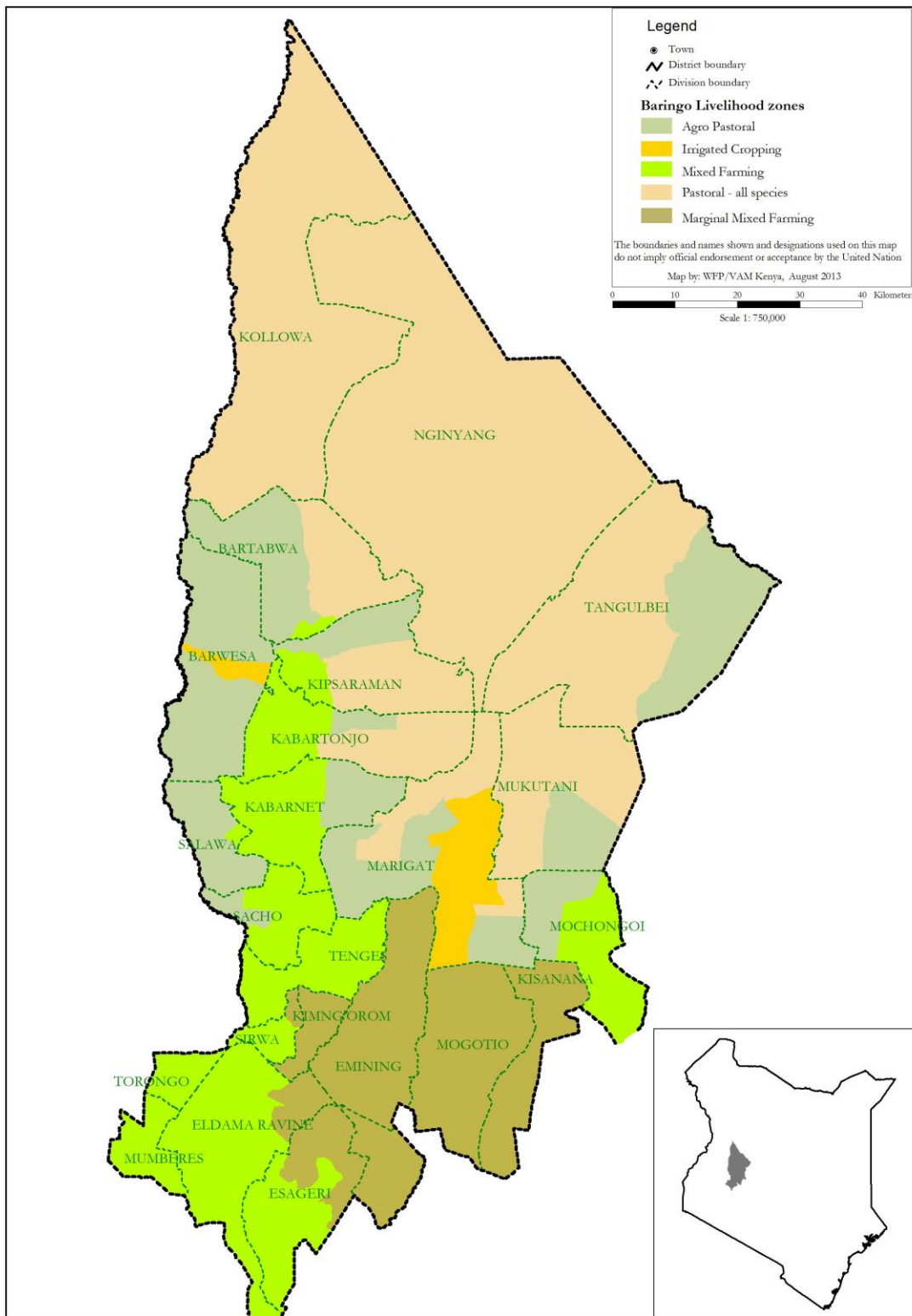


**BARINGO COUNTY**  
**2013/2014 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT**  
**7<sup>TH</sup> TO 14<sup>TH</sup> FEBRUARY 2014**



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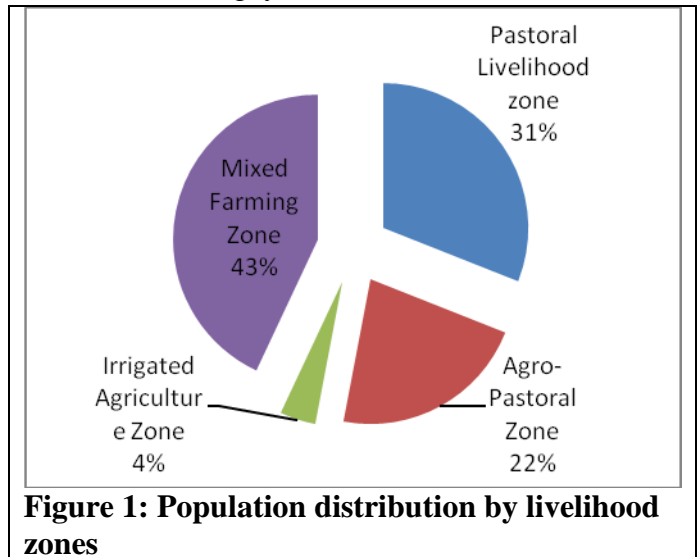
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# 1 INTRODUCTION

## 1.1 County Background

Baringo County borders Turkana and Samburu counties to the north, Laikipia to the east, Nakuru and Kericho to the south, Uasin Gishu to the southwest, and Elgeyo-Marakwet and West Pokot to the west. It covers an area of 11,015.3 square kilometers with an estimated population of 389,329 persons (Kenya National Bureau of Statistics, 2009 census report). The county includes 165km<sup>2</sup> of Lake Baringo, Lake Bogoria, Lake Kamnarok and Lake 94.

