National Drought Management Authority

GARISSA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR OCTOBER 2020

A Vision 2030 Flagship Project

OCTOBER 2020 EWS PHASE

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Alert	Deteriorating
Pastoral cattle/sheep	Alert	Deteriorating
Pastoral-all species	Alert	Deteriorating
County	Alert	Deteriorating
Biophysical Indicators	**value**	**Normal Range/Value**
Rainfall (% of Normal)	<25%	91-110%
VCI-3Month	58.38	>35
Forage condition	fair	Good
Production indicators	**Value**	**Normal**
Livestock Body Condition	2-3	1
Milk Production	1.9	>2.3 litres
Livestock Migration Pattern	Normal migration	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	**Value**	**Normal**
Terms of Trade (ToT)	46.4	26.3
Milk Consumption	1.5	>1.97 litres
Return grazing distance to water sources in km	25..4	24 km
Cost of water at source (20 litres)	Kshs 5	<5Kshs
Utilization indicators	**Value**	**Normal**
Nutrition Status, MUAC (% at risk of malnutrition)	13.3	10.7%
Coping Strategy Index (CSI)	13.2	<21
Food Consumption Score(mean)	39	35

Drought Situation & EW Phase Classification

Biophysical Indicators

- The short rains season started on the 3rd dekad of October, the onset was normal but depressed with a temporal distribution of only 2 days was experienced in some sections of the county. The spatial distributed was un even across the county, few areas reported rainfall and the average amount recorded was 10mm of rain during the month
- The average vegetation condition index for month was 58.38. with a declining trend as compared to the previous month. similarly, when compared to the long-term average, the current vegetation condition index is way above the long term average. However, the current vegetation condition index is below the maximum value ever recorded at this particular time of the year.
- Pasture condition was generally poor to fair across the livelihood zones while browse condition was fair to poor in the county.
- Both household distances and livestock trekking distances to water sources increased and are above the long term average.

Socio Economic Indicators (Impact Indicators)

- Livestock body condition of all species was generally fair with isolated cases of small stock and lactating herds at poor body condition in all the livelihood zones.
- Household milk production per day for the month under review was 1.9litre/household/day in all the livelihood zones and relatively reduced as compared to the previous.
- Market prices for all livestock species reduced.
- The terms of trade were 46.4 kilograms of maize upon sale of a goat and reduced as compared to the previous month
- The mean coping strategy index (CSI) was 13.2 for the month
- Proportion of sampled children below five years at risk of

▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ migrations ▪ Land preparation	▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase ▪ Breeding period					▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks ▪ Kidding (Sept) ▪ Migrations ▪ Herd separations			▪ Short rains ▪ Planting/weeding ▪ High birth rates ▪ Wedding			
Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- The short rains season started on the 3rd dekad of October, the onset was normal but depressed with a temporal distribution of only 2 days was experienced in some sections of the county.
- The spatial distributed was un even across the county, few areas reported rainfall and the average amount recorded was 10mm of rain during the month.
- The normalised vegetation index for the month remained above the long term average for the period.

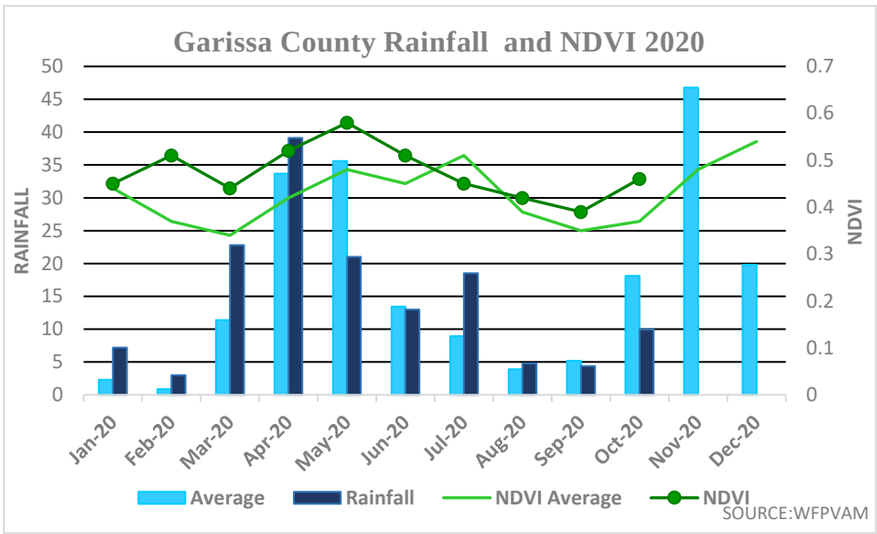


Figure 1:Rainfall &NDVI Trend

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1. 1 Vegetation Condition Index (VCI)

