

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



A Vision 2030 Flagship Project



JUNE 2021 EWS PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- The county received an average of 7.5mm of showers which was below the long term average amount.
- The 3-month VCI was 29.37 indicating moderate vegetation deficits and was below the long term average for the period.
- Pasture condition was poor in all livelihood zones with exception of Ijara sub county which had fair pasture condition
- Both household 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 2.5 litres.
- Milk consumption was an average of 1.2 litres which was greatly below the long term average amount of 2.29 litres.
- Market prices for all livestock species remained within the normal ranges.
- The terms of trade were 38.1 against the long term average of 51.0
- The mean coping strategy index (CSI) was 11.3 for the month against a long term average of 12.5.
- 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 38.12 which was below the long term average of 41.36.

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	7.5mm	13.3mm
VCI-3Month	29.37	50.1
Forage condition	Poor	Fair
Production indicators	Value	Normal
Livestock Body Condition	2	2
Milk Production	1.5 litres	2.5 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)	37.1	51.0
Milk Consumption	1.2 litres	2.29 litres
Return grazing distance to water sources in km	23.8km	18.0km
Cost of water at source (20 litres)	Kshs 5	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	7.4	12.8
Coping Strategy Index (CSI)	11.3	12.5
Food Consumption Score(mean)	38.12	41.36

<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 county received an average of 7.5mm of off season showers in the month of June 2021 which was below the long term average amount for the month.
- The county is expected largely to remain dry(generally dry conditions) with light showers expected on the southern parts (the areas bordering costal Kenya)which is expected to be below average .
- The temperatures are expected to range between 24C⁰-28C⁰. Which are slightly below average.

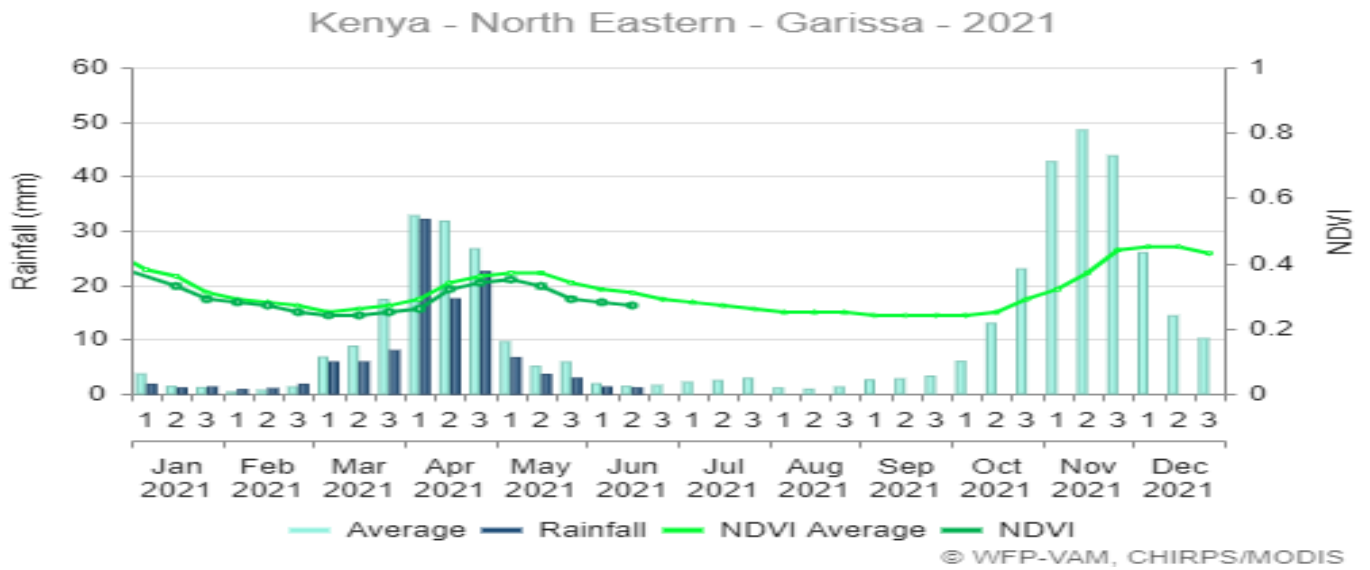


Figure 1: Rainfall and NDVI trend

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 June 2021 was 29.37 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.
- Lagdera sub-county was in the severe vegetation deficit band, similar to the previous month. .
- The current 3-month VCI was below the long term average but within the base year of 2017.

