

**National Drought Management Authority**  
**GARISSA COUNTY**  
**DROUGHT EARLY WARNING BULLETIN FOR DECEMBER 2017**



A Vision 2030 Flagship Project



**DECEMBER EW PHASE**



**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- The average vegetation condition index for the county decreased from 28.83 and fall in the moderate vegetation deficit category.
- The current average vegetation condition index is below the normal range of >35
- Lagdera, Balambala and Township Sub Counties are in severe vegetation deficit category with an index of 10.33 ,12.01 and 19.31 respectively
- Dadaab and Fafi sub counties are in moderate vegetation deficit category at 21.23 and 34.45 respectively
- Water sources currently in use are boreholes, River Tana, Benane spring, water trucking and few water pans in the southern part of the county.

**Socio Economic Indicators (Impact Indicators)**

- 100 % of communities sampled reported fair livestock body condition,
- Milk production recorded 12.40 litres which indicate below the normal of 36 litres.
- The terms of trade recorded at 41.4kg of maize per sale of goat.
- No livestock migration was reported
- The return distance to water sources for livestock increased from 13km to 20.7km in the month under review.
- The malnutrition rate of children under five years at risk based on MUAC reduced from 16.3% to 13.8% in the month under review, while the mid at risk levels increased from 5.6 % to 11.53%
- In addition, moderately and severely malnourished levels increased from 1.1% to 3.2 % and 0.56% to 0.86% respectively

**Early Warning Phase Classification**

Livelihood Zone	Phase	Trend
Agro-pastoral	Alarm	Deteriorating
Pastoral cattle/sheep	Alarm	Deteriorating
Pastoral-all species	Alarm	Deteriorating
County	Alarm	Deteriorating
Biophysical Indicators	value	Normal Range/Value
Rainfall (% of Normal)	Nil	80 -120
SPI-3Month (TAMSAT)		
VCI-3Month	28.83	>35
Forage condition		
Production indicators	Value	Normal
Crop Condition(specify crop)		
Livestock Body Condition	3-4	poor
Milk Production	12.40	36litres
Livestock Migration Pattern	No migration	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	41.4	>66
Milk Consumption	6.9	36 litres
Return distance to water sources	20.7	<5 Km
Cost of water at source (20 litres)	5-10	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	13.8	<13.4
Coping Strategy Index (CSI)		
Food Consumption Score		

<ul style="list-style-type: none"> <li>▪ Short rains harvests</li> <li>▪ Short dry spell</li> <li>▪ Reduced milk yields</li> <li>▪ Increased HH Food Stocks</li> <li>▪ migrations</li> <li>▪ Land</li> </ul>	<ul style="list-style-type: none"> <li>▪ Planting/Weeding</li> <li>▪ Long rains</li> <li>▪ High Calving Rate</li> <li>▪ Milk Yields Increase</li> <li>▪ Breeding period</li> </ul>	<ul style="list-style-type: none"> <li>▪ Long rains harvests</li> <li>▪ A long dry spell</li> <li>▪ Land preparation</li> <li>▪ Increased HH Food Stocks</li> <li>▪ Kidding (Sept)</li> <li>▪ Migrations</li> <li>▪ Herd separations</li> </ul>	<ul style="list-style-type: none"> <li>▪ Short rains</li> <li>▪ Planting/weeding</li> <li>▪ High birth rates</li> <li>▪ Wedding</li> </ul>								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

## 1. CLIMATIC CONDITIONS

### 1.1 RAINFALL PERFORMANCE

- The short rain season ceased in the fourth week of November 2017 hence no rains received in the entire county in the month under review.
- Dry and extremely hot weather condition prevailed throughout the month in all the livelihoods

## 2. IMPACTS ON VEGETATION AND WATER

### 2.1 VEGETATION CONDITION

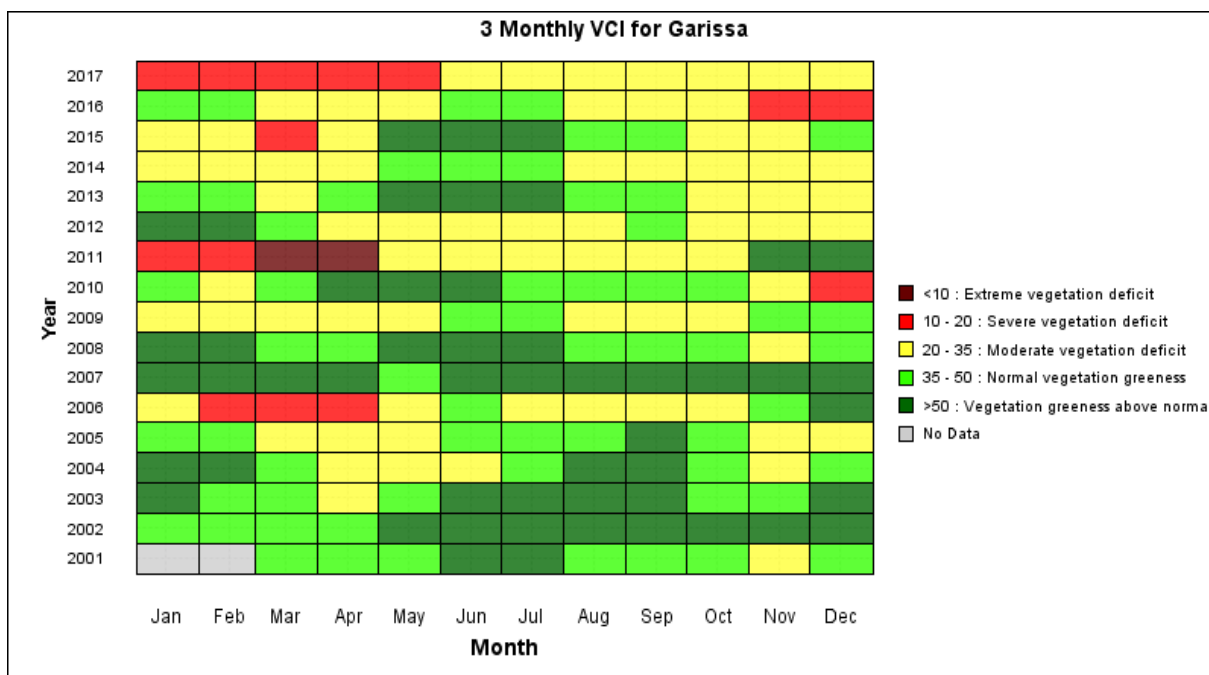


Figure 1: VCI Matrix for Garissa County, 2001 – 2017

### 2.1 1 Vegetation Condition Index (VCI)

- The average vegetation condition index for the county decreased from 31.15 to 28.83.
- The current average vegetation condition index is below the normal range of >35
- Lagdera, Balambala and Township Sub Counties are in severe vegetation deficit category with an index of 10.33 ,12.01 and 19.31 respectively.
- Dadaab and Fafi sub counties are in moderate vegetation deficit category at 21.23 and 34.45 respectively
- Ijara sub county is in normal vegetation deficit with an index of 49.21
- The matrixes below indicate the vegetation condition index for Lagdera Sub County which indicates severe vegetation deficit category and Ijara Sub County with highest VCI average