- The average vegetation condition index for month was 58.38. with a declining trend as compared to the previous month.
- When compared to the long-term average, the current vegetation condition index is way above the long term average. However, the current vegetation condition index is below the maximum value ever recorded at this particular time of the year.
- The trend in vegetation condition index is deteriorating which is expected to move to moderate vegetation deficit in the near future.
- All the sub counties were in above normal vegetation greenness. Dadaab and Township sub counties experienced the highest level in vegetation condition deterioration during the month of October.

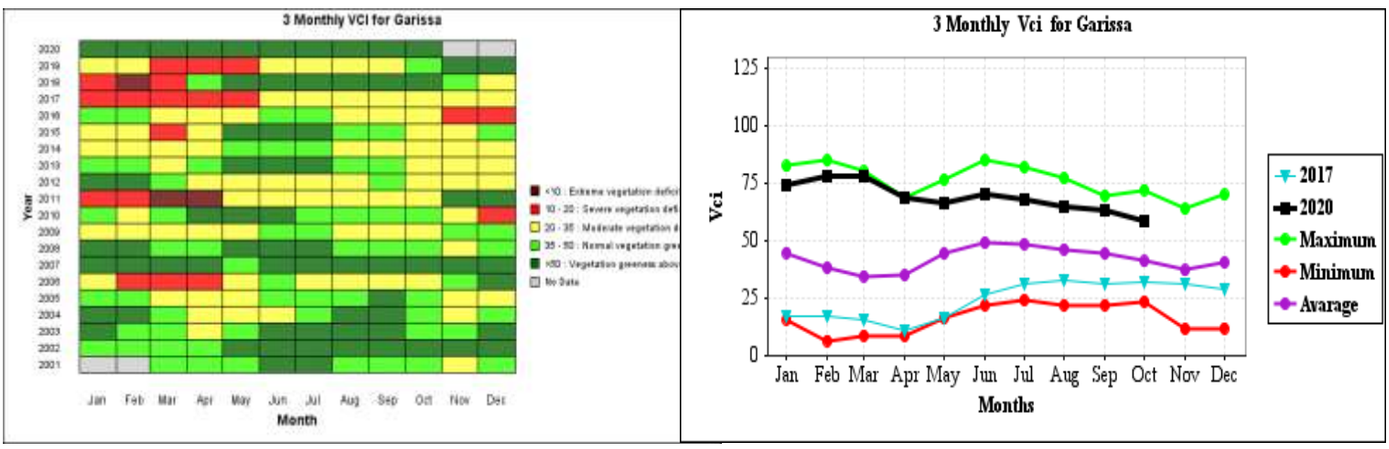


Figure 2:VCI matrix and graph

2.1.2 Pasture and browse condition

- Pasture condition as observed during the transect drive and interviews with the key informants from communities across all the livelihood zones was generally poor to fair during the period under analysis.
- The prevailing level of pasture condition during the month was slightly above with the one normally observed at such a time of the year.
- With the onset of short rains season pasture condition is expected to improve at slower
- Browse condition was generally fair to poor across all livelihood zones, the quality and quantity of browse is fair to poor in all the livelihood zones. Largely, in the agro-pastoral areas, browse will last for 1 months whereas in the pastoral livelihood zone browse is expected to last for less than a month but with the onset of the short rains season browse condition is expected to improve.

