

# National Drought Management Authority

## GARISSA COUNTY

### DROUGHT EARLY WARNING BULLETIN FOR APRIL 2023



A Vision 2030 Flagship Project



#### APRIL 2023 ALERT EWS PHASE

Drought Status: **NORMAL**



Shughuli za kawaida

#### Drought Situation & EW Phase Classification

##### Biophysical Indicators

- The county received an average of 87mm of rainfall received in the county during the month of April 2023, indicating above the normal value for the month.
- The 3-month VCI was 13.35 indicating severe vegetation deficit which was below the long-term average for the month.
- Forage condition was good in all livelihood zones.
- Both Livestock trekking distances from grazing areas to water sources and households trekking distances to water were below the longterm average distances.

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

##### Production indicators:

- Livestock body condition for all livestock species was generally fair to good.
- No livestock death due to drought was reported in the county during the month.
- Average household milk production was 2.0 litres which was slightly lower than the long-term average amount of 2.12 litres

##### Access indicators:

- The average milk consumption at household level was 1.3litres compared to a long-term average amount of 1.6 litres
- Market prices of cattle was above the short-term ranges while that of goats slightly below the short term average prices.
- The terms of trade were 37.2kg of maize with the sale of a goat which was below the long-term average of 44.8percent.

##### Utilization indicators:

- The mean coping strategy index (CSI) was 12.9 for the month as compared to a long-term average of 13.4 indicating households are employing stressed and crisis coping mechanisms.
- The proportion of children below five years of age at risk of malnutrition was 13.7 percent compared with the long-term average of 13.28 percent.

#### Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Normal	stable
Pastoral	Normal	stable
Formal Employment/ Casual labour	Normal	stable
County	Normal	stable
Biophysical Indicators	Value	Normal Range/Value
Rainfall amount	87mm	41mm
VCI-3Month	13.35	37.5
Forage condition	Fair to Good	Fair
Production indicators	Value	Normal
Livestock Body Condition	2-3	1-2
Milk Production	2.0litres	2.12litres
Livestock Migration Pattern	No migration	No migration
Livestock deaths (from drought)	No Death Cases reported	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	37.2	44.8
Milk Consumption	1.3 litres	1.6 litres
Return grazing distance to water sources in km	9.3km	15.92km
Cost of water at source (20 litres)	Kshs 15	< Kshs 5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	13.7	13.28
Long rains harvests		Short rains
Coping Strategy Index (CSI) A long dry spell	12.9	13.5 Planting/weeding
Food Consumption Score (mean) Increased HH Food Stocks	29.1	27.7 High birth rates Wedding

<ul style="list-style-type: none"> <li>migrations</li> <li>Land preparation</li> </ul>			<ul style="list-style-type: none"> <li>Breeding period</li> </ul>			<ul style="list-style-type: none"> <li>Kidding (Sept)</li> <li>Migrations &amp; Herd separations</li> </ul>					
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

# 1. CLIMATIC CONDITIONS

## 1.1 RAINFALL PERFORMANCE

- The long rains season commenced on the third dekad of March 2023 which was timely, the distribution was fair to good both in time and space.
- The county received an average of 87mm of rainfall during the month of April 2023 which was above normal.
- The atmospheric temperatures were ranging between 22.7 C<sup>0</sup> – 33.2 C<sup>0</sup> were recorded during the month.

