A Vision 2030 Flagship Project

National Drought Management Authority

MANDERA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JUNE 2024

JUNE 2024 EW PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- No rains received in any part of the county during the Month under review.
- **Vegetation condition**: the current three-month Vegetation Condition index for the County showed vegetation greenness above normal band.
- Pasture and browse conditions are good to fair in all parts of the County and can last for five months.
- Water availability is normal across the County with all the earth pans having water.

Socio Economic Indicators (Impact Indicators)

Production indicators:

- Currently, the body condition of livestock species is good to fair while the distance to water source lies within the normal range.
- Milk production is above the normal range.

Access indicators:

- Terms of trade are favourable but slightly lower than the preceding month.
- Milk consumption is above normal in the entire livelihood zone.

Utilization Indicators:

- The percentage of under five children at risk of malnutrition (MUAC) was below the long-term average.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral zone	Normal	Stable
Irrigated Cropping	Normal	Stable
Pastoral all species	Normal	Stable
County	Normal	Stable
2	Value	**Normal Range/Value**
Rainfall (% of Normal)	0.25mm	10mm
VCI-3Month	81.57	>35
Forage condition	Good	Good
Production indicators	**Value**	**Normal**
Crop Condition (Maize)	fair	Good
Livestock Body Condition	3-4	5
Milk Production	2.7	1.15 litres
Livestock Migration Pattern	No Migration	Normal
Livestock deaths	No Deaths	No deaths
Access Indicators	**Value**	**Normal**
Terms of Trade (TOT)	90.70	>57..0kgs
Milk Consumption	1.5	0.4litres
Return distance to water sources	7.8	<8.67 Km
Cost of water at source (20 litres)	0-5	<5Kshs
Utilization indicators	**Value**	**Normal**
Nutrition Status, MUAC (% at risk of malnutrition)	24.15	33.45
Coping Strategy Index	18.85	<0.95

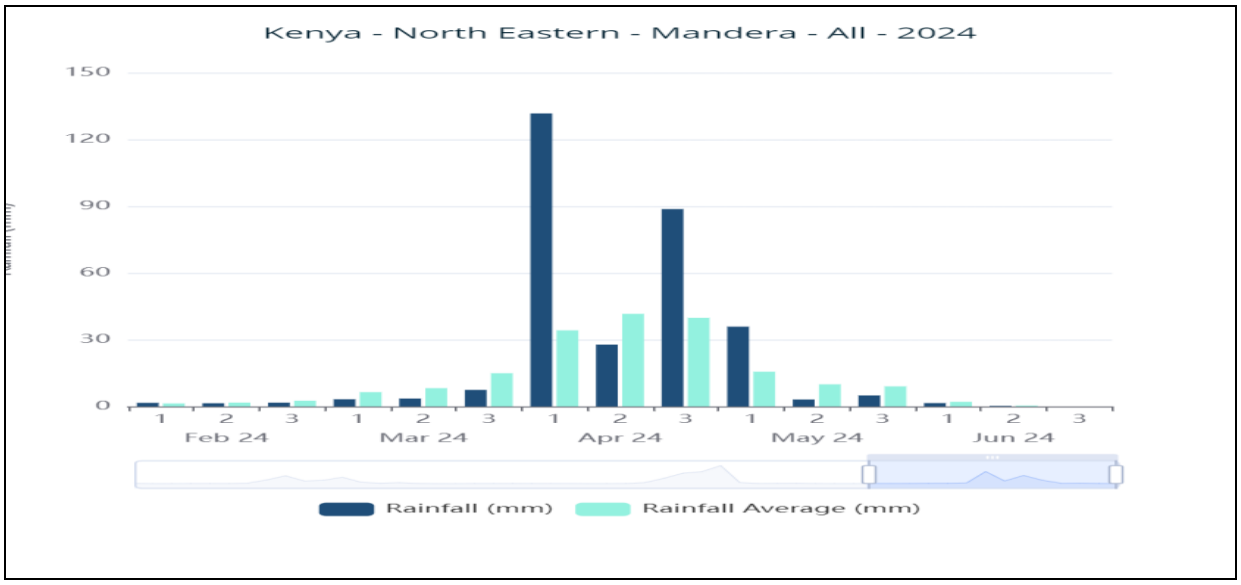
▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ Land preparation	▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase	▪ Long rains harvests ▪ A long dry spell ▪ Land preparation. ▪ Increased HH Food Stocks ▪ Kidding (Sept)	▪ Short rains ▪ Planting/weeding

Jan	Feb	Mar	Apr	June	Jun	Jul	Aug	Sept	Oct	Nov	Dec

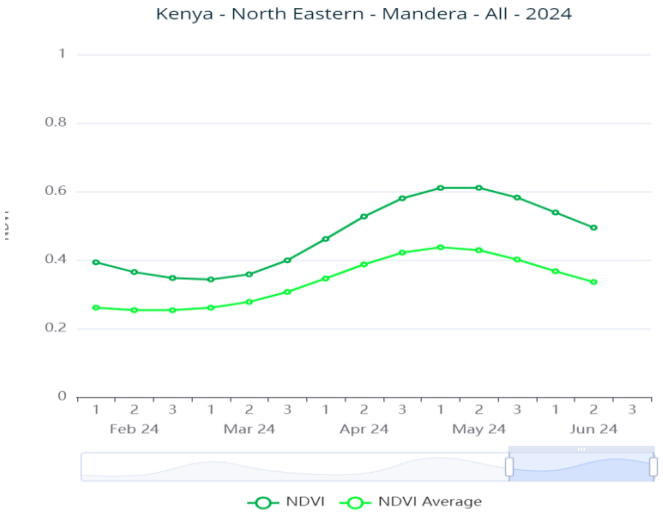
1.0 CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE.

- following the early cessation of the MAM long rains, the month under review marked no significant rainfall received. According to climate explorer rainfall analysis on the second dekad of June show a 0.25MM of rainfall against an average of 0.35MM.
- The county experienced an early end to the long rains and no rainfall in June 2024. This scenario presents potential risks of water stress, although the high NDVI values suggest that vegetation remained healthy during this period. Moving forward, it is essential to consider strategies for water management and continued monitoring to mitigate the impacts of such irregular rainfall patterns.



- The Normalized Difference Vegetation Index (NDVI) is a crucial indicator of vegetation health and greenness:
- First Dekad: The NDVI was 0.46, well above the average of 0.36.
- Second Dekad: The NDVI increased to 0.49, again significantly higher than the average of 0.34.
- These NDVI values suggest that the vegetation was thriving despite the insignificant rainfall. The higher-than-average NDVI indicates healthy and abundant vegetation during both dekad of June. The graphs above were extracted from climate explorer.



1.2 Other Events

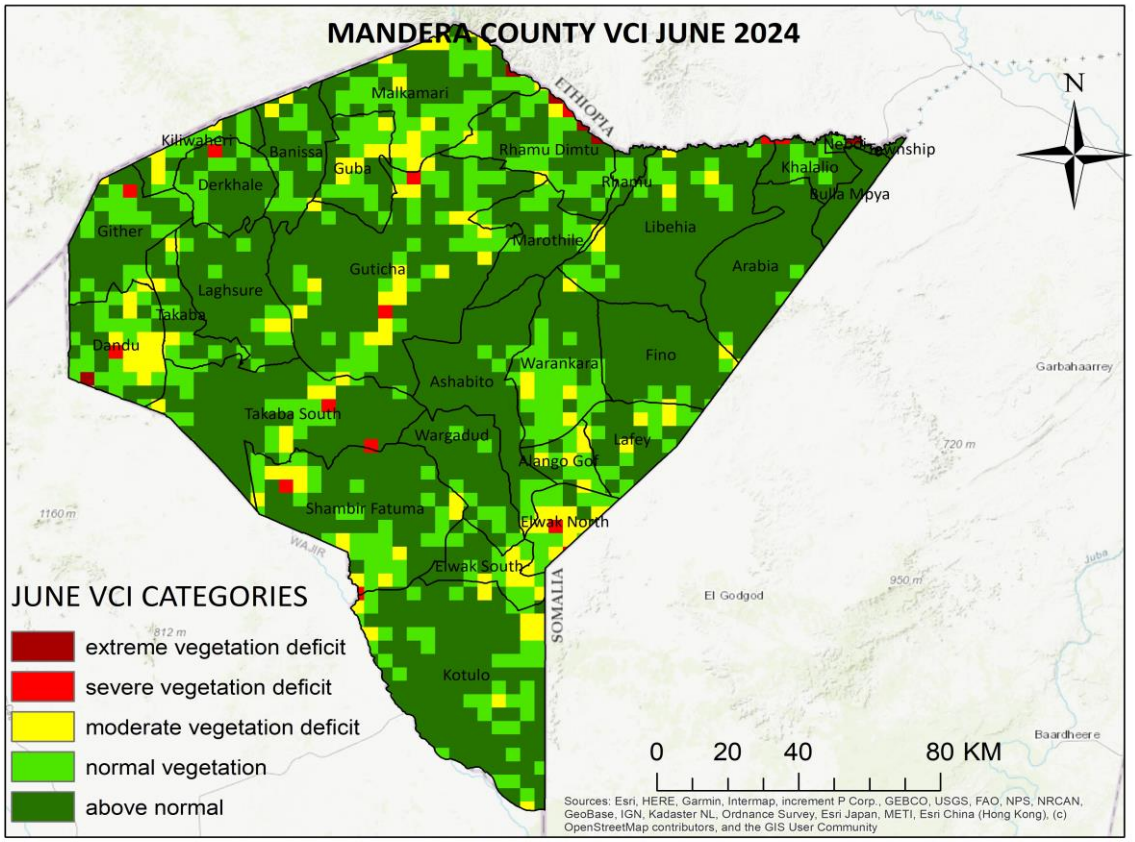
- No cases of unusual events such as outbreak of diseases or attacks from al-Shabaab were reported during the month under review, however some of the roads in the county are still impassable due to fear of insecurity.

