

LAMU COUNTY
DROUGHT EARLY WARNING BULLETING FOR JUNE 2021



A Vision 2030 Flagship Project



Drought Status: ALERT



Maandalizi ya mapema

Drought Situation & EW Phase Classification

Biophysical Indicators

- The County received below average rainfall during the Month of June.
- The vegetation condition Index (VCI-3Month) showed decrease of four percent when compared to previous month.
- The VCI indicated normal vegetation greenness. The overall drought phase in the county was at Normal according to VCI but Alert according to the situation on the ground.
- Forage condition was fair to poor across all livelihood zones during the month.

Socio Economic Indicators

Production indicators

- All livestock species exhibited fair to good body condition.
- Crops farmers are at Land preparation and Knee High and flowering stage.
- Milk production increased and above the LTA compared to previous month of June.

Access indicators

- Terms of trade were favorable crop farmers than livestock herders in mixed and Agro pastoral livelihood zones respectively.
- Water access for both human and livestock was fair depending on the water sources in the zone.
- Milk consumption was decreased and was lower than the long-term Average.

Utilization indicators

- The proportion of children at risk of malnutrition currently increased and below average when compared to normal ranges.
- The average coping strategy decreased when compared to previous month of June.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Agro pastoral	Alert	Improving
Mixed farming/Irrigated cropping	Alert	Improving
Fisheries /Mangroves	Alert	Improving
Formal/Casual Labour	Normal	Improving
County	Alert	Improving
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	27	80 -120
VCI-3Month	43.66	<50
Forage condition	Fair to poor	Good
Production indicators	Value	Normal
Crop Condition (specify crop) Maize	Fair	Good
Livestock Body Condition	Fair to poor	Good
Milk Production	2.8 litres	>3 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	109	84
Milk Consumption	1.2 litres	>2litres
Return distance to water sources (HH).	5	<5 Km
Cost of water at source (20 litres)	5-10	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC colour	Green-98.6 Yellow-1.4 Red -0	>90%
Coping Strategy Index (CSI)	7.67	<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
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Seasonal Calendar

1.0 CLIMATIC CONDITIONS

1.1 Rainfall performance

- Rainfall received during the month of June was of low intensity when compared to the previous months as recorded in the first and second dekad of June as in figure 1b below.
- The current NDVI value is slightly below average when compared to the historical long-term values as shown in figure 1a.

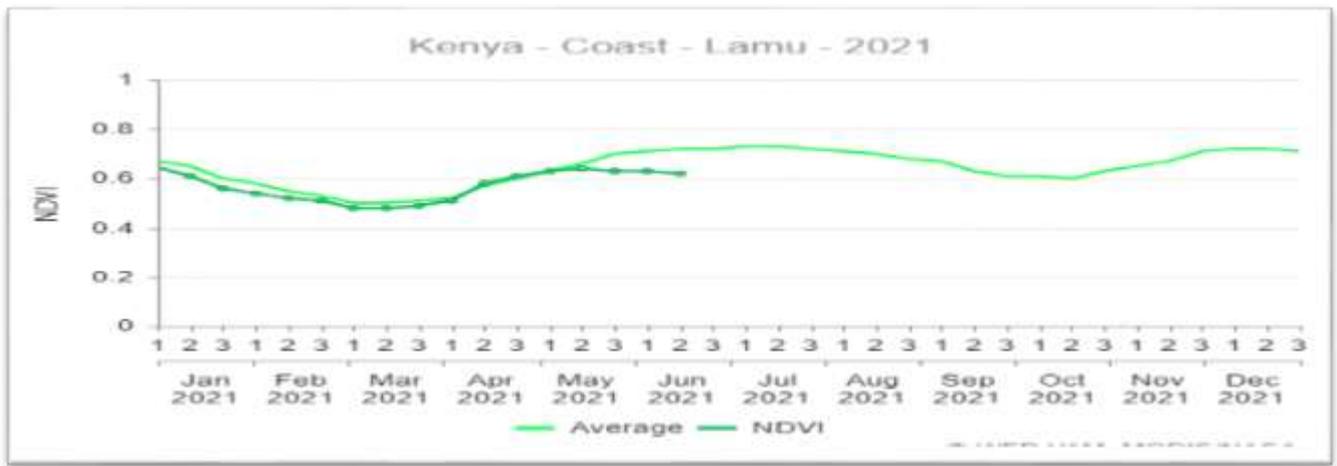


Figure 1a: NDVI data.

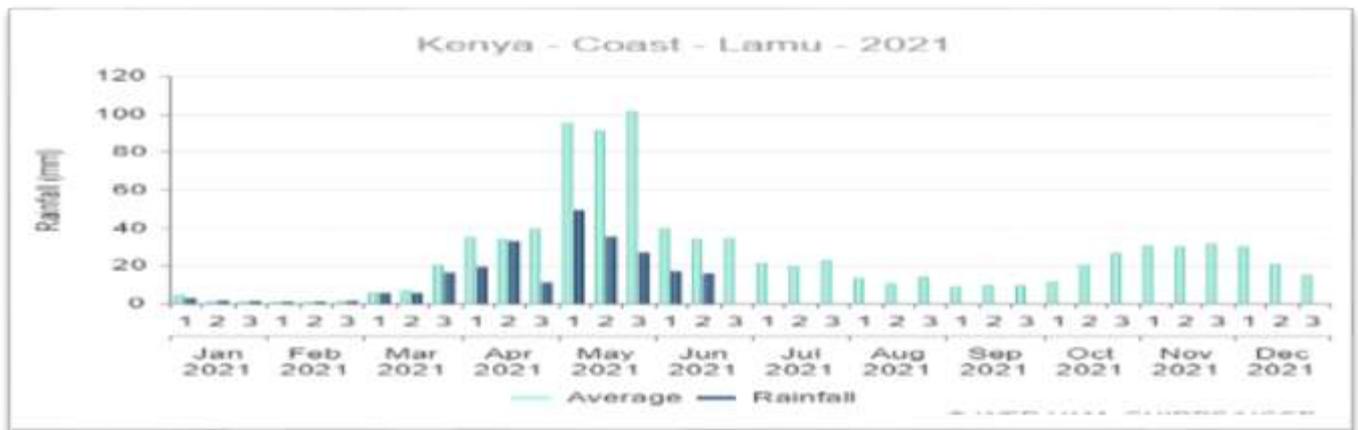


Figure 1b: Rainfall Satellite data

1.2 Amount of rainfall and spatial distribution

- According to VAM WFP rainfall and vegetation data, the County received a total of 32.2mm of rainfall in the month of June during the first and second dekad.
- This was an increase of 62 percent rainfall when compared to previous month of May; however, this (32.2mm) was lower when compared to long-term average of 73.4mm for the first and second dekad as in the figure 1b above.

