



**NATIONAL DROUGHT MANAGEMENT AUTHORITY  
LAMU COUNTY**

**MAY 2022: EW PHASE**

**REPORTING FOR MAY 2022**



**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- The County received normal average rainfall during the Month of May.
- The vegetation condition Index (VCI-3Month) showed decrease of 14 percent when compared to previous month of April.
- The VCI indicated Normal vegetation. The overall drought phase in the county was at Normal according to the other indicators.
- Forage condition was fair to good across all livelihood zones during the month.

**Socio Economic Indicators**

**Production indicators**

- All livestock species exhibited fair to good body condition.
- Crops farmers are currently at planting, germination and knee-high planting stage.
- Milk production remained stable and above the LTA compared to previous month of April.

**Access indicators**

- Terms of trade were favorable to livestock farmers when compared to crop farmers.
- Water access for both human and livestock was good depending on the water sources available in the livelihood zone.
- Milk consumption remained stable and was lower than the long-term Average.

**Utilization indicators**

- The proportion of children at risk of malnutrition was currently stable when compared to previous month but below average when compared to normal ranges.
- The average coping strategy decreased when compared to previous month

**Early Warning (EW) Phase Classification**

Livelihood Zone	Phase	Trend
Agro pastoral	Normal	Improving
Mixed farming	Normal	Improving
Fisheries	Normal	Improving
Employment/Unskilled labour	Normal	Improving
County	Normal	Improving
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	153	80 -120
VCI-3Month	44.1	<50
Forage condition	Fair to good	Good
Production indicators	Value	Normal
Crop Condition (specify crop) Maize	Fair	Good
Livestock Body Condition	Fair to good	Good
Milk Production	1 litres	>3 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	106	84
Milk Consumption	1litre	>2litres
Return distance to water sources (HH).	4	<2 Km
Cost of water at source (20 litres)	5-10	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC colour	Green-99.8 Yellow-0.2 Red -0	>90%
Coping Strategy Index	9.46	<0.95

**Seasonal Calendar**

<ul style="list-style-type: none"> <li>▪ Short rains harvests</li> <li>▪ Short dry spell</li> <li>▪ Reduced milk yields</li> <li>▪ Increased HH Food Stocks</li> <li>▪ Land preparation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Planting/Weeding</li> <li>▪ Long rains</li> <li>▪ High Calving Rate</li> <li>▪ Milk Yields Increase</li> </ul>	<ul style="list-style-type: none"> <li>▪ Long rains harvests</li> <li>▪ A long dry spell</li> <li>▪ Land preparation</li> <li>▪ Increased HH Food Stocks</li> <li>▪ Kidding (Sept)</li> </ul>	<ul style="list-style-type: none"> <li>▪ Short rains</li> <li>▪ Planting/weeding</li> </ul>								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

## 1.0 CLIMATIC CONDITIONS

### Rainfall performance

- Seasonal rainfall received during the month of May was of high precipitation when compared to the previous months of April as recorded in the two decades as in figure 1 below.
- The current NDVI value is below average when compared to the historical long-term values as shown in figure 1.

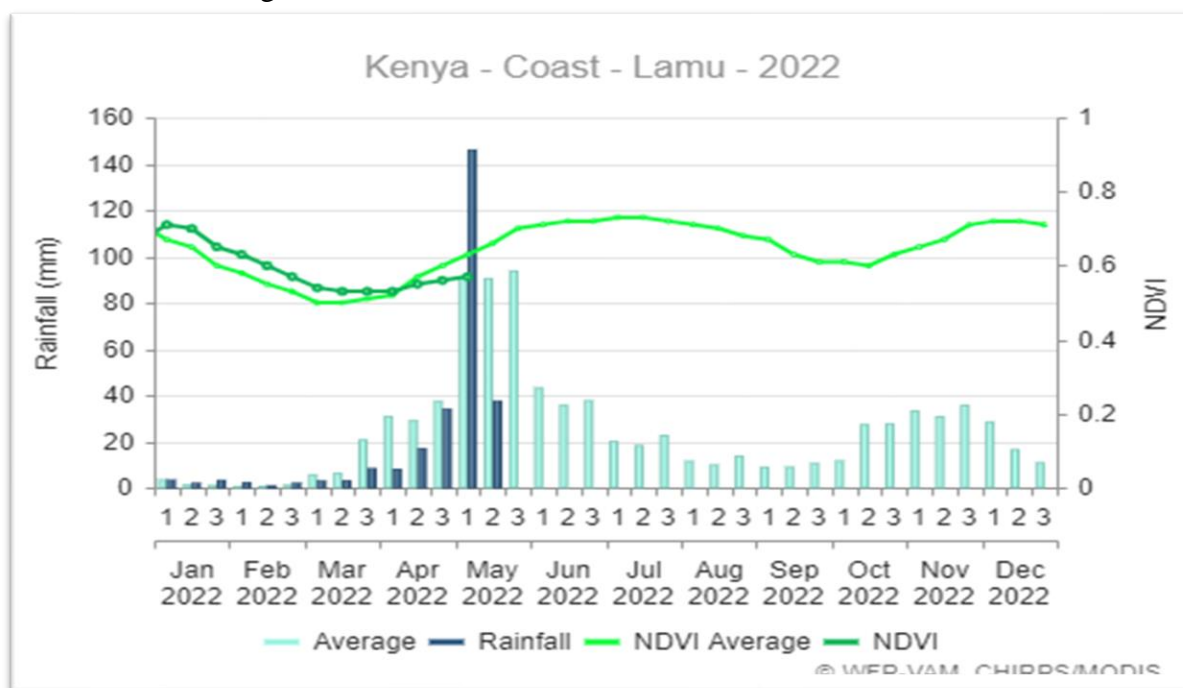


Figure 1: Rainfall and NDVI Satellite data

### 1.2 Amount of rainfall and spatial distribution

- According to VAM WFP rainfall and vegetation data, the County received a total of 183.1mm of rainfall in the month of May during the first and second decades.
- This was an increase of 87 percent rainfall when compared to previous month of April 2022; however, this (183.1mm) was higher when compared to long-term average of 181.5mm for the two decades as in the figure 1 above.
- This 183.1mm of rainfall was higher when compared to 83.8mm received in the same period during the previous year.
- The seasonal rainfall received was fair, both in spatial and temporal and was unevenly distribution in all parts of the livelihood zones of the county during the month of May.

### 1.3 Other hazards.

- High prices of food commodities and fuel.
- Insecurity and conflicts between farmers and herders.

## 2.0 VEGETATION CONDITION

### 2.1 Vegetation Condition Index (VCI)

The vegetation condition index for the month of May decreased by 14 percent compared to the previous month of April. This was due to below average precipitation received during the previous month of April.

The vegetation condition index for the month of May was 44.1 compared to 51.17 in the previous month.

However, Lamu East Sub-County was Normal vegetation at three months VCI of 45.93 while Lamu West Sub County recorded Above Normal vegetation of 43.05 respectively.

