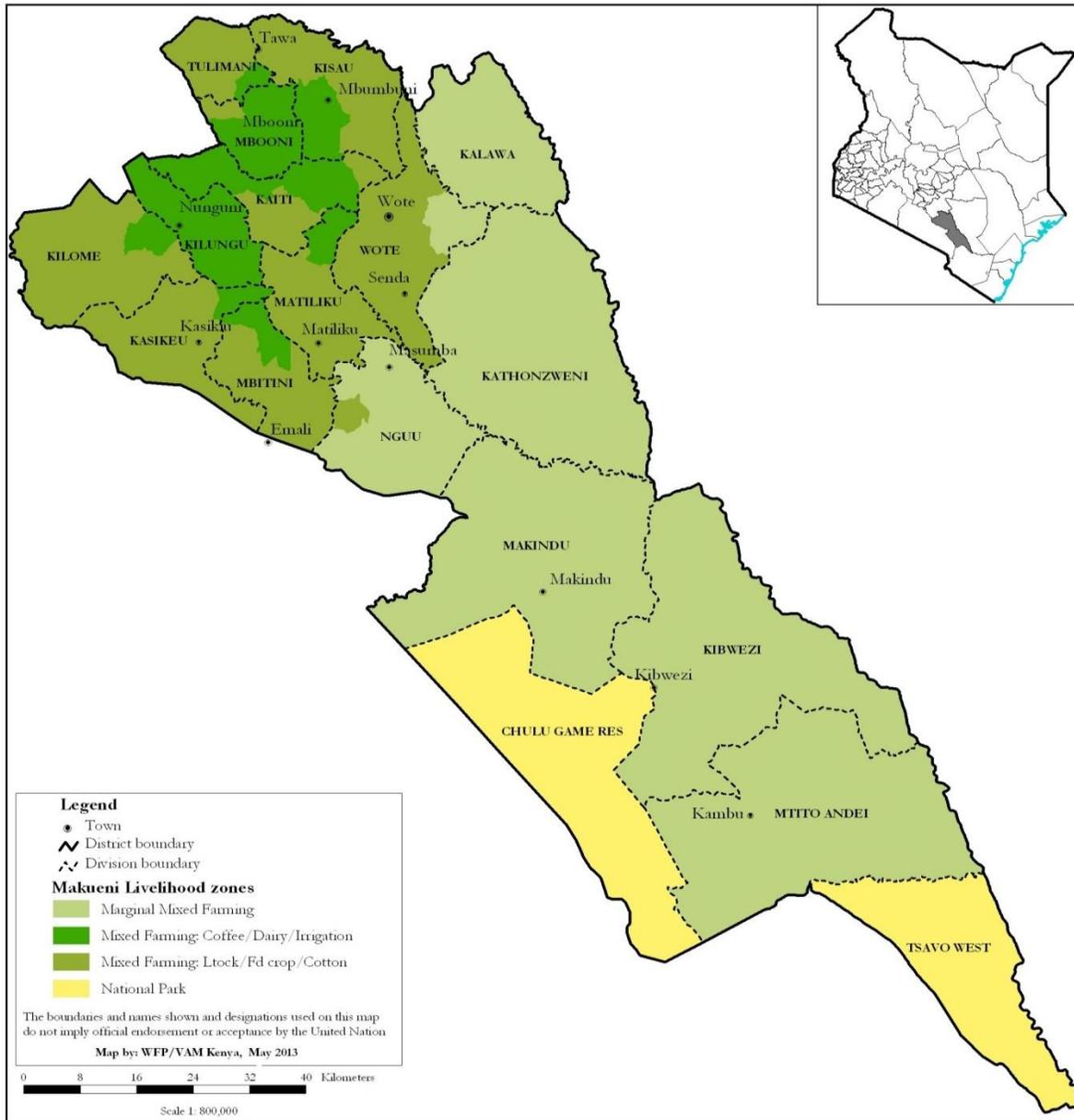


**MAKUENI COUNTY 2014
SHORT RAINS FOOD SECURITY ASSESSMENT REPORT**



A joint report by Kenya food Security Steering Group (KFFSG)¹ and Makeni County steering group

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1.0 Introduction

1.1 County back ground information

Makueni County is located in the south-western part of the country. It borders Kajiado County to the west, Machakos County to the North, Kitui County to the East and Taita Taveta to the South. It has an estimated population of 833,671 persons (2009 census) and covers an area of 7,965.8 square kilometres (km²). The County is sub-divided into six sub counties namely; Makueni, Kilome, Mbooni, Kaiti, Kibwezi East and Kibwezi West. The County is characterised by three main livelihood zones namely; marginal mixed farming (40 percent), mixed farming; food crop/livestock (30 percent) and mixed farming; coffee/dairy (30 percent) respectively.

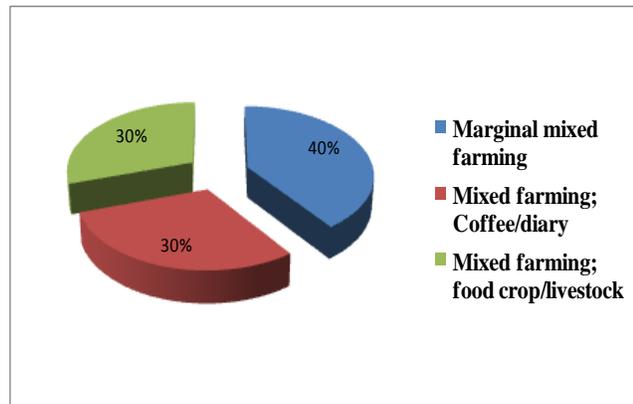


Figure 1: Population by livelihood zones

1.2 Current Factors Affecting Food Security

The major factor affecting food security in the county was poor temporal and uneven spatial distribution of the short rains coupled with a late onset and early cessation in most areas, Other factors affecting food security are poor soil fertility across all the livelihood, human-wildlife conflict, limited forage and water retention, limited household stocks, and overreliance of maize as staple food.

