



A Vision 2030 Flagship Project



## National Drought Management Authority

### GARISSA COUNTY

#### DROUGHT EARLY WARNING BULLETIN FOR JUNE 2024

##### JUNE 2024 NORMAL EWS PHASE



**Shughuli za kawaida**

##### Drought Situation & EW Phase Classification

###### Biophysical Indicators

- The county received a total of 15.09 mm of off-season rainfall. Which was below the long-term average but still within the lower normal range limit for the same period.
- The county's 3-month Vegetation Condition Index (VCI) was recorded at 84, indicating a high level of vegetation greenness for the month which represents an increase over the long term average and the previous month.
- The condition of pasture across all livelihood zones is rated as fair, while browse is rated as good to fair. The current pasture condition is below the normally expected levels for this time of year but falls within the normal range for browse during the same period
- Households traveled an average distance of 7.2 kilometers to access water sources which represents a 39 percent above compared to the long-term average. The average livestock trekking distance to water sources from grazing areas was 13.6 km was 33 percent above the long-term average.

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

###### Production indicators:

- Currently livestock body condition ranges between good to fair across the different livestock species in all the livelihood zones with most species exhibiting a moderate to good, smooth appearance.
- Milk production for the month amounted to 3.5 litres, compared to 2.2 litres recorded the previous month. This production level surpassed the long-term average for the month by 51 percent.

###### Access indicators:

- The average goat market prices were ksh.4877 which was slightly lower compared to the previous month but stands 30 percent above the short-term average for the month,
- The average milk intake per household has increased to 1.8 liters surpassing the upper limit of the normal consumption range for this period by 12 percent
- Currently, the terms of trade for the sale of a medium-sized goat by pastoral households indicate that they can purchase 37.6 kilograms of maize representing a 7 percent above the short-term average

###### Utilization indicators:

- The average Reduced Coping Strategy Index (rCSI) for the month was 12.62 and was 15 percent higher than the long-term average but remained 9 percent below the upper limit of the normal range for this month.
- The average food consumption score for the month stood at 41.8, marking a notable 16 percent increase above the long-term average expected for this period.
- The current proportion of children at risk of malnutrition, based on Mid-Upper Arm Circumference (MUAC) measurements, stands at 15.5 percent

##### Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Normal	Deteriorating
Pastoral	Normal	Deteriorating
Formal Employment/ Casual labour	Normal	Deteriorating
County	Normal	Deteriorating
Biophysical Indicators	Value	Normal Range/Value
Rainfall amount	15.09 mm	17.7 mm
VCI-3Month	84	50
Forage condition	fair	Good –fair
Production indicators	Value	Normal
Livestock Body Condition	2-3	2-3
Milk Production	3.5litres	1.7litres
Livestock Migration Pattern	No migration	No migration
Livestock deaths (due to drought)	No deaths	No deaths
Access Indicators	Value	Normal
Terms of Trade (ToT)	37.6	35kg
Milk Consumption	1.8 litres	1.4litres
Return grazing distance to water sources in kilometres	13.6km	10.6km
Cost of water at source (20 litres)	Kshs5	< Kshs 5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	15.5%	11.75%
Reduced Coping Strategy Index (rCSI)	12.68	10.7
Food Consumption Score	41.8	35.3

• Short rains harvests	• Planting/Weeding	• Long rains harvests	• Short rains
• Short dry spell	• Long rains	• A long dry spell	• Planting/weeding
• Reduced milk yields	• High Calving Rate	• Land preparation	• High birth rates
• Increased HH Food Stocks	• Milk Yields Increase	• Increased HH Food Stocks	• Wedding
• migrations	• Breeding period	• Kidding (Sept)	
• Land preparation		• Migrations &Herd separations	
Jan	Feb	Mar	Apr
May	Jun	Jul	Aug
Sept	Oct	Nov	Dec

## 1. CLIMATIC CONDITIONS

### 1.1 RAINFALL PERFORMANCE

- Throughout the month, the county received a total of 15.09 mm of off-season rainfall. This amount was below the long-term average but still within the lower normal range for the same period.
- During the month, the rainfall was primarily coastal showers that extended to the southern parts of the county. It exhibited poor temporal and uneven spatial distribution across the various livelihood zones.

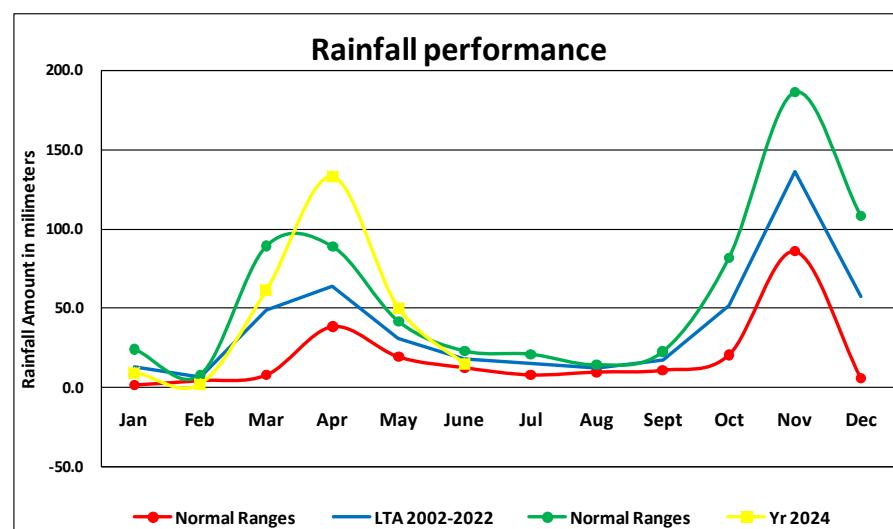


Figure 1: Rainfall Performance

### 2.0 IMPACTS ON VEGETATION AND WATER

#### 2.1 VEGETATION CONDITION

##### 2.1.1 Vegetation Condition Index (VCI)

The county's 3-month Vegetation Condition Index (VCI) was recorded at 84, indicating a high level of