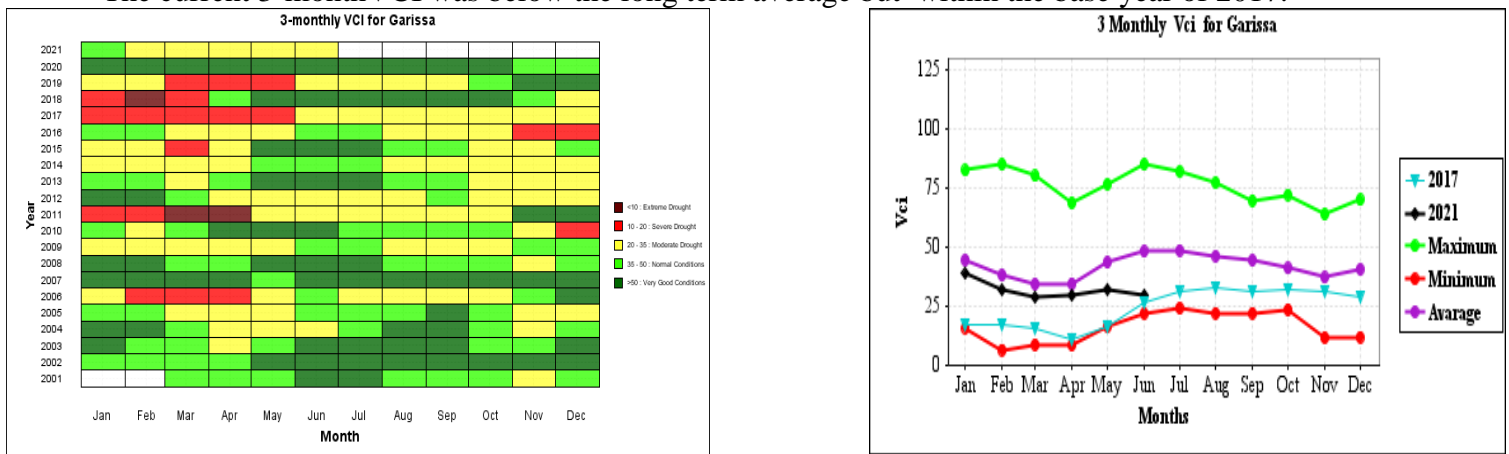


Figure 2: VCI graph and matrix

2.1.2 Pasture and browse condition

- It was reported that 93.3 percent of pasture condition in the county was poor. Only Ijara and Hulugho sub-counties had pasture in fair condition.
- The forage condition is worsening because of poor March-April-May rains and the beginning of windy dry spell in June
- Browse condition is fair to poor and is expected to continue diminishing as the dry spell progresses.

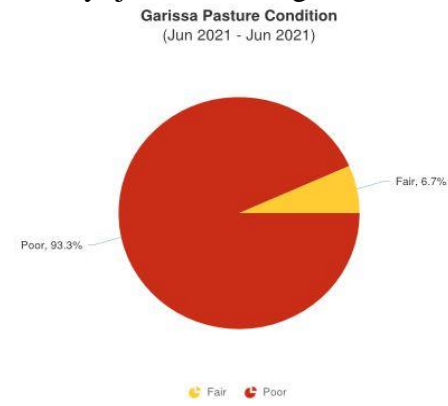


Figure 3: Pasture condition

2.2 WATER RESOURCE

2.2.1 Sources

- Main sources of water currently are pans and dams, River Tana, boreholes and shallow wells as presented in the pie chart.
- Over 60 percent of water pans dry up, the remaining water pans have less than 50 percent full and will supply water for domestic and livestock consumption for less than a months.
- The dry weather conditions coupled with temperatures experienced in June has increased the rate of evaporation in water sources increasing the risk of them drying up quickly.

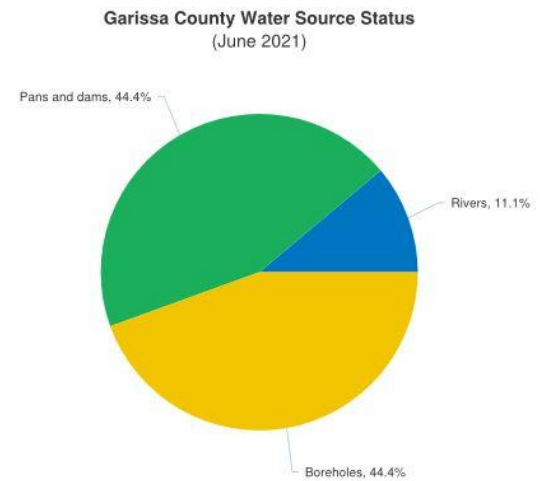


Figure 4: water sources

2.2.2 Household access and Utilization

- The average return distances from households to water sources increased from 10.3km to 10.6km in this reporting month.
- This is attributed to very little rain received in May and onset of dry spell in June coupled with high evaporation rate in water pans because of high temperatures and windy condition.
- The current distance is 72 percent longer than the long term average distance for the month
- The average water consumption per household per day is 8liters in pastoral livelihood zones and 20liters for households in the agro-pastoral livelihood zone against a normal of 30 liters/household per day.