2.0 County Food security situation

The county food security classification is stressed (IPC Phase 2) in the marginal mixed farming zone while in mixed farming; food crop/livestock and mixed farming; coffee/dairy is in minimal phase (IPC Phase 1) of the Integrated Food Security Phase Classification (IPC). Though the performance of the short rains was near normal, temporal and spatial distribution was poor and uneven. Maize crop was the most affected especially in marginal mixed farming and lower areas of mixed farming (food crop/livestock) where farmers experienced 70 to 80 percent total crop failure. In most areas of mixed farming (food crop/livestock) and mixed farming (coffee/ dairy) maize crop yield was 30 to 40 percent of long term average (LTA).The available stocks are 18 percent of normal and mostly held by traders. The current terms of trade (ToT) are on an improving trend with households purchasing 92 kilograms (kgs) of maize from sale of a goat as of December, 2014. Marginal mixed farming zone, mixed farming; food crop/livestock and mixed farming; coffee/dairy) recorded a ToT of 102, 88 and 92 kgs respectively for the month of January 2015. Pasture and browse was fair in mixed farming (coffee/diary) and mixed farming (livestock/food crops). Forage condition was fair to poor in marginal mixed farming livelihood zones. The livestock body condition is good across all the livelihoods except in the marginal mixed farming livelihood zone where cattle had a good to fair body condition. Households are currently consuming an average of two meals in a day in all the livelihood zones, compared to 3 - 4 meals normally. Households in the marginal mixed farming livelihood zone have a water

consumption of 15 litres in comparison to a normal of 20 litres per person per day while in both mixed farming zones households are consuming 20 litres, which is normal at this time of the year. The nutrition status of children under five as measured by Mid Upper Arm Circumference (MUAC) less than 135 millimeters has been within normal range during the period under review, with current levels as at December was 8 percent below the LTA of 13.5 while January recorded 6.71 percentage of malnourished cases.

2.1 Food Security Trends

The County was classified in none/minimal phase for the mixed farming zones of coffee/dairy and livestock/crops/cotton while it was in the stressed phase for marginal mixed farming zone after the 2013 short rains assessment the classification was similar to the 2014 short rains. The performance of the 2014 long rains season was poor resulting in poor production with a decline of 72 percent for maize, 40 percent for cow peas and 16 percent for green grams due to poor performance of the long rains across the livelihood zones. The food stocks held by households were at 18 percent of the LTA which was similar to the previous season.

Pasture condition was fair, but some pockets have poor pasture a similar status in comparison to the previous season however, rainfall was not sufficient as the recharge of major water sources was only 60 percent with very minimal regeneration of pasture for livestock comparable favorably to the previous season. The terms of trade between October and November 2014 registered an increase followed by stabilization at 81, 92 and 92 kgs of maize to a sale of a goat respectively, and were fairly comparable to the LTA but slightly higher than those of the same period in 2013. Households in the marginal mixed farming livelihood zone are consuming 15 litres in comparison to a normal of 20 litres per person per day while in both mixed farming zones households are consuming 20 litres. The percentage of children under five at risk of malnutrition based on MUAC was below the LTA in 2014 and fairly comparable to the percentages in 2013.

2.2 Rainfall Performance

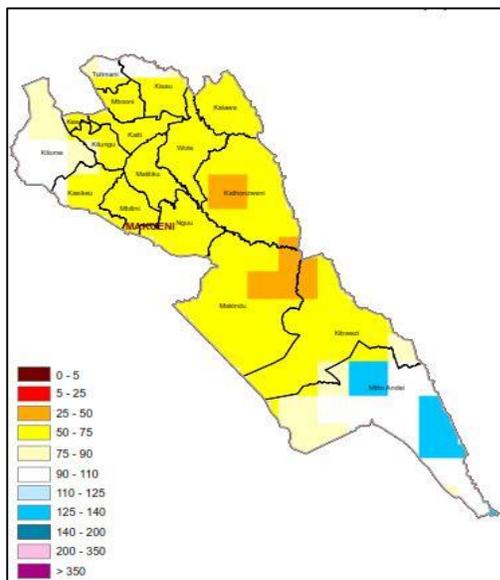


Figure 1: Short Rainfall performance

Makueni County receives a bimodal rainfall, and is short rains dependant for both rain fed and irrigated agriculture. Onset of short rains was timely in second dekad of October for mixed farming livelihood zone while in first dekad of November in marginal mixed farming and was characterized by uneven spatial and poor temporal distribution. Most parts of the County received depressed rains of between 50 - 75 percent of normal rains as illustrated in figure 2. The rains ceased early in the first dekad of December in comparison to the normal second dekad of January.

