

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



A Vision 2030 Flagship Project



NOVEMBER EW PHASE



Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Pastoral-all species	Normal	Stable
Agro-Pastoral	Normal	Stable
Fisheries	Normal	Improving
Formal Employment/Casual Labour	Normal	Stable
COUNTY	NORMAL	STABLE

Drought Situation & EW Phase Classification

Biophysical Indicators

- **Rainfall:** The County received 80 percent of normal rainfall that was fairly distributed across the county.
- State of water sources are normal.
- **Vegetation:** The Vegetation Condition Index (VCI) remained above the normal.
- Pasture and browse are normal (green vegetation cover).

Socio Economic Indicators (Impact Indicators)

- Crops are in a fair condition; but pests for Maize reported mostly in Turkana East and South Sub-counties.
- All livestock species in good body condition and normal.
- Milk production is above normal and improving.
- The distance of livestock from grazing areas to water sources decreased and is below the long term average.
- Return distance of households to water sources remained similar to previous month and above normal.
- Terms of Trade remained good and was above normal.
- The percent of children below 5 years with MUAC less than 135 mm (at risk of malnutrition), remained 13 and below the normal.
- Coping Strategy Index increased, albeit below normal.

Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	80	60-100
VCI-3 month	90	>35
State of Water Sources	4	3-4
Vegetation Condition	Normal	Normal
Production indicators	Value	Normal
Livestock Migration Pattern	Normal	Normal
Livestock Body Conditions	Normal	Normal
Milk Production	205 Litres	> 138 litres
Livestock deaths (from drought)	No Deaths	No Deaths
Crops Condition	fair	Fair
Access Indicators	Value	Normal
Terms of Trade (ToT)	43	>33
Milk Consumption	187 litres	>90 litres
Return distance to water sources	8 km	<4.85 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	13%	<21%

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|--|---|---|---|
| <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

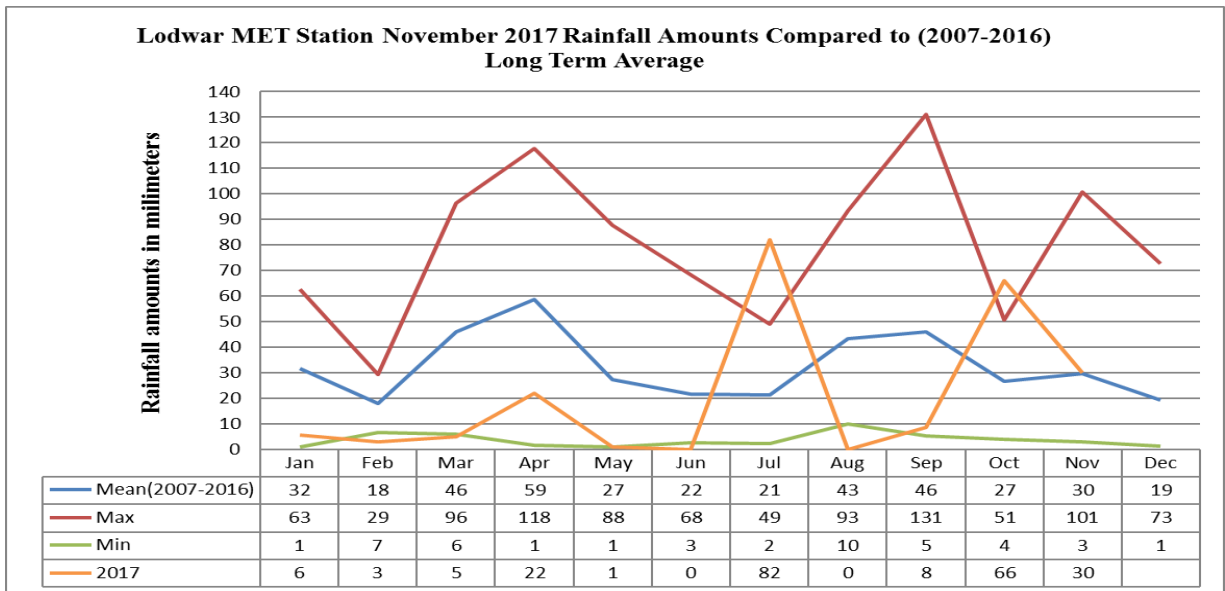
1.0 CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- The rains were fairly distributed in space and time, having been part of the short rains season and were received in the second week of the month.
- On average, the county received 14.52 mm of rainfall, which is a decrease from the normal 18.10 mm for such time of the year, representing 80 percent of normal.
- The rainfall progression was rather poor, unlike during the previous month.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- Lodwar Meteorological station recorded rainfall amounts of 17.8 mm, 11.0 mm, Trace, 1.1 mm and Trace on the 5th, 6th, 7th, 8th and 11th days of the month respectively; totalling to 29.9 mm for the entire month.
- In comparison to same time of the year, Lodwar Meteorological station recorded almost a similar amount of rainfall (30 mm), which was normal, the decrease notwithstanding.