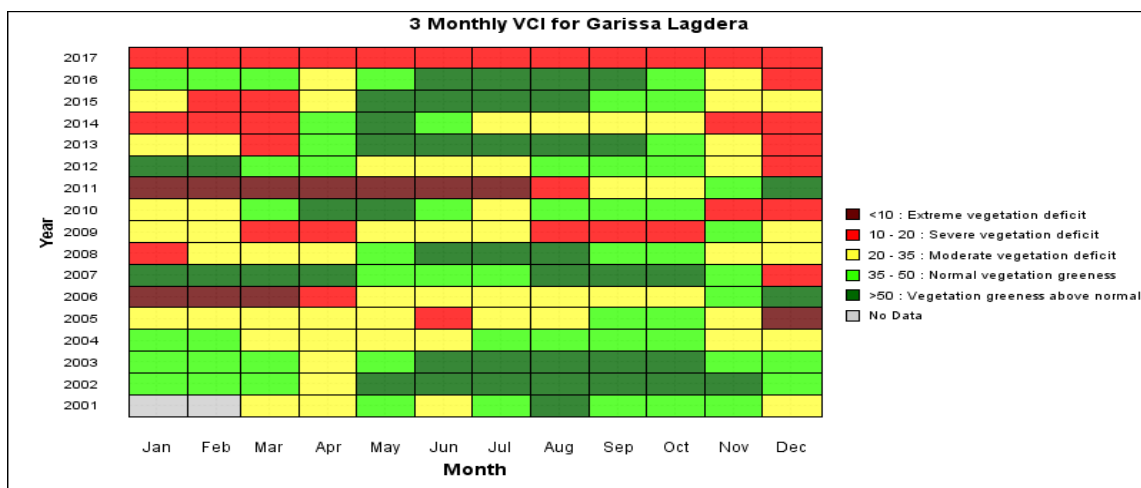


Figure 2: VCI Matrix for Lagdera sub county indicating lowest Sever vegetation deficit 10.33

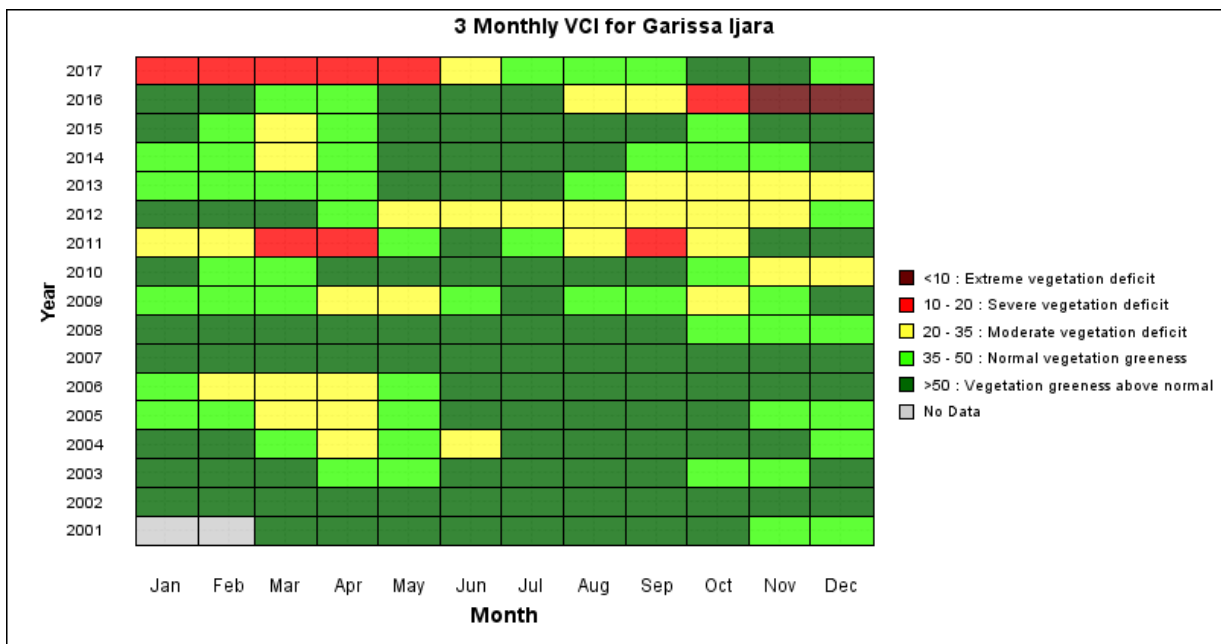
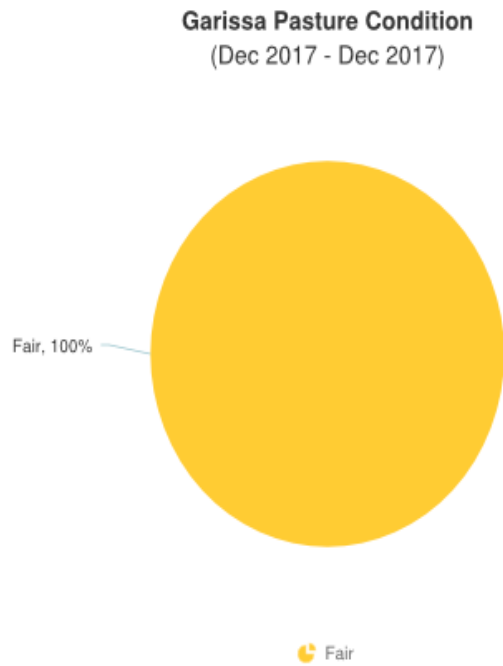


Figure 3: VCI Matrix for Ijara sub county indicating normal vegetation greenness 49.21