3.0 Impact of Rainfall Performance, Shocks and

Hazard

3.1 Crop Production

Rain-fed Cropping

The major crops grown under rain fed are maize, green grams, cowpeas and beans while tomatoes, kales and beans are grown under irrigation. In marginal mixed farming livelihood zone; maize, green grams and cowpeas contributing 27, five and 34 percent to cash income respectively and 70, two and eight percent to food respectively. In the mixed farming: coffee/dairy, maize and beans contribute 10 and eight percent respectively to cash income and maize and Beans contributing to 77 and 10 percent to food respectively. While in the mixed farming /food crop maize contributes 58 percent to cash income while beans and cowpeas contribute two percent. Maize, beans and cowpeas contribute 59, 20 and one percent of food respectively. The crop production is both under rain fed and irrigation, the details in hectarage and production are illustrated in table 1 and table 2 below.

Table 1: Rain-fed Crop Production Compared to LTA

Crop	Ha planted 2014 Short rains	Long Term Average during Short rains season (Ha)	Production Short rains (90 kg bags) Projected/Actual	Long Term Average production Short rains season
1.Maize	74,150	65,650	278,200	626,800
2.Green grams	32,312	28,050	80,200	278,900
3.Cowpeas	31,417	30,588	84,552	294,550

The hectarage under maize increased by 13 percent while that under green grams and cowpeas increased by 15 percent during the short rains in 2014 compared to the LTA. The increase on hectarage was attributed to the short rains weather forecast which predicted above normal rainfall for the region. The production of maize, green grams and cowpeas decreased by 65, 72 and 71 percent respectively, of the long term average. The decline in production of green grams and cowpeas was accelerated by outbreak of pests due to the dry weather experienced in the month of December 2014 and January 2015.

Irrigated Crop

Table 2: Crop Production

Crop	Ha planted 2013 Short rains	Short Term Average(3yrs) during Short rains season (Ha)	2014 Production Short rains (Tons)Projected/Actual	Short Term Average production Short rains season
Tomatoes	214.1	156	2047	1802
Kales	172	118	1964.4	1632
French Beans	15	10	300	250

There was an increase of 37, 45 and 50 percent in area planted under irrigation from the short term average for tomatoes, kales and french beans respectively as illustrated in table 2 above. Production increased by 14, 20 and 20 percent for tomatoes, kales and french beans of the short

term average respectively. The increased crop production in tomatoes, kale and french beans can be attributed to ready market for the produce and especially the export market for the french beans. However the trend is expected to change due to poor recharge of the water sources.

Maize Stocks

Stocks held at household level were at 18 percent of the LTA due to the poor performance of the previous long rains season. The stock held by traders is only 68 percent of the LTA, The National Cereals and Produce Board (NCPB) is holding 27 percent of their long term average. The available stocks are estimated to last for one month in both mixed farming livelihood zone compared to the normal three months. Currently, there are no stocks held in the marginal mixed farming livelihood zone which is due to minimal maize production.

Table 3: Stocks

Maize stocks held by	Quantities held currently (90-kg bags)	Long Term Average quantities held (90-kg bags) at similar time of the year
House Holds	33,310	189,200
Traders	164,572	241,000
Millers	0	0
NCPB	8,432	31,000
Total	206,314	461,200

3.2 Livestock Production

The major livestock species kept in the County are cattle, sheep and goats. In the marginal mixed farming zone, the contribution to food and income is 50 percent while in the mixed farming: coffee/dairy zones is 40 percent. The contribution to food and income in the mixed farming; crop and livestock is 39 percent.

Livestock Body Condition

The body condition of cattle is currently fair to good across all the livelihood zones but is expected to deteriorate if the dry spell continues. The effect of this will be felt most severely in Emali/Mulala, Nguu-Masumba ward; Kalata in Mtito Andei ward); Mukaa (Malili-Kalanzoni ward), Kitise-Kithuki ward; and Kalawa ward where the body condition of cattle was between fair and poor attributed to the ongoing dry spell and exhaustion of water sources.

Forage Condition

Pasture and browse condition is fair to poor in the marginal mixed farming zone and fair in both mixed farming zones of crop/livestock and mixed farming coffee/dairy zone. The situation is normal at this time of the year although it is likely to deteriorate in the next one month due to the current high temperatures before the onset of the long rains. Forage is expected to last up to mid March except some pockets in the marginal mixed farming zone which may last until the end of February. The situation is reported to be normal at this time of the year. In the mixed farming: food crop/livestock zone, crop residue from harvested legumes and wilted maize crops are expected to contribute to livestock feeds. The maize residues are expected to supplement livestock feeds after the crop is harvested.

Birth rate

The effects of good nutrition from November and the subsequent improvement in body condition as relates to improved fertility are yet to be realized in birth rates. The situation is the same in all the three zones for all animals including the small stock (sheep and goats). It is however expected that the rate will increase in the next 2 - 3 months.

Tropical livestock units (TLUs)

Overall, for all the 3 livelihood zones, the TLUs have remained below normal since the decline of herd and flock sizes during the 2009/2010 drought. Recovery has been slow for marginal mixed farming zone, average livestock holding per household is currently 3.5 TLUs, compared to normal of 4.5 TLUs. In mixed farming; food crop/livestock, TLUs are 2.5 compared to normal of three TLUs in livelihood mixed farming; coffee/dairy compared to normal of 1.2. Reduced TLUs has impacted negatively on the household food security status. Low supply of goats, for example, is reflected in increasing goat meat prices. Low volumes of livestock are available for sale owing to reduction in TLUs hence reduced income and consequently increased vulnerability to food insecurity at household level.

