

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



A Vision 2030 Flagship Project



DROUGHT EW PHASE: ALARM

Drought Status: ALARM



Mipango ya kukabiliana na ukame

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Alert	Deteriorating
Pastoral All species	Alarm	Stable
Fisher folk/Casual labour/Petty Trading	Alarm	Stable
County	Alarm	Stable
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	65	80 -120
VCI-3Month (County)	22.8	>35
Forecast (VCI-3Month)		>35
Forecast soil moisture	0.2	< 0.2
Production indicators	Value	Normal
Livestock Body Condition	Good-Fair	Good-Fair
Milk Production	1.1	>1.7Litres
Livestock Migration Pattern	Unusual	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	79	>79
Milk Consumption	1.0	>1.6 Litres
Return distance to water	10.7	0.0-7.4Km
Utilization indicators	Value	Normal
Nutrition Status (severe & moderate)	9.8	0.0-9.1
Coping Strategy Index	19.6	<18
Food Consumption	36.6	>35

Drought Situation & EW Phase Classification

Biophysical Indicators

Rainfall: In the month under review, most parts of the county generally remained dry with exception of localized parts of North Horr, Laisamis and Moyale Sub-Counties which received off-season rains.

Vegetation condition: 3-months Vegetation Condition Index for the month under review was 22.8 across the county thus considerable deterioration when compared to the previous months VCI of 28.15 but remained in the moderate vegetation deficit band.

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 below the short term average. Unusual livestock migration was reported across the County. Incidences of small stock deaths were reported in North Horr Sub-County due to hypothermia. Below normal maize and beans harvest registered in Saku Sub-County. Desert locust invasion reduced.

Access indicators: Household and livestock water distances increased across the County. 90 percent of sub-surface water sources have dried up across the County. Breakdown of some strategic boreholes was reported in some parts the County and in some areas households are experiencing acute water shortage. Milk consumption was below the short term average and terms of trade favourable due to stable maize and goats' prices.

Utilization indicators. Household food consumption score remained in the acceptable band whereas consumption based coping strategies applied by households shifted from stressed to crisis. Admission trends increased both in the supplementary and therapeutic feeding programmes.

<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

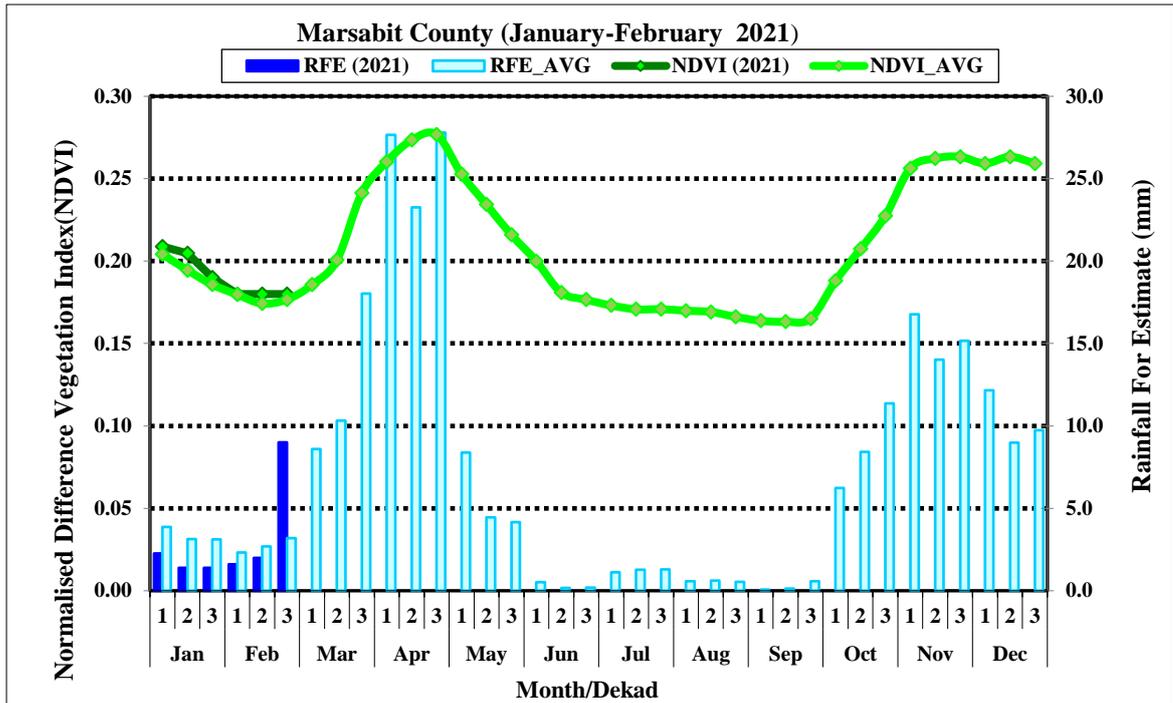


Figure 1: Dekadal Rainfall (mm) and NDVI values compared to the Long Term Average
Source: WFP-VAM, CHIRPS/MODIS

- From the figure 1 shown above, dekadal rainfall for estimate (RFE) amounts for the first and second dekads were below normal when compared to their respective long-term dekadal rainfall for estimate (RFE) averages. However, third dekadal rainfall amounts were above the long term average attributed to the off-season rains that were received in some parts of the County.
- Normalized Difference Vegetation Index (NDVI) for the first, second and third dekads were normal when compared to their corresponding long term dekadal NDVI values.

1.2 OFF-SEASON RAINS

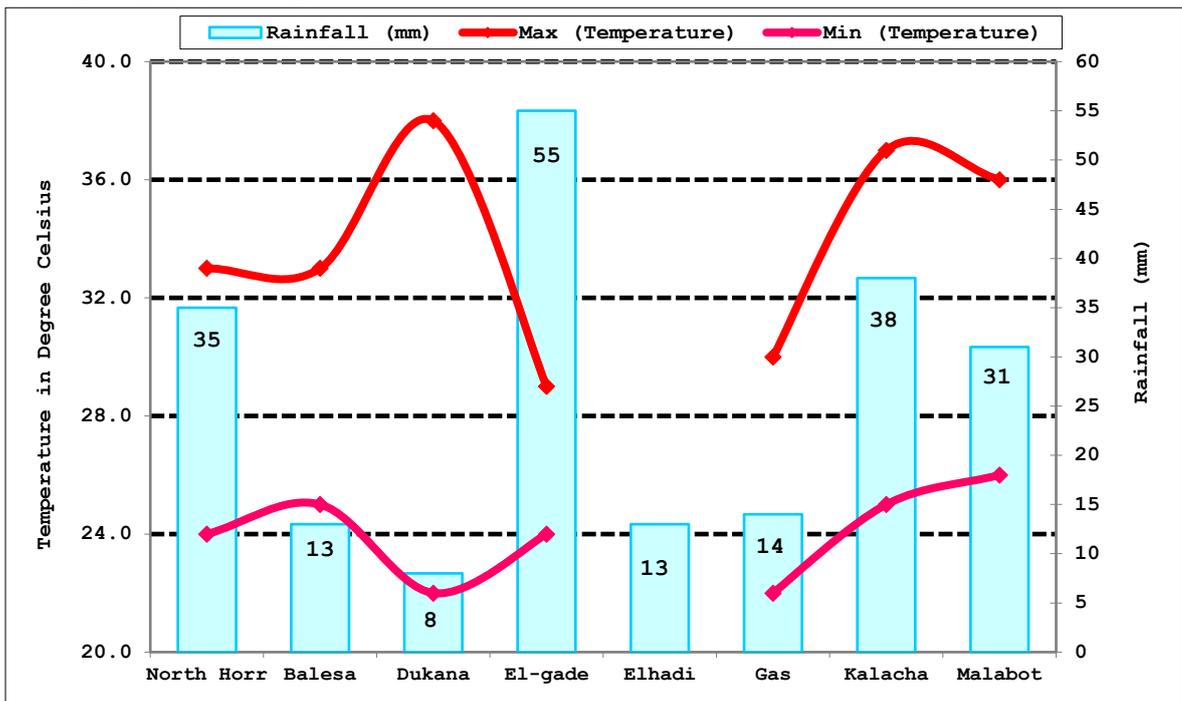


Figure 2: Rainfall Amounts and Temperature at Health Facilities under One Health Project, North Horr Sub-County

- Off season rains were received in some localised areas of North Horr, Laisamis and Moyale Sub-Counties with exception of Saku Sub-County that didn't receive any rainfall. From figure 2 shown above, El-gade, North Horr, Kalacha and Malabot received slightly enhanced rains in 2 days. However, Balesa, Dukana, Elhadi and Gas received depressed rains. Illeret received enhanced rains in the month under review.
- Some pockets of Laisamis Sub-County namely Elem, Namarei, Ngurnit, Farakoren and Merile, Loiyangalani, Mt. Kulal, Moite, Nayanailim and Sarima received fair rains in one rainy day. Moreover, a few areas of Moyale Sub-County (Sololo Junction, Elle Borr and Elle Dimtu) recorded fair rains. Pastoral areas of North Horr and Laisamis Sub-Counties received better off-season rains than the agro-pastoral areas of Moyale Sub-Counties.

