was 21 for both beneficiaries and no- beneficiaries. During transect drive in the pastoral and MMF livelihood zone the prices of basic food commodities were found to be cheaper compared to same period in the previous year. Charcoal burning, construction and fetching water for sale were the main coping strategies in the MF and MMF. The most common type of strategy being employed was the reduction in the number of meals to one and two per day for both children and adults in pastoral and MMF respectively.

Food Consumption Score (FCS) for Dec 2014 indicated that 5, 22 and 73 percent of non-beneficiaries had poor, boarder line and acceptable FCS respectively symbolising an

improvement in food security compared to Dec 2013 where 15, 71 and 14 percent of non-beneficiaries had poor, borderline and acceptable FCS respectively.

3.8 ONGOING INTERVENTIONS

Food interventions

Non Food Intervention

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Agriculture							
Laikipia East and West Sub Counties	Sensitization on Maize Lethal Necrosis Disease	Ngarua Rumuruti Ol moran		County Government			
Laikipia East and West Sub Counties	Crop diversification	Ngarua Rumuruti Ol moran		County Government			
Laikipia North	Conservation Agriculture	Segera	1358	County Government			
Laikipia North	Water Harvesting	Makurian	1700	County Government	2M		2years
Laikipia East	Irrigation for Livestock Fodder	Ngobit and Nanyuki	200HHs	County Government	1.5 M		
Livestock							
Laikipia East, West and North	Cattle dips rehabilitation	Losogwa, Arjijo, Mirera, Koinja	800 HH	County Government	1.8 M		
Laikipia East, West and North	Abattoirs development and Environ Impact Assessment	Rumuruti, Chumvi, Doldol, Sipili	450 HH	County Government	7 M		
Laikipia North	Range Management (Grass seeds)		50 HH	County Government	104,000		
Laikipia County	Vaccination against FMD, Rabies		650 HH	NDMA	7M		

Laikipia West	Development and rehabilitation of Livestock sale yard	Sipili, Rumuruti, Ol moran	250 HH	County Government	0.8 M		
Laikipia West and East	Construction and Installation of milk coolers	Winyitie, Matanya, Muhotetu, Ngarua	300 HH	County Government	27M		
Laikipia East, North and West	Fish pond development	Ngobit, Rumuruti, Umande, Githiga, Igwamiti, Salama and Thingithu	10 Schools	County Government	1M		

Education							
Laikipia East, North and West	Homegrown school feeding programme	Laikipia East, North and West	110 Schools	MoE			
	Tanks for Schools	Laikipia East, North and West		MoW MoE			
Water							
Laikipia North East	Water trucking	Mukogodo East and West Lamuria	5000 HHs 20 Schools	MoW NDMA	On going	GOK through NWSB	

4.0 FOOD SECURITY PROGNOSIS

4.1 Prognosis Assumptions

- Long rains will be timely in terms of onset, amounts and distribution.
- Maize production is expected to reduce due to MLND that affected the county and requires two closed seasons before growing maize again.
- The maize prices are expected to marginally increase while livestock prices may be stable except for pastoral livelihood where pasture is fast depleted.
- Pastoralist will return to their normal grazing areas at the onset of the long rains.
- Food security is expected to deteriorate; the current household stocks available will last for one month. In the Marginal Mixed Farming and pastoral livelihood zones, pasture and browse available - is likely to last 1 - 2 months while in the mixed livelihood zone, it is likely

to last 3 - 4 months. Malnutrition rates for the children under five is likely to increase further owing to reduced milk availability and food stock at the household level.

- Water available in the county is expected to last for 1 - 2 months
- Other factors likely to impact negatively on food security situation are wildlife menace, in migration of livestock from other districts as well frost bite in parts of central and Lamuria mainly affecting the marginal mixed livelihood zone.

4.2 Food Security Outcomes in the next three months

The food security situation across all the livelihoods is expected to deteriorate and more so in pastoral areas where children and women are left behind as men migrate with the livestock. Currently, maize stocks are minimal in the county and attracting a higher price than the LTA although there are large numbers of traders bringing maize from outside the county. Pasture and browse condition is expected to deteriorate further due to the on-going drought and pressure from in migrating livestock from neighbouring counties of Baringo, Isiolo and Samburu. As a result, livestock body condition is also expected to deteriorate. Livestock prices are expected to remain stable in the mixed farming and marginal mixed farming livelihood zones, however in the pastoral livelihood zones, the prices may decline. Terms of trade are expected to reduce due to decreased availability of pasture and increasing prices of maize. Nutrition status of children under five is expected to deteriorate.

4.3 Food Security Outcomes for the last three months (June, July, August)

Positive change in the food security is expected from the harvest of short season crops (potatoes, and beans) and increased milk production from May. Maize stock supply in the markets will be low leading to increased market price until July when harvest is expected. Pasture and browse will be regenerated providing ready feed for livestock and consequently, the livestock body conditions will improve resulting in increased milk production for home consumption and sale. Livestock market prices are expected to improve leading to better terms of trade. Water availability and access is expected to improve across the livelihoods following the long rains. Nutrition status of the under -fives is expected to improve due to milk availability and harvest of short season crops.

