

# National Drought Management Authority MARSABIT COUNTY DROUGHT EARLY WARNING BULLETIN FOR MAY 2022



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:** Cessation of the long rains was early as it occurred towards the first week of May, long rains failed hence large rainfall deficits compounded by failure of previous three successive seasons.

**Vegetation condition:** 3-months Vegetation Condition Index for the month under review was 15.4 which is indicative of severe vegetation deficit category. Moyale sub-county and Illeret had moderate VCI.

#### Socio-Economic Indicators (Impact Indicators)

**Production indicators:** Livestock body condition was poor-fair in all the livelihood zones. Milk production was significantly below the short-term average. Livestock unusually migrated to the dry season grazing areas. Livestock deaths due to drought and endemic disease incidences especially amongst cattle, sheep and goats were reported. Milk production was at an-all time low across the livelihood zones. Total crop failure expected in Saku sub-county.

**Access indicators:** Household and livestock water distances were significantly above the long-term average. Milk consumption was below normal and terms of trade unfavourable with similar pattern expected in the next month. Livestock traded volumes were very low and operations in those markets were sub-optimal. Maize prices were high while goat prices below normal.

**Utilization indicators:** Household food consumption score stagnated in the borderline band while households applied crisis food consumption coping strategies to address high food consumption gaps. Malnutrition rates amongst the under-fives were above the long-term average.

### Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Alarm	Stable
Pastoral All species	Alarm	Stable
Fisher folk/Casual labour/Petty Trading	Alarm	Worsening
<b>County</b>	<b>Alarm</b>	<b>Stable</b>
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	65	80 -120
VCI-3Month (County)	15.4	>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	0.25	>1.4 Litres
Livestock Migration Pattern	Unusual	Normal
Livestock deaths (from drought)	Deaths	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	51	>74
Milk Consumption	0.25	>1.2 Litres
Return distance to water	10.1	0.0-6.2Km
Utilization indicators	Value	Normal
Nutrition Status (malnourished)	15.2	0.0-10.9
Coping Strategy Index	18.7	<18
Food Consumption	29.2	>35

<ul style="list-style-type: none"> <li>▪ Short rains harvests</li> <li>▪ Short dry spell</li> <li>▪ Reduced milk yields</li> <li>▪ Increased HH Food Stocks</li> <li>▪ Land preparation</li> </ul>			<ul style="list-style-type: none"> <li>▪ Planting/Weeding</li> <li>▪ Long rains</li> <li>▪ High Calving Rate</li> <li>▪ Milk Yields Increase</li> </ul>			<ul style="list-style-type: none"> <li>▪ Long rains harvests</li> <li>▪ A long dry spell</li> <li>▪ Land preparation</li> <li>▪ Increased HH Food Stocks</li> <li>▪ Kidding (Sept)</li> </ul>			<ul style="list-style-type: none"> <li>▪ Short rains</li> <li>▪ Planting/weeding</li> </ul>		
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

# 1.0 CLIMATIC CONDITIONS

## 1.1 RAINFALL PERFORMANCE

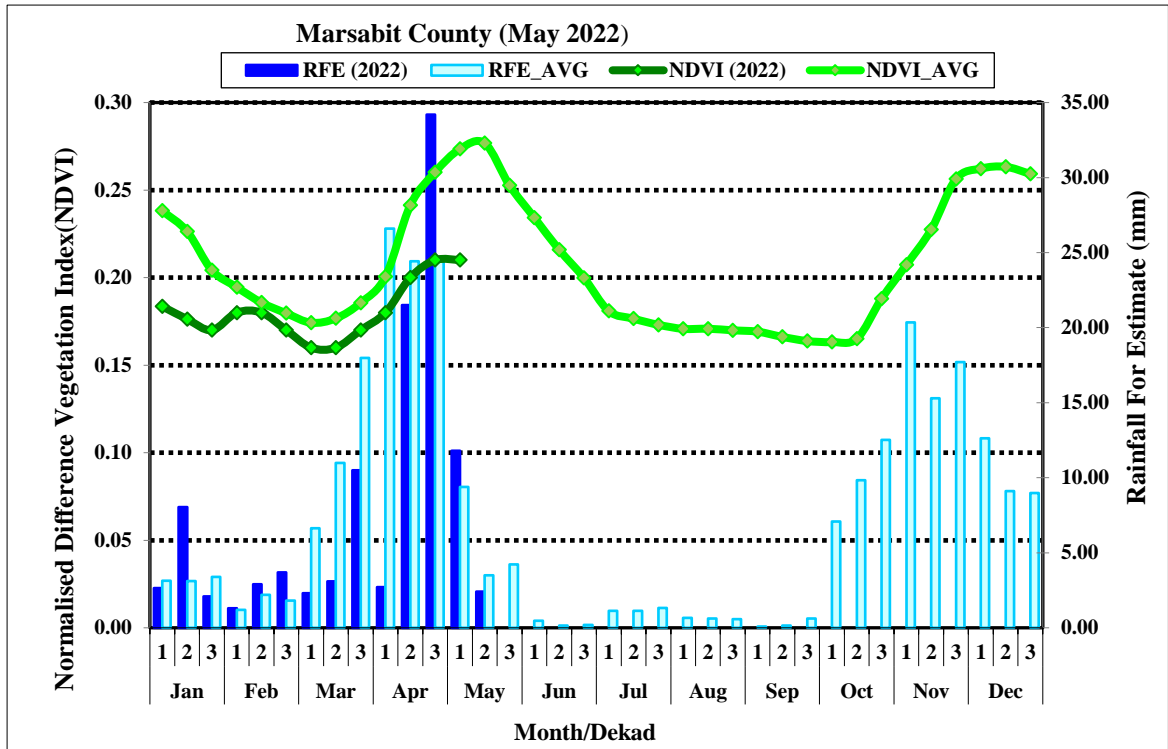


Figure 1: Dekadal Rainfall (mm) and NDVI values compared to the LongTerm Average

Source: WFP-VAM, CHIRPS/MODIS

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

## 1.2 SEASONAL CUMULATIVE RAINFALL AMOUNTS

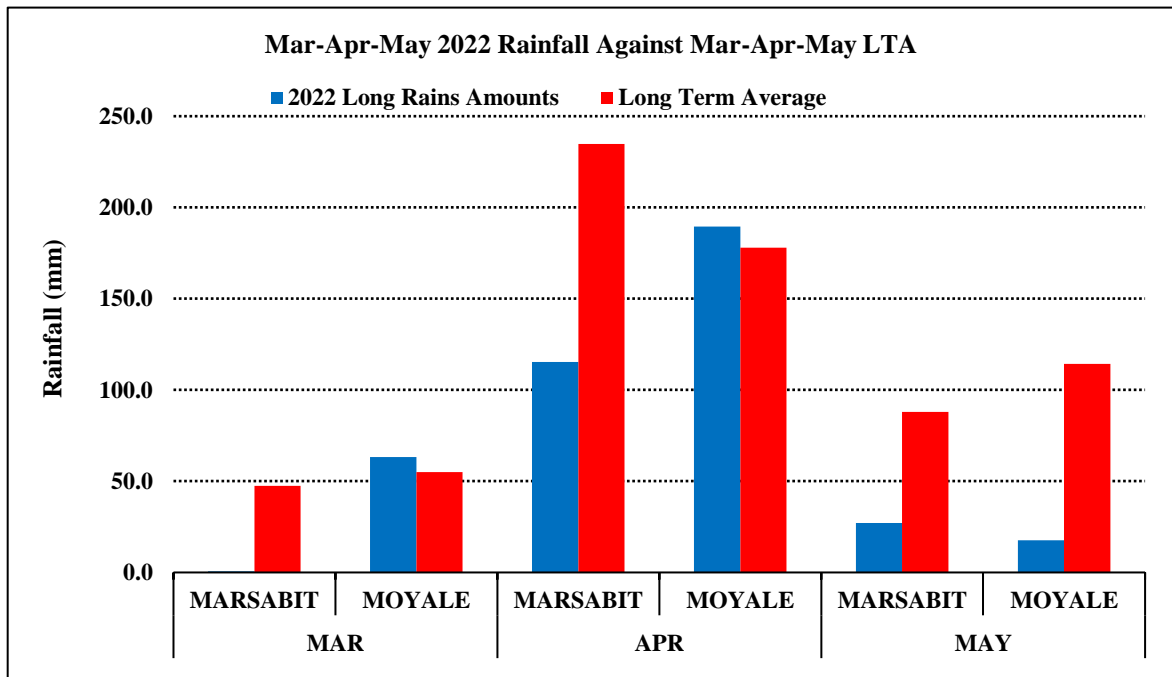


Figure 2: Cumulative Rainfall Performance (mm)

- From the figure (2) shown above, March-April and May cumulative rainfall amounts recorded in Moyale and Marsabit meteorological stations were 270.6mm and 143mm respectively. Seasonal rainfall amounts for Moyale Township was near average while Marsabit Central recorded significantly below normal rains. No rains were recorded in the months of March while the intensity improved towards the last dekad of April especially Moyale Township which received enhanced rains during the same period. Below average cumulative rains are attributed to seasonal rainfall deficits resulting from delayed onset by one-month, uneven distribution and early cessation of the rains across the County in the month under review.
- Parts of Moyale sub-county (Heillu Manyatta, Butiye, Uran and Sololo wards) received near average rains whereas Golbo and Obbu wards generally recorded depressed rains. In North Horr sub-county, cumulative rainfall amounts for Balesa, Dukana, North Horr, Gas, Elhadi and Kalacha were 107mm, 89mm, 74mm, 78mm, 54mm and 22mm respectively. Significant negative seasonal rainfall anomalies of 148mm, 94mm, 84mm and 40mm were recorded for Elhadi, Kalacha, Dukana and North Horr respectively whereas Balesa and Gas depicted negligible seasonal negative rainfall anomalies of 19mm and 12mm respectively. Most parts of Illeret ward and North western parts of North Horr ward (Qorqa, Elbesso and Darade) received near average rains.
- Loiyangalani/Gatab, Logologo and isolated parts of Kargi/South Horr wards received near average rains. However, most parts of Korrr/Ngurnit and Laisamis wards recorded depressed rains while most parts of Saku sub-county received depressed rains.
- Therefore, most parts of pastoral livelihood of North Horr and Laisamis sub-county and agro-pastoral areas of Saku received significant seasonal rainfall shortfalls in 1-7 rainy days whereas Moyale sub-county recorded near average rains in 2-10 rainy days. Therefore, temporal and spatial distribution of the long rains was poor and uneven respectively across the County.
- Cessation of the long rains was early as it occurred towards the first week of May as opposed to the normal second week. Therefore, 2022 long rains failed (seasonal rainfall deficits) compounded by failure of previous three successive seasons.

