

National Drought Management Authority MARSABIT COUNTY DROUGHT EARLY WARNING BULLETIN FOR OCTOBER 2021



A Vision 2030 Flagship Project



DROUGHT EW PHASE: ALARM

Drought Status: **ALARM**



Mipango ya kukabiliana na ukame

Drought Situation & EW Phase Classification

Biophysical Indicators

Rainfall: In the month under review, there was delayed onset of the short rains with a probability of cumulative rains less than 60 percent of the average. Probabilities of forecasted standard precipitation index ranged between 25-30 percent which is above the usual chance of 16 percent.

Vegetation condition: 3-months Vegetation Condition Index for the month under review was 35.55 (normal greenness) across the county.

Socio-Economic Indicators (Impact Indicators)

Production indicators: Livestock body condition was poor in all the livelihood zones. Milk production was significantly below the short term average. Livestock typically migrated to the dry season grazing areas. Livestock deaths due to drought especially amongst camel calves were recorded across the County. Livestock morbidity cases increased in all the species. Cultivation of farmland occurred in the agro-pastoral areas.

Access indicators: Household and livestock water distances remarkably increased across the County and were at an all-time high. Milk consumption was below the short-term average and terms of trade declined significantly. Maize prices were above average while goat prices were below normal. Cattle and sheep prices were also below average.

Utilization indicators. Household food consumption score stagnated in the borderline food consumption category while households adopted frequent and severe coping mechanisms to cope with short term food consumption gaps at the household level. Trends in both SFP (increased wasting) and OTP new admissions were recorded(wasting). Admissions are generally on an increasing trend and expected to increase further.

Early Warning (EW) Phase Classification

| Livelihood Zone | Phase | Trend |
|---|--------------|--------------------|
| Agro-pastoral | Alarm | Stable |
| Pastoral All species | Alarm | Worsening |
| Fisher folk/Casual labour/Petty Trading | Alarm | Worsening |
| County | Alarm | Worsening |
| Biophysical Indicators | Value | Normal Range/Value |
| Rainfall (% of Normal) | 41 | 80 -120 |
| VCI-3Month (County) | 35.55 | >35 |
| Forecast SPI | < -0.98 | -0.98 |
| Forecast soil moisture | 0.2 | 0.28-0.4 |
| Production indicators | Value | Normal |
| Livestock Body Condition | Poor | Fair-Good |
| Milk Production | 0.5 | >1.7 Litres |
| Livestock Migration Pattern | Unusual | Normal |
| Livestock deaths (from drought) | Deaths | No death |
| Access Indicators | Value | Normal |
| Terms of Trade (ToT) | 52 | >80 |
| Milk Consumption | 0.5 | >1.5 Litres |
| Return distance to water | 10.6 | 0.0-7.8Km |
| Utilization indicators | Value | Normal |
| Nutrition Status (malnourished) | 13.1 | 0.0-8.2 |
| Coping Strategy Index | 19.4 | <18 |
| Food Consumption | 33.9 | >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

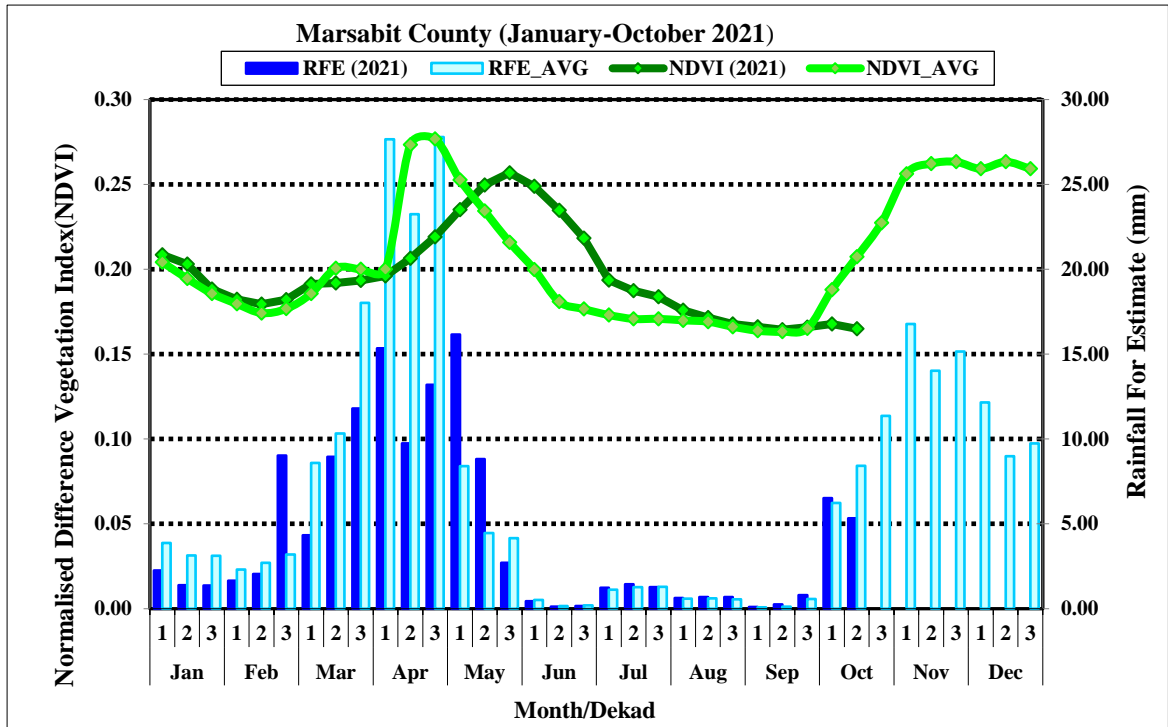


Figure 1: Dekadal Rainfall (mm) and NDVI values compared to the Long Term Average

Source: WFP-VAM, CHIRPS/MODIS

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

1.2 CUMULATIVE RAINFALL

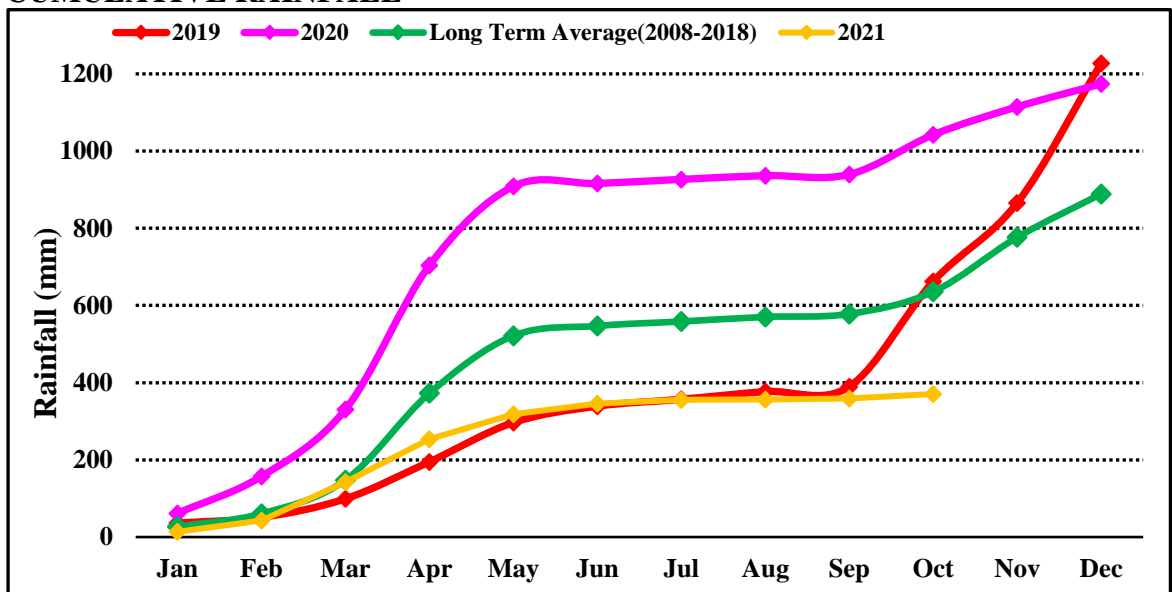


Figure 2: Cumulative Rainfall Performance (mm)

- From the figure (2) shown above, seasonal cumulative rains are significantly below the long-term cumulative rainfall amounts with a paltry 41percent of the normal rains received. It can be deduced that 2021 October rains failed and was remarkably below average and expected

to follow the same pattern through 2021. However, some pockets in Moyale sub-county (Kinisa, Uran, Sololo, Dabel, Township) received poor rains with Moyale Township receiving cumulative of 11.7mm in 5 rainy days.

- There is an enhanced probability that 2021 short rains are expected to continue abnormally drier than usual. Observations of rainfall for the last two consecutive seasons indicates that Marsabit County is currently facing significant rainfall shortfalls in 2021 and is expected to persist through 2021. Based on rainfall estimates through October, the delayed onset of the short rains is likely to place October 2021 among one of the driest on record in Marsabit County. Therefore, based on the poor start of season, short length of the season, and median rainfall in analog years, cumulative rainfall is likely to be less than 60 percent of average in most parts of Marsabit County and there is a lower than usual chance of exceeding 200 and 300 mm in the next rainy season.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

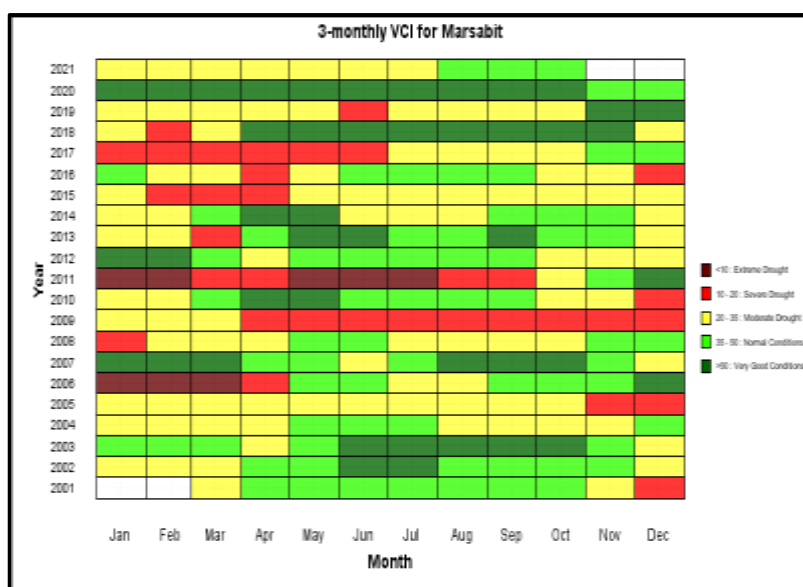


Figure 3: Vegetation Condition Index Matrix across Marsabit County

- Current vegetation condition index is 35.55 hence exhibited negligible variation when compared to the previous month's vegetation condition index of 36.38. The 3-months vegetation condition index remained in the normal vegetation condition band. With expected persistence of abnormally drier than usual conditions, the 3-months vegetation condition index will possibly reduce and likely shift to the

moderate vegetation deficit in the month of November.

