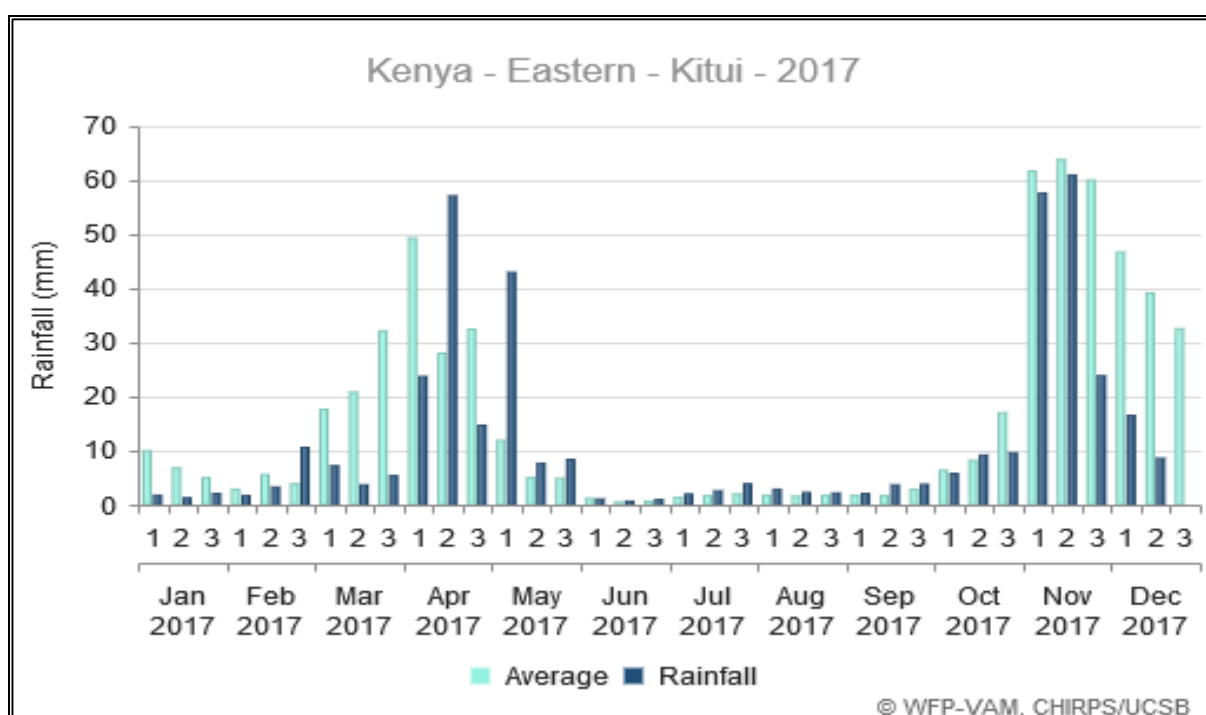


1.0 CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- Kitui County received timely onset of October, November and December (OND) short rains in the second week of October in few parts of the county.
- The short rains were depressed in the month of December. Most areas received poor amount of rains for between 1-2 days in the month. These rains were poor, erratic and unevenly distributed across the livelihood zones in the county.
- During the month, the county received 27.4 percent of the total amount expected in the region at this particular time of the year. This was 270.4 mm less than the total amount received in the area in the previous month and 117.5 mm less than the Long Term Averages.
- The seasonal cessation was early in the first week of December 2017 for most areas across the county.
- The performance of rains were below the predicted amount for the season in the county as shown in the figure below.



1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- Temporal distribution was fair while spatial distribution was uneven across livelihoods; Urban areas and Mixed farming livelihood zones received some rainfall in comparison with Marginal Mixed farming livelihood zones which received poor/no rains. The rains were characterized by periodic wet and dry days.
- Kitui ATC and Kitui Met Rain stations in Urban areas recording the highest cumulative amount of rainfall at 579.3mm and 573.4 in 20 and 22 wet days respectively as indicated in table 1 below.
- Marginal mixed farming livelihood zones recorded the least cumulative amount of rainfall as represented by Endau town rain station which recorded 47mm in one wet day.

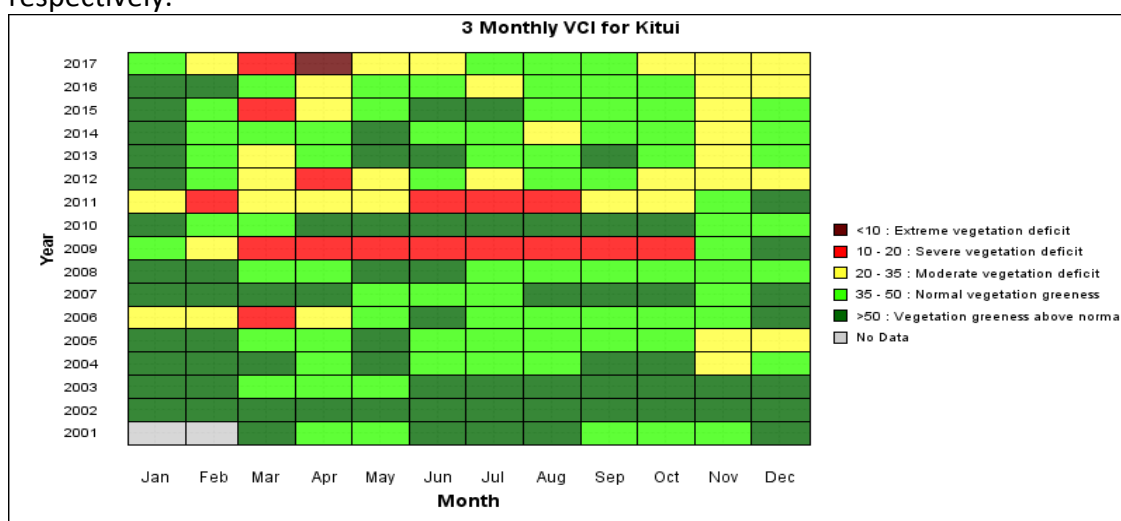
		Table 1: RAINFALL AMOUNT AS AT DECEMBER 31, 2017							
Sub Counties	Rain Stations	OCTOBER		NOVEMBER		DECEMBER		OND 2017 TOTAL	
		Total Amount	Wet Days	Total Amount	Wet Days	Total Amount	Wet Days	Total Amount	Wet Days
Kitui South	Mutomo	10.8	1	-	-			10.8	1
	Mutha	31	1	150.5	5			181.5	6
	Kasaala	0	0	67.7	5			67.7	5
	Kanziko	8.9	1	-	-			8.9	1
	Athi	24.6	1	-	-			24.6	1
Kitui East	Endau(ikisaya)	0	0	129.2	8			129.2	8
	Endau (katumbi)	0	0	50	1			50	1
	Endau town	0	0	47	1			47	1
	Zombe	10.5	1	146.6	9			157.1	10
	Kisasi	39	2	-	-			39	2
Kitui Central	Kitui ATC	241	5	338.3	15			579.3	20
	Kitui MET	228.9	4	323.2	17	21.3	1	573.4	22
	Kavuta	50.2	3	238.1	11			288.3	14
	Tiva	151.6	5	363.2	15			514.8	20
Kitui Rural	Kyangi	0	0	193.2	11			193.2	11
	Kiusiani	38.1	3	120.5	7			158.6	10
	Mbitini	30.5	4	-	-			30.5	4
Kitui West	Matinyani	83	4	-	-			83	4
Mwingi West	Migwani	38.3	3	187.7	15			226	18
Mwingi Central	Mwingi Town	59.4	2	246.5	15			305.9	17
	Nuu	0	0	59	5			59	5
Mwingi North	Kyuso	26.2	2	95.3	5			121.5	7
	Kyuso (Maseki)	9	1	141.1	5			150.1	6
	Katse	50	3	158.3	7			208.3	10
	Tseikuru	49.5	2	147.5	6			197	8
	Tharaka	204.1	6	209.1	9			413.2	15
	Ngomeni	25	2	83.5	5			108.5	7