1.3 CUMULATIVE RAINFALL

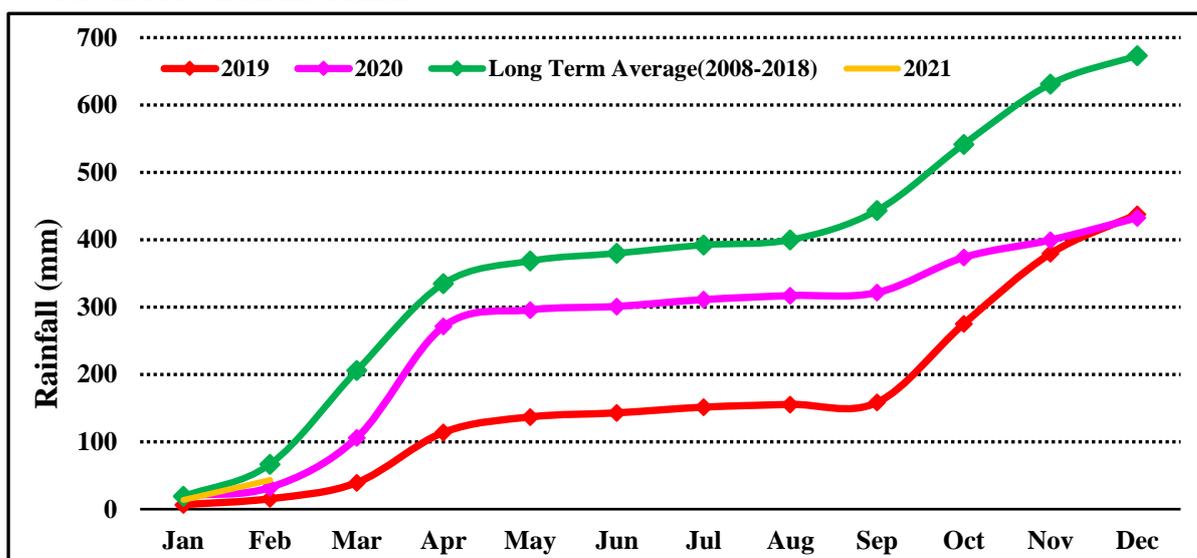


Figure 3: Cumulative Rainfall Performance (mm)

- From the figure (3) shown above, current seasonal cumulative rains are below the long-term cumulative rainfall amounts. Generally, 2019 was a dry year where the cumulative annual rains were significantly below the long term average while 2020 was a moderate year.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

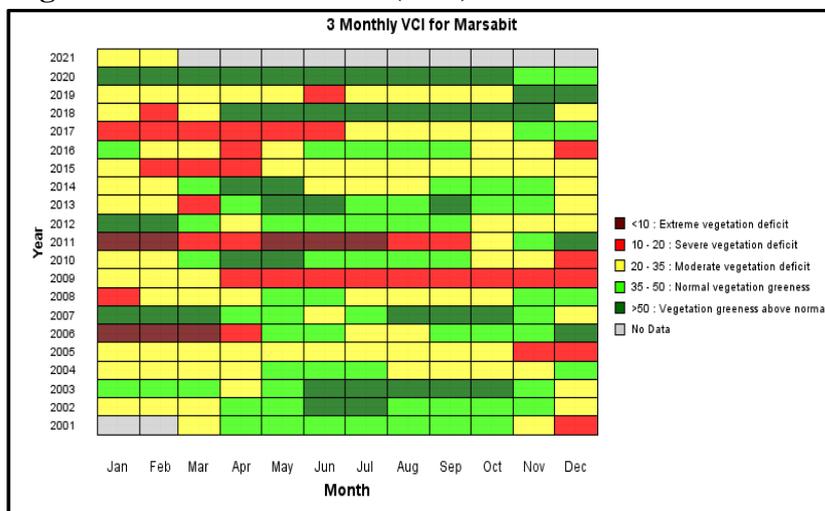


Figure 4: Vegetation Condition Index across Marsabit County

From the figure 4 shown, current vegetation condition index is 22.8 thus exhibited considerable decline when likened to the previous month's vegetation condition index of 28.15. Significant deterioration in vegetation condition prompted a reduction in the 3-months vegetation condition index as the drier than usual

conditions experienced in most parts of the county over crowded out the off-season rains that were received in isolated areas of the county. However, mild invigoration of pasture was recorded in Gas and Illeret of North Horr sub-county due to enhanced off-season rains.

- With expected drier than usual conditions in the next one month, the 3-months vegetation condition index will decline further and with a tendency to shift towards the severe vegetation deficit band. When compared based on the Sub-Countries, Saku sub-county depicted a 3-months vegetation condition index of 44.92 (normal vegetation greenness), whereas Moyale, Laisamis and North Horr sub-counties remained in the moderate

moderate vegetation deficit category with VCI values of 21.78, 22.81 and 25.43 respectively.

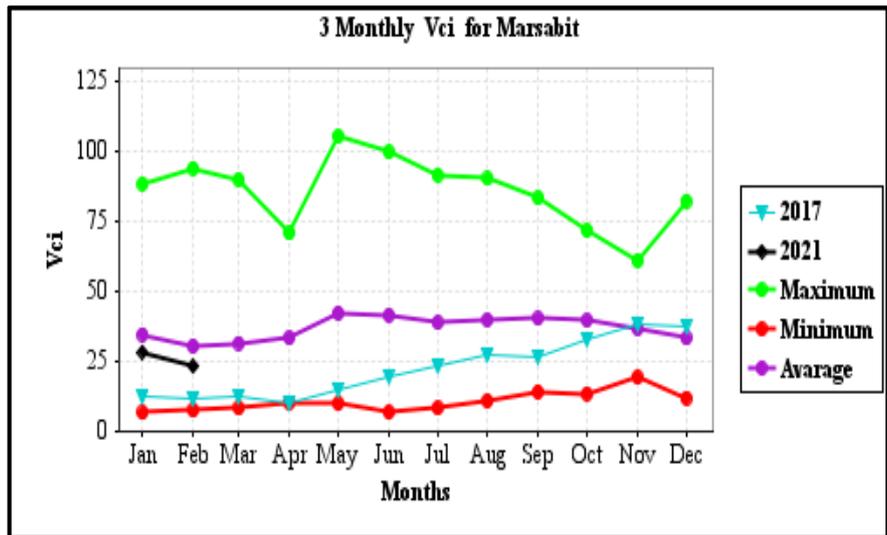


Figure 5: Vegetation Condition Index Trends

- Figure (5) shown above compares February 2021 vegetation condition index to February 2021 long term average, historical maximum and minimum vegetation condition index values. The current vegetation condition index is below the long term average and it's expected to decline further in the next one as the short dry spell progresses.

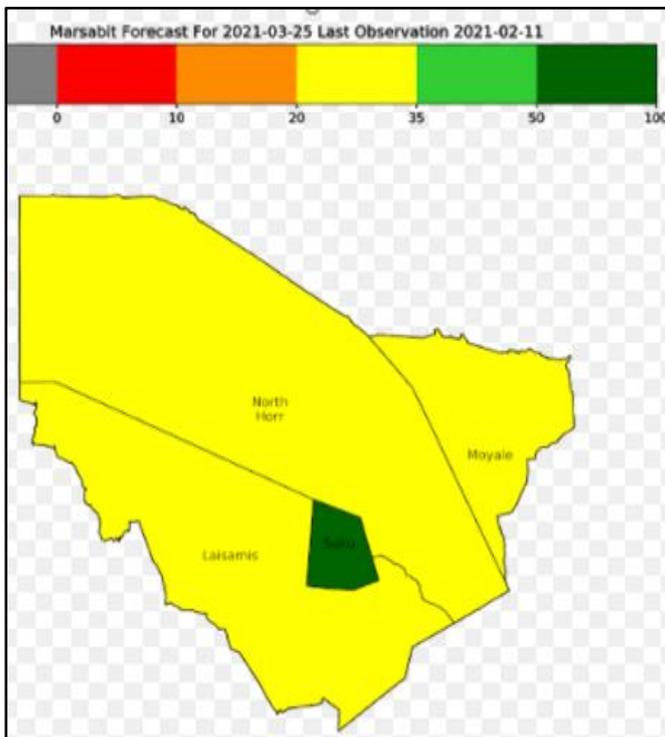


Figure 6: Vegetation Condition Index phase by Sub-County

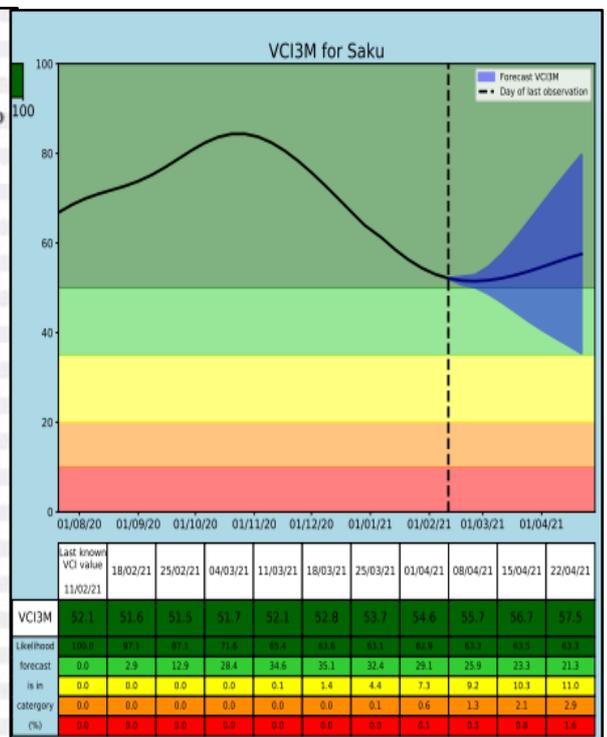


Figure 7: 3-months VCI Saku Sub-County

- Sub-counties vegetation condition index forecasts illustrate that Moyale, North Horr and Laisamis Sub-Countries remained in the moderate vegetation deficit band. However, Saku Sub-County will remain in the normal vegetation greenness category in the next one month.

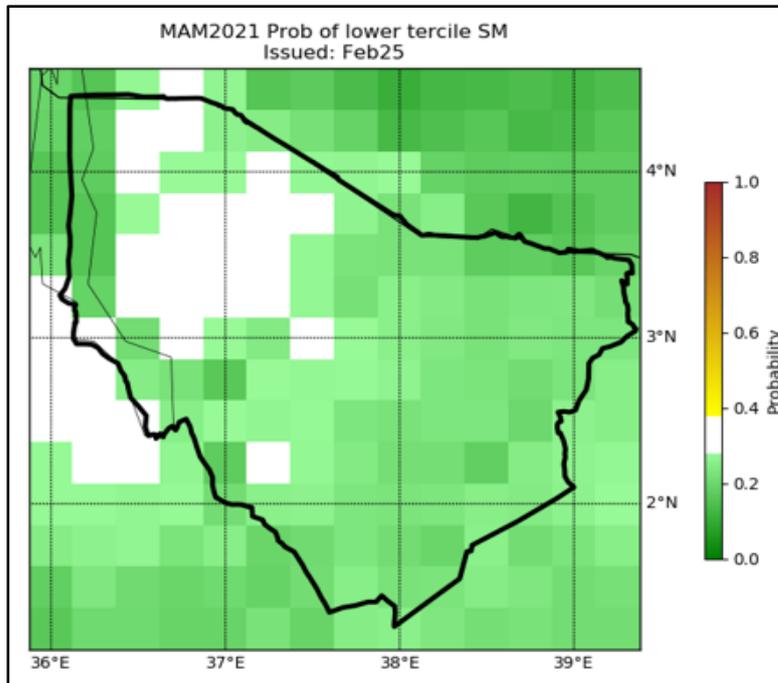


Figure 6: Probability of lower tercile soil moisture

(Figure 8) exhibits forecasted soil moisture that indicates a likelihood improvement across the county in the MAM season. Expected onset of the long rains in the first week of April might sustain soil moisture to normal conditions across the County. On average, there is a 0.2 probability that soil moisture will be in the lower tercile attributable to heightened probability of normal soil moisture quotient in the forecasted period.

