

**National Drought Management Authority**  
**TURKANA COUNTY**  
**DROUGHT EARLY WARNING BULLETIN FOR JULY 2017**



A Vision 2030 Flagship Project



**JULY EW PHASE**



**Early Warning (EW) Phase Classification**

Livelihood Zone	Phase	Trend
Pastoral-all species	Alert	Improving
Agro-Pastoral	Alert	Improving
Fisheries	Alarm	improving
Formal Employment/Casual Labour	Alert	Improving
<b>COUNTY</b>	<b>Alert</b>	<b>IMPROVING</b>

**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- The county received the highest amounts of rains recorded towards the second of the month which was above normal by 23 percent.
- The situation of pasture and browse is fair, although the condition was below normal.
- Compared to the previous month, the state of water sources has improved and it is within the normal range.

**Socio Economic Indicators (Impact Indicators)**

- During the month, livestock body condition was fair and below normal.
- Milk production and consumption was very low and below normal.
- Return to water distances was very high and above normal.
- The Terms of Trade (ToT) was favourable and normal.
- The percentage of children under five years at risk of malnutrition was high (increased) although normal.
- Copying strategy index was good and below normal

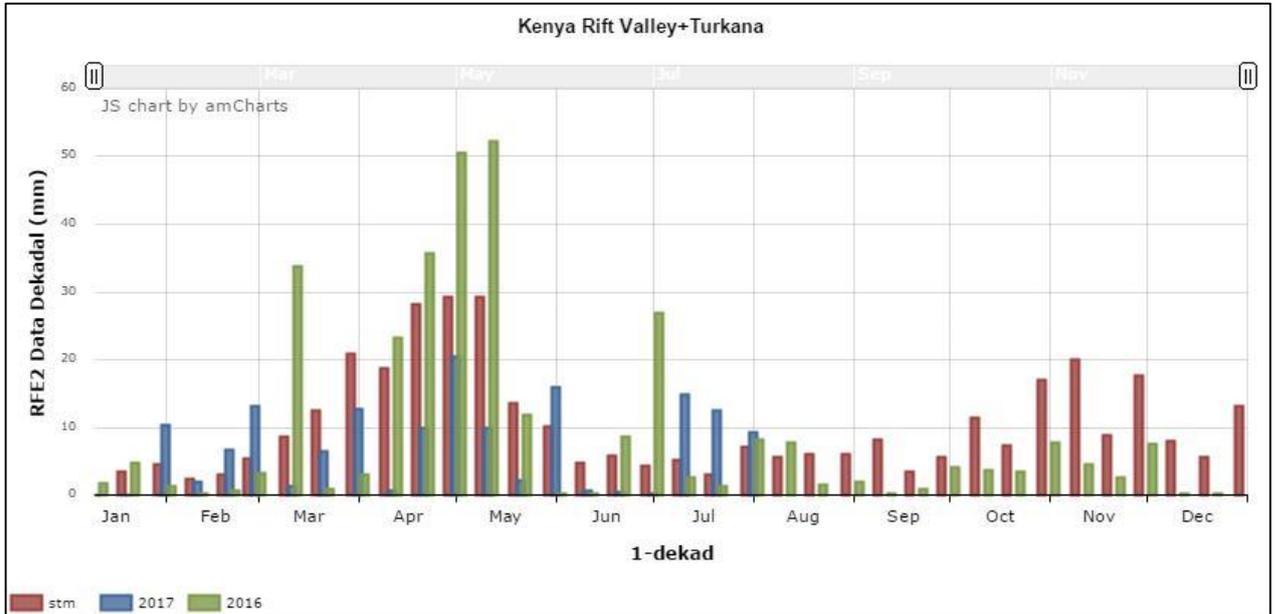
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	123	60-100
VCI-3 month	24	>35
State of Water Sources	3	3-4
Vegetation Condition	Below Normal	Normal
Production indicators	Value	Normal
Livestock Migration Pattern	Normal	Normal
Livestock Body Conditions	Fair	Normal
Milk Production	6	>128 litres
Livestock deaths (from drought)	No Deaths	No Deaths
Crops Condition	poor	Fair
Access Indicators	Value	Normal
Terms of Trade (ToT)	32	>32
Milk Consumption	6	>50 litres
Return distance to water sources	11 km	<4.96 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	19	<19
Coping Strategy Index (CSI)	14	<32