The county has a bimodal rainfall pattern with the long rains falling in March to May and short rains from August to November. Temperatures range from 10 degrees in the Tugen highlands to 37 degrees in the lowlands with the hottest months being January to early March. The county is divided into four livelihood zones namely;



**Figure 1: Population distribution by livelihood zones**

Mixed Farming, Pastoral, Agro pastoral and irrigated cropping. The proportion of the population in each livelihood is 43, 31, 22 and 4 percent respectively (see Figure 1).

The county has an altitude ranging from 800 meters in the low lands to 3000 meters in the highlands and receives an annual rainfall of 500 millimeters (mm) in the lowlands and up to 1,500 mm in the highlands. Administratively the county is divided into six sub counties namely: Mogotio, Baringo North, Baringo Central, East Pokot, Koibatek, and Marigat.

## 1.2 Current Factors Affecting Food Security

- Insecurity due to livestock-rustling raids by Pokot.
- Poor infrastructure.
- Foot and Mouth Disease out-break
- Outbreak of Maize Lethal Necrosis Disease (MLND)
- Flooding around Lake Baringo
- High food commodity prices.

# 2 COUNTY FOOD SECURITY SITUATION

The county is currently classified at stressed (IPC phase 2). The Mixed Farming and Irrigated Farming livelihood zones are in the minimal phase while the Pastoral-all species and Agro-pastoral zones are in the stressed phase. Maize production was four percent of the Long Term Average (LTA) due to the placement of the county under closed production system to reduce loss to the MLND. Maize stocks for the season were 79 percent of LTA mainly from carryover stocks from the long rains harvest. Production of beans and Irish potatoes, the other major crops grown in the county was 19.4 percent and 78.7 percent of their respective LTA. Milk availability was 3.75 litres compared to a normal of 7 litres normally which represents 53.5 percent of normal milk availability. The distances to water sources for livestock stood at 3.8 km while those of

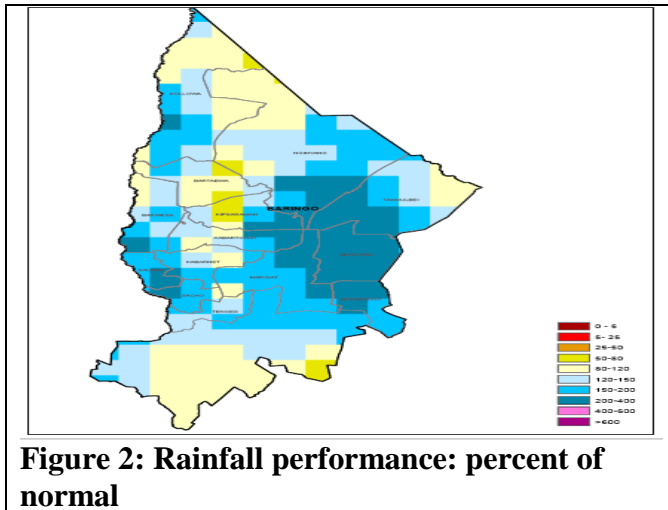
households were at 8 km in December compared to a normal of 4 km. The waiting time at water sources was currently 7 minutes compared to a normal of 4 minutes while the consumption of water per person per day was normal at 8 litres. A kilogram of maize was retailing at Kshs. 41 in December which was 8 percent above the LTA. The retail price of a medium-sized goat was Kshs. 2,989 which was 69.9 percent above the LTA. In December 2013, 11 percent of non-beneficiaries had a poor food consumption score while 15 percent and 74 percent had borderline and acceptable food consumption scores respectively. The coping strategy index for December 2013 was 15 on a scale of 0 - 56. Malnutrition levels stood at 13.1 percent lower than the LTA of 16 percent.

## **2.1 Food Security Trends**

The county is classified at the stressed phase (IPC Phase 2). The food security situation has remained stable following the good performance of long rains of 2013 and fair performance of short rains of 2013. Further, the Mixed Farming and Irrigated Farming livelihood zones were classified in the minimal food insecurity phase (IPC Phase 1) while the Pastoral and Agro-pastoral livelihood zones were classified in the stressed food insecurity phase (IPC Phase 2) similar to the long rains assessment. The situation is expected to be sustained with the available food stocks at household level which are projected to last up to the next 4 months in the Mixed Farming livelihood zone through food production under irrigation. In the Pastoral –all species and Agro-pastoral livelihood zones, the situation is expected to deteriorate due to livestock disease outbreaks, constant insecurity threats, closure of markets, depletion of household food stocks, depletion of forage and rise in price of food commodities.

Maize production reduced compared to a similar period last year. Milk availability also reduced by 10.7 percent from an average 4.2 litres six months ago to 3.7 litres in December 2013. The distances to water sources for livestock have doubled from 1.9 km last July to 3.8 km currently while those of households increased from 2.6 km to 8 km during the same period, although the consumption of water remained constant at 8 litres pppd. Maize prices reduced by 6.8 percent from Kshs. 44 in July 2013 to Kshs. 41 in December 2013 while those of goats increased by 26.9 percent as they stood at Kshs. 2989 in December compared to Kshs. 2356 during the last assessment. TOTs are on an increasing trend as they registered a 35 percent increase since households could purchase 73 kilograms of maize in December 2013 compared to 54 kilograms in July 2013 with the sale of one goat. The nutritional status of children aged below five years improved as the proportion of children at risk reduced from 16 percent during the last assessment to 13 percent in December 2013. The food consumption score remained constant as the percentage of households with poor, borderline and acceptable food consumption score was 10, 15 and 75 percent respectively in May 2013 compared to 11, 15 and 74 percent respectively in December 2013. The coping strategy index reduced from 24 in May 2013 to 15 in December 2013.

