

**National Drought Management Authority**  
**MARSABIT COUNTY**  
**DROUGHT EARLY WARNING BULLETIN FOR APRIL 2017**



A Vision 2030 Flagship Project



**APRIL EW PHASE: ALARM**



**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- **Rainfall report:** 124.2 mm and 62 mm of rainfall was recorded at Marsabit and Moyale stations respectively.
- **Vegetation condition;** Pasture and browse condition is poor in pastoral livelihood zone and fair to poor in Agro pastoral livelihood zone.

**Socio Economic Indicators (Impact Indicators)**

- **Production indicators;** an average of 0.5 litres per household was produced in households which reported milk production. Slight improvement in milk production is noted in Saku and Moyale. Livestock body condition is fair in agro pastoral livelihood zone and fair to poor in pastoral livelihood for all the species except camels which have fair to good body condition across the County.
- Livestock deaths as a result of drought and erratic rains have been reported.
- Access indicators; Cost of water (20 litres) is within normal ranges of Ksh 0-5. Milk consumption has slightly improved due to increased production. Terms of trade remained unchanged at 44.7 Return distance to water sources for human was 2.5 km and above the normal ranges.
- Utilization Indicators; children less than 5 years at risk of malnutrition was 19%. Coping strategies index has stabilized at 20.1 although it is above the normal ranges.

Early Warning (EW) Phase Classification		
Livelihood Zone	Phase	Trend
Agro-pastoral	Alarm	Improving
Pastoral All species	Alarm	Improving
Fisherfolk/ Casual labour /Petty Trading	Alert	Improving
County	Alarm	Improving
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	58.7	80 -120
VCI-3Month	10.52	>35
Forage condition	Poor	Good
Production indicators	Value	Normal
Livestock Body Condition	Poor	Good
Milk Production	0.5	>1.7 litres
Livestock Migration Pattern	Not Normal	Normal
Livestock deaths (from drought)	Deaths reported	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	44.7	>75.6
Milk Consumption	0.5	>1.1 litre
Return distance to water sources	2.5	< 2.2 Km
Cost of water at source (20 litres)	0-5	<5 Ksh
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	19	<20.3
Coping Strategy Index (CSI)	20.1	

<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>▪ Land preparation</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> </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> </ul>	<ul style="list-style-type: none"> <li>▪ Short rains</li> <li>▪ Planting/weeding</li> </ul>								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

**Seasonal Calendar**

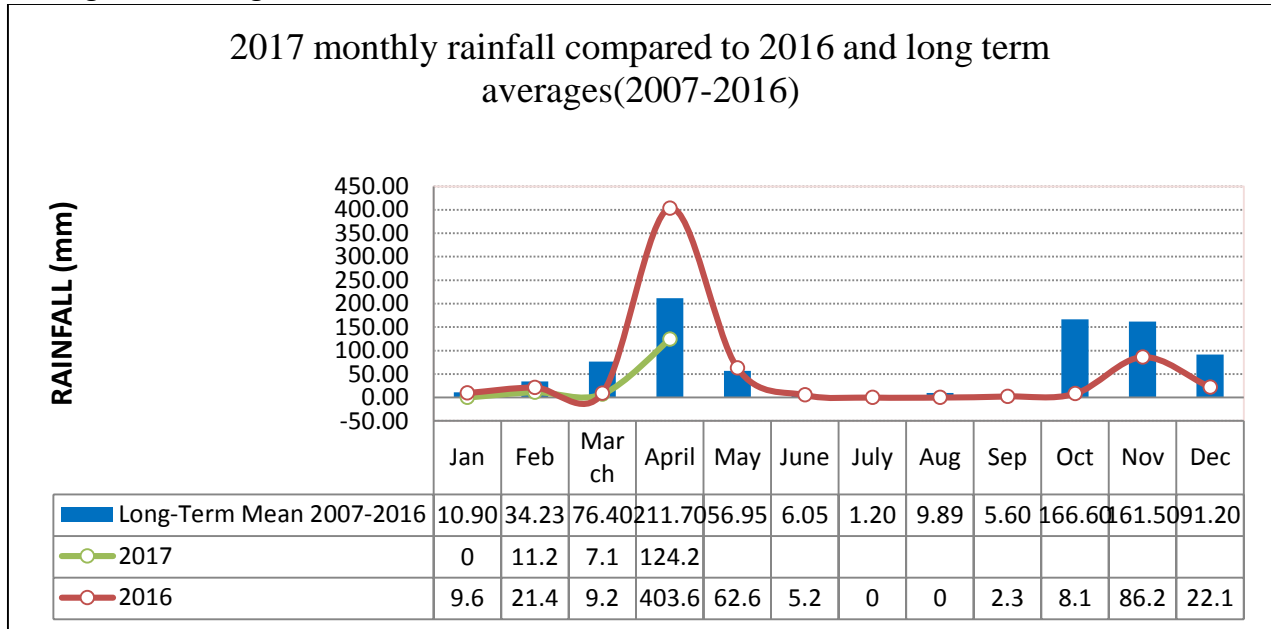
# 1. CLIMATIC CONDITIONS

## 1.1 RAINFALL PERFORMANCE

### Onset

Long rains onset was on 26<sup>th</sup> March 2017 which was late than expected.

The graph below shows 2017 rainfall recorded in Marsabit Station and compared to 2016 as well as long term average.



### Amounts received

During the month, 142.2 mm was recorded at Marsabit from 9 rainy days with the highest amount recorded on 8<sup>th</sup> April amounting to 31.6 mm. At Moyale station, 62 mm was recorded with 11 rainy days experienced. Highest amount in Moyale was recorded on 26<sup>th</sup> April (23.2 mm). Cumulative amount for the month is 58.7% of the normal.