- This 32.2mm of rainfall was lower by 47 percent when compared to 60.8mm received in the same period during the previous year.
- The seasonal rainfall received was poor, both in spatial and temporal and was unevenly distribution in all parts of the livelihood zones of the county during the month of June.

1.3 Other hazards.

- New castle disease outbreak in chicken was reported across the entire county during the Month of June but under control.

2.0 VEGETATION CONDITION

2.1Vegetation Condition Index (VCI)

- The vegetation condition index for the month of June decreased by four percent compared to the previous month. This was due to below average precipitation rate received during the previous month.
- The vegetation condition index for the month of June was 43.66 compared to 45.31 during the previous month.
- The VCI indicated normal vegetation greenness in the County.
- VCI-3Months is below the long-term average and the previous year as shown in the figures 2a and 2b below respectively. {Source: Boku University, Austria}

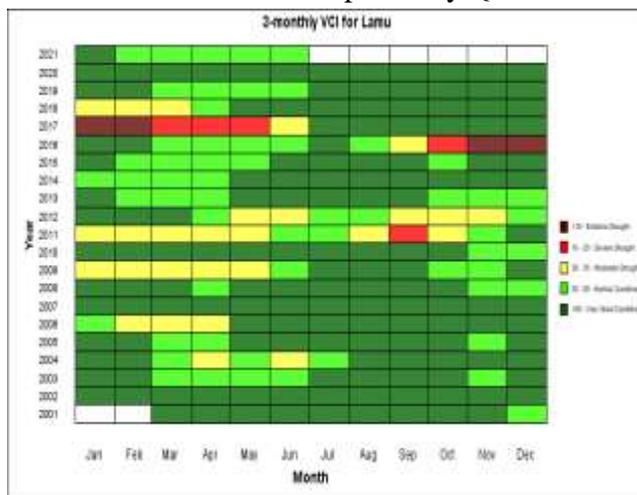


Figure 2a: VCI-Lamu County

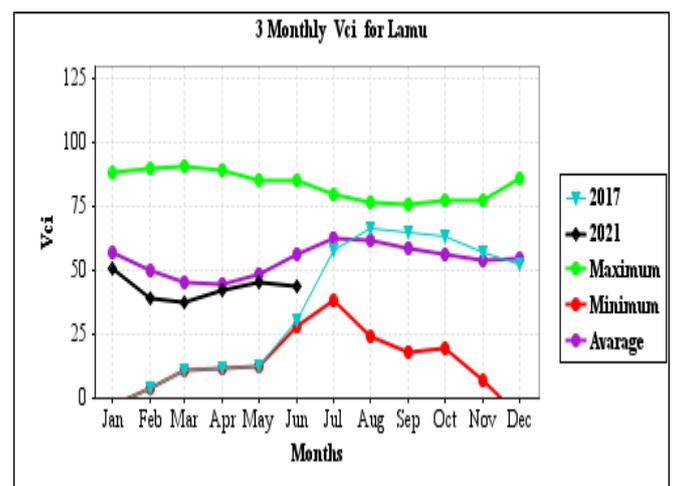


Figure 2 b: VCI-Lamu County

OBSERVATIONS-PASTURE AND BROWSE CONDITION

2.1.2 Pasture

- Pasture condition was good in all livelihood zones in the county but more on worsening trend in fishing zones both in quality and quantity.
- 30 percent of community members interviewed stated that pasture was fair while 20 percent stated it was poor and improving trend as in figure 3.
- Pasture condition by livelihood zones was as follows; Agro pastoral is fair to poor, mixed farming and fishing/ mangrove was poor as well.
- The available pasture is expected to last less than one month. The current pasture is within the normal range.

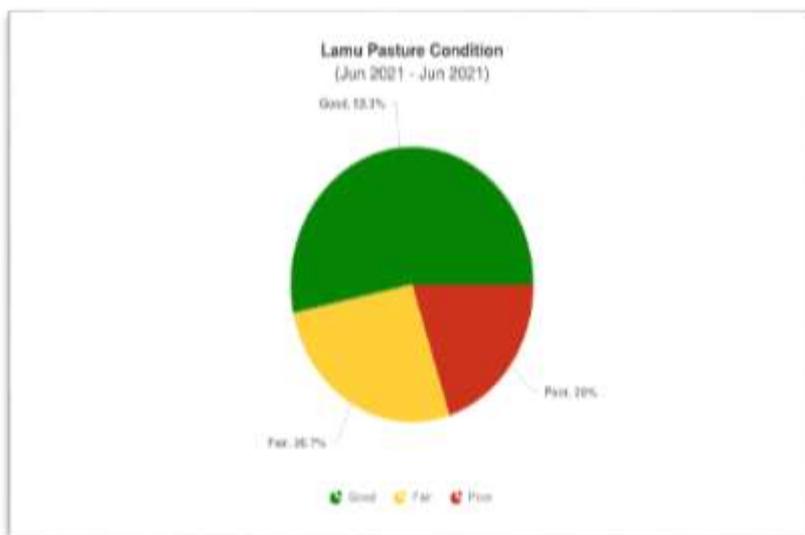


Figure 3: Pasture condition

2.1.3 Browse conditions

- The quantity and quality of browse was fair to good across all livelihood zones.
- Community members interviewed indicated that 30percent of the respondents stated that browse was fair while 20 percent stated that it was poor and on improving trend due to the off seasonal rains and low rate of transpiration as shown below in figure 4.
- Browse condition by livelihood zones was as follows; Agro pastoral, mixed farming was fair to good and fishing/ mangrove was fair.
- The browse is expected to last less than a month. The current browse condition is within the normal range compare to previous year.

