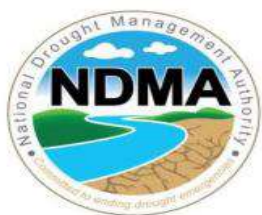


National Drought Management Authority
GARISSA COUNTY
DROUGHT EARLY WARNING BULLETIN FOR MAY 2021



A Vision 2030 Flagship Project



MAY 2021 EWS PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- The county received an average of 10.1mm of rainfall which was below the long term average amount.
- The 3-month VCI was 32.02 indicating moderate vegetation deficit and was below the long term average for the month.
- Pasture condition was poor to fair across all livelihood zones
- Both household distances and livestock trekking distances to water sources increased and were above the long term average.

Socio Economic Indicators (Impact Indicators)

- Livestock body condition for cattle and sheep was fair to poor while that of goats and camels was fair to good.
- Average milk production was 1.5 litres against the long term average of 2.6 litres.
- Milk consumption was at an average of 1.4 litres against the long term average amount of 2.25 litres
- Market prices for all livestock species remained within the normal ranges.
- The terms of trade were 39.5 against the long term average of 52.0
- The mean coping strategy index (CSI) was 9.75 for the month against a long term average of 12.9.
- Proportion of children below five years at risk of malnutrition was 7.5 percent which was below the long term mean
- The mean food consumption score was 41.43 which was below the long term average of 43.7.

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Alert	Worsening
Pastoral cattle/sheep	Alert	Worsening
Pastoral-all species	Alert	Worsening
County	Alert	Worsening
Biophysical Indicators	value	Normal Range/Value
Rainfall amount	10.1mm	14.5mm
VCI-3Month	32.02	43.4
Forage condition	Poor	Fair
Production indicators	Value	Normal
Livestock Body Condition	2	2
Milk Production	1.5 litres	2.6 litres
Livestock Migration Pattern	Out-migration reported	No migration
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	39.5	52.0
Milk Consumption	1.4 litres	2.25 litres
Return grazing distance to water sources in km	23.8km	17.3km
Cost of water at source (20 litres)	Kshs 5	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	7.5	13.2
Coping Strategy Index (CSI)	9.75	12.9
Food Consumption Score(mean)	41.43	43.7

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

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- The onset of the season was on the 3rd dekad of March 2021 which was false onset.
- The county received an average of 4.5mm of rainfall during the month against the long term average amount of 10.1 mm.
- The temporal distribution was uneven and spatial distribution of the rainfall was poor.
- Cession of the season was on the first dekad of May which was earlier than normal.