- Figure 9 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 in 2021. The dashed vertical lines show the start (1st March) and end (31st May) of the rainy season.

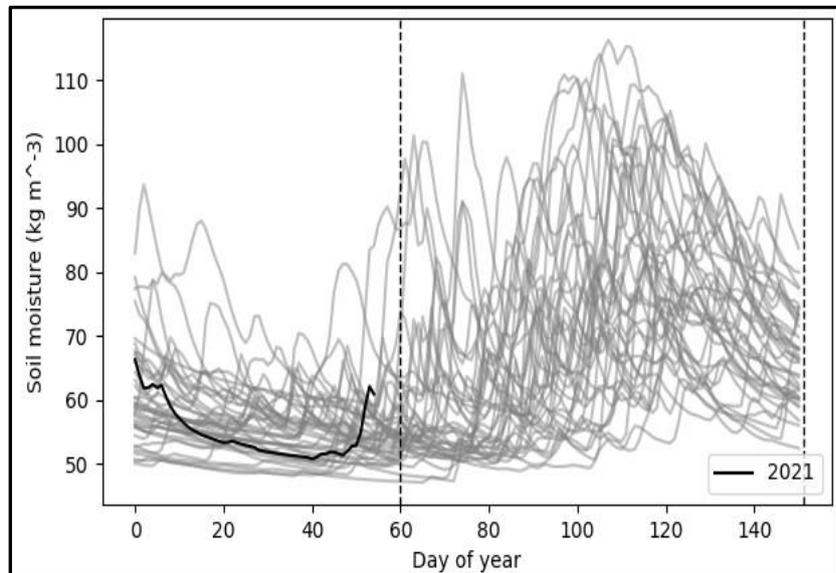


Figure 9: TAMSAT-ALERT soil moisture for Marsabit County

Soil moisture declined in January but improved in the month of February due to the off-season rains that were received in some localized parts of the county.

2.1.2 Pasture

- Pasture condition is fair-poor in the pastoral livelihood zone of North Horr and Laisamis and agro-pastoral areas of Moyale Sub-County. However, pasture is fair in most parts of Saku sub-county.
- Pasture condition was good-fair in some isolated areas of Saku sub-county (Karare and Marsabit Central wards), Laisamis sub-county (Kargi, Mt. Kulal, Soriadi, Gudas, Ngurunit), North Horr sub-county (Gas, Dukana, Bambala, Hurri Hills, Uranidera, Qarsa goresa, Chari Ashe, Lalesa, Sibilo, Korondell and Illeret), Moyale sub-county (Elle-Dimtu, Elleborr and Toi).

- When compared to similar periods, pasture condition is below normal in all the livelihood zones attributed to multiple combinations of drier than usual conditions, mass livestock migration and the effect of desert locust invasion on livestock rangeland.
- With the progression of the short dry spell, available pasture is expected to last for the next one month in the pastoral zone while 1-2 months in the agro-pastoral livelihood zone.

2.1.3 Browse

- Browse condition is fair in all the livelihood zones with exception of isolated areas of Moyale, North Horr and Laisamis sub-counties where browse is poor.
- Available browse will last for 1-2 months when compared to the normal of 2-3 months. Variations in pasture and browse conditions across the livelihood zones is mainly attributed to the off-season rains, desert locust invasion and intense livestock migration.
- Notable emergence of herbaceous vegetation was witnessed in some parts of North Horr, Laisamis, Saku and Moyale sub-counties especially calotropis procera and bush encroachment.
- Quality and quantity of browse is fair in all the livelihood zones. Insecurity hindered access to pasture and browse across the livelihood zones especially in Elleborr, Rawana and Elledimtu in Moyale sub-county, Bulluk, Sibilo and Balesaru in North sub-county, Gof chop, Mude, Qirisa, Dololo Dokatu, Jaldesa and Kubiqallo in Saku sub-county and the border between Laisamis and Samburu county.

2.2 WATER RESOURCE

2.2.1 Sources

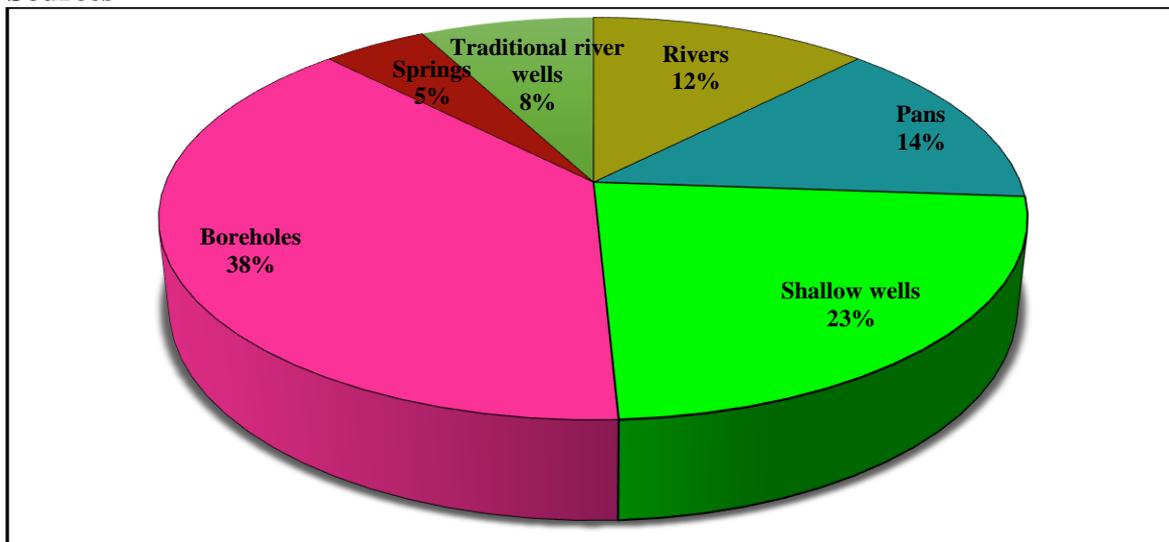


Figure 10: Main sources of water across the livelihood zones

- From figure 10 shown above, borehole is the main water source applied by majority of the communities in all the livelihood zones as exhibited by a response rate of 38 percent.
- When compared to similar periods, borehole is usually the main sources of water at this particular time of the year. Other water source employed by the communities in the month under review are shallow wells, water pans, seasonal rivers, traditional river wells and springs at 23 percent, 14 percent, 12 percent, 8 percent and 5 percent respectively.
- Generally, 90 percent of all surface water sources have dried up and the few isolated ones are expected to last for a period of less than 1 month. Across the livelihood zones, permanent water sources such as boreholes, shallow wells and springs are over utilized by both human

and livestock which has triggered congestion and long pumping hours leading to regular breakdown of strategic boreholes across the county.

- In North Horr and Illeret wards, open water sources are recharged due to slightly enhanced off-season rains that were received and will last for the one and half months.

Table 1.0: Areas that require Water Trucking

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, Manya 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"> • 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, Qonqom, Funanyatta
Laisamis	<ul style="list-style-type: none"> • Ulauli, Sakardalla, Farakoen, 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

Table 2.0: Non-functioning Boreholes across the County

BOREHOLE NAME	NATURE OF BREAKDOWN AND CAUSES	MAINTENANCE & REPAIR WORK DONE	STATUS
Ulauli (Laisamis Sub-County)	-The borehole pump set is defective	-A new pump set required urgently	Borehole is not operational
Odda (Moyale Sub-County)	-The borehole is hybrid system, where the source of power is solar and Genset system. -The solar system is defective due to defective pump controller	-Replacement of pump controller is required. -The controller is subverted to run a 7.5KW motor.	-The Genset system is operational. -The solar system is not operational.
Demo (North Horr Sub-County)	-One of the standby Gensets is not functional -The Battery charging system is faulty due to defective starter motor	-The starter motor need to be replaced	-The borehole is operational but the standby Genset is not operational
Elle Borr (Moyale Sub-County)	-The submersible motor is defective	-The rating of motor is 7.5KW -The motor has been provided by Concern Worldwide. -BRRT have left to carry out the repair work.	The borehole is not functional.

2.2.2 Household Water Access and Utilization

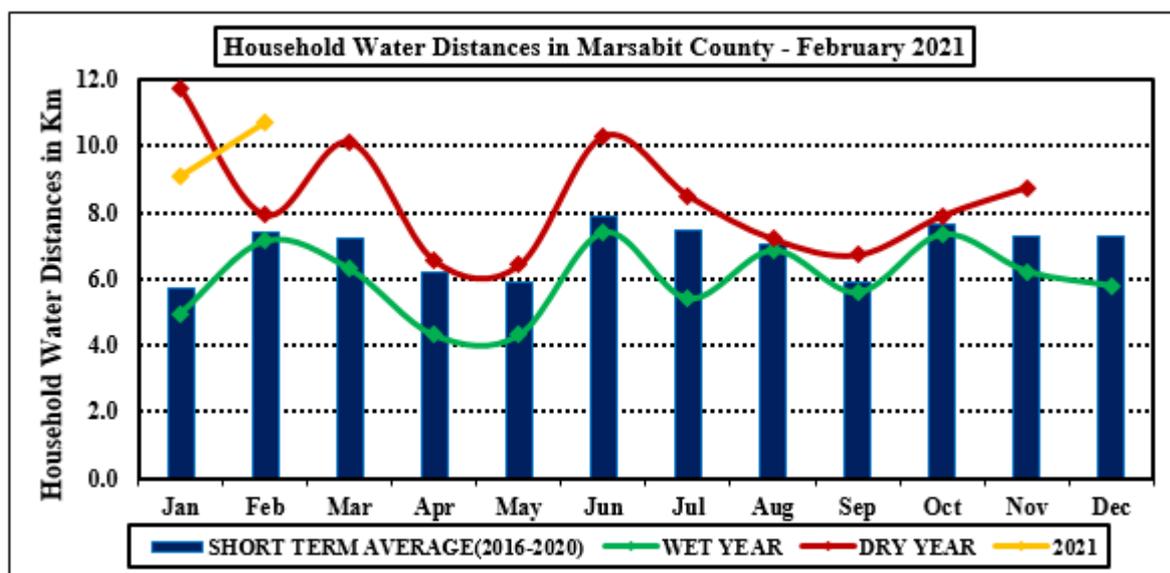


Figure 11: Current household return water distance (km) compared to Short Term Average distances (km)

- From (Figure 11) shown above, return household water distances to the main water sources was 10.7km in the month under review which illustrates an increase when compared to the preceding month's household water distance of 9.1km in all the livelihood zones. The current household water distance of 10.7km is above the short term average household water distance of 7.4km by 45 percent.
- Equally, the current household water distances are above water distances during wet and dry years. There was general increase in waiting time across the livelihood zones compared to normal due to drying up of open water sources and breakdowns of strategic boreholes. Waiting time ranged 2-6 hours across the livelihood zones compared to the normal 1-3 hours in agro-pastoral and 3-4 hours in pastoral livelihood zones.
- Water consumption per household per day was 5 litres in agro-pastoral and 6litres in pastoral livelihood zone compared to 12 and 8 litres per person per day respectively during normal times.
- With expected drier than usual conditions in the next month, household water distances will likely increase further hence longer waiting time at the water source and reduction of water consumption at the household level.

