

National Drought Management Authority MARSABIT COUNTY DROUGHT EARLY WARNING BULLETIN FOR DECEMBER 2020



A Vision 2030 Flagship Project



DROUGHT EW PHASE: ALERT

Drought Status: ALERT



Maandalizi ya mapema

Drought Situation & EW Phase Classification

Biophysical Indicators

Rainfall: In December, depressed rains were received across the County in the third dekad. Seasonal rainfall amounts were below normal.

Vegetation condition: 3-months Vegetation Condition Index for the month under review was 37.11 across the County hence significant deterioration when compared to the previous months VCI of 49.08.

Socio-Economic Indicators (Impact Indicators)

Production indicators: Livestock body condition was good-fair for all the livestock species in all the livelihood zones. Milk production was above the short term average. Unusual livestock migration was reported in North Horr and Laisamis sub-counties. Incidences of livestock diseases were reported across the County especially rabies ad foot and mouth. Maize is at tasselling stage whereas beans are at flowering-podding stage. Mass calving in camel was observed across the livelihood zones.

Access indicators: Household and livestock water distances increased across the County. Breakdown of some strategic boreholes was reported in some part of the County and in some areas households are experiencing acute water shortage. Milk consumption was normal and terms of trade above average attributed to favourable maize and goats' prices.

Utilization indicators. Household food consumption score declined but remained in the acceptable band whereas consumption based coping strategies applied by households were stressed in all the livelihood zones. There were no notable variations in livelihood coping strategies applied. Total admissions trends for under-fives remained similar amongst the moderately and severely malnourished children across the County.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Normal	Deteriorating
Pastoral All species	Alert	Deteriorating
Fisher folk/Casual labour/Petty Trading	Alert	Stable
County	Alert	Stable
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	65	80 -120
VCI-3Month (County)	37.11	>35
Forecast (VCI-3Month)		>35
Forecast SPI3 (OND)	-0.09 to -0.98	> Zero
Production indicators	Value	Normal
Livestock Body Condition	Good-Fair	Good
Milk Production	2.3	>2.1Litres
Livestock Migration Pattern	Unusual	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	91	>67
Milk Consumption	1.3	>1.3 Litres
Return distance to water	7.7	0.0-7.3Km
Utilization indicators	Value	Normal
Nutrition Status (severe & moderate)	11.6	6.0
Coping Strategy Index	15.1	<20
Food Consumption	39.0	>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

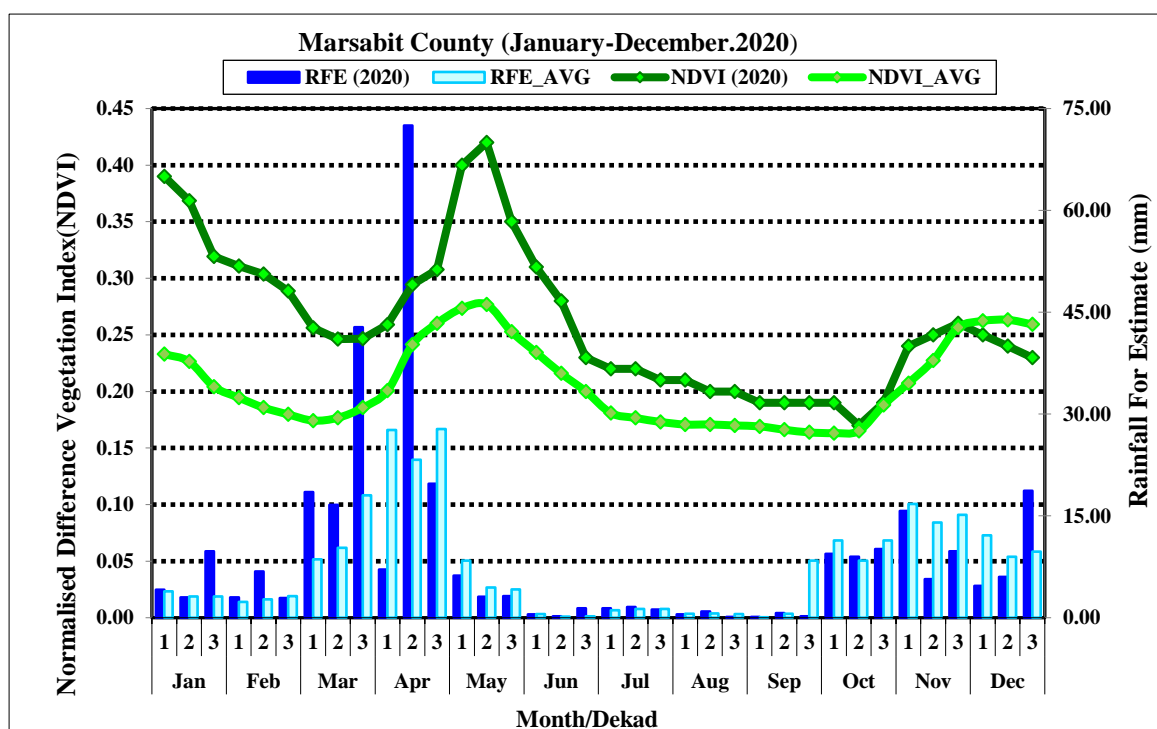


Figure 1: Dekadal Rainfall (mm) and NDVI values compared to the Long Term Average

Source: WFP-VAM, CHIRPS/MODIS

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

1.2 Cessation of the Short Rains

- Cessation of the short rains was timely as it occurred in the third dekad of the month.

1.3 Amounts received

- In the month under review, Marsabit Mountain received 39.3mm of rainfall in 4 rainy days with the maximum amount received on 30th December at 18.4mm. Similarly, Moyale Township received 41.5mm of rainfall in 3 rainy days with the highest amount recorded on 30th December at 33mm. Most parts of North Horr sub-county received rains which were below average with Dukana, Balesa, El-hadi, Elgade and North Horr recording rainfall amounts of 34mm, 10mm, 6mm, 4mm and 3mm respectively in 1-3 rainy days as illustrated in figure 2 below. Northern parts of Dukana received 60-70mm of rainfall, areas between El-hadi and Balesa (Yaa Sharbana, Kalesa, Dakane, Boqe) recorded about 30mm while areas south of Kalacha (Ollom) received about 30mm of rainfall. North western parts of Laisamis and North Horr sub-counties received above average rains. Isolated areas of Laisamis sub-county received some light showers while Kargi ward and Mt. Kulal (about 60mm) received slightly better rains in 1-2 rainy days.

1.4 Spatial and temporal distribution

- Distribution of the December rains was poor both temporally and spatially across most parts of the County coupled with significant decline in rainfall intensity when compared to the

previous month. Moyale lowlands, most parts of North Horr and Laisamis sub-counties generally remained dry in the month under review.

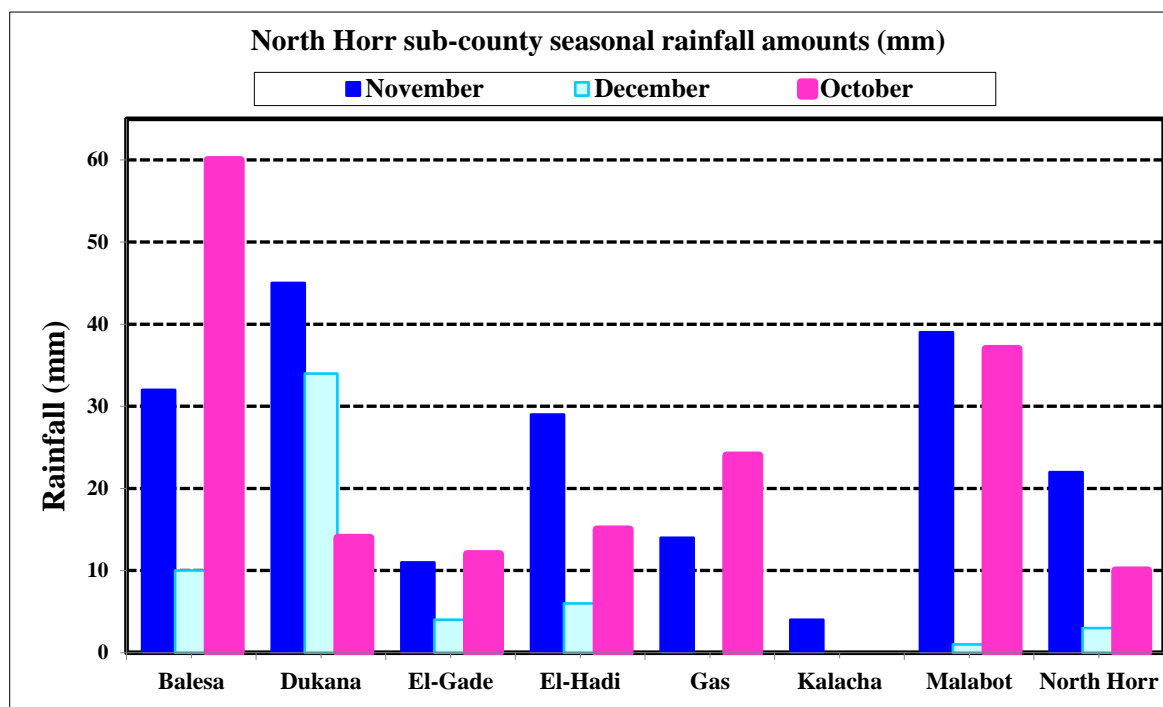


Figure 2: Rainfall amounts at health facilities under One Health Project:

- Agro-pastoral and pastoral livelihood zones received below average rains in 1-3 rainy days which illustrates significant decline in rainfall amounts and frequency of the previous month.