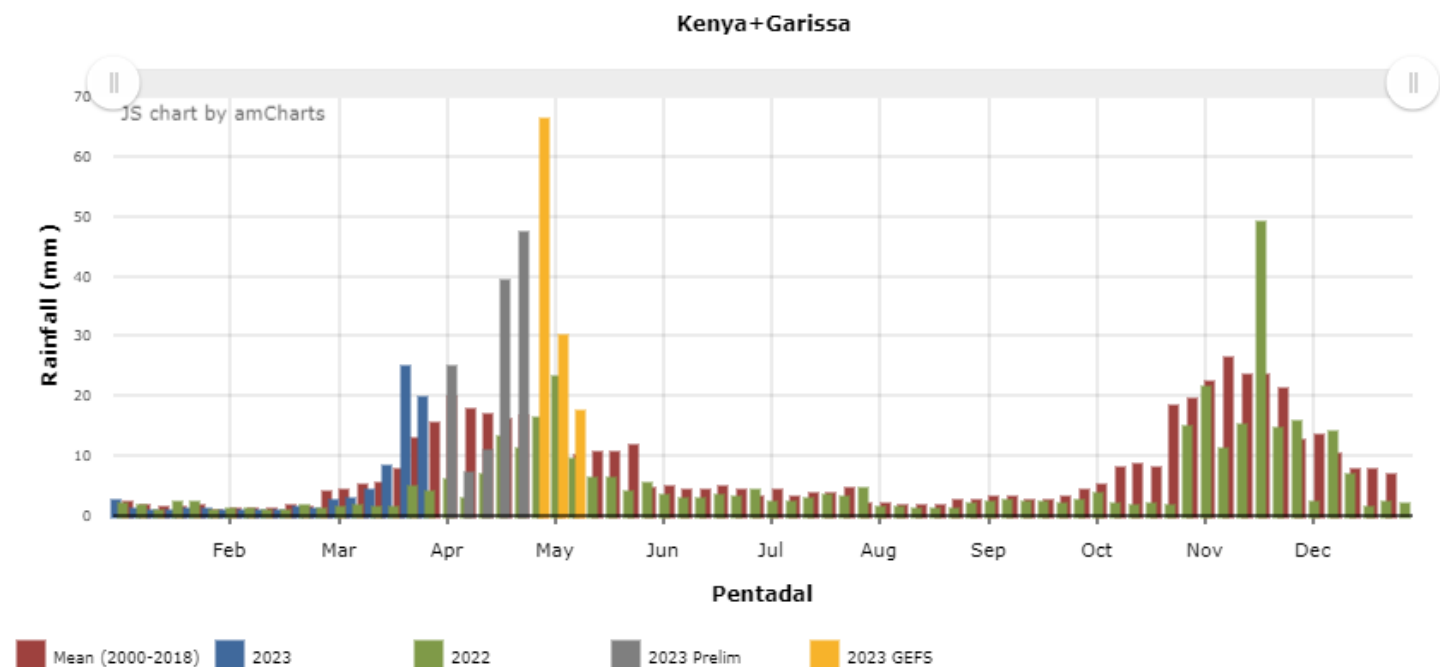


Figure 1: Rainfall graph

## 2.0 IMPACTS ON VEGETATION AND WATER

### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

- The 3-month VCI for the county dropped from 24.02 to 13.35 indicating severe vegetation conditions.
- Extreme vegetation deficit conditions were recorded in Balambala, Dadaab, Fafi subcounties while in Lagdera subcounty there was moderate vegetation deficit conditions
- Ijara and Township subcounties registered above-normal vegetation conditions.
- The current 3-month VCI was almost 50 percent lower than the long-term average value and slightly higher than the base year of 2017.

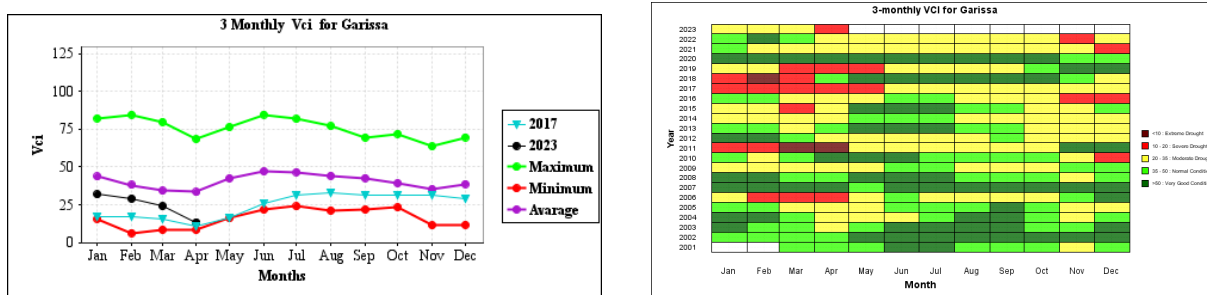


Figure 2: Vegetation condition index

#### 2.1.2 Pasture and Browse condition

- Field observations and community interviews indicated pasture condition improved to normal during the month with fair to good condition. The pasture regeneration realized during month was mainly low nutritive values forbes rather than the palatable grasses.
- Browse condition improved ranging between good and very good across the livelihood zones, this was due to good performance of the ongoing long rains season.

## 2.2 WATER RESOURCE

### 2.2.1 Sources

Water pans, boreholes and Benane Springs are main water sources in the county for domestic use and for watering livestock in the most pastoral livelihood zones. Other water sources are shallow wells along seasonal rivers which provide water during rainy season. River Tana was the main water source in the agro-pastoral livelihood zones while in the formal employment/casual labour livelihood zone areas which covers Garissa Township Sub County and Masalani town in Ijara subcounty, piped water from River Tana was the main water source. In Dadaab town in Dadaab subcounty, boreholes were the main water source for both watering livestock and for domestic use.

All the water sources across the county have been will be recharged, most water pans are between 70 to 100 percent full.

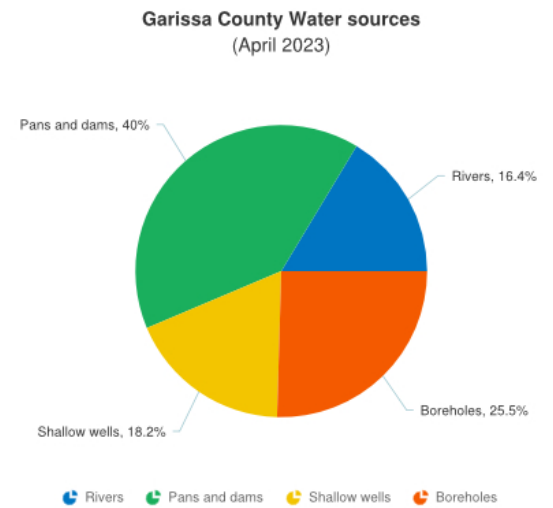


Figure 3: Water sources

### 2.2.2 Household access and Utilization

- The average return distances from households to water sources reduced from 5.5km to 4.5km in this reporting. This reduction is attributed to the rains which recharged all the water sources including shallow wells along seasonal rivers. The current trekking distances were 47.7 percent shorter than the long term average for the month.
- Only seven percent of households in the county were treating water by use of chemicals and boiling.
- The average water consumption per household per day was 45 liters in pastoral livelihood zones against a normal of 30-40 litres while 60 liters for households in the agro-pastoral livelihood zone against a normal of 40-45 liters/household per day.
- The highest trekking distances were recorded in the pastoral livelihood zones at 6.2km while the shortest distances were observed in agro pastoral zones of 2.2km

