

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



A Vision 2030 Flagship Project



AUGUST EW PHASE



Early Warning (EW) Phase Classification

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

Drought Situation & EW Phase Classification

Biophysical Indicators

- The county received some rains, recorded in the first and third week of the month.
- Pasture and browse situation is fair but below normal.
- The state of water was within the normal range.

Socio Economic Indicators (Impact Indicators)

- Livestock body condition was fair and below normal.
- Milk production and consumption was still low and below normal, but improving.
- Livestock trekking distance from grazing to water was still high and above normal though decreasing.
- Household return distance to water was still high and above normal although decreasing.
- Terms of trade was good and above normal.
- The percentage of children under five years who are at risk of malnutrition decreased from 19 to 18 and was below normal.
- During the month, coping strategy index was low and below normal.

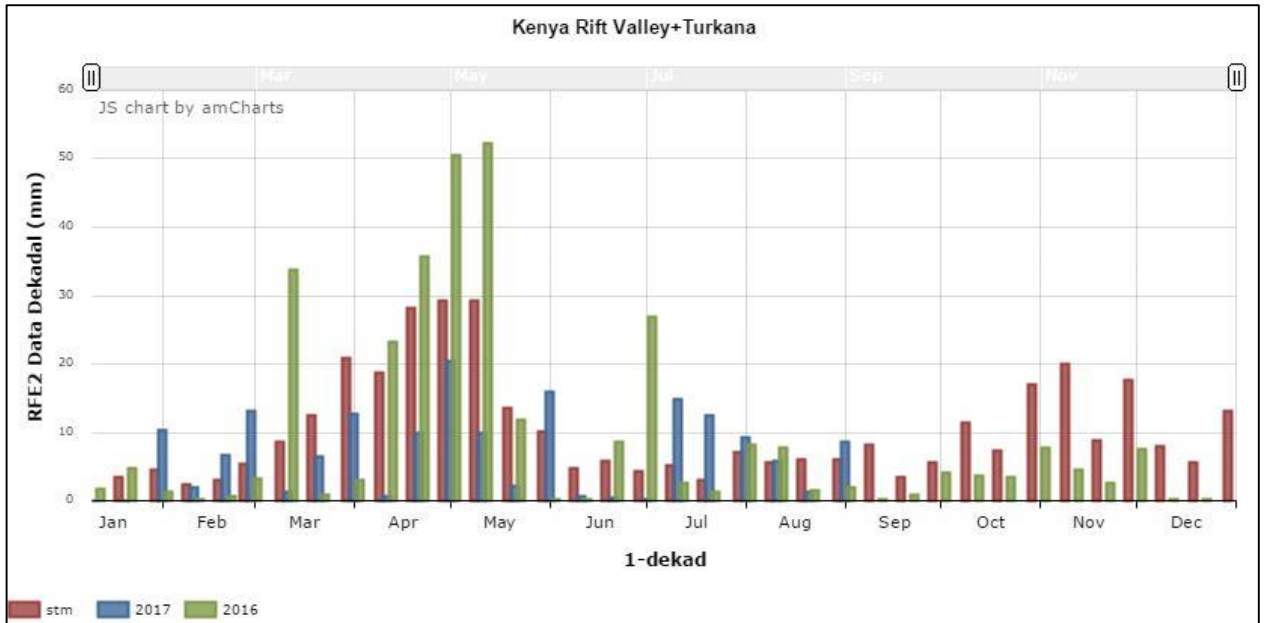
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	88	60-100
VCI-3 month	35	>35
State of Water Sources	3	3-4
Vegetation Condition	Below Normal	Normal
Production indicators	Value	Normal
Livestock Migration Pattern	Normal	Normal
Livestock Body Conditions	Fair	Normal
Milk Production	39	> 128 litres
Livestock deaths (from drought)	No Deaths	No Deaths
Crops Condition	fair	Fair
Access Indicators	Value	Normal
Terms of Trade (ToT)	36	>32
Milk Consumption	30	>50 litres
Return distance to water sources	9 km	<5.69 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	18%	<20%
Coping Strategy Index (CSI)	14	<32

