

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



A Vision 2030 Flagship Project



EW PHASE: NORMAL



Drought Situation & EW Phase Classification

Biophysical Indicators

Rainfall: In the month under review, the County received slightly enhanced rainfall amounts in 5-6 rainy days, which was well distributed in time and space. Cumulative seasonal rainfall amounts were above normal.

Vegetation condition: 3-months Vegetation Condition Index for the month under review improved from 60.81 in November to 82.13 in the month under review thus fell in the above normal vegetation greenness strap.

Socio Economic Indicators (Impact Indicators)

Production indicators: Livestock body condition was good for all the livestock species across the livelihood zones. The early-planted maize is at maturity stage, while early-planted beans are being harvested however with the invasion of desert locust, crop yields are expected to decline. Milk production was 4.7Litres/household/day, which was above normal due to high calving, kidding and lambing across the livelihood zones. Livestock grazed within their normal traditional grazing areas.

Access indicators: Household and livestock trekking distances were short and considerably reduced due recharge of 100percent of open water sources. Milk consumption was 2.0Litres/household/day which was above normal when compared to similar periods. Terms of trade was normal occasioned by above normal goat prices and stable maize prices. Livestock market operations were below normal due to low traded volumes.

Utilization indicators: Nutritional status of children below the age of five years improved and was within the normal range. Food consumption score improved and fell with acceptable band. Households employed reduced food consumption coping strategies that were stressed and less severe.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Normal	Improving
Pastoral All species	Normal	Improving
Fisherfolk/ Casual labour /Petty Trading	Normal	Improving
County	Normal	Improving
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	132	80 -120
VCI-3Month	82.13	>35
Forage condition	Good	Good
Production indicators	Value	Normal
Livestock Body Condition	Good	Good
Milk Production	4.7	>2.4Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	102	>83
Milk Consumption	2.0	>1.5Litre
Return distance to water	0.5	0.0-2.9Km
Cost of water	0	<Ksh.5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	14.2	0.0-18.4
Coping Strategy Index	16.18	<20
Food Consumption Score	44.95	>35

<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

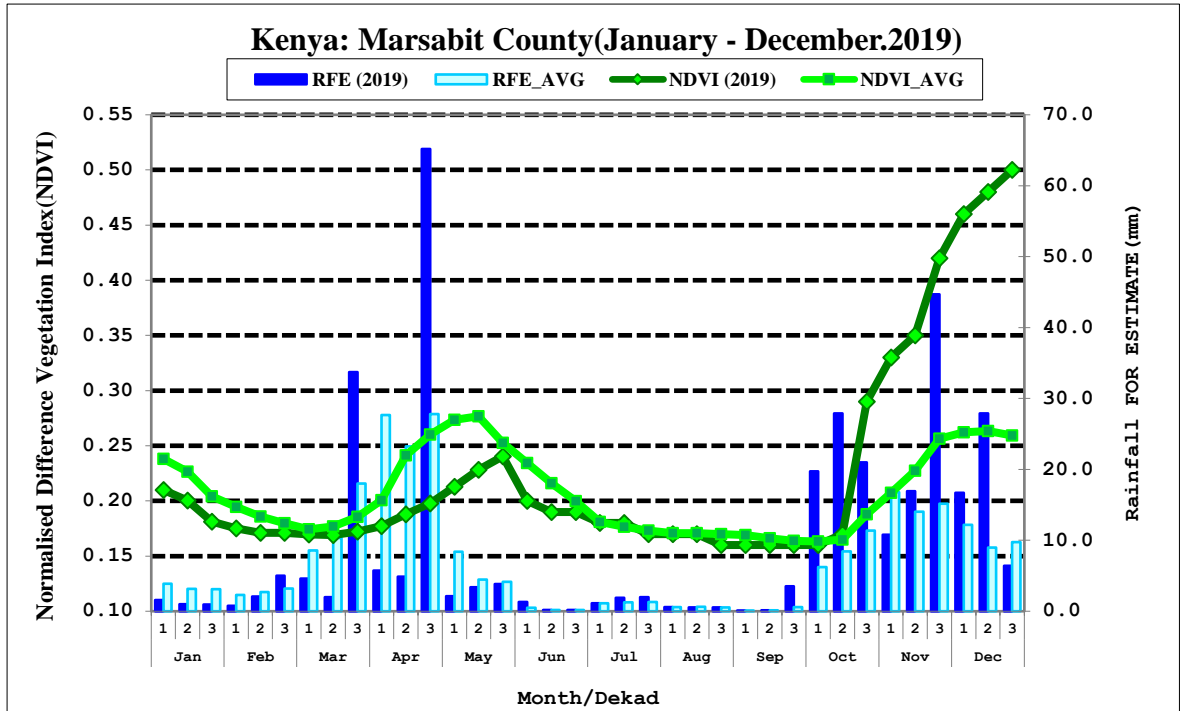


Figure 1: Dekadal Rainfall (mm) and NDVI values compared to the Long Term Average
Source: WFP-VAM, CHIRPS/MODIS

- From the figure 1 shown above, dekadal rainfall for estimate amounts for the first and second dekads were above normal. However, dekadal rainfall amounts for the third dekad was below normal when compared to the long-term dekadal average.
- Normalized Difference Vegetation Index (NDVI) for the first, second and third dekads were significantly above normal when compared to the corresponding long term dekadal NDVI values.

1.2 Cessation of the Short Rains

- Cessation of the short rains occurred in the second dekad as opposed to the first dekad of the month of December hence it was late.

1.3 Amounts received

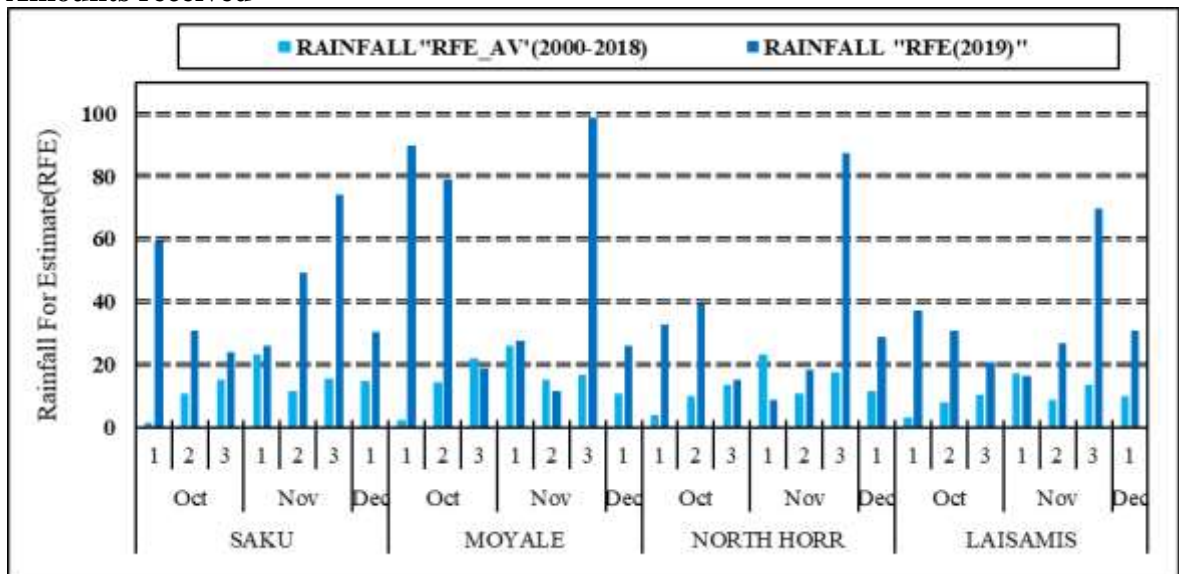


Figure 2: Rainfall Amounts (mm) per sub-counties/dekad

- In the month under review, 70.9mm of rainfall was received in Moyale Township in 6 rainy days with the maximum rainfall amount recorded on 15th December at 27.1mm. Similarly, Marsabit Mountain received 89mm of rainfall in 6 rainy days with the highest amount received on 11th December at 51.5mm. Dukana town, Gas, Balesa, Kalacha and El-gade in North Horr sub-county received depressed rainfall amounts at 42mm, 65mm, 17mm, 20mm and 31mm respectively in 4-5 rainy days.
- Generally, Moyale and Saku sub-counties received slightly enhanced rains, which were above normal rainfall amounts but significantly subsided when compared to the previous month. Most parts of Laisamis sub-county received torrential rainfall amounts while most parts of Illeret, Dukana and Turbi/Bubisa wards in North Horr sub-county received slightly enhanced rains in the month under review.

1.4 Spatial and temporal distribution

- Distribution of the rains in the month under review was good and even both spatially and temporally across the County. When compared based on the livelihood zones, agro-pastoral areas of Saku sub-county received much better rains than Moyale sub-county. Similarly, pastoral areas of North Horr sub-county received slightly enhanced rains than Laisamis sub-county. Generally, pastoral areas of Laisamis and Northhorr sub counties received rains for 8-11 days while agro pastoral areas of Saku and Moyale received rains for 11-15 days during the month. Rainfall amounts at health facilities in North Horr sub-county is illustrated in (figure 3) below.

