

# National Drought Management Authority MARSABIT COUNTY DROUGHT EARLY WARNING BULLETIN FOR JULY 2019



A Vision 2030 Flagship Project



## EW PHASE: ALARM



### Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Alarm	Deteriorating
Pastoral All species	Alarm	Deteriorating
Fisherfolk/ Casual labour /Petty Trading	Alarm	Deteriorating
County	Alarm	Deteriorating
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	48	80 -120
VCI-3Month	23.39	>35
Forage condition	Fair-Poor	Good
Production indicators	Value	Normal
Livestock Body Condition	Fair	Good
Milk Production	0.75	>2.0Litres
Livestock Migration Pattern	Unusual	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	75	>80
Milk Consumption	0.5	>1.4Litre
Return distance to water	7.9	0.0-3.5Km
Cost of water	0-5	<Ksh.5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	18.5	0.0-18.1
Coping Strategy Index	18.15	<20
Food Consumption score	34.65	>35

### Drought Situation & EW Phase Classification

#### Biophysical Indicators

**Rainfall:** Offseason rains were received in few pockets across the County. Offseason rains were poorly distributed both temporally and spatially.

**Vegetation condition:** The 3-months Vegetation Condition Index for the month of July was 23.39 hence fell in the moderate vegetation deficit band and below normal when compared to similar periods. Forage condition was fair-poor across the livelihood zones.

#### Socio Economic Indicators (Impact Indicators)

**Production indicators:** Livestock body condition was fair for all the livestock species across all livelihood zones with exception of cattle which depicted fair-poor body condition. Milk production was 0.75Litres/household/day which was below normal. No livestock deaths were reported due to drought however mass slaughter of calves was witnessed across the County. There was total failure of maize and beans.

**Access indicators:** Household and livestock trekking distances to water sources more than doubled and 95percent of the sub-surface water sources dried up. Milk consumption was 0.5Litres hence below normal. Terms of trade was near normal due to stable goat and maize prices. Markets operations below equilibrium as traded volumes and prices of livestock considerably declined.

**Utilization indicators:** Nutritional status of children below the age of five years were above the normal thresholds with GAM rates Laisamis sub-county more than doubled the emergency threshold. Food consumption score was in the borderline band while 57percent of the households adopted stressed reduced food consumption based coping strategies.

<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

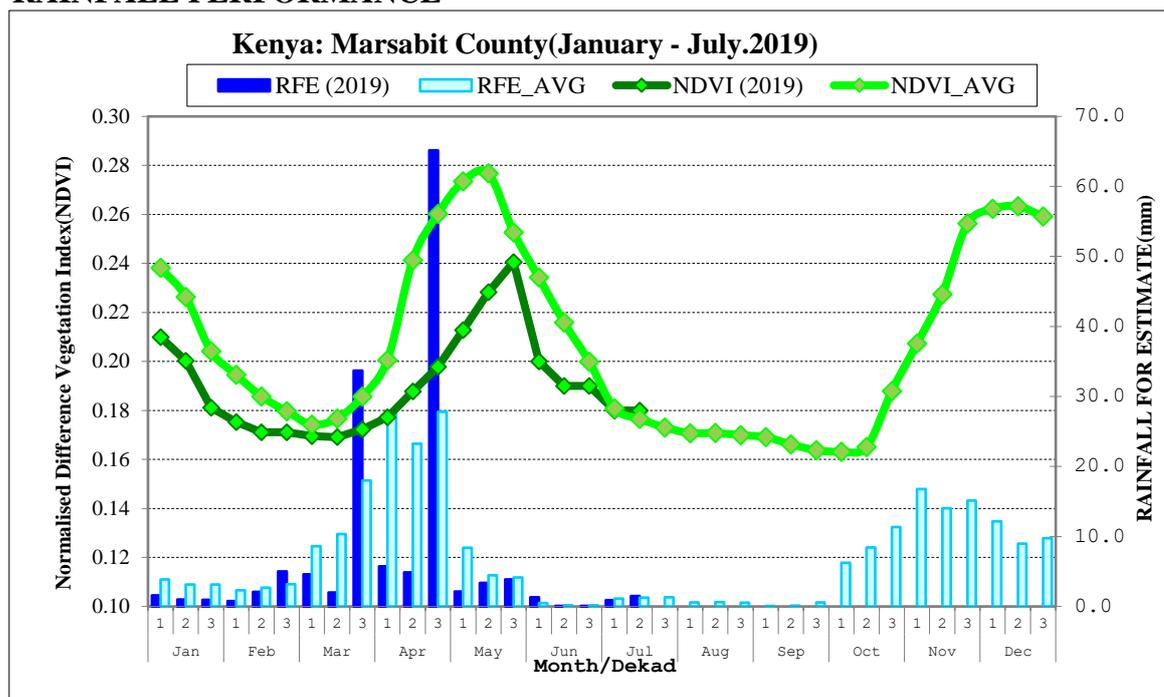


Figure 1: Dekadal Rainfall(mm) and NDVI values compared to the Long Term Average

Source: WFP-VAM, CHIRPS/MODIS

- From the figure 1 shown above, current dekadal amounts (rainfall for estimate) for the first dekad were normal when compared to their corresponding long term dekadal averages.
- Similarly, Normalized Difference Vegetation Index (NDVI) for the first and second dekads were normal when compared to their respective long term dekadal NDVI values.

### 1.2 Amounts received

- During the month under review, off-season rains were received in a few pockets across the County. 12.5mm of rainfall was recorded in Moyale rainfall station for a period of 2 rainy days whereas Marsabit Mountain exhibited traced rainfall amounts totalling to 2.9mm. Northwest parts of Moyale, Northern parts of Laisamis and Northwest parts of North Horr sub-counties also received some off-season light showers in the month under review.

### 1.3 Spatial and temporal distribution

- Distribution of off-season rains was poor in time and space and was characterized by some showers in a few pockets across the County. In Laisamis sub-county (Loyangalani, Mt.Kulal, Sarima, Moite, Gas and Mt.Kulal) received off-season rains in 1-2 rainy days. Illeret, Sarimo, Ushunur, Darade, Sibilo, Balesaru and areas along the Kenya/Ethiopia border near Dukana and Bulluk in North Horr sub-county received slightly enhanced off-season rains in 2-3 days. In Moyale sub-county (Sololo and Uran wards) received two days of torrential rainfall amounts and one day of light showers.
- However, most parts of the County didn't receive rains in the month under review thus generally remained drier. When compared based on the livelihood zones, Agro-pastoral of Moyale sub-county received slightly enhanced rains while agro-pastoral areas of Saku sub-county (Marsabit Mountain) received light showers. Most pastoral areas across the County generally remained drier in the month under review.

## 1.5 CUMULATIVE RAINFALL AMOUNTS

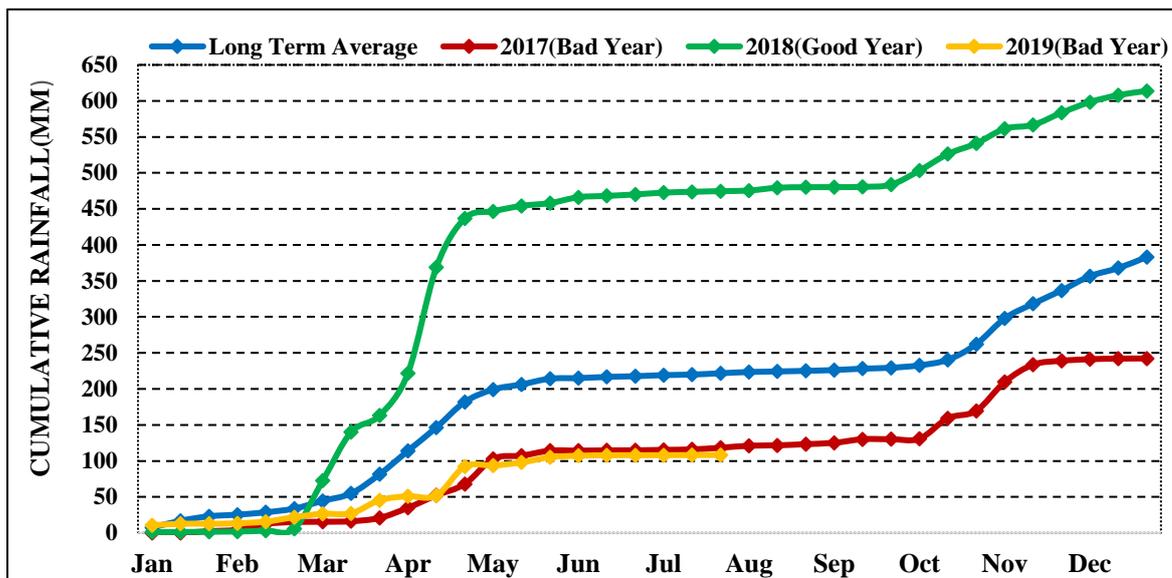


Figure 2: Marsabit County Cumulative Rainfall Amounts(mm)

- From the figure (2) shown above, current cumulative rains are 48percent of the long-term cumulative rains. The current cumulative rainfall amounts are similar to the cumulative rains of 2017 which was a bad year hence an illustration of cumulative rainfall deficits.
- As the long dry spell and drier than average rainfall conditions expected to continue, cumulative rainfall amounts are expected to stagnate until the expected onset of the short rains in the third dekad of October.

