

National Drought Management Authority
TURKANA COUNTY
DROUGHT EARLY WARNING BULLETIN FOR MARCH 2018



A Vision 2030 Flagship Project



MARCH EW PHASE

Drought Status: NORMAL

Shughuli za kawaida

Drought Situation & EW Phase Classification

Biophysical Indicators

- The County experienced off season rainfall during the first and second dekad of the month with a temporal distribution of 8-10 days across all livelihood zones. Rainfall received represents 97% of what is normally received for the period.
- The condition of vegetation improved slightly during the month with Turkana West Sub County that was previously worst affected experiencing some recovery.
- Forage condition is generally fair and tending to good in some sites along the Agro Pastoral livelihood zone.

Socio Economic Indicators (Impact Indicators)

- The body condition of all livestock species was generally fair and there was no migration taking place nor deaths attributed to dehydration reported during the month under review.
- Milk production and consumption level remains stable in relation to the previous month but lie slightly outside the normal range for the month.
- Distance to water source for households dropped and is within the normal range for the month.
- Terms of Trade (ToT) remain unchanged from February and remain above the normal range by a significant margin.
- Proportion of children at risk of malnutrition did not change and lies within the normal range for the month of March.
- No significant change was recorded on the coping strategy index (CSI) and it continues to lie within the normal range and a general improvement in food consumption was noted as depicted by the improved FCS.

Early Warning (EW) Phase Classification

| LIVELIHOOD ZONE | PHASE | TREND |
|----------------------|--------|--------|
| PASTORAL-ALL SPECIES | NORMAL | STABLE |
| AGRO-PASTORAL | NORMAL | STABLE |
| FISHERIES | NORMAL | STABLE |
| COUNTY | NORMAL | STABLE |

| Biophysical Indicators | Value | Normal Range |
|------------------------|-------|--------------|
| Rainfall (% of Normal) | 97 | 60-100 |
| VCI-3 month (County) | 39 | >35 |
| VCI-3 month (T.West) | 29 | >35 |
| Forage Condition | Fair | Good |

| Production Indicators | Value | Normal Range |
|--|------------|--------------|
| Livestock Migration Pattern | Normal | Normal |
| Livestock Body Condition | Fair | Good |
| Milk Production | 1.6 Litres | > 2.3 Litres |
| Livestock deaths (attributed to drought) | No Deaths | No Deaths |

| Access Indicators | Value | Normal Range |
|----------------------------------|------------|--------------|
| Terms of Trade (ToT) | 40 | >30 |
| Milk Consumption | 1.6 Litres | >1.8 Litres |
| Return distance to water sources | 7 km | <7.2 km |
| Cost of Water (Ksh/20L) | Ksh.5 | Ksh.5 |

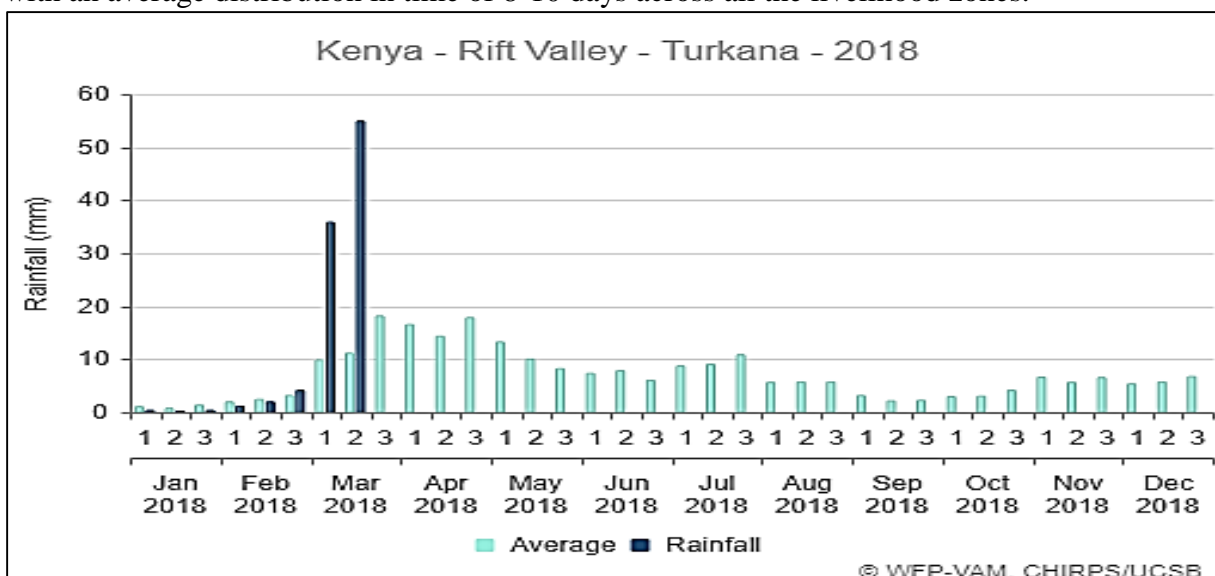
| Utilization indicators | Value | Normal Range |
|--|-------|--------------|
| Nutrition Status, MUAC (% at risk of malnutrition) | 22 | <22.5 |
| Food Consumption Score (FCS) | 43 | >35 |
| Coping Strategy Index | 16.5 | <23 |

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

- During the month under review, the County experienced off season rainfall of significant amount with an average distribution in time of 8-10 days across all the livelihood zones.