- When compared based on the Sub-counties; Saku, Moyale and North Sub-counties had 3-months vegetation condition index of 50.8, 37.51 and 36.14 respectively hence stagnated in the normal vegetation greenness band with Saku Sub-county illustrating a slight improvement between the two periods. However, Laisamis Sub-county posted VCI value of 32.14 thus remained in

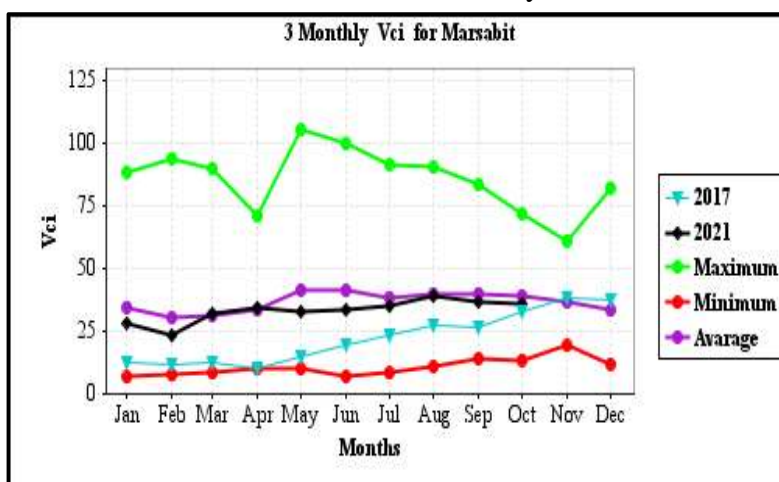


Figure 4: Vegetation Condition Index Trends

the moderate vegetation deficit band attributed to extreme drier than usual conditions than the other Sub-counties.

- Figure (4) shown above compares October 2021 vegetation condition index to October long term average, historical maximum and minimum vegetation condition index values. The current vegetation condition index equates to the long term average attributed to failure of two consecutive seasons coupled with delayed onset of the short rains. With the persistence of drier than usual conditions, vegetation condition index will decline and fall below the long term average in the month of November.

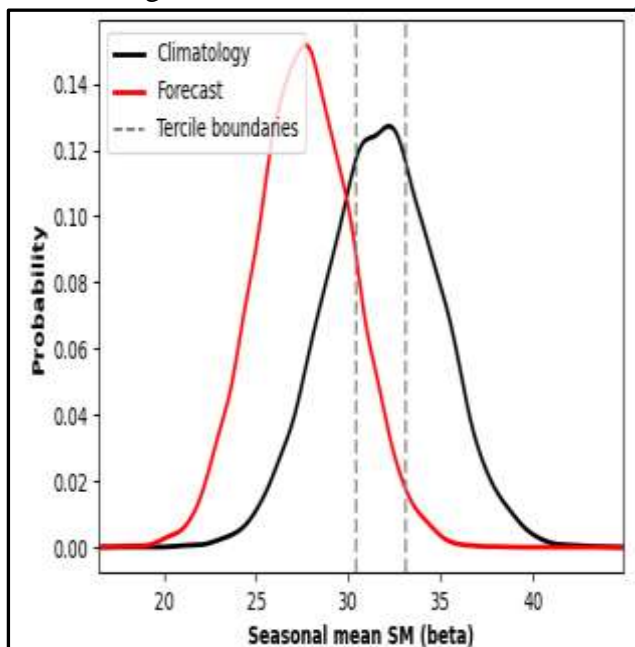


Figure 5: Forecasted Tercile Climatology

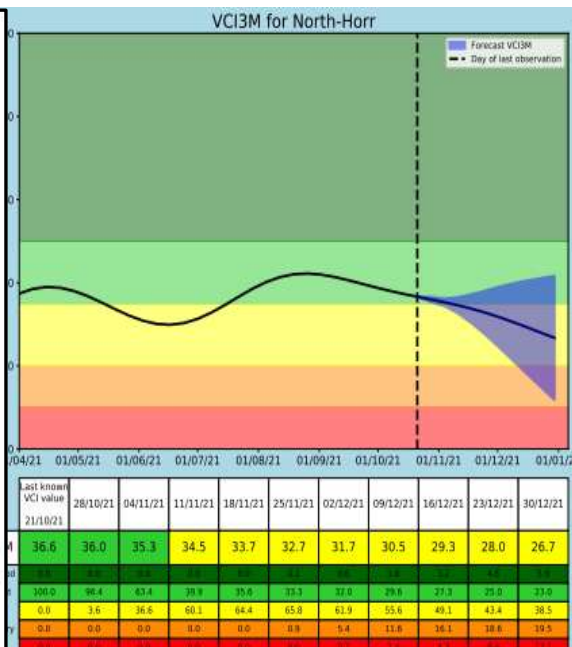


Figure 6: North Horr Sub-county forecasted VCI

- Figure (5) shown above illustrates forecasted probabilities of the seasonal soil moisture which illustrates a high likelihood of falling in the lower tercile. In Marsabit County, standard precipitation index (SPI) probabilities range between 25-30 percent which is about the average chance of 16 percent in the forecasted period. North Sub-county forecasted VCI indicates a likelihood deterioration of vegetation condition to the moderate vegetation deficit category due to continued drier than normal conditions.

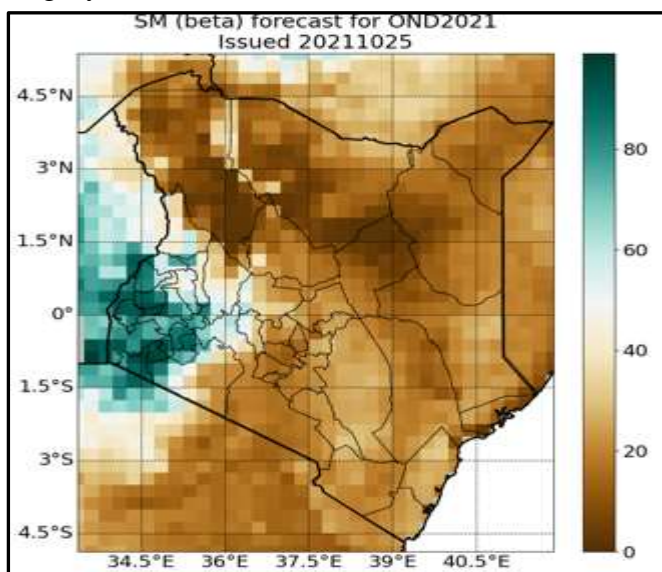


Figure 7: Probability of lower tercile soil moisture

(Figure 7) exhibits forecasted soil moisture that indicates a possibility of deterioration during the long dry spell period occasioned by failure of the long rains and high evapotranspiration rate. Drier than usual conditions will worsen the soil moisture quotient across the County. There is increased tendency that soil moisture will be in the lower tercile category attributable to high tendency of below normal soil moisture quotient in the forecasted period.

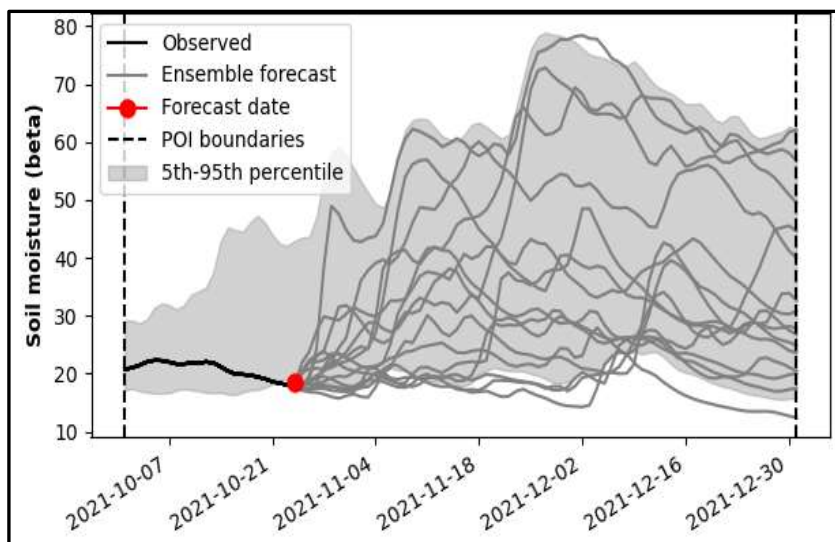


Figure 8: TAMSAT-ALERT soil moisture for Marsabit County

progression of the long dry spell thus expected soil moisture deficit across the County.

Figure 8 shows TAMSAT-ALERT soil moisture time series for Marsabit County. The black lines show the progression of soil moisture in 2021 (5th-95th percentile). The dashed vertical lines show the start (21st October) and end (30th December) of the long dry spell and OND period. The forecasted OND indicates failure of the season and

2.1.2 Pasture

- Pasture condition is poor in all the livelihood zones compared to fair at this time of the year attributable to consecutive failure of two rainy seasons and delayed onset of the 2021 short rains.
- However, pasture is available in isolated areas of Laisamis Sub-county (Gudas) and North Horr Sub-county (Balesaru, Sabare, Garwole, Araftis and Hurri Hills).
- Insecurity along the border of Elledimtu in Moyale Sub-County, North Horr Sub-County (Bulluk, Darade and Chari Ashe), Laisamis Sub-County (Arapal) and Badassa in Saku Sub-County hindered access of pasture.
- With expected progression of the long dry spell, available pasture is expected to last two weeks in the pastoral livelihood zone of North Horr and Laisamis Sub-Counties while one month in the agro-pastoral areas of Moyale Sub-county.

2.1.3 Browse

- Browse condition is poor in the pastoral livelihood zone while fair-poor in the agro-pastoral livelihood zone.
- Available browse will last one month when compared to the normal of 2 months across the livelihood zones.
- Limited or unavailability of conserved hay across the livelihood zones resulted to poor quality conserved forage thereby limiting utilization.
- Variations in pasture and browse conditions across the livelihood zones was mainly occasioned by intense temporal variations of temperature and livestock migration in the month under review.
- Notable emergence of herbaceous vegetation was witnessed in some parts of North Horr, Laisamis, Saku and Moyale Sub-Counties. Quality and quantity of browse is fair in all the livelihood zones and is below normal.