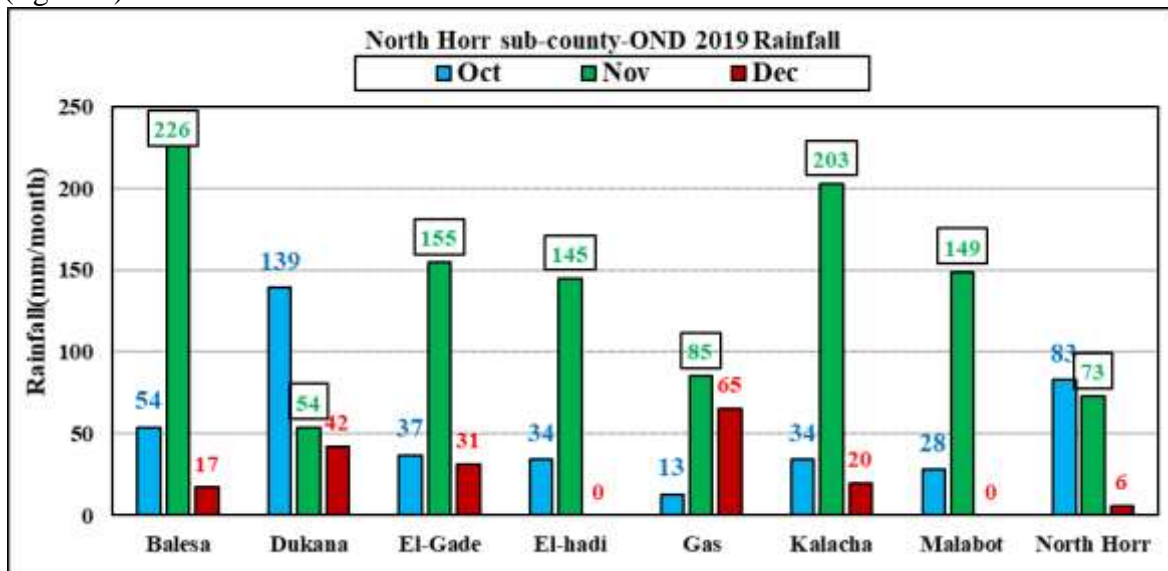


Figure 3: Monthly Rainfall recorded at health facility level under the One Health Project

1.5 CUMULATIVE RAINFALL AMOUNTS

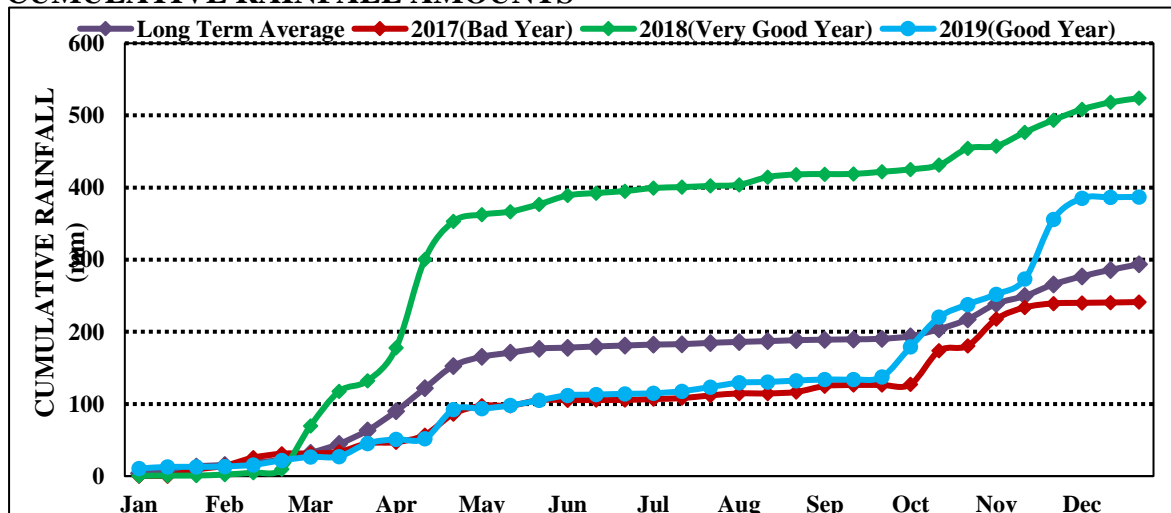


Figure 4: Marsabit County Cumulative Rainfall Amounts (mm)

- From the figure (4) shown above, current cumulative rains are 32percent above the long-term cumulative rainfall amounts.
- The current cumulative rainfall amounts are above the normal cumulative rainfall amounts due to seasonal above normal rains received in all the livelihood zones. Generally, the last quarter of 2019 was generally good due to above normal seasonal cumulative rainfall amounts that resuscitated environmental and socio-economic indicators.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

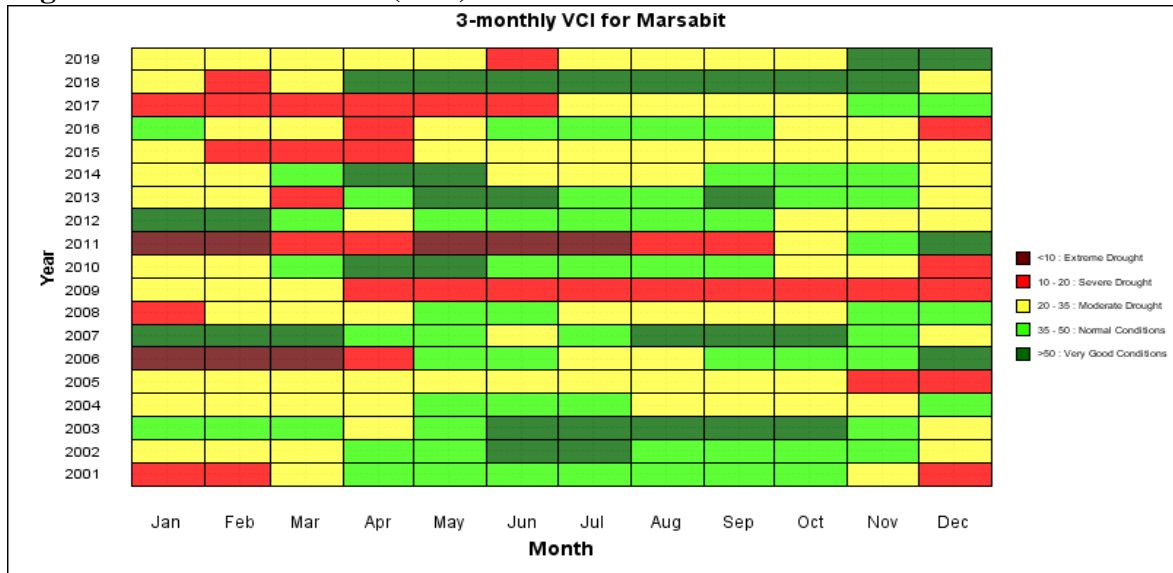


Figure 5: Vegetation Condition Index across the County

- From the figure shown above, vegetation condition index for the month under review was 82.13 thus remarkably improved when compared to the previous months vegetation condition index of 60.81 hence fell in the above normal vegetation greenness band. Above normal vegetation greenness was occasioned by highly enhanced cumulative seasonal rainfall amounts that were evenly distributed spatially coupled with good rainfall intervals.
- Even though the cessation of the short rains occurred in the second dekad of the month, vegetation condition index for the next month is expected to be in the above normal vegetation greenness band.

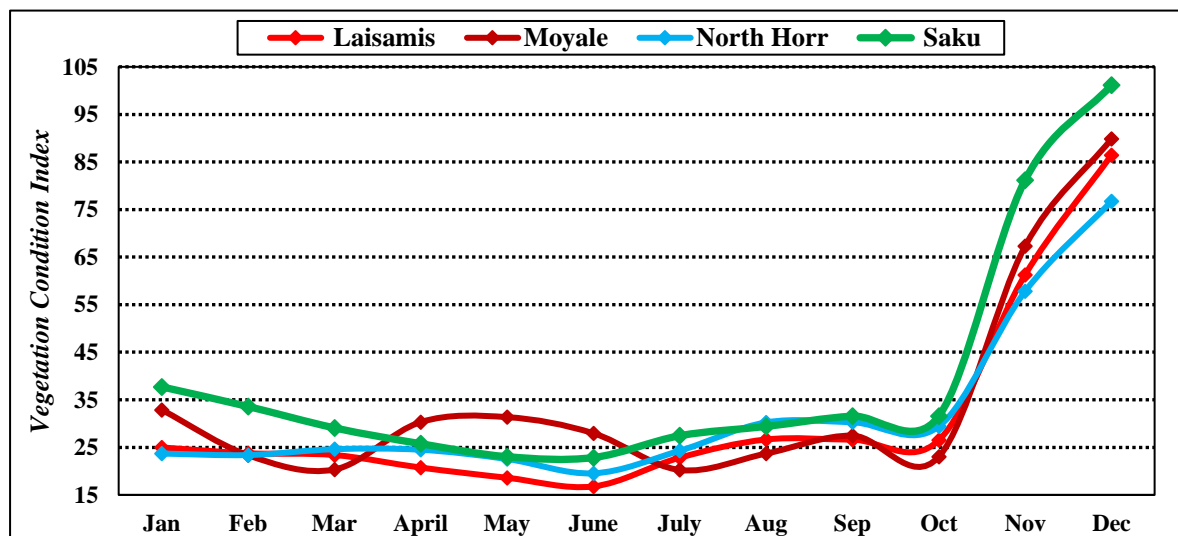


Figure 6: Vegetation Condition Index across sub-counties

- From figure (6) shown above, all sub-counties depicted considerable improvement in the 3-months vegetation condition index with Saku sub-county illustrating the highest vegetation condition index when compared to other sub-counties.
- Saku, Moyale, Laisamis and North Horr sub-counties exhibited 3-months vegetation condition index of 101.15, 89.84, 86.43 and 76.71 respectively thus all fell in the above normal vegetation greenness band due to above normal cumulative seasonal rains.