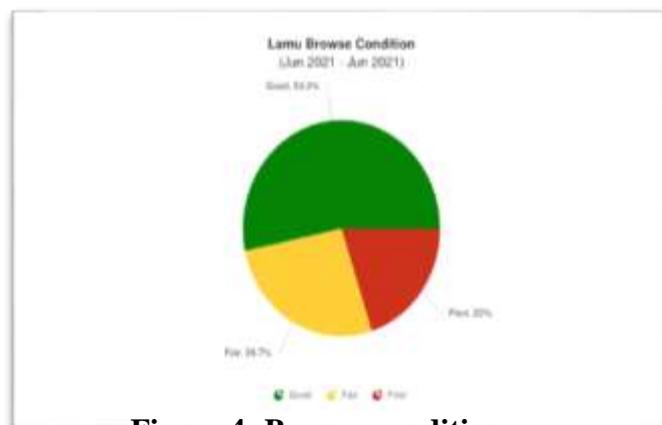


Figure 4: Browse conditions

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 poor across most livelihood zones, except in the Islands where most of the Djabias have dried up and the shallow wells have turned totally saline.
- However, the current water situation reduced compared to previous month.
- The main water sources in the month of June; shallow wells-73.3 percent,Traditional river wells-6.7 percent andRiver-20 percent respectively, as shown in the figure 5.
- The status of main sources of water were improving at this period of the Month.

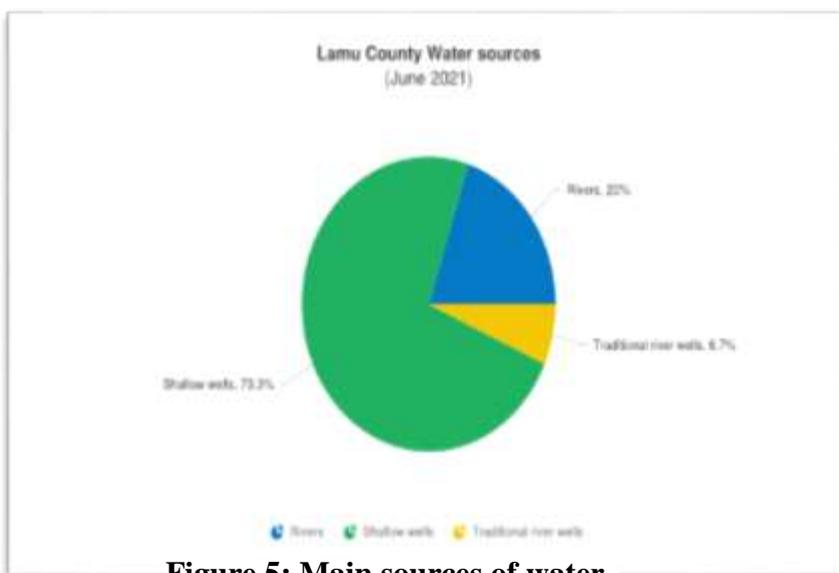


Figure 5: Main sources of water

2.2.2 Household access and Utilization

- Average household watering return distance remained stable at 5 Kilometers, when compared to previous month of May at 5.4 kilometers; this stability in household water distance was attributed to the below average rainfall received and the water trucking by County Government to hot spot areas in the County. Household return water distances per livelihood zones were as follows; the Agro pastoral 3.8 Kilometers, Fishing & Mangrove Harvesting 4 Kilometers and Mixed Farming Zone it was 1.4 Kilometers respectively.
- The below average precipitation received led to low recharge levels of open water sources of between 30-35 percent of their capacity when compared to 90-100 percent recharge.
- The average household water distance for June was 5 Kilometers which is below LTA of 2.6 Kilometers as shown in figure 6 below.
- The average household water consumption per person per day is at 10-15 liters in all livelihood zones. Water costs at source are 5-10 Kshs in town/village centers for 20 liters while the cost in fishing and mixed farming is ranging between Kshs 20-50.

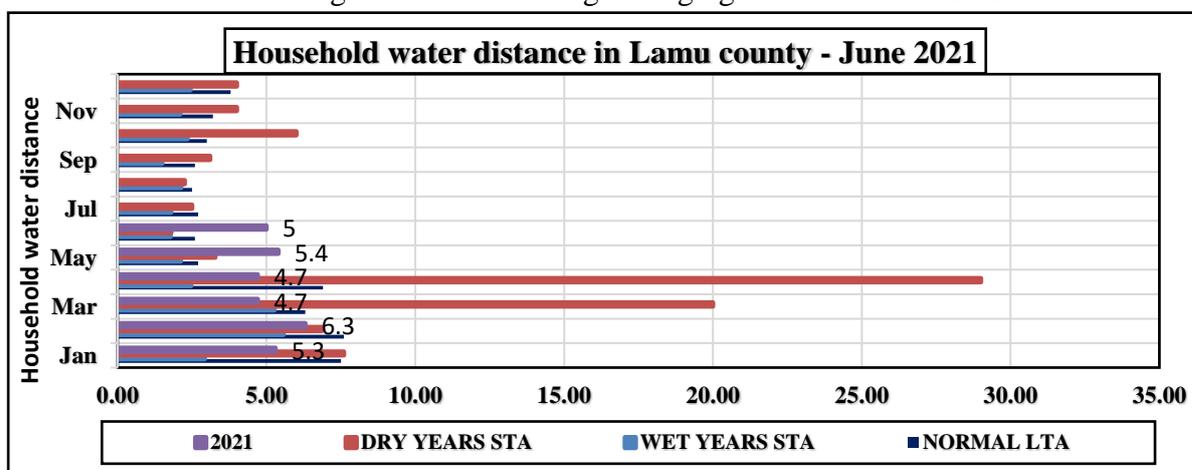


Figure 6: Households water distance-Kms

2.3 Livestock access to Water

- Livestock average distance to water source from grazing areas remained stable at 10 Kilometres when compared to 10.4 kilometrers during the previous month as in figure 7.
- Grazing return water distances per livelihood zone were as follows: the Agro pastoral 5.2Kilometres, Fishing & Mangrove Harvesting 7 Kilometres and for Mixed Farming zone it was 3.8 Kilometres and irrigated farming 1.7 Kilometres.
- The stability of grazing water distance when compared to last month was due to the below average rainfall received and the water levels at different sources.
- Watering frequencies for livestock species was 5-7 days times per week.
- The current average grazing distance for June was 10 Kilometers was higher when compared to the short-term average of 4.4 Kilometres.