## 2.0 IMPACTS ON VEGETATION AND WATER

### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

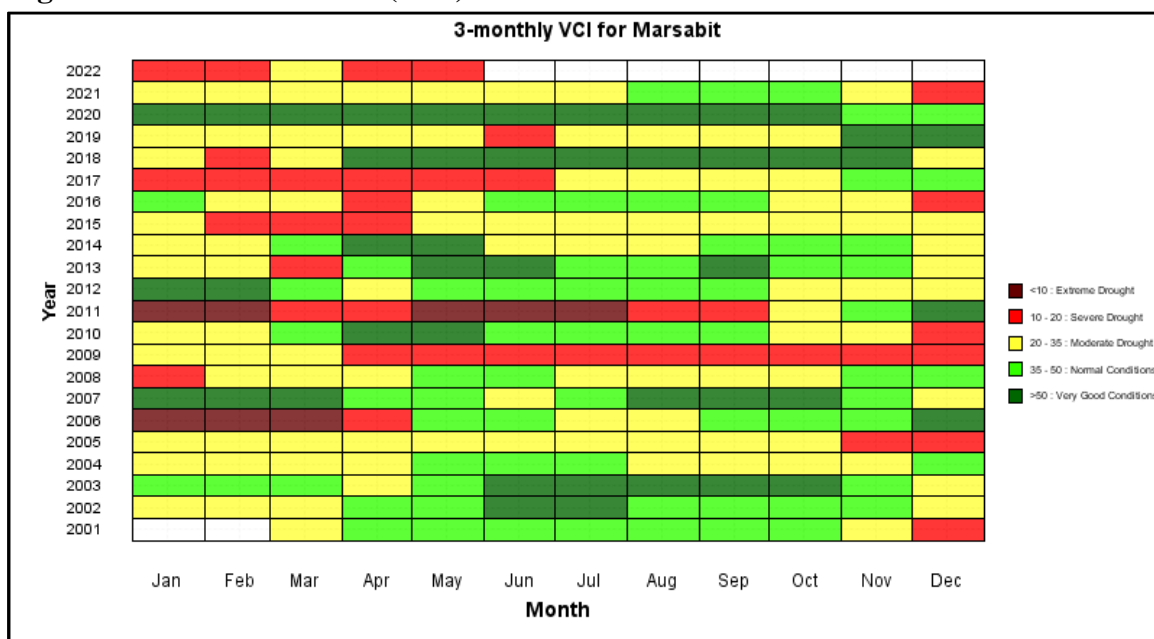


Figure 3: Vegetation Condition Index Matrix across Marsabit County

- Current vegetation condition index is 15.4 hence depicts deterioration when compared to the previous month's vegetation condition index of 18.9. The 3-months vegetation condition index stagnated in the severe vegetation deficit band in May attributed to seasonal cumulative rainfall deficits. With expected persistence of drier than usual conditions in June, the 3-months vegetation condition index will possibly remain in the severe vegetation deficit band in the next month.
- Vegetation condition index for Moyale sub-county remained stable at moderate vegetation condition deficits while North Horr and Saku 3-months VCI values worsened from moderate to severe vegetation deficit category values of 15.54 and 15.13 respectively. Laisamis sub-county didn't post a change in the vegetation cover thus remained in the severe vegetation deficit band with an index of 11.97 with a tendency to shift to the extreme vegetation deficit band if drier than usual conditions continue.

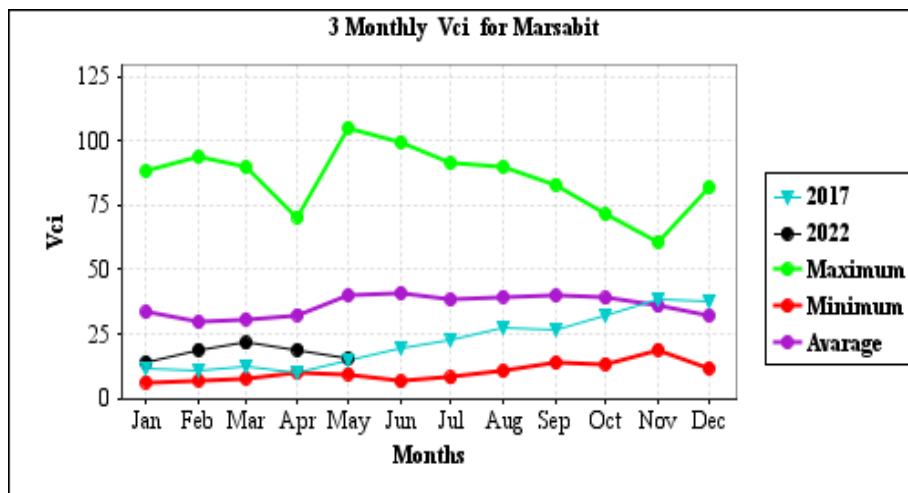
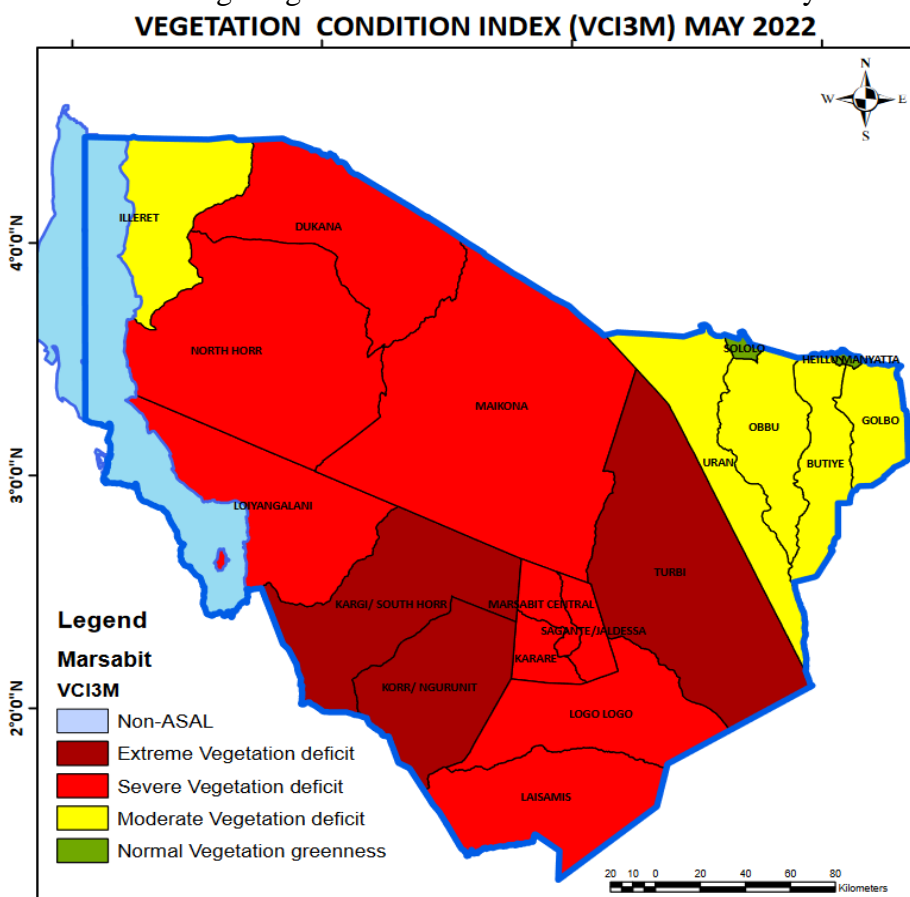


Figure 4: Vegetation Condition Index Trends

- Figure (4) shown below compares May 2022 vegetation condition index to May long term average, historical maximum and minimum vegetation condition index values. The current vegetation condition index is considerably below the long-term average and almost equates to the minimum vegetation condition index value ever recorded.

- Below average vegetation condition index is occasioned by failure of the 2022 long rains in addition to successive failure of three successive seasons. With expected persistence of drier than usual conditions, vegetation condition is expected to coincide with the minimum value ever recorded in the month of June.



**Figure 5: Vegetation Condition Index across the wards**

ward of North Horr sub-county; Obbu, Uran, Golbo and Butiye wards of Moyale sub-county.

- All wards in Saku sub-county were classified under the severe vegetation deficit category with Dukana, North Horr, Maikona wards of North Horr sub-county and Loiyangalani, Loglogo, Laisamis wards of Laisamis sub-county also remaining in the same phase. However, extreme vegetation deficit values were exhibited in Kargi/South Horr and Korr/Ngurunit wards of Laisamis sub-county.

- Figure 5 illustrates normal vegetation greenness in Moyale Township, Sololo and Heillu Manyatta wards of Moyale sub-county. Moderate vegetation deficit values were recorded in Illeret

### 2.1.2 Pasture Condition

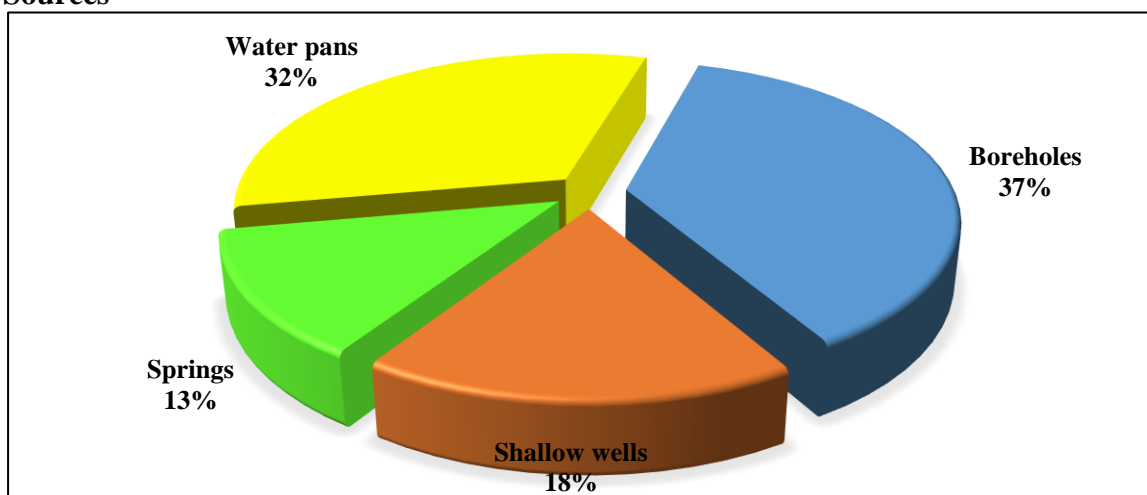
- Pasture condition is poor in the pastoral livelihood zone of North Horr and Laisamis sub-counties while poor-fair in the agro-pastoral livelihood zone of Moyale and Saku sub-counties compared to good at this particular time of the year.
- Considerably below normal pasture condition is attributed to successive failure of four rainy seasons, reduced length of growing period for rangelands and early cessation of the long rains.
- However, pasture is available in some pockets of the agro-pastoral livelihood zone of Saku (Jaldesa/Sagante ward), parts of Moyale sub-county (Uran, Butiye and Heillu Manyatta wards) and pockets of pastoral livelihood zone of Laisamis sub-county (Kamboe, Gudas, Mt. Kulal and parts of Kargi) and North Horr sub-county (Diid Golla, Darade, Balesaru, Sabare, Dukana, Garwole, Araftis, Hurri Hills and Qorqa).
- Available pasture is expected to last two months in the pastoral livelihood zone of Laisamis and North Horr Sub-Counties while three months in the agro-pastoral areas of Saku and Moyale sub-counties against the normal of four and half months.

### 2.1.3 Browse Condition

- Browse condition is poor in the pastoral livelihood zone while fair-poor in the agro-pastoral livelihood zone compared to the normal of good-fair at this particular time of the year.
- Available browse is expected to last 2 months especially in the pastoral livelihood zone compared to 3 months normally while 3 months in some parts of the agro-pastoral livelihood zone.
- Variations in browse conditions across the livelihood zones was mainly attributed to failure of four successive seasons, poor and uneven distribution of the long rains and intense livestock migration to the dry season grazing areas. Insecurity along the border of North Horr Sub-County with Ethiopia (Garwole, Forolle, Bulluk, Chari Ashe and Batha Afar), Laisamis Sub-County (Olturot, Arapal) and parts of Jaldesa/Sagante and Karare wards in Saku Sub-County hindered access to pasture and browse.
- Invasion of plant species such as *Prosopis juliflora*, *Acacia reficiens* and some unfamiliar unpalatable green shrubs in most areas of North Horr, Maikona, Korr, Laisamis, Sololo, Loglogo and some parts of Moyale sub county has resulted in partial pasture regeneration in the aforementioned areas.