## 1.2 Pasture

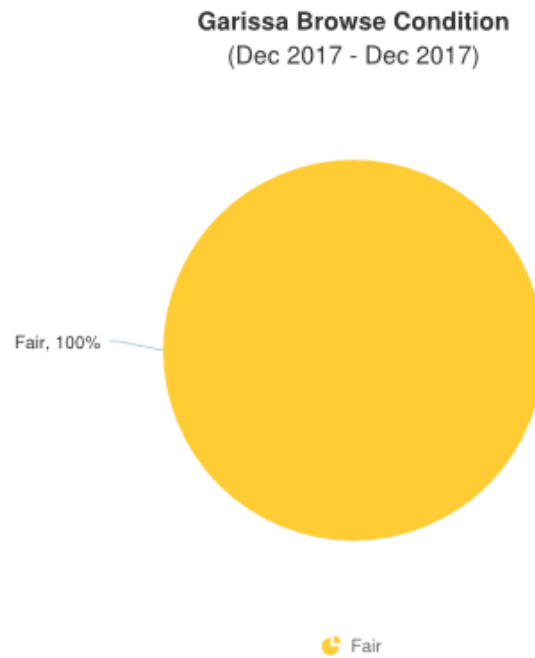
- 100% of sampled communities reported fair pasture condition in all the livelihoods.
- The quality and quantity of pasture deteriorated when compared with preceding month.
- The negative trend was attributed to worsening drought situation coupled with livestock influx around the grazing field.
- The northern corridor consisting of Balambala and Lagdera sub counties have the most forage deficiency in the whole county as depicted by the (VCI values of about 10.33 and 12.01 respectively indicating severe vegetation deficit)
- Similarly, in the central grazing corridor consisting of Garissa, Dadaab and upper Fafi sub counties, the forage situation is better than the northern corridor although high concentration of livestock was reported.
- In addition, the southern zone consisting of lower Fafi, Ijara and Hulugho sub counties, the pasture situation is fairer than all the other areas, however it is below normal compared to similar seasons.
- In a nutshell, the pasture condition is projected to last for 1 month.



***Figure 4: Garissa pasture condition***

### **2.1.3 Browse**

- 100% of sampled communities reported fair browse condition across all the livelihoods.
- However, the quality and quantity of browse condition continued to deteriorate when compared with previous month. The negative trend is attributed to the worsening drought situation.
- Browse condition is anticipated to sustain pastoralist for 1-2 months



**Figure 5: Garissa Browse condition**

## **2.2 WATER RESOURCE**

### **2.2.1 Sources**

The current water sources are boreholes, River Tana, water pans, spring and water trucking.

### **2.2.2 Household access and Utilization**

- The average return distances from household to water sources increased from 6km to 10km when compared with the previous month.
- The downward trend was attributed to drying up of nearby water sources and depletion of forage thereby forcing pastoralists to search the resources from far areas
- The current distance is above the long term average of 3.75km.
- The pastoral All species livelihood zone recorded the highest trekking distance for household's water access at 19km while the Agro pastoral livelihood zone had recorded the lowest distance at 8km.

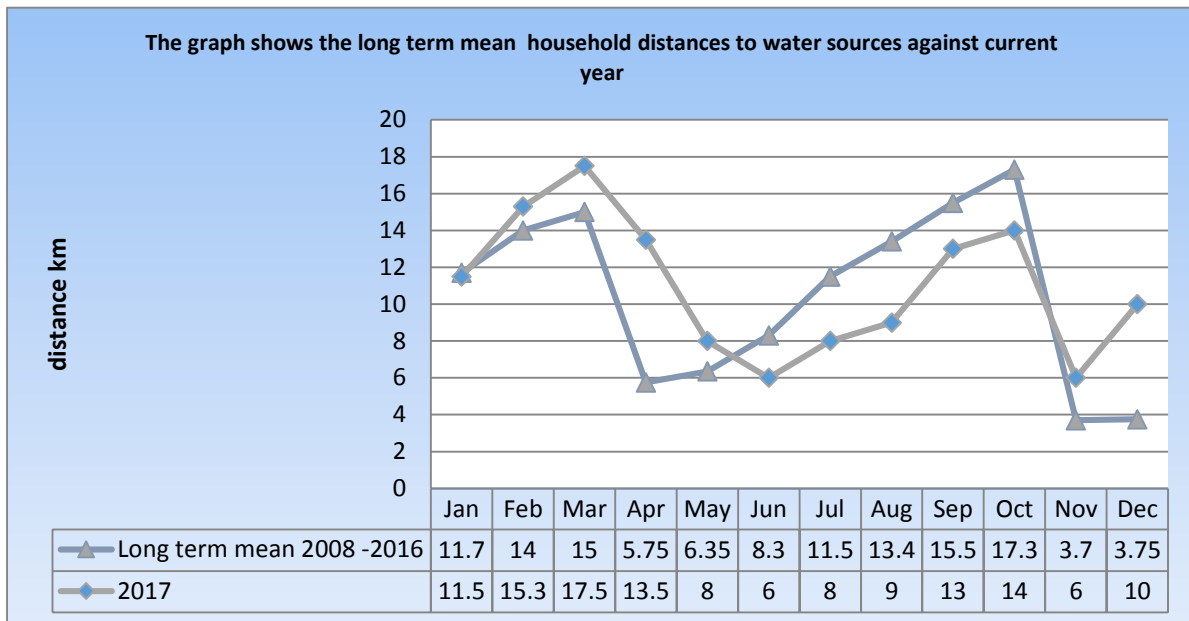


Figure 6: Trends of household distance to water sources for Garissa County, 2008 – 2017

### 2.2.3 Livestock access

- The average livestock return distances from grazing field to water sources increased from 13km to 20.7km in the month under review.
- The worsening trend was due to drying up of water pans/ponds and diminishing forage that compelled pastoralists to move to grazing fields with better pasture.
- The current distance is above the long term average for the month recorded at 6.9km.
- Pastoral All species livelihood zone recorded the highest livestock trekking distance at 17.8km while Agro Pastoral livelihood zone recorded the lowest distance at 17.5km.

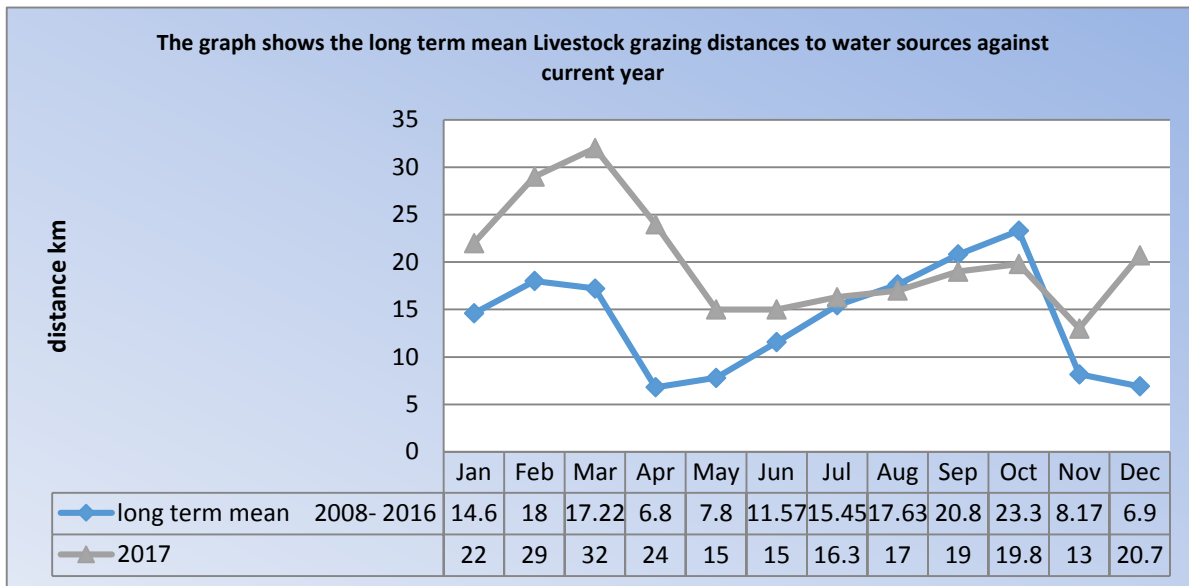


Figure 7: Trends of Livestock grazing distance to water sources for Garissa County, 2008 - 2017

### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

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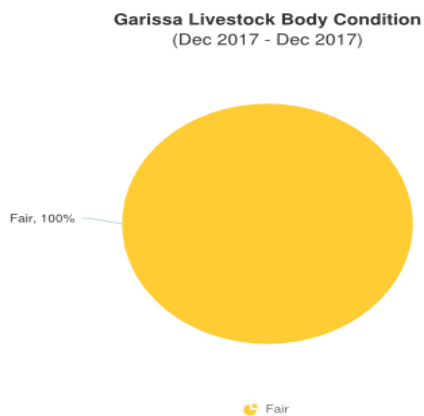


Figure 8: Garissa livestock body condition December 2017

- Generally, across the county livestock is in fair body condition. Cattle are in body condition 3-4, which is fair to good.
- The small stock, about 11-14% are in poor body condition, with the higher figure being from the northern Lagdera and Balambala sub counties which are in severe



vegetation deficit category, 22-24% are fair body condition while 62-67% reportedly in good body condition.

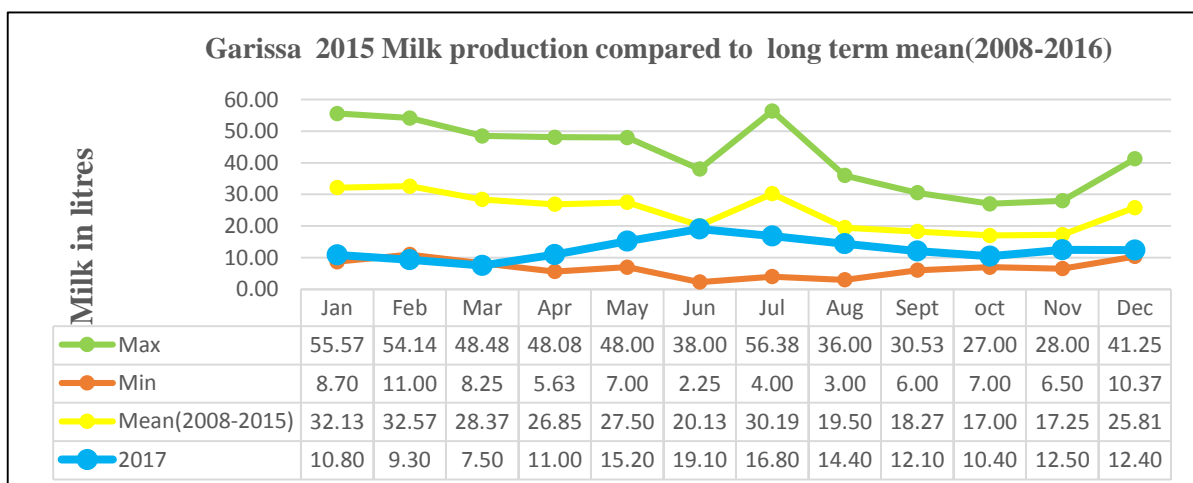
- For camels, about 70-80% are in fair to good condition.

### 3.1.2 Livestock Diseases

- There was no major outbreak of livestock diseases reported in the month under review.
- However, in Fafi there has been confirmed cases of FMD.
- Other areas in the sub counties reported incidences of CBBP, CCPP, LSD, helminthiasis and Trypanosomiasis.

### 3.1.3 Milk Production

- The average household milk production decreased from 12.50 litres to 12.40 litres in the month under review.
- The downward trend is attributed to diminished forage condition that favour livestock body condition
- The current production is below the long term average recorded at 25.81litres.
- The Agro pastoral livelihood zone recorded the highest milk production at 13.2 litres per household while Pastoral livelihood zone had recorded the lowest milk production at 9.5 litres.
- The market price of 750ml bottles is Kshs80, the same for previous month.



**Figure 9: Trends of average milk production per households for Garissa County, 2008-2017**

### 3.2 RAIN-FED CROP PRODUCTION

#### 3.2.1 Stage and Condition of food Crops

There were no crops planted in the month under review.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

#### 4.1.1 Cattle Prices

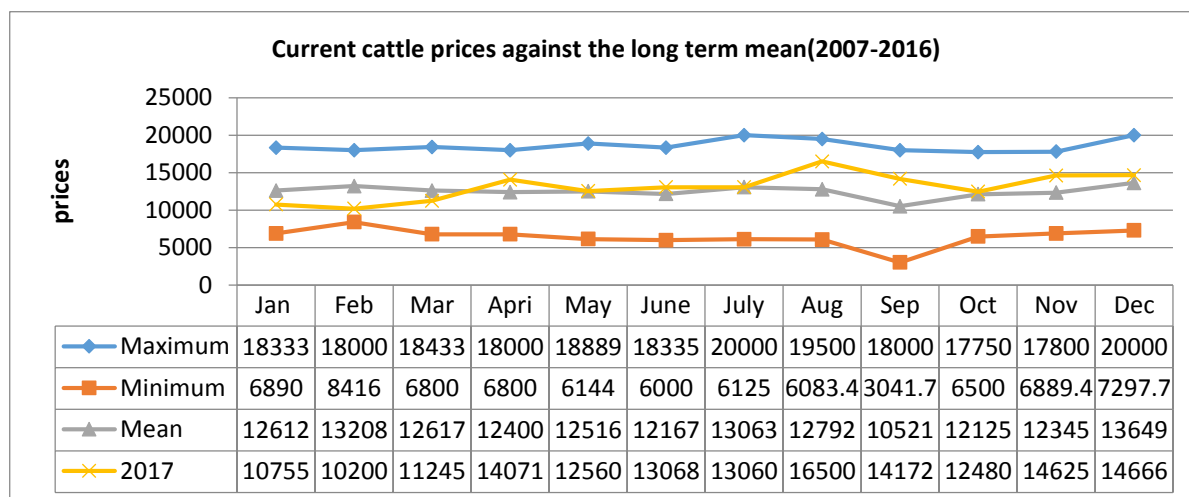


Figure 10: Trends of cattle prices for Garissa County, 2007-2017

- Cattle prices are gradually improving because of good body condition following the impact of the OND 2017 in areas that received moderate rainfall. The average cattle price has risen slightly to ksh 14666 up from ksh 14625 in the month under review.
- The current price is above the long term mean for the month recorded at kshs13649.
- The highest price was recorded in Agro pastoral livelihood zone at ksh15,300 while pastoral All species livelihood zone recorded the lowest price at ksh 14437.