CUMULATIVE RAINFALL AMOUNTS

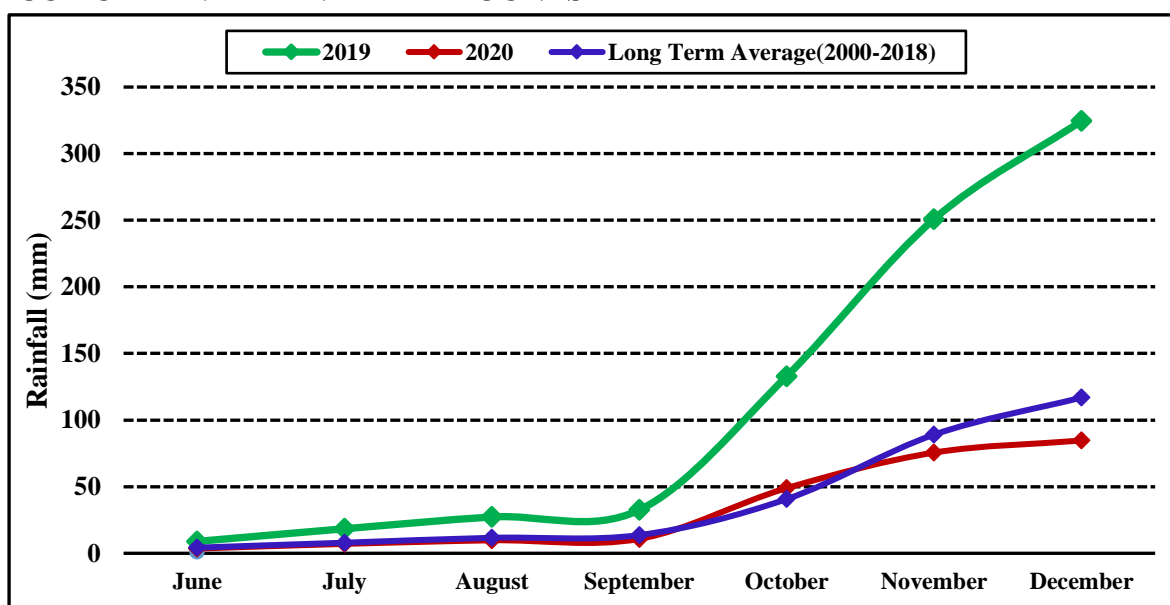


Figure 3: Marsabit County Cumulative Rainfall Amounts (mm)

- From the figure (3) shown above, current seasonal cumulative rains are below the long-term cumulative rainfall amounts. Largely, 2019 (wet season) where the cumulative seasonal short rains were exceedingly above average and more double the seasonal cumulative long term average amounts.
- The current cumulative rainfall amounts are below the long term cumulative rainfall amounts due to the depressed rains that were received in North Horr and Laisamis sub-counties which crowded out the near average rains in Moyale and Saku sub-counties.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- From the figure 4 shown below, current vegetation condition index is 37.11 thus exhibited significant deterioration when compared to the previous month's vegetation condition index of 49.08. However, the current vegetation condition index remained in the normal vegetation greenness band.
- Significant decline in the vegetation condition index was attributed to generally below average cumulative seasonal rainfall amounts that didn't sufficiently invigorate vegetation cover across the County mostly in the pastoral areas of North Horr and Laisamis sub-counties. With drier than usual conditions and below average seasonal rains, the 3-months vegetation condition index will decline further in the next one month and shift towards the moderate vegetation deficit band.

- When compared based on the sub-counties, Saku sub-county illustrated a 3-months vegetation condition index of 50.52 (vegetation greenness above normal), Laisamis sub-county had a VCI of 41.72 (normal vegetation greenness band).

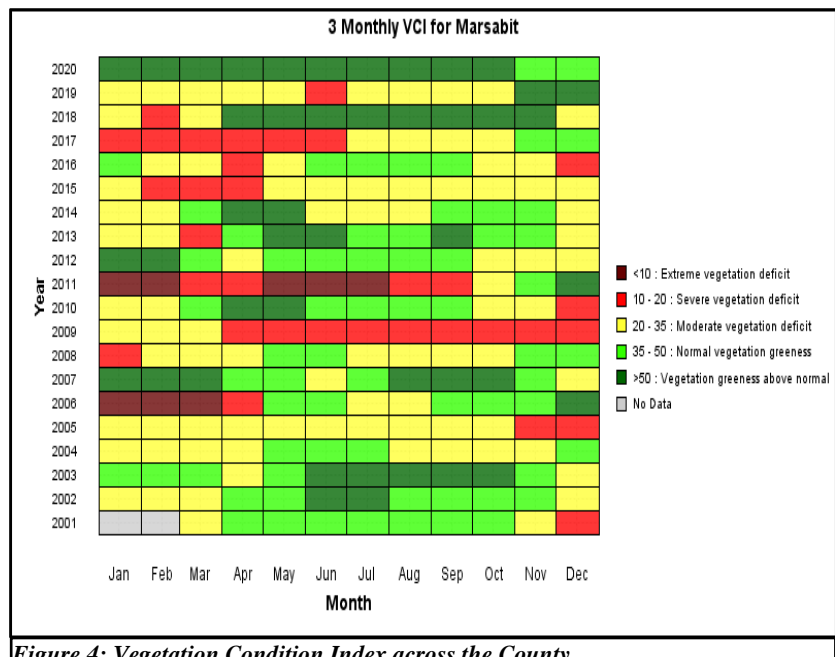


Figure 4: Vegetation Condition Index across the County

However, Moyale and North Horr sub-counties registering moderate vegetation deficit of 34.80 and 34.38 respectively.

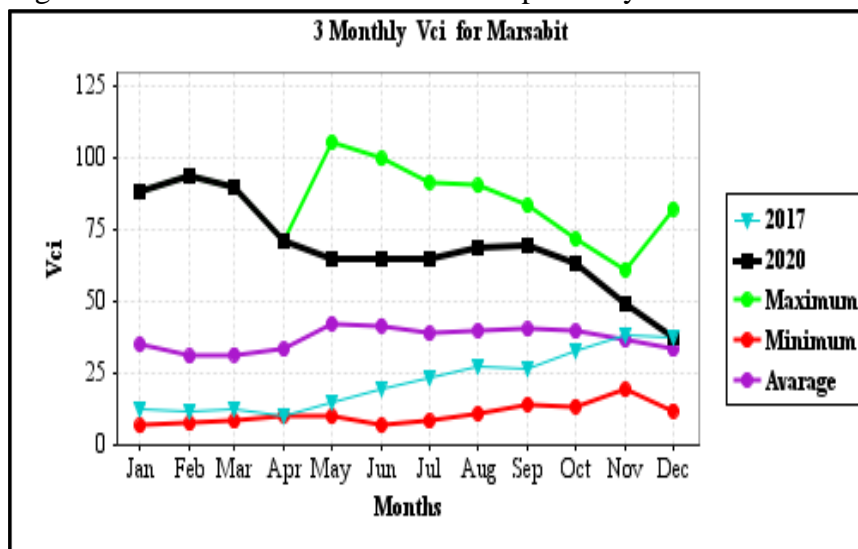


Figure 5: Vegetation Condition Index Trends across the County

- Figure (5) shown above compares December 2020 vegetation condition index to December 2020 long term average, historical maximum and minimum vegetation condition index values. When compared to the long-term average, the current

vegetation condition index equates the long term average and the VCI value in a dry year

(2017). With expected drier than usual conditions, vegetation condition index is likely to considerably decline and fall below the long term average in the next one month.

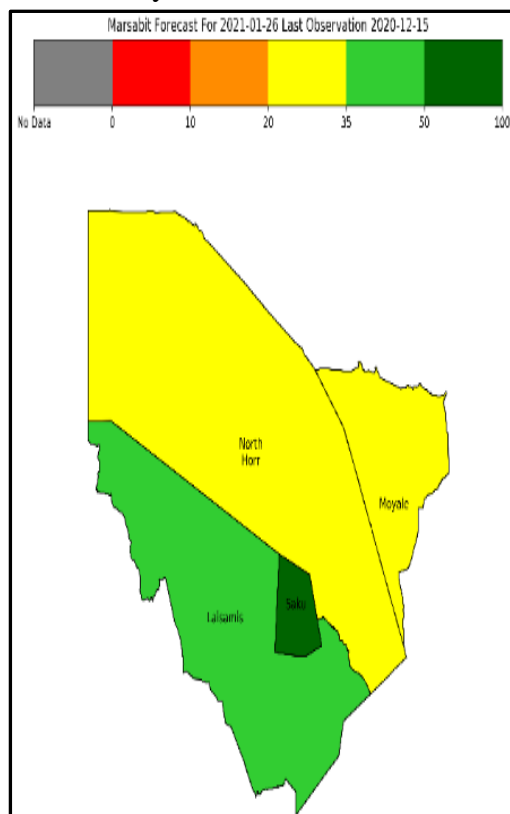


Figure 6: Marsabit County Monthly VCI

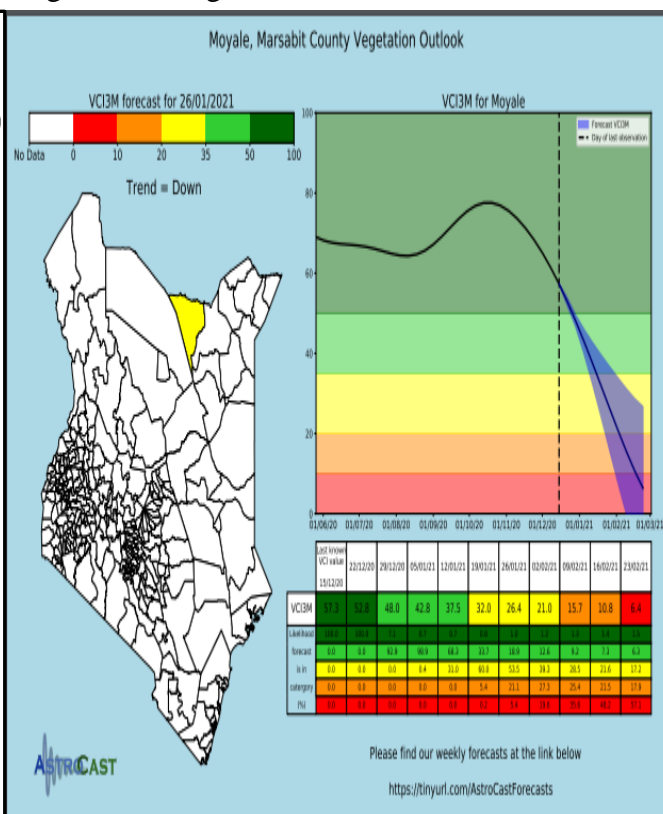


Figure 7: 3-months VCI forecast for Moyale sub-county

- Figure 6 shown above illustrates sub-counties forecasts vegetation condition index which indicates that most parts of Moyale and North Horr sub-counties recorded moderate vegetation deficit with a tendency of shifting towards the severe vegetation deficit band in the next one month if the short dry spell progresses. Laisamis and Saku sub-counties are in the normal and above normal vegetation greenness band respectively.
- From (Figure 7) shown above, the 3month vegetation condition index forecast for Moyale sub-county in the month under review indicates normal moderate vegetation deficit. Vegetation condition index is expected to shift towards the severe vegetation deficit band from 9th February 2021.

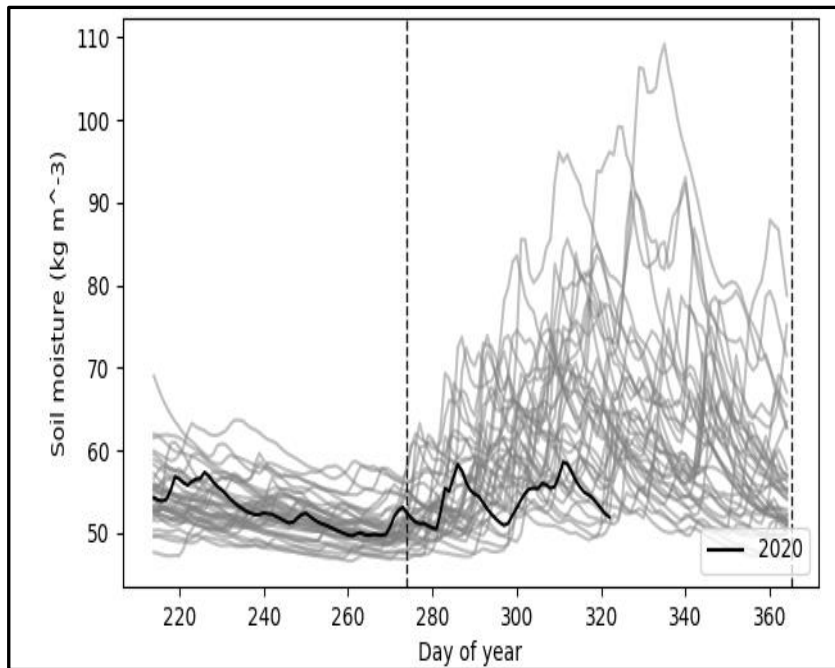


Figure 8: TAMSAT-ALERT soil moisture for Marsabit County

Figure 8 shows TAMSAT-ALERT soil moisture time series for Marsabit County. The grey lines show the progression of soil moisture throughout historic years (1983-2019). The black lines show the progression of soil moisture throughout 2020. The dashed vertical lines show the start (1st October) and end (31st December) of the rainy season.