## 2.2 WATER RESOURCE

### 2.2.1 Sources



*Figure 6: Main Sources of Water in Marsabit County*

- Figure 6 above illustrates that boreholes and water pans are the main water sources applied by majority of the households across the livelihood zones as depicted by a response rate of 36percent and 35percent respectively. Other water sources applied by the communities in the month under review are shallow wells and springs at 17percent and 12percent respectively.
- Some boreholes are not functioning especially Weltei, Lagg Ferreji, Tirgamo, Halisirwa, Gobore and Farakoen attributed to break downs and inadequate fast moving spare parts

hence not operationalized due to lack of funds for the technicians to undertake some of the repairs and maintenance to the strategic boreholes.

- Acute water shortage is currently experienced in isolated parts of pastoral livelihood zone especially parts of Kargi/South, Maikona, North Horr and Korr/Ngurnit wards occasioned by very low water recharge levels as the long rains failed.

### 2.2.2 Household Water Access and Utilization

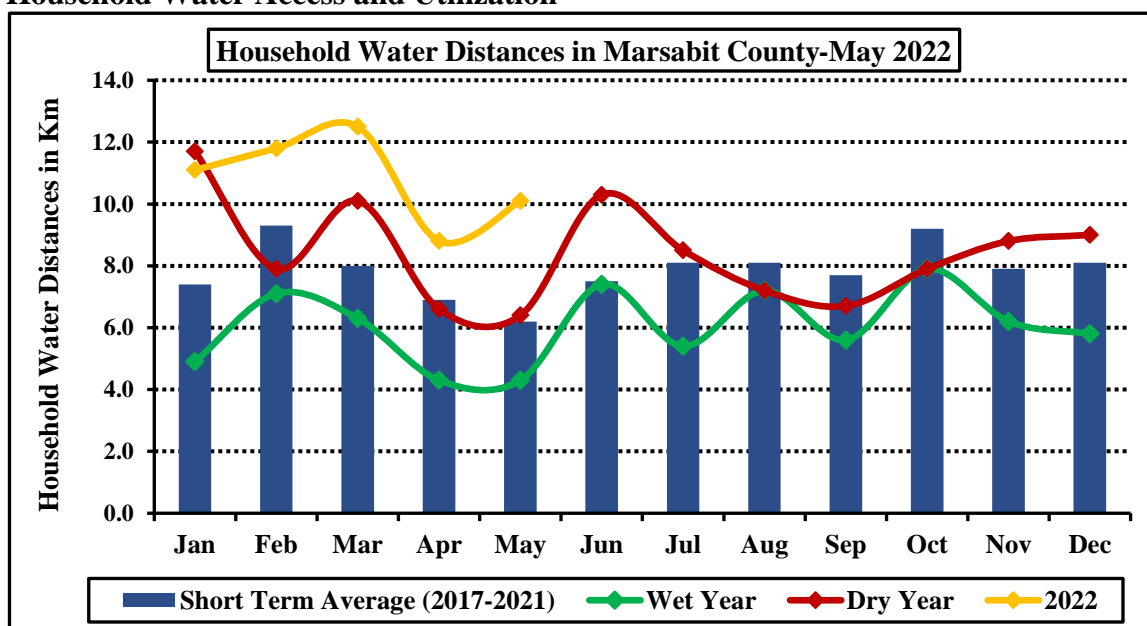


Figure 7: Current household return water distances compared to the Short-Term Average distances (Km)

- From (Figure 7) shown above, return household water distances to the main water sources is 10.1km in the month under review which indicates an increase when compared to the previous month's household water distance of 8.8km across the livelihood zones.
- However, the current household water distance of 10.1km is above the short-term average household water distance of 6.2km by 63percent. Similarly, current household water distances are above wet and dry year's water distances. Above average water distances were accelerated by significant rainfall shortfalls especially in the pastoral livelihood zone of North Horr and Laisamis sub-counties.
- Waiting time ranged between 30-45 minutes against the normal of 15-30 minutes in the agro-pastoral livelihood zone while ranged between 2-3 hours against the normal of 45 minutes in the pastoral livelihood zone.
- Water consumption per person per day was 10 litres in agro-pastoral and 7 litres in pastoral livelihood zone compared to the normal 15-20 litres per person per day. The cost of water ranged between Ksh.3-5 in urban areas and Kshs.20/jerrican from water vendors.
- With the expected continuation of drier than usual conditions, household water distances are likely to increase in the next month hence likely reduction in household water consumption levels across the livelihood zones.

### 2.2.3 Livestock Access

- From (Figure 8) shown below, return livestock trekking distance from grazing areas to water points is 31.4km in all the livelihood zones thus was stable when compared to the preceding months livestock trekking distances of 31.9km.

- Livestock trekking distance of 31.9km is above average by 123percent when compared to the short-term average livestock trekking distance of 14.3km thus an indication of exceptionally long trekking distances.
- Livestock trekking distances ranged from 10-12km in the agro-pastoral livelihood zone whereas in the pastoral livelihood zone, trekking distances ranged between 30 and 35km. However, livestock trekking distances were unusually longer in some pockets of the pastoral livelihood zone and ranged between 35-40km in the month under review.

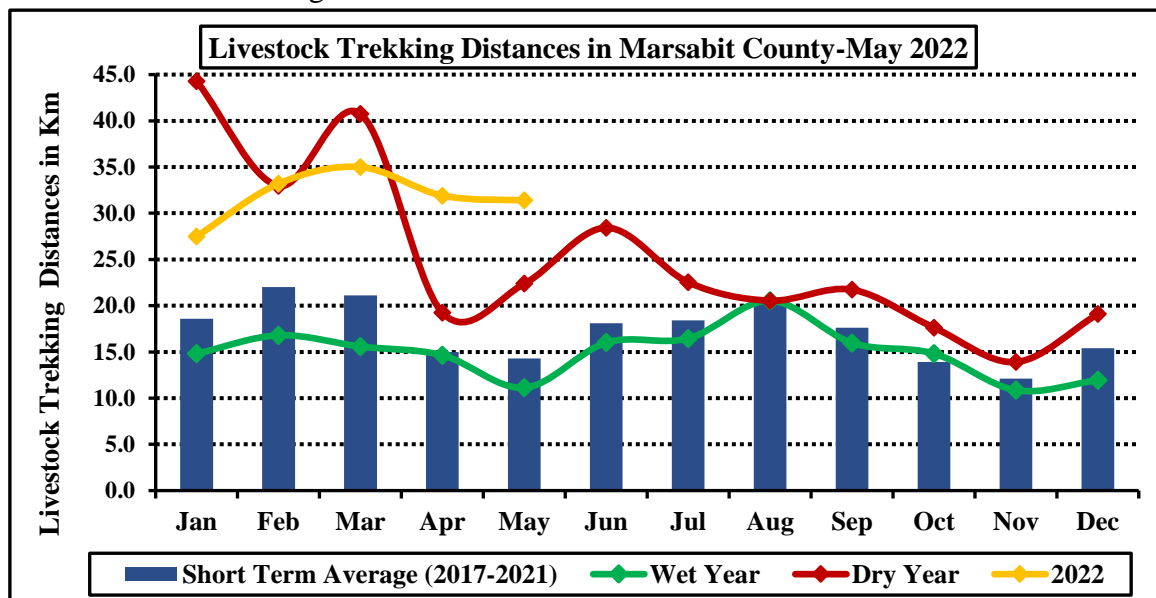


Figure 8: Current return livestock trekking distances compared to the Short-Term Average distances (Km)

- In the pastoral livelihood zone, the watering interval ranges after 2 days for cattle, 7–12 days for camel and 3–4 days for small stock compared to after 1-2 days for cattle, 4–6 days for camel and 2 days for small stock. In agro-pastoral livelihood zone watering interval is after 1 day for cattle, 3-6 days for camel and 2 days for small stock against the normal of 1 day for cattle, 2-3days for camel and 1-2days for small stock.
- Above average watering interval across the livelihood zone was occasioned by below normal forage conditions and extremely longer livestock trekking distances.
- With expected drier than usual conditions in the next month, gradual forage deterioration is anticipated which will necessitate increased livestock trekking distances in the next month thus expected decline in watering intervals for all livestock species across the livelihood zones.

### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition



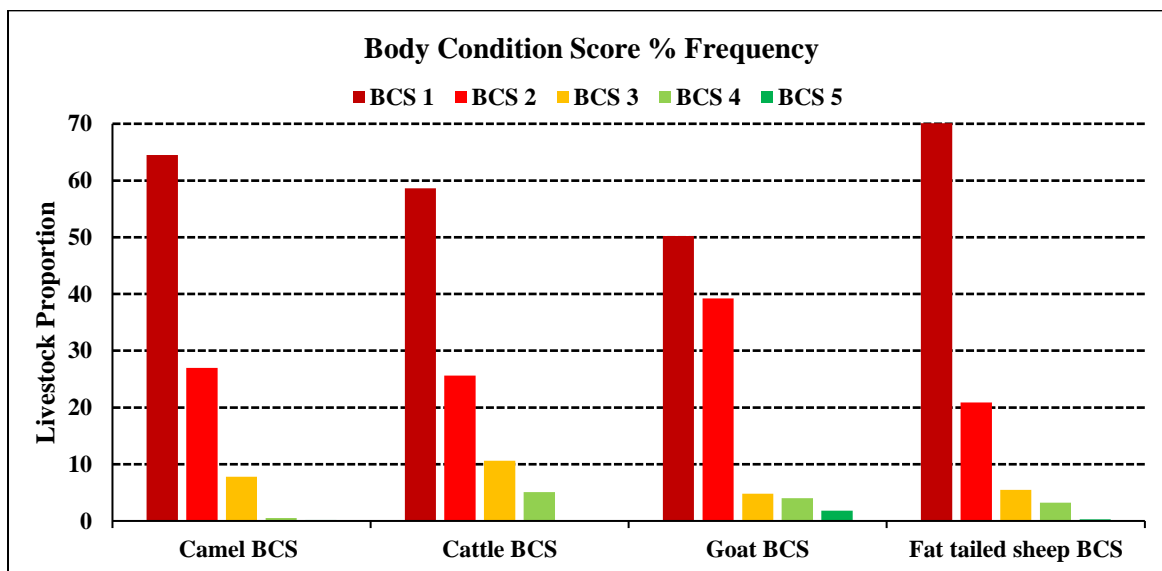


Figure 9: Livestock Body Condition Index across Marsabit County

BCS	Description	Colour Codes
1	Very poor BC	Maroon
2	Poor BC	Red
3	Fair BC	Orange
4	Good BC	Light green
5	Very Good BC	Green

- The figure above illustrates Livestock Body Condition Score (LCS) for cattle, goats, sheep and camels in all the livelihood zones. It can be deduced that 65percent, 27percent and 8percent of the camel had very poor, poor and fair body condition score respectively across the livelihood zones while 59percent, 26percent, 11percent and 5percent of the cattle had very poor, poor, fair and good body condition score correspondingly. Additionally, 50percent, 39percent, 5percent, 4percent and 2percent of the goats posted very poor, poor, fair, good and very good body condition score respectively whereas 70percent, 21percent, 6percent and 3percent of sheep exhibited very poor, poor, fair and good body condition score respectively across the livelihood zones.
- The current poor livestock body condition is attributed to four successive failures of seasons in all the livelihood zones accelerating forage and water deficiency. The current poor livestock body condition is likely to deteriorate across the livelihood zones with expected persistence of the drier than usual conditions.