### Distribution

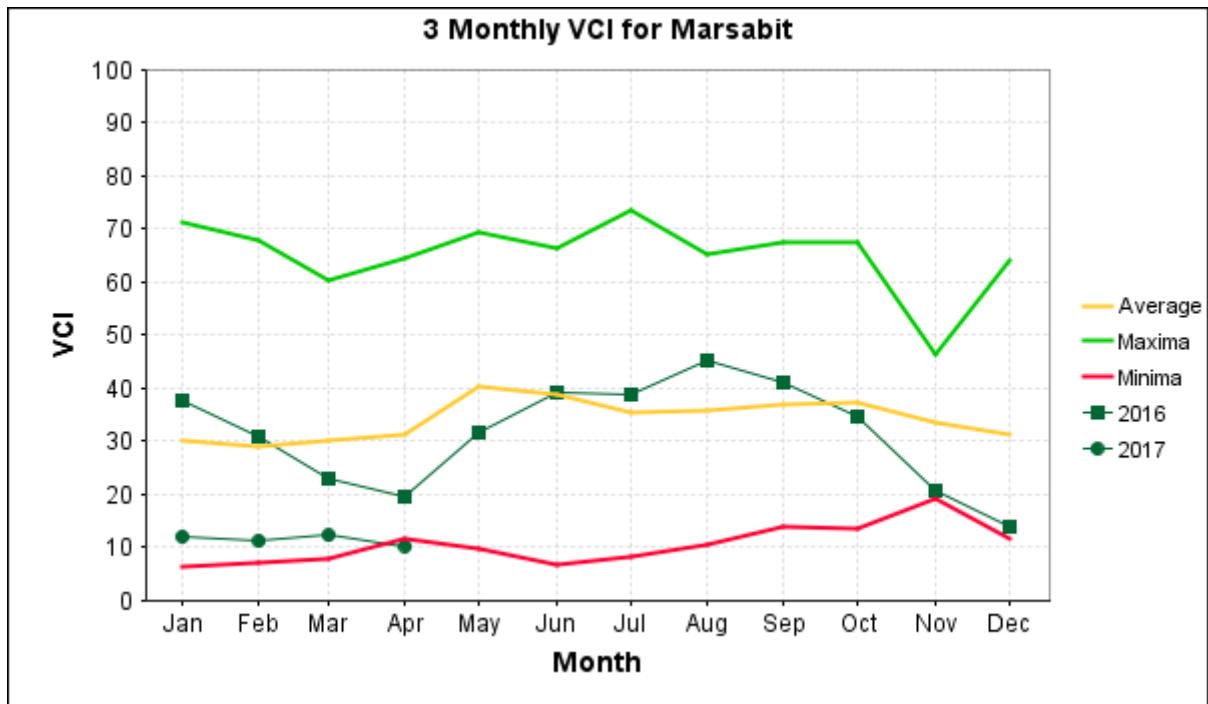
Rainfall distribution has been poor across the County in terms of time and space apart from Saku and Moyale which experienced fair spatial distribution but poor temporal distribution. Most of the lowlands (pastoral livelihood) has received two to four rainy days during the month and the amounts were below normal.

## 2. IMPACTS ON VEGETATION AND WATER

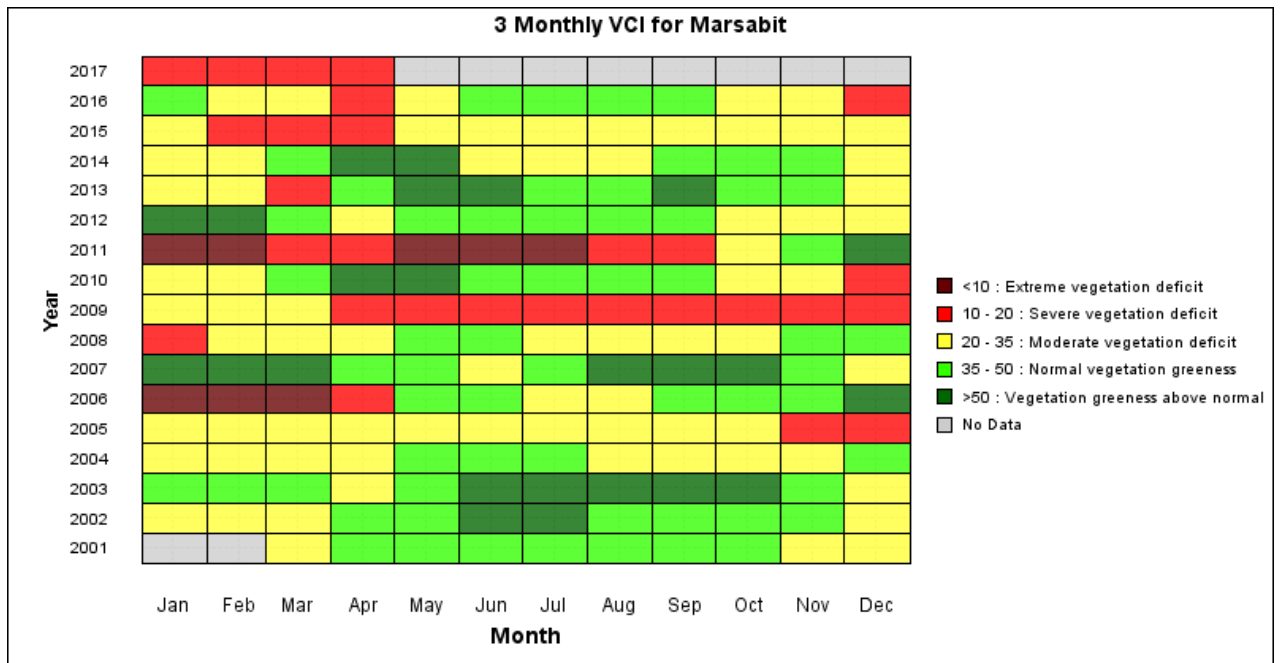
### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

- The graph below compares 2017 VCI trend to 2016, long term average and gives maximum and minimum values ever recorded. The overall vegetation condition for the county is below average which is not normal at this time of the year/season.



- The overall Vegetation Condition Index for the County in April was 10.52 placing the County in Severe vegetation deficit band. All the sub counties are in severe vegetation deficit category. The matrix below compares 2017 vegetation condition to previous seasons in the County



- This implies that Vegetation condition is below normal and falls below the minimum value ever recorded. Despite the improvements noted in pasture condition, the quality and quantity is very low compared to same time in previous years. Vegetation condition is expected to continue improving as the long rains continue.

### 2.1.2 Pasture

- Pasture condition varies across the County. Significant improvement in pasture quality and quantity has been observed in Moyale, Sololo, Mt Marsabit, Huri Hills, Dukana, Loglogo, Illeret, Mt Kulal and Shurr. Pasture in mentioned places is fair while it largely remains poor in all other areas.
- The quality and quantity of pasture is below normal compared to similar time of the year and season. Available pasture is expected to last for one to two months where it is fair. Pasture condition will likely improve across the County as rains continue.

