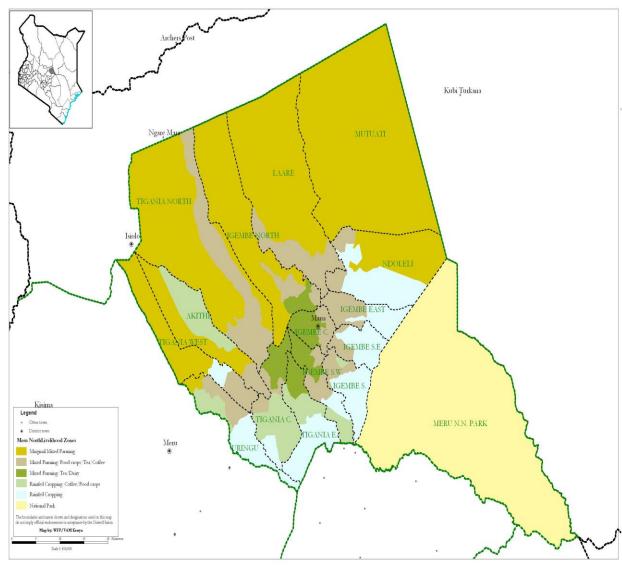
# MERU (NORTH) COUNTY 2014 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT $3^{\rm RD}$ - $7^{\rm TH}$ FEBRUARY 2014



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#### 1.0 INTRODUCTION

#### 1.1 County Background

Meru County is comprised of Igembe North, Igembe South, Tigania East, Tigania West, Igembe Central, Buuri, Imenti Central, Imenti South, and Imenti North sub-counties. Collectively, six sub-counties out of total of nine exhibit climatic conditions similar to those in the arid and semi-arid land (ASALs). They include Igembe North, Igembe South, Igembe Central, Tigania Tigania West, and Buuri. collectively cover 65 percent of the County. The ASAL area lies in a transition zone between the arid

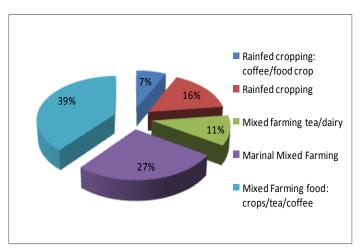


Figure 1: Population by Livelihood Zone

Isiolo and Garbatulla Sub-Counties to the North and the medium potential Imenti North and Imenti Central sub-counties in the West. The region also borders Tharaka to the South, and Tana River County to the Southeast. Climatic conditions range from arid in areas bordering Isiolo and Garbatulla Sub-counties to highland areas in the central regions around the Nyambene ranges and the slopes of Mt. Kenya. Meru North covers an area of 5,028 square kilometres with a population of 885,785 persons (*Kenya Bureau of Statistics*, 2009).

# **1.2 Current Factors Affecting Food Security**

- Poor performance of the last two seasons as a result of erratic, poorly distributed rainfall.
- Low use of fertilizers and certified seeds
- Over reliance on maize as staple food
- Land fragmentation
- Poor post-harvest management
- Cross border conflict and cattle rustling
- Poor access to markets and low commodity prices

#### 2.0 COUNTY FOOD SECURITY SITUATION

#### 2.1 Current Factors affecting food security

The overall food security situation is stressed and currently classified at phase 2. The mixed farming and rain-fed livelihood zones are characterized by declining crop production from 70 and 30 percent for maize and pulses respectively compared to long term average (LTA). The food security situation is therefore stressed. The marginal mixed farming livelihood zone has remained stressed at phase 2 as classified in the same period in 2013. Currently, household food stocks available are at 22 percent of LTA. The stocks are projected to last one month. Terms of trade are favorable where one goat exchanges for 109 kg of maize compared to 84 kg LTA. The current milk production is two litres compared to the normal three litres for cattle. The distance to water sources has increased to average of 9.5km compared to the normal five km at this time of the year. Water consumption has generally reduced by an average of 10 litres

per person per day across the county. Middle Upper Arm Circumference (MUAC) is currently at 17.8 percent compared to 15.9 percent LTA and within the normal 33 percent emergency threshold. Crude mortality rates (CMR) is 0.48/10,000/day while under-five mortality rate is 0.24/10,000/day which depicts a stable situation.