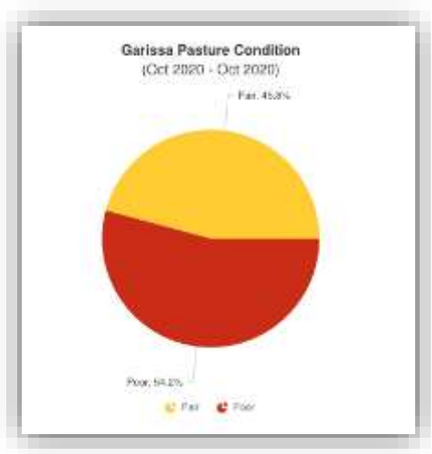


Figure 3:Pasture & Browse condition

2.2 WATER RESOURCE

2.2.1 Sources

- The major sources of water during the period under review across the three livelihood zones included boreholes, water pans/dams and tana river. Other water sources exist in areas outside the sentinel sites.
- 50 percent of the population are currently dependent on boreholes for both households and livestock use. River water use was the second largest water sources in the county,water pans were still in use but a lower level and with a reducing trend.
- The graph below provides an illustration of the various water sources:

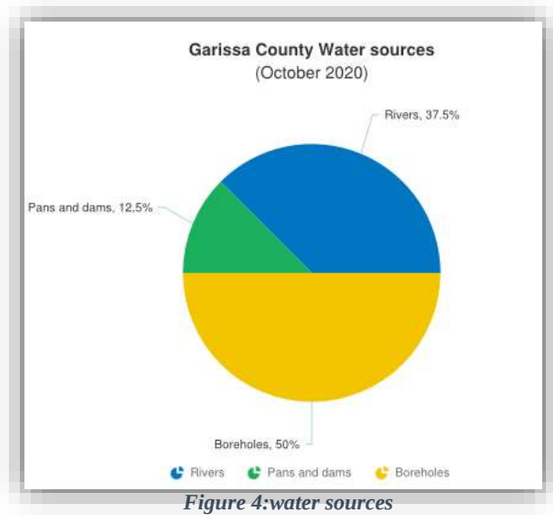


Figure 4:water sources

2.2.2 Household access and Utilization

- Return household water distances to the main water sources was 10.60km in the month under review which depicts an increase when compared to the preceding month's household water distance of 10.40km in all the livelihood zones.
- The current trekking distances for households was above the long term average for the month by 17 percent but was below the same period of a bad year by 13 percent (figure5).
- Current waiting time in the agro-pastoral livelihood zone varied between 30-35 minutes which is slightly above the long term average of 20-30 minutes whereas in the pastoral livelihood zone, waiting time was 90-120 minutes compared to 35-40 minutes normally.
- The trend was attributed to reduced water availability and increased demand at household level.
- Current waiting time in the agro-pastoral livelihood zone was between 30-60 minutes which was slightly above the long term average of 20-40 minutes whereas in the pastoral livelihood zone, waiting time was 60-90 minutes compared 40-60 minutes normally.

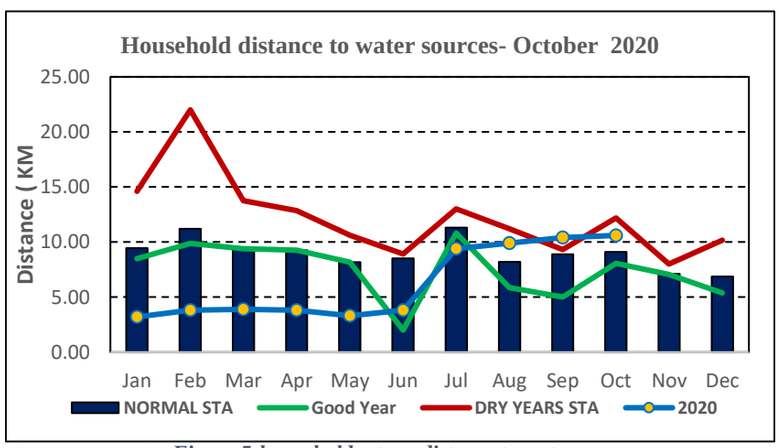


Figure 5:household return distance to water sources

2.2.3 Livestock access

- During the month under review, the return livestock trekking distance from grazing areas to water points was 25.4km which depicts gradual increase when compared to the previous month's distance of 24.7km.
- The pastoral all species livelihood zone recorded the highest trekking distance of 25km. Maalimin ward recorded the highest trekking distances of 34km for all livestock due to drying up of available open water sources.
- The current trekking distance was by 12 percent above the normal long term average for the month but was below the same period of a bad year by 19.2 percent. (figure 6)
- The trend was attributed to reduced water availability within the rangeland and diminishing forage availability around water sources.