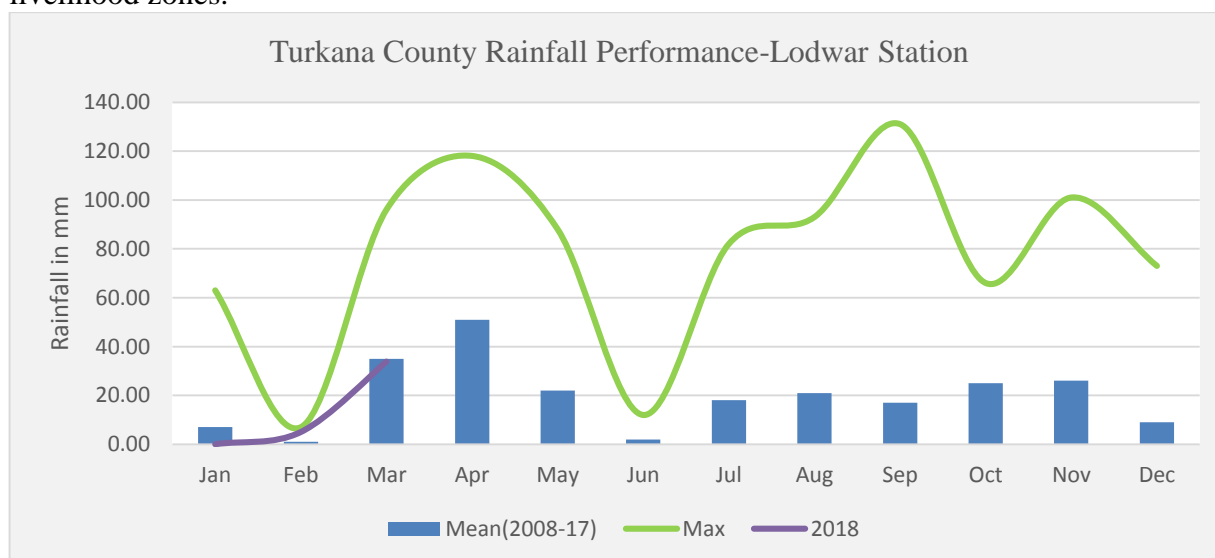


Source: VAM-World Food Programme

- Rainfall recorded in dekad one and two was significantly above the normal for the respective dekads as illustrated above with a notable increase in amount from dekad one to two.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- During the month under review, rainfall received in Lodwar town (a baseline for the County) as per data from Lodwar rainfall station amounted to 33.9mm.
- The temporal distribution was fair with the spatial distribution being equally even across all the livelihood zones.



Source: Meteorological Department-Turkana County

1.3 OTHER EVENTS

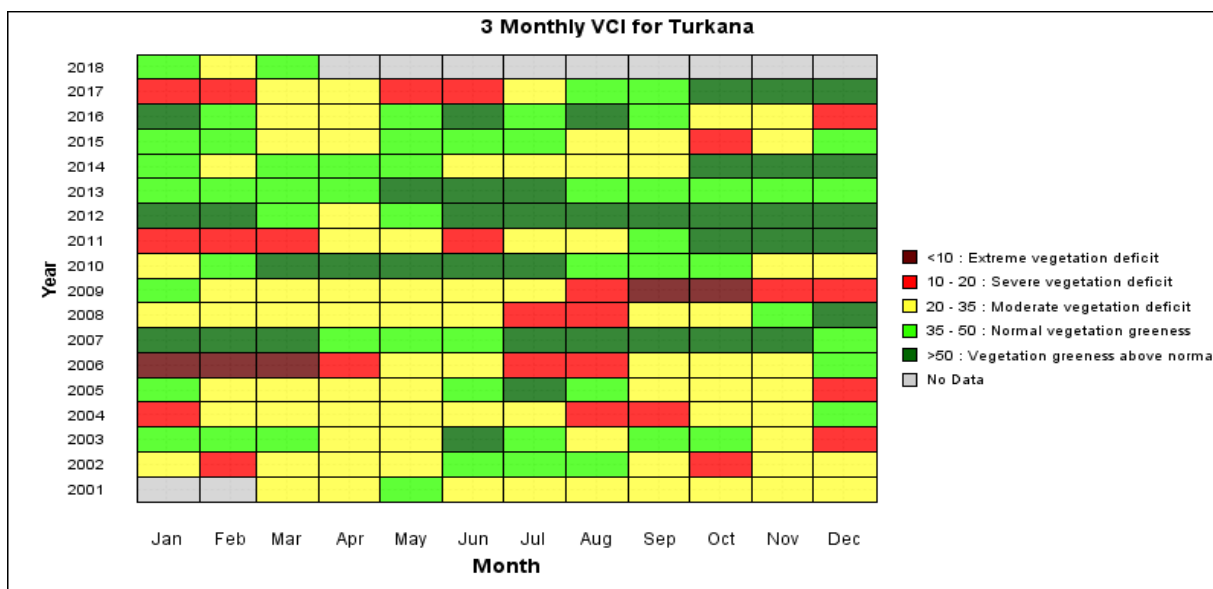
- There were no notable events such as floods or mud/landslides reported during the month under review.

2.0 IMPACTS ON VEGETATION AND WATER

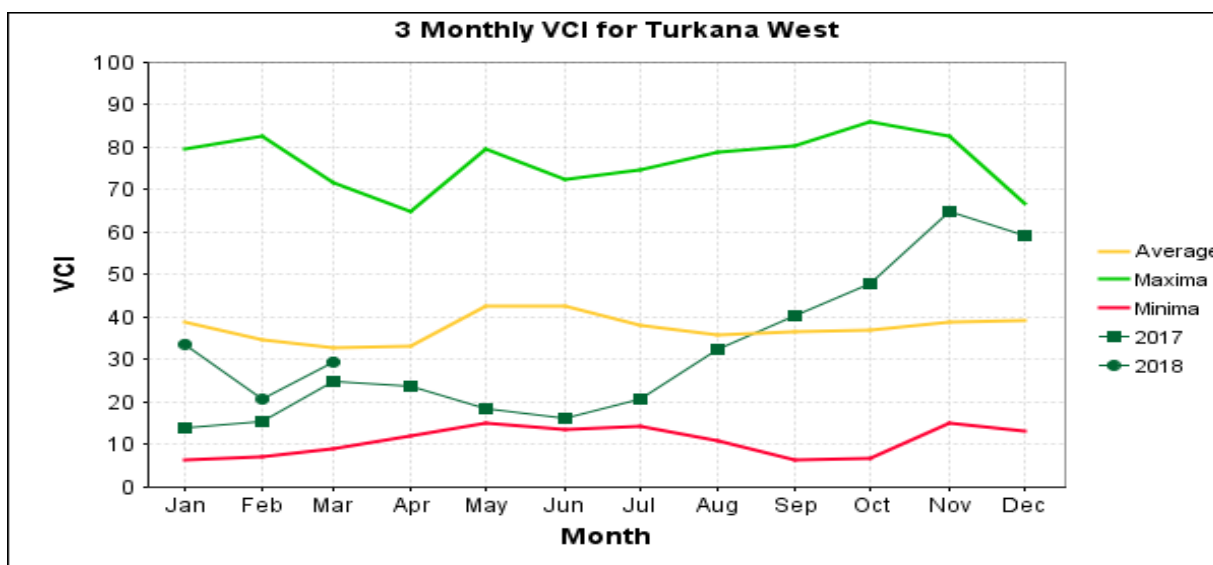
2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- Below is a County matrix that illustrates how months have been classified based on the applicable VCI thresholds. Retrogressive analysis of the vegetation condition enables placement of each month under an appropriate vegetation deficit band.
- Slight improvement in the condition of vegetation was noted during the month under review as supported by the change in the VCI-3month from 32 recorded in February to 39 in March.



- All sub counties including Turkana West, North and Loima that were previously the most affected recorded a positive trend in the condition of vegetation with the respective VCI-3month shifting from 20, 26 and 34 to 29, 41 and 37 accordingly during the month under review.
- The off season rainfall received especially during the first and second dekad of the month under review promoted regeneration of vegetation hence the observed trend.



