

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



A Vision 2030 Flagship Project



APRIL 2021 EWS PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- The county received an average of 25.1mm of rainfall compared to 32.2mm long term average.
- The 3-month VCI was 29.29 indicating moderate vegetation deficit and was below the long term average for the month.
 - Pasture condition was fair to poor 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 of cattle was fair to poor while that of sheep, goats and camels was fair to good.
- Average milk production was 2.0 litres against the long term average of 2.6 litres.
- Milk consumption was at an average of 1.3 litres against the long term average amount of 2.3 litres
- Market prices for all livestock species remained within the normal ranges.
- The terms of trade were 37.9 against the long term average of 49.0
- The mean coping strategy index (CSI) was 10.3 for the month
- Proportion of children below five years at risk of malnutrition was 6.8 percent against the long-term mean of 13.6 percent
- The mean food consumption score was 42.1 compared to long-term average of 44.2

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Alert	Improving
Pastoral cattle/sheep	Alert	Improving
Pastoral-all species	Alert	Improving
County	Alert	Improving
Biophysical Indicators	value	Normal Range/Value
Rainfall)	20%	30%
VCI-3Month	29.29	32.1
Forage condition	Fair to Poor	Fair
Production indicators	Value	Normal
Livestock Body Condition	2	2
Milk Production	2.0 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)	37.9	49.0
Milk Consumption	1.3 litres	2.3 litres
Return grazing distance to water sources in km	22.5km	15.3km
Cost of water at source (20 litres)	Kshs 5	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	6.8	13.6
Coping Strategy Index (CSI)	10.3	14.1
Food Consumption Score(mean)	42.1	44.2

<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 but with a false start.
- The county received an average of 25.1mm of rainfall against the long term average amount of 32.2 mm.
- The temporal distribution was un even and spatial distribution of the rainfall was poor.

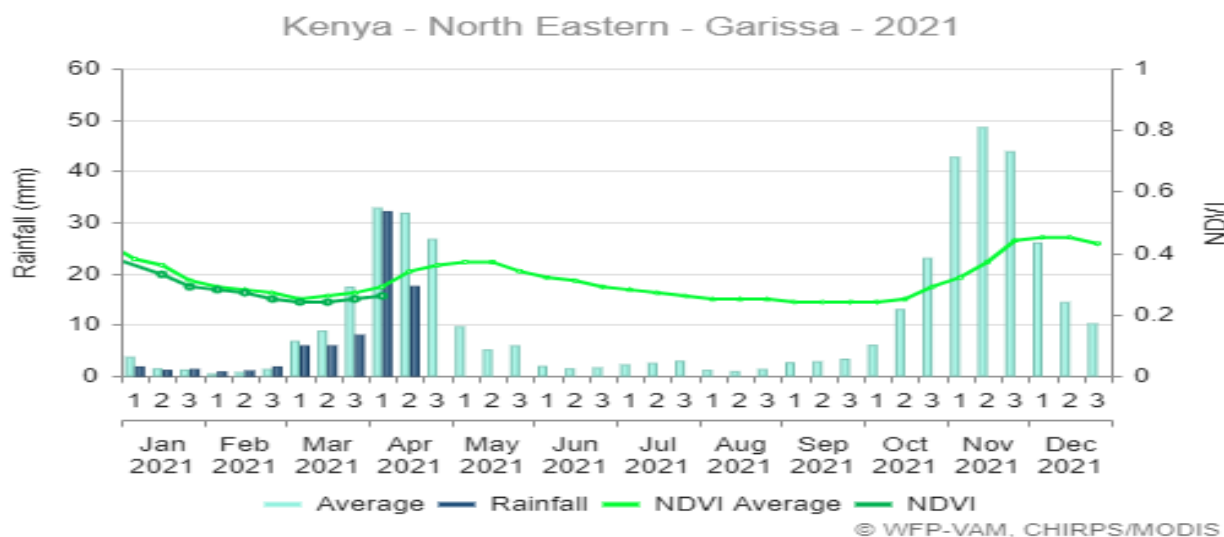


Figure 1: Rainfall and NDVI trend

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 April 2021 was 29.29 indicating moderate drought condition similar to the previous month.
- Five sub-counties, namely: Daadab, Lagdera, Fafi, Township and Balambala were classified to be in moderate vegetation deficit category while Ijara sub-county had normal vegetation greenness, comparable to the month of March 2021.
- The current 3-month VCI was slightly below the long term average and higher than the base year of 2017.