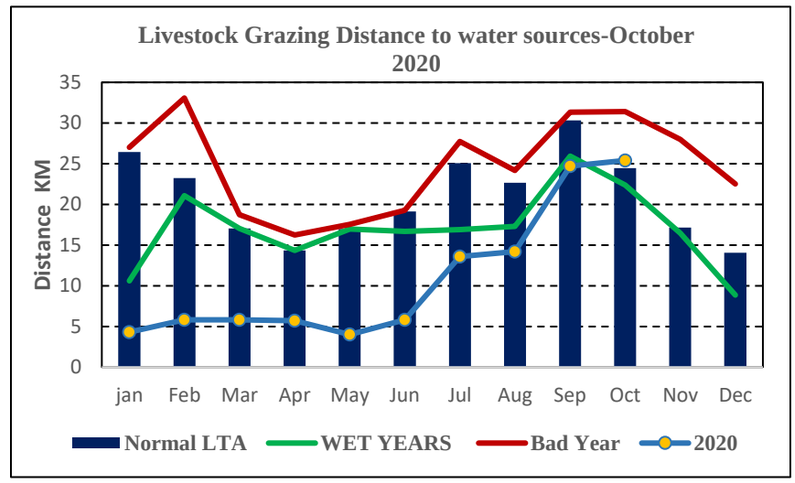


Figure 6:Return distance from grazing areas to water sources

- Livestock watering frequencies declined due to pressure at water points and increased distances to grazing areas. Small stocks are watered after 2 days, cattle after 2-3 days and camels after 6-10 days in all the livelihood zones.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body condition of all species was generally fair with isolated cases of small stock and lactating herds at poor body condition in all the livelihood zones,with the onset of the short rains season though with false start as forecasted may improve the forage condition which will in turn is expected to improve livestock body condition.
- The observed livestock body condition for all species was slightly above with the one normally observed for similar periods during the previous years.

3.1.2 Livestock Diseases

- Livestock disease incidences reported were, suspected cases of small stock enterotoxaemia, haemorrhagic septicaemia in camel's contagious caprine pleuropneumonia and tick borne diseases in small stock.
- Upsurge of endo parasites and ectoparasites across the livelihood zones was reported
- Endemic trypanosomiasis in parts of fafi sub county and entire ijara sub county reported during the month.
- Mortalities were within normal ranges and mainly due to predation.

3.1.3 Milk Production

- Household milk production per day for the month under review was 1.9litre/household/day in all the livelihood zones and relatively reduced when compared with the previous month.
- The production level for the month under review was below the long term average and the same period of a good year by 16.4% and 15% respectively.
- Below normal milk production was due to very low calving rates as most camels and cattle are likely to calf down in the next few weeks across the livelihood zones. Available milk is mainly derived from goats across the County.
- Milk retailed at an average of Kshs 80- per litre in all the livelihood zones compared to Kshs 30-35 per litre normally which is 43 percent above the normal price attributed to low milk production

