

**NATIONAL DROUGHT MANAGEMENT AUTHORITY
LAMU COUNTY
DROUGHT EARLY WARNING BULLETING FOR APRIL 2023**



A Vision 2030 Flagship Project



APRIL 2023: EW PHASE

Drought Status: ALERT



Maandalizi ya mapema

Drought Situation & EW Phase Classification

Biophysical Indicators

- The seasonal rainfall received was below average during the Month of April.
- The vegetation condition Index (VCI-3Month) showed a decrease of three percent when compared to previous month of March.
- The VCI indicated Above Normal vegetation. The overall drought phase in the county was at Alert but improving.
- Forage condition was fair to poor but improving across all livelihood zones during the month.

Socio Economic Indicators

Production indicators

- All livestock species exhibited fair body condition except in fishing zones with poor body condition.
- Crops farmers are currently at different stages such as land preparation and Planting.
- Milk production was slightly increased and below the LTA when compared to previous month of March.

Access indicators

- Terms of trade were favorable to goat sellers compared to crop farmers.
- Water access for both human and livestock was fair to poor 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 above average when compared to normal ranges.
- The average coping strategy increased by less than one per cent when compared to previous month of March.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agropastoral	Alert	Improving
Mixed farming	Normal	Improving
Fisheries	Alert	Improving
Formal/Unskilled labour	Normal	Improving
County	Alert	Improving
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	39	80 -120
VCI-3Month	71.3	<50
Forage condition	poor	Good
Production indicators	Value	Normal
Crop Condition (specify crop) Maize	Fair	Good
Livestock Body Condition	Fair	Good
Milk Production	1.5 litres	>3 Litres
Livestock Migration Pattern	Not normal	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	68	<84
Milk Consumption	1 litres	>2litres
Return distance from grazing areas to water sources.	6.8	<2 Km
Return distance to water sources (HH).	4.9	<2 Km
Cost of water at source (20 litres)	5-10	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC categories	6.9	>90%
Coping Strategy Index (CSI)	19.77	<0.95

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

1.0 CLIMATIC CONDITIONS

Rainfall performance

- Rainfall received during the month of April was of above average precipitation when compared to the long-term average as recorded in the two decades as in figure 1 below.
- The current NDVI value was slightly below when compared to the historical long-term values as shown in figure 1.

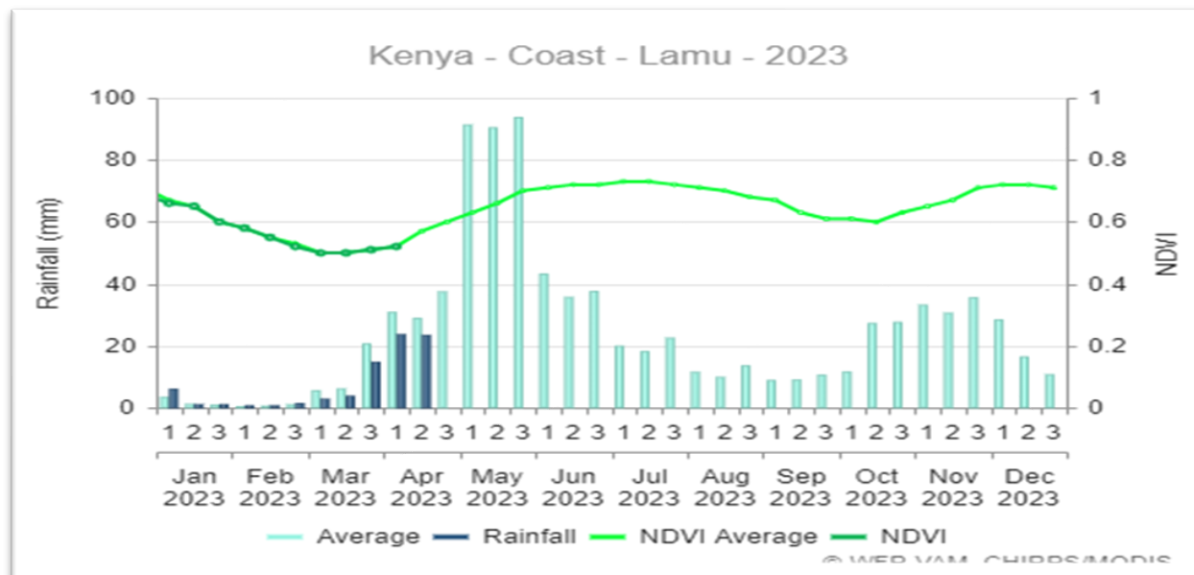


Figure 1: Rainfall and NDVI Satellite data

1.2 Amount of rainfall and spatial distribution

- According to VAM WFP rainfall and vegetation data, the County received a total of 46.8mm of rainfall in the month of April during the first two decades.
- This was an increase of 87 percent rainfall compared to previous month of March.
- However, this (46.8mm) was lower when compared to long-term average of 59.5mm for the two decades as in the figure 1 above.
- This 46.8mm of rainfall was higher when compared to 24.3mm received in the same period during the previous year.
- The seasonal rainfall received was poor, both in spatial and temporal and was unevenly distributed in all livelihood zones.

1.3 Other hazards.

- Insecurity
- Diseases caused by tsetse fly infestation (Trypanosomiasis) Ticks and worms affecting livestock body condition and production.