#### 4.1.2 Small Ruminants Prices (Goats)

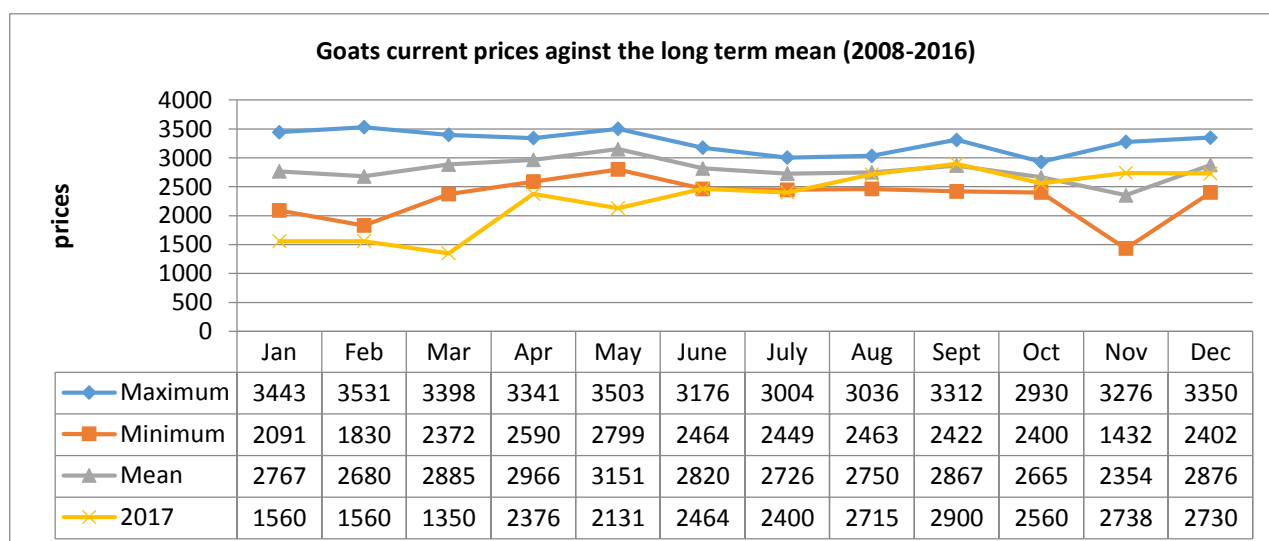


Figure 10: Trends of Goats prices for Garissa County, 2008-2016

- The average price of goats decreased from ksh 2738 to ksh 2730 in the month under review.
- The decreased goats price was attributed to reduced body condition because of the worsening drought situation especially in the northern sub counties coupled with lack of prospective buyers in the market.
- The current average price is below the long term average price recorded at ksh 2876.
- Pastoral livelihood zone recorded the highest goat prices at ksh 3010 while Agro Pastoral livelihood zone recorded the lowest average price of ksh 2982.

## 4.2 CROP PRICES

### 4.2.1 Maize

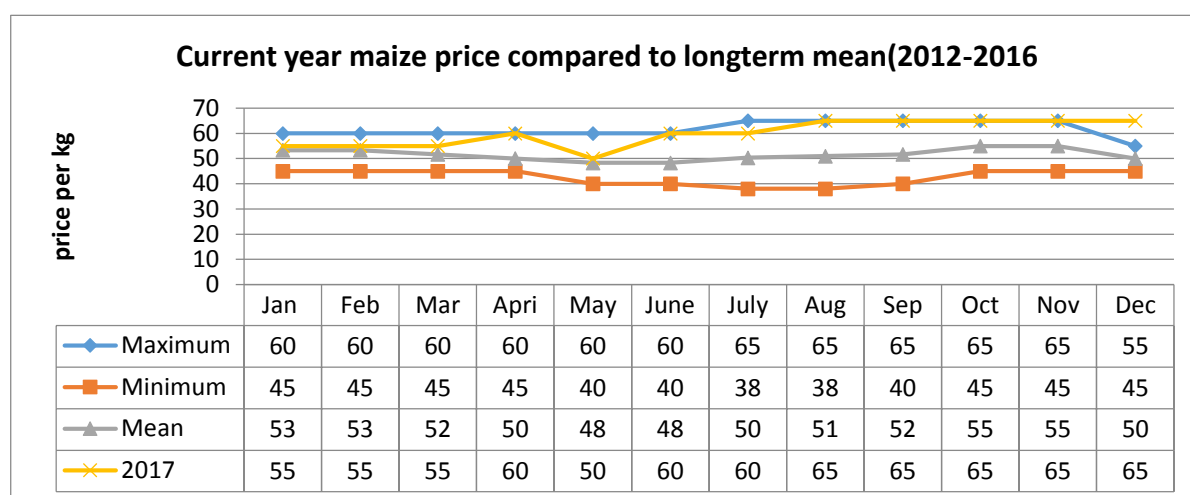


Figure 11: Trends of Maize prices for Garissa County, 2012-2017

- The average maize price for the month remained stable at ksh 65 per kg
- The current maize price is higher than long term mean average recorded at ksh 50
- The trend had positive impact on food security as it favoured the purchasing power the pastoralist

### 4.2.2 Sifted Maize Meal

- The average price for sifted maize meal remained stable at ksh 100.
- The average price recorded was the same across the livelihoods zones.
- The current price is above the long term average and the long term maximum prices of ksh 90.