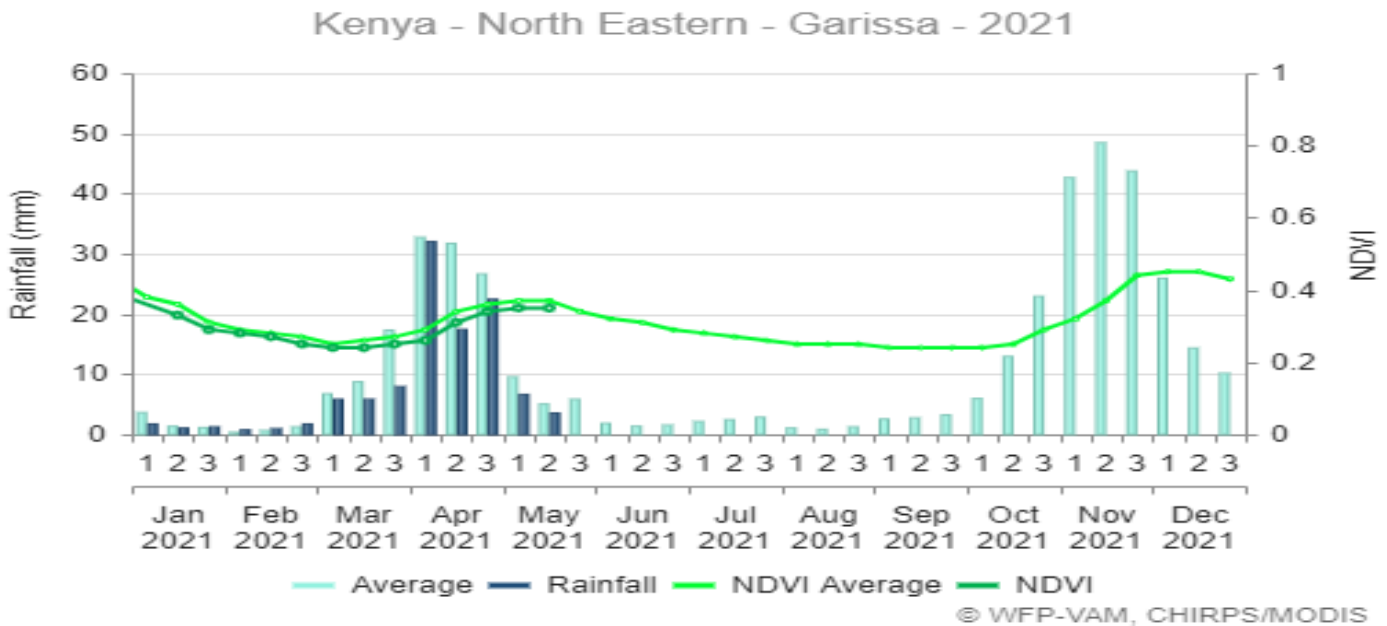


Figure 1: Rainfall and NDVI trend

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The 3-month VCI for the month of May 2021 was 32.02 indicating moderate drought conditions similar to the previous month.
- Four sub-counties, namely: Daadab Fafi, Township and Balambala were classified to be in moderate vegetation deficit category while Ijara sub-county had normal vegetation greenness, similar to the month of April 2021.
- Lagdera sub-county was classified to be in the severe vegetation deficit band.
- The current 3-month VCI was below the long term average and higher than the base year of 2017.

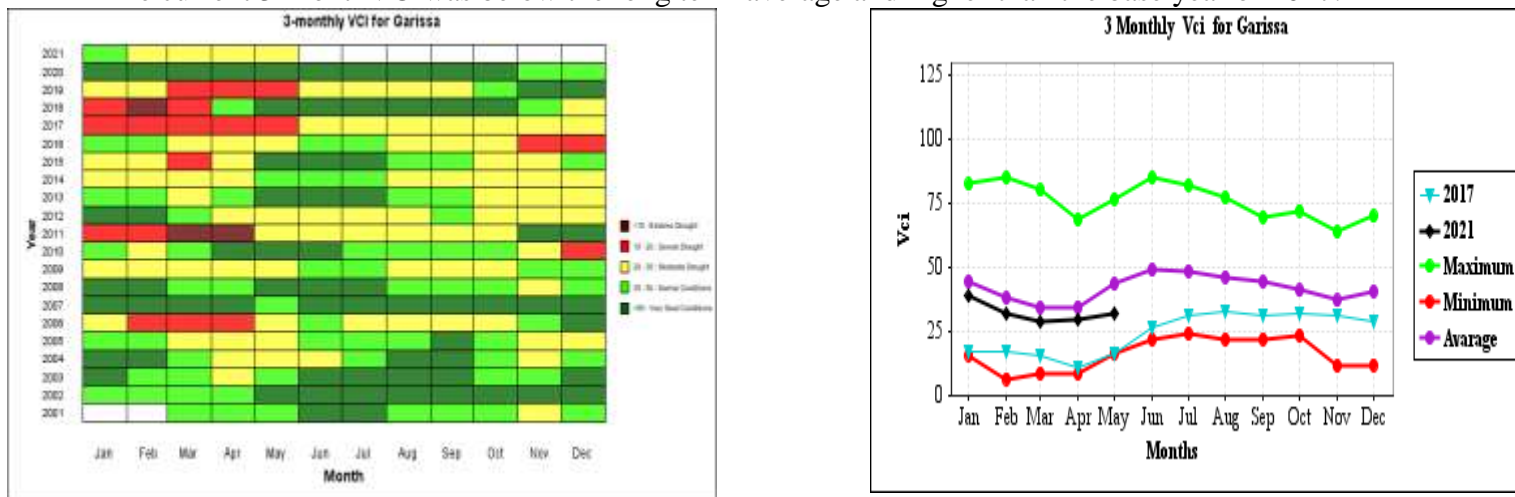


Figure 2: VCI graph and matrix

2.1.2 Pasture and browse condition

- It was reported that 75 percent of pasture and browse was in poor condition in most parts of the county, except for Ijara and Hulugho sub-counties where pasture was in fair condition.
- The forage condition may worsen due to below normal rainfall received in the month of May and the expected onset of the dry spell period in June.

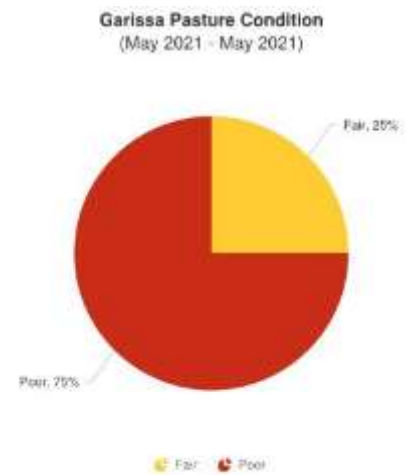


Figure 3: Pasture condition

2.2 WATER RESOURCE

2.2.1 Sources

- Main sources of water currently are pans and dams, River Tana, boreholes and shallow wells as shown in the pie chart.
- Most water pans are 50 percent full and will supply water for domestic and livestock consumption for two months.
- The little rains received in May coupled with high temperatures, may cause water sources to dry up faster than anticipated.