2.1.2 Pasture

- During the month under review pasture condition across all the livelihood zones was fair and within the level normally witnessed at such a time during a normal year. Receipt of fair to good off season rainfall across most areas of the County promoted regeneration of pasture hence the observed condition.
- The condition of pasture is anticipated to improve further with the onset of the long rains in April.
- Insecurity remains the major deterrent to pasture access in select areas of Turkana East and Kibish sub counties.
- Slight variations in pasture quality and quantity were witnessed during the month of March with the Agro Pastoral livelihood zones performing optimally better compared to the Pastoral livelihood zone.

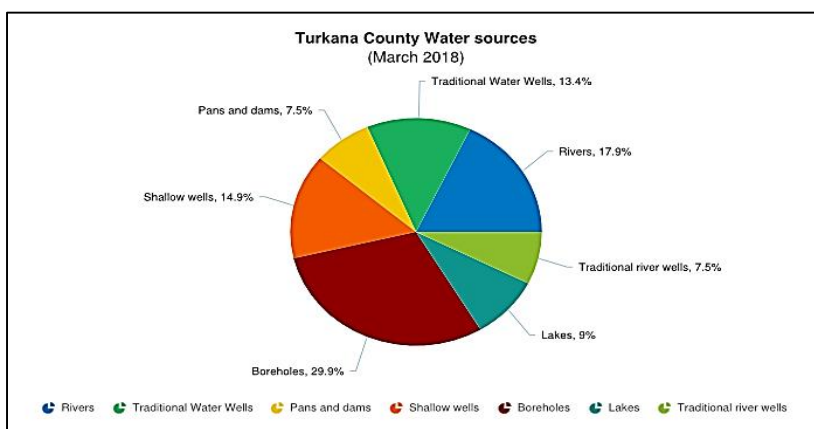
2.1.3 Browse

- Browse condition during the period under review in all livelihood zones was generally fair but tending to good in some pocket zones and the current level is at par with that observed at such a time during a normal year. The cold and humid weather conditions over some days in the month occasioned by the off season rainfall received promoted regeneration of browse thus the improved situation.
- The current browse quantity is adequate for utilization over a period of two months with further improvement expected during the long rains period.
- The main constraint to browse access during the month of March was insecurity in some parts of Turkana East, North and Kibish including Lomelo, Todonyang and Kapedo.
- Some slight variations in browse quality and quantity were observed in the three livelihood zones with the Agro Pastoral zone boosting a better performance.

2.2 WATER RESOURCE

2.2.1 Sources

- Boreholes, rivers and shallow wells sufficed in meeting household water requirements during the month of March with a significant proportion of households as illustrated below using them.

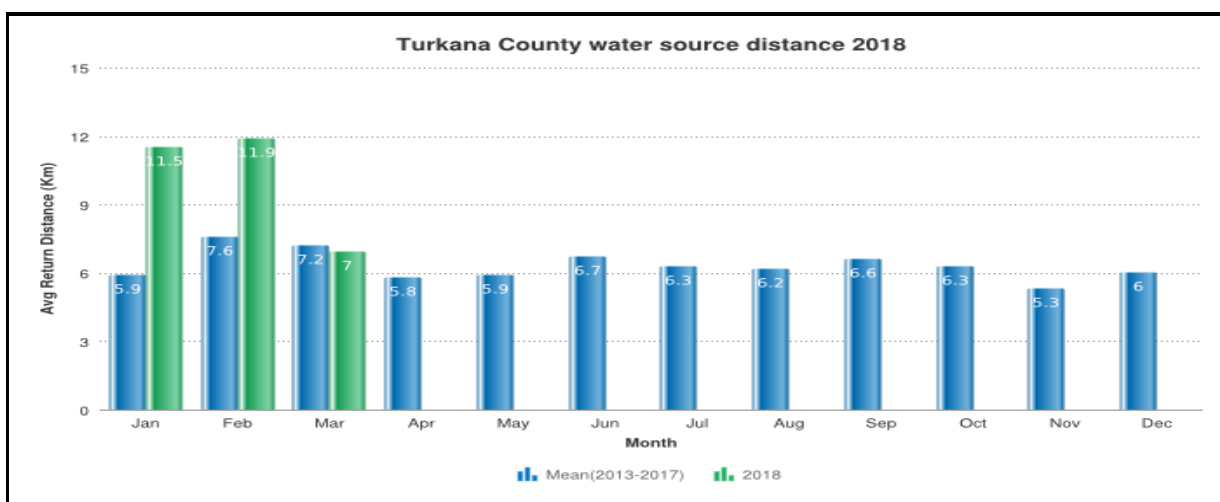


- The water level in open water sources rose slightly from that observed in February and that is as a result of some recharge taking place mainly attributed to receipt of rainfall in March.
- Boreholes and rivers are usually the main sources of water at such a time of the year.

2.2.2 Household access and Utilization

- The household return distance to water source reduced significantly from the 12km recorded previously to 7km during the month under review. In addition, the current distance is at par with the long term average distance for the month.

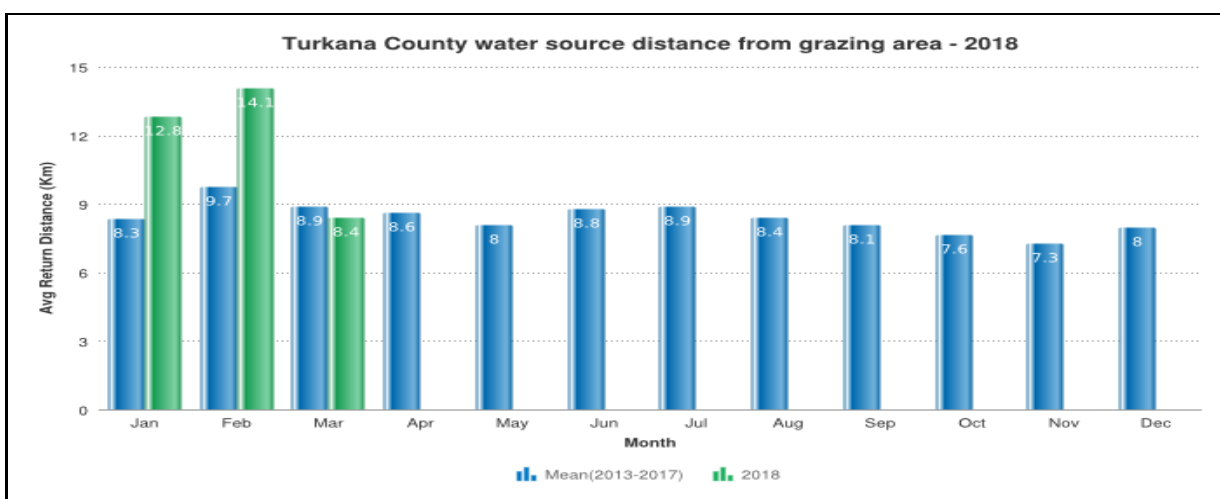
- Households along the Pastoral livelihood zone covered longer distances in search of water compared to those in the Agro Pastoral and Fisheries livelihood zones.
- Waiting time at water source across the Agro Pastoral and Pastoral livelihood zones during the month under review was 30-45 minutes and thus within the normal range of 30 minutes for the period.
- Across the Pastoral, Agro Pastoral and Fisheries livelihood zones the household water consumption per person per day was 25litres, 30litres and 40litres respectively during the month under review.