2.2 WATER RESOURCE

2.2.1 Sources

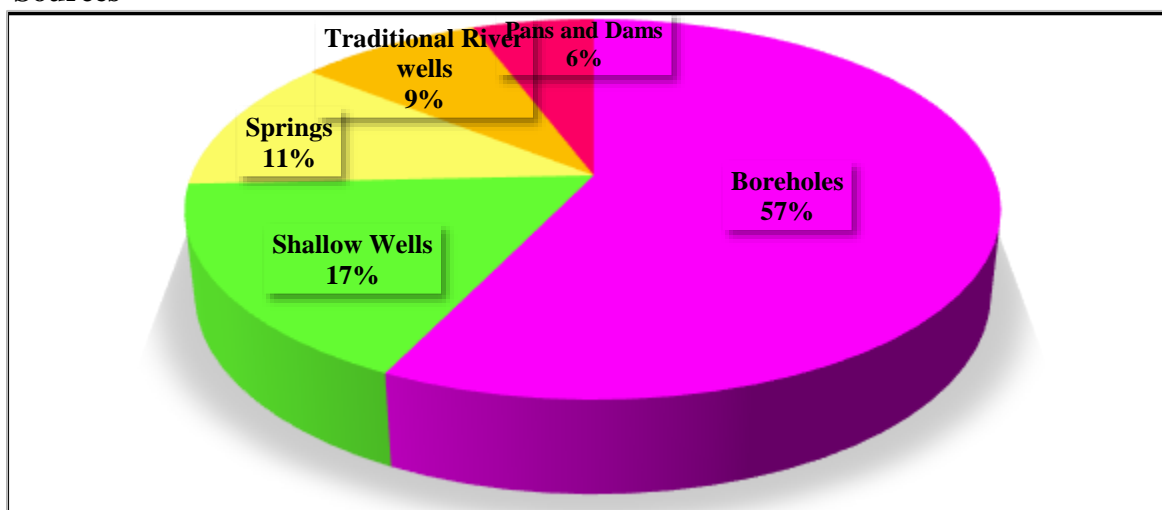


Figure 9.0: Main Sources of Water across the livelihood zones

- From figure 9 shown above, borehole is the main water source employed by majority of the communities in all the livelihood zones as illustrated by a response rate of 57 percent which is not the normal water source at this time of the year. Other water sources applied by the communities in the month under review are shallow wells, springs, traditional river wells and water pans at 17 percent, 11 percent, 9 percent and 6 percent respectively.
- Approximately 95 percent of all surface water sources are depleted in all the livelihood zones and with the progression of the long dry spell coupled with typically abnormal livestock migration and accelerated depletion of the sub-surface water sources, recharge levels are likely to reduce further as the drier than usual conditions persists.

Table 1.0: Areas with acute water shortage that require water trucking

| Sub-County | Name of the village/Settlement | Ward |
|-------------------|---|------------------|
| Moyale | Godhe, Qonqom, Giribe | Golbo |
| | Oga | Obbu |
| | Antut | Butiye |
| | Elle Dimtu | Uran |
| | School and Health centres | Sub-county wide |
| North Horr | Kalesa Manyatta, Shankera, Toricha, Bori Manyatta, Qatamur, | Maikona |
| | Yaa Sharbana, Yaa Algana, Konon Gos, Kubi Adhi | Dukana |
| | Odola Manyatta, Mude, Demo, Oronderi | Turbi-Bubisa |
| | Arilo Manyatta, Kob Dertu, Olom | North Horr |
| | Schools and Health centres | Sub-County Wide |
| Laisamis | Ulauli, Weltei, Sakardala, | Laisamis |
| | Bagasi, Kambinye | Kargi/South-Horr |
| | Namarei, Lmooti, Lependera | Korr/Ngurunit |
| | Schools and health centres | Sub-County Wide |
| Saku | Dololo Dokatu, Jaldesa | Sagante Jaldesa |
| | Karare | Karare |
| | Schools and health centres | Sub-County wide |

Table 2.0: Broken down strategic boreholes

| Boreholes that have broken down | |
|---------------------------------|------------------|
| Sub-County | Name of Borehole |
| North Horr | Lag Ilworabesa |
| | Dosa Wachu |
| | Burgabo |
| | Forole |
| | Kalacha |
| | Elhadi |
| Moyale | Odde |

2.2.2 Household Water Access and Utilization

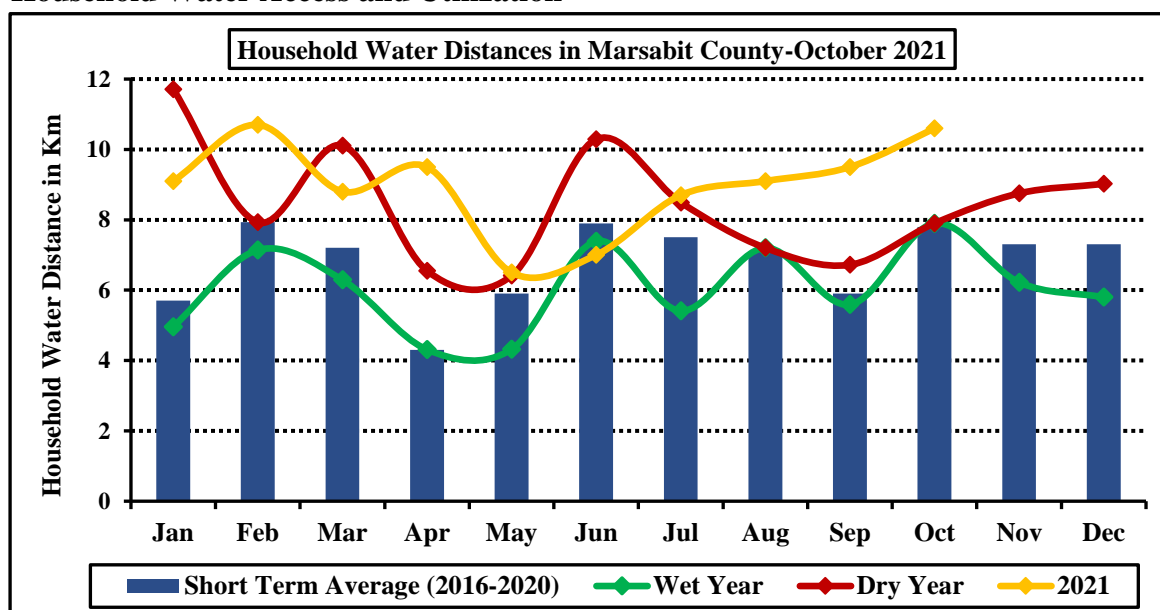


Figure 10: Current household return water distances compared to the Short Term Average distances (Km)

- From (Figure 10) shown above, return household water distances to the main water sources was 10.6km in the month under review which exhibits an increase when compared to the preceding month’s household water distance of 9.5km across the livelihood zones. The current household water distance of 10.6km is above the short term average household water distance of 7.8km by 36 percent. Similarly, current household water distances are above dry year and wet year water distances driven by accelerated depletion of the surface water sources and delayed start of the season.
- Increased household waiting time at the water source was recorded in all the livelihood zones occasioned by overconcentration of the boreholes and short pumping hours. Waiting time ranged between 3-5 hours against the normal of 45 minutes in the agro-pastoral livelihood zone while ranged between 5-6 hours against the normal of 60 minutes in the pastoral livelihood zone.
- Water consumption per household per day was 4 litres in agro-pastoral and 5 litres in pastoral livelihood zone compared to the normal 15-20 litres per person per day. The cost of water ranged between Ksh.2-5 in urban areas and Kshs.20/jerrican from water vendors.
- Driven by abnormal dryness across the livelihood zones, levels of sub-surface water sources have significantly reduced hence increased pressure and waiting time at water sources.

- With delayed start of the season, household water distances are expected to increase further hence likely decline of water consumption levels across the livelihood zones.

2.2.3 Livestock Access

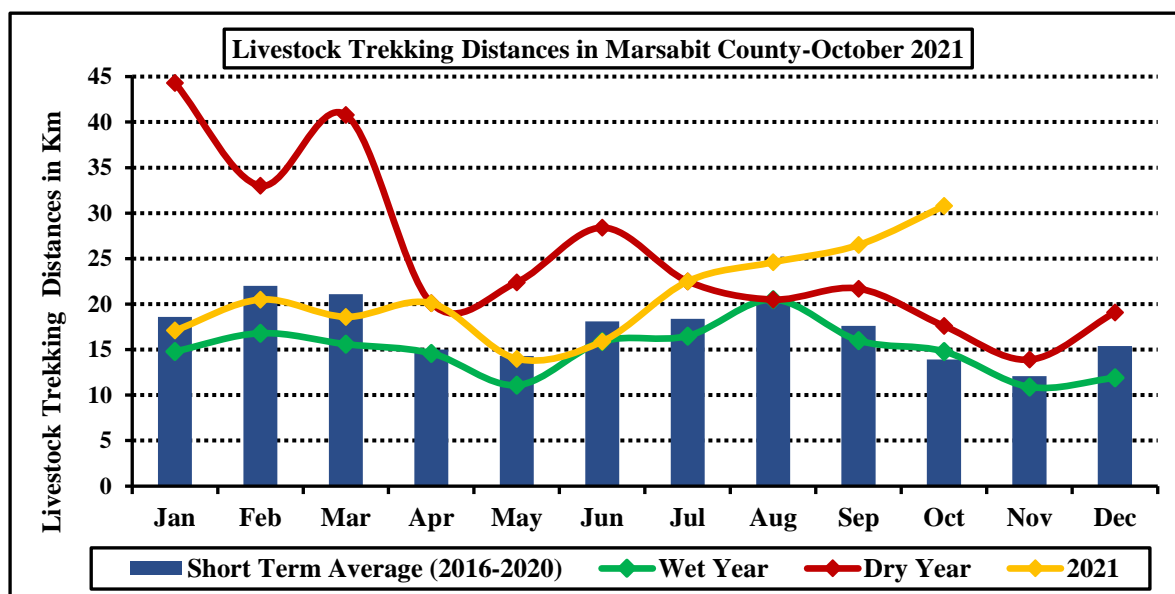


Figure 11: Current return livestock trekking distances compared to the Short Term Average distances (Km)