<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

# 1.0 CLIMATIC CONDITIONS

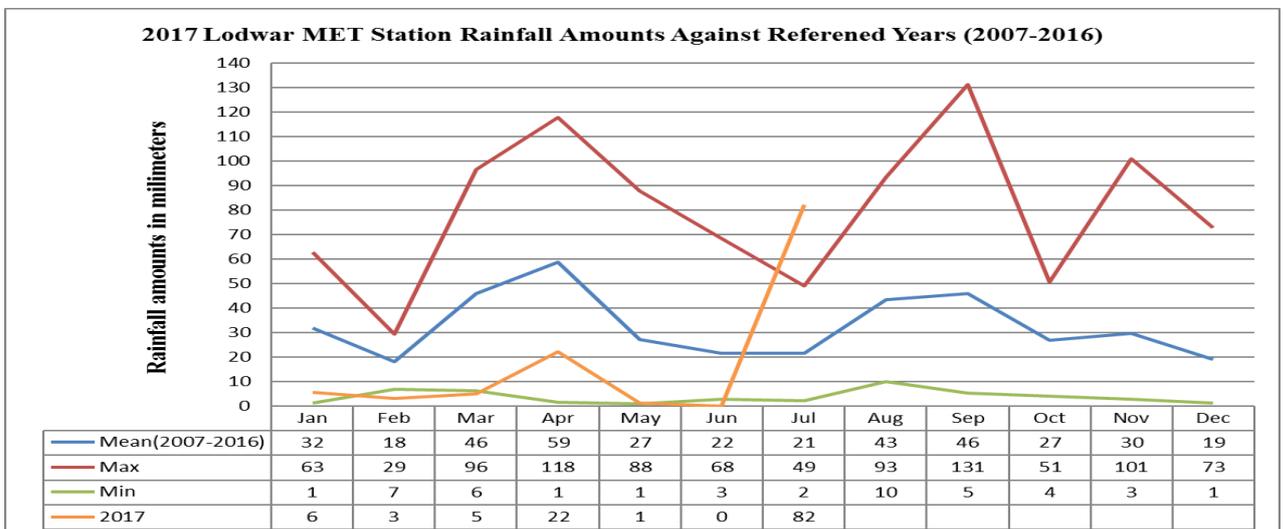
## 1.1 RAINFALL PERFORMANCE

- During the month of July 2017, the county recorded a higher amount of rainfall averaging to 8.8 mm, compared to normal of 7.1 mm, attributing to 23 percent of above normal.
- The rains received was fairly distributed albeit poor progression.
- The rains received were off-season ones across the county within the second and third week of the month.



## 1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- Rainfall distribution was fair with most parts of the county receiving relatively good amount of rainfall.
- Lodwar MET station recorded a total of 82 mm during the month. This was a significant increase from 0 mm recorded in the previous month.
- Lodwar meteorological station recorded Trace, 24.1 mm, 38.3 mm and 19.6 mm of rainfall for days 3<sup>rd</sup>, 4<sup>th</sup>, 13<sup>th</sup> and 27<sup>th</sup> respectively.
- Rainfall was above the mean (21 mm) for such time of the year.

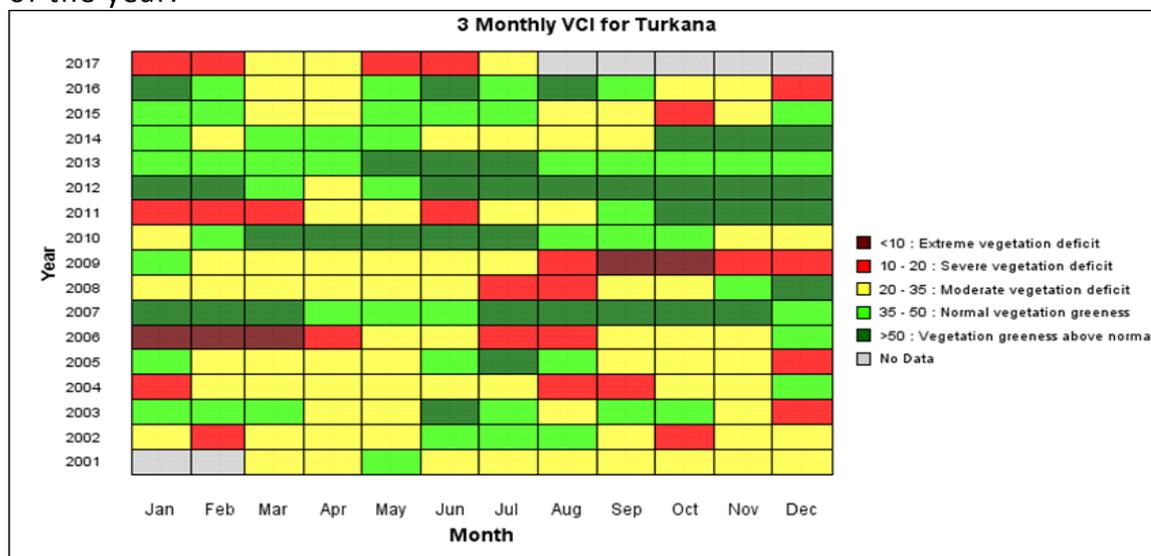


## 2.0 IMPACTS ON VEGETATION AND WATER

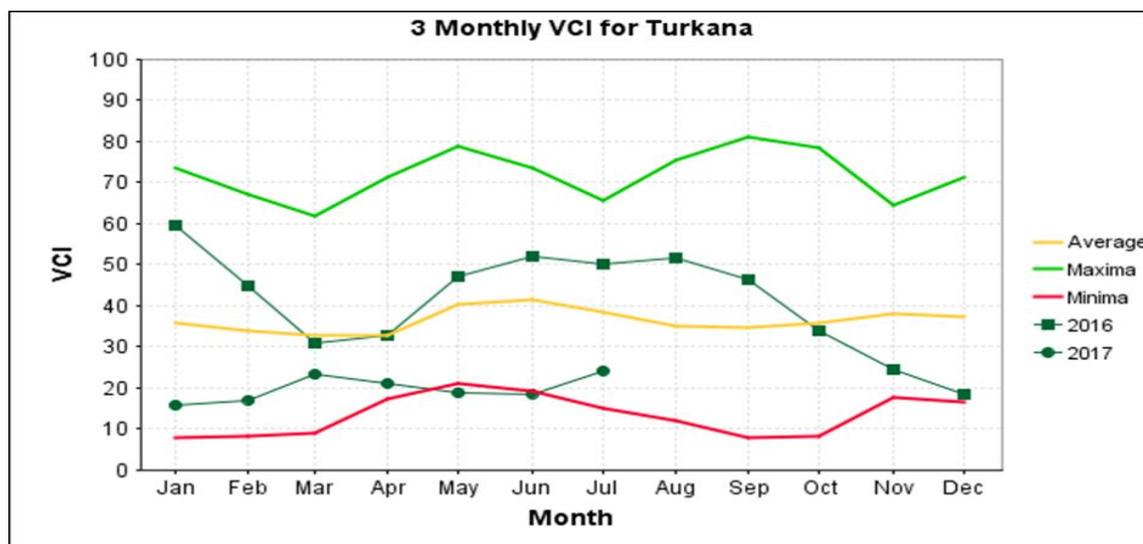
### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

- During the month, the VCI (which shows vegetation greenness) was 24, indicating an increase from 18 recorded in the previous month. The VCI depicts improved vegetation cover. However, it is below the normal (35) for such time of the year.