Milk Availability

Households are currently getting an average of 0.5 - 1 litre per day compared to the normal of one litre from cattle dependant households. In the mixed farming zone; crop and livestock, milk availability is 0.5 to one litre compared to the normal of 0.8, and 1.5 litres compared to 1.5 - 2 litres in the mixed farming coffee/dairy zone. Milk availability is likely to reduce as the livestock nears kidding and calving from May to September 2015. Average milk consumption per household is 0.3 litres in the marginal mixed farming zones compared to the normal of 0.5 litres, compared to a litre in the mixed farming: crop /livestock zone and a litre compared to 1.5 litres in the mixed farming: coffee/dairy livelihood zone. The current milk prices range from Ksh. 45 - 60 per litre compared to the normal of Ksh. 40 - 45 across all the livelihood zones.

Water for Livestock

The main sources of water for livestock are dams, perennial rivers, boreholes, springs, shallow wells, piped schemes and sand dams which are the normal sources at this time of the year. The current trekking distances to water ranges from less 1 - 4 kilometres in marginal mixed farming in comparison to a normal range of 1 - 3 kilometers while watering frequency is once daily across the livelihood zones. The situation is expected to deteriorate in the next one month as distances covered to water sources increase attributed to the exhaustion of the water sources. Perennial rivers and springs are mostly concentrated in the mixed farming zones of coffee/dairy while the other water sources are in the other two livelihood zones of crops/livestock and marginal mixed farming. In the mixed farming zones of crop/livestock, water is taken to livestock as opposed to the latter going for watering at the water sources thereby covering no distance to water points.

Migration, Livestock diseases and mortalities

There is no reported migration of livestock into or out of the county however, normal dry season grazing patterns are expected to take place before the end of March as pasture gets depleted in the lower parts of Kibwezi West (Kathekani), Makindu (Nguumo), Makueni (Kitise) and Kaiti (Kee)

Foot and Mouth disease outbreak reported sporadically in parts of Makueni Sub county and Kibwezi. Mortalities reported were attributed to Pestes des Petits ruminants (PPR) and Rift Valley Fever (RVF) at 30 and 67 for cattle and goats respectively at KALRO Kiboko station in Kibwezi West Sub County.

3.3 Water and Sanitation

Major water sources

The major water sources for domestic use in the county are rivers, dams, boreholes, springs, shallow wells, sand dams and piped water in kiosks. The sources were adequately recharged to about 60 percent during the short rains season. The prevailing high temperature is accelerating the drying up of the remaining seasonal rivers. Water is currently exhausted in most of the water sources and the few existing water pans are expected to last until early march in both mixed farming and the marginal mixed farming areas; water in the pans and dams is currently 25 percent of normal capacities and is expected to last for approximately one month in most areas of the marginal mixed farming livelihood zone. The water situation is below normal across the livelihood zones attributed to the onset of the dry spell.

Distance to water sources

Distance to water in the mixed farming (coffee/diary), mixed farming (food crops/livestock) and marginal mixed farming is two, four and five kilometres (km) respectively. The normal walking distance to water source ranges between 1 - 3 km, in the marginal mixed farming, mixed farming (food crop/livestock) and mixed farming (coffee/diary) livelihood zone. The distances have increased from 3 – 7 kms in localized areas of Kasikeu this is above normal for this time of the year leading to limited consumption. The increasing water distances is attributed to high pollution in River Athi and break down of the borehole.

Waiting time at the source

The waiting time at water kiosks in marginal mixed farming zone, mixed farming (food crop/livestock) and mixed farming (coffee/diary) is 60, 50 and 30 minutes compared to normal of 30, 20 and 15 minutes respectively however during the community interviews waiting time at localized places of Mukuyuni was at 5 hours attributed to breakdown of the main water supply other areas of concern are not limited to Kalata in Kibwezi at four hours attributed to construction of the standard gauge railway and Kikoko at three hours owing to break down of Thomeando borehole .

Cost of water and consumption

The current cost of water ranges between Ksh. 2 - 5 per 20 litre jericin across all livelihood zones, which is normal at this time of the year however, Malili, Emali and Kalawa prices were as high as Ksh 10 - 15 attributed to water supply by the vendors. Households in the marginal mixed farming livelihood zone are consuming 15 litres in comparison to a normal of 20 litres per person per day while in both mixed farming zones households are consuming 20 litres, which is normal at this time of the year.

Sanitation and hygiene

The county's latrine coverage has increased to 89 percent from 84.5 percent in April 2013 however, it was noted that some of the markets had no public latrines for use which include

Mukuyuni, Kasikeu, and Kitise. Household water treatment practices were generally low at approximately 20 percent boiling water as noted at Kitise and Kasikeu however water from pipes was considered clean thus not boiled. Water treatment chemicals are not available at household level owing to low purchasing power and competing needs with the minimal available recourses. Contamination of water sources along the bed of River Athi Poor sewerage construction has become a hazard which led to drainage of sewerage water to a dam. Garbage disposal in a pit, hand washing practices and use of dish rack at household level was recorded at 50 percent as noted during the transect walks at Kalata and Kitise, Kilome, Kilungu and Kaiti. Food handling and hygiene practices such as washing of hands before cooking and covering of food are generally practiced in all livelihood zones but at low rate of 40 percent

3.4 Markets and Trade

The main markets in the county are Mbumbuni, Wote, Kathonzweni, Machinery, Makindu, Kalawa, Matiliku, Marinduni, Kitize, Mukuyuni and Kikive which were functioning smoothly without disruptions for both livestock and farm produce with an exception of Kibwezi which was under quarantine attributed to Foot and Mouth Disease. The main foodstuffs in the market include maize, beans, maize flour, and horticultural crops such as tomatoes, onions, Irish potatoes and oranges. The market operations for livestock and other commodities, including traded volumes, were normal across the livelihood zones.