### 3.1.2 Livestock Migration

- In the month under review, over 70percent of all livestock species have migrated to the dry season grazing areas due to below normal forage which is unusual at this particular time of the season. Livestock in North Horr ward have migrated from Sibilo, Chari-Golo to Dosole, Elbesso and into the interior part of Galas and North Horr while livestock from Dukana ward are concentrated in Gola, Bales-Saru, Qonye, Yibo, El-Hadi, Kalesa and Gof-Arusi.
- Livestock in Maikona and Turbi wards have moved towards the slopes of Hurri-Hills in areas of Jaldesa, Idhido, Gara-dida, Demo and Ramat.
- In Loiyangalani-Gatab ward, livestock are around Sarima, Civikon, Pallo, Moite and Mt. Kulal while in Kargi-South Horr and Korr-Ngurunit ward livestock are still in their grazing areas of Yell, Holigutha, Koya, Koom, Pajelo, Thurusi, Ririma, Farakoren and Burro. Livestock in Laisamis and Loglogo wards are in Soriadi, Koya and Kom.

- Livestock in Badan Arero, Amballo, Antut and Rawana in Moyale Sub County have migrated towards Uran which received good rainfall in the previous month. In Sagante Jaldesa ward concentration of livestock are within Jaldesa and Kubiqalo while those in Karare ward are within Karare and Kamboe areas.

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

- The poor income households in pastoral and agro-pastoral livelihood zones are currently owning 1-2 TLUs when compared to 6-10 and 3-5 respectively. TLUs ownership among the poor and middle-income households stood at 5-10 and 3-4 in the pastoral and agro-pastoral livelihood zones when compared to 16-20 and 7-8 respectively. The decline in TLUs at the household level is attributed to significant livestock deaths due to severe drought and poor livestock productivity.
- Livestock breeding is seasonal for all species and depends upon forage and water availability. The birth rates (kidding, lambing and calving) based on gestation period of different livestock species is also as a result of previous breeding status. Four successive failed seasons have led to below normal birth rates across the livelihood zones.

### 3.1.4 Livestock Diseases and Mortalities

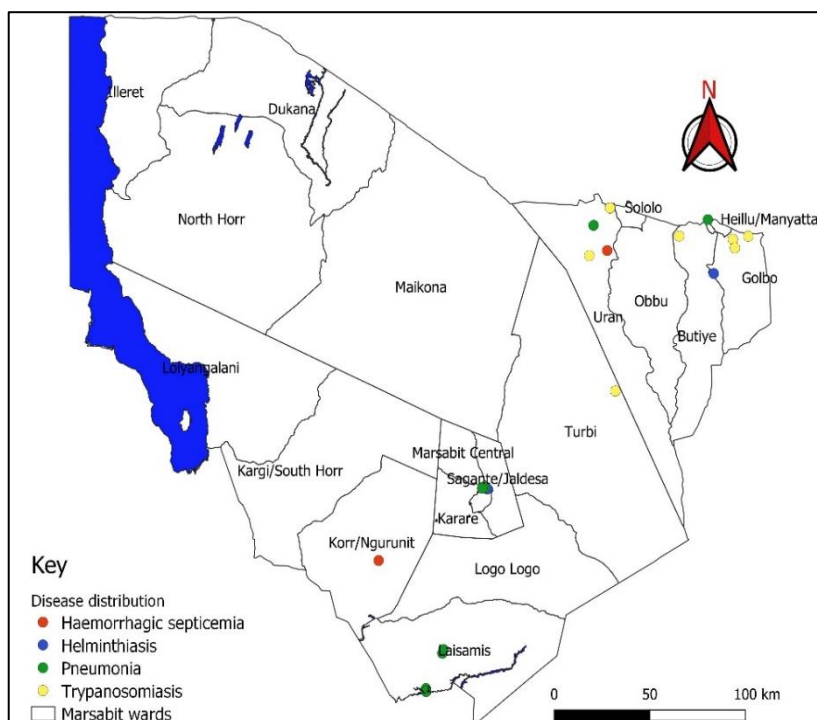


Figure 10: Distribution of livestock disease incidences across the County

- In the month of May 2022, a total of 99 cases of animal diseases were reported. Moyale subcounty reported 51.5percent of these cases, Laisamis 28.3percent and Saku 20.2percent. The most commonly reported syndromes were Gastrointestinal (Diarrhoea) 26percent Respiratory (coughing and nasal discharge) 23percent and Neurologic (circling, paralysis and depression) 16percent.

- These syndromes are indicative of PPR, CCPP, heart water, trypanosomiasis and rabies in animals. Livestock diseases reported by clinical presentation during the month under review include: Trypanosomiasis (14.3percent), CCPP (12.1percent), Haemorrhagic septicaemia (9.1percent) and Helminthiasis (7.2percent). The currently observed status in occurrence of livestock disease is a shift from previous observations where PPR and CCPP were the major diseases reported which are contagious in nature.
- The current shift from contagious diseases to exclusive agent derived infection may have been confounded by the climatological changes with precipitation in some areas and effect of immunity through vaccination or exposure to PPR virus over time. However, CCPP continues to be a major threat to livestock production in the area. Livestock deaths were reported due to drought and partly disease incidences.

Table 1.0: Distribution of Morbidity rate, Mortality rate and Case fatality

<b>Key variable</b>	<b>Morbidity rate</b>	<b>Mortality rate</b>	<b>Case fatality</b>
<b>Suspected disease</b>			
Trypanosomiasis	8	3	33
CCPP*	28	4	14
Haemorrhagic septicaemia	13	4	33
Helminthiasis	45	0	0

*CCPP\*-Contagious Caprine Pleuropneumonia*

- The observed high case fatality associated with Trypanosomiasis and Haemorrhagic septicaemia which are diseases of camel, there is a possible increase morbidity and outbreak of camel diseases given the changes in climatic conditions. Increased cases of pneumonia and helminthiasis (worm infestation) are also expected.
- Moyale: Outbreak of sheep and goat pox in Uran and Obbu ward. Abortions among small ruminants, Haemorrhagic septicaemia among camels at Yaballo in Golbo ward, camel pox at Walda in Uran ward and stray dogs mainly at Heillu Manyatta. There was observed influx of livestock from Ethiopia into Kenya through Gotu in Waiye area.
- Laisamis: Widespread Haemorrhagic septicaemia in camel was reported, sheep and goat pox in the villages of Tirgamo, Silapani and Nairibi. Generally, there was an observed decline in cases of PPR on clinical presentation.
- North Horr: Reports of diarrhoea and sudden deaths among goats in Shurr and diarrhoea in cattle around Dukana. Increased cases of CCPP are reported in Illeret. Suspected zoonotic diseases in the county include brucellosis, rift valley fever and rabies.

### 3.1.5 Milk Production

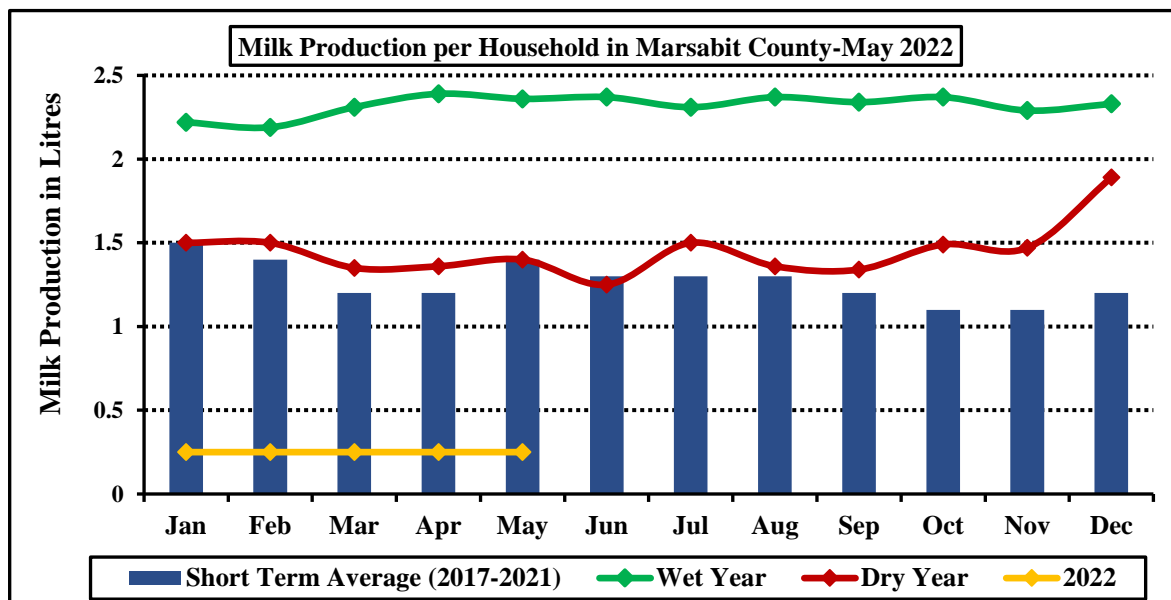


Figure 11: Milk Production at household level in Litres

- From figure 11 shown above, household milk production per day for the month under review was 0.25 litres/household/day across the livelihood zones. An all-time low milk production was attributed to typical mass livestock migration to the dry season grazing areas and successive failure of four rainy seasons in all the livelihood zones.
- Current milk production of 0.25 litres is significantly below the short-term average milk production of 1.4 litres/household/day and remarkably lower than wet and dry years' household milk production.
- Considerable below normal milk production was driven by successive rainfall deficits of the previous three seasons and mass livestock migration across the livelihood zones.
- Milk retailed at an average of Kshs.85-120 per litre across the livelihood zones compared to Kshs.75-90 normally which is 25-30 percent above normal.

### 3.2 RAIN-FED CROP PRODUCTION

#### 3.2.1 Area Under Crop Cultivation

- Land preparation activities in the County were carried out early by farmers in preparation for the long rains season planting. A total of 797.2 Ha (1993 acres) of land were prepared and planted as follows under various crops:

Table 2.0: Area Under Crop Cultivation

Crop	Area(acres)	Remarks
Maize	1000	Sowing was done by 3 <sup>rd</sup> week of March for all the cereals and legumes.
Beans	625	
Cowpeas	120	
Green grams	80	
Sorghum	125	
Kales	30	
Spinach	8	
Tomatoes	10	
<b>Total</b>	<b>1993</b>	

- Weeding is ongoing for the field crops (Maize, Beans, Green grams and Sorghum) in areas that received slight enhanced rains in Moyale, North Horr and Saku sub-counties.

