

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



A Vision 2030 Flagship Project



**FEBRUARY EW PHASE**

**Drought Status: ALERT**



**Maandalizi ya mapema**

**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- Rainfall received represents a paltry twenty seven percent of the one experienced normally for the period.
- Deterioration in vegetation condition was witnessed during the month under review with Turkana West being the most affected.
- Forage condition is fair and tending to poor.

**Socio Economic Indicators (Impact Indicators)**

- Livestock body condition is fair, neither thin nor fat. No migration nor deaths were reported during the month under review.
- Milk production and consumption level lies below the normal range and on a downward trend.
- Household access distance to water source remained unchanged from that recorded previously.
- Terms of Trade (ToT) decreased but remains above the normal range.
- Proportion of children at risk of malnutrition remained stable in relation to the previous month and within the normal range for the month of February.
- The coping strategy index (CSI) dropped and remained below the normal range but majority of households fell under the borderline category based on the food consumption score.

**Early Warning (EW) Phase Classification**

LIVELIHOOD ZONE	PHASE	TREND
PASTORAL-ALL SPECIES	ALERT	WORSENING
AGRO-PASTORAL	ALERT	WORSENING
FISHERIES	NORMAL	WORSENING
COUNTY	ALERT	WORSENING

Biophysical Indicators	Value	Normal Range
Rainfall (% of Normal)	27	60-100
VCI-3 month (County)	32	>35
VCI-3 month (T.West)	20	>35
Forage Condition	Fair	Good

Production Indicators	Value	Normal Range
Livestock Migration Pattern	Normal	Normal
Livestock Body Condition	Fair	Good
Milk Production	1.5 Litres	> 2.2 Litres
Livestock deaths (attributed to drought)	No Deaths	No Deaths

Access Indicators	Value	Normal Range
Terms of Trade (ToT)	42	>30
Milk Consumption	1.4 litres	>1.8 litres
Return distance to water sources	12 km	<7.6 km
Cost of Water (Ksh/20L)	Ksh.5	Ksh.5

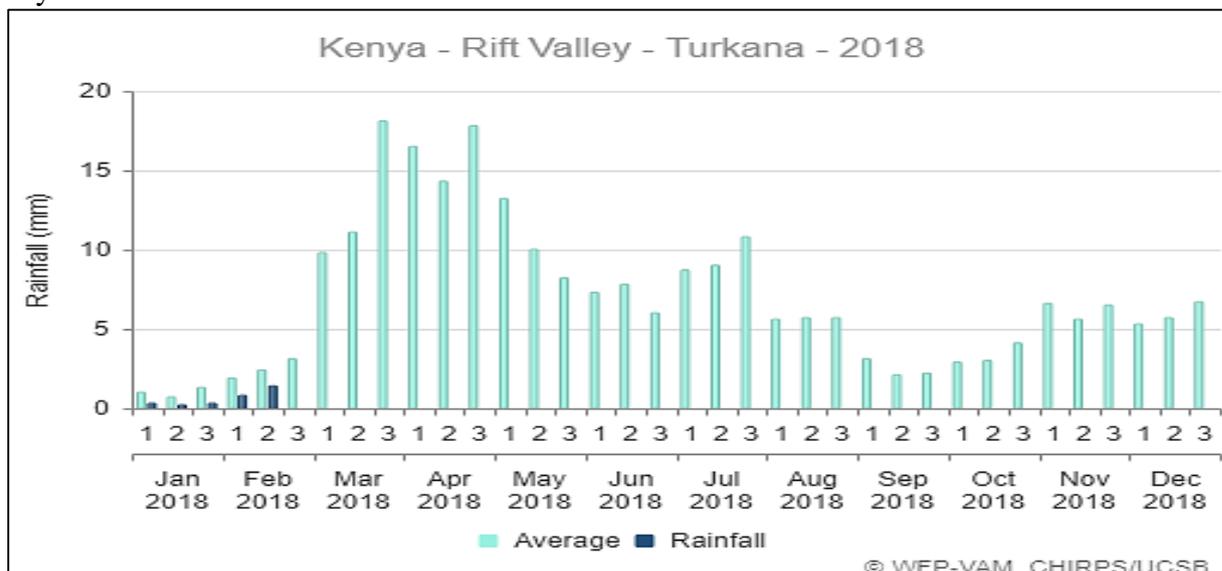
Utilization indicators	Value	Normal Range
Nutrition Status, MUAC (% at risk of malnutrition)	23%	<23%
Food Consumption Score (FCS)	33	>35
Coping Strategy Index	15	<32

<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

- No significant rainfall was received during the month under review save for light showers in select areas along the Fisheries and Agro Pastoral livelihood zones with a temporal distribution of one day.

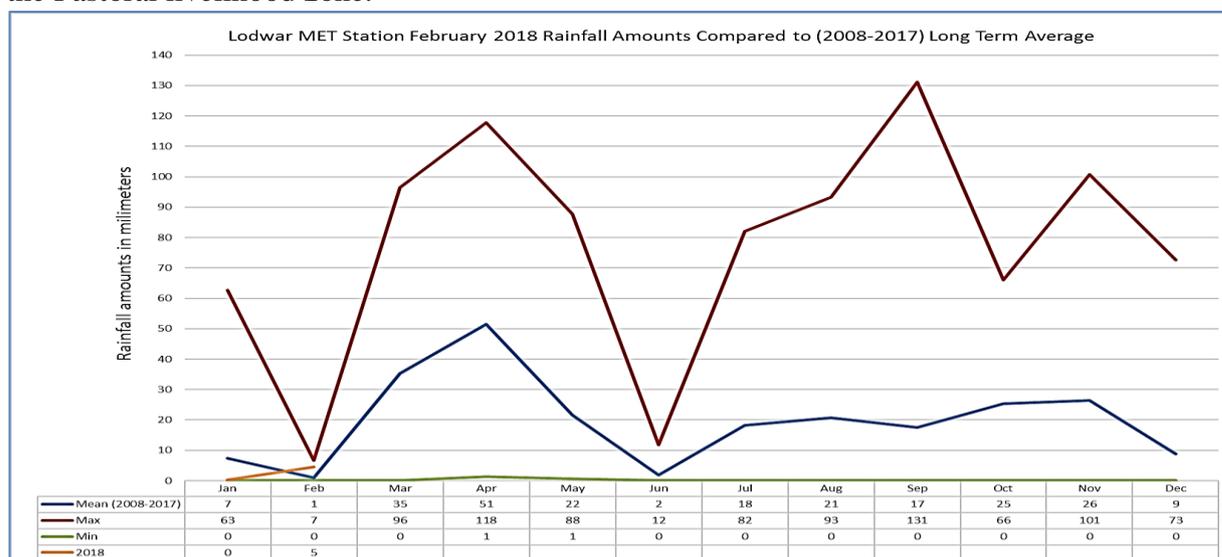


Source: VAM-World Food Programme

- Dekadal rainfall recorded was below what is normally received. However, a gradual increase in amount was recorded from the first dekad to the second dekad.