#### 2.2 Food Security Trends

The County is currently classified in stressed phase 2 classification except for pockets in marginal mixed farming livelihood zones. The impact of the poor rains in the last two seasons contributed to only 30 percent below LTA maize production culminating to below normal household stocks. Households currently rely on markets for food and prices are on the increase with increasing demand. Livestock productivity has declined as evident in low milk production from the normal three litres to two currently. Households consume an average of one litre compared to two to three litres normally. With deteriorating pastures, livestock currently feed on maize stovers and observed to have fair body condition. The proportion of children at risk of malnutrition and under five mortality rate remains below alert threshold.

#### 2.3 Rainfall Performance

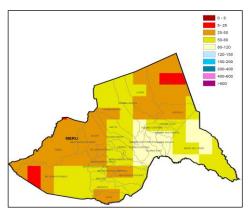


Figure 2: Rainfall performance as percentage of the normal; Meru North

The county experiences bimodal rainfall with long rains season expected from mid-March to May and short rains from mid October to late December. The onset of the rains was in the third dekad of October compared to the normal first dekad of October. The county generally received 50-80 percent of normal. Lower rainfall, 25-50 of normal were received in Igembe central and south east and Tigania North. Pockets of Tigania central, Tigania East, Igembe East and Igembe South East received 80-120 percent of normal. **Temporal** distribution was poor and erratic while spatially, the rains were unevenly distributed. Cessation was normal in the third dekad of December.

#### 2.4 Current Shocks and Hazards

- Poor temporal and uneaven spatial distribution of rainfall
- Low soil fertility
- Endemic crop diseases
- Livestock pest and diseases
- Lack of drinking water and pasture for livestock.

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

#### 3.1 Crop Production

The county is short rains dependant. The main food crops include maize, beans and pigeon peas in order of importance. Maize and beans contribute 40 and 30 percent of cash income in the marginal mixed faring livelihood zone and 45 and 30 percent cash income in the rain fed crop livelihood zone respectively. In the marginal mixed farming and rain fed cropping; tea/dairy livelihood zones, maize contributes 56 and 60 percent food to households.

#### 3.1.1 Rain-fed cropping

Table 1: Rain-fed crop production

Crop	during 2013	2		Long Term Average production during the Short Rains Season (90 kg bags)
Maize	51,630	52,566	474,144	1,152,147
Beans	29,364	30,240	190,805	305,190
Pigeon Peas	4,530	3,900	83,800	73,000

The acreage under the main crop was relatively within the LTA for maize, beans and pigeon peas (Table 1). The production of pigeon peas was 14 percent above the LTA while that of maize and beans were 41 and 62 percent below LTA. The drop in maize and beans production is attributed to below normal rainfall.

#### 3.1.2 Irrigated cropping

**Table 2: Irrigated crop production** 

Crop	Area planted during 2013 Short rains season(Ha)	planted during the Short rains season	l <del>-</del>	Long Term Average production during the Short rains season(Tons)
Onions	546	540	1,532	1,675
Tomatoes	267	212	2,700	2,380
Kales	93	95	548	730

Onions, tomatoes and kales are the main crop grown under irrigation and largely commercialized, intended to target local markets (Table 2). The acreage under the three high value crops was relatively within LTA. The production was largely normal with kales production attained at 13 percent above LTA.

#### 3.1.3 Maize stocks

Table 3: Maize stocks held compared to LTA

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
<b>House Holds</b>	18,377	83,444
Traders	20,187	47,240
Millers	1,715	1,800
NCPB	4,955	12,400
Sub Total	45,234	144,884

In general maize stocks held by households, traders, millers and (National Cereals and produce Board) NCPB are 22, 42, 95 and 39 percent compared to the LTA respectively (Table 3). Low household stocks are attributed to a gradual decline of household stock from the short rains harvests. Stocks held by the households are projected to last one to two months.

#### 3.2 Livestock production

Livestock production contributes 26, 15 and 30 percent of cash income to households in the marginal mixed farming, mixed farming and rain fed cropping livelihood zones respectively. The main livestock kept in these livelihood zones include cattle, sheep, goats and chicken. Chicken contributes to 50, 60 and 40 percent to household food in the marginal mixed farming, mixed farming and rain fed cropping; tea/dairy livelihood zones respectively. Goats also contribute 30 and 20 percent food to households in marginal mixed farming; food crop livelihood zones. Cattle contributes significantly to food in households in the rain fed crop livelihood zones at 80 percent. Constraints impacting on livestock production include lack of drinking water, pasture and browse prevalence of livestock pests and diseases.