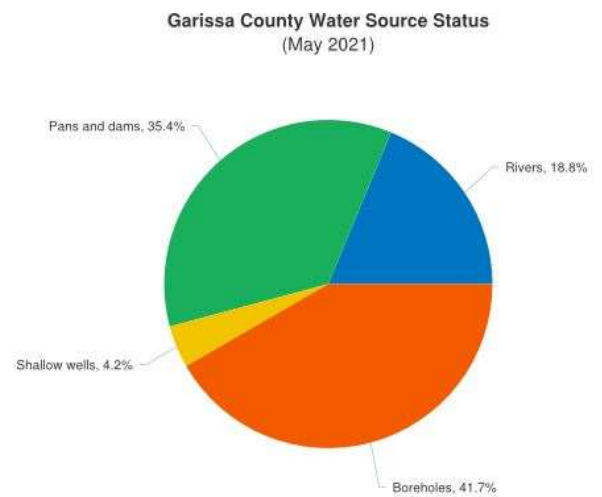


Figure 4: Water sources

2.2.2 Household access and Utilization

- The average return distances from households to water sources were 10.3km, a slight increase from 10.0km recorded the previous month.
- This increment may be attributed to very little rain received in course of the month and high evaporation rate in water pans because of high temperatures.
- The current distance is 79 percent longer than the long term average distance for the month
- The average water consumption per household per day is 10 liters in pastoral livelihood zones and 20 liters for households in the agro-pastoral livelihood zone against a normal of 30 liters/household per day

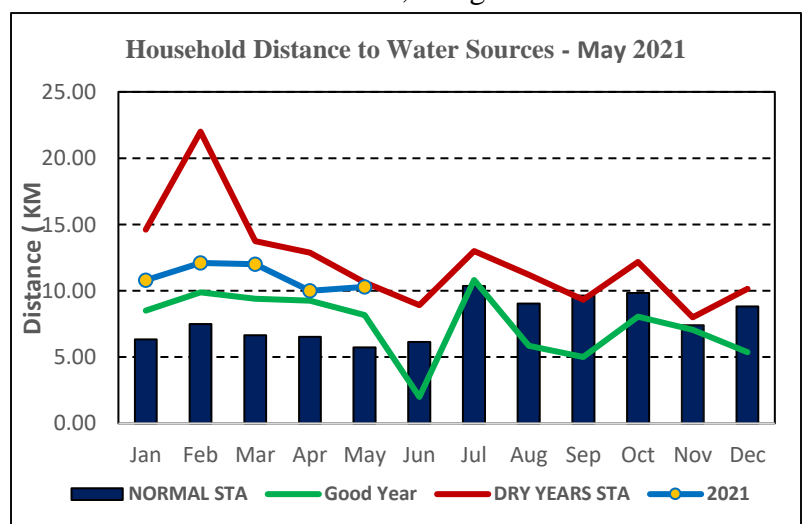


Figure 5: Household return distances to water sources

2.2.3 Livestock access

- The average trekking distance from grazing areas to water sources increased slightly from 22.5 km to 23.8 km.

- The pastoral all species livelihood zone recorded the longest trekking distance of 28.2km while agro-pastoral zones had the shortest distances at 18.9km.
- The current trekking distances were 40 percent longer than the long-term average distance for the month.
- The grazing distances may increase as a result of minimal forage regeneration because of poor rains.
- Livestock watering frequencies is 3 times a week for small stocks and 5 times for cattle in many watering points.

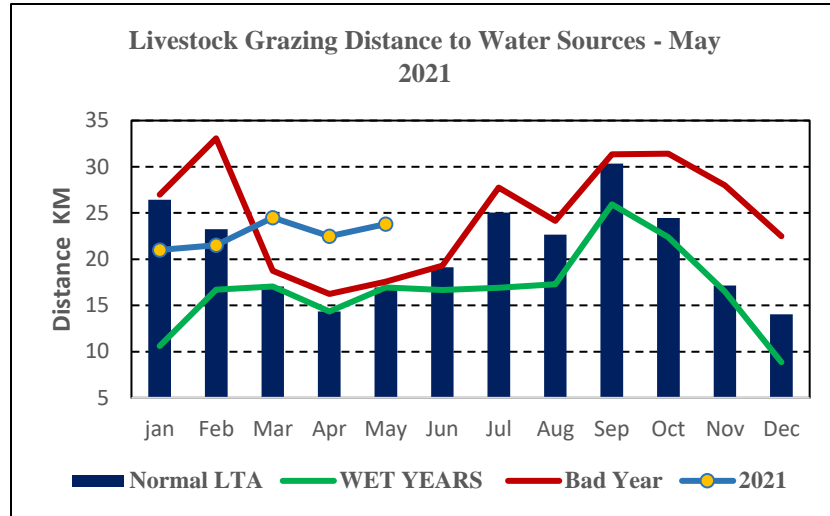


Figure 6: Livestock return trekking distances to water sources

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock in the county were observed to have fair (moderate body condition, neither fat nor thin.) to poor body condition, cattle and sheep recorded poor body condition while goats and camel were in fair body condition. With the start of the dry spell it is expected livestock body condition to be on the decline.