## 1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The Lodwar Meteorological station recorded 5 mm of rainfall during the month under review.
- The temporal distribution was poor with the distribution in space being uneven especially along the Pastoral livelihood zone.



Source: Meteorological Department-Turkana County

## 1.3 OTHER EVENTS

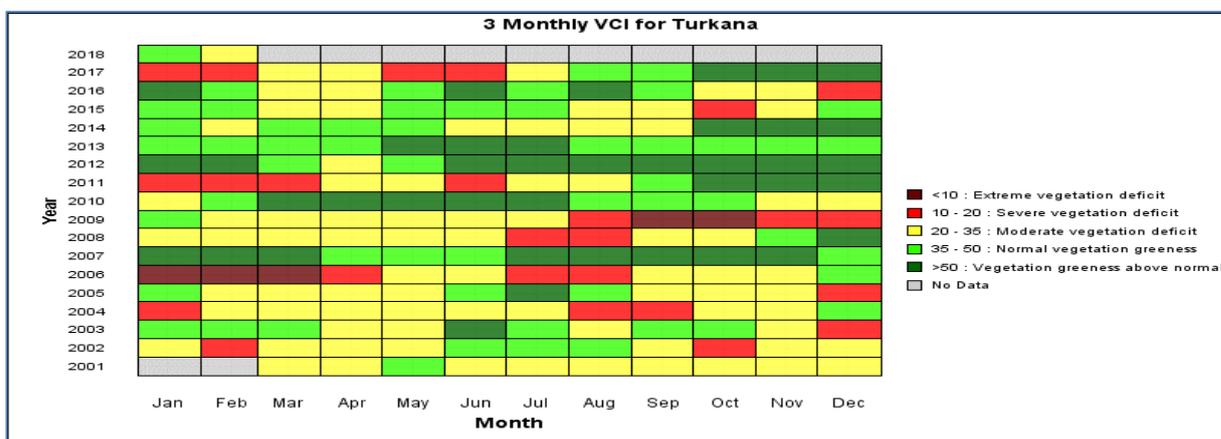
- During the month under review there was no notable event such as floods, lightning nor land/mud slides that took place.

## 2.0 IMPACTS ON VEGETATION AND WATER

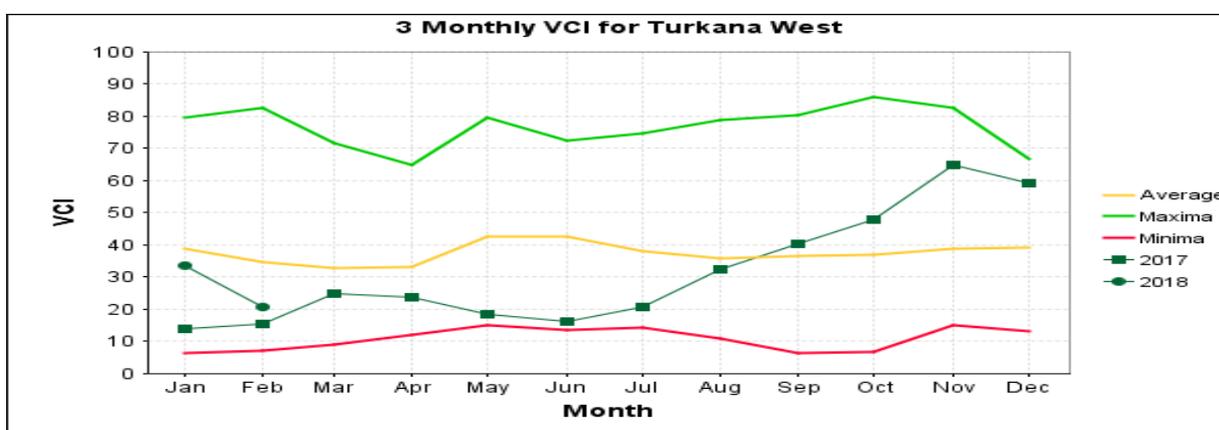
### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

- The matrix below depicts how months have been categorized based on relevant VCI thresholds. Every month has been placed under an appropriate vegetation deficit category upon conducting a retrogressive analysis of the vegetation condition.
- The condition of vegetation deteriorated during the month under review as evidenced by the shift in the VCI-3month from the 46 recorded in January to 32.



- A negative trend in the condition of vegetation was noted in Loima, Turkana North and West sub counties that reported a VCI-3month of 34, 26 and 20 respectively.
- The observed trend is as a result of no significant rainfall being received during the month under review with high temperatures dominating most parts of the county hence the rapid deterioration witnessed.



#### 2.1.2 Pasture

- During the month under review, pasture condition across all the livelihood zones was poor and comparatively below the normal level witnessed during a normal year. The observed pasture condition is as a result of the dry weather conditions experienced during the month under review.
- Pasture condition is forecasted to deteriorate further before the anticipated onset of the long rains in April.
- The major constraint to pasture access especially in Kibish and Turkana East was insecurity and locust infestation.

- Pasture quality and quantity was poor along the Pastoral zone in comparison to that along the Agro Pastoral zone.

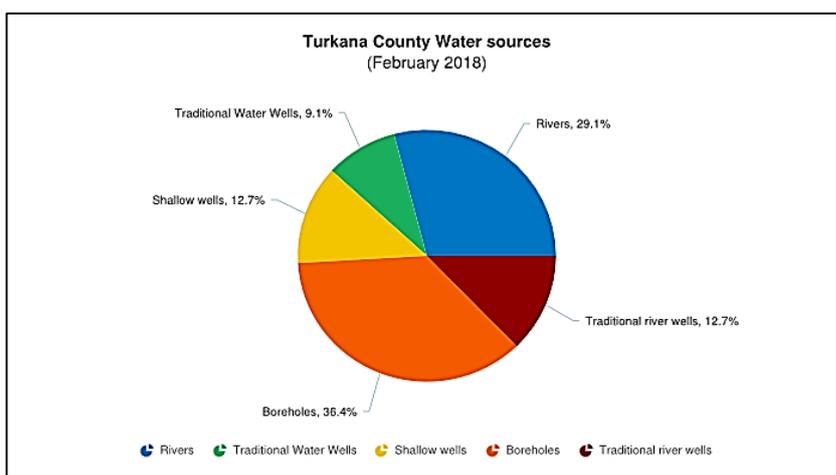
### 2.1.3 Browse

- The condition of browse remains fair but tending to poor across all livelihood zones and in comparison to the level at such a time in a normal year, the current level rates below. The dry weather conditions witnessed across the county accelerated browse deterioration during the month under review.
- Further deterioration is forecasted across March but the available browse shall suffice over that period in anticipation of regeneration with the onset of the long rains.
- Major deterrents to browse accessibility during the month under review included insecurity along some sites such as Turkana East, Kibish and Todonyang.
- No significant variation in terms of browse quality and quantity was observed across all the livelihood zones.