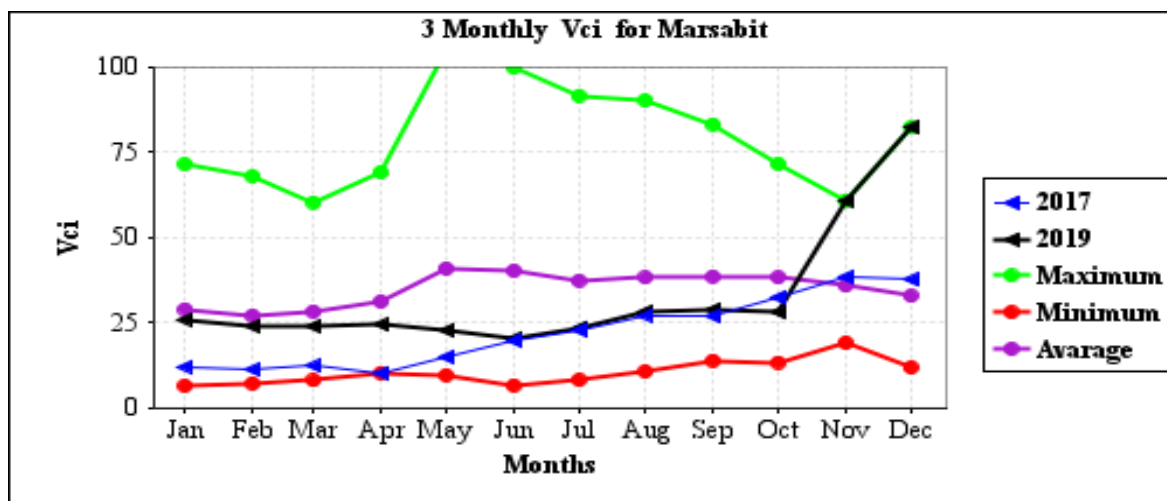


Figure 7: Vegetation Condition Index Trends across the County

- Figure (7) shown above compares December 2019 vegetation condition index to November 2018, long term average and also illustrates the maximum and minimum vegetation condition index values ever recorded.
- When compared to the long-term average, the current vegetation condition index is exceedingly above normal and equates to the maximum vegetation condition index ever recorded at this particular time of the year due to substantial seasonal rains received that surpassed the normal seasonal cumulative rainfall amounts.
- The 3-months vegetation condition index will still be above the long-term average in the next month.

2.1.2 Pasture

- Generally, pasture was very good across in the pastoral and agro-pastoral livelihood zones occasioned by late cessation of the short rains and highly enhanced seasonal cumulative rainfall amounts that revitalized forage condition.
- The agro-pastoral areas of Moyale and Saku sub-counties had better succulent pasture than the pastoral areas of Laisamis and North Horr sub-counties. When compared normally, the quality and quantity of pasture was very good in all the livelihood zones and above normal.
- With the current invasion of desert locust in some parts of the County, defoliation of pasture has been witnessed in some parts which will likely reduce the expected period pasture is expected to last from 4 months to 2 months in the affected areas.
- The worst affected areas include Teso, Illadu, Teso, Kubbe, Malbeali, Diid Golla, Maikona, Dukana, Balesa, Dirib Gomba and Qarqasa where locust has defoliated pasture. In areas not invaded with locust, pasture is expected to last for the next 4 months.

2.1.3 Browse

- Browse condition is good in all the livelihood zones. Enhanced cumulative seasonal rains significantly invigorated browse cover across the livelihood zones.

- Emergence of non-palatable vegetation was witnessed in North Horr and Laisamis sub-counties especially calotropis procera and bush encroachment.
- Quality and quantity of browse is good in all the livelihood zones agro-pastoral.
- In the areas infested with locust, browse is expected to last for the next 3 and half months against the normal four months in the agro-pastoral areas whereas in the pastoral livelihood zone browse is likely to last for the next 3 months against the normal 4 months.

2.2 WATER RESOURCE

2.2.1 Sources

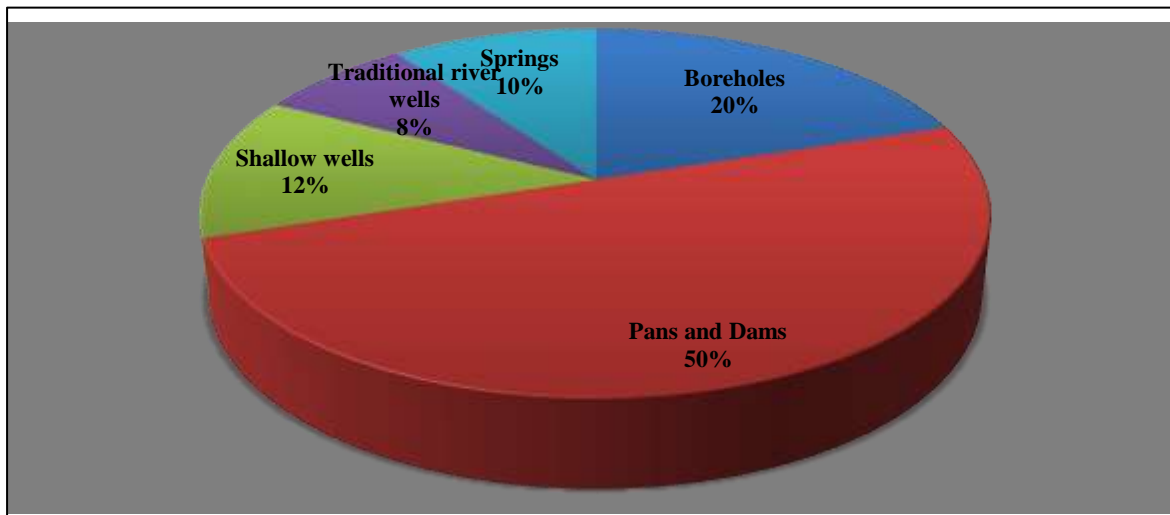


Figure 8: Major water sources across the livelihood zones

- From figure 8 shown above, water pan is the main water source employed by most of the communities' across the livelihood zones as illustrated by a response rate of 50percent which is usually the normal source of water at this time of the year.
- Other water sources adopted by the communities in the month under review were boreholes, shallow wells and springs at 20percent, 12percent and 10percent respectively.
- 95percent of open water sources in all the livelihood zones are fully recharged and it is expected last until the next season.

2.2.2 Household access and Utilization

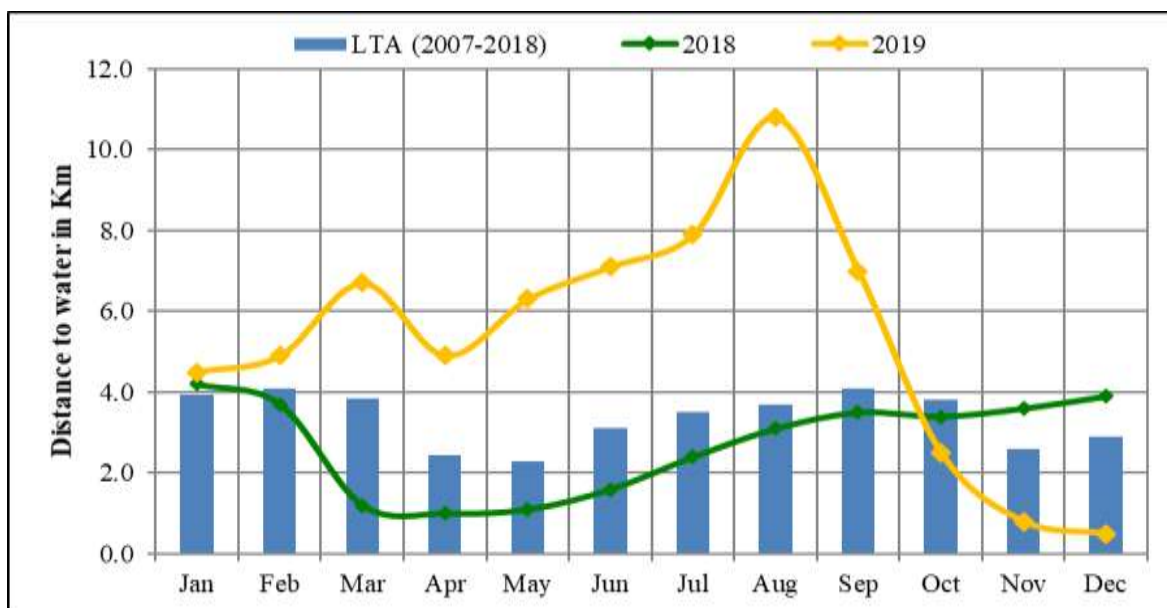


Figure 9: Current household return water distance (km) compared to Long Term Average distances (km)

- From (Figure 9) shown above, return household water distances to the main water sources was 0.5km in the month under review which illustrates slight reduction decline when compared to the preceding months distance of 0.8km.
- All-time short household distances to water sources was occasioned by above normal cumulative seasonal rains that fully recharged sub-surface water sources across the livelihood zones.
- When compared to similar periods, the current household water distance of 0.5km is 83percent shorter than the long-term household water distance of 2.9km.
- Current waiting time in the agro-pastoral and pastoral livelihood zones is 0-20mins against the normal waiting time of 30-45mins.
- Average water consumption across the livelihood zones was 15-20litres per person per day against the normal 15litres per person per day