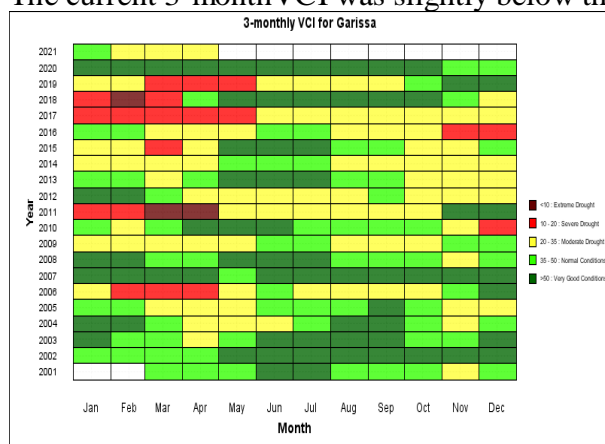
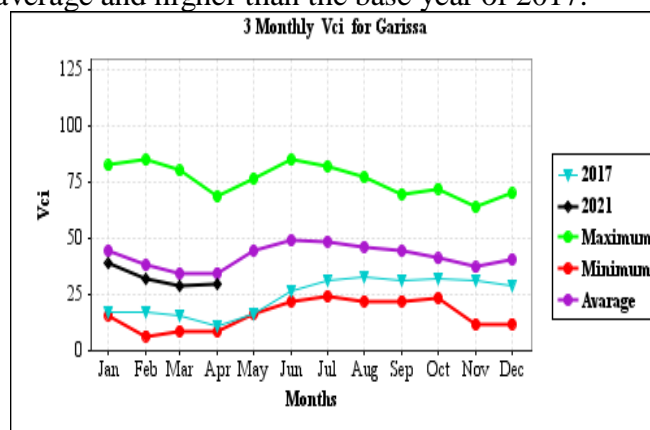


Figure 2: VCI graph and matrix



2.1.2 Pasture and browse condition

- It was reported that 72 percent and 24 percent of pasture and browse respectively was in poor condition across the county.
- The poor status of forage was observed across all sub-counties with exception of Ijara and Hulugho which receive some rains in the course of the month.
- Pasture and browse condition slightly improved when compared with the previous month.

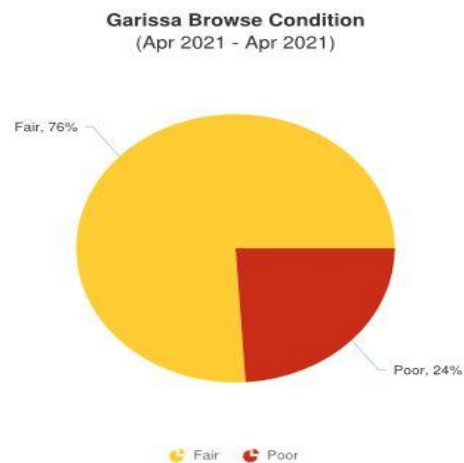
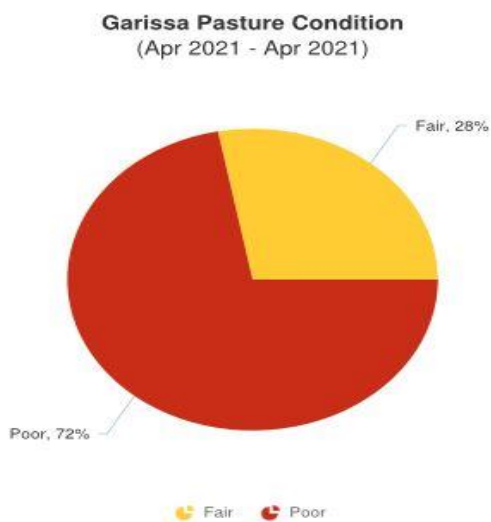


Figure 3: Pasture and Browse Condition

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.
- Water pans are currently in use for both livestock and households, in some areas boreholes are still operation as opposed to resting period observed normally.
- The rains received in some parts of the county were able to recharge a few pans.

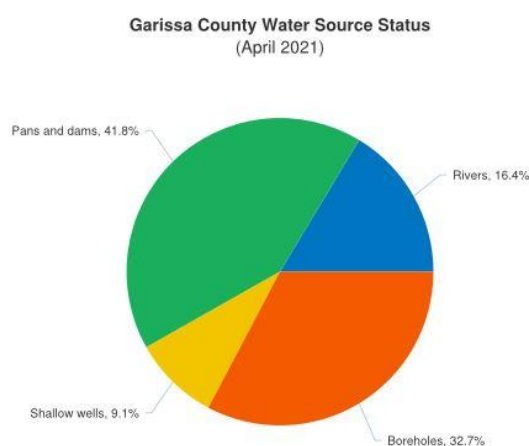


Figure 4: Water sources

2.2.2 Household access and Utilization

- The average return distances from household to water sources reduced from 12.1km to 10.0km
- This is attributed to the rains received in course of the month which were below the long term average
- The current distance is 37.8 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 25 litres for households in the agro-pastoral livelihood zone against a normal of 30 liters/household per day