2.0 IMPACTS ON VEGETATION AND WATER

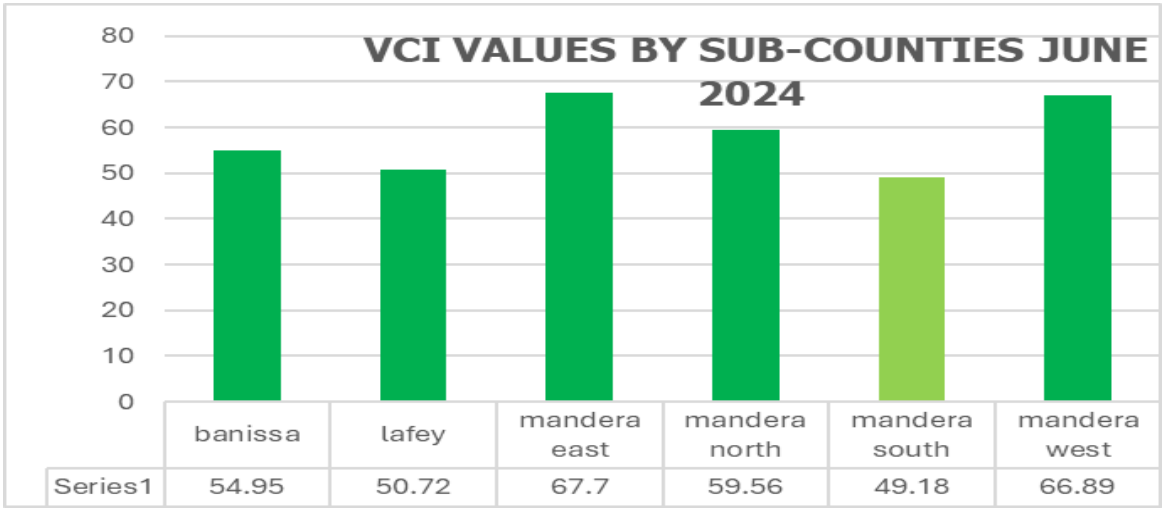
2.1 VEGETATION CONDITION INDEX

2.1.1Vegetation Condition Index (VCI)

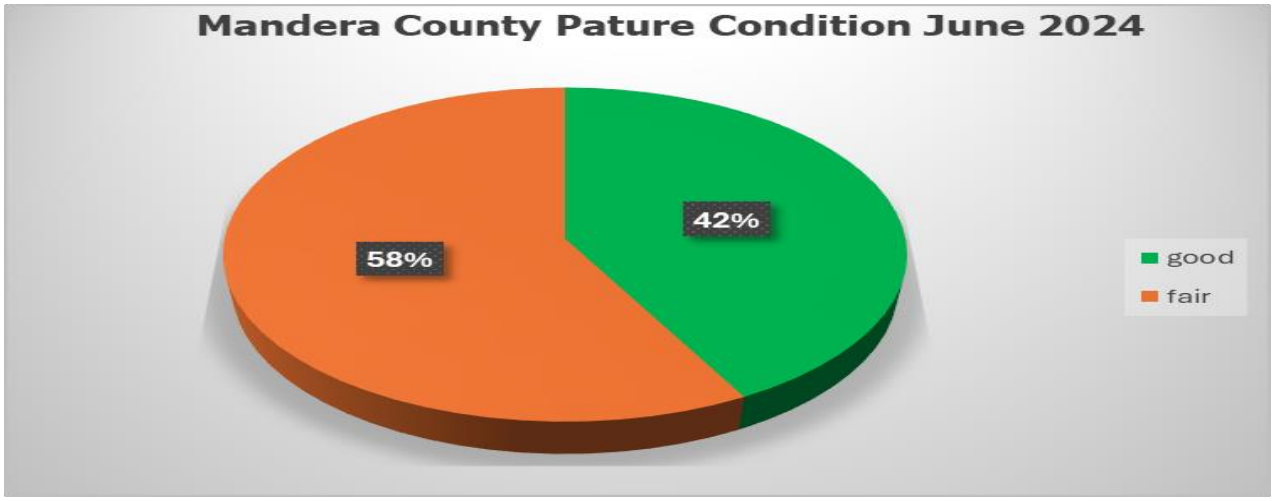
- **Vegetation condition index:** the current one-month vegetation condition index for the county has been above normal (>50).
- The ground vegetation cover shows above normal greenness and adequate ground service water according to eye observation during the month under review.
- All sub-counties are showing above normal greenness, except Mandera south with a VCI of 49.18. The highest VCI for the month was recorded in Mandera east at 67.70.



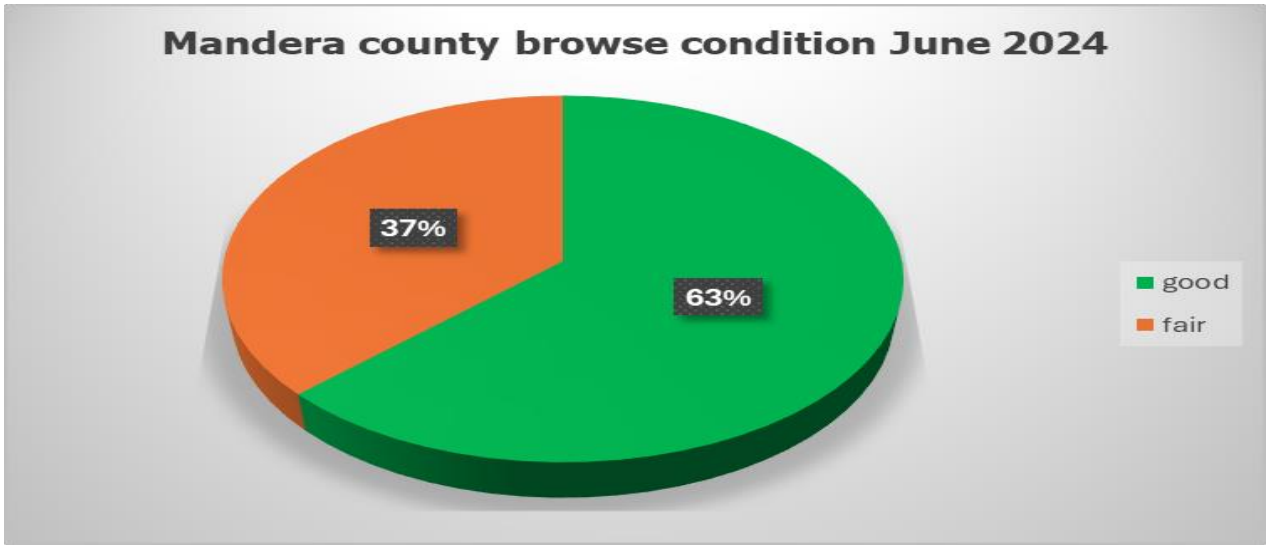
VCI categories by sub-counties.



2.1.2 Pasture and Browse



- Based on the data collected from the sentinel sites in June 2024, out of 210 households surveyed, 42% reported the condition of pasture as good. While 58% of these households considered it fair the same observation was derived at during the monthly monitoring in our transect drive.
- There is sufficient quantity of pasture however its quality may have reduced during the reporting month this is because of the early cessation of the long rains ultimately reducing the soil moisture.
- Pastures are easily accessible throughout the County, and it is anticipated that the current pasture conditions will persist in quantity across all livelihood zones in the next few months.