2.2.3 Livestock access

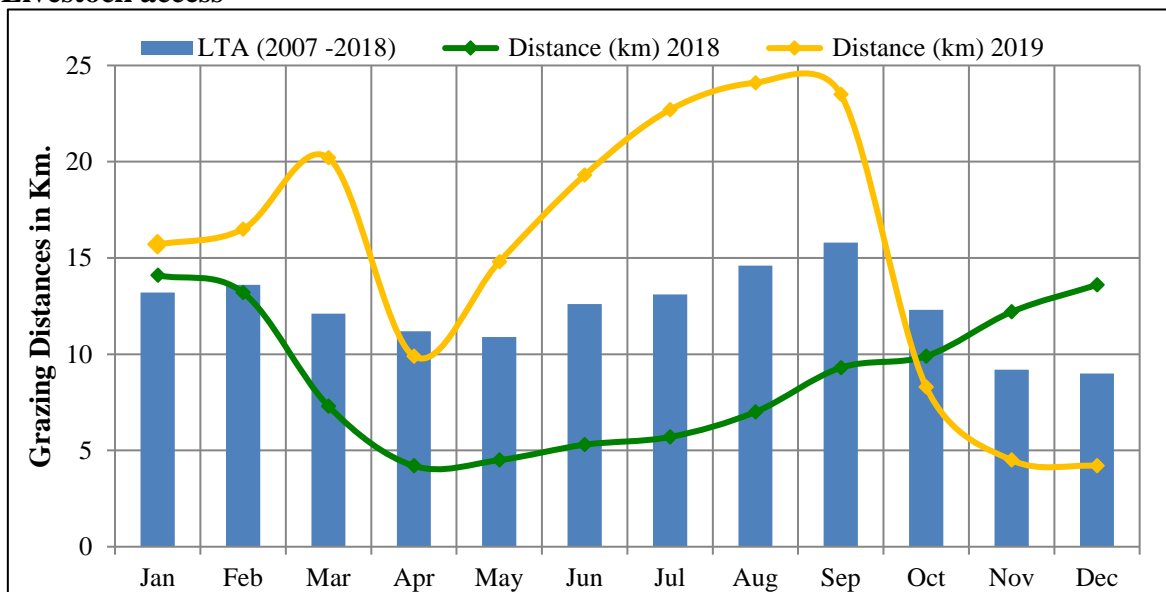


Figure 10: Current livestock trekking distances compared to long term average trekking distances (km)

- From (Figure 10) shown above, return livestock trekking distance from grazing areas to water points is 4.2km across the livelihood zones.
- When compared to the previous months' livestock trekking distances of 4.5km, an all-time short livestock trekking distances were noted across the livelihood zones occasioned by late cessation of the short rains coupled with enhanced cumulative seasonal rains that surpassed the normal seasonal rainfall amounts.
- Current livestock return trekking distance of 4.2km is shorter than the long-term average livestock trekking distance of 9.0km by 53percent.
- Even though the cessation of the short rains occurred in the second dekad of the month under review, livestock trekking distances are likely to be at all-time low in the next month.
- Watering frequencies significantly declined due to shorter livestock trekking distances across the County. Currently, cattle and small stock are watered daily and camels watered after 1-2 days across all the livelihood zones thus watering frequencies were above normal.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Across the livelihood zones, the body condition of cattle and small stock was good which is normal when compared to similar periods attributed to above normal vegetation greenness.
- Camel were in very good body condition across all the livelihood zones which is normal at this time of the year occasioned by good browse and low watering frequencies intervals.
- The body condition for all the livestock species is likely to stagnate in good body condition in the next one month across the livelihood zones.

3.1.2 Livestock Migration

- Normal migration for all the livestock species across the livelihood zones was noted in the month under review. Livestock that had trekked to far-flung areas in search of pasture and water have returned to their normal wet season grazing areas. Currently, 95percent of all the livestock species that had migrated have returned to the homesteads.

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

- In the agro pastoral livelihood zone, poor income households had 3-5TLUs compared to 2-4TLUs normally while the middle income had 10-12TLUs compared to 10-15TLUs normally. In the pastoral livelihood zone, poor income households had 3-7TLUs compared to 4-7TLUs normally while the middle income had 16-21TLUs compared to 15-20TLUs normally.

3.1.4 Livestock diseases and mortalities

- Cumulatively, 2,500 small stock in Moyale, 600 in North-Horr, 1,800 in Saku and 500 in Laisamis during the short rains period due to excess rains. However, some cases attributed to disease showed signs like nasal discharge, cough, and fibrinous lungs.
- Unconfirmed reports of Peste des petits ruminants (PPR) outbreak in areas of Diid Galgallu in Turbi/Bubisa ward. In addition, cases of camels falling sick after assisted during delivery was reported in Turbi.
- Livestock mortality was normal across the County apart from pockets of Laisamis (Korr ward) and Northorr (Dukana ward) sub-counties where mortality was slightly higher due to unknown disease. Department of livestock took sample to ascertain the disease.

3.1.5 Milk Production

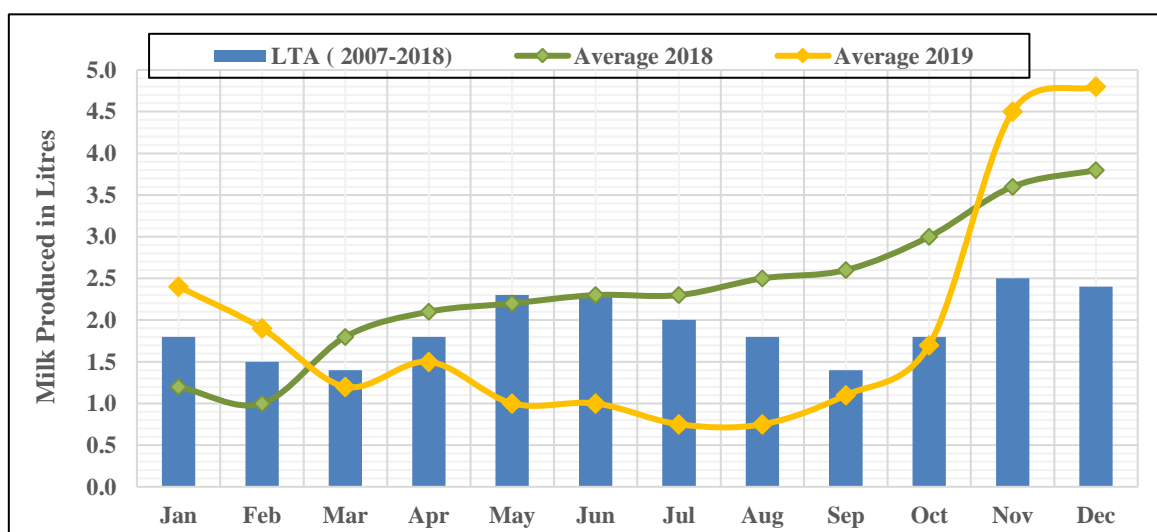


Figure 11: Milk production per household per day in litres across the livelihood zones

- From figure 11 shown above, household milk production per day for the month under review was 4.8litre/household/day across all the livelihood zones.
- When compared to similar periods, average milk production of 4.8litres was significantly above normal.
- Exceedingly above normal milk production across the livelihood zones was attributed to generally good livestock body condition attributed to an-livestock trekking all time low livestock trekking distances, improved vegetation cover, moderate calving, kidding and lambing.
- Currently, milk price retailed at Ksh.45-60 per litre across the livelihood zones against the normal of Kshs.60-75 per litre.

3.1 RAIN-FED CROP PRODUCTION

3.2.1 Area under crop production

- Farmers commenced land preparation in mid-August 2019 for the short rain season. During the initial stages of the activity, famers majorly relied on private tractor service providers because the County tractor services were not available due to resource availability constraints. Most farmers opted for furrowing their land since no much farming husbandry practices had happened during the failed previous long rain season of 2019 and hence most of the farm-planting surface were soft and loose.