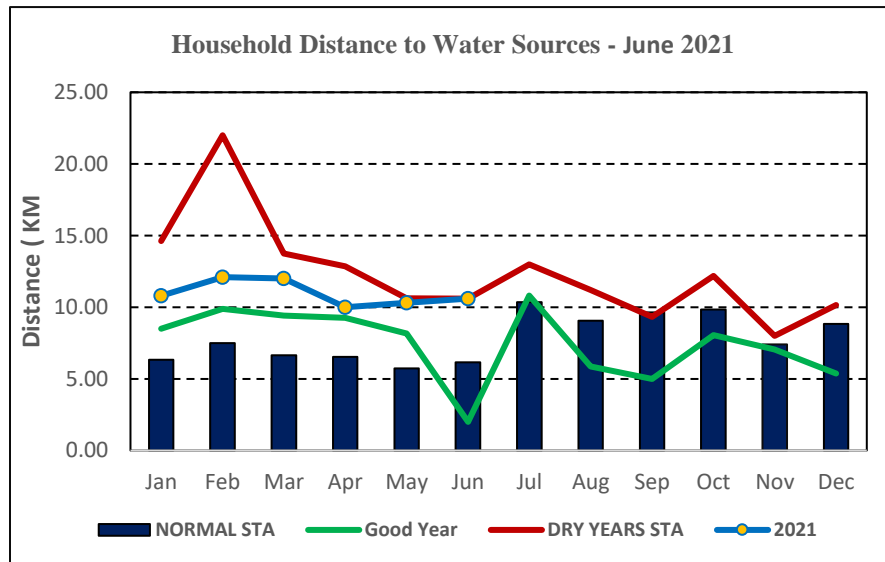


Figure 5: Household return distances to water sources

2.2.3 Livestock access

- The average trekking distance from grazing areas to water sources increased slightly was 23.8 km.
- The pastoral all species livelihood zone recorded the longest trekking distance of 29.4km while agro-pastoral zones had the shortest distances at 18.9km.
- The current trekking distances were 23 percent longer than the long-term average distance for the month.
- The grazing distances are increasing as a result of minimal forage regeneration because of poor rains and onset of dry spell period.

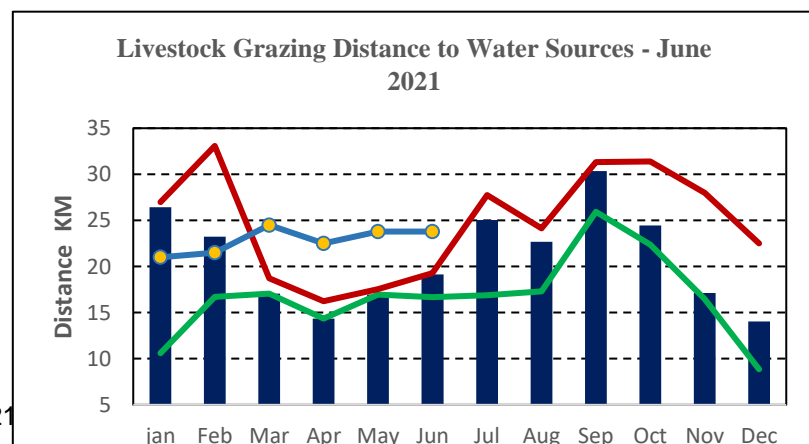


Figure 6: Livestock return distances to water sources

- Livestock watering frequencies is 3 times a week for small stocks and 5 times for cattle in many watering points.
- The waiting time for water in pastoral and agro pastoral livelihood zones increased significantly due to drying up of water pans, high concentration of water points for both human and livestock

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock in the county were observed to have fair to poor body condition. The body condition of cattle in pastoral and agro livelihood zones was fair to poor compared to good to fair expected at this time of the year. Goat and camel had fair body condition across the livelihood zones, while cattle and sheep had fair to poor body condition which was below normal.
- The body condition of livestock was mainly due to poor regeneration of pasture and browse available, however, the condition is likely to worsen with the onset of dry seasons, increased distances to water and pasture and increased cases of vector borne related diseases.

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 decreased slightly from 1.6 litres to 1.5 litres in this reporting month.
- Milk production trend was due to poor forage condition for livestock that is for body maintenance coupled with long trekking distances
- Production was 36 percent lower than the long term average for the month.
- The production of milk is likely to continue declining further as livestock have started migrating to dry period grazing areas and cross border to Somalia.
- The cost of milk ranges between kshs 80 and 90 in agro pastoral and pastoral livelihood zones respectively