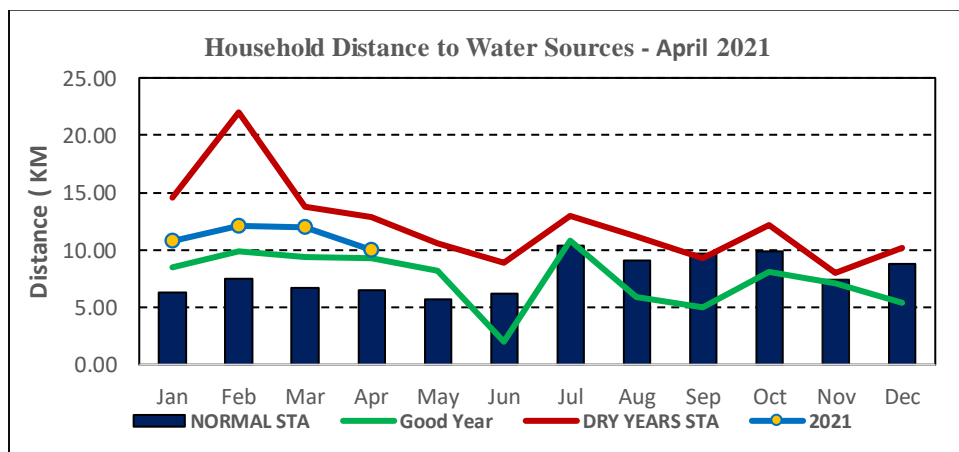


Figure 5: Household return distances to water sources

2.2.3 Livestock access

- The average trekking distance from grazing areas to water sources reduced slightly from 24.5 km to 22.5 km reported in April 2021.
- The pastoral all species livelihood zone recorded the longest trekking distance of 27.9 km while agro-pastoral zones had the shortest distances at 18.2 km.
- The current trekking distances were 55 percent longer than the long-term average for the month.
- The distances are expected to decrease with regeneration of forage enhanced with the onset of long rains
- Livestock watering frequencies is 3 times a week for small stocks and 5 times for cattle in many watering points.

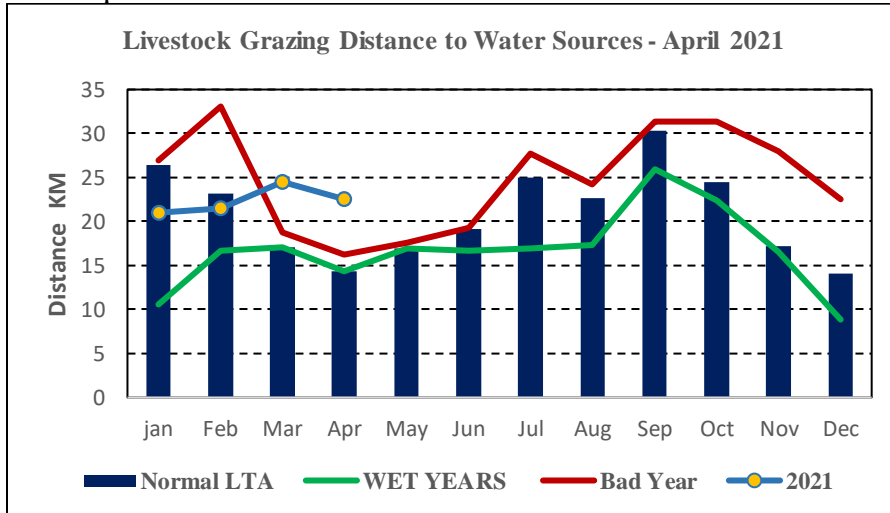


Figure 6: Livestock return trekking distances to water sources

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. The most affected species were cattle and sheep.
- With the ongoing long rains season likely to improve forage growth, livestock body condition is anticipated to improve.

3.1.2 Livestock Diseases

- No major livestock disease outbreak was reported during the month, however suspected cases of lumpy skin disease was reported in abakaile ward.
- Endemic Contagious Caprine Pleuropneumonia (CCPP) and Contagious Bovine Pleuropneumonia (CBPP) continue to be reported across the livelihood zones.
- 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 slightly reduced from 2.1 litres to 2.0 litres recorded during this reporting month.
- Milk production may increase with expected availability of pasture due to ongoing long rains season.
- Production was within the long term average for the month but below the same period of a good years.

- 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.