## 2.2 Rainfall Performance



**Figure 2: Rainfall performance: percent of normal**

The onset of short rains was normal, during the second week of October. Amount received in most parts ranged between 80-120 percent of normal except in sections of Bartabwa and Kipsaraman Ngingang, Kallowa, Tangelubei where amount of rainfall ranged between 50-80 percent of normal. In Makutani and Muchugou they were above normal. Spatial distribution was good while the temporal distribution was poor. The rains ended in December which is the normal time for cessation in the county.

## 2.3 Current Shocks and Hazards

- Outbreak of Livestock diseases
- Outbreak of maize lethal necrosis disease

## 3 IMPACT OF RAINFALL PERFORMANCE, SHOCKS AND HAZARDS

### 3.1 Crop Production

Short rain is not the main cropping season for the county but it is relied upon for growth of pasture and browse and recharge of water facilities. However, harvest realized from the season supplements existing food stocks from long rains. The main food crops grown in the county are maize, beans and Irish potatoes.

#### a) Rain-fed Crops (3 major crops)

**Table 1 Rain-fed Crop**

Crop	Area planted during the 2013 short rains season (Ha)	Long Term Average area planted during the short rains season (Ha)	2013 short rains season production (90 kg bags) Projected/Actual	Long Term Average production during the short rains season (90 kg bags)
1. Maize	104	1,780	624	16,112
2. Beans	1,254	6,478	12,880	50,420
3. Irish Potatoes	645	820	7,740	13,120

Maize crop was grown in Baringo North Sub County. The rest of the county was put under closed production system<sup>1</sup> following an outbreak of MLND during the long rains. The area put under Beans and Irish potatoes was 19.4 and 78.7 percent and crop yield was 25.6 and 59 percent of normal respectively (see Table 1). The yield per hectare for beans was higher at an average of

<sup>1</sup> Closed Production System- A system whereby farmers completely skip production of a particular crop following an outbreak of a certain disease.

10.3 bags than the LTA of 7.8 bags since the Ministry of Agriculture had supplied high yielding seed varieties during the planting season. The production of Irish potatoes was 12 tons per hectare compared to the normal 16 tons per hectare. Potato production was affected by outbreak of diseases and poor choice of cultivation methods.

### b) Irrigated Crop

**Table 2: Irrigated Crop**

Crop	Area planted during the 2012 short rains season (Ha)	Short Term Average area planted during the short rains (Ha)	2012 short rains production (90 kg bags) Projected/Actual	Short Term Average production during short rains season (90 kg bags)
1. Maize	50	240	2,480	10,800
2. Tomatoes	67	127	792	1,508
3. Water melons	126	120	630	1200

More area under irrigation was planted with water melons, followed by tomatoes and maize at a rate of 105, 52.8 and 20.8 percent of normal respectively. (Table 2) The average production of maize was 22.9 percent while that of tomatoes and water melons was 52.5 and 53 percent of short term mean. During this season, yield per hectare of water melons dropped from the seasonal average of 10 tons per hectare (4 tons per acre) to average of 5 tons per hectare (2 tons/acre) due to large outbreak of diseases, and reduced levels of Irrigation water in the Irrigation schemes

### Maize Stock

**Table 3 Maize Stocks in the County**

Maize stocks held by	Quantities of maize held (90-kg bags)	Long Term Average quantities held (90-kg bags) at similar time of the year
House Holds	322,333	401,374
Traders	118,610	161,000
Millers	8,254	8,654
NCPB	24,108	27,000
Total	473,305	598,028

Total maize stock held by various actors was 79 percent of normal. More stocks were held at the household level followed by Traders, National Cereals and Produce Board and least by Millers (Table 3). Most of the maize is held in the Mixed Farming livelihood zone of Eldama Ravine Sub County (63 percent) the rest is held in the other five sub counties. The current stocks held are from the long rains 2013 harvest and are expected to last up to four months in the Mixed Farming zone, one month in Agro Pastoral livelihood zone. No stocks are available in the Pastoral livelihood zone. During a normal season maize stocks lasts for six to eight months across the County.

### 3.2 Livestock production

Main livestock species kept within the county include cattle, camels, donkeys, goat and sheep. Others include poultry and honey bees. Camel farming takes place in the Pastoral livelihood zone. Their contribution to food security and income is from sale of the livestock and other products such as milk, meat, skins and hides and manure. Livestock contributes 88, 50, 23 and 5 percent of incomes in the Pastoral, Agro pastoral, Mixed Farming and Irrigation Farming livelihood zones respectively.

### **Pasture and Browse**

The pasture condition is good in the Mixed Farming zone, fair in the Agro-pastoral zone and poor in the Pastoral zone. Browse situation is good in the Mixed Farming, Agro pastoral and Irrigation livelihood zones while it is fair in the Pastoral Zones. For both pasture and browse, the situation is normal for this time of the year although it is expected to deteriorate which is normal for this time of the year.

In the Mixed Farming livelihood zone, pasture was available in enclosures. In the Pastoral and Agro pastoral livelihood zones, pasture had been depleted and where available it was dry and fallen. Available forage is expected to last between 1-2 months in the Pastoral and Agro Pastoral Livelihood Zones. Crop residues will support livestock in the Mixed Farming and Irrigation agriculture livelihood zones during the dry spell. Access to pasture in the following areas has been affected by insecurity; Bartabwa division (Kalabata), Chemoe/Chepkesin), in Baringo North, Arabal, and Mukutani in Baringo South (Marigat).

### **Livestock Productivity**

#### **Livestock body condition**

The body condition for cattle was good in the Mixed Farming zone and fair in the Agro Pastoral and Pastoral Livelihood zones. Other species (camels, goats and sheep) were in good body condition across all livelihood zones which was normal for this time of the year. Cattle body condition is projected to deteriorate while that of camel, goats and sheep will remain stable. Cattle will be affected by prevailing hot temperatures and movement in search of water and pasture. Uncontrolled movement is likely to cause conflicts between communities and deny access to pastures.

#### **Birth rate**

Birth rate was 30 percent in the Agro-pastoral and the Pastoral areas during the month of November/December. The level of kidding was low as most of the goats kidded during the period of July/August which has reduced milk availability at household level although the situation was normal for this time of the year.