Maize Prices

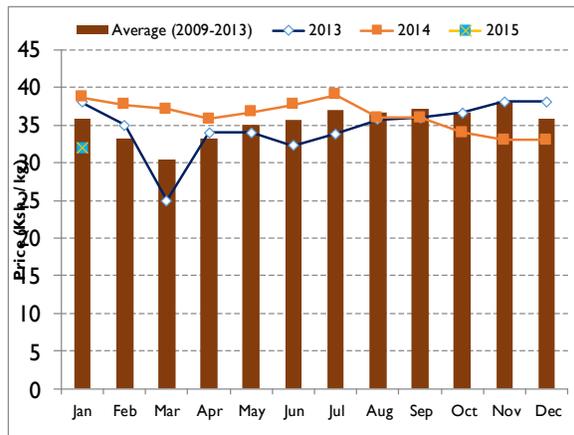


Figure 3: Maize prices

In the period of October to December 2014, maize prices remained fairly stable, at Ksh.34 in October and Ksh. 33 in November and December but below the LTA at Ksh. 37, 38 and 36 in October, November and December respectively as shown in figure 3. The current maize price is slightly lower than in marginal mixed farming, mixed farming; coffee/dairy and mixed farming; cotton/livestock attributed to traders from Loitokitok, Busia and Taveta. The maize prices are expected to increase gradually until next harvest when prices are expected to reduce marginally, after the long rains harvest.

Goat Prices

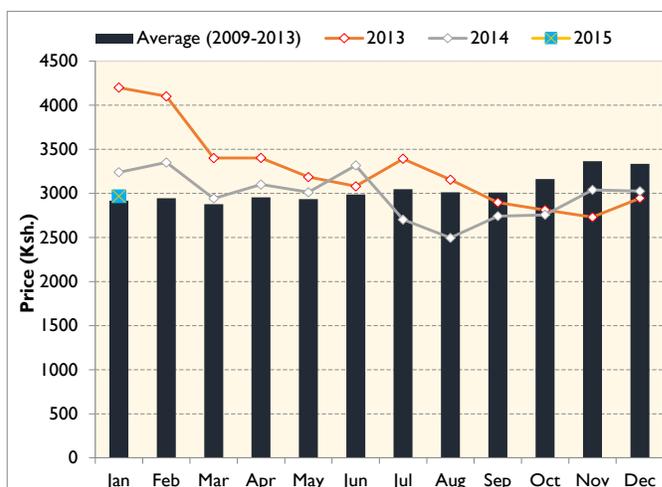


Figure 4: Goat Prices in Makeni County

Goat prices remained stable from October to December. The prices were favorably comparable LTA at Ksh 2,967 for January 2015 in comparison LTA of Ksh. 2,916 as illustrated in Figure 4. In the marginal mixed livelihood zones, a goat in January 2014, was selling at Ksh. 3,045 while in the mixed farming; coffee/Dairy and mixed farming; cotton/livestock livelihood zones was Ksh. 3,063 and Kshs. 3,000 respectively.

Terms of Trade (TOT)

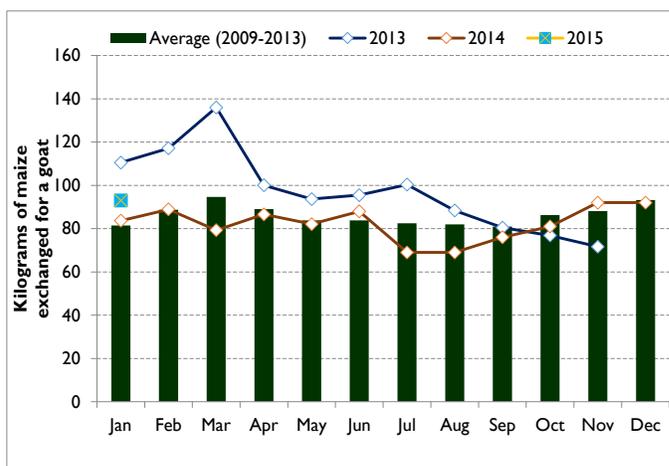


Figure 5: Terms of Trade in Makeni County

The terms of trade between October to November 2014 registered an increase followed by stabilization at 81, 92 and 92 respectively, and were fairly comparable to the LTA as shown in Figure 5. January 2015 recorded a ToT of 93 which was slightly higher than LTA of 81. There was no significant difference in the terms of trade in the livelihood zones as both the maize and goat prices remained relatively the same. The terms of trade are fairly comparable to normal for this time of the year and are expected to remain stable till the next long rains season.

3.5 Health and Nutrition

Morbidity and mortality patterns

The major diseases among under fives include; upper respiratory tract infections (URTIs), clinical malaria, diarrhea, skin diseases and pneumonia. All the mentioned diseases decreased with an exception of malaria and skin diseases increasing at 9.55 and 39.79 percent respectively compared to July – December period in 2013. The major diseases among general population include; upper respiratory tract infections (URTIs), clinical malaria, skin diseases, diarrhea and rheumatism with all mentioned diseases increasing except for clinical malaria when compared to

2013 same period The trends water borne diseases indicated there was a general increase in watery diarrhea cases by 40.3 percent from 26,920 cases in July - December 2013 to 37,760 cases in 2014 same period. It was attributed to low adherence to water safety and poor hygienic practices. The standard gauge railway was noted to have caused an increase in persistent upper respiratory cases attributed to the dusty environment.