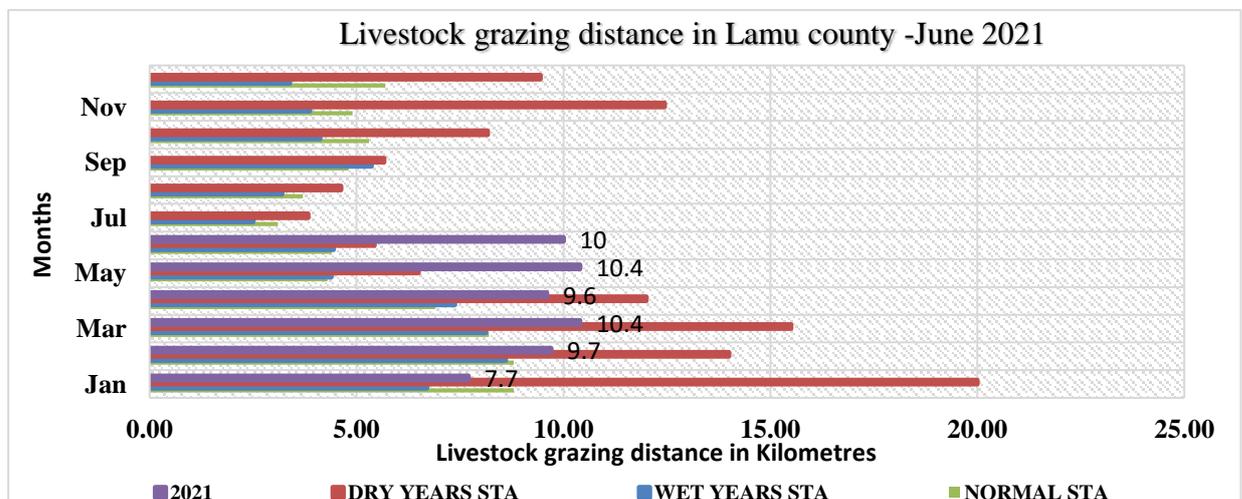


Figure 7: Grazing water distances

2.2.4 Household Income Sources

- The main households income for the month of June in the County was distributed as follows: Casual labour 57.3 percent, trade 16 percent, employment 14 percent, sale of livestock 9.3 percent and sale of crop 3.3 percent in figure 8 alongside.
- However, employment and trade increased by one percent respectively when compared to the previous month of May while casual, sale of crop and sale of livestock and livestock product also increased by one percent.

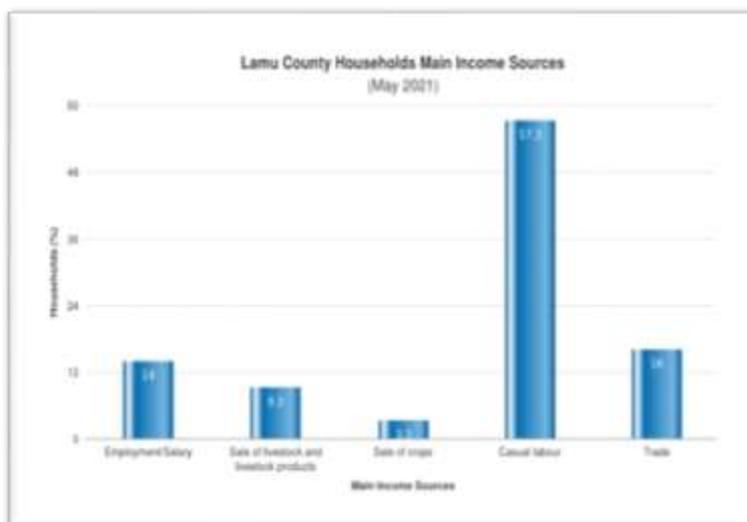


Figure 8: Households sources of Income

2.4 Implication to Food Security

- All livelihood zones will experience decreased in water salinity due to high 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 of animals and household hygiene standards.
- Improvement in forage condition and recharge into open water sources. Hence this would be favourable environment in terms of water and forage condition for the next one month in case the county will receive off season rainfall.
- Curfew and stay home orders issued by the government because of the third wave of the COVID-19 outbreak and increased number of HIV-positive cases according to the Health department and this had undermined the general normal operation in all livelihood zones hence impacted on food security.

3.0

PRODUCTION INDICATORS

3.1.0 Livestock Production

3.1.1 Livestock Migration Patterns

- In-migration of livestock from neighbouring counties of Tana River and Garissa towards Agro pastoral areas of Witu and mixed farming zone of Boni forest.
- This in-migration is normal during this period of the year.

3.1.2 Livestock Body Condition

- The livestock body condition was fair to poor for cattle and fair to good for small ruminants.
- This was attributed to low quality and quantity of pasture and browse due to the below average precipitations received during this month.
- However, due to the off season precipitation, pasture and browse are likely to improve livestock body conditions.

3.1.3 Livestock Diseases

- Large scale New castle disease outbreak in chicken and suspected foot and mouth diseases was reported during the month of June.