2.1.2 Pasture

- Pasture condition is fair in the pastoral livelihood zone of North Horr and Laisamis sub-counties whereas good-fair in the agro-pastoral areas of Moyale and Saku sub-counties.
- Pasture condition is good-fair in the agro-pastoral livelihood zone attributed to near average rains that invigorated pasture whereas in the pastoral livelihood zone, pasture condition is fair attributed to depressed and below normal cumulative seasonal rainfall amounts.
- Areas that exhibit good pasture condition in North Horr sub counties are Illeret, Turbi, Dukana along the border, Hurri-Hills and the rangeland of Sibilo, Dosole, Buluk, Darade and Sabarei while other areas depict generally fair to poor pasture condition.
- In Laisamis sub county, pasture is good in Logologo, parts of Laisamis ward, fair in Namarei, Ngurnit, Illaut, Gatab, Kargi area and South Horr while fair to poor in the areas of Sarima, Civikon, Oltorot and Loiyangalani.
- When compared to similar periods, the quality and quantity of pasture is normal in all the livelihood zones occasioned by spill-over effect of the exceedingly good performance of the last long rains season.
- With prediction of drier than usual conditions, pasture is expected to last for the next 1-2 months in the pastoral livelihood zone while 2-3 months in the agro-pastoral livelihood zone.

2.1.3 Browse

- Browse condition is fair in the pastoral livelihood zone while good-fair in the agro-pastoral livelihood zone. However, there is rapid emergence of non-palatable vegetation in Moyale, North Horr and Laisamis sub-counties especially *calotropis procera* and bush encroachment attributed to environmental degradation.
- Prevalence of notifiable diseases were the main hindrances towards access of browse in the month under review.
- Quality and quantity of browse is fair in all the livelihood zones. Generally, in the agro-pastoral areas, browse will last for 2-3 months whereas in the pastoral livelihood zone browse is likely to last 2 months if drier than usual conditions continue.

2.2 WATER RESOURCE

2.2.1 Sources

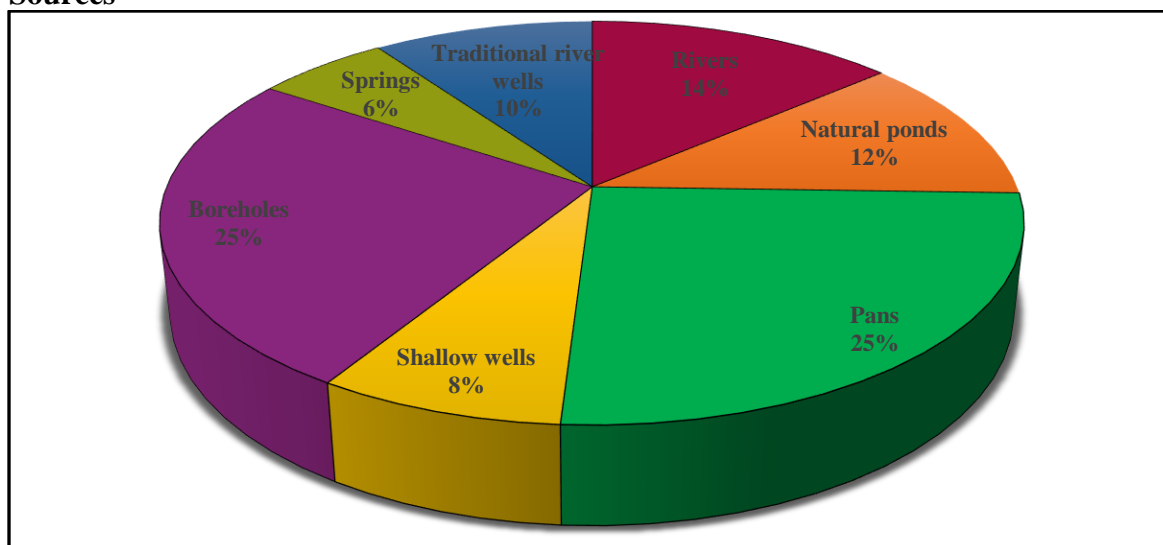


Figure 9: Main sources of water across the livelihood zones

- From figure 9 shown above, water pans and borehole are the main water source employed by majority of the communities in all the livelihood zones as depicted by a response rate of 25percent.
- When compared to similar periods, water pans and boreholes are usually the main sources of water at this particular time of the year.
- Other water sources applied by the communities in the month under review are seasonal rivers, natural ponds, traditional rivers, shallow wells and springs at 14percent, 12percent, 10percent, 8percent and 6percent respectively.
- The recharge level in the open water sources in Saku are between 30-40percent while in Moyale it was 50-70percent. The open water sources are expected to last over the next 2-3 months in these two sub-counties.
- Congestions at strategic boreholes is expected to increase in the coming days and frequency of borehole breakdowns are expected to increase too. Currently, Ulauli Borehole and Lapikutuk in Laisamis Sub-County are not operational. The BRRT Team is now working to operationalize Ndikir II and Sakardalla boreholes in Laisamis sub-county.

Sub-County	Areas where water trucking is required
Saku	<ul style="list-style-type: none"> • Sagante/Jaldesa Ward-Boru Haro, Gar Qarsa, Qachacha, Manyatta Jillo, Dololo Dokatu, Manyatta Jillo Dispensary, Boru Haro Dispensary, Dub Goba Dispensary
	<ul style="list-style-type: none"> • Karare Ward-Parkishon, Karare Town, Ilpus,
	<ul style="list-style-type: none"> • Central/Mountain Ward-Public institutions (St. Theresa, Dibayu High School, Kiwanja Ndege, Badasa Mix,)
North Horr	<ul style="list-style-type: none"> • North Horr Ward-Kob Dertu, Malabot/Gorich), Kalesa, Yaa Algana, Yaa Odhola, Konon Gos, Daqane, Toricha, Mudhe and Hurri Hills
Moyale	<ul style="list-style-type: none"> • Elle Borr, Elle Dimtu, Funa Qumbi, Watiti. Laqi, Antut, Adadi, Gadha Korma
Laisamis	<ul style="list-style-type: none"> • Ulauli, Sakardalla, Kambinye, Bagasi, Namarei, Lependera, Lmooti • Merille Secondary School, TTI Laisamis, Sakardall Pry, Silapani Pry, Manyatta Lengima Pry, Namarei Pry, Lependera Pry, Farakoren Pry, Balaah Pry, Mt. Kulal Girls Sec

2.2.2 Household Water Access and Utilization

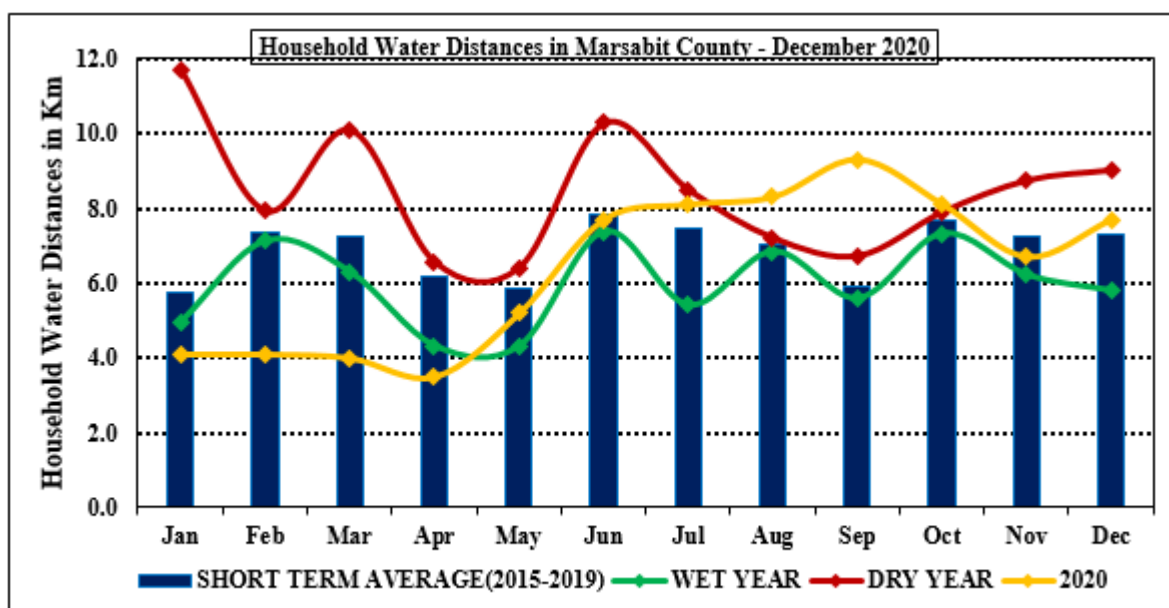


Figure 10: Current household return water distance (km) compared to Short Term Average distances (km)

- From (Figure 10) shown above, return household water distances to the main water sources was 7.7km in the month under review which illustrates an increase when compared to the previous month's household water distance of 6.7km in all the livelihood zones. The current household water distance of 7.7km is above the short term average household water distance of 7.3km by 5percent.
- The current household water distances are above and below wet and dry years' water distances respectively. Current waiting time in the agro-pastoral livelihood zone varied between 45-60minutes which is above the long term average of 30-45 minutes whereas in the pastoral livelihood zone, waiting time was 30-45 minutes compared to 45-60 minutes normally. Increased household waiting time at the water source in the agro-pastoral areas was attributed to near average rains whereas waiting time in the pastoral livelihood zone was long occasioned by depressed rainfall amounts.
- In the agro-pastoral livelihood zone, water consumption per person per day was 8-10 litres while in the pastoral livelihood zone, water consumption per person per day was 10-12 litres.
- With expected drier than normal conditions in the next month, household water distances will likely increase significantly thus expected long waiting time at the water source and reduced water consumption at the household level.

2.2.3 Livestock Access

- From (Figure 11) shown below, return livestock trekking distance from grazing areas to water points is 16.8km in all the livelihood zones which depicts an increase when compared to the previous month's distance of 12.1km.
- The current livestock trekking distance is below the trekking distances in a dry year and above the wet year and short term average trekking distances.
- Livestock trekking distances steadily increased in the agro-pastoral areas of Moyale and Saku sub-counties (7-8km) whereas the pastoral areas of Laisamis and North Horr sub-counties posted significant increase in livestock trekking distances (15-20km) due to low recharge of sub-surface water sources.