#### 3.2.1 Pasture and Browse

Pasture and browse in the mixed farming and rain fed livelihood zones is fair. In the marginal mixed farming livelihood zones, they are poor but fair in the rain fed livelihood zone. Currently, livestock are fed on dry maize and bean residues as fodder in the mixed farming and marginal mixed farming livelihood zones. Pasture is projected to last until the February, the alternative fodder, will last until the onset of the long rains in October.

### 3.2.2 Livestock Productivity

#### 3.2.2.1 Livestock body condition

Currently, livestock body condition ranges from good to fair as opposed to normal at this time of the year. Poor pasture and long trekking distances to watering points is contributing to the deterioration in livestock body condition in the mixed farming and marginal mixed farming livelihood zones

#### 3.2.2.2 Birth rate milk availability and consumption

There are no changes on birth rate reported. The current milk production is two litres compared to the normal three litres per household for cattle and 0.5 litres compared to 1.5 litres for dairy goats which is attributed to depletion of pasture and browse and increase in watering distances for animals. This is expected to decline further in the next one to two months. Milk consumption has reduced from the normal two to three litres to one litre per household per day currently. Milk is available and is sold at Ksh.40- 60 and generally 10 Ksh. above normal in respective areas.

#### 3.2.2.3 Tropical livestock unit (TLUs)

The current average TLU is two per household which is normal at this time. However, with deteriorating livestock body condition, households are selling livestock to gain cash income to purchase food and other household commodities. TLUs are therefore expected to decline.

#### 3.2.3 Water for Livestock

River, communal watering pans, boreholes and water pans are the main sources of water for the livestock. Recharge of seasonal rivers is low with below normal rainfall in the marginal mixed farming livelihood zone. Water scarcity has contributed to pressure and tension at watering points. Trekking distances have increased to 9.5 km on average compared to the normal of five km in the marginal mixed farming zones. Where households have access piped water, the distances are normal 0.2 km to one km. Livestock are watered every one to two days which compared to daily normally.

#### 3.2.4 Migration, Livestock Diseases and Mortalities

Contrary to the normal trend, livestock migration in the county has been noted from Isiolo through Buuri, Tigania west and Igembe south. Approximately 500 cattle and small stock have migrated in search of water and pasture. This is largely attributed to prolonged dry spell with below normal rainfall in the marginal mixed farming livelihood zones. Foot and Mouth disease was reported in all livelihood zones especially in lower grazing zones. Measures to contain the disease through vaccination are ongoing.

#### 3.3 Water and Sanitation

#### 3.3.1 Major water sources

The main sources of water for both domestic and livestock use are rivers, boreholes, water pans and communal piped water. Access to water is compromised in the agro-pastoral livelihood zone. This is attributed to low recharge of seasonal rivers which are also the current water sources. Water pans with damaged inlets have little or no water holding capacity. Currently, River Likiundu is the main source of water in the agro pastoral livelihood zone.

#### 3.3.2 Distance and waiting time sources

The distances to water points have increased from two to six km, three to six km and five to 10 km for mixed farming, rain fed and pastoral livelihood zones respectively. Distances are 20km, in the lower grazing zones of the marginal mixed farming livelihood zones of Buri, Igembe North, Tigania East and Tigania West where the water pans and boreholes have dried up. The waiting time has increased from 10 to 15 minutes compared to the normal five to 10 minutes.

#### 3.3.3 Cost of water and consumption

The cost of water has relatively increased and is at, Ksh. 45 compared to the normal Ksh. 30 in the marginal mixed farming livelihood zones of Igembe North, Tigania East, Buuri and Tigania West. In the mixed farming livelihood zone the same amount of water cost Ksh. 20 which normal. Consumption has also declined by 10litres form normal across all livelihood zones.