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

1.0 CLIMATIC CONDITIONS

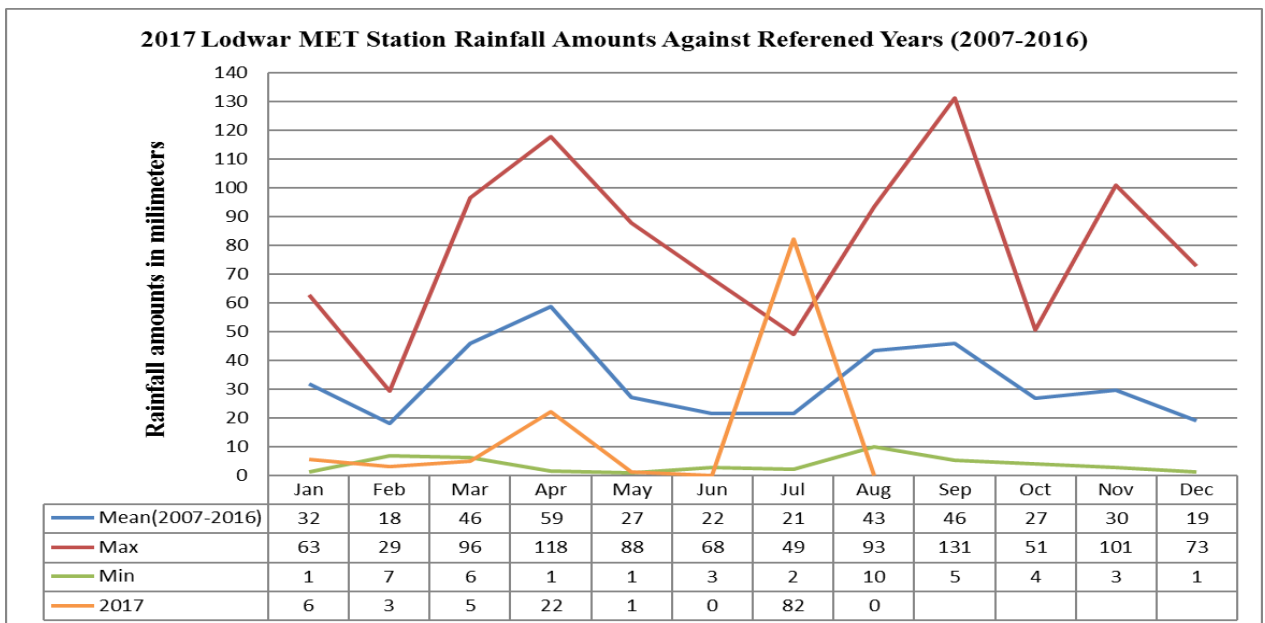
1.1 RAINFALL PERFORMANCE

- In August 2017, the county recorded an average amount of 15.72 mm of rainfall, compared to normal 17.79 mm normally; constituting 88 percent of normal rainfall.
- The rains were fairly distributed but with poor progression over the month.
- The rains were off-season and were received during the first and third week of the month.



1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- Lodwar meteorological station recorded trace rains on 11th and 30th days of the month.
- Recorded rainfall is extremely below the ten-year average (43 mm) for such time of the year.