#### **Milk availability**

Milk availability was at 53.5 percent of normal recorded at 3.75 litres currently compared to 7 litres normally. The quantity had reduced from 10 litres to 6 litres per household per day in the Mixed Farming and Irrigation livelihood zones. In the Agro-Pastoral zone, it reduced from 5 to 2 litres and 3 to 1 litres in the Pastoral livelihood zone. Cited reasons for reduced milk production include reduced kidding and lambing and migrations as cattle move away from settlements in search of pasture especially in the Pastoral livelihood zone.

#### **Milk consumption**

The current milk consumption by household was normal for this time of the year. In the Pastoral and Agro-pastoral livelihood zones, milk produced was consumed at household level. In the Mixed Farming livelihood zone, households on average consumed 1.5 litres and sold the rest to the neighboring kiosks. Scarcity of milk as a result of less production led to an increase in both producer and consumer prices. The producer price in the Mixed Farming zone rose by 20 percent from 25 to 30 Kshs. per litre and by 42 percent from 35 to 50 Kshs. in the Agro-pastoral livelihood zone. The consumer price increased by 25 percent from Kshs. 40 to 50 in the Mixed

Farming zone and by 50 percent from Kshs. 50 to 75 in both the Agro-Pastoral and the Pastoral livelihood zones.

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

The average tropical household unit was 1.5 TLU's in the Mixed Farming zone, 2.8 TLU's in the Agro-Pastoral and 3.6 TLU's in the Pastoral Livelihood zones which is normal for this time of the year. More livestock are kept in the Pastoral livelihood zone and the Agro-Pastoral livelihood zone. The average TLU's per household is below the threshold of 4 TLUs per household to be able to sustain food security. There was no significant change in herd numbers for both the poor and medium households.

### **Water for Livestock**

Critical water sources for the livestock currently are: bore holes, water pans, Lake Baringo, Kerio River and seasonal rivers. All the water sources except seasonal rivers are currently providing water. Water pans are currently holding an estimated 50 percent of their capacity in the Agro-pastoral and Pastoral livelihood zones.

The trekking distances from grazing areas to watering points were; 1-2 km in the Mixed Farming zones, 2-3 km in the Agro-pastoral zones and 5-10 km in the Pastoral zones. The sources and distances are normal for this time. Distances to water points are expected to remain stable in the Mixed Farming and Irrigation livelihood zones and increase in the Pastoral and Agro-Pastoral livelihood zones. Watering frequency is daily in the Mixed Farming livelihood zone for all species and once in two days in the Pastoral livelihood zone.

### **Migration**

Cattle migrated from the Pastoral and Agro-pastoral livelihood zones to Lake Baringo region and to neighbouring counties of Samburu and Laikipia. The migration routes are normal and included: Bartabwa- Kerio Valley area, Sibilo – Lake Baringo, Tangelbei towards Rugus (around Lake Baringo), Chemolingot towards Nadome, Silale, Samburu (Malaso) and Laikipia County. In Mixed Farming zones, cattle moved from Eldama Ravine, Muserechi, Orinie and Sagat to Esageri and Narasha Forests; Lower Chesaik, Saos and Tolmo to Chemorgong Forest. Migration due to insecurity included movement from Bartabwa to Kerio Valley and Mukutani to Kasiela. Approximately 30-50 percent of cattle had moved. Increased number of migrating animals is likely to cause conflict over utilization of pasture and water.

### **Livestock Diseases**

The county is currently faced with an outbreak of Foot and Mouth Disease. Normal endemic diseases like CCPP, Enterotoxaemia, PPR, Mange, East Coast Fever, Helminthiasis, eye infection and Lumpy Skin Disease were reported across all livelihood zones. The outbreaks have led to the closure of Marigat, Loruk & Emining Markets. New Castle Disease attacking poultry was reported in Marigat where about 100 poultry had been reported dead. To contain the spread of the diseases, vaccination campaigns have been planned for FMD in Saimo Soi Ward (Sibilo area).

### **Mortalities**

Mortality rate were 2 percent for cattle and 2.5 percent for goats across the county. Decline in immunity and persisted attacks by diseases are likely to increase mortality rates. The situation is not normal for this time.



### **3.3 Water and Sanitation**

#### **Introduction**

The main sources of water for both livestock and domestic use include; pans and dams, lakes, water pans, streams, protected shallow wells, springs, boreholes and traditional river wells

#### **Major water sources**

Most of the water sources are currently operational. Open surface water sources are holding approximately 50 percent of their capacities. In isolated cases boreholes were not operational due to break-downs mainly in the Pastoral and Agro-pastoral livelihood zones. The short rains managed to recharge the water sources to between 60 and 80 percent of normal.

Water sources are mainly concentrated in the Mixed Farming livelihood zone where the potential is high and rainfall amounts are higher as compared to the Pastoral and Agro-pastoral livelihood zones which are rocky and poorly served by rivers. The water sources currently in use are the normal ones during this time of the year.

The available water is expected to serve communities in the Mixed Farming livelihood zones up to the onset of long rains in early April, 2014. In the Pastoral and Agro-pastoral zones, it is projected to serve for one and a half months while normally, these sources last for two months.

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

The distances to domestic water sources were eight kilometers compared to the normal four kilometers. The distances were stable (2 – 4km) in the Mixed Farming and Irrigated farming zones whereas in the Pastoral and Agro-Pastoral livelihood zones, it increased from six to ten kilometers. Households in the Mixed Farming and Irrigated Farming zones had more access to water than in those in the Pastoral livelihood zones.

#### **Waiting time at the source**

The waiting time at the source is seven minutes compared to a normal of 4 minutes. It rose from the normal 3 minutes in the Agro-pastoral zone to 5 minutes and from 5 to 15 minutes in the Pastoral zone. The duration of time spent queuing for water is projected to increase in the latter zone if the situation does not improve.