Sub County	Prepared by County Tractor	Prepared by private Tractor	Prepared by Oxen and hand Hoe	Total
Saku	150 Acres	320 Acres	160 Acres	630 Acres
Moyale	19 Acres	6 Acres	95 acres	120 Acres
North Horr	-	-	8 Acres	8 Acres
Laisamis	-	-	12 Acres	12 acres
Total	143	220 Acres	257 Acres	770 Acres

3.2.2 Stage and Condition of food Crops

- Early-planted maize is at maturity stage while late-planted maize is in tasseling-silking stage in the agro-pastoral areas of Moyale and Saku sub-counties. Beans are at physiologically maturity stage with the early-planted ones ready for harvesting.
- There is desert locust infestation in Saku, Moyale and North Horr sub counties, which will negatively affect crop harvests majorly in the agro-pastoral areas if not curtailed.
- Major crops affected are maize and beans. Maize tassels have been eaten and broken while maize leaves have been defoliated majorly in the agro-pastoral areas of Saku sub-county(lower parts of Jaldesa/Sagante ward) and approximately 10acres of maize crop has been defoliated. Beans has also been defoliated.
- Expected harvest for maize and beans will reduce by 30-40percent in the agro-pastoral areas of Saku sub-county. If Desert locust infestation persists, then the late-planted maize will be significantly affected.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

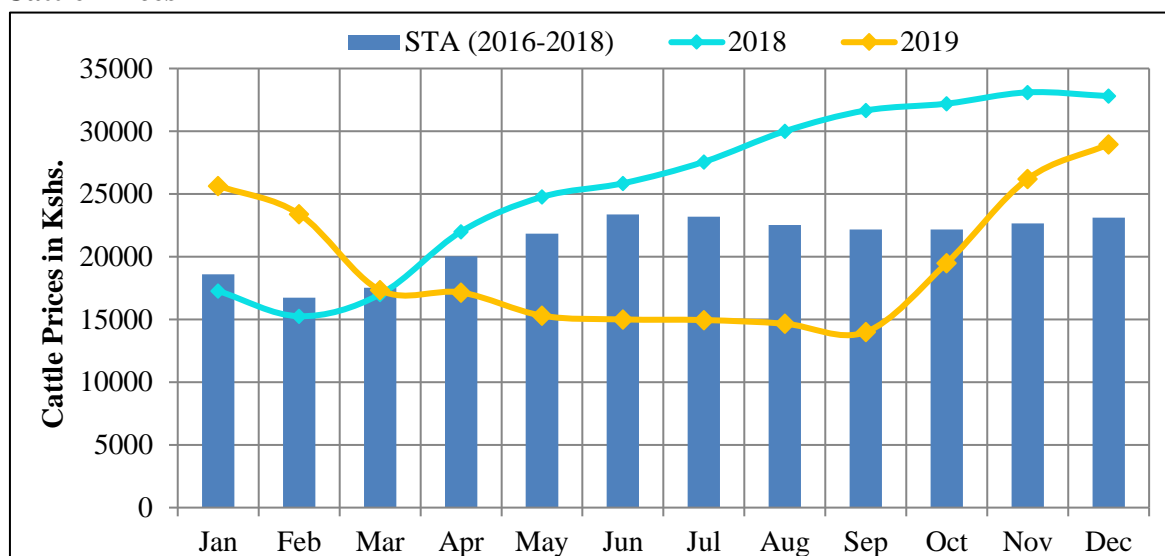


Figure 12: Current cattle prices compared to the short term average prices

- From the figure (12) shown above, cattle price for the month under review was Kshs. 28,950 hence slightly increased when compared to the previous months' price of Kshs.26,200.
- When compared to similar periods, current cattle price of Kshs. 28,950 is above the short-term average price of Kshs. 23,122 by 25percent. Above normal cattle price was attributed to good body condition and better prices during the festive season.
- Moyale livestock market posted higher cattle prices averaging between Kshs. 29,000 - 32,500 while Merille and Jirime livestock markets recorded cattle prices of Kshs.20,000-25,000.
- Most of the traders in Moyale sub-county preferred selling their cattle to neighbouring Ethiopian market that offer much favourable prices.
- Cattle prices are expected to be above normal in the next one month in the major livestock markets due to sustained good body.

4.1.2 Goat prices

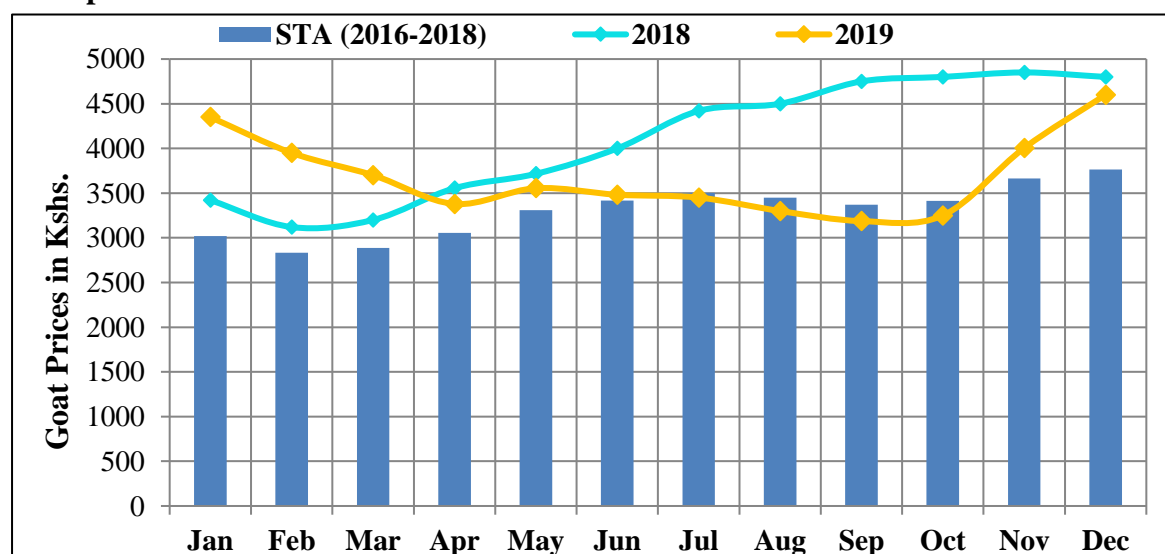


Figure 13: Current goat prices compared to short term average prices

- From figure 13 shown above, the average goat prices in the month under review was Ksh. 4,600 thus increased when compared to the previous month's goat price of Kshs.4, 005.
- When compared to similar periods, current goat price of Kshs. 4,600 is above the short-term average price of Kshs. 3,764 by 22percent. Above normal goat prices were occasioned by good body condition and favourable prices during the festive season.
- Moyale and Merille livestock markets exhibited favourable goat prices averaging Ksh 5000-6000 whereas North Horr sub-county posted slightly lower goat prices averaging at Ksh. 2,500-3,500.
- High goat prices in Moyale attributed to preference of majority of the buyers from Kenya and neighbouring Ethiopia who fancy Moyale as a major livestock market for small stocks.
- Most of the livestock markets were operational as there was no reported incidences of insecurity or major events that might have disrupted the livestock markets.

4.1.3 Sheep Prices

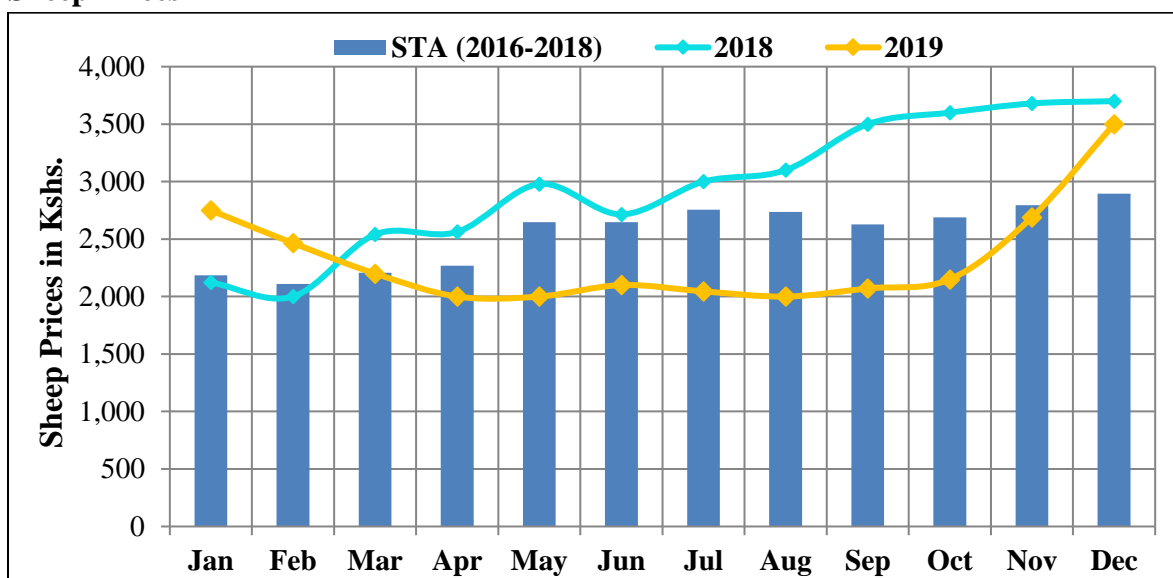


Figure 14: Current sheep prices compared to the short-term average prices (kshs.)

- From the figure 14 shown above, sheep price for the month under review was Kshs. 3,500 across the livelihood zones, which illustrates an increase when compared to the previous months' sheep price of Kshs.2, 690.
- When compared to the short-term average price of Kshs. 2,896, current sheep price is above normal. Above normal sheep prices prompted by to good body condition and increased demand of sheep during the festive season. Moyale livestock market posted favourable sheep prices averaging at Kshs.4, 000.
- With sustained good sheep body condition, sheep prices are likely to be above normal in the next one month.

4.2 CROP PRICES

4.2.1 Maize

- The average price of maize for the month under review was Ksh.45 per kg, which was normal when compared to the short-term average of Ksh.46 per kg.
- However, lower maize prices were recorded in Moyale and Sololo commodity markets with maize prices retailing at Kshs. 30-35 mainly occasioned by improved supplies from the neighbouring Ethiopia market.