## 2.2 WATER RESOURCE

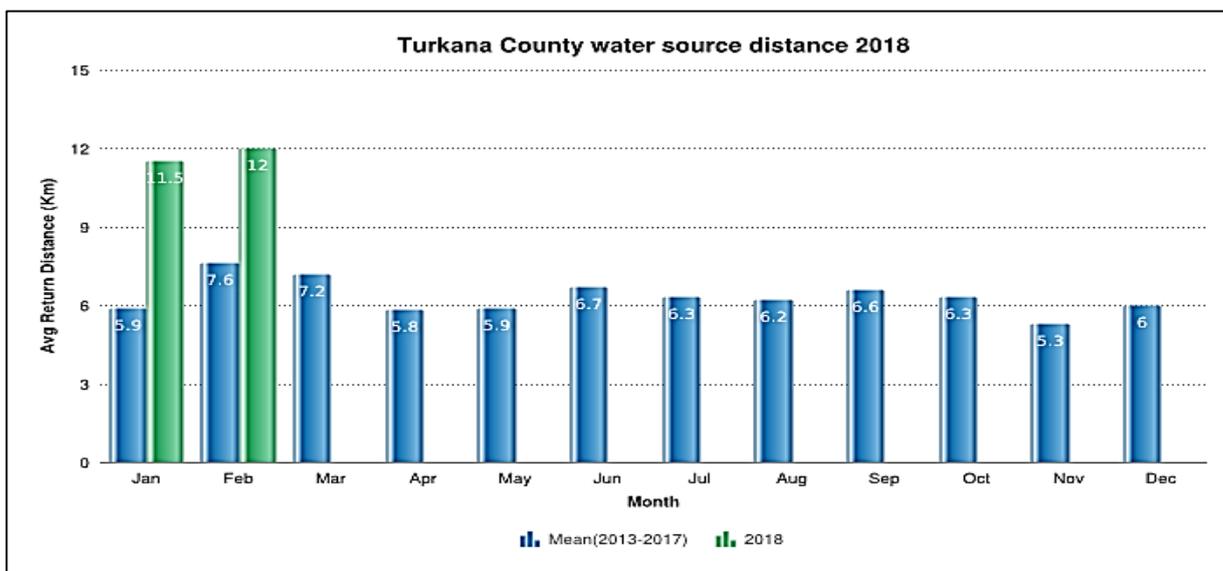
### 2.2.1 Sources

- During the month household water needs were met mainly through use of boreholes, rivers and traditional river wells. Significant proportion of the households (36%) reported to be using boreholes with 29% resorting to use of rivers.
- In comparison to January, water situation in open sources dropped due to absence of rainfall during the month under review.
- The aforementioned water sources are the main sources normally at such a time of the year.



### 2.2.2 Household access and Utilization

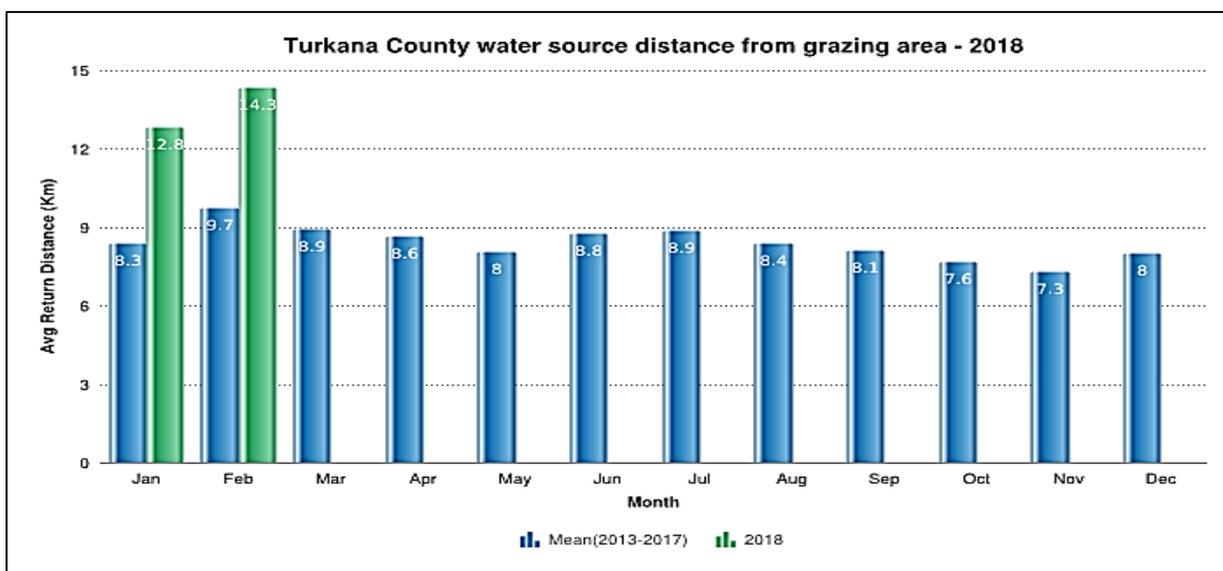
- Currently the household return distance to water source stands at 12km and remains unchanged from that recorded during the previous month. The current distance is significantly higher than the long term average distance for the month by fifty seven percent.
- During the month under review, trekking distance to water source was longer in the Pastoral zone than the other two zones (Agro Pastoral and Fisheries).
- Average waiting time at water source across the Pastoral and Agro Pastoral zone was 45-60 minutes in comparison to the normal of 30 minutes.
- Household water consumption in the Fisheries, Agro Pastoral and Pastoral livelihood zones currently averages 25litres, 20litres and 15litres per person per day respectively.



- Water at source is cost free whereas at water kiosks in major centres across the county it costs Ksh.5 per 20litre jerrican and this is within the normal range.

### 2.2.3 Livestock access

- Return distance from grazing areas to water source for livestock increased slightly by one kilometre from the 13km recorded in January. Compared to the long term average trekking distance, the current distance is above by forty four percent.
- Animals in the Pastoral livelihood zone covered a longer distance to access water than those in the Agro Pastoral livelihood zone during the month under review.



- The increase in trekking distance of livestock from grazing areas to main water sources could be attributed to depletion of pasture and browse in areas in close proximity to water sources.
- The frequency of watering livestock was highest in Agro-Pastoral livelihood zone and lowest in pastoral zone but averagely ranged at 3-4 times in a week.