#### 3.3.4 Hygiene and Sanitation

Latrine coverage is 75 percent compared to the national target of 80 percent. Open defecation, poor waste disposal, poor hygiene and food handling practices have contributed to the prevalence of water borne diseases. 71 percent of households consume untreated water. Water pollution is higher in streams and rivers in Igembe South, Tigania East and Tigania West remains a great challenge. It's common in urban centers where the river channel passes through; sewage pipes directly remit raw human waste into the river.

#### 3.4 Markets and Trade

#### 3.4.1 Market Operations

The main markets in the six sub-counties are Laare, Mutuati, Maua, Kangeta, Mikinduri, Kianjai, Muthara and Mulika. Operations at the markets have remained normal. The main suppliers at the markets during the season are traders. Currently, cereals are from Busia and Kakamega comprise larger percentage of what the traders are holding. Households account for a lower proportion of sales from household produced. Farmers are currently selling livestock to obtain school fees. The market operations are expected to remain normal.

# 3.4.2 Market prices

# 3.4.2.1 Maize prices

Currently maize is being sold at Ksh. 36 per Kg which is relatively higher compared to Ksh. 33 per kg in December 2013 (Figure 3). The maize price is above the LTA of Ksh.28 as indicated (figure 3) In June through August the maize prices were below LTA. The maize prices are expected to increase gradually in the month of February 2014.

#### 3.4.2.2 Goat prices

Currently, goats are selling for Ksh. 3,481 which is relatively above LTA of 2402 but much lower compared to 3833Ksh in 2012 same period (Figure 4). Households are also selling goats to obtain school fees. The prices are expected to decline with fair to poor livestock body condition.

#### 3.4.3 Terms of trade

The terms of trade in December 2013 is 55 percent compared to the LTA. One goat exchanges for 131 kg of maize (Figure 5). One goat exchanged for 116 kg in the same period in 2012.

#### 3.4 Health and Nutrition

#### 3.5.1 Morbidity and mortality patterns

Other than clinical malaria and respiratory tract infections, morbidity Figure 5: Term of trade compared to LTA prevalence among the children under

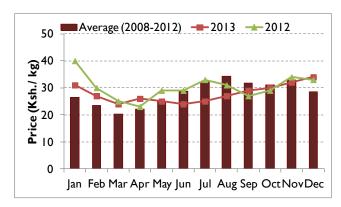


Figure 3: Maize prices compared to LTA

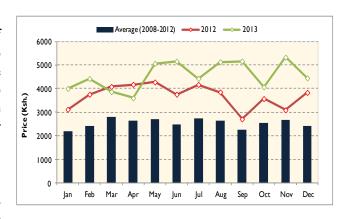


Figure 4: Goat prices compare to LTA



five years of age and the general population were dissimilar. While diarrhea, intestinal worms and pneumonia were prevalent among children under five, rheumatism, skin diseases and urinary tract infections were common in the general population. With the exception of measles, morbidity prevalence was higher in July to December 2013 compared to 2012 same period. Crude death rate (CDR) and under-five death rate (U5DR) was 0.24 and 0.48 per 10,000 persons per day respectively. Both CDR and U5DR rates are below the alert thresholds.

#### 3.5.2 Immunization and vitamin A supplementation

Immunization coverage for fully immunized child (FIC) in July to December 2013 was 58 percent; an increase from 43 percent in the same period in 2012. The immunization coverage slightly increased for oral polio vaccine (OPV) 1 and 3 in July to December 2013, which was 68 and 69.2 percent when compared to 67 and 68 percent in 2012 same period. Measles coverage remained the same at 60.2 percent for July to December 2013 and 2012 in the same period. Vitamin A supplementation for children aged six to 11 months, 12 to 59 months (once) and (twice) was 54.8 percent, 79.3 percent and 35.9 percent respectively. Immunization coverage and Vitamin A supplementation are below national target of 80 percent.