- From (Figure 11) shown above, return livestock trekking distance from grazing areas to water points is 30.8km in all the livelihood zones thus an indicative of an increase and an all-time high distances when compared to the previous month's grazing distance of 26.5km.
- Livestock trekking distance of 30.8km is above normal by 122 percent when compared to the short term average livestock trekking distance of 13.9km. Similarly, the current livestock trekking distances are remarkably above the dry and wet years' distances.
- In the agro-pastoral livelihood zone, livestock trekking distances ranged from 20-25km whereas in the pastoral livelihood zone, livestock trekking distances oscillated between 30-40km in the month under review. Exceptional longer trekking distances above 50km were exhibited in North Horr Sub-County (Mataburi, Yaa-Gara, Konon-Gos, Dakane, Kalesa, Diid Gola, Kubiadhi, Marime, Qatamur and Toricha) and Laisamis Sub-County (Sarima, Soriadi, Hafare, Buuro, Civicon and Moite).
- Significant reduction in watering frequencies for all the livestock species were recorded across the livelihood zones. Watering intervals for cattle was 3-4 days in the agro-pastoral livelihood zone while 4-5 days in the pastoral livelihood zone compared to the normal watering interval of one day. Camels watering frequency is 14 days in the agro-pastoral livelihood zone which is above normal while in the pastoral livelihood zone, camels watering frequency is 15-20 days against the normal of 7 days. In the pastoral livelihood zone, small stock watering frequency is 5-6 days while 4-5 days in the agro-pastoral livelihood zone compared to the normal of 1-2 days.
- The cost of water is between Kshs. 10-20 for camel, Kshs. 5-10 for cattle and Kshs.2-5 for shoats while a 20-liter jerry can at water sources is Kshs.10-20 but sold by water vendors at Kshs.30-50 in most areas.
- With the continuation of the long dry spell coupled with delayed start of the season, watering frequencies are expected to reduce further 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 was poor across all the livelihood zones in the county compared to fair-good at this time of the year.
- Due to depleted pasture in most parts of the County resulting to poor body condition of animals, some of the livestock keepers in both the agro-pastoral and pastoral livelihood zones are purchasing livestock feeds, maize and sorghum as an alternative means of coping for the livestock. Owing to depletion of pasture/browse, livestock in the county is facing severe feed shortages. The most affected are core herds-lactating females, calves and kids.
- With rapid deceleration of rangeland and increased distances of forage to the already overstretched water resources, the livestock body condition is likely to deteriorate further in November.

3.1.2 Livestock Migration

- In the month under review, 85percent of the livestock migrated to the dry season grazing areas due to accelerated depletion of water sources, poor forage and delayed start of the season.
- In North Horr Sub-County, livestock in Dukana ward are concentrated along Balesaru, Diid Gola, Dosolle, Qarari, Garwole and Mata-lamana. In Maikona ward, livestock are concentrated around Hurri Hills, Toricha, Chari-Ashe, Thushe, Koronder and Idhido. In North Horr ward, livestock have moved towards Konon-Gos, Dosole, Qorqa and Uranura.
- In Laisamis Sub-County, livestock from Loiyangalani ward are concentrated around Komote, Pallo, Moite, Gatab, Civicon and Oltorot. In Laisamis and Loglogo wards, livestock are around Kolboga, Lontolio, Merille and Nairibi, Kom, Thurusi and Sereolipi.
- Livestock in Korr-Ngurnit and Kargi wards have migrated to Elem, Palam, Buuro, Yell and Irrir while in Moyale Sub-County, livestock have migrated towards southern Ethiopia.
- Livestock in Saku Sub-County are concentrated around parts of Badassa and Jaldesa. With expected progression of the long dry spell, typical livestock migration is expected to be intense across the livelihood zones.

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

- In the agro-pastoral livelihood zone, poor income households had 1-2 tropical livestock units compared to 3-5 normally while the middle income households had 5-6 compared to 7-10 normally.
- In the pastoral livelihood zone, poor income households had 2-5 TLUs compared to 6-10 normally while the middle income households had 5-12 compared to 16-20 normally.
- TLUs declined across the livelihood zones and household categories due to reported cases of livestock deaths as a result of the severe drought and livestock disease incidences. In agropastoral and pastoral livelihood zones, the TLUs in poor income households declined by 65 and 40 percent respectively compared to the normal.
- Likewise, in the pastoral and agropastoral livelihood zones in the medium income households, TLUs declined by 42 and 18 percent respectively compared to the normal.

3.1.4 Livestock Diseases and Mortalities

- Livestock diseases incidences is on an increasing trend across the livelihood zones. There are reported cases of pneumonia among camel calves in the County. Coupled with drought stress, this could cause loss to the affected herders.
- The biggest burden around the season is parasite-worms, ticks and flies. Other species of livestock

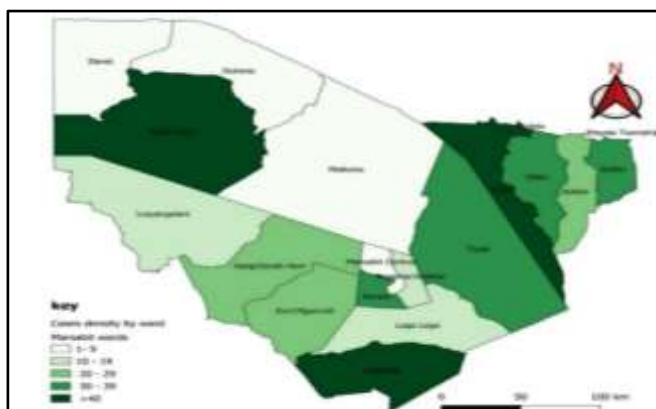


Figure 12: Geospatial Density of Cases by Ward

found at the water source, especially camels were highly infested with flies (engorged ticks-rephicephalus). Sheep and goats' deaths due to drought was reported across the County and about 5 sheep and goats are lost from every herd due to the ongoing severe drought. Cattle deaths were also reported and from every herd, at least ten cattle died due to drought. The lactating, old aged and especially camel calves (44 percent mortality rate) were also affected by the drought coupled with opportunistic diseases.

Table 2.0: Measure of Disease Severity by Livestock Species

| Species | Morbidity (%) | Mortality (%) | Case fatality (%) |
|---------|---------------|---------------|-------------------|
| Camel | 9.5 | 2.2 | 22.8 |
| Cattle | 7.1 | 1.4 | 19.1 |
| Goats | 11.0 | 2.0 | 18.3 |
| Sheep | 8.3 | 1.3 | 15.8 |
| Shoats | 8.6 | 1.2 | 14.1 |

3.1.5 Milk Production

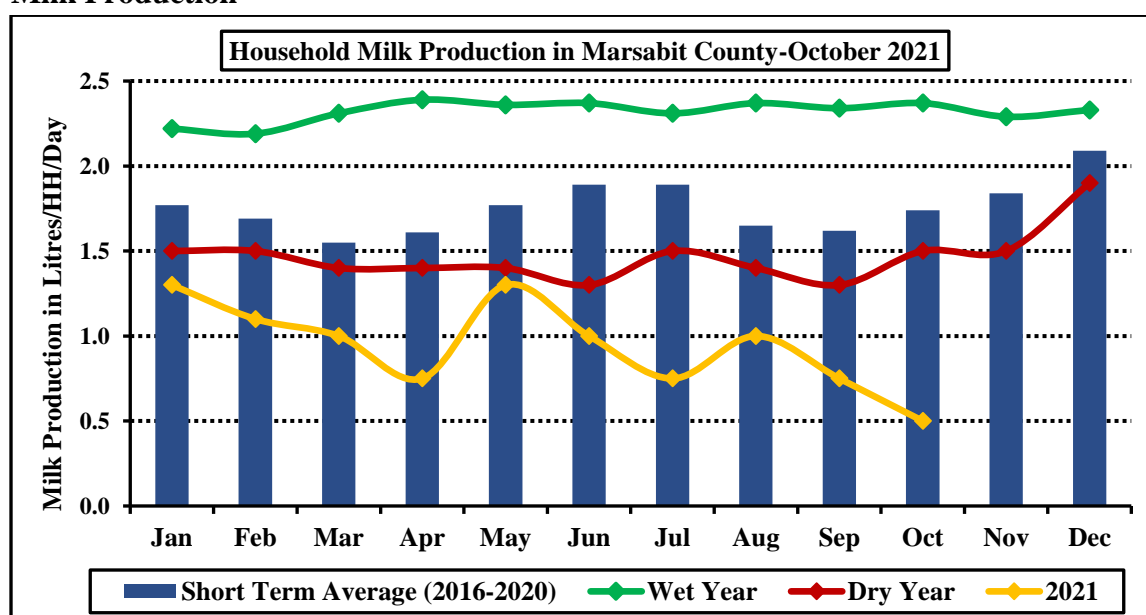


Figure 13: Milk production per household per day in litres across the livelihood zones

- From figure 13 shown above, household milk production per day for the month under review was 0.5 litres/household/day across the livelihood zones hence a decline when compared to

the previous month's milk production of 0.75 litres/household/day. Reduction in milk production was attributed to typical mass livestock migration to the dry season grazing areas.

- Current milk production of 0.5 litres is significantly below the short term average milk production of 1.7 litres/household/day and considerably lower than wet and dry years' household milk production.
- Significantly below normal milk production was driven by consecutive rainfall shortfalls of the previous two seasons, decelerated livestock rangeland and delayed start of the 2021 short rains season. With typical progression of intense livestock migration, milk production is expected to decline further in the next one month.
- Milk retailed at an average of Kshs.80-120 per litre across the livelihood zones compared to Kshs.75-90 normally which is 20-25 percent above normal.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Area Under Crop Cultivation

- Land preparation was carried out early in the month of October and planting has already been done. The area under crop is expected to be more than the previous season as there are no restrictions on movement based on easing of restrictions imposed due to Covid 19 protocols. 604 hectares of maize, 120 hectares of green grams, 248 hectares of beans and 68 hectares of teff were planted.
- The OND season is a very important season for Marsabit County in terms of contribution to crop production. However, the season may not have the desired results as the onset of the rains has delayed against the traditional start of the season which is usually on the second-third week of October and this has caused unnecessary panic to the farmers.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