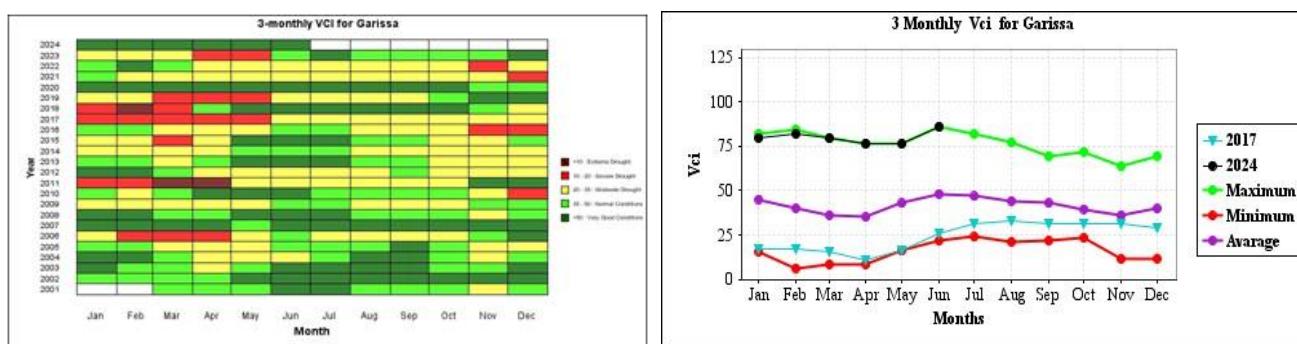


Figure 2: VCI Matrix and Graph

vegetation greenness for the month which represents an increase compared to the previous month. Suggesting that the county is experiencing above-average vegetation greenness, reflecting improved environmental conditions and potentially favorable conditions.

- All sub counties recorded above normal vegetation greenness that has surpassed the normally expected levels of greenness during this period.
- Most of the county wards have normal to above normal vegetation greenness with the exception of Baraki, jarajara and Huluhgo wards that recorded moderate vegetation deficit

##### 2.1.2 Pasture and Browse condition

- Currently, the condition of pasture across all livelihood zones is rated as fair, while browse is rated as good to fair. The current pasture condition is below the normally expected levels for this time of year but falls within the normal range for browse during the same period.
- The available under growth are mainly forbs that of low quality and poor palatability for most livestock species affecting their daily feed intake and body condition.
- Pasture and browse availability and access were also affected by the presence of tree locust in the grazing zones across all livelihood zones.

### 2.2 WATER RESOURCE

#### 2.2.1 Sources

- During the month of June, Boreholes which are crucial water source during the dry period accounted for 54.8 percent of the water sources accessed by households and livestock showing an increase in dependence as compared to the previous month.

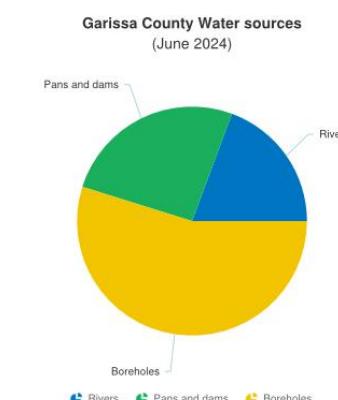


Figure 3: Water Sources Status

- Water pans make up of 25.8 percent of water sources for households and livestock and reduced slightly as compared to the previous month.
- River and Shallow wells and Benane Springs accounts for 19.2 percent of the total water sources for both households and livestock.
- Water sources are expected to continue reducing during the long dry spell begins

## 2.2.2 Household Access and Utilization

- Throughout the reporting period, households traveled an average distance of 7.2 kilometers to access water sources. representing a slight increase as compared to the previous month, during which they traveled an average of 6.1 kilometers.
- The current distance represents a 39 percent increase compared to the long-term average and similarly was 19 percent higher than the upper threshold normal for this month.
- Households in the pastoral livelihood zones travelled an average trekking distance of 6.8 kilometers to reach water sources while the agro-pastoral zones where the average distance to access water was considerably shorter, at just 5 Km
- In pastoral livelihood zones, households normally consumed an average of 20-25 liters of water per day, whereas those in agro-pastoral livelihood zones utilized an average of 30 liters daily. The consumption rates fall comfortably within the normal range for both zones, which is 25 to 35 liters per household per day.