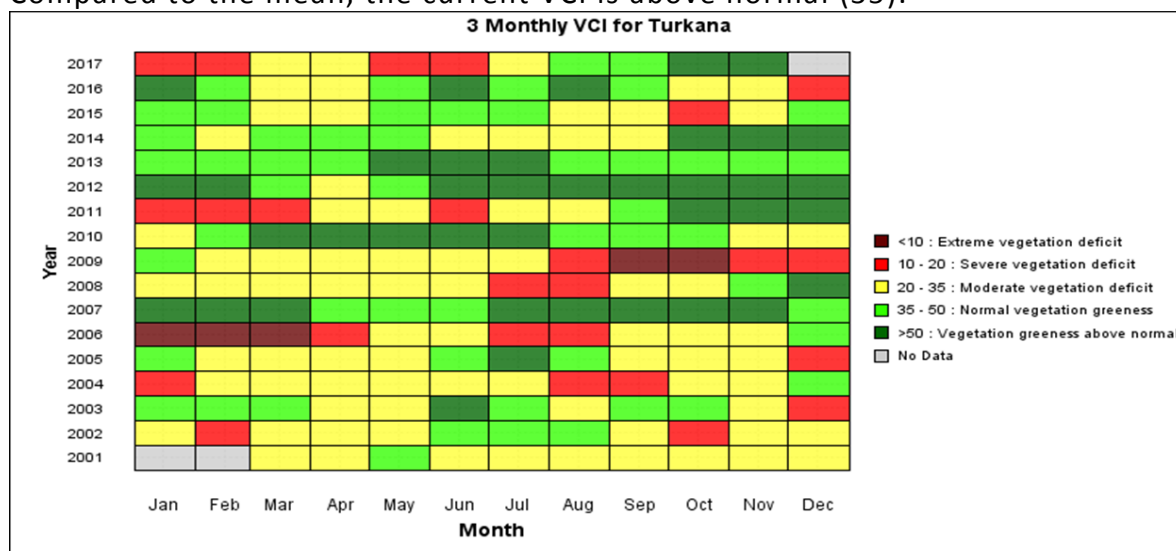


2.0 IMPACTS ON VEGETATION AND WATER

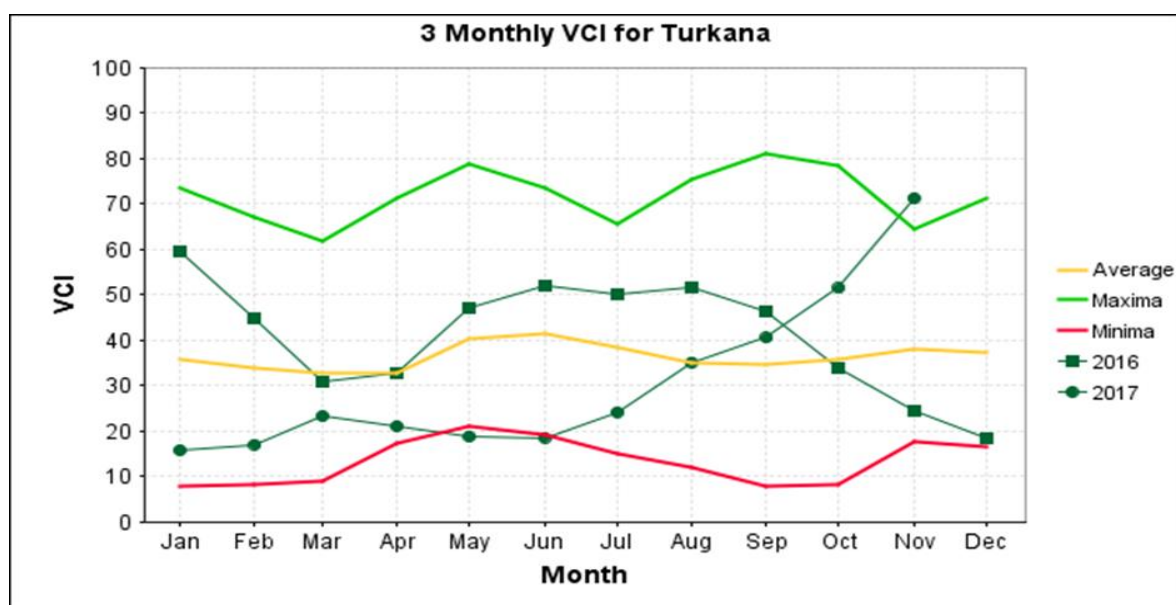
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- During the month, the VCI (which indicates the vegetation greenness), was 90; an increase from 51 recorded in the previous month.
- The VCI improved significantly following the persistent rains received over the month.
- Compared to the mean, the current VCI is above normal (35).



- Turkana North sub county recorded the highest VCI of 108.56 whereas Turkana South recorded the lowest of 72.94.



2.1.2 Pasture

- The quantity and quality of pasture was good in all livelihood zones, with the Agro-pastoral zone featuring best while Fisheries having the less improved pasture.
- On the whole, pasture improved significantly in the county during the month compared to the previous month.
- Pasture is expected to last for three months. It is above normal for such time of the year.