## 2.0 IMPACTS ON VEGETATION AND WATER

### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

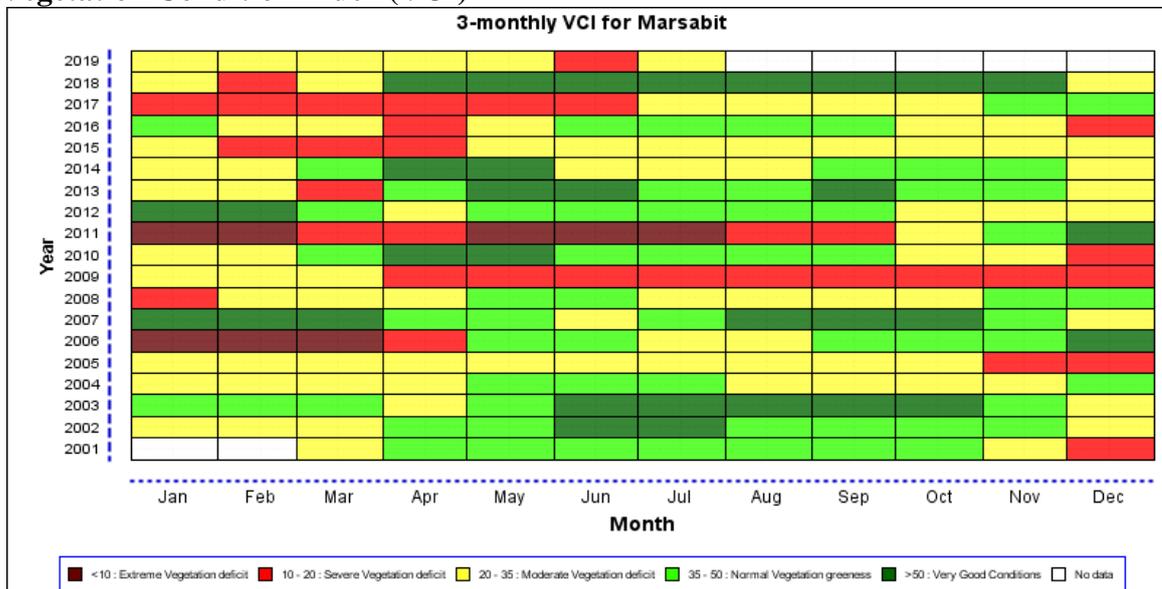


Figure 3: Vegetation Condition Index Across the County

- From the matrix shown above, the 3-months vegetation index for the month under review was 23.39 hence fell in the moderate vegetation deficit band and if the next month remains drier than normal then it will slide to severe vegetation deficit band in the month of August. The off-season rains received in a few isolated areas across the County had no effect on vegetation cover.

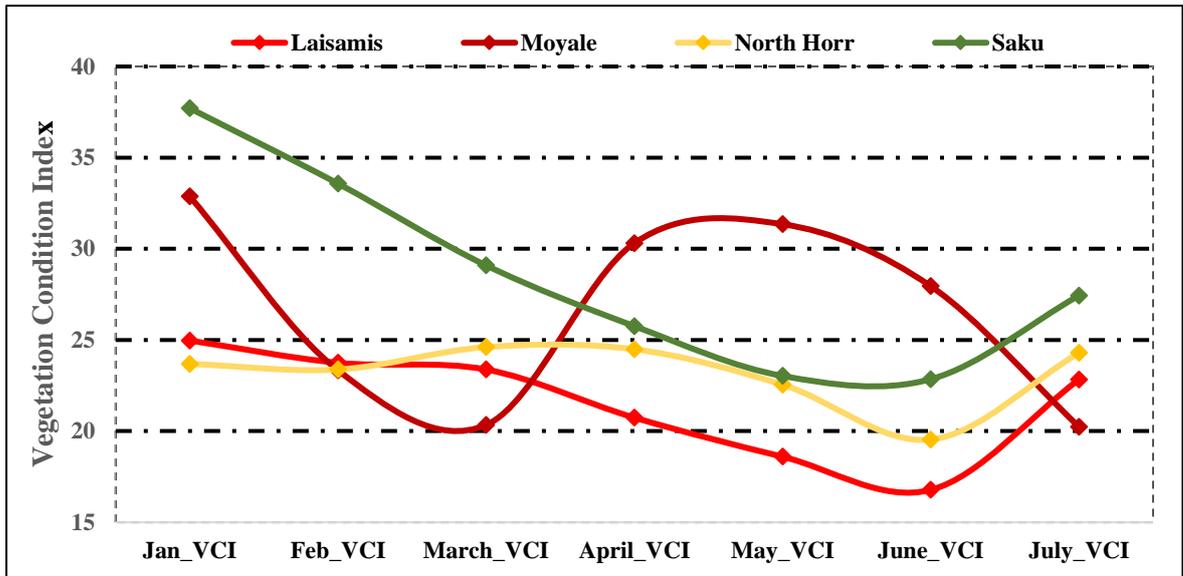


Figure 5:Vegetation Condition Index across sub-counties

- From figure (4) shown above, Saku sub-county illustrated slightly better vegetation condition index than other sub-counties attributed while Moyale sub-county registered significant drop in vegetation condition index when compared to the previous month.
- Saku, North Horr, Laisamis and Moyale sub-counties posted a 3-months vegetation condition index of 27.44, 24.29, 22.83 and 20.24 respectively thus remained in the moderate vegetation deficit band.
- Moderate vegetation deficit was occasioned by failure of the long rains which was characterized by below normal cumulative rainfall amounts thus marginal causality on vegetation cover which didn't sufficiently revitalize forage condition in all livelihood zones.

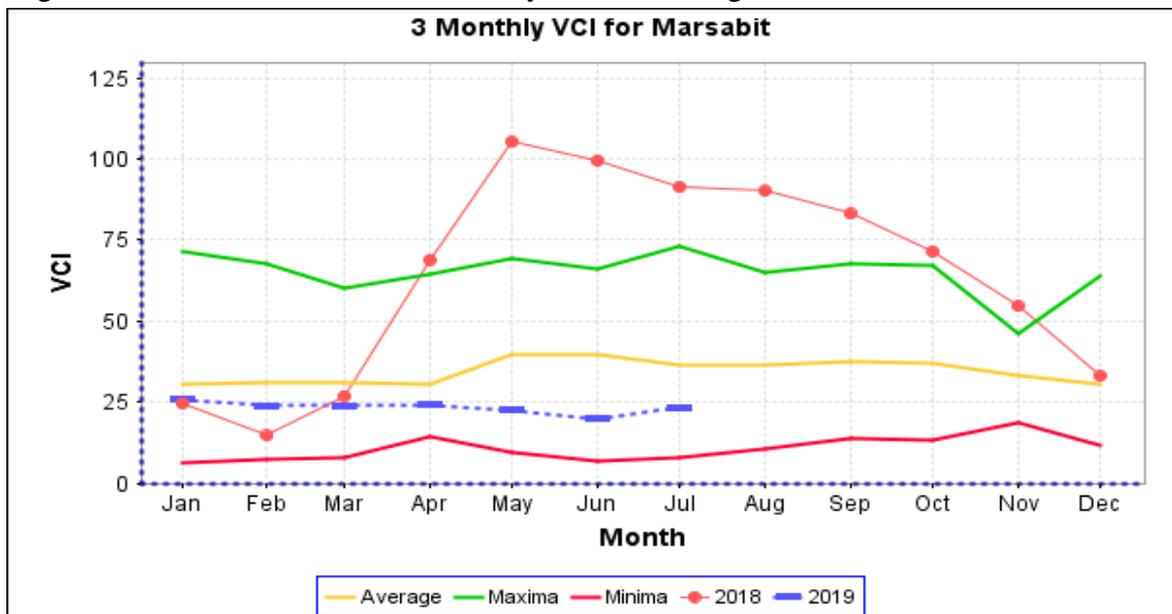


Figure 5: Vegetation Condition Index Trends across the County

- The figure shown above compares July 2019 vegetation condition index to July 2018, long term average and also illustrates maximum and minimum VCI values ever recorded.
- From the figure shown above, vegetation condition index for the month under review was considerably below the July 2018 VCI value which was at an all-time high. When compared to the long term average, the current vegetation condition index was below normal for seven

successive months. If the long dry spell progresses, vegetation condition index will significantly decline and slide to the severe vegetation deficit band in the next one month.

### 2.1.2 Pasture

- Pasture is currently depleted in all the wet season grazing areas in pastoral and agropastoral livelihood zones except for a few areas which are traditionally dry season grazing.
- However, pasture was fair in the pastoral areas of South Horr, Mt.Kulal and Logologo in Laisamis sub-county, Dara Bulluk, Bares Saru and Huri-Hills in North Horr sub-county , few pockets of Sololo and Uran wards in Moyale sub-county. Available pasture in the aforementioned dry season grazing areas was induced by the spill-over effect of the remarkably good long rains of 2018.
- Pasture was also available along the porous borders of Kenya and Ethiopia (Dukana, Illeret, Darade, Ellebor and Eledimtu). However, resource-based conflicts inhibited access to good pasture in the above the fall back areas. Total crop failure was witnessed in the agro pastoral livelihood zones thus no existence of crop residues as part of livestock feeds. Off-season rains received in few pockets across the County didn't have meaningful impact on pasture generation.
- Where pasture is available, it will last for the next one and half months against the normal two-three months attributed to seasonal cumulative rainfall shortfalls and massive livestock migration. Additionally, as livestock migration intensifies pasture will be depleted in the dry season grazing areas and likelihood occurrence of resource-based conflicts.

### 2.1.3 Browse

- Browse condition was fair in most parts of Moyale, Laisamis and Saku sub-counties with exception of North Horr sub-county which had generally poor browse. Off-season rains received in isolated areas across the County didn't enhance browse generation.
- Emergence of herbaceous vegetation across the County especially calotropis procerca coupled with bush encroachment.
- Quality and quantity of browse is fair against good during similar periods. Browse is expected to last for the next 2months against the normal 4months in the agro-pastoral areas whereas in the pastoral livelihood zone browse is expected to last for the next one and half months against the normal of 3 months.