- VCI-3 Months is below the long-term average and the previous year as shown in the figures 2 below. {Source: Boku University, Austria}

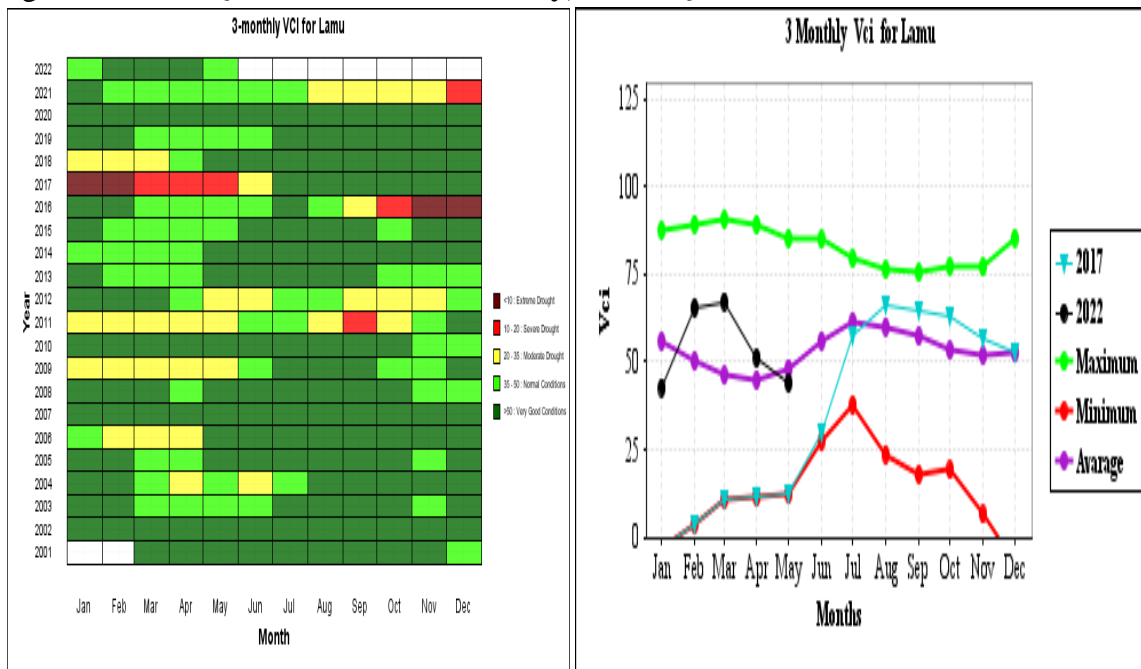


Figure 2: Vegetation condition index

## OBSERVATIONS-PASTURE AND BROWSE CONDITION

### 2.1.2 Pasture

Pasture condition was fair to good in all livelihood zones in the county but on improving trend in fishing and Agro pastoral zones both in quality and quantity.

- 60 percent of community members interviewed stated that pasture was good 35 percent stated it was fair while five percent stated that it was poor as in figure 3.
- Pasture condition by livelihood zones was as follows; Agro pastoral is fair to good, mixed farming was good while fishing/ mangrove was fair as well.

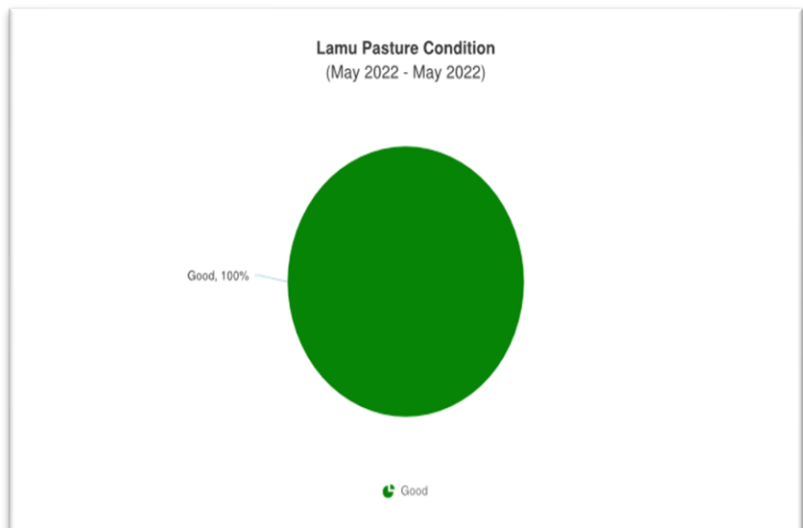
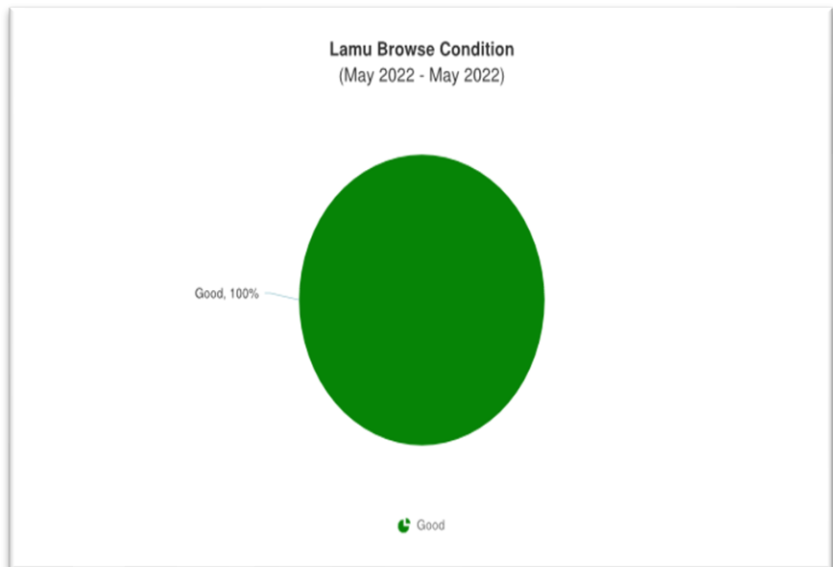


Figure 3: Pasture condition

- The current pasture is within the normal range.

### 2.1.3 Browse conditions

- The quantity and quality of browse was fair to good across all livelihood zones.
- Community members interviewed indicated that five percent of the respondents stated that browse was poor while 60 percent stated that it was good and 35 percent fair on improving trend due to the seasonal rains and low rate of transpiration as shown below in figure 4.



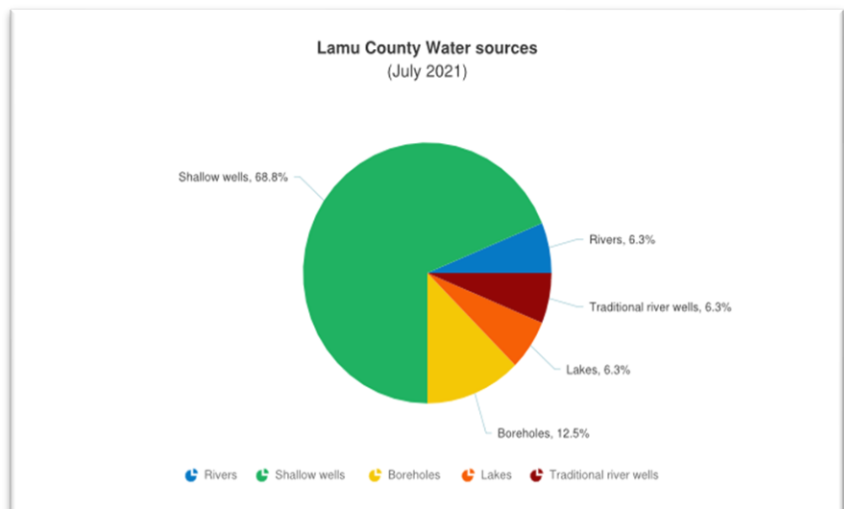
**Figure 4: Browse conditions**

- Browse condition by livelihood zones was as follows; Agro pastoral, mixed farming was good and fishing/ mangrove was good.
- The browse is expected to last two to three months. The current browse condition is below the normal range compare to previous year.

## 2.2.0 HYDROLOGICAL DROUGHT

### 2.2.1 Water Sources and Availability

- The state and condition of water sources in the County was to fair to good across most livelihood zones.
- However, the current water situation improved when compared to previous month.
- The main water sources in the month of May; shallow wells-57.9 percent, Traditional river wells-5.3 percent, pans and dams-26.3 percent Lakes-5.3, Borholes-5.3 and River-5.3percent respectively, as shown in the figure 5.



- The status of main sources of water was improving at this period of the Month.