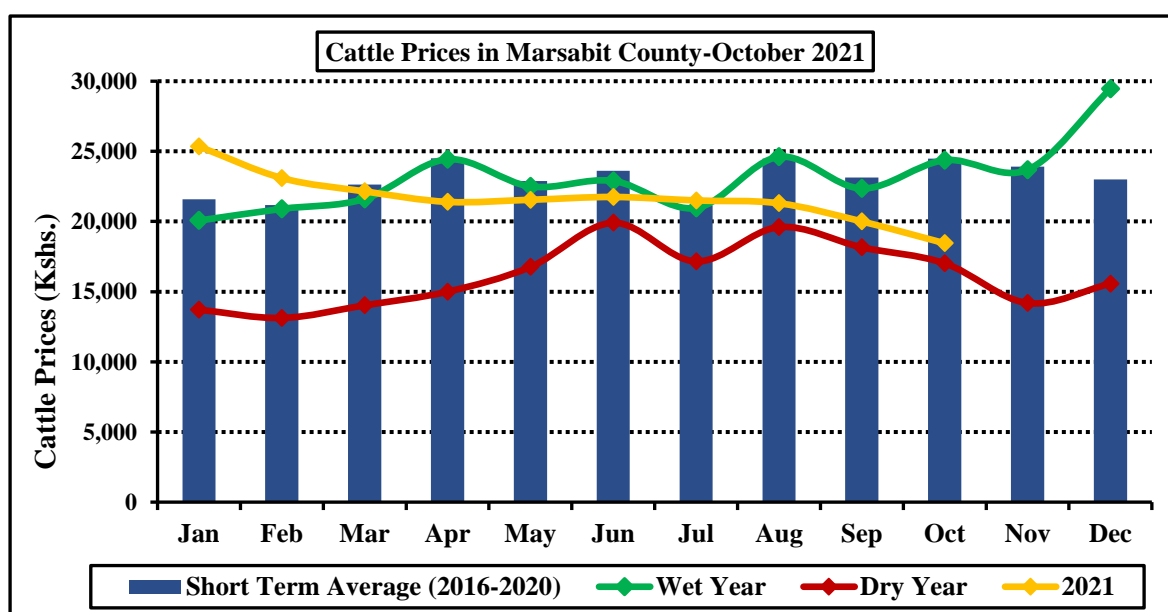


Figure 14: Cattle Prices Trends in Marsabit County

- From the figure (14) shown above, cattle price for the month under review was Kshs. 18,450 thus declined when compared to the preceding months' cattle price of Kshs. 20,005.

- Current cattle price of Kshs. 18,450 is below the normal and wet years' prices by 24 percent while slightly above the dry year prices. Below normal cattle prices were occasioned by poor cattle body condition across the livelihood zones and sluggish demand levels. In Merille livestock market, the price of medium size cattle ranged between Kshs. 15,000-17,000 hence an indicative of a decline when compared to the normal price of Kshs. 25,000 while Moyale livestock market exhibited slightly better cattle prices averaging Kshs. 20,000.
- With expected further deterioration of cattle body condition, cattle prices are likely to decline to an all-time low in the next one month especially in the pastoral livelihood zone of North Horr and Laisamis Sub-counties.

4.1.2 Goat Prices

- The current average goat price is Kshs. 2,865 thus below normal by 29 percent when compared to the short term average price of Kshs. 4,028 as illustrated in figure 16 below.
- Below normal goat prices were attributed to deteriorating goat body condition and reduced demand in the livestock markets. Similarly, goat prices are below the dry and wet years' prices.
- Disruptions of market injections mainly from the feeder to the terminal markets was occasioned by typical migration to the dry season grazing areas and weakened body condition.
- However, Moyale livestock market exhibited slightly better prices averaging Kshs. 3,500 while in Merille livestock market, the price of medium size goat was Kshs. 3,000.
- Traded market volumes for goats slightly declined due to low demand of goats from both the internal and external markets as their productivity has been exacerbated by severe drought.

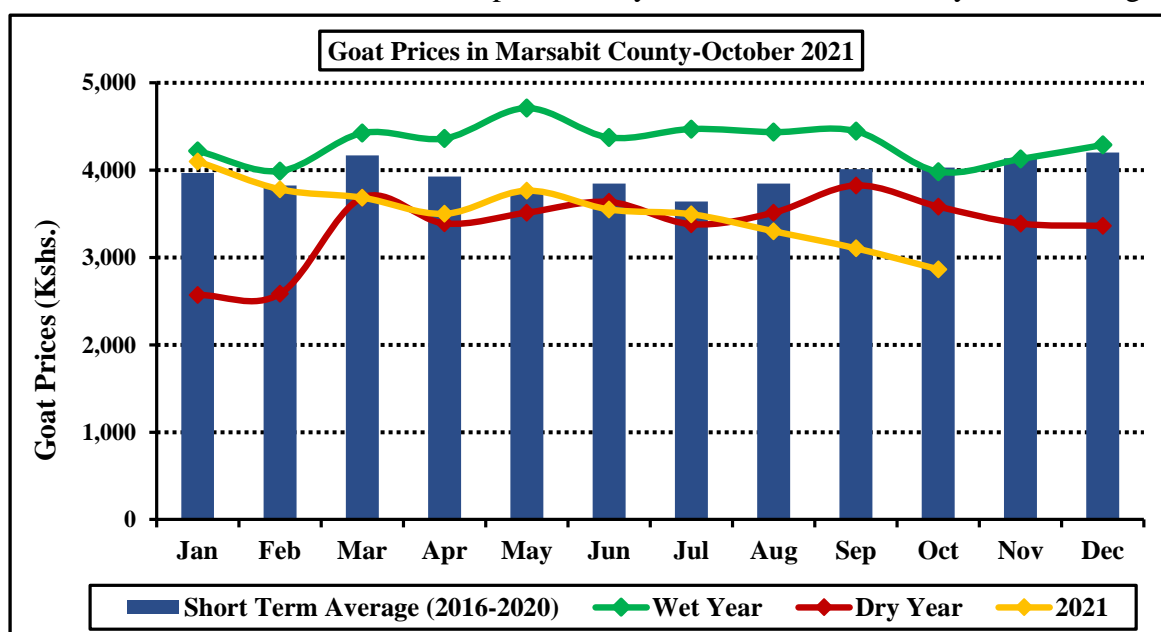


Figure 15: Goat Prices Trends in Marsabit County

- Goat's prices are expected to decline further to an all-time low in the month of November driven by multiple factors such as volatile price margins, abysmal livestock market linkages, insecurity concerns in the neighbouring vibrant Ethiopia market and ongoing severe drought.

4.1.3 Sheep Prices

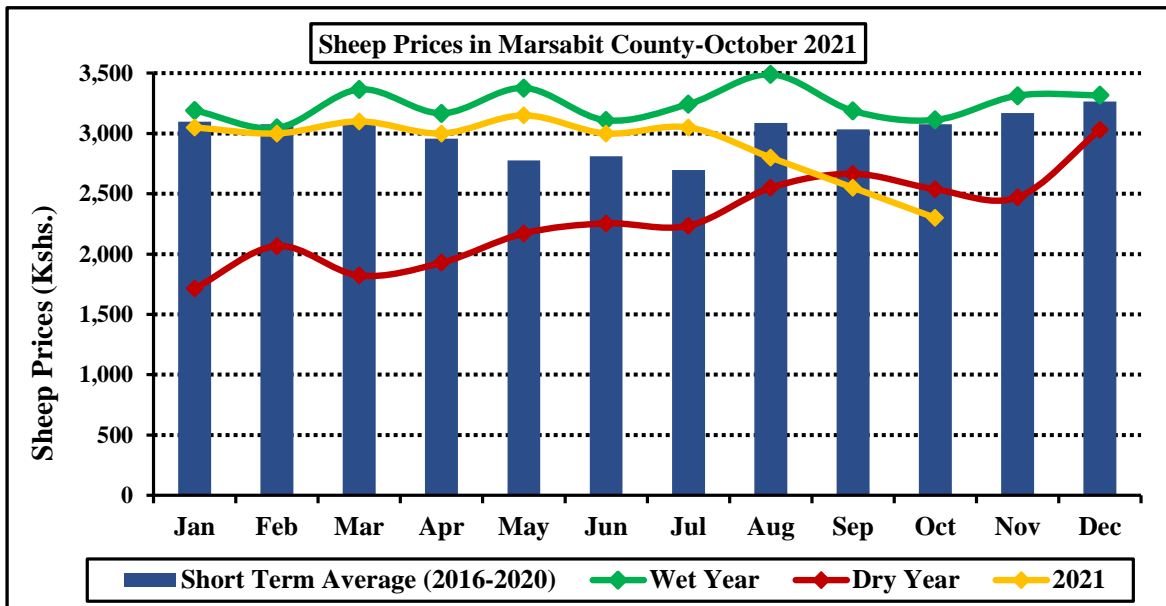


Figure 16: Sheep Prices Trends in Marsabit County

- From the figure 16 shown above, sheep price for the month under review was Kshs. 2,300 thus reduced when compared to the previous month's sheep price of Kshs. 2,550.
- When compared to the short-term average price of Kshs. 3,076, current sheep price is below normal by 25 percent. Similarly, the current sheep prices are below the dry and wet years' average prices.
- Traded volumes for sheep was 25-30 daily in Moyale livestock market thus considerable decline attributed to poor body condition and less demand from the external markets.
- Sheep prices are likely to decline further in the next one month across the livelihood zones as the severe drought situation continues coupled with abysmal market systems.

4.2 CROP PRICES

4.2.1 Maize

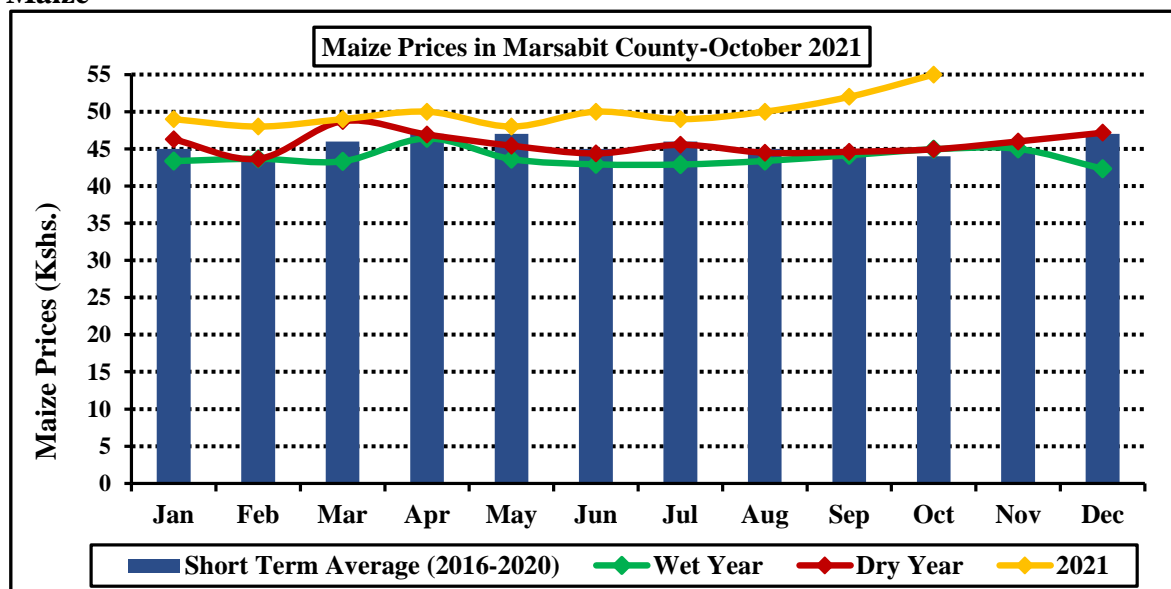


Figure 17: Maize Prices Trends in Marsabit County

- The current average maize price is Kshs. 55/kg, which is 25percent above average when compared to the short-term average price of Kshs. 44/kg as illustrated in figure 17 above

due to reduced supplies from the main external markets to the internal commodity markets coupled with increased inflationary tendencies.