3.1.2 Livestock Diseases

- No major livestock disease outbreak was reported during the month, endemic diseases like Contagious Caprine Pleuropneumonia (CCPP) and Contagious Bovine Pleuropneumonia (CBPP) continue to be reported across the livelihood zones.
- Upsurge of vector borne disease were reported in the southern parts of the county.
- Livestock mortalities remain within normal ranges, predation was the highest contributor.

3.1.3 Milk Production

- Cows were the main producers of milk in this reporting month similar to the previous month.
- Average milk production per household per day was 1.7 litres, a reduction from 2 litres recorded the previous month.
- Milk production may decrease of unavailability of enough pasture for livestock.
- Production was below the long term average for the month.
- The average prices of milk was Kshs 60-70 per litre in all the livelihood zones compared to Kshs 35-45 per litre normally which is 35 percent above the normal price.

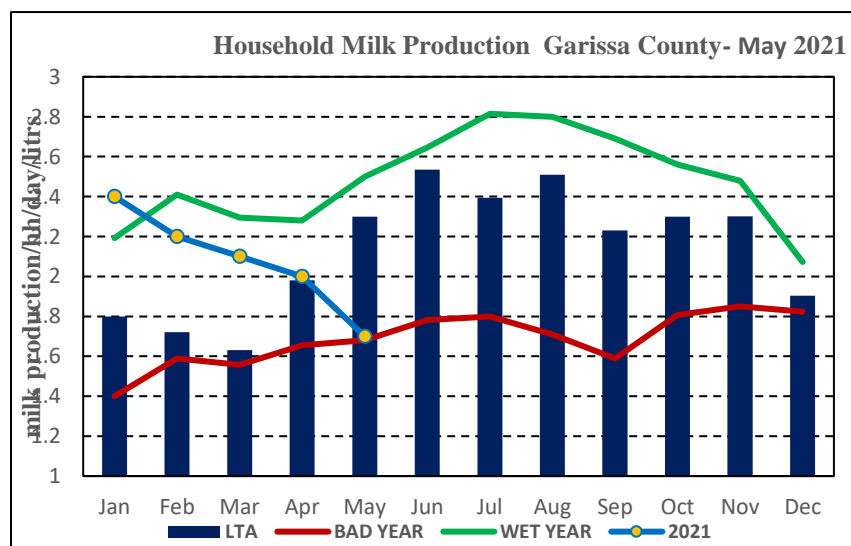


Figure 7: Current milk production against long term averages

3.1 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

The crops planted earlier in the season wilted and died hence no harvest expected in rain-fed farms.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- The average market price of a 4-year medium sized bull reduced slightly from Kshs. 18,150 to Ksh. 18,040 reported in May 2021.
- The current selling prices were 12 percent higher than the short term average prices.
- The markets in pastoral livelihood zone recorded the highest price of Kshs 21,500 while Kshs. 17,810 was recorded in agro pastoral livelihood zones.
- Volumes of cattle traded in the livestock markets was the same as compared with the previous month.

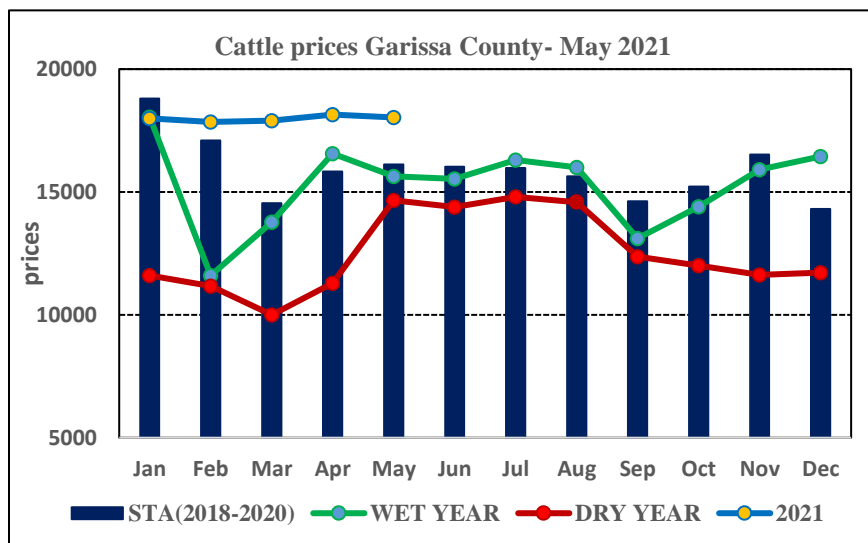


Figure 8: Trend in cattle prices

Small Ruminants Prices (Goats)

- The average trading price of a medium-sized three-year old goat increased from Ksh. 3,266 to Kshs. 3,467 in this reporting month.
- This increment is attributed to increased demand of goats during the Idd holiday.
- The current goat prices were 14 percent higher than the short term average price.