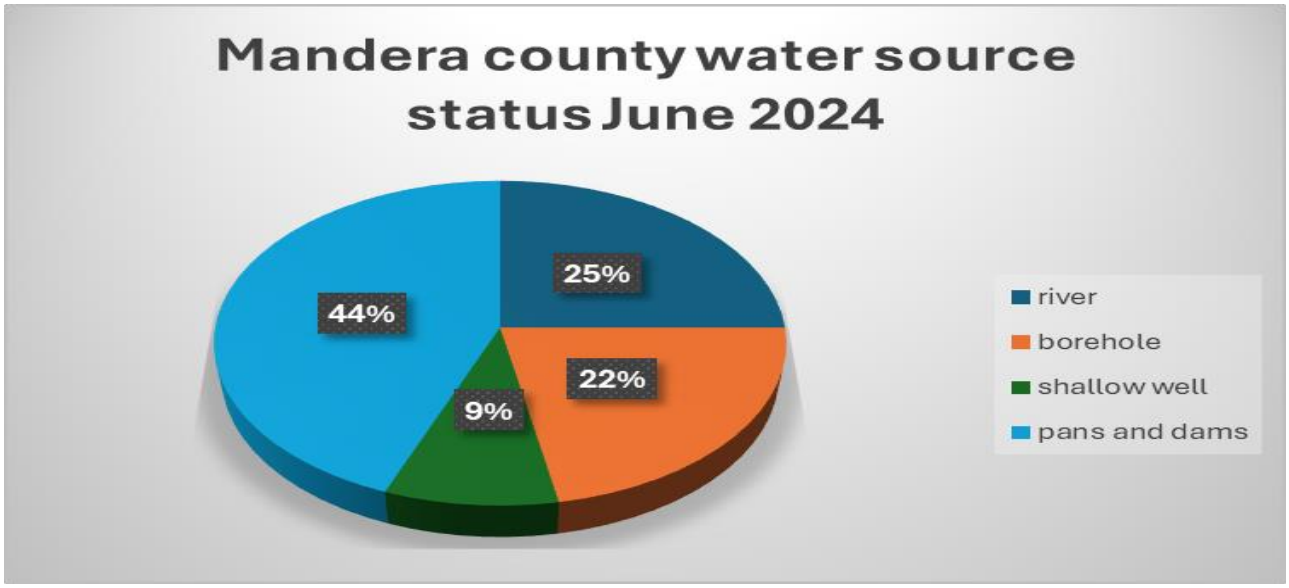


- According to the Sentinel sites data, during the month under review for the same sample size surveyed 63% reported the browse condition as good while 37% describing it as fair during the reporting month. The quality and quantity of browse is still intact comparing the reduced temperatures and the amount of water in the leaves of plants meaning that the level of evapotranspiration is low in June and July.

- It is expected that the browse condition will persist for approximately three months virtually in all livelihood zones.

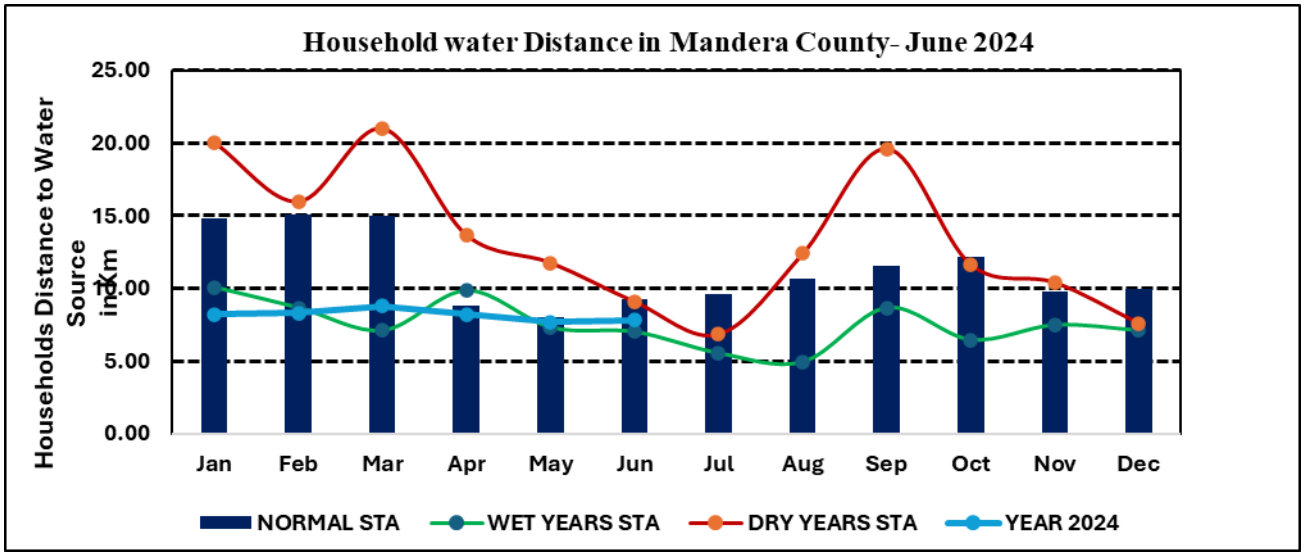
2.2 WATER RESOURCE

2.2.1 Sources



- The primary sources of water for both humans and livestock in the county include earth pans, boreholes, River Daua, shallow wells.
- Approximately 44% of households rely on earth pans, with 25% utilizing River Daua, 22% depending on boreholes while 9% are using shallow wells as their main source of water.
- The utilization of water sources remained consistent compared to the previous month, thanks to the widespread availability of water across the County due to the average MAM long rains received during the season.
- Underground tanks, traditional ponds, and roof catchments which were fully recharged, during the long rains have now mostly dried-up or utilised, however the water situation is expected to be stable at least in the next three to four months.

2.2.2 Household access and utilization

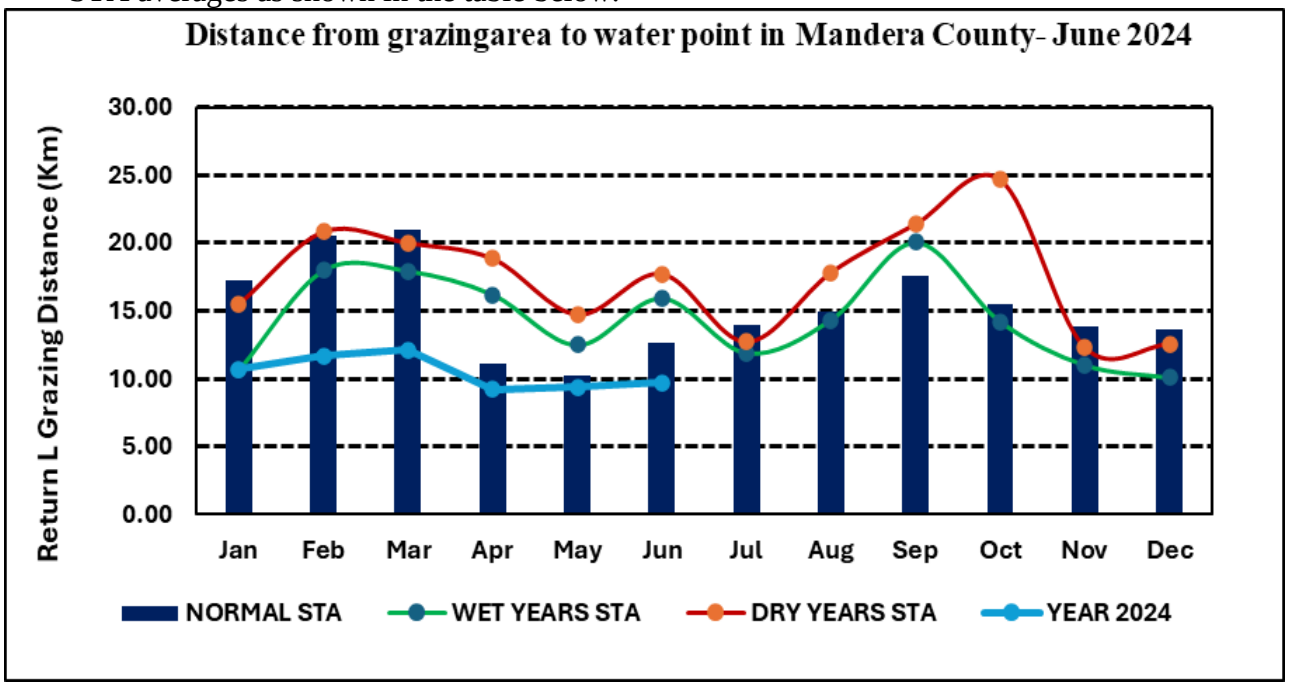


- The household return distances to the main water sources reported during the month under review was 7.8 KM compared to the 7.7km the previous month.

- The current average return distance is still below the normal range.
- Currently there is no cost incurred in fetching water in most parts of the County boreholes are charging 5 shillings maintenance fee which is normal.
- The proportion of households treating water is significantly very low with only few households mainly in the urban centres reported to have used boiling methods.