#### 3.2.2 Crop Situation

**Table 3.0: Rainfed Crop Situation**

CROP	STAGE	CONDITION
Maize	At tasselling and silking stage in Moyale sub county but at vegetative stage in Saku sub county.	The condition of the crop is good in Moyale sub-county. In Saku sub county the crops are at vegetative stage and experiencing moisture stress.
Cowpeas	At flowering and podding stage in Moyale sub county but at vegetative stage in Saku sub county.	The condition of the crop is good in Moyale Sub County. In Saku sub county the crops are at vegetative stage and experiencing moisture stress.
Beans	At flowering and podding stage in Moyale sub county but at vegetative stage in Saku sub county.	The condition of the crop is good in Moyale Sub County. In Saku sub county the crops are at vegetative stage and experiencing moisture stress.
Green grams	At flowering and podding stage in Moyale sub county but at vegetative stage in Saku sub county.	The condition of the crop is good in Moyale Sub County. In Saku sub county the crops are at vegetative stage and experiencing moisture stress.
Kales/Spinach/ Tomatoes	Some at production, marketing and transplanting stage.	The crops are doing well as they are grown at the boreholes and water pans.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

#### 4.1.1 Cattle Prices

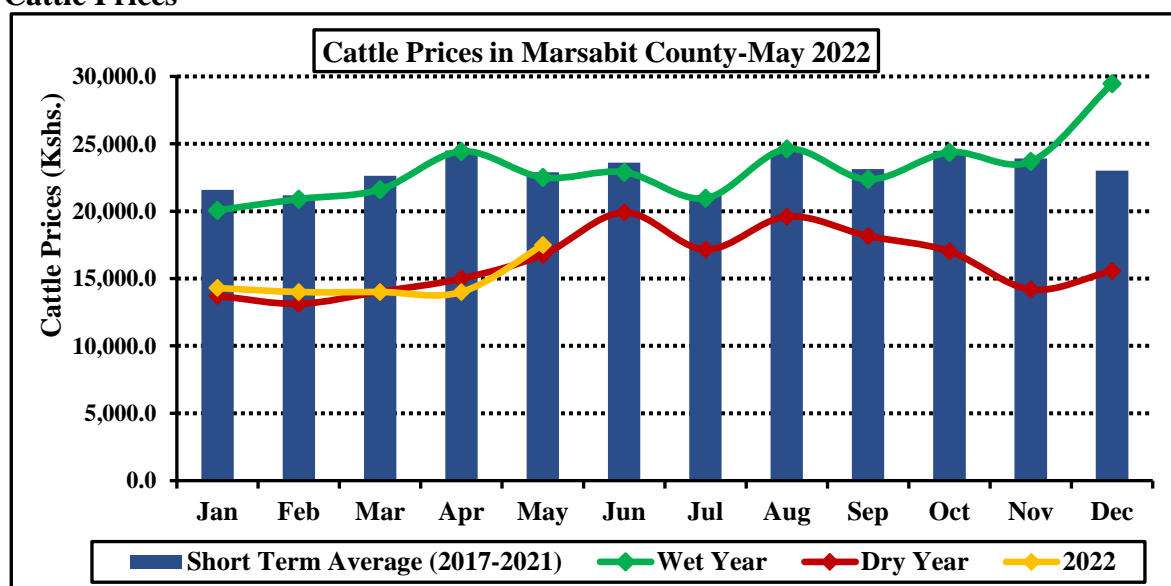


Figure 12: Cattle Prices Trends in Marsabit County

- From figure 12 shown above, cattle price for the month under review was Kshs. 17,500 thus increased due to gradual improvement of body condition when compared to the previous months' cattle price of Kshs.14,000 across the livelihood zones.
- Current cattle price of Kshs. 17,500 is below normal by 24percent and equates to the dry year price. Below average cattle prices were occasioned by below normal cattle body condition across the livelihood zones and low traded volumes. Moyale livestock market exhibited slightly better cattle price at Kshs.20, 000 in the month under review with some markets especially in North Horr sub-county recording cattle prices below Kshs.15,000.

- Moyale livestock market posted traded volumes for cattle averaging at 55 per day with Merille livestock market recording dismal cattle traded volumes at 30 per day due to intense livestock migration to the dry season grazing areas.
- Below normal cattle body condition and closure of some livestock markets due to insecurity have significantly led to dismal cattle traded volumes.
- Cattle prices are likely to remain below the short-term average in the next month across the livelihood zones due to cumulative seasonal rainfall shortfalls coupled with expected drier than usual conditions.

#### 4.1.2 Goat Prices

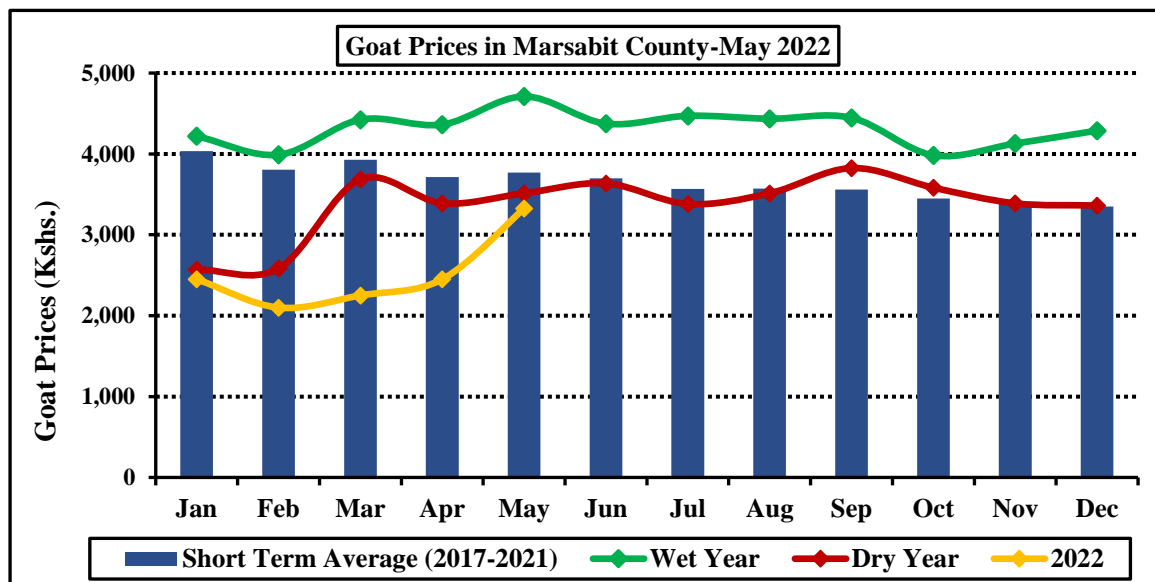


Figure 13: Goat Prices Trends in Marsabit County

- The current average goat price is Kshs. 3,326 hence below normal by 12percent when compared to the short-term average price of Kshs. 3,770 as illustrated in the figure 13 above.
- Below average goat prices were attributed to poor-fair goat body condition and low traded volumes. Disruptions of market supplies mainly from the feeder markets to the main markets was attributed by migration of goats to the dry season grazing areas, low traded volumes and insecurity particularly in Jirime and Merille livestock markets.
- However, Moyale livestock market depicted better goat prices averaging Kshs. 4,100 while in Merille livestock market, the price of medium size goat retailed at Kshs. 3,900.
- Traded market volumes for goats nosedived due to low demand of goats from the external markets necessitated by poor-fair body condition.
- Merille and Illaut livestock markets recorded daily traded volumes of 220 and 200 small stock respectively compared to the normal 1500 small stock. Moyale and Korr livestock markets posted daily traded volumes of 330 and 100 respectively.
- Goat's prices are likely to persist below the short-term average driven by poor livestock market linkages and below normal body condition.

### 4.1.3 Sheep Prices

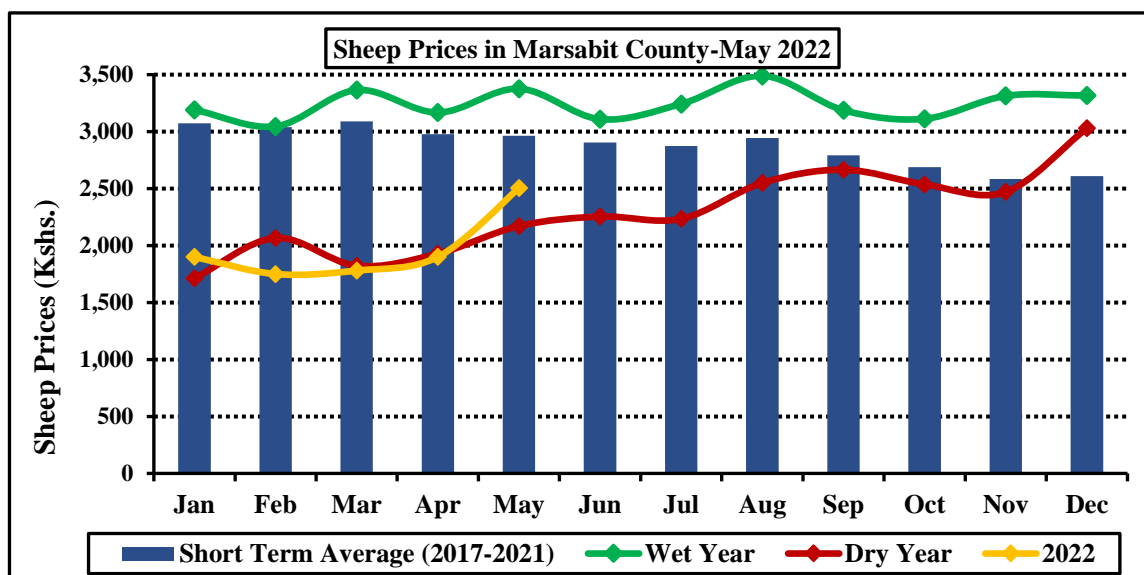


Figure 14: Sheep Prices Trends in Marsabit County

- From figure 14 shown above, sheep price for the month under review was Kshs.2,505 hence improved when compared to the previous month’s sheep price of Kshs. 1,900.
- When compared to the short-term average price of Kshs. 2,964, current sheep price is below normal by 15percent. Likewise, sheep prices are considerably below the wet year prices.
- Traded volumes in the main markets considerably declined occasioned by below normal body condition and poor market integration. With persistence of drier than usual conditions, sheep prices are expected to stagnate below the short-term average in the next month.

## 4.2 CROP PRICES

### 4.2.1 Maize

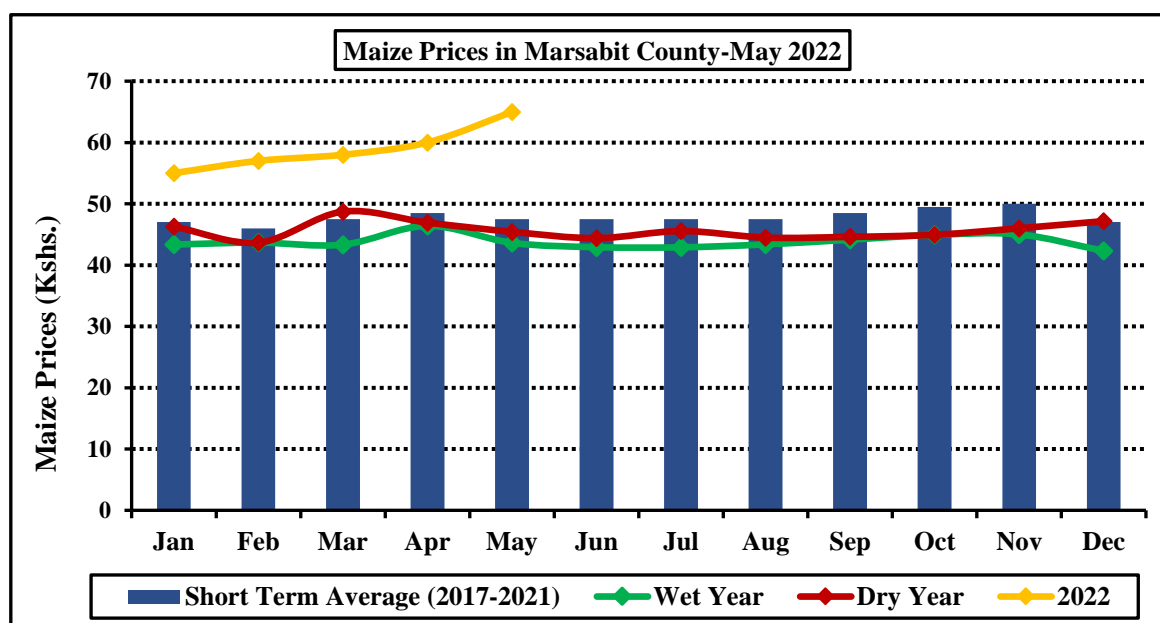


Figure 15: Maize Prices Trends in Marsabit County

- The current average maize price is Kshs. 65/kg, which is 35percent above normal when compared to the short-term average price of Kshs. 48/kg as illustrated in figure 15 above.
- Above short-term maize prices were occasioned by macroeconomic challenges (increased fiscal tendencies) that have led to high cereal prices in the main food commodities markets coupled with a weakened shilling along the Kenya/Ethiopia markets.