### 2.2.2 Household access and Utilization

- Average household watering return distance decreased to four Kilometers in May, when compared to previous month of April which was at 8.8Kilometers. This decrease in household water distance was attributed to the normal average rainfall received. Household return water distances per livelihood zones were as follows; the Agro pastoral 3.5Kilometers, Fishing & Mangrove Harvesting 5Kilometers and Mixed Farming Zone it was 1.7Kilometers respectively.
- The below average precipitation led to decrease in the level of open water sources of between 5-10percent of their capacity.
- The average household water distance for May was four Kilometers which is above the long-term average of 3.46Kilometers as shown in figure 6 below.
- The average household water consumption per person per day is at 10-15liters in all livelihood zones except in fishing zone at 5-15 litres per person per day.
- Water costs at source are 5-10 Kshs in town/villagecenters for 20 liters while the cost in fishing and mixed farming is ranging between Kshs 20-50.

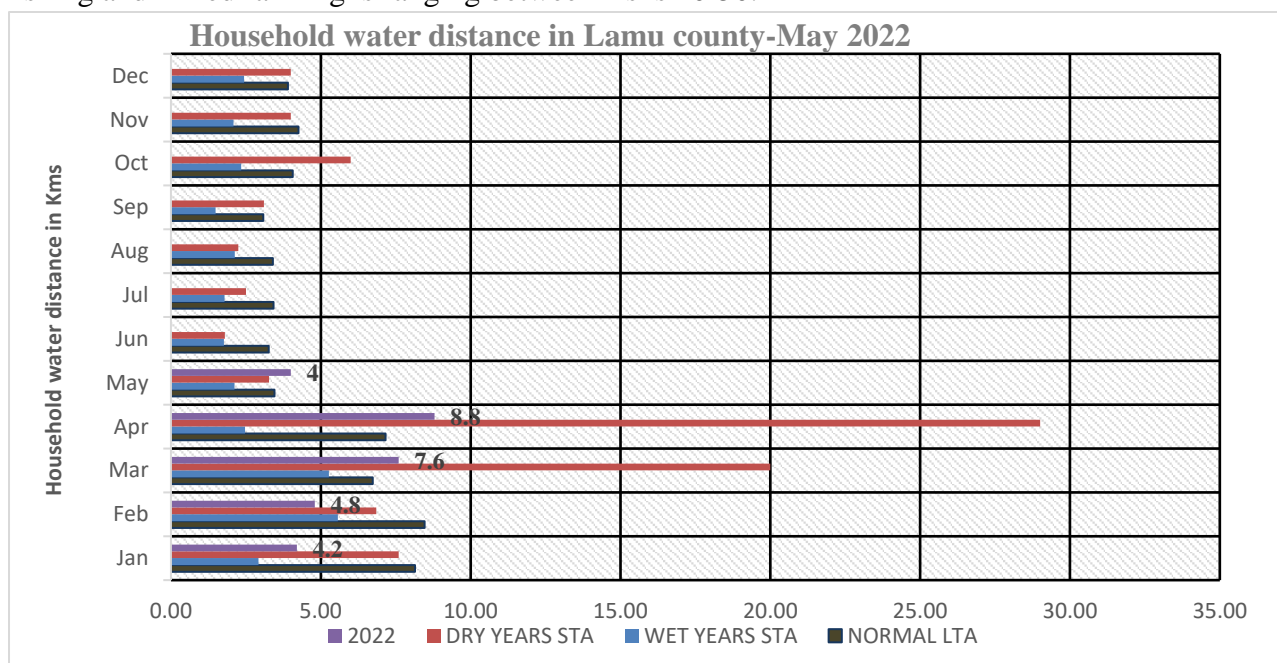
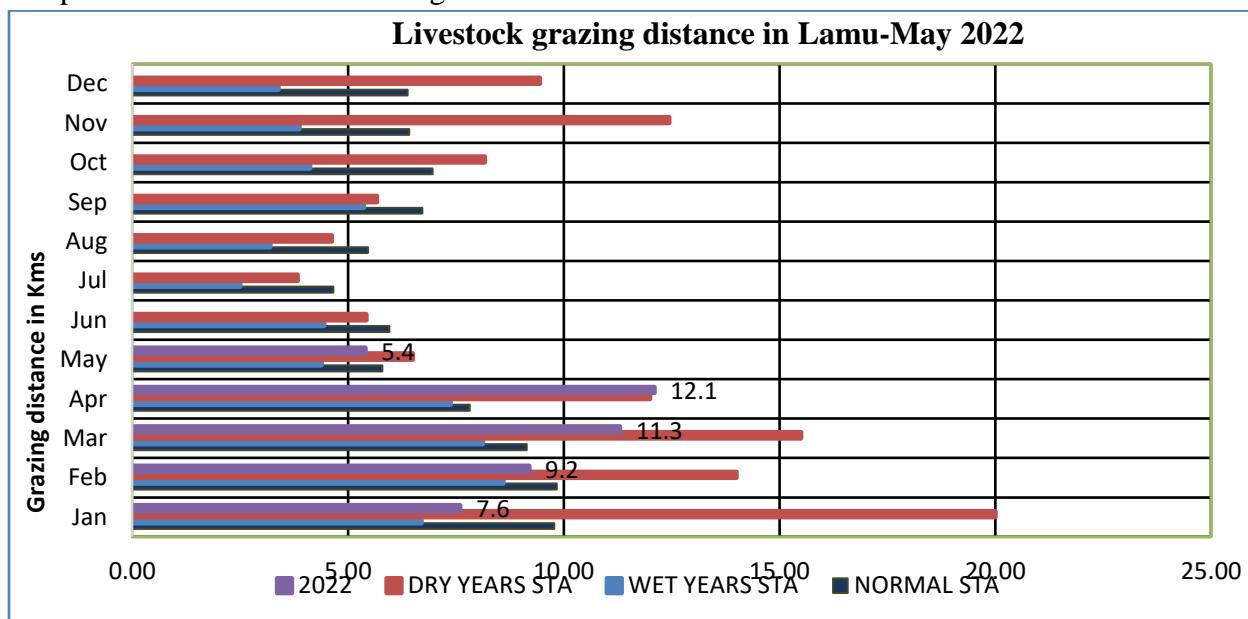


Figure 6: Households water distance

### 2.3 Livestock access to Water

- Livestock average distance to water source from grazing areas decreased to 5.4 kilometres when compared to 12.1 kilometres during the previous month as shown in figure 7.
- Grazing return water distances per livelihood zone were as follows: the Agro pastoral 3.5 Kilometres, Fishing & Mangrove Harvesting two Kilometres and for Mixed Farming zone recorded 2.2Kilometres.
- The decrease of grazing water distance was as a result of normal average precipitation received during this period under review.
- Watering frequencies for livestock species was 5-7days times per week.

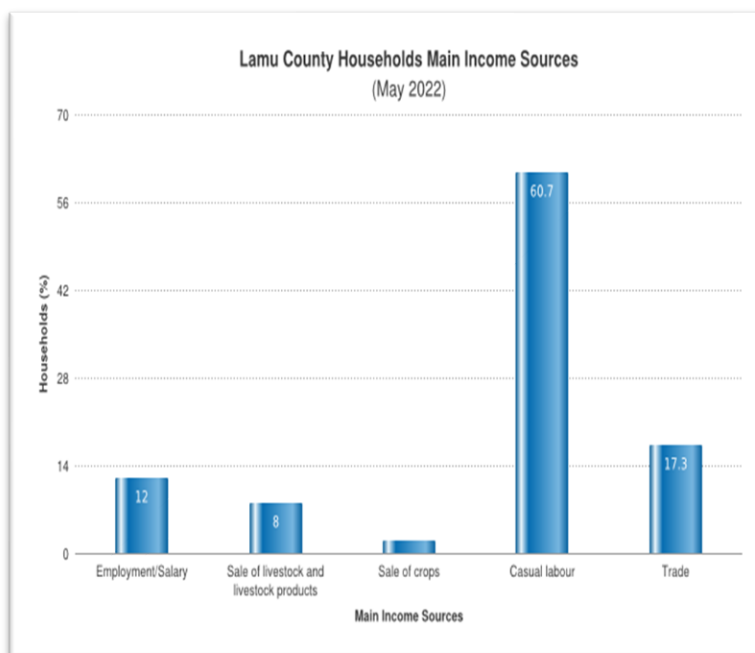
- The current average grazing distance for May was 12.1 Kilometers was higher when compared to the short-term average of 5.8 Kilometres.