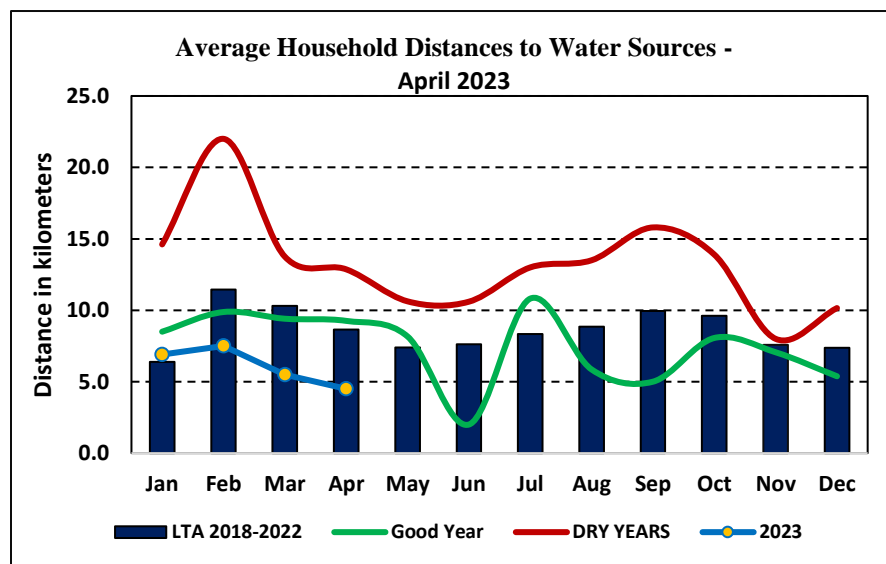


Figure 4: Households trekking distances to water sources

### 2.2.3 Livestock access

- The average return trekking distance from grazing areas to water sources has also decreased from 15.1km to 9.3km during this reporting month.
- This is improvement is attributed to the rains received within the month which have catalyzed forage regeneration. The grazing distances are expected to decrease further as the long rains season continue pour. The current trekking distances was slightly shorter than the long-term average distances.
- The pastoral livelihood zone recorded the longest trekking distance of 18.9 km while agro-pastoral zones had the shortest distances at 8.2 km.
- Livestock watering frequencies is 5 times a week for most livestock species.

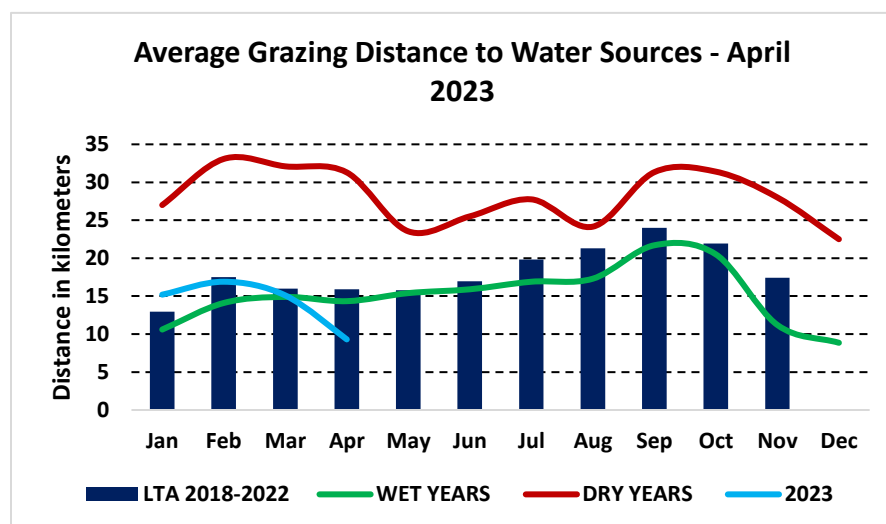


Figure 5: Livestock trekking distances to water sources

### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

- The livestock body condition for cattle and sheep was generally fair while that of goats and camels was ranging from fair to good all livelihood zones.
- The body condition of all livestock species is improving and it is attributed to availability of forage and water as a result of the long rains.

##### 3.1.2 Livestock Diseases

- Outbreak of sheep and goat pox has been reported in Abakaile, Sankuri, Gurufa, Benane, and Nanighi Wards
- A number shoats and cattle mortalities caused by extreme bloat as a result of consumption of lush pasture has been reported in Sankuri, Gulan and Jarajara areas in Balambala subcounty.

##### 3.1.3 Milk Production

- The average milk production per household per day increased from 1.5 litres to 2 litres during this reporting month. Milk production is increasing because of availability of water and pasture as result of the onset of the long rains.
- The current milk production level was comparable to the long-term average amount for the month.
- The average cost of a litre of raw milk of at household level in both agro-pastoral and pastoral livelihood zones was Kshs. 85 while in the formal casual labour/ formal employment zones a litre of packaged pasteurized milk was selling at Kshs. 170.