3.1.4 Milk Production

- Milk production in June increased slightly to 2.8 litres when compared to previous month with increase in households' milk production. The 2.8 litres of milk was from three percent of total household interviewed as in figure 9.
- Milk productions were distributed as follows: Mixed farming produced three litres, Fishing is nil, while the Agro pastoral Zone produced average of two litres. Milk prices are retailing at an average price of Kshs.40-100 per Liter across the livelihood zones which is the normal milk price at this period of the year.

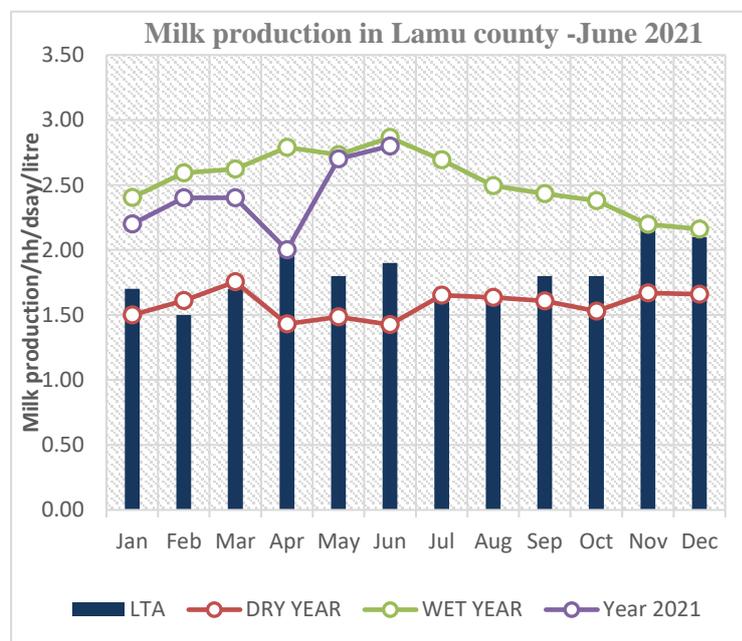


Figure 9: Milk production

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 on Land preparation, knee high and flowering stage.

3.2.2 Crop Harvest

- Currently there is no harvest that is going on.

3.2.3 Implications on Food Security

- Due to the late onset of the long rains, crop farmers across the livelihood zones have shortage in food supply at household level due to crop failure, hence these have impact to food insecurity.

4.0 MARKET PERFORMANCE

4.1 Livestock marketing

4.1.1 Cattle Prices

- Average cattle market price in the month of June increased to Kshs 28,200 compared to previous month (Kshs24, 400) as in figure 10 below.
- This increase in sixteen percent price could be attributed to high demand and low supply coupled with fair to good body condition of cattle by local herds owing to improved quality of forage.
- The cattle average market prices were highest in Patte at 30,000 and lowest at Witu at Kshs 29,000.
- The average market cattle price for the month of June was Kshs.28, 200 was higher when compared to normal short-term average of Kshs.23, 585.

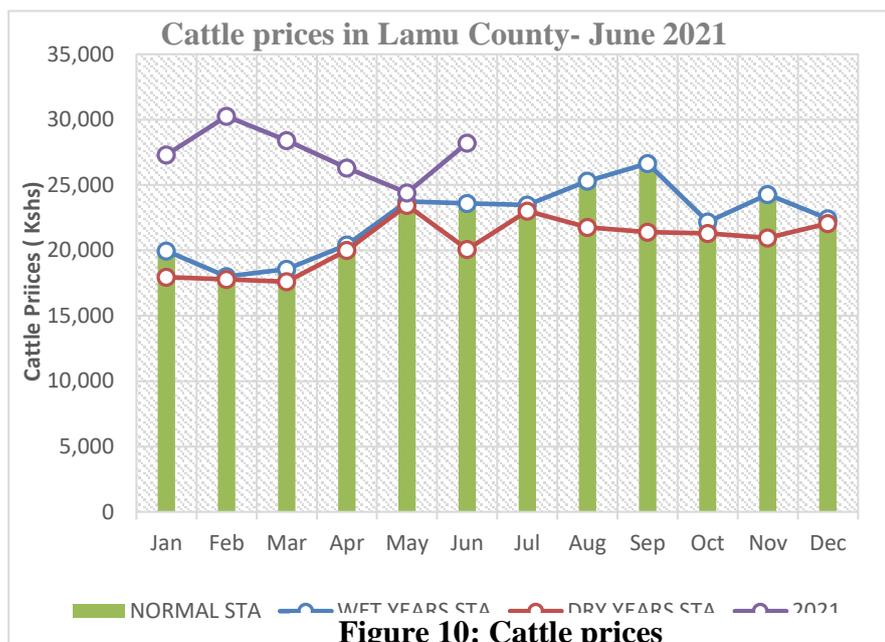


Figure 10: Cattle prices

4.1.2 Small Ruminants Prices

4.1.3 Goat Prices

- Goat price slightly increased in June (Kshs 5,000) when compared to previous month of June (Kshs4, 900).
- The current goat price increased when compared to the short term average but higher when compared the price recorded in previous year at a similar period and following seasonal trends as shown in figure 11.
- This increase in price of goats could be attributed to low market demand and high supply in different markets.
- The goat average market price for June was highest in Kiunga at Kshs 6,000 and the lowest was in Mpeketoni market at Kshs 4000.