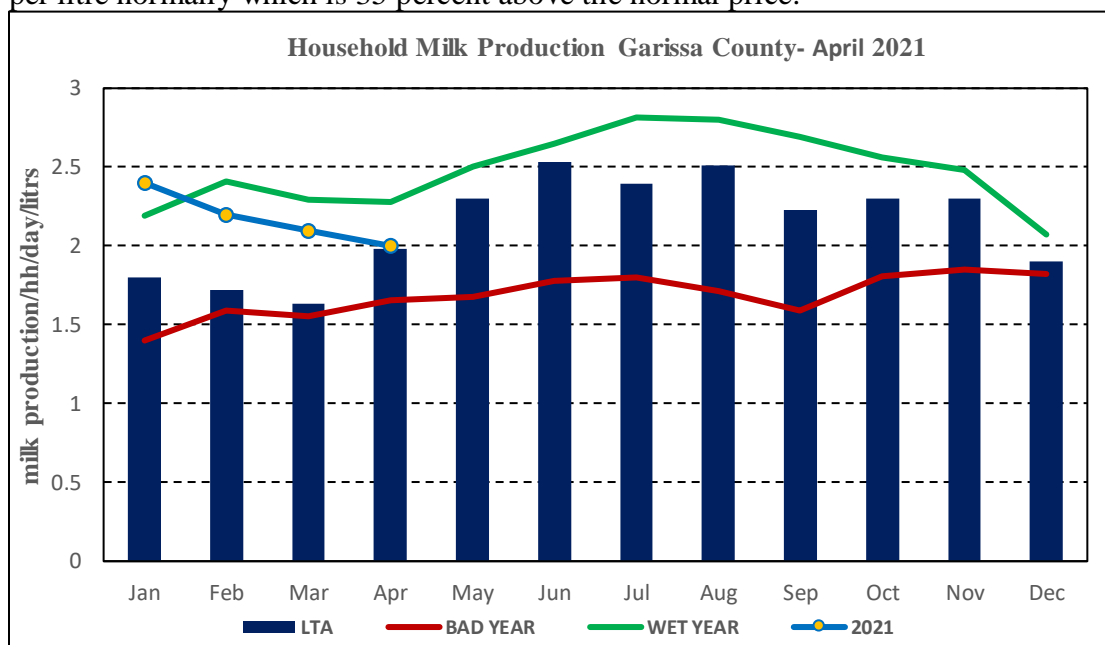


Figure 7: Current milk production against long term averages

3.1 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

Land preparation was done but with the poor onset of the season no crop was planted in rain fed areas

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. 18,150 compared to Ksh. 17,900 reported the previous month.
- The current selling prices were 9.6 percent higher than the short term average prices.
- The markets in pastoral livelihood zone recorded the highest price of Kshs 21,800 while Kshs. 17,600 was recorded in agro pastoral livelihood zones.
- Volumes of cattle traded in the livestock markets was the same as compared with the previous month.

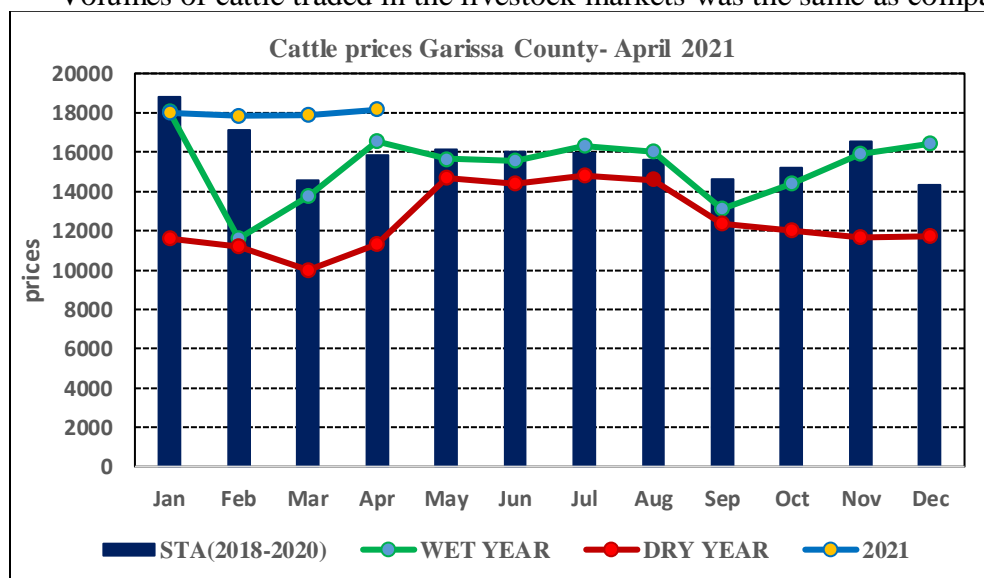


Figure 8: Trend in cattle prices

Small Ruminants Prices (Goats)

- The average trading price of a medium-sized three-year old goat was Ksh. 3,266 which is a slight drop from Kshs 3,396 recorded the previous month.
- The current goat prices were quite comparable to 2018-2020 short term average price.
- The prices are expected to increase as the short rains season commences which will catalyse forage regeneration and shorten water distances.