2.0 VEGETATION CONDITION

2.1 Vegetation Condition Index (VCI)

- The vegetation condition index for the month of April decreased by three percent compared to the previous month of March.
- The vegetation condition index for the month April was 71.3 compared to 73.3 in the previous month.
- However, Lamu East Sub-County was Above Normal drought vegetation at three months VCI of 70.76 while Lamu West Sub County also recorded Above Normal vegetation of 71.59.
- VCI-3 Months is below the long-term average and the previous year as shown in the figures 2 below. {Source: Boku University, Austria}

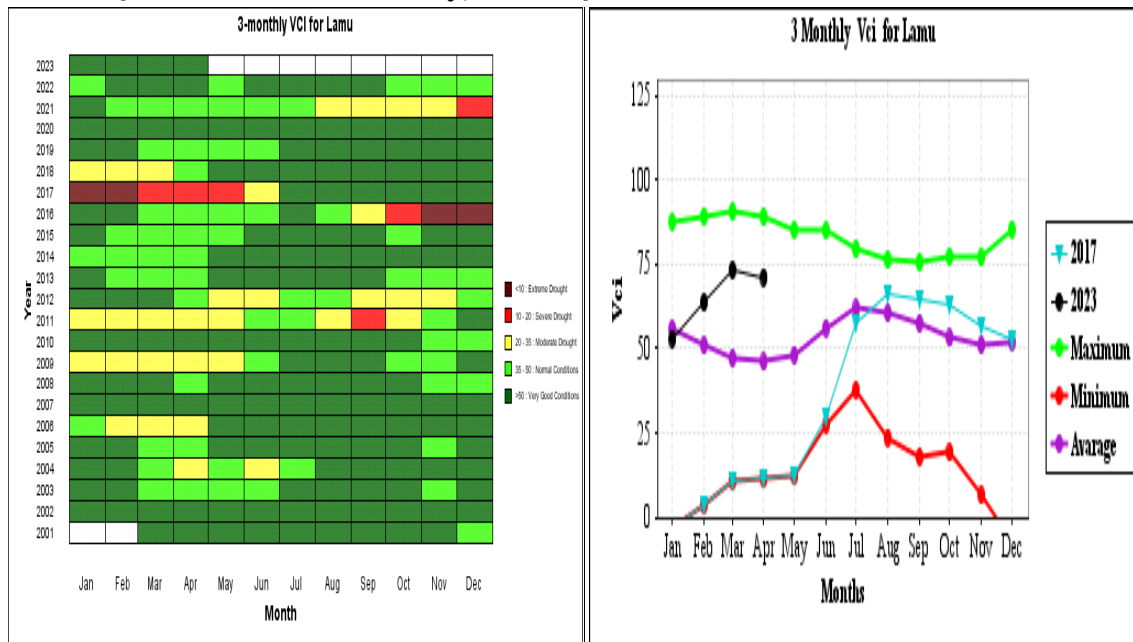


Figure 2: Vegetation condition index

OBSERVATIONS-PASTURE AND BROWSE CONDITION

2.1.2 Pasture

- Fifty-three per cent of the community members interviewed stated that pasture was poor while forty-seven per cent stated that it was fair.
- Pasture condition was fair in Agropastoral, poor to fair in mixed farming and fishing livelihood zones as in figure 3. The pasture trend is improving both in terms of quality and in quantity.
- The pasture expected to last for the next three months.
- The current pasture is within the normal range.

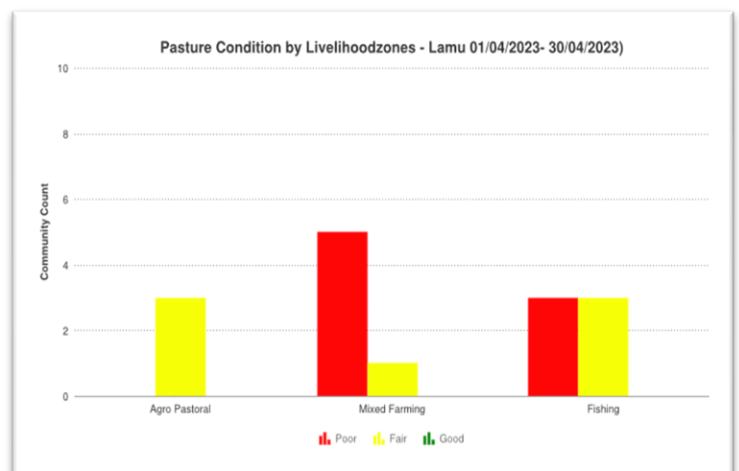


Figure 3: Pasture conditions

2.1.3 Browse conditions

- The quantity and quality of browse was poor across all livelihood zones.
- Community members interviewed indicated that fifty-three per cent of the respondents stated that browse was poor, forty-seven per cent stated that the browse was fair to poor.
- The browse condition was fair to poor in mixed farming and fishing zones while it was fair in Agropastoral the condition.
- This attributed to low precipitation and high temperatures as shown in figure 4.
- The browse expected to last two to three months.
- The current browse condition is poor when compared to the same period during the previous year.

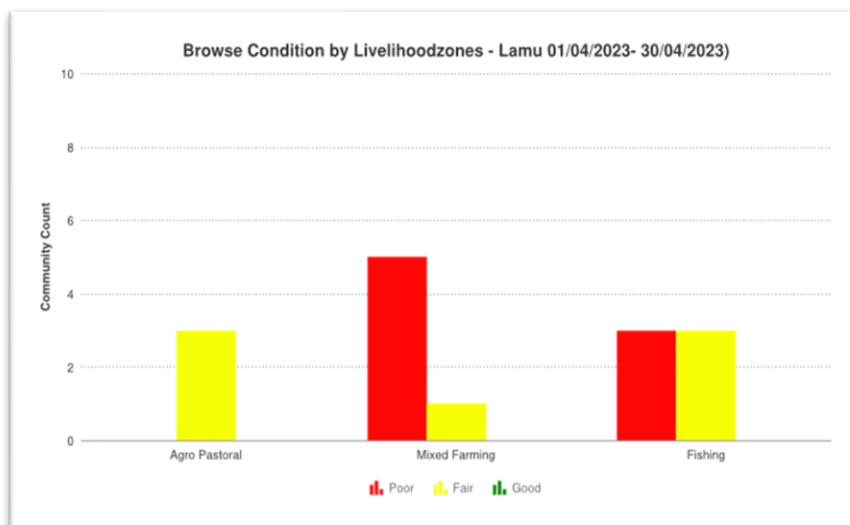


Figure 4: Browse conditions

2.2.0 HYDROLOGICAL DROUGHT

2.2.1 Water Sources and Availability

- The main water sources in the month of April was shallow wells and water pans as shown in the figure 5.
- The state and condition of open and underground water sources in the County is fair across most livelihood zones.
- However, the current water situation improved when compared to previous month of March.
- The status of main sources of water was slowly improving due to the ongoing long rains.