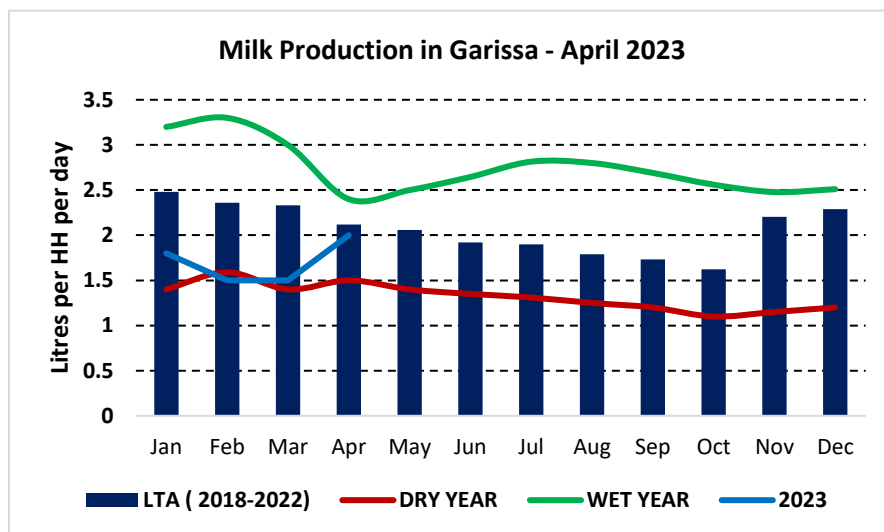


Figure 6: Milk production trend

#### 3.1 RAIN-FED CROP PRODUCTION

##### 3.2.1 Stage and Condition of food Crops

In rain-fed farms planting is ongoing and the crops being planted are maize, cow peas and green grams, the crops are in different stages of development since they get continuous supply of water.

## 4.0 MARKET PERFORMANCE

### 4.1 LIVESTOCK MARKETING

#### 4.1.1 Cattle Prices

- The average market price of a 4-year medium sized bull increased from Kshs. 15,300 to Kshs 17,900 during this reporting month.
- The livestock prices are increasing because of improvement livestock body condition as a result of availability of pasture and water. Hence livestock are fetching better prices in markets.
- The current prices were six percent higher than short-term average prizes for the month.
- The highest prices were recorded in Garissa livestock market at an average of Kshs 25,000 while in other markets located in pastoral livelihood zones the prices were as low as Kshs12,500.
- Volumes of cattle traded in the livestock markets have slightly increased compared to the previous months.

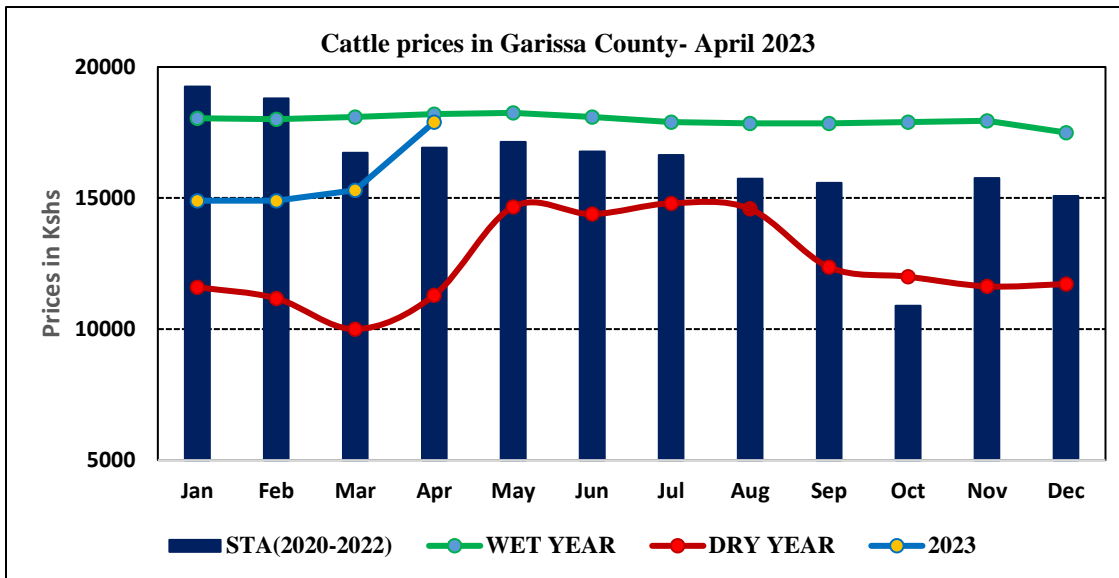


Figure 7: Trend in cattle prices

#### 4.1.2 Small Ruminants Prices (Goats)

- The average market price of a medium-sized goat slightly increased from Kshs. 3,075 to Kshs. 3,350 during this reporting month. This increment is attributed improved body condition and increased demand for meat during the Idd celebrations.
- The current prices were 4.5 percent lower than the short-term average price for the month.
- The Agro Pastoral livelihood zone recorded the highest price of Kshs 3900 while the lowest price recorded in the pastoral livelihood zones at Kshs. 2,810.