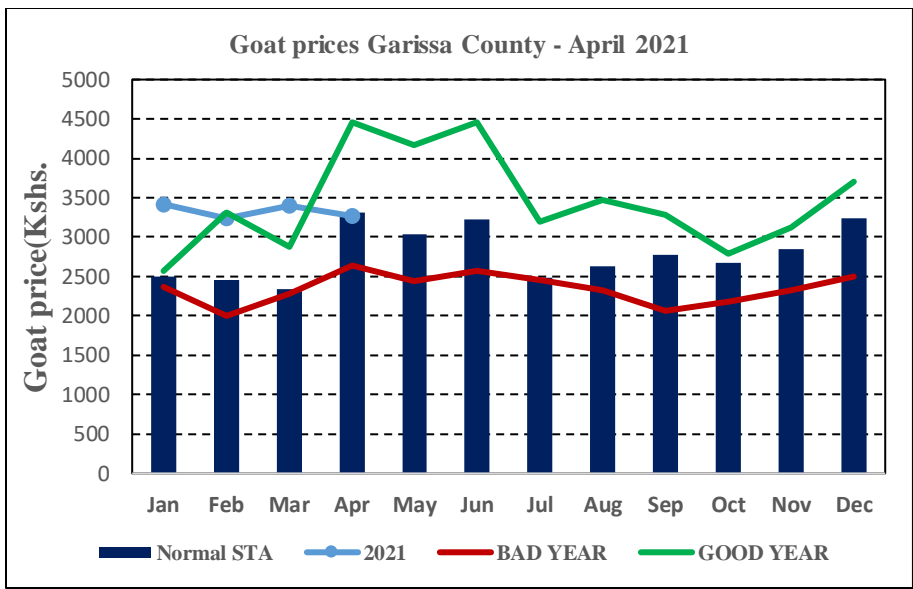


Figure 9: Trend in goat prices

4.2 CROP PRICES

4.2.1 Maize

- The average maize prices were Ksh.72 per kilogram similar to the previous month.
- The current price was 8 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.68 per kilogram.

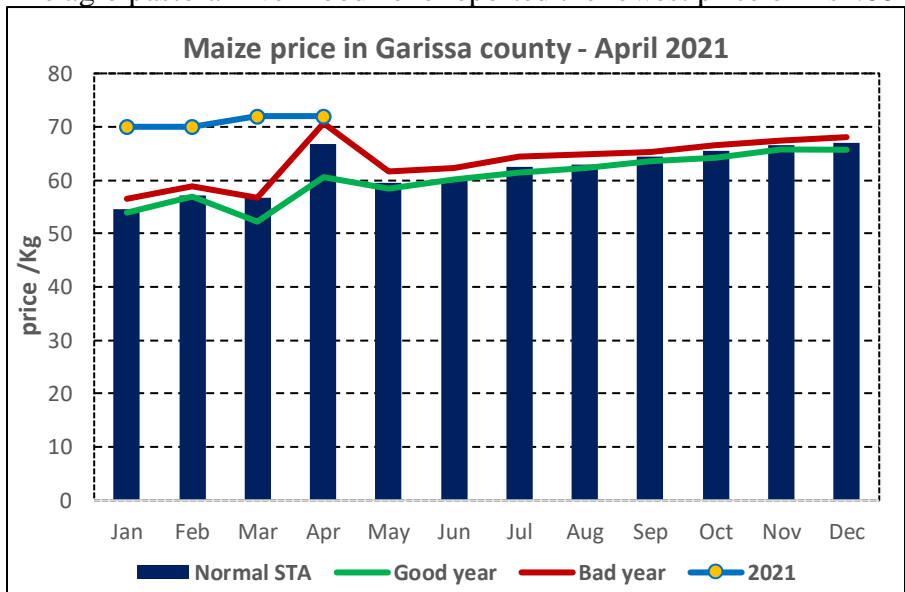


Figure 10: Trend in maize prices

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.

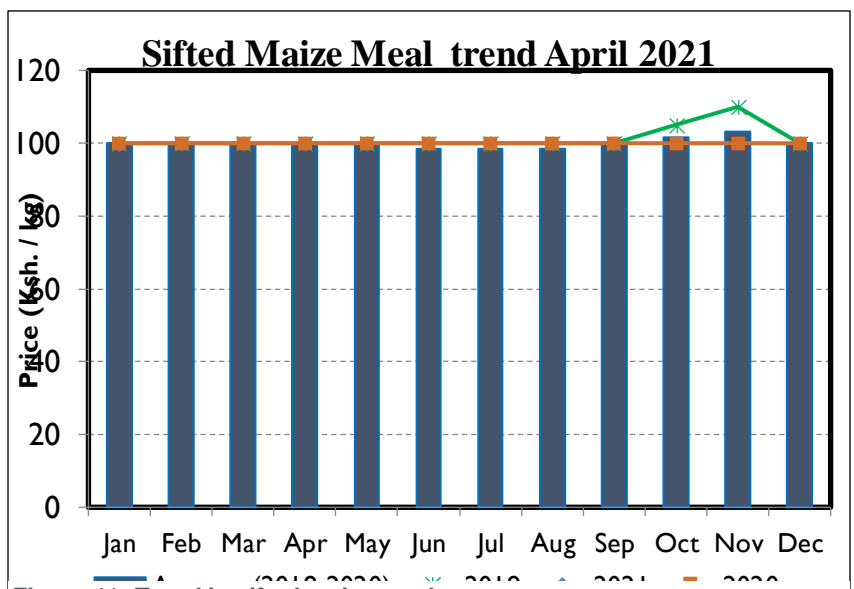


Figure 11: Trend in sifted maize meal

4.2.3 Terms of Trade (Goat prices vs Maize prices)

- The terms of trade decreased slightly from 39.4 to 37.8 recorded this reporting month.
- The terms of trade is within the normal ranges implying the communities can afford to purchase basic essential food stuffs.
- The terms of trade are expected to increase in the near future with expected availability of pasture as a result of rains.
- The current terms of trade was slightly above the short term average for the month.