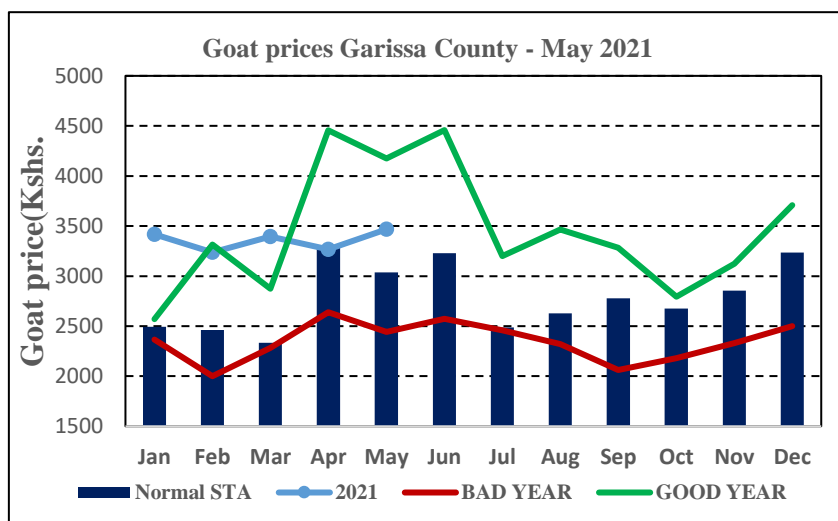


Figure 9: Trend in goat prices

4.2 CROP PRICES

4.2.1 Maize

- The average maize price was Ksh. 75 compared to Ksh.72 per kilogram registered the previous month.
- The current price was 15 percent above the short term average price.
- The price is expected to remain stable with the availability of other substitute cereals in the market at cheaper prices.
- The agro pastoral livelihood zone reported the lowest price of Ksh.65 per kilogram and highest at Ksh. 80 in pastoral livelihood zones.

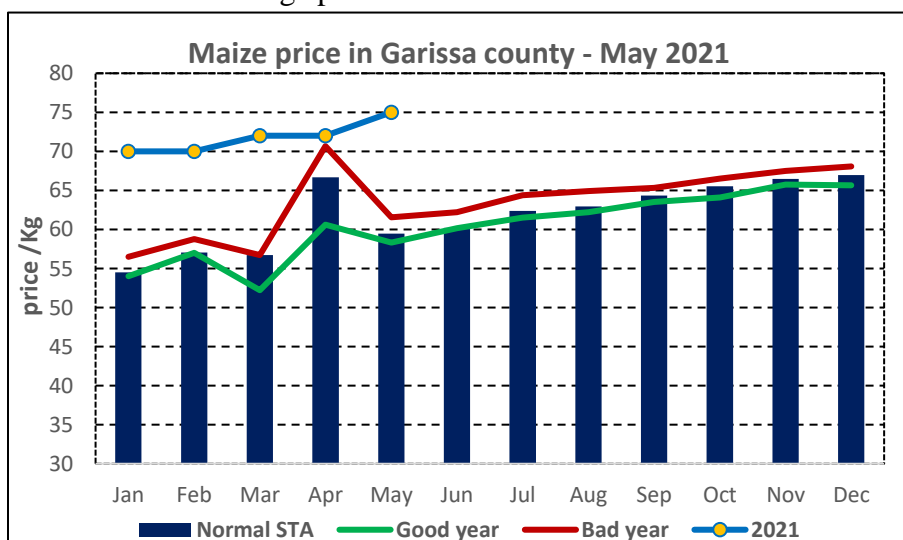


Figure 10: Trend in maize prices

4.2.2 Sifted Maize Meal

- The average selling price of a kilogram of sifted maize flour was Kshs 100 similar to the previous month.
- The price was within the long term average price
- The highest prices were recorded at pastoral livelihood zones at Kshs. 110 and lowest at agro-pastoral zones at Kshs. 95
- In pastoral communities sifted maize meal is a staple food due to its ease of preparation
- It is expected that the price will remain stable for long until when cost of production and transportation changes.