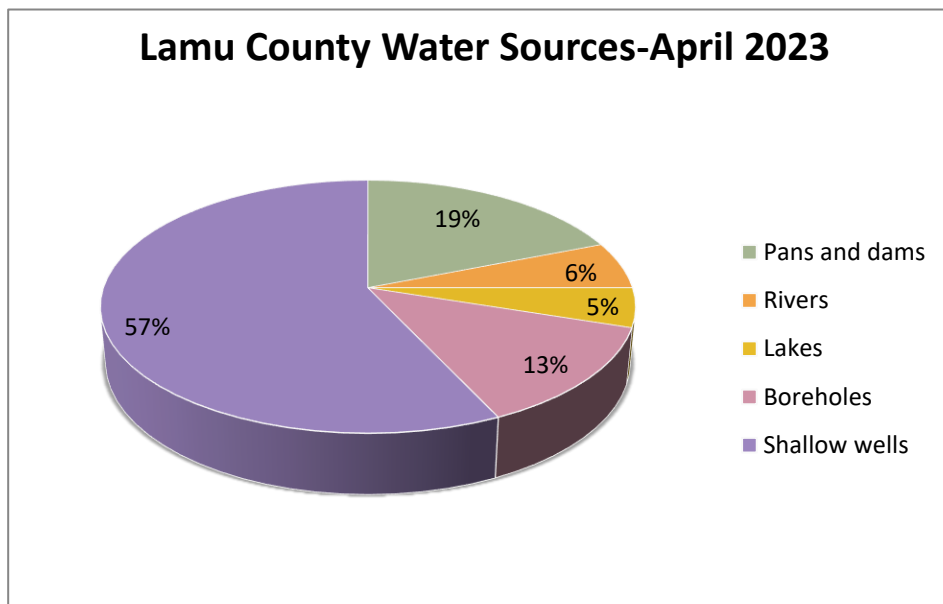


Figure 5: Main sources of water

2.2.2 Household access and Utilization

- Average household watering return distance decreased to 4.9 Kilometers in April when compared to previous month of March which recorded 6.7 Kilometers.
- This decrease in household water distance was attributed to improving recharge of open water sources.
- Household return water distances per livelihood zones were as follows; the Agropastoral 2.9 Kilometers, fishing 3.3 Kilometers and Mixed Farming Zone were 1.6 Kilometers respectively.
- The precipitation received during the month have some impact in the water levels of open and underground water sources.
- The average household water distance for April was 4.9 Kilometers that is below compared to the long-term average of 6 Kilometers as shown in figure 6 below.
- The average household water consumption per person per day is at 15-20 liters in all livelihood zones except in fishing zone at 10-15 litres per person per day.
- Water costs at source are 5-10 Kshs in town/village centers for 20 litres jericane while the cost in fishing ranging between Kes 50-100.

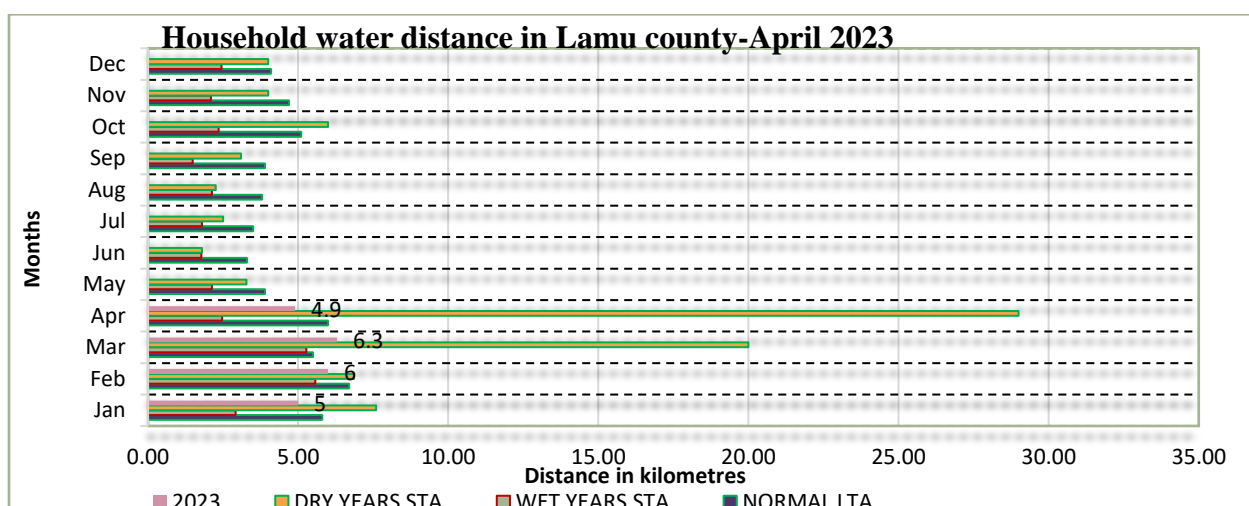


Figure 6: Households water distance

2.3 Livestock access to Water

- Livestock average distance to water source from grazing areas decreased to 6.8 kilometres when compared to 10.1 kilometres during the previous month of March as shown in figure 7.
- Grazing return water distances per livelihood zone were as follows: the Agropastoral two kilometres, 3.5 Kilometres in mixed farming and four kilometres in Fishing zone.
- The decrease in grazing water distance was as a result of precipitation received during the long rains.
- Watering frequencies for livestock species was five to seven days times per week.
- The current average grazing distance of 6.8 Kilometers was higher when compared to the short-term average of 11.2 Kilometres.