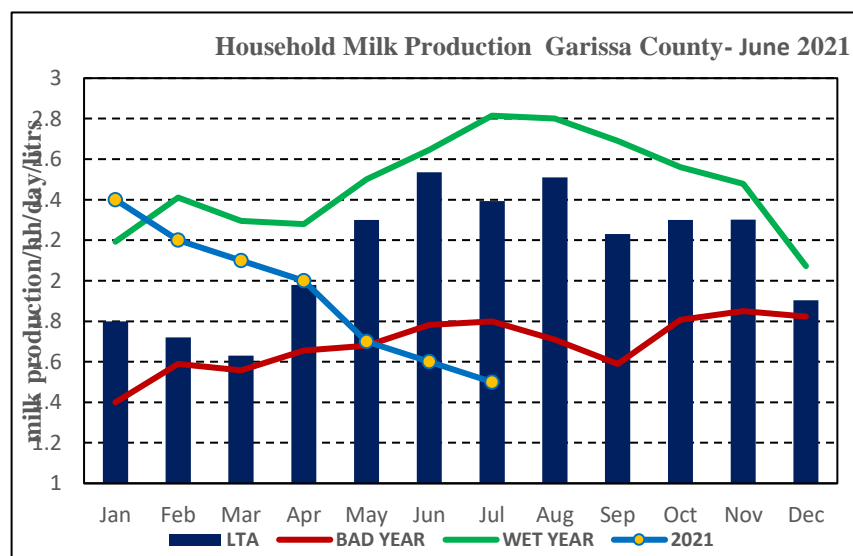


Figure 7: Current milk production against long term averages

3.1 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

No farming activities is taking place in rain-fed farms across the county.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- The average market price of a 4-year medium sized bull was Kshs. 17,800, which is a reduction from Kshs. 18,040 recorded the previous month.
- The current selling prices were 11 percent higher than the short term average prices.
- The markets in pastoral livelihood zone recorded the highest price of Kshs 21,300 while Kshs. 16,420 was recorded in agro pastoral livelihood zones.
- Volumes of cattle traded in the livestock markets was the same as compared with the previous month.

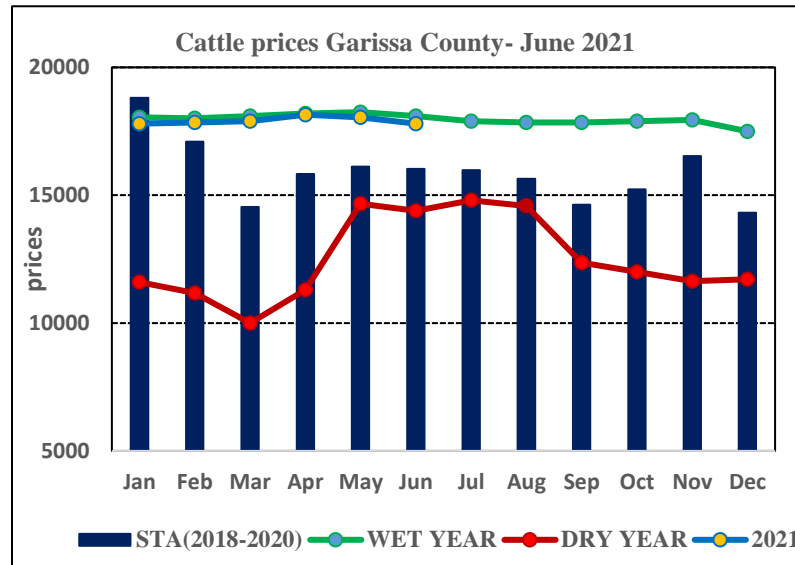


Figure 8: Trend in cattle prices

4.1.2 Small Ruminants Prices (Goats)

- The average trading price of a medium-sized three-year old goat reduced from Kshs. 3,467 to Kshs. 3,390 in this reporting month.
- The current goat prices were 5 percent higher than the short term average prices but lower than the same period of good years by 24 percent .
- It is expected prices to reduce further as the dry spell progresses affected the purchasing powers of the pastoralist.