## 3.0 PRODUCTION INDICATORS

### 3.1 LIVESTOCK PRODUCTION

#### 3.1.1 Livestock Body Condition

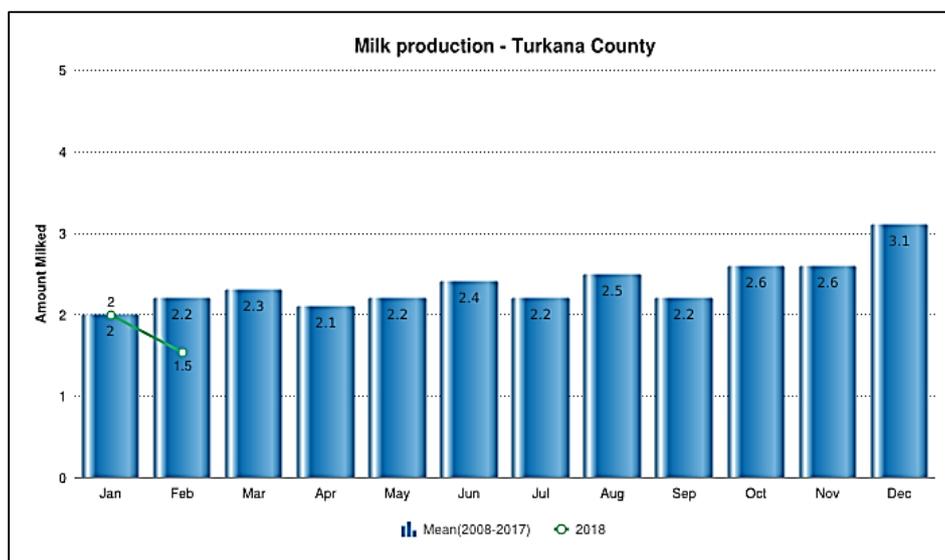
- The body condition for all livestock species across the two livelihood zones was fair but tending to poor in some sites such as Nanam and Kalapata.
- The body condition is anticipated to deteriorate further across March with some improvement likely to be witnessed over the long rains period if sufficient regeneration takes place.
- In comparison to similar periods during previous years, the body condition of all species is below normal and this is heavily attributed to pasture depletion across a number of sites especially along the Pastoral zone necessitating animals to trek for longer distances in search of pasture and water.

#### 3.1.2 Livestock Diseases

- During the month, notifiable diseases such as Lumpy Skin Disease (LSD) and endemic ones including Contagious Caprine Pleural Pneumonia (CCPP) and Contagious Bovine Pleural Pneumonia were reported along the Pastoral zones such as Nanam, Lokitaung and Lokori.

#### 3.1.3 Milk Production

- Quantity of milk produced dropped slightly to an average of 1.5 litres per household per day from the 2litres reported in January.
- In comparison to the long term average of milk produced for the month, the current household milk production level is lower by thirty two percent.
- Reduced size of milking herd, low calving rate and poor rangeland conditions such as pasture and water accessibility over longer distances were the major drivers behind the observed negative trend in milk production.



## 3.2 RAIN-FED CROP PRODUCTION

### 3.2.1 Stage and Condition of food Crops

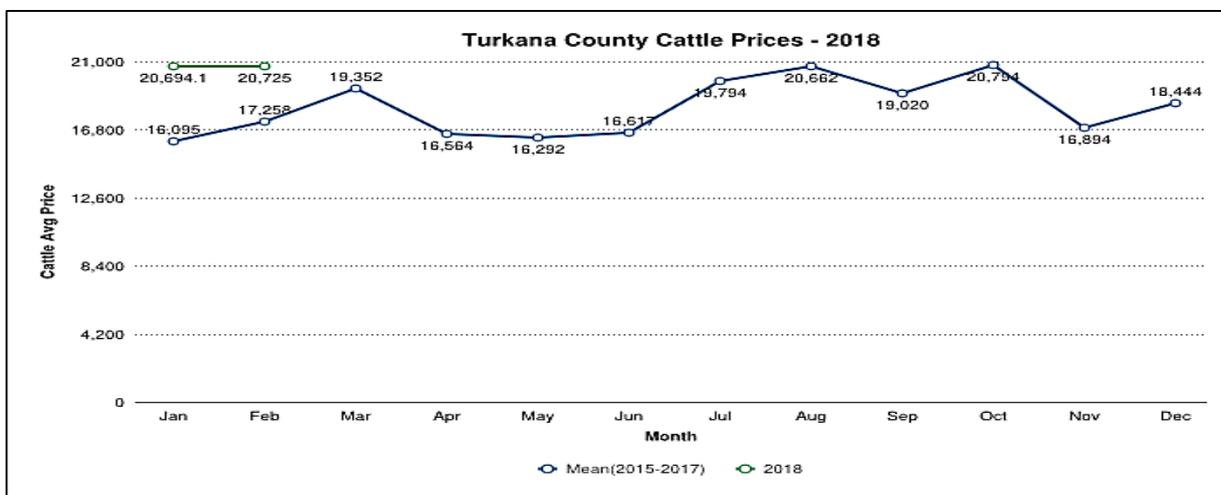
- Maize, cowpeas and sorghum are the main crops grown by farmers along the Agro Pastoral livelihood zone.
- However, during the month under review there were no crop production activities on going across the county.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

#### 4.1.1 Cattle Prices

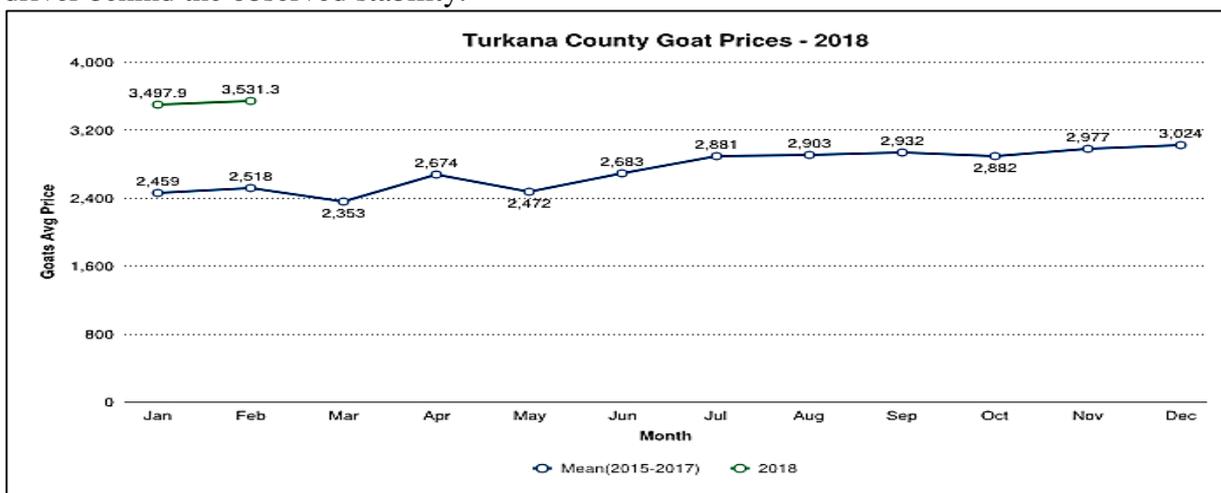
- During the month under review, stability in the market price of Cattle was observed with a 4-year old medium sized bull being sold at Ksh. 20,725.