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

It is projected that food security will decline for the next two months in all the livelihood zones with the hard hit being pastoral and marginal mixed farming; however, the situation is expected to improve with the onset of long rains in March. Pasture will rejuvenate and livestock that have migrated will be back thus improving milk availability in the pastoral livelihood zone. Effects of Maize Lethal Necrotic Disease is expected to impact negatively on maize production because most farmers prefer maize crop for food; the affected soils require two closed seasons which is not likely to be observed by the farmers. There will be increased movements of livestock from neighboring counties of Baringo, Isiolo and Samburu to Laikipia County coupled with migration from the county to Mt. Kenya and Ndaragwa forest in search of pasture and browse; this may lead to conflict over pasture and water with the local ranchers and conservancies. Human wildlife conflict is projected to increase as the pastoralists invade ranches and conservancy and

also as the wildlife move into farm land in search of pasture and water. Close monitoring on their food security will be required due to increase in migration, low water availability, human wildlife conflicts, high malnutrition cases in Laikipia North and adverse coping strategy methods.

5.2 Summary of Recommendations (food and non-food)

- Scale up of pasture & fodder production, conservation and utilization
- Scale up de-worming, Vitamin A supplementation for the 12 - 59 months through outreaches and at ECD centers to reach the national target of 80 percent and increase the number of integrated health and nutrition survey.
- Focus on livelihoods programmes that improve and sustain dietary diversity such as Home Grown gardens- by MOE and MOA
- To increase community strategy units and train more community Health Workers to reach all community far from the health facilities.
- Health and Nutrition SMART Survey is highly recommended so as to understand the nutritional status of the county for appropriate action.
- Sensitization of the community on Wildlife Conservation Act
- Enhance community peace building initiatives especially along the entry points of livestock from other counties.
- Rehabilitation of no functional boreholes, dams and water pans
- Crop diversification, promotion of Drought Tolerant Crops ad legumes
- Promotion and up-scaling of micro-irrigation schemes
- Campaign against Maize Lethal Necrotic Disease, two closed season for maize
- Promotion of Conservation Agriculture
- Promotion of pasture and fodder conservation with emphasis on hay baling and utilization of crop residues.
- Scale up extension services through electronic means

6.0 ANNEXES

Annex 1: Food intervention required

Table 5: Proposed population in need of food assistance

Sub County	2014 LRA % in need	2015 SRA % in need	Proposed mode of intervention	Remarks
Laikipia East	15%	20 - 25%	C/FFA	Tigithi and Ngobit wards who are SR dependent and there was failed harvest, erratic rainfall Human wildlife conflict

Laikipia North	20%	20 - 25%	C/FFA	Sosian, Mukogodo East and Mukogodo West Wards Higher levels of malnutrition (Inadequate water, hygiene) Migration of livestock Initial conflicts over resources Human wildlife conflict
Laikipia West	10%	15 - 20%	C/FFA	Olmoran, Rumuruti and Salama wards Highly affected by MLND Erratic rainfall Long rain dependent which was erratic Human wildlife conflict

Annex II. Non-food Interventions (by sector)

Specific food security related recommended medium to long term

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Agriculture							
Laikipia East and West	Relief seeds for Legumes	Salama, Olmoran Rumuruti	66,000	County Govt (MoALF)	144M	Staff	Feb – April 2015
Laikipia East, North and West	Conservation Agriculture	Salama, Olmoran Rumuruti Segera	10,000 farmers	MoALF	funds	Trained staff	March – May 2015
Livestock							
Laikipia North West	Promotion of Hay production	Ilng'wesi, Makurian, Ilmotiok Rumuruti	8000	Livestock Production	Funds Seeds Transport Personnel	Personnel	Feb to July 2015
	Promotion of Bee keeping	Ilng'wesi, Makurian, Ilmotiok Rumuruti	8000	Livestock Production	Funds Transport Personnel	Personnel	February to September 2015
Education							
Laikipia North and East	Water trucking to Schools	Mukogodo West and East, Tigithi	6677	MOE , MOW ,CDF, NDMA	funds	Water boozers	Jan to March 2015
Health							
Laikipia North ,East and west	Scale-up IMAM	County	10,917 Children	MOH, NSO	Finance Vehicles	Human Resource	Jan – June 2015
Laikipia County	SMART) Survey	County		MOH and partners			March 2015
Laikipia North ,East and west	Training of ECD teachers on Vitamin A supplementation and deworming.	County	10% ECD Teachers	MOH, NSO	Finance Vehicles Fuel	Human Resource	Feb –July 2015
Laikipia North ,East and west	Scale-up Integrated health and nutrition outreaches	County	20 sites in the county	MOH, NSO	Finance, Vehicles	Human Resource	Feb – June 2015

Water							
Laikipia North ,East and west	Servicing of boreholes, Water pans and Dams	Laikipia	20,000	GOK through NWSB NDMA	Funds	Personnel	Jan – April 2015
Laikipia North and East	Fuel subsidy to motorized boreholes		6,096 6,648	GOK through NWSB NDMA	Fuel	Personnel	Jan – June 2015