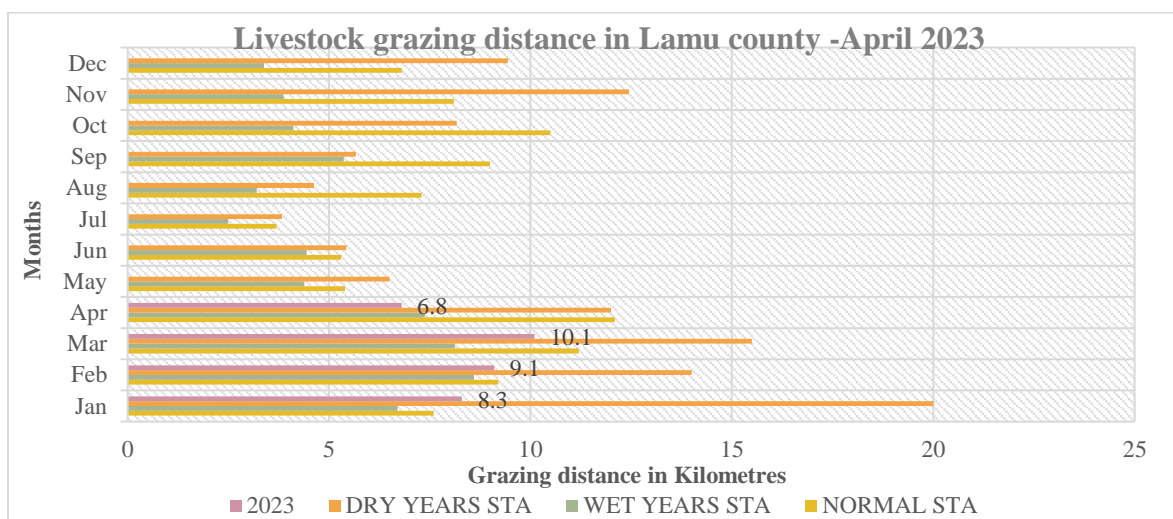


Figure 7: Grazing water distances

2.4 Household Income Sources

- The main households income for the month of April in the County was casual labour that recorded 63 per cent.
- The lowest household income recorded 5 per cent in sale of crop in April compared 3.3 per cent in March, this was attributed to crop failure in the five consecutive rainy seasons as shown in figure 8 .
- However, Casual labour decreased by two per cent while the rest remained stable during the month when compared to the previous month of March.

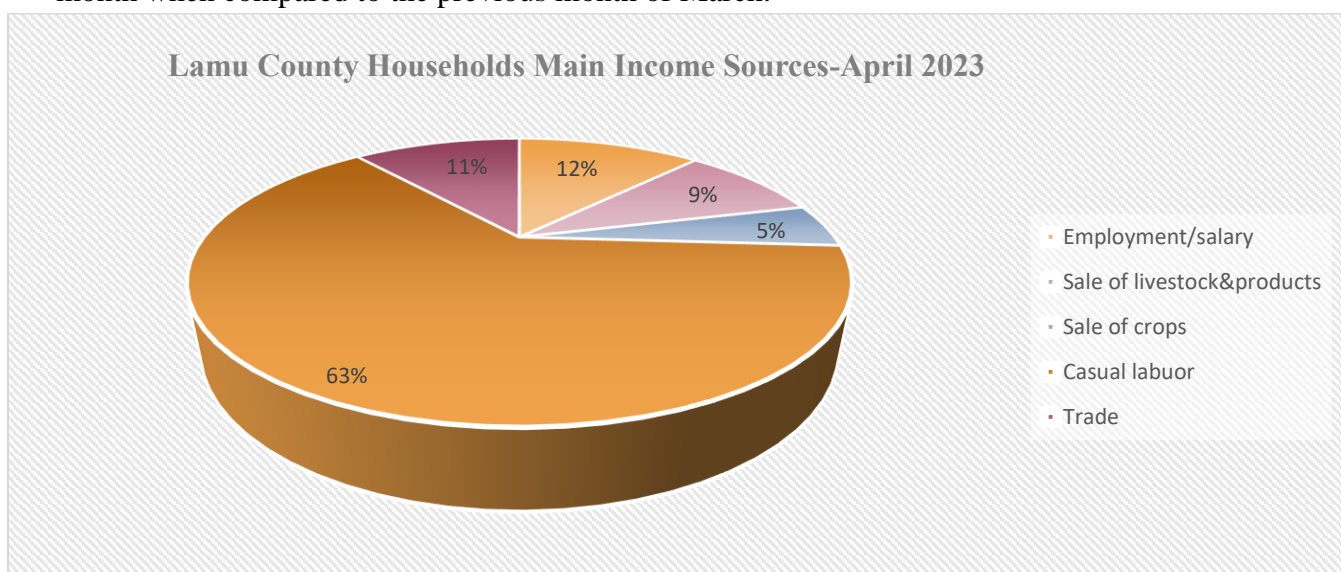


Figure 8: Households sources of Income

2.5 Implication to Food Security

- All livelihood zones experiences decreased water salinity due to improve in water levels of open and underground water sources.
- Diseases such as Lumpy skin disease; Trypanosomiasis, 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

- Out-migration of livestock from Agropastoral to grazing zones in Tana River county, this is due to less infestations in neighbouring county.
- This out-migration is normal during this period of the season.

3.1.2 Livestock Body Condition

- The livestock body condition was fair to good for cattle and good for small ruminants.
- In Fishing Livelihood zones, the body condition was poor.
- However, due to pasture regeneration the body conditions are expected to improve.

3.1.3 Livestock Diseases

- There were no cases of livestock diseases reported during the month.

3.1.4 Milk Production

- Milk production in April recorded at 1.5litres when compared to previous month.
- The 1.5litres of milk was produced by one percent of total household interviewed as in figure 9.
- The Milk production was distributed as follows: Mixed farming produced 1.6litres; Fishing is one litre, while the Agro pastoral Zone produced an average of 1.5 litres.
- Milk prices are retailing at an average price of Kes 100-120 per litre across the livelihood zones. This price is normal at this period of the year.