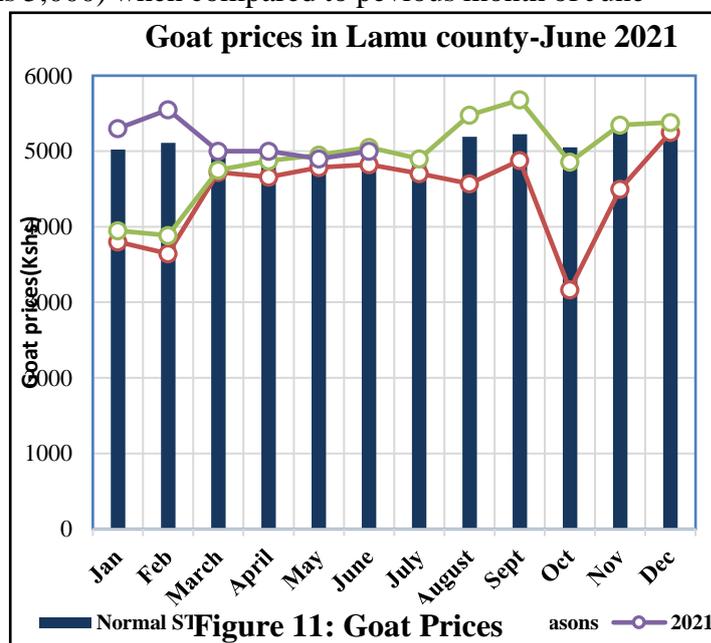


Figure 11: Goat Prices

4.2: Crop prices

4.2.1 Maize price

- The maize prices slightly increased when compared to previous month, as shown in the figure 12.
- The average price for June was Kshs 46, which was below the short term, the wet and dry season's averages.
- The increase of price was due high demand of the product coupled with low supply in different markets.
- The maize market prices were highest in Mokowe at Kshs 45 and lowest in Patte at Kshs 45. However, price ranges are determined by commodity supply in different markets.

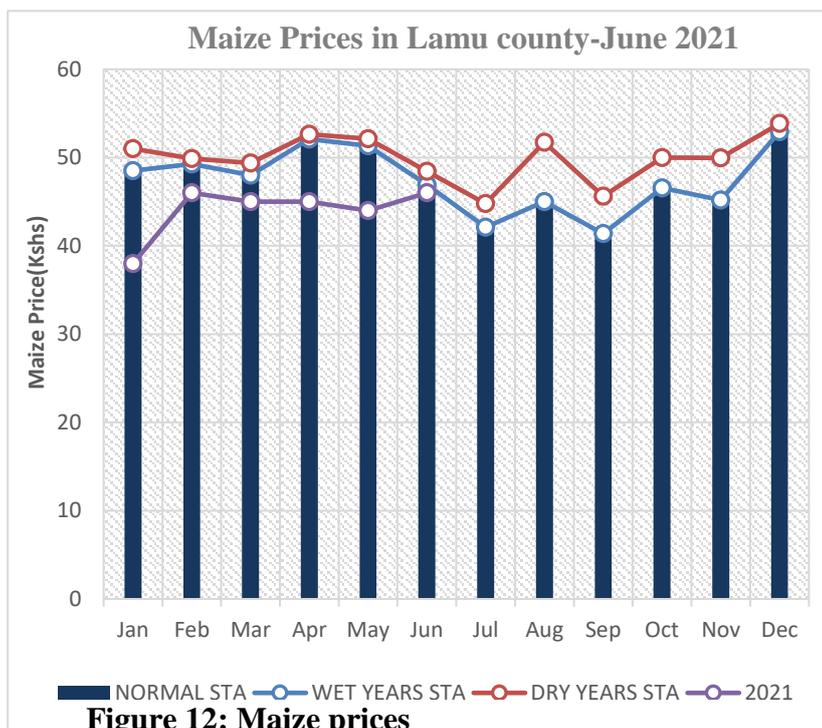


Figure 12: Maize prices

4.2.2 Beans prices

- Average price of Kilogram of beans was Kshs 125 in June, which was decrease when compared to the previous month of June at Kshs 130 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 Kiunga at Kshs 130 and lowest in Mpeketoni at Kshs 110.
- However, price ranges is determined by commodity supply in the different markets and the purchasing power since covid-19 has affected most of the bussiness enterprises.
- The short-term average price of beans was Kshs 108 which is lower when compared to the current beans price for the month of June and the pervious year.

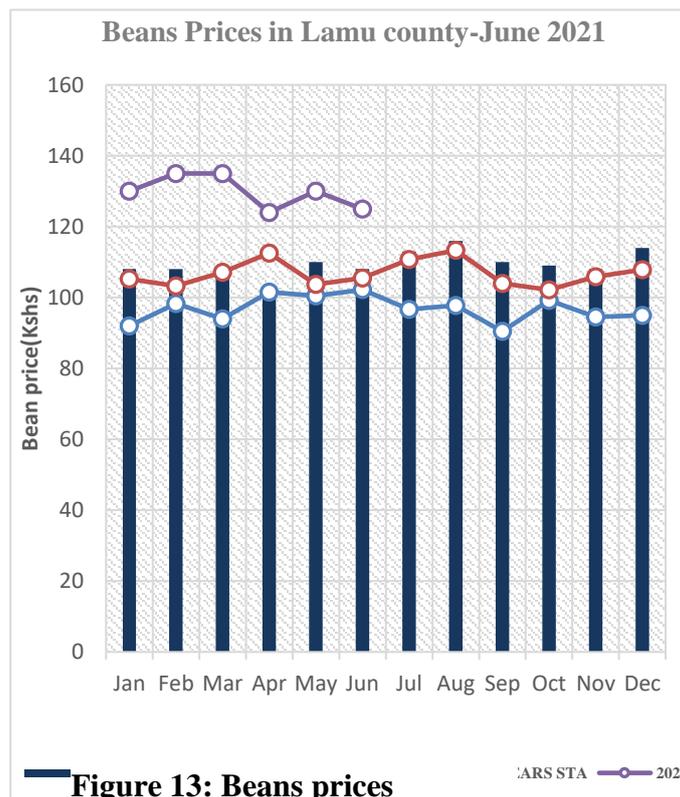


Figure 13: Beans prices

4.3 Livestock Price ratio/Terms of Trade

- The terms of trade (ToT) for the month of June (109 Kilograms) which was decreased by four percent when compared to previous month of June (114 Kilograms) as in figure 14 below.