2.2.3 Livestock Access

- From (Figure 12) shown below, return livestock trekking distance from grazing areas to water points is 20.5km in all the livelihood zones which depicts an increase when compared to the previous month's distance of 17.1km.
- The current livestock trekking distance is normal when compared to the short term average distance of 22km.
- Livestock trekking distances increased in the agro-pastoral areas of Moyale and Saku sub-counties (10-12km) whereas the pastoral areas of Laisamis and North Horr sub-counties exhibited considerable increase in livestock trekking distances (17-25km). However, considerable longer trekking distances above 35km were recorded in Dukana ward (Kalesa, Yaa Gara, Kubiadhi) and Turbi ward (Bubisa and Demo).

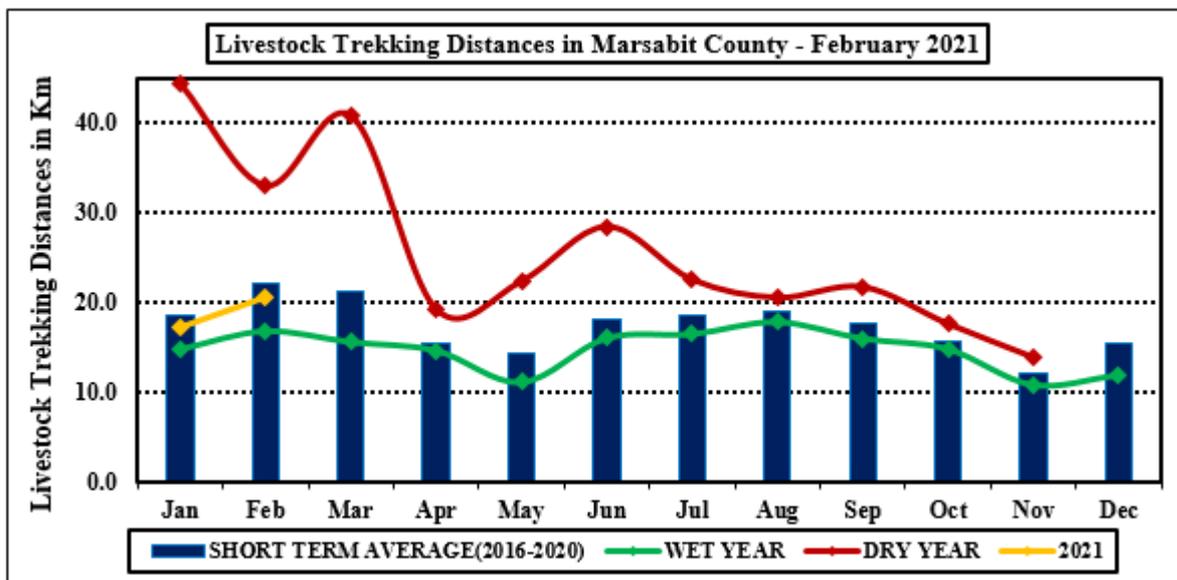


Figure 12: Current livestock trekking distances (km) compared to Short Term Average distances (km)

- Watering intervals for cattle is after 2 and 2-3 days in the agro-pastoral and pastoral livelihood zones respectively compared to the normal watering interval of 1-2 days. Camels watering frequency is after 6-8 days compared to the normal of 5-6 days in the agro-pastoral livelihood zone while in the pastoral livelihood zone, camels watering frequency is 8-12 days against the normal of 7-10 days. In the pastoral livelihood zone, small stock watering frequency is after 3-5 days while 2-4 days in the agro-pastoral livelihood zone compared to the normal of 2-3. With the progression of the short dry spell, 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

- Livestock body condition in the pastoral areas of North Horr and Laisamis Sub-Counties is fair and on a deteriorating trend especially for the small stocks, while 12 and 13 fore ribs was visible for cattle. Camel body condition is good to fair in all the livelihood zones.
- In Moyale sub county, camels body condition is good while fair for small stock and cattle in areas of Obbu, Golbo and Uran wards but on a deteriorating trend. In Saku sub County livestock body condition is generally good for all the species.
- With expected drier than usual conditions, livestock body condition is likely to gradually deteriorate further especially in the pastoral livelihood zone of Laisamis and North Horr Sub-counties and Moyale lowlands.

3.1.2 Livestock Migration

- In-migration of camel from traditional grazing areas is intense in North Horr and Laisamis Sub-Counties occasioned by traditional events and expected to return to the dry season grazing areas in the next 3 weeks.
- In North Horr Sub-County livestock from Dukana ward have migrated towards Sabarei, Bulluk, Badha Afar, Hurri Hills, Tumtich, Yibo and Darade while in North Horr ward livestock are concentrated in areas of Dosole, Darade, Sibiloi, Chari-Ashe and Konon-Gos. In Turbi and Maikona wards livestock are mainly around Hurri Hills, Segel, Shurr, Demo, Burgabo, Maikona, Mata-Arba, Sabas-guba, Titaa and Sabas-Haro.

- In Laisamis sub county livestock have migrated towards River Malgis, Gudas, Elem, Farakoren, Ngurnit, Kargi, Yell and Sere-elperwa in Merile.
- 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. In-migration of livestock from Wajir were reported in areas of Dabel and Badanrero. No major out migration of livestock were reported as livestock are concentrated in areas of Toi, Guyotimo,
- No notable livestock migration witnessed in Saku sub-county in the month under review to availability of forage. With continuation of the drier than usual conditions, intense livestock migration is expected to persist 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 2-4 tropical livestock units compared to 3-5 normally while the middle income had 6-10 compared to 10-15 normally. In the pastoral livelihood zone, poor income households had 3-5 tropical livestock units compared to 4-7 normally while the middle income had 8-14 compared to 15-20 normally. Tropical livestock units are below the long term average due to minimal herds recovery from the 2016-2017 extreme drought that led to massive livestock deaths and increased livestock generation intervals.

3.1.4 Livestock Diseases and Mortalities

- Sporadic cases of sudden death among camels in North Horr and severe congenital deformities reported among newborn camels. High parasite (ticks, worms and flies) load and report of Rift Valley Fever in Garissa, Isiolo and Mandera put the county at high risk.
- Incidences of livestock diseases and mortalities are normal across the livelihood zones. Diarrhoea in small stocks resulted to deaths amongst the kids and lambs in Dukana and Dabel. Cases of rabies outbreak reported in Dukana ward where 3 cases of stray dog's bites have been reported among the under-five and elderly people. A total of 40 small stock were reported to have died in Elboji due to hypothermia.

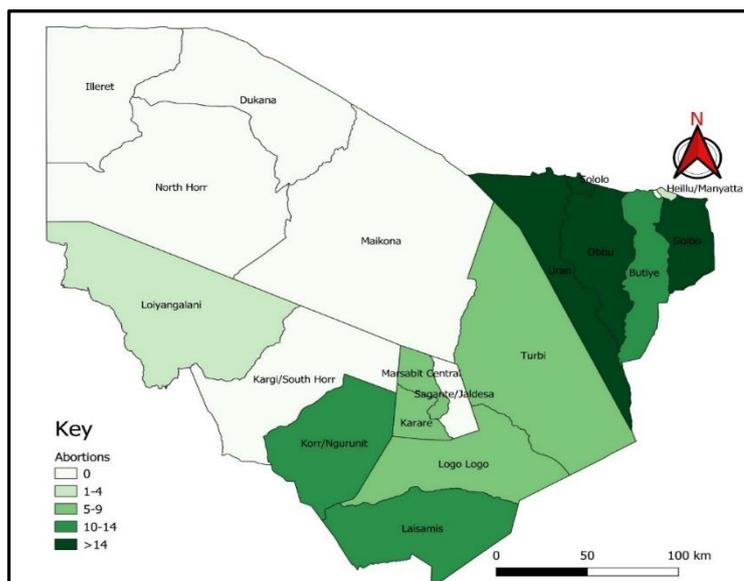


Figure 13: Distribution of Abortions Syndromes by Sub-County

Table 3.0: 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

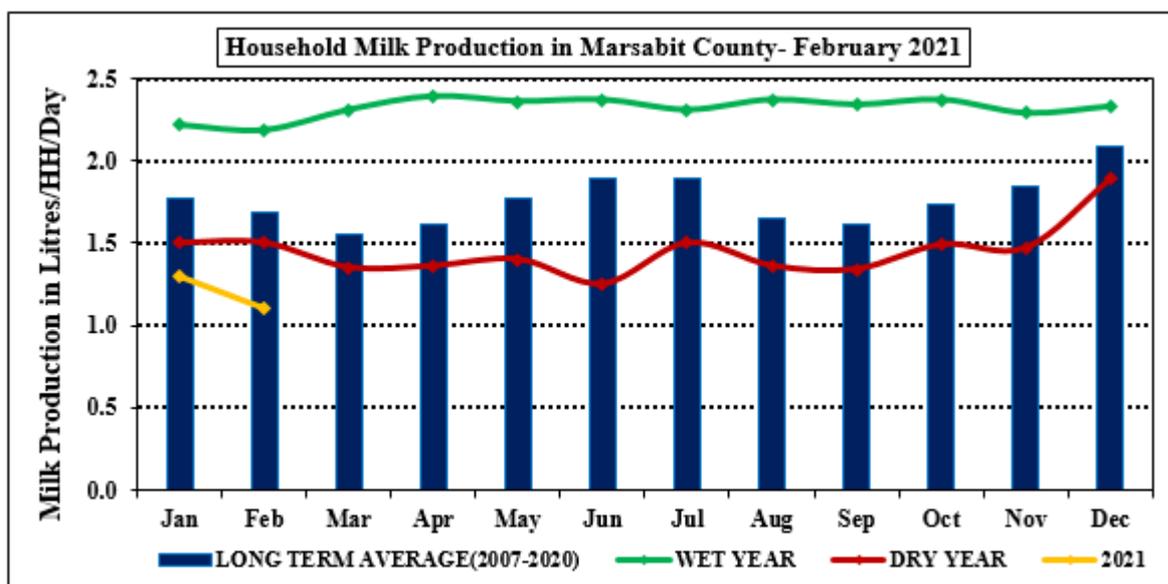


Figure 14: Milk production per household per day in litres across the livelihood zones