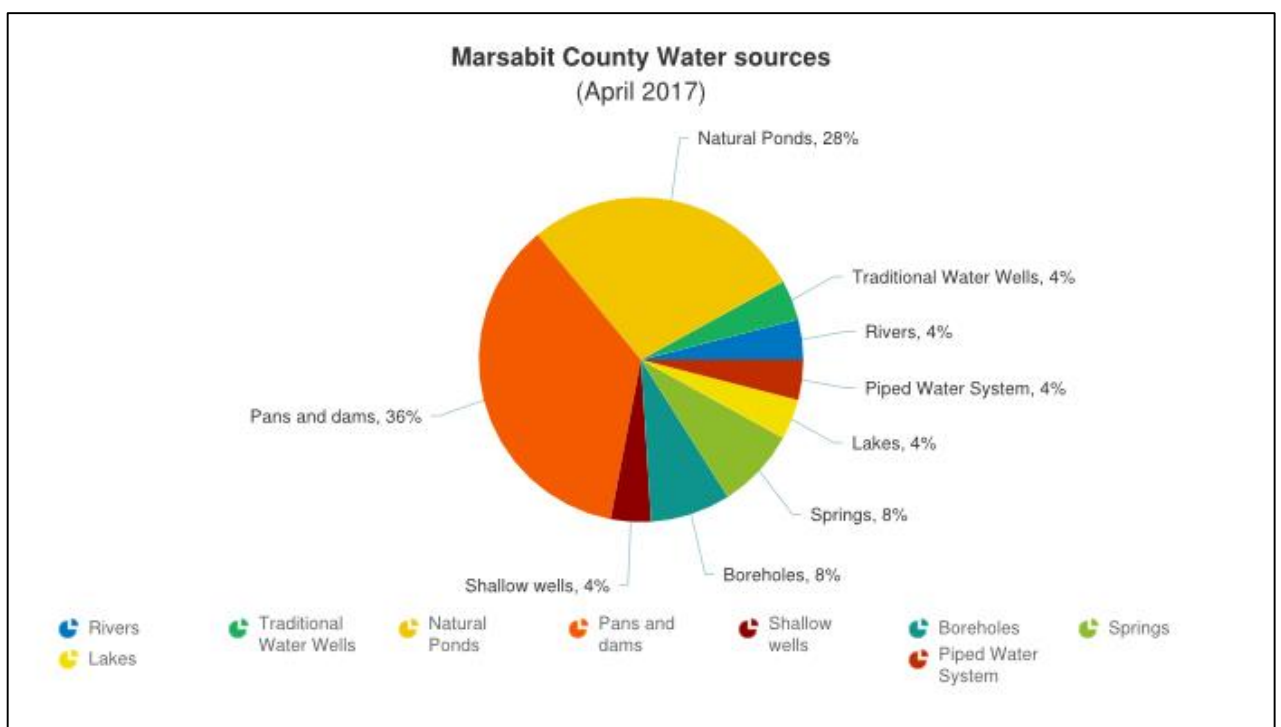
### 2.1.3 Browse

- Browse is fair in Saku and Moyale sub Counties as well as some pockets of North Horr and Laisamis sub Counties but poor in most pastoral livelihood zone areas.
- Browse is expected to last 2-3 month in Saku (mainly agro pastoral areas) and 1-2 months in pastoral livelihood zones.
- Significant improvement has been noted in browse condition although the situation is below normal at this time of the year and season. Browse is expected to improve if the rains continue.

## 2.2 WATER RESOURCE

### 2.2.1 Sources

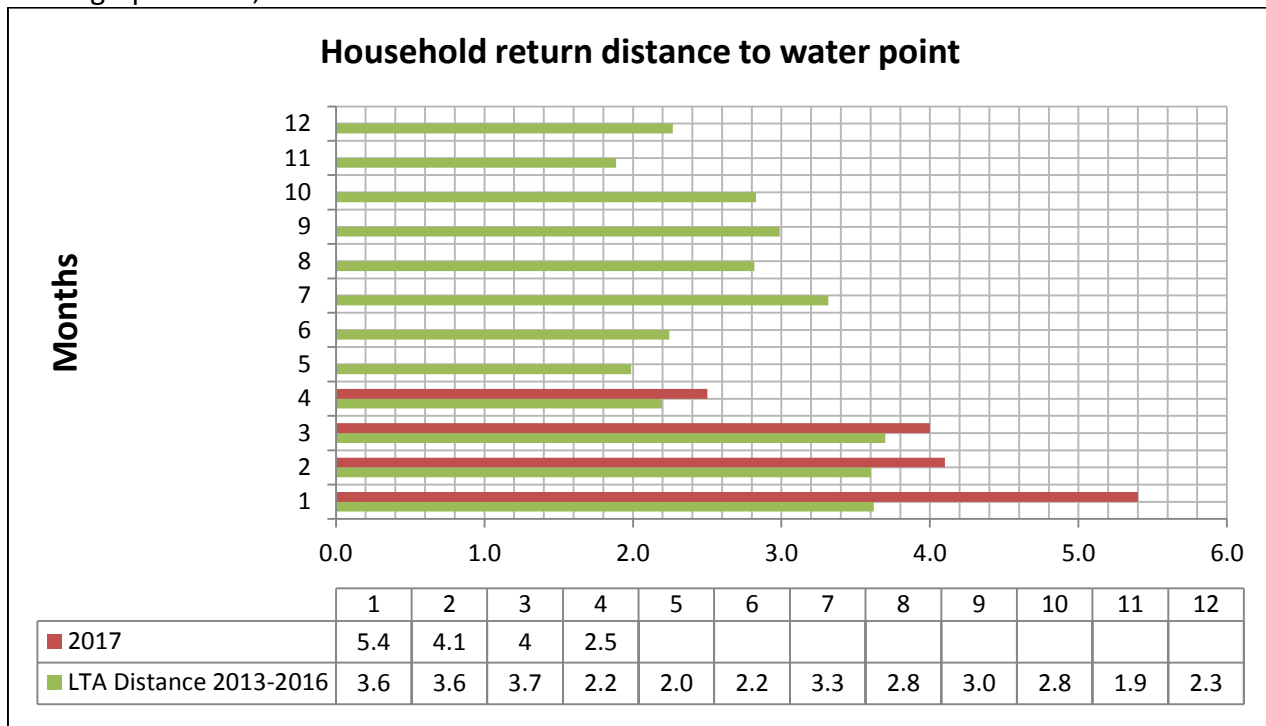
- The major water source for domestic and livestock use in the County was pans and dams. Other sources of water are as shown in the pie chart below;



- Open water sources have fully recharged in Moyale and Saku during the last dekad of April improving water availability.