- The cost of water at the source is free with the exception of water kiosks along major centres where it costs Ksh.5 per 20litre jerrican, a price that is within the normal range for the month.

2.2.3 Livestock access

- The return distance for livestock from grazing sites to water source decreased significantly to 8.4km from the 14km recorded in February. The current distance is at par with the long term average trekking distance for the month under review.
- The Agro Pastoral livelihood zone recorded a shorter distance compared to that recorded in the Pastoral livelihood zone during the month of March.



- Availability of pasture in most sites that are in close proximity to water points (majorly water pans that had recharged) was the main factor behind the recorded decrease in trekking distance.
- Livestock watering frequency was lowest in the pastoral zone at 4-5 times in a week with that of the Agro Pastoral zone being 5-6 times in a week.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

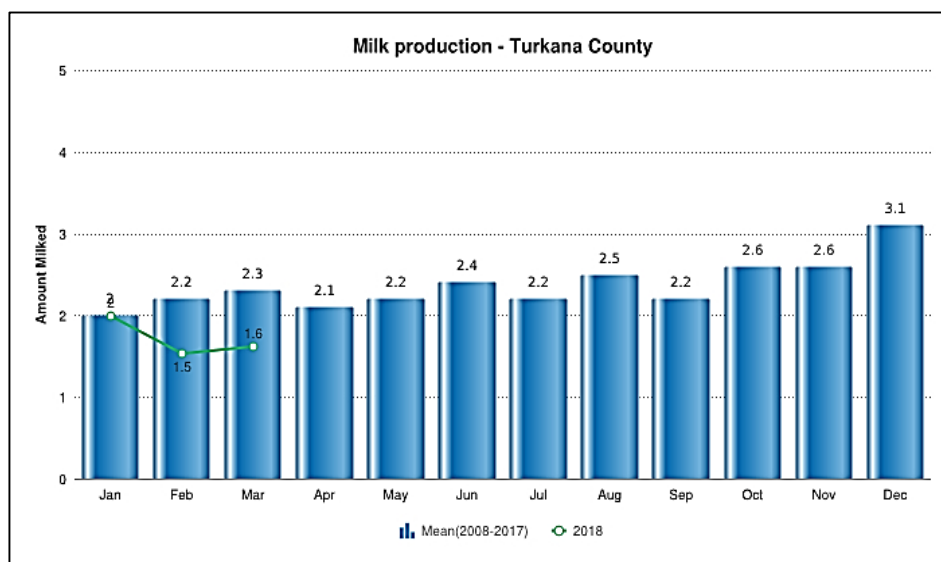
- Livestock body condition for all species is fair but tending to good in some sites along the Agro Pastoral zone such as Katilu and Kaitese.
- Improvement in body condition is expected over the long rains period owing to improved availability and accessibility to quality pasture occasioned by good regeneration.
- Compared to similar periods during the previous years, the current livestock body condition remains normal and that could be attributed to pasture availability across all livelihood zones implying that animals covered shorter distances in search of pasture and water.

3.1.2 Livestock Diseases

- Incidents of Contagious Bovine Pleural Pneumonia were reported by some households along the Pastoral zone including Lobei, Loppii and Kearis during the month under review.

3.1.3 Milk Production

- Amount of milk produced during the month under review remained stable in relation to that produced during the previous month.
- The current household milk production level is lower than the level normally attained for the month by thirty percent.
- The observed stability could be attributed to the fact



that animals had not fully recovered from the effects of the January-February dry spell coupled with the slow recovery in rangeland conditions in select sites within the County.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

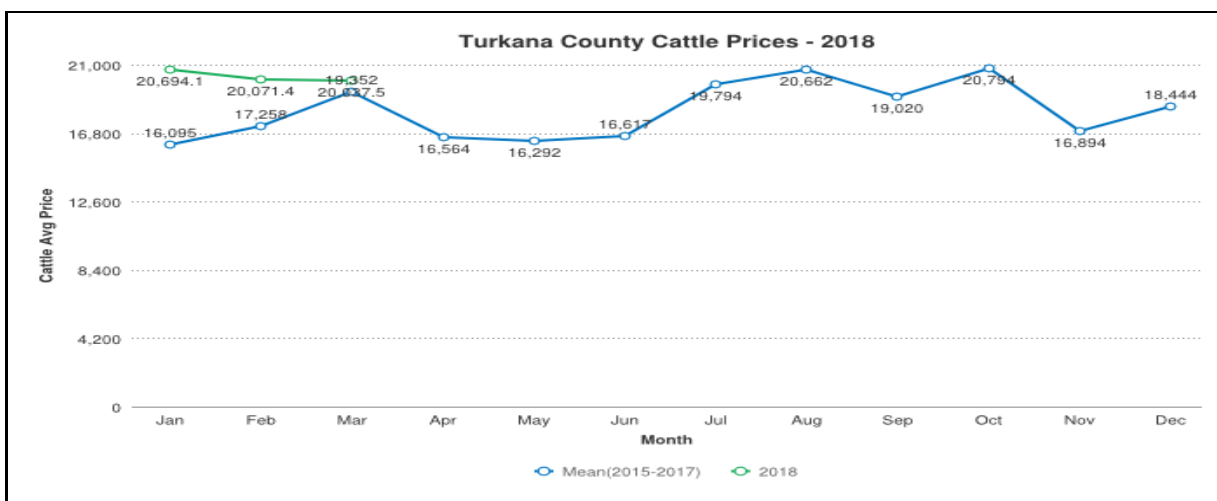
- Majority of the farmers mainly along the Agro Pastoral zone practice Sorghum, Maize and Cowpeas farming during the long rains season.
- Land preparation in anticipation of the onset of the long rains was the only on-going crop production activity during the month under review.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