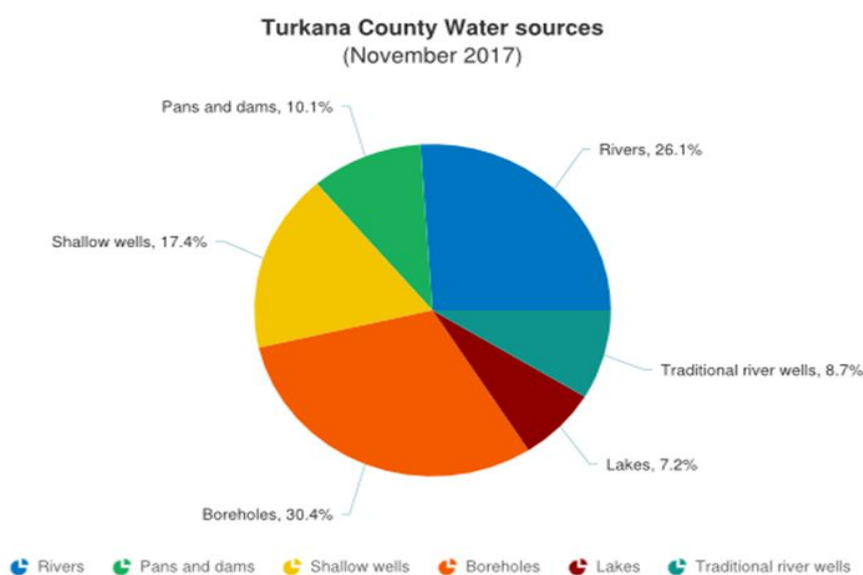
2.1.3 Browse

- The general condition (quantity and quality) of browse was good with most parts of the county reported to have green vegetation cover.
- Agro-Pastoral livelihood zone had most green cover and Fisheries with less green cover.
- The significant improvement in browse is due to rains that have been consistently received in the county during the short rains season since October 2017.
- Compared to the previous month, browse condition has improved and it is above normal for same a time of the year.

2.2 WATER RESOURCE

2.2.1 Sources: Percent of water sources in use

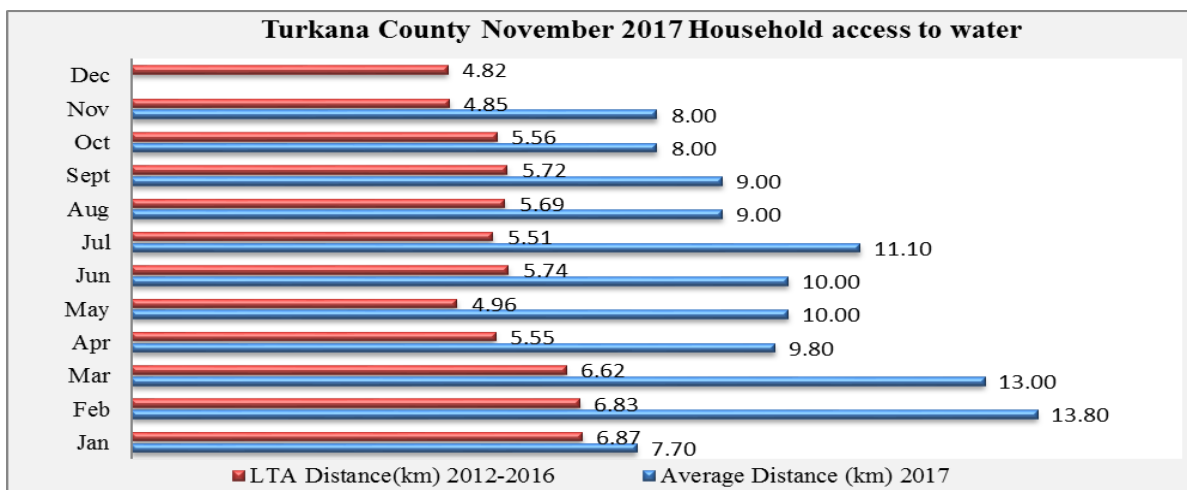
- During the month, the main water sources used by households and livestock were, Boreholes, Rivers and Shallow wells at 30, 26 and 17 percent respectively.
- The main current water source used was borehole water.



- The quality and quantity of water improved in the county due to the rains received.
- The available water sources are expected to last for three (3) months.

2.2.2 Household access and Utilization

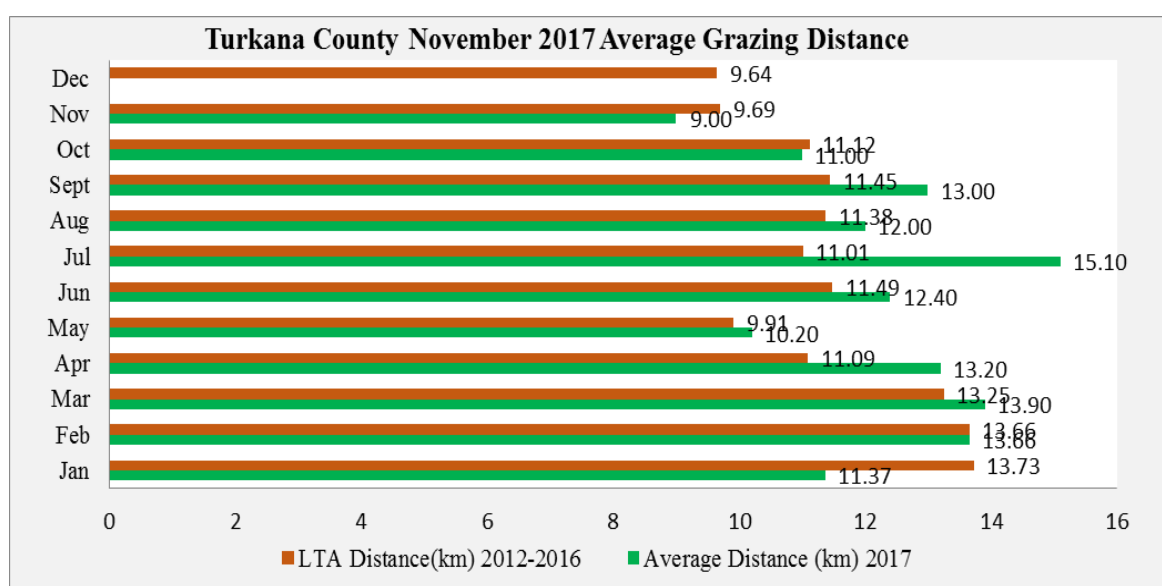
- The current average return distance (in Kms) from households to main water sources is 8; a similar distance recorded in the previous month.
- This is attributed to the rains received in the previous and current month that maintained good levels of main water sources for households.