- Moyale sub-county recorded better prices averaging Kshs.37/kg attributed to injections from Ethiopia in addition to Saku Sub-County where maize prices retailed at Kshs.45/kg.
- Most of the food commodity markets in North Horr and Laisamis Sub-County recorded maize prices of Kshs.70-75kg connoting 42-45percent above the short-term average attributed to imperfect market functions. Surge in maize prices were recorded along the fishing livelihood zone with prices ranging between Kshs. 95/kg-120/kg due to poor access.

#### 4.2.2 Beans

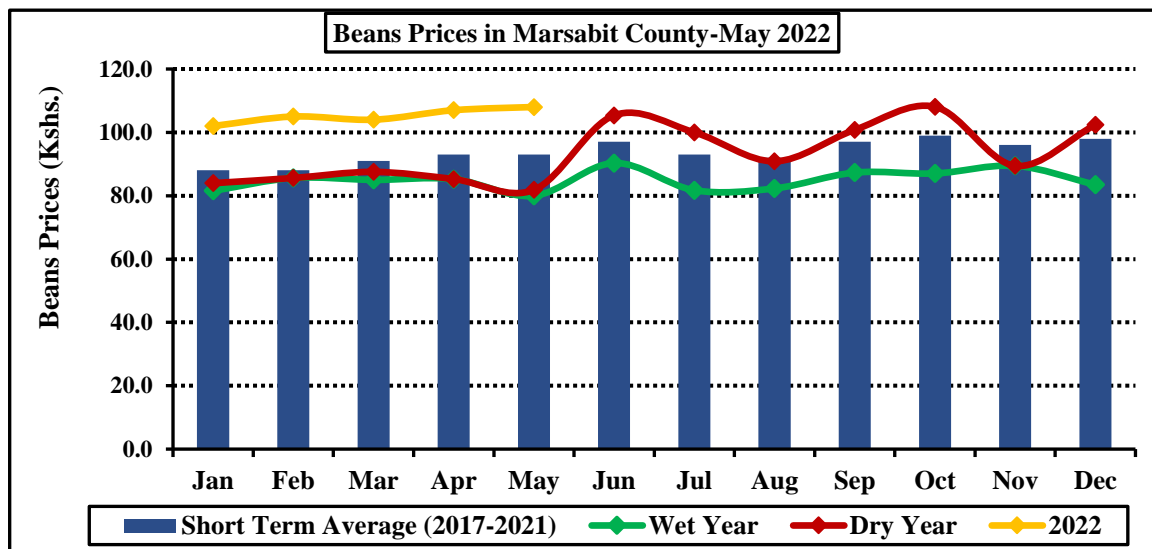


Figure 16: Beans Prices Trends in Marsabit County

- From the figure 16 shown above, beans prices retailed at Kshs 108/kg in the month under review across the County thus remained stable when compared to the previous month’s beans price of Kshs.107/kg. Current beans prices are above the wet and dry years’ prices.
- Moyale commodities market exhibited better beans prices averaging Kshs.75/kg driven by supplies from the neighbouring vibrant Ethiopia.
- However, North Horr and Laisamis Sub-counties illustrated high beans prices averaging Kshs.120/kg driven by poor market linkages to the main commodities markets.
- Beans prices are likely to remain above the short-term average occasioned by poor trading margins and high inflationary tendencies recorded in the major markets across the County.

#### 4.2.3 Terms of Trade (TOT)

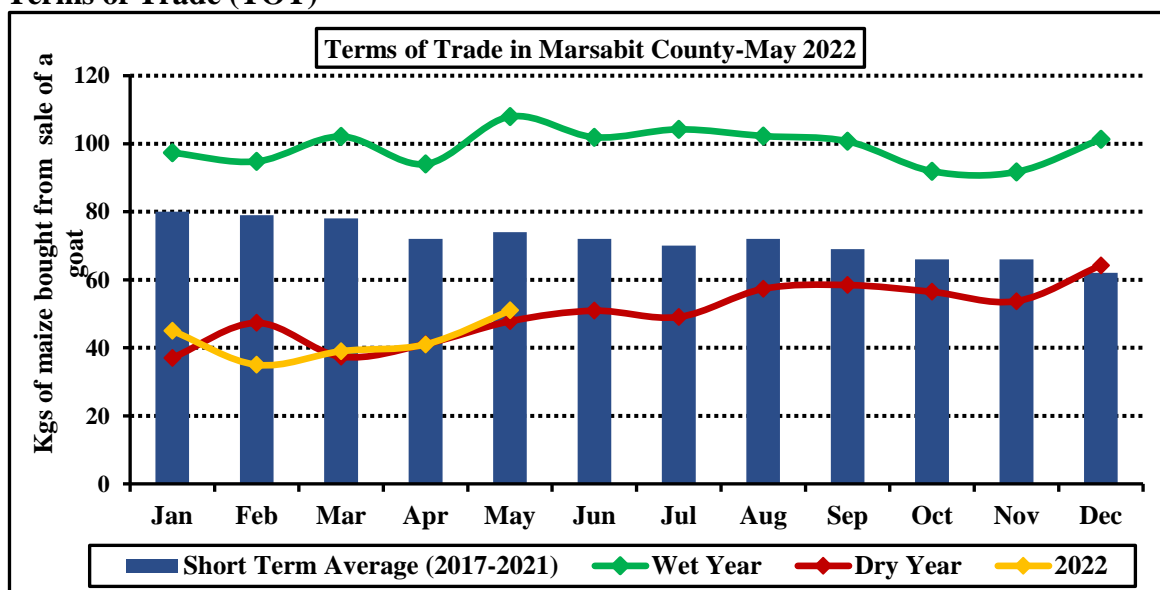


Figure 17: Current Terms of Trade versus Short Term Average



- The current terms of trade are 51 kilograms in exchange for the sale of a goat in the month under review thus an indication of significant deterioration when compared to the short-term average terms of trade of 74 kilograms. Deteriorating terms of trade was attributed to an all-time low goat's prices and above average maize prices.
- However, Moyale sub-county recorded better terms of trade than other sub-counties occasioned by stable maize and goat's prices. Terms of trade for North Horr and Laisamis sub-counties were remarkably below the short-term average attributed to poor market functions.
- Terms of trade are likely to remain below the short-term average but with a stable trend in the next one month across the livelihood zones due to interruptions of markets functionalities constraining market supplies and operations.

## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 Milk Consumption

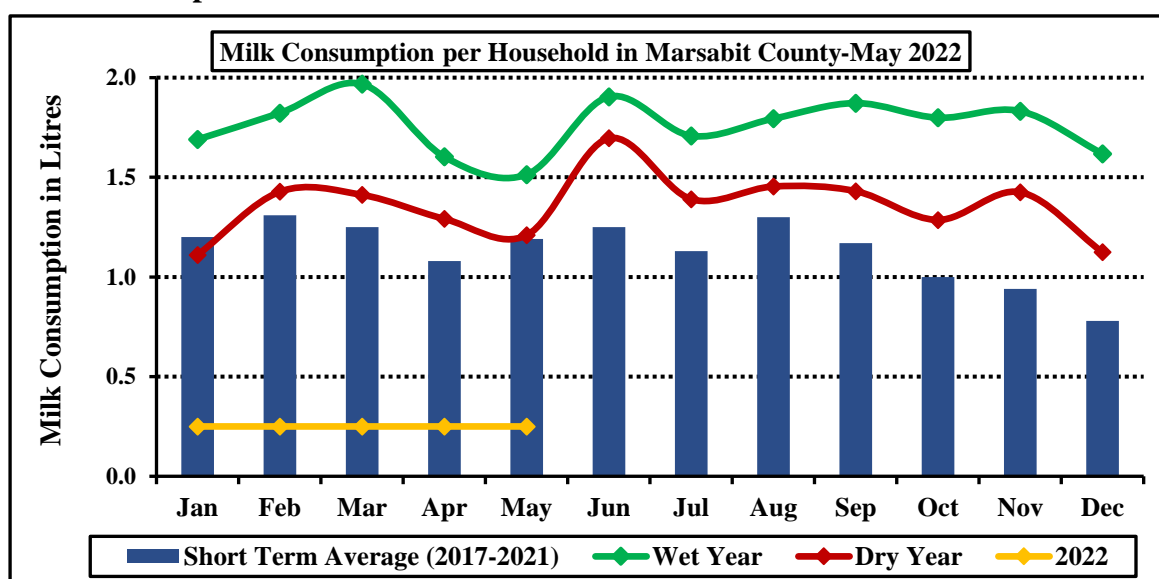


Figure 18: Milk consumption at household level in Litres

- From figure 18 shown above, household milk consumption is 0.25 litres/household/day in the month under review. An all-time low milk consumption across the livelihood zones was attributed to mass livestock migration to the dry season grazing areas especially in the pastoral livelihood zone of North Horr and Laisamis sub-counties.
- When compared to the short-term average milk consumption of 1.2 litres/household/day, current milk consumption is significantly below average attributed to an all-time below average milk production.
- Similarly, current milk consumption is significantly below the dry and wet years. Milk consumption is likely to remain below the short-term average in the next month attributed to expected persistence of below average milk production across the livelihood zones.