- The county recorded the highest VCI of 29 in Turkana North Sub-County while Turkana Central Sub-County recorded the lowest VCI of 19.
- The increase in VCI is attributed to the little rains received in parts of Turkana North sub-county and Loima sub-county in the previous month.



#### 2.1.2 Pasture

- During the month, both quality and quantity of pasture was fair across all the livelihood zones.
- The Agro-pastoral livelihood zone had fairer browse with green cover visible in parts along River Turkwel while fisheries livelihood zone had depressed pasture.
- Compared to the previous month, pasture situation is fair.

- However, the pasture condition is still below normal (Green vegetation cover) for such time of a normal year.

### 2.1.3 Browse

- Browse was fair (quality and quantity) with most shrubs and acacia trees flowering across the livelihood zones.
- Browse situation was good in Agro-pastoral zone compared to fisheries livelihood zone which had slightly underperformed browse.
- The condition of browse was better compared to the previous month of June 2017. It remains below normal for such time of a normal year.
- Owing to the recently received off-season rains during the reporting month, it is expected that the existing browse will last for three (3) months.

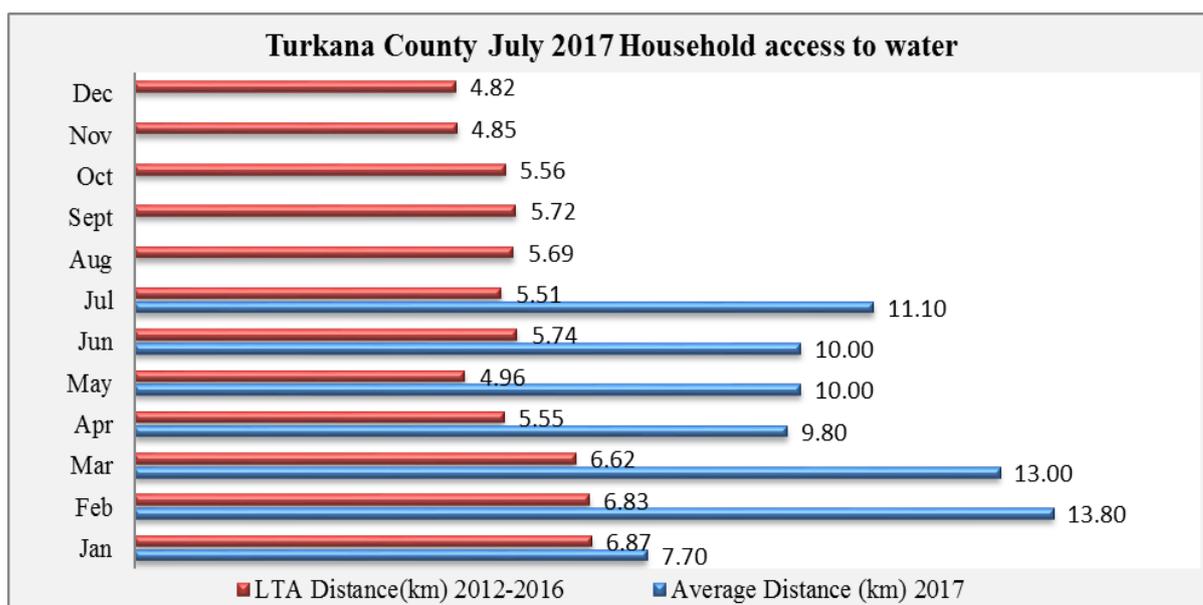
## 2.2 WATER RESOURCE

### 2.2.1 Sources: Percent of water sources in use

- During the month, the percent main water sources used by households and livestock are 45.8, 20.8 and 12.5 for Boreholes, Rivers and Lakes respectively. Rivers and Boreholes were the main water sources in the pastoral livelihood zone while Lake water was majorly used in fisheries livelihood zone.
- The major water source in use in the county was Boreholes.
- The current water sources are expected to last for three months or more.
- Compared to the previous month, water quality and quantity have improved.