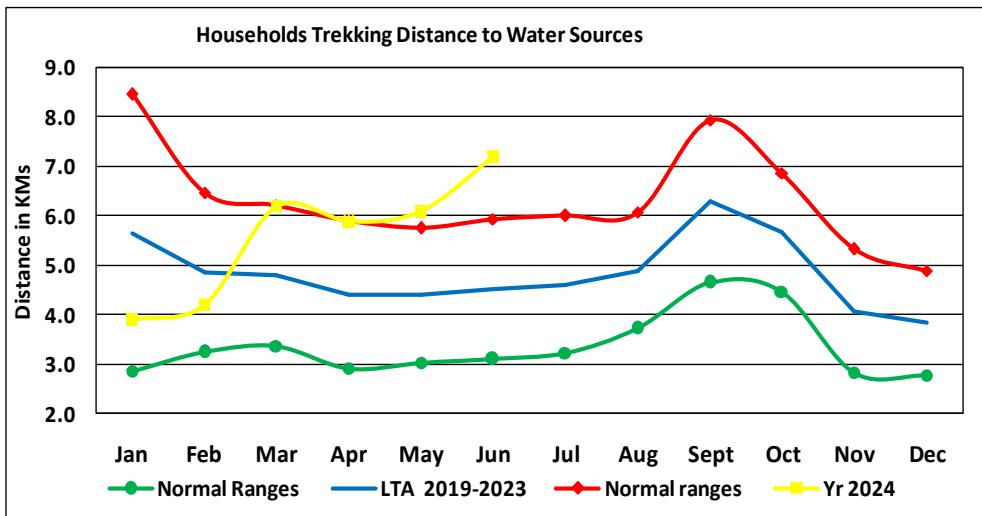


Figure 4: Households' Distances to Water Sources

## 2.2.3 Livestock Access

- The average trekking distance to water sources from grazing areas was 13.6 km which considerably increased as compared to the previous . The current trekking distance was 33 percent above the long-term average for this month but 8.2 percent below the upper limit of the normal range for trekking distances.
- The longest trekking distance recorded in the pastoral livelihood zone at 12.5 km whereas in the agro-pastoral zones, the average distance was 5.3 kilometres.
- Across various livelihood zones, the watering intervals for different livestock species were observed to be within the normal frequency of 4 to 5 times a week.

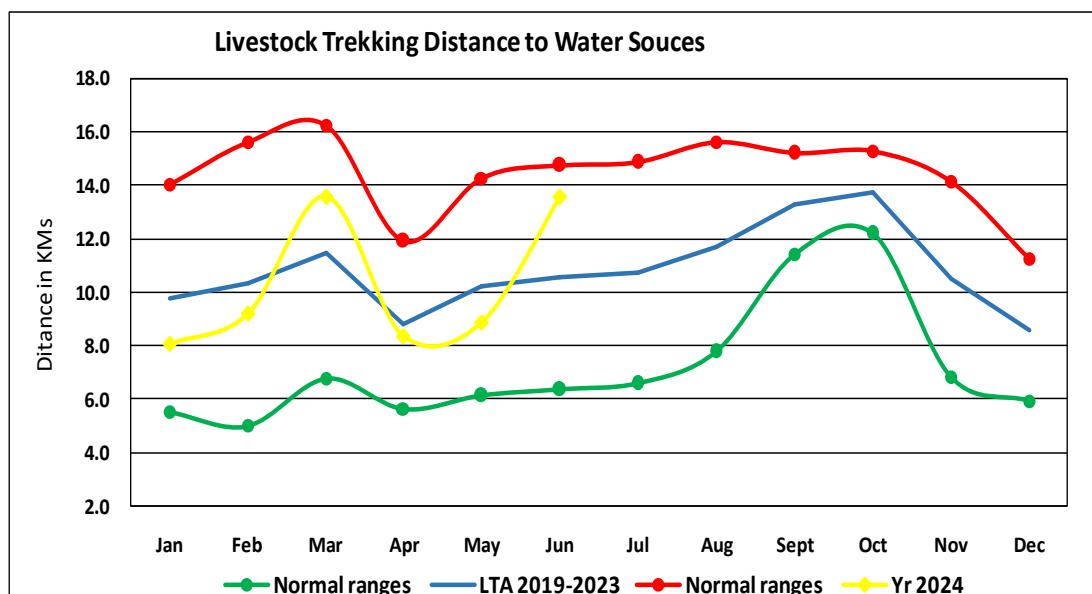


Figure 5: Livestock Trekking Distances to Water Sources

### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

- Currently livestock body condition ranges between good to fair across the different livestock species in all the livelihood zones with most species exhibiting a moderate to good, smooth appearance. Lactating animals across the species are in fair (moderate neither fat nor thin) body condition and is attributed to poor quality forage in the rangelands.
- The body condition is expected to deteriorate further with the expected continued reduction in quality and quantity of forage across the livelihood zones.

##### 3.1.2 Livestock Diseases

- There are confirmed cases of Peste des Petits Ruminants (PPR) disease in Kumahumato, Dadaab Sub county, and Iftin in Township Sub county.
- The county is facing challenges with Contagious Caprine Pleuropneumonia (CCPP), predominantly reported in wards of Dadaab, Lagdera, Fafi, and Balambala Sub counties. CCPP is a contagious bacterial disease severely affecting goat herds across the region.
- There is an increased prevalence of vector-borne diseases, including confirmed cases of trypanosomiasis and anaplasmosis in camel and cattle herds in Ijara, Fafi, and Balambala Sub counties.

##### 3.1.3 Milk Production

- Milk production for the month amounted to 3.5 litters, compared to 2.2 litters recorded the previous month. This production level surpassed the long-term average for the month by 51 percent and exceeded the upper limits of the normal range by over 48 percent.
- The level of milk production for the month was influenced by increased livestock calving and kidding reported during the period.