- The observed stability could be attributed to lack of push factors such as pasture and water availability that could influence the price upwards owing to improved body condition.
- Agro-pastoral livelihood zone recorded the highest cattle price (Ksh 20,800) while the Pastoral livelihood zone recorded the lowest price of Ksh 20,690.
- Compared to the short term average price for the month, the above reported price is higher by twenty percent.

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

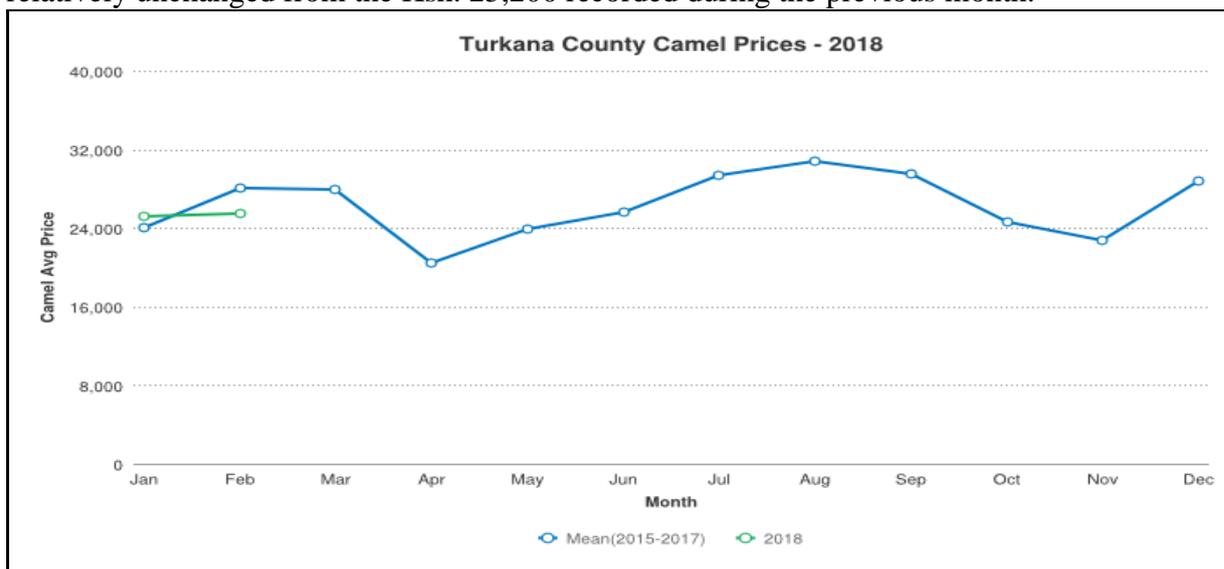
- The trading price of goat remained stable in relation to the previous month with a 2-year old medium sized goat being sold at Ksh. 3,530.
- A stable body condition influenced by availability of browse albeit of poor quality was the major driver behind the observed stability.



- The highest goat price (Kshs 3,530) was recorded in Agro-Pastoral livelihood zone while Fisheries zone recorded the lowest price (Kshs 3,500).
- Notably, the prevailing price exceeds the short term average price for the month by forty percent.

#### 4.1.4 Camel Prices

- During the month, a 4-year old camel was sold at Ksh. 25,420 and thus the price remained relatively unchanged from the Ksh. 25,200 recorded during the previous month.

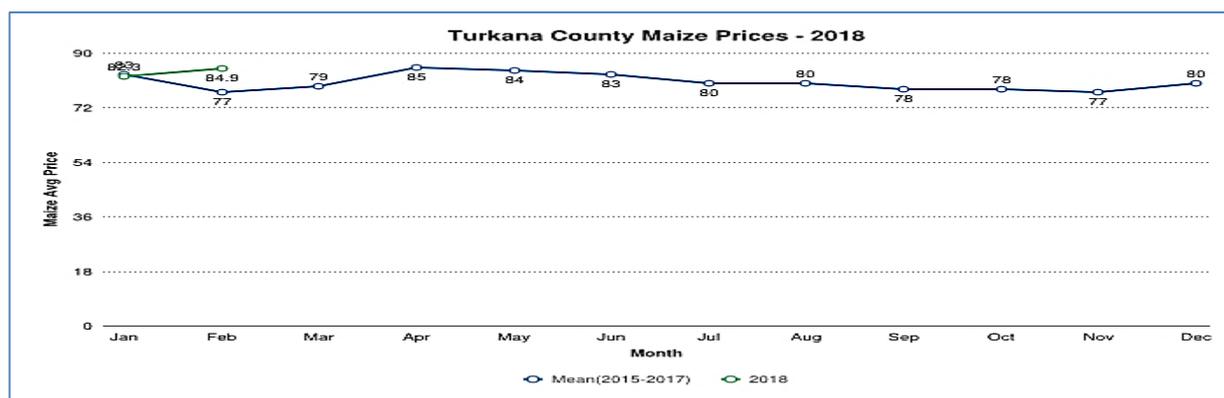


- Camel maintained a fair body condition across all livelihood zones in the county hence the observed stability in market price.
- The highest camel price (Ksh. 25,500) was recorded in Pastoral livelihood zone while the lowest price was recorded in the Agro-Pastoral livelihood zone.
- In comparison to the short term average price for the month, the current market price of Camel is lower by ten percent.