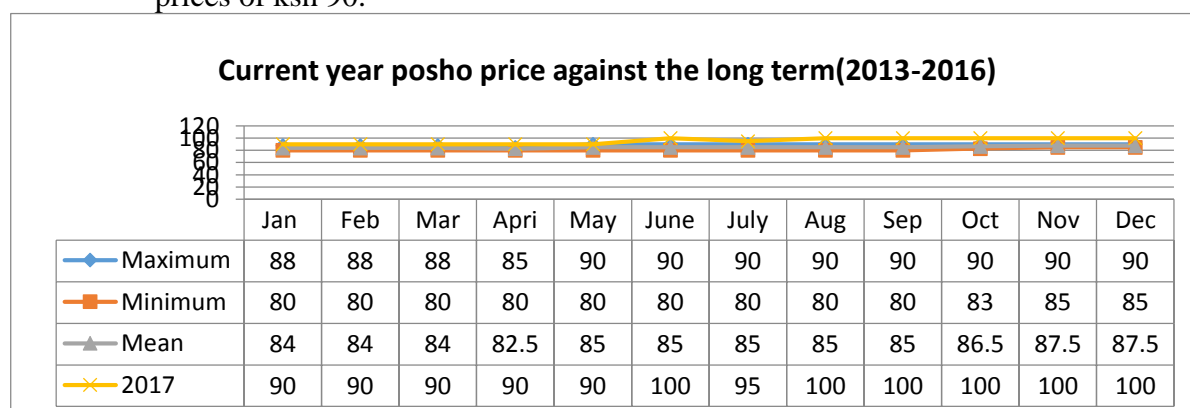
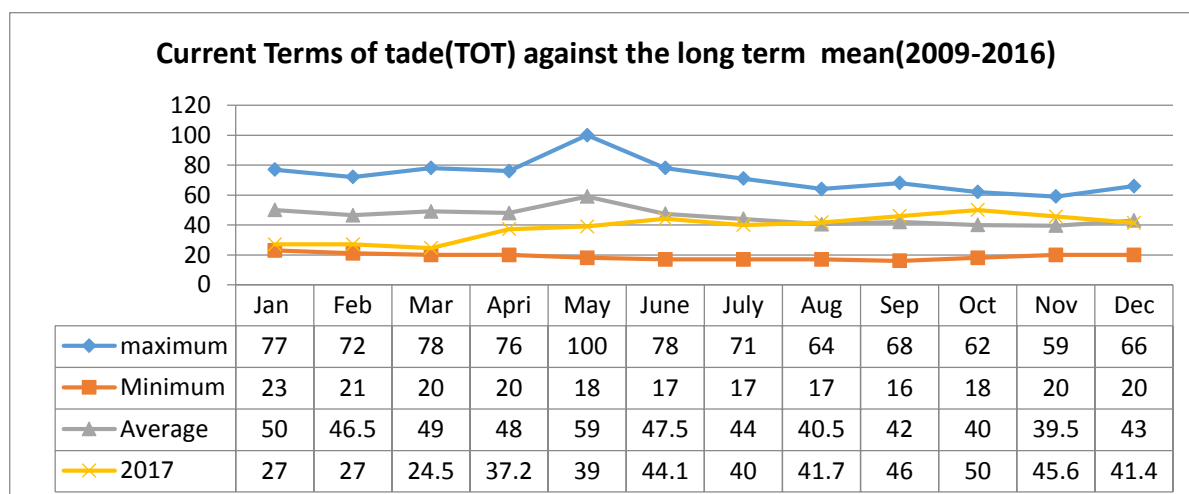


Figure 12: Trends of Sifted Maize Meal prices for Garissa County, 2013 -2017

## Livestock Price Ratio/Terms of Trade



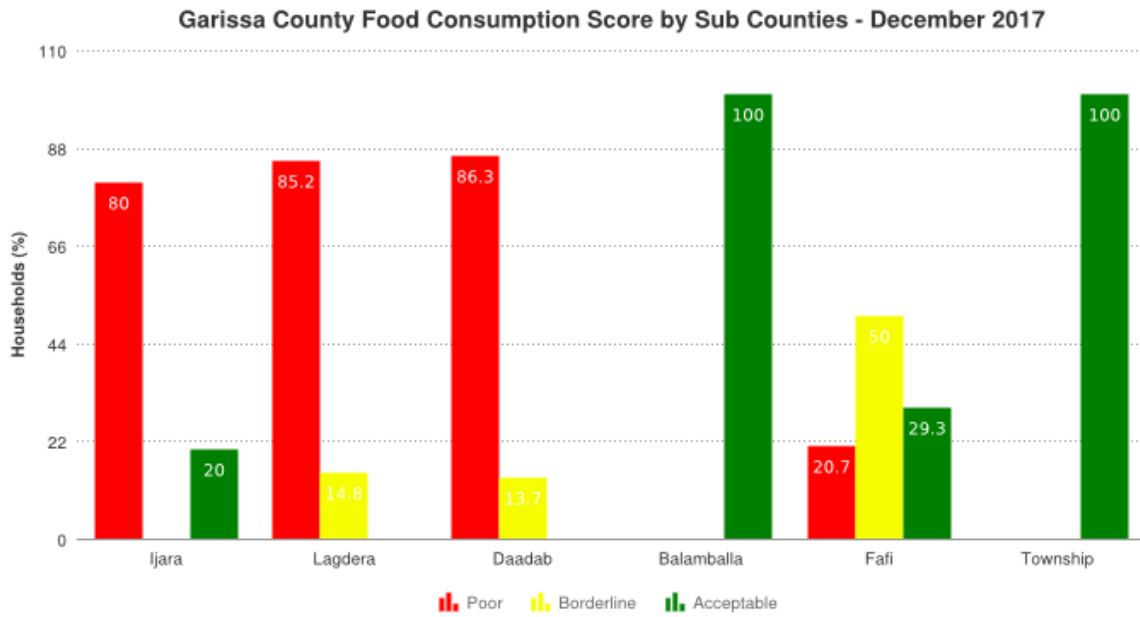
**Figure 13: Trends of terms of trade for Garissa County, 2009-2017**

- The terms of trade for pastoralists reduced from 45.6 kg to 41.4k in the month under review.
- The current terms of trade are 41.4 kg per goat sold at farm gate price.
- The terms of trade are below the long term average recorded at 43 kg per goat.

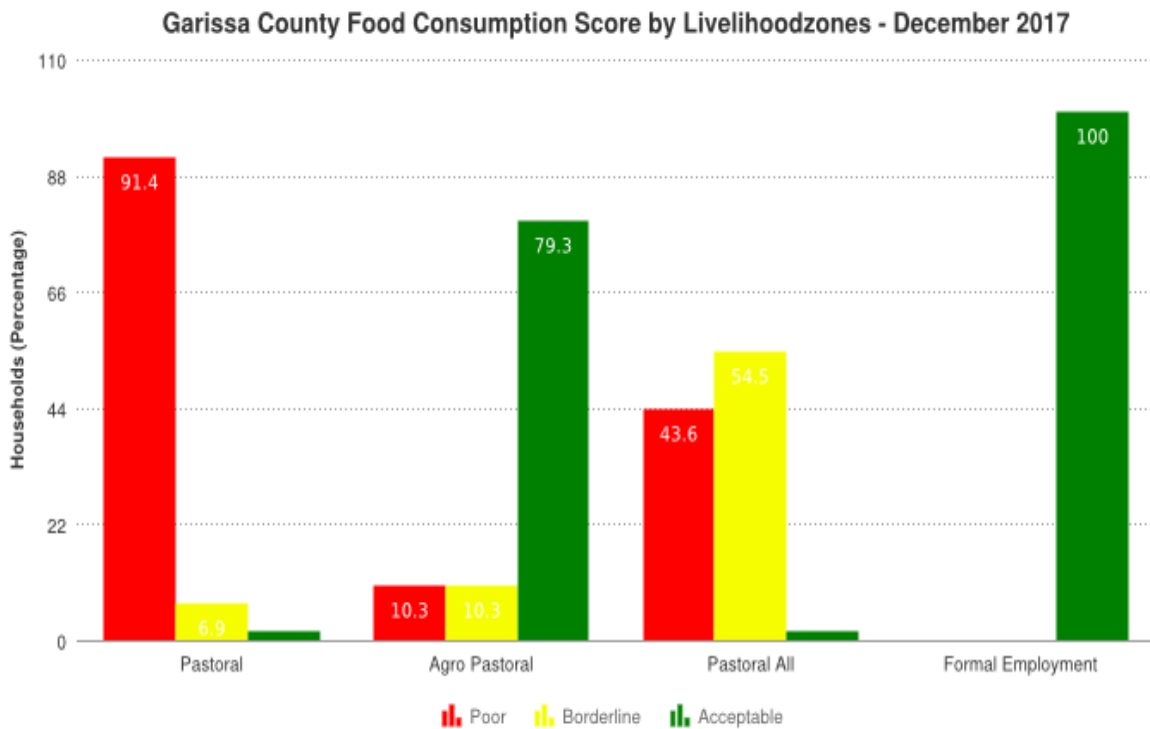
## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 FOOD CONSUMPTION SCORE