### 2.2.2 Household access and Utilization

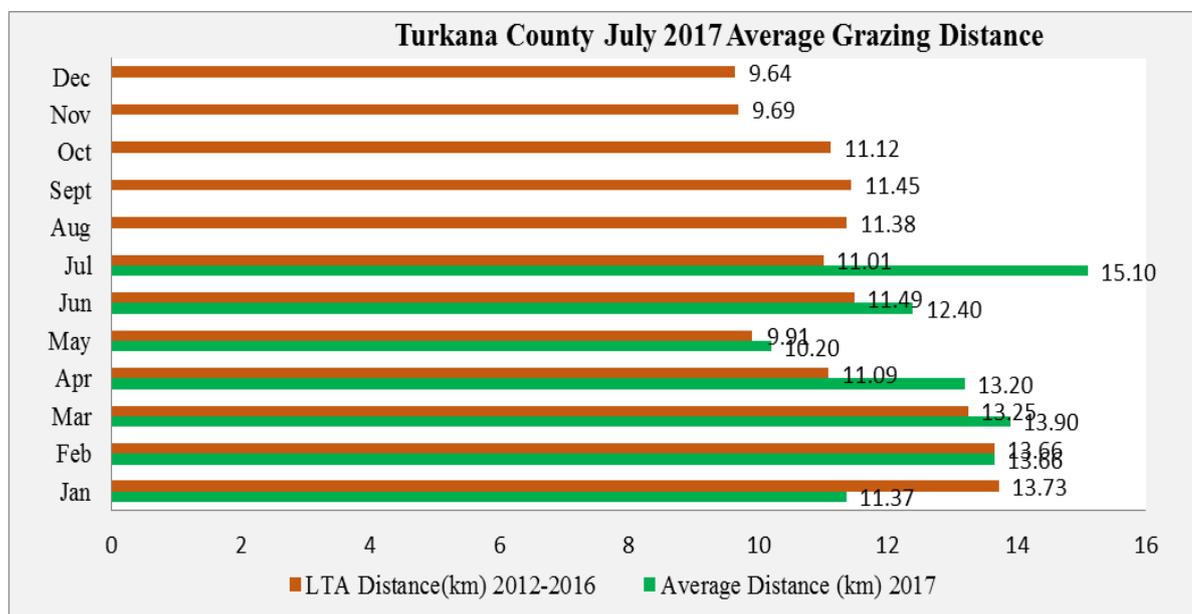
- The average return distance of households to main water source was 11 Kms, indicating an increase from 10 Kms recorded in the previous month. The slight increase in the household return distance is attributed to declining water levels of main water sources due to lack of recharge during the previous month. However, this is expected to improve due to the recently received rains during the month.



- Water consumption per person per day remained highest in Agro-Pastoral livelihood zone and lowest in Pastoral zone.

### 2.2.3 Livestock access

- During the reporting month, the average return trekking distance of livestock from grazing areas to main water sources was 15 Kms which is an increase from 12.4 Kms recorded in the previous month. This is attributed to lack of rains received in June 2017 which led to poor recharge of water sources and hence livestock trekking to far water sources.



- However, it is expected that livestock trekking distance will reduce due to the rains received in the reporting month.

### 2.3 Implication to food security

- Food security situation is expected to worsen during the reporting month. This is attributed to poor rains received in June 2017 resulting to livestock walking for long distance to access water.

### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

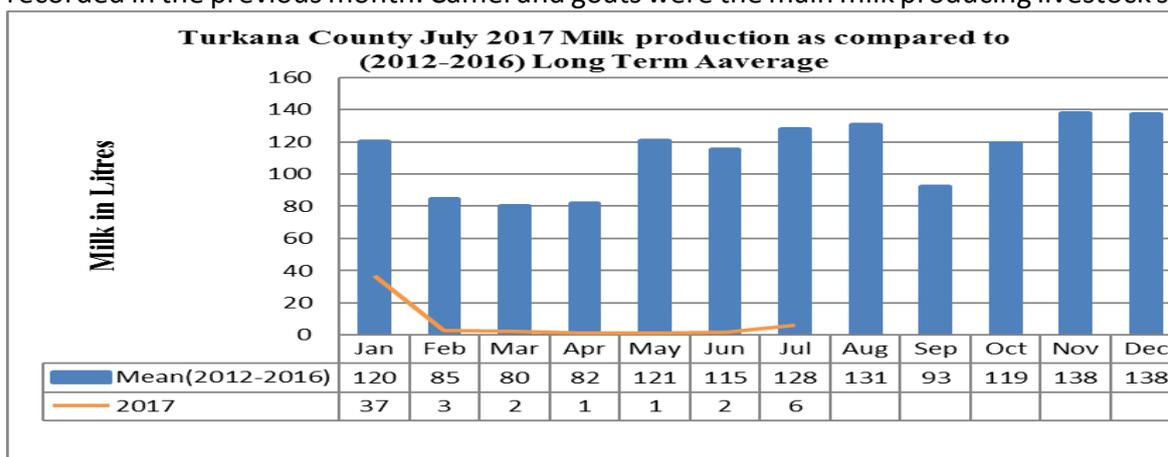
- The general livestock body condition is fair across the county according to Early Warning System classification.
- Goats had good body condition as characterized by appearance and classification as moderate, neither thin nor fat. Agro-pastoral livelihood zone had fairer livestock body condition and Fisheries had poor body condition.
- The observed livestock body condition has generally improved compared to the previous month. This is attributed to good browse especially in Agro-Pastoral livelihood zone.

##### 3.1.2 Livestock Diseases

- During the reporting month, Contagious Caprine Pleural Pneumonia (CCPP), Trypanosomiasis and Contagious Bovine Pleural Pneumonia (CBPP) remained the prevalent livestock diseases.
- There were however no major livestock deaths reported during the month.

##### 3.1.3 Milk Production

- Milk production was recorded at six (6) litres across the county having increased from two (2) recorded in the previous month. Camel and goats were the main milk producing livestock species.



- Compared to such time of a normal year, milk production is below the average of 128 litres.
- It is expected that milk production will improve in the next three (3) months due to the off-season rains received in the reporting month.

#### 3.2 RAIN-FED CROP PRODUCTION

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

- During the reporting month, farmers depending on rain-fed cropping had not planted.
- No major crop pests and diseases were reported during the month.