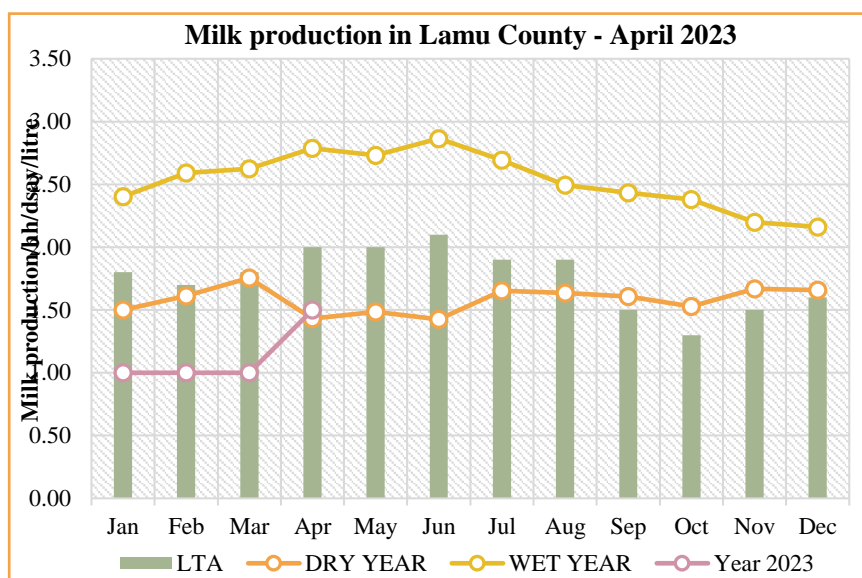


Figure 9: Milk production

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 planting and preparing land. However, few farmers who planted earlier have their crops especially maize at knee height and above.

3.2.2 Crop Harvest

- There was no harvest report during the month.

3.2.3 Implications on Food Security

- The fair to good body condition of livestock across the livelihood zones has stabilized the prices resulting to increased income for livestock farmers.

4.0 MARKET PERFORMANCE

4.1.0 Livestock marketing

4.1.1 Cattle Prices

- Average cattle market price in the month of April increased to Kes 31,400 when compared to previous month (Kes31, 000) as in figure 10.
- This increase in price is attributed to high demand and low supply in different markets as Cattle were transported to Oman by Shipping from Lamu Port and for the Eid al-Fitr festivity and the start of the long rain season.
- The cattle average market prices were highest in Kiunga at Kes 40,000 and lowest at Mswakini at Kes 20,000.
- The average market price for the month of April was recorded Kes 31,400 was higher when compared to normal short-term average of kes.25, 600.
- The current price was also higher when compared to dry and wet seasons.

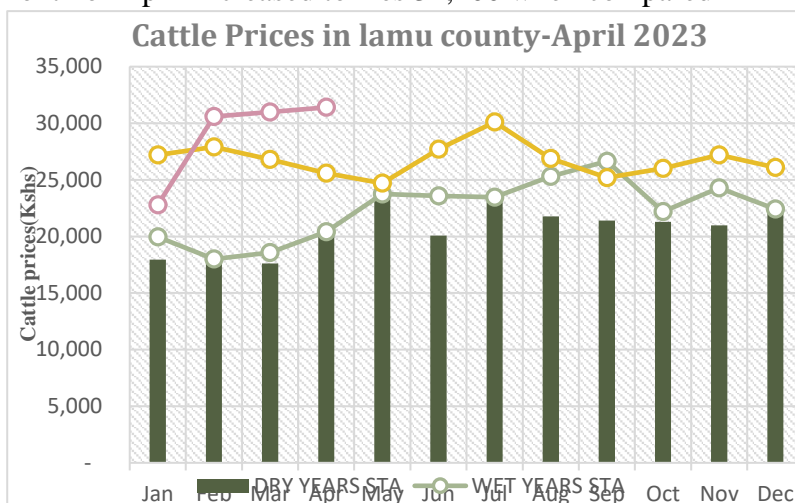


Figure 10: Cattle prices

4.1.2 Small Ruminants Prices

4.1.3 Goat Price

- Goat price increased in the month of April at (Kes 5,000) when compared to previous month of March (Kes 4,800).
- The current goat price trends was stable when compared to the previous month .
- The current price was higher compared to short term average and price recorded in previous year at a similar period.
- The goat prices following seasonal trends are as shown in figure 11.
- The increase in price of goats attributed to low supply and High demand at different markets during the Eid fitr festival.
- The goat average market price for April was highest in Patte at Kes 5,800 and the lowest in Mswakini market at Kes 3,500.
- The current price was also higher when compared to bad season.

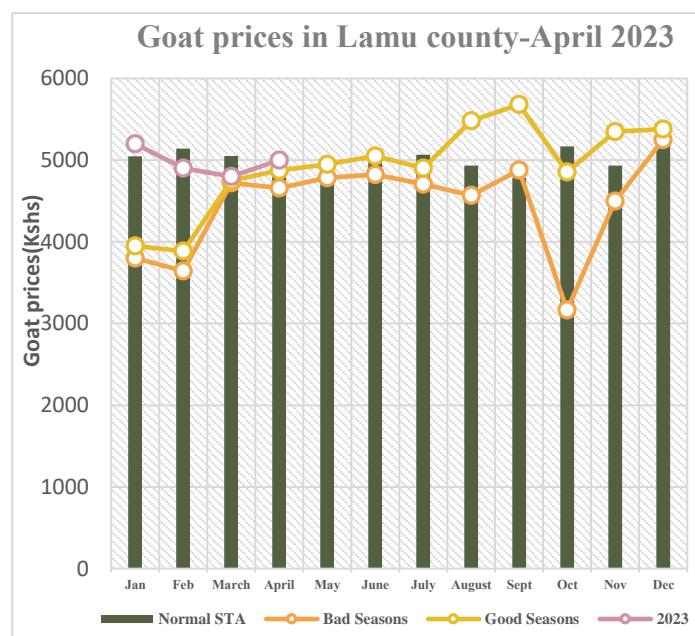


Figure 11: Goat prices

4.2.0: Crop prices

4.2.1 Maize price

- The maize prices increased to Kes 74 when compared to previous month of March (Kes 70) at as shown in the figure 12.
- The average price for April was Kes 74, which was above the normal short term and the dry season's averages.
- The increase was due to low harvest of product by crop farmers especially maize.
- The maize market prices were highest in Mswakini market at Kshs 100 and lowest in Patte at Kes 50.
- However, price ranges determined by commodity supply in different markets.
- The price is likely to follow seasonal trends.