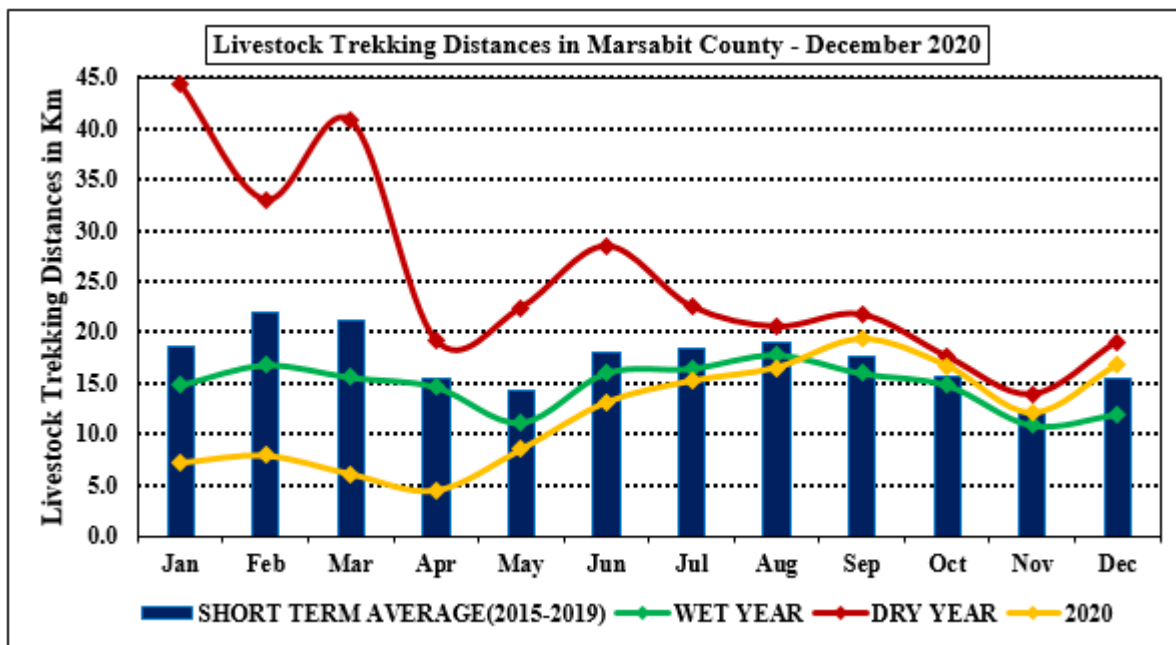


Figure 11: Current livestock trekking distances (km) compared to Short Term Average distances (km)

- Livestock watering frequencies have gradually increased due to reduced concentration of livestock at water points and decline in livestock trekking distances. Small stocks are watered after 2-3 days, cattle after 1-2 days and camels after 7-10 days in all the livelihood zones.
- With expected drier than usual conditions in the next month, watering frequencies are expected to reduce for all the livestock species across the livelihood zones.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Generally, livestock body condition is good-fair in all the livelihood zones which is normal when compared to similar periods occasioned by availability of forage. However, body condition of small stock is generally fair in all the livelihood zones.
- In isolated areas of North Horr and Laisamis sub-counties, livestock body condition is fair-poor attributed to rapid depletion of forage and emergence of epidemic disease incidences.
- With expected drier than usual conditions, livestock body condition is likely to gradually deteriorate especially in the pastoral livelihood zone.

3.1.2 Livestock Migration

- In-migration of livestock within the sub-counties and wards has been noted as livestock migrate to areas perceived to have received rains.
- In Laisamis sub-county, livestock from Korr, Loglogo, Laisamis, Merille and Kargi are concentrated in areas of Malgis, Merille, Gudas, Ellem, Koya, Ririma, Thuur and Yell. While livestock in Loiyangalani ward have moved towards Sarima, Nangolle, Lerashi, Pallo, Gas and Sarimo.
- In-migration of livestock has been reported in North Horr sub-county. In Turbi/Bubisa ward livestock have moved towards Turbi, Dossa Wachu and Maikona. In Dukana ward, livestock have migrated towards the border of Kenya –Ethiopia in areas of Garwole, Dibis, Bales-Saru, Araptis, Batha-Afar and Yibo. In Maikona ward livestock migrated to Hurri hills and

Chari-Ashe while in North Horr ward livestock migrated towards Dossole, Sarimo, Sibilo, Gidible, Darade, Qarsa-gate and Chari-Ashe.

- In Moyale sub-county, most livestock in Uran ward have migrated towards water sources of Ellebor, Walda and Gawale while most livestock from Moyale areas have moved towards Kenya/Ethiopia border and livestock from Amballo moved towards Walda.
- No notable livestock migration witnessed in Saku sub-county in the month under review due to availability of forage and partial recharge
- With continuation of the drier than usual conditions, intense livestock migration is expected in North Horr and Laisamis sub-counties.

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

- In the agro-pastoral livelihood zone, poor income households had 3-4 tropical livestock units compared to 3-5 normally while the middle income had 6-12 compared to 10-17 normally. In the pastoral livelihood zone, poor income households had 3-6 tropical livestock units compared to 5-8 normally while the middle income had 9-15 compared to 15-20 normally.
- Calving is high in both cattle and camel across all the livelihood zones.

3.1.4 Livestock Diseases and Mortalities

- Livestock disease incidences have been reported in some parts of Saku, Laisamis and North Horr sub-counties. In Malabot of North Horr sub-county, sudden death of the lambs and kids were reported.
- There has been an upward trend of outbreaks of camel diseases which begun with camel respiratory syndrome and outbreak of rabies. Rabies outbreak in Marsabit County was occasioned by the nomadic nature of the pastoralist community. Most affected areas are Civicon and Mt. Kulal of Laisamis sub-county, Gas and Illeret of North Horr sub-county.
- Foot and Mouth outbreak was reported in Jaldesa of Saku sub-county and Hurri hills of North Horr sub-county.

3.1.5 Milk Production

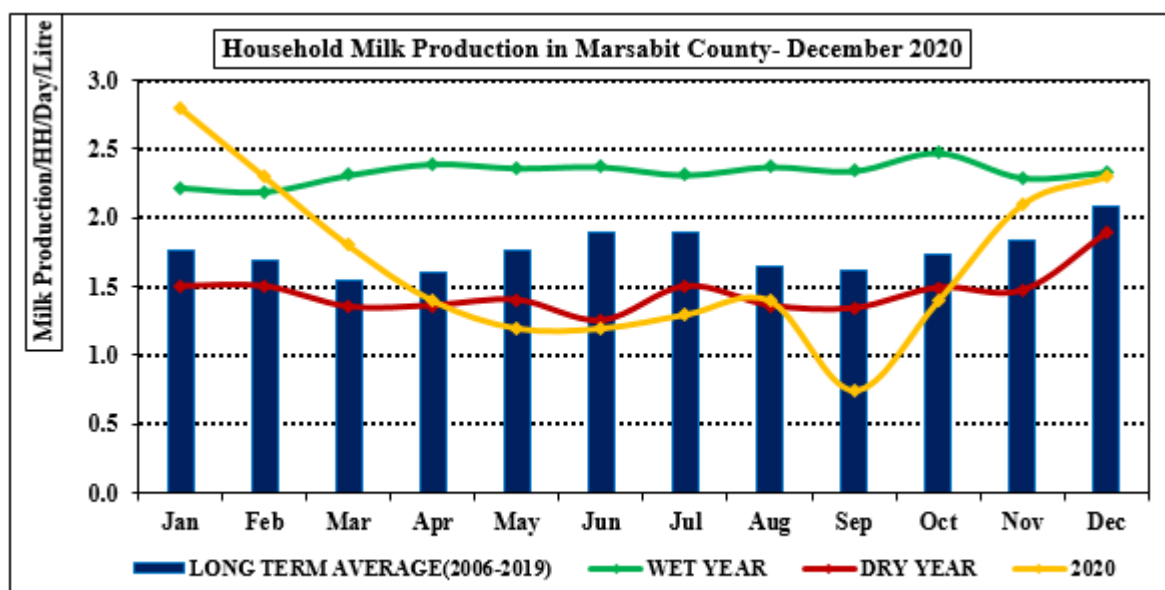


Figure 12: Milk production per household per day in litres across the livelihood zones

- From figure 12 shown above, household milk production per day for the month under review was 2.3litre/household/day across the livelihood zones hence an increase when compared to the previous month's milk production of 2.1litre/household/day.
- Current milk production of 2.3litres is above normal when compared to the long term average milk production of 2.1litres and equates the average milk production in a wet year.
- Above normal milk production was attributed to mass calving in camel across the livelihood zones. Due to the expected short dry spell, milk production is expected to gradually decline in the next one month.
- Milk retailed at an average of Kshs 75-90 per litre in all the livelihood zones which is the normal price.

3.1 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of Food Crops

- Agro pastoral areas had prepared their land and planted main rainfed crops. The main rainfed crops grown are maize, beans, sorghum and cowpeas. Total area under crop cultivation in the agro-pastoral areas of Moyale and Saku sub-counties is 2700 acres for maize, 800 acres under beans, 400 acres for sorghum, 200 acres under cowpeas, 200 acres under green grams, 80 acres for kales 15 acres' tomatoes and 10 acres spinach.
- Due to the ongoing dry spell and cessation of rains during the month, maize and beans crops have partially withered reported in areas of Uran and Sololo wards in Moyale sub-county and the expected harvest will be 50percent below the long term average.
- In Saku sub-county, early planted maize is at flowering stage while late planted one are at tasseling while early planted beans are forming pods with the late planted beans still at the germination stage.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

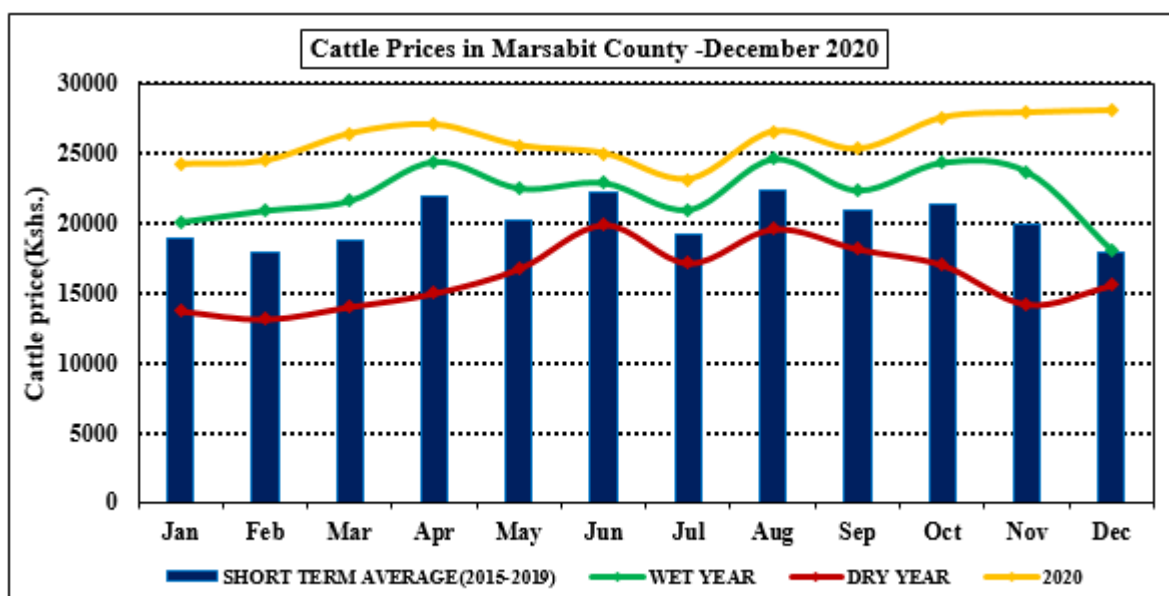


Figure 13: Current cattle prices compared to the short term average prices

- From the figure (13) shown above, cattle price for the month under review was Kshs. 28,100 thus remained stable when compared to the preceding months' cattle price of Kshs. 27,950.