#### **Cost of water**

The cost of water at the source was stable as a 20 litre' jerry can retailed at Ksh. two, three, five and two in the Mixed Farming, Agro-Pastoral, Pastoral and Irrigated Farming zones respectively. Water is more accessible in the Mixed Farming and Irrigated zones compared to the Pastoral and Agro-pastoral zones. Water consumption per person per day was normal at 12litres in the Mixed Farming and Irrigated farming livelihood zones and three to six litres in the Agro-Pastoral zone.

#### **Sanitation**

The latrine coverage in the county varies from one livelihood zone to the other. In the highlands, the latrine coverage is above 50 percent. In the Pastoral areas, where nomadic pastoralism is practiced, latrine coverage in some areas is below 5 percent. As a result of poor latrine coverage, open waste disposal normally contaminates water in rivers and dams leading to high incidences of water borne diseases in the Pastoral and Agro-pastoral zones

## Hygiene

The communities normally do not treat water at household level except in the Mixed Farming livelihood zone where water for drinking is boiled. Water is collected in closed jerry cans and stored in the same reducing opportunities of contamination at the household level. There is rarely any food left over, however any dry cereals are stored in elevated baskets. Occurrence of diarrhea, typhoid, and dysentery and skin infection is an indication of the level of water contamination and lack of treatment.

## 3.4 Markets and Trade

### Market operations

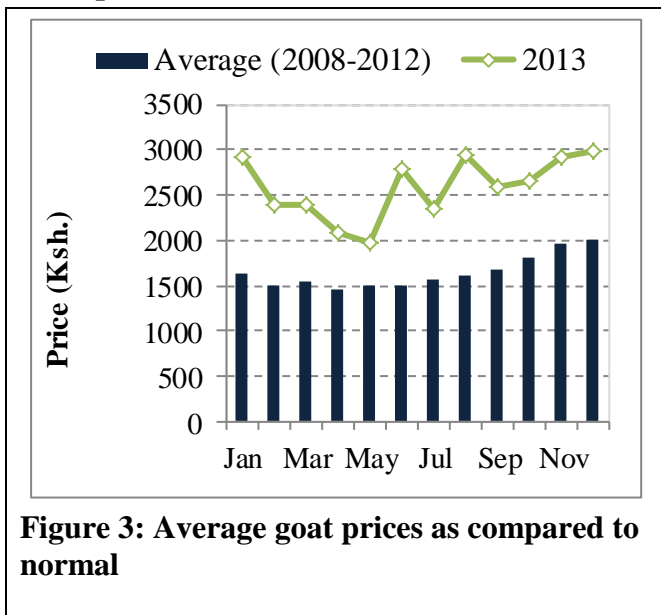
The main markets in the county include Kabarnet, Tenges, Barwessa, Marigat, Nginyang, Kipsaraman, Kapendasm, Chemolingot, Loruk and Churo. These markets are simple open air markets which are held weekly on designated days. They provide an opportunity for the pastoralists to sell their livestock and purchase household commodities from the farming community. The markets offering food items at present were operating normally. However, Loruk, Sibilo, Yatya in Baringo North, Marigat, Emining and others in Mogotio sub-county which offer livestock are currently closed due to an outbreak of Foot & Mouth Disease.

### Market Prices

#### Maize price

The average price of a kilogram of maize was Kshs. 41 in December 2013 similar to that of the previous month. The highest prices were posted in the Pastoral livelihood zone at Kshs. 51.8 owing to the erratic accessibility of the commodity in the local market. The Agro-pastoral livelihood zone posted the lowest price at Kshs. 35 due to ease of accessibility of the commodity in the market. The current price of maize was 8 percent above the five-year-average of Kshs 38, but below the recorded price of Kshs. 43 at this time of the year in 2012. The prices are projected to increase in the next three months as households exhaust their stocks.

#### Goat price



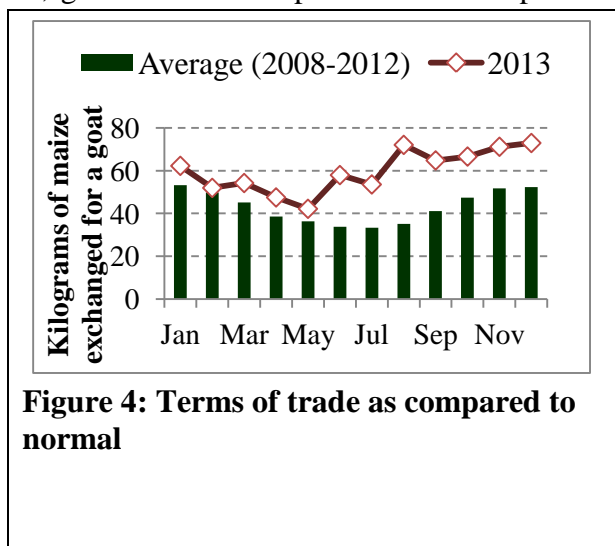
**Figure 3: Average goat prices as compared to normal**

The average goat prices in December 2013 were Kshs. 2,989 compared to Kshs. 2,917 in the month of November 2013, indicative of a slight increase of 2.4 percent (see Figure 3). The increase in prices was largely attributed to improved markets due to improved security. The Agro-pastoral livelihood zone posted the highest price at Kshs. 3,498 due to the availability of external buyers in the zone. On the other hand, the Pastoral livelihood zone posted the least price at Kshs. 2,480 due to instability in the markets. The average price was 70 percent higher than the five-year average attributed mainly to increased inflation rates and the festive season. However, the prices are expected to fall as livestock body

condition deteriorates in the coming months.