- From figure 14 shown above, household milk production per day for the month under review was 1.1 litres/household/day across the livelihood zones thus illustrates a gradual reduction when compared to the preceding month's milk production of 1.3 litres/household/day.
- Current milk production of 1.1 litres is below the long term average milk production of 1.7 litres and also lower than milk production in wet and dry years.
- Below normal milk production was attributed to mass livestock migration to the dry season grazing areas. As the short dry spell continues, milk production is expected to decline further in the next one month.
- Milk retailed at an average of Kshs.75-90 per litre across the livelihood zones compared to Kshs.60-75 normally which is 20-25 percent above normal.

3.1 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of Food Crops

- Harvesting of maize is ongoing in Saku Sub-County while land preparation and planting is also an ongoing farm activity in some parts. Beans have already been harvested in Saku Sub County with a total production of 3840kg while minimal production of beans was reported in Moyale sub county. Farmers in Moyale Sub-County reported total crop failure due to failure of the short rains and weathered germination.
- Saku Sub-County recorded total production of 2513 bags of maize, 696 bags of beans, 140 bags of green grams and 200 MT of kales. Production of maize and beans was below normal in Saku Sub-County due to near average rains and shift to miraa farming that led below area under crop production.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

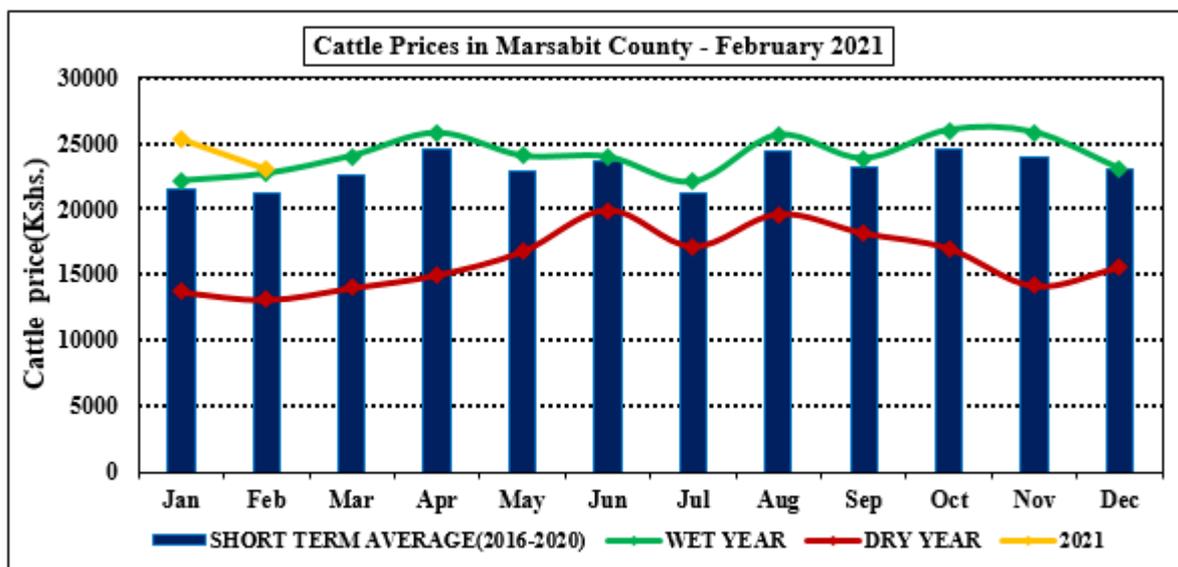


Figure 15: Cattle Prices Trends in Marsabit County

- From the figure (15) shown above, cattle price for the month under review was Kshs. 23,100 thus a gradual decline when compared to the previous months' cattle price of Kshs. 25,350.
- When compared to similar periods, current cattle price of Kshs 23,100 is slightly above the short-term average price of Kshs 21,811 by 9 percent. Above short term average cattle price is occasioned by the vibrancy of major livestock markets across the county.
- Generally, the trend of cattle prices was above the short term average prices and prices during a dry year but equated to the wet year prices.
- 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

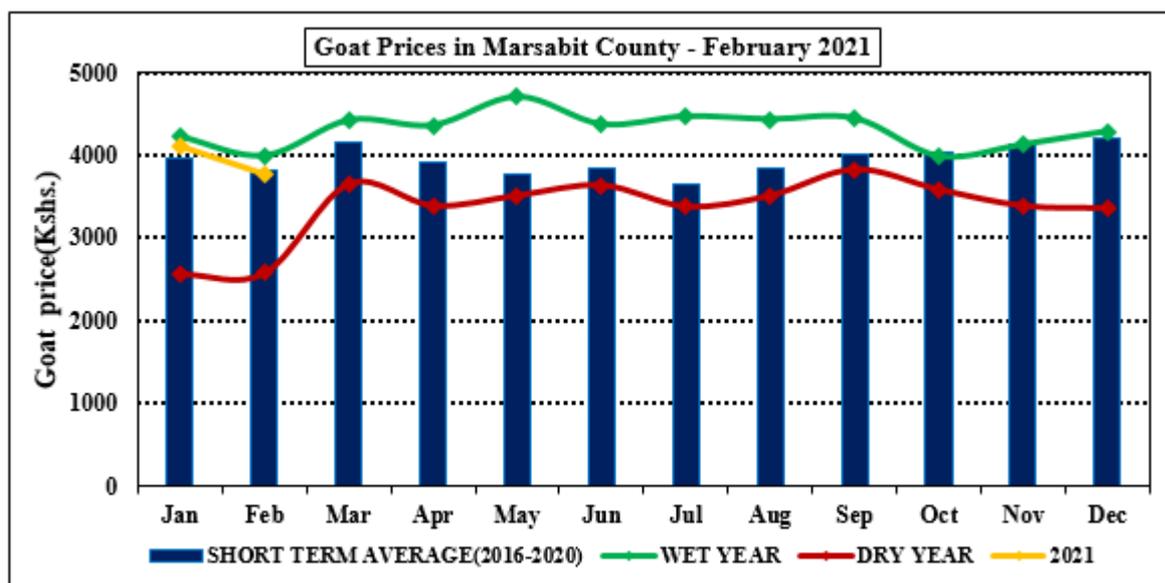


Figure 16: Goat Prices Trends in Marsabit County

- The current average goat price is Kshs. 3,781 thus normal when compared to the short term average price of Kshs. 3,824 as illustrated in figure 16 above. Normal goat prices were

attributed to good-fair body condition and vibrant livestock markets. However, slightly below normal prices were depicted in major markets of pastoral areas of Laisamis and North Horr sub-counties due to disruptions of the supply chains mainly from the feeder markets.

- Moyale livestock market recorded better prices of Kshs. 4,500-5,000. The traded livestock market volumes improved but fluctuated daily depending on demand and supply.
- Approximately, 75 percent of the livestock markets were operational with exception of Forolle market in North Horr sub-county which remained closed due to insecurity and Dabel and Sololo markets in Moyale sub-county due to weak demand and poor linkages to the traders. With the progression of the short dry spell coupled with poor market integration in the pastoral areas, goat's prices are expected to gradually decline.

4.1.3 Sheep Prices

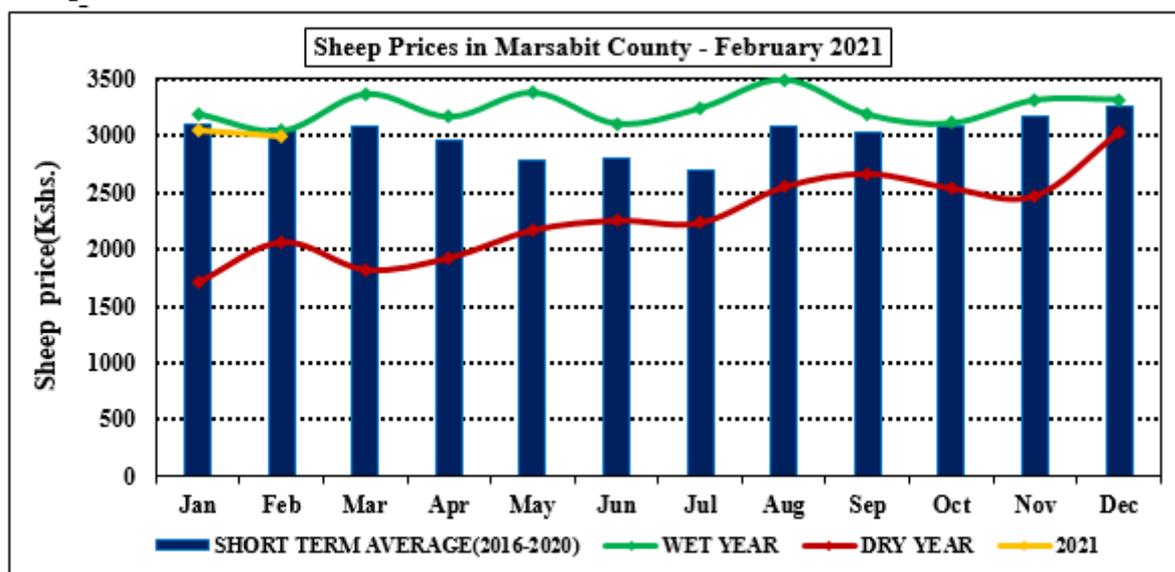


Figure 17: Current sheep prices compared to the short-term average prices (Kshs.)