- When compared to similar periods, current cattle price of Kshs 28,100 is above the short-term average price of Kshs 17,904 by 57percent. Above short term average cattle price is attributed to generally good body condition across the livelihood zones and increased demand of cattle during the festive season.
- Generally, the trend of cattle prices has been above the short term average prices, wet and dry years' average prices since January-December 2020.
- Current traded volumes of cattle in the livestock markets increased by 5-10percent when compared to the previous month.
- With the continuation of the short dry spell and expected increased supply, cattle prices are likely to gradually decline in the next one month across the livelihood zones.

4.1.2 Goat prices

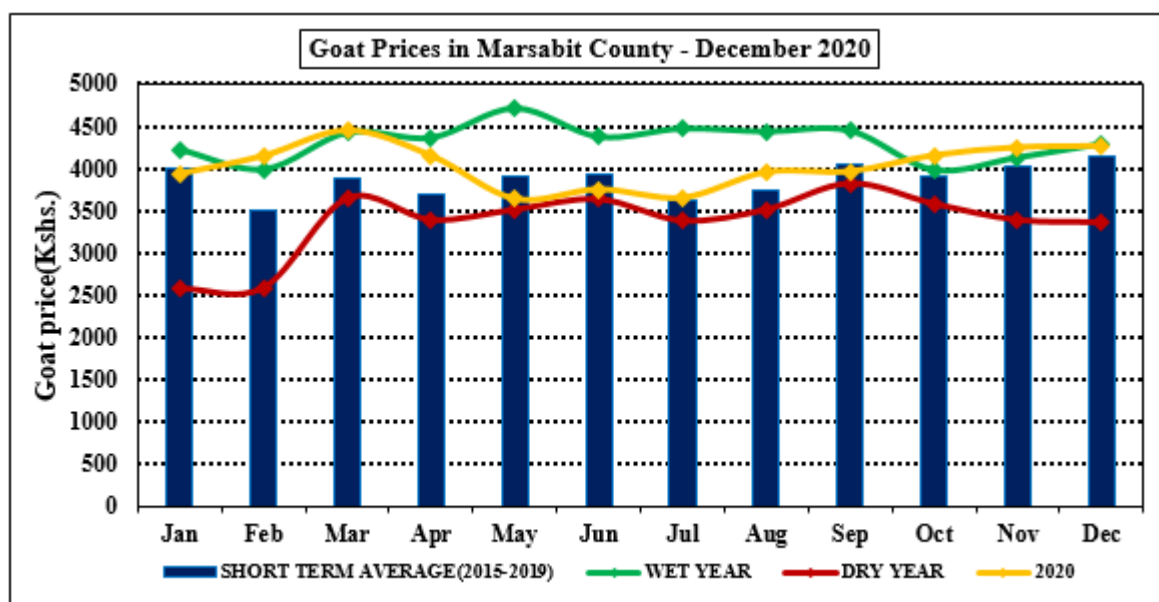


Figure 14: Current goat prices compared to short term average prices

- From the figure (14) shown above, goat price for the month under review was Kshs. 4,265 hence remained stable when compared to the preceding months' goat price of Kshs. 4,250.
- The current average goat price of Kshs. 4,265 equates to the short term average price and prices in a wet year. Normal goat prices were attributed to good body condition and increased demand in the terminal and feeder livestock markets.
- However, slightly below normal goat prices were recorded in major livestock markets of North Horr and Laisamis sub-county due to poor market integration. Along the fisher folk area that has experienced surging water levels in Lake Turkana, there is no organized livestock market along the eastern shores of Lake Turkana which has led to unfavourable goat prices.
- Moyale livestock market depicted above average goat prices of Kshs 5000 due to a favourable Ethiopia market with daily traded volumes varying between 130 and 150 compared to normal daily traded volumes of 150-200 goats.
- With expected drier than normal condition, goat prices are likely to gradually reduce in the next one month.

4.1.3 Sheep Prices

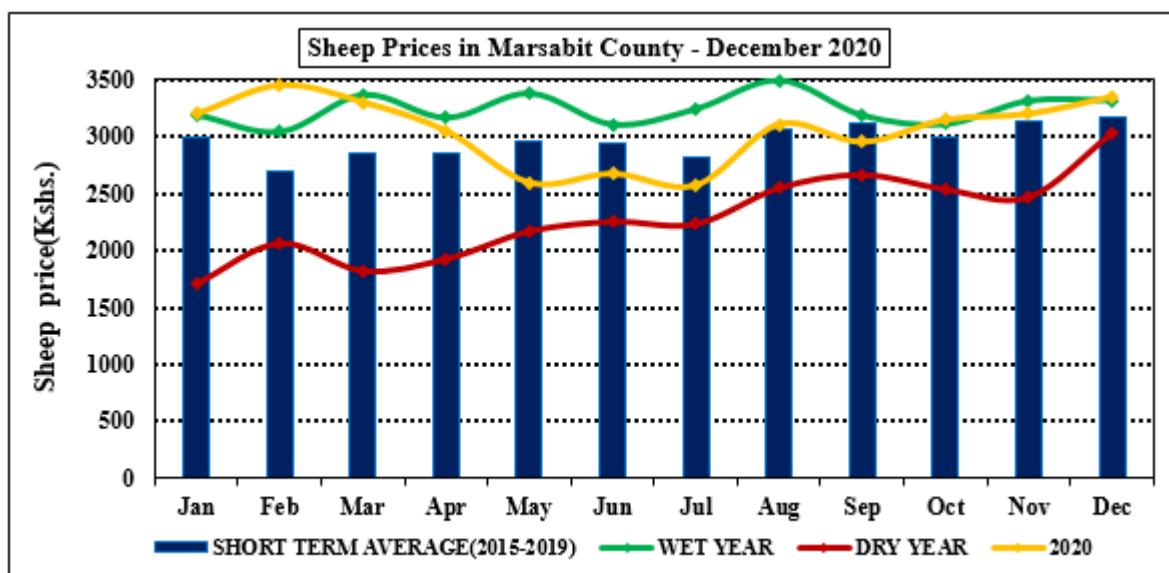


Figure 15: Current sheep prices compared to the short-term average prices (Kshs.)

- From the figure 15 shown above, sheep price for the month under review was Kshs 3,350 hence was stable when compared to the previous month’s sheep price of Kshs 3,200.
- When compared to the short-term average price of Kshs 3,180, current sheep price is above normal by 5percent attributed to generally good-fair body condition.
- Traded volumes for sheep has significantly declined due to considerable reduction of sheep in the Arabian market.
- Sheep prices are expected to gradually decline in the next one month across the livelihood zone due to the drier than normal conditions.
- Significant improvement of Livestock prices recorded in primary markets of Dukana, Gatab, Korr, Turbi and Dambala Fachana which further improved the performance of major markets in Saku, Moyale and Merille in the month under review.

4.2 CROP PRICES

4.2.1 Maize

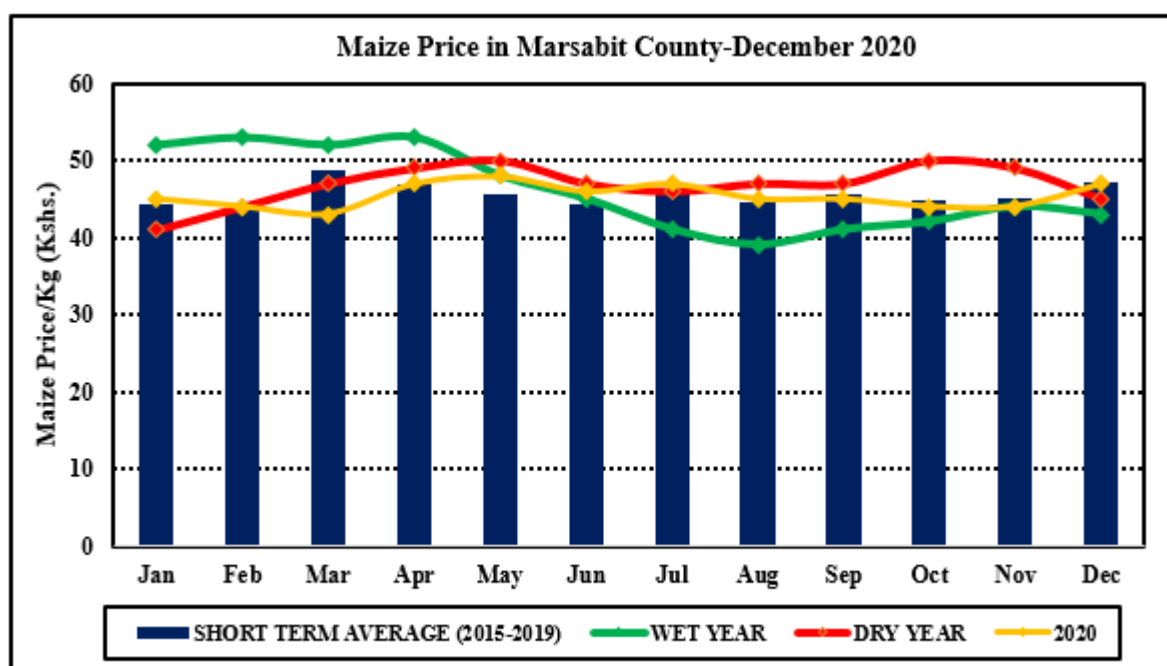


Figure 16: Current maize prices compared to the short-term average maize prices (Kshs.)

- The current average maize price is Kshs. 47/kg which is normal when compared to the short term average price. The current maize price is slightly above maize prices in in the wet and dry years.
- Moyale sub-county recorded better maize prices averaging Kshs 30/kg due to generally improved cross border supplies from Ethiopia and good market integration.
- Saku sub-county posted stable maize price at Kshs 40/kg attributed to improved supplies from external markets of Meru, Nanyuki and Nyahururu.
- On the contrary, most markets in Laisamis and North Horr sub-counties recorded largely high maize prices of Kshs 55-60/kg depicting 25percent above the short term average attributed to poor market integration.
- Notable high maize prices were recorded in some parts of Laisamis sub-county especially along Lake Turkana belt where a kilogram of maize retailed at Kshs.80 occasioned by unprecedented surge in water levels that completely cut-off the area.