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- In December, the 3 month VCI for the County was 27.08 . This was 6.46 higher units recorded than in the previous month implying that the county was still experiencing moderate vegetation deficit.
- Generally, most subcounties experienced moderate vegetation deficit with Kitui East, Mwingi Central, Mwingi North and Kitui South subcounties being the most affected with deficit represented by a 3 month VCI of 20.26, 20.46, 26.23 and 28.9 respectively.
- Kitui Central and Kitui Rural were the only subcounties that recorded a 3 month VCI of 53.2 and 41.87 hence experienced above normal and normal vegetation greenness respectively.



2.1.2 Field Observations (Pasture and Browse Condition)

2.1.2.1 Pasture

- The pastures quality and quantity conditions ranged from poor to good across the livelihood zones in the month.
- Pastures condition of about 18.7 percent were considered good, 52.1 percent were considered fair while the remaining 29.2 percent of them were considered poor across the livelihood zones.
- In the Mixed Farming livelihood zones, only 7.1 percent of the pastures were considered good, 64.3 percent of the pastures were considered fair while the remaining 28.6 percent of the pastures were poor.
- In the Marginal Mixed Farming livelihood zones, 30 percent of pastures were considered good, 40 percent of them were considered fair while the remaining 30 percent of the pastures that were poor.
- The good and fair conditions were attributed to the re-generation of the grazing areas occasioned by the OND rains received in the county.
- The poor conditions reported were due to the below normal rains experienced especially in the areas of Endau/Malalani, Zombe/Mwitika, Voo/Kyamatu, Mutha, Kanziko, Ikutha, Kanyangi, Nuu, Ngomeni, Tseikuru wards.
- These trends were considered below normal for the county at this particular time of the year and the conditions are expected to worsen as the dry spell continues.

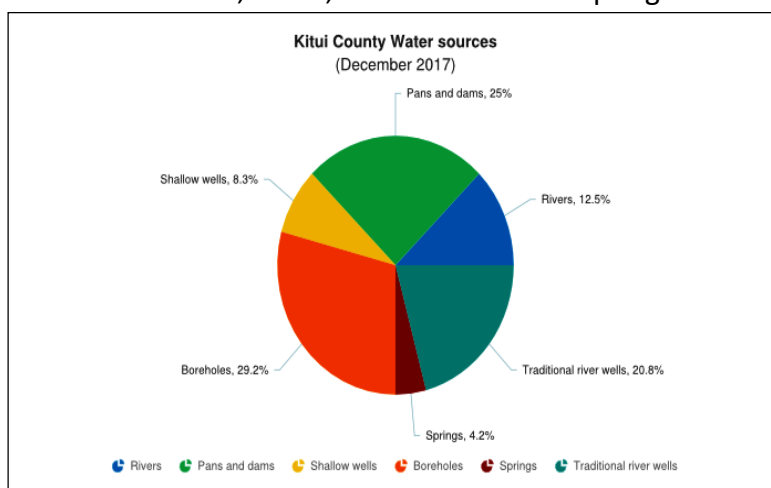
2.1.2.2 Browse

- The browse quality and quantity conditions ranged from fair to good across the livelihoods zones in the month.
- 50 percent of the browse was considered good, 37.5 percent of the browse was considered fair while the remaining 12.5 percent of the browse were considered poor.
- In the Mixed Farming livelihood zones, 42.9 percent of the browse was considered good, 35.7 percent of the browse was considered fair while the remaining 21.4 percent of them were considered poor these are areas of Mui, Kivoo, Kyome/Thana, Kiomo/Kyethani wards.
- In Marginal Mixed Farming livelihood zones, 60 percent of the browse was considered good while the remaining 40 percent of them were fair.
- These trends were considered below the normal for the county at this particular time of the year.

2.2 WATER RESOURCE

2.2.1 Sources

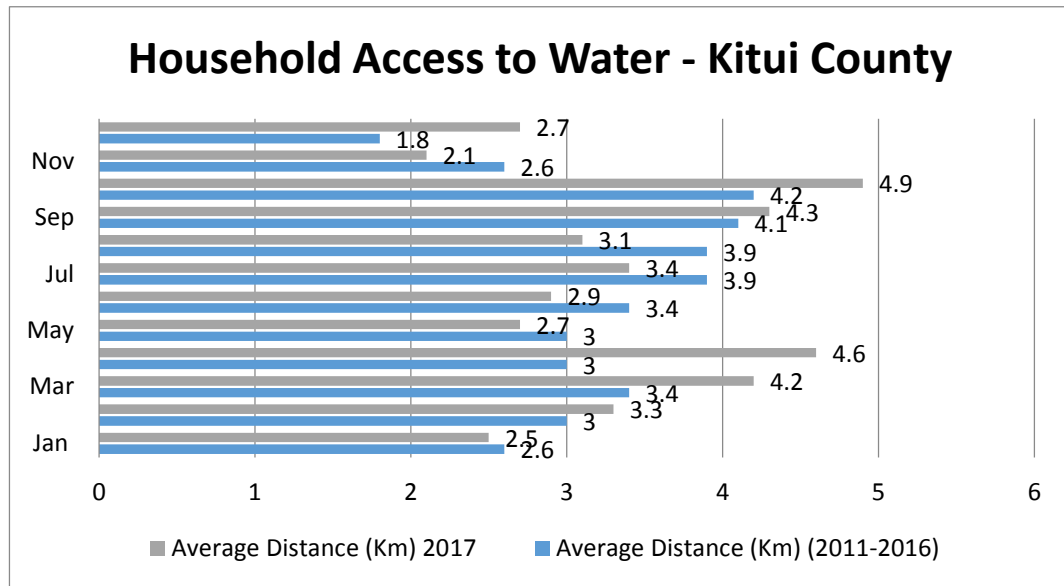
- The main water sources used by human and livestock in the month of December were boreholes, pans and dams, traditional river wells, rivers, shallow wells and springs at 29.2 percent, 25 percent, 20.8 percent, 12.5 percent, 8.3 percent and 4.2 percent respectively as shown in the figure and this was unusual at this time of the year.
- Other water sources included piped water, rock catchments, and roof catchments.
- Open water sources especially in the Mixed farming livelihood zone had recharged at about 70 percent and 40 percent in the Marginal Mixed farming livelihood zone.