## 2.2 WATER RESOURCE

### 2.2.1 Sources

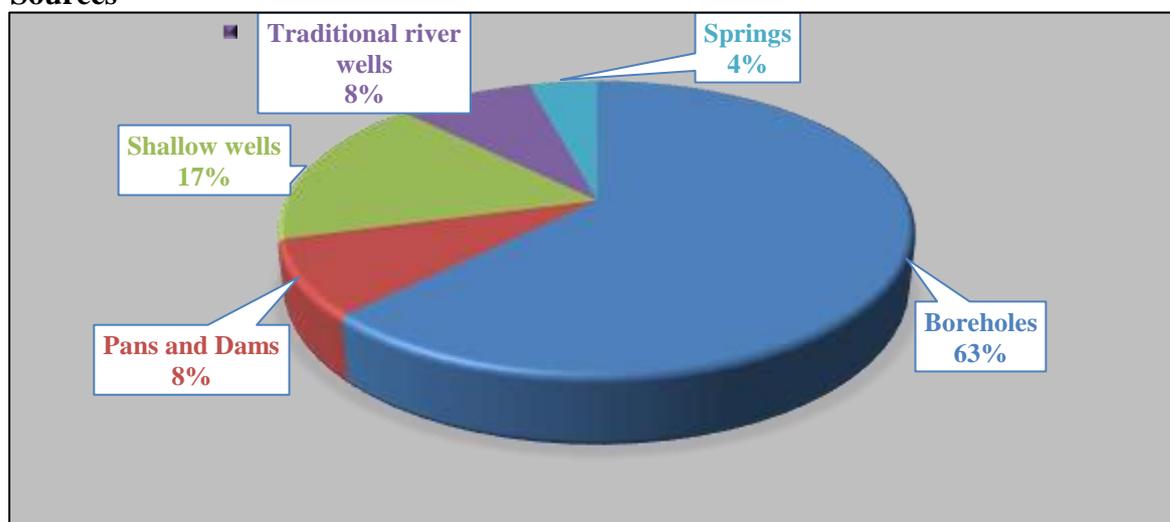


Figure 6: Major water sources across the livelihood zones

- From figure 6 shown above, borehole was the major water source employed by the majority of households across the livelihood zones at 65percent which is unusual when compared to similar periods. At this time of the year, water pan is always the main source of water.
- Other water sources utilized by the communities were shallow wells, water pans, traditional river wells and springs at 17percent, 8percent, 8percent and 4percent respectively.
- 95percent of sub-surface water sources have dried up and the remaining 5% will last for the next one month due to high evapotranspiration and massive livestock migration
- 20percent of the shallow wells are currently functional and are likely to dry up in the next 1 month. Some few boreholes in Moyale and Laisamis sub-counties have broken down and water trucking is currently ongoing in areas as illustrated in the table below.

Sub-County	Boreholes that have broken down	Issues raised	Areas Water trucking being undertaken
Moyale	Misa	Genset has power related challenges to drive the pump (efficiency has gone down. The storage tank was built at a higher altitude and pumping water up the gradient has been a challenge	Illadu,Mayie,Kukub,Aria,Damballafachana,Adadi Odda, Bori Junction,, Funannyata, Godhe, Antut,Laqi, Osmole,Funanqumbi,Ellebor, Elledimtu, GadaKorma, Somare
	Dabel II	Genset has completely broken down	
	Nana II	Genset is broken down(completely worn out)	
	Mansille I	Genset is broken down(completely worn out)	
	Qate	Genset completely worn out	
	Rawana II	Genset completely worn out	
Laisamis	Sori-Adhi I	Borehole experiences frequent breakdown because low efficiency of the genset	Namarei,Lekuchula,Lependera and Kambinye
	Merille I	The existing genset is old. Frequent break down is reported often	
	Ririma	Frequency of breakdown is high due to aging genset	
	Civicon I and II(Gatab)	Motor short circuited for both boreholes	
North Horr	All boreholes functional	Not applicable	North Horr Ward (Kob Dertu,Malabot/Gorich), Maikona Ward(Kalesa, Yaa Sharbana,Qatamur), Dukana Ward(Elhadi) ,Turbi/Bubisa Ward(Tigo Area).
Saku	All boreholes functional	Not applicable	Sagante/Jaldesa Ward-Boru Haro, Gar Qarsa, Qachacha,Manyatta Jillo,Jillo Schemes,Wario Duba,Kubi Dibayu,Galgallo Halake,Golole 1,Golole 2,Huka Adhi,Kukub Tiro,Dub Goba,Wario Guyo,Malka Lakole, Kubibagasa

## 2.2.2 Household access and Utilization

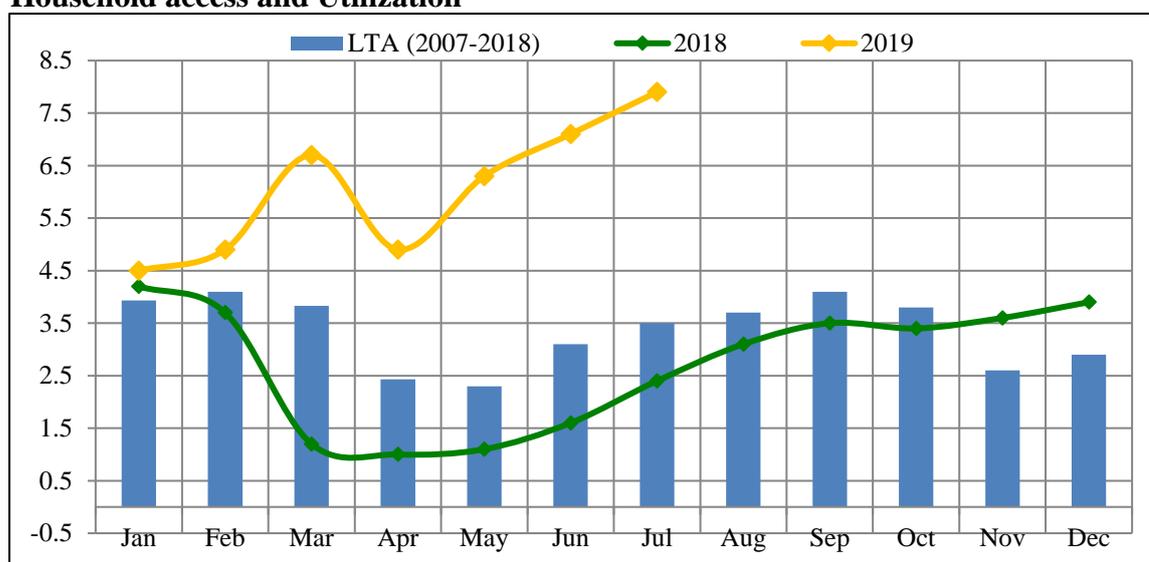


Figure 7: Current household return water distance(km) compared to Long Term Average distances(km)

- From (Figure 7) shown above, return household water distances to the main water sources was 7.9km in the month under review which exhibited an increase when compared to previous months' household water distances of 7.9km.
- When compared to similar periods, the current household water distance has more than doubled the normal threshold.
- However, in the pastoral areas of North Horr sub-county (Tuluqarsa, Diid Golla, Kubiadhi, Garwole, Arara, Malabot, Kalesa, Qatamur, Anchacha, Tigo, Shankuru, Hurri Hills), Moyale sub-county (Guyotimo, Basil, Elledimtu, Qolob, Antut, Adadi, Mayie, Kukub, Illadu, Mansille, Rawana, Misa, Qate); Laisamis sub-county (Civicon, Lependera, Namarei, Lekuchula, Kambinye) in Laisamis sub-county where households trekked for more than 17km in search of water.
- Current waiting time in the agro-pastoral was 45-60mins against the normal of 30 minutes. In the pastoral areas, waiting time was 60-90 minutes against the normal 45 minutes.
- The cost of water was sold at Ksh.3-5 per 20 litres across the livelihood zones compared to the normal price of Kshs.2-5 per 20 litre jerrican. Cost of water was high in Marsabit Central and Moyale Township where vendors sold water at Ksh.40-50 per 20 litre jerrican.
- The average water consumption across the livelihood zones was 5-6 litres per person per day against the normal 15-20 litres per person per day.

## 2.2.3 Livestock access

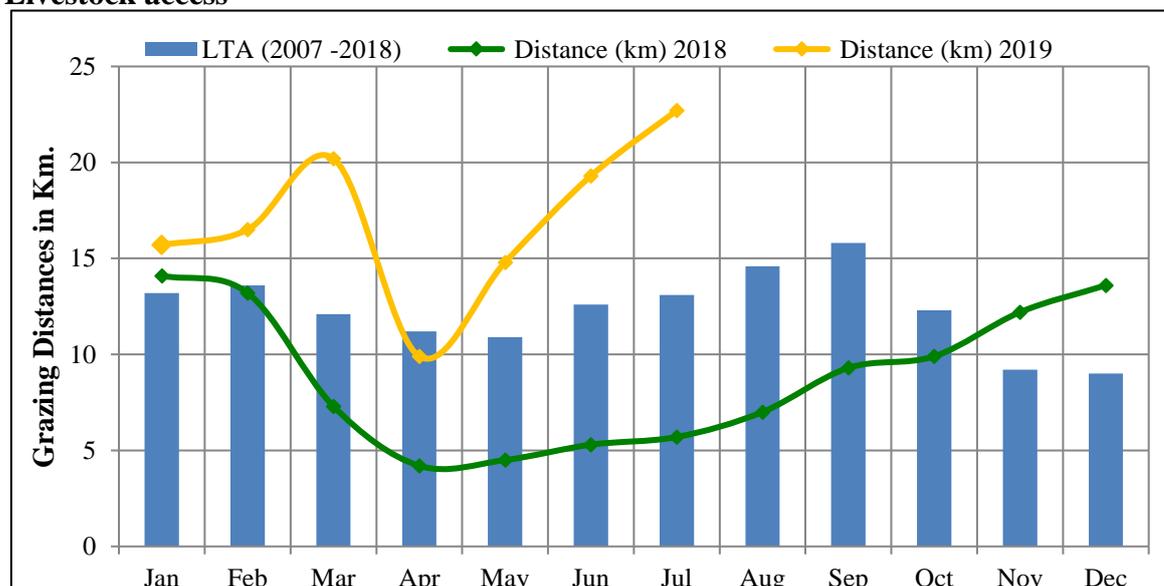


Figure 8: Current livestock trekking distances compared to long term average trekking distances(km)