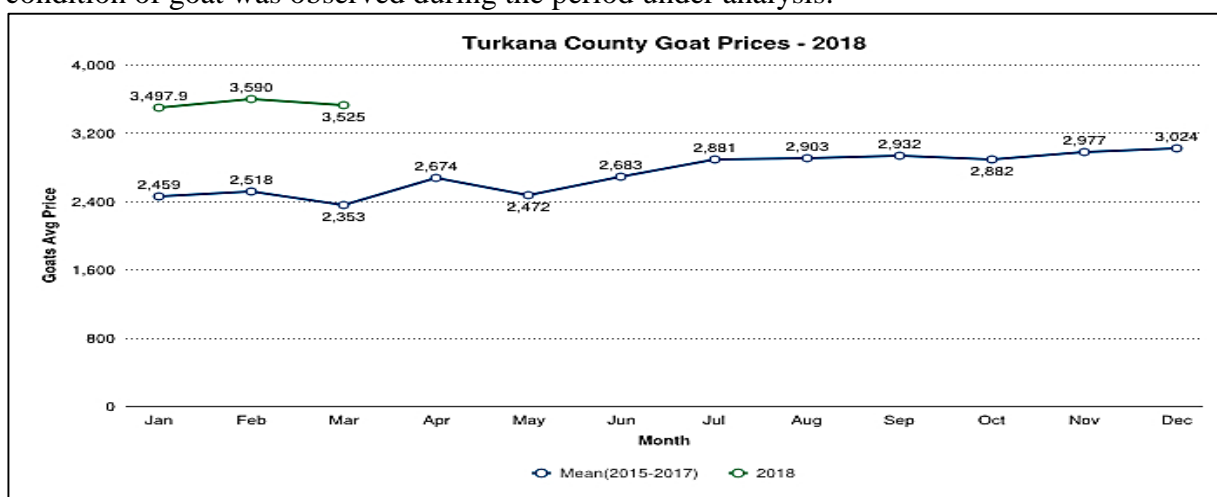
- Cattle price remained stable with a 4-year old medium sized bull trading at Ksh. 20,040 during the month under review.



- The above stability in price could be attributed to the fact that no significant change in animal body condition had taken place as a result of adequate pasture level having not been attained.
- The Pastoral livelihood zone reported the lowest cattle price (Ksh19, 700) compared to the Agro Pastoral zone that reported Ksh. 20,300.
- The current cattle market price is at par with the short term average price for the month under review.

4.1.1 Small Ruminants Prices (Goat price)

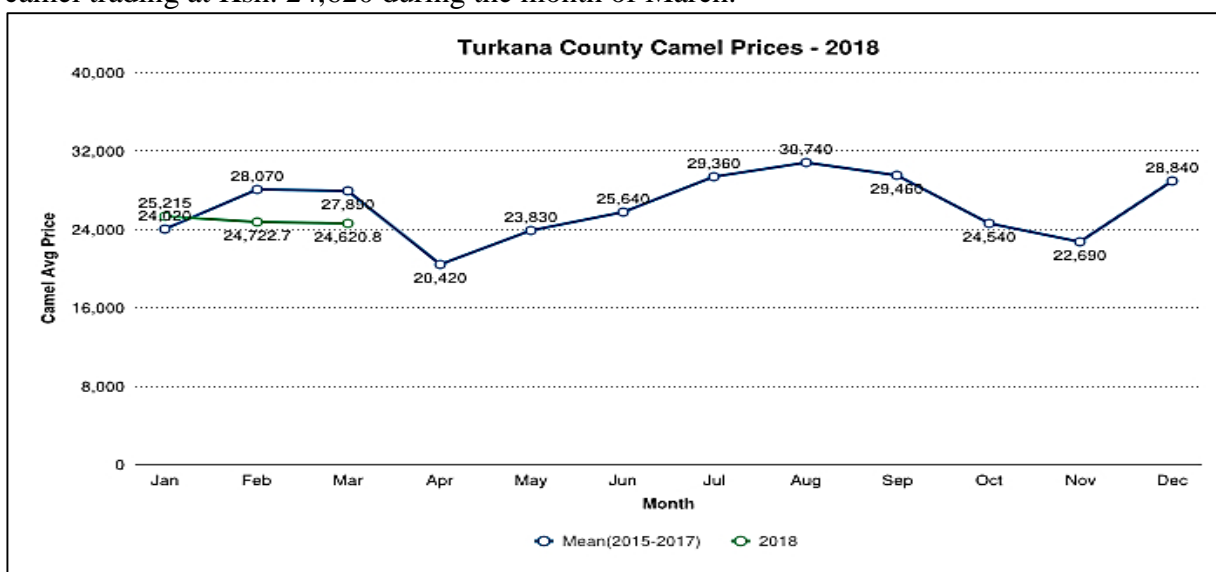
- The price of a 2-year old medium sized goat at market during the month under review remained unchanged from that recorded during the previous month.
- The stability could be attributed to the fact that available browse for utilization by goats remained relatively the same as the previous month and thus no significant change in the body condition of goat was observed during the period under analysis.



- Goat traded at the highest price along the Pastoral livelihood zone (Ksh 3,570) compared to the Ksh. 3460 reported along the Agro Pastoral livelihood zone.
- The current price exceeds the short term average price for the month by fifty percent.

4.1.4 Camel Prices

- The price of camel at market remained stable in relation to the previous month with a 4-year old camel trading at Ksh. 24,620 during the month of March.