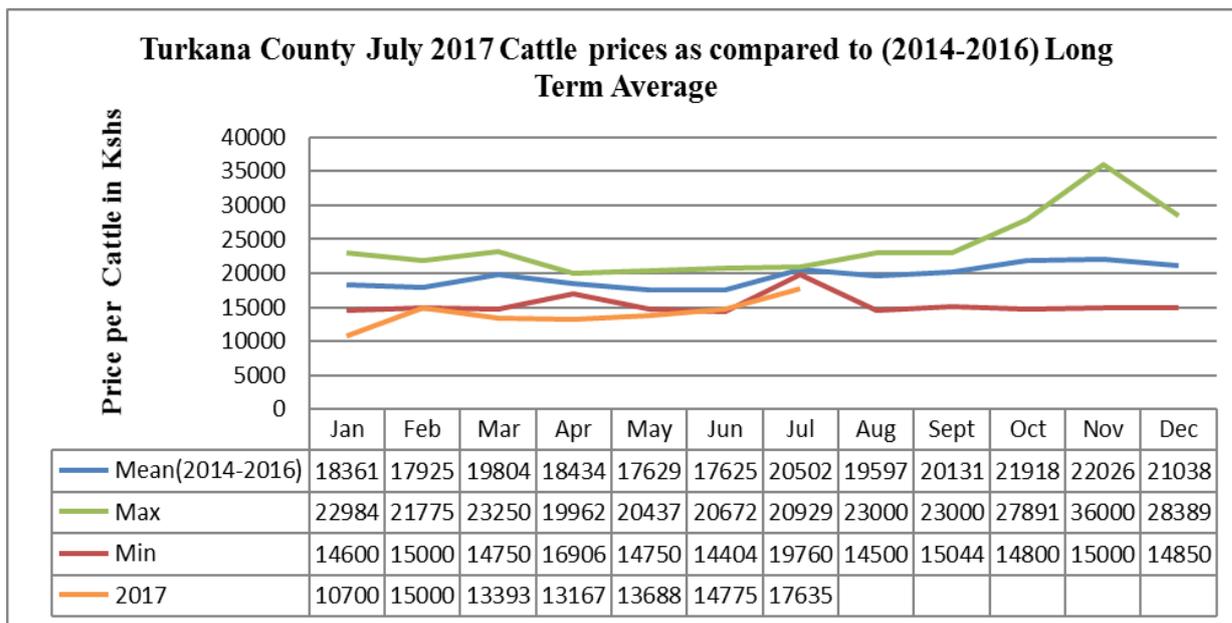
#### 3.3 IMPLICATION OF THE ABOVE INDICATORS TO FOOD SECURITY

- The improved livestock body condition will enable farmers to sell livestock at good prices and hence purchase more food stuffs. This will improve food security situation in the county.
- The increased milk production is expected to improve food security situation at the household level.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

#### 4.1.1 Cattle Prices

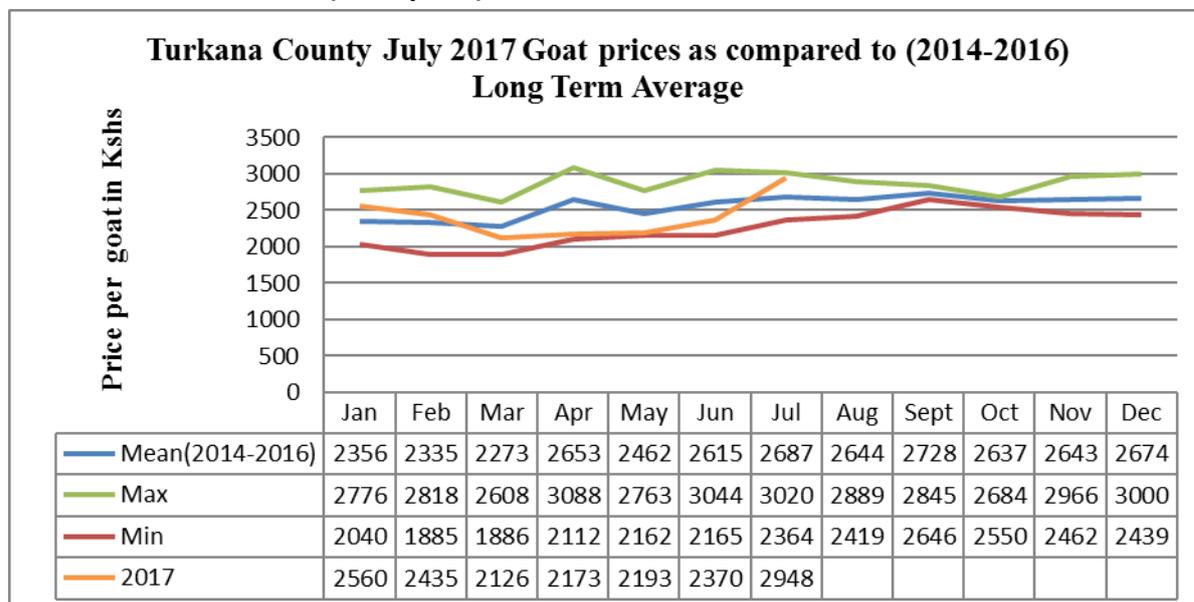


- A 4-year old medium size bull was sold at an average price of Kshs. 17,635, an increase from Kshs 14,775 recorded in the previous month.
- The highest cattle price (Kshs 19,358) was recorded in Pastoral livelihood zone while Fisheries zone recorded the lowest cattle price (Kshs 16,500).
- The observed increase in cattle prices is attributed to the existing fair pasture and body condition.
- However, cattle price is below the three-year average (Kshs 20,502) for such time of the year.