4.2.2 Beans

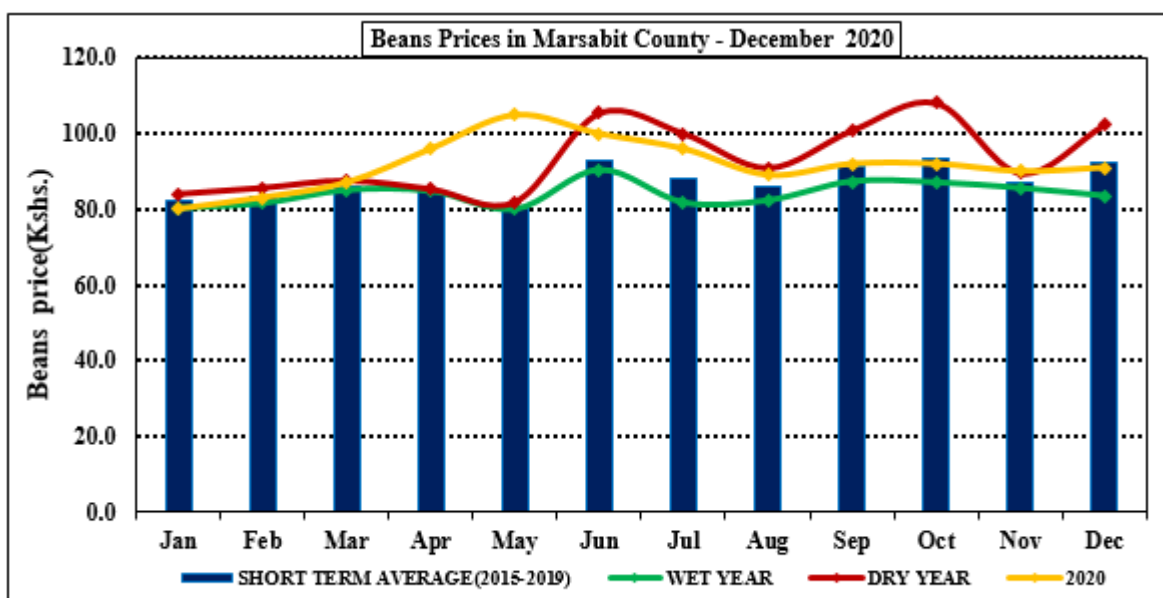


Figure 17: Beans prices compared to the short average term average prices(Kshs.)

- From the figure shown above, beans prices retailed at Kshs 91/kg in the month under review across the livelihood zones thus remained stable when compared to the preceding month's beans price of Kshs.90/kg. The current beans price of Kshs.91 is normal when compared to the short-term average beans price of Kshs 92/kg.
- Moyale commodity market posted favourable beans prices averaging at Kshs 60/kg. Favourable beans prices in Moyale commodity market was attributed to improved supplies from the neighbouring Ethiopia market coupled with effective market integration system.
- However, Laisamis and North Horr sub-counties recorded high beans prices of Kshs 100-120 attributed to poor commodity market integration.

4.2.3 Terms of Trade (TOT)

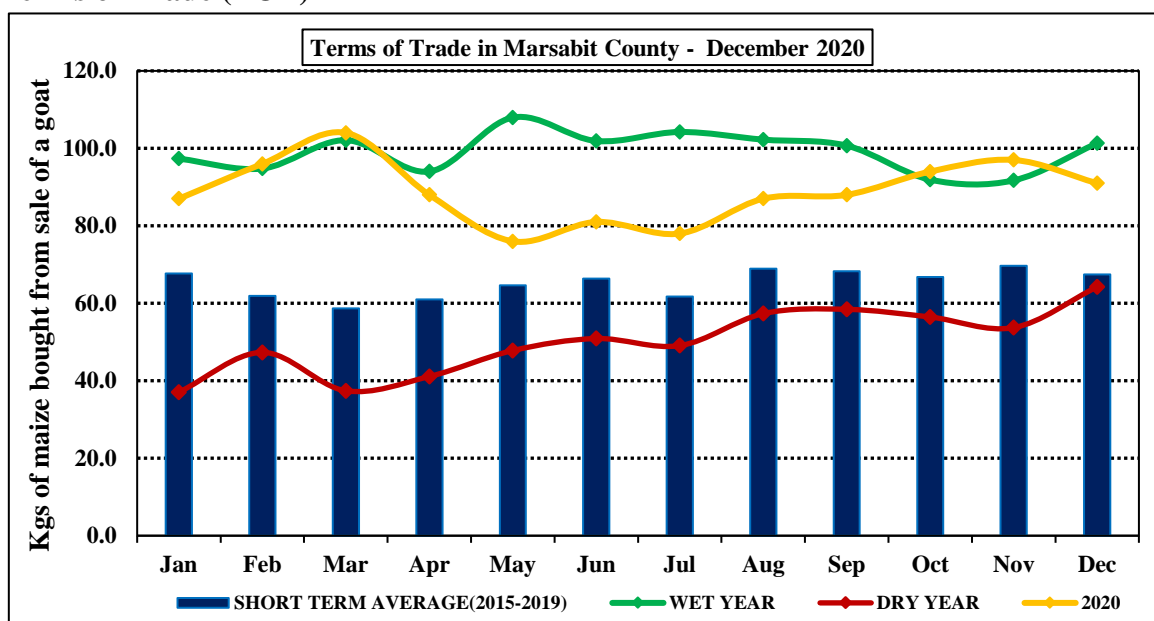


Figure 18: Current terms of trade versus short term average terms of trade

- The current terms of trade is 91 kilograms in exchange for the sale of a goat which is 36 percent above the long term average terms of trade of 67 kilograms.
- Terms of trade is above normal attributed to improved livestock market operations, good livestock body condition and increased demand of goats during the festive season.
- Moyale sub-county illustrated favourable terms of trade than other sub-counties attributed to high goats’ prices coupled with lower maize prices and improved market injections from the Ethiopia market.
- However, terms of trade for Laisamis and North Horr sub-counties were below the short term average mainly attributed to poor market integration and high cereal prices.
- Current term of trade surpasses the terms of trade in a dry year. With normal maize prices, stable goat prices and improved livestock market operations, terms of trade are expected to be stable in the next one month.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

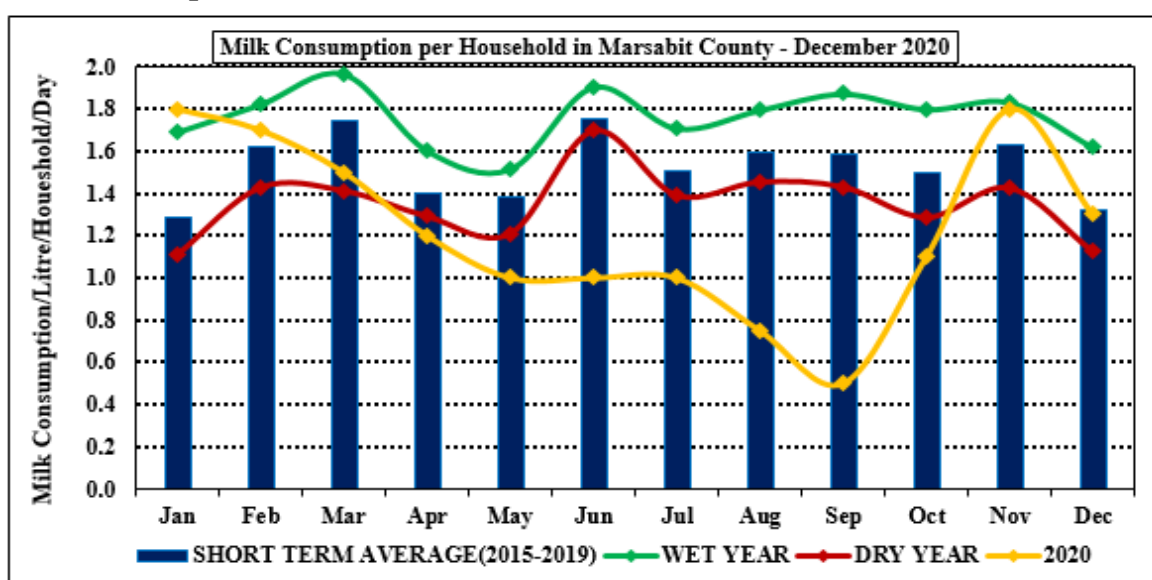


Figure 19: Milk Consumption at household level in Litres per day

- From the figure 19 shown above, household milk consumption is 1.3 litre/household/day in the month under review across the livelihood zones thus declined when compared to the preceding month's household milk consumption of 1.8 litre/household/day.
- When compared to the short-term average milk consumption of 1.3litres/household/day, current milk consumption is normal.
- Current milk consumption is below that of a wet year by 18percent while slightly higher than the household milk consumption in a dry year.
- Considerable decline in household milk consumption across the livelihood zones was attributed to intense livestock migration which inhibited milk access. With expected increase in livestock migration across the livelihood zones in the next one month, milk consumption will likely deteriorate further.

5.2 FOOD CONSUMPTION SCORE (FCS)

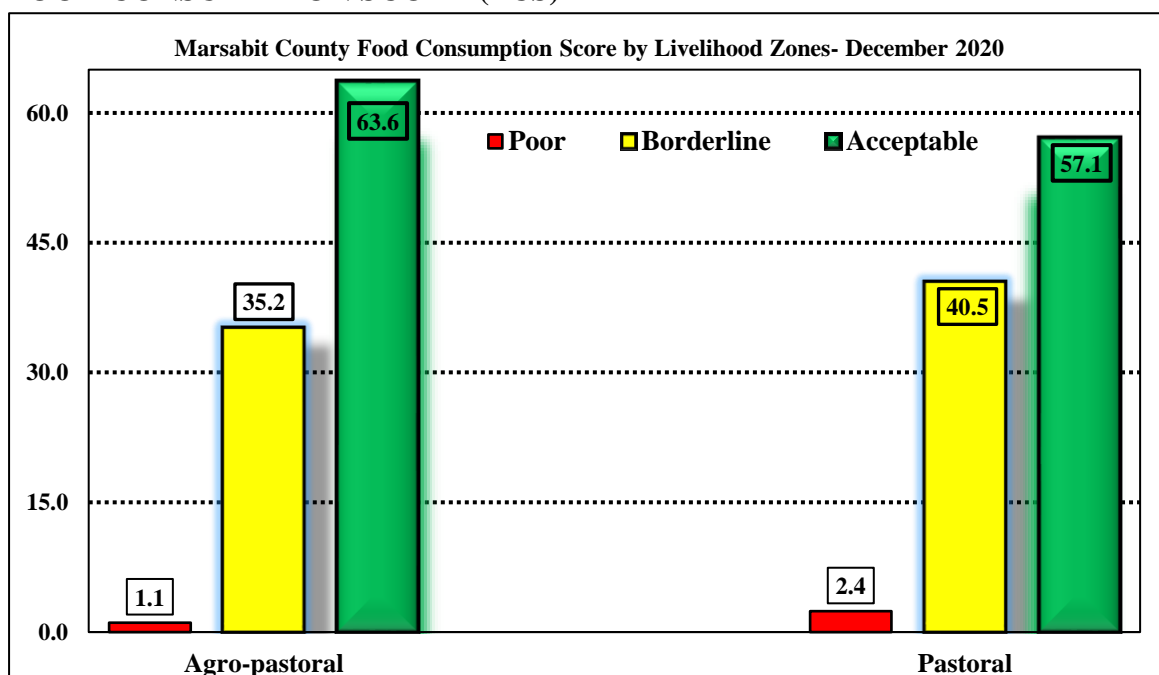


Figure 20: Food Consumption Score across the livelihood zones

- In the month under review, food consumption score is 39.02 in all the livelihood zones thus steadily declined when compared to the previous month's food consumption score of 40.0.
- Agro-pastoral and pastoral livelihood zones posted food consumption score of 40.1 and 36.6 respectively. Proportion of households in the agro-pastoral livelihood zone that were within acceptable, borderline and poor food consumption score were 52.3percent, 42.1percent and 5.7percent respectively. Similarly, proportion of households in the pastoral livelihood zone that were within the acceptable, borderline and poor food consumption scores were 52.7percent, 43.9percent and 3.4percent respectively.