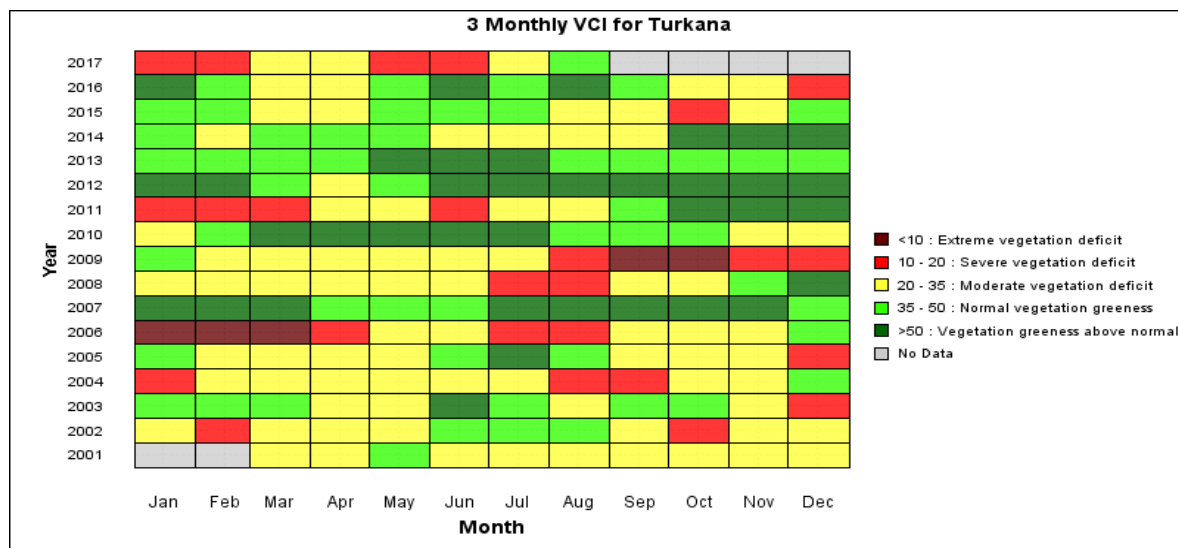


2.0 IMPACTS ON VEGETATION AND WATER

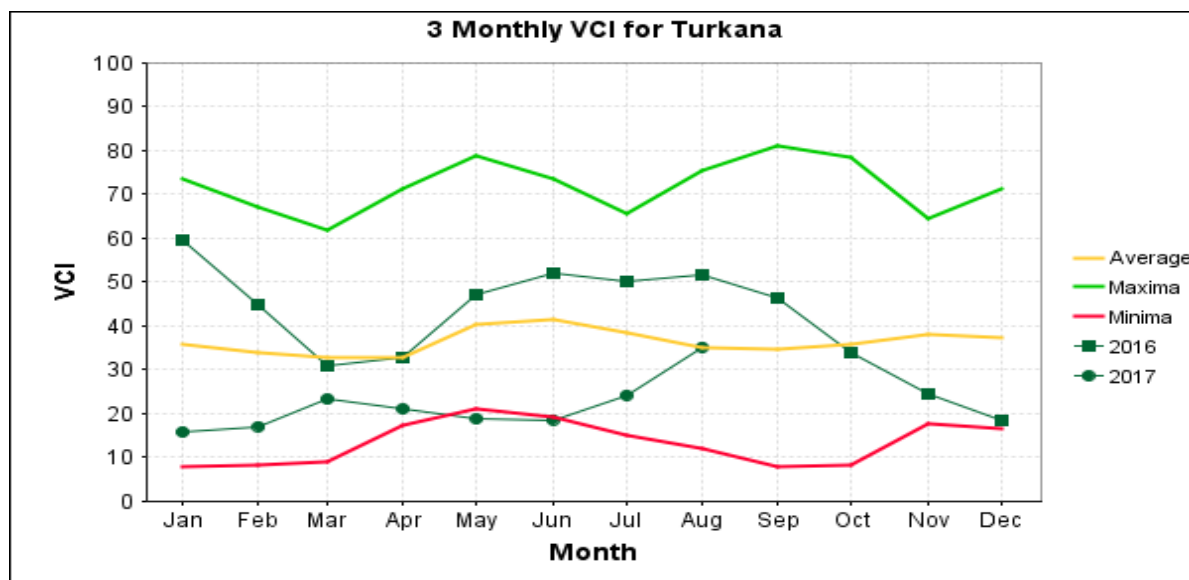
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The VCI, which indicates the greenness of the vegetation was 35, which is an increase from 24 recorded in the previous month.
- The observed increase in VCI is attributed to the rains received in the previous month. VCI is comparable to normal (35), for such time of the year.



- The highest VCI (40) was recorded in Turkana Central sub-county while the lowest (32) was recorded in Turkana West sub-county.



2.1.2 Pasture

- The quality and quantity of pasture remained fair in all livelihood zones.
- The pasture situation was fair in pastoral zone, and a bit depleted in fisheries livelihood zone.
- The situation is better compared to the previous month. The available pasture is expected to last for two (2) months.

- In comparison with such a time of a normal year, Pasture is below average.

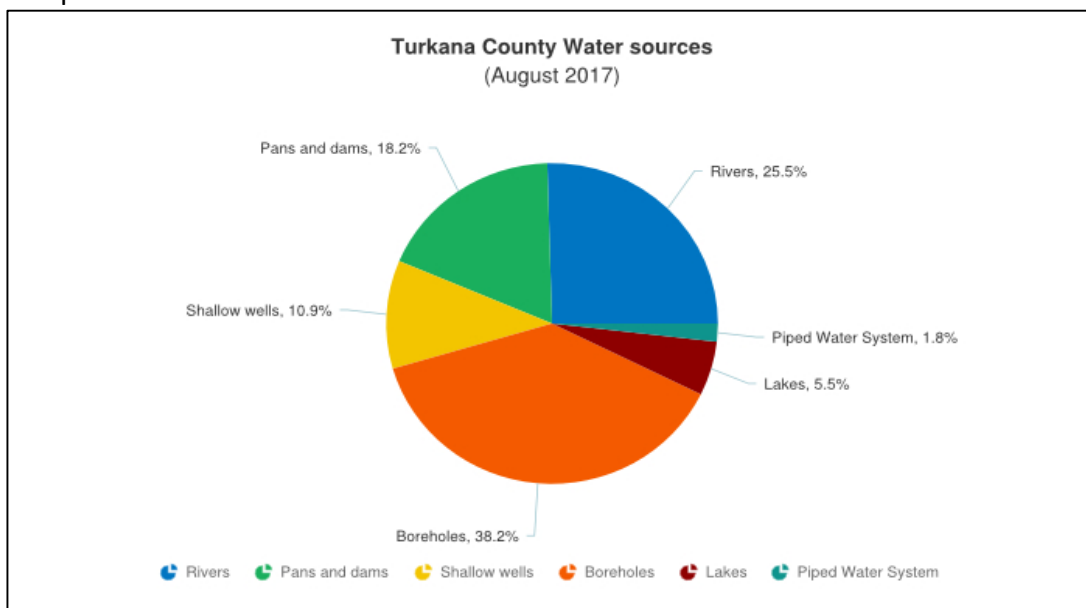
2.1.3 Browse

- The quality and quantity of browse was good across all livelihood zones. However, the pastoral livelihood zone had better browse compared to fisheries which had slightly poor browse condition.
- The situation has improved compared to the previous month. The improvement is attributed to the off-season rains received during the previous month.
- Compared with an average of such time of the year, browse situation is fairly similar.
- The available browse is expected to last for at least three (3) months.