- The food consumption score for the month indicated 45% of households are in poor, 13% in borderline while 42% of households are in acceptable level.
- Dadaab Sub County has the highest households with poor food consumption score at 86.3% while township Sub County has the lowest recorded at 0%.
- The pastoral livelihood zones have highest number of household with poor food consumption score at 91.4 % while the formal employment livelihood zones recorded the lowest no of households with poor food consumption score recorded at 0%.
- The charts below show the comparison of the food consumption score based on livelihood zones and by sub counties



*Figure 14: Garissa County food consumption score by sub county*



*Figure 15: Garissa County food consumption score by livelihood*

## 5.1 MILK CONSUMPTION

- The average milk consumption per household slightly increased from 6.4litres to 6.90 litres in the month under review.
- The increasing milk consumption trend was attributed to improving milk production as pasture and browse condition improved.
- However, the current milk consumption per household is below the long term average recorded at 20.51 litres.

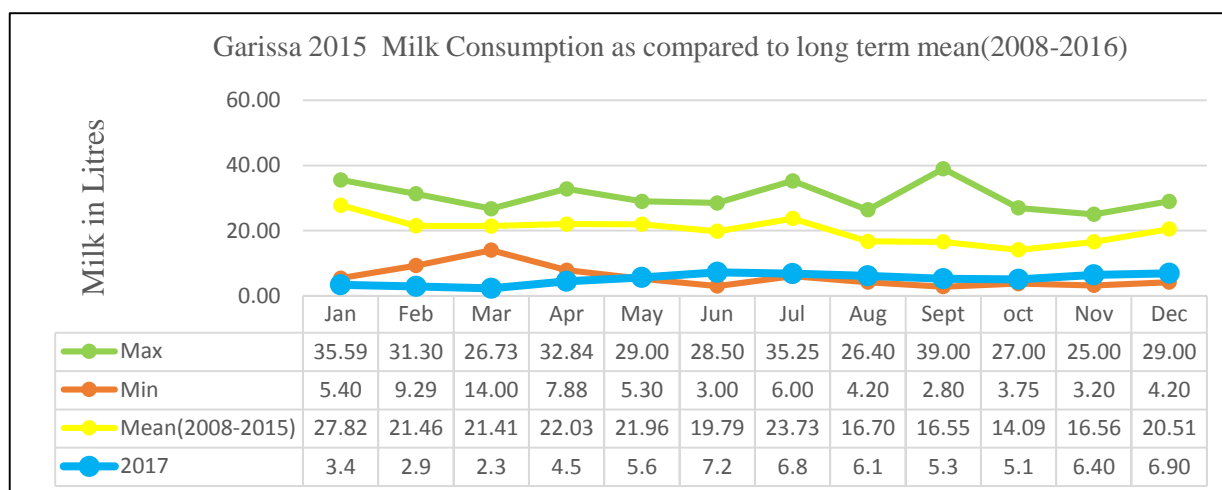
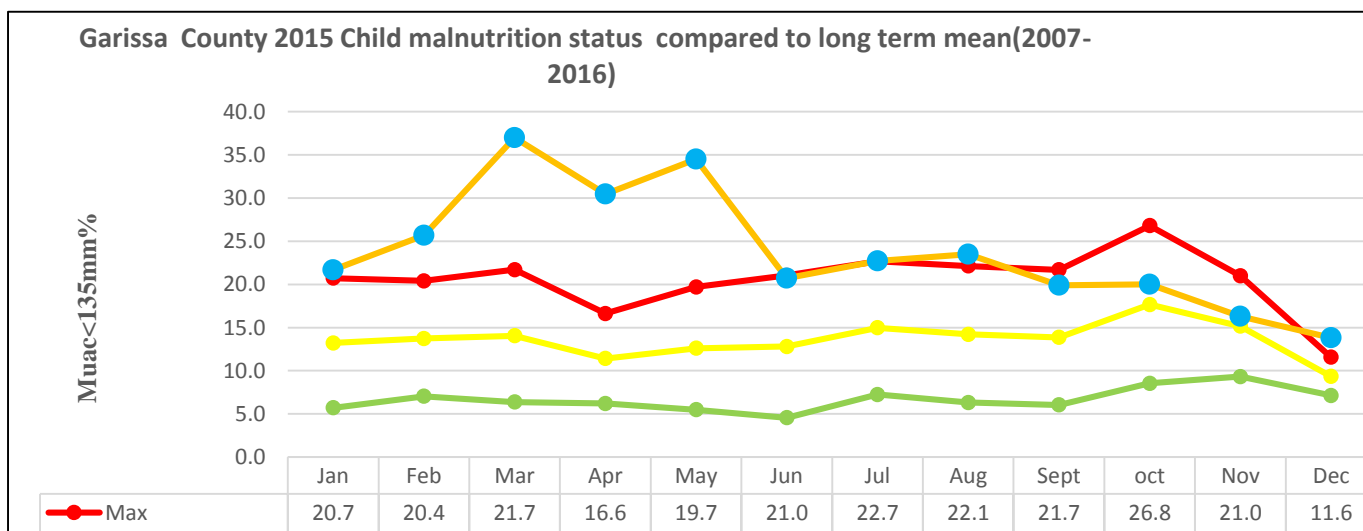


Figure 16: Trends of Milk consumption for Garissa County, 2008-2016

## 5.3 HEALTH AND NUTRITION STATUS

### 5.3.1 Nutrition Status

- The malnutrition rate of children under five years at risk based on MUAC reduced from 16.3% to 13.8% in the month under review, while the mid at risk levels increased from 5.6 % to 11.53%
- Similarly, moderately malnourished level increased from 1.1% to 3.2% while severely malnourished category also increased from 0.56% to 0.86%
- The reducing trend at risk level was attributed to improving milk production and consumption.
- The current average malnutrition level was above the long term average recorded at 9.3 %.