- Moyale Sub-County recorded favourable prices averaging at Kshs.33/kg attributed to cross border supplies from Ethiopia. Similarly, Saku Sub-County exhibited stable maize price at Ksh.40/kg attributed to supplies from the external commodity markets of Meru and Nyahururu.
- Most of the commodity markets in North Horr and Laisamis Sub-County recorded maize prices of Kshs.60/kg denoting 36 percent above the short term average attributable to poor market integration.
- Notable high maize prices were exhibited along the fishing livelihood zone with prices averaging at Kshs. 80/kg due to limited access to the main commodity markets.
- Abysmal markets in the pastoral areas in addition to weakened demand will likely disrupt market chains in the local commodity markets thus likely increase in maize prices.

4.2.2 Beans

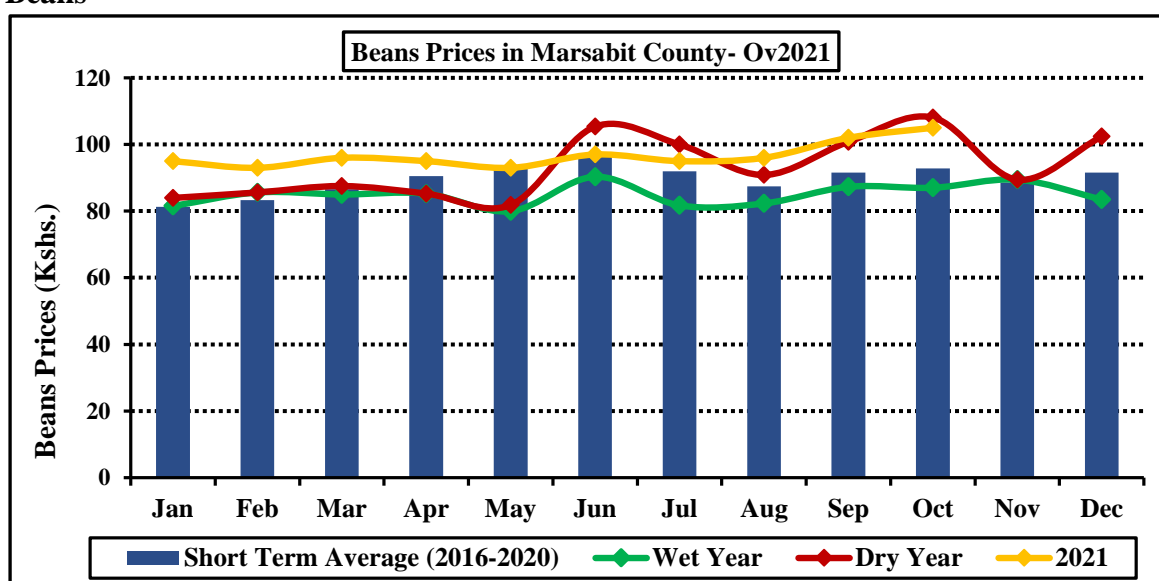


Figure 18: Beans Prices Trends in Marsabit County

- From the figure 18 shown above, beans prices retailed at Kshs 105/kg in the month under review across the livelihood zones thus an indicative of gradual increase when compared to the previous month's beans price of Kshs.102/kg. Current maize prices equate to the dry years' prices.
- Driven by supplies from the neighbouring Ethiopia market, Moyale commodity market posted favourable beans prices averaging at Kshs 65-70/kg.
- However, North Horr and Laisamis Sub-counties illustrated high beans prices of averaging Kshs 115/kg prompted by limited access to the existing commodities markets.
- Beans prices are anticipated to increase further driven by the increased fiscal tendency, disruptions of the market supplies chain from the Ethiopia market due to the ongoing insecurity incidences and poor market integration.

4.2.3 Terms of Trade (TOT)

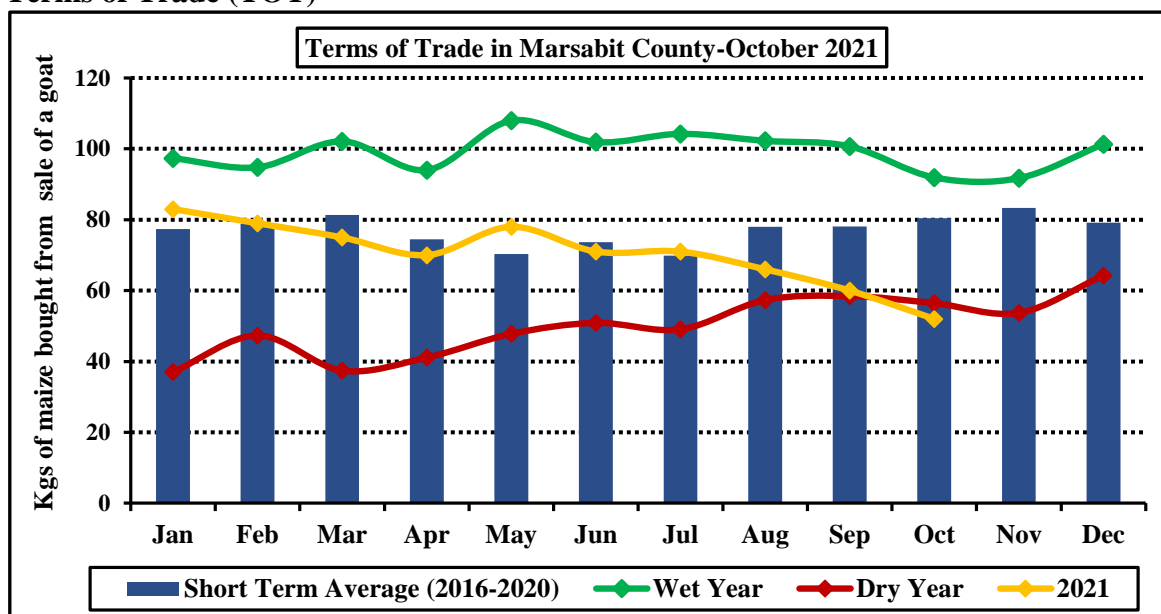


Figure 19: Current Terms of Trade versus Short Term Average

- The current terms of trade are 52 kilograms in exchange for the sale of a goat in the month under review and exhibited a reduction when compared to the preceding months' term of trade of 60 kilograms. Deteriorating terms of trade was attributed to below normal goats' prices and above average maize prices.
- However, Moyale Sub-County exhibited favourable terms of trade than other Sub-Counties attributed to slightly better goats' and favourable maize prices. Terms of trade for North Horr and Laisamis Sub-Counties were considerably below the short term average mainly due to high maize prices and an all-time low goats' prices.
- With expected instantaneous increase and decrease in maize and goats' prices respectively, terms of trade are likely to deteriorate further in the next one month across the livelihood zones.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

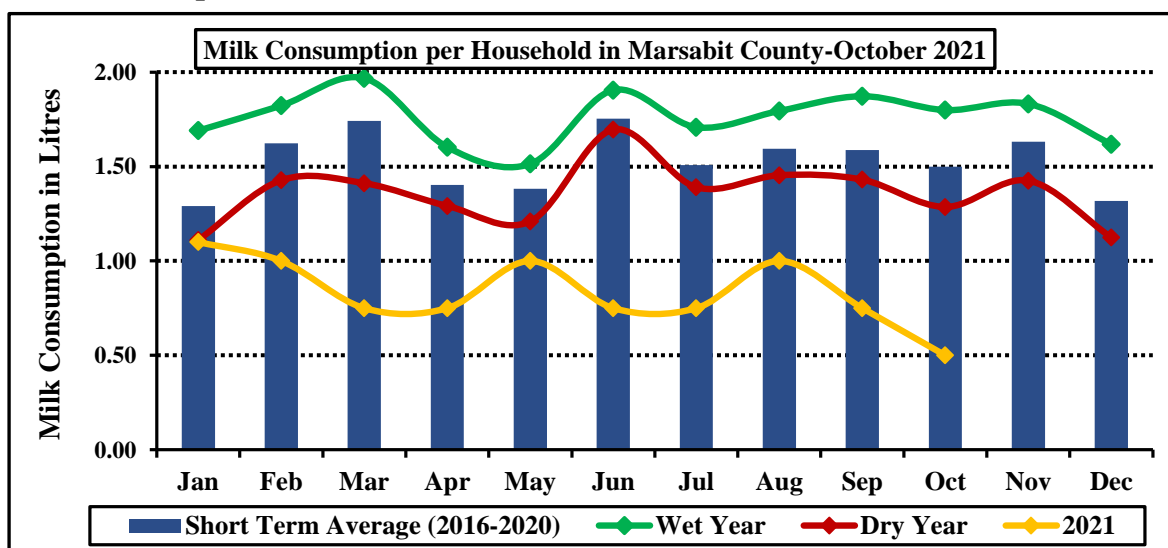


Figure 20: Milk consumption at household level in Litres

- From the figure 20 shown above, household milk consumption is 0.5 litres/household/day in the month under review hence a decline when compared to the previous months' milk consumption of 0.75 litres/household/day.
- Reduced milk consumption across the livelihood zones was attributed to mass livestock migration to the dry season grazing areas as the existing rangeland has been significantly decelerated due to the ongoing severe drought situation.
- When compared to the short-term average milk consumption of 1.5litres/household/day, current milk consumption is considerably below average attributed to below average milk production.
- Likewise, current milk consumption is significantly below the dry and wet years' household milk consumption. Milk consumption at household level is likely to decline further in the next one month due to delayed start of season and mass livestock migration.

5.2 FOOD CONSUMPTION SCORE (FCS)

- The current food consumption score (FCS) across the County is 33.9 with percent of households having poor food consumption while those with borderline and acceptable consumption were 45.9 percent and 47.2 percent respectively across the livelihood zones. In comparison to the previous month, deterioration in the food consumption categories was recorded and stagnated in the borderline food consumption band.