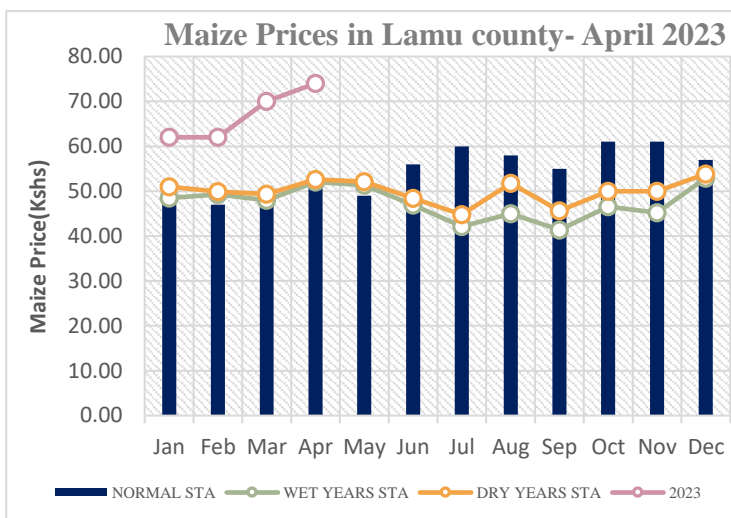


Figure 12: Maize prices

4.2.2 Beans prices

- Average price of Kilogram of beans was Kes 182 in April, which was an increase when compared to the previous month of March at Kes 173 as shown in the figure 13 below.
- The increase in price was attributed to high demand and low supply of the commodity in the market.
- The beans price was highest in Patte at Kes 200 and lowest in Hindi at Kes 120.
- However, price ranges is determined by commodity supply in the different markets and the purchasing power of households.

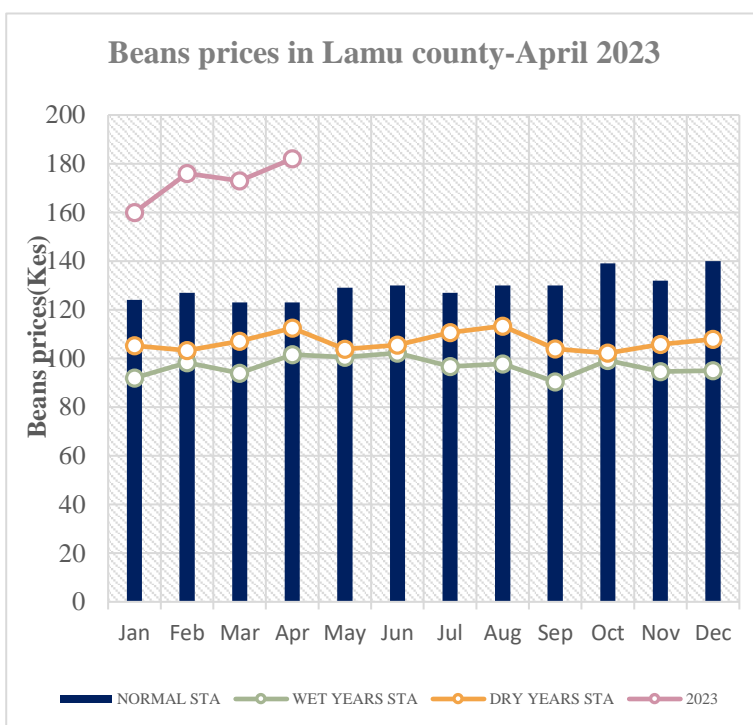


Figure 13: Beans prices

The short-term average price of beans was Kes 123 which is lower when compared to the current beans price for the month of February which was higher compared to the short term average, the wet and dry seasons.

4.3 Livestock Price ratio/Terms of Trade

- The terms of trade (ToT) for the month of April recorded 68 Kilograms, which remained stable when compared to previous month of March (68 Kilograms) as in figure 14 below.
- Sale of a medium goat in April would cost a household about 68kilograms of maize.
- This showed the exchange ratio in favour of crop farmers when compared goat sellers.
- However, this was determined by supply in different markets.
- The ToT was highest in fishing zones at 90 Kilograms and lowest at Agropastoral zones at 55 Kilograms.
- The Terms of trade for April was lower when compared to the short-term average and above the bad seasons and lower than good season.