- The average return distance is above the five-year Long Term Average (LTA) of 4.85 Kms for such time of the year.
- Consumption of water per person per day by households was highest in Agro-pastoral livelihood zone and lowest in the Pastoral livelihood zone.

2.2.3 Livestock access

- During the month, the average return trekking distance of livestock from grazing areas to main water sources was 9 Kms; a decrease from 11 Kms recorded in the previous month.



- The observed decrease in distance from livestock grazing areas to water sources is attributed to the rains received in the previous month that enhanced growth of pasture and browse near water sources, together additional/emerging water sources near grazing areas.
- Livestock in Agro-Pastoral livelihood zone were watered more frequently than those in the Pastoral livelihood zone.
- The average return trekking distance of livestock from grazing areas to main water sources is below the LTA of 9.69 Kms for such a time of the year.

2.3 Implication to food security

- The increase in the VCI together with the decrease in the return trekking distance from livestock grazing areas to main water sources, imply that livestock will maintain good body condition that will fetch better prices to enable farmers buy relatively more amounts of food. It is likely to improve the food security situation at household level.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

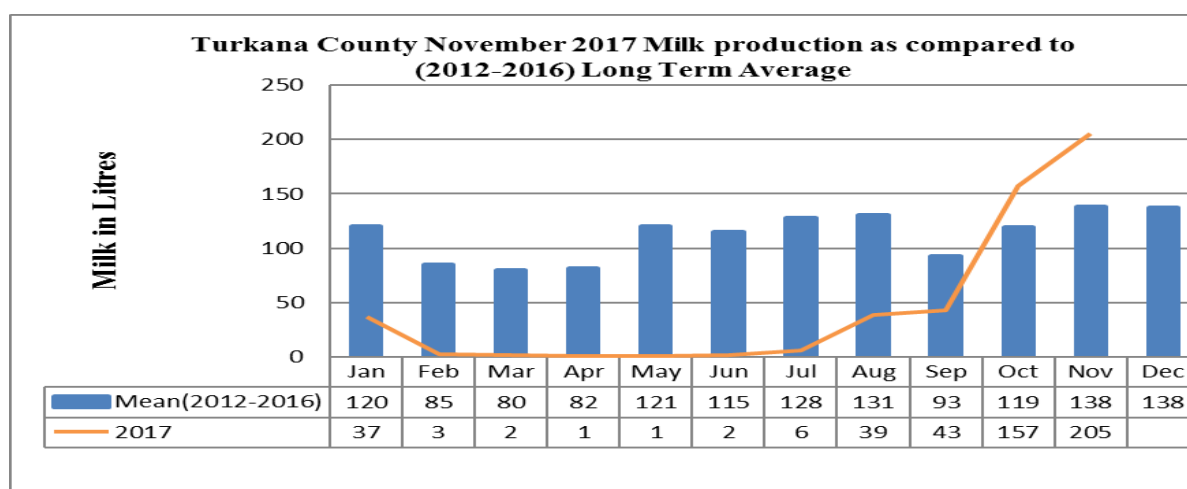
- The body condition of all livestock species is good/normal (smooth appearance) based on the Early Warning System Classification.
- Livestock in Pastoral livelihood zone had best body condition compared to those in Fisheries zone which had a fair body condition.
- The body condition of livestock improved significantly compared to the previous month, a scenario attributed to improved forage and water resources for livestock.

3.1.2 Livestock Diseases

- The following were reported during the month: Worms, Contagious Caprine Pleural Pneumonia (CCPP), Mange and Contagious Bovine Pleural Pneumonia (CBPP).
- The disease situation was not alarming and as such, there were No major livestock deaths reported during the month.

3.1.3 Milk Production

- During the month, an average of 205 litres of milk was produced, constituting an increase from 157 litres recorded in the previous month.
- The increase in milk production is due to the good livestock body condition and better access to forage and water by livestock.



- The highest milk was produced in Agro-pastoral livelihood zone while the lowest was produced in the Fisheries zone.
- Camels and goats remained the major species milked in the county.
- Compared to the five-year average (138 Litres), milk production is above the normal for such time of the year.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Rain-fed crops are generally at podding/tussling stage and performing better in most farms in the county.
- Maize has been affected by pests in most farms especially in Turkana South and Turkana East Sub-counties.