**Figure 7: Grazing water distances**

#### 2.2.4 Household Income Sources

- The main households income for the month of May in the County was distributed as follows: Casual labour 61 percent, employment 12 percent, sale of livestock 8 percent, sale of crop 2 percent and trade 17.3 percent in figure 8 alongside.
- However, Casual labour, employment and sale of crop increased by seven, 20 and 50 percent respectively and Sale of livestock/livestock products remained stable at eight percent. when compared to the previous month of April.



**Figure 8: Households sources of Income**

#### 2.4 Implication to Food Security

- All livelihood zones will experience decreased water salinity due to improving level of water table of the Boreholes and shallow wells.

- Diseases such as Lumpy skin disease; Trypanosomiasis, New castle, foot and mouth have had a negative impact on the livestock body condition and production of animals and household hygiene standards.

### 3.0 PRODUCTION INDICATORS

#### 3.1.0 Livestock Production

##### 3.1.1 Livestock Migration Patterns

- In-migration of livestock from the neighbouring counties of Agro pastoral, mixed farming zones were reported during the month.
- This in-migration is normal during this period of the year, owing to the drought situation of the neighbouring counties.

##### 3.1.2 Livestock Body Condition

- The livestock body condition was fair to good for cattle and good for small ruminants.
- This was attributed to high quality and quantity of pasture and browse due to the normal average precipitations received during this month.
- However, due to pasture depletion the body conditions are expected to deteriorate.

##### 3.1.3 Livestock Diseases

- There were no outbreak of livestock diseases reported during the Month of May.

##### 3.1.4 Milk Production

- Milk production in May remained stable to one litre when compared to previous month. The one litre of milk was from one percent of total household interviewed as in figure 9.
- Milk productions were distributed as follows: Mixed farming produced 1.2litres, Fishing is nil, while the Agro pastoral Zone produced average of 1litres. Milk prices are retailing at an average price of Kshs.60-100 per litre across the livelihood zones which were normal at this period of the year.

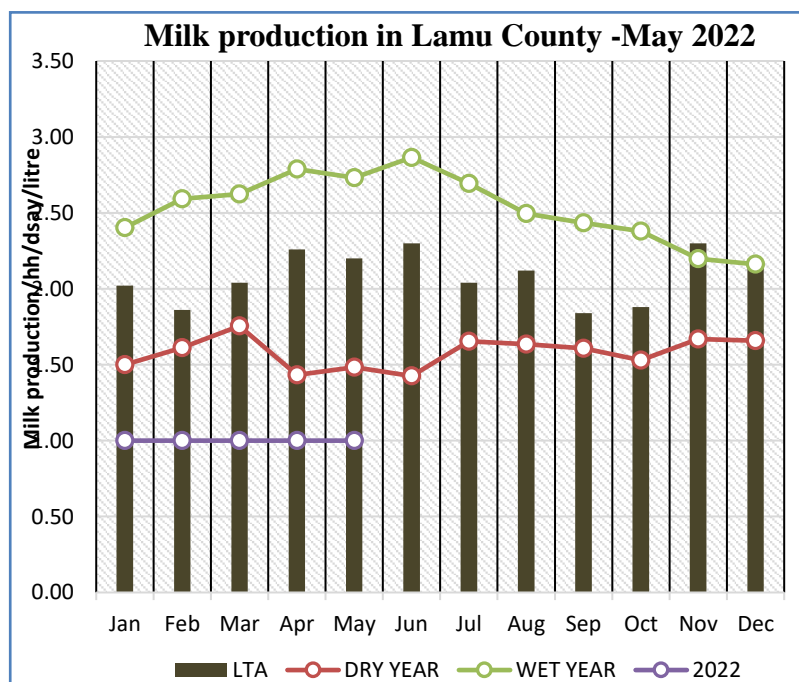


Figure 9: Milk production

#### 3.2.0 Rain fed crop production

##### 3.2.1 Stage and condition of food crop

The main crops grown are Maize, Cowpeas, Green grams and Simsim in the County. Crops farmers are currently at Planting, Germination and Knee-High stages.

#### Crop Harvest

- Currently there were no reports of any harvesting.

### 3.2.2 Implications on Food Security

- The fair body condition of livestock body condition across the livelihood zones has decreased the prices resulting to decreased income for livestock herders. The crop failure due to below average precipitations and reduced food stocks at household level will have negative impact on food security.

## 4.0 MARKET PERFORMANCE

### 4.1 Livestock marketing

#### 4.1.1 Cattle Prices

- Average cattle market price in the month of May decreased to Kshs 25,200 when compared to previous month (Kshs28,700) as in figure 10 below.
- This decrease in price could be attributed to low demand and below average rainfall during the previous months.
- The cattle average market prices were highest in Kiunga at 30,000 and lowest at Mswakini at Kshs 18,000.
- The average market cattle price for the month of May was Kshs.25, 200, thus was higher when compared to normal short-term average of Kshs.24, 100.

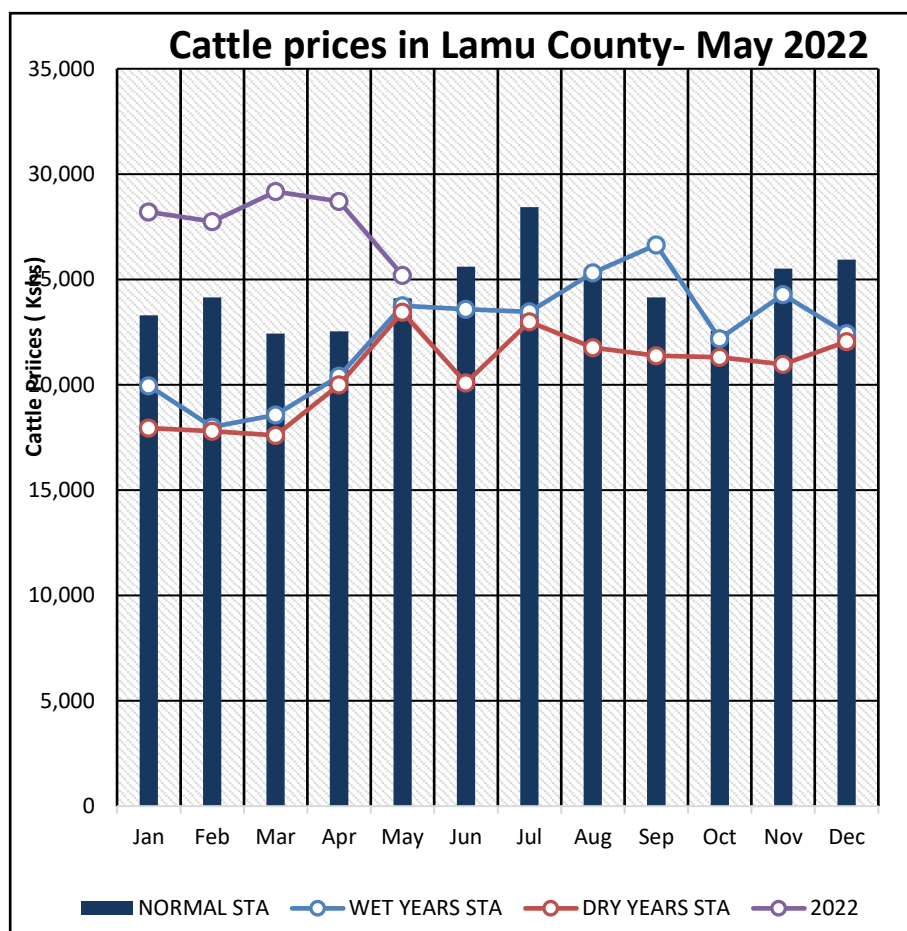


Figure 10: Cattle prices

- The current price was also higher when compared to dry and wet seasons.