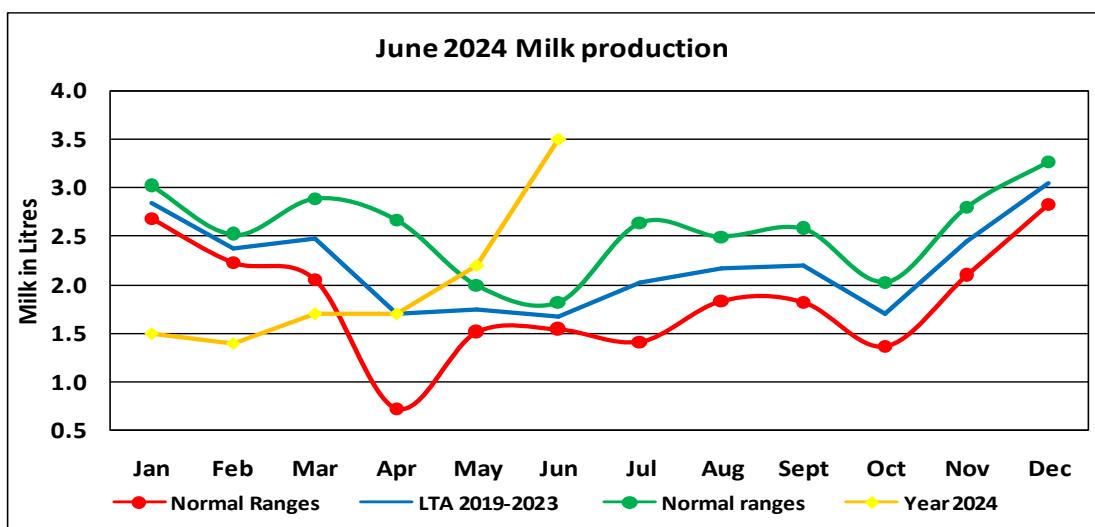


Figure 6: Milk production

#### 3.1 RAIN-FED CROP PRODUCTION

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

No production of maize and sorghum was observed as most of the crops were used as livestock feeds for lactating herds.

### 4.0 MARKET PERFORMANCE

#### 4.1 LIVESTOCK MARKETING

##### 4.1.1 Cattle Prices

- The average market price for a 4-year-old medium-sized bull was KES 21,421. The figure represents a relative decrease compared to the previous month's average price of KES 25,780.
- The current price is still 27 percent higher than the short-term average and exceeds the normal upper price limit for the

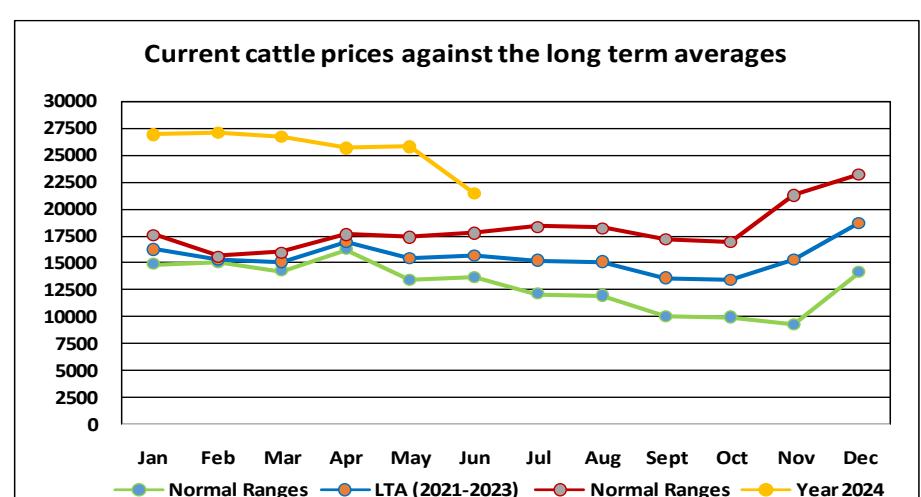


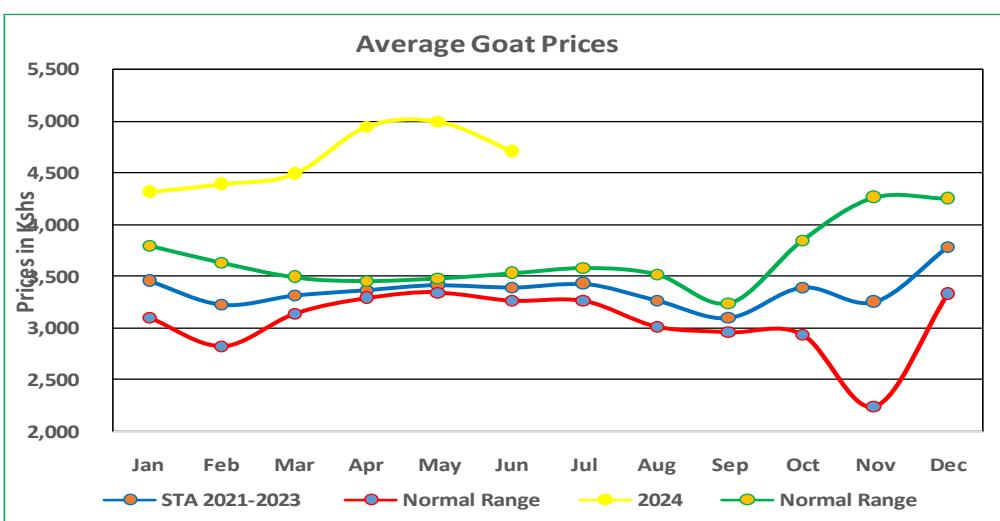
Figure 7: Cattle Prices

month by 17 percent.

- The market conditions contributing to these prices are due to increased demand and reduced supply and traded volume of cattle within the main livestock markets.
- In the agro-pastoral zone, a price of Ksh. 33,000 was recorded, whereas the pastoral livelihood zones reported the highest average price of Ksh. 28,000.

#### 4.1.2 Goats Prices

- The average goat market prices were ksh.4877 which was slightly lower compared to the previous month's average of Ksh. 5,000.
- The current price is significantly higher than usual though below the previous month. It stands at 30 percent above the short-term average for the month, indicating a notable increase compared to typical prices observed in recent months.