### Terms of trade

Baringo County is dependent on maize, maize flour, goats and of sheep as the most important commodities in terms of food security. Currently, the TOT is favourable as households are able to purchase 73 kilograms of maize with the sale of one goat compared to 52 kilograms normally. TOT were most favourable in the Mixed Farming livelihood zone where one goat was sold to purchase 80 kilograms of maize while they were least favourable in the Agro-pastoral and Pastoral livelihood zones where 73 kilograms of maize could be purchased. The closure of some major markets as a result of the quarantine imposed due to the Foot and Mouth Disease is likely to reduce the TOTs.



**Figure 4: Terms of trade as compared to normal**

### 3.5 Health and Nutrition

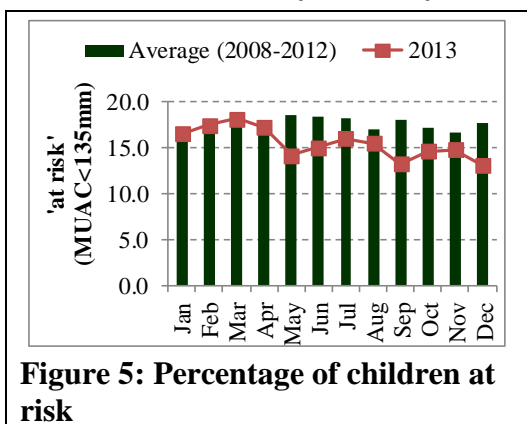
#### Morbidity and mortality patterns

The top five diseases in the county for children below the age of five years and the general public included: upper respiratory tract infection at 53.6 percent, Clinical malaria at 23.7 percent, skin infection at 14.8 percent, diarrhea at 3.8 percent and rheumatism at 2.0 percent<sup>2</sup>. The total number of children reported ill remained the same in 2013 compared to the same time in 2012.

#### Immunization and Vitamin A supplementation

The proportion of the fully immunised child (FIC) is 56.8 percent in July to December 2013, a slight decline when compared to 59.8 percent in 2012 during the same period. The proportion of children six to 11 months and 12 to 59 months supplemented with Vitamin A in the last six months is 69 percent and 51 percent respectively. The proportion of coverage is lower than the recommended national average of 80 percent.

#### Nutrition and dietary diversity



**Figure 5: Percentage of children at risk**

The proportion of children at risk of malnutrition by MUAC less than 135 millimeters was 13.1 percent in December 2013; which was lower than the recorded five-year average of 17.6 percent. Areas that posted particularly high malnutrition cases include Kinyach (30%), Komolion (27.7%), Kapenguria (25.3%) and Kaptuiya (18.5%). The food consumption score for non-beneficiaries in December 2013 was 11 percent for households with poor food consumption score and 15 percent and 74 percent for those with borderline and acceptable food consumption scores respectively.

<sup>2</sup> Source DHIS (Ministry of Health information systems)

### **3.6 Education**

#### **Enrolment**

There was a decrease in enrolment for both boys and girls in term 1 of 2014 as compared to the same period in 2013. Boys dropped from 94,161 to 91,736 (2.5percent) while girls dropped from 89,986 to 85,327 (5.1%). Marigat was the most affected sub-county. The decrease is mainly due to insecurity and transfer of children to other sub-counties. On the other hand, some sub- counties have shown positive improvement in enrolment which include Tiaty with a 10.3percent increase for boys from 13607 (2013) to 15170 (2014) and Koibatek with a 2.5percent increase for boys from 17811 (2013) to 18281 (2014).The major reasons for this increase include: increase in boy child education sensitization, the presence of ECD teachers in centers and up-scaling of sponsorship programmes by partners. The school attendance has however declined as compared to the same period last year. The male attendance dropped by 7.88 percent from 87514 in 2013 to 80612 in 2014 and females by 5.8 percent from 84512 in 2013 to 79578 in 2014. The drop is attributed to involvement in domestic chores, male circumcision, high early pregnancy rates, early marriages, and insufficient food and water in schools.

#### **Drop out**

Compared to term 1, 2013, drop out cases reduced both for boys and girls by 4.5 and 7.3 percent respectively. The reduction is due to increase in community sensitization on the importance of education as well as gradual change in community livelihoods from purely pastoral practices to agro pastoral. There was also an intensified campaign against FGM and early marriages for girls.

#### **Transition**

The transition rate for ECDE to class one decreased from 80.1 and 80.2 percent in 2013 to 78.4 and 74.5 percent in 2014 for boys and girls respectively. Transition from primary school to form one also decreased from 74.5 percent and 72.2 percent in 2012 to 68.8 percent and 69.5 percent in 2013 for boys and girls respectively. Parents' inability to pay for secondary education after completion of free primary education due to depressed livestock prices has contributed to decrease in transition from primary to secondary school.

#### **School meals programme**

The number of pupils benefiting from SMP slightly decreased as community school meals programme for Baringo North, Baringo Central, Koibatek and Mogotio was phased out. The Regular School Meals Programme is present in Tiaty and the Home Grown School Meals Programme for Baringo Central, Marigat, Baringo North and Mogotio.

There was a delay in dispatches from the DEO's store as term three reports and balances were yet to be received on time for term one 2014 at school level. Where food had been delivered, consistent attendance was noted and children especially in ECDE benefited from Corn Soya Blend which was incorporated in the term 1 2014 ration. Since last year, feeder ECDEs attached to main schools were not included in the programme.

### **3.7 Coping Mechanisms**

The coping strategy index was 15 in December 2013 compared to 12 in September and 24 in May of the same year. The index dropped from May 2013 after the long rains season harvest and rose

again when the lean season began in September. Households were currently employing insurance strategies.