#### 4.1.2 Small Ruminants Prices

#### 4.1.3 Goat Prices

- Goat price remained stable in May at (Kshs 5,200) when compared to previous month of April (Kshs 5,200).
- The current goat price remained stable when compared to the previous month and was higher than the short term average and price recorded in previous year at a similar period and following seasonal trends as shown in figure 11.
- This stability in price of goats could be attributed to stable market demand, and normal average rainfall.
- The goat average market price for May was highest in Kiunga at Kshs 6,000 and the lowest was in Mpeketoni market at Kshs 4,000.
- The current price was also higher when compared to bad and good seasons.

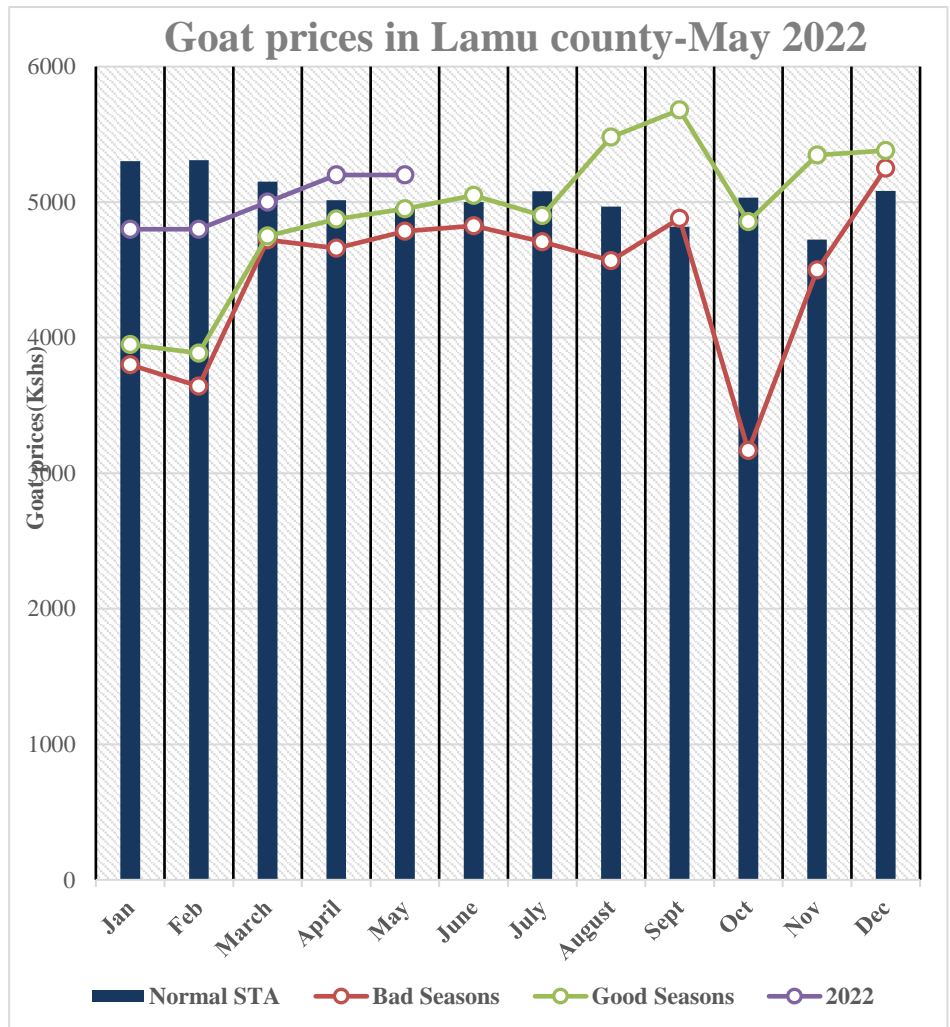


Figure 11: Goat prices

## 4.2: Crop prices

### 4.2.1 Maize price

- The maize prices decreased to Kshs 49 when compared to previous month of April at Kshs 51 as shown in the figure 12.
- The average price for May was Kshs 49, which was below the normal short term and the dry season's averages.
- The decrease of price was due to the demand of the product coupled with supply of green maize in different markets.
- The maize market prices were highest in Mpeketoni market at Kshs 55 and lowest in Kiunga at Kshs 45. However, price ranges are determined by commodity supply in different markets. The price is likely to follow seasonal trends.

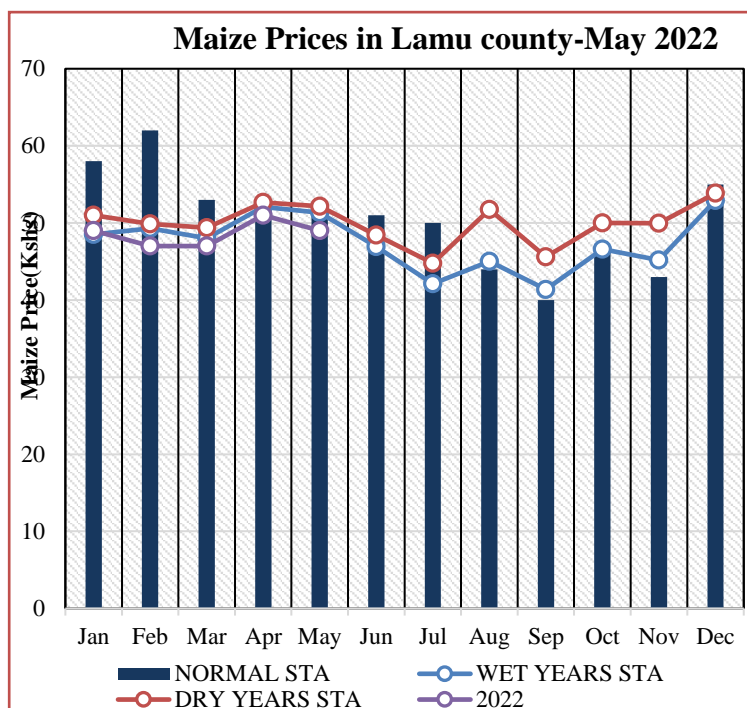


Figure 12: Maize prices

### 4.2.2 Beans prices

- Average price of Kilogram of beans was Kshs 136 in May, which was a slight decrease when compared to the previous month of April at Kshs 137 as shown in the figure 13 below.
- The decrease in price was attributed to low demand and high supply of the commodity in the market.
- The beans price was highest in Patte at Kshs 140 and lowest in Mpeketoni at Kshs 120.
- However, price ranges is determined by commodity supply in the different markets and the purchasing power since COVID-19 has affected most of the business enterprises.
- The short-term average price of beans was Kshs 116 which is lower when