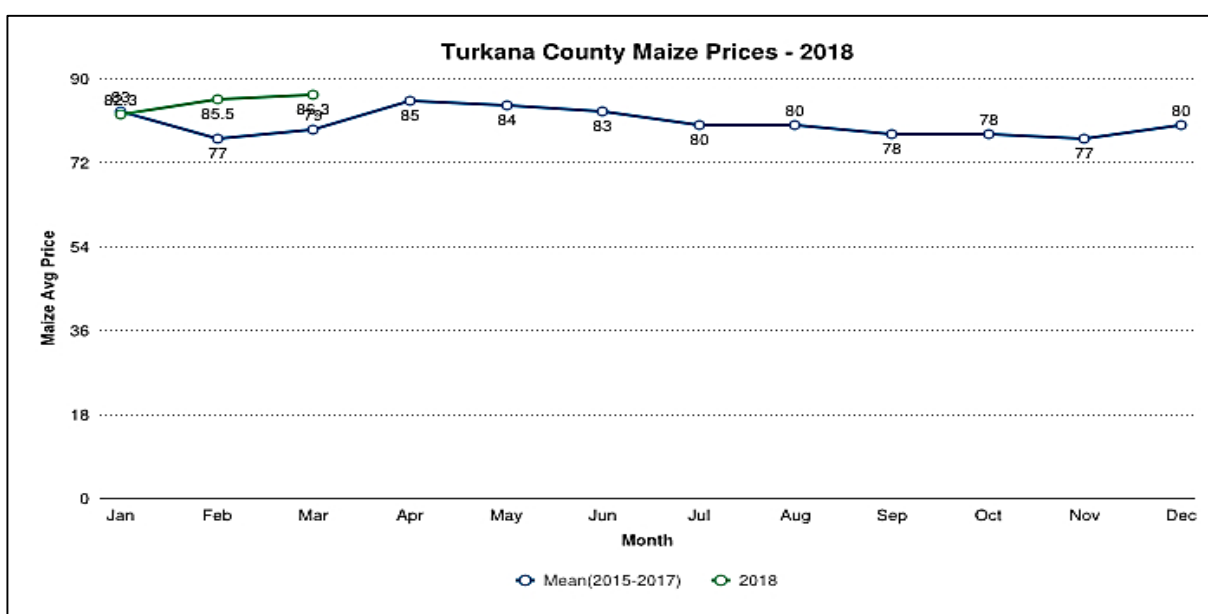


- The observed stability in price could be attributed to the fact that the body condition of camel remained relatively unchanged across the two months.
- The Agro-Pastoral livelihood zone reported the lowest camel price at Ksh. 23,375 with the Pastoral livelihood zone reporting Ksh. 25,000 during the month under review.
- The current price of camel is lower than the short term average price for the month by twelve percent.

4.2 CROP PRICES

4.2.1 Maize

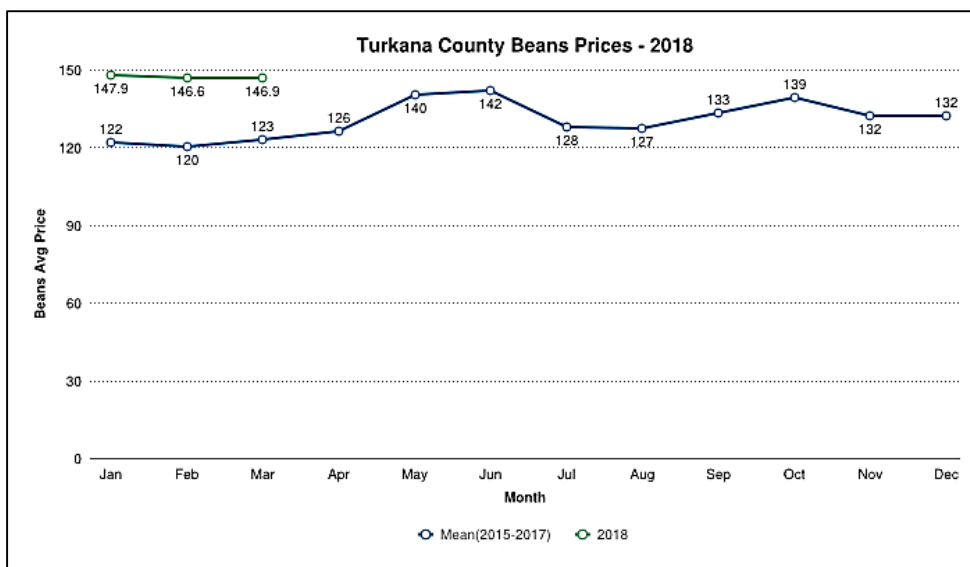
- The price per kilogram of Maize during the month under review was Ksh.86 and thus remained unchanged from that recorded in February.
- In comparison to the short term average price for the month, the current price is higher by nine percent.



- The Pastoral livelihood zone reported the highest price (Ksh.92) with the Agro-Pastoral zone reporting Ksh. 83 per kilogram of Maize. The variation is as a result of the former zone being heavily dependent on the latter zone for its supplies.
- The observed stability in price is as a result of no major impact in market dynamics being experienced more so in the external supply markets located in Trans Nzoia and Uganda.

4.2.2 Beans

- During the month under review, the price of beans per kilogram was ksh. 146 and thus remained stable in relation to the previous two months. Beans price in the County is mainly determined by



the price of the commodity within the external market hence the observed stability.

- Lowest beans price of Ksh.143 was reported along the Agro Pastoral zone with the highest (Ksh.150) being reported along the Pastoral zone.

- The current price of beans is higher than the

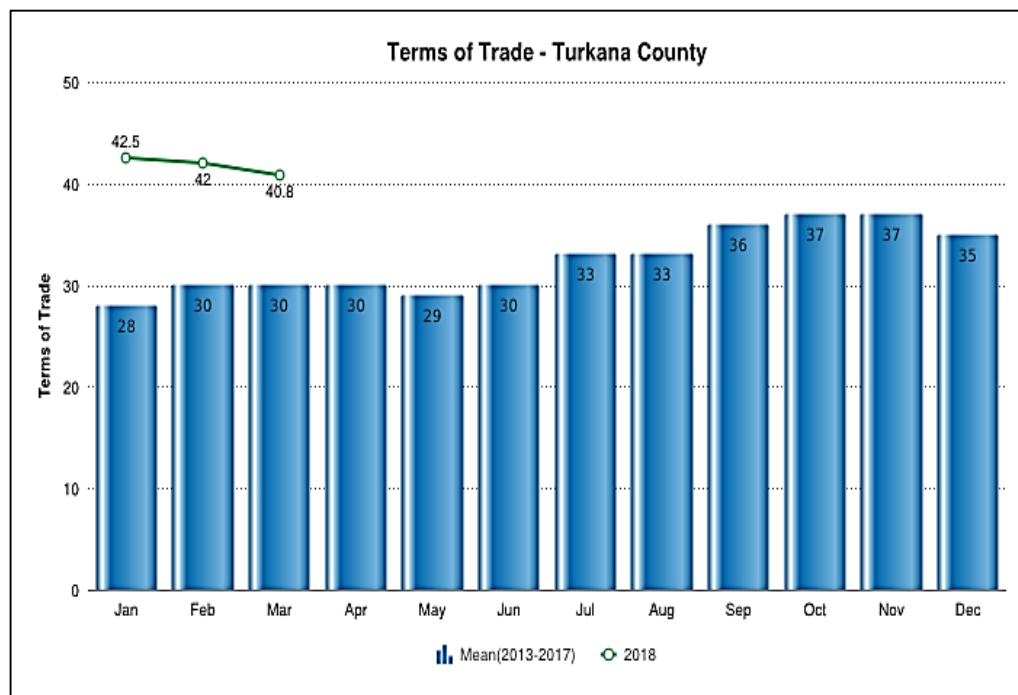
short term average price for the month under review by nineteen percent.

4.3 Livestock Price Ratio/Terms of Trade

- Stability in ToT was observed during the month under review. However, the reported ToT (40) exceeded the long term average ToT for the period by thirty six percent.
- The determinant factors of the ToT including maize and goat price did not experience any

significant fluctuation in relation to the previous month thus translating to a stable ToT.