2.2.3 Livestock Access

- Livestock trekking distances depend on factors such as forage-Water Balance In some cases, the best grazing areas might not be near water sources. Livestock may graze in areas with ample forage but then need to travel to different locations to find water, Infrastructure and accessibility, lack of infrastructure such as water troughs or piped water systems in grazing fields can force livestock to travel long distances. Better infrastructure could reduce these distances.
- Current trekking distances recorded from the grazing fields to the main water sources during the reporting month stands at 9.7 KM which is normal at this time of the season in comparison to the preceding month a slight increase was noted.
- Livestock watering frequency is seven times a week which is normal across all livelihood zones at these times of the season.
- The current trekking distances is above the normal STA, the wet season and the dry season STA averages as shown in the table below.



3.0 PRODUCTION INDICATORS
3.1 LIVESTOCK PRODUCTION
3.1.1 Livestock Body Condition.

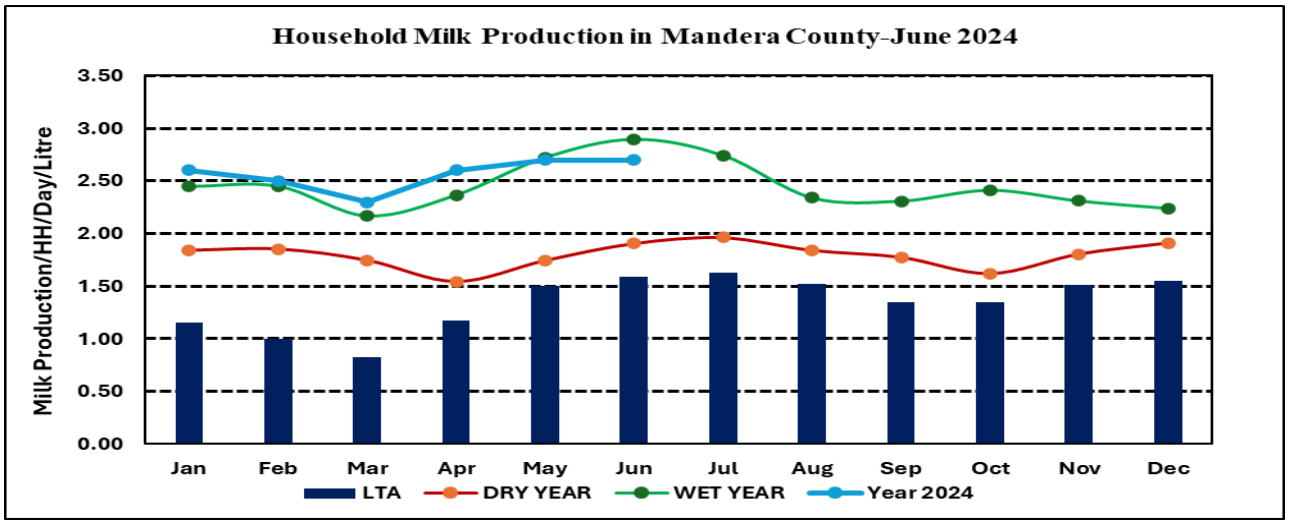
- Livestock body condition as evaluated using the predetermined photo indicators provided by **PET** livestock presently show the Body Condition Score **(BCS)** for sheep and camel as **4 (good),** while in goats and cattle can be seen as fair **(BCS) 3**. Notably, when assessed from the right-hand side of the body, the characteristic triangular curve filled with flesh, typically indicative of a **BCS of 4**, has slightly reduced in goats and cattle. However, in camels, the hump sac still contains adequate fat, forming a distinct hump that covers approximately 60% of the dorsal length of the body.
- The favourable body condition of the livestock is attributed to the ample availability and accessibility of forage and water.
- The following table shows the colour codes and descriptions of the BCS as highlighted.

BCS	DESCRIPTION	COLOUR CODES
1	Very poor	Maroon
2	poor	red
3	fair	orange
4	good	Light green
5	Very good	green

3.1.2 Livestock Diseases.

- There were no cases of unusual deaths of livestock due to diseases reported during the month under review.
- Currently there are various cases of abortions reported throughout the county, epidemiological investigations and sampling is still ongoing.
- Commonly reported and encountered diseases in county-PPR, CCPP, Sheep & Goat pox, trypanosomiasis, orf, brucellosis, Black quarter, and rabies.

3.1.3 Milk Production



- Household milk production for the month of June 2024 was recorded at 2.7 litres same as the previous month, surpassing long-term averages of 1.7 litres. The stability in milk production can be attributed to the availability of adequate forage and water which are essential for livestock health and productivity. Additionally, this period coincides with the breeding season for all livestock species, further contributing to the rise in milk output.

- In conclusion, the rise in household milk production is a positive development driven by ample forage and water availability, the breeding season, and supportive market and community conditions. The pastoral livelihood zones lead in production, followed by irrigated cropping zones, with agropastoral zones recording the lowest but still improved output. Continued focus on sustainable livestock practices and resource management is essential to maintain and further enhance milk production levels.

3.2 RAIN-FED CROP PRODUCTION.

3.2.1 Stage and Condition of food Crops

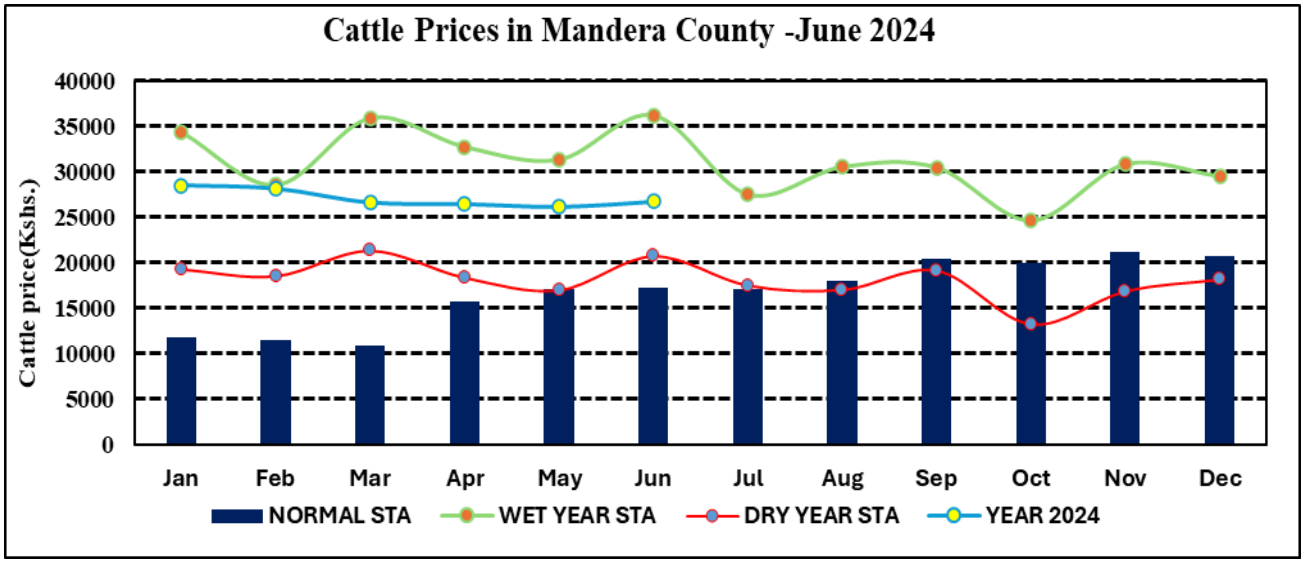
- In the agropastoral livelihood zones, farmers have observed that their crops are currently ready for harvest. While the rains seem to have ceased, the soil remains moist, which is crucial for the ongoing growth of these crops. However, with temperatures now exceeding 32 degrees Celsius, there is a significant risk of rapid soil moisture evaporation. This could lead to moisture deficiency, putting stress on the crops and potentially affecting their yield. If these high temperatures persist and no further rainfall occurs, the likelihood of a good harvest diminishes.
- In the irrigated zones farmers have replanted their farms which were submerged by the flash floods.
- Overall, both the agropastoral and irrigated zones are facing considerable challenges. In the agropastoral areas, the cessation of rainfall combined with high temperatures threatens to reduce crop yields due to potential moisture loss. Meanwhile, in the irrigated zones, the aftermath of flooding and persistent high temperatures severely hinder crop recovery and replanting efforts.
- To mitigate these issues, it is recommended to closely monitor soil moisture levels in the agropastoral zones and consider supplementary irrigation if possible. In the irrigated zones, support for replanting efforts and infrastructure repair is essential to recover from flood damage. Additionally, implementing measures to conserve soil moisture, such as mulching, and exploring drought-resistant crop varieties could help mitigate the impact of high temperatures across both zones.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

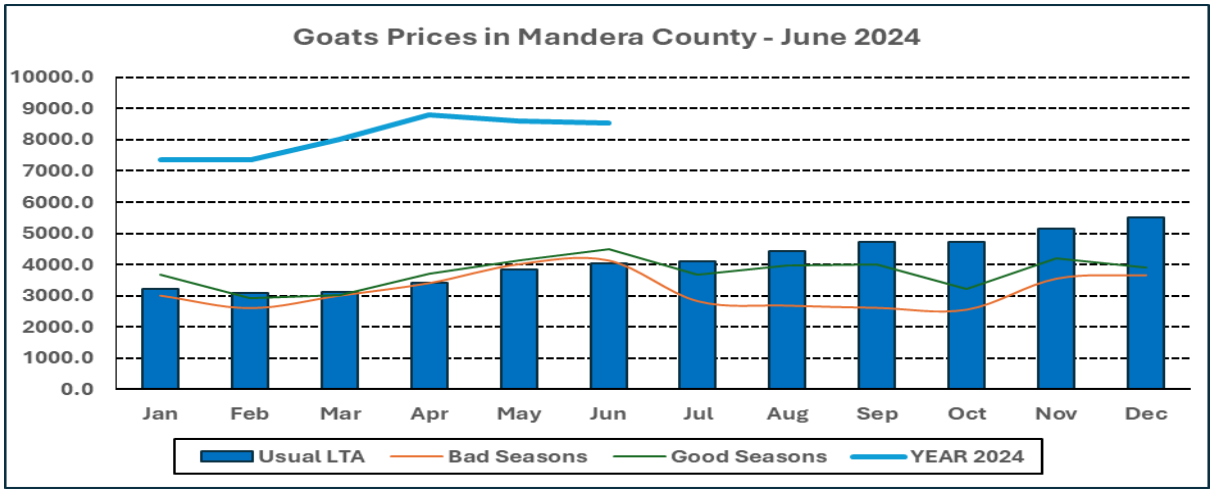
4.1.1 Cattle Prices

- The average cattle price for the current month stood at Ksh 26,750 more Ksh 550 when compared to the preceding month, the price remained within range which can be attributed to the quality and quantity of pasture and the availability of water during the season.
- There were no market disruptions noted so far, but the sales volume was not sufficient across all markets in the sentinel sites, cattle prices are unpredictable however due to the fair body condition its expected to pick again in July and August.
- Pricing dynamics differ among various livelihood zones, with the pastoral zone witnessing the highest price range, followed by the Agro-Pastoral zone. Conversely, the irrigated livelihood zone reported the lowest price range.
- When compared against the long-term mean, the average price exceeds the expected normal range, as illustrated below.



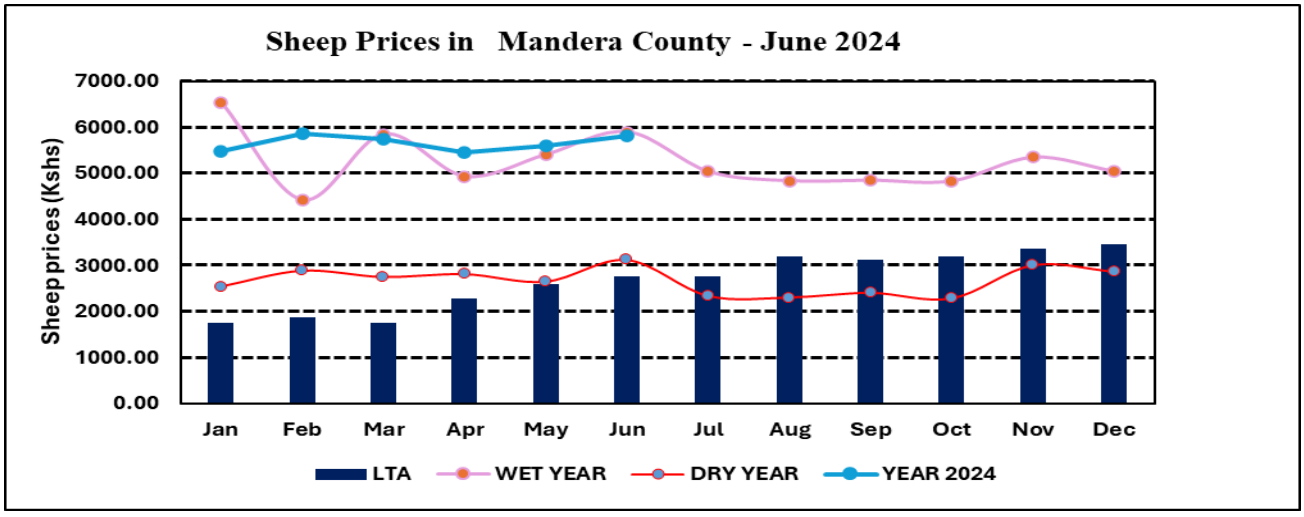
4.1.2 Goat Prices

- Data gathered from sentinel sites in June indicates an insignificant decline in goat prices this month. The current average price is Ksh 8,533, down from Ksh 8,596 in the preceding month. Despite this, goats remain in high demand across all markets and livelihood zones, surpassing other livestock species in popularity.
- Several factors could contribute to the fluctuation in goat prices, even when the body condition of goats is good and the market is stable, they include but not limited to, Seasonal Supply and Demand, Market Saturation, Economic Factors, Transportation Costs that may lead to variation in prices due to changes in fuel price or logistical issues.
- The ongoing trend suggests that goat prices are likely to continue increasing in the upcoming months, given their significant role as a preferred medium of exchange, particularly within pastoral communities, influencing terms of trade.
- With the availability of forage and water attributed to the long rains the livestock body conditions are currently good, hence impacting on the livestock market as well.
- The current goat price is above the long-term averages as well as the bad and good season averages as shown in the diagram below.



Sheep Price

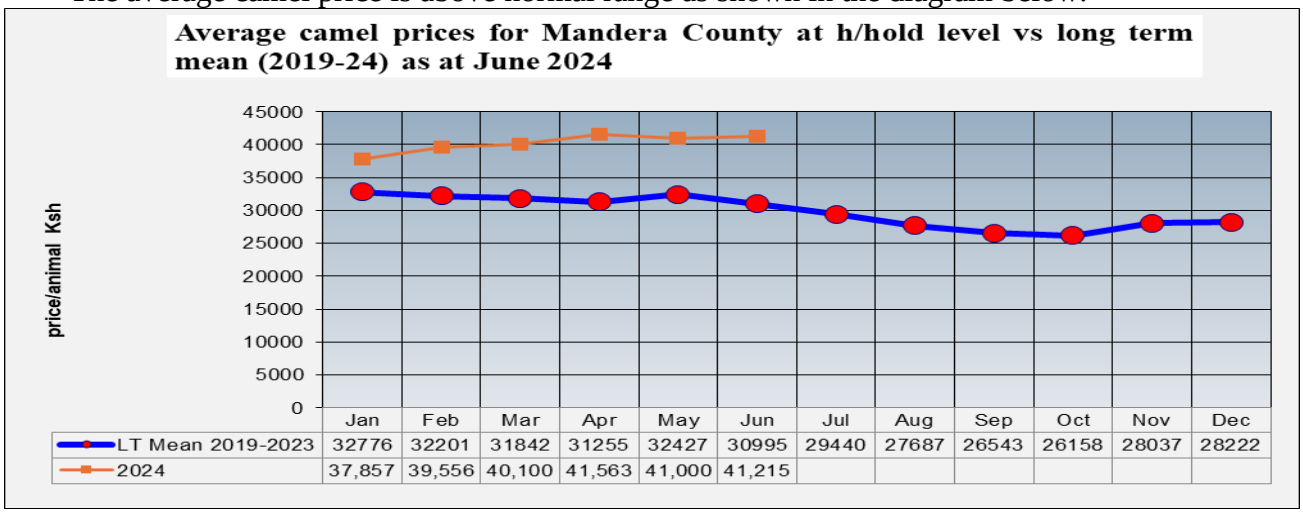
- The price of a medium sheep recorded during the reporting month was Ksh 5,825 up from Ksh 5,607 the preceding month. Comparatively, these monthly prices are all higher than the long-term averages, suggesting an overall upward trend in sheep prices. Despite the limited number of sentinel sites reporting sheep sales, the market remained stable, supported by the good body condition of the sheep.
- When analysing the prices across different livelihood zones, the agro-pastoral zones recorded the highest prices, indicating strong market demand and good sheep conditions in these areas. The pastoral zones followed, with moderately high prices, reflecting a stable market. In contrast, the irrigated cropping zones recorded the lowest prices, possibly due to differing market dynamics and supply conditions in these areas.
- In summary, the sheep market has shown a stable yet upward trend in prices across various zones, with the highest prices in agro-pastoral zones and the lowest in irrigated cropping zones.



4.1.2 Camel Prices

- Data from sentinel sites in June 2024 indicates a stable pricing trend in camel sales, with recent reports showing a notable increase in prices to unprecedented levels. This upward trajectory is expected to persist, primarily due to the emergence of a new external market that is being embraced by both pastoralists and camel traders.
- The Middle East, spanning from Moyale in Ethiopia across the Red Sea and from Somalia into the Gulf region, is still identified as a significant factor contributing to the observed surge in camel prices. The region exhibits strong demand for camels, further propelling their prices upward.

- As of June 2024, the sale price for a single camel was selling at KSH 41,215 reflecting a slight increase from figures in the previous month.
- The highest average price was recorded in the Pastoral all species category, followed by the Agro-pastoral livelihood zone and the irrigated cropping livelihood zone.
- The average camel price is above normal range as shown in the diagram below.

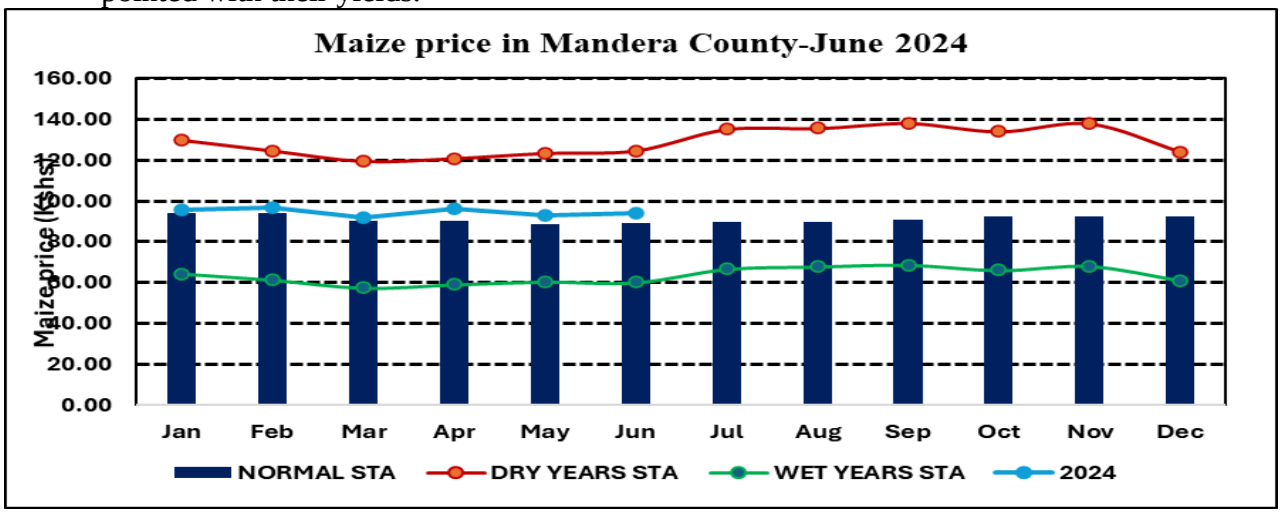


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
LT Mean 2019-2023	32776	32201	31842	31255	32427	30995	29440	27687	26543	26158	28037	28222
2024	37,857	39,556	40,100	41,563	41,000	41,215						

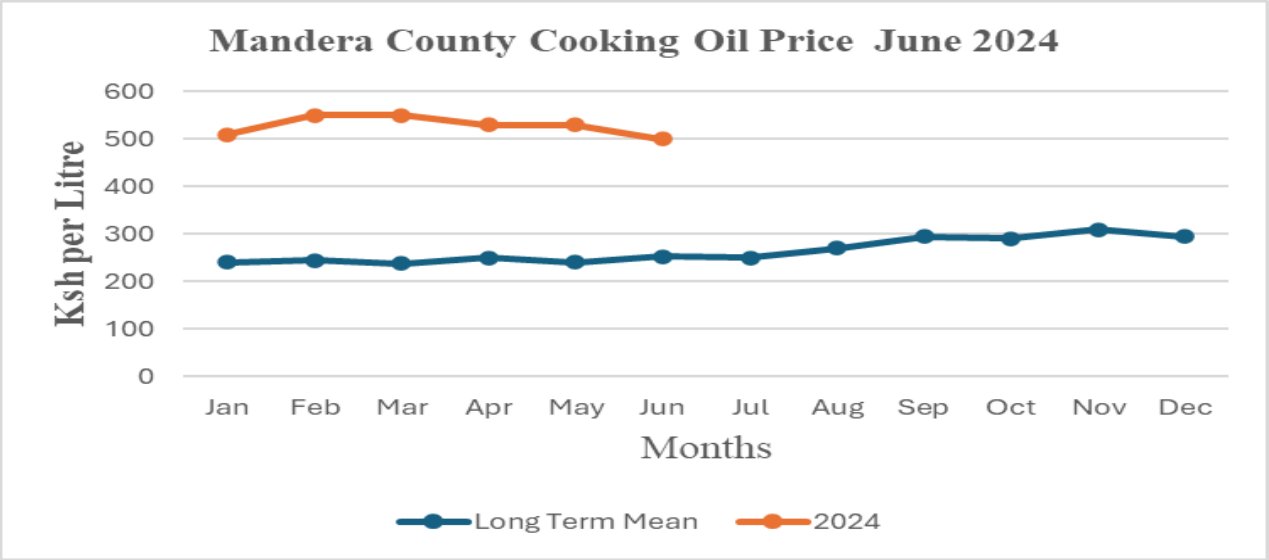
4.2 CROP PRICES

Maize

- In June 2024, the average price of maize per kilogram was 94 shillings one shilling higher than preceding month. This was largely attributed to the local harvest during the previous season, which contributed to balancing the external market and maize supplies.
- When comparing the current maize price to the normal Short-Term Average (STA) and Long-Term Average (LTA), the average price is slightly higher than the normal LTA. This suggests that maize prices are currently elevated compared to historical averages.
- In the Agro-pastoral livelihood zones, maize crops have predominantly been harvested due to the sustained soil moisture that supported their growth even after the cessation of rainfall, resulting in favourable yields for most farmers.
- In the Irrigated cropping zone, a different situation is observed. Floods have caused damage to crop, infrastructure, and the water has receded from farms and famers have been disappointed with their yields.

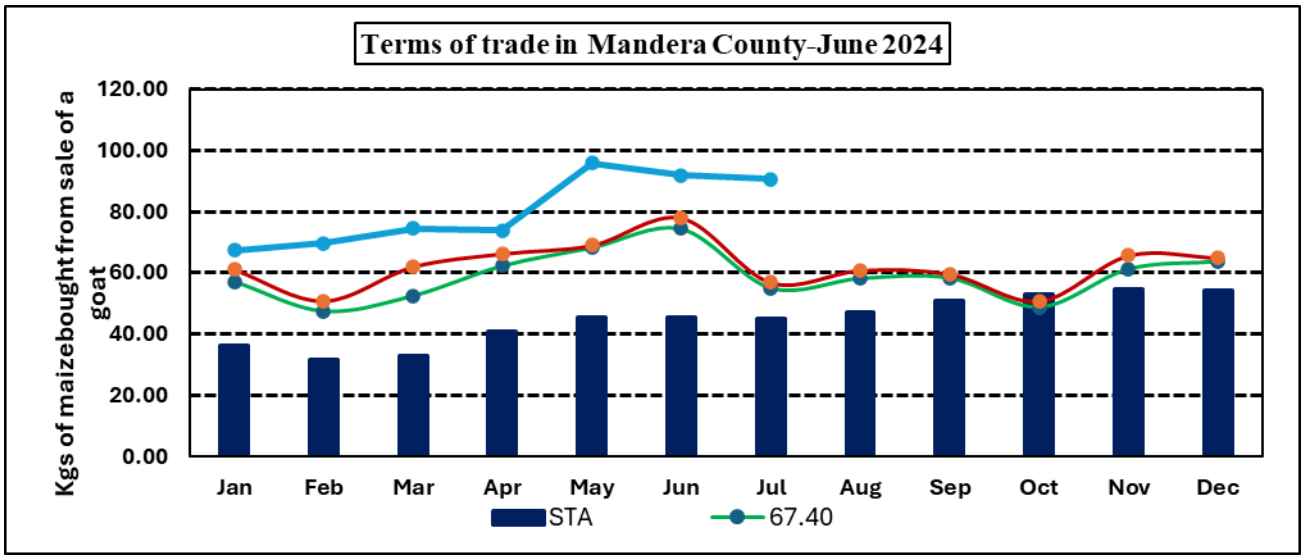


OIL PRICES



The prices of basic commodities remain high for all livelihood zones. Commodities such as sugar and oil are outrageous and completely unaffordable. However, a price decrease was observed in oil prices for the reporting month from Ksh 530 to Ksh 500.

Livestock Price Ratio/Terms of Trade

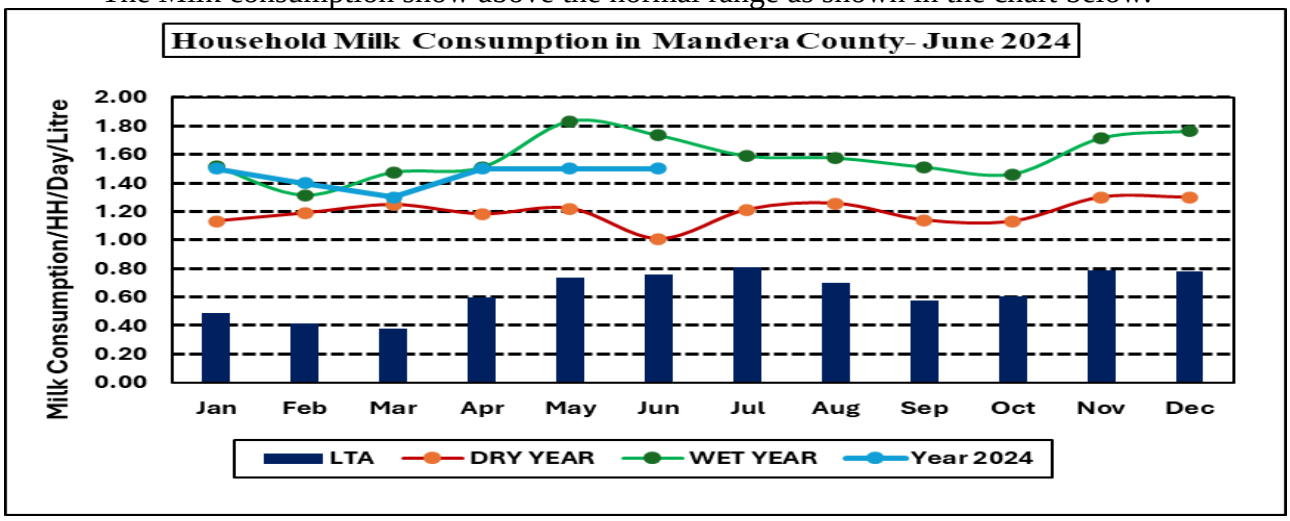


- Presently, exchanging one medium-sized goat enables a household to acquire 90.70 kilograms of maize.
- The current exchange ratio showed a decrease in comparison to the previous month this is because of a slight difference in both goats and maize prices.
- Pastoral communities are experiencing favourable terms of trade.
- The Pastoral all species livelihood zone reported the highest terms of trade, followed by the Irrigated livelihood zone and then the Agro pastoral zone.
- The favourable terms of trade can be attributed to the long rains which had a positive impact on both livestock and crop production.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

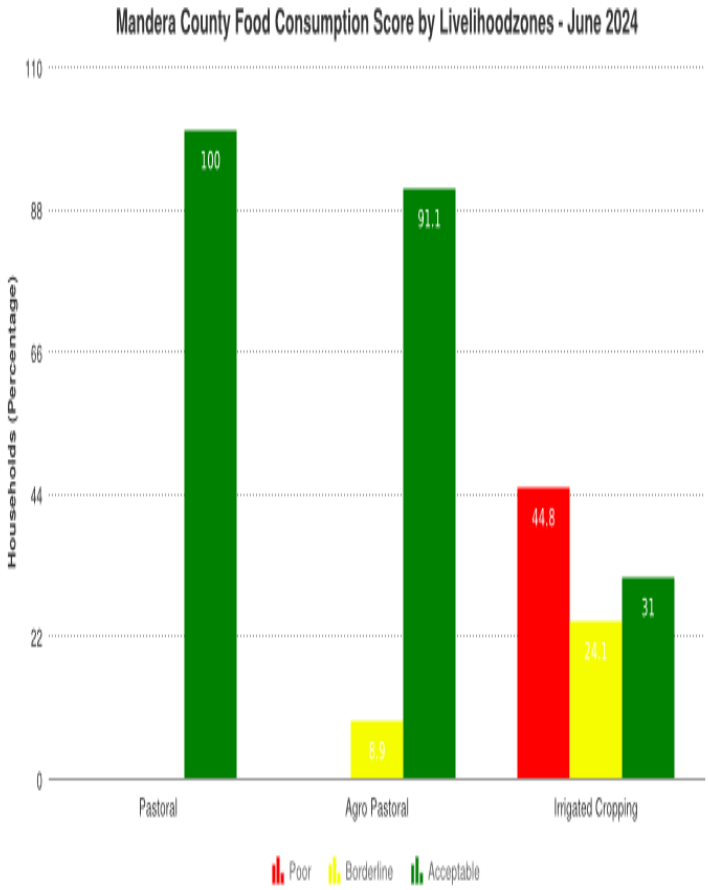
Milk consumption.

- Household Milk consumption shows a stable trend in all livelihood zones for the month of June 2024 and was recorded at 1.5 litres.
- The highest milk consumption was recorded in pastoral livelihood zones.
- Most of the households sell their milk to be able to purchase other food commodities. A litre of milk is currently trading at Ksh 80 to 100 shillings.
- The Milk consumption show above the normal range as shown in the chart below.

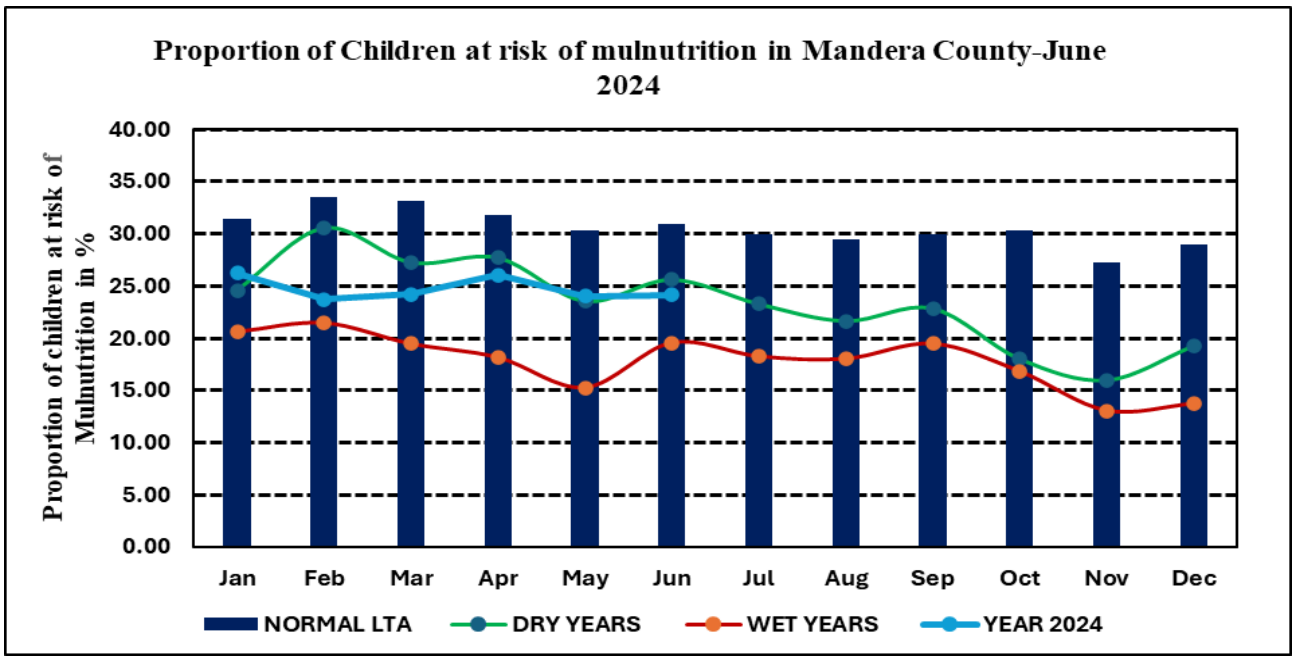


5.1 Food Consumption Score

- The Food Consumption Score (FCS) is a measure used to assess the dietary diversity and frequency of food intake, which helps determine the overall food security status of a population. During the month under review, 12% of households had a poor FCS, 10% been under borderline category, while 77% had an acceptable FC. There is a reduction in households within BL FCS and those in the acceptable category indicating improved food security among the most vulnerable.
- In comparison to last year same time households with poor FC was 15%, those in the BL were 7% while 62% had an acceptable FC. However, this also means that a small fraction still remains at risk of falling back into food insecurity.
- Overall, these figures suggest a notable improvement in food security within the county over the past year, with a significant increase in the number of households achieving an acceptable Food Consumption Score as expressed in the attached graph.



5.2 HEALTH AND NUTRITION STATUS



- The current frequency of children (<5yrs) at mid-risk category (125mm to 134mm) for the reporting month was recorded at 24.15 changing slightly from the preceding months 24.00
- The trend of children at risk of malnutrition in Mandera has been declining over the past months due to enhanced milk production and concerted efforts by the Ministry of Health and other partners in providing supplements to children under five years old. milk production was stable during the reporting month.
- MUAC rates are lower than the long-term averages.
- The high levels of malnutrition cases are attributed to Poor dietary diversity, poor child feeding practices, poor caring and poor feeding practices.
- The agro pastoral cropping livelihood zone recorded the highest percentage of malnourished children the lowest been the pastoral livelihood zone.

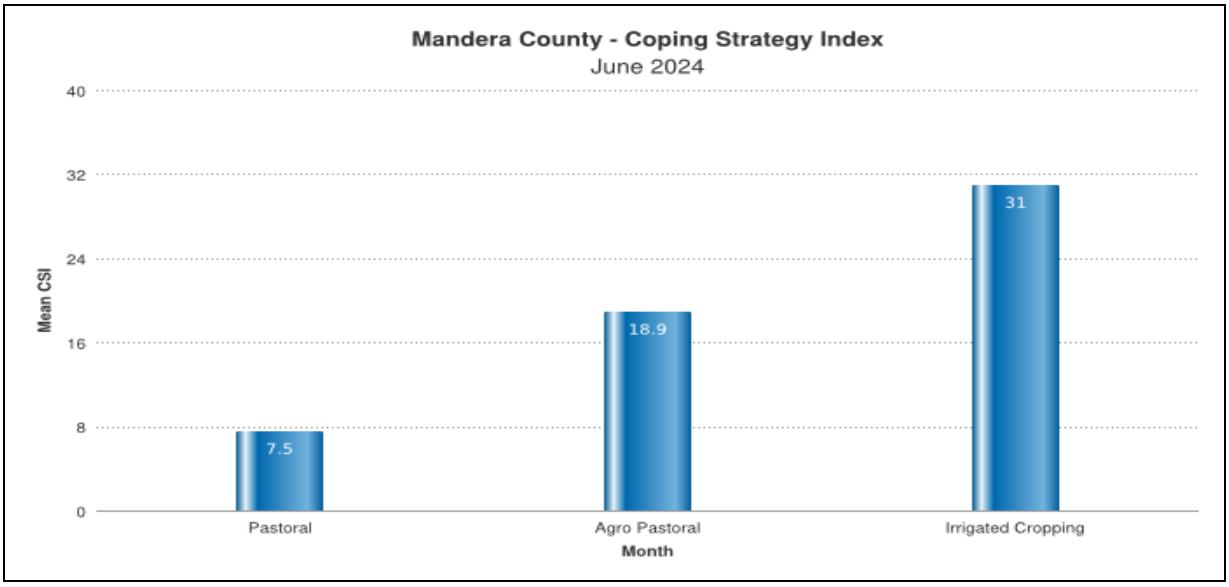
5.2.1 Health

- No new cases of disease outbreaks were reported across the county during the reporting month, despite alerts and warnings from the Ministry of Health regarding water-borne diseases caused by the recent flash floods washing away many sanitary facilities.
- Following the flash floods during the long rains, the Department of Health reported the destruction of pit latrines in many facilities. They also noted an increase in vectors such as flies and mosquitoes, which could lead to serious disease outbreaks in the near future.
- Infrastructure damage remains, with minimal interventions implemented. The department has requested input from the county and stakeholders and is awaiting feedback.

5.2.2 COPING STRATEGIES

- The Coping Strategy Index (CSI) is a straightforward tool designed to assess household stress due to food scarcity or insufficient financial resources to purchase food. It evaluates households' responses to a single question about their actions during times of inadequate food or financial means to acquire it, analysing the frequency of each coping strategy used. In the current reporting month, the average CSI is 18.85, slightly lower than the previous month's 19.14.
- Notably, the irrigated livelihood zone recorded the highest CSI at 31, the agro-pastoral livelihood zone recorded 19, and the pastoral zone had the lowest CSI at 8.
- Compared to the same period last year, the CSI was 18.42, indicating that communities have employed similar strategies for dealing with food shortages across various livelihood zones.

- The indices at the livelihood zone level are illustrated in the diagram below.

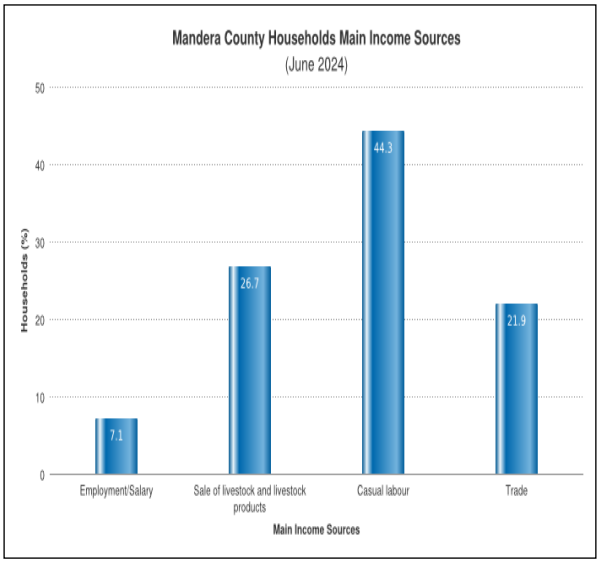


The main coping strategies used by communities include-

- HSNP regular beneficiaries receiving monthly payment for 22231 households.
- Food and nutrition support services offered by various actors.
- Sale of livestock and livestock products
- Purchasing basic food items on credit from local shops.
- Borrowing and receiving of gifts from neighbours.
- Engaging in casual labour to support families.
- Financial aid and remittances from relatives working in and outside the County.
- borrowing from friends and relatives
- Cash transfer for elderly/OVC.

5.3 HOUSEHOLD SOURCE OF INCOME

- The county's primary income sources include employment, casual labor, the sale of livestock and livestock products, and trade. Notably, there has been an increase in the sale of livestock and livestock products, as well as trade during the reporting month.



- The positive impact of the long rains is evident in the stabilization of the livestock market, facilitating exchange and trade both within the county and across borders. This, in turn, has improved the overall food security situation by boosting household incomes.
- The anticipated benefits include enhanced agricultural production, leading to increased food accessibility and improved nutrition. Additionally, the availability of forage and water is expected to enhance livestock productivity, while the increased rainfall is set to improve water availability for irrigation, further supporting agricultural development. These interconnected positive developments suggest a promising outlook for the county's food security situation.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTIONS

- NDMA through hunger safety net program (HSNP) are supporting 22,231 households in the entire county as regular beneficiaries receiving monthly payment of 2700/=
- RACIDA is conducting cash transfer to 1825 households in six counties across the County.
- IRK is conducting cash transfer program of 950 Household for 3 cycles with transfer value of 12,000 per household.

6.2 FOOD AID -

- Distributions of nutritional commodities to 93 health facilities by KRCS
- Integrated medical outreach to 46 centers in Mandera east, South, West and Lafey sub counties by KRCS.
- Supplementary feeding at 63 health facilities by WFP through KEMSA and COCOP.
- Sustainable food system program by World Food Program through COCOP over 7000 households in Mandera West, North and Banissa Sub-counties.

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No interclan conflict reported during under review.
- No insecurity cases related to attacks of al-Shabab, and explosives reported across the county during the month under review.
- Roads to and from all sub-counties to the county headquarters are still impassable due to the fear of Shabab attack making public service delivery difficult. Some of the worst affected areas include Arabia, Lafey, Banissa and Mandera south.

7.2 Migration.

- No new migration reported during the month under review.

7.3 FOOD SECURITY PROGNOSIS

- The current food security situation is at Normal phase and trend is stable.
- Water availability is normal across the county.
- Currently pasture and browse is available across the county.
- Livestock body condition is good to fair across all the species.
- Malnutrition rates are still low due to improved milk production.
- Terms of trade (TOT) is currently favourable increasing the purchasing power of the pastoralist communities due to increased prices of goats.
- The food security situation is projected to be remain stable in the next three months.

8.0 RECOMMENDATIONS

- Enhance livelihood programmes especially for livelihood affected families.
- Repair and maintenance of roads and water infrastructures damaged by floods.
- Construction of dykes and other floods control measures along the riverine
- Food aid to beneficiaries affected by the floods.
- Construction of toilets to schools and health facilities affected by floods.
- Mass deworming and treatment of livestock county wide.
- Fast truck disbursement of Drought Contingency funds for resilience activities.
- Capacity building and training of communities on Disaster Risk Reduction and EWS and drought cycle management.
- Scale up of health and nutrition outreach programme for settelement without facilities
- Increase mass screening of under five children.
- Provide essential drugs to all health facilities particularly newly operationalised facilities
- Fast truck nutritional commodities supplies to avoid IMAM programme defaulters.