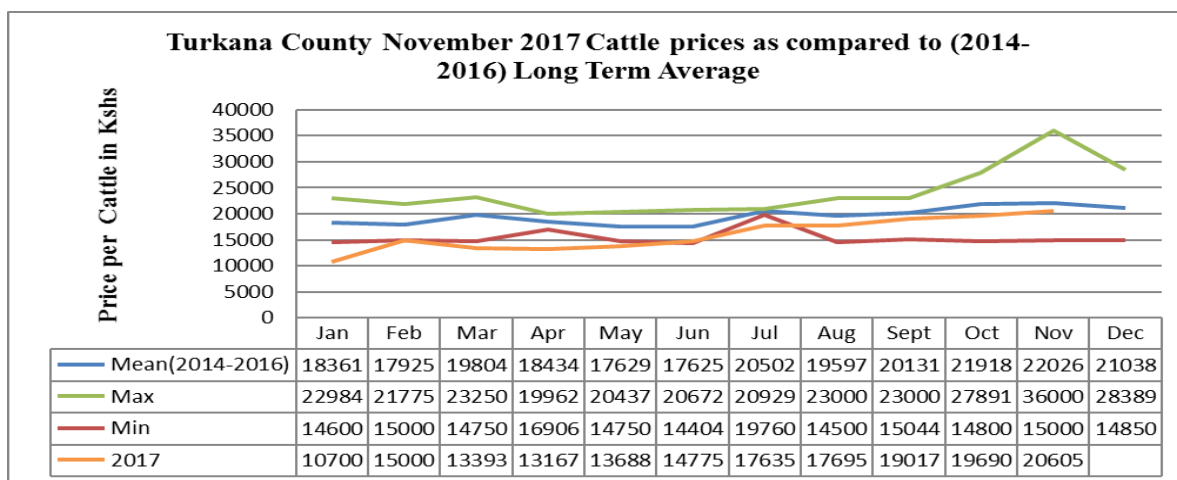
3.3 IMPLICATION OF THE ABOVE INDICATORS TO FOOD SECURITY

- Owing to the increased milk production in the county, children and lactating mothers will access considerably enough food hence improved food security situation. Some extra milk could also be sold to trade-in for other food groups thus enhancing food security.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

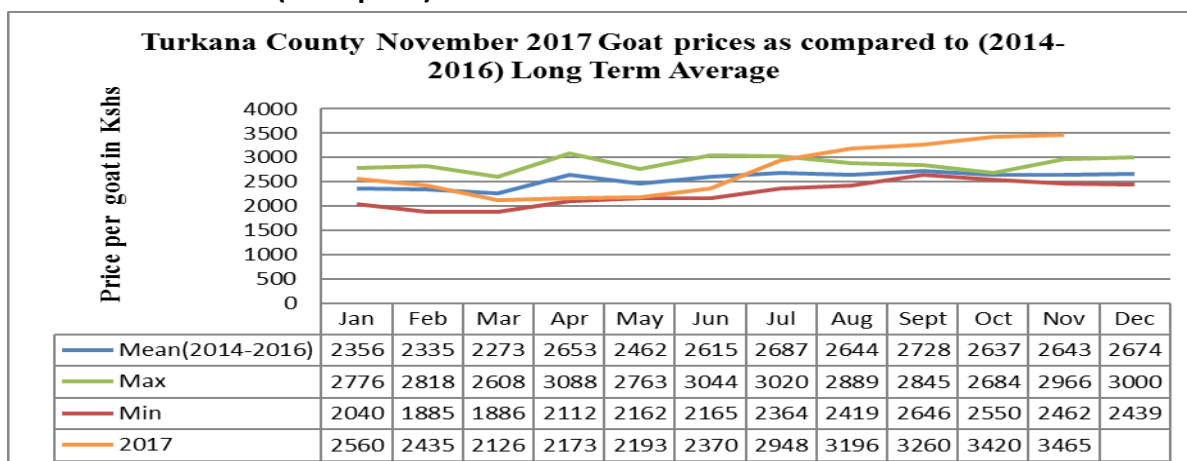


- During the month, a 4-year old medium size bull was sold at Kshs 20,605, depicting an increase from Kshs 19,690 recorded in the previous month.
- The highest cattle price (Kshs 20,760) was recorded in Pastoral livelihood zone while the lowest of Kshs 20,500 was recorded in Agro-Pastoral zone.
- The general increase in cattle prices is attributed to low cattle supply in markets, with high demand where most farmers were restocking as there was enough water and pasture.
- Cattle price remained below the LTA of Kshs 22,026 for such a time of the year.