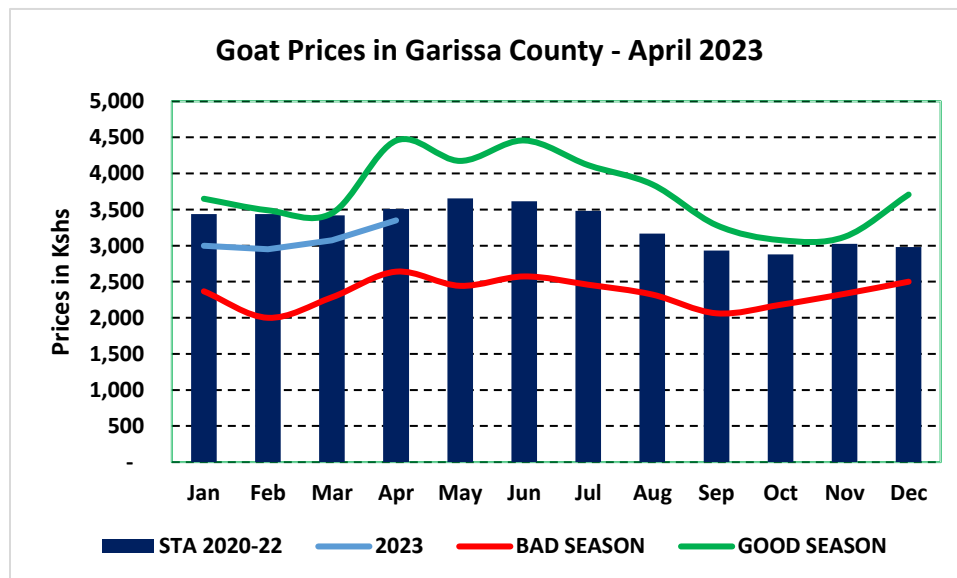


Figure 8: Trend in goat prices

## 4.2 CROP PRICES

### 4.2.1 Maize

- The average price of a kilogram of maize decreased from Kshs. 95 to Kshs. 90 during this month of April 2023. This was due to reduced demand for the product in the local markets
- The current prices were 22.1 percent higher than the short-term average price for the month.
- The current prices remained above the same period of dry years and is expected to continue reducing as the performance of the long rains season continues.
- The agro pastoral livelihood zone reported the lowest price of Kshs.80 per kilogram of maize and highest at Kshs. 110 in pastoral livelihood zones.

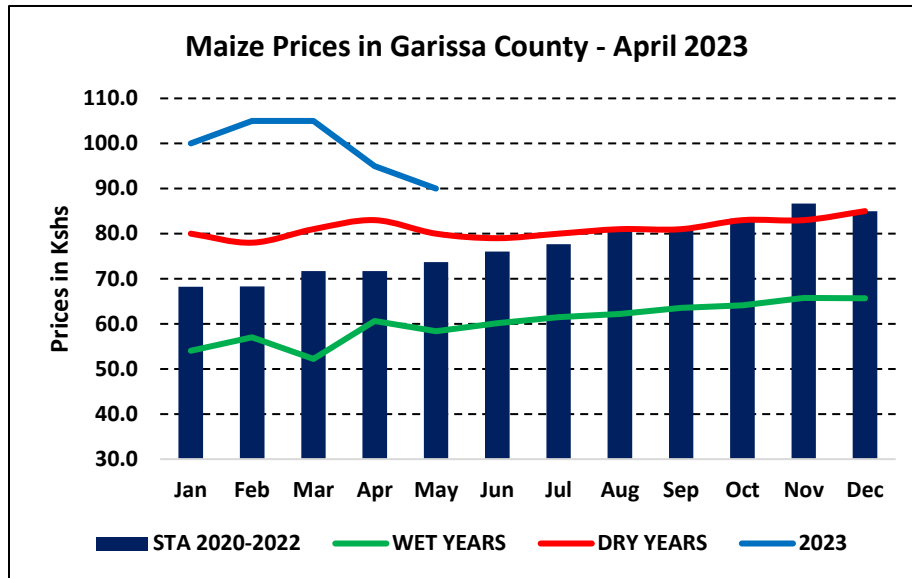


Figure 9: Maize price trend

### 4.2.2 Sifted Maize Meal

- The average price of a kilogram of sifted maize flour in most shops was Kshs.100 similar to the previous month. The high maize flour prices is attributed to high-than-normal maize prizes
- The current price was comparable to the short-term mean for the month.
- The highest prices were recorded at pastoral livelihood zones at Kshs. 130 and lowest at agro-pastoral zones at Kshs. 90 for a kilogram of sifted maize mean.

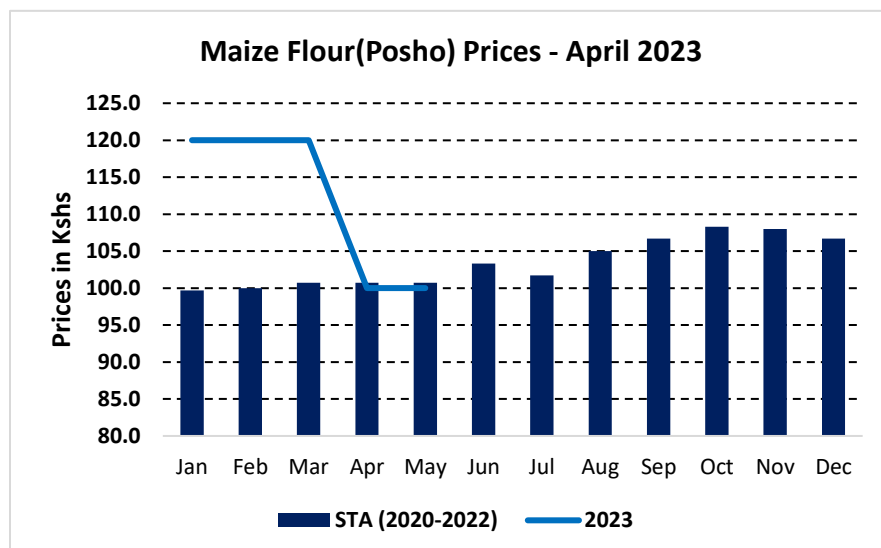


Figure 10: Trend in sifted maize meal prices

### 4.2.3 Terms of Trade (Goat prices vs Maize prices)

- The terms of trade slightly increased from 30.5 to 37.2. during this reporting month. And this improvement is attributed to increase in goat prices and slight decrease in maize prices.
- The terms of trade was 17 percent lower than the short term average for the month indicating low purchasing powers of the pastoral households
- The agro pastoral livelihood zone recorded the highest terms of trade, households were able to purchase 43.6 kgs of maize per goat sold and lowest was recorded at pastoral livelihood zone, with purchase of 32.1kgs of maize per goat sold.