- From the figure 17 shown above, sheep price for the month under review was Kshs 3,000 thus remained stable when compared to the previous month's sheep price of Kshs 3,050.
- When compared to the short-term average price of Kshs 3,076, current sheep price normal.
- Traded volumes for sheep was 60-80 daily thus significant declined due to considerable reduction in demand of sheep in the external markets.
- Sheep prices are expected to gradually decline in the next one month across the livelihood zone due to the drier than usual conditions.

4.2 CROP PRICES

4.2.1 Maize

- The current average maize price is Ksh 48/kg which is slightly above the short term average price of Ksh 44 as illustrated in figure 18 below. Moyale sub-county recorded favourable prices averaging at Kshs.30/kg attributed to cross border supplies from Ethiopia.
- Saku sub-county exhibited stable maize price at Ksh.40/kg attributed to injections from the external terminal markets of Meru and Nyahururu and maize harvest. However, majority of the commodity markets in North Horr and Laisamis sub-county recorded high maize prices of Kshs. 50-66/kg denoting 25 percent above the short term average mainly occasioned by poor market integration.

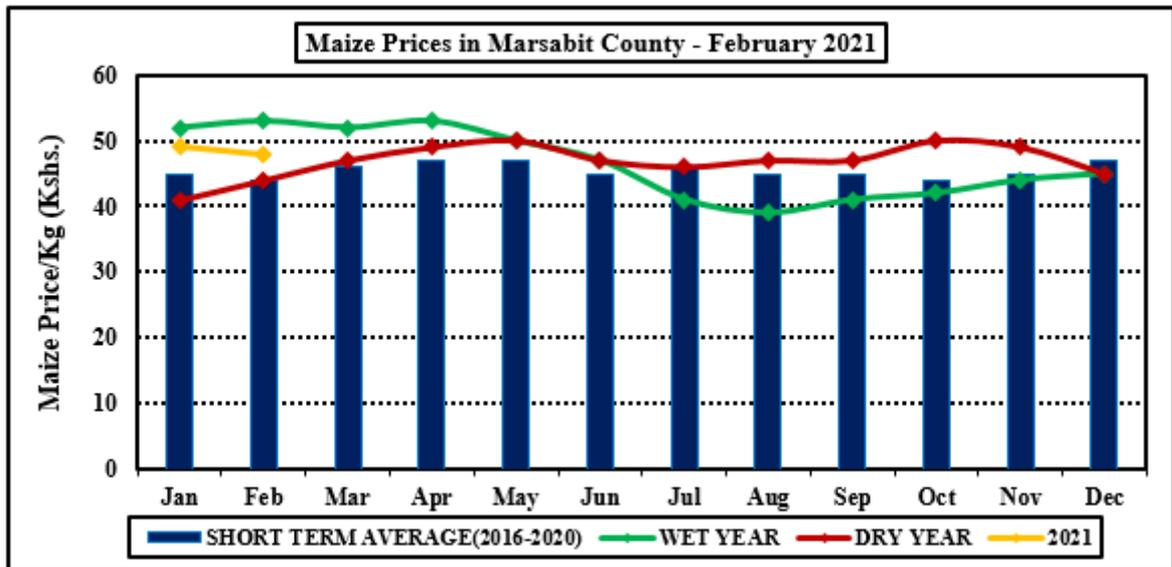


Figure 18: Current maize prices compared to the short-term average maize prices (Kshs.)

- Notable high maize prices were recorded in along the stretch of Lake Turkana belt in Laisamis sub-county and parts of North Horr sub-county with prices averaging at Kshs. 85/kg due to unprecedented surge in water levels that completely cut-off the local settlements and cross border conflict respectively.
- Combination of rising Lake Turkana water levels, cross border conflict in the pastoral livelihood zone, weaker demand and distortions to local supply chains will necessitate disruptions in the local commodity markets thus expected increase in maize prices.

4.2.2 Beans

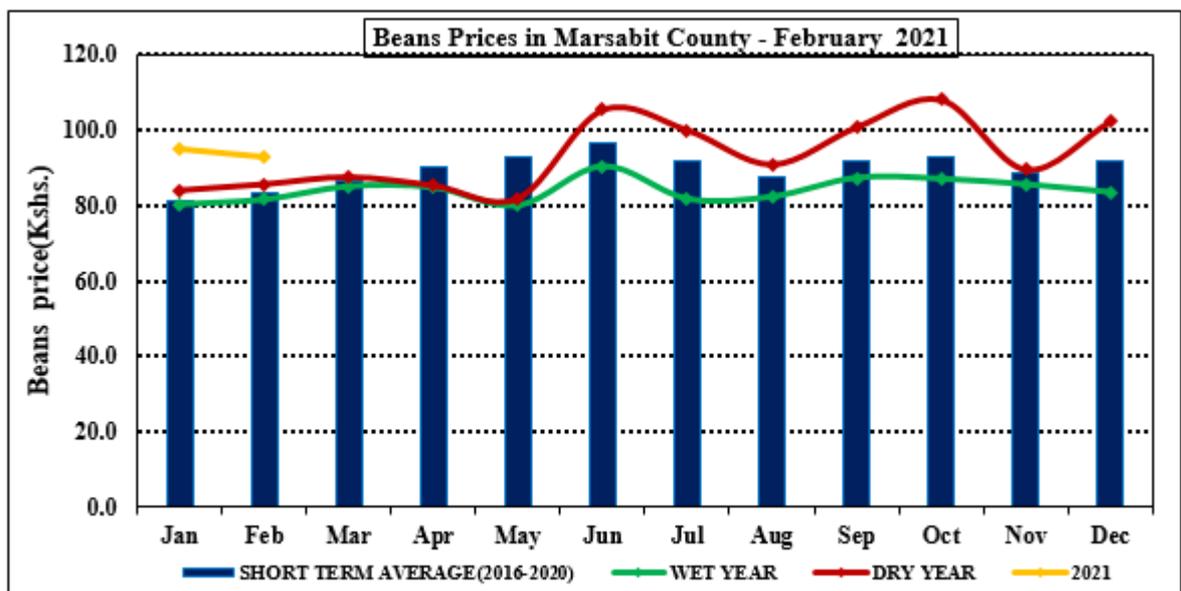


Figure 19: Beans prices compared to the short average term average prices (Kshs.)

- From the figure shown above, beans prices retailed at Kshs 93/kg in the month under review across the livelihood zones thus remained stable when compared to the preceding month's beans price of Kshs.95/kg. The current beans price of Kshs.93 is above the short-term average beans price of Kshs 83/kg by 12 percent.
- Moyale commodity market posted favourable beans prices averaging at Kshs 60-75/kg. Favourable beans prices in Moyale commodity market was attributed to improved supplies from the neighbouring Ethiopia market coupled by effective market integration system.

- However, Laisamis and North Horr Sub-Counties recorded high beans prices of Kshs 100-120/kg attributed to poor commodity market integration and unprecedented surge in Lake Turkana with areas of Komote and Layeni in Laisamis sub-county illustrating very high beans prices of Kshs.140-160/kg.

4.2.3 Terms of Trade (TOT)

- The current terms of trade gradually declined from 83 in the previous month to 79 kilograms in exchange for the sale of a goat in the month under review.

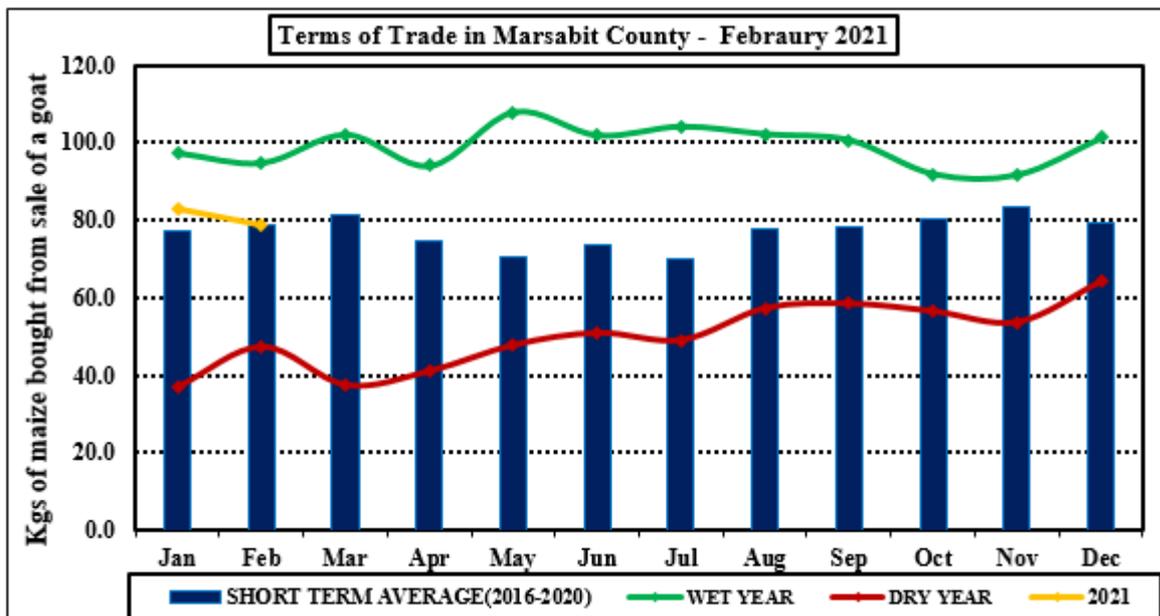


Figure 20: Current Terms of Trade versus Short Term Average

- Terms of trade is favourable attributed to stable maize and goats' prices. Moyale sub-county depicted favourable terms of trade than other Sub-Counties attributed to better 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 surpassed that of a dry year. With stable maize prices and expected decline in goats' prices, terms of trade likely to gradually deteriorate in the next one month.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