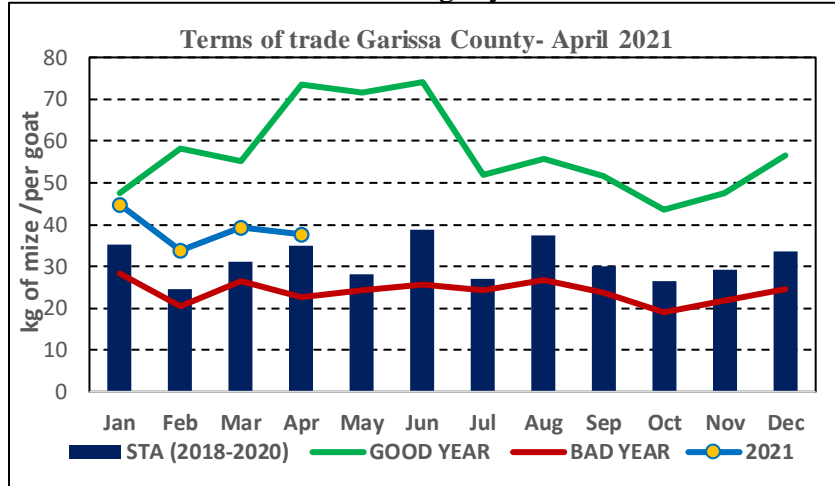


Figure 12: Terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- The average milk consumption at household decreased from 1.5 litres to 1.3 litres reported in April 2021.
- The average milk consumption was 34.8 percent lower than the long term average amount.
- Milk consumption is expected to improve with likely increased milk production expected after the onset of long rains season.

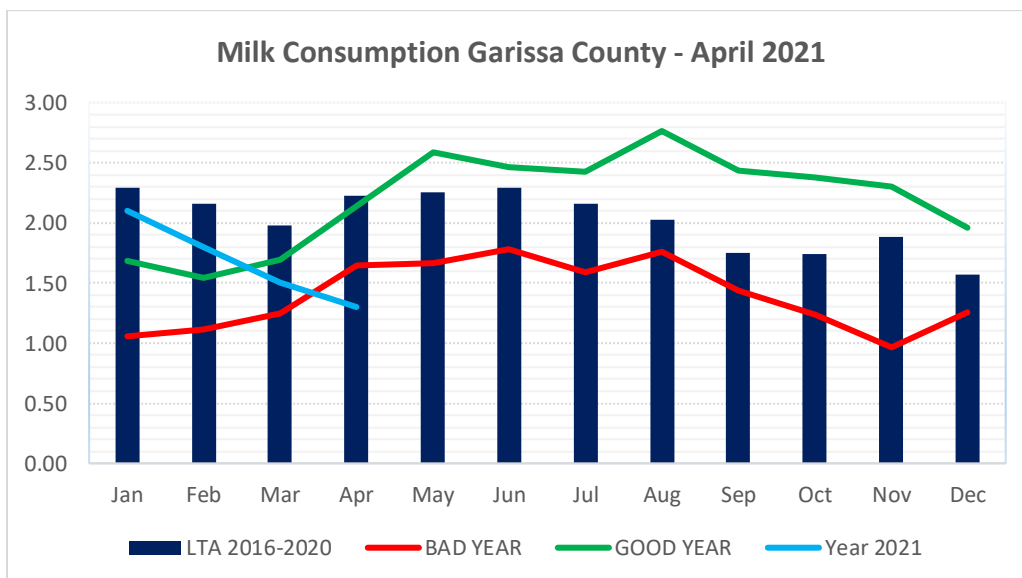


Figure 13: Milk consumption trend

5.2 FOOD CONSUMPTION SCORE

- The proportion of households categorized as having poor, borderline and acceptable food consumption scores was 6 percent, 22 percent and 72 percent respectively.
- 90 percent of households in agro pastoral and urban areas were observed to have acceptable food consumption score while 16.9 percent of households in pastoral livelihood zones had poor food consumption score.
- The proportion of the communities with acceptable food consumption score increase from 69 to 72 percent indicating improving trend.
- 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 42.1