#### 3.5.3 Nutrition and dietary diversity

Under-fives at risk of malnutrition by MUAC less than 135mm is 15.3 percent for December

2013, below the long term mean (LTM) of 17.8 percent (Figure 6). However, malnutrition rates among under-fives might worsen attributed to insufficient dietary intake and high incidences of childhood illnesses reported. The most affected divisions include Mutuati, Akithi and Kangeta. Children are consuming three meals a day across all livelihoods

The meal frequency among adults has slightly declined from a normal three meals per day to a range of two to three meals currently. Main food groups consumed among under-five

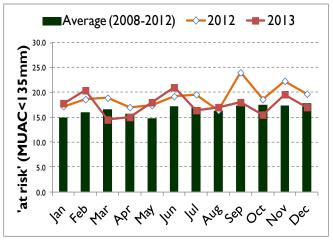


Figure 6: Proportion of children (6-59months)at risk of malnutrition

are cereals and legumes constituting 74.8 percent and 46.7 percent respectively. The December 2013 Food Security Outcome Monitoring (FSOM) report indicated that 61 percent of households were consuming acceptable diets compared to 57 percent currently. Exclusive breastfeeding (EBF) for children less than six months of age was 57.4 percent; timely initiation of breast milk with one hour of birth was 88.4 percent. Findings of the nutrition survey conducted in July 2013 revealed that the prevalence of wasting, stunting and underweight was 5.5 percent, 45.5 percent and 19.8 percent respectively.

#### 3.6 Education

#### 3.6.1 Enrolment, Attainment and dropout

The district has a total of 345 public primary schools with a total of 224,475 pupils out of which 114,560 are girls and 109,865 are boys. According to the ministry of Education County Statics, the enrolment for boys and girls between first term 2013 and first term 2014 decreased by 7.0 percent and 6.2 percent respectively. Generally, in Meru North more girls are enrolled in early child development (ECD) and primary schools than boys, this is attributed to concerted efforts by government and other stakeholders to empower girl child and ensure no child of school going age is left out. Absentism in first and second term is very high though in third term more children become active in their respective classes due to fear of failing to transit into the next class. High dropout rates between the third term 2013 and first term 2014 increased by 4.1 percent and 2.3 percent for boys and girls. The increased dropout rate among boys is attributed to quick cash generated in Miraa (*Catha endulis*) business. Dropout rate among girls is attributed to increased household poverty forcing them to engage in casual job such as housemaids.

#### 3.6.2 Transition

Transition rate from Early Childhood Development Centres (ECDCs) classes to standard one is generally good at 86 percent above the 70 percent threshold. This was attained with continued forcement by the Ministry of Education. Completion rate from class one to eight stood at 30 percent. The low completion rates is due to early marriages, household food shortages leading to child labour in the tea and *Miraa* farms.,socio-cultural factors that compromise girl child education. Transition rate from primary schools to secondary schools is very low; approximately 30 percent attributed to high household poverty; many families are unable to pay fees required for enrolment of form one student at secondary schools.

#### 3.6.3 School meals programme

Currently, no school in the district is under home grown school meals program me (HGSMP). .

#### 3.7 Coping Mechanisms

According to FSOM, the coping strategy index for non-beneficiary increased from CSI of 10 in September 2013 and 13 in December 2013. However the situation remained stable for beneficiaries.

#### 3.8 Ongoing interventions

Sub County	Intervention	Locatio n	No. of benf.	Implementer s	Impacts in terms of food security	Cost	Time Frame
Agricultu	re Sector						
Uringu ward	Kimanchia Irrigation scheme	Kimana chia	300	NIB and farmers	Increased food production	50M	2013/201 4 FY
Mituntu ward	Mumui water pan	Mituntu	200	State department of Agriculture	Increased food production through small scale irrigation	2.5M	
Mutuati	Kachiuru B/hole	Kabachi	1,000	GoK/CDTF/ EU		5M	12 months
Akithi	Drilling of Mula B/Hole	Rwanda	800	TWSB/World Bank			6 months
Health Se	ctor						
County wide	Vitamin A Supplementation	all	All childre n 6-59 month s	МОН	Improved immunity		Continuou s
Livestock	Sector						
Igembe South	Deworming, animal feeds and treatment	Agro pastoral and rain fed	Livest ock keeper s	SCVO/SCLP O NDMA/DCC	Transport and allowances	0.3M	Feb- March
Igembe North and South	Community capacity building on drought coping mechanism	Agro pastoral and rain fed	Livest ock keeper s	SCVO/SCLP O NDMA/DCC	Transport, Farmers lunches, Hall hire, stationery and allowances	0.03M	Feb
Tigania West	Buying bales of hay	Agropas toral	Livest ock	SCLPO/ND MA/DCC	Increased production and	0.2M	Feb 2014 – Dec