	FCS Mean	Poor FCS	Borderline FCS	Acceptable FCS
County	39.0	4.1%	43.3%	52.6%
Golbo	39.6	0.0%	36.7%	63.3%
Karare	34.4	3.5%	48.3%	48.3%
Korr	36.9	0.0%	60.0%	40.0%
Loiyangalani	27.1	16.7%	70.0%	13.3%
Logologo	50.1	0.0%	10.0%	90.0%

Turbi	39.4	0.0%	36.7%	63.3%
North Horr	43.2	0.0%	33.3%	66.7%
Heillu Manyatta	27.1	6.7%	93.3%	0.0%
Sagante	33.9	13.8%	41.4%	44.8%
Uran	58.4	0.0%	6.7%	93.3%

- From the table shown above, 4.1percent of households consumed staples and vegetables every day and never or very rarely are consuming protein rich food such as meat and dairy. 43.3percent of the households consumed staples and vegetables every day, accompanied by oil and pulses a few times a week while 52.6percent consumed staples and vegetables every day, regularly accompanied by oil and pulses and occasionally meat or dairy product.
- All wards across the County fell in the acceptable food consumption band with exception of Karare, Loiyangalani, Heillu Manyatta and Sagante/Jaldesa wards that were in the borderline food consumption band category.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

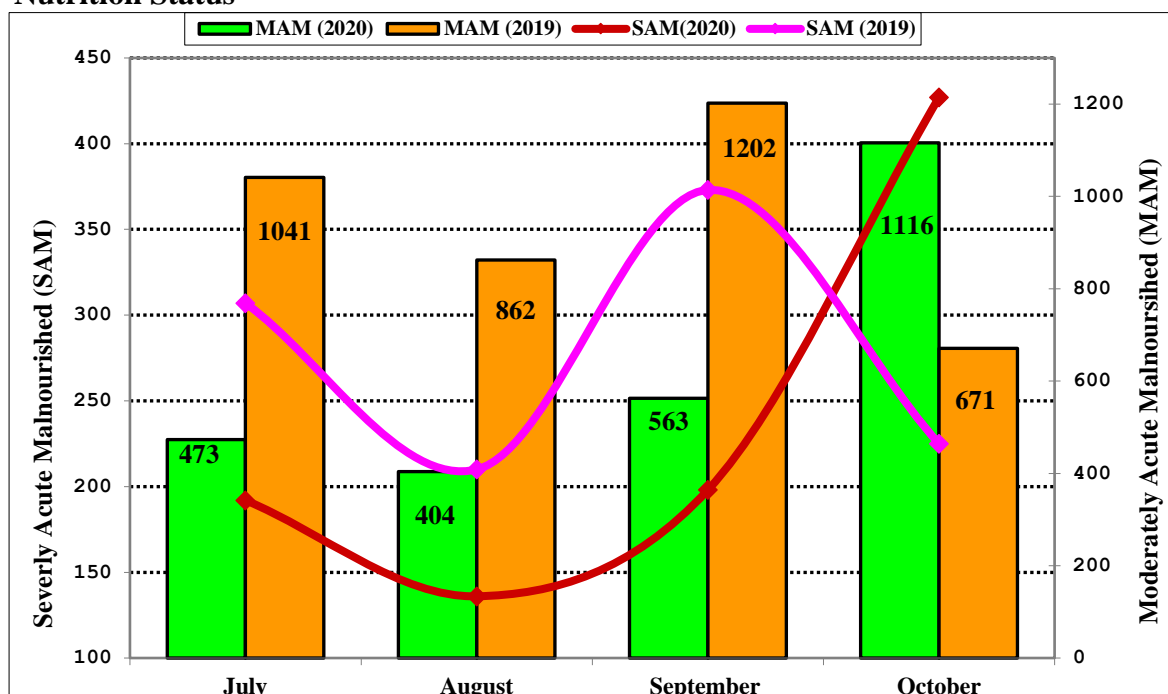


Figure 21: Marsabit County Total Admissions-Kenya Health Information System

- From figure 21 shown above, significant increase in total admission was noted in the month of October when compared to the month of September possibly due to increased cases of diarrheal diseases that was reported from September and a sharp increase in October 2020. Total admissions are much higher compared to the same period last year probably attributed to the fact that 2019 short rains remarkably performed than 2020. For the month of November, 364 and 98 were the SFP and OTP admissions respectively.

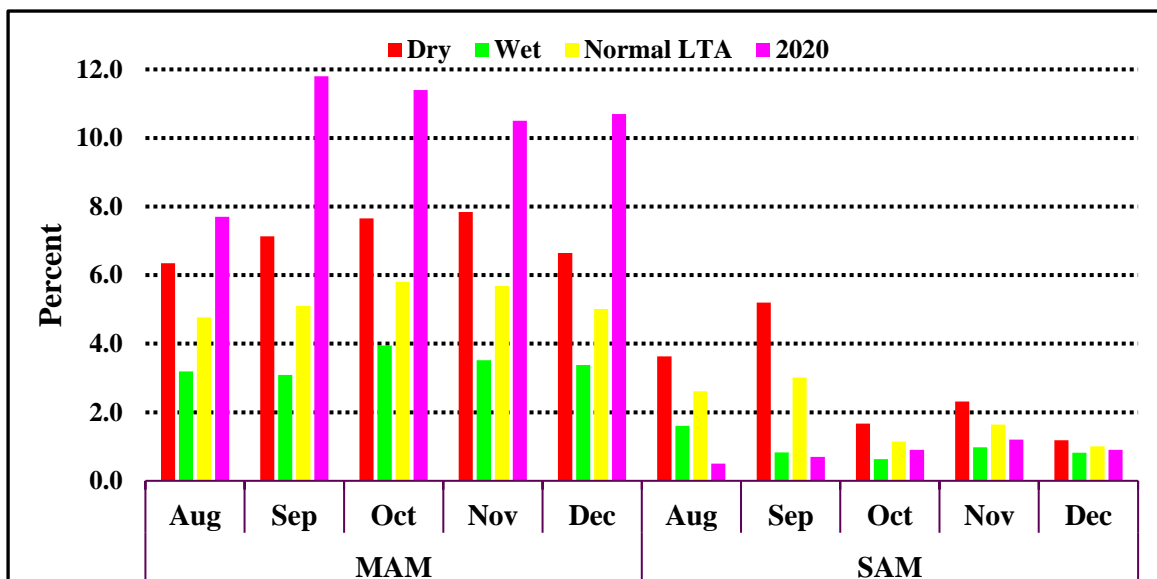


Figure 22: Family MUAC_Under Fives in Percent

- Figure 22 shown above depicts caregiver’s family MUAC results which illustrates that 10.7percent and 0.7percent of the under-fives are moderately and severely malnourished respectively. The proportions of children who are moderately malnourished are higher than those in the dry year, wet year and normal year. For severe malnourished children, no significant variation was noted from October-December 2020.

5.4 COPING STRATEGIES

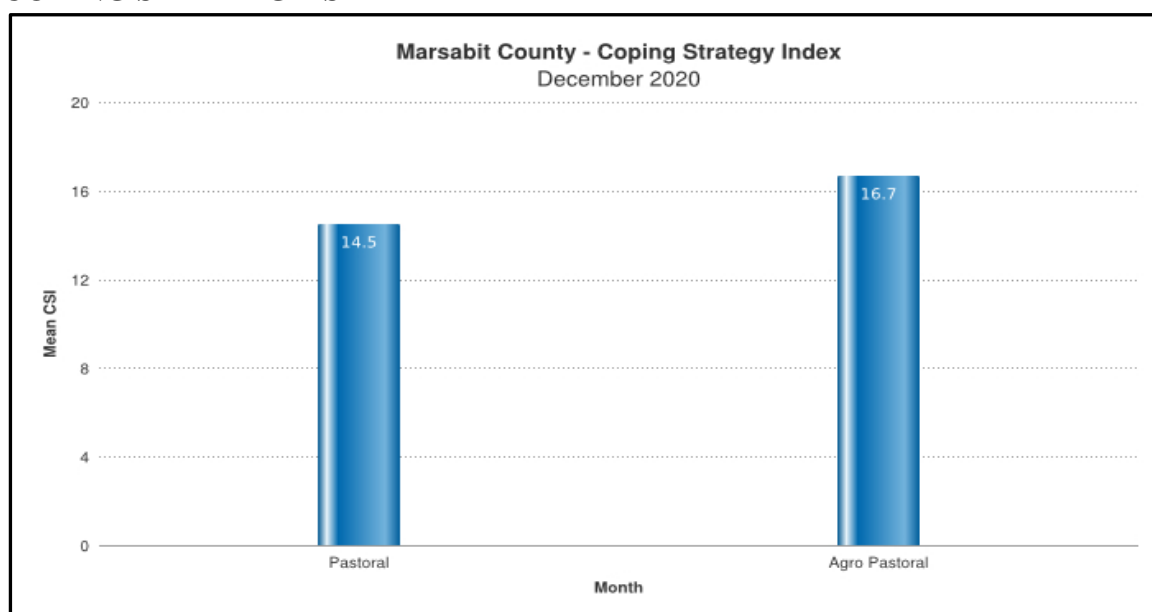


Figure 23: Coping Strategy Index across livelihood zones

- From figure 23 shown above, reduced coping strategy index(rCSI) for the pastoral and agro-pastoral livelihood zones was 14.5 and 16.7 respectively hence majority of households applied stressed reduced food consumption based coping strategies in all the livelihood zones.
- Reduced consumption based coping strategy index (rCSI) for the month under review is 15.1 thus no change when compared to the previous months rCSI.

- 93.8percent of the households applied coping mechanisms while a paltry 6.2percent of the households didn't apply any of the reduced coping strategies in the month under review.
- From table shown below, households in Sagante and Loiyangalani wards applied crisis reduced consumption based coping strategies whereas those in Heillu Manyatta, Karare, Logologo, Turbi and Uran wards adopted stressed coping strategies.

Consumption based coping strategy index(rCSI)		
Sub-county	Ward	rCSI
Saku	Sagante	25.2
Saku	Karare	9.5
Laisamis	Korr	16.9
Laisamis	Logologo	9.8
Laisamis	Loiyangalani	31.2
North Horr	North Horr	18.2
North Horr	Turbi	10.1
Moyale	Uran	10.2
Moyale	Heillu Manyatta	14.9
Moyale	Golbo	15.3

- It can also be deduced that 10.7percent, 53.5percent and 35.8percent of the households applied reduced consumption based coping strategies that were minimal, stressed and crisis respectively.
- Notable reduced consumption based coping strategies employed by the households were reduction in frequency of food consumption, reduced portion size of meals and reliance on less preferred food in all the livelihood zones.