**Figure 8: Goat Prices**

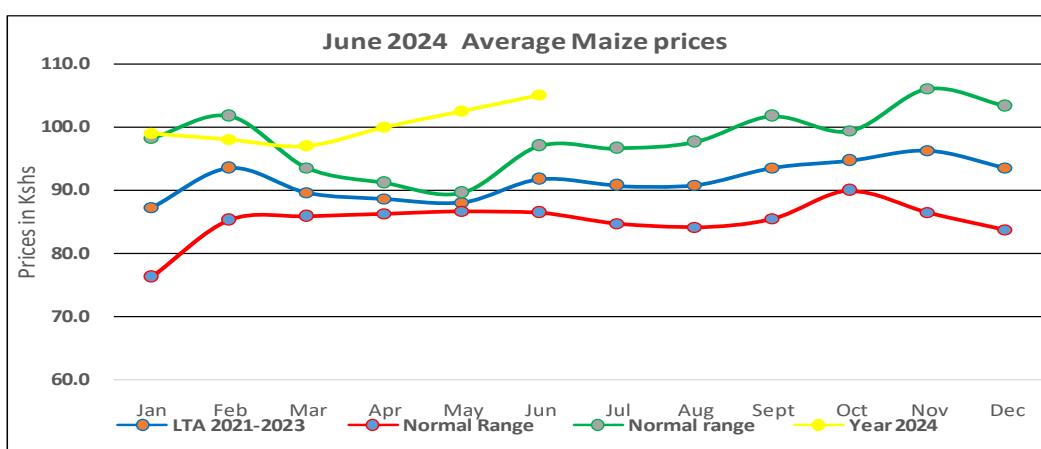
Additionally, this price exceeds the upper limits of the normal price ranges by 28 percent, further highlighting the exceptional nature of the current market conditions..

- The high goat prices were attributed to several factors. Firstly, the goats were in good body condition, making them more valuable. Secondly, there was increased demand due to a Muslim festival that fell within the month, maintaining prices up. Lastly, there was a reduced supply of goats in the market from pastoralists.

## 4.2 CROP PRICES

### 4.2.1 Maize Prices

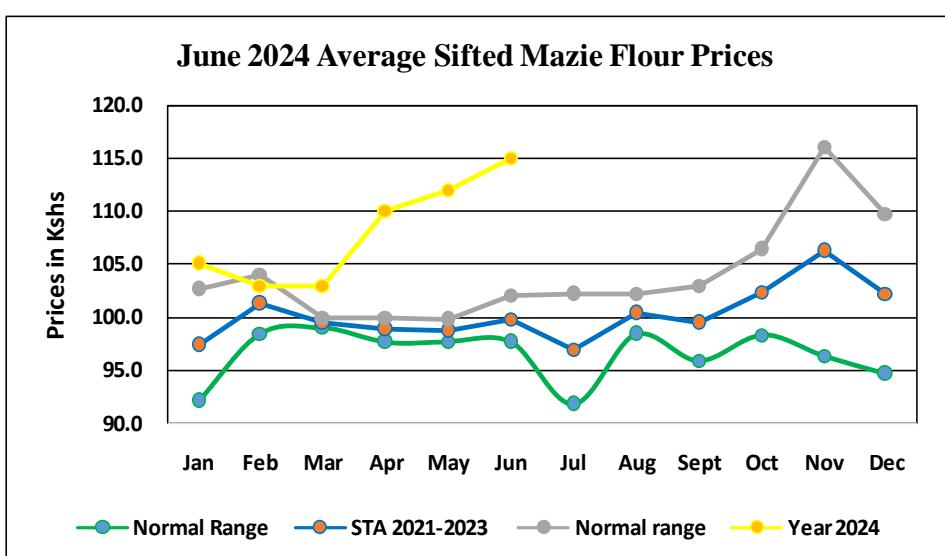
- During the reporting month, the average price of a kilogram of maize reached Ksh 105, reflecting a 3 percent increase compared to the previous month's average. This upward trend indicates a steady rise in maize prices. Additionally, the current price is 13 percent higher than the short-term average for this time of year, suggesting a significant deviation from typical



**Figure 9: maize price trend**

price patterns. Furthermore, the price exceeded the normal price range for the month by 8 percent, highlighting an exceptional and possibly temporary spike in maize prices.

- The price variation observed across the livelihood zones indicated the pastoral livelihood zone recording the highest price at ksh 110 per kg of maize.



**Figure 30: Trend in sifted maize meal**

#### 4.2.2 Sifted Maize Flour

- The average cost of a kilogram of sifted maize flour during the reporting month was Ksh 115, reflecting an increase from the previous month's price of Ksh 112. The rise in price represents a notable 13 percent increase above the short-term average for this period, indicating a significant deviation from typical price levels.
- The current price is 12 percent higher than the upper limit of the normal price range for this time of year, underscoring an unusual and marked elevation in the cost of sifted maize flour..
- The price was highest in pastoral livelihood zones at ksh.120 and lowest in the formal employment livelihood zone at ksh. 100.

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

- Currently, the terms of trade for the sale of a medium-sized goat by pastoral households indicate that they can purchase 37.6 kilograms of maize during the month under review.
- The current terms of trade represents a 7 percent increase above the short-term average, signaling improved purchasing power compared to typical

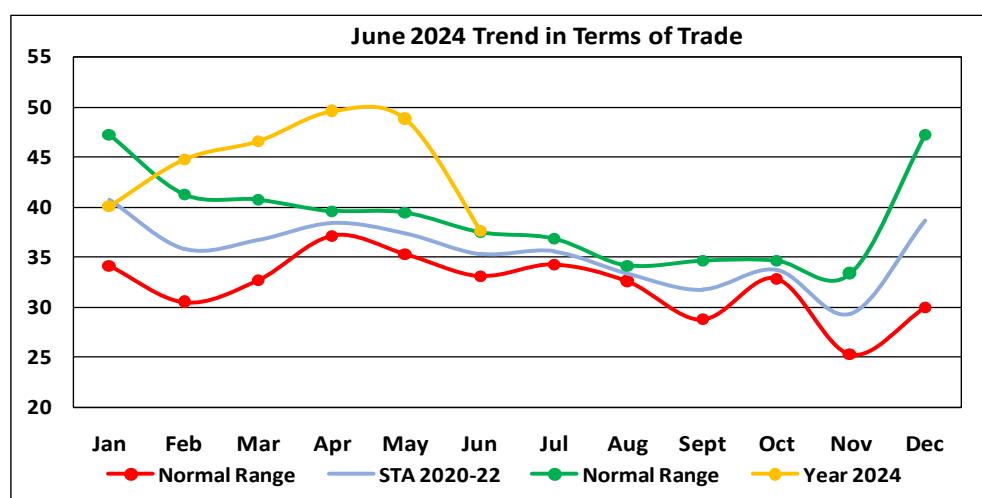


Figure 11: Trend in terms of trade

months. Importantly, it remains within the normal upper limit for the month, suggesting a favorable market exchange rate for pastoralists.