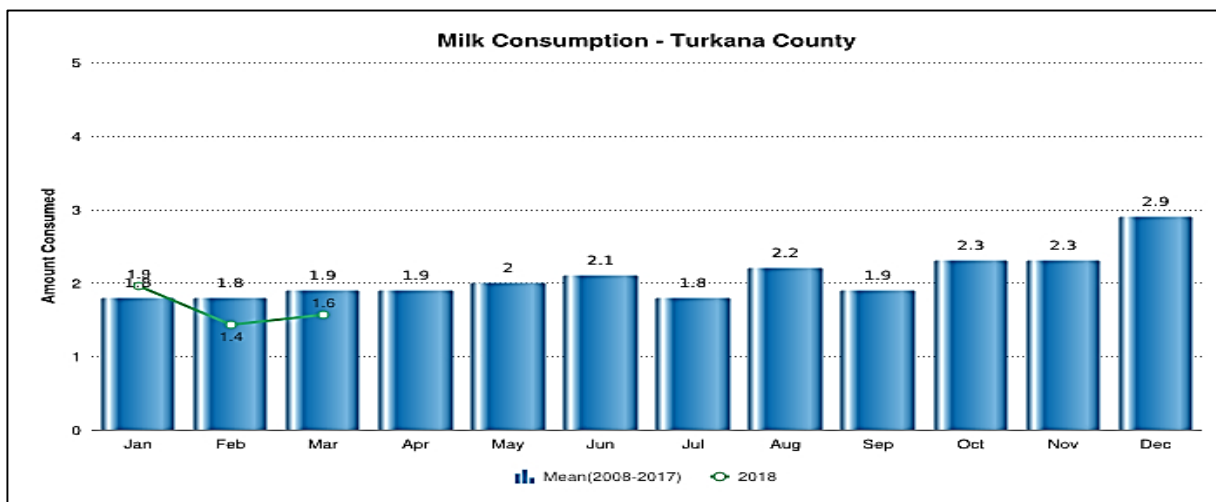
- Rangeland conditions are projected to improve with the onset of the long rains and thus the ToT is forecasted to be on an ascending trend.



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

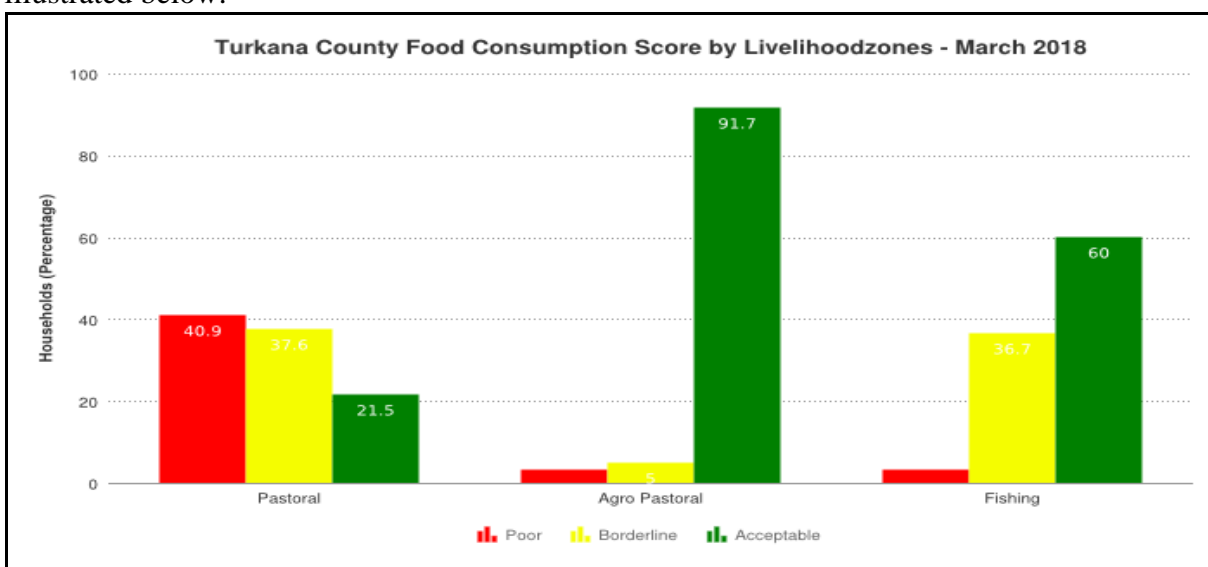
- Quantity of milk consumed per household per day during the month under review did not change significantly from the one reported in February and thus remained stable at 1.6litres.



- Limited milk availability owing to low production at household level was the major driver behind the observed stability in milk consumption during the period under review.
- In comparison to the normal milk consumption at such a time of the year, the current consumption level is lower by sixteen percent.

5.2 FOOD CONSUMPTION SCORE (FCS)

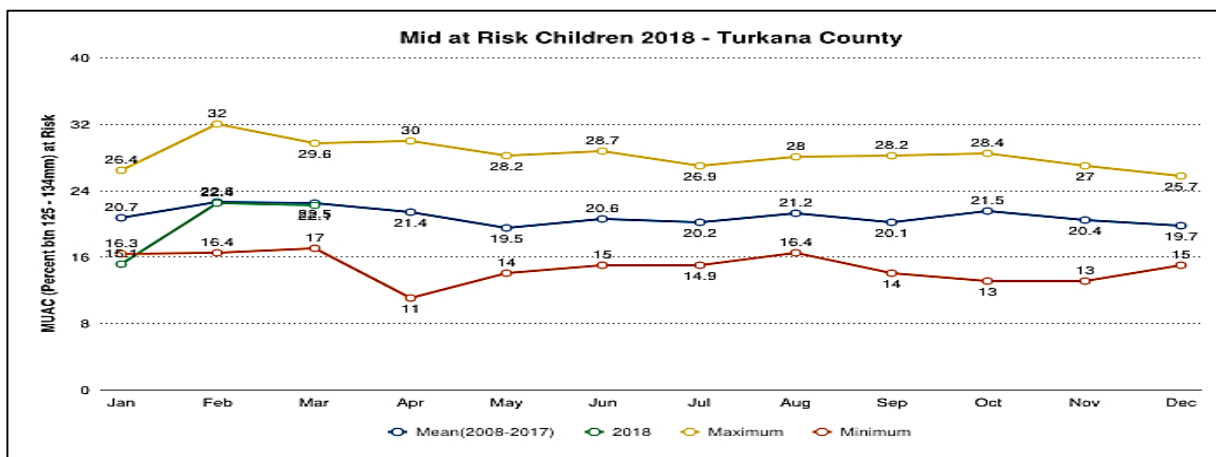
- Among the sampled households during the month, twenty seven percent were classified as having a poor food consumption score whereas twenty nine percent and forty four percent of them were categorized under the borderline and acceptable FCS band.
- Food consumption during the period under review improved as supported by the shift in the FCS for the entire county from 33 (borderline) reported previously to 43 (acceptable).
- However, significant variations were observed across the three livelihood zones. For instance, the Pastoral zone reported a majority of households as having a poor FCS as opposed to the other livelihood zones that reported majority to be falling under the acceptable FCS category as illustrated below.