### 2.2.2 Household access and Utilization

- The average return distance from households to main water sources was 2.5 km depicting significant decrease compared to March. The average return walking distances are shown in the graph below;



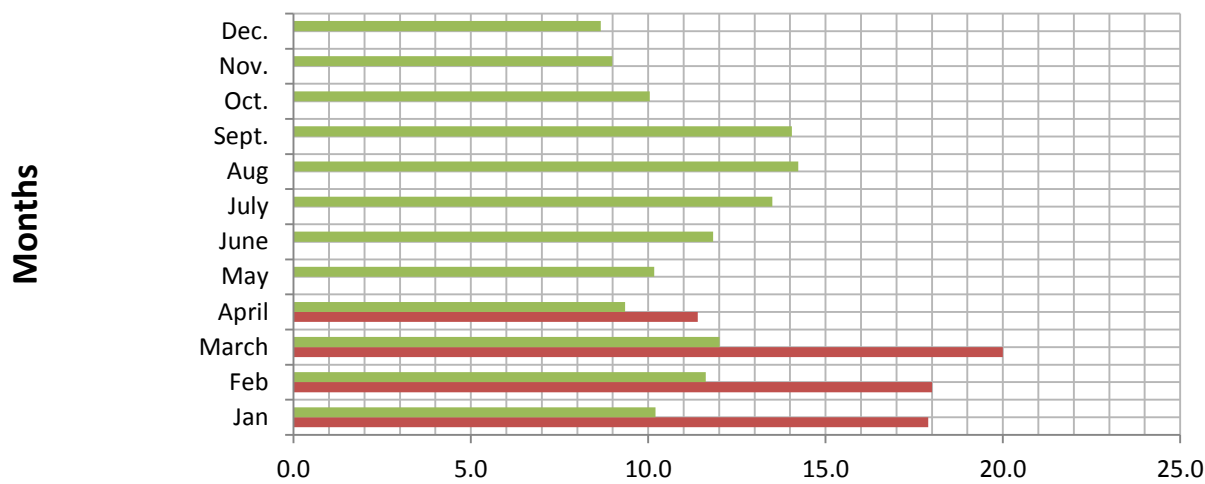
- Significant improvement in distance to water sources as well as waiting time were noted during the last week of April since rainfall was received in all parts of the County.
- Waiting time ranged between 30 to 60 minutes across all livelihood zone which is above the normal waiting time of 10-30 minutes at this time of year.
- Cost of water is within the normal ranges of Ksh 2-5 per 20 litre jerrican at the source.

### 2.2.3 Livestock access

- Distances from water sources to grazing areas have significantly improved and was 11.4 km in April.

The graph below compares trekking distances with short term average.

**Average Grazing Distance**



	Jan	Feb	March	April	May	June	July	Aug	Sept.	Oct.	Nov.	Dec.
■ LTA distance 2011-2016	10.2	11.6	12.0	9.4	10.2	11.8	13.5	14.2	14.1	10.0	9.0	8.7
■ Grazing Distance 2017	17.9	18	20	11.4								

- Compared to short term average, distances from grazing areas to water sources are slightly higher than normal.
- Improvement is attributed to ongoing rains and improving pasture condition. Watering frequency for livestock was 2 – 3 days for small stock and cattle, and 6 – 8 days for camels.

### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

- Livestock body condition has improved in areas where pasture has significantly improved such as Moyale, Sololo, Mt Marsabit, Huri Hills, Dukana, Loglogo, Illeret, Mt Kulal, South Horr and Shurr. Livestock body condition is fair in mentioned areas.
- Body condition largely remains poor in pastoral livelihood zones. In some pockets such as Maikona, North Horr, Amballo, El-Hadi, Badan Rero, Laq, Farakoren, Gas, Burgabo, Eleborr, Barambate and Balesa livestock body condition was emaciated with deaths reported.
- Body condition is expected to improve in all the species due to regenerating pasture and browse as well as improved water availability reducing trekking distances.

##### 3.1.2 Livestock Diseases

- There were no reported outbreaks of livestock diseases only the endemic diseases reported which included; Peste des Petits Ruminants (PPR, Contagious Caprine Pleuropneumonia (CCPP) and Contagious Bovine Pleuro-pneumonia (CBPP) across the county.

##### 3.1.3 Milk Production

- Milk production has slightly improved in agro pastoral livelihood zones of Saku and Moyale sub counties. Approximately 95% of the households reported no milk production. For those who reported having milk, households produced 0.5 – 1 litre.

## **3.2 RAIN-FED CROP PRODUCTION**

### **3.2.1 Stage and Condition of food Crops**

- 1162 acres were put under cultivation for the season with more than 90% of the acreage being in Saku. Crops are flourishing well as the rains continue in Saku and Moyale sub counties. For those areas which were planted early such as Songa, Dakabaricha, Sagante and Dirib Gombo, maize and beans are having the second and third leaf. Weeding has also started in some areas in Karare, Kituruni and Sagante.

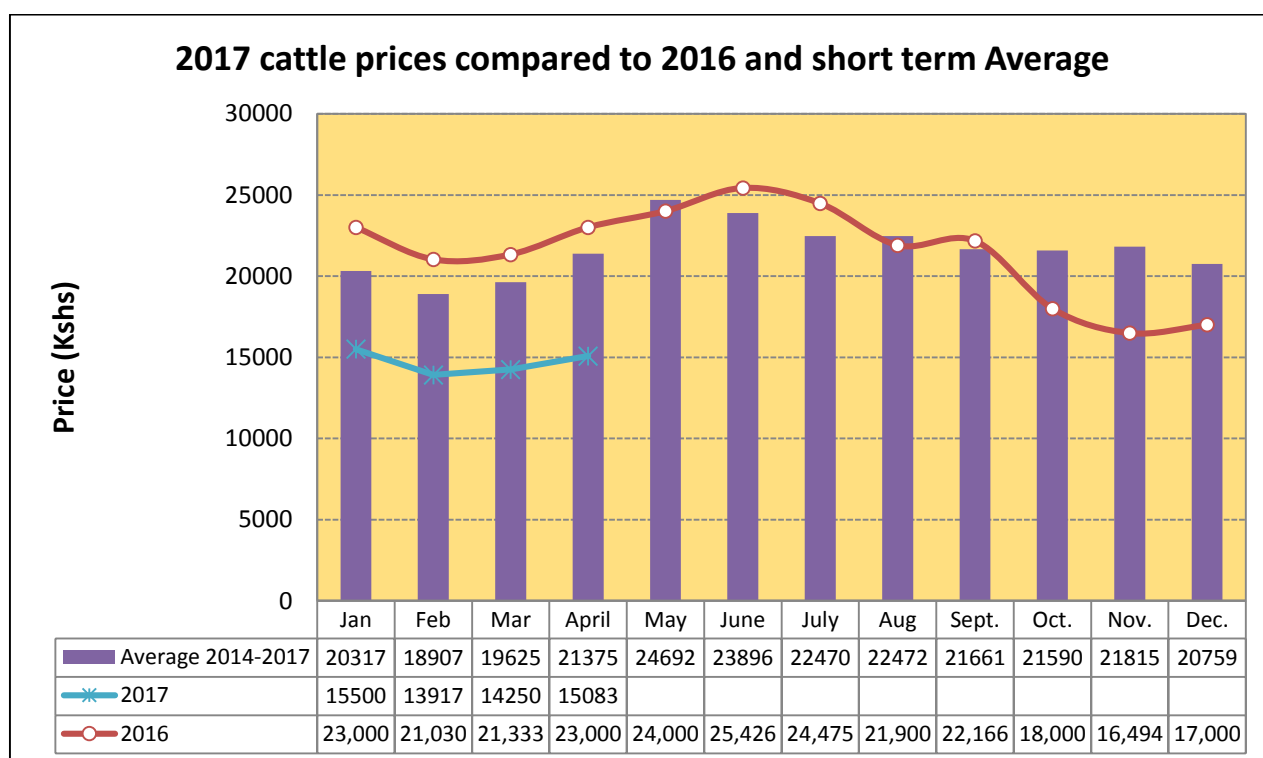
## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