2.2 WATER RESOURCE

2.2.1 Sources: Percent of water sources in use

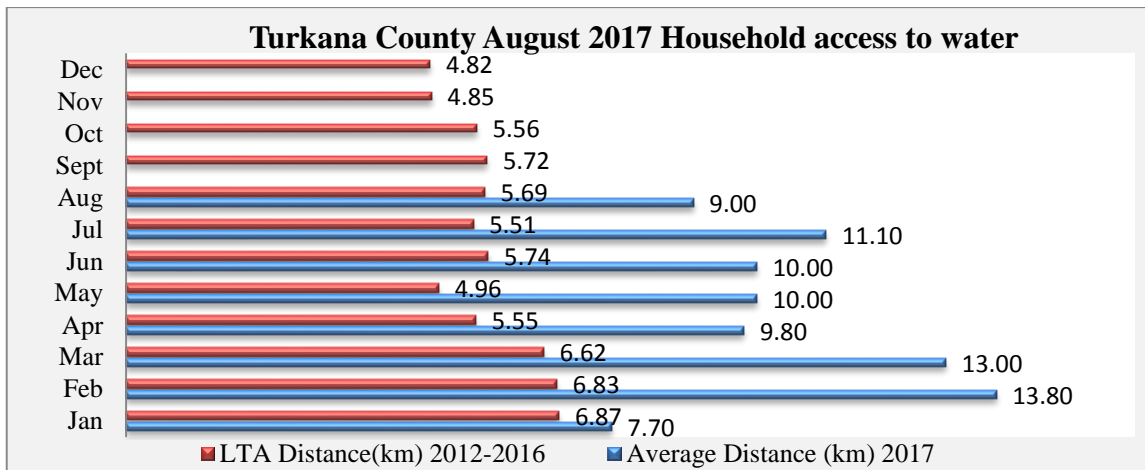
- The percentage of the current main water sources used by both households and livestock were 38.2, 25.5 and 18.2 for Boreholes, Rivers and Pans/Dams respectively.
- The prevalent current main water source are boreholes and rivers.



- Both quality and quantity of water improved compared to the previous month across all livelihood zones.
- It is expected that the current main water sources will last for three months.

2.2.2 Household access and Utilization

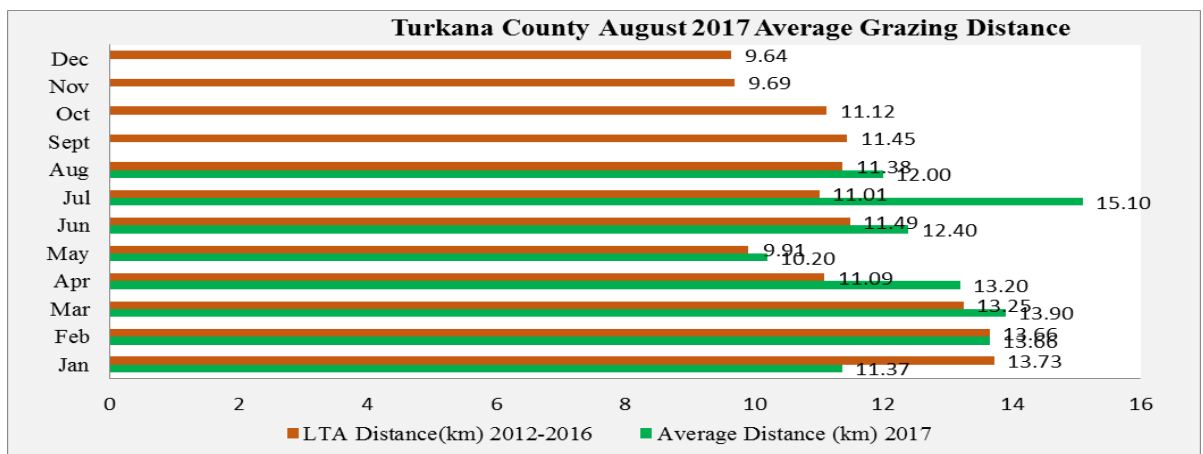
- During the month, the average return distance to main water sources by households was 9 Kms, a decrease from 11 Kms recorded in the previous month.
- The observed decrease in household distance to main water sources is attributed to the persistent off-season rains which led to recharge of the available surface water sources.



- Compared to a normal year, the average return distance to main water sources by households is still higher, despite the current being lower than the previous month.
- The Agro-Pastoral livelihood zone had the highest consumption of water per person per day while pastoral had lowest consumption.

2.2.3 Livestock access

- The county recorded an average return trekking distance of livestock from grazing areas to main water sources of 12 Kms, connoting a decrease from 15 Kms recorded in the previous month.
- The decrease is attributed to the rains received in the previous month which led to significant forage development across the county.



- In Agro-pastoral livelihood zone, livestock were watered more frequently (daily) while livestock in pastoral zone were watered every other day
- The current livestock distance from grazing to water sources is expected to increase if rains perform poorly in the next two months as forage will get depleted and result to livestock trekking long distances in search of pasture.