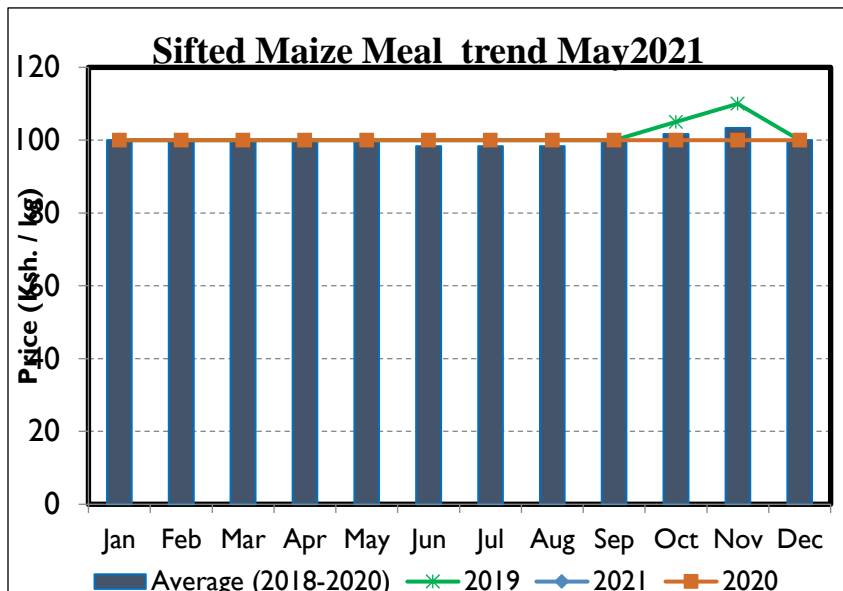


Figure 11: Trend in sifted maize meal

4.2.3 Terms of Trade (Goat prices vs Maize prices)

- The terms of trade increased slightly from 37.8 to 39.5 this reporting month.
- The terms of trade were 40 percent more than the short term average implying the communities have increased purchasing power are able to afford basic essential food stuffs.
- The terms of trade are expected to remain stable till the start of short rains season.
- The current terms of trade was slightly above the short term average for the month.

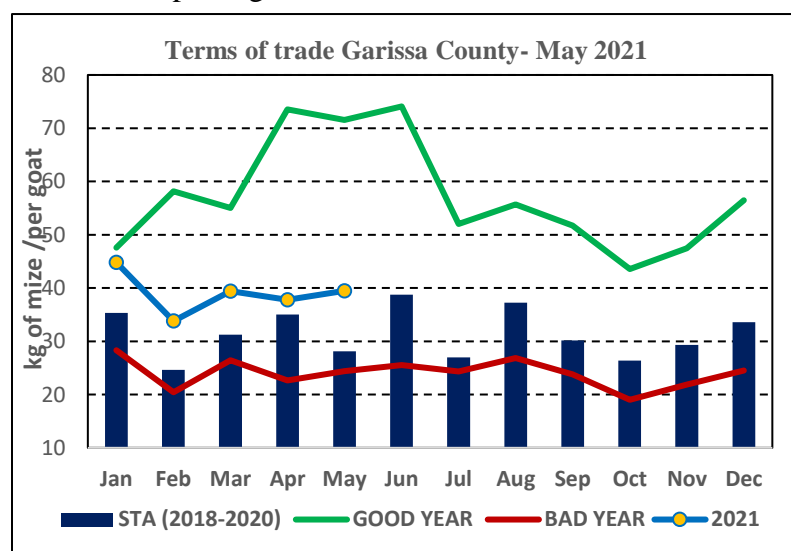


Figure 12: Terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- The average milk consumption at household increased slightly from 1.3 litres to 1.4 litres reported in May 2021.
- The average milk consumption was 37.8 percent lower than the long term average amount.
- Milk consumption is expected to decline due to anticipated reduced milk production as a result of depleted pastures and long trekking distances to water sources.

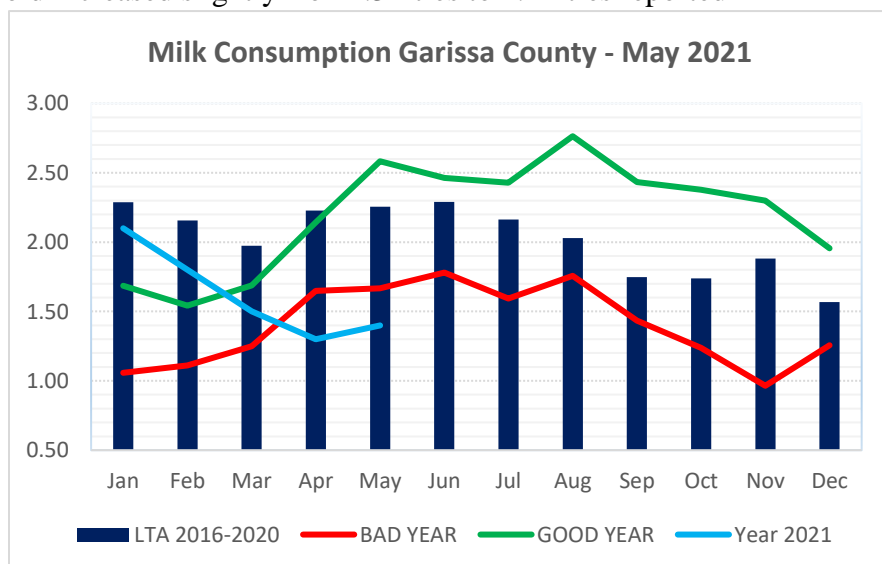


Figure 13: Milk consumption trend

5.2 FOOD CONSUMPTION SCORE

- The proportion of households categorized as having poor, borderline and acceptable food consumption scores was 4 percent, 24 percent and 72 percent respectively.
- 100 percent and 80 percent of households in agro pastoral and urban areas respectively were observed to have acceptable food consumption score while 18 percent of households in pastoral livelihood zones had poor food consumption score.
- Majority of households were consuming staples and vegetables every day, accompanied by oil and pulses a few days per week.
- The mean food consumption score for the month was of 41.43