- From (Figure 8) shown above, return livestock trekking distance from grazing areas to water points is 22.7km across the livelihood zones.
- When compared to the preceding months' livestock trekking distances of 19.3km, there was increased livestock trekking distances from grazing areas to water points due to progression of the long dry spell.
- Current livestock return trekking distance of 22.7km is above normal by 73percent when compared to the long-term average trekking distances of 13.1km.
- The return livestock distances are likely to increase further due to drying up of water sources and pasture deterioration in most parts of the County. Longer livestock trekking distances were noted in North Horr sub-county with other areas especially Turbi/Bubisa ward, Maikona ward and North wards posting abnormal trekking distances greater than 50km. Livestock in North Horr and Laisamis areas trekked longer distances greater than 20 km. The water points on Dukana/Illeret border not accessible due to insecurity.
- Watering frequencies significantly reduced as a result of increased livestock trekking distances in most parts of the County. Currently, cattle are watered after every 2-3 days against the normal 1-2 days; small stock 3-4 days against the normal 1-2 days and camels after 8-12days against the normal 4days across all livelihood zones.

### **3.0 PRODUCTION INDICATORS**

#### **3.1 LIVESTOCK PRODUCTION**

##### **3.1.1 Livestock Body Condition**

- Across the livelihood zones, the body condition of cattle was fair to poor against the normal good body condition. However, majority of cattle concentrated around Badanrero, Uran, Godoma and Sololo exhibited good body condition. In North Horr sub-county, cattle around Hurri Hills and Buraraat; Laisamis sub-county (Olturot, Mt.Kulal, Logologo and Civicon) also depicted generally good body condition Uran, Sololo, Olturot, Civicon were in good body condition.
- The body condition of goats was good-fair across all livelihood zones with exception of the agro-pastoral areas of Saku sub-county which exhibited fair to poor body condition. The body condition of sheep was fair across all the livelihood zone save for most parts of North Horr sub-county which illustrated poor body condition.
- Camel were in good to fair body condition across all the livelihood zones against the normal good body condition mainly attributed to lack of pasture and browse, increased trekking distance to pasture and water points and insecurity along the Kenya/Ethiopia border.
- The body condition for all species is expected to deteriorate further in the next 1-2months as pasture and browse gets depleted, quality and quantity of forage diminishes, unusual reduction in livestock watering frequencies and more than double the normal livestock trekking distances.

##### **3.1.2 Livestock Migration**

- Livestock migratory routes were unusual in dry grazing areas across all the livelihood zones. In the month under review, 90percent, 80percent and 70percent of cattle, small stock and camel migrated to unusual dry season grazing areas.
- In North-Horr sub-county livestock have migrated towards Sarimo, Darade, Bulluk, Sabare, Balesaru, Burrarat, Shurr, Hawaye, Lalesa, Alaftisi, Tao and Hurrihills. In Laisamis sub-county, livestock from are concentrated around Soriadi, Dedertu, Gudas, Sabarwawa and

Kom. Those in Ngurnit, Illaut, and South Horr have also migrated towards Baragoi in Samburu County. Livestock from Sarima moved to Losam and Likayo in Samburu county and others to Karumbe and Kamesesil in Mt Kulal. Those livestock from Moite moved to Lochalgoro, Halgore Darade and Sarima.

- In Moyale sub-county livestock from Golbo and Butiye wards have out-migrated towards Wajir North (Lakole, Basir, Arbijan, Bute), southern Ethiopia and Waso in Isiolo County. Livestock from most parts of Obbu ward are concentrated in Sololo, Badanrero, Rawana and southern Ethiopia.
- Livestock from Uran are concentrated in Banale, Uran dida, Rawana and southern Ethiopia. In Saku sub-county, most of the livestock especially cattle have migrated towards Jaldesa, Kubiqallo, Baragoi, Shurr, Uran, Sololo and Dukana.

### 3.1.3 Tropical Livestock Units (TLU) and Calving & Kidding Rates

- In the agro pastoral livelihood zone, poor income households had 1-2TLUs compared to 2-4 normally while the middle income had 5-8 compared to 10-15 normally. In the pastoral livelihood zone, poor income households had 2-5TLUs compared to 4-7 normally while the middle income had 8-10 compared to 15-20 normally. The reduced TLUs was associated with livestock losses during the 2016/2017 severe drought and consecutive failure of the 2018 short rains and 2019 long rains.
- Birthrates were slightly above normal across the livelihood zones especially for camels and goats during this season. Slightly above normal birthrates were occasioned by extraordinary good cumulative long rains of 2018. Even though the current birthrates are slightly above normal, there is no notable change in TLUs due to lapse in livestock generation interval and considerable slaughter of calves in the pastoral areas of Moyale and parts of North Horr.

### 3.1.4 Livestock diseases and mortalities

- Cases of livestock mortalities amongst calves attributed to drought were reported in most parts of the county where slaughtering of calves were observed for survival of the co-herds.
- There was no outbreak of livestock diseases however few incidences of endemic livestock diseases in some parts of the County in addition to foot and mouth were reported along the Laisamis/Samburu border due to livestock migration. The current herd mortality rate is normal for cattle averaging 1.0percent.

### 3.1.5 Milk Production

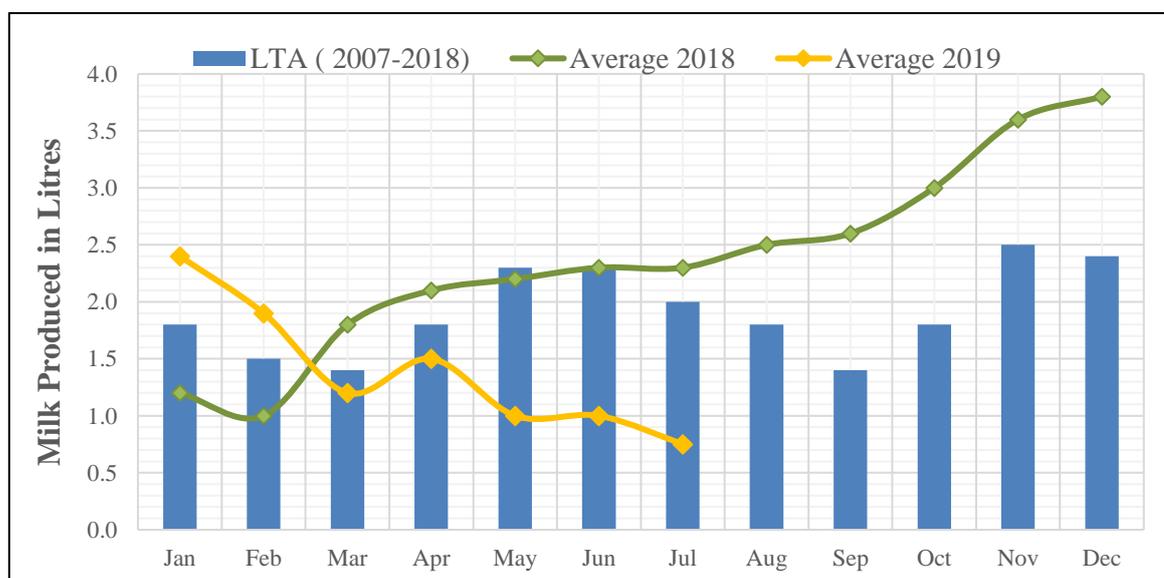


Figure 9: Milk production per household per day in litres across the livelihood zones

- From figure 9 shown above, household milk production per day for the month under review was 0.75Litre/Household/Day across all the livelihood zones.
- When compared to similar periods, average milk production of 0.75Litre was below the long-term average milk production of 2.0Litres.
- Milk is generally produced in 10 percent of the households from Camel. In the pastoral livelihood zone, milk production was 0.5-1 litres compared to 2-4 litres normally. Few lactating herds especially camels and goats were available near homestead which provided milk to the households.
- Below normal milk production was attributed to massive abnormal livestock migration to drought fall back areas.
- Milk price was Ksh.90-120 per litre against the normal of Ksh.60 per litre.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