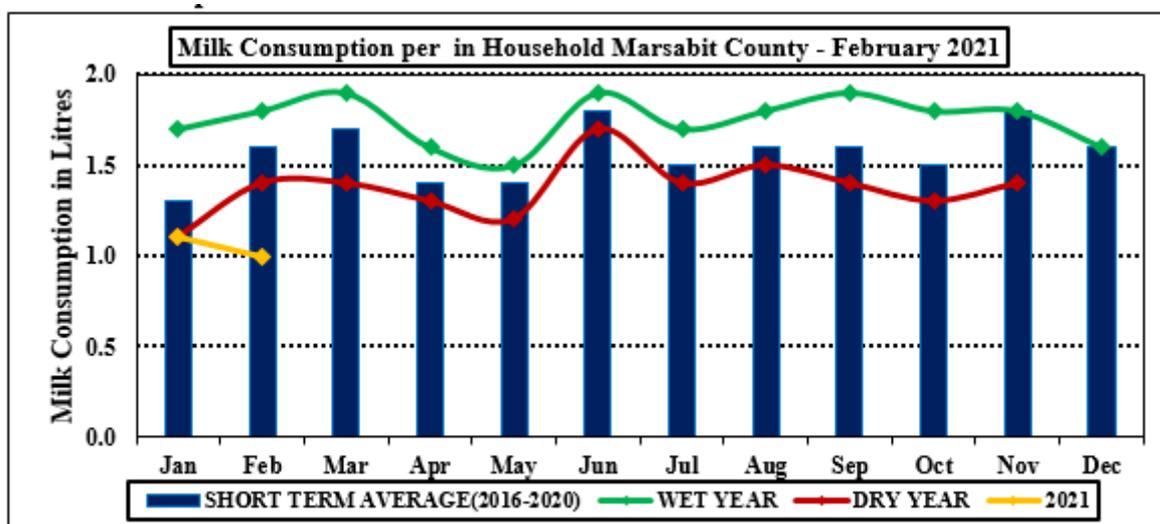


Figure 21: Milk Consumption at household level in Litres per day

- From the figure 21 shown above, household milk consumption is one litre/household/day in the month under review across the livelihood zones thus a gradual declined when compared to the preceding month's household milk consumption of 1.1 litres/household/day.
- When compared to the short-term average milk consumption of 1.6litres/household/day, current milk consumption is below normal by 38 percent attributed to inaccessibility of milk as majority of livestock have migrated to the dry season grazing areas.
- Current milk consumption is below the dry and wet years' household milk consumption. As livestock migration intensify across the livelihood zones in the next one month, milk consumption will likely decline further.

5.2 FOOD CONSUMPTION SCORE (FCS)

- The current food consumption score (FCS) across the County is 36.6 with 5.4 percent of households having poor food consumption while those with borderline and acceptable consumption were 38.9 percent and 55.7 percent respectively in all livelihood zones. In comparison to the previous month, a slight deterioration in the food consumption categories was noted. In the

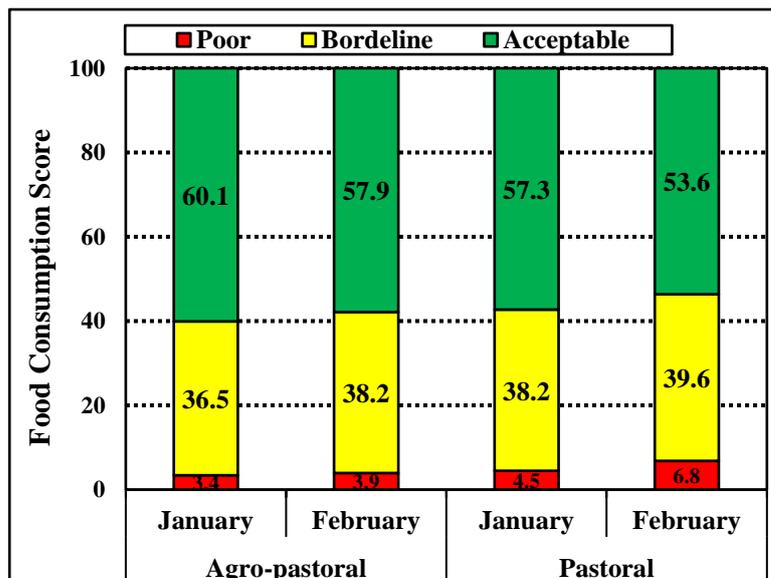


Figure 22: Food Consumption Trends in Marsabit

agro-pastoral livelihood zone, proportion of households that had poor food consumption was 3.9 percent while those with borderline and acceptable food consumption were 38.2 percent and 57.9 percent respectively. Equally, proportion of households in the pastoral livelihood zone that had poor, borderline and acceptable food consumption scores were 6.8 percent, 39.6 percent and 53.6 percent respectively. Generally, food consumption score is expected to gradually deteriorate in the next 1 month as the short dry spell progresses.

Table 4.0: Food Consumption Score by Wards

	FCS Mean	Poor FCS	Borderline FCS	Acceptable FCS
County	36.6	5.4%	38.9%	55.7%
Golbo	37.3	2.5%	37.0%	60.5%
Karare	43.5	3.0%	48.8%	48.2%
Korr	33.4	2.2%	58.5%	39.3%
Loiyangalani	29.5	15.6%	73.2%	11.2%
Laisamis	50.6	0.5%	11.6%	87.9%
Turbi	32.5	2.6%	39.9%	57.5%
North Horr	38.7	1.9%	43.5%	54.6%
Dukana	29.4	3.5%	75.2%	21.3%
Sagante	31.1	9.2%	52.3%	38.5%
Uran	42.9	0.0%	10.5%	89.5%

- From the table shown above, 5.4 percent of households consumed staples and vegetables every day and never or very rarely are consuming protein rich food such as meat and dairy. 38.9 percent of the households consumed staples and vegetables every day, accompanied by oil and pulses a few times a week while 55.7 percent consumed staples and vegetables every day, regularly accompanied by oil and pulses and occasionally meat or dairy product.
- Most of the wards fell in the acceptable food consumption band with exception of Sagante/Jaldesa, Loiyangalani, Korr and Dukana wards that were in the borderline food consumption band category.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

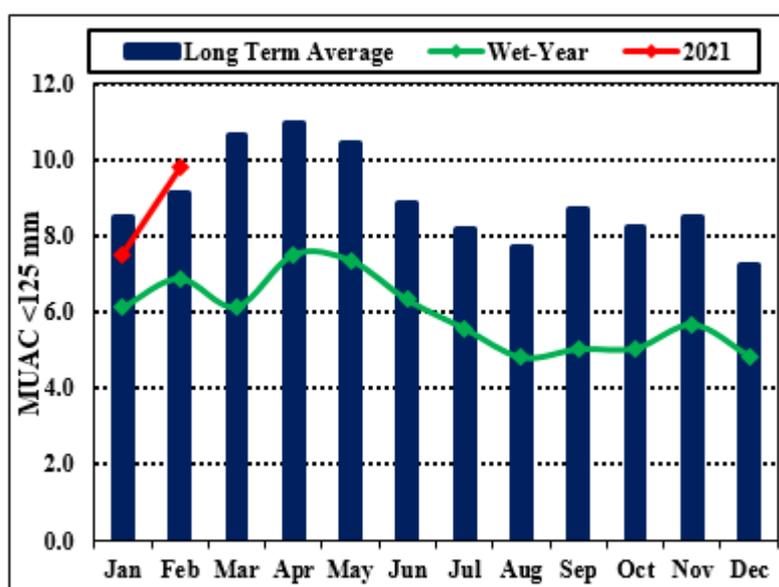


Figure 23: Proportion of Children with MUAC < 125 mm

Figure 23 depicts MUAC of 9.8 percent of children who are moderately and severely malnourished which is above the long term average MUAC of 9.1 percent and wet year MUAC of 6.9 percent. The proportions of children who are moderately malnourished are slightly higher than those in the wet year and normal year. There were no notable variations of children who were severely malnourished in the wet and dry years.

- There was notable increase in the number of admissions in the county in the month of January compared to December of last year. This could be attributed to the worsening situation in the county due to failure of the short rains.
- Illeret moved from alarm to emergency, Malabot and Dukana Alarm, Elhadi is at normal and recently reported cases of SAM with complication. Loiyangalani is in Alert stage. Currently 1489 children have so far been screened for malnutrition from 12 out of 17 villages in Illeret. 132 new admissions in OTP, 293 in SFP <5, 176 were old OTP cases, 400 SFP. 20.7 percent SAM and 46.5 percent MAM. 196 PLW were screened and 17 were newly enrolled.

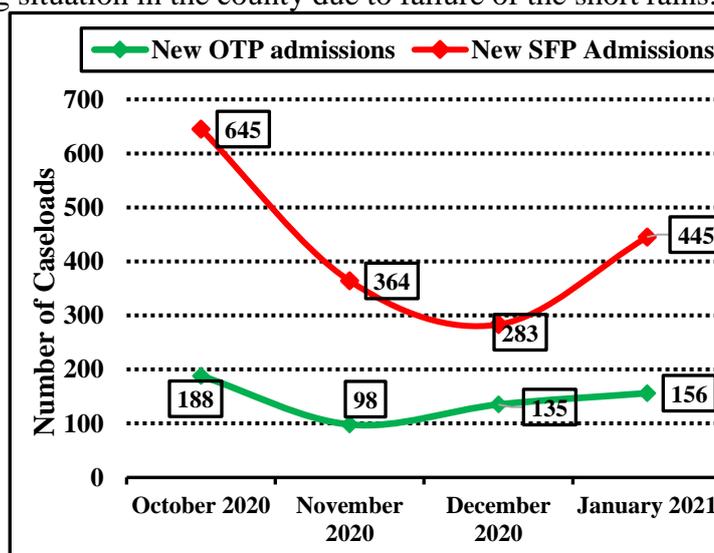


Figure 24: Marsabit County Admission Trends

- 3 cases admitted with SAM and complication; 2 currently stable and in Inpatient. IMAM surge dashboards are currently reporting normal for most of the facilities however community level discussions by stakeholders are indicative of a different situation.