## 4.2 CROP PRICES

### 4.2.1 Maize

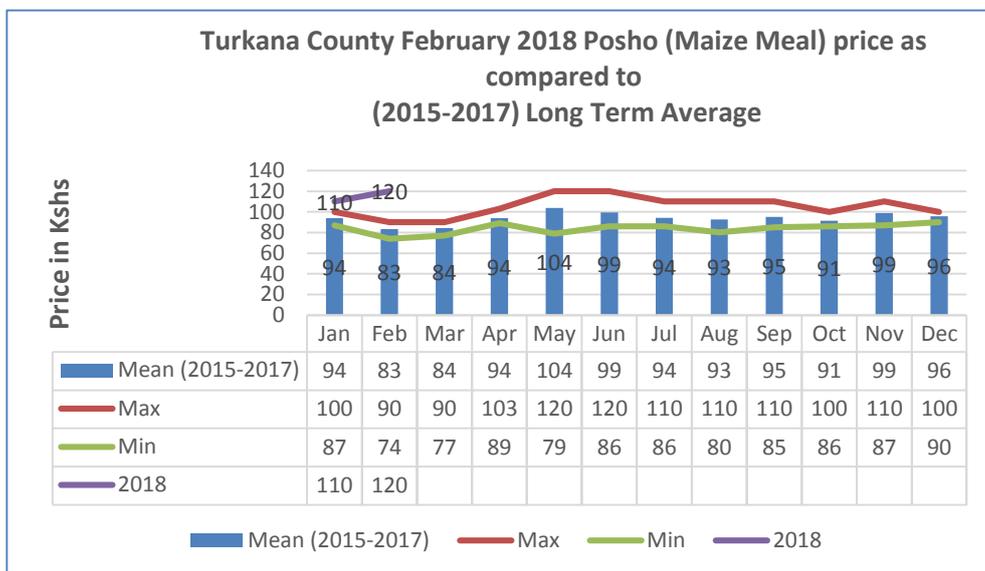
- Maize price remained stable in relation to the previous month with a kilogram retailing at Ksh.85 during the month under review.
- Compared to the short term average price for the month, the current price is higher by ten percent.



- Variation was observed across the livelihood zones with the price highest in the Fisheries livelihood zone (Ksh. 100 per kg) in comparison to that in the Agro-Pastoral zone (Ksh.80 per kg) due to its dependence on the latter zone for its supplies.
- Over-reliance on the external market including Trans Nzoia for Maize supplies coupled with dwindling stocks for alternatives such as Sorghum within the County are the push factors behind the rise in price.

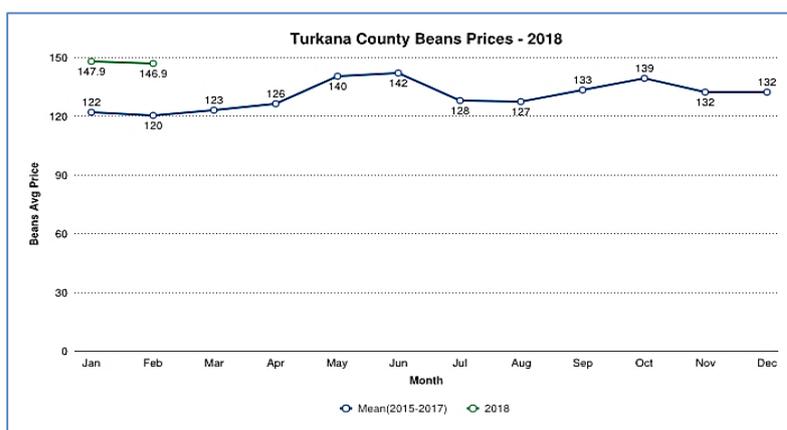
### 4.2.2 Posho (Maize Meal)

- The price of Posho (Maize Meal) increased from the Ksh.110 per kilogram reported in January to Ksh.120 per kilogram in February.
- The above rise could be attributed to scarcity of maize especially along the Pastoral zone that prompted an increase in the price.



- The current Posho price is higher than the three year average price for the month by 45 percent.

### 4.2.3 Beans

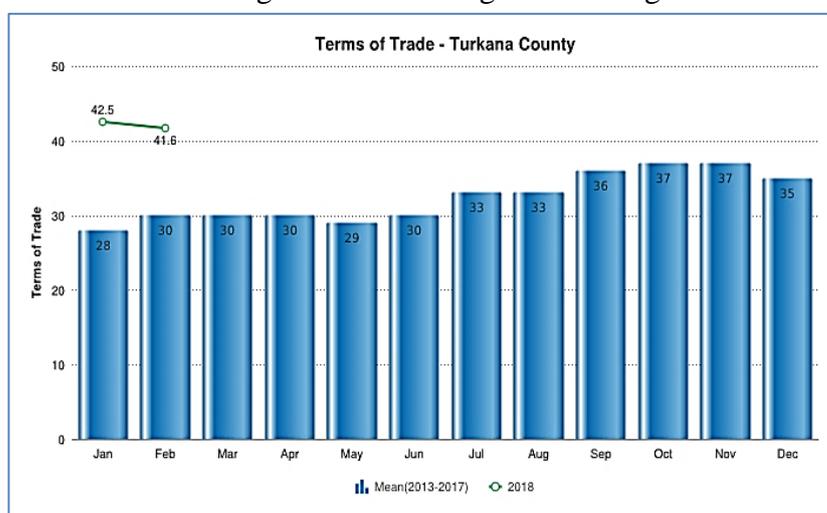


- The price of beans remained stable during the month under review with a kilogram retailing at Ksh. 147. The stability could be attributed to a constant flow of beans into the County from the external market.
- Fisheries zone recorded the highest beans price (Ksh 150) and Agro-Pastoral zone recorded the lowest price of Ksh 143.
- Compared to the short term average price for the month, the

current price is higher by twenty two percent.

### 4.3 Livestock Price Ratio/Terms of Trade

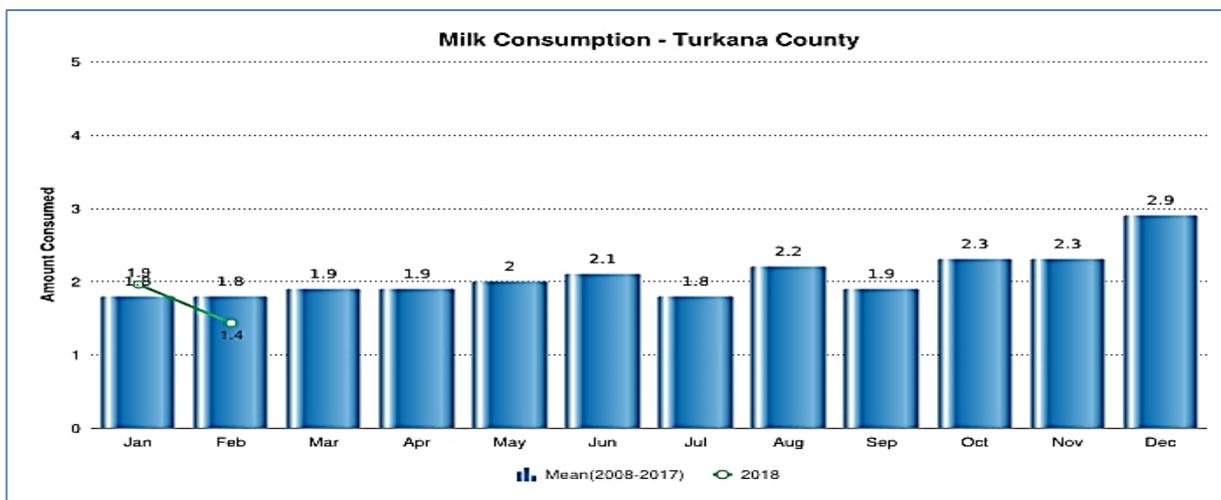
- The ToT for the month under review was 42 hence remained unchanged from that recorded during the previous month. The ToT for the month was higher than the long term average ToT for the month by thirty eight percent.
- The above stability could be attributed to the fact that neither goat price nor maize price adjusted significantly from the price reported in January.
- The ToT is projected to deteriorate slightly across March before assuming an upward trend with improved rangeland conditions.



## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 MILK CONSUMPTION

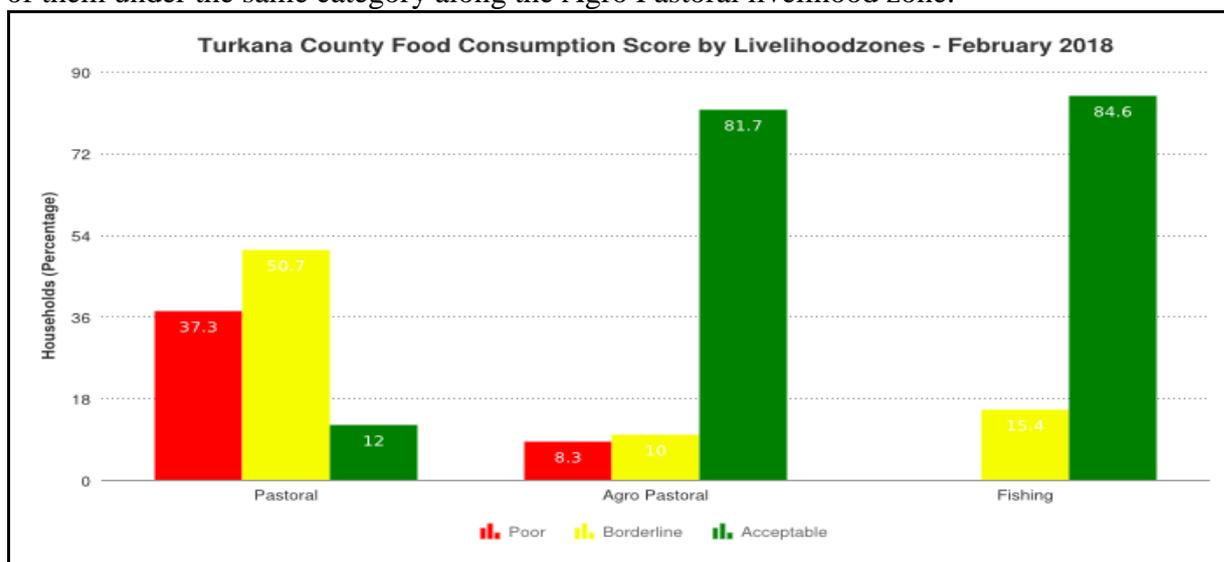
- The amount of milk consumed per household per day during the month under review dropped slightly to 1.4litres from the 1.9litres recorded in January.



- The above decrease could be ascribed to reduced milk availability at household level for consumption arising from a drop in milk production owing to low calving rate that was witnessed during the month under review.
- Noteworthy, the current consumption level is lower than the normal consumption level at such a time of the year by twenty three percent.

### 5.2 FOOD CONSUMPTION SCORE (FCS)

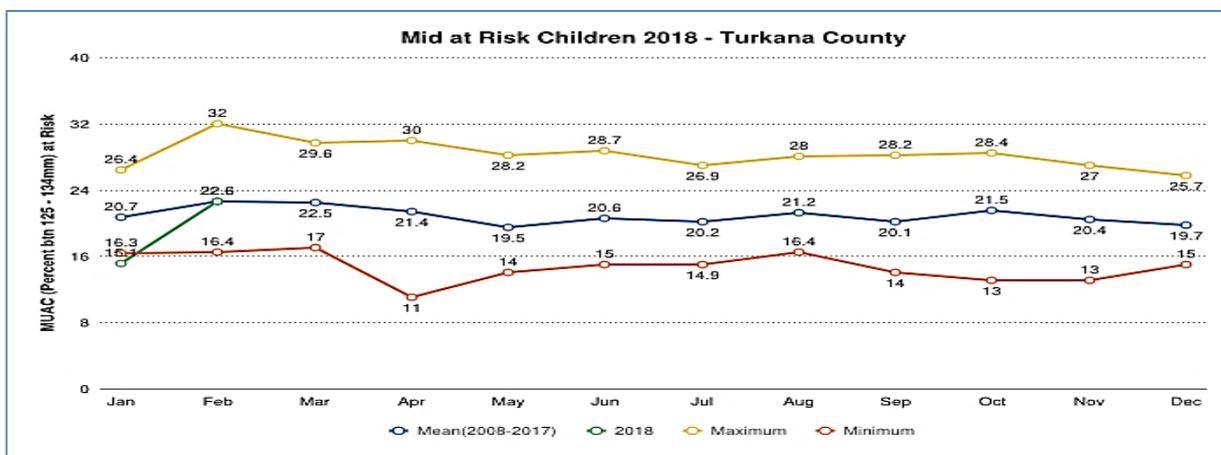
- Thirty eight percent of sampled households were categorized as having an acceptable food consumption score with thirty six percent and twenty six percent of them falling under the borderline and poor FCS category.
- Stability in food consumption was observed as evidenced by the unchanged FCS that stood at 33 for the entire County.
- Noticeable variation was observed across the livelihood zones with for instance, 37.3% of households in the Pastoral zone falling under the poor FCS category in comparison to only 8.3% of them under the same category along the Agro Pastoral livelihood zone.



## 5.3 HEALTH AND NUTRITION STATUS

### 5.3.1 Nutrition Status

- During the month under review, 65 percent of the sampled children were males while 35 percent were females.
- Proportion of children rated being at risk of malnutrition during the month under review was 23 and that was an increase from that reported in January



- The current proportion of children at risk of malnutrition is at par with the long term average for the month under review.
- Reduced milk consumption coupled with absence of integrated medical outreaches especially in conflict hotspots were the factors contributing to the rise in number of under-fives falling outside the normal range of children at risk of malnutrition.