4.1.2 Other outstanding observations

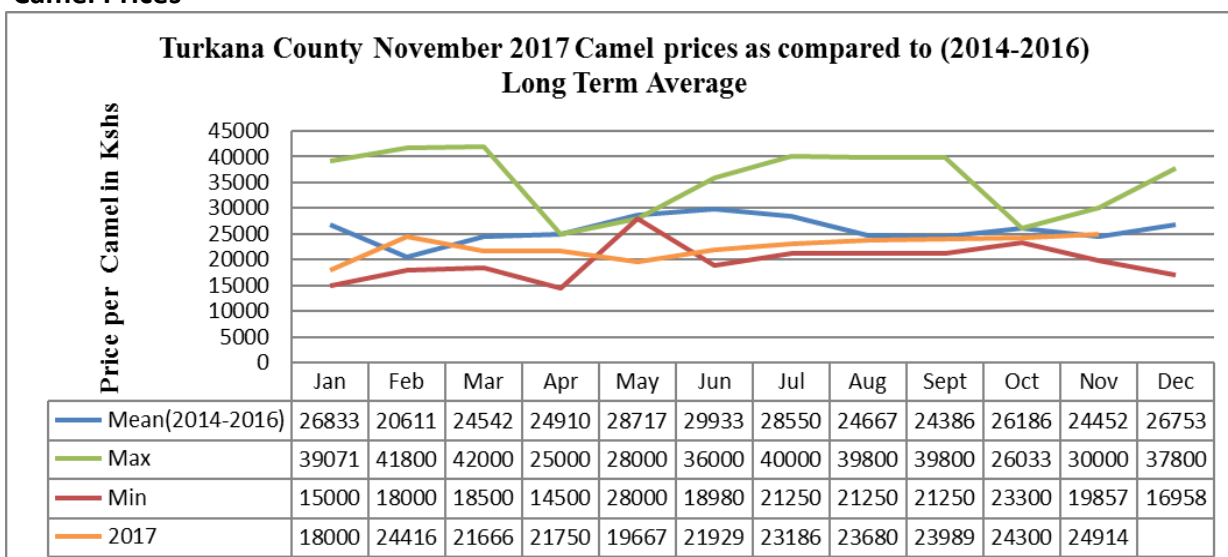
- Cattle was not readily available in markets as evidenced by Fisheries not making any sales during the month. Cattle prices were on a steadily upward trend in all livelihood zones.

4.1.3 Small Ruminants Prices (Goat price)



- A 2-year old medium size goat was sold at Kshs 3,465, making a slight increase from Kshs 3,420 recorded in the previous month.
- The observed increase in price is due to the general good body condition of goats that that attracted better market prices.
- The Pastoral livelihood zone recorded the highest goat price of Kshs 3,478 while the Agro-Pastoral zone recorded the lowest of Kshs 3,397.
- Compared to the LTA of Kshs 2,643, goat price is above normal for such time of the year.

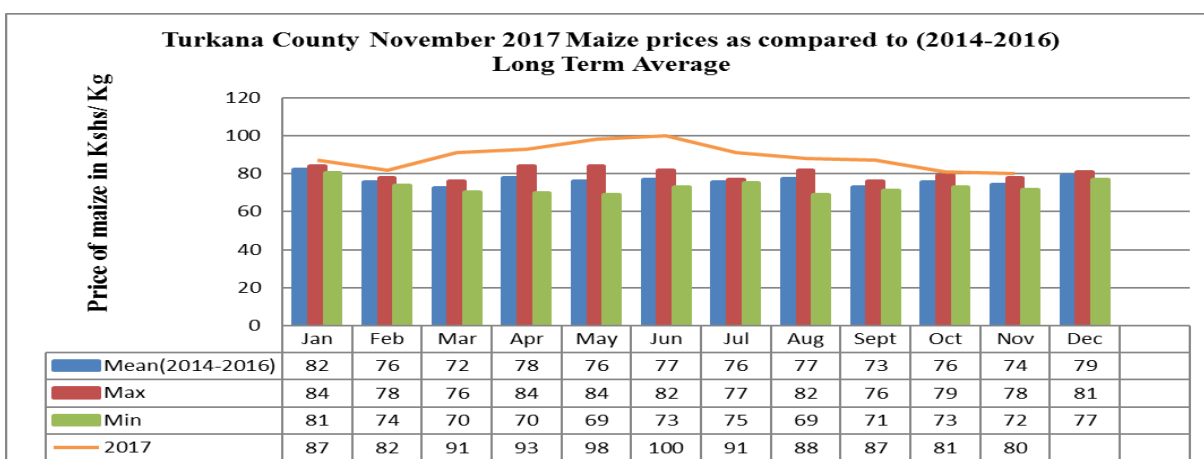
4.1.4 Camel Prices



- The 4-year old camel was sold at Kshs 24,914, being an increase from Kshs 24,300 sold in the previous month.
- The increase in camel price is attributed to the observed good and strong body condition which attracted higher market prices.
- The highest camel price of Kshs 24,967 was recorded in the Pastoral livelihood zone while the lowest price of Kshs 24,300 was witnessed in the Agro-pastoral zone.
- Compared to the LTA of Kshs 24,452, the current camel price is above normal for such a time of the year.

4.2 CROP PRICES

4.2.1 Maize



- In November 2017, maize was sold at an average price of Kshs 80 per kg, having decreased from Kshs 81 recorded in the previous month.
- The decrease is attributed to availability of maize in markets in the county.
- The highest maize price (Kshs 85 per kg) was recorded in the Fisheries livelihood zone while the lowest (Kshs 78 per kg) was recorded in the Agro-pastoral zone.
- Maize price is above the LTA of Kshs 74 for such a time of the year.

4.2.1.1 Other outstanding observations

- Similar to the previous month, Maize remained readily available in markets across all livelihood zones.

4.2.2 Posho (Maize Meal)

- Posho (Maize Meal) was sold at an average price of Kshs 100 per kg, similar to the previous month.
- Posho price remained slightly above average for such a time of the year.