6.0 CURRENT INTERVENTION MEASURES

- Unconditional Cash transfer to HSNP II beneficiaries through National Drought Management Authority targeting 20,452 households received Kshs.5, 400 each totalling to Kshs. 110,440,800.
- CIFA interventions: COVID-19 Emergency intervention on food distribution for vulnerable house hold in Dukana Elhadi and Illeret through myfugo electronic voucher redeeming food basket worth KES 3,000 for 250 households. Provision of conditional grant to 8 women groups in Dukana, Elhadi and Illeret with micro grants amounts of Kshs. 250,000 to purchase food items for beneficiary of food voucher for their respective community in response to Covid-19. Provision of poultry to vulnerable households in Watiti and Dadach Lakole each households benefiting from 12 (10 hens 2 cock) with improved kienyeji a total of 240 poultry.
- FAO supported training of 40 youths drawn from the four sub-counties on Desert locust surveillance in Laisamis. The scouts are already in the field, distributed across all the 4 -sub-counties, and reporting using the e-Locust3M. The scouts are being facilitated by CARITAS DOM contracted by FAO to implement desert locust post recovery activities.
- FAO distributed assorted vegetable seeds & cereals-sorghum gaddam. Kitchen gardens have been set up and thriving well across the 4 sub-counties.
- VSF Germany provided unconditional cash transfers: 200 vulnerable (Illeret -95 HH and Loiyangalani- 105 HH) households for a period of 2 months. @ HH Ksh 3000 per month.
- CCM together with VSF Germany under One Health Project supported Integrated One Health mobile outreach services in Elhadi, Balesa and North-Horr zone. Conducted 6days rabies control sensitisation campaign in Gas, Barambate and Malabot zone, supported

ongoing animal vaccination activities in North Horr sub-county and dogs and livestock vaccination against rabies.

- FH-K distributed 26 Beehives to four groups in Jaldesa and extension service on bee farming. Revisit and extension to water users, wash support to school, medical support to children, organized and supported RRT in Sololo, Saku and North Horr.
- FH-K supported child sponsorship programmes in Sololo, Saku, North Horr and Kargi in Laisamis.
- Kenya Red Cross Society through cholera prevention and MNCH project funded by Norwegian Red Cross implemented in Laisamis and Moyale sub-counties, conducted hygiene promotion in 13 community units in Moyale and Laisamis sub-counties. Community Led Total Sanitation triggering done in Sololo Makutano and Uran targeting 6 villages in Moyale and 6 villages in Laisamis which certification is on progress.
- Kenya Red Cross Society supported outreaches in hard to reach areas, hygiene promotions in the 13 community units, support to 10 community health assistants and a nutritionist from each community unit in providing health services, hygiene and sanitation education, community dialogue days in the community units, sensitization of covid 19 among others.
- Kenya Red Cross supported epidemic control for Volunteers TOT training sensitization done for CHMT and the training done for sub county teams. Micro planning for link facilities and water quality assessment and result dissemination. The organization through Covid 19 intervention also supported health department in screening and sensitizations.
- Concern World Wide supported 20 vulnerable secondary schools' girls in form one with bursary. Each beneficiary received Ksh.15, 000 during the month of December. Twenty (20) vulnerable girls from the twenty (20) project schools in Maikona, Turbi, Uran and Sololo wards were supported with cash transfer to meet their needs during the month. Each beneficiary received Kshs. 4000 for the month of December.
- Concern World Wide supported the County agriculture department to undertake monthly extension services to 1500 Households targeted with nutrition sensitive agriculture through kitchen gardens. Supported the livestock production officers to undertake monthly extension services on best livestock production practices. In partnership with the department of Livestock, undertook a joint monitoring activity to assess impact of livestock interventions in the county and areas of improvement.
- Concern World Wide supported 3090 households with cash transfer value of Kshs. 4616 under food security intervention to desert locust affected communities. Distributed Livestock feeds of 50Kg to 200 households in Moyale sub-county as part of asset protection through livestock feeding. Logistical support to the veterinary department with vehicles to support mass vaccination and treatment in Laisamis, North Horr and Moyale sub-counties.
- Concern World Wide supported six hundred and ninety-four (694) pupils (190 boys, 504 girls) from fourteen (14) primary schools; Segel, Turbi, Turbi Nomadic, Bubisa, Bishop Cavallera, Rawana, Funan Qumbi, Walda, Dadach Elele, Elgadhe, Maikona, Kalacha, Forole, Baqaqa and Hurri Hills were given psychosocial support by the sub county children officer from the department of children service and also sensitised on Covid -19 and its prevention measures as per Ministry of Health guideline. Twenty (20) vulnerable girls from the twenty (20) project schools were supported with cash transfer to meet their needs during the month. Each beneficiary received Kshs. 4000 for the month of November.
- Concern World Wide successfully conducted IMAM Surge assessments in 16 of possible 17 IMAM surge health facilities with MOH in North Horr Sub-county and 15 out of 19 in Laisamis sub county. The team supported the SCHMT to conduct High Impact Nutrition Interventions (HiNi) gap assessment in 23 Health Facilities (14 Laisamis & 9 North Horr). Some of the key interventions assessed included; Management of SAM (in-patient & out-patient), Infant and Young Child Feeding (IYCF), Micronutrient supplementation, De-worming and Improved Hygiene.

- Concern World Wide supported health and nutrition team and participated in conducting Technical support to MOH - SCHMT to assess gaps in IMAM surge implementation in both Laisamis and North Horr sub-counties. A total of 31 health facilities (16 North Horr, 15 Laisamis) were assessed.
- CRS procured 325 handwashing booths and 5000 litres of liquid soap for onward distribution to county ECDE. Supported department of health on Covid-19 Infection, Prevention and Control through capacity building of health care workers, community health workers, provision of hand washing supplies to health facilities across the county (225 handwashing booths, 10,000 litres of liquid soaps and 1080 litres of chlorine), public prevention messaging using radio talk shows, radio spots and vehicle mounted Public Address Systems (PAS).
- CRS in collaboration with Caritas and the County Department of Agriculture, Livestock and Fisheries, procured and distributed crop seeds to farmers affected by the desert locust invasion. Supported range land rehabilitation through cash for work program. Supported regular desert locust coordination meetings under the leadership of DoAL&F and facilitated county led joint support supervision to monitor the progress of DL activity implementation.
- SND in partnership with Terre des Hommes Netherlands, 50 families whose children are either victims or vulnerable to child trafficking were supported Kshs. 2000/month for 6 months in Moyale Sub County as part of COVID 19 response measures. In partnership with OXFAM, SND supported recruitment and training of 19 scouts/volunteers on elocust3m app. in Moyale Sub County.
- SND in collaboration with department of Agriculture, awareness creation on Locust was also done through IBSE FM. In partnership with Pact Kenya and EU in Ethiopia, SND supported series of peace meeting between Gabra and Dasaanach in Darathe-North Horr Sub County, which culminated into voluntary return of 36 stray donkeys by Dasenach to Gabra. In partnership with Pact Kenya and EU in Ethiopia, SND also supported bush clearing of Sabare-Qorobo road as part of peace dividend activities to connect the border communities of Gabra and Hamar.
- Welthungerhilfe through desert locust recovery programme, provided cash transfer to 500 households in Laisamis and North Horr sub-counties with Kshs. 5000 per household. 500 farmers in Saku sub-county were supported with farm inputs.
- Welthungerhilfe supported 500 households in Moyale, Laisamis and Saku sub-counties with a cash transfer of Kshs.5000 per household under the COVID-19 recovery project. Cash voucher assistance (CVA) small animal breeding for 300 households in Laisamis sub-counties @ Kshs. 6000.
- ADS supported installation of an additional 10M³ plastic water tank at Lontolio primary school and rehabilitation of Nairibi community water kiosk.

7.0 EMERGING ISSUES

- Conflict between two worrying communities of Gabra and Borana reported during the month with a number of small stock taken by bandits and casualties reported in Saku sub-county. Conflict between Gabra and Dasaanach also reported in rangelands of Sibiloil with casualties from both side recorded.
- The overall desert locust situation in the County is calm except for confirmed reports from Moyale sub-county, Hurri Hills and parts of Dukana ward. On 4th December 2020, hopper bands were controlled in *Keleswa*, Samburu Marsabit border while on 8th December 2020 mature desert locust was controlled in Buna ward in Wajir county, the ward borders Marsabit county. No desert locust presence was reported in all the sites visited in Laisamis sub-county. In Sarima the community reported presence of tree locust in Nakwamusing.

8.0 FOOD SECURITY PROGNOSIS.

- Seasonal rainfall amounts are below the long term cumulative rainfall amounts due to the depressed rains that were received in most parts of North Horr and Laisamis sub-counties that crowded out the near average rains recorded in Moyale and Saku sub-counties and with the expected drier than normal conditions, then soil moisture deficit is anticipated.
- Vegetation condition index is within the normal vegetation greenness band which indicates a significant decline from the VCI values recorded in the preceding month. With persistence of drier than usual conditions, the 3-months vegetation condition index will decline further in the next one month and shift in the moderate vegetation deficit band.
- Seasonal rainfall deficit and the dry rainfall forecast suggest soil moisture conditions for much of Marsabit will be below the long-term average hence enhanced probability that soil moisture will be in the lowest tercile.
- With the expected short dry spell, household and livestock trekking distances to water sources are expected to considerably increase consequently leading to a reduction in livestock watering frequencies for all the livestock species in the next one month. Communities in parts of North Horr, Laisamis and Moyale lowlands are likely to experience water stress thus need for water trucking.
- With expected increase in livestock migration across the livelihood zones in the next one month, milk consumption will likely deteriorate further.
- The County is much more prepared than it was previously to manage the next looming Locust invasion. County has enough PPE's and pesticides (EC, ULV & Bio pesticide) to start off any control efforts. Aerial apparatus for surveillance are ready awaiting activation hence second emergence of desert locust is likely to be contained.
- With stable maize and goat prices and resurgence of the livestock markets, stability of the terms of trade is expected to persist. Mean food consumption score gradually fell in the acceptable food consumption score band across the livelihood zones and it's likely to decline to the borderline food consumption score category in the next one month while adoption of reduced consumption based coping strategies is likely to remain in the stressed phase.
- Nutritional status of children below the age of five years is expected to gradually deteriorate due to expected limited access to milk as majority of the livestock shall have migrated to the dry season grazing areas in the next one month.

8.0 RECOMMENDATIONS

- Continuous experts' advisory on migration patterns of the desert locust to determine the direction of the swarm movement and effective control measures.
- Unconditional Cash Transfer to target worst hit households from desert locust invasion.
- Livestock disease surveillance and vaccination against endemic disease incidences.
- Water department should repair the stalled water bowzers, broken down boreholes in North Horr, Laisamis and Moyale sub-counties and undertake water trucking to areas that are currently experiencing acute water shortage.
- Immediate assistance to the affected fisher folk communities in all the 10 landing sites with fishing gears such as nets, hooks, boats, and floaters to revive their main source livelihood.
- Scale up mass screening and integrated medical outreaches targeting malnutrition hotspots in all the livelihood zones.
- The County Government should lead and coordinate reconciliation efforts at all levels. In addition, develop and update negotiated and agreed land use and range management plans and continue research on current grazing patterns to prevent sporadic violence.