2.3 Implication to food security

- Owing to the improved browse and pasture situation, coupled with decreased livestock trekking distance, it is expected that food security will improve. As livestock body condition will improve, it will fetch good market prices hence enable households purchase more food.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

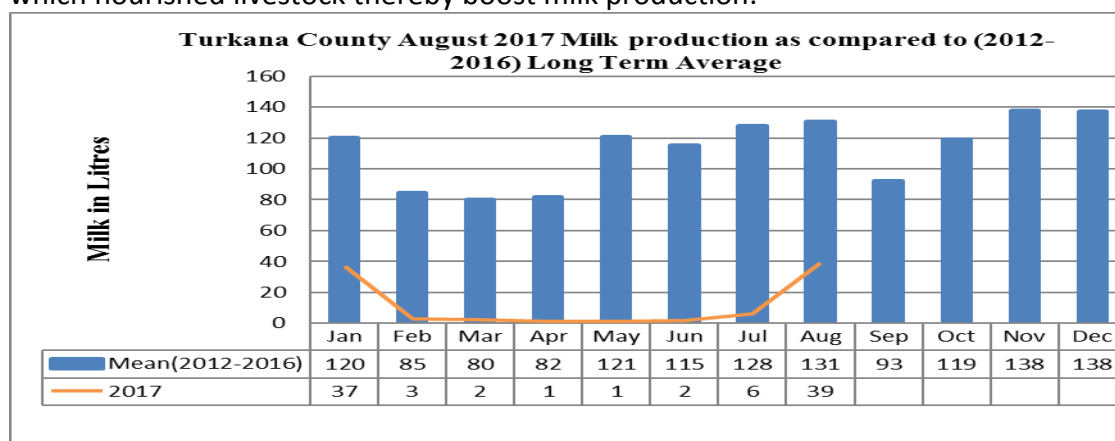
- According to the Early Warning System Classification, livestock body condition is significantly fair across the county.
- Goats and camel had good body condition, categorized by smooth appearance (no ribs visible) in Agro-pastoral livelihood zone and moderate (neither fat nor thin) in pastoral zone.
- Compared to the previous month, the general livestock body condition has improved. The improvement is attributed to the better pasture and browse condition in the county.

3.1.2 Livestock Diseases

- Mange, Contagious Caprine Pleural Pneumonia (CCPP), Contagious Bovine Pleural Pneumonia (CBPP) and Trypanosomiasis were the main diseases reported during the month, otherwise there were no major livestock deaths reported.

3.1.3 Milk Production

- The county produced 39 litres of milk, indicating a significant increase from 6 litres produced in the previous month.
- This is attributed to the notably improved forage condition across all livelihood zones, which nourished livestock thereby boost milk production.



- Agro-pastoral livelihood zone produced a higher proportion of milk compared to other zones. Milk produced was mostly from goats and camel.
- However, milk produced is below the 5-year average (131 litres) for such time of the year.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Farmers practicing rain-fed agriculture have started planting sorghum and cowpeas in areas along Kalemng'orok in Turkana South. The crop was at germination stage.
- During the reporting month, no crop pests and diseases were reported.

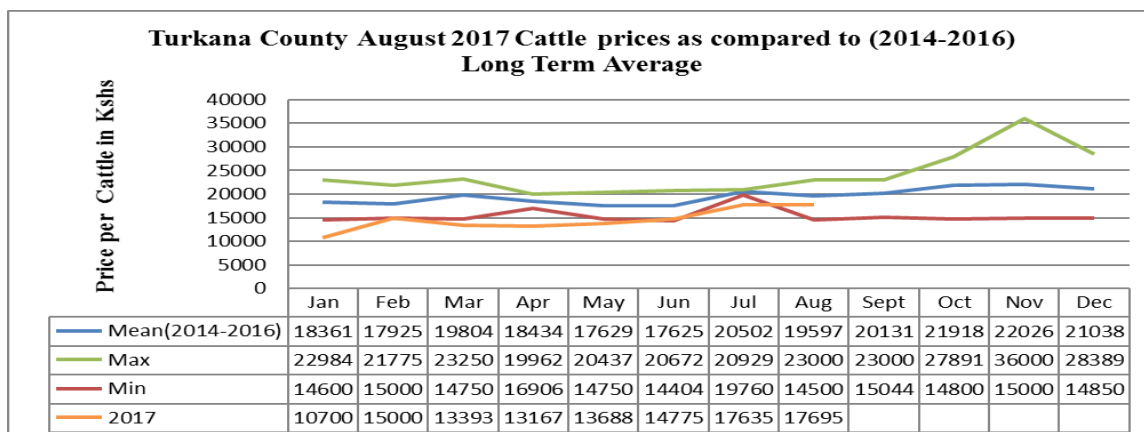
3.3 IMPLICATION OF THE ABOVE INDICATORS TO FOOD SECURITY

- The significant increase in milk production, will improve milk consumption and hence boost food security at household level.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