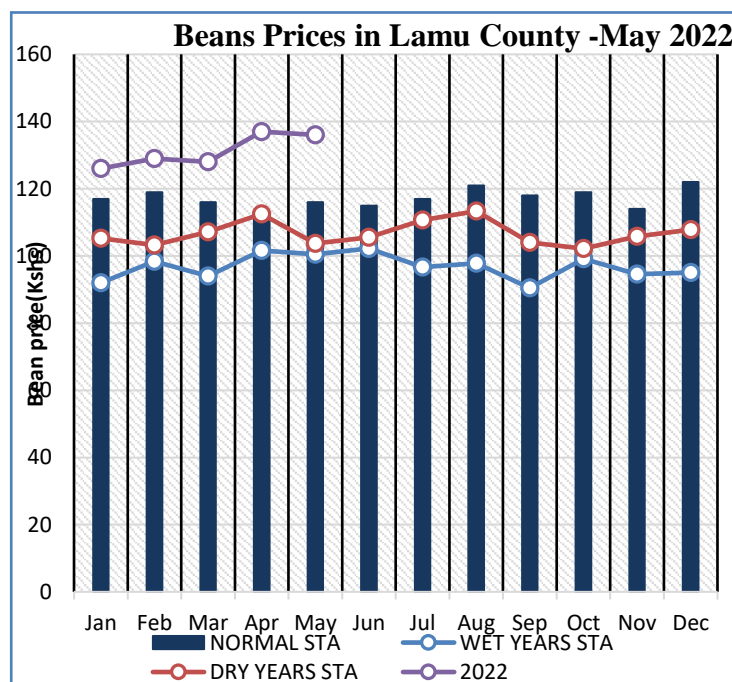
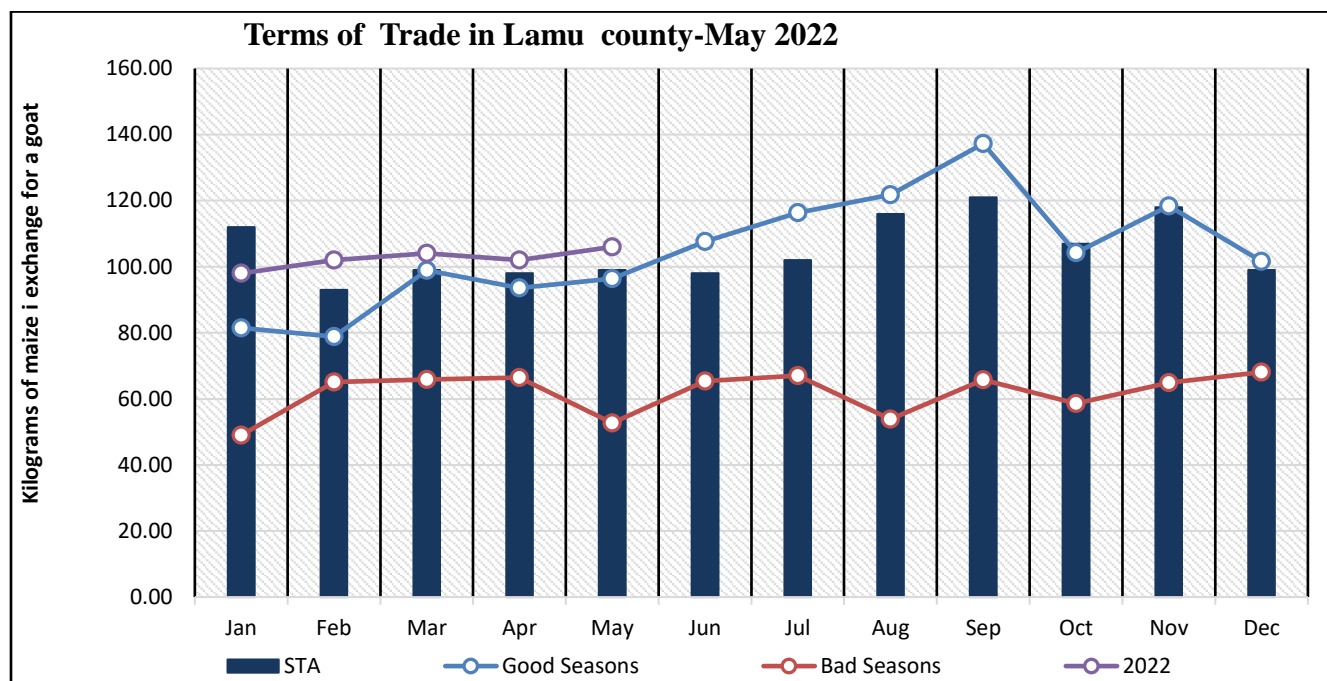


Figure 13: Beans prices

compared to the current beans price for the month of May and higher when compared with the wet and dry seasons. The price is likely to follow seasonal trends.

### 4.3 Livestock Price ratio/Terms of Trade



**Figure 14: Terms of Trade**

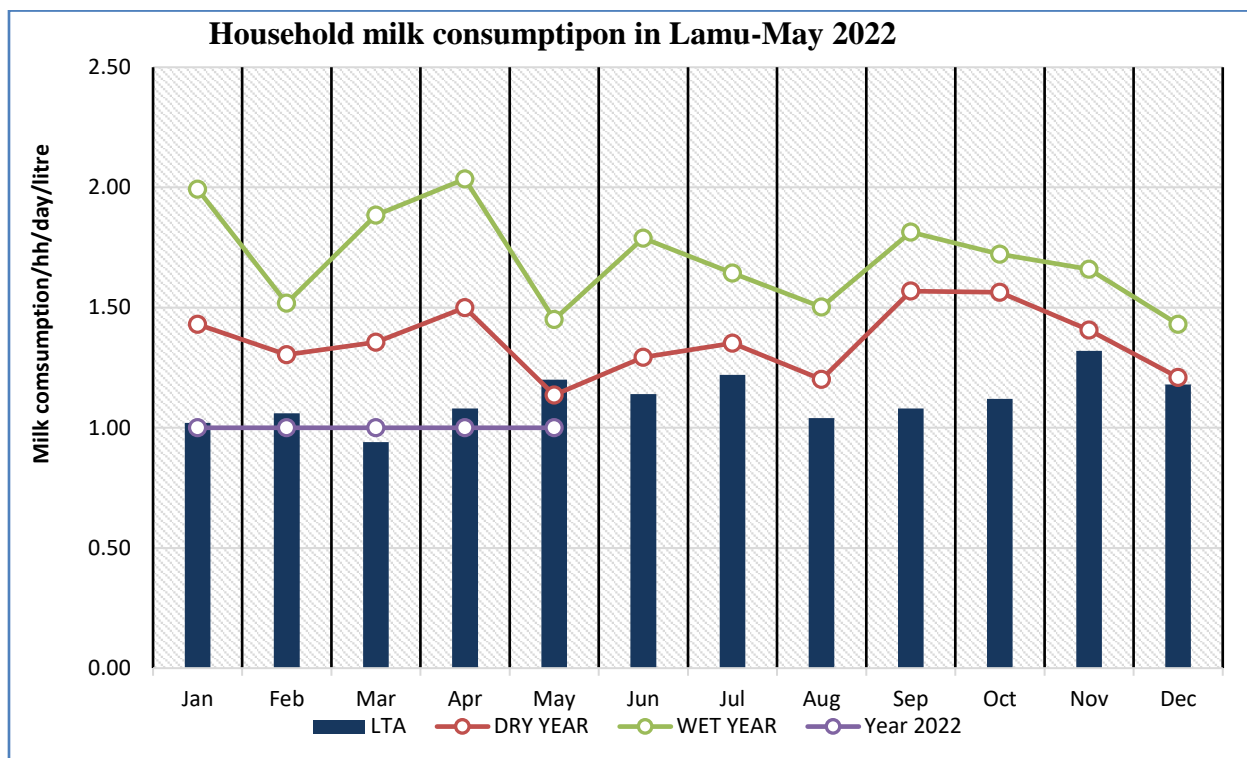
The terms of trade (ToT) for the month of May (106 Kilograms) which was an increased by four percent when compared to previous month of April (102 Kilograms) as in figure 14 below. This TOT of 106 Kilograms was higher when compared to the short-term average by seven percent. Sale of a medium goat in May would cost a household about 106 kilograms of maize. This showed the exchange ratio increased in favour of goat sellers when compared to crop farmers. However, this was determined by supply in different markets. The ToT was highest in fishing zones at 118 kilograms and lowest at mixed farming zones at 96 kilograms. The Terms of trade for May was higher when compared to the short-term average of 99 Kilograms and above the good seasons.