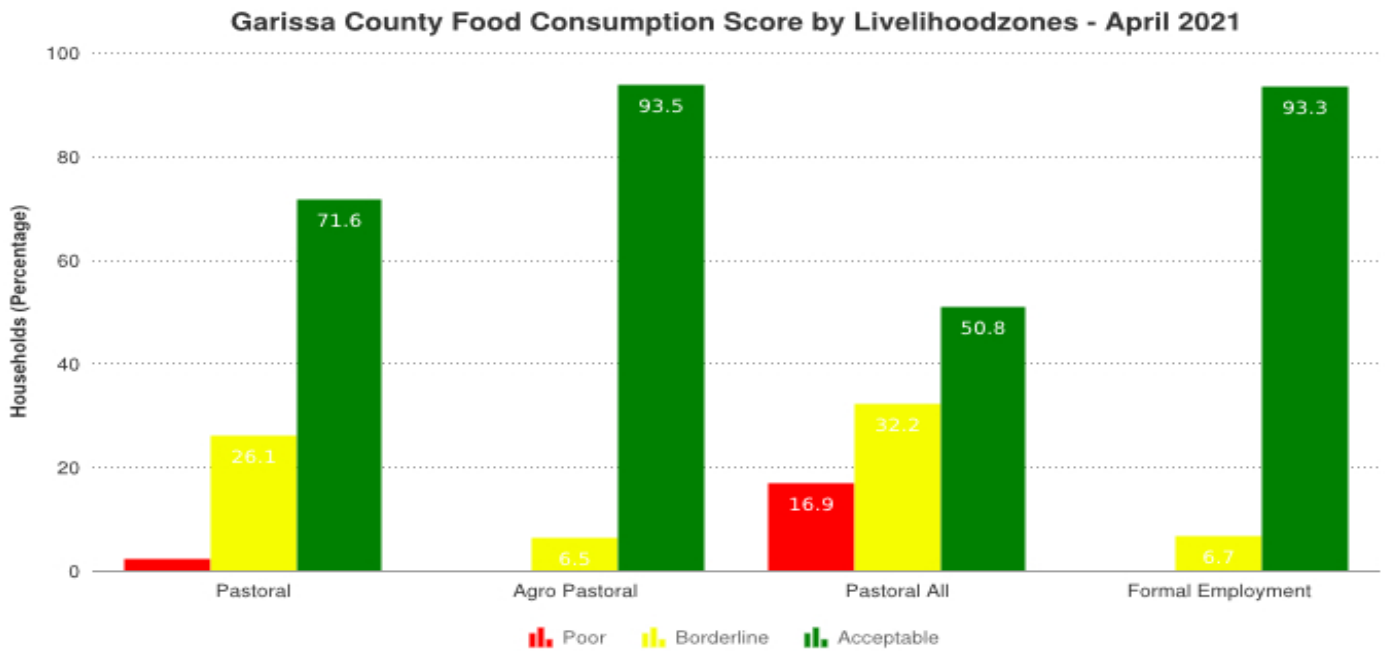


Figure 14: Food consumption score

5.3 HEALTH AND NUTRITION

5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition during this month of April 2021 reduced slightly from 7 percent to 6.8 percent
- The proportion of moderately malnourished of children 6-59 month slightly increased from 6.4 to 6.5 percent 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.

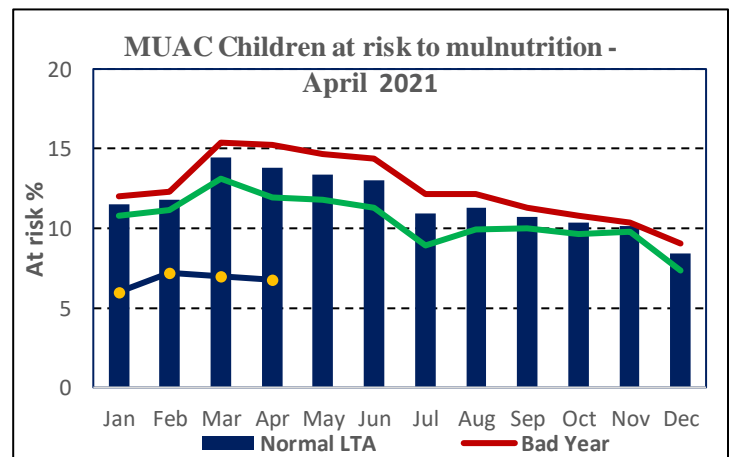
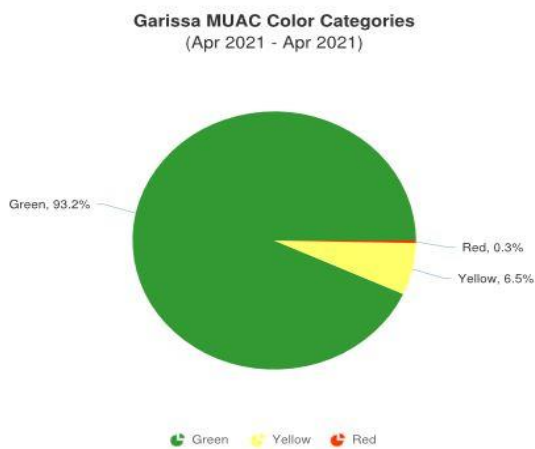


Figure 15: Proportion of at risk and moderately malnourished children

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 were 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.