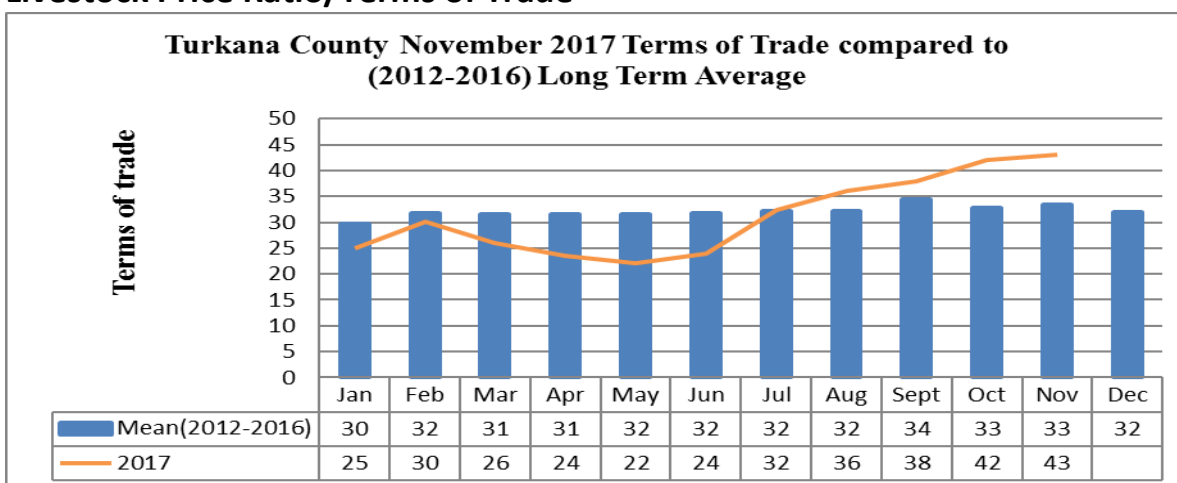
4.2.2.1 Other outstanding observations

- The availability of Posho in markets is expected to reduce since maize crop, which is essential for production of Posho, is still in farms (both in farms in the county and in those outside) thus Posho price expected to rise accordingly.

4.2.3 Beans

- During the month, beans was sold at Kshs 146 per kg; a price similar to the previous month.
- The observed constant beans price is attributed to constant availability of beans in markets in the county.
- Fisheries livelihood zone recorded the highest beans price of Kshs 151 per kg while Agro-pastoral zone recorded the lowest at Kshs 140 per kg.

4.3 Livestock Price Ratio/Terms of Trade



- The county recorded a Terms of Trade (ToT) of 43, which was an increase from 42 realized in the previous month.
- The increase in ToT is associated with increased goat price along with the decreased maize price.
- The highest ToT of 44 was recorded in Agro-pastoral livelihood zone and the lowest of 40 was recorded in fisheries zone.
- Compared to the five-year mean of 33, ToT is above the average for such time of the year.

4.4 Implication of the above indicators to food security

- Since farmers can buy more cereals for a sale of a similar size of a goat, food security will improve accordingly.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

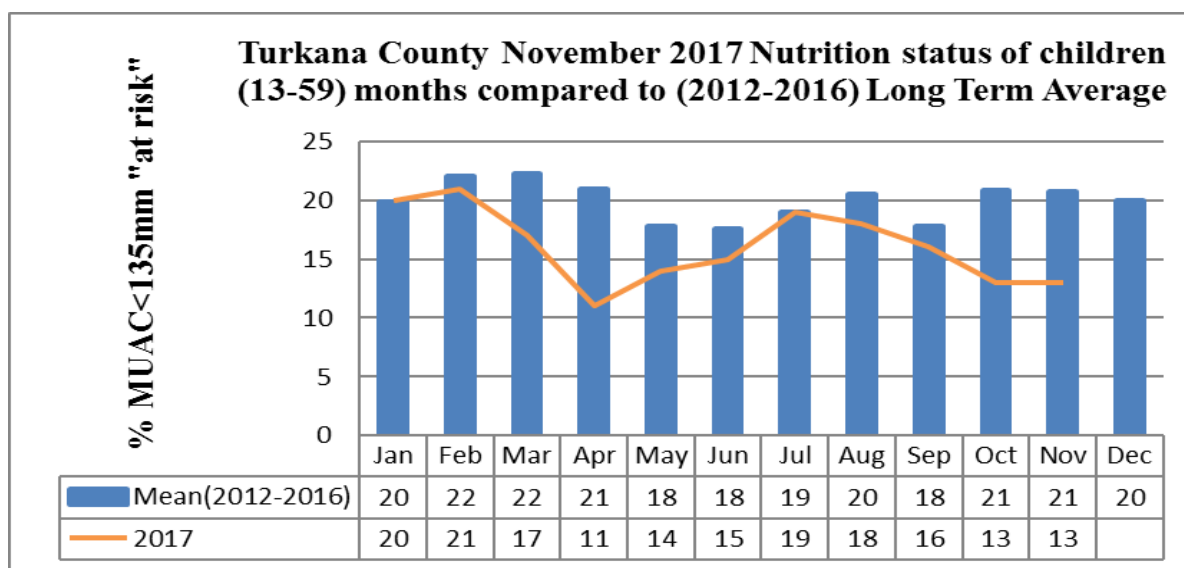
5.1 MILK CONSUMPTION

- During the month, the average milk consumption per month per household was 187 litres, indicating an increase from 142 litres recorded in the previous month.
- The Pastoral livelihood zone reported the highest milk consumption while the Fisheries reported the least consumption.
- Milk consumption is above the normal of 90 Litres for such a time of the year.