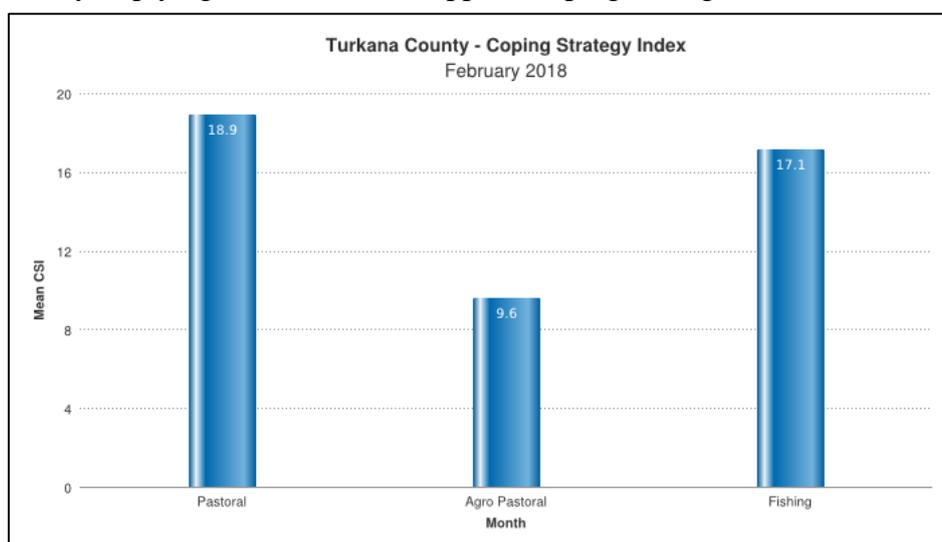
### 5.3.2 Health

- Prevalent ailments reported among the sampled children during the month under review were Malaria and diarrhoea but no major disease outbreak was reported.

## 5.4 COPING STRATEGY

### 5.4.1 Coping Strategy Index (CSI)

- The Coping Strategy Index (CSI) for the month (16.34) remained relatively stable in comparison to the one reported in January implying that households applied coping strategies similar to those applied during the previous month.
- Pastoral CSI remained stable at 19 but that of Agro Pastoral zone adjusted downwards to 10.
- Reliance on less preferred/less expensive food and borrowing were the most commonly applied coping strategies.



## 6.0 CURRENT INTERVENTION MEASURES (ACTION)

### 6.1 FOOD

- **Welt Hunger Hilfe:** Blanket supplementary feeding programme (bsfp) to decrease prevalence of malnutrition in Turkana West targeting Under-fives- 42,699 (85.7%) and PLWs- 9,340 (71.2%).
- **World Vision:** The Linda Lishe bora project (Protection ration project) which began during the 3rd cycle of BSFP distribution is now in the 2nd phase of its implementation. The beneficiaries were given the second and last cash allocation of 8000 during the month of February. This money is meant to boost the food security of the households with beneficiaries who are malnourished.
- **World Vision:** Distributed 378 MT of food (Sorghum, Rice, Split peas, Veg.oil) to 6666 households in Turkana East, South and West Sub Counties.

### 6.2 NON-FOOD

#### Health

- **Save the Children:** Round 22 of integrated outreaches in Turkana North and Kibish and round 23 Turkana Central was completed. Hygiene promotion was conducted in Kerio and the numbers reached for Kerio 847 (Females- 485, Males-122, Girls- 146, Boys -94).
- **World Vision:** Nutrition emergency response project supported 30 integrated health and nutrition outreaches in Turkana East and South sub-counties through which a total of 3015 (1486 Male, 1529 Female) children aged 6-59 months were screened for malnutrition where 40 children (6-59 months) with severe acute malnutrition (SAM) were admitted to the out-patient therapeutic program (OTP) and 171 children (6-59 months) with moderate acute malnutrition (MAM) were admitted to supplementary feeding program (SFP) for treatment of malnutrition

#### Cash Transfer

- **Save the Children:** Cash was transferred to 3,000 households in Turkana North, Kibish and Kerio delta ward with each household receiving a monthly cash grant of Kshs. 4,000. A total of 1,807 cash transfer target households were issued with new HSNP ATM cards to enable them access cash from Equity bank pay agents.

#### Water

- **Lokado:** Water trucking to abaat (3500 beneficiaries), Nadwat (3822 beneficiaries), Nalapatui (5142 beneficiaries), Lolupe (9246 beneficiaries), Lokwamor (3411 beneficiaries), Tulabalany (9720 beneficiaries), Kanagateiberu (1812 beneficiaries), Kangitesiroi (1842 beneficiaries), Lotaka (1223 beneficiaries) and Kangura (1308 beneficiaries).

#### Livestock

- **VSF Germany:** Under the F.A.O Funded Project; 38,756 livestock were in treated in Turkana North and west, 239 households in the same Sub Counties received 1480(50kg) bags of ranch cubes , 1028 shoats were destocked at Ksh. 3,000 per shoat in Lokore,Nanam, Ngeuu, Lokangae, Nasinyono and Namon with 1237 beneficiaries receiving meat in the same areas.
- **CRS:** In partnership with the department of veterinary services, CRS is doing mass vaccination and deworming exercise in Kibish sub County. The exercise is targeting 2298 households.
- **Oxfam:** Completed final cash transfer of Ksh.4000 per beneficiary targeting 3000 households under DEC Phase 2.

## 7.0 EMERGING ISSUES

### 7.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT

- There was no notable incident of insecurity or conflict reported during the month under review.

### 7.2 MIGRATION

- During the month under analysis, there was no migration taking place into or outside the County.

### 7.3 FOOD SECURITY PROGNOSIS

- Livestock body condition is expected to deteriorate slightly over the next one month due to limited access to quality pasture within a limited trekking distance from water sources. Consequently, a downward shift in livestock productivity (milk production level and market return value) will be the likely scenario across that period.
- Limited agricultural activity especially along the Agro Pastoral zone is likely to be witnessed and as a consequence household food per capita shall remain outside the desirable level owing to depletion of minimal stocks from the short rains season.
- Pastoral household purchasing power is likely to be compromised as a result of the deteriorating terms of trade and hence malnutrition rates are likely to go up since access to quality food will be highly constrained.
- Generally, the food insecurity in the county is projected to remain within the stress band and thus proper market functionality will suffice in bridging food gaps that may arise over that period.

## 8.0 RECOMMENDATIONS

- **Veterinary:** Improve animal health by conducting mass vaccination in areas such as Nanam, Lokitaung and Lokori where incidents of LSD, CCPP and CBPP have been reported while upscaling disease surveillance efforts along the borders of the county.
- **Water:** Enhance water availability for livestock and humans during scarcities through strategic repositioning of fast moving spare parts while equipping contingency boreholes that have a high yielding capacity.
- **Health and Nutrition:** Provision of health education to communities on water quality improvement to minimize the risk of water borne diseases such as cholera outbreak while expanding the reach of on-going integrated health outreaches to all hotspots within the county.