### 4.4 Implication on food security

- Farmers are able to sell livestock at good prices, hence improved food security at household level, especially for small stocks.
- Crop production have problem since most of the farmers did not start planting early due to unreliable rainfall patterns.

## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 Milk for Household Consumption

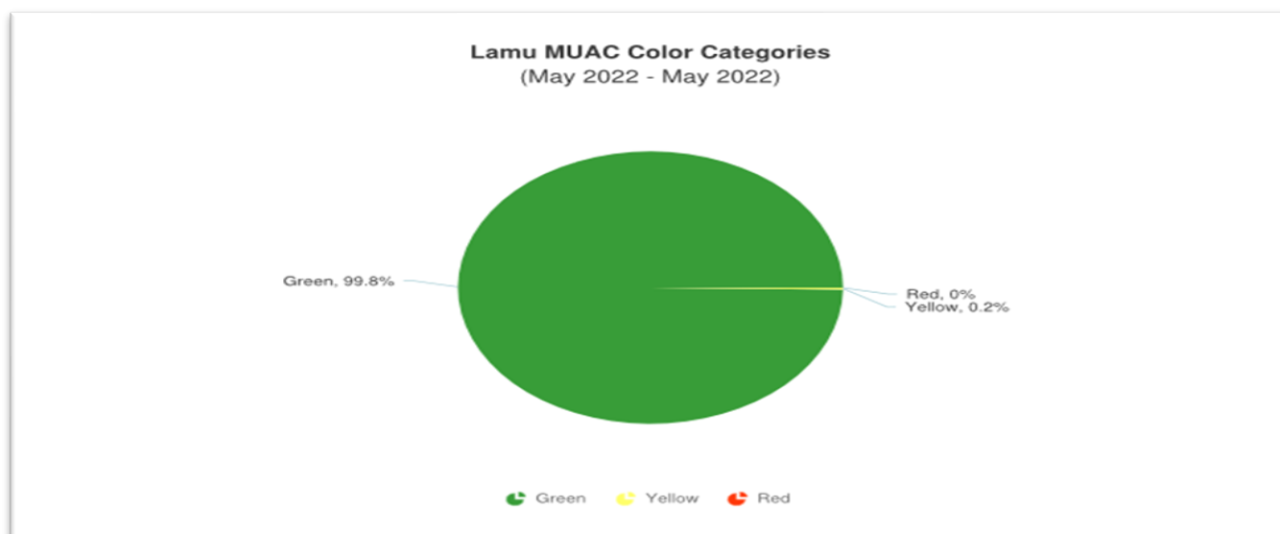


**Figure15: Milk consumption**

- Average milk Consumption was one litre in the month of May, when compared to previous month as in figure 15. This one litre of milk was consumed by two percent of the total households interviewed.
- Milk consumption was highest in mixed farming at one litre and zero in fishing zones.
- The stability in milk consumption level was as a result of low production by household coupled with low purchasing power of the commodity.
- The current consumption of the product was lower when compared to the dry and wet periods.

## 5.2 Health and Nutrition status

### 5.2.1 MUAC



**Figure 16: MUAC colour categories**

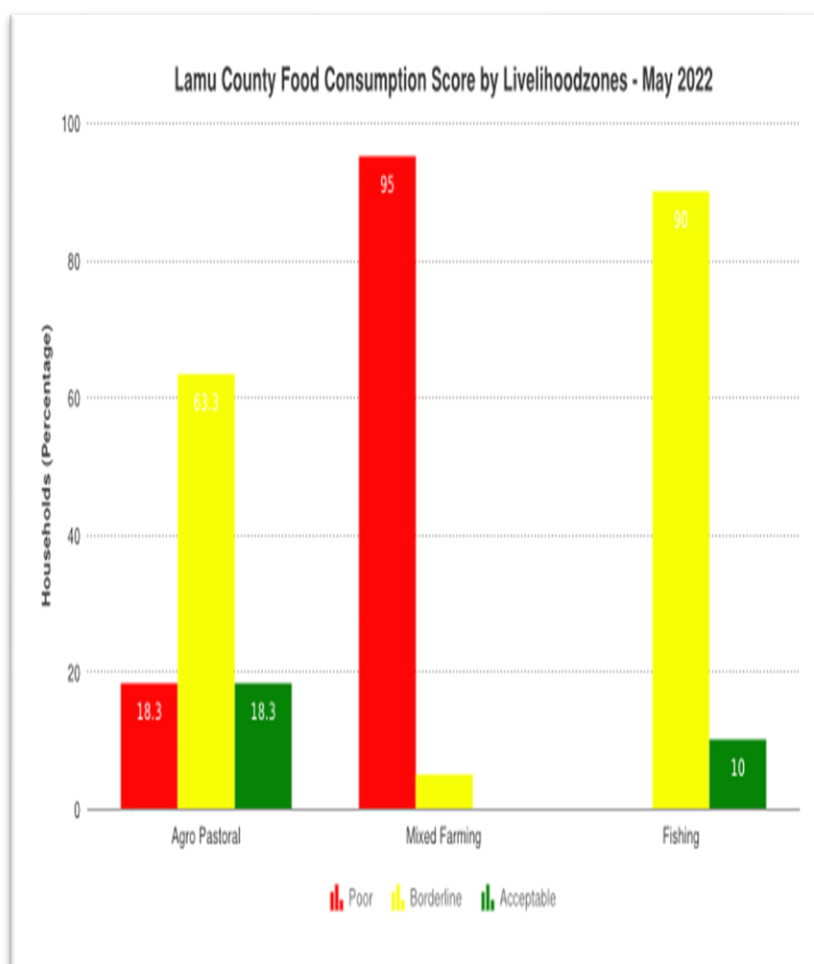
- Proportion of the under-fives categorized as being moderately malnourished was 0.2 percent (Figure 16). This is stable when compared to last month of April.
- The reported proportion of children categorized as being severely malnourished during the month of May was zero percent when compared to the previous month of April. The 99.2 percent which indicated stable condition.
- The observed trend in May was as a result of milk consumption by households through production. Poor child care practices, poor dietary diversity, reduced number of integrated health outreaches delivering essential nutrition services to the malnutrition hotspots area.

### 5.2.2 Health

- There were no cases of major disease outbreak both for children and general population in the County.