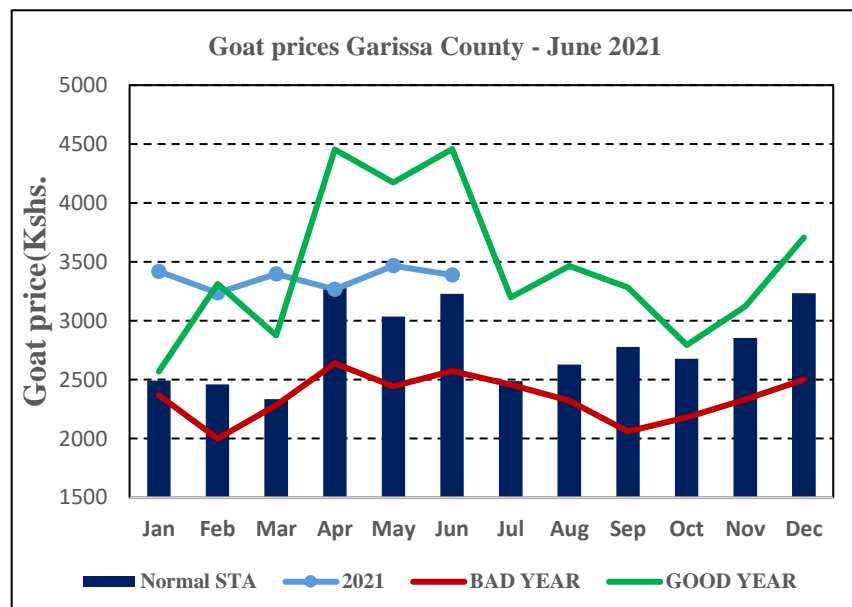
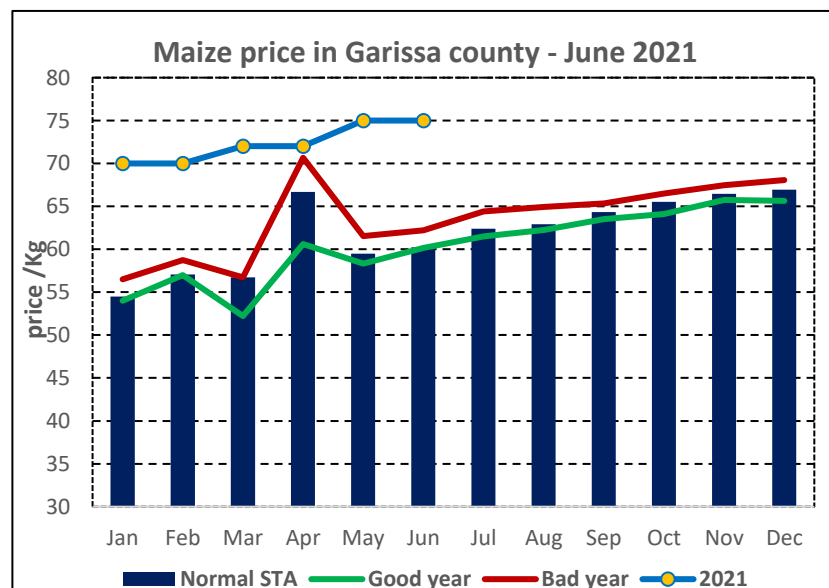


Figure 9: Trend in goat prices

4.2 CROP PRICES

4.2.1 Maize

- The average maize price of a kilogram of maize was Ksh. 75 similar to the previous month.
- The current price was 13 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.



GARISSA DROUGHT MONITORING BULLETIN JUNE 2021 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.

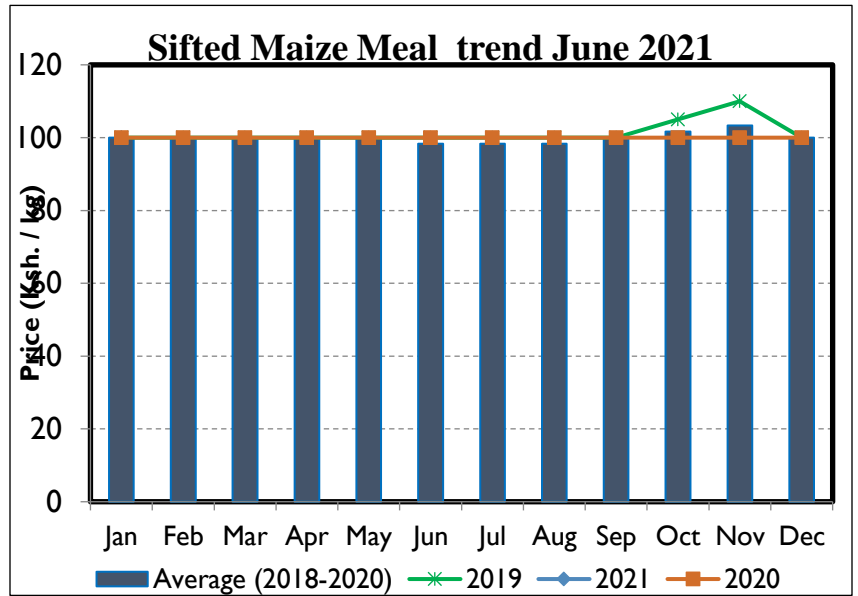


Figure 11: Trend in sifted maize meal

4.2.3 Terms of Trade (Goat prices vs Maize prices)

- The terms of trade decreased slightly from 39.5 to 38.1 this reporting month as compared to the previous month.
- The terms of trade were within the short term average implying the communities have decreasing purchasing power and are not able to afford some basic essential food stuffs.
- The terms of trade are expected to remain stable till the start of short rains season.