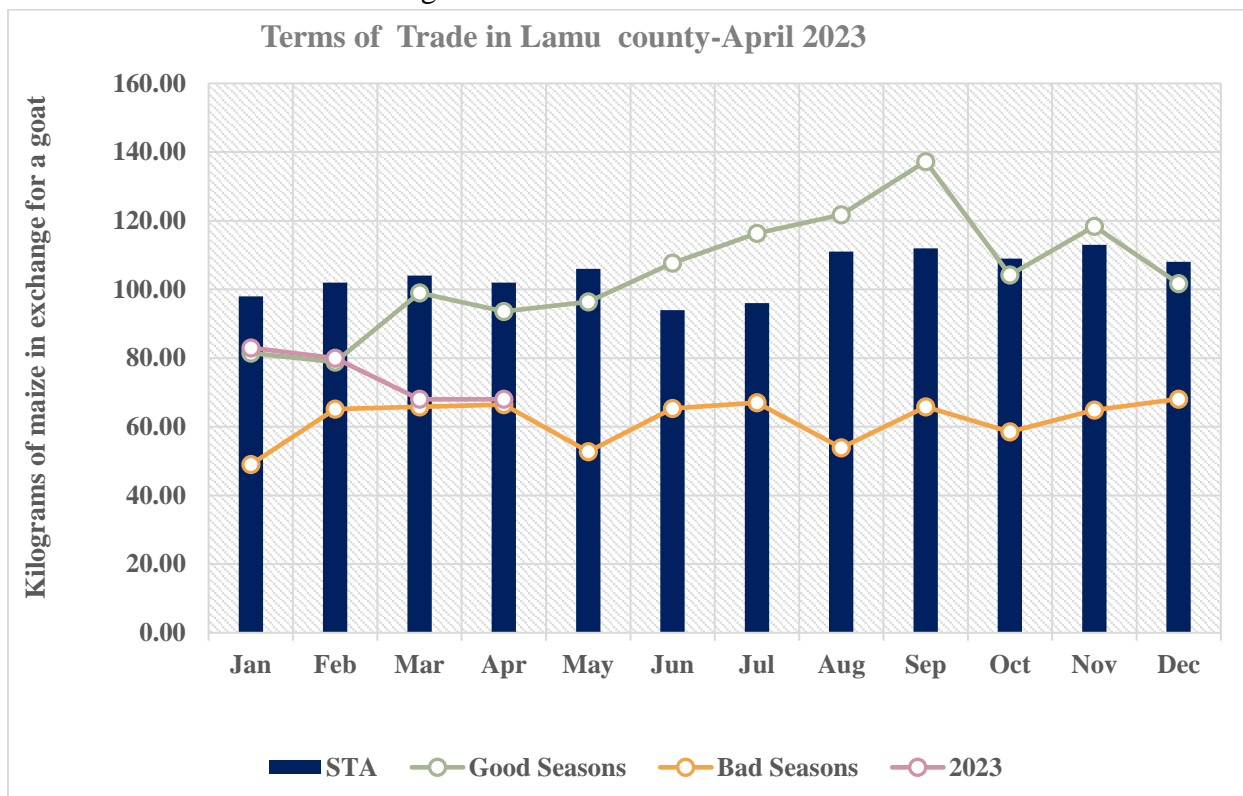


Figure 14: Terms of trade

4.4 Implication on food security

- The stable condition of livestock body condition improved prices, hence ameliorated food security at household level, especially for small stocks.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk for Household Consumption

- Average milk Consumption was stable in the month of April, when compared to previous month as shown in figure 15.
- This one litre of milk was consumed by one percent of the total households interviewed.
- Milk consumption was highest in mixed farming at 1litre and null litres in fishing zones.
- The stability in milk consumption level was because of low production by household coupled with low purchasing power of the commodity.
- Currently, households are purchasing packed milk from shops and markets.
- The current consumption of the product was lower when compared to the dry and wet periods.

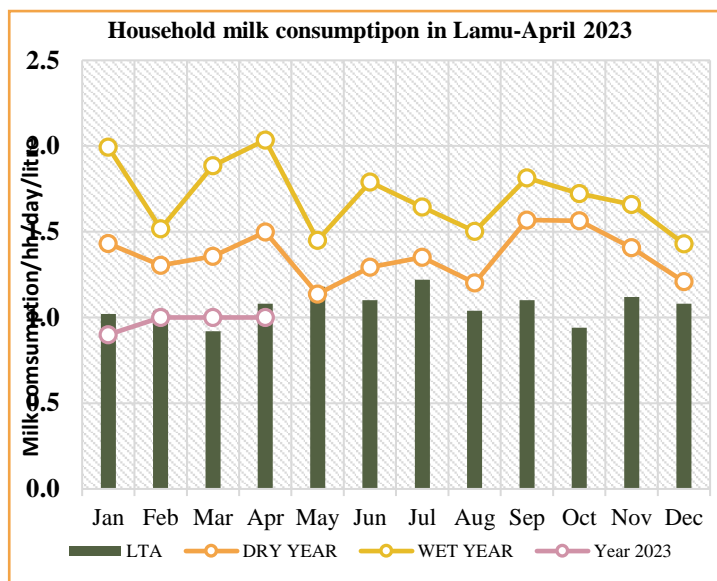


Figure 15: Milk consumption

5.2 Health and Nutrition status

5.2.1 MUAC

- The proportion of children under five at risk of malnutrition with Mid Upper Arm Circumference below 135mm slightly decreased to 6.9 per cent compared to previous month of March.
- The proportion of children under five with severe category was zero percent during the month under review, indicating decrease in the number of children with severe category.
- This was attributed to provision of nutritional porridge by KRCS and other donors.
- The rates of malnutrition cases reduced in Agro pastoral and Mixed farming Zones of Witu, Hindi and Mpeketoni areas.
- Poor childcare practices, poor dietary diversity, reduced number of integrated health outreaches delivering essential nutrition services to the malnutrition hotspots area have exacerbated the condition of the under-fives. The hot spot areas are Kiunga, Bahamisi, Kiangwe, Pandanguo, Bargoni among others.

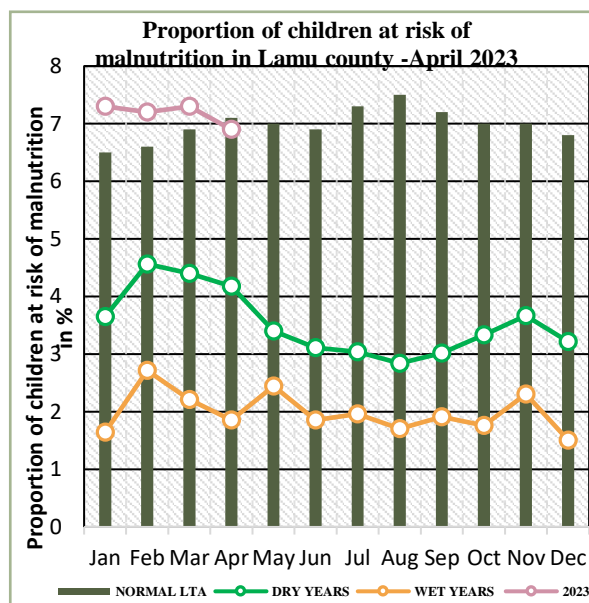


Figure 16: MUAC

5.2.2 Health

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

5.3 Food consumption score

- The Proportion of households with poor, borderline and acceptable in the county recorded 37, 61 and two per cent respectively during the month of April.
- There was a decrease in poor and borderline food consumption households by four per cent when compared previous month of March respectively.
- The population with the highest poor food consumption in the county was mixed farming with 80 per cent while fishing zone had the highest borderline food consumption of 93 per cent, owing to reduced availability of food at households' level.
- Households have low purchasing power, thus consuming one meal for the very poor and poor households per day with one to two food groups as in figure 17.
- Food commodity prices are high in all livelihood zones. However, food prices are highest in fishing zones.