2.2.2 Household Access and Utilization

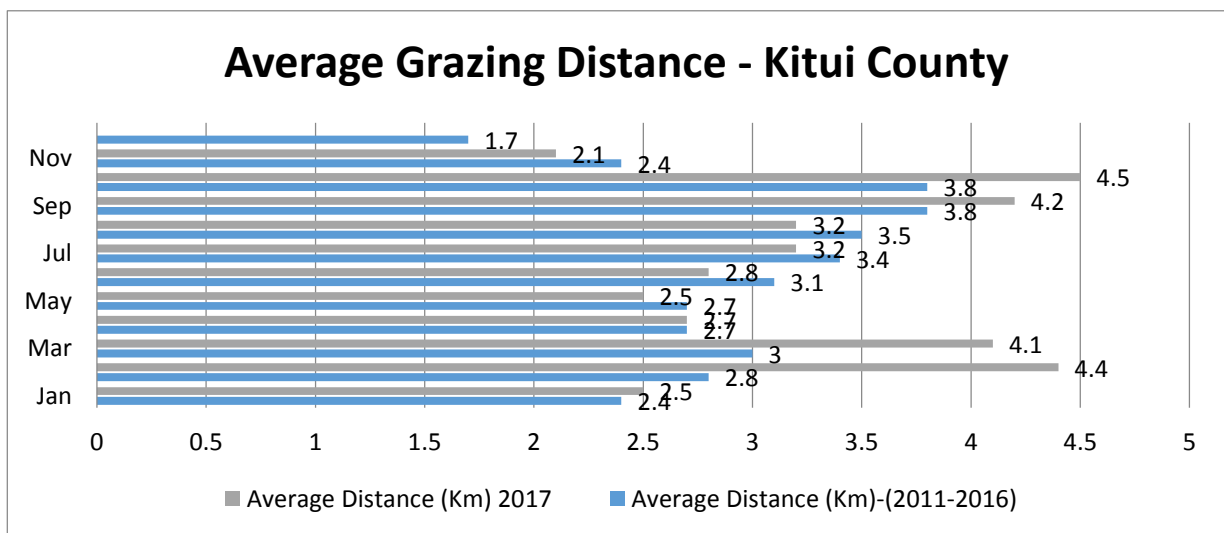
- The average return distances from the households to water sources increased from 2.1 Km in November to 2.7 km in December.
- This was 0.9 Km longer than a normal year average distances and 1.2 Km more than the same month last year.
- Households in the Marginal Mixed Farming livelihood zones trekked relatively longer distances of 2.7Km in search for water compared to those in the Mixed Farming livelihood zones at 2.4Km.
- Boreholes, pan/dams and traditional river wells were the most frequented sources at 29, 25 and 21 percent respectively across the livelihood zones.
- This variation of the trekked distances across the livelihood zones was attributed to unreliable rainfall patterns.

- These sources were considered normal in the area at this particular time of the year.



2.2.3 Livestock Access

- Livestock average return distances to grazing areas increased from 2.1Km in the previous month to 2.4 Km in the month of December. This was 0.7 km longer than the normal year distances.
- Livestock in the Marginal Mixed Farming livelihood zones trekked longer distances of 2.7 Km in search for forage and water compared to 2.1 Km in the Mixed Farming livelihood zones.
- This was attributed to shortage of sufficient water and forage in the Marginal Mixed Farming livelihood zones.
- On average, livestock were being watered 5 times within 7 days across the livelihood zones.
- This trend was above normal compared to long term mean as shown in the figure below.



2.3 Implication to Food Security

- Concentration of livestock and human at the water points was low and normal.
- The ceased rainfall season is expected to worsen forage condition, water access and availability, hence would have a negative impact on food security.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

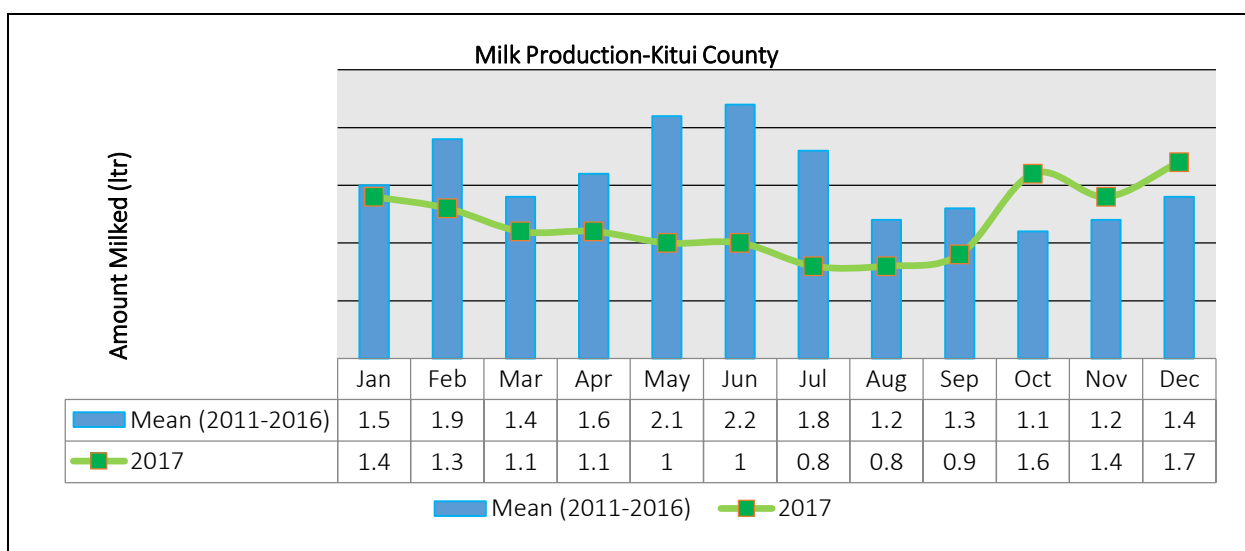
- The livestock body conditions ranged from borderline to good and smooth appearance body condition across the livelihood zones in the county.
- Only 17 percent of the livestock had good body conditions, 54 percent of them had moderate (neither fat nor thin) body condition while the remaining 29 percent of them that had borderline (fore rib not visible, 12th and 13th rib visible) body conditions.
- Goats’ body conditions were good and stable compared to cattle and sheep that had body condition ranging from fair to poor body across the County.
- These conditions were attributed to the availability of moderate forage at relatively shorter distances to grazing areas and watering points across the livelihood zones.
- This trend was considered below normal for the County at this particular time of the year and is expected to worsen if the conditions don’t improve.
- Majority of livestock in Nguni and Nuu wards had very thin no fat, bones visible body condition and this was mainly attributed to minimal pastures and browse available and internal and external parasites for the livestock in the area.
- The trend was unusual at this particular time of the year.