Immunization and Vitamin A supplementation

Immunization coverage for the fully immunized child (FIC) was 78 percent, an increase from 75 percent in 2013 though below the national target of 80 percent. The low coverage is attributed to inaccessible areas, and frequent breakdown of cold chain. Vitamin A supplementation for children less than one year old from July to December 2014 was at 83 percent while that of the children aged 1 -5 years was 29 percent which is below the national target of 80 percent. The low immunization is also attributed to poor documentation and reporting and the fact that most of these children at ECDE centres are not covered. The under-five mortality rate was at 0.082 while CMR data was at 0.09 both CDR and U5MR are below alert levels of one death per 10,000 persons per day and 2 deaths per 10,000 persons per day respectively.

Nutritional Status and Dietary Diversity

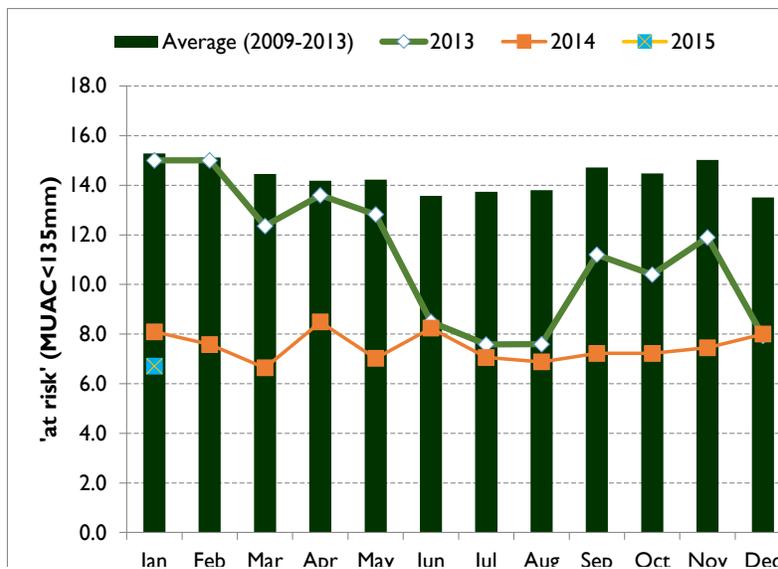


Figure 6: Percentage of children <135 MUAC at risk

The percentage of children under five at risk of malnutrition based on MUAC less than 135mm was below the LTA in 2014 as illustrated in Figure 6. The trend in July to December 2014 indicated a generally stable nutrition status and at 7.22, 7.45 and 8 for October, November and December respectively while the LTA was 14.5, 15 and 13.5 respectively. In January 2015, the children at risk of malnutrition were 6.71 percent and this was lower compared to the LTA of 15.3 percent.

Current meal frequency for under-fives is at 1 - 2 meals a day in the marginal mixed farming livelihood zones noted at Kalata and Kitise and 1 - 3 in both mixed farming livelihood zones compared to a normal of 3 - 4 meals across the county while the frequency is 1 - 2 meals for adults in comparison to a normal of three in all livelihood zones. Dietary diversity for all populations in marginal mixed farming livelihood zones was below normal with households consuming meals mainly comprising of starch and vegetables (cabbage or kales). In both mixed farming and marginal mixed farming livelihood zones, households consumed 3 - 4 food groups.

3.6 Education

Makueni County has a total of 914 public primary schools spread across all the nine sub-counties namely Makueni, Mbooni East/West, Kilungu, Mukaa, Nzau, Makindu, Kathonzi and Kibwezi.

Enrolment

Total enrolment in Makueni County in 2014 is 311,653 pupils comprising of 167,405 boys and 152,148 girls compared to 312,008 pupils in 2015 with 159,599 boys and 152,419 girls, an increase of 0.1 percent. There is fair gender parity in enrolment which is attributed to the positive attitude towards both gender child education and government support in ECDE. Transfers of children have been observed from public to private schools due to the perception that private schools offer quality education.

Drop Out

Dropout rate is minimal across the County with an average 16 pupils dropping out in every sub-county. Majority of the drop outs are girls especially along the Nairobi Mombasa highway in Kibwezi as they seek cash income. Other sub-counties that have recorded significant dropouts are Kilungu and Kathonzi. The decline in dropout rate has been attributed to the support offered by the government to the orphaned households through cash transfer programmes implemented by the department of youth and gender.

Transition

Transition from ECDE to primary is high at 90 percent while that of primary to secondary is improving and is currently at 88 percent compared to 86 percent in 2014. The increase reported is due to access to bursaries and opening up of additional day secondary schools. The ECDE transition to primary school is below 20 percent due to age factor in that there are more under age children in baby class where some parents find it more reliable to send children for baby care under teachers than under domestic house helps who may not have the right attitudes and skills in child development.

School Meals Programme

Out of the 914 schools in the County, only 231 schools representing 25 percent are under Home Grown School Meals Programmes (HGSMP) targeting 55,687 pupils. The programme's impact includes increased retention and completion rates and eventually enhanced academic performance.

3.7 Coping Mechanisms

The current mean coping strategy index (CSI) for the county in December 2014 was 23, compared to 17 in December 2013 for non beneficiary implying the situation is deteriorating and household are becoming more vulnerable.