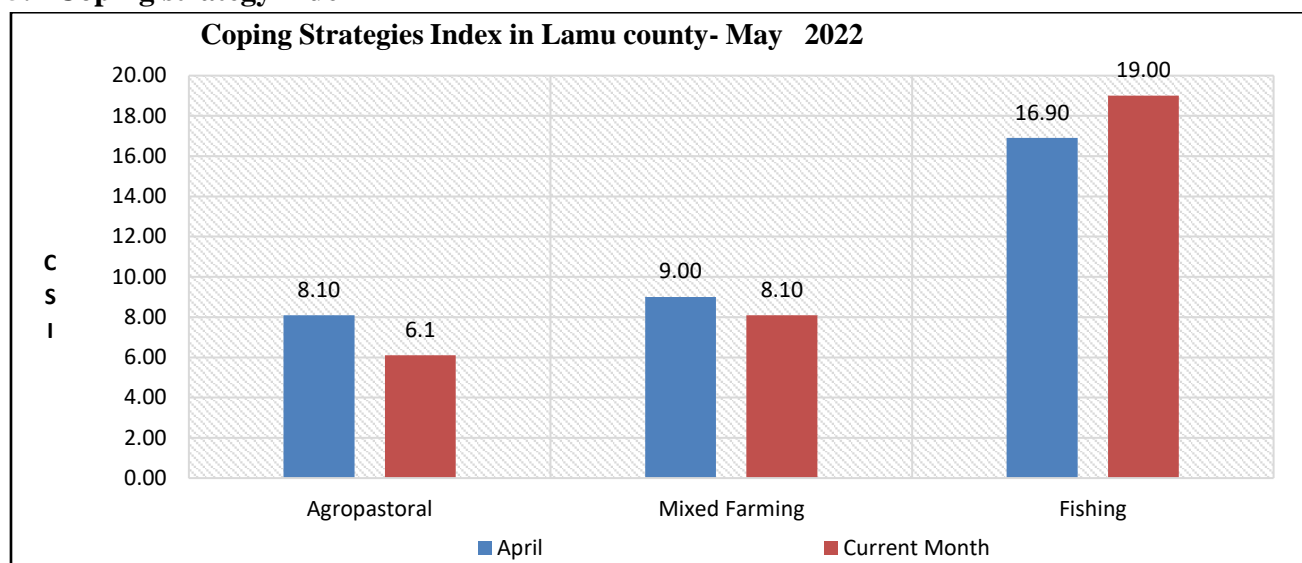
### 5.3 Food consumption score

- The Proportion of households with poor, borderline and acceptable in the county was at 18.3, 63.3 and 18.3 percent respectively during the month of May.
- There was an increase in poor food consumption by 16 percent when compared previous month of April. The population with the highest poor food consumption in the county was mixed farming with 95 percent while Fishing had the highest borderline food consumption of 90 percent, owing to reduced availability of food at households' level.
- Households have low purchasing power, thus consuming two to three meals per day with two to three food groups as in figure 17. Food commodity prices are on the increase in all livelihood zones. However, food prices are highest in Fishing zones.



**Figure17: Food consumption scores**

## 5.4 Coping strategy index



**Figure 18: Coping strategy index**

- The mean coping strategy Index in the Month of May (9.46) decreased when compared with the previous month of April (10.2) indicating increased in coping strategies at household level.
- Agro pastoral Zone had CSI of 6.1 Mixed Farming livelihood zone had 8.1 while Fishing Livelihood zone had the highest copying strategy of 19.
- Common coping strategies employed by food insecure households in the month of May were; Reduction in the number of meals, Purchase on credit/remittances from relatives, borrow food from friends or relatives, adopting for less preferred or less expensive food.

## 5.5 Implication on Food Security

- The Stability of milk consumption at household levels in all Livelihood zones could lead to good dietary diversity and hence positive impact on food security and the under-fives.

## 6.0 CURRENT INTERVENTION MEASURES (ACTION)

### 6.1 Food aid

- There was food aid distribution by National government to vulnerable households in the county. The food distributed stocks were 450kg of rice and 1215kg of beans.

### 6.2 Non-food interventions

- Seeds were distributed by the Lamu county government to various farmers.

## EMERGING ISSUES

### 7.2 Coronavirus out break

- There were no cases of coronavirus reported during this month underview.

### 7.3 Insecurity/Conflicts

- There were some cases of insecurity and conflicts reported during the Month.

### 7.4 Migration

- There were no abnormal cases of human migration during the month under review.

## **7.5 Food security prognosis.**

- Household food security expected to decline following poor performance of the last two consecutive seasons and depressed rains forecasted for 2021 short rains.
- Tsetse flies and Ticks infestation is expected to impact on Livestock body conditions, leading to unstable livestock retail prices, especially for cattle.
- Food and milk intake are expected to decline hence possibility of acute malnutrition levels increasing and likely to remain high due to below-average milk production and consumption and poor child-care practices. Food prices expected to remain high following poor previous seasons and increase in fuel prices.
- The distance to water sources for both human and livestock is expected to decrease further due to increased in water levels hence improving both quality and quantity of water. The overall food security situation remains in the stressed phase (IPC 2), however due the looming dry season the county may slide in to crisis phase (IPC phase 3) and on a worsening trend.

## **8.0 RECOMMENDATIONS BY SECTORS;**

Immediate/Short Term: Partners to collaborate on;

### **8.1 Water**

- Water trucking to hot spot areas in the County.
- Desalting of open water sources Lamu West Sub- County.
- Installation of solar powered water systems e.g., desalination plants.
- Promotion of rain water harvesting, repair of Djabias, roof catchment areas, installation of gutters and tanks in Villages and Institutions. Before the onset of the short rains.

### **8.2 Livestock**

- Provision of livestock feeds to hot spot areas.
- Livestock disease surveillance and control through vaccinations against notifiable diseases such as CCPP, FMD, in the county.
- Promote livestock insurance services.
- Construction of vaccination crushes and cattle dips which are currently dilapidated.

### **8.3 Agriculture**

- Build Capacity of crop farmers to plant drought resistance food crops.
- Mobilization and sensitization of farmers on crop insurance.

### **8.4 Health and Nutrition**

- Sensitize the community on the safety precaution measures against coronavirus.
- Strengthen malnutrition screening and active case search as well as strengthen integrated management of acute malnutrition in the community.

### **8.5 Peace and Security Sector (Co-ordination)**

- Peace and security meetings should be enhanced in the County
- Provision of relief food or cash transfer to vulnerable household during this period of COVID - 19.

### **8.6 Information Communication Technology**

- Promote use of ICT on drought information (Forums) sharing and development programmes.

## ANNEX 1: ONGOING DROUGHT RESPONSE

### Annex 1.1 Ongoing Drought Responses in Lamu County

Sector	Intervention (examples below)	Quantity & Type (Cumulative to date)	Beneficiaries reached (Cumulative to date)			Supporting agency (Institution supporting intervention)	Geographical coverage (County, Sub-County/ward)	Quantify the cost of intervention	Intervention gaps (Quantify and cost the intervention)
			Population/ numbers	Households	Institutions (specify)				
<b>Water</b>	Water trucking	64,240m <sup>3</sup>	10195	2317		CGL, LAWASCO	L.E & Central Sub Counties	160M	Water to 4 more villages at a cost of 600,000
	<b>Sub-Total for water sector</b>							160M	
<b>Social protection</b>	General food distribution	1500 bags of rice	26400	6000		National Government (Interior & Coordination)	Lamu East, Central & West Sub Counties	9M	Relief food/cash transfer to 15700HHs at a cost of 41M
		1200 bags of beans						6M	
		35000 bales of maize flour		35000				57M	
	<b>Sub-Total for sector Social protection</b>							72M	
<b>Livestock</b>	Vaccination against rabies		32306 dogs	2480		CGL	Hongwe, Hindi, Bahari, Mkunumbi&Faza wards	1.6M	
	Vaccination against BQ anthrax, CBPP, CCPP & PPR		1. Cattle: 22154-CPBB, 33451-BQ 2. Sheep 9754-PPR 3. Goats 12365-			CGL	Witu, Hongwe, Bahari, Mkunumbi and Hindi wards.	840,000	1. 500 litres Albendazole 10% needed for deworming livestock during this season.



			CCPP 10128 PPR						2. 400 litres diesel and 300 litres petrol to facilitate transport 3. Kshs. 250,000.00 staff facilitation.
	<b>Sub-Total for livestock sector</b>							<b>2,340,000</b>	
Agriculture	Distribution of seeds (recovery)	Maize seeds Cowpeas seeds Green grams Sorghum seeds 202 tons} 200 bags fertilizer (202 Tons)		25,250		County Government GoK FAO	Witu, Bahari, Hongwe, Mkunumbi, Hindi, Mkomani, Shella/Manda, Kiunga and Faza wards	<b>50.0 M</b>	