#### 4.1.1 Cattle Prices

- The average price of medium size cattle in the County was Ksh15,083 while the same was sold at Ksh14,250 in March showing price increase of 5 %.

The graph below compares 2017 monthly price with 2016 as well as three year price averages.



n=330 HH

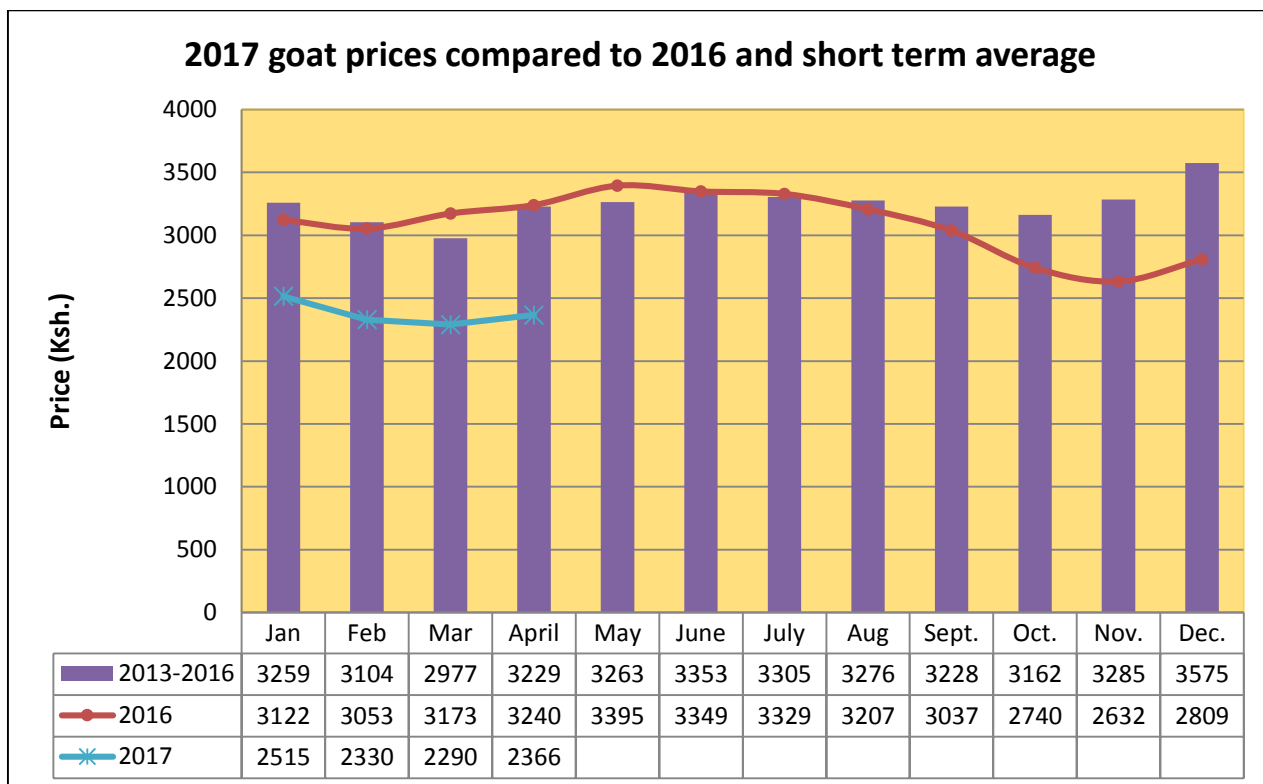
- Compared to short term average, April 2017 prices are 30% lower. Prices of medium sized cattle ranged between Ksh 10,000 -20,000.
- Communities got relief from slaughter destocking done by NDMA where a cattle was bought at Ksh 15,000.

#### 4.1.2 Goat Prices

Average selling price of a medium sized goat was Ksh 2,366 while the same was sold at Ksh2,290 in March depicting price increase of 3.3 %.

The graph below compares 2017 average goat prices versus 2016 and short term average.