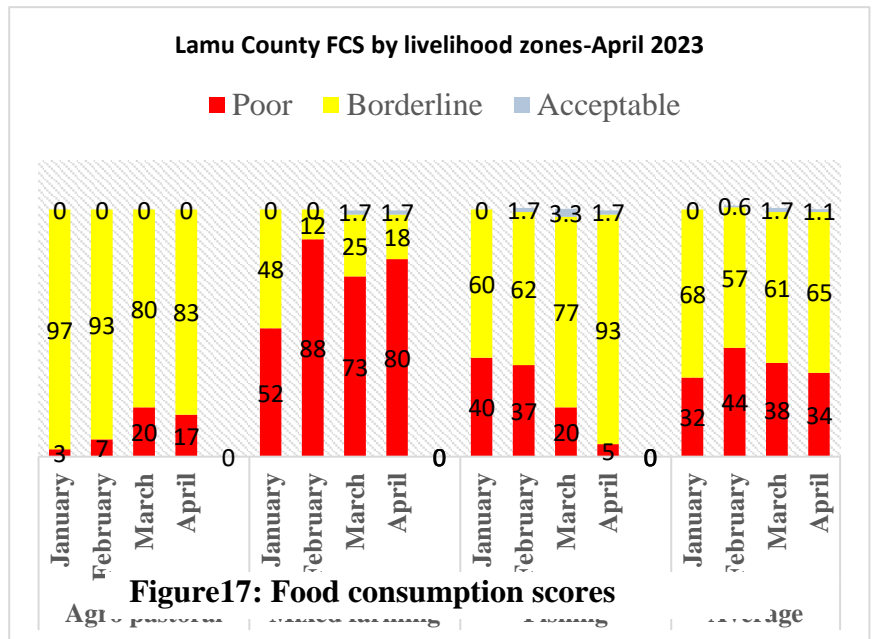


Figure 17: Food consumption scores

5.4 Coping strategy index

- The mean coping strategy Index in the Month of April recorded 19.77 showing an increase, when compared with the previous month of March.
- This indicates increase in coping strategies at household level in all livelihood zones.
- Agropastoral Zone had coping index of 13, Mixed Farming livelihood zone had 19 while Fishing Livelihood zone had highest coping strategy of 24.
- Common coping strategies employed by food insecure households in the month of April were; Reduction in the number of meals, Purchase on credit, remittances from relatives, borrowing food from friends or relatives, adopting less preferred or less expensive food.

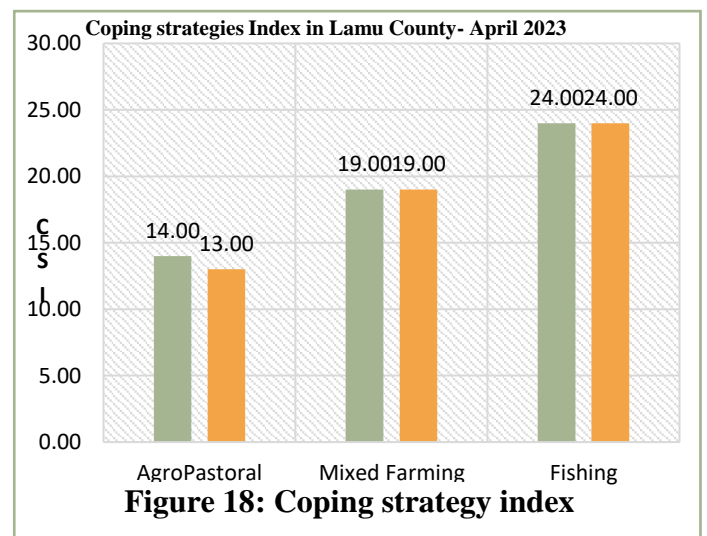


Figure 18: Coping strategy index

5.5 Implication on Food Security

- The instability of milk consumption at household levels in all Livelihood zones could lead to poor dietary diversity and hence positive impact on food insecurity.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 Food aid

- There was food aid distribution by National government through the County Government providing logistics in transportation to hot spot areas affected by drought. Each Family received 10 Kilograms of Rice and five Kilograms of beans.
- Food distribution by NSCODR to drought affected communities in seven wards, each 5,857 households targeted received 22 Kilograms of food hampers.

6.2 Non-food interventions

- There was no non-food intervention reported during the month.

7.0 EMERGING ISSUES

7.1 Coronavirus out break

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

7.2 Insecurity/Conflicts

- There were cases of insecurity, Conflict between crop farmers and Livestock herders reported during the month.

7.3 Migration

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

7.4 Food security prognosis.

- The regional and Kenya Meteorological forecasts indicate that there is a high likelihood of below average rainfalls during the (March to May) long rains season. Additionally, historical analogue of warning La Nina occurrence.
- The distance to water sources for both human and livestock is expected to improve due to recharge of open water sources, hence improve in both quality and quantity of water.
- Tsetse flies and Ticks infestation is expected to impact on Livestock body conditions, production leading to decline in household income. Hence, lead to unstable livestock retail prices especially for cattle.
- Food and milk in take was 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 commodity prices are expected to remain high, following failure of five consecutive poor seasons and exacerbated by increase in fuel prices.
- The overall food security situation remains stable in the stressed phase (IPC 2) compared to the previous season.

8.0 RECOMMENDATIONS BY SECTORS;

Immediate or Short Term response: Partners to collaborate on;

8.1 Water

- Repair of Boreholes, water pans and desalination plants in hot spot areas.

8.2 Livestock

- Livestock disease surveillance and control through vaccinations against notifiable diseases such as CCPP, FMD, in the county.

8.3 Agriculture

- Build Capacity of crop farmers to plant crops that are drought resistance.
- Provision of certified seeds to plant during the long rains period.
- Provision of low cost tractors hire to crop farmers.

8.4 Peace and Security Sector (Co-ordination)

- Peace and security meetings should be enhanced in all livelihood zones and inter counties.
- Provision of relief food or cash transfer to vulnerable household in the county.

ANNEX 1: ONGOING DROUGHT RESPONSE

Annex 1.1 Ongoing Drought Responses in Lamu County

- There was completed response during the month of April.

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	House holds	Institutions (specify)				
Social protection	General food distribution	Food hamper s of 22 Kgs for each household.	30,000	5857		NSCODR	All Sub counties in Seven wards	-	12,000HH
		Rice 900 bags, beans 780 bags @50kg	13,000	2000	Mokowe Arid, Lamu special school	NG/ Interior	All Sub counties in seven wards	-	18,000HH