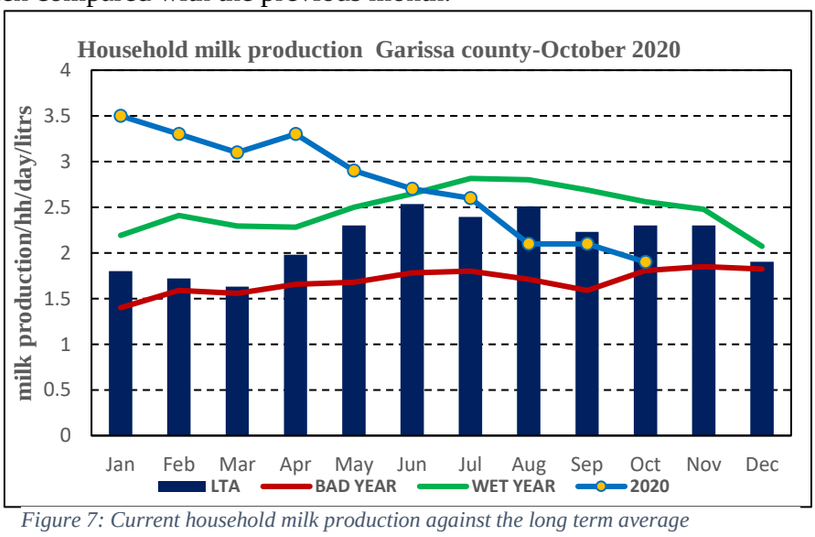


Figure 7: Current household milk production against the long term average

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

No crops were planted during the month; Land preparation activities are ongoing with anticipation of good performance of the short rains season.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- Cattle prices for the month under review was kshs.16258 in the local markets and remained stable when compared with the previous month.
- The recorded price of cattle for the month under analysis was higher than the short term average price for the month by 13 percent. Similarly, it was above the same period of wet years by 11 percent. (figure8)
- The deteriorating cattle price trend was attributed to poor body condition and reduced markets demands due to dry spell.
- The current price is expected to improve with the onset of the short rains season which is expected to improve livestock body.
- The pastoral livelihood zone recorded the highest price of kshs. 18000
- Current traded volumes of cattle in the livestock markets reduced as compared to the previous month.

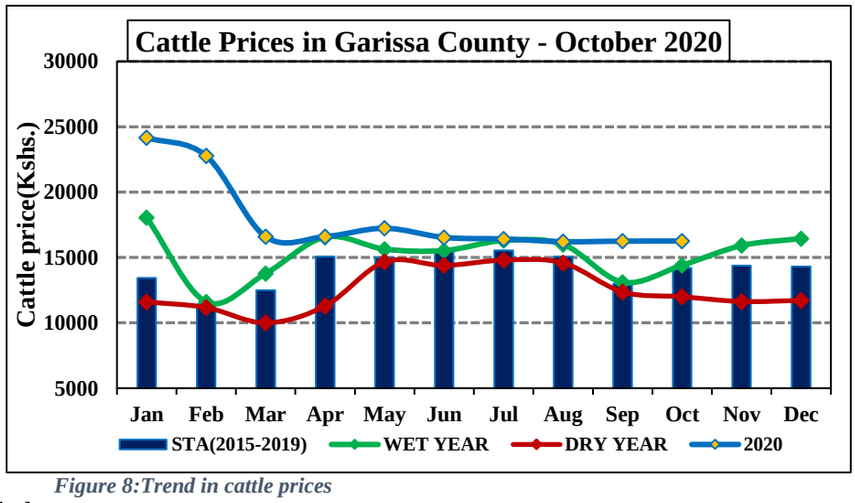


Figure 8:Trend in cattle prices

4.1.2 Small Ruminants Prices (Goats)

- During the period under review,the average price of goats was kshs. 3250 indicating a decline of 5.5 percent as compared to the previous month.
- the price trend was in relation to poor body condition recorded and market dynamics, goat prices was also affected by diseases that affected the marketability of the animals.
- The recorded price for the month was higher than the normal short term average and the same period of a good years by 18 and 14 percent respectively.
- There was minimal price variation across the livelihood zone and with the onset of the short rains season and the anticipated performance the price of goats is expected to improve.