### 3.8 Ongoing Interventions by Sector

#### Non- food Interventions (food security related)

Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
<b>Agriculture</b>							
Koibatek	Excavation of Utwesagat water pan	Kabimoi	200 HHs	MoA LD&F (SDA)	Availability of water for domestic use& small scale Irrigation	2.5 M	End of June 2014
East pokot	Irrigated Agriculture	Kolloa	500	KRS/ MOA	3000 persons food secure	150M	1 yr
	''	Loyamok	200	KRS/ MOA	1200 persons food secure	122M	1yr
	Promotion of THVC	All	1527	GOK \$ WB	3054 households will be food secure	-	1yr
Mogotio	Supply of metal silos for demos	All	16 Groups 1 Primary school 1 Polytechnic	KARI MOA	Groups and institutions were able to store between 1-10bags of maize each	168,000	From March 2013 2016
Mogotio	Buying of metal silos for maize storage by farmers	L/Mogotio,	5 farmers	Trained Local Artisans	Over 60bags maize stored safely	96,000	From December 2013
Baringo central	Traditional high value crops being promoted in all the zones		180	State department of Agriculture	Increased access of drought tolerant crops seed and cuttings, thus increased food security	1,000,000	

Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
	Construction of pans & dams in Salawa (Agro-pastoral zone)	Salawa division	350	State department of Agriculture	Increase availability of water for livestock and crop Irrigation	1.6 million	
Marigat	Extension and training of farmers, retrieval and re-issuing of THVCs	Marigat, Mukutani and Mochongi	9150HH	MOA, W/V, NDM A and other Stake holders	Satisfactory	2.5M	Continuous
<b>Livestock</b>							
Baringo Central	Capacity building on off-take, pasture conservation & water harvesting	All	4920HH	MOA LF Partners Community	140,000/=	6 months	
	Reseeding	Salawa, Tenges	180HH	MOA LF SNV Other partners	800,000	6 months	
Baringo South	Vaccinations against FMD	All	2700	GOK	3.3M	1 months	
	LMA Capacity building	Marigat	40	- MOA LF, - FAO, - S/Holders	100,000	1 year	
Baringo	Vaccinations against	Sibilo,	800	MOA	0.5M	1 month	

Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
North	CCP & NCD	Yatya		LF			
	Capacity Building on pasture Conservation, Poultry production	Bartum, Loruk, Kampiya Samaki	100	MOA LF Partners	20,000	1 month	
Eldama Ravine	Grass Seed distribution	Esageri, E/Ravine	10	MOA LF	600,000	3 months	
<b>Health and Nutrition</b>							
Baringo County	Vitamin A Supplementation		93,449 (children 6 – 59 months)	MoH	Increased immunity improves underfives' resilience to illness. Supplements for lack of adequate Vit A intake	467,245.00	Jan - Dec 2014
	Zinc Supplementation		23,993 (based on total diarrhea caseload of 2013)	MoH	contributes to prevention of mortality due to diarrhoea		Jan - Dec 2014
	Management of Acute Malnutrition (IMAM)		8,971 No. of children 6 – 59 months estimated to be malnourished.	MoH	Contributes to reduced mortality due to malnutrition. Clients are used to link HH to Food Security projects	27,631,000.32	Jan - Dec 2014
	IYCN Interventions (EBF and Timely)		41,533 Children birth – 2 years	MoH	Builds the resilience of caregivers in feeding	4,153,280.00	Jan - Dec 2014

Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
	Intro of complementary Foods)				practices thus reducing malnutrition, morbidity and mortality		
	Iron Folate Supplementation among Pregnant Women		34,576 All pregnant women	MoH	Supplements inadequate diet diversity	5,324,704.00	Jan - Dec 2014
	Deworming		83,066 children 1 – 5 years	MoH	Reduces loss of food due to worm infestation)	1,661,320.00	Jan – Dec 2014
	Food Fortification		9,893 HH				Jan – Dec 2014

### 3.9 Sub County food security ranking (worst to best)

Sub County	Food security rank (1-10)	Main food security threat (if any)
Tiaty	1	Scarcity of pasture, increase in food prices, poor road networks, Livestock disease outbreak (FMD)
Baringo South	2	Insecurity (cattle rustling), poor road infrastructure, high food prices
Baringo North	3	Insecurity (cattle rustling), poor road infrastructure, high food prices
Mogotio	4	Poor harvest (Maize Lethal Necrosis), Poor roads
Baringo Central	5	Poor road infrastructure,
Eldama Ravine	6	Food crop potential, water access better compared to others,

## 4 FOOD SECURITY PROGNOSIS

### 4.1 Prognosis Assumptions

- Food commodity prices are likely to increase due to depletion of household food stocks
- Livestock prices are likely to decline as a result of deteriorating livestock body condition and vulnerability to diseases.



- Distances to grazing areas are likely to lengthen as the quality and quantity of pasture and browse conditions deteriorates.
- Consumption of water per person per day is likely to reduce as water sources dry up and lengthen distances to water points.

#### **4.2 Food Security Outcomes for the Next Three Months**

The food security situation is expected to decline. In the Agro-pastoral and the Pastoral livelihood zones, nutritional status for children aged below five is expected to decline as the number of meals consumed reduces from three to one per day. The water consumption per person per day is likely to reduce and terms of trade to deteriorate as livestock body condition worsen. In the Mixed Farming and Irrigated Farming livelihood zones, the situation is likely to be stable.

#### **4.3 Food Security Outcomes for the Last Three Months**

If the long rains set in on time (late March or at the beginning of April), the water, pasture and browse situation is expected to improve. In the Pastoral livelihood zone the percentage population with a low dietary diversity will decline with improvement in milk production and increased availability of vegetables. However, in the case of delayed rains, the situation is likely to degenerate into a food crisis.

### **5 CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Conclusion**

Currently the food security situation is stable in the Mixed Farming livelihood zone and deteriorating in the Pastoral and Agro-pastoral livelihood zones, a state of affairs which is expected to prevail up to the onset of long rains in April. The following indicators need to be monitored; livestock diseases, prices of the main food commodities, livestock migration, and nutritional status for under-fives.