3.1.2 Livestock Diseases

- No alarming livestock diseases outbreaks cases had been reported in the county.
- Internal and external parasites have been reported in most of the livestock across the livelihood zones, aggravated by the OND rains.

3.1.3 Milk Production

- The average daily milk production per household marginally increased from 1.4 litres in previous month to 1.7 litres in the month of December. This was 0.3 litres more than the normal year production.
- Marginal Mixed Farming livelihood zones were the major production areas in the county.
- The increase in the production was attributed to the availability of forage, short distances to grazing areas and watering points across the livelihood zones.
- This trend was considered normal for the area at this particular time of the year but it is expected to deteriorate in the coming months with the worsening conditions in the county.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of Food Crops

- About 80 percent of households had planted during the season and weeding was on going mainly in most of the mixed farming zones, while 60 percent have planted and 40 percent are weeding in marginal mixed farming. These was attributed to by lack of seeds and delayed rains.
- The main crops grown in the Mixed Farming livelihood zone included maize, cowpeas, pigeon peas, beans and green grams while in the Marginal Mixed farming livelihood zone farmers were growing maize, sorghum, millet, cowpeas and green grams and this is normal at this time of the year.
- Majority of crops in the Mixed farming livelihood zone were in good condition and past knee high and flowering stage. In the majority parts of Marginal Mixed farming livelihood zone, crops performance are likely to be negatively affected following delayed onset of short rain and germination losses.
- Maize, millet, sorghum, beans, cow peas and green grams planted in the season were at knee height/ flowering stage of development.
- The condition for millet, sorghum, cow peas and green grams was relatively fair in most farms across the livelihood zones.
- Maize and beans were poor with some strong signs of maize wilting due to water stress in most farms in the area. However, there are pockets of areas with good maize.
- Suspected cases of fall army worm and caterpillars were reported across the County.

3.3 Implication of the Above Indicators to Food Security

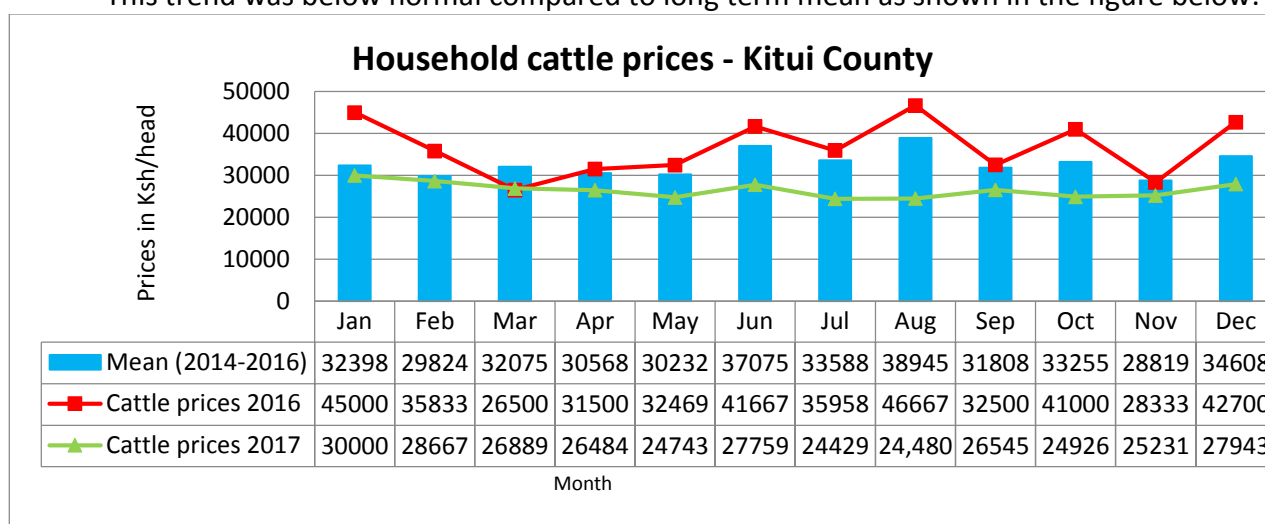
- Livestock productivity is expected to worsen following partial regeneration of forage specifically pasture and parasite infestation which will impact negatively of livestock body condition.
- Uneven rains, poorly distributed rain, early cessation of the short rains, Fall army worm and caterpillars might have a negative impact on crop performance especially in Marginal Mixed farming livelihood zone where about 10-30 percent are expected to harvest. While for Mixed farming they are expect 30-40 percent harvest.
- Milk for production marginally improved in the month but not stable. This boosted the food security conditions during the month but the situation is expected to worsen in the coming months due to the poor regeneration of pasture
- Suspected cases of fall army worm and caterpillars might reduce the production, hence adversely affecting food security.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