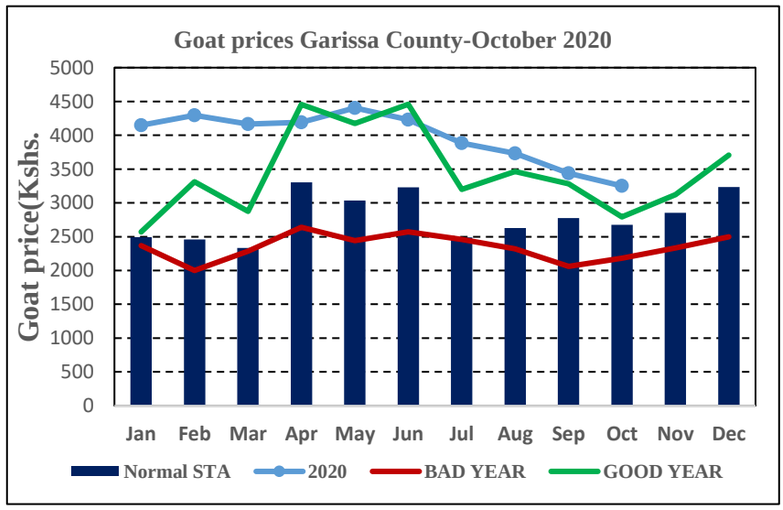


Figure 9:Trend in goat prices

4.2 CROP PRICES

4.2.1 Maize

- A kilogram of maize retailed at Kshs. 70 across all the major markets during the period under review and thus it remained stable in relation to the month of September.
- Outstandingly, the reported price was higher than that reported for the same period during the bad years and normal short term average by 5 and 6.5percent (figure10)
- Availability of substitute cereals such as sorghum and improved accessibility occasioned by continuous supply of the commodity to the local markets.
- Markets in pastoral all species livelihood zone returned the highest prices of maize grains due to increased need of the commodity as livestock feed.
- The lowest maize grain price was recored in agro pastoral livelihood zone due to availability of other other cerials commodities in the markets plus availability of standing hey in the farms.

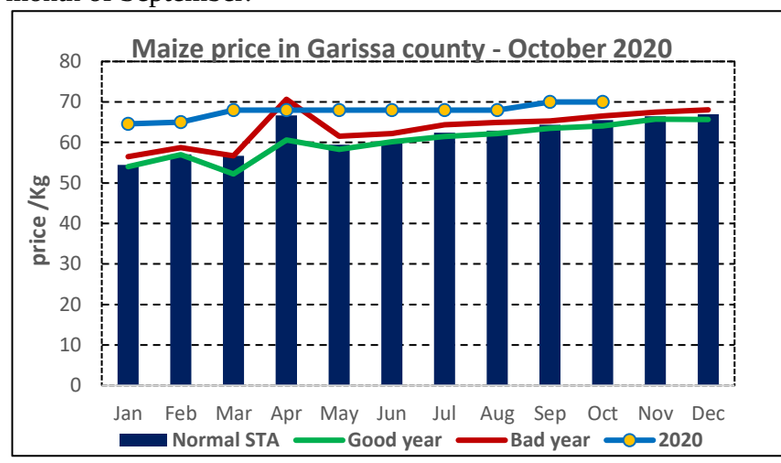


Figure 10:Trend in maize grain prices

4.2.2 Sifted Maize Meal

- The average price for sifted maize meal was kshs.100 per kilogram and remained stable as compared to the previous month.
- The current price was higher than the normal short term average for the month by 10 percent (Figure11) but remained within the same period of 2018 (bad year).
- Sifted maize meal remains key staple food for pastoral households due to its ease and faster preparation.
- Price variability across the livelihood zones was reported, in Agro pastoral livelihood a price of kshs. 95 per kg was recorded while in pastoral livelihood zone a price of kshs 110 per kg was reported as the highest
- It is expected that the price of sifted maize meal will continue to remain stable as it is readily available in the local markets, if the short rains season performs well will likely damage road infrastructure leading to increased cost of transportation thus the product price may increase.