## 5.2 FOOD CONSUMPTION SCORE (FCS)

- The current food consumption score (FCS) across the County is 29.2 with 7.7percent of households having poor food consumption whereas those with borderline and acceptable

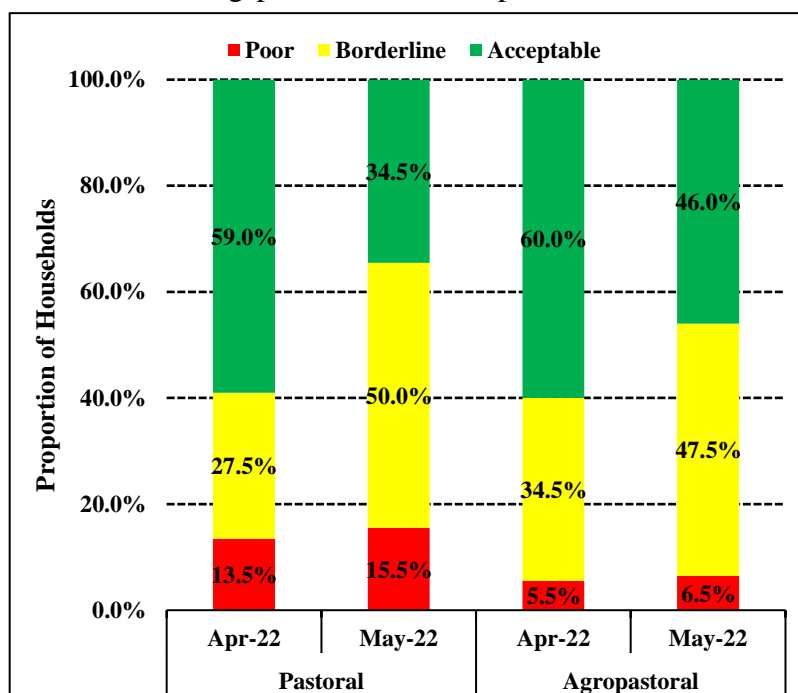


Figure 19: Food Consumption Trends in Marsabit

acceptable food consumption scores were 47.5percent and 46percent respectively. Similarly, proportion of households in the pastoral livelihood zone that had poor, borderline and acceptable food consumption scores were 15.5percent, 50percent and 34.5percent respectively.

Table 4.0: Food Consumption Score by Ward

	FCS Mean	Poor FCS	Borderline FCS	Acceptable FCS
<b>County</b>	<b>29.2</b>	<b>7.70%</b>	<b>55.00%</b>	<b>37.30%</b>
Golbo	31.5	4.50%	56.00%	39.50%
Karare	37.5	1.00%	48.50%	50.50%
Korr	23.5	10.50%	77.20%	12.30%
Loiyangalani	20.0	14.00%	72.50%	13.50%
Laisamis	28.3	9.00%	60.20%	30.80%
Turbi	22.4	11.50%	68.20%	20.30%
North Horr	25.5	20.40%	45.40%	34.20%
Dukana	30.1	4.50%	54.00%	41.50%
Sagante	27.5	6.00%	70.50%	23.50%
Uran	38.0	1.50%	25.20%	73.30%
Heillu Manyatta	36.5	2.00%	27.50%	70.50%

- From the table shown above, 7.7percent of households consumed staples and vegetables every day and never or very rarely are consuming protein rich food such as meat and dairy. Approximately 55percent of the households consumed staples and vegetables every day, accompanied by oil and pulses a few times a week while 37.3percent consumed staples and vegetables every day, regularly accompanied by oil and pulses and occasionally meat or dairy product. Due to poor livestock productivity and volatile livestock markets

consumption were 55percent and 37.3percent respectively across the livelihood zones. In comparison to the previous month, deterioration in the food consumption categories was recorded but remained in the borderline food consumption score band.

- In the agro-pastoral livelihood zone, proportion of households that had poor food consumption score was 6.5percent while those with borderline and

functionalities and increased inflationary tendencies, food consumption score is expected to deteriorate but remain in the borderline food consumption band in the next month.

### 5.3 HEALTH AND NUTRITION STATUS

#### 5.3.1 Nutrition Status

- Figure 20 depicts MUAC of 15.2percent of children who are moderately and severely malnourished which is above the long term average MUAC of 10.9 percent and significantly above the wet and dry years MUAC of 7.4percent and 11.2percent respectively thus an illustration on deteriorating nutritional status of the under-fives occasioned by remarkably below normal household milk consumption, high household food consumption gaps and adoption of reduced food consumption coping strategies.

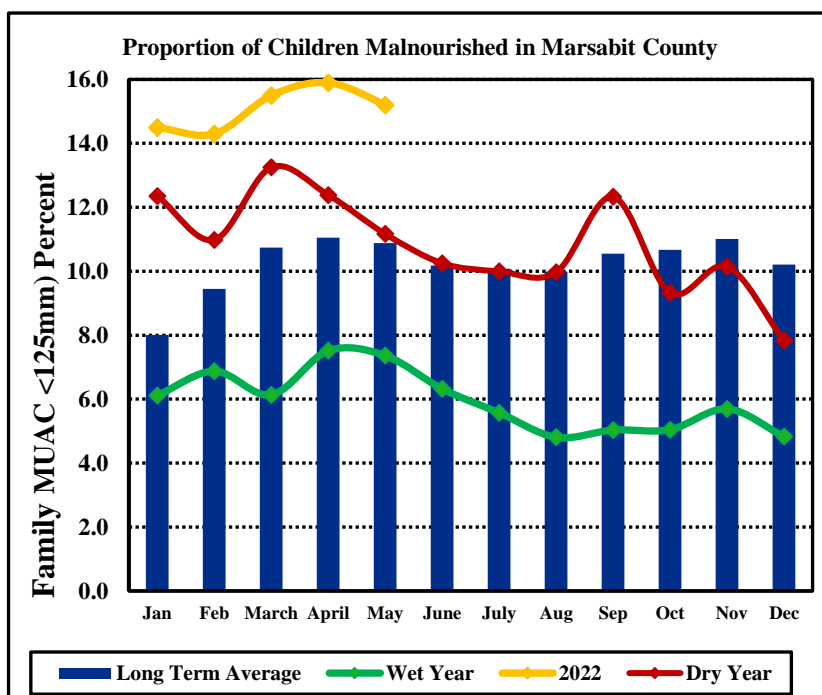


Figure 20: Proportion of Children < 5 Years Malnourished in Marsabit

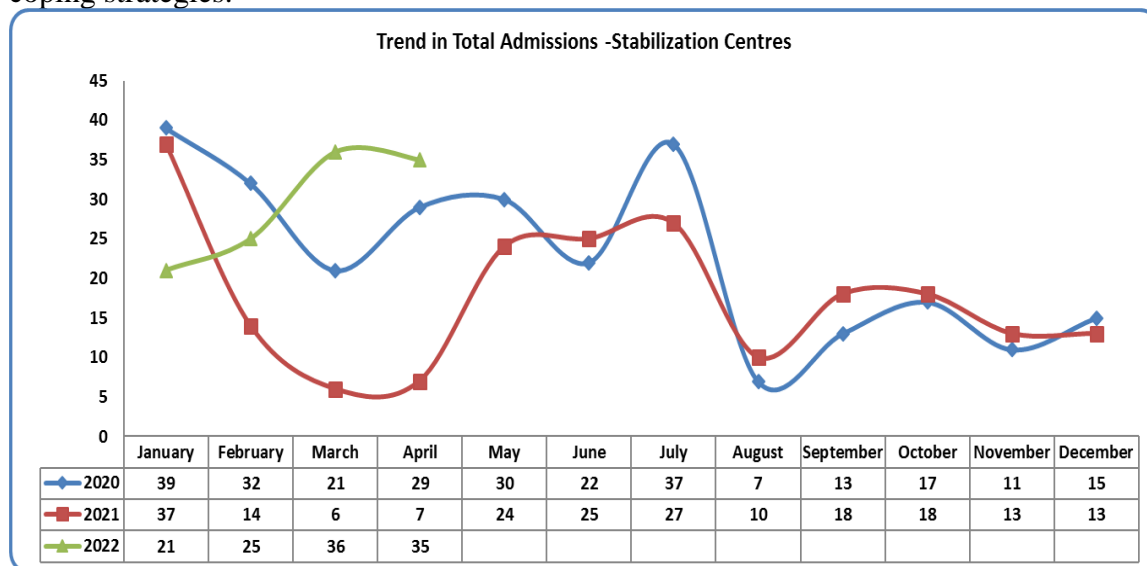


Figure 21: Inpatient Admission Trends-Marsabit County

- Trends in the new admissions for the previous three months have set a pattern of decline except for SFP, which has shown a sharp increase from March to April. This could be associated with a deteriorating nutrition situation and a worsening food insecurity across the county. Additionally, sharp increase in the SFP admission could be due to the ongoing supported outreaches, which resulted to increased cases of moderate acute malnutrition being identified and enrolled into the program.

- IMAM surge dashboard indicates that out of the 81 health facilities implementing IMAM surge, 8 facilities were above normal. Lontolio dispensary in Laisamis was reported to be in Alert while in Moyale, Yaballo dispensary was in Alert phase. In Saku sub-county, both Hula Hula and Songa are reported to be in Alert phase. Additionally for North Horr sub-county, Dukana health facility reported to be in Alarm while Malabot, Illeret and North Horr health facilities were at emergency phase.

#### 5.4 COPING STRATEGIES

- Current reduced consumption-based coping strategy index (rCSI) for the households is 18.6. When compared to similar period last year (rCSI) of 19.9, it's an illustration of application of

similar food consumption-based coping strategies at almost similar frequencies. Consumption based coping strategy index remained in the crisis phase with the pastoral and agro pastoral livelihood zones recording coping strategy indices of 19.2 and 17.4 respectively.

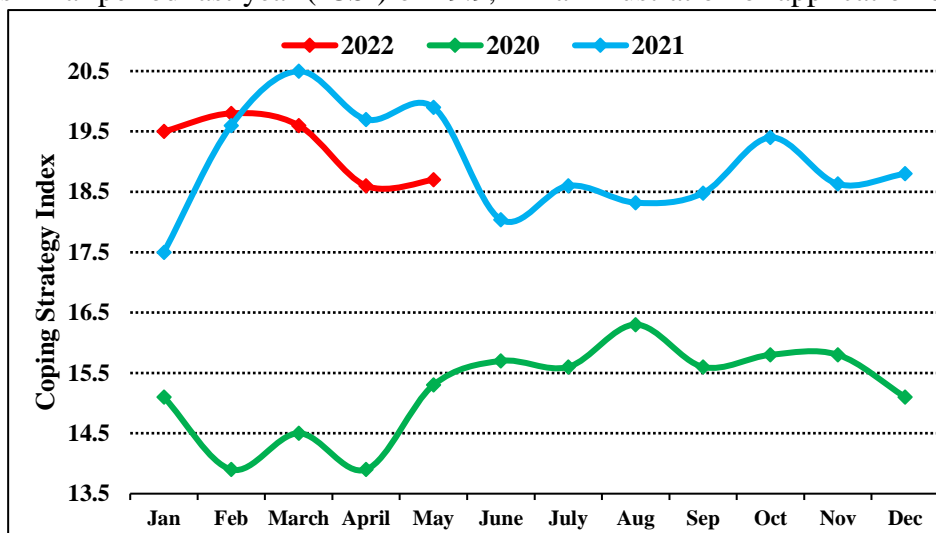


Figure 22: Coping Strategy Trends across the County

Therefore, households are applying frequent and severe coping mechanisms to address high food consumption gaps at the household level.