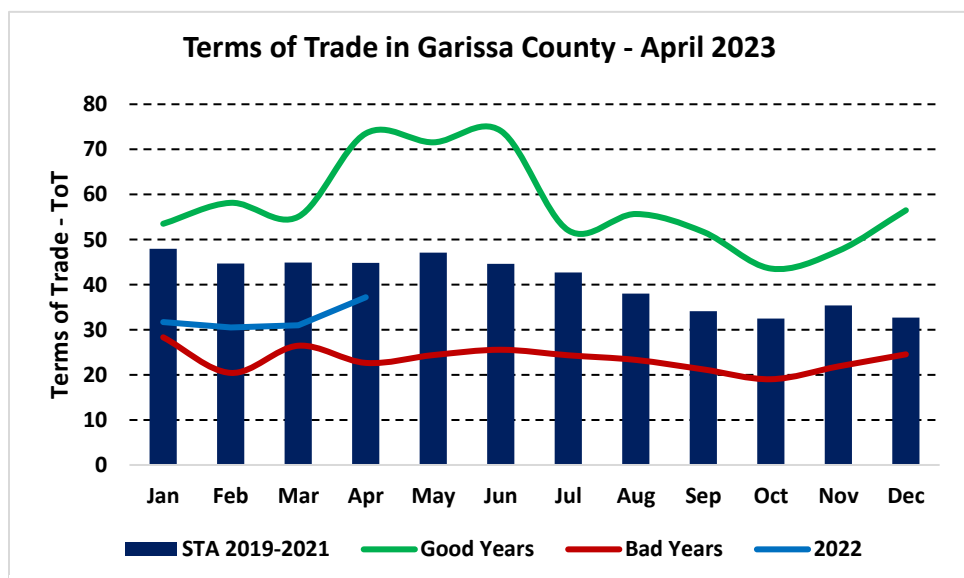


Figure 11: Terms of trade

## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 MILK CONSUMPTION

- The average household milk consumption increased from 1.0 liters to 1.3 litres in April. This was attributed to increased milk production as a result of livestock having sufficient pasture and water.
- The average milk consumption was 18.8 percent lower than the normal long-term average amount.
- The agro pastoral livelihood zone recorded the highest milk consumption of 1.52 litres in the county while the least average amount was realized in pastoral livelihood zones at .1.1litres

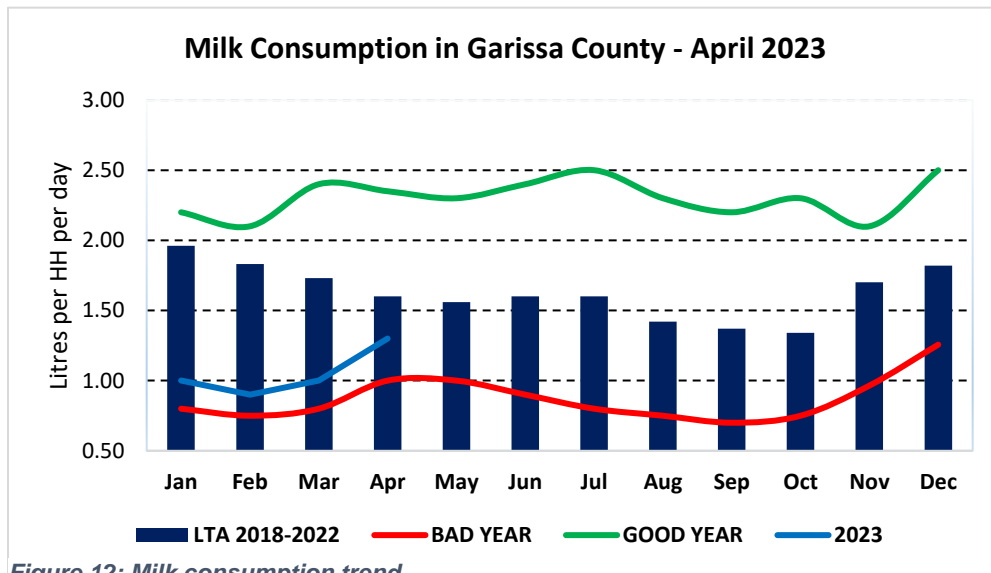


Figure 12: Milk consumption trend

### 5.2 FOOD CONSUMPTION SCORE

- The proportion of households with poor, borderline and acceptable food consumption scores were 32 percent, 54 percent and 14 percent respectively compared to 22 percent, 54 percent and 14 percent reported the previous month.
- 11.3 percent. 7.3 percent and 69.2 percent of households in the pastoral, agro-pastoral and casual labour/formal employment livelihood zones respectively had an acceptable food consumption score.
- 32 percent which is a third of the population had poor food consumption score were employing crisis consumption based due to poor dietary diversity as a result of high food and commodity prices and low purchasing power of pastoralists because of poor livestock prices in markets.
- The mean food consumption score for the month was 29.1 of compared to 27.9 recorded the previous month.