3.8 Ongoing Interventions

Agriculture							
Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame

All	Promotion of Drought tolerant crops	County wide	95,000 HH	National government & County government.	Increases food production	5M	On going
All	Promote utilization of tradition food crops	County wide	120,000 HH	County government and stakeholders	Increased consumption of traditional crops.	0.5 M	ongoing
All	Provision of Fruit seedlings (Mango & Avocado) to establish Mother Orchards	County wide	Selected fruit farmers	County Government	Get a source of clean and true to type grafting materials.	0.969 M	On going
All	Post harvest management campaigns	County wide	100,000 HH	County government and stakeholders	Reduced post-harvest losses	0.5 M	On going
All	Supply of subsidized fertilisers- Planting & Topdressing	County wide	35,000 HH	National government	Improved crop yields	60M	On going
All	Provision of relief food	County wide	15,000 HH	National government & county government.	Prevent loss of life	46 M	On going
All	Water harvesting structures construction, e.g. farm ponds (lined) , zai pits, negarims, semi circular bunds	County wide	6,000 HH	County government and stakeholders	Increase food production	2 M	On going
All	Soil and water conservation through terracing	County wide	75,000 HH	County government and stakeholders	Improved crop yields	1.8 M	On going
Kibwezi East, Kibwezi west, Makueni & Mbooni	Food for assets (FFA)	Masongaleni, Kikumbuluyu, Kathonzweni and Kalawa	61,000 HH	NDMA/WFP/Red cross/World vision	Reduce hunger & Nutrition		On going
Livestock							
Makueni county	Mechanized and manual grass harvesting and hay baling	ALL wards	500 H/H	All Stakeholders	Improved Feed Security	Ksh200,000	Jan – Mar 2015

Makueni county	Vaccination against RVF & PPR	County wide (all wards)	500 H/H	County Govt	Secured livestock assets;	Ksh 2M	Jan - Feb 2015
Makueni county	Poultry breed and husbandry skills improvement; NCD control	Kibwezi East & West; Mbooni (all wards)	2500 H/H	County Gvt, FAO, Heifer International KAPAP	Increased poultry productivity; raised incomes	2 M	2014-2015
Makueni county	Artificial Insemination Programme	County wide	3500 H/H	Private Inseminators, CGM	Increased births rate, milk yield, hh income	20M	2014-2015
Makueni county	Milk collection, cooling & value addition process facilities	County wide	2300 H/H	CGM, Dairy Coop. Societies	Increased and efficient milk intake, distribution.	20M	2014-2015

Water

Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame	Implementation Status
Construction of Kaiti Pipeline	Wote town	1,500	County Government	Provision of safe water/livestock	9M	June, 2015	30%
Construction of Kwa wau earth dam	Kasikeu	700	County Government	Provision of safe water/livestock/irrigation	2.1M	March, 2015	90%
Rehabilitation of Ivuso Earth dam	Masongeleni	600	County Government	Provision of safe water/livestock/irrigation	2.95M	May, 2015	40%
Borehole drilling	Thange at Machinery	500	County Government	Provision of safe water/livestock	1.556M	March, 2015	70%
Rehabilitation of a piped WP- Kwinyithya Kiw'u Water project	Kikumbulyu South/North	1,500	County Government	Provision of safe water/livestock	8.52M	May, 2015	80%
Rehabilitation of a piped WP Kiboko	Makindu	900	County Government	Provision of safe water/livestock	5.007M	May, 2015	75%
Schools (construction)	Kibwezi west,	1288H	German Agroaction	Installation of rain water harvesting	3000\$		

of a 50M3 masonry tank)	kibwezi east			system and construction of 3 double pit latrines			
Health							
Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame	
Vitamin A Supplementation	Health Facilities	33041	MOH UNICEF Education	Reduced Infection	33,536	Jul-Dec 2014	
Zinc Supplementation	Health Facilities	24856	MOH UNICEF	Improved Health/Nutrition status	109,720	Jul-Dec 2014	
Management of Acute Malnutrition (IMAM)	Health Facilities	853	MOH UNICEF WFP KRCS	Improved Nutrition status	3,712,500	Jul-Dec 2014	
MIYCN Interventions	Health Facilities	43200	MOH UNICEF AMREF	Improved Health/Nutrition status	1,750,250	Jul-Dec 2014	
Iron Folate Supplementation among Pregnant	Health Facilities	17670	MOH UNICEF MI	Improved Health/Nutrition status	4,650,000	Jul-Dec 2014	
Deworming	Health facilities and ECDE centres	26500	MOH Education	Improved Health/Nutrition status	1,250,000	Jul - Dec 2014	
Education							
Home Grown School Meals Programme	Selected Schools within pockets of poverty	55,867	National Govt & WFP	Enhance retention, completion & Nutrition status	109 M	Jan – Dec 2015	
Implementation of Comprehensive School Health	Selected Primary schools	14,728	National Govt, KRC & JICA	Minimize absenteeism	2.5 M	Term I,II and III 2015	

3.9 Sub County ranking

Table 1: Sub County ranking

Sub County	Food security rank (1-10) worst to best	Main food security threat	Remarks
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Kibwezi West	1	Water shortages, Limited household stocks, and Human/wildlife conflict	Food security situation is stressed
Kibwezi East	2	Water shortages, Human/wildlife conflict.	Food security situation is stressed
Mbooni	3	Poor road network, land fragmentation, poor soil fertility	Food security situation stable across the livelihood zones with an exception of Kako
Makueni	4	limited household stocks,	Food security situation stable across the livelihood zones with an exception of Mavindini and Kitise
Kilome	5	Poor road network, limited household stocks	Food security situation stable across the livelihood zones with an exception of Kiima
Kaiti	6	Land fragmentation.	Food security situation stable across the livelihood zones with an exception of Kee
Very Good (9-10) Good (7-8) Fair (5-6) Poor (3-4) Very Poor (<2)			

4.0 Food security prognosis

4.1 Prognosis Assumptions

- The 2015 long rains expected to be normal to above normal
- Food prices are expected to remain stable attributed to ready supply from the outside market within the proximity with a slight increase starting from March until June when the harvest from long rains is expected.
- Pasture and browse are expected to deteriorate in the next two months owing to poor regeneration and prolonged drought however starting from March 2015 the condition is expected to improve.