- The slight decrease in terms of trade compared to the previous month is primarily due to the rise in maize prices relative to goat prices. This change has made market conditions less favorable for livestock sellers, resulting in them receiving less maize for each goat sold. However, it is worth noting that these conditions are more favorable compared to the same period in previous years.

### 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

#### 5.1 MILK CONSUMPTION

- The average milk intake per household has increased to 1.8 liters, up from 1.3 liters the previous month.
- The current consumption level represents a 23 percent increase over the long-term average for this month. Moreover, the current milk consumption slightly surpasses the upper limit of the normal consumption range for this period by 12 percent.

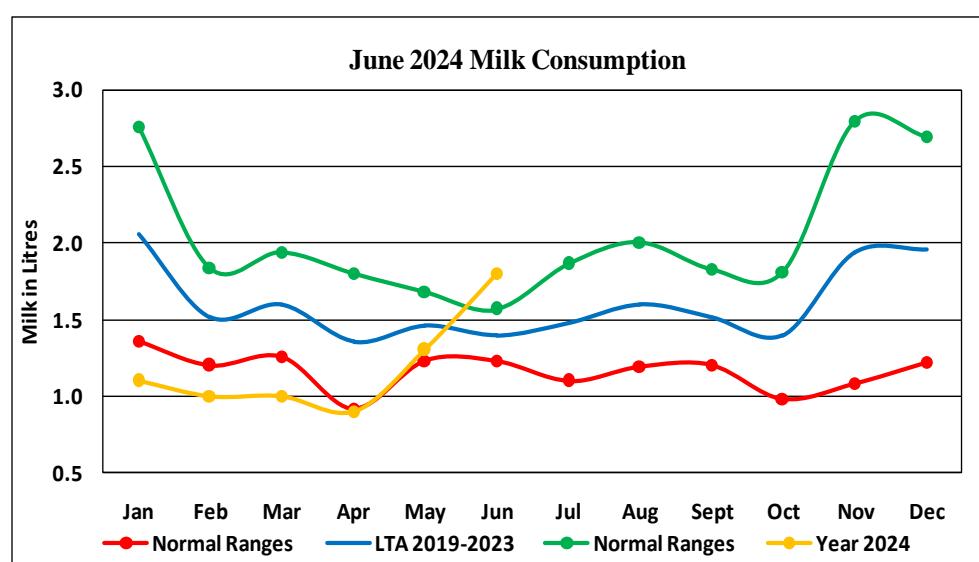


Figure 12: milk consumption

- The rise in milk consumption can be attributed to enhanced production levels within households, which have been able to produce more milk than usual which positively impacted overall consumption rates.
- Consumption rates vary across different livelihood zones. In particular, the pastoral areas reported the lowest consumption rate, with households consuming an average of 0.7 liters of milk. In contrast, the agro-pastoral zones recorded the highest consumption rate, with an average intake of 1.1 liters per household.

#### 5.2 FOOD CONSUMPTION SCORE

- The average food consumption score for the month stood at 41.8, marking a notable 16 percent increase above the long-term average expected for this period. This score also surpassed the upper limit of the normal range for the month by 5 percent, indicating a higher level of food consumption across the county.

- Regarding the distribution within the population, 2.5 percent of the county's residents had poor food consumption scores, while 32.5 percent fell into the borderline category, and a significant majority of 65 percent achieved acceptable scores. This distribution contrasts with the previous month, where only 1.25 percent were classified as having poor food consumption, 28 percent were borderline, and a higher proportion of 71.75 percent attained acceptable scores.
- The figures illustrate fluctuations in food security and consumption patterns over the months, reflecting both improvements and challenges in meeting dietary needs across the county.
- There are 3.1 ,2.4 and 1.6 percent of households in the formal employment ,pastoral livelihood zone and agro pastoral livelihood zone had poor food consumption score.

### 5.3 HEALTH AND NUTRITION

#### 5.3.1 Nutrition Status

- The current proportion of children at risk of malnutrition, based on Mid-Upper Arm Circumference (MUAC) measurements, stands at 15.5 percent. This figure represents a significant increase of 25 percent compared to the normal long-term average for this month, yet it remains within the upper limit of the normal ranges for this period.
- The high proportion of at-risk children is primarily attributed to an increase in disease prevalence

exacerbated by dusty and dry conditions experienced throughout the month. These environmental factors have contributed to health challenges among children, highlighting the need for targeted interventions to address malnutrition risks during such periods.

- Maalimin in Lagdera sub counties recorded the highest proportion of children at risk of malnutrition at 34 percent while saka in balambala recorded the lowest at 0.1 percent.
- Both in pastoral and agro-pastoral livelihood zones, the number of meals consumed per day ranged from 2 to 3 meals, which is considered normal for this time of year..

#### 5.3.2 Health

- There has been an increase in cases of malaria, diarrhea, and upper respiratory infections, affecting not only children under five but also the wider population. These illnesses highlight significant public health concerns within the community
- Measles outbreak was reported in the sub counties of Lagdera and Fafi, raising concerns about the spread of this highly contagious disease within these areas.