Sub County	Intervention	Locatio n	No. of benf.	Implementer s	Impacts in terms of food security	Cost	Time Frame
			keeper s groups	County government of Meru	income generation		2014
Water Sec	ctor						
Igembe South	Irrigation Scheme	Kianda	300	150	90Million	JICA/ GOK	Ongoing
Tigania East	Nerica Rice Promotion	Sub County	45	6		EAPP/ GoK	Ongoing

#### 3.9 Sub-County Ranking

Sub	Food security	Main food security threat (if any)					
County	rank (1-10)						
Igembe	4	Water stress and pasture; overdependence of maize; insecurity; cattle					
North		rustling;					
Buuri	4	Poor crop performance due to short rains;					
		Birds infestation on sorghum farms; water stress and pasture; insecurity					
Tigania	5	High sale of post-harvest; ; poor post-harvest management; poor crop					
East		performance of short rains					
Tigania	5	Water stress and pasture; low use of certified seeds; high sale of post					
West		harvests					
Igembe	8	Land fragmentation; prioritizing Miraa over food crops; insecurity					
Central							
Igembe	7	Land fragmentation; prioritizing Miraa over food crops; insecurity					
South							
Very Good (	(9-10) Goo	d (7-8) Fair (5-6) Poor (3-4) Very Poor (<2)					

#### **4.0 FOOD SECURITY PROGNOSIS**

#### **4.1 Prognosis Assumptions**

- The county is expecting long rains in second dekad of February
- Markets will operate normally with no disruptions
- Livestock diseases will remain relatively low with ongoing interventions.
- Livestock prices are expected to remain stable.
- Pasture and browse is expected improve with timely onset of the rains

#### **4.2 Food Security Outcomes (March to May)**

Pasture and browse is likely to decline from fair to poor in the mixed farming livelihood zones and remain poor in the marginal mixed farming livelihood zones. Livestock will therefore rely on dry maize and beans residue until the onset of the rains. Livestock migration is likely to continue with deteriorating pasture conditions and drying up of water sources especially in the marginal mixed farming livelihood zones. Milk production will therefore remain below normal. Owing to low recharge, pressure is likely to increase at the water points. With low water recharge, there is likely to be extended waiting time at the water sources and incidences of tension at the current water points.

Household stocks are expected to last a month. Households will therefore continue relying on markets for household food commodities. Maize prices are projected to increase with increasing demand. Food consumption is likely to remain borderline in the mixed farming and rain fed; cropping livelihood zones but poor in the marginal mixed farming livelihood zone. Nutrition status of children under five will remain stable in both livelihood zones. Morbidity trends of water borne diseases and URTIs among children and adults alike are likely increase with the onset of the rains in March.

#### 4.3 Food Security Outcomes (June-August)

Notable improvement in food security is expected from June-August in the county. In the rain fed cropping livelihood zones, adequate rainfall will ensure fair harvests and replenished household stocks that may last two to three months. Livestock body condition and milk production is also expected to improve with regenerated pasture and browse in the marginal mixed farming livelihood zone. Although maize prices are expected to remain high, terms of trade will remain stable in functional markets. Food consumption will relatively improve to two to three meals per day across the livelihoods.. Household stocks are expected to replenish with average harvests in both the mixed farming and rain fed livelihood zones. Prevalence of URTI and diarrhea will however remain high. In the month on June and August, the marginal mixed farming zones may still remain in the stressed phase, while the mixed farming and rain fed cropping livelihood zone will improve to 'no acute or minimal' food security phase.

#### 5.0 CONCLUSION AND RECOMMENDATIONS

#### **5.1 Conclusion statement**

Food security is Stressed (IPC Phase 2) in the lower grazing zones of Meru north that are largely under the marginal mixed farming livelihood zone. Areas in the border of marginal mixed farming and Uringu and Tiganis west areas that received good amounts of rainfall are likely to improve to 'no acute or non minimal phase with good rainfall in July/August. The mixed farming and rain fed cropping areas are also likely to remain in the same phase. Interventions that encourage adoption of drought tolerant strategies for livestock and crop production, especially irrigation for high value crops, should be prioritized in reference to the short rains assessment recommendations. Ongoing repairs of boreholes and destroyed water pans should be completed in time to ensure optimal water harvest with the rains in March. Possible tension at water points should also be monitored. Surveillance of water borne and endemic diseases should up scaled in March-May when they are most prevalent alongside advocacy for their management.