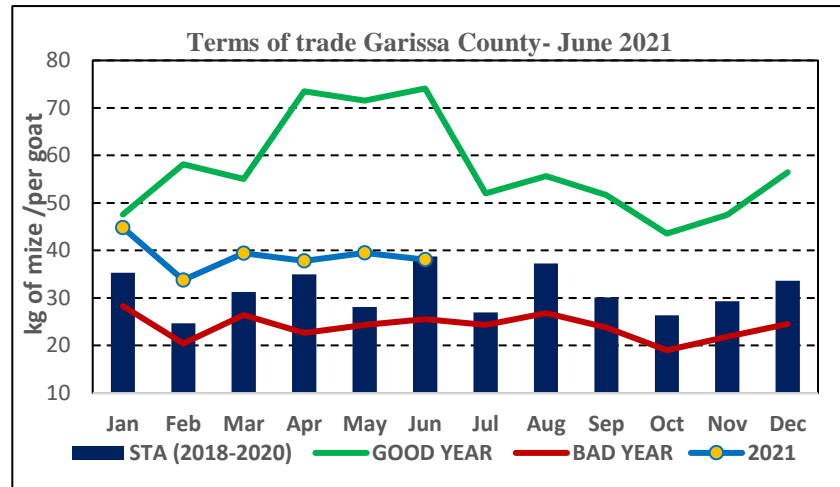


Figure 12: Terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- The average milk consumption at household decreased from 1.4 litres reported in May 2021 to 1.2 litres recorded this month.
- The average milk consumption was 47.6 percent lower than the long term average amount.
- Milk consumption is declining due to reduced milk production as a result of depleted pastures and longer trekking distances to water sources.

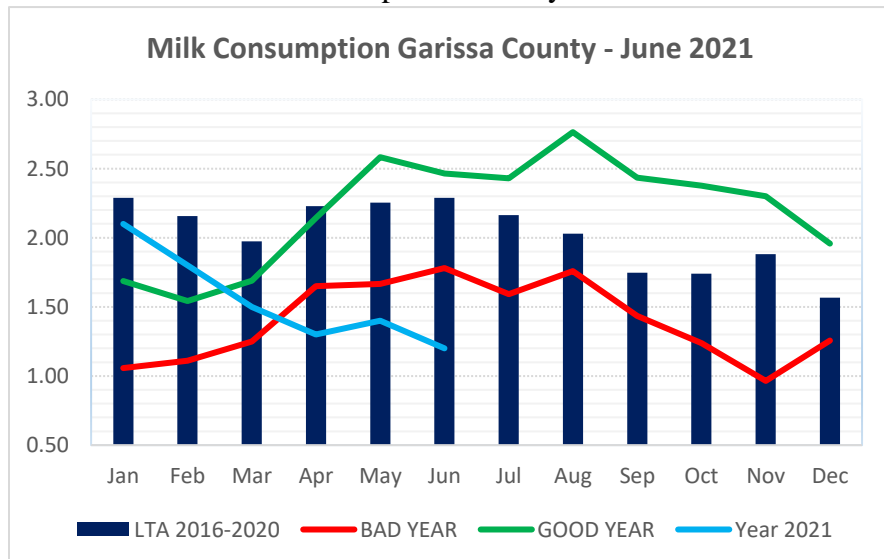


Figure 13: Milk consumption trend

5.2 FOOD CONSUMPTION SCORE

- The proportion of households categorized as having poor, borderline and acceptable food consumption scores was 13 percent, 23 percent and 64 percent respectively.
- 96.7 percent and 90 percent of households in agro pastoral and urban areas respectively were observed to have acceptable food consumption score while 78.1 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 38.12