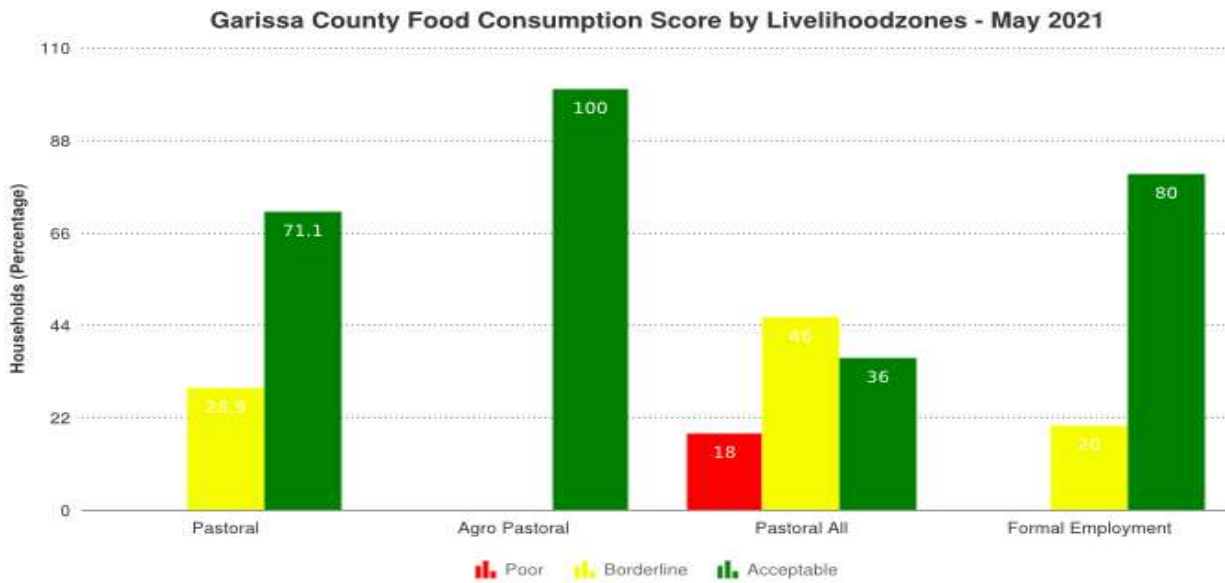


Figure 14: Food Consumption score

5.3 HEALTH AND NUTRITION

5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition during this month of May 2021 increased from 6.8 percent to 7.5 percent
- The proportion of moderately malnourished of children 6-59 month slightly increased from 6.5to 6.9percent based on family MUAC.
- The worsening nutritional status was attributed to decline food and milk consumption as well as increased incidences of water borne diseases and malaria among the under-fives.
- The number of meals consumed in the pastoral and agro pastoral livelihood zone was 1-2 meals per day that was normal at this time of the year.

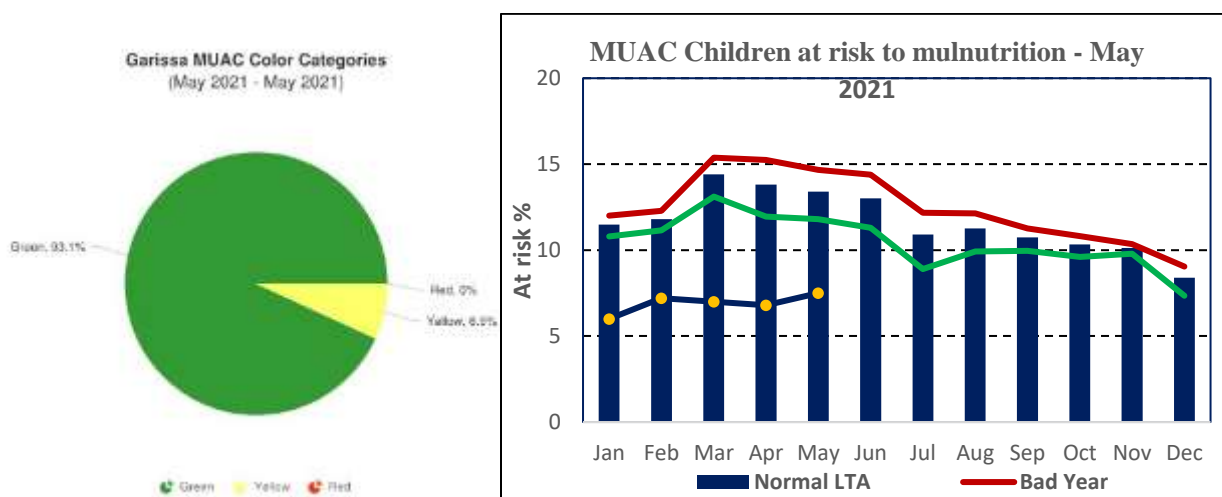


Figure 15: Proportion of at risk and moderately malnourished children

5.3.2 Health

- Diseases reported from health facilities, Upper Respiratory Tract Infection (URTIs), diarrhea and malaria for under five years were the main, for the general population urinary tract infection was reported to be the highest.
- Other diseases reported were Typhoid which increased due to contaminated food,
- Cases of Covid-19 infections continue to be reported.