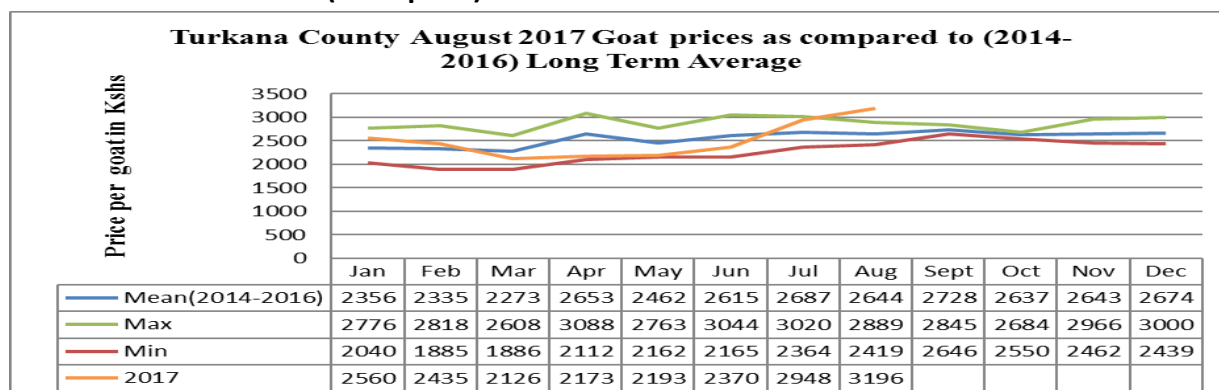


- During the month, a 4-year old medium size bull was sold at an average price of Kshs 17,695, indicating a slight increase from Kshs 17,635 recorded in the previous month.
- Pastoral livelihood zone recorded the highest cattle price of Kshs 19,633 while fisheries recorded lowest price of Kshs 17,400.
- The increase in cattle price, though little, is attributed to the good forage situation in the county which made cattle develop good body condition thus favourable market prices.
- Compared with a similar time of the year, cattle price is below a three-year average of Kshs 19,597.

4.1.2 Other outstanding observations

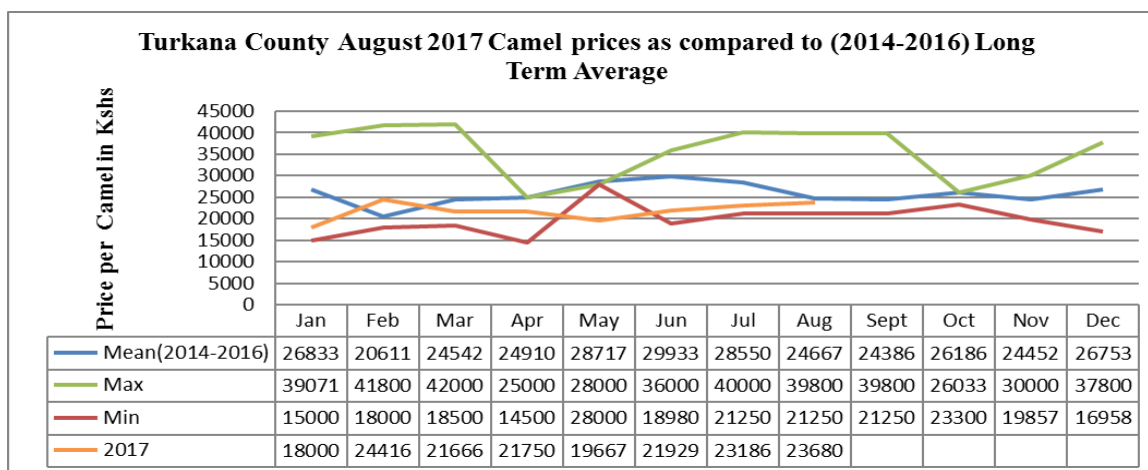
- Cattle was not much available in markets as famers sought to retain cattle with aim of production having noted improving pasture situation hence most were restocking.

4.1.3 Small Ruminants Prices (Goat price)



- During the reporting month, a 2-year old medium size goat was sold at Kshs 3,196, depicting an increase from Kshs 2,948 recorded the previous month.
- The increase in goat price is attributed to the fact that goats had good body condition which fetched favourable market prices.
- The highest goat price of Kshs 3,280 was recorded in pastoral livelihood zone and lowest (Kshs 3,067) was in fisheries.
- For such time of the year, goat price is above a three-year average of Kshs 2,644.