#### 4.1.1 Cattle Prices

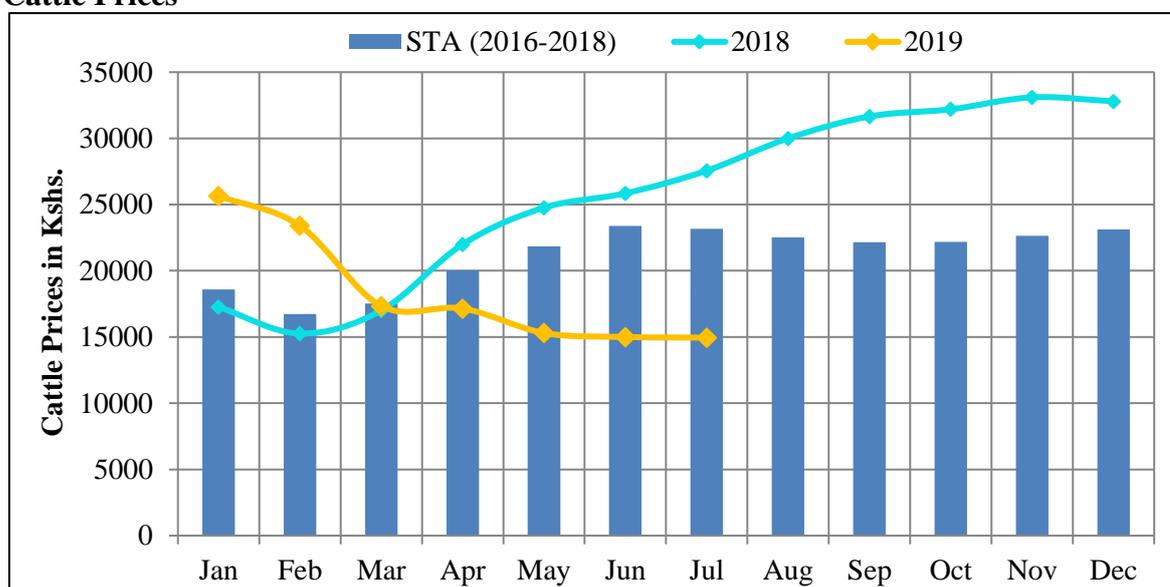


Figure 10: Current cattle prices compared to the short-term average prices

- From the figure (10) shown above, cattle price for the month under review was Kshs. 14,950 which was constant when compared to the previous months' price of Kshs. 15,000.
- Current cattle price of Kshs. 14,950 is below the short-term average price of Kshs. 23,178 by 35percent. Considerable below normal cattle price was occasioned by deteriorating cattle body condition and lack of ready buyers in the major livestock markets.
- Moyale livestock market posted fairly better cattle prices with prices averaging at Kshs. 20,000 whereas North Horr and Jirime markets recorded lower cattle prices. Cattle sale volume is low because traders prefer selling to Ethiopian markets which offer better prices
- If the long dry-spell continues, major livestock markets are expected to record an all-time low cattle prices thus considerable decline in saleable cattle herds.

#### 4.1.2 Goat prices

- From figure 11 shown below, the average goat prices in the month under review was Kshs. 3,450 which was normal when compared to the short-term average goat price of Kshs. 3,501.
- Normal goat price was attributed to by the spill-over effects of the 2018 long rains which were exceedingly good coupled with fair browse condition across the livelihood zones which sustained the body condition thus stable goat prices.

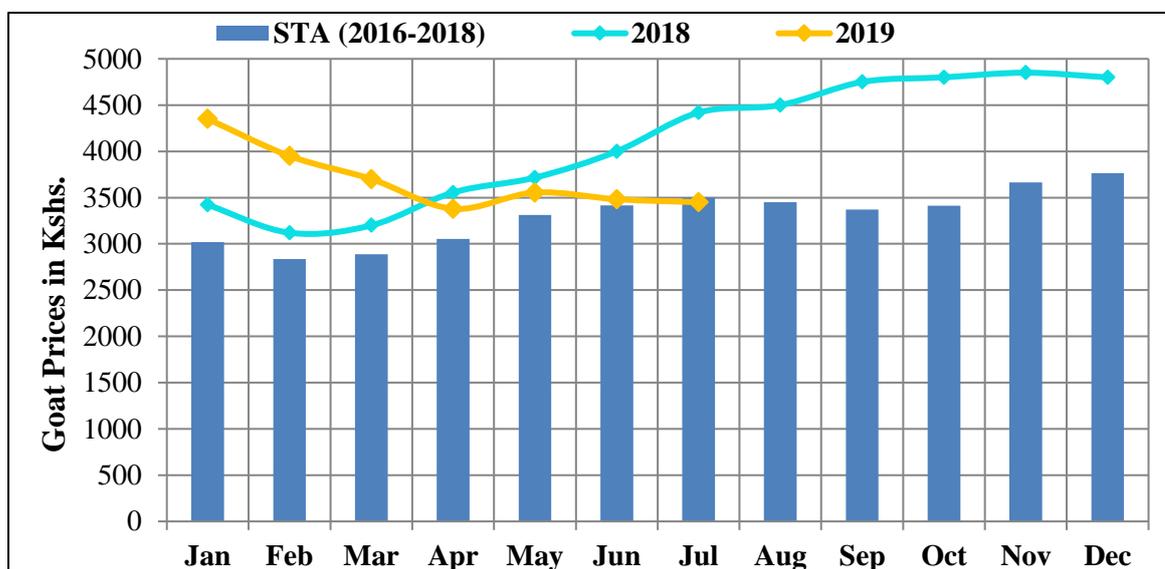


Figure 11: Current goat prices compared to short term average prices

- Favourable goat prices were recorded in Moyale livestock market with prices ranging between Kshs 4000-5500 whereas North Horr sub-county posted lower goat prices ranging between Ksh.2500-3000. Many traders both in Kenya and Ethiopia perceive Moyale as market for small stocks hence justification of better goat prices.
- Market operations were below normal across the county, however disruptions in the livestock market in North Horr sub-county especially Forolle market was reported with its neighbouring Ethiopia due to insecurity.

#### 4.1.3 Sheep Prices

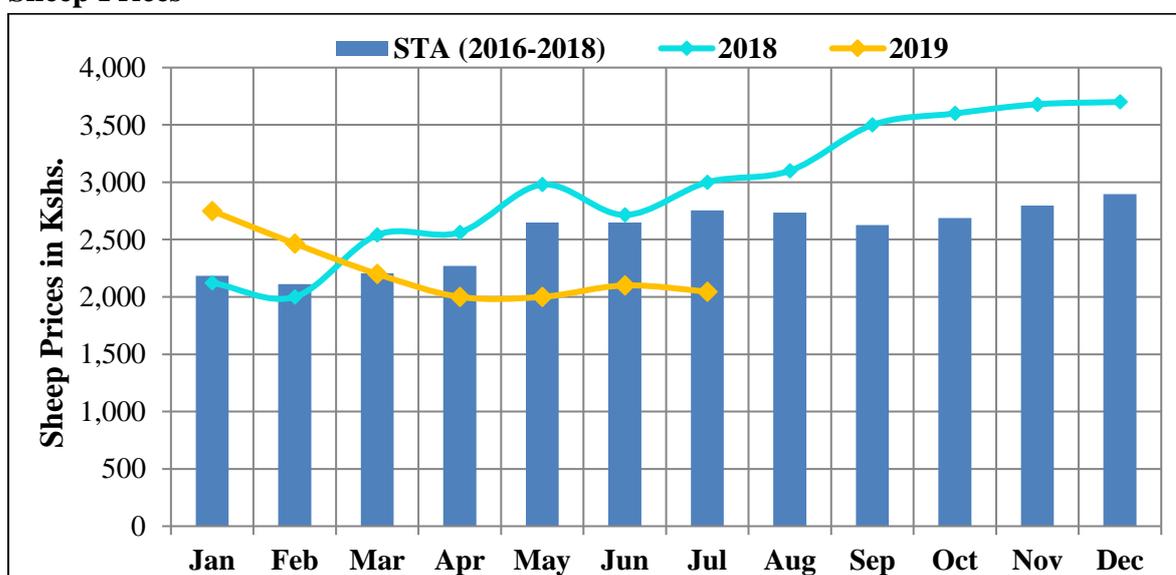


Figure 12: Current sheep prices compared to the short-term average prices(Kshs.)

- From the figure 12 shown above, sheep price for the month under review was Kshs. 2,045 across the livelihood zones which is an illustration of no change when compared to the previous months' sheep prices of Kshs.2, 100.
- When compared to the short-term average price of Kshs. 2,755, current sheep price is below normal by 26percent. Below normal sheep prices were generally attributed to fair body condition. However, Moyale market posted better sheep prices averaging Kshs. 3,500.
- Poor local livestock market affected reduced household purchasing power as 85percent of the pastoralists mainly depend on livestock hence impacting negatively on food security.

## 4.2 CROP PRICES

### 4.2.1 Maize

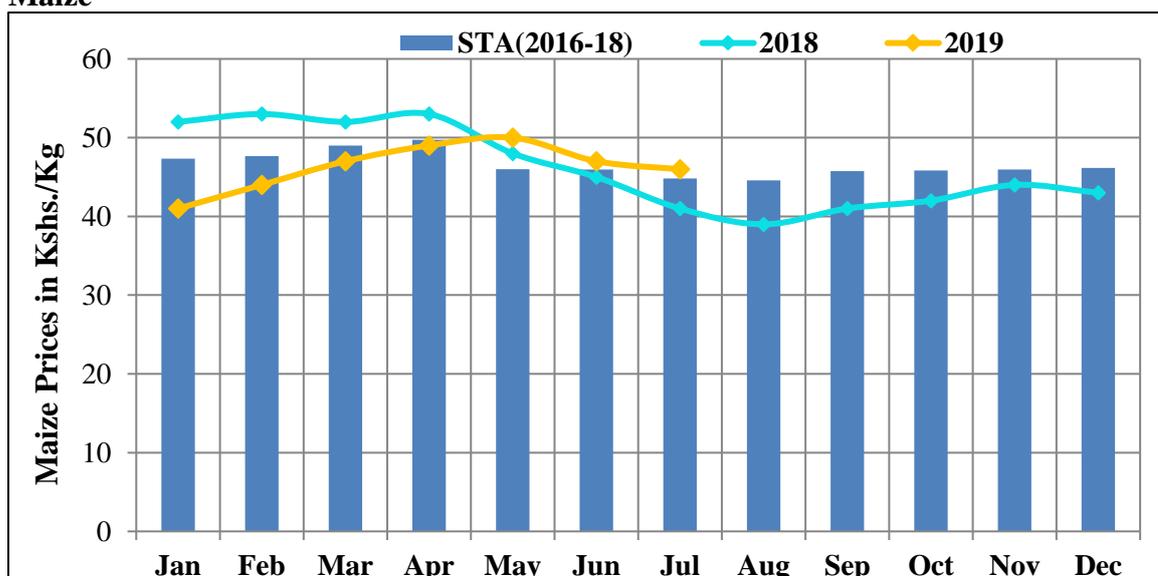


Figure 13: Current maize prices compared to the short term average maize prices (Kshs.)