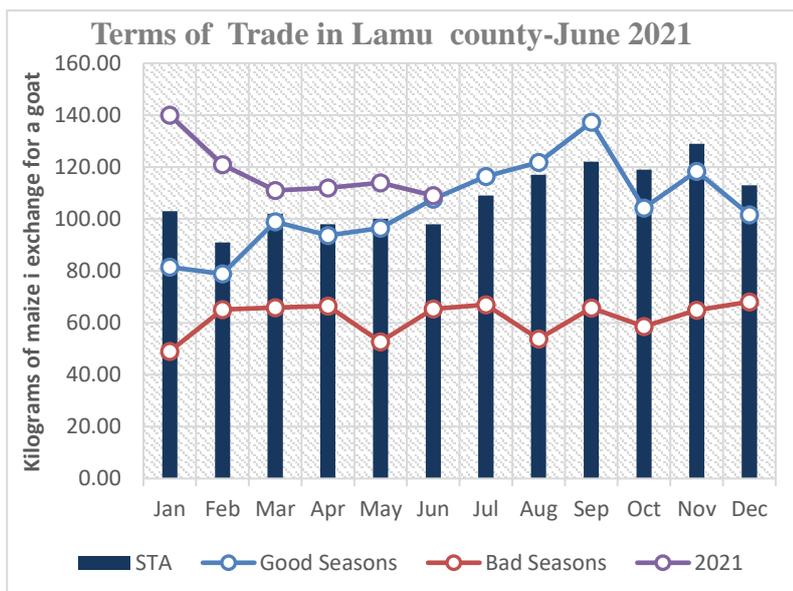


Figure 14: Terms of Trade

- However, this was determined by supply in different markets.
- The ToT was highest in fishing/mangrove harvesting zone at 124 kilograms and lowest at mixed farming zone at 102 kilograms.
- The Terms of trade for June was higher when compared to the short-term average of 98 Kilograms and above the good season.

4.4 Implication on food security

- Farmers are able to sell livestock at fair prices, hence improved food security at household level, as prices are on increase following seasonal trend.
- The Curfew and stay home orders issued by the government because of the third wave of the COVID-19 outbreak had under mined the general normal operation in all livelihood zones hence negative impact on food security.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk for Household Consumption

- Average milk Consumption was 1.2 litres in the month of June, decreased when compared to previous month as in figure 15. This 1.2 litres of milk were consumed by three percent of the total households interviewed.
- Milk consumption was highest in mixed farming at 1.5 litres and 1litres lowest in fishing zones.
- The decrease in milk consumption level was as a result of low production by households coupled with high purchasing power of the commodity.
- The average consumption of the product was higher when compared to the long term, dry and wet periods.

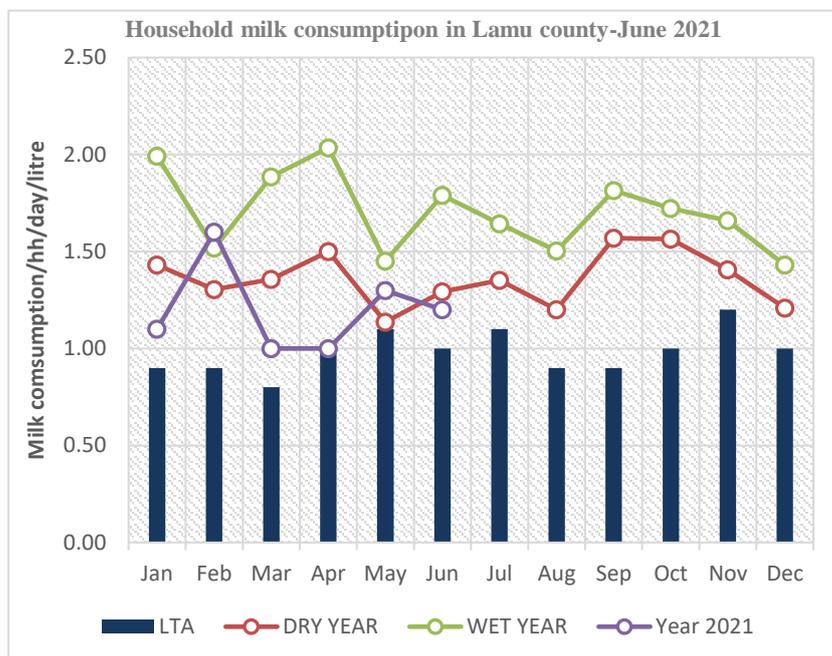


Figure15: Milk consumption

5.2 Health and Nutrition status

5.2.1 MUAC

- Proportion of the under-fives categorized as being moderately malnourished was 1.4 percent (Figure 16). An increase of seventy one percent when compared to last month.
- The reported proportion of children categorized as being severely malnourished during the month of June was zero when compared to the previous month of June which indicated a deteriorating condition.
- The observed trend in June was as a result of the decrease in the level of milk consumption by households through purchase.
- Poor child care practices, poor dietary diversity, reduced number of integrated health outreaches delivering essential nutrition services to the malnutrition hotspots area.
- This was also impacted by COVID-19 pandemic restrictions hence low purchasing power of the households.

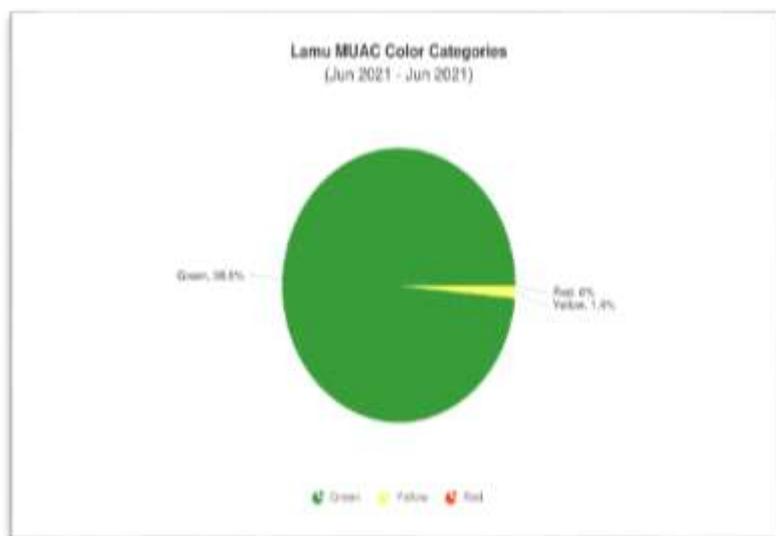


Figure 16: MUAC colour categories

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 35, 60 and five percent respectively during the month of June.
- There poor food consumption was stable when compared to the previous month of June. The population with the highest poor food consumption in the county was mixed farming with 85 percent while fishing had the highest borderline food consumption of 93 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 especially in the Islands.