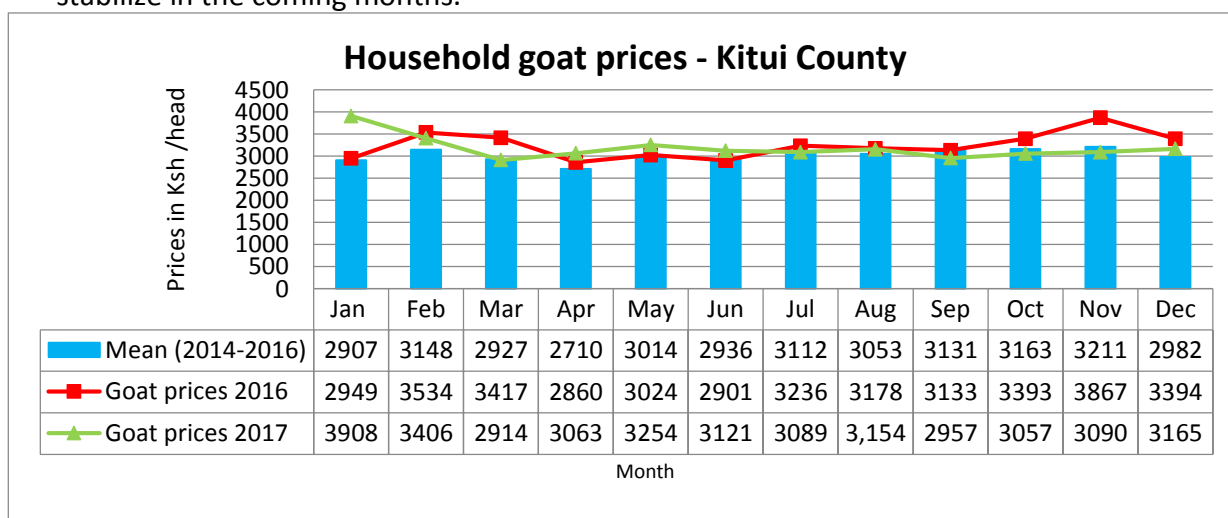
4.1.1 Cattle Prices

- The average cattle prices per household significantly increased to Ksh. 27,943 from Ksh. 25,231 in the month of October. This was mainly attributed to improving cattle body condition.
- The prices were higher in Mixed Farming livelihood zone at Ksh.29, 786 compared to Ksh.26, 100 in Marginal Mixed Farming livelihood zone.
- The difference in prices between the livelihood zones was attributed to tough economic situations in the Marginal Mixed Farming livelihood zones.
- This trend was below normal compared to long term mean as shown in the figure below.



4.1.2 Small Ruminants Prices (Goat price)

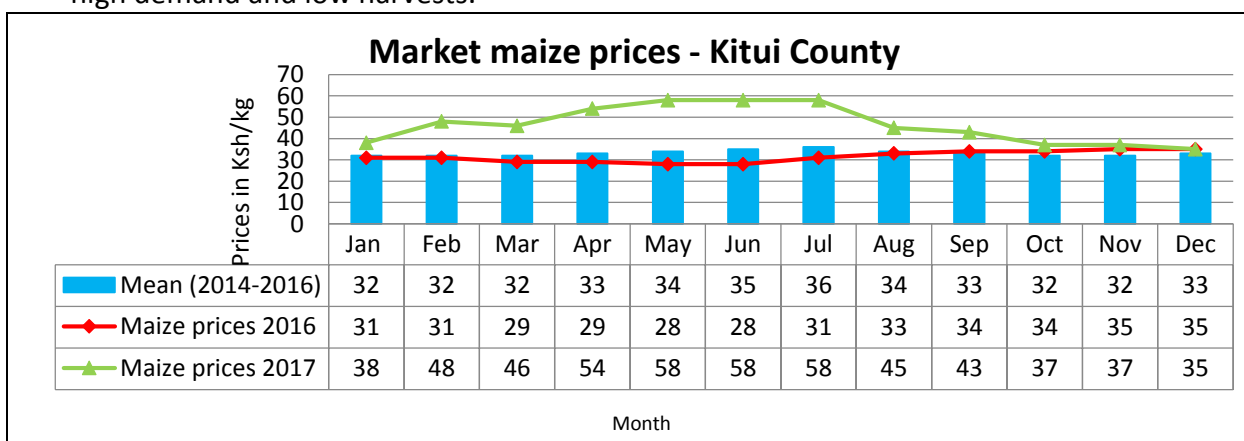
- The average goat market prices marginally increased from Ksh 3,090 in the previous month to Ksh 3,165 in the month of December. This was Ksh 183 higher than the normal year average price. This was attributed to the good body conditions.
- Goats were retailing for Ksh 3,107 in the Mixed Farming livelihood zones and Ksh 3,222 in the Marginal Mixed Farming livelihood zones.
- This trend was above the normal at this particular time of the year and is expected to stabilize in the coming months.



4.2 CROP PRICES

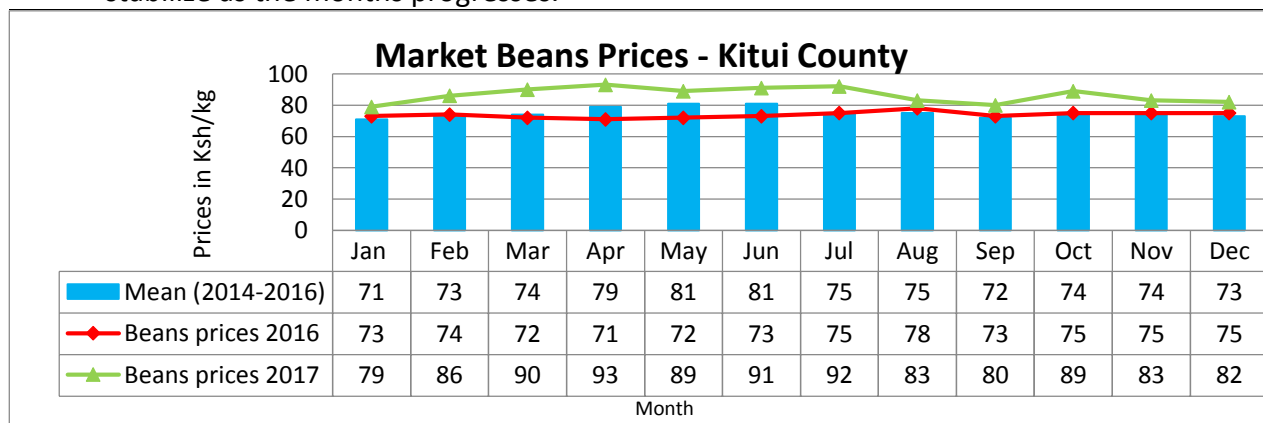
4.2.1 Maize

- The average maize price per kilogram slightly decreased at Ksh. 35 as compared to Kshs 37 in the previous month of November.
- The average price per kilogram at Marginal Mixed Farming Livelihood Zone retailed at Kshs 34 compared to Kshs37 in Mixed Farming Livelihood Zone.
- Out of the sampled markets, maize price per kilogram was as cheap as Ksh 30 in Tseikuru cereal markets and as high as Ksh 39 in Kithyoko cereal market.
- The price stability was attributed to the low demand of the cereal in the local markets occasioned by enough stocks supplied in the market thereby forcing the traders to lower their prices.
- This trend is considered normal for the region at this particular time of the year. The prices are projected to rise in the coming months as the available market stock decreases due to high demand and low harvests.