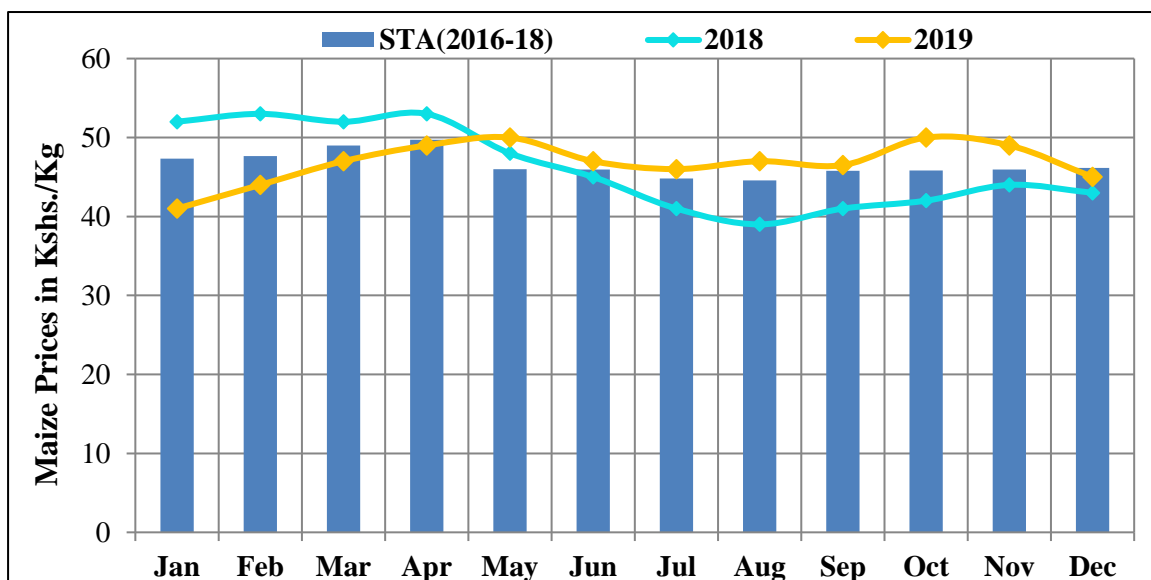


Figure 15: Current maize prices compared to the short-term average maize prices (Kshs.)

- Merille, Loiyangalani, South Horr and Korr posted higher maize prices at Kshs.50-60per kg mainly attributed to accessibility.
- Maize prices are anticipated to be gradually decline (likely improved injections) in the next one month due to expected harvest albeit desert locust infestation that will likely reduce the expected harvest.

4.2.2 Beans

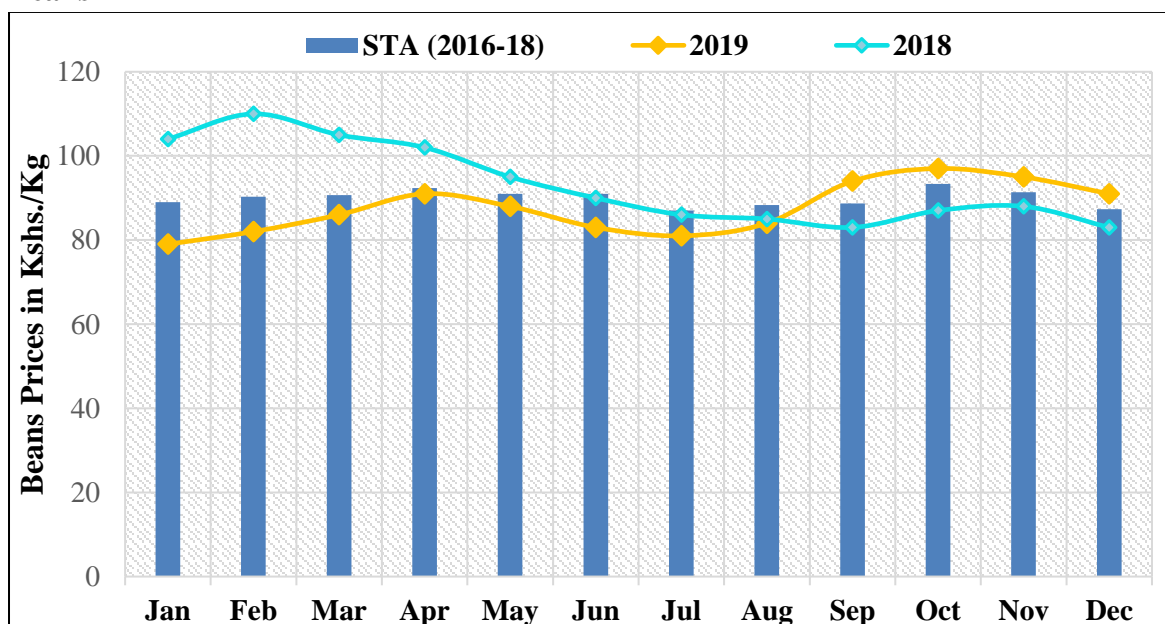


Figure 16: Beans prices compared to the short average term average prices(Kshs.)

- From the figure shown above, beans prices retained at Kshs.91/kg across the livelihood zones in the month under review thus no notable change when compared to the previous months' beans price of Kshs.95/kg.
- When compared to short-term average beans price of Kshs.87/kg, beans price of Kshs.91/kg is normal.
- Favourable beans prices was exhibited in Moyale commodity market with prices ranging between Kshs.50-60/kg. However, beans prices were higher in major markets of North Horr and Laisamis sub-counties where prices retained at an average of Kshs.100/kg.
- Improved market supplies from the neighbouring vibrant Ethiopia market prompted favourable beans price in Moyale commodity market.

4.2.3 Terms of Trade (TOT)

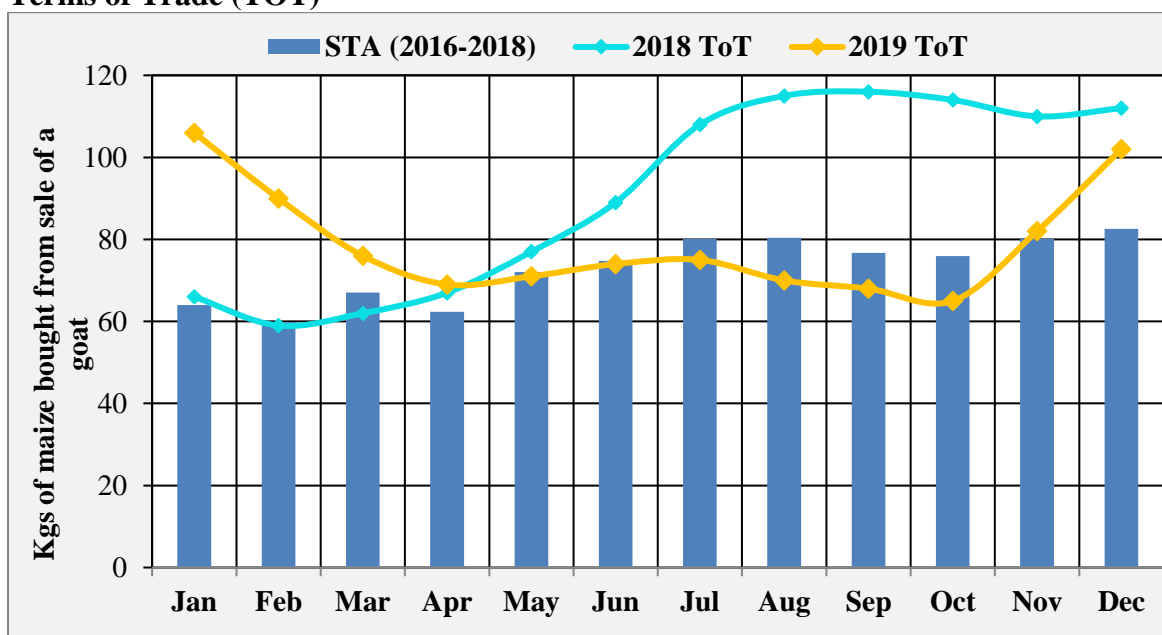


Figure 17: Current terms of trade versus short term average terms of trade

- In the month under review, terms of trade were 102 across all the livelihood zones thus improved when compared to the preceding month’s terms of trade of 82.
- When compared to the short-term average terms of trade of 83, the current terms of trade is above normal by 23percent. Above normal terms of trade were attributed by favorable goat prices and stable maize prices, which improved the purchasing power for the pastoralists.
- Terms of trade is expected improve further in the next one month due to sustained good body condition of goats and expected decline in maize prices.
- Moyale sub-county posted better terms of trade than other sub-counties due to higher goats prices and much lower maize prices prompted by vibrant neighbouring Ethiopian market, normal in Saku sub-county and near normal in North Horr and Laisamis sub-counties.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