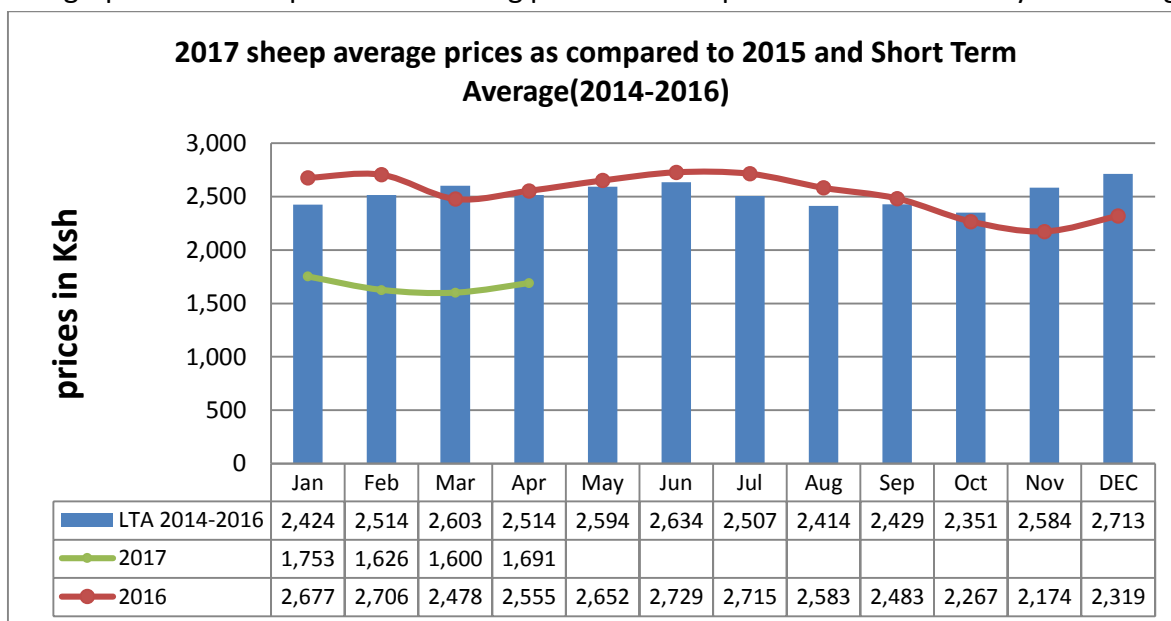


n=330 HH

- Prices were slightly pushed up by better prices in Saku and Moyale where a goat was sold between Ksh 3,000-3,500 due to improving body condition. Goat prices in North Horr and Laisamis sub counties worsened during the month with some areas such as Balesa, North Horr, Gas a medium sized goat for was fetching Ksh 500. Decrease in price may be attributed to poor body condition.
- Comparing to the short term average, the price is 26.7% below the normal ranges.

#### 4.1.3 Sheep Prices

The graph below compares 2017 selling prices to 2016 prices as well as three years average.



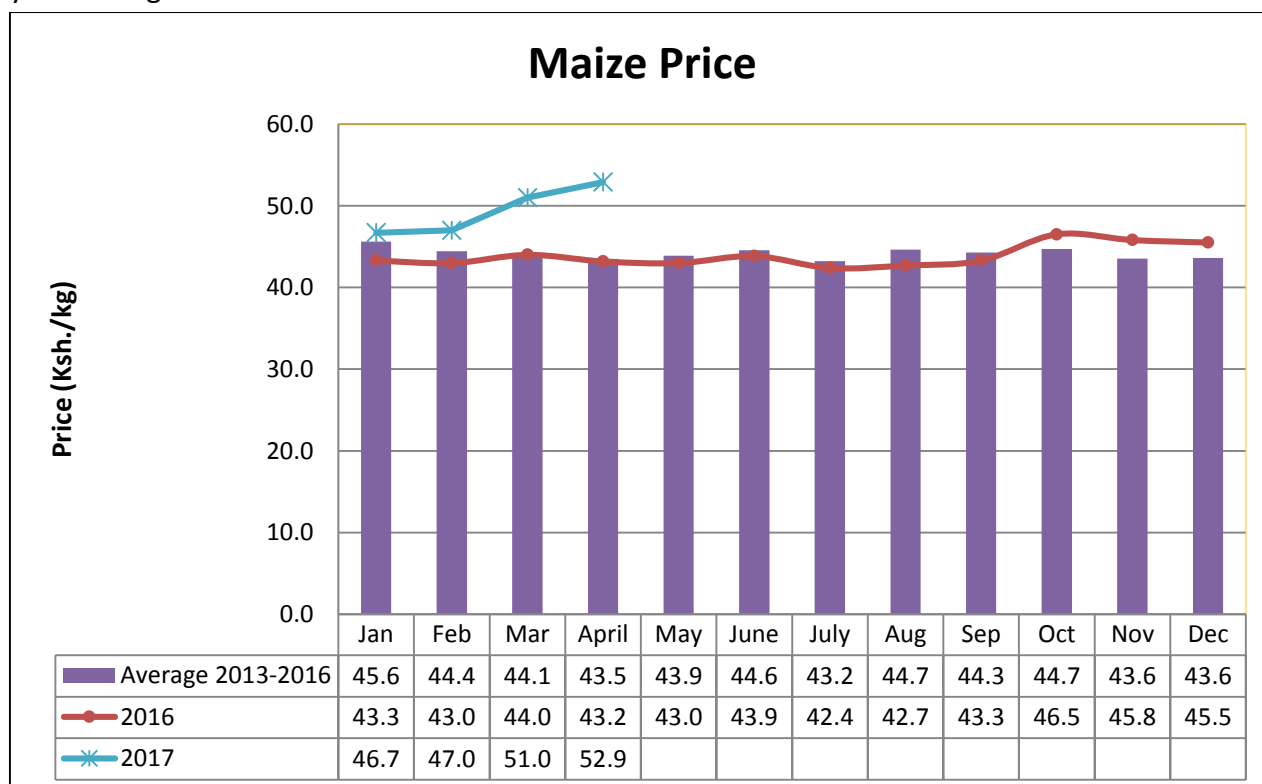
n=330 HH

- Average selling price of a medium sized sheep in April was Ksh1,691 depicting price increase of 5 % when compared to last month and 32.7% below the short term average.
- Traded volumes were very low with pastoralists forced to go back with their livestock due to lack of buyers. Slaughter destocking by NDMA provided relief to herders since they were able to sell their small stock at Ksh 2,000 per head. However, Brokers are taking advantage of the desperate households and buy sheep for as low as Ksh 300.

## 4.2 CROP PRICES

### 4.2.1 Maize

The graph below compares the average monthly prices of maize in 2017 to 2016 and short term year average.