- In the agro-pastoral livelihood zone, proportion of households that had poor food consumption score was 6.5percent while those with borderline and acceptable food consumption scores were 50.6 percent and 42.9 percent respectively. Likewise, proportion of

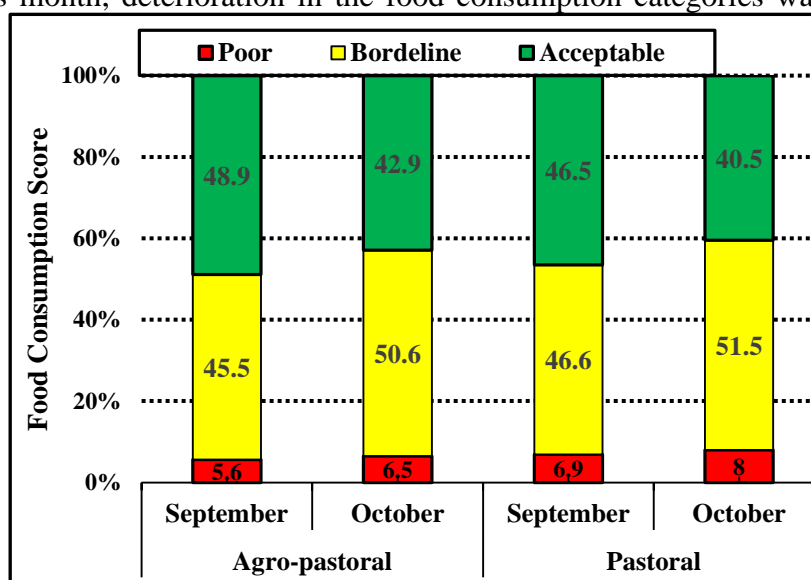


Figure 21: Food Consumption Trends in Marsabit

households in the pastoral livelihood zone that had poor, borderline and acceptable food consumption scores were 8.0 percent, 51.5 percent and 40.5 percent respectively.

Table 3.0: Food Consumption Score by Ward

| | FCS Mean | Poor FCS | Borderline FCS | Acceptable FCS |
|---------------|-------------|--------------|----------------|----------------|
| County | 33.9 | 6.90% | 45.90% | 47.20% |
| Golbo | 35.5 | 5.80% | 45.50% | 48.70% |
| Karare | 38.6 | 2.00% | 43.50% | 54.50% |
| Korr | 27.5 | 10.50% | 71.50% | 18.00% |
| Loiyangalani | 27.1 | 11.50% | 70.50% | 18.00% |
| Laisamis | 34.5 | 7.60% | 40.50% | 51.90% |
| Turbi | 35.2 | 8.50% | 40.80% | 50.70% |
| North Horr | 34.5 | 7.00% | 45.50% | 47.50% |

| | | | | |
|---------|------|-------|--------|--------|
| Dukana | 32.0 | 7.50% | 48.50% | 44.00% |
| Sagante | 25.5 | 9.50% | 62.50% | 28.00% |
| Uran | 40.2 | 2.50% | 21.30% | 76.20% |
| Kinisa | 42.5 | 3.50% | 15.00% | 81.50% |

- From the table shown above, 6.9 percent of households consumed staples and vegetables every day and never or very rarely are consuming protein rich food such as meat and dairy. Nearly 45.9 percent of the households consumed staples and vegetables every day, accompanied by oil and pulses a few times a week while 47.2 percent consumed staples and vegetables every day, regularly accompanied by oil and pulses and occasionally meat or dairy product. As the severe drought situation progresses, food consumption score is expected to remain in the borderline food consumption category.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

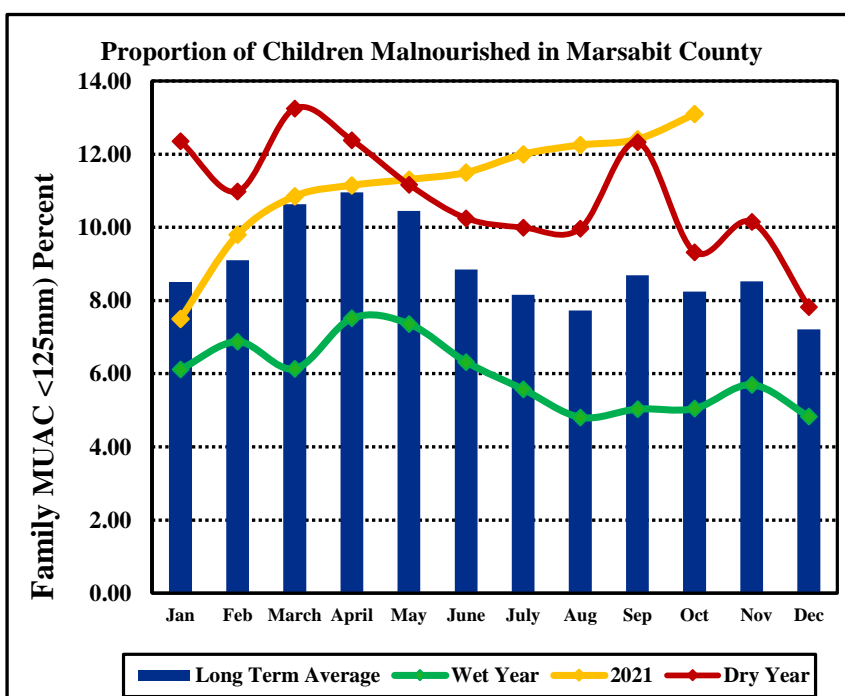


Figure 22: Proportion of Children < 5 Years Malnourished in Marsabit

- Figure 22 illustrates MUAC of 13.10 percent of children who are moderately and severely malnourished which is above the long term average MUAC of 8.24 percent and considerably above the wet and dry years MUAC of 5.05 percent and 9.32 percent respectively. Trends in both SFP and OTP new admissions increased across the County

when compared to the previous month admission trends. The rise in both SFP and OTP new admissions in addition to increased GAM rate by MUAC indicative of increased wasting due to deteriorating food security situation attributed to the ongoing severe drought situation.

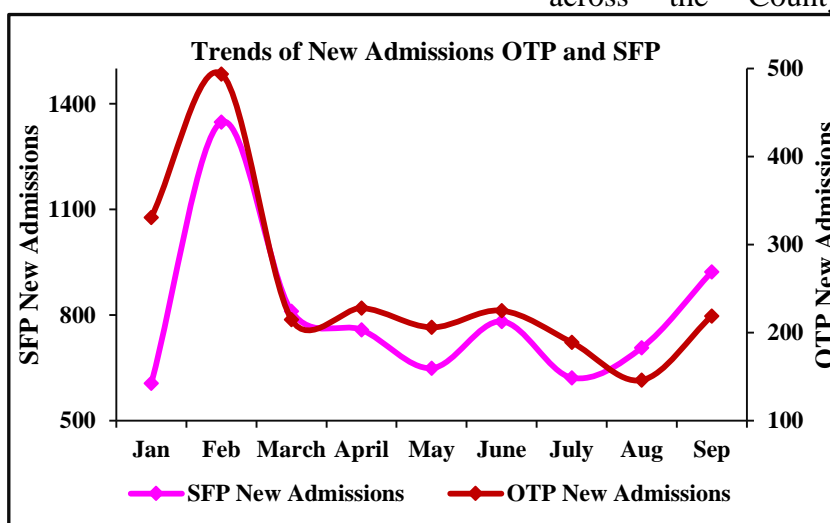


Figure 23: Admissions Trends in Laisamis and North Horr Sub-counties

5.4 COPING STRATEGIES

- From the (Figure 24) shown below, the current reduced consumption based coping strategy index (rCSI) for the households is 19.4. When compared to similar period last year (rCSI) of 15.8, it's an indicative of significant increase in adoption of coping mechanisms. Consumption based coping strategy index deteriorated from stressed (January) to Crisis in February, March, April, May, June, July, August, September and October with rCSI of 19.6, 20.5, 19.7, 19.9, 18.04, 18.6, 18.32, 18.5 and 19.4 respectively. Generally, households applied frequent and severe coping mechanisms to address short term food consumption gaps at the household level.

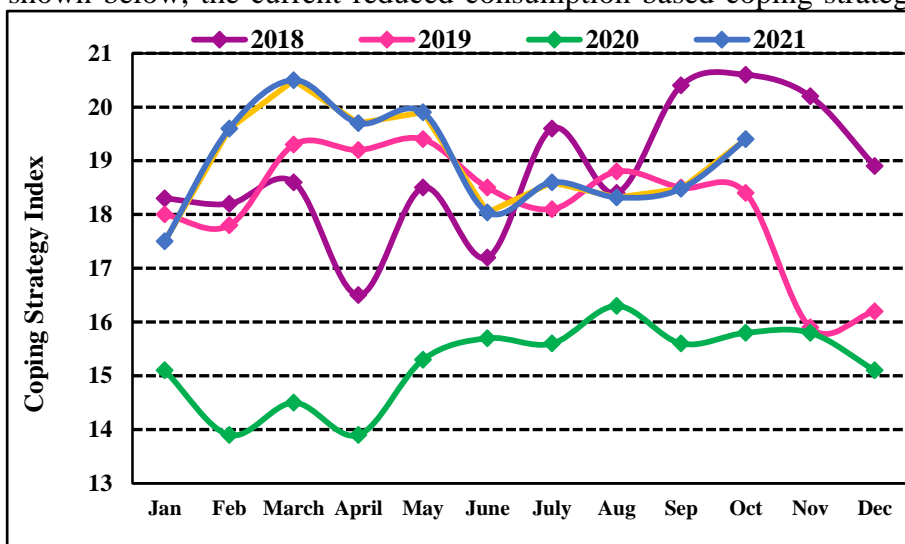


Figure 24: Coping Strategy Trends across the County

Table 5.0: Consumption Based Coping Strategy Index by Wards

| Consumption based coping strategy index(rCSI) | | |
|---|-----------------|------|
| Sub-county | Ward | rCSI |
| Saku | Sagante | 23.5 |
| Saku | Karare | 11.7 |
| Laisamis | Korr | 18.5 |
| Laisamis | Loiyangalani | 31.5 |
| Laisamis | Laisamis | 15.8 |
| North Horr | North Horr | 24.5 |
| North Horr | Turbi | 25.8 |
| North Horr | Dukana | 20.5 |
| Moyale | Uran | 12.5 |
| Moyale | Golbo | 17.6 |
| Moyale | Heillu Manyatta | 11.5 |