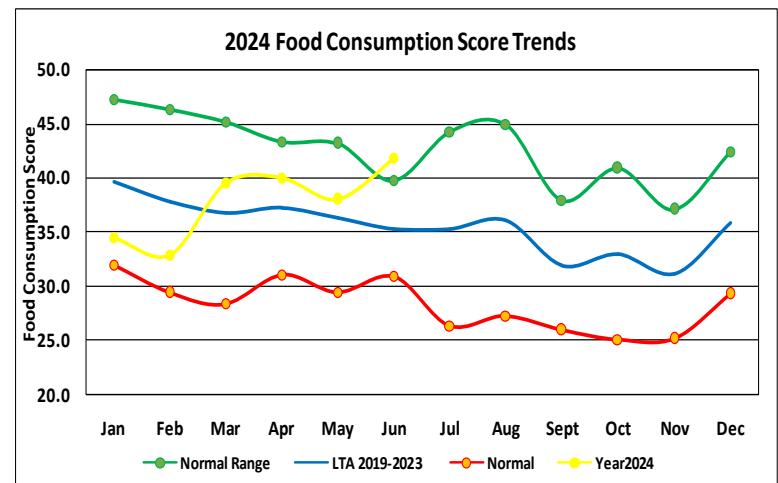


Figure 14: Food consumption score by livelihood zone

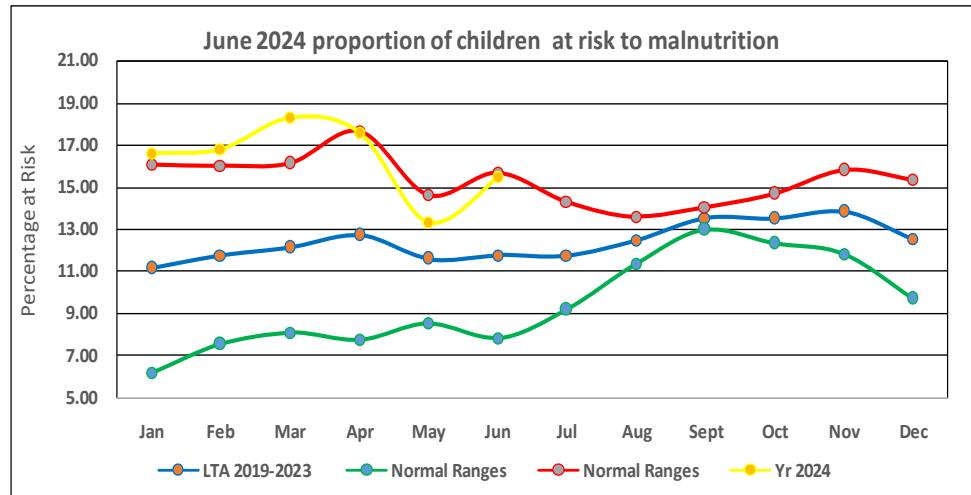
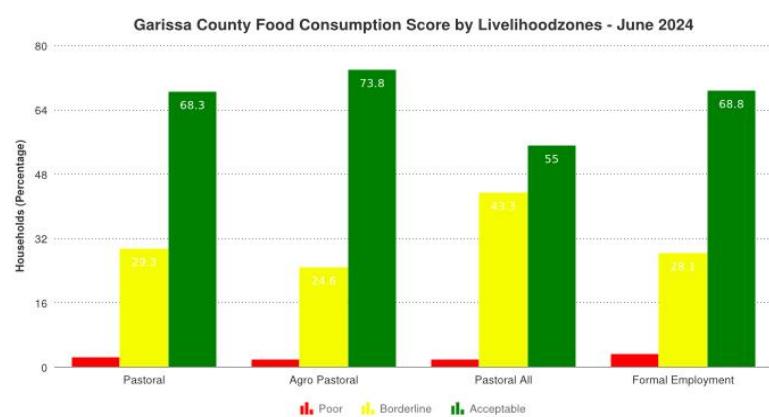


Figure 15: proportion of children at risk of malnutrition

## 5.4 REDUCED COPING STRATEGIES INDEX - rCSI

- The average Reduced Coping Strategy Index (rCSI) for the month was 12.62, showing a slight increase from 12.37 recorded the previous month. This current index is 15 percent higher than the long-term average but remains 9 percent below the upper limit of the normal range for this month.
- A significant number of households in the county have adopted stressed coping

strategies, such as reducing frequency and limiting dietary diversity. These measures are being taken to manage limited food resources effectively. Priority is given to ensuring that children and the elderly receive adequate meals despite the challenges faced by these households

- In the pastoral livelihood zone, the highest proportion of households, at 22.4 percent, continued to employ stressed coping strategies, consistent with the figures from the

previous month. In contrast, the agro-pastoral livelihood zone reported the lowest incidence, with only 6.7 percent of households resorting to stressed coping mechanisms