- The average price of maize for the month under review was Ksh.46 per kg which was normal when compared to the short-term average of Kshs. 45 per kg.
- Nevertheless, lower maize prices were recorded in Saku and Moyale sub counties which retailed at Kshs. 35 -50 occasioned by injections from neighbouring Ethiopia and external markets of Meru and Nyahururu.
- North Horr sub-county recorded 15-20percent price increase due to limited supplies from Ethiopia which was prompted by tension and insecurity incidences in Dukana and Forolle.
- Highest maize prices were recorded in most parts of Laisamis sub County with prices averaging between Kshs.60-70 per kg.
- 60-70percent of the normal stock were held by traders due to reduction in maize supplies from external markets.
- Maize prices are expected to increase in the next 1 month due to total crop failure in Moyale and Saku sub-counties and expected decline from the external markets.

### 4.2.2 Beans

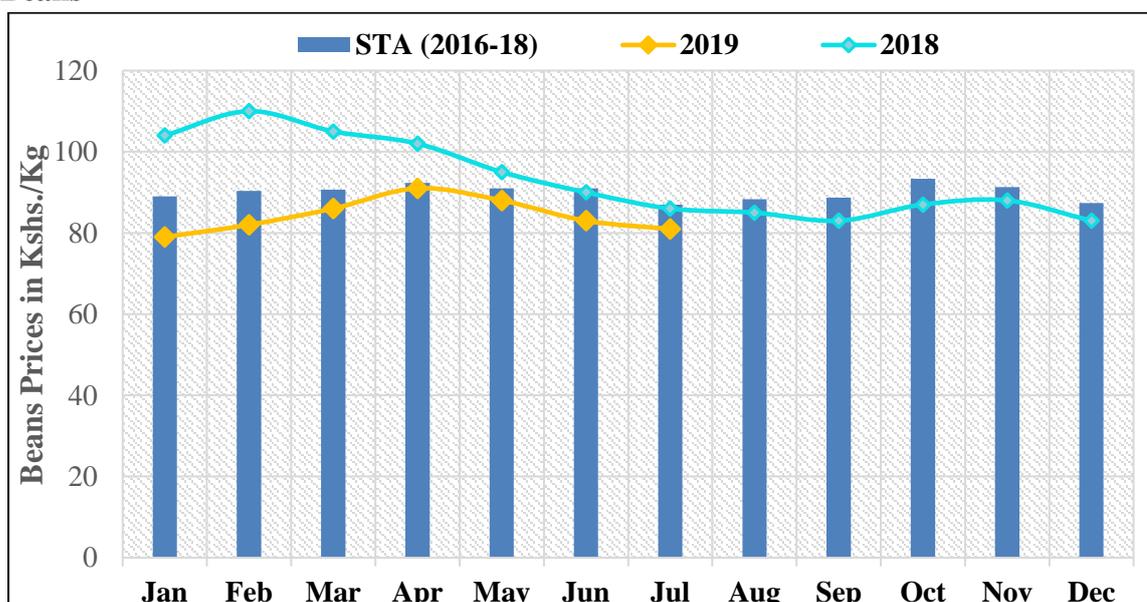


Figure 14: Beans prices compared to the short average term average prices (Kshs.)

- From the figure shown above, beans prices retailed at Kshs.81/kg across the livelihood zones in the month under review hence no notable change if compared to the previous months' beans price of Kshs.83/kg.
- When compared to similar periods, beans price of Kshs.81/kg is slightly below the short-term average price of Kshs.87/kg by 7percent.
- Better beans prices were posted in Moyale and Sololo markets markets with prices ranging between Kshs.50-75/kg. Marsabit commodity market also posted better beans prices. However, beans prices were higher in most parts of Laisamis sub-county due to reduced market access.
- Favourable beans price was attributed to market injections from the neighbouring vibrant Ethiopia market and supplies from external markets of Meru and Nyahururu.

#### 4.2.3 Terms of Trade (TOT)

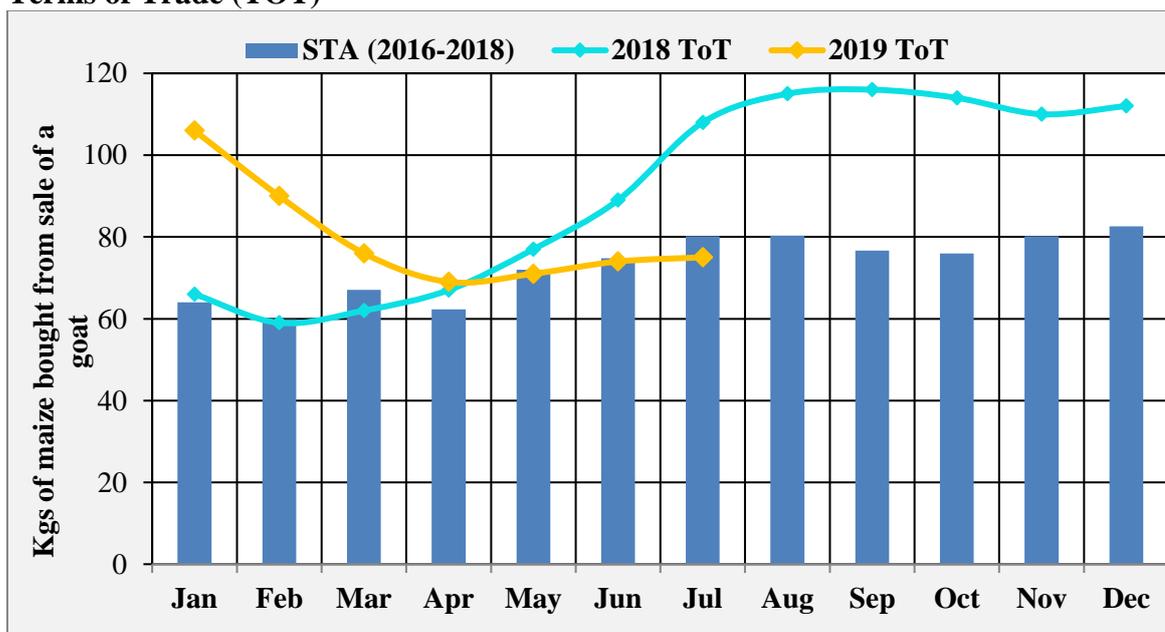
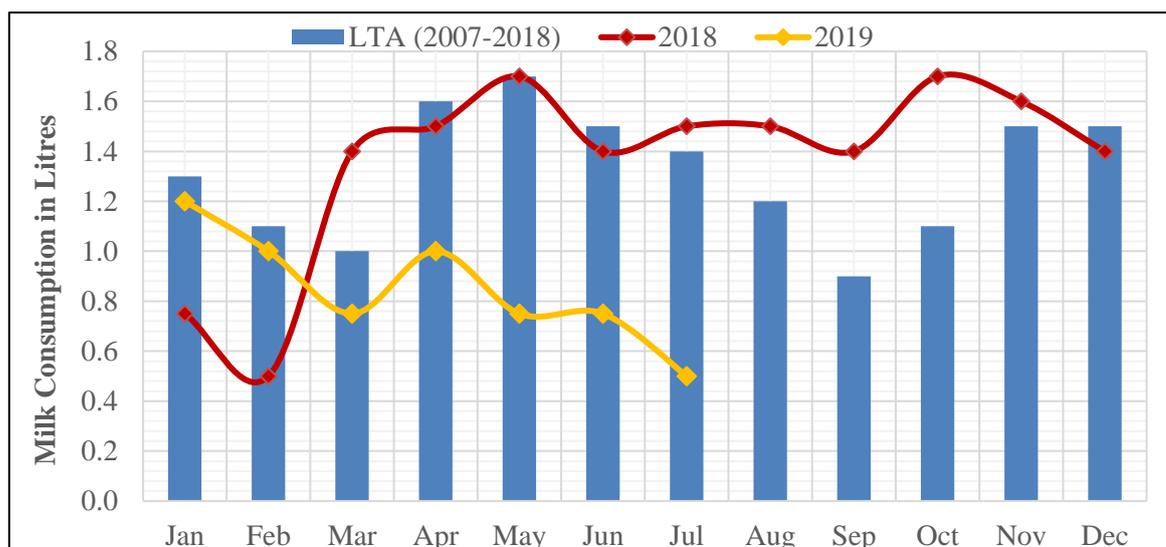


Figure 15: Current terms of trade versus short term average terms of trade

- In the month under review, current terms of trade is 75 across all the livelihood zones thus stable when compared to the previous months terms of trade of 74. When compared to similar periods, current terms of trade of 75 is near-normal.
- Near-normal terms of trade was attributed to relatively stable goat and maize prices resulting in stable household purchasing power thus improved household food access particularly in Moyale sub-county.
- Terms of trade is expected to worsen in the next one month and fall below the long term average due to expected slightly below normal goats prices coupled with increased maize prices.
- Terms of trade is near-normal in Moyale sub-county due to favourable market with its neighbouring Ethiopia, slightly below normal in Saku sub-county and way-below normal in North Horr and Laisamis sub-counties. North Horr sub-county will be continue to post dismal terms of trade due to insecurity incidences and severe drought.
- As the livestock body condition deteriorates, goat prices are expected to decrease while maize prices are expected to gradually increase thus reduction in terms of trade and low household purchasing power.