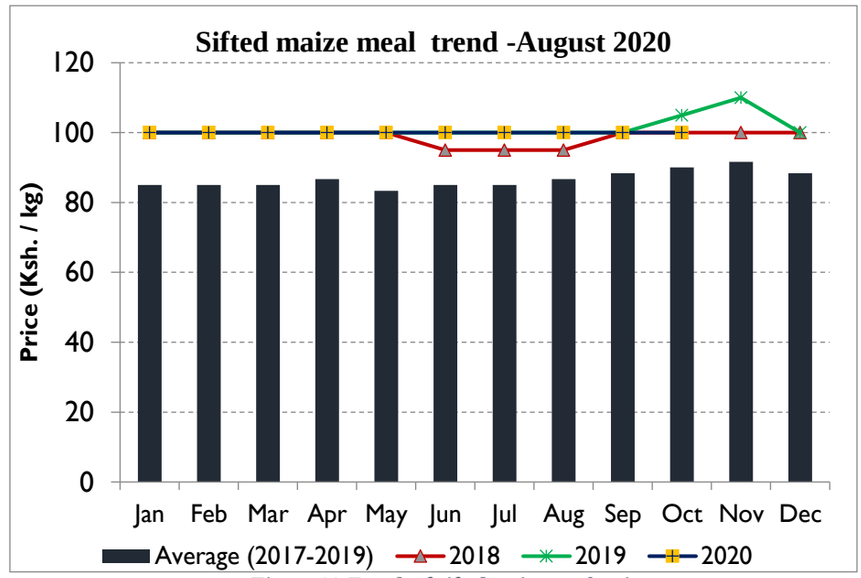


Figure 11:Trend of sifted maize meal price

4.2.3 Terms of Trade

- The terms of trade were 46.4 kilograms of maize upon sale of a goat and as compared to the previous month of 50kg of maize per goat sold. **(**Figure 12**).**
- The current reported terms of trade were within the same period of Good years but above the long term average by 43 percent. Therefore, the purchasing power of Pastoral households slightly reduced during that period but a good proportion of households were able to purchase basic essential food stuffs albeit in small quantities.
- The performance of terms of trade was due to reducing goat's prices against stable maize grain prices in the local markets.
- The terms of trade are expected to continue reducing with the expected continued fall in goat's price but may increase with good performance of the short rains season.

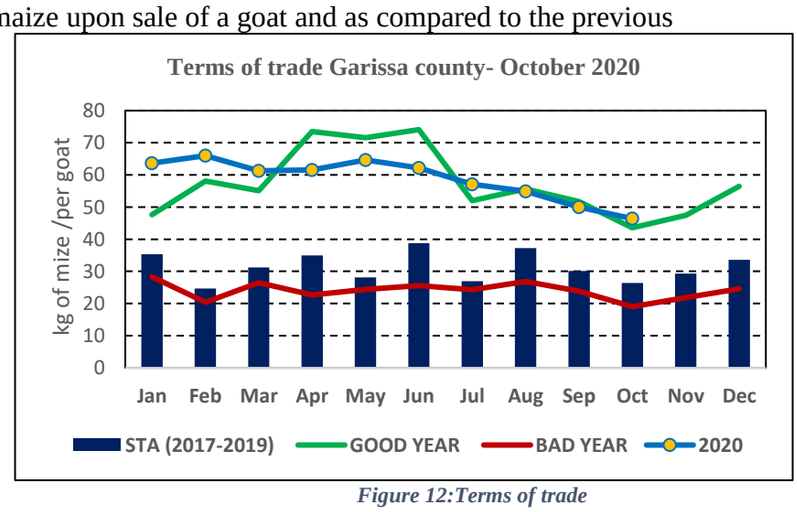


Figure 12:Terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- The average consumption was 1.5 litres / household/ day and reduced when compared with the previous month. consumption was below the long term average and the same period of Good years for by 21 and 34 percent accordingly. (Figure13.)
- The low consumption could be attributed to reduced production at household level occasioned by the reduced yield per animal and low calving/lambing taking place.
- Livestock herds remaining outside homesteads and in dry spell fall areas contributed to milk production and consumption at household's level
- Based on historical trends, milk consumption is projected to slightly increase as kidding /calving is expected to start across the livelihood zones in the next few weeks.

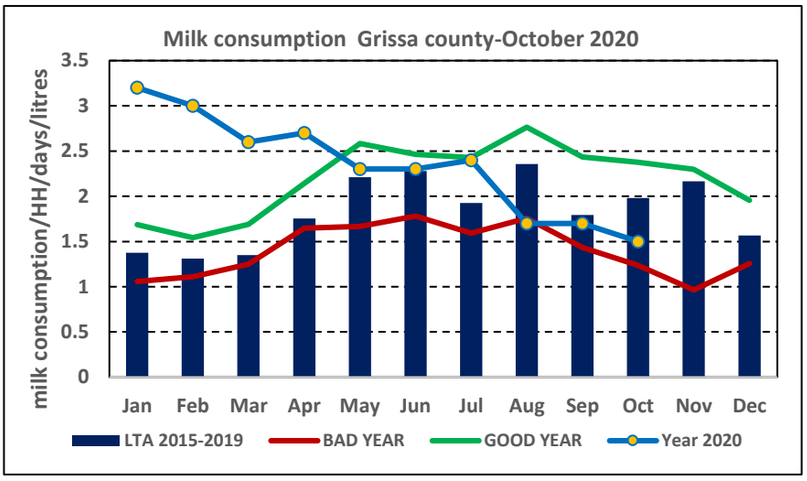


Figