



A Vision 2030 Flagship Project



National Drought Management Authority SAMBURU COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JUNE 2024

JUNE 2024 EW PHASE

Drought Status: **NORMAL**



Shughuli za kawaida

Early Warning Phase Classification

LIVELIHOOD ZONE	EW PHASE	TRENDS
Agro-pastoral	Normal	Stable
Pastoral (North)	Normal	Stable
Pastoral (East)	Normal	Stable
County	Normal	Stable

Drought Situation & EW Phase Classification

The March to May 2024 rainfall season performed above average which has triggered significant improvement in vegetation cover as well as fully recharge of water sources. The drought status remained normal and stable during the month under review.

Biophysical Indicators

Forage condition is good both in quantity and quality across the livelihood zones. Water sources have been well recharged.

Production Indicators

The body condition for all livestock species remained good to very good across the livelihood zones. Lameness has been common in goats and sheep in Samburu Central sub county due to wet soils. Milk production is comparable to the long-term average at the same period of the year.

Access & Utilization Indicators Details

Livestock and maize prices remained above average supporting favorable terms of trade. Proportion of children under five at risk of malnutrition is below the long term mean and stable.

Biophysical Indicators		Value	Normal range/Value
NDVI	Dekad 1	0.51	0.42
	Dekad 2	0.48	0.40
Production indicators		Value	Normal ranges
Livestock Migration Pattern		Insecurity induced movement	No Migration
Livestock Body Conditions		Good for all species	Good for all species
Milk Production (Litres/Household/day)		0.6	0.0 – 1.5
Livestock deaths due to drought		No deaths	No death
Access Indicators		Value	Normal ranges
Terms of Trade (TOT)		82.0	25.4 – 68.6
Milk Consumption (Litres/Household/day)		0.5	0.0 – 1.1
Return distance (km)	Household	4.8	4.5 – 6.9
	Livestock	9.4	7.2 – 12.8
Utilization indicators		Value	Normal ranges
MUAC (%) at risk of Malnourished		21.4	29
FCS (%)	Poor	7.7	0 - 21
	Borderline	38.2	21.5 - 35
	Acceptable	38.2	>35
rCSI	Mean	11.01	8.7 – 12.6

- 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

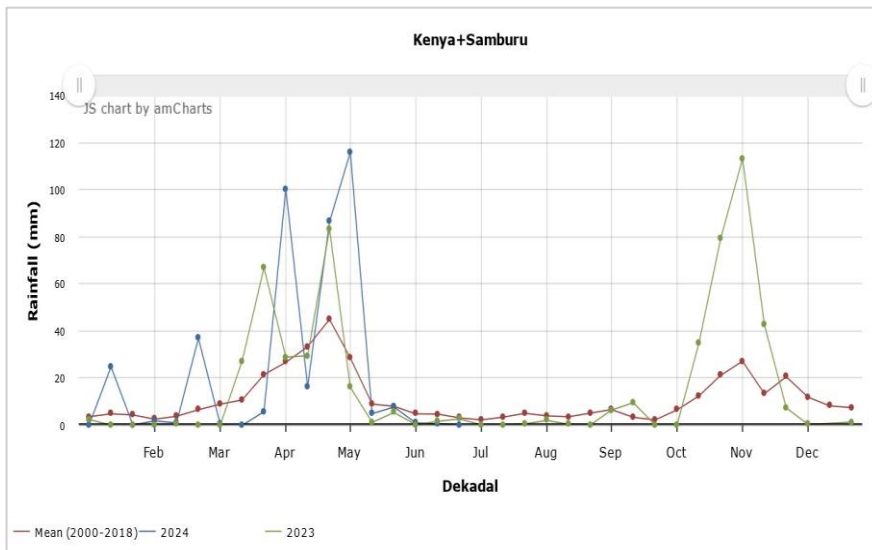
- Long rains harvests
- A long dry spell
- Land preparation
- Increased HH Food Stocks
- Kidding (Sept)

- Short rains
- Planting/weeding

1.0 CLIMATIC CONDITIONS

1.1 Rainfall Performance

The month of June 2024 was predominantly characterized sunny and dry with few intermittent showers experienced in upper areas of Suguta and Loosuk wards. Normally June marks the beginning of the long dry spell which lasts up to commencement of the October to December (short rains) season.



The 2024 March to May (MAM) season had timely cessation that occurred during the third dekad of May 2024 (Figure 1). Several areas of Agro Pastoral livelihood zone experienced cold seasons during the month of June 2024 which is likely to progress to July which is normally the coolest month in the year.

Figure 1: Remote Sensed Dekadal Rainfall Estimates (RFE) (Source: ...)

1.2 Amount of Rainfall and Spatial Distribution

Satellite imagery from WFP VAM indicates that most part of the county received less rains compared to the normal of the long-term average at this time of the year. The eastern parts of the county got less than 40 percent of normal while the western parts received less than 90 percent of their normal (Figure 2).

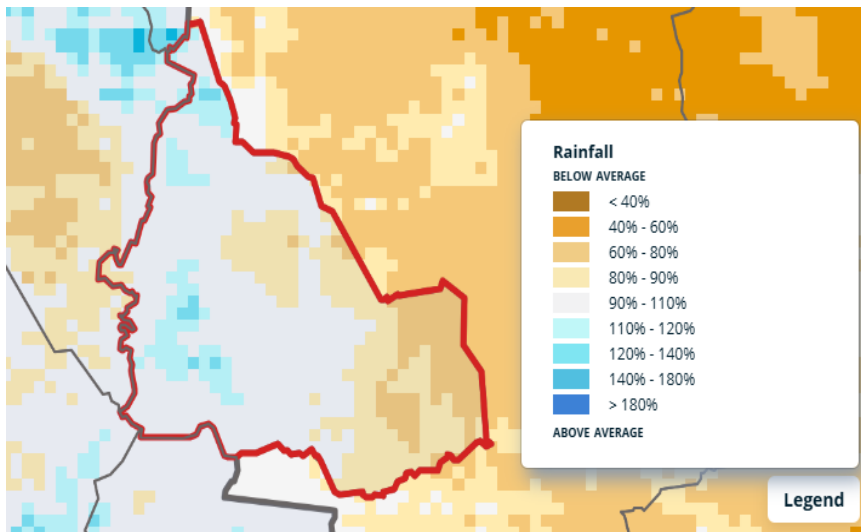


FIGURE 2: SPATIAL DISTRIBUTION

The rains were poorly distributed across the county.

1.1 Other Hazards and Shocks

1.1.1 Banditry Attack/Cattle Rustling

Banditry attacks have calmed down across the county.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

2.1.1 Vegetation Condition Index (3 month-VCI)

The

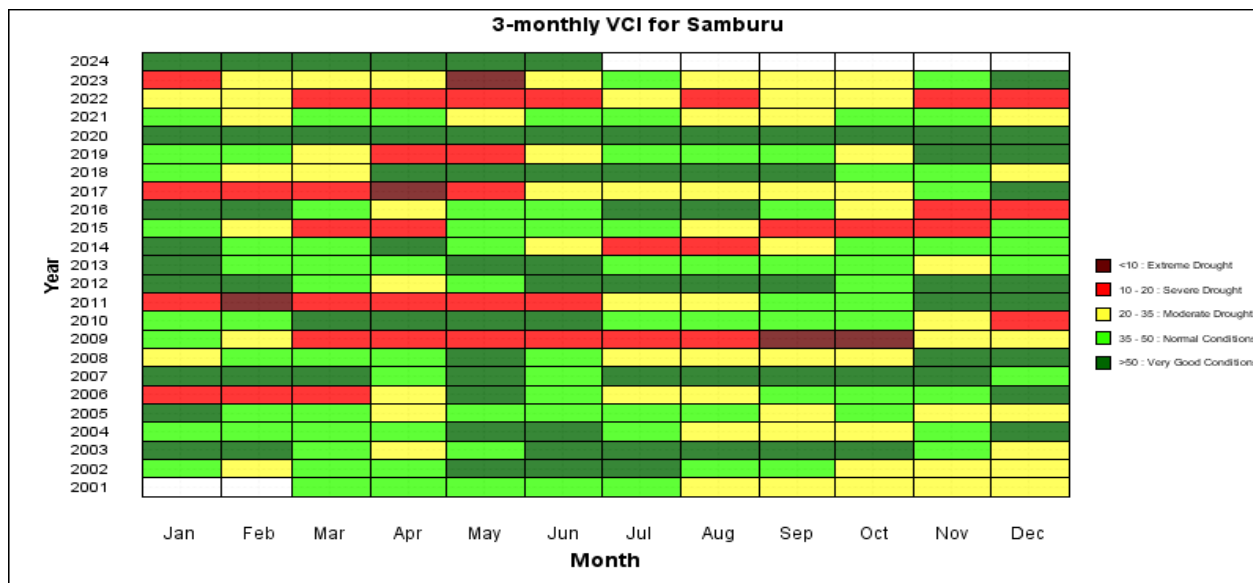


FIGURE 3: THREE MONTH VCI

vegetation condition as depicted by the three-month vegetation condition index (VCI) remained normal, a trend that has persisted for the last six months (Figure 3). The existing conditions were attributed to the enhanced rains that were received for the last two rainfall seasons and are expected to remain so for the next one month.

2.1.2 Field Observations (Pasture and Browse Conditions) Quality and Quantity

The rangeland cover especially pasture and browse remained good both in quantity and quality in several

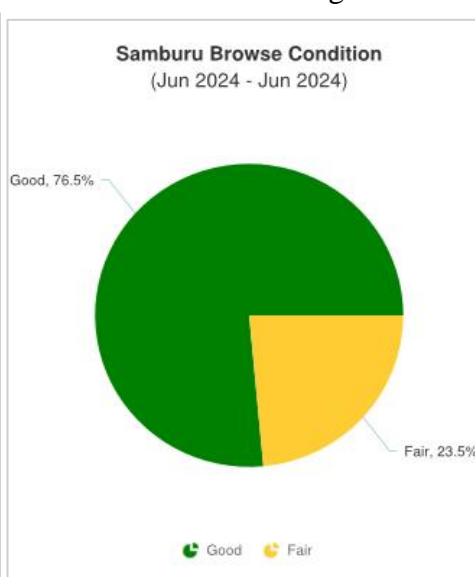
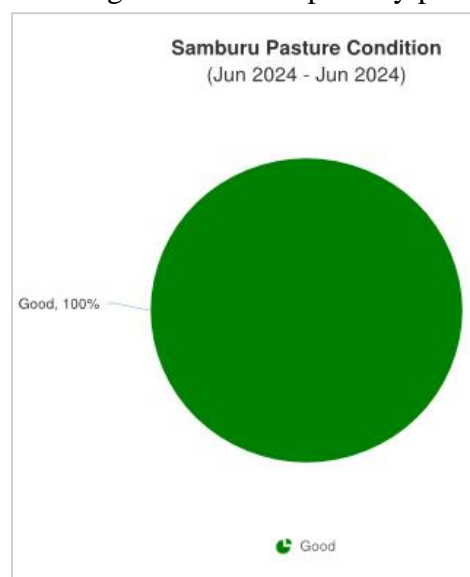


Figure 4: Pasture and Browse Condition

areas of the county (Figure 4). The good condition is attributed to the just concluded March to May 2024 rainfall which performed above the average. Community key informants' reports indicated that larger proportion of the key informants (76.5%) said pasture and browse is good with only 23.5 percent of the key informants from Pastoral livelihood zone responding browse is in fair condition in isolated areas of Wamba

West and Wamba North wards. The emergence of new invasive alien plants such as *Cissus Rotundifolia* (*Raraiti*) which climbs on acacia trees negatively affecting growth of leaves even making the acacia tree dry up in long term. The available pasture and browse are likely to last for the next 2 – 3 months across the livelihood zones.

2.2. Water Resource

2.2.1 Sources

Frequently used water sources during the month of June 2024 includes but not limited Wells, boreholes, pans and dams. Larger proportion which is approximately 41.6 percent relied on hand

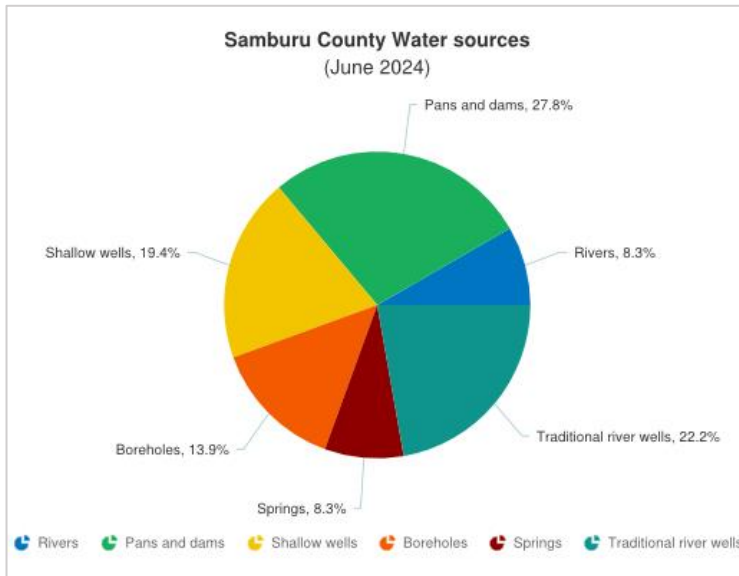


Figure 5: Frequently used Water Sources

Approximately 41.6 percent relied on hand dug and traditional river wells. Another 27.8 percent and 13.9 percent used pans and dams and boreholes respectively. Other sources include seasonal rivers and springs at 8.3 each (Figure 5). Springs are commonly used in areas of Arsim bordering Mathew ranges. Different open surface water sources have half to full water volume. However, pans in Pastoral livelihood zone have started dwindling due to high temperature and weak soil structure that has weak water retention capacity. The open water sources are projected to last for 1 – 2 months in Pastoral livelihood and around 2 -3 months in Agro Pastoral

livelihood zone. Water consumption remained approximately similar to last month at the household level with an average of 8 – 12 litres per person per day. Current water consumption remained below the recommended minimum threshold of about 15 and above litres per person per day as per the Sphere book Standards.

2.2.2 Household Access and Utilization

Following the cessation of the March to May 2024 rainfall season, distance have started increasing in

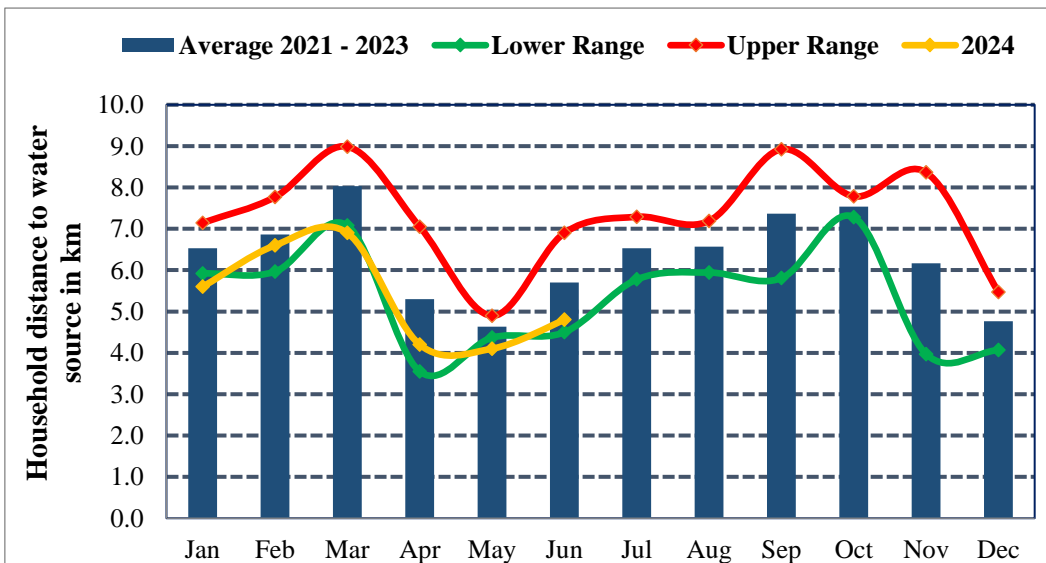


Figure 6: Average Distance Travelled by Households in Search of Water

recorded in the month of May 2024. The current average return distance is 28 percent lower than the 2021 – 2023 average at the same period of the year (Figure 6).

isolated areas. The increase in attributed to dwindling water volumes coupled with breakages of boreholes, for instance community in Lodung’okwe have reported Lodung’okwe borehole broke down thus forcing households to seek alternative sources for household water. The current average return distance was 4.8 km compared to 4.1 km

2.2.3 Livestock Access (Grazing Distances to Water Points)

The return average trekking distance by livestock to water points from grazing fields has increased to 9.4 km from 5.7 km which is 64 percent increase. The increase is attributed to declining rangeland resources such as water and forage in areas closer to homesteads. The distances are likely to continue increasing as the season for long dry spell sets in. sentinel sites Pastoral livelihood zone especially from Samburu East (Wamba West, Wamba North and Waso trekked 12 – 14 km to and back in search of water and forage. Data from Agro Pastoral livelihood zone indicated low distance ranging between 3 – 8 km for livestock moving from grazing fields to water points. In reference to the

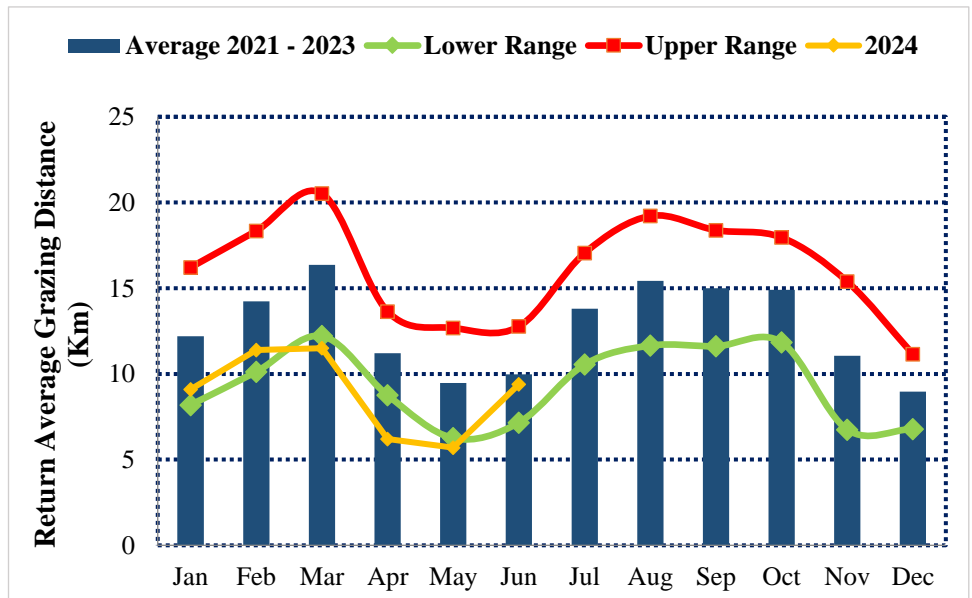


Figure 7: Distance Travelled from Grazing Areas to Water Points

average of the last three consecutive years (2021 – 2023) at the same period of the year, the current recorded return monthly average is relatively comparable to each other (Figure 7). There is possibility of further increase in trekking distances up to commencement of 2024 short rains season expected in October 2024.

3.0 PRODUCTION INDICATORS

3.1 Livestock Production

3.1.1 Livestock Body Condition

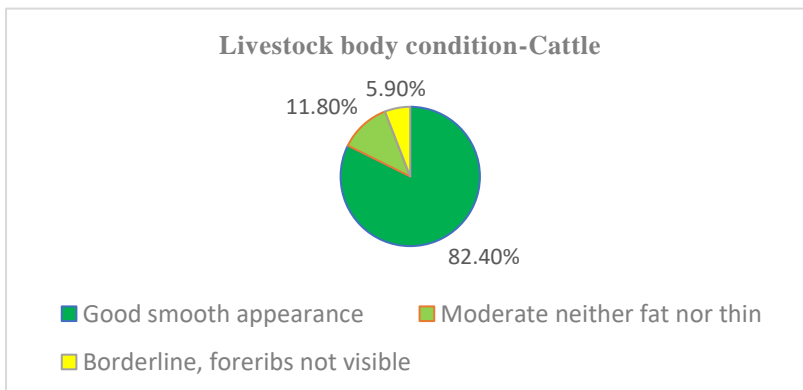


FIGURE 8: LIVESTOCK BODY CONDITION-CATTLE

The body condition for all livestock species still remained good across the livelihood zones attributed to favorable rangeland resources although there were some cattle that had fair body condition at six percent (Figure 8).

3.1.2 Livestock Diseases and Deaths

The county department has confirmed outbreak of foot and mouth (FMD) in Samburu North, Central and East sub counties. However, no ring vaccination has been undertaken therefore it is likely to spread all over the county. There were also incidences *Peste des Petits Ruminants* (PPR) in sheep and goats. Endemic diseases such as contagious caprine pleuropneumonia (CCPP), mange, helminthiasis, heartwater, enterotoxaemia and sheep and goat pox across the livelihood zones. No abnormal occurrence of livestock mortalities across the livelihood zones.

3.1.3 Milk Production

Milk production remained within the three years average (2021 – 2023) with the current average standing at 0.6 litres per household per day (Figure 9). Out of 170 sampled households, only 60 of them reported getting 1 – 4 litres of milk from own their livestock. Calving has increase although the cattle herd size still remained below the normal following the 2022 – 2023 drought that led to larger proportion of cattle mortality.

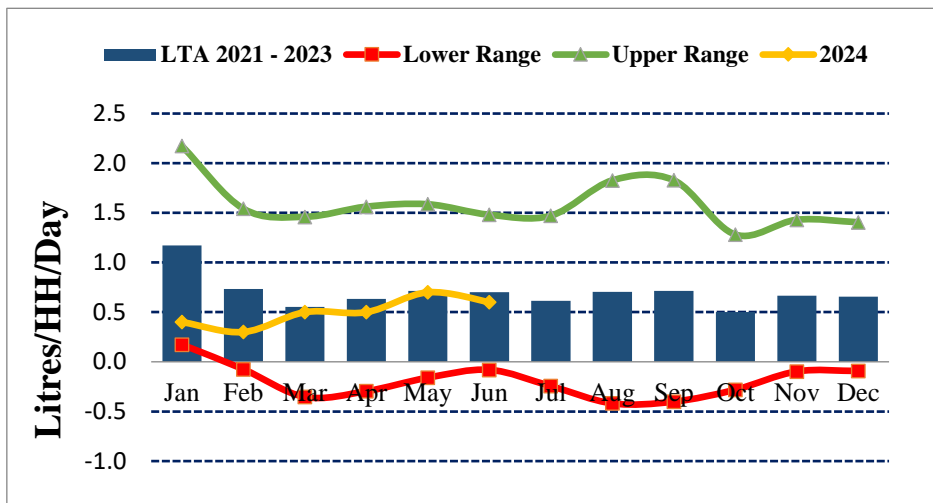


Figure 9: Trends in Milk Production per Household

3.2 Rain Fed Crop Production

3.2.1 Stage and Condition of Food Crops

- Maize crops are at tussling stage in Agro Pastoral livelihood zone although are water stressed especially in lowlands of Agro Pastoral livelihood zone.

3.2.2 Harvest of Crop

- Farmers that dry planted have started harvesting beans in Agro Pastoral livelihood zone.

4.0 MARKET PERFORMANCE

4.1 Livestock Prices

4.1.1 Cattle Prices

Livestock and food stuff markets are operating well except isolated feeder markets such as Longewan, Pura and Siambuthat have not been operational for long due to banditry attacks along the Amiya to Morojo belt. Cattle selling average price significantly increased to Ksh 29,000 from Ksh 22,350 recorded during the month of May 2024. The increase has been attributed to high demand to restock and the rangeland resources remained favourable for

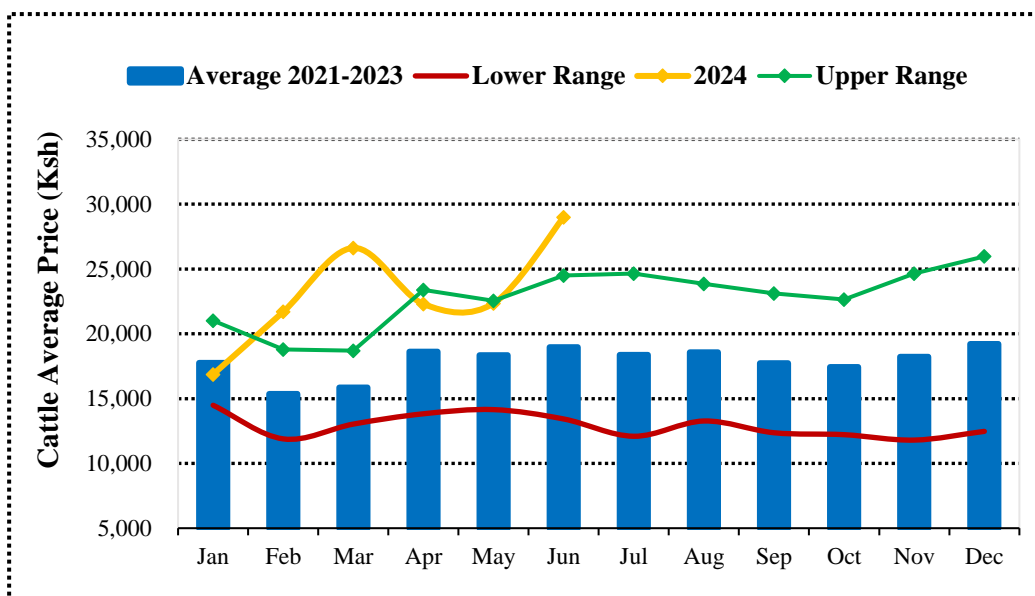


Figure 10: Cattle Selling Price Trends at Market Level

livestock productivity. This has led to local traders going to buy young heifers (medium sized) cattle from Kilgoris in Narok County. The current average cattle selling price at the market is 53 and 18 percent higher than the 2021 – 2023 and the upper range average at the same time of the year (Figure 10).

4.1.2 Goat Prices

Selling prices for goats like cattle prices also increased in a small extent ascribed to good body condition of goats across the livelihood zones. There has also been steadily market for goat and sheep meat from

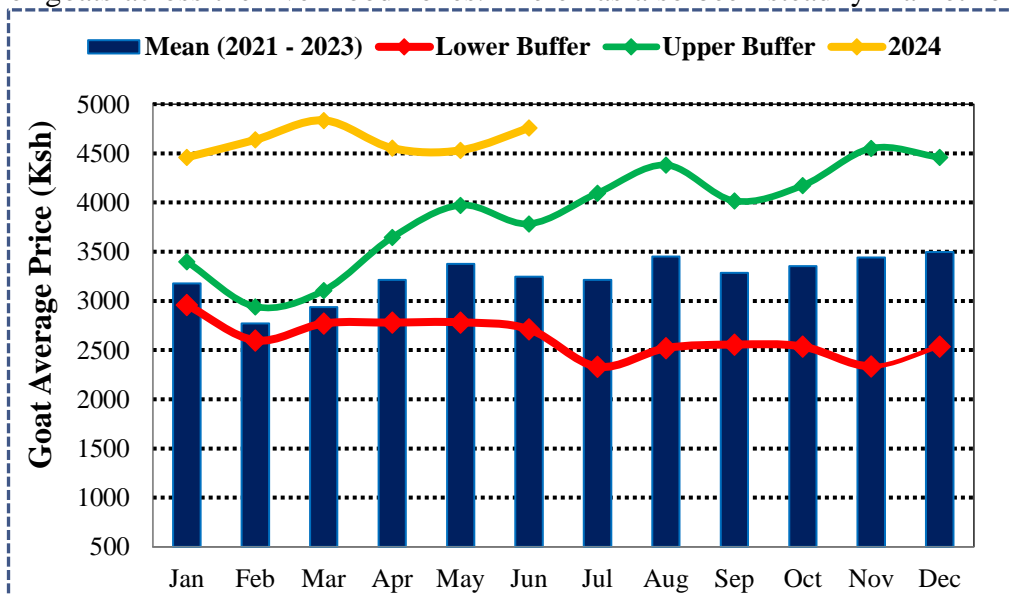


Figure 11: Goats' Selling Price Trends at Market Level

Kenya to United Arab Emirates which has also immensely contributed to higher goat prices. In addition, availability of external traders from Marsabit and Isiolo counties in some Pastoral markets also supported higher demand for goats. The current average retail price was Ksh 4,760 which is relatively comparable to Ksh 4,530 recorded in the month of May 2024. Monitored markets reported goat prices ranging from Ksh 3,700 to Ksh 5,750 across the livelihood zones. The current goats average retail price of Ksh 4,760 is approximately 47 percent above the 2021 – 2023 average at the same time of the year (Figure 11). The selling price for goats is most likely to sustain above average trend for probably the next three months due to favorable rangeland conditions.

4.1.3 Sheep Prices

The selling prices for sheep like other livestock species have retained above average prices since the beginning of the year. The improved prices are attributed to good body conditions driven by improved forage and water condition. The current average retail price stands at Ksh 4,100 which is comparable to Ksh 3,950 recorded during the preceding month. Most of the markets recorded prices for sheep ranging from Ksh 3,200 to Ksh 5,300 for medium size sheep across the livelihood zones. The current average price is around 55 percent higher than the short term (2021 – 2023) average at similar period of the year (Figure 12).

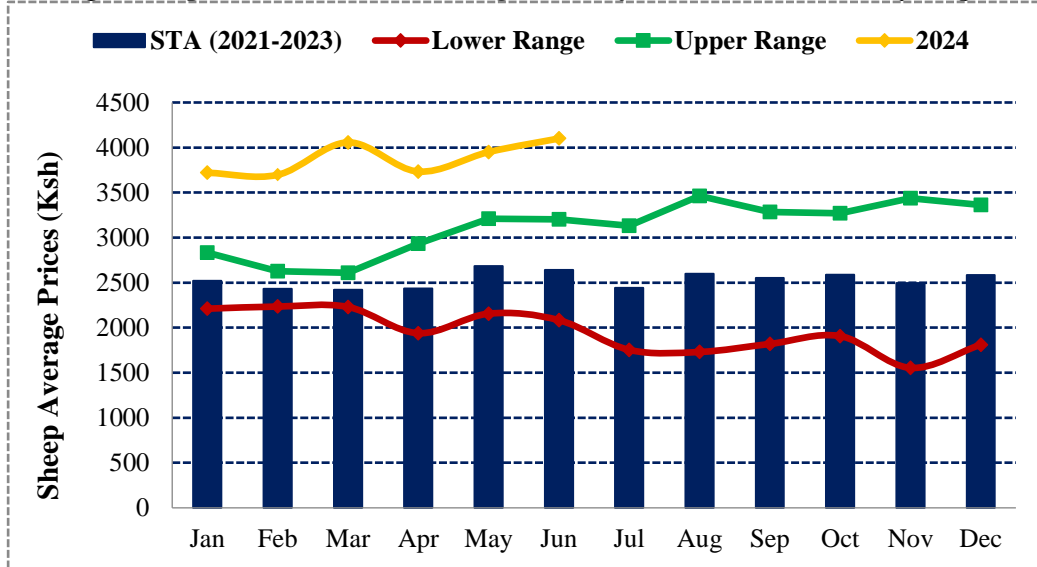


Figure 12: Sheep Price Trend

4.2 Crop Prices

4.2.1 Maize

Maize production in the country has been improving in maize growing regions of Rift Valley and Western Kenya. The improved production is a welcome relief for regions previously affected by drought, driven by

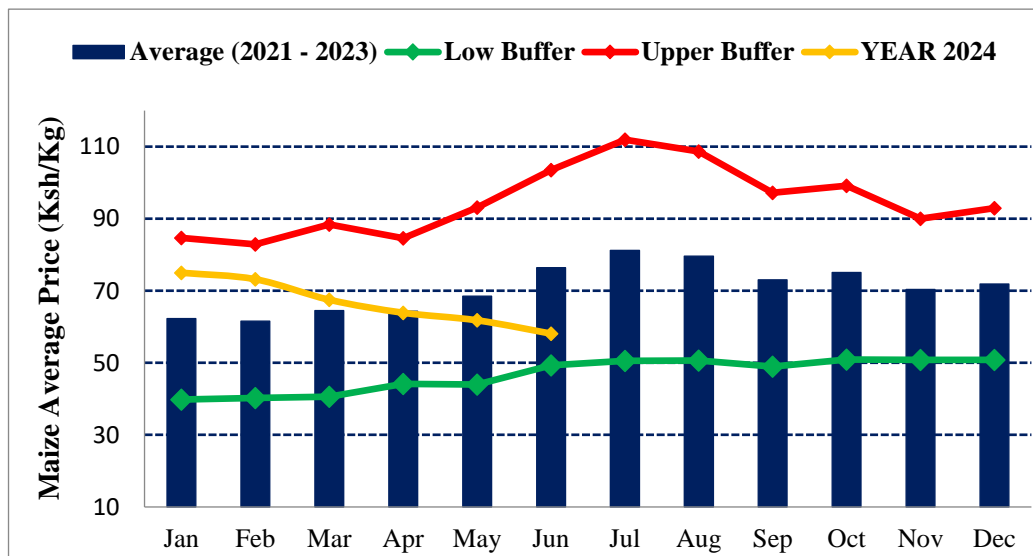


Figure 13: Maize/Maize Flour Price Trend

enhanced performance of the 2024 March-April-May long rains and subsequent short rain season in October-November-December 2023 playing a crucial role. The current average retail price for dry while maize was Ksh 58 per kilogram which is comparable to last month average price, however it was lower than the 2021 – 2023 average by 24 percent at the same period of the year (Figure 13). Most of the markets recorded a retail price ranging between Ksh 50 – 60 except far flung markets such as Illaut, Loonjorin, Seren that reported retail prices of about Ksh 80 – 100 per kilograms. The high prices in far flung markets is attributed to transportation charges due to poor roads to the markets.

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4.3 Terms of Trade (ToT)

Household purchasing power has improved following improved goats selling prices and dwindling maize prices. The current income obtained by selling one goat can purchase 82 kilograms of maize. The goat to cereal ratio has remained significantly above average with the current ToT being 75 percent higher than the 2021 – 2023 average at the same time of the year (Figure 14). Households in Pastoral livelihood zone can buy 87 kilograms in exchange of income of one mature goat while in household Agro Pastoral livelihood, households were able to purchase 103 kilograms of cereal by selling one goat.

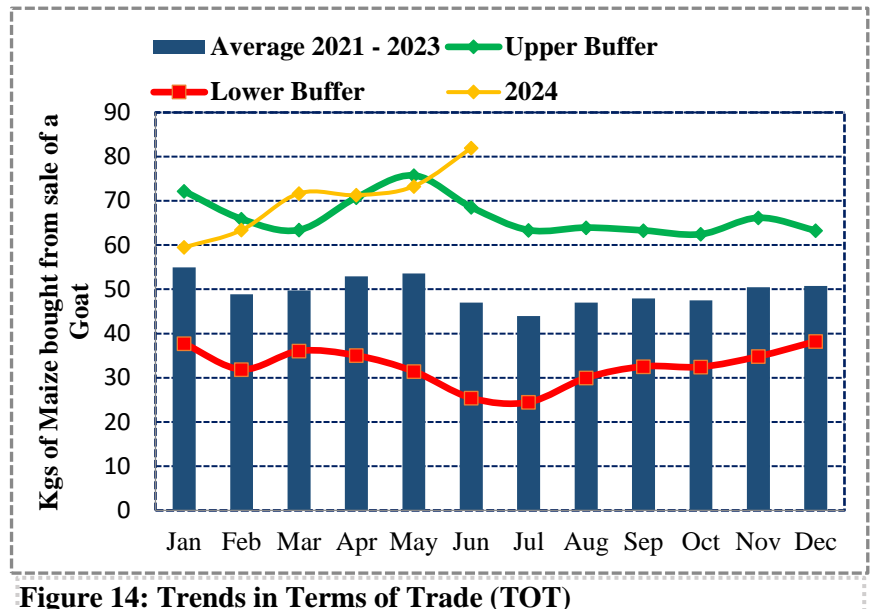


Figure 14: Trends in Terms of Trade (TOT)

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

Following increased calving of cows and camels, availability of milk has improved therefore supporting consumption at household level (Figure 15). The current average consumption is similar to 2021 – 2023 average at 0.5 litres per household per day

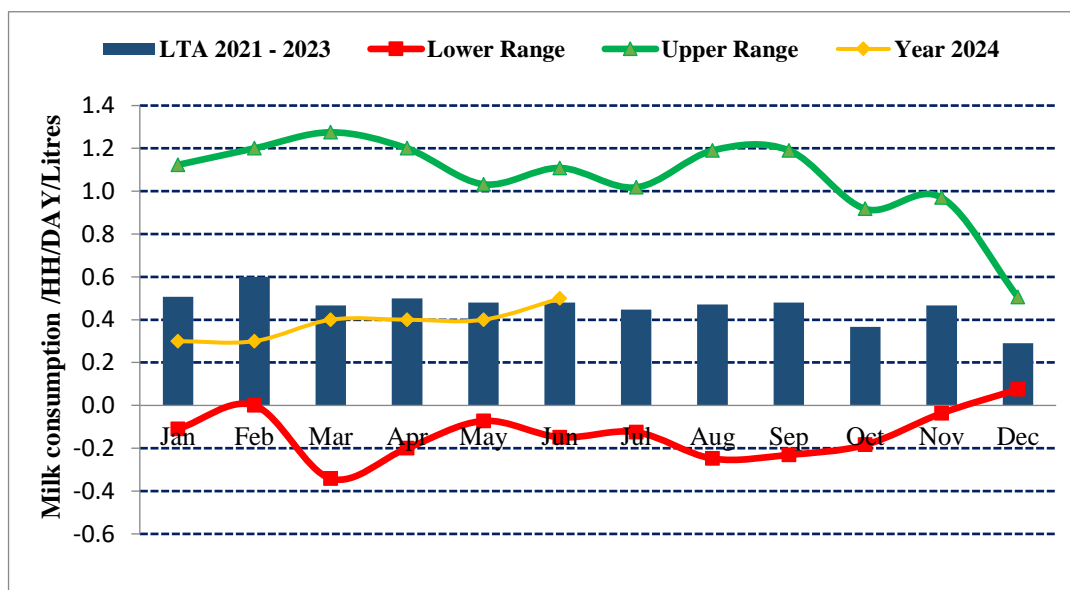


Figure 15: Milk Consumption Trend

5.2 FOOD CONSUMPTION SCORE (FCS)

Food consumption score is a composite score based on dietary diversity, food frequency and relative nutrition importance of different food groups based on a seven-day recall of food consumed at household level (World Food Programme Vulnerability Analysis & Mapping). On average, 54.1 percent of the households had acceptable food consumption with another 38.2 percent had borderline food consumption which means consumption. Acceptable food consumption indicates consumption of staples and vegetables everyday accompanied with meat or dairy products. Larger proportion (76.7%) of households in Agro Pastoral had borderline food consumption while in Pastoral 60.7 percent and 30 percent had acceptable and borderline food consumption respectively (Figure 16). Another 9.3 percent of households in Pastoral livelihood zone had poor food consumption. Poor food consumption means that households are consuming staples and vegetables every day and never or very seldom are consuming protein rich food such as meat and dairy.

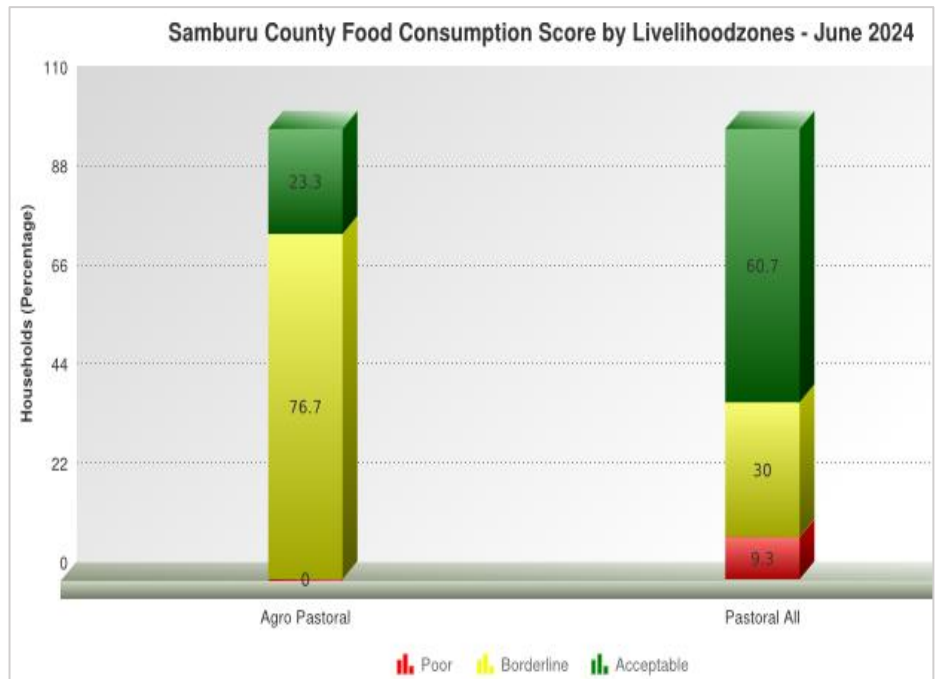


Figure 16: FCS Per Livelihood zone

5.3 Health and Nutrition Status

5.3.1 Health

No human disease outbreak was reported during the period under review although endemic diseases such as Pneumonia, Upper respiratory tract infections, coughing were reported in health facilities across the county.

5.3.2 MID Upper-Arm Circumference (MUAC 125-134 mm)

The proportion of children below five years at risk of malnutrition stands at 21.4 percent compared to 19.5 percent. In reference to long term average, the current proportion is below the 2019 – 2023 by 26 percent at the same time year (Figure 17). Cultural rural households within the county reported taking usual 1 – 2 meals per day comprising of milled posho, vegetables and oil.

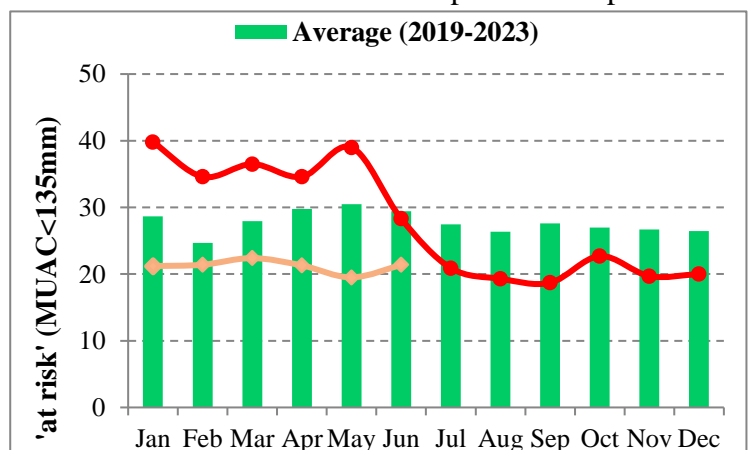


Figure 17: Rates of Malnutrition for Children Under Five

5.4 Reduced Coping Strategies Index (rCSI)

The coping strategy index measures the frequency and severity of the food consumption behaviors the households engage in due to food shortage in the 7 days recall period. The household coping strategy index remained relatively stable with current rCSI standing at 11.01 from 11.09 recorded in May 2024. Larger proportion (50%) of the households coped using stressed coping strategies while those that used crisis coping strategies stand at 26 percent. Around 24 percent of the households reported not using any coping strategies. The current mean index is relatively comparable to the 2019 – 2023 mean index at similar period of the year (Figure 18).

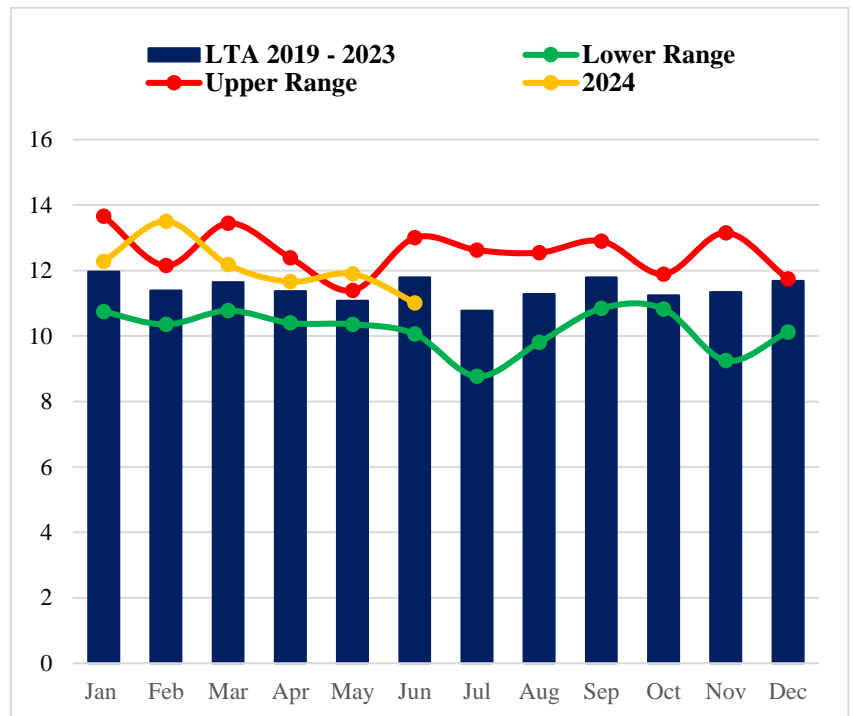


Figure 18: rCSI Trends

6.0 EMERGING ISSUES

6.1 Insecurity/Conflict/Human Displacement.

- No emerging incidences of conflicts reported however households are still in Kraals (*Lororas*) in parts of Suguta ward.

6.2 Migration

- No cases of unusual livestock migration reported during the month of June 2024 within the county.

6.3 Food Security Prognosis

Rangeland resources are likely to remain stable in the next one month supporting improved livestock productivity. This will result in stability for milk production and consumption at the household level. Stability in livestock prices will; result in good livestock prices hence contributing to improved terms of trade for the pastoral households. Water resources are likely to remain stable and therefore trekking distances for both humans and livestock will be less than the long-term average hence enabling household members to have more time being reserved for other important economic activities. Food commodity prices are likely to remain typically stable and near average to above average for the 2 – 3 months hence easing access to food sources. Food consumption is expected to remain good in terms of quality and quantity thus having a positive impact on nutrition status of household members.

7.0 RECOMMENDATIONS

Table 1: Proposed Interventions per Sector

Sector	Recommended Interventions	Beneficiaries	Wards	Estimated Cost (Ksh. in Million)
Water	Provision of water treatment chemicals for rural households	15,000 HHs	County wide	4.5
Agriculture	Intensify provision of extension services to crop farmers in agro pastoral livelihood to promote good farming practices.	1,000 Farmers	Marala, Baawa, Lodokejek, Loosuk, Poro, Suguta	4
Livestock	Enhance community participatory livestock disease surveillance.	Livestock owners	County wide	3.5
	Prepositioning of necessary livestock vaccines at the county veterinary office	600,000 cattle and small stocks	County wide	350
Peace and Security	Facilitate frequent community peace dialogue meetings along the affected areas.		Suguta, Loosuk, Poro and Angata Nanyukie, Nachola, Elbarta	5
Public Works and Roads	Repair of roads damaged in the previous rain experienced during the rainy season.	6 urban centers	Maralal, Suguta, Waso, Wamba East, Nyiro, Lodokejek	10.5
Health and Nutrition	Active disease surveillance and treatment of malnutrition cases.		County wide	8
	Advisories on privation measures on measles outbreak			

ANNEXES

8.0 CURRENT INTERVENTIONS AND RECOMMENDATIONS

8.1 Non-Food On-going Interventions

Table 2: Non-food On-going Interventions

Sector	Drought Intervention	Targeted Beneficiaries	Estimated Cost (KES)	Implementer	Wards
SOCIAL SAFETY NETS/FOOD AID	HSNP cash transfer for the month of June 2024	6,909 HHs each getting Ksh 2,700	18,654,300	NDMA, KCB Bank	County wide
	Food provision to special schools and institutions 100bags of rice 280 bags of beans and 50 bags of fortified flour. 260 bags of rice ,300 bags of beans distributed to security camps across the county	10 special schools and 22 security camps.			National Government through County commissioner office
LIVESTOCK	Vaccination of goats and sheep	2000 doses of CCPP		KEVEVAPI	Baawa
	Vaccination of Cattle against lumpy skin diseases	2000 doses of LSD			
	Dogs vaccination against Rabies	600		County Department of veterinary	Samburu North sub county