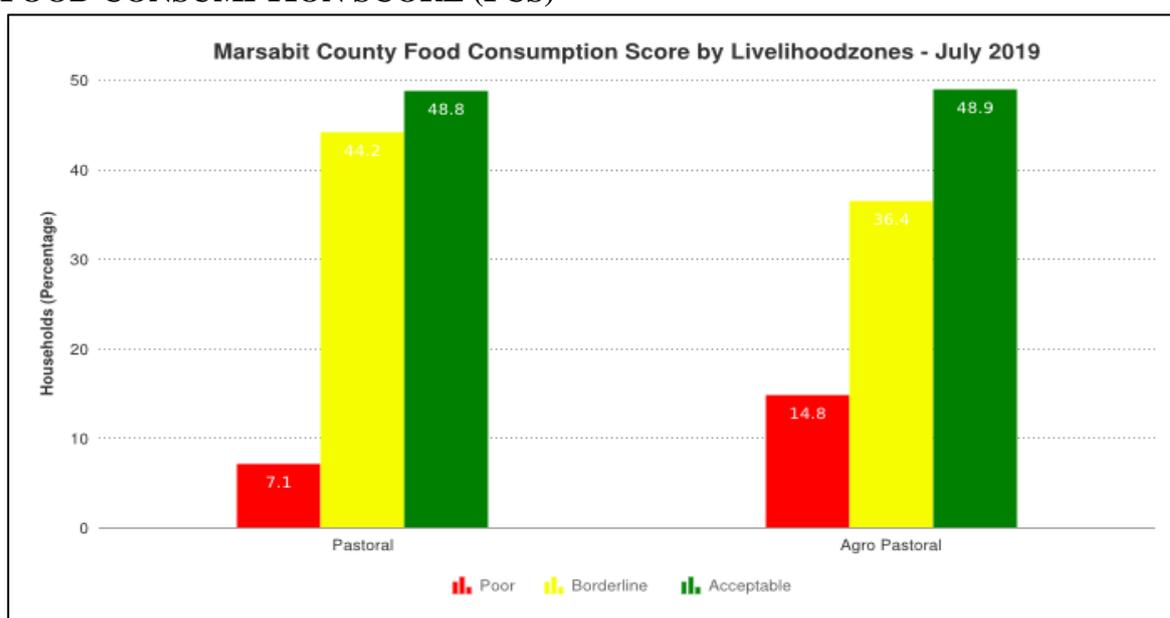
**5.0 FOOD CONSUMPTION AND NUTRITION STATUS**  
**5.1 MILK CONSUMPTION**



**Figure 16: Current milk consumption/household/day/litre against long term average**

- From the figure 16 shown above, household milk consumption is half litre/household/day in the month under review across the livelihood zones hence decline when compared to the preceding months’ milk consumption of 0.75 litres/household/day.
- When compared to the long-term average milk consumption of 1.4litres/household/day, current milk consumption is at an all-time low.
- Average household milk consumption per day in the pastoral zone is 0.5-0.75litres against the normal 2.0litres whereas in the agro-pastoral livelihood zone household milk consumption is 0.5litres against the normal 1.5litres.
- An all-time low milk consumption was occasioned by reduction milk production in a paltry 10percent of Camels across the County as other livestock herds unusually migrated to dry-fall back areas thus limiting milk availability and access at the household level.
- Majority of households generally used processed or powdered milk. If the long dry spell continues, milk consumption is likely to decline further.

**5.2 FOOD CONSUMPTION SCORE (FCS)**



**Figure 17: Food Consumption Score across the livelihood zones**

- The mean food consumption score was 34.65 across the livelihood zones thus no change when compared to previous months' food consumption score of 34.86 which is an indicative of borderline food consumption score.
- From the table shown below, 9.9percent of households are consumed staples and vegetables every day and never or very seldom are consuming protein rich food such as meat and dairy, 46.6percent are consumed staples and vegetables every day, accompanied by oil and pulses a few times a week whereas 43.5percent are consumed staples and vegetables every day, frequently accompanied by oil and pulses and occasionally meat of dairy product.
- Proportion of households in the pastoral livelihood zone that were within the acceptable, borderline and poor food consumption score were 48.8percent, 44.2percent and 7.1percent respectively. Similarly, proportion of households in the pastoral livelihood zone that were within the acceptable, borderline and poor food consumption scores were 48.9percent, 36.4percent and 14.8percent respectively

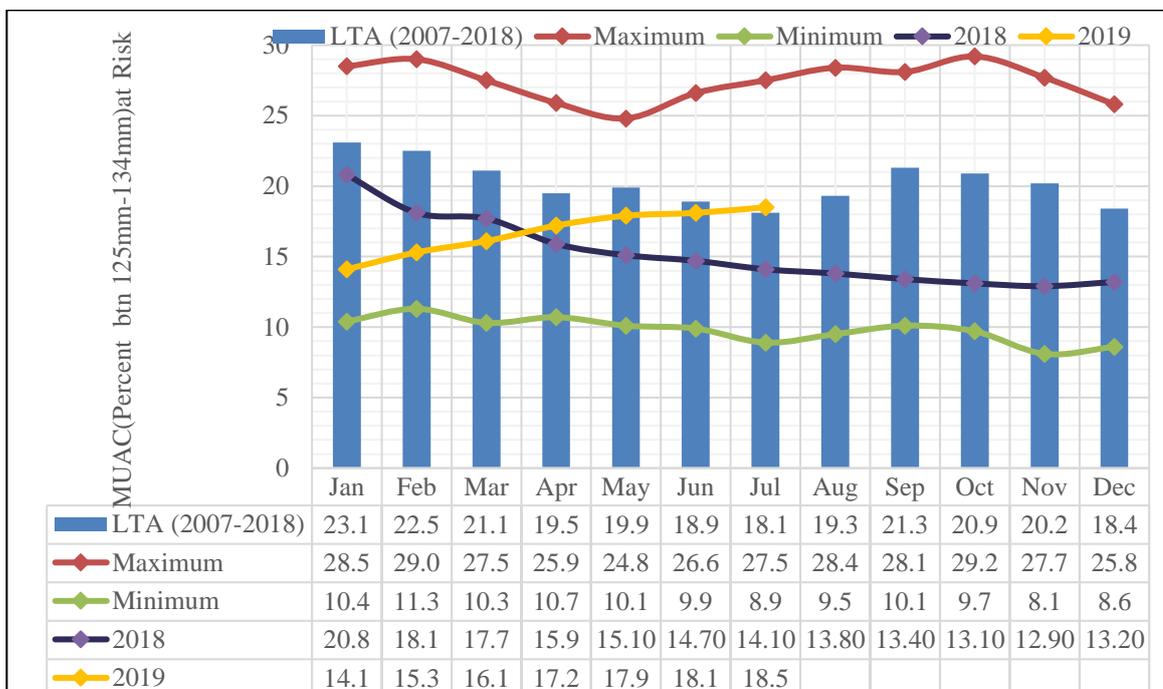
	<b>FCS Mean</b>	<b>Poor FCS</b>	<b>Borderline FCS</b>	<b>Acceptable FCS</b>
<b>County</b>	<b>34.65</b>	<b>9.9%</b>	<b>46.6%</b>	<b>43.5%</b>
Dukana	39.15	3.3%	36.7%	60.0%
Golbo	48.42	0.0%	15.0%	85.0%
Heillu Manyatta	31.61	0.0%	86.7%	13.3%
Karare	30.08	30.0%	33.0%	37.0%
Korr	32.64	0.0%	70.0%	30.0%
Laisamis	34.65	11.0%	48.0%	41.0%
Loiyangalani	34.31	16.7%	30.0%	53.3%
North Horr	23.72	0.0%	26.7%	73.3%
Sagante	26.63	13.3%	73.3%	13.4%
Turbi	43.26	0.0%	17.2%	82.8%
Uran	48.36	0.0%	20.0%	80.0%

- Food consumption score was better in the pastoral than the agro-pastoral livelihood zone with a mean of 29.54 and 35.89 respectively. From the table shown above; Golbo and Uran wards in Moyale sub-county, Karare ward in Saku sub-county and Laisamis ward had better food consumption score. However, North Horr and Sagante wards posted slightly worse off food consumption scores.
- If the long dry spell continues, food consumption score is expected to deteriorate and majority of the households will fall in the borderline food consumption band.

### 5.3 HEALTH AND NUTRITION STATUS

#### 5.3.1 Nutrition Status

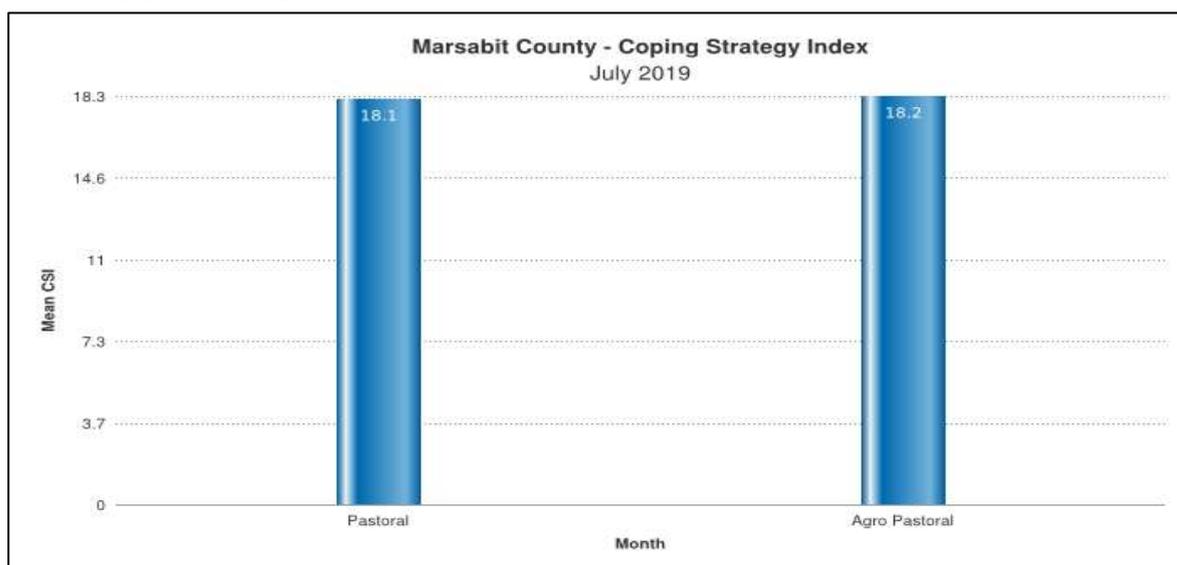
- From (Figure 18) shown below, the proportion of children under the age of five years with MUAC less than 135mm was 18.5percent in the month under review which depicts slight increase when compared to the previous months' MUAC of 18.1percent.
- The proportion of children at risk of malnutrition was slightly above normal when compared to the long term average of 18.1percent thus exhibits deteriorating nutritional status for children below the age of five years.
- Deteriorating nutritional status of children below the age of five years was attributed to an all time low milk consumption at household level coupled with reduced and cultural practices where households deliberately skipped meals.