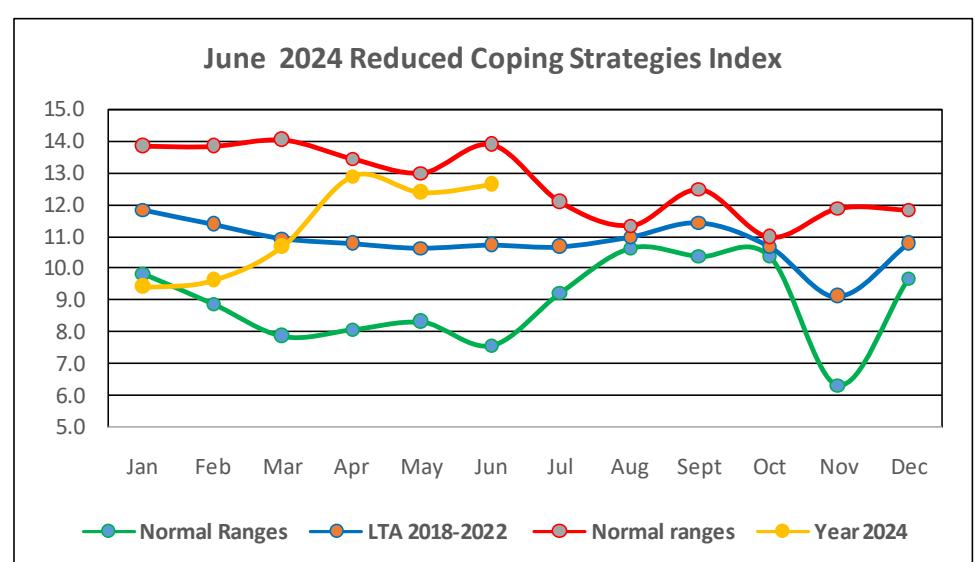


Figure 16; reduced coping strategies index

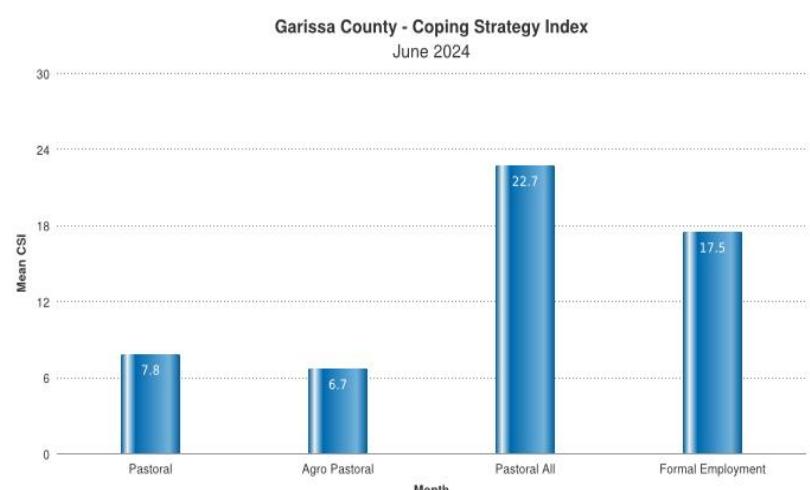


Figure 17: Coping strategies index

## 6. CURRENT INTERVENTION MEASURES (ACTION)

### 6.0 FOOD INTERVENTION

- Distribution of Nutrition Components-Corn Soya Blend++ to 6, 519 pregnant, breast feeding women and girls (PBWGs) by WFP

### 6.1 NON-FOOD INTERVENTION

Table 1 Non-food and food interventions

Activity	Area covered	No. of Beneficiaries	Implementers
Hunger Safety Net Programme	All sub counties	8380	NDMA/ World Bank
Roll out of niche project to the county beneficiaries	All sub counties	4200	NDMA
Distribution of RUSF to children under fives	All sub counties	8,307 children	WFP
Cash transfer for health project and nutrition	Dadaab sub county (Abakaile and Dertu ward and Lagdera	4,620HHs	KRCS
Cash transfer to flood victim		695 households	Pastoralist Girls Initiative
Construction of 5water tanks and 21 emergency toilets and hand washing materials in the displacement camps	6 displacement sites within township subcounty	790 households	Pastoralist Girls Initiative
Treatment of acute malnutrition among children under-fives and PLWs	County	85 static health facilities 249 outreach sites	SCI, TDH, IRC, UNICEF/KRCS

## **7.0 EMERGING ISSUES**

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

- During the reporting month, conflicts over resources along the borders with Isiolo County resulted in incidents where herds of goats were rustled from pastoralists, leading to the unfortunate death of two individuals.
- Additionally, security concerns related to terrorism continue to persist in the county, particularly in areas along the border with Somalia. These ongoing challenges highlight the complex landscape of security issues affecting the county.

### **7.2 Migration**

No livestock out migration reported during the month

## **8.0 FOOD SECURITY PROGNOSIS**

- It is anticipated that the distance between livestock grazing areas and households, as well as their nearest water sources, will likely increase. This could lead to reduced frequency of watering livestock, and overall decreased water usage by households.
- With the expected decline in forage quality and quantity, it is probable that milk production and consumption at the household level will decrease in the coming months.
- In terms of food security, cereal and other food prices are predicted to remain stable initially, but there is a possibility of subsequent increases due to ongoing market trends and rising inflation rates.
- Baraki and Jarajara wards have been identified as experiencing severe vegetation deficit during the reporting month, indicating heightened vulnerability in those areas.

## **9.0 RECOMMENDATIONS**

*Table 2. Recommended interventions*

<b>Sector</b>	<b>Sub County</b>	<b>Recommended Intervention</b>
Livestock	All sub counties	Intensify vaccination against PPR and contagious Caprine Pleuropneumonia
	All sub counties	Rangeland management, conservation and managements.
	Balambala, Fafi and Ijara	Vector control through integrated pest management.
Education	All sub counties	Supply of hygiene kits to schools
	Township and Fafi	Repair of schools infrastructure
Water	Lagdera, Ijara and Hulugho	Supply of water treatment chemicals for water pan dependent areas
	Dadaab and Fafi sub counties	Repair and maintenances of boreholes
Agriculture	Garissa Township, Fafi and Balambala	Rehabilitation of irrigation infrastructure (closed pipe system)
	All sub counties	Provision of seed and seedlings to farmers along tana rivers for recovery
Health	All sub counties	Monitoring of ongoing intervention by partners
	All sub counties	Health and nutrition outreach programmes
	All sub counties	Mass screening for under fives
Coordination	All sub counties	Upscale sub county steering group meeting