#### 4.1.2 Other outstanding observations

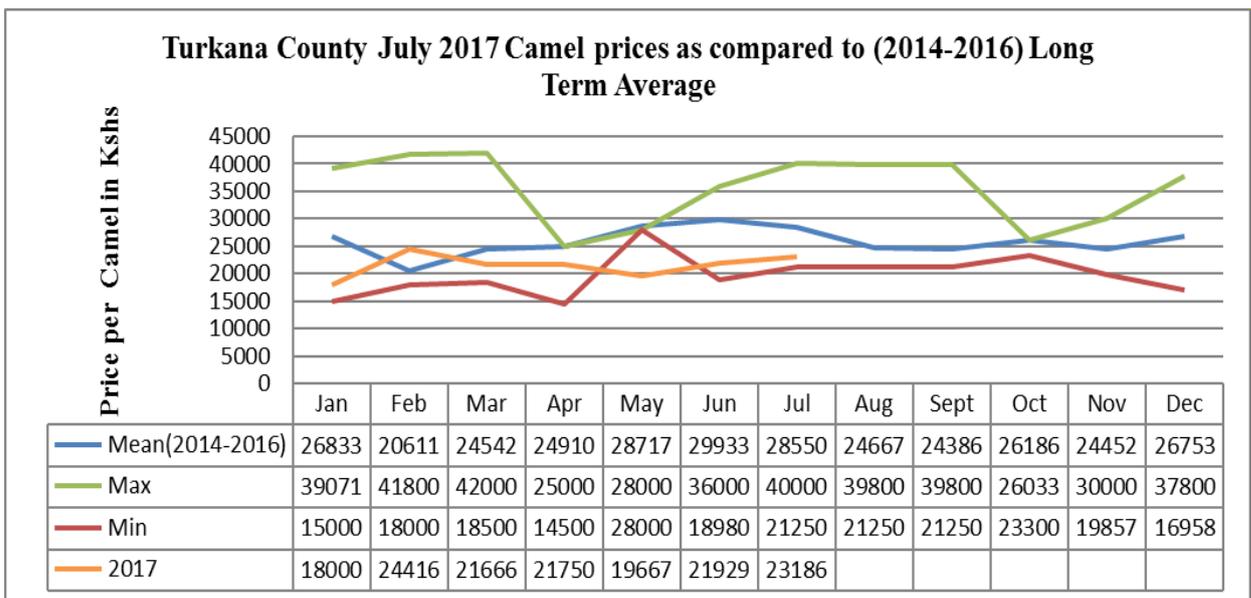
- Farmers are still hesitant to sell cattle with anticipation of more rains and pasture improvement hence cattle not much available in the markets.

#### 4.1.3 Small Ruminants Prices (Goat price)



- The county recorded a sale of a 2-year old medium size goat at Kshs 2,948 indicating an increase from Kshs 2,370 recorded in the previous month.
- Agro-Pastoral livelihood zone recorded the highest goat price of Kshs 3,000 while fisheries zone recorded the lowest price of Kshs 2,850.
- The increase in goat price in the Agro-Pastoral zone is attributed to the improved browse condition and hence good goat body condition which attracted favourable market prices. Fisheries had underperformed browse resulting to less impressive goat body condition thus meagre goat prices.
- Compared to three-year average, goat price is above the normal (Kshs 2,687) for such time of the year.

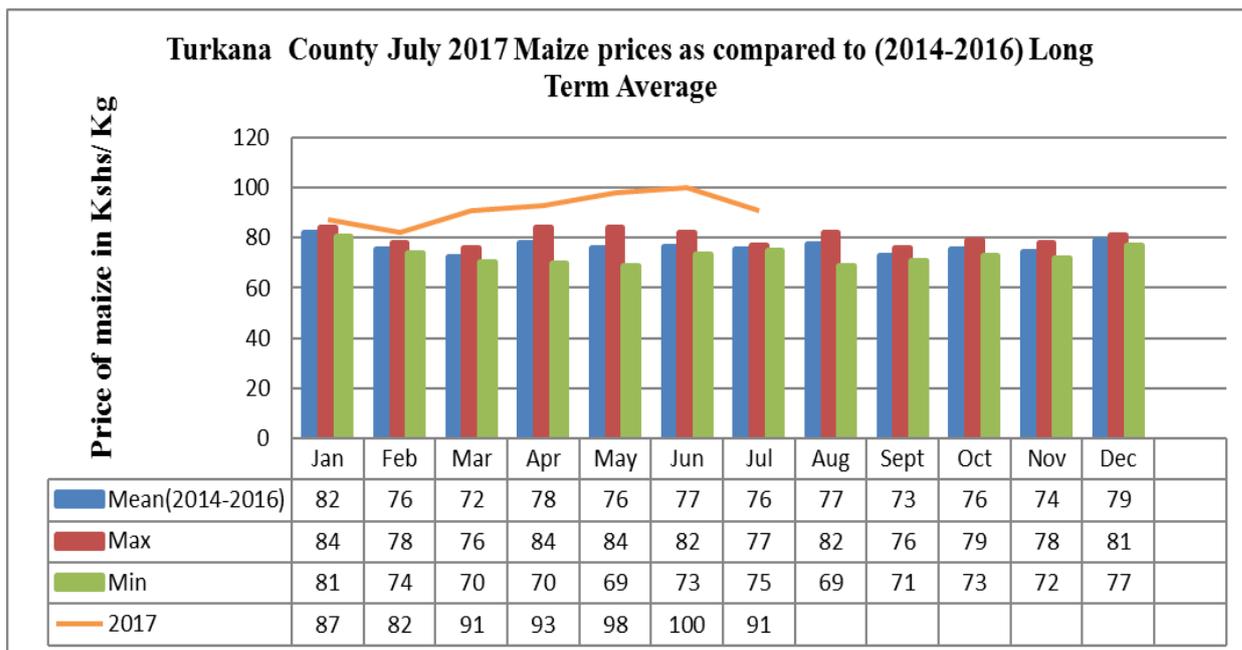
#### 4.1.4 Camel Prices



- During the month, a 4-Year old camel was sold at an average price of Kshs 23,186, indicating an increase from Kshs 21,929 recorded in the previous month.
- Kshs 23,500 was the highest camel price recorded in Agro-Pastoral livelihood zone while fisheries zone recorded the lowest camel price (Kshs 22,834).
- The observed increase in camel price is attributed to good browse and good camel body condition which attracted favourable market prices.
- Compared to three-year average, camel price is below the normal (Kshs 28,550) for such time during a normal year.