**Figure 18: Nutritional status of children below the age of five years versus long term average**

- According to the SMART Survey results, two sub-counties reported Global Acute Malnutrition (GAM) rates above the 15percent global emergency threshold with North Horr and Laisamis sub-counties posting GAM rates of 25.1percent and 30.7percent respectively. County GAM rate was 18percent and more alarmingly, GAM rate in Laisamis sub-county surpassed 30percent (more than doubled the emergency threshold). Moyale and Saku sub-counties posted GAM rates of 9percent and 9.5percent respectively.
- The epidemic diseases were lower for the period under review in 2019 compared to the same period in 2018, attributed to less favourable disease thriving conditions that were witnessed in 2018 as a result of exceedingly good long rains in 2018.

#### 5.4 COPING STRATEGIES



**Figure 19: Coping Strategy Index across livelihood zones**

- From (Figure 19) shown above, reduced consumption based coping strategy index(rCSI) for the pastoral and agro-pastoral livelihood zones was 18.1 and 18.2 respectively thus majority

of households employed stressed reduced food consumption-based mechanisms in all the livelihood zones.

- Reduced consumption based coping strategy index(rCSI) for the month under review was 18.15 hence no change when compared to the previous months rCSI of 18.38.
- 92percent of the households adopted coping mechanisms while only 8percent of the households didn't cope.
- From table shown below, households in Golbo and Loiyangalani wards recorded higher consumption based coping strategy indexes whereas households in Karare, Turbi, Heillu Manyatta and Logologo wards posted lower consumption based coping strategy indexes.

Consumption based coping strategy index(rCSI)		
Sub-county	Ward	rCSI
Saku	Sagante	24.27
Saku	Karare	7.29
Laisamis	Korr	18.63
Laisamis	Loiyangalani	31.07
Laisamis	Logologo	15.29
North Horr	North Horr	19.81
North Horr	Dukana	20.27
North Horr	Turbi/Bubisa	12.1
Moyale	Heillu Manyatta	14.1
Moyale	Uran	13.52
Moyale	Golbo	33.67

- Notable reduced consumption based coping strategies employed by the households across the livelihood zones were reduced portion size of meals, reduction in frequency of food consumption and reliance on less preferred food.

## 6.0 CURRENT INTERVENTION MEASURES

### 6.1 Food Aid

- County Government of Marsabit is distributing 10,000 bags of maize, 2000 bags of beans and 2,000 cartons of oil and 2,000 bags of rice across the County at a cost of Ksh.143 million.
- USAID/World Food Programme through SND distributed 20, 463 bags of sorghum, 4093 bags of pulses and 3285 cartons of vegetable oil each to 9168 households across the 15 wards (50 sites) as food ration for 2 months (July and August) under the Sustainable Food Systems Programme

### 6.2 NON-FOOD AID

- Unconditional Cash transfer to 20,488 each receiving Kshs5,400 in the month of July totalling to Kshs. 110,635,200- Hunger Safety Net Programme through National Drought Management Authority.
- HSNP 2 scalability (NDMA) targeted 903 households in North Horr sub-county, 1075 households in Laisamis sub-county, 719 households in Moyale sub-county and 593 households in Saku sub-county. Already Kshs. 8,883,000 was disbursed to 3,290 households across the County.
- Kenya Red Cross supported 4000 households with cash with each household receiving Kshs. 3,000 per month in the month of July (Laisamis, North Horr and Moyale sub-counties).

- World Vision Kenya supported One off Cash transfer to 2,000 HH in Laisamis and Moyale sub counties. Each beneficiary to get Kshs 3,000 totalling to Kshs.3M.
- UNICEF, Concern Worldwide, World Vison Kenya, Kenya Red Cross, FH-K, NHPPLus and GIZ continued to provide direct support to the department of Health through capacity building for Health workers on IMAM surge approach; support Vitamin A supplementation during Malezi Bora and supplying all the health facilities with Ready to Use Therapeutic Feeds (Plumpy Nuts).
- UNICEF, Kenya Red Cross, FH-K, Concern Worldwide, World Vison Kenya, GIZ, CCM and NHPPLus supported integrated medical outreaches for screening of Pregnant and Lactating Women and Children under the age of 5 years.
- Department of Water undertook water trucking in areas of Laisamis, North Horr, Saku and Moyale sub-counties that are experiencing acute water shortage
- Northern Water Services Board provided 15,000litres of fuel for water trucking distributed; Moyale (4,000litres), North Horr(4,000litres), Laisamis(4,000litres) and Saku(3,000litres).
- Concern Worldwide will be supporting borehole rapid response team for 6 months and provision of fast-moving spare parts worth Kshs 950,000.
- Department of Livestock conducted vaccination against PPR across the County and Foot and Mouth in Laisamis sub-county.
- CARE Kenya supported WASH programmes in partnership with MOH and a total 2,700 cartons of water purifiers (PUR) was distributed to schools in Laisamis sub-county.
- Kenya Rapid are supporting maintenance and rehabilitation of boreholes on need basis.
- ADS-MKE supported service and pipeline extension at Nairibi borehole and provision of desalination machine in Lontolio both in Laisamis sub-county.
- Kenya Wildlife Service provided 2000 beehives, solar pumps, money maker pumps, water tanks and house dams mostly in Saku sub-county.

## **7.0 EMERGING ISSUES**

### **7.1 DISEASES/CONFLICT/HUMAN DISPLACEMENT**

- 1,464 cases of Kalazaar were reported as at 8th July 2019. Out of these, 353 cases were positives by RDT and fifteen deaths (CFR 4.5percent). 61 patients on active treatment (Laisamis 30, Logologo Health Centre 10, Marsabit County Referral Hospital 21).
- Outbreak of a disease in El Isacko Mala (North horr) with symptoms similar to that of diarrhoea. 6 were hospitalized at North Horr hospital but their situation has been stabilized. 3 have been treated and discharged. Patients were said to have consumed water from a flowing 'laga' after rains received in nearby areas.
- Insecurity incidences have been reported in Idido (North Horr sub-county) where 2 herders have been killed.
- Casualties were reported which arose from conflicts along Dukana/Illeret border where three deaths and six injuries occurred. Moreover, over two thousand goats were stolen in Bulluk area of North Horr sub-county.
- There is tension along Ethiopia/Kenya border, Marsabit/Samburu border as herders migrate to areas with pasture.

### **7.2 FOOD SECURITY PROGNOSIS.**

- The 2019 seasonal cumulative rainfall amounts are similar to the cumulative rains of 2017 which was a bad year hence a depiction of seasonal rainfall shortfalls. With progression of

the long dry spell, cumulative rainfall amounts are expected to stagnate until towards the third dekad of October when onset of the short rains are expected to commence.

- The 3-months vegetation index for the month of July fell in the moderate vegetation deficit band and if the next month remains drier than normal then it will slide to severe vegetation deficit band. Off-season rains received in a few isolated areas across the County had no ripple effect on vegetation cover.
- Market prices for cattle and sheep were below normal by 26 and 35percent respectively while goat prices were normal across the livelihood zones. As the livestock body condition deteriorates, goat prices are expected to decrease while maize prices are expected to gradually increase thus reduction in terms of trade and low household purchasing power. Poor local livestock market affected reduced household purchasing power as 85percent of the pastoralists mainly depend on livestock hence impacting negatively on food security
- Two sub-counties reported Global Acute Malnutrition (GAM) rates above the 15percent global emergency threshold with North Horr and Laisamis sub-counties posting GAM rates of 25.1percent and 30.7percent respectively. County GAM rate was 18percent and more alarmingly, GAM rate in Laisamis sub-county surpassed 30percent (more than doubled the emergency threshold) and the situation is expected to deteriorate further if long dry spell continues.
- Food consumption score will decline and households will continue to adopt coping mechanisms of high severity. Generally, all the food security outcomes have fluctuated outside their seasonal norms.

## **8.0 RECOMMENDATIONS**

- Immediate food assistance to the vulnerable households.
- Upscaling of various safety net programmes across the County.
- Enhanced water trucking, procurement and stock piling of fast-moving spare parts for strategic water sources.
- Repair of strategic boreholes in Moyale sub-county (Dabel II, Nana II, Mansille I, Qate and Rawana II), Laisamis sub-county (Sori-Adhi I, Merille I, Ririma, Civicon I and II(Gatab), servicing of gensets and rehabilitation of grounded water bowsers.
- Stockpiling of vaccines, strategic vaccination, multivitamin, deworming and enhancement of disease surveillance.
- Commercial destocking across the markets to salvage pastoralists against imminent losses. Stimulation of livestock feeder markets to enhance voluntary commercial destocking.
- Provision of livestock feeds and supplements to salvage milking/core herd.
- Treatment of acute malnutrition in North Horr and Laisamis sub-counties. Enhanced screening and referral for malnutrition in all hot spot areas in all livelihood zones with continued active case finding through MUAC screening and referral by community health volunteers.
- Enhanced peacebuilding and reconciliation efforts between local communities to Fastracks access of scarce rangelands.