4.2 Food Security Outcomes for the Next Three Months (March, April and May)

Food security situation will remain minimal across livelihood zones. However there are pockets of marginal mixed farming areas of the county will remain stressed until the onset of long rains. When the minimal harvest of the short rains crops becomes available this may last upto one month for some households. Nutritional status of children under five is expected to deteriorate as the milk intake within households is expected decline as livestock body condition becomes poorer due to depleted pastures. However, there is no likelihood of unusual mortalities, as the food security indicators are likely to be boosted with the onset of the long rains March to May. More households likely to be categorized in poor food consumption scores as result of diminished household food stocks.

4.3 Food security outcomes for the last three months (June, July and August)

Food security situation at the household level is expected to improve from June to August 2015. Improved food consumption at the household level is expected from the long rains harvest, as the pastures and browse is expected to regenerate and livestock body conditions improve leading increase in milk consumption at household level. Availability of on-farm casual labour opportunities will result in labour re-allocation to the farms away from insurance activities and unsustainable practices such as charcoal burning and bricks baking. Good rangeland conditions

will boost livestock productivity, resulting to increased milk production and improved nutritional status of under-five. No unusual mortalities expected in humans and livestock.

5.0 Conclusion and recommendation

5.1 Conclusions

The county food security classification is expected to be stressed in marginal mixed farming zone while in mixed farming; food crop/livestock and mixed Farming; coffee/dairy is in minimal phase of the Integrated Food Security Phase Classification (IPC) .The indicators to monitor in the coming months are water availability, disease outbreak in humans and livestock market prices of basic food commodities, health and nutrition status of children and pasture and fodder availability.

5.2 Summary recommendations

- Training of farmers on diseases and disease control.
- Promotion of pastures management and conservation trainings at the community level.
- Surveillance by Ministry of Livestock for livestock diseases.
- Emphasis on monitoring of food stock and on farm crop performance at household level.
- Increased surveillance on malnutrition and disease and conduct nutritional survey.
- Promotion of drought tolerant crops
- Real time climate /weather feedback system
- Rainwater harvesting
- Agro-forestry and improvement of soil texture
- Improvement of livestock breeds.

6.0 Annexes

6.1 Food interventions recommended

Table 2: Food interventions recommended as per sub County

Sub County	% vulnerable population	Proposed intervention	Remarks
Kibwezi East	10-15%	FFA/GFD	99450, Thange ,Nzambani and ,Mtito Andei
Kibwezi West	10-15%	FFA/GFD	Mulala, Makindu, Nguumo and Nguu (119,723)
Mbooni	5-10%	FFA/GFD	23,082 (Kako)
Makueni	5-10%	FFA/GFD	45328 (Mavindini and Kitise)
Kilome	5-10%	FFA/GFD	22991(Kiima)
Kaiti	0-5%	FFA/GFD	26649(kee)

Recommendations

Agriculture							
Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
All	Drought tolerant crop seeds (THVC)	County wide	33120 House holds	County government & Stake holders	24M		Long rains 2015
All	Water harvesting structures construction and storage facilities	County wide	6000 Households.	All Stakeholders	132M	6 M	From February, 2015
All	Subsidy on seed and pesticides	County wide	65,000 HH	Increase production	48M	3 M	From February, 2015
Livestock Production							
Makueni County	Intensify livestock feed production, conservation	County wide	All farmers	All Stakeholders	15M	Labour Technical staff	Feb.- March 2015
Makueni County	Livestock disease surveillance and Vaccination	County wide	144,000HH	GM C, Farmers	20 M	Staff Vehicles	Feb- July 2015
Makueni County	Development of livestock markets,	County-wide	All markets	GMC and other development partners	10M	Staff Vehicles, equipment	Feb- July 2015
Makueni County	Breed improvement for small stock and poultry	County wide	All farmers	GMC, WVK, Individual farmers,	20M	Good breed sources; Technical expertise	Jan- June 2015
Makueni	Beekeeping	Zone II	All farmers	GMC,	5M		Jan- June

County	promotion	and III		Stakeholders			2015
Makueni County	Promote range management	Zone II & III	All farmers	All Stakeholders	20M	Labour Certified grass seed	Jan- June 2015
Water Sector							
Makueni	Minor repairs of the pumping sets	Piped Schemes (10)	5000HH	All Stakeholders	7M	To be sourced	Once in 3months
	Provision of HH water treatment	All	5,000HH	All Stakeholders	1.5M	To be sourced	Once in 3months(once per week)
ZONE 11 and 111	Subsidized water trucking	Emali to Malili Kaiti	4,500HH	All Stakeholders	2M	To be sourced	3months (once per 3 months)
Health							
ALL	Scale up trainings on Vit.A to ECDE teachers	County	68,429	-MOH -MOE -NDMA	7.5M	Trainers	Jan-Dec 2015
Education							
All	Provision of HGSM Programme	County	240,635	National Government & County Govt	289 M	None	May to July, 2015
County	De-worming	County	698,125	MoEST & MoH	1.4 M	None	March to May, 2015