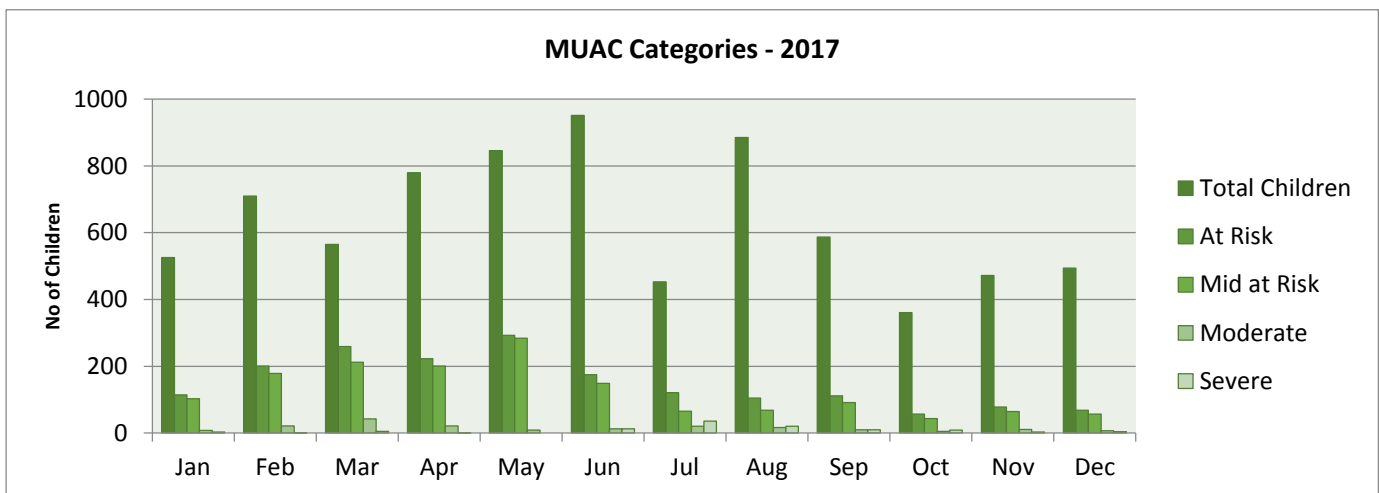


Figure 17: Trends in the proportion of U5 at risk of malnutrition in Garissa County, 2007 – 2016

### 5.3.2 Health

- There was no outbreak of major Human disease reported during the month.
- Cases of diarrhoea, upper respiratory tract infection, urinary tract infection and malaria were reported in most of the health facilities

### 5.4 COPING STRATEGIES INDEX

- The average coping strategies index for the county increased from 12.2 to 18 in the month under review.
- The formal employment livelihood zone has the highest index at 36.6 while pastoral all species livelihood zone recorded the lowest at 3.1.
- The graphs below show the mean copying strategy based on the livelihood zones.

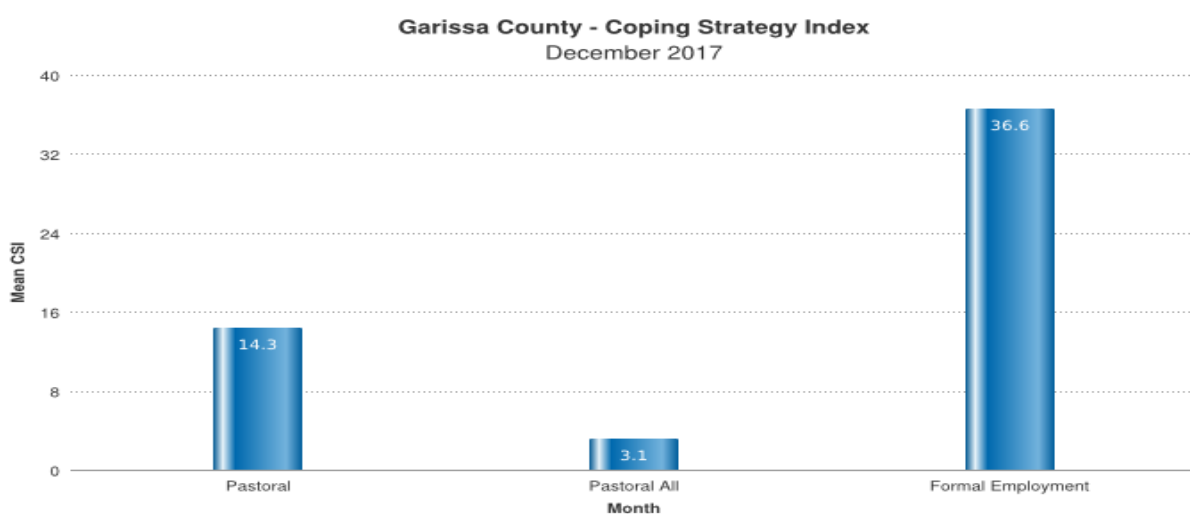


Figure 18 : Garissa County coping strategy

The coping strategies adopted by the pastoralist included;

- Internal migration and herd separation for proper management.
- Borrowing of credit from petty traders.
- Charcoal burning and sale of wood product in the agro pastoral and formal employment livelihood zone.

## **6. CURRENT INTERVENTION MEASURES (ACTION)**

### **6.1 NON-FOOD INTERVENTION**

- Cash transfer programme for poor and needy households by KRCS supported by WFP and GOK.
- Health Outreach Services.

### **6.2 FOOD AID**

- Supplementary feeding programme for the management of malnutrition in the health facilities
- GOK food distribution by the respective deputy county commissioners.
- Food for asset food distribution to the beneficiaries through work norm verification.

## **7. EMERGING ISSUES**

### **7.1 Insecurity/Conflict/Human Displacement**

There were no reported cases of conflict over resource utilization and human displacement in the month under review.

### **7.2 Migration**

- There was no livestock outmigration reported in the month under review
- However, internal migrations within the sub counties has occurred resulting in specific areas of very high livestock concentration.

### **7.3 FOOD SECURITY PROGNOSIS**

- The drought stage is Alarm and the trend is deteriorating
- Livestock body condition is currently fair but expected to continue declining because of diminished forage and increased grazing distance.
- Major water pans have started drying up.
- The livestock prices for cattle have registered slight improvement in the month under review while for goats have decreased. Because of diminishing forage condition the livestock body condition is anticipated to decline in the coming months hence decreased prices.
- The trend is expected to impact negatively on household food security in the county.

## **8. RECOMMENDATIONS**

- Short Rains Assessment to determine the performance and impact on livelihoods.
- Activation of Drought response plan.



- Provision of animals feeds especially for northern sub counties i.e Lagdera and Balambala sub counties.
- Upscale the food ration for the vulnerable households under the FFA and general food distribution.
- Expansion of pasture and fodder production initiatives along River Tana.
- Livestock and human disease surveillance.
- Undertake ward level contingency scenario planning.