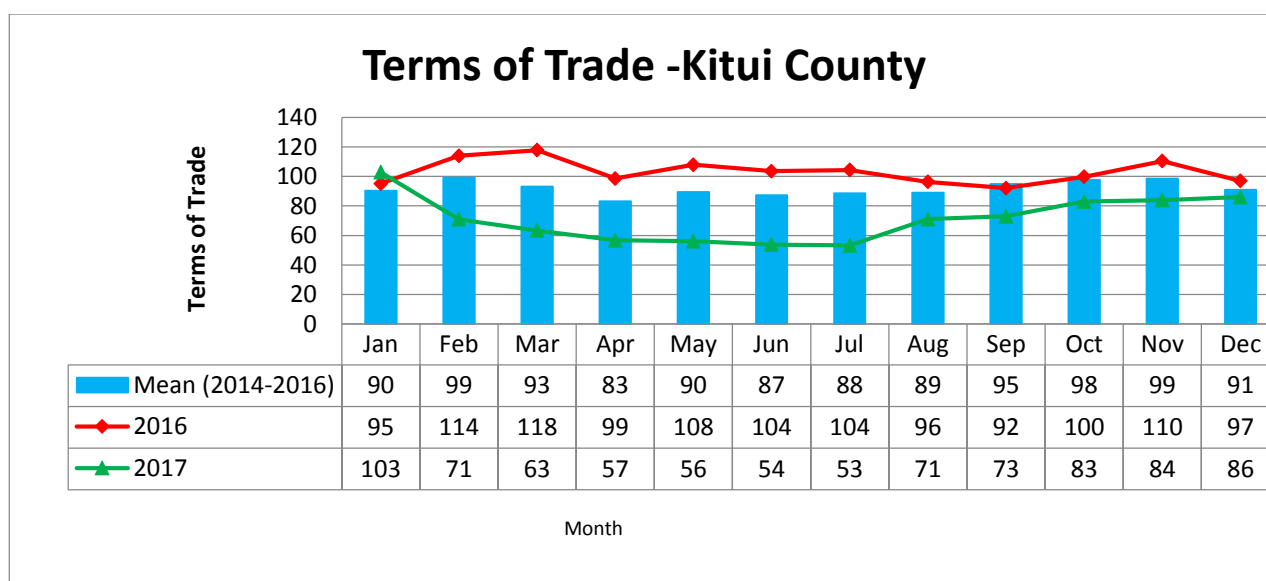
4.2.3 Beans

- The average beans price marginally decreased from Ksh 83 in the previous month to Ksh 82 in the month of December. This was Ksh 9 higher than the normal average price in the County.
- Beans price per kilogram was as cheap as Ksh 75 in Mwingi cereal market and as high as Ksh 100 in Kasaala cereal market.
- This price differences in the local markets was occasioned by shortage of the cereal in Mwingi cereal market compared to other markets. The shortage was attributed to low supply of the crop to the market.
- This trend was abnormal in the area at this particular time of the year and is expected to stabilize as the months progresses.



4.3 Livestock Price Ratio/ Terms of Trade

- Terms of Trade slightly improved from 84 in the previous month to 86 in the month of December. This implies that the sale of one goat would help household purchase 86kg of maize. This was 5 kg less than the normal year amount.
- In the Mixed Farming Livelihood zone, the terms of trade were at 84 while in the Marginal Mixed Farming Livelihood Zone were at 95.
- This difference in the livelihood zones was attributed to low maize price and high goat price in the Marginal Mixed Farming livelihood zones.
- This trend is considered normal for the region at this particular time of the year and is expected to continue worsening as the months progresses.



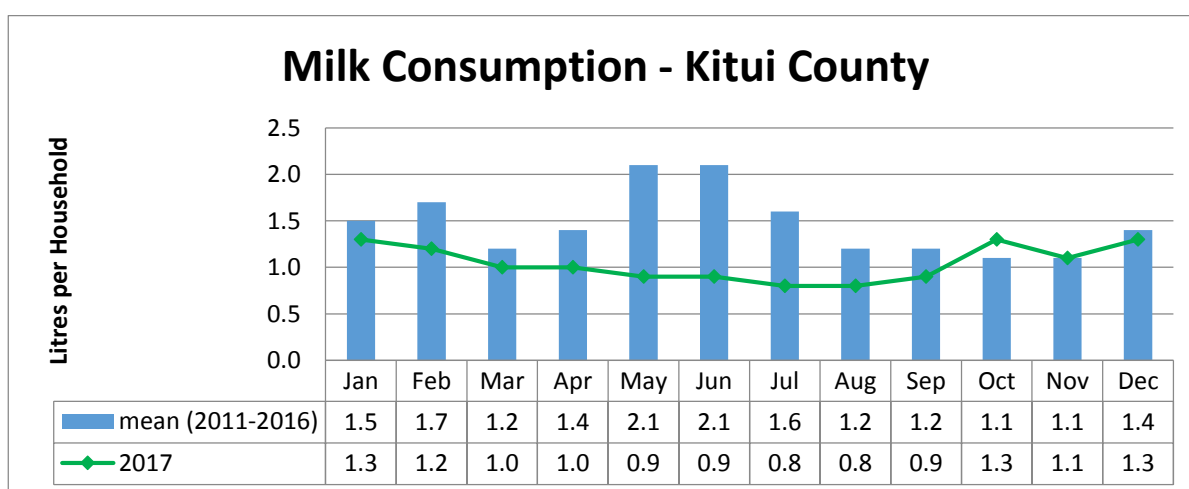
4.4 Implication of the Above Indicators to Food Security

- Cattle and goat prices marginally increased in the area. This shows trend in the food security since
- However, maize and beans prices remained low and stable. This implies that the region had food in the local markets at affordable prices.
- The improvement of terms of trade in the month shows a positive sign of food security.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