n=330 HH

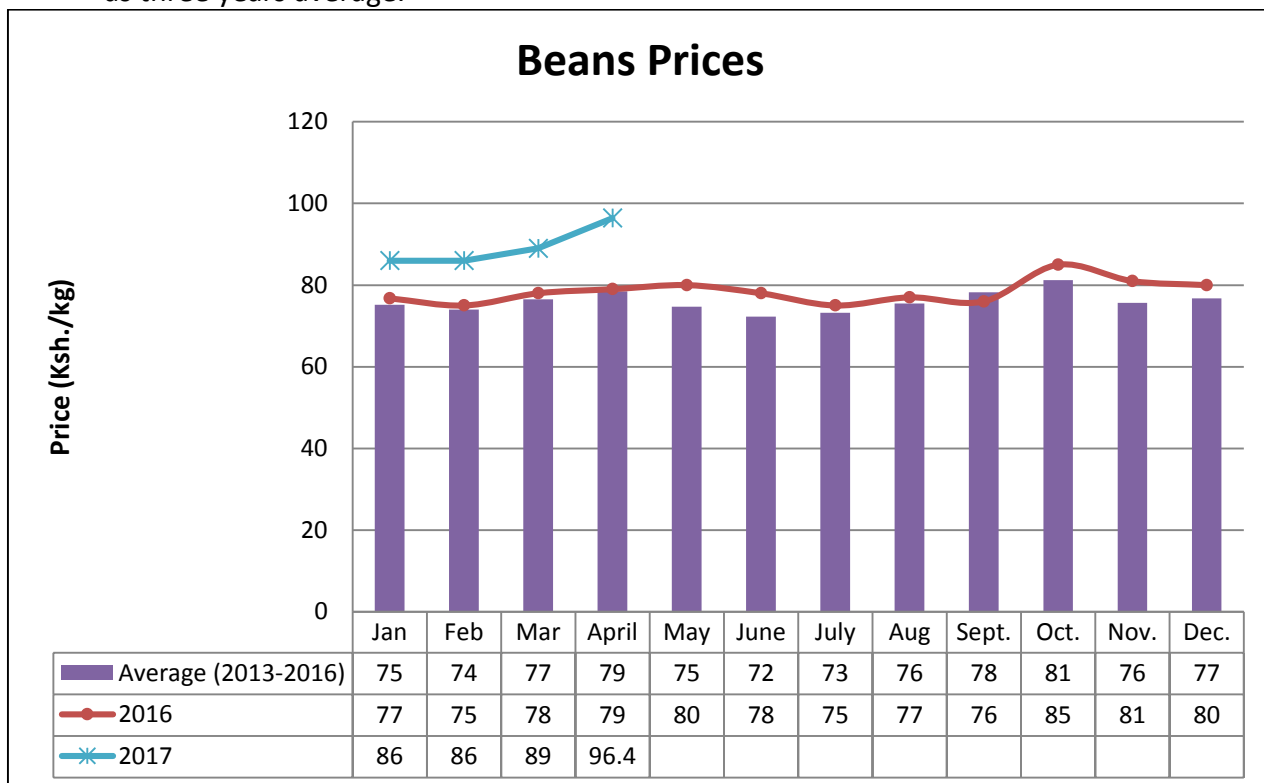
- Average Maize price in the month under review was Ksh 52.9 while the same was Ksh 51 in March depicting price increase of 3.7%. Gradual increase in maize price is noted from November 2016.
- The commodity is available in all markets with stable supplies from major markets such as Ethiopia, Isiolo and Meru.
- Lower maize Prices are noted in Saku (Agro pastoral Livelihood zones) and border towns of Moyale Central, Forolle, Elhadi and Dukana where a kilo goes for Ksh 35-45. Highest prices are recorded in Elmolo, Sarima and Olturot where a kilo goes for Ksh 60-80.

### 4.2.2 Posho (Maize Meal)

- The average price of Posho was Ksh 66 in April 2017 and retailed at Ksh 63 in March showing price increase. The price increase may be attributed to increase in maize prices.

### 4.2.3 Beans

- Average retail price for beans in April was Ksh 96.40 while the same was Ksh 89 in March depicting price increase of 8.3%. Graph below compares 2017 beans prices to 2016 as well as three years average.

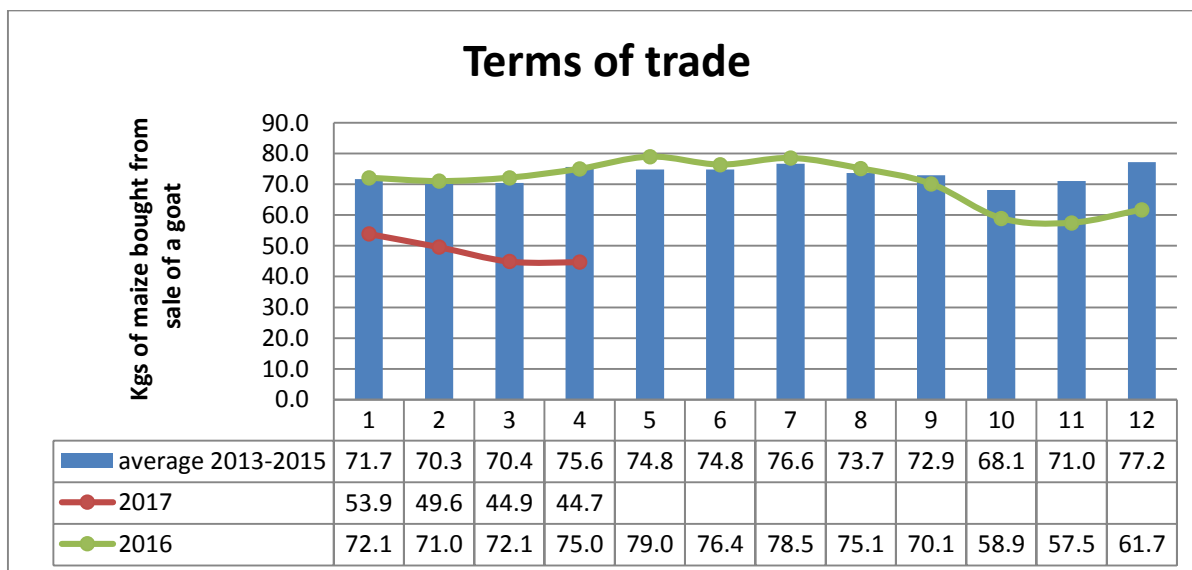


n=330

- Beans are cheaper in Marsabit and Moyale towns retailing at Ksh 60-70 and highest in Loiyangalani, Laisamis, Elmolo and Ngurnit where a kilo retails at Ksh 90-120.
- Compared to respective three year average, April 2017 prices are 22% above the normal ranges.

### 4.3 Terms of Trade (TOT)

The graph below shows April 2017 TOT compared to 2016 and short term average.



n=330 HH

- A sale of one goat would buy 44.7 kg of maize depicting decrease in pastoralists' purchasing power across the County. This is due to increase in maize prices and low goat prices. TOT was more favourable in Moyale ranging between 80-120 due to cheaper maize prices and higher goat prices.
- Compared to short term average, TOT is 58% of normal. This depicts eroded purchasing power of the households translating to food insecure households.

## **5.0 FOOD CONSUMPTION AND NUTRITION STATUS**

### **5.1 MILK CONSUMPTION**

- Milk consumption has marginally improved in agro pastoral livelihood zone of Saku and Moyale. Approximately 5% of the interviewed households reported milk production which was majorly consumed at household. Consumption was between 0.5 -1 litre which was mainly used to prepare tea.
- Few households in Sagante, Karare, Songa, Kituruni, Turbi and Shurr are collecting milk together and sell at Marsabit town where a litre goes for Ksh 120-150.