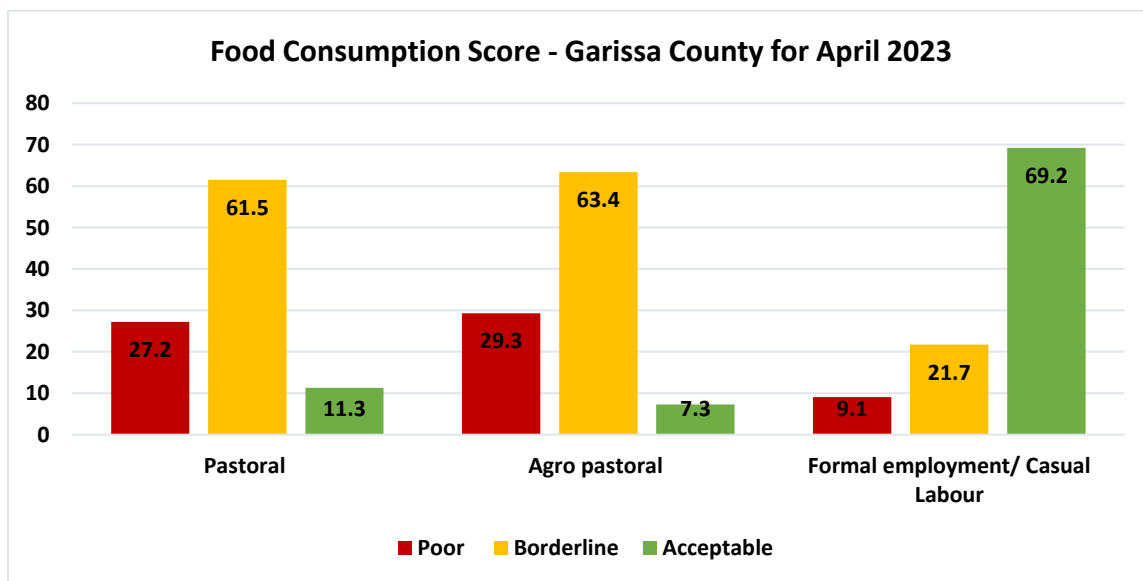


Figure 13: Food consumption score

## 5.3 HEALTH AND NUTRITION

### 5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition based on MUAC increased from 12.9 percent to 13.7 percent recorded this reporting month.
- The high malnutrition rates among children under five years of age is attributed to increased cases of water borne diseases like diarrhoea and cholera, high food prices and insufficient nutrition supplements in health facilities.
- The proportion of children at risk of malnutrition was slightly higher than the long-term average percentage.
- The moderately malnourished rate was 6.1 percent a slight increase from the previous month.
- 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.

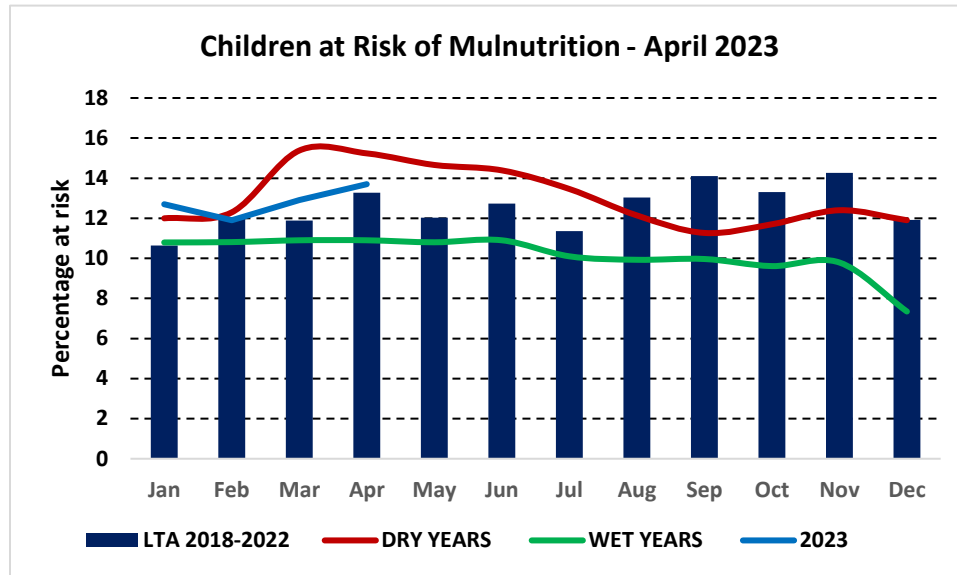


Figure 14: Proportion of children at risk of malnutrition

### 5.3.2 Health

- Outbreak of measles in children was reported across the county
- Cholera cases continue to be reported in Balambala, Township and Dadaab Sub Counties.
- Other diseases reported during the month were Malaria, diarrhoea and upper respiratory infections affecting both under-five and general population.
- Increased diarrhoeal cases were also reported in parts of Dadaab and Township subcounties.