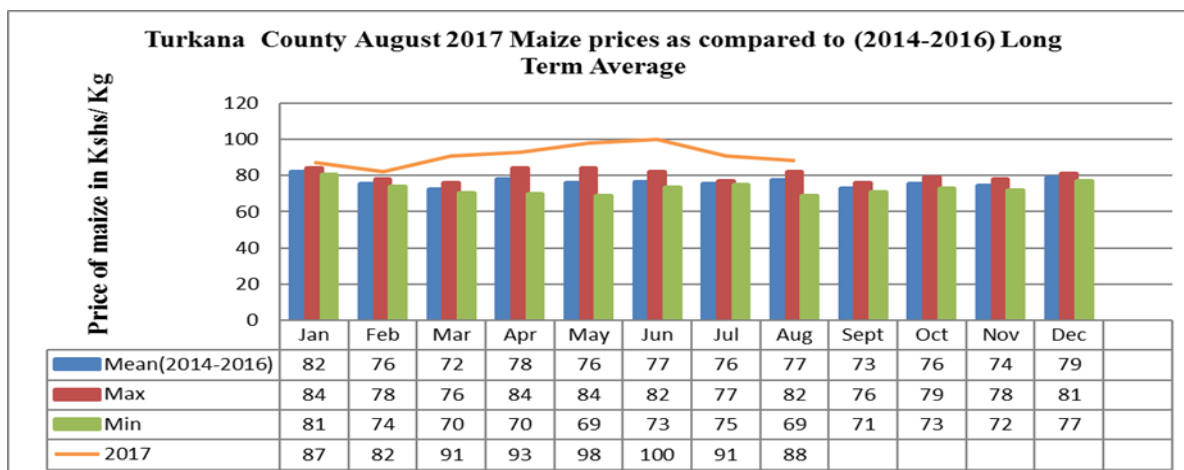
4.1.4 Camel Prices



- The county recorded a sale of a 4-year old camel at a price of Kshs 23,680, which is an increase from Kshs 23,186 recorded in the previous month.
- The increased camel price is attributed to good market prices as a result of good camel body condition.
- The Pastoral livelihood zone recorded highest price (Kshs 24,400) and Agro-pastoral recorded the lowest price of Kshs 22,500. Fisheries zone made no camel sales during the month.
- Despite the increasing camel price, it is below the three-year average of Kshs 24,667 for such time of the year.

4.2 CROP PRICES

4.2.1 Maize



- Maize price decreased from Kshs 91 recorded in the previous month to Kshs 88 recorded during the reporting month.
- The decrease in maize price is attributed to availability of maize in markets coupled with households depending on livestock products as meals and hence reluctant to buying maize.
- Pastoral livelihood zone recorded the highest price (Kshs 92), while lowest price (Kshs 80) was recorded in Agro-pastoral zone.
- Compared with three-year average, maize price is above the mean (Kshs 77) for such time of the year.

4.2.1.1 Other outstanding observations

- Owing to the ongoing plating season for maize, on both rain-fed and irrigated farms, maize price will decrease even further in future as there will be considerably good supply to markets.

4.2.2 Posho (Maize Meal)

- During the month, Posho (maize meal) was sold at Kshs 110, being similar to the price sold in the previous month.
- Posho price remains above the three-year average for such time of the year.

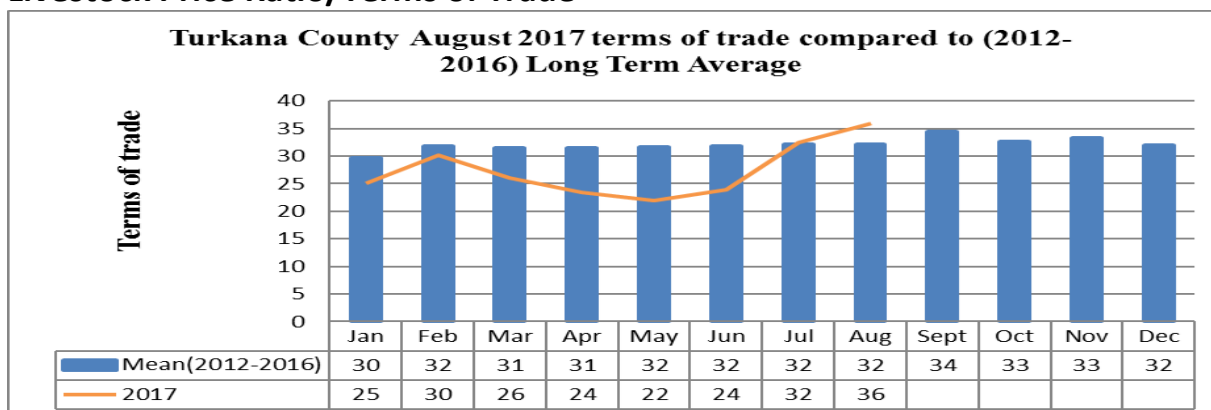
4.2.2.1 Other outstanding observations

- During the next three months, Posho price is expected to decrease if farmers produce good amount of maize that would be milled into Posho and thus supply markets.

4.2.3 Beans

- The price for beans was Kshs 150 per Kg, indicating a decrease from Kshs 166 recorded in the previous month.
- Beans was generally available in markets and thus buyers had several market options which led to reduced beans price.
- Fisheries livelihood zone recorded the highest beans price of Kshs 155 and pastoral zone recorded the lowest price of Kshs 149.
- Compared to a three-year average, beans price is above normal for such time of the year.

4.3 Livestock Price Ratio/Terms of Trade



- During the month, Terms of Trade (ToT) was 36, having increased from 32 recorded in the previous month.
- The highest (55) ToT was recorded in Agro-pastoral livelihood zone while lowest (41) was recorded in fisheries zone.
- The observed increase in ToT is attributed to good livestock body condition which attract favourable market prices and hence enable famers buy more maize for a sale of a goat, coupled with decreasing maize price.
- The ToT is above a three-year average (32) for such time of the year.