5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) for the month was 10.3 comparable to 10.5 reported the previous month.
- Formal employment/waged labour livelihood zone recorded the highest of 29.3 while pastoral all species livelihood zone recorded the lowest at 3.9
- The most strategies employed include reduced number of meals eaten per day and reliance on less preferred or less expensive food
- The trend implied that households had not significantly increased or decreased the frequency or severity of consumption based coping strategies used to mitigate food deficits between current year and similar period.

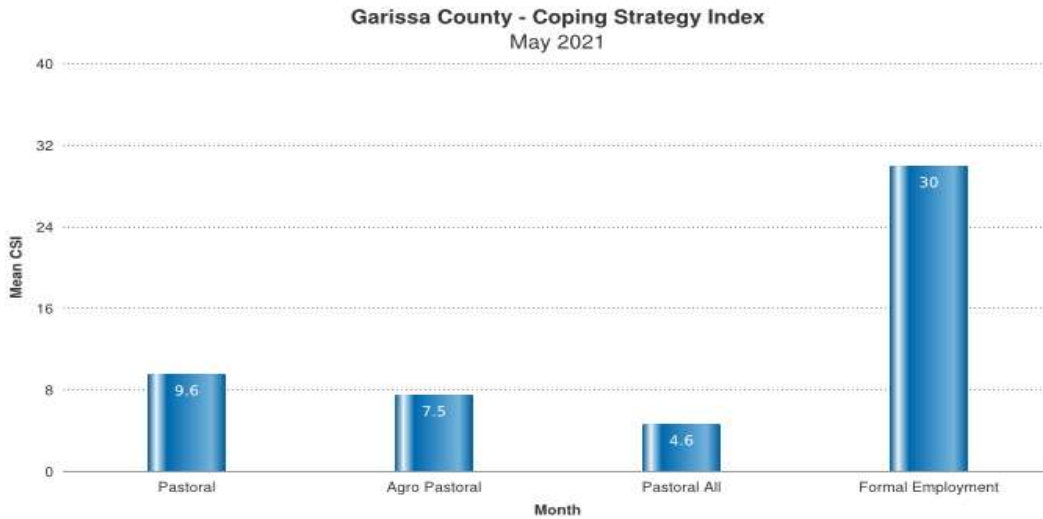


Figure 16: Coping strategy index

6. CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTION

Table 1 Non-food interventions

Activity	Beneficiaries	Implementers
Provision of Extension Services and Agri nutrition trainings for youth and farmers	3,000 households	County Govt of Garissa/WFP
Disease surveillance, vaccination and control of vectors	Livestock owners	Veterinary Department
Water trekking to 106 sites on-going	25,000 persons	Water department and stakeholders
Improvement of water supply	Masalani water supply	Water works
Repair and maintenance of 6 boreholes	54,000 persons	Water department

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- During the month no resource based conflicts were reported. Conflict between communities of Lagdera Sub County and isiolo south was reported, a number of fatalities were reported on both sides and conflict resolution mechanism is ongoing.
- Terror related threats continued to be experienced in areas bordering the Republic of Somalia resulting to limited livelihood activities.

7.2 Migration

7.3 Livestock outmigration to areas of Lamu county, Koran national park in meru and cross border to Somalia was reported during the month.

7.4 FOOD SECURITY PROGNOSIS

- The season performance is reported to be below normal as predicted by meteorology
- Forage and water resources reduced and remained below the seasonal level, livestock body condition reduced and is expected to deteriorate further negatively impacting on milk production and availability.
- Food commodity prices are expected to remain stable but above five-year averages.

- Livestock prices are expected to reduce but may remain the short term averages, the season livestock prices is expected to fall below normal as the dry spell progress.
- Household's food consumption score is expected to deteriorate further with more households falling under the poor food consumption category. The same households are expected to employ crisis based coping strategies
- Modogashe and maalimin ward was flagged off with water related stress.

8. RECOMMENDATIONS

Table 2. Recommended interventions

Sector	Sub County	Recommended Intervention
Livestock	Lagdera /Balambala/Dadaab /Fafi	Livestock vector control and treatment and vaccination.
	Lagdera /Balambala/Dadaab /Fafi	Sensitization for early owners led livestock commercial off take.
	Lagdera /Balambala/Dadaab /Fafi	Prepositioning of Livestock feed supplement.
	Lagdera /Balambala/Dadaab /Fafi	Traders subsidy and market operanization
	Lagdera /Balambala/Dadaab /Fafi	Up scaling of livestock insurance programme
	Lagdera /Balambala/Dadaab /Fafi /Ijara	Strengthen extension service provision to livestock owners .
Health	Township/Balambala /fafi /Ijara Dadaab/Lagdera	providing water treatment chemicals to areas prone to water borne diseases
	All subcounties	Active case finding
		Integrated outreaches for hard to reach areas
Water	Lagdera /Balambala/Dadaab /Fafi	Protection of water sources
	Lagdera/fafi/Dadaab	Provide fast moving spare parts for strategic boreholes
		Repair and maintenance of strategic boreholes
Coordination	Lagderaand .Balambala	Community peace buildings and dialogues