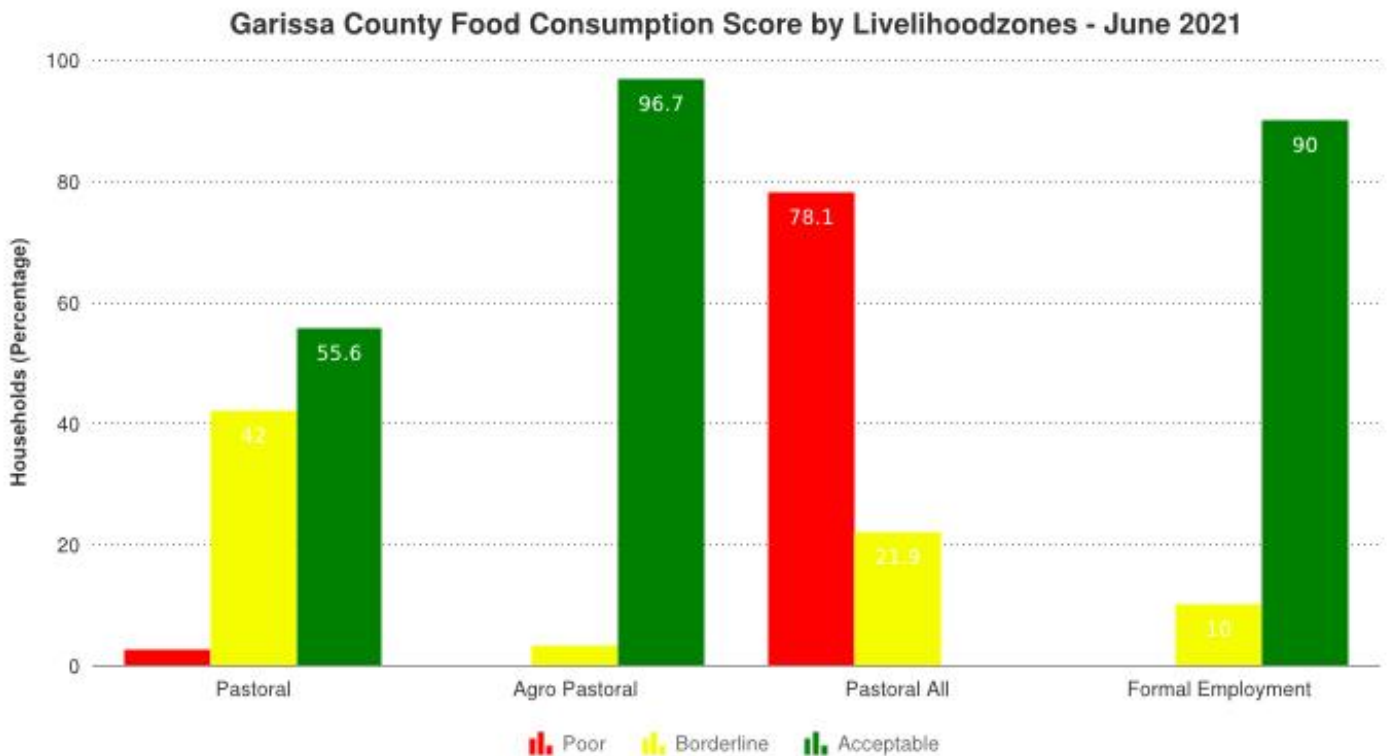


Figure 14: Food consumption score

5.3 HEALTH AND NUTRITION

5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition during this month of June 2021 was 7.4 percent, quite comparable to the previous month.
- The proportion of moderately malnourished of children 6-59 month slightly decreased from 6.9 to 6.1 percent based on family MUAC.
- The worsening nutritional status was attributed to decline food and milk consumption as well as increased incidences of diseases and among the under-fives.
- This month's proportion of children at risk of malnutrition was 43 percent lower than the long term mean
- 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.

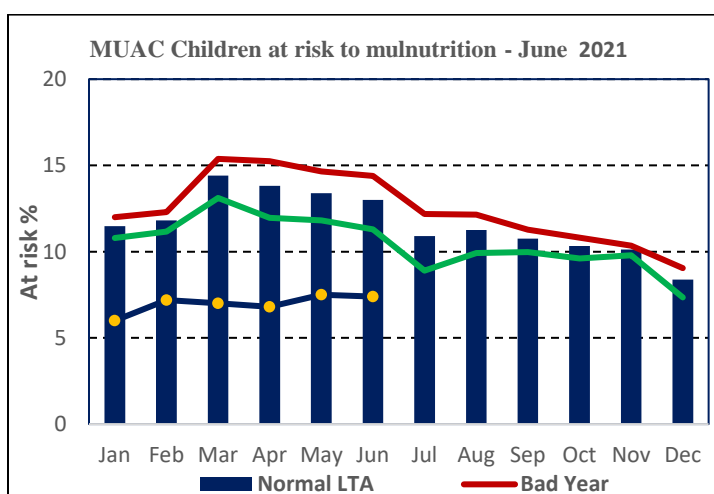
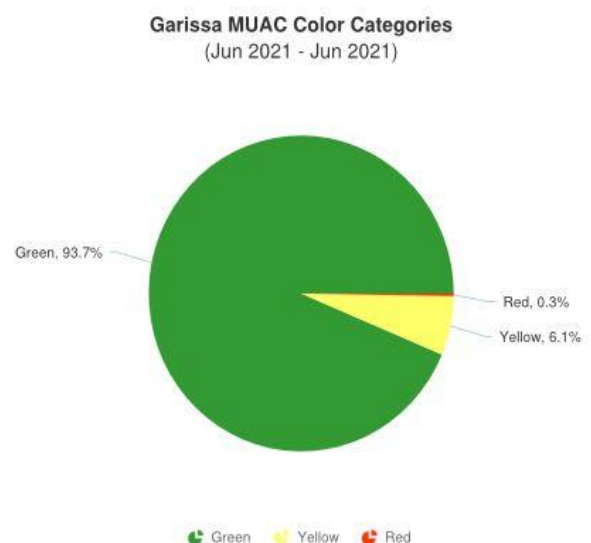


Figure 15: Proportion of at risk and moderately malnourished children



5.3.2 Health

- The most common diseases in the both under-fives and general population were Upper Respiratory Tract Infection (URTIs), diarrhea and malaria.
- Other diseases reported were water quality related such as scabies and typhoid.
- Cases of Covid-19 infections continue to be reported.