### 5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) for the month reduced was 12.9, compared to 15.3 reported the previous month. This improvement may be attributed to cash based interventions provided by partners across the county.
- Formal employment/Casual labour livelihood zone recorded the highest CSI at 14.4 while agro-pastoral livelihood zone recorded the lowest at 8.9

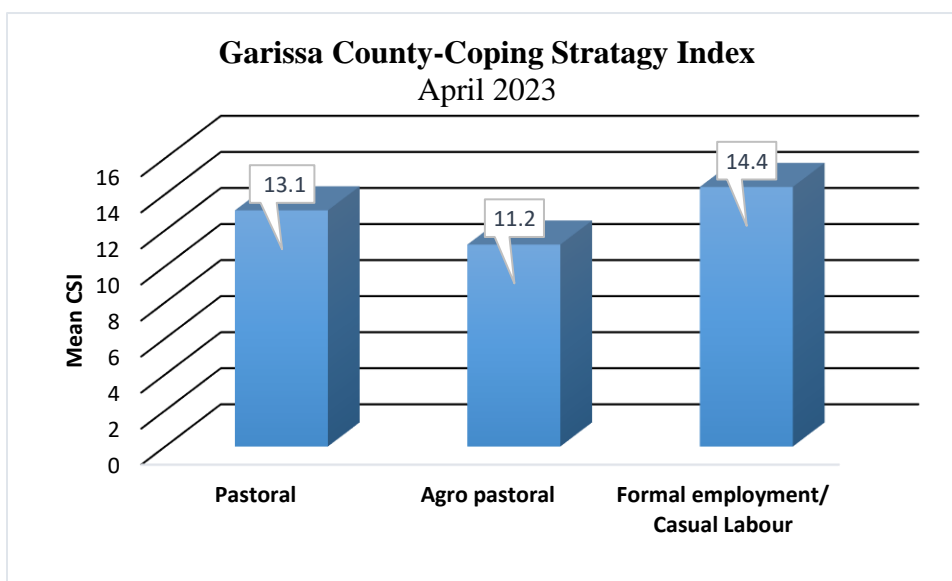


Figure 15: Coping strategies index (CSI)

- Most employed coping strategies include relied on less preferred and less expensive foods, reducing meal frequency and reduced dietary diversity, giving children and the elderly preference in terms of meal consumption as well as reducing meal portions size implying that households have insignificant change in consumption.



## 6. CURRENT INTERVENTION MEASURES (ACTION)

### 6.1 NON-FOOD INTERVENTION

*Table 1 Non-food and food interventions*

<b>Activity</b>	<b>No. of Beneficiaries</b>	<b>Implementers</b>
Training of 30 Community disease reporters	30 persons	Livestock department through support from Save the Children
Livestock Insurance	2,488 pastoralists	Livestock department through the DRIVE Project and World Bank
Cash for Health	1800 beneficiaries	The Kenya Red Cross Society
Sensitization campaigns on Cholera management and prevention		The department of Health and the Kenya Red Cross Society
Giving Extension services to farmers	10 farms groups	The department of agriculture with support from Save The Children.
Community training on participatory risk analysis in benane and Jarajara wards	100 persons	NDMA- twende
Sensitization on E-voucher guidelines for the fertilizer subsidy programme		The department of agriculture with support from Save The Children
Non conditional Livelihood grant in three wards ( benane, masalani and bura )	370 beneficiaries	Mercy corp-ASAL –Adapt
Unconditional cash transfer to vulnerable households	3656 households	Islamic relief , PGI, RRDO and Mercy corps

## **7. EMERGING ISSUES**

### **7.1 Insecurity/Conflict/Human Displacement**

No resource-based conflicts or serious insecurity incidences were reported during the month in the county.

### **7.2 Migration**

No livestock migration was reported, however the county livestock that migrated during the drought started returning to the wet season grazing areas within the county.

### **FOOD SECURITY PROGNOSIS**

- The long rains season is expected to continue in the county, improving water availability and accessibility in the rangelands
- Livestock production is expected to improve with the returns of herds from outside the county, milk availability likely to improve with the expected increased birth rates.
- Community access to food is expected to improve with likely increase in livestock prices in the local markets
- Food commodity prices is expected to remain high affected by the global inflations.
- Households employing consumption based coping are expected to reduce but may continue to employ stress coping.

## 9. SECTOR RECOMMENDATIONS

*Table 2. Recommended interventions*

Sector	Sub County	Recommended Intervention
Livestock	All subcounties	Support disease surveillance campaigns and reporting
	All subcounties	Breed improvement for small stock and cattle
	All subcounties	Capacity build communities on livestock husbandry practices
	Dadaab, Fafi, Balambala and Ijara	Support integrated pest management for all livestock species
Agriculture	All subcounties	Support conditional cash transfers for households through livelihood support grants.
	Fafi, Balambala	Support rain fed farmers with crop husbandry practices
	Dadaab, Lagdera	Initiate livelihood support programme
	Fafi and Balambala	Increase acreage under irrigation to increase food production
Health	All Subcounties	Mass vaccination against measles.
	Dadaab , Fafi and Hulugho subcounties	Integrated health and nutrition Outreach for hard to reach areas
	All subcounties	Mass screening of under-fives and lactating and pregnant mothers
Water	Lagdera, Balambala	Protection of community water pans
	Lagdera and Daadab and Balambala subcounties	
	Lagdera, dadaab and fafi	Drilling of new boreholes and Solarization of existing boreholes
Education	All subcounties	Support food for fees in secondary schools
Coordination	County	Mapping and supporting of inter community peace initiatives.