Table 4.0: Consumption Based Coping Strategy Index by Wards

Consumption based coping strategy index(rCSI)		
Sub-county	Ward	rCSI
Saku	Sagante	22.0
Saku	Karare	16.5
Laisamis	Korr	18.4
Laisamis	Loiyangalani	31.0
Laisamis	Laisamis	18.3
North Horr	North Horr	18.5
North Horr	Turbi	20.0
Moyale	Uran	13.5
Moyale	Golbo	19.5
Moyale	Heillu Manyatta	12.5

- From table shown above, households in Heillu Manyatta, Uran and Karare wards applied stressed food consumption based coping mechanisms whereas those in Turbi, Loiyangalani, Golbo, Korr, Sagante, Laisamis and North Horr wards adopted crisis consumption based coping strategies. Generally, 4.0percent, 53.5percent and 42.5percent 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 FOOD SECURITY PROGNOSIS**

- Most parts of pastoral livelihood of North Horr and Laisamis sub-county and agro-pastoral areas of Saku received significant seasonal rainfall shortfalls in 1-7 rainy days whereas Moyale sub-county recorded near average rains in 2-10 rainy days. Therefore, temporal and spatial distribution of the long rains was poor and uneven respectively across the County. Cessation of the long rains was early as it occurred towards the first week of May as opposed to the normal second week. Therefore, 2022 long rains failed (seasonal rainfall deficits) compounded by failure of previous three successive seasons.
- The 3-months vegetation condition index stagnated in the severe vegetation deficit band in May attributed to seasonal cumulative rainfall deficits. With expected persistence of drier than usual conditions in June, the 3-months vegetation condition index will possibly remain in the severe vegetation deficit band in the next month. Available pasture is expected to last two months in the pastoral livelihood zone of Laisamis and North Horr Sub-Counties while three months in the agro-pastoral areas of Saku and Moyale sub-counties against the normal of four and half months.
- Household and livestock watering distances are 10.1km and 31.4km respectively which are significantly above normal. With expected drier than usual conditions in the next month, gradual forage deterioration is anticipated which will necessitate increased livestock trekking distances in the next month thus expected decline in watering intervals for all livestock species across the livelihood zones.
- The current poor livestock body condition is attributed to four successive failures of seasons in all the livelihood zones accelerating forage and water deficiency. The current poor livestock body condition is likely to deteriorate across the livelihood zones with expected persistence of the drier than usual conditions.
- Terms of trade are unfavourable and are likely to remain below the short-term average but with a stable trend in the next one month across the livelihood zones due to interruptions of markets functionalities constraining market supplies and operations.
- Food consumption score and coping strategy index remained in the borderline and crisis phases respectively 4.0percent, 53.5percent and 42.5percent of the households applied reduced consumption-based coping strategies that were minimal, stressed and crisis respectively. Therefore, households are applying frequent and severe coping mechanisms to address high food consumption gaps at the household level.
- Trends in the new admissions for the previous three months have set a pattern of decline except for SFP, which has shown a sharp increase from March to April and it's expected to follow similar trend lines with expected continuation of severe drought situation.

## ANNEX: Ongoing Drought Response Interventions and Recommendations

### Ongoing Drought Response Interventions Across Marsabit County

Sector	Intervention	Number of Households Targeted by Ward
Cash Transfer	National Drought Management Authority paid a total of 20,453 phase 3 HSNP beneficiaries with each household receiving Kshs.5,400 totalling to Kshs.110, 446,200.	Butiye= 860, Dukana=1,188, Golbo=1,215 Heillu Manyatta=920, Illeret=594 Karare=807, Kargi/South Horr=928 Korr/Ngurnit=1,396, Laisamis=1,320 Loglogo=486, Loiyangalani=1,213 Maikona=1,299, Marsabit Central=2,219 Moyale Township=792, North Horr=997 Obbu=263, Sagante Jaldesa=1,342 Sololo=789, Turbi Bubisa=988, Uran=838
Cash Transfer	National Drought Management Authority paid 6,812 beneficiaries (scalability component) each household received Kshs.2,700 totalling to Kshs.18,392,400.	Butiye= 737, Dukana=187, Golbo=96 Heillu Manyatta=510, Illeret=73 Karare=67, Kargi/South Horr=188 Korr/Ngurnit=240, Laisamis=676 Loglogo=258, Loiyangalani=274 Maikona=434, Marsabit Central=958 Moyale Township=335, North Horr=590 Obbu=14, Sagante Jaldesa=344 Sololo=270, Turbi Bubisa=436, Uran=29
Cash Transfer	USAID Nawiri in collaboration with CARITAS supported a total of 3,300 households with cash transfer Kshs.5000 across the County. Additionally, 1500 households have been enrolled in Adapted Nutrition Friendly Graduation Model and are receiving monthly consumption cash worth Kshs.5,000 per household in addition to other graduation packages.	Dukana=348, Golbo=235, Illeret=642 Karare=93, Korr/Ngurnit=400 Loglogo=149, Loiyangalani=400 Maikona=394, Sagante Jaldesa=207 Turbi Bubisa=267, Uran=165
Cash Transfer	World Vision Loiyangalani through ADH targeted 1,365 vulnerable households within Laisamis sub-county. Each household received Kshs. 6, 282 per month.	Loiyangalani= 683 Kargi/South Horr=682
Cash Transfer	SND supported 535 households with cash transfer, each household getting Kshs. 8,956 totalling Kshs. 4,791,460. The cash transfer was supported by ECHO.	Turbi Bubisa= 209 Uran=326
Cash Transfer	SND supported 285 households with cash transfer, each household getting Kshs. 5,000 equalling Kshs.1,425,000. The cash transfer was supported by The Christensen Fund.	Golbo=50 Obbu=176 Butiye=59
Cash Transfer	SND supported 812 households with cash transfer of Kshs. 8,000 per household	Heillu Manyatta=306 Moyale Township=290 Butiye=216

	totalling Kshs.6,496,000 supported by GIZ/IGAD.	
Cash Transfer	SND supported 599 households with cash transfer of Kshs. 8,956 per household totalling Kshs. 5,364,644 supported by OXFAM-US.	Turbi Bubisa=130 Uran=469
Cash Transfer	PACIDA supported 835 vulnerable households with cash transfer of Kshs.8, 000 per month.	North Horr=500 Loiyangalani=335
Cash Transfer	VSF Germany (German Foreign Office Funded Integrated Lifesaving Disaster Risk Reduction Project) supported emergence cash transfers of Kshs. 2500 per beneficiary targeting 700 households.	Illeret=150 Dukana=100 North Horr=250 Loiyangalani=200
Cash Transfer	ADS-Mt. Kenya East disbursed cash transfer through funding from Diakonie Katastrophenilfe to 208 households with each beneficiary receiving Kshs.4,700 per month.	Uran=100 Turbi Bubisa=108
Cash Transfer	Dorcas Aid International supported 400 vulnerable households from Moyale sub-county with cash transfer of Kshs 4000.	Butiye=200 Golbo=200
Food Aid (General Food Distribution).	WFP/USAID through SND dispatched a total of 249.205 Metric Tonnes of assorted food stuff to North Horr sub-county to support 3,487 households as part of drought response intervention. Monthly ration/household are 56kg Maize, 8kg Beans & 4.5 litres Veg Oil).	Illeret= 1,485 (106.250 Metric Tonnes) Dukana=400 (28.619 Metric Tonnes) North Horr=700 (50.085 Metric Tonnes) Maikona=297 (21.250 Metric Tonnes) Turbi Bubisa=601 (43.001Metric Tonnes)
Food Aid (Sustainable Food Systems Programme).	WFP/USAID through SND distributed a total of 1,118.496 Metric Tonnes of assorted food (100kg of cereals and 22kg of pulse.) to 9,168 households across the county. The food ratio given per households was 122kg.	Korr/Ngurnit, Kargi/South Horr, Loiyangalani, Loglogo and Laisamis = 2,783 households (339.526 Metric Tonnes).  Maikona and North Horr = 2,304 households (281.088 Metric Tonnes).  Sagante and Karare = 2,105 households (256.810 Metric Tonnes)  Heillu Manyatta, Golbo, Butiye, Obbu, Sololo and Uran = 1,976 households (241.072MT).
Food Aid (General Food Distribution).	Kenya Red Cross Society distributed food items targeting 1000 households in, North Horr sub-county. Each household received 10kg of rice, 2kg of beans, 2litres of vegetable oil and 250grams of salt.	Illeret= 1,000

Food Aid (Food voucher).	VSF Germany (EUTF Funded Omo Delta Project) supported E-voucher food transfers worth Kshs. 3000 per households targeting 200 households.	Illeret=95 Loiyangalani=65 Moite=40
Water	FH-K constructed rain water harvesting infrastructures in 9 institutions.	Hulahula and Parkishon Primary Schools-Karare Jaldesa Primary School- Sagante Elebor Primary School-Uran Balesa Primary-Dukana Hurri Hills Primary-Maikona Adadi dispensary-Obbu
Water	FH-K supported water trucking to schools and communities that faced water shortage.	Obbu ward= 16,000 litres Sololo ward=8,000 litres
Water	ADS-Mt. Kenya East supported water trucking in Ellebor through funding from Bread for the World.	Uran ward
Livestock	FAO distributed 178 Tons (3883 Bags of range cubes) of livestock feed supplements to be distributed.	Dukana=119 households, Kargi/South Horr=217 households, Korr/Ngurnit=99 households, Laisamis=150 households, Loiyangalani=158 households, Maikona=116 households, North Horr=316 households, Turbi Bubisa=116 households
Health and Nutrition	Integrated outreaches in 116 sites (Monthly) & 77sites Bimonthly out of the 201 mapped high priority sites. KRCs will be upscaling to 10 additional sites in Laisamis and North Horr-UNICEF Health, Concern Plans to scale up surge response outreaches to Golbo and Karare wards in Moyale and Saku sub counties respectively.	All wards in North Horr and Laisamis sub-counties. Karare and Golbo wards.
Health and Nutrition	IMAM treatment in all 86 Health facilities. A further scale up to 16 Newly Opened Health facilities that already have trained staff.	All wards.
Health and Nutrition	Marsabit county has been issued with 3.7 tonnes of assorted essential medicine through UNICEF health support.	All wards.
Health and Nutrition	Illeret was resupplied with RUTF from KRCS hub worth 100 cartons. A further dispatch of 299 cartons of RUTF was made.	Illeret
Education	Concern supported 291 most vulnerable secondary school students with bursary of Kshs.13,000 per student totalling to Kes 3,783,000 in this term (May 2022).	Needy secondary school students across the County.



Education	School Feeding Programme targeting 190 public primary schools in Marsabit County (Maize=7438kg, Oil=620 litres, Salt=248kg Blended porridge=3967kg, Beans=1102kg).	26,743 boys and 28,350 girls in all public primary schools across the County.
<b>Recommended Interventions in Marsabit County</b>		
<b>Sector</b>	<b>Intervention</b>	<b>Cost</b>
Water	Water trucking to communities and institutions.	Kshs. 3,609,072
Water	Provision of fuel subsidy to strategic boreholes.	Kshs.5,616,000
Water	Purchase of fast moving spare parts and facilitation of borehole rapid response team.	Kshs.11,165,000
Livestock	Provision of drought pellets especially in Laisamis and parts of North Horr sub-county.	Kshs.40,000,000
Livestock	Disease Surveillance, mass treatment and deworming across the County.	Kshs.5,614,400
Livestock	Destocking of weak herds	Kshs.58,000,000
Food Aid	Provision of food assistance and upscale of cash transfer to the food insecure population.	Kshs.65,000,000
Education	Provision of school meals in ECDE centres	Kshs.20,000,000
Health and Nutrition	Conduct and urgent SMART survey across all the 4 sub counties to establish the current nutrition situation and to trigger faster response.	Kshs.9,000,000
Health and Nutrition	Roll out Blanket Supplementary Feeding Programme in North Horr and Laisamis sub-counties in all community units within the malnutrition hotspots.	Kshs.16,000,000
Health and Nutrition	Establish a clear follow up mechanism for all children in IMAM program with a consideration of a motivated graduation model that will encourage mothers and caregivers towards having their children exit IMAM treatment Programs.	Kshs.1,500,000