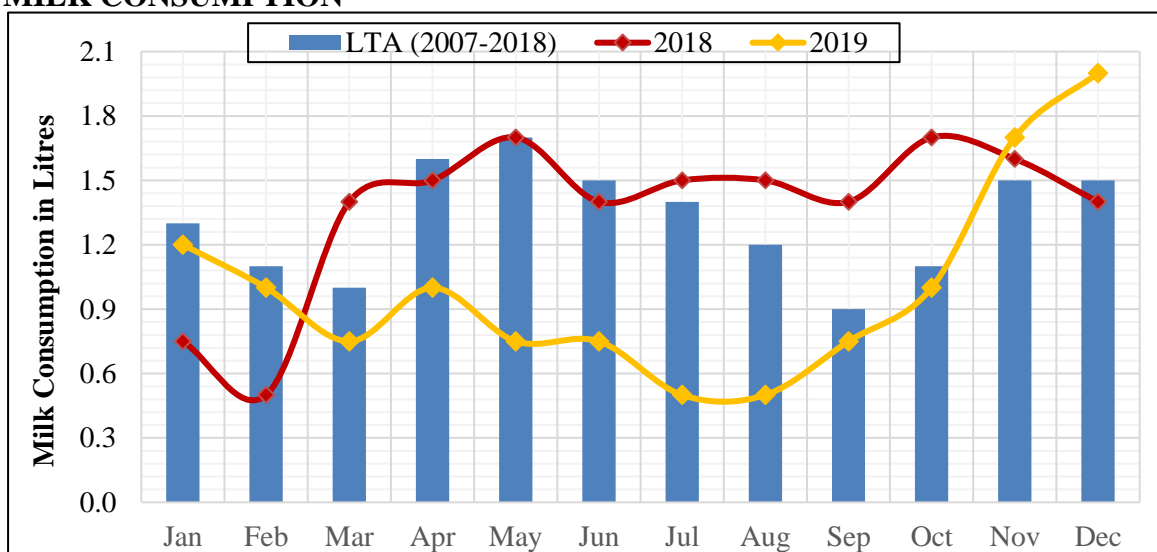


Figure 18: Current milk consumption/household/day/litre against long term average

- From the figure 18 shown above, household milk consumption is 2.0litre/household/day in the month under review across the livelihood zones thus improvement when compared to the previous month's milk consumption of 1.7litre/household/day.
- When compared to the long-term average milk consumption of 1.5litres/household/day, current milk consumption is above normal by 33percent.
- Above normal milk consumption at the household level was occasioned by improved milk production as 75percent of households accessed milk from camel.
- With continued moderate calving, lambing and kidding across the livelihood zones, milk consumption is likely to gradually improve in the next one month.

5.2 FOOD CONSUMPTION SCORE (FCS)

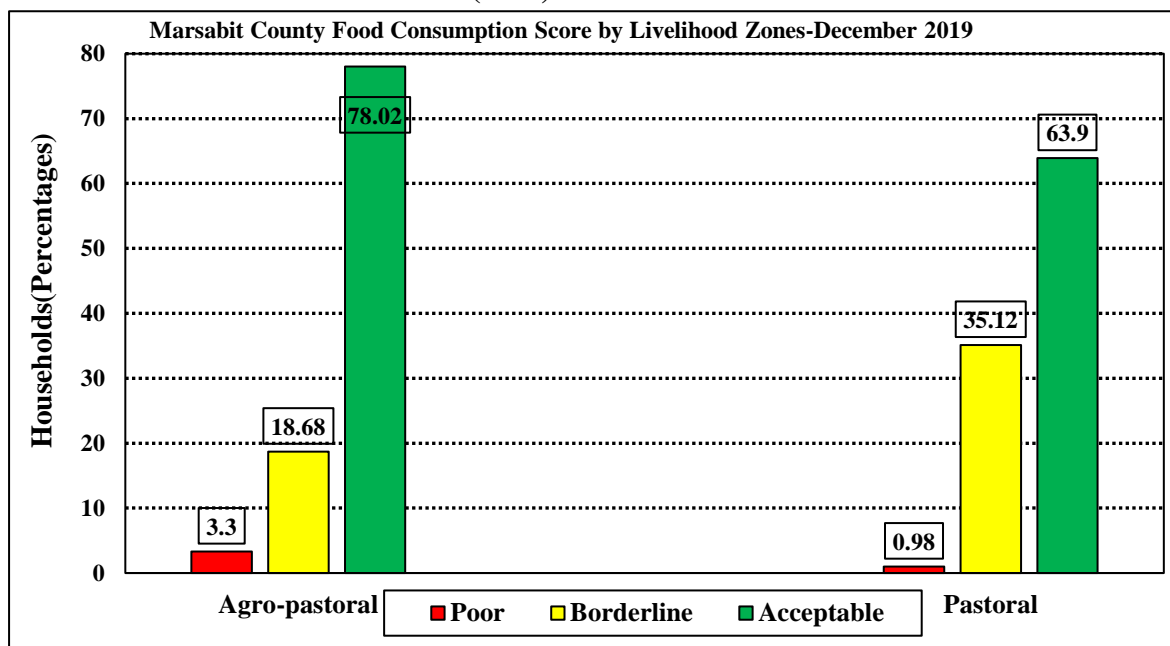


Figure 19: Food Consumption Score across the livelihood zones

- The mean food consumption score was 44.95 across the livelihood zones thus slightly improved when compared to previous months' food consumption score of 42.88 hence households remained in the acceptable food consumption score band for two consecutive months.
- Food consumption score was better in the agro-pastoral than the pastoral livelihood zone with a mean of 55.76 and 40.16 respectively.

	FCS Mean	Poor FCS	Borderline FCS	Acceptable FCS
County	44.95	1.7%	30.1%	68.2%
Dukana	40.76	3.45%	13.79%	82.76%
Golbo	78.73	0.0%	3.5%	96.5%
Karare	56.52	0.0%	10.0%	90.0%
Korr	43.40	0.0%	20.0%	80.0%
Loiyangalani	39.65	3.3%	40.0%	56.7%
North Horr	34.57	0.0%	53.3%	46.7%
Turbi	44.08	0.0%	11.5%	88.5%
Heillu Manyatta	28.87	0.0%	96.7%	3.3%
Sagante	32.79	9.7%	45.2%	45.1%
Uran	50.37	0.0%	6.7%	93.3%

- From the table shown above, 1.7percent of households consumed staples and vegetables every day and never or very seldom are consuming protein rich food such as meat and dairy. 30.1percent are consumed staples and vegetables every day, accompanied by oil and pulses a few times a week whereas 68.2percent are consumed staples and vegetables every day, frequently accompanied by oil and pulses and occasionally meat of dairy product.
- Proportion of households in the agro-pastoral livelihood zone that were within the acceptable, borderline and poor food consumption score were 78.0percent, 18.7percent and 3.3percent respectively. Similarly, proportion of households in the pastoral livelihood zone that were within the acceptable, borderline and poor food consumption scores were 63.9percent, 35.1percent and 1.0percent respectively.
- From the table shown above: Dukana and Turbi wards in North Horr sub-county, Uran and Golbo wards in Moyale sub-county, Karare ward in Saku sub-county, Korr and Loiyangalani wards in Laisamis sub-county exhibited acceptable food consumption score. However, Heillu Manyatta, North Horr and Sagante wards posted borderline food consumption scores.
- As the short rains progresses, food consumption score is likely to improve further and majority of the households will continue to fall in the acceptable food consumption band.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

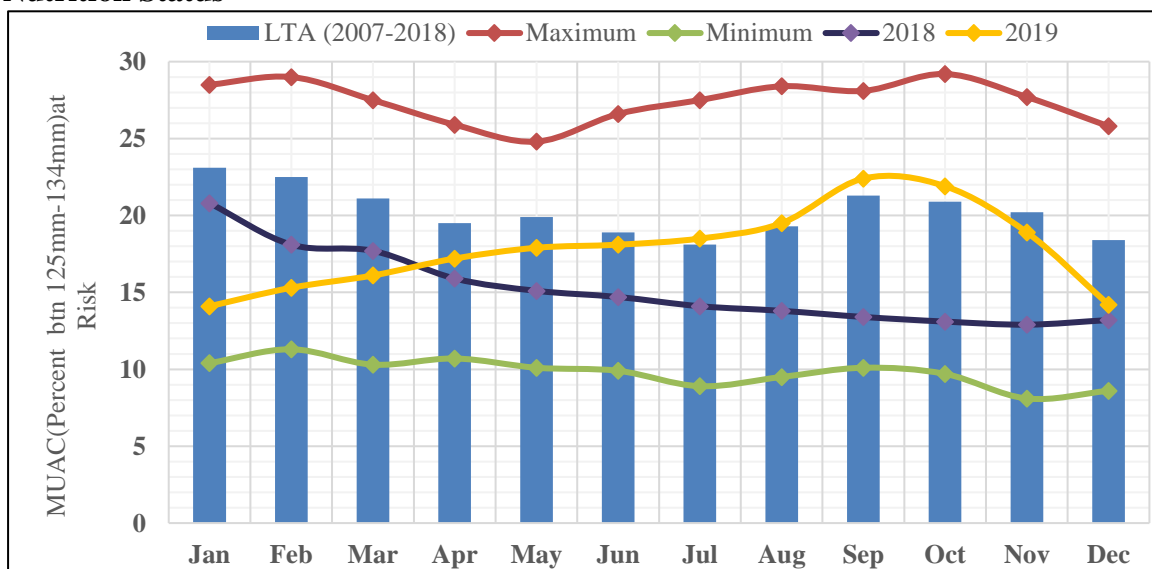


Figure 20: Nutritional status of children below the age of five years versus long term average

- From (Figure 20) shown above, proportion of children under the age of five years who were ‘at risk’ of malnutrition was 14.2percent in the month under review, which depicts an improvement when compared to the preceding months’ MUAC of 18.9percent.
- The proportion of children ‘at risk’ of malnutrition was within the normal range when compared to the long-term average MUAC of 18.4percent thus posted improvement of nutritional status of children below the age of five years over time.
- Improvement in nutritional status of children below the age of five years was attributed to increased milk consumption at the household level, favourable terms of trade, safety nets programmes and acceptable food consumption score across the livelihood zones.
- According to the latest Nutrition Sector Update, 3,712 children below the age of five and 1,405 pregnant and lactating women were screened for malnutrition through the ongoing integrated outreach support. 5.3% (198) were enrolled as new clients for management of

acute malnutrition while 9.9 % (140) Pregnant &/Lactating women were enrolled as new client for management of moderate malnutrition.