5.2 HEALTH AND NUTRITION STATUS

- During the month, the percentage of sampled children (by gender) was 48.5 and 51.5 males and females respectively.

5.2.1 Nutrition Status



- The percentage of children at risk of malnutrition - whose Mid Upper Arm Circumference (MUAC) is less than 135 mm, was 13; similar to the one recorded in the previous month.
- The stability is attributed to children accessing sufficient amounts of milk, as justified by the outstanding milk production. The observed general increase in milk consumption indicates too that other members of the households were as well consuming milk alongside children.
- Compared to the percent LTA for such time of the year, the percentage of children with MUAC less than 135 mm is below normal.

5.2.2 Health

- No major epidemic disease outbreaks reported.

5.3 COPING STRATEGIES

- In November, 2017, the Coping Strategy Index (CSI) was 16, an increase from 13 recorded in October, 2017.
- Although the county experienced a seemingly improving general food security situation, a significant contribution to the contrary by the Fisheries livelihood zone led to such a high eventual CSI, attributed to households applying much more coping mechanisms in acquiring food or money to buy food.
- The CSI is however expected to decrease with time as the production effects of the short rains season persists across the livelihoods.

- The highest CSI of 20 was recorded in Fisheries livelihood zone while the lowest index of 11 was recorded in Agro-pastoral zone.
- Although the month's CSI underwent increment, it still remained below the LTA of 32 for such time of the year.

5.4 Implication of the above indicators to food security

- Food security will improve because famers are now able to produce and consume milk significantly.

6.0 CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- Cash transfers to regular and emergency beneficiaries for Hunger Safety Net Programme targets along with beneficiaries registration exercise being done **by NDMA**.
- Livestock deworming and vaccination against CBPP in Turkana West, Turkana North, Kibish and Loima sub-counties **by Regional Pastoral Livelihood Resilience Project (RPLRP)**.
- Reseeding of degraded areas in Kaapus and Turkwel wards in Loima sub-county **by RPLRP**.
- Emergency Cash Transfers in Turkana Central **by Save the Children**.
- Cash Transfers in Turkana North (in Lake Zone, Kaikor, Lokitaung, Lowarengak and Kaeris) **by World Relief Kenya**.
- Integrated health and nutrition services in Turkana Central and Loima **by International Rescue Committee (IRC)**.
- Support to integrated nutrition outreaches for in Kerio division in Turkana Central; Supplying hygiene kits during outreaches and is targeting unconditional Cash Transfers to 3,000 households in November and December 2017 in Kibish, Turkana North and Turkana Central **by Save the Children**.
- Supporting training of Water Management Committees in compliance with new water laws in Kibish and Turkana Central **by Save the Children**.
- Supply and development of 10,000 litre tank to Lolupe primary school **by Water Resource Authority**.

(The above non-food interventions are still being implemented in the county; similar to the previous month.)

6.2.1 FOOD AID

- Support in retaining pupils at schools through distribution of food to public primary schools (wheat pellets, beans and cooking oil) Loima Sub County: Nakamane, Kabulokor and Kotela primary schools **by Girl Child Network (GCN) - Kenya Equity for Primary Education Project (KEEP)**.
- Support emergency nutrition for one year in Turkana South sub-county **by World Vision Kenya**.

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No major insecurity incidences reported during the month.

7.2 Migration

- No major migration reported.

7.3 FOOD SECURITY PROGNOSIS

- Food security will improve now that most crops in both irrigated and rain-fed farms are at good condition and in tussling and poding stage. This will improve food access and availability in the county.
- The improvement in milk production and consumption will improve food security in the county. Extra milk will be sold to earn cash for purchase of cereals thus better food security.
- Improvement in livestock body condition will lead to better livestock prices to earn more cash for food purchase.
- Now that the ToT has increased, though slightly, famers will buy fairly more food stuffs for similar livestock sales and hence improvement in the food security situation.

8.0 RECOMMENDATIONS

- Vaccination and deworming is urgently required in the county. This is to be done by the Ministry of livestock together with line agencies and stakeholders.
- Disease and crop pests' surveillance should be intensified in order to identify potential threat to livestock and crops in the county. Maize crop facing pest infestation needs to be given attention by the Ministry of Agriculture since it is seriously affecting the crop.
- Now that the county is at NORMAL stage of drought cycle, all government and non-government actors should invest in resilience projects across the county, targeting historically vulnerable areas.
- Strengthening of the existing Stabilization Centres in Turkana South (Katilu Health Centre), Turkana West (Lopiding Hospital) and Turkana East (Lokori AIC Health Centre).
- The ministry of health should provide malaria drugs to health centres so as to curb any outbreak that may arise.
- The department of security and the county government should increase peace talks among communities living along the borders especially in Turkana North, East and South Sub-counties.
- Repair of the irrigation structures in Turkana East needs to be done in order to enhance production as some irrigation channels have blocked thus water not flowing to a number of farms.