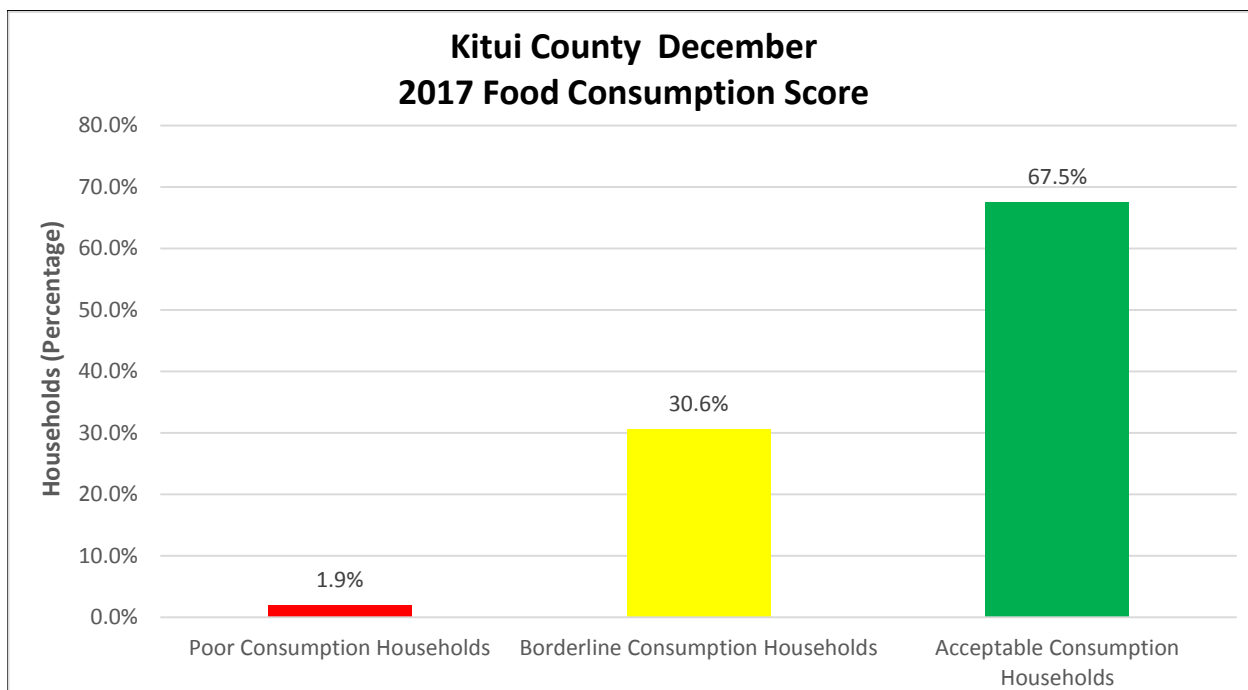
5.1 MILK CONSUMPTION

- The average daily household milk consumption marginally increased from 1.1 litres in the previous month to 1.4 litres in the month of December. This was 0.1 litres more than the long-term average for the county at this particular time of the year.
- Households in the Mixed Farming livelihood zones consumed more litres daily compared to households in the Marginal Mixed Farming livelihood zones who consumed much less than this amount daily.
- This was attributed to the higher amount of milk produced in the Mixed Farming livelihood zones compared to Marginal Mixed Farming livelihood zones in the month.
- This trend was considered normal and within the expected range for area at this particular time of the year. However, the amount of milk consumed is expected to improve when the production increases in the progressive months of the rainy season.



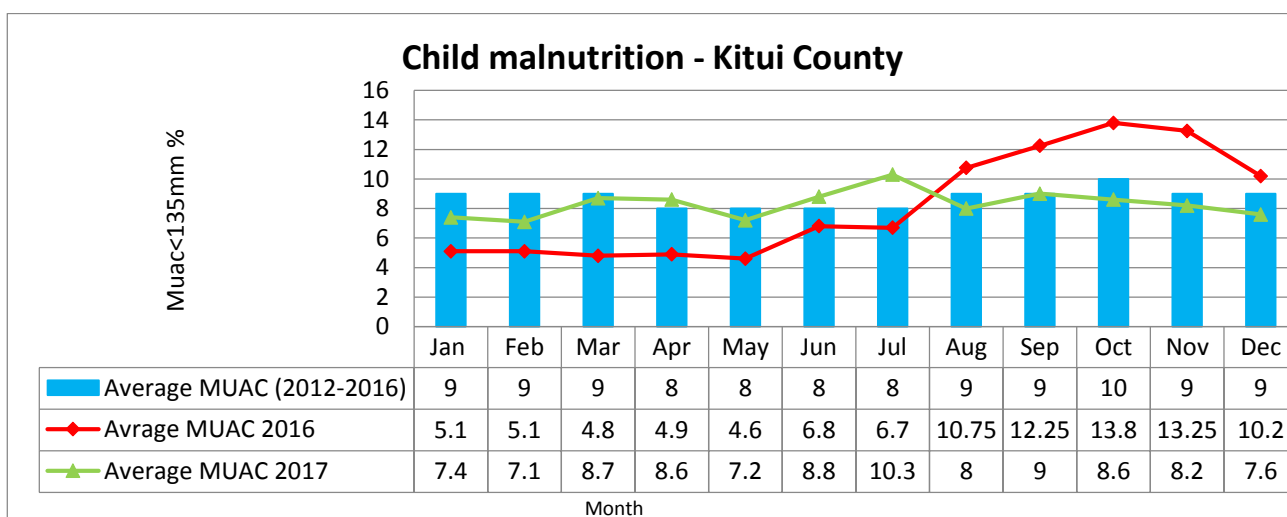
5.2 FOOD CONSUMPTION SCORE

- 67.5 percent of the sampled-out households had acceptable Food Consumption Score, 30.6 percent of them had borderline while the remaining 1.9 percent of them had poor Food Consumption Score.
- Mixed Farming livelihood zones had slightly better Food Consumption Score compared to Marginal Mixed Farming livelihood zones in the county.
- Kitui South, Kitui East, Mwingi North and Mwingi Central sub-counties had small percentage number of the sampled-out households with poor Food Consumption Scores.
- This was attributed to poor feeding habits occasioned by the type of coping strategies employed by the households more frequently.
- This trend was considered normal for the region at this particular time of the year and is projected to continue until the situation improves.



5.2 NUTRITION STATUS

- The proportion of children with MUAC < 135 mm marginally decreased from 8.2 percent of the sampled-out children in the previous month to 7.6 percent of the sampled-out children in the month of December. This was 0.84 percent less than the normal year proportion for the county at this particular time of the year.
- Out 1403 of the children under five years sampled, the proportion of mid at risk (MUAC 125-134mm), moderately malnourished (MUAC 115-124mm) and severely malnourished (MUAC <115mm) children were 7.1 percent, 0.3 percent and 0.2 percent respectively
- This trend was considered normal and within the expected range for the county at this particular time of the year.