4.4 Implication of the above indicators to food security

- The increasing livestock (especially goat) prices which led to increase in ToT, is expected to improve food security since farmers will acquire more cereal for a sale a goat than they would on a three-year average.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

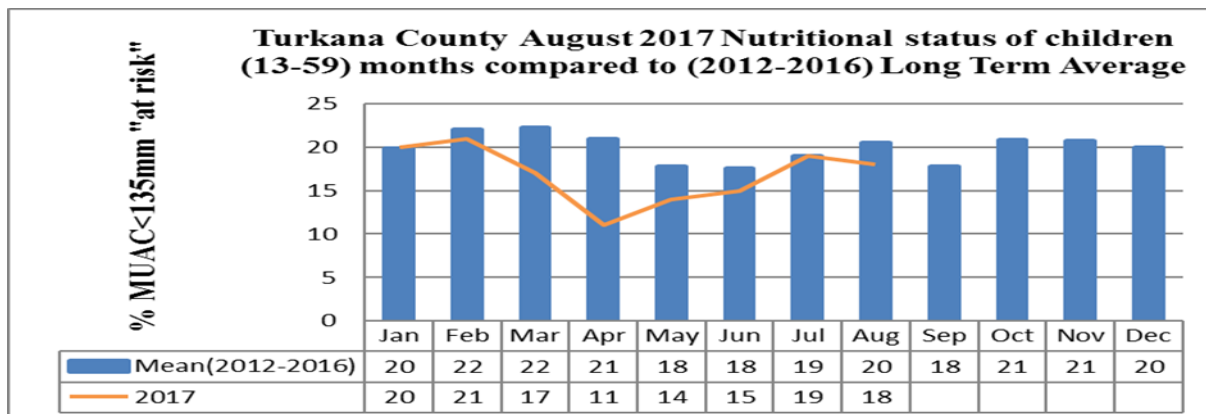
5.1 MILK CONSUMPTION

- Sampled households reported milk consumption of 30 litres, depicting a significant increase from 6 litres recorded in the previous month.
- Milk consumption was majorly reported in Agro-pastoral and pastoral livelihood zone.
- Compared with similar time of the year, milk consumption is below normal of 50 litres.

5.2 HEALTH AND NUTRITION STATUS

- The proportion of children sampled during the month, was 48.9 and 51.1 percent males and females respectively.

5.2.1 Nutrition Status



- The nutrition of sampled children (under five years) who are at risk of malnutrition, measured by Mid Upper Arm Circumference (MUAC) less than 135 mm, was recorded at 18 percent. This is a decrease from 19 percent recorded in the previous month.
- The decreasing percentage of children who at risk of malnutrition, is attributed to the increased milk consumption at household level.
- Compared with a five-year long-term average, percentage of children with MUAC <135 mm is lower than the mean (20 percent) for such time of the year. It is below normal.

5.2.2 Health

- There were no major epidemic disease outbreaks reported from the samples children.

5.3 COPING STRATEGIES

- Coping Strategy Index (CSI) was recorded at 14, similar to the CSI recorded in the previous month.
- Pastoral livelihood zone recorded the highest CSI of 18 while Agro-pastoral recorded the lowest of 12.
- Compared with similar time of the year, CSI is below the normal (32).
- The decreasing CSI indicate that households employed less coping strategies in order to acquire food.

5.4. Implication of the above indicators to food security

- Owing to increasing milk consumption, food security situation will improve as household members will have improved nutrition as indicated by decreasing percent of children with MUAC less than 135 mm.

6.0 CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- Cash transfers to regular beneficiaries and upscaling of emergency beneficiaries for Hunger Safety Net Programme targets **by NDMA.**
- Cash transfers program to schools for fees payment **by WFP.**
- Cash transfers in Lokariwan (294 Households) and Lokichoggio (80 Households). In Kakuma, morugole (301 Households) and Nadapal (379 households) **by Oxfam**
- Emergency cash transfers in Turkana central (4000 households), Turkana West (2500 households) and Turkana south (2500 Households) **by Global Fund Program.**
- Emergency cash transfers in Turkana central (1389 HHs), Kibish (750 HHs) and Turkana north (1557 HHs) **by save the children**

6.2.1 FOOD AID

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

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- There were no major insecurity cases reported during the month.

7.2 Migration

- Consequent to the good browse and general forage in the county during the reporting month, there has been no major migration (out and in) reported.

7.3 FOOD SECURITY PROGNOSIS

- Now that both rain-fed and irrigated farmers have planted following the off-season rains received in the last month, there will be supply of food into the county and hence improve food security.
- It is expected that food security will improve due to the likely effects of changes in rainfall across the county.
- The observed current good condition of forage, will keep livestock nourished in the next three months and hence improve food security as there will be livestock products (milk and meat) at the household level.
- The improving livestock body condition will enable farmers access good market prices and also enable them buy relatively enough food. This will improve food security in the county.

8.0 RECOMMENDATIONS

- The ministry of agriculture should supply farmers who practice both rain-fed and irrigated farming with early maturing crop varieties.
- Agencies and sectors, led by ministry of livestock, should enhance livestock restocking to farmers.
- Livestock deworming should be reinforced.
- All agencies mandated to ensure that peace is realized in the county, should strengthen peace initiatives in areas with high insecurity cases especially Turkana East and Turkana south sub-counties.
- Thorough livestock and crop surveillance to be done by the ministry of livestock and agriculture together with other partners in order to identify any livestock disease or crop pests that may arise.
- Strengthen existing Stabilization Centres in Turkana South (Katilu Health Centre), Turkana West (Lopiding Hospital) and Turkana East (Lokori AIC Health Centre).
- Increase supply of nutrition supplements to areas with high cases of malnutrition.