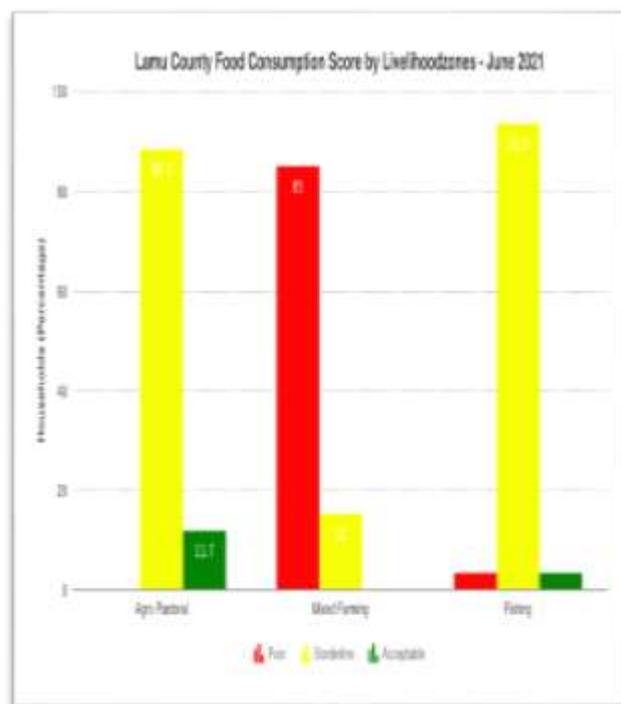


Figure17: Food consumption scores

5.4 Coping strategy index

- The mean coping strategy Index in the Month of June (7.67) decreased when compared with the previous month of June (9.52) indicating slight decreased in coping strategies at household level.
- Agro pastoral Zone had CSI of 5.6; Mixed Farming livelihood zone had 5.0 while Fishing Livelihood zone had the highest copying strategy of 17.2. Common coping strategies employed by food insecure households in the month of June 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.

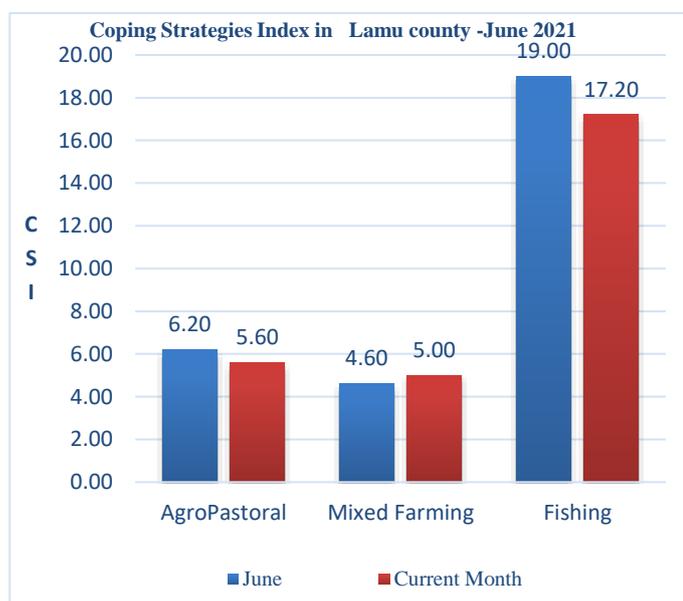


Figure 18: Coping strategy index

5.5 Implication on Food Security

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

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 Food aid

- There were no reports of food aid distribution in the county to vulnerable households during the Month.
- The Education sector have Home Grown as the only feeding Programme in the county out of 15,059 boys and 14,678 girls, only 3,455 boys and 3,288 girls' benefits from these programmes.
- An average of 22.68 percent of the entire pupils' population are beneficiaries of the school meal programmes.

6.2 Non-food interventions

- Cash transfer by the Social protection department to 3,500 households for older persons, Orphans and people with disabilities respectively for the entire county.
- The cash transfer will improve the purchasing power of the households to access food of their preferences during the current curfew and stay at home period.

EMERGING ISSUES

7.2 Coronavirus out break

- The announcement of the emergence of the coronavirus in the country has destabilized the socioeconomic aspect in the all livelihoods zones in the county, specially when orders of stay at home and curfew were imposed, impact on household income.

7.3 Insecurity/Conflicts

- There were no cases of insecurity and conflict 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.

- Livestock body conditions are likely to improve, leading to stable in livestock retail prices.
- Food and milk intake are expected to improve hence possibility of malnutrition levels decreasing.
- The distance to water sources for both human and livestock is expected to decrease further due off season precipitation received.
- Water salinity is expected to decrease due the increase in water levels in all livelihood zones.
- The overall food security situation remains in the stressed phase (IPC 2) and on a worsening trend due to the effects of COVID 19.
- Due to the effects of Trypanosomiasis, Lumpy skin disease, worms, foot and mouth diseases, the body conditions of livestock are expected to deteriorate in coming Months.

8.0 RECOMMENDATIONS BY SECTORS;

Immediate/Short Term: Partners to collaborate on;

8.1 Water

- Constructions/rehabilitation of water pans for preparedness.
- Desalting of open water sources Lamu West Sub-county.
- Installation of solar powered water systems e.g. desalination plants.

8.2 Livestock

- 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.
- Provision of drought tolerance seeds to rain-fed crop farmers and crops under irrigation in preparation to long rains season planting.

8.3 Health and Nutrition

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

8.4 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 and drought.

8.5 Social Protection Sector

- Mapping of vulnerable households, impact on food availability and responding through safety-nets programmes.

8.6 Information Communication Technology

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