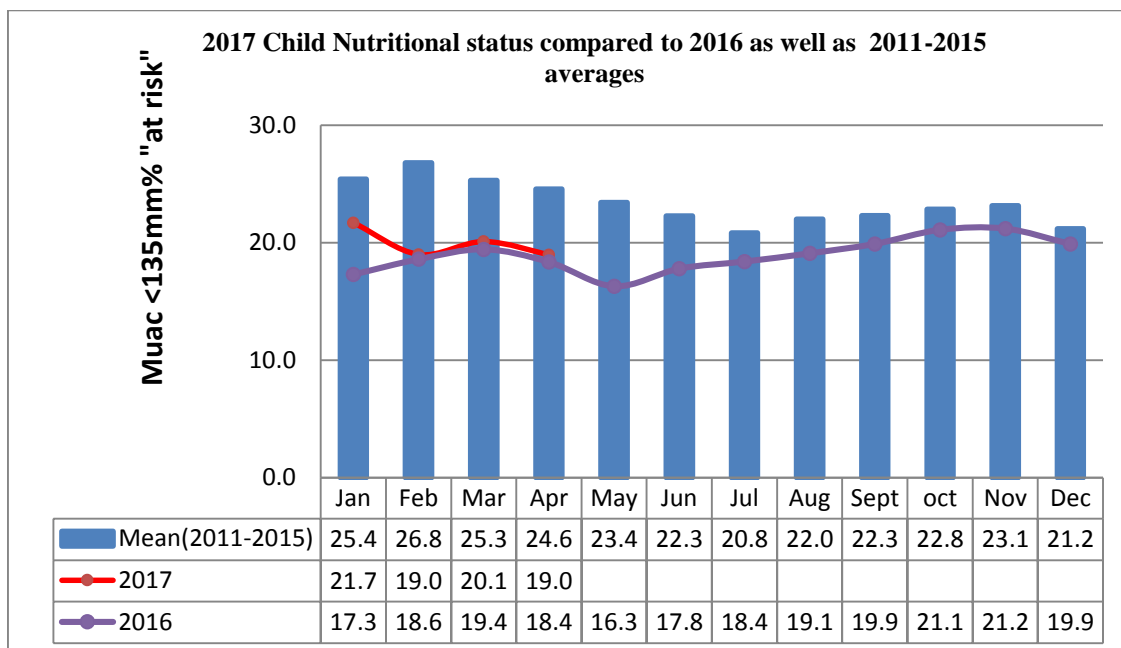
### **5.2 FOOD CONSUMPTION SCORE (FCS)**

- Food consumption Score has slightly improved when compared to last month. 25 % of the interviewed households had acceptable FCS, 31% had borderline FCS while 44 % had poor FCS. This may be attributed to ongoing food interventions, slaughter destocking and improving milk availability (agro pastoral areas).
- Consequently, dietary diversity has slightly improved in Agro pastoral livelihood due to availability of vegetables and milk. Currently, most households reported consuming one meal per day instead of the usual 2-3 meals per day.

## **5.3 HEALTH AND NUTRITION STATUS**

### **5.3.1 Nutrition Status**

- From the sampled children (6-59 months), 19% were at risk of malnutrition (MUAC 125-134 mm) showing marginal decrease in children at risk of malnutrition when compared to last month's 20.1%. A decrease in moderately malnourished (MUAC 115-124 mm) children was noted from 5.06% to 4.05% while 0.43% were severely malnourished (MUAC <115) compared to March's 0.61%. The figure below shows proportion of children at risk of malnutrition.



### 5.3.2 Health

- There were no disease outbreaks reported during the period. The leading cases of morbidity for both children under five years and the general population for the month were; Upper Respiratory Tract Infections (URTI), diarrhoea, Pneumonia and fever.

### 5.4 COPING STRATEGIES

The mean Coping Strategies Index (CSI) in April was 20.1 the same as last month. The stability may be attributed to ongoing food interventions and food vouchers provided by various actors. Pastoral livelihood zone applied more coping strategies more frequently than households in agro pastoral livelihood zone.

CSI is expected to improve if household food security condition will improve.

## **6. CURRENT INTERVENTION MEASURES**

### **6.1 NON-FOOD INTERVENTIONS**

- Cash transfers by County Government, Concern WW, Social services Department, DORCAS and NDMA.
- Integrated outreaches and screening across the County.
- Rehabilitation, servicing and equipping of Boreholes.
- Distribution of livestock feed supplements (range cubes) across the County done by NDMA and Livestock department.

### **6.2 FOOD AID**

- Slaughter destocking done by NDMA in collaboration with livestock department.
- General Relief food distribution to across the County done by various partners. Food for Asset (FFA) in Moyale and Sololo done by WVK, NDMA and WFP.
- Therapeutic Integrated Management of Acute Malnutrition for the Under-fives, Pregnant and Lactating Mothers (Supplementary Feeding Program (SFP), Out Patient Therapeutic Program (OTP) by MOH supported by WFP, UNICEF, FHK, CONCERN WW, FHK among other actors.

## **7. EMERGING ISSUES**

### **7.1 Migration**

- Migration has eased due to the rains received in various areas within the county.
- Resource based Conflict cases have been reported in drought fall back areas. Conflicts will likely subsidize as pasture and browse regeneration takes place.
- Livestock deaths as a result of drought were reported in parts North Horr, Loiyangalani, Barambate, Qorqa, Maikona and Gas.
- More than 200 cattle died as a result heavy downpour in Malbe Bali and Laqi in Moyale sub County during the week. Approximately 5000 small stock died across the county (Karare, Huri Hills, Elgade, Olturot, Toricha, Bori, Mt Kulal, Laqi, Sololo, Gas) as a result of heavy downpour received on 30<sup>th</sup> April 2017. Few donkeys and camels also died as a result of the rains.

### **7.2 FOOD SECURITY PROGNOSIS.**

- Rainfall received in April was 58.7 % of the normal with most parts of the County receiving rains for 2-4 days during the month. According to Kenya Meteorological Department (KMD) forecast, most parts of the Country are likely to experience depressed rainfall in May and rainfall cessation is expected to occur in the 2nd to 3rd week of May 2017.
- Pasture regeneration has taken place in areas that have received continued rains such as Saku, Sololo, Moyale, Dukana, Mt Kulal although the quantity is below average. Water availability has improved reducing trekking distances for both human and livestock.
- Basic food commodity prices have shot up but livestock prices are not improving greatly reducing the purchasing power.

- Current area under cultivation is less than 10 % and the planted crops (maize and beans) are flourishing well.
- The food security situation will likely improve if the rains continue mainly with milk and vegetable availability but with the forecasted cessation, crops may not reach maturity thus the food insecure households is anticipated. If the season performs well, food security situation will likely improve when impacts of long rains is realized probably in June to July if the long rains will be normal or near normal.

## **8. RECOMMENDATIONS**

- Provision of relief food to desperate households.
- Surface water run off harvesting
- Provision of water plastic tanks to harvest rain water.
- Slaughter offtake in selected areas
- Continued integrated outreach support
- Continued cash transfers programmes
- Support farmers through mechanization.