- From table shown above, households in Loiyangalani, North Horr, Sagante, Korr, Dukana and Golbo applied crisis consumption based coping strategies whereas those in Uran, Karare, Uran and Laisamis wards employed stressed consumption based coping mechanisms.
- Generally, 2.0 percent, 55.5 percent and 42.5 percent of the households adopted 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 EMERGING ISSUES (LIKELIHOOD OCCURRENCE OF DESERT LOCUST INVASION)



Figure 25.0: Courtesy FAO-DLIC

- Desert locust third invasion has hit Kenya from Ethiopia/Somali border as illustrated in Figure 1. The mature swarm was reported on 1st November 2021 that roosted at Rhamu-Dimtu in Mandera followed by second successive two swarms the following day measuring 200kms.
- Marsabit County is currently calm, but on alert as an attack is imminent based on the currently southerly wind movement, Marsabit close proximity to Mandera County and lastly favourable weather conditions along borders with Ethiopia. Early this week parts of Moyale sub-county bordering Ethiopia and Dukana received on average 6 inch of rainfall sufficient to trigger conducive conditions for the mature adult desert locust to oviposit.
- Desert locust surveillance has been triggered in hot Spot areas of Moyale, Laisamis and North Horr sub-counties as follows: Laisamis (Pallo, Sarima, Moite/Loiyangalani, Oltorot, Kargi, Korr, Illaut & Farakoren), Moyale (Somare, Dabel, Heillu and Uran) and North Horr (Dukana, Kalacha, Olom, Barambate, Gas, El-Isako Mala, El-Boru Magado, Yaa Algana and Balessa)

7.0 CURRENT INTERVENTION MEASURES

7.1 Food Aid

- USAID/WFP through SND distributed food rations to 9,168 households across the County under the Sustainable Food System Programme which comprised of 458.4Mts of sorghum, 100.848Mts of pulses and 33.686Mts of vegetable oil.
- Kenya Red Cross Society distributed assorted food items to Laisamis Sub-county (900 households), Moyale Sub-county (503 households) and Saku Sub-county (1,726 households) with each household receiving 20kg of rice, 10kg of sugar, 10kg of flour, 5 litres of vegetable oil, 10kg of maize, 5kg of beans and 1kg of salt.

7.2 Non Food Aid

- 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.
- National Drought Management Authority supported water trucking across the County and provision of fuel subsidy worth 24,000 litres of diesel to 24 strategic drought fall back boreholes.
- National Drought Management Authority supported livestock core herds with nutritive livestock feeds (drought pellets) worth 10,080 bags of 50kg each.
- National Drought Management Authority supported screening of under-fives. Family MUAC scale up in 20 CUs mapped in Saku (10) and Moyale (10). A total of 160 CHVs have been

trained and will sensitize and distribute family MUAC tapes to Mothers within the 20 target Community Units.

- County Government of Marsabit supported water trucking to few far flung areas and institutions in Moyale, Saku and Laisamis Sub-counties.
- County Government of Marsabit and Concern World Wide supported Borehole Rapid Response Team(BRRT) during borehole emergency breakdowns.
- County Government of Marsabit repaired water bowsers to enhance water trucking.
- USAID Nawiri in collaboration with CARITAS supported cash transfer at Kshs.5000 per month targeting 1300 households– Loglogo ward 149 HH, Turbi-267 HH, Dukana-348 HH, Illeret -142 HH and Maikona -394 HH.
- USAID Nawiri supported drought emergency including provision of fuel subsidy – 10,000 litres for 14 boreholes, distribution of livestock feeds – 1500 bales of hay for 750 farmers, procurement of feed pellets, procurement and installation of 3 gensets for strategic boreholes, repair and provision of first moving spare parts collaboration with CARITAS provided fuel subsidy to strategic boreholes worth 7500 litres of diesel. Distributed hay /fodder distribution to 600 households and drought tolerant seeds to 325 households in Saku sub county. Supported mass screening North Horr /Laisamis sub county.
- PACIDA supported borehole rapid response team, repair of Elhadi and Forolle boreholes by providing submersible motors and draw pipes.
- World Vision Kenya supported 5 schools in Golbo with 10,000 litres of plastic water tanks. Also supported 600 households in Loiyangalani and 600 households in Golbo with cash transfer of Kshs. 3,000.
- FAO supported 3,000HH for the OND season with assorted inputs (6000 Kg of cowpeas, 8000 Kg of beans, 5000 Kg of maize, 1600 of 25kg of kales, 1600 of 25kg of Ethiopian kales).
- FAO delivered 4000 bags (50kg) Range Cubes to Laisamis sub-county through PACIDA as part of the on-going drought intervention measures.
- Integrated outreach services in 42, 14 and 5 sites in North Horr, Laisamis and Saku respectively. (34.6% coverage) by CWW, KRCS, CCM, THS and NAWIRI.
- Integrated management of acute malnutrition in all 82 health facilities supported by UNICEF, WFP, MOH, SND and NAWIRI.
- KRCS through the support of UNICEF is implementing Rapid Life-saving Health Emergency Response to drought, floods and associated diseases outbreaks and effects of COVID-19 in Laisamis and North/Horr Sub Counties to ensure continuity of health services to drought affected communities and those living far from static facilities through integrated outreach services, coordination and monitoring of the response interventions and awareness creation for all emergency affected communities (children and pregnant women) for increased access to emergency life-saving health interventions.
- Welthungerhilfe supported rehabilitation of 6 boreholes in Laisamis (Laga Feregi, Ulauli, Laisamis borehole-2) and Moyale (Odda) and Turbi (Dosawachu, Burgabo) Sub-Counties with a cost of Kshs. 4,822,876.36 as part of covid-19 recovery initiative.
- SIF is undertaking water trucking targeting 450 households in Sagante and Karare wards.
- SIF rehabilitated 10 shallow wells (4 in Sagante/Jaldesa and 6 in Karare).
- FH-K supported water trucking in schools and communities where a total of 105 trips was covered.

- Child Sponsorship (CSP)- distribution of relief supports with food items to 70 households in Dogogicha and Gufu Ali in Saku and distributed of 1604 school uniforms to vulnerable children,
- ERIKS Children Projects in partnership with ERIKSJALPHEN supported CRC training in Segel, Kubi Qallo, Daaba pry and Qicha/Qiltipe Sololo, completion of Kubi Qallo Classroom and near completion of Teachers Quarter in Segel.
- FBA (Focus Base Action) Pilots- training of Lead farmers for fodder production and purchased 3000 bales of Grass for groups in Segel for drought mitigation efforts. Supported 15 farmers to cultivate 26 acres of Land
- Concern World Wide supported update of IMAM Surge data and identification of seasonal patterns in consultation with health facility staff, CHVs/CHAs, and communities -during the reported month, the team was able to follow up on the ongoing IMAM pilot for the three components in North Horr and Laisamis.
- Concern World Wide procured fast moving spare parts for the department of water, logistical support (transport and allowances) to BRRT team during borehole breakdown
- Concern World Wide Supported Mass screening in Illeret and progressing with Dukana. Supporting Integrated outreaches in Bubisa, Elhadi and Illeret for 2 cycles in a month. (triggered by IMAM Surge dashboards).

8.0 FOOD SECURITY PROGNOSIS

- Based on rainfall estimates through October, the delayed onset of the short rains is likely to place October 2021 among one of the driest on record in Marsabit County. Therefore, based on the poor start of season, short length of the season, and median rainfall in analog years, cumulative rainfall is likely to be less than 60 percent of average in most parts of Marsabit County and there is a lower than usual chance of exceeding 200 and 300 mm in the next rainy season.
- The 3-months vegetation condition index remained in the normal vegetation condition band. With expected persistence of abnormally drier than usual conditions, the 3-months vegetation condition index will possibly reduce and likely shift to the moderate vegetation deficit in the month of November.
- Forecasted soil moisture that indicates a possibility of deterioration during the long dry spell period occasioned by failure of the long rains and high evapotranspiration rate. Drier than usual conditions will worsen the soil moisture quotient across the County.
- Approximately 95 percent of all surface water sources are depleted in all the livelihood zones and with the progression of the long dry spell coupled with typically abnormal livestock migration and accelerated depletion of the sub-surface water sources, recharge levels are likely to reduce further as the drier than usual conditions persists.
- Household water distance of 10.6km is above the short term average household water distance by 36 percent whereas livestock trekking distance of 30.8Km is above normal by 122 percent. With the continuation of the long dry spell coupled with delayed start of the season, watering frequencies are expected to reduce further for all the livestock species across the livelihood zones.
- Milk production and consumption are significantly below the long term average attributed to mass migration of 85 percent livestock herds to the dry season grazing areas and expected to decline further with the progression of severe drought.

- Terms of trade for North Horr and Laisamis Sub-Counties were considerably below the short term average mainly due to high maize prices and an all-time low goats' prices. With expected instantaneous increase and decrease in maize and goats' prices respectively, terms of trade are likely to deteriorate further in the next one month across the livelihood zones.
- Marsabit County is currently calm, but on alert as desert locust attack is imminent based on the currently southerly wind movement, Marsabit close proximity to Mandera County and lastly favourable weather conditions along borders with Ethiopia.
- Food consumption score remained in the borderline band while households adopted crisis coping strategies to address short term food consumption gaps. 2.0 percent, 55.5 percent and 42.5 percent of the households adopted reduced consumption based coping strategies that were minimal, stressed and crisis respectively.
- The rise in both SFP and OTP new admissions in addition to increased GAM rate by MUAC indicative of increased wasting due to deteriorating food security situation attributed to the ongoing severe drought situation.

9.0 RECOMMENDATIONS

- Immediate food assistance to the most vulnerable populace in Marsabit County
- Scale up active case finding in all 85 functional community units covering 176 sites in North Horr, Laisamis, Moyale & Saku Sub-counties.
- Reprioritization of integrated outreach support based on community based surveillance finding to ensure all the hot spot areas are supported to enhance access to emergency nutrition services with continued surveillance through IMAM surge monitoring and support.
- Up-scaling of various safety nets programmes across the County.
- Water trucking to address the immediate water needs for both human and livestock in the water scarce areas and provision of fuel subsidy to strategic boreholes.
- Repair of strategic boreholes, servicing of gensets and rehabilitation of grounded water bowzers for timely drought response. Desilting of water pans required in readiness of rains.
- Stock piling of vaccines, strategic vaccination and enhanced livestock disease surveillance.
- Enhanced disease surveillance and monitoring to effectively treat livestock and reduce losses.
- Activation of satellite livestock markets and commercial destocking to salvage pastoralists against imminent losses due to severe drought. Provision of livestock feeds and supplements to vulnerable households.
- Prepositioning of aerial apparatus to intensify desert locust aerial surveillance
- Sustained and enhanced peace dialogue meetings in conflict hotspots areas.