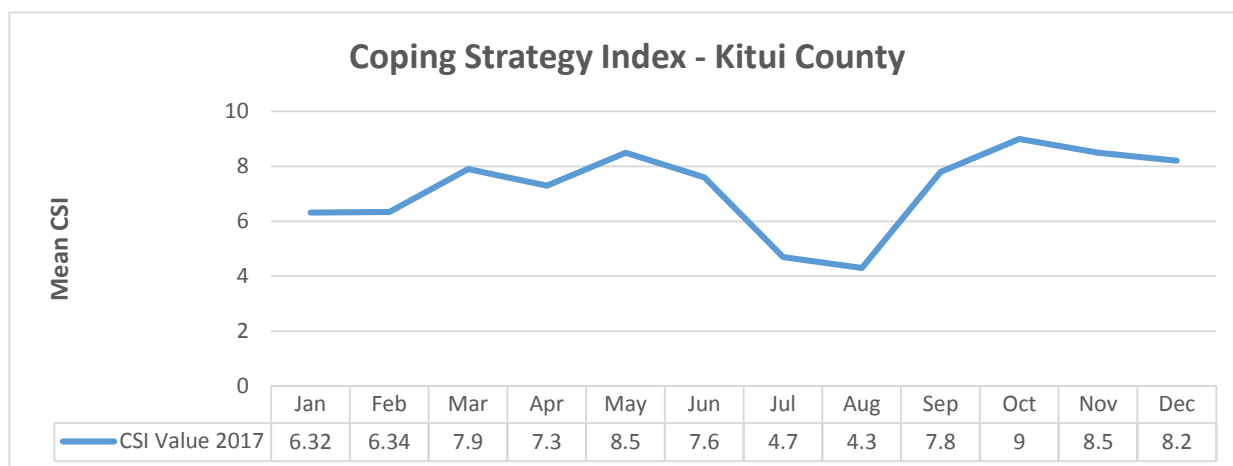


5.3. HEALTH

- No major human disease outbreak was reported across the livelihood zones.

5.4 COPING STRATEGIES

- The mean coping strategy index (CSI) marginally decreased from 8.5 in the previous month to 8.2 in the month of December.
- Marginal Mixed Farming livelihood zones had CSI of 10.7 compared to 5.6 from the Mixed Farming livelihood zones.
- This implied that Marginal Mixed Farming livelihood zones were coping more frequently compared to Mixed Farming livelihood zones in the month.
- This discrepancy in the livelihood coping index was attributed to shortage of food in the Marginal Mixed Farming livelihood zones.
- This trend was considered normal and within the expected range of the county at this particular time of the year.



6.0 CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- **Excavation of Mathima earth dam** in Kitui South Sub county by a joint partnership of National Drought Management Authority (NDMA), County Government of Kitui, Mathima community members and Anglican Development Services Eastern (ADSE). The activity is targeting 8,283 people (3,909 male and 4,374 female), 2100 cattle and 30,000 goats.
- **Cash for assets programme** by the National Government of Kenya through Action Aid, National Drought Management Authority, Caritas Kitui and United Nations World Food Programme targeting 22,220 beneficiaries in Kitui South, Kitui East, Mwingi Central and Mwingi North sub counties.
- **Infrastructure development, promotion of education and provision of safe clean Drinking water for school going children by Deutsche Welthungerhilfe e.V;** The activity includes construction of 26 classrooms, five administration blocks, six blocks of pit latrine, three Kitchen with store and 2 boilers each, dining hall, five farm ponds, four 50 M³ and one 100 M³ Masonry water tanks. Besides construction, support electrical installation to infrastructure, provision of five drip irrigation kits and furniture to classrooms. The activity targets 642 beneficiaries in Ikutha, Kitui South.
- **Vector control, deworming and treatment by County Government of Kitui in collaboration with State Department of Livestock.** The activity targeted all livestock species across the county

6.2 FOOD AID

- Therapeutic Integrated Management of Acute Malnutrition for the Under-fives, Pregnant and Lactating Mothers (Supplementary Feeding Program (SFP), Out Patient Therapeutic Program (OTP) & Stabilization Centres by Ministry of Health supported by several partners.
- **Relief food distribution** by ADRA Kenya targeting 500 households in Kivou and Waita Wards in Mwingi Central Sub County.
- **Chakula Kwa Jamii Cash transfer** by the National Government targeting 30,043 beneficiaries across the county.

7.0 EMERGING ISSUES

7.1 Insecurity/ Conflict/ Human Displacement

- High influx livestock which might lead to resource based conflicts between pastoralists from Tana-River County and locals were reported in Ngomeni, Tsekuru and Mutha wards.

7.2 FOOD SECURITY PROGNOSIS

- Accessibility of maize at cheaper prices from the source market may stabilize the terms of trade.
- Improved livestock prices would impact positively on food security; however, this is short leaved due to internal and external parasites emanating due rains season this might change the situation
- Poorly performed season in Marginal Mixed farming livelihood zone, then water stress and increase in frequency and severity use of coping mechanisms is expected.
- Wilting of Crops due to poor rains across the county and other factors would reduce the current expected harvest to as low as 30 percent in Mixed farming and 10 percent in Marginal mixed farming livelihood zone.
- Conflicts between pastoralists and locals will hamper economic activities hence impact negatively on food security.
- Sub counties/ wards that need particular attention are Endau/Malalani, Zombe/Mwitika, Voo/Kyamatu, Mutha, Kanziko, Ikutha, Kanyangi, Nuu, Ngomeni, Tseikuru, Mui, Kivoo, Kyome/Thana, Kiomo/Kyethani wards since they have reported very peculiar rainfall/water source patterns that are likely to affect crop and livestock production, household coping strategies, human health and peaceful coexistence.

8.0 RECOMMENDATIONS

Immediate/Short term

Agriculture Sector

- Surveillance and campaigns against pests and diseases.
- Post-harvest trainings and market linkages.

Livestock Sector

- Mass livestock vaccination to boost their body immunity.

Water

- Promote home based water treatment and conservation measures such as storage facilities.

Health and Nutrition

- Hotspot screening for malnutrition and provision of supplementary feeding.

Peace Building Initiatives

- Peace building and conflict management activities.

Medium and Long term

Agriculture Sector

- Up scaling of current crop production improvement programs

Livestock sector

- Livestock development programs to improve production (goats, chicken, cattle)

Water Sector

- De-silting of 16 earth dams and rock catchment
- Service of 150 boreholes and rehabilitation of 40 boreholes

Health Sector

- Improving Vitamin A supplementation to children under five years and de-worming
- Improving vector control activities

Education

- Expand HGSMP to more schools

Peace Building Initiatives

- Peace building and conflict management activities.