5.4 COPING STRATEGIES

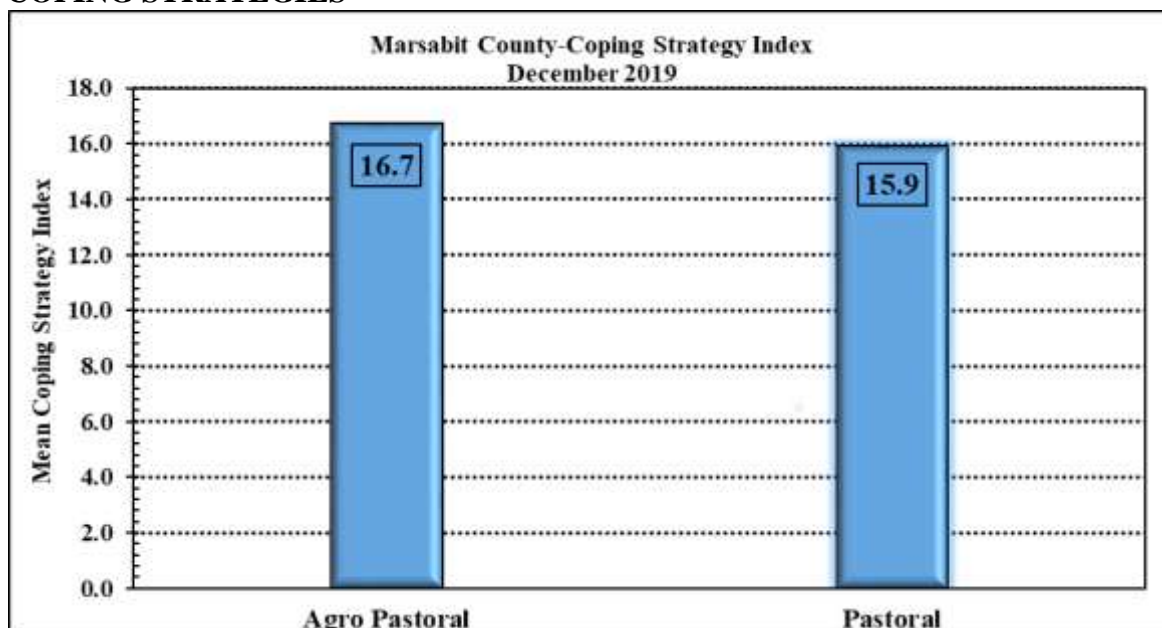


Figure 21: Coping Strategy Index across livelihood zones

- (Figure 21) shown above, reduced consumption based coping strategy index (rCSI) for the pastoral and agro-pastoral livelihood zones was 15.9 and 16.7 respectively thus most households employed stressed reduced food consumption based strategies across the livelihood zones.
- Reduced consumption based coping strategy index (rCSI) for the month under review was 16.18 hence insignificant change when compared to the previous month's rCSI of 15.93.
- 84 percent of the households adopted coping mechanisms while 16 percent of the households didn't employ any of the coping strategies in the month under review.
- From table shown below, households in Sagante, Golbo, Dukana and Loiyangalani wards exhibited higher consumption based coping strategy indexes whereas households in Karare, Uran, Turbi and Korr wards exhibited favourable consumption based coping strategy index.

Consumption based coping strategy index (rCSI)		
Sub-county	Ward	rCSI
Saku	Sagante	21.6
Saku	Karare	9.9
Laisamis	Korr	12.2
Laisamis	Loiyangalani	30.4
North Horr	Turbi	13.5
North Horr	North Horr	11.8
North Horr	Dukana	18.2
Moyale	Uran	11.4
Moyale	Heillu Manyatta	13.9
Moyale	Golbo	18.6

- 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

- National Government distributed 7,000 bags of Rice each 90kg to 7 Districts.
- CIFA provided food items for most vulnerable households one time off for 294 households each household received 10 kg of Rice , 3Ltr veg oil , 1kg of Salt and 5 kg of sugar in Laqi and Badanrero.

6.2 NON-FOOD AID

- Unconditional Cash transfer to 20,488 each receiving Kshs5, 400 bi-monthly. 19,901 households in Marsabit County received Ksh109 million under Hunger Safety Net Programme III through National Drought Management Authority.
- CIFA will provide cash transfer for food insecure household for three month Jan-March 2020 at KES 3,000 for 180 HH (Badan Rero (80) , Laqi(20HH) 100 HH for two month and Watiti 80HH for three month among them 30 HH from Host community and 50 HH IDPs) and Cash For Work for 100HHs for Antuta, Laqi and Watiti.
- World Vision Kenya distributed 146,400 sachets of water treatment chemicals.
- UNICEF, Kenya RedCross, FH-K, Concern Worldwide, World Vision Kenya, GIZ, CCM and NHPPlus supported integrated medical outreaches for screening of Pregnant and Lactating Women and Children under the age of 5 years.
- Kenya RedCross supported Community Health Volunteers in visiting households to trace defaulters in ANC,PNC,IMMUNIZATION, NUTRITION, sensitization on hygiene and sanitation and strengthen MNCH services
- CIFA supported hygiene promotion and sensitization on cholera due to contaminated water sources through capacity building in Watiti, Antuta, Badanrero and Laqi. Wash interventions by supply of Purr and Aqua tabs for 544 HH in Laqi, Watiti, Antuta and Badanrero. Rehabilitation and construction of pit latrine 40 in number (10 Watiti, 20 Badanrero and 10 Antuta).

7.0 EMERGING ISSUES

7.1 DISEASES/CONFLICT/HUMAN DISPLACEMENT

- Desert locust infestation was reported at Obbu, Ambalo and Iladu in Moyale, Jaldesa, Dokatu and Badasa in Saku, Shurr and Awaye in North Horr sub counties.
- Some health centers are inaccessible due to floods, which rendered delivery of medical nutritional commodities to the health facilities difficult.

7.2 FOOD SECURITY PROGNOSIS.

- Cessation of the short rains was late as it occurred in the second dekad as opposed to the normal first dekad of the month. Generally, Moyale and Saku sub-counties received slightly enhanced rains, which were above normal rainfall amounts but significantly subsided when compared to the previous month. Most parts of Laisamis sub-county received torrential rainfall amounts while most North Western parts of North Horr sub-county received slightly

enhanced rains. The cumulative seasonal rainfall amounts exceedingly surpassed the normal cumulative rainfall amounts in all the livelihood zones.

- 3-months vegetation condition index fell in the above normal vegetation greenness band occasioned by highly enhanced cumulative seasonal rainfall amounts that were evenly distributed spatially coupled with good rainfall intervals. The current vegetation condition equates to the maximum vegetation condition index ever recorded at this particular time of the year. Even though the cessation of the short rains occurred in the second dekad of the month, vegetation condition index for the next month is expected to be in the above normal vegetation greenness band.
- 95percent of open water sources in all the livelihood zones are fully recharged and expected to last until the next season. Household and livestock water distances are at an all-time low and expected to continue to be within the normal ranges in the next one month.
- Market prices for cattle and small stock were above normal, with expected improvement in livestock body condition for all the species in the next one month, livestock prices are likely to improve further. Terms of trade was above normal attributed to favorable goat prices and stable maize prices and expected to be still above normal in the next one month.
- Early-planted maize is at maturity stage while late-planted maize is in tasseling-silking stage. Beans are at physiologically maturity stage with the early-planted ones ready for harvesting. Desert locust infestation will negatively affected crop harvests majorly if not curtailed. Currently, maize tassels have been eaten and broken while maize leaves have been defoliated majorly in the lower parts of Jaldesa/Sagante ward and approximately 10acres of maize crop has been defoliated. Beans has also been defoliated. Expected harvest for maize and beans will reduce by 30-40percent in the agro-pastoral areas of Saku sub-county. If desert locust infestation persists, then the late-planted maize shall be affected significantly.
- The mean food consumption score fell in the acceptable food consumption score band in all the livelihood zones for two consecutive months and expected to be in the same strap in the next one month while reduced consumption based coping strategies were stressed as households adopted mechanisms that were less severe.
- Proportion of children ‘at risk’ of malnutrition was within the normal range when compared to the long-term average attributed to increased milk consumption at the household level, favourable terms of trade, safety nets programmes and acceptable food consumption score across the livelihood zones.
- Generally, the last quarter of 2019 was generally good due to above normal seasonal cumulative rainfall amounts that resuscitated environmental, production, access and utilization indicators.

8.0 RECOMMENDATIONS

- Immediate food assistance to the 111,000 vulnerable population (Saku-18,000 people, North Horr-28,000 people, Moyale-32,000 people, Laisamis-33,000 people)
- Upscale of various safety net programmes especially in floods affected areas across the County.
- Water harvesting techniques especially roof catchment and run-offs to harness water for storage.
- Restocking of small stock targeting households affected by floods.
- Improved storage of crops especially maize and beans to minimize post harvests losses.
- Strategic vaccination across the County. Procurement of vaccines, multivitamin, deworming and enhancement of disease surveillance.
- Enhanced screening and referral for malnutrition in all hot spot areas.
- Integrated medical outreaches in flood affected areas and sensitization of affected population on disease prevention and control with focus on epidemic potential diseases
- Support of ground surveys, aerial spraying services, provision of chemicals, information dissemination, and capacity building for control operations of Desert Locust Invasion in Moyale, Saku and North Horr sub-counties.