#### 5.2 Summary of recommendation

- Drilling repairing and renovation of water pans and boreholes.
- Continuous surveillance and monitoring of infant and young child health and nutrition where child illnesses are most prevalent
- Livestock vaccination and de-worming
- Capacity building on appropriate drought coping practices and technologies for livestock production.
- Promotion of Nerica Rice under irrigated cropping
- Timely provision of certified seeds for production of high value crops
- Advocacy for adoption of improved hygiene practices where waterborne diseases are most prevalent.

#### Annexes

Annex 1: Food Intervention required Proposed population in need of food assistance

<b>Sub County</b>	Population	Pop in need( % range min -	Proportion	Proposed mode of
		max)		intervention
Tigania East	157,246	(10.8-20.8)%	15.8%	General Food
				Distribution
Buuri	109,803	(10.8-20.8)%	15.8%	General Food
				Distribution
Tigania West	135,980	(10.8-20.8)%	15.8%	General Food
				Distribution
Igembe North	154,814	(6.0-16.0)%	11.0%	General Food
				Distribution
Igembe South	145,301	(6.7-16.7)%	11.7%	General Food
				Distribution
Igembe	182,641	(6.0-16.0)%	11.0%	General Food
Central				Distribution
Total	885,785	(8.5-18.5)%	13.5%	

# **Annex II** Non-food Interventions

# **Recommended interventions**

Sub County	Intervention	Location	No. of benefici aries	Proposed Implement ers	Required Resources	Available Resources	Time Frame		
AGRICULTURE SECTOR									
Igembe North,Igembe South , ,Tigania East	Relief food	All areas of Igembe North & Tigania East. (Giika,Kindan i &Kianda) in Igembe South	36,560	KFSSG	Food transport/subsi stence	personnel	6 months		
Tigania East and Tigania West	Drought tolerant crops seeds	Sub County wide	18,900	GOK/MO ALF	Seed transport	personnel	2014/2015		
Buuri and Igembe North	Water harvesting for food production	Buuri and Kabachi	3500	MOALF	Water pan excavation <k sh.3 million&gt;</k 	Site, EIA &Survey and design report	1 year		
LIVESTOCK S	SECTOR								
Tigania East and Buuri	Purchase of feeds for livestock/fo dder conservatio n	Agro-pastoral and rain fed	Livesto ck keepers	SCLPO/N DMA/DC C	600,000	Vehicles and personnel	February 2014		
Igembe North and South,	Disease and pasture	Agro-pastoral and rain fed	Livesto ck	SCLPO/N DMA/DC	Transport and allowances	Vehicles and personnel	immediately		

Sub County	Intervention	Location	No. of benefici aries	Proposed Implement ers	Required Resources	Available Resources	Time Frame
Tigania East and West, Buuri	surveillanc e		keepers	С			
Igembe North	Poultry/dai ry goat rearing/bull scheme/bee keeping	All	430	MOALF	2.66M	Personnel	January 2012 June 2014
WATER SECTO	R						
Igembe South/Igembe North	Replaceme nt of broken down hand pumps/serv icing of boreholes	All	20,000	GOK	Fuel and spare pats	personnel	Continuous for every 3 months
Tigania West/Igembe North	Water pan; Athwana water project	Kianjai,Akithi , Antubetwe,At hwana	85,000	Nationa l water( WTSF)/ DWO/C	Water excavation/pip ing system/15mill ion	personnel	3 months
HEALTH SEC	TOR						
All sub Counties	Scaling of High impact nutrition interventio ns (HiNi)	All	40,000	GOK	Establishing community outreach sites; nutrition commodities for treatment of SAM &MAM	personnel	6 months
All sub Counties	Strengtheni ng community units(CHW s)	All	40,000	GOK	Training and transport allowances of CHWs	personnel	6 months
EDUCATION SE	ECTOR						
All sub Counties	Strengthenin g SMP in public schools	All		GOK	Fuel, food stuff,cooking utensils,personn el		6 months