## 4.2 CROP PRICES

### 4.2.1 Maize



- During the month, maize was sold at Kshs 91 per kg, indicating a decrease from Kshs 100 recorded in the previous month.
- The highest maize price of Kshs 99 was recorded in fisheries livelihood zone and the lowest (Kshs 85) was recorded in Agro-Pastoral.
- The decreasing maize price is attributed to availability of maize in markets.
- The maize price is however above the average (Kshs 76) for such time of a normal year.

#### 4.2.1.1 Other outstanding observations

- It is expected that maize price will raise due to lack of crops planted on the farms (rain-fed and irrigated) that would otherwise supplement maize and lead to decreased maize price.

### 4.2.2 Posho (Maize Meal)

- The county recorded sale of Posho at Ksh 110 during the month, which is a decrease from Kshs 120 recorded in the previous month.
- However, the price of Posho is above the average for such time of a normal year.

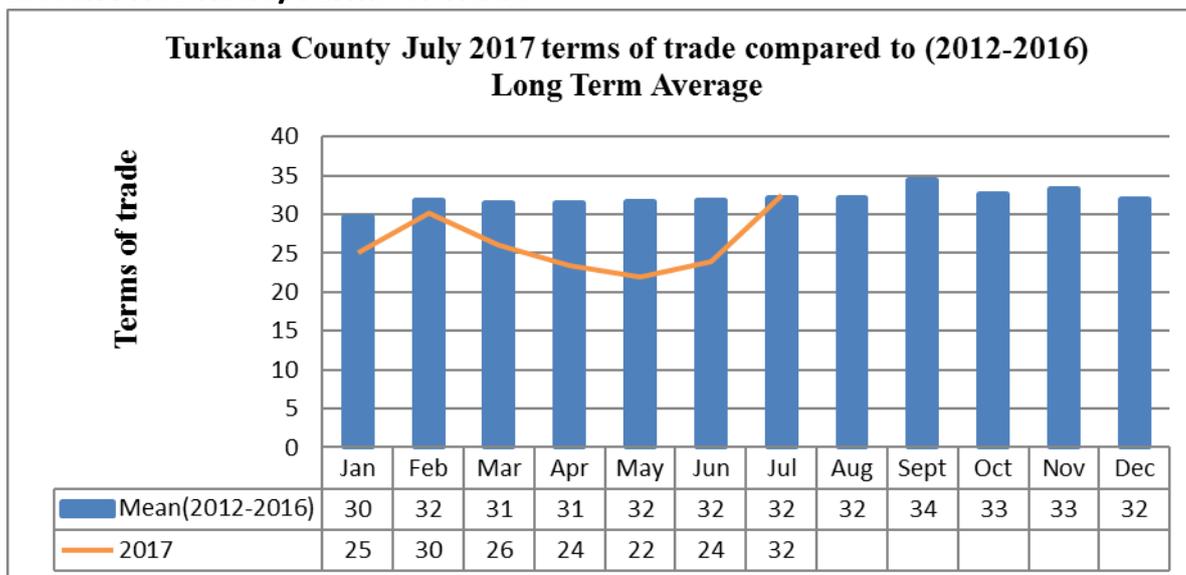
#### 4.2.2.1 Other outstanding observations

- The price of Posho is expected to increase in the coming months since no maize farming was done during the month.

### 4.2.3 Beans

- Beans was sold at Kshs 166 per kg during the month, depicting a decrease from Kshs 180 recorded in the previous month.
- The highest beans price (Kshs 170) was recorded in Pastoral livelihood zone while the lowest price (Kshs 150) was recorded in Agro-Pastoral livelihood zone. The observed general decrease in beans price is attributed to availability of beans in the markets.

### 4.3 Livestock Price Ratio/Terms of Trade



- The county recorded Terms of Trade (ToT) of 32, which is an increase from 24 recorded in the previous month.
- During the month, Agro-pastoral livelihood zone recorded the highest ToT of 35 and fisheries zone recorded the lowest ToT of 29.
- The ToT was good in Agro-Pastoral livelihood zone which is attributed to favourable goat price and lower maize price. The poor ToT recorded in fisheries is attributed to unfavourable goat price against high maize price.
- Compared to a five-year average, the ToT is similar to that recorded in such time of the year.

### 4.4 Implication of the above indicators to food security

- Food security situation is expected to improve now that for sell of a goat, farmers will buy similar amount of cereal as they would on a normal year at such time of the year.

## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

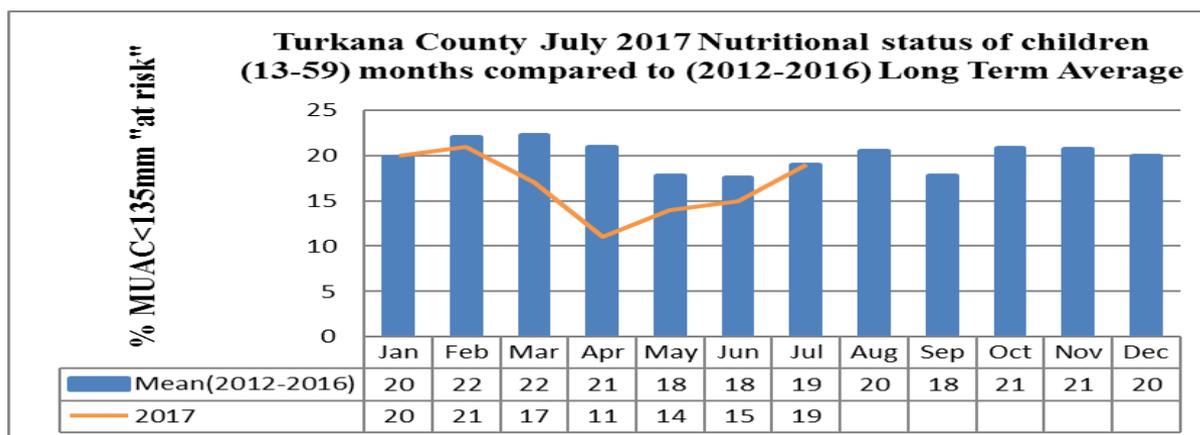
### 5.1 MILK CONSUMPTION

- During the month, milk consumption was six (6) litres, which is an increase from two (2) recorded in the previous month.
- Milk consumed was in Agro-Pastoral livelihood zone.
- Milk consumption remains below normal (50 litres) for such time of the year.

### 5.2 HEALTH AND NUTRITION STATUS

- The children sampled during the month, were (proportion by gender) boys and girls 48 and 52 percent respectively.

#### 5.2.1 Nutrition Status



- The nutrition of children under five years who are at risk of malnutrition, indicated by Mid Upper Arm Circumference (MUAC) less than 135 mm, showed deterioration to 19 percent. This was an increase from 15 percent recorded in the previous month.
- MUAC is similar to the five-year mean (19) for such time of the year.
- The observed increase in percentage of nutrition of children under five years who are at risk of malnutrition is attributed to little/insignificant milk production in most households and hence consumption in the county during the month.

#### 5.2.2 Health

- During the month, there were no major epidemic disease outbreaks reported.

### 5.3 COPING STRATEGIES

- During the month, the county recorded Coping Strategy Index (CSI) of 14, portraying a decrease from 21 recorded in the previous month.
- The highest CSI (19) was recorded in pastoral livelihood zone and the lowest (11) as recorded in fishing livelihood zone.
- The CSI is below a normal index of 32.
- During the month, households consumed less expensive food and kept on reducing the sizes of meals for children to eat enough.

### 5.4. Implication of the above indicators to food security

- The decreasing CSI, which indicates that households apply few coping strategies to access and acquire food, will improve food security situation.
- The improving milk consumption imply that households (specifically children) will have improved nutrition and hence indicate an improved food security.

## 6.0 CURRENT INTERVENTION MEASURES

### 6.1 NON-FOOD INTERVENTIONS

- Response to drought shocks in Turkana East (3,911 households) and Turkana South (1,200 households)
- Desilting of a water pan at Nanyaa (Oropoi division) **by Lokado.**
- Cash transfer to regular beneficiaries and upscaling of emergency beneficiaries for hunger safety net programme targets **by NDMA.**
- Cash Transfer program to 1,355 target households in Turkana North sub-county **by World Relief.**
- Cash transfer program to schools for fees payment **by WFP.**
- Cash transfer in Lokariwan (294 Households) and Lokichoggio (80 Households). In Kakuma, Morugole (301 Households) and Nadapal (379 households) **by Oxafam.**
- Emergency cash transfer in Turkana central (4,000 households), Turkan West (2,500 households) and Turkana South (2,500 Households) **by Global Fund Program.**
- HIV /AIDs Program that is aimed to empower girls between the age of 15-24 years to meet the basic necessities of living with HIV/AIDs and to help them access treatment as a prevention measure **by Kenya red cross under Global Fund Program**
- Emergency cash transfer in Turkana Central (1,389 Households), Kibish (750 Households) and Turkana North (1,557 Households) **by save the children.**

#### 6.2.1 FOOD AID

- Integrated health and nutrition in Turkana Central and Loima sub-counties **by IRC.**
- Support emergency nutrition for one year in Turkana South sub-county **by World Vision.**
- Blanket Supplementary Feeding Program in the county **by WFP.**
- Supplementary feeding mapping out in the county (rolled out in Turkana Central and Loima sub-counties) **by WFP.**
- Supporting school meals programme **by World Food Programme (WFP).**

## **7.0 EMERGING ISSUES**

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

- During the month, there were no major insecurity cases reported.

### **7.2 Migration**

- Livestock migration is towards normal grazing areas as off-season rains perform better than the previous month.

### **7.3 FOOD SECURITY PROGNOSIS**

- The recent off-season rainfall will improve vegetation and water levels which will improve livestock body condition. Farmers will sell livestock at good prices. This will improve food security situation in the county.
- The likely effects of changes in rainfall will improve food security situation as farmers start planting.
- Forage is expected to improve and hence livestock body condition which will improve food security situation in the county.
- Forage condition is expected to improve and sustain livestock for the next three months. This will improve food security.

## **8.0 RECOMMENDATIONS**

- Intensify supply of nutrition supplements to more affected areas especially Turkana Central, Loima and Turkana West sub-counties.
- The Ministry of Livestock and affiliate partners should strengthen livestock disease surveillance across the county.
- Continue supporting farmers that depend on rain-fed farming with seeds and training on sustainable crop farming, such as drought tolerant crop promotion.
- Supply of drought tolerant seeds and fruit trees to farmers along the riverine.
- Strengthen peace initiatives in areas with high insecurity cases especially Turkana East and Turkana South sub-counties.
- Strengthen existing Stabilization Centres in Turkana South (Katilu Health Centre), Turkana West (Lopiding Hospital) and Turkana East (Lokori AIC Health Centre).
- The security arm to be more keen and increase surveillance as we approach elections, during and thereafter.