5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) for the month was 11.33 compared to 10.3 recorded the previous month.
- Formal employment/waged labour livelihood zone recorded the highest of 30 while pastoral all species livelihood zone recorded the lowest at 6.1
- 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 the previous year.

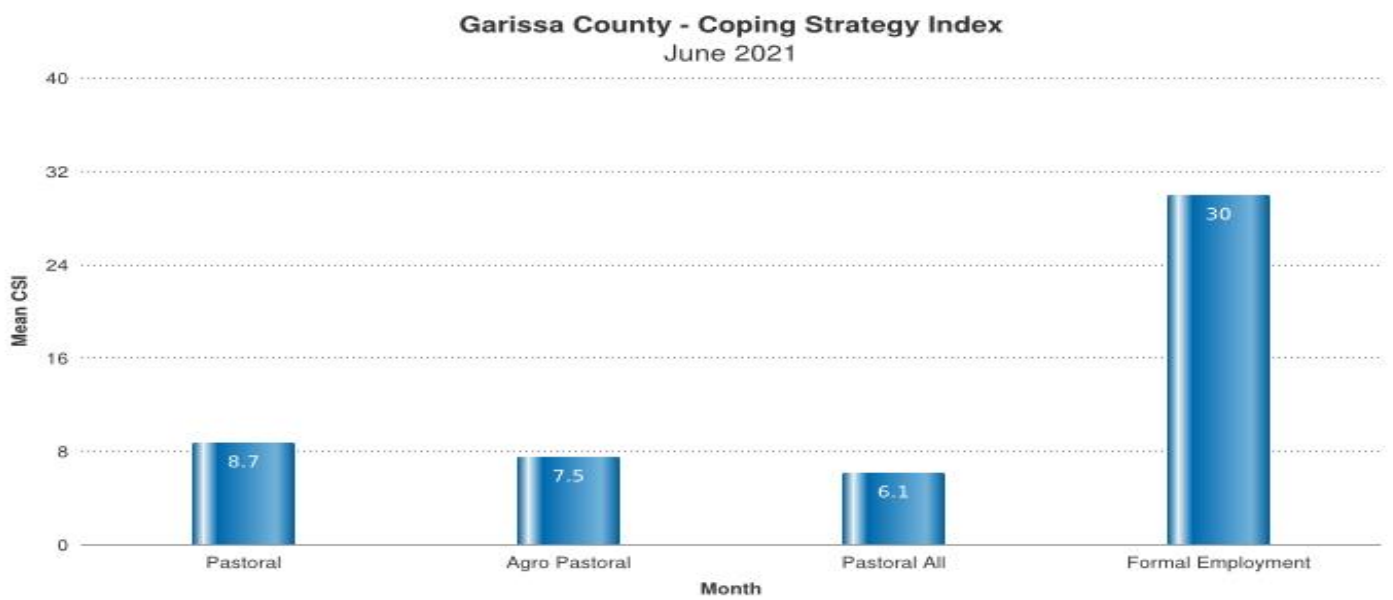


Figure 16: Coping strategy index

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
Registration of households	Sankuri ward	NDMAH SNP
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
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.
- Terror related threats continued to be experienced in areas bordering the Republic of Somalia resulting to limited livelihood activities.

7.2 Migration

More Livestock out migration was reported to a cross border to Somalia. 30 percent of small stocks, 60 percent of cattle and 40 percent of cattle are expected to be outside the county .

7.3 FOOD SECURITY PROGNOSIS

- According to Kenya Metrological Department (KMD) and IGAD climate prediction centre no rainfall is expected to continue during the period of June-July-August 2021
- 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 and move below 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
- Lagdera sub county need to be monitored for water related stress.

8. RECOMMENDATIONS

Table 2. Recommended interventions

Sector	Sub County	Recommended Intervention
Livestock	Lagdera /Balambala/Dadaab /Fafi	Disease surveillance, vaccination and control of vectors.
	Lagdera /Balambala/Dadaab /Fafi	Livestock feed supplementation
	Lagdera /Balambala/Dadaab /Fafi	Water for livestock.
	Lagdera /Balambala/Dadaab /Fafi	Traders subsidy and market operanization
	Lagdera /Balambala/Dadaab /Fafi	Up scaling of livestock insurance programme
Health	Township/Balambala /fafi /Ijara Dadaab/Lagdera	providing water treatment chemicals to areas prone to water borne diseases
	All subcounties	Nutrition and disease surveillance
		Integrated outreaches for hard to reach areas
Water	Lagdera /Balambala/Dadaab /Fafi	Repair and maintenance of strategic boreholes in specific areas
	Lagdera/fafi/Dadaab	Provide fast moving spare parts for strategic boreholes
		Activation of rapid response teams
Coordination	Lagderaand .Balambala	Community peace buildings and dialogues