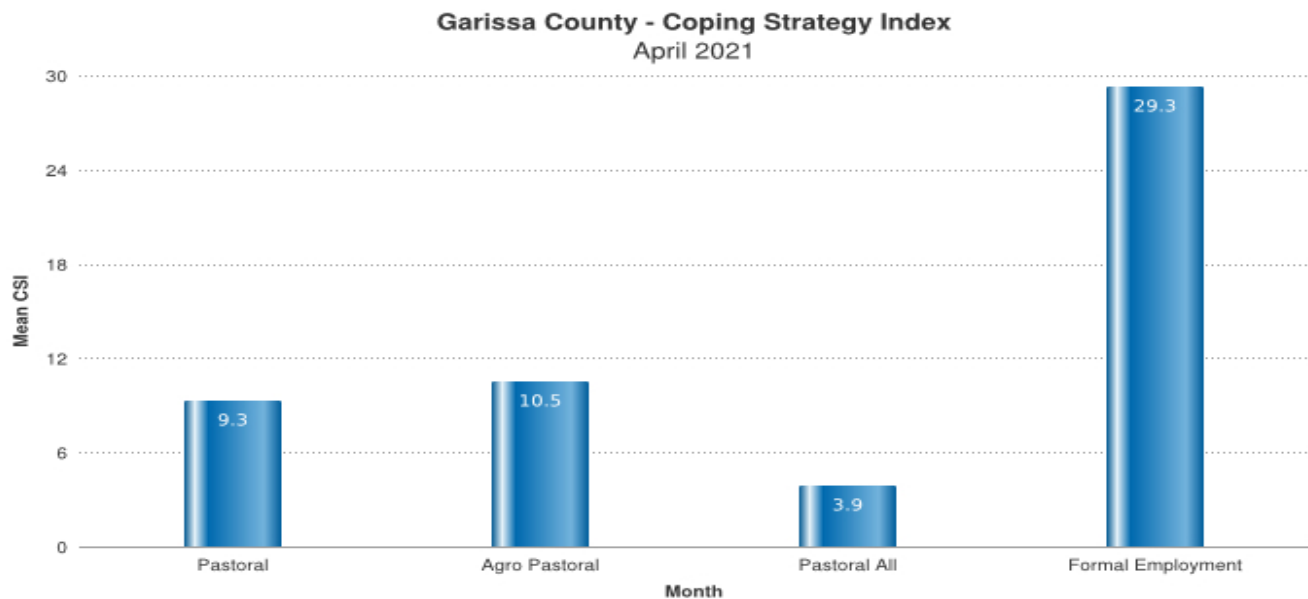


Figure 16: Coping strategy index

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 58 sites on-going	25,000 persons	Water department
Improvement of water supply	Masalani water supply	Water works
Repair and maintenance of 12 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

- Livestock outmigration is expected any time the season ends, with the expected costal showers after the season there is likely migration to Somalia and Lamu County. Intra county livestock movements were observed and concentration reported in areas that received rain.

7.3 FOOD SECURITY PROGNOSIS

- The season performance is reported to be below normal as predicted by meteorology
- Forage and water resources slightly improved with the onset of the season as predicted but remained below the seasonal level, livestock is expected to return to the county and milk production to improve shortly.
- Food commodity prices are expected to remain stable but above five-year averages.

- Livestock prices are expected to slightly improve but may remain the short term averages, after the cessation of the season livestock prices is expected to fall with expected declining body condition.
- Household's food consumption score is expected to deteriorate with more households falling under the poor food consumption category. The same households are expected to employ crisis based coping strategies
- Migrations and concentration of livestock in areas that received some rains is a recipe for resource based conflicts emergence.

8. RECOMMENDATIONS

Table 2. Recommended interventions

Sector	Sub County	Recommended Intervention
Livestock	Lagdera /Balambala/Dadaab /Fafi	Livestock vector control and treatment and vaccination.
		Sensitization for early owners led livestock commercial off take.
	Lagdera /Balambala/Dadaab /Fafi	Up scaling of livestock insurance programme
Agriculture	Garissa/Fafi/Balambala	Procurement and distribution of assorted farm inputs (certified seeds, seedlings and agro-chemicals) for irrigated farms in order to increase production.
	Garissa/Fafi/Balambala	Land preparation and expansion of farm lands
	All sub counties	Water harvesting for irrigation
	Lagdera /Balambala/Dadaab /Fafi /Ijara	Strengthen extension service provision to farmers
Health	Township/Balambala /fafi /Ijara Dadaab/Lagdera	providing water treatment chemicals to areas prone to water borne diseases
	All subcounties	Active case finding
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	Lagdera and .Balambala	Community peace buildings and dialogues