5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- During the month under review, the proportion of children rated being ‘at risk’ of malnutrition was 22 percent and thus remained stable in relation to that reported previously.



- In comparison to the long term average of children at risk of malnutrition for the period, the current proportion is at par.
- The observed stability could be attributed to limited access to essential nutritious meals (arising from the low household purchasing power) for the under-fives coupled with inadequate milk consumption owing to scarcity attributed to low production.

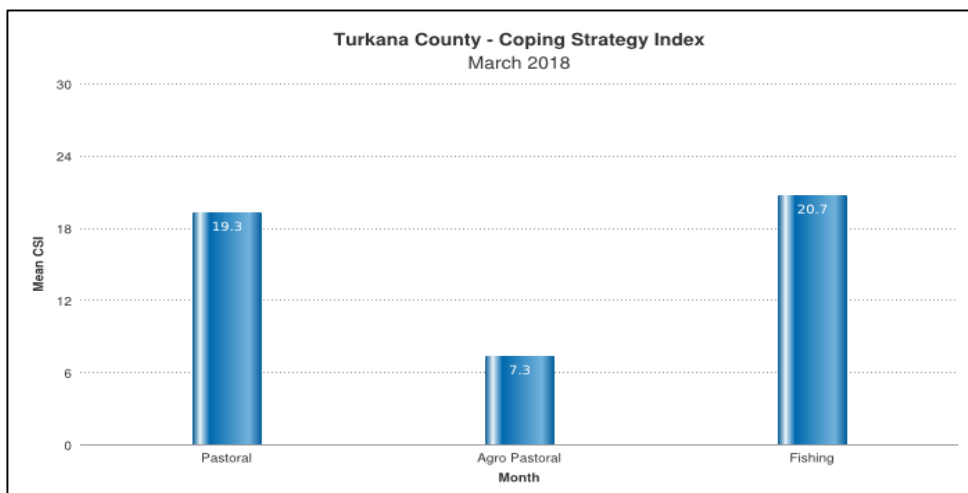
5.3.2 Health

- Diarrhoea was the most commonly reported ailment among the sampled children during the month of March.

5.4 COPING STRATEGY

5.4.1 Coping Strategy Index (CSI)

- The coping strategies applied by households during the month under analysis remained similar to those applied previously and thus the Coping Strategy Index (CSI) remained stabled at 16.48.
- Notably the CSI for the Agro Pastoral adjusted slightly downwards from the 10 recorded in February but that of the Pastoral livelihood zone did not change.
- The fisheries zone reported the highest CSI owing to limited fishing activity currently taking place at the lake.
- The prevalent coping strategy included reliance on less expensive food and borrowing.



6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 FOOD

| Sub County/Ward/Location | Intervention | No. of beneficiaries | Implementers |
|---|---|----------------------|---|
| Napeitom, Lokori and Kerio Schools | Provision of green grams and Oil. | 1500 HH | Kenya Red Cross |
| Turkana East, South and West Sub counties | Cereals-300.3MT, Pulses-60MT Vegetable Oil- 17.967MT | 6666 HH | World Vision Kenya- Food for Asset Project |

6.2 NON-FOOD

| Sub County/Ward/Location | Intervention | No. of beneficiaries | Implementers |
|--|---|---|---|
| Loima | Drilling and equipping of Kotela borehole with a yield of 2.2 cubic meters per hour of fresh water. | 600 HH | Catholic Relief Services (CRS) |
| Kibish | Conducted mass deworming and vaccination against PPR and CCPP | 1450HH 39,952 Shoats | CRS |
| Katilia and Kochodin | Cash Transfer | 3911 HH | Kenya Red Cross |
| Turkana West-Letea Ward | Provision of assorted NFIs(Blankets, Kitchen set,Jerricans and Soaps) | 200HH | Kenya Red Cross |
| Loima-Kang'alita, Moruese, Kaitese/Kolyoro, Kalemnyang/Kotela,Nanyee,Napeikar Turkana South-Katilu Turkana East- Morulem,Lokubae | Community Mobilization and sensitization of farmers in 9 irrigation schemes | 8666 HH | VSF Germany |
| Turkana East and South | Integrated health and nutrition outreaches | 3452 (1653-Male, 1799-Female)- children between 6-59 months 1398 pregnant and lactating women | World Vision Kenya (WVK)-Emergency response project |
| Songot ,Lokangae and Kanamkemer | Agri-Nutrition and Business skills Training | 93 | ILRI/AVCD-LC Project |

7.0 EMERGING ISSUES

7.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT

- Apart from a few incidents of banditry attacks along the Kainuk-Lodwar highway, there was no major cases of insecurity or conflict reported during the month under review.

7.2 MIGRATION

- No significant in-migration or out-migration was taking place during the month of March.

7.3 FOOD SECURITY PROGNOSIS

- Rainfall onset is anticipated during the first dekad of April. Therefore, agricultural production is projected to experience an upward shift with intensive crop production activities especially along the Agro Pastoral livelihood zone likely to be witnessed over the long rains period.
- Forage availability within the vicinity of households is forecasted to improve during the long rains season with a probable improvement in animal body condition thus translating to better livestock productivity in terms of milk production and market price across all the livelihood zones.
- The distinct possibility of pastoral household purchasing power going up over this period will be high owing to the improved terms of trade implying that accessibility to nutritious foods from own production and markets will thus be enhanced translating to reduced malnutrition rates.
- Consequently, majority of households will most likely fall within the minimal food insecurity category with normal market functionality and adequate security being critical ingredients to bridging any food gaps among select households that might be under food stress during that period.

8.0 RECOMMENDATIONS

- **Water:** Enhance water availability for use through smart water harvesting technologies such as provision of storage tanks to farmers, health facilities and institutions.
- **Veterinary:** Enhance livestock disease surveillance while monitoring and vaccinating animals that will be migrating back from the dry season grazing areas to curb the spread of any disease.
- **Health and Nutrition:** Intensify integrated health outreach activities to areas where high rates of malnutrition have been reported while educating the communities on water treatment techniques so as to minimize the risk of any water borne disease outbreak.
- **Livestock:** Enhance availability of pasture (for use during the dry season) through provision of pasture seeds to farmer groups while intensifying rangeland reseeding more so along the Pastoral zone.