5.4 COPING STRATEGIES

- From the (Figure 25) shown, the current reduced consumption based coping strategy index (rCSI) for the households is 19.6 compared to 13.9 similar period last year thus a significant deterioration.
- Reduced consumption based coping strategy index deteriorated from stressed (January) to Crisis in February with

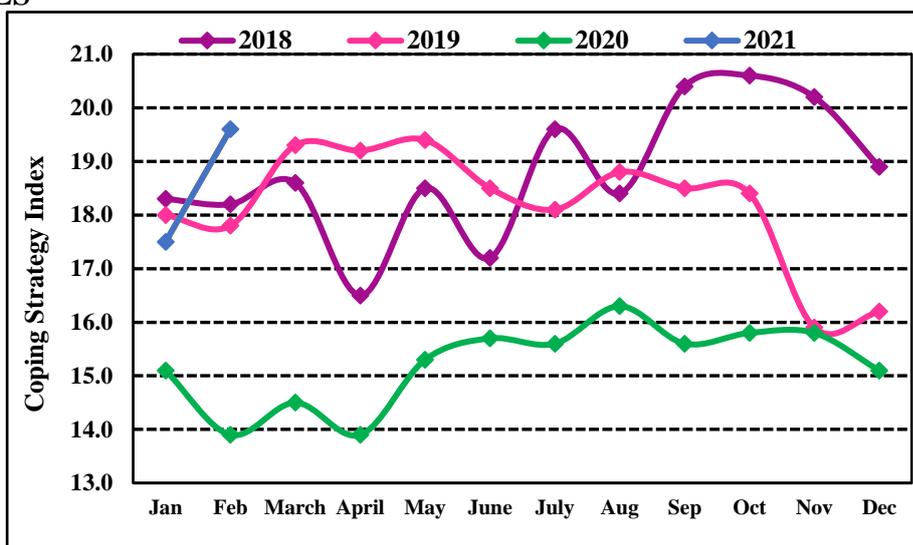


Figure 25: Coping Strategy Trends across the County

rCSI of 17.5 and 19.6 respectively. Generally, households applied strategies to cope with food gaps at a more severe degree than the previous month and similar period last year.

- From table shown below, households in Loiyangalani, Merille and North Horr applied crisis reduced consumption based coping strategies whereas those in Dukana, Karare, Sagante, Turbi, Uran, Korr and Golbo wards adopted stressed coping strategies.

Table 5.0: Consumption Based Coping Strategy Index by Wards

Consumption based coping strategy index(rCSI)		
Sub-county	Ward	rCSI
Saku	Sagante	18.4
Saku	Karare	9.1
Laisamis	Korr	17.4
Laisamis	Merille	25.2
Laisamis	Loiyangalani	31.1
North Horr	North Horr	20.5
North Horr	Turbi	12.2
North Horr	Dukana	18.5
Moyale	Uran	12.5
Moyale	Golbo	15.5

- It can also be deduced that 1.4 percent, 53 percent and 46 percent 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

6.1 Food Aid

- USAID/WFP through SND distributed food rations to 38,310 beneficiaries across the County under the Sustainable Food System Programme which comprised of 458Mts of cereal, 101Mts of pulses and 34Mts of vegetable oil.

6.2 Non Food Aid

- FAO supported 117 scouts from the four sub-counties on Desert locust surveillance. The scouts are already in the field, distributed across all the 4 -sub-counties, and reporting using the e-Locust3M.
- FAO conducted aerial and ground desert locust surveillance covering 12,104 sq. kilometres.
- Caritas and FAO supported on-farm trainings on agronomic aspects of seeds distributed, utilization of cowpeas and sorghum and post-harvest management cereals and pulses.
- Caritas ploughed 200 acres of land in Badassa and Leyai geared towards encouraging farmers to plant green grams.
- CCM supported One Health mobile clinics (12 days a month of integrated animal, human and environmental health service provision in El Hadi, North Horr and Balesa catchment area. Supported creation of a Zoonotic Disease Unit (ZDU) in Marsabit County involving key county and Sub County stakeholders. One Health Sensitization activities in 9 primary schools in North Horr Sub County;
- CCM distributed basic medical equipment to 8 health facilities under the framework of a new project initiative called HEAL: One Health for human, environment, animals and livelihoods.
- 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.
- FH-K supported child sponsorship programmes in Sololo, Saku, North Horr and Kargi in Laisamis.
- 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.
- Concern Worldwide provided grants for ward Disaster Risk Reduction plans. 12 DRR plans were approved by the donor (USAID) in the period under review.
- Concern Worldwide provided subsidized payment for animal's treatment: In a bid to enhance access to private animal health services through the e-voucher model, 16 animal health service providers (AHSPs) were trained on business development model and sensitized on the improved e-voucher approach. Following this, Introduction of the AHSPs to communities for commencement of treatment of Animal Health service delivery was successfully carried out in Kalacha and North Horr Wards. 262 (163M, 79F) people were reached, and 47 livestock from 7 farmers treated for various ailments.
- Concern Worldwide supported a total of 830 households with cash transfer from locust affected communities of Laisamis and North Horr sub Counties of Marsabit, received their 6th tranche of cash transfer.
- Concern Worldwide supported County department of Health to conduct mass screening in 12 villages across Illeret ward and a total 210 PLWs underwent screening. Additionally, the county department of health redeployed three health workers (2 nutritionists and 1 nurse) to Illeret health Centre to support in emergency response for a period of three months. Concern will support in paying for the upkeep of the three health workers during the redeployment period.
- Concern Worldwide supported the second cycle outreaches in 5 sites in Illeret ward: Namugusey, Lomadang, Ilolo, Telesgaye and Sieslichu and hygiene promotion at

community level in North Horr and Laisamis Sub-Counties. Training of borehole operators and WUAs: In the month under review, 28 WUA members from 4 boreholes i.e. Laisamis (13 members) and North Horr (15 members) were trained on water governance, tariffs and accountability aimed at improving their water management skills, knowledge and practice for eventual adoption of sustainability for continued service delivery.

- CRS supported formation and orientation of multisectoral platform for food security and nutrition, participatory institutional capacity assessment for county government and partners (PICA) to identify gaps for strengthening, participatory epidemiology study to define seasonality of calendar /months in North Horr and Loiyangalani.
- CRS supported roll out of adapted IMMAM surge, identification process of small micro enterprises for commercialization of milk value chain and environmental compliance assessment for health facilities in North Horr and Laisamis.
- Welthungerhilfe supported 500 households in North Horr and Laisamis Sub-Counties with cash transfer of Kshs. 5,000 per household for desert locust recovery. Provided farm inputs (seeds, jembe, panga) to 500 farmers in Saku with in kind support of (beans, cowpeas and greengrams). Capacity building of 100 (scouts, farmers and county government staff) on desert locust control in Saku and Laisamis.
- Welthungerhilfe supported 500 households in Moyale, Laisamis and Saku Sub-Counties with cash transfer of Kshs. 5,000 per household as part of COVID-19 recovery initiative. Provided cash voucher assistance (CVA)-small animal breeding in Laisamis and Turbi targeting 300 households with vouchers worth Kshs. 6,000 per household. Cash for work to 240 casuals in Laisamis, Saku and Moyale at Kshs. 1,000 per casual for 5 days.

7.0 EMERGING ISSUES

- The number of immature swarms have declined both at source, Somalia and at sink in Marsabit. Previous two swarms reported at Gatab in Hurri hills (< 90Ha) have since moved to Samburu and only few scattered one left in Sarima, Laisamis sub-county.
- However, the onset of rainfall in the county and neighboring counties could complicate the situation providing impetus to the immature adults to quickly transform into mature adults which can oviposit and commence the life cycle yet again. Hotspots areas on our radar are Gatab, South Horr and Olom potential sites for oviposition. Desert locust invasion reported North Horr and Laisamis Sub-Counties. In North Horr Sub-County the areas of El-Isako mala, Gas, Chari Golo, Sarimo, Wano and Qorqa are invaded during the month. In Laisamis sub County the areas of Sarima, Loiyangalani, Pallo, Moite and localized parts of Kargi, Korr, Laisamis wards were invaded. FAO conducted aerial and ground desert locust surveillance covering 12,104 sq. kilometres
- Tribal clashes between Turkana and Samburu also reported in Sarima, Loiyangalani ward of Laisamis sub county that leads to casualties, injuries, displacement of community from the area and livestock stolen. Due the reported conflict, transport was paralyzed for few days disrupting access between Loiyangalani, Kargi and Marsabit routes.

8.0 FOOD SECURITY PROGNOSIS.

- Significant deterioration in vegetation condition prompted a reduction in the 3-months vegetation condition index as the drier than usual conditions experienced in most parts of the county over crowded out the off-season rains that were received in isolated areas of the county. However, mild invigoration of pasture was recorded in Gas and Illeret of North Horr

sub-county due to enhanced off-season rains. With expected drier than usual conditions in the next one month, the 3-months vegetation condition index will decline further and with a tendency to shift towards the severe vegetation deficit band.

- Below normal harvest of maize and beans crop in the agro-pastoral livelihood zone will diminish household food stock.
- With the progression of the 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.
- Livestock migration is expected to intensify increasing the likelihood of resource based conflict and occurrence of livestock disease incidences. The forage condition expected to deteriorate further with the progression of the short dry spell while livestock body condition for all the livestock species is likely to deteriorate further in all the livelihood zones with exception of camels which are likely to remain in the good-fair category.
- Likelihood occurrence of rift valley fever due to reported cases in the neighbouring counties of Garissa, Isiolo and Mandera which might lead to livestock quarantine and likely closure of livestock markets.
- Desert locust invasion is likely to spread with intensified breeding during the long rains season if not controlled, immature adults to transform into mature adults which can oviposit and commence the life cycle yet again.
- With stable maize and expected reduction in goat prices, terms of trade are expected to worsen. 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 crisis phase.
- Admission trends have been on an upward trajectory. Nutritional situation is projected to worsen if the long rains perform poorly which will likely result to reduced milk production and availability at household level.

8.0 RECOMMENDATIONS

- Immediate food assistance to the food insecure population across the county.
- Unconditional cash transfer to target worst hit households from desert locust invasion.
- Disease surveillance, mass treatment for parasites and clinical cases across the county.
- Livestock commercial off-take and activation of satellite markets.
- Water department should repair the stalled water bowzers, repair of broken down boreholes in North Horr, Laisamis and Moyale sub-counties, provision of fuel subsidy to the strategic boreholes, stock piling of fast moving spare parts and water trucking to areas that are currently experiencing acute water shortage across the County.
- Intensification of ACF trough CHS and Family MUAC, scaling up Family MUAC in hot spot wards/ facilities
- Establishing an additional sub hub at Illeret due to high transport costs from the sub county hub for 3 months.
- Scale up IMAM services in newly opened 7 facilities, scale up of outreaches by THS to 15 new sites.
- Scale up mass screening and integrated medical outreaches targeting malnutrition hotspots in all the livelihood zones.