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

- Provide fuel subsidy to community-managed water projects
- Provision of tanks to institutions
- Enhanced serving of motorized and non-motorized water facilities
- Provision of water treatment facilities
- Upscale vaccination against FMD and CCPP
- Support dips in tsetse prone with acaricides (target 10)
- Support pasture-reseeding programmes
- Promote commercial off take
- Support livestock breed improvement in small stocks
- Provision of traditional high value crops
- Provision of certified seeds to the Mixed Farming livelihood zone

## 6 ANNEXES

### 6.1 Annex 1. Food Intervention Required

#### Proposed population in need of food assistance

Sub County	Population in the division	Pop in need ( percent range min – max	Proposed mode of intervention
Tiaty	133,189	25-30	FFA/GFD
Baringo South	80,871	20-25	FFA/GFD
Baringo North	93,789	20-25	FFA/GFD
Mogotio	60,959	15-20	FFA/GFD
Baringo Central	81,480	15-20	FFA/GFD
Eldama Ravine	105,273	5-10	FFA/GFD

### 6.2 Annex II. Non-food Interventions (by sector)

#### Recommended Interventions

Division/Ward Name	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
<b>Agriculture</b>							
Eldama Ravine	Trainings on post-harvest management & food utilization	All	3,000 HHs	MoALD&F MoH	Transport DSA Stationery	Nil	2 months
	Provision of Hermetic bags	Saos/Kibias, Kiplombe, Kabimoi&Perkerra	1,000 HHs	MoALD&F	Transport DSA Stationery	Nil	2 months
	Provision of Alternative/ drought tolerant planting materials to farmers affected by MLND	All affected locations (Saos/Kibias, Perrkerra, Ravine, Kabiyet, Sabatia, Kiplombe, Torongo&Torongo)	100 HHs	MoALD&F (SDA)	Funds Transport DSA Stationery	Nil	2 months
East Pokot	Train farmers on soil and water conservation	All	500	MOA	Gabion chain-links Fuel & DSA Staff	staff	1yr

Division/Ward Name	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
	Train farmers on early land preparation	All	1000	MOA	Tractors	staff	3 months
	Provision of subsidized assorted farm inputs	All	1000	MOA	10,000,000	staff	1yr
	Water harvesting	All	500	MOA	4,000,000	Staff & land	1yr
	Installation of green houses	All	3500	MOA	10,500,000	Staff & land	5yrs
Mogotio	Production of dual purpose Sorghum	Kapkechui Kamar Koibos Chberen Kimose	5000	MOA KARI World Vision Hand in Hand	Seeds Fuel Funds	Land Labour	January 2014- April 2017
	Soil conservation and water harvesting	Kipngorom Cheberen	3000	MOA Water/Irrigation KVDA KFS World vision	Funds Fuel	Springs Land labour	July 2013- June 2014
	Relief food	All	5000	WFP	Maize Beans Cooking oil		
Baringo Central	Increase funds provision on THVC crops	All Wards(Divisions)	300 per division	State Department of Agriculture	-Funds for the purchase of planting materials -Transport	Technical personnel	March 2014
	Construction of more dams in the agro pastoral zones to enhance ability of the household	All Wards(Divisions)		State Department of Agriculture, Water department and NGO'S	Funds to hire tractors(bulldozers)	Technical personnel	May 2014

Division/Ward Name	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
	s to get water for Irrigation and livestock						
<b>Livestock</b>							
Mogotio, Baringo South, Baringo North, Tiaty, Baringo Central	Commercial Off take	All	700	GOK/NGO'S	Personnel, Funds,	personnel	2 months
Baringo North, Mogotio Baringo South	Vaccination against FMD	Sibilo, Mochongoi, Marigat, Mogotio	20,000	MOLD ACTED Action Aid KLMC KRDP	Funds 3M	Personnel Transport	1 Month
Baringo North	Upgrading	Kipsaraman Bartum	300	MOLD NDMA KRDP	Funds 3M	Personnel Transport Comm. contribution	2 months
Mogotio, Baringo South, Baringo North, Tiaty, Baringo Central	Reseeding	All	30,000 Acres (15,000 HH)	MOALF, SNV County GVT	-Funds, -Pasture seeds (300,000Kg)	Personnel	6 months
<b>Health</b>							
East Pokot	Increased integrated outreaches	4 locations of Mondri, Nginyang and Tangulbei each (12 outreaches in total per month for 12 months)	5186 under 5s, 1178 pregnant and lactating mothers	KRC, MoH, WVK	1, 440, 000.00		Feb 2014 – Feb 2015
	Mass screening	15 Screening sites: Katikit, Kamusuk, Koipa -Kaner,	.	KRC, MoH,	<b>165,000.00</b>		2 screenings in Feb and Aug

Division/Ward Name	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
		Akoret, Chesawach, Kulal, Kongor, Kapau, Nasorot, Silale, Kinyach, Komolion, Kapenguria, and Kaptuiya					2014
Marigat	Integrated outreach	Salabani, Ng'ambo, Sirata, Mbechot, Ng'elecha.	2416 children under 5, 644 pregnant and lactating mothers	KRC MoH WVK	600,000.00		12 outreaches per site from Feb 2013 – Feb 2014
	Mass Screening	7 Mass screening sites: Rorobai, Bekibon, Ngolbelon, Cheleba, Kapkun, Chebinyiny, Kivumbini		KRC, MoH	80,000.00		2 screenings per site in Feb and Aug 2014
Mogotio	Integrated outreach	5 mass screening sites	2739 Children under 5, 478 Pregnant and lactating mothers	KRC, MoH and WVK	600,000.00		12 outreaches per site from Feb 2013 – Feb 2014.
	Mass screening	7 screening sites Chemoinoi, Kamar, Kabiemet, Maagoi, Molok, Molo sirwe, Kaibos		KRC and MoH	62,500.00		2 screenings per site in Feb and Aug 2014
Baringo North	Mass screening	7 Screening sites:		KRC, and MoH	62,500.00		2 screenings per

Division/Ward Name	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
		Likwon Yatya, Kinyach, Kalabata, Kapturo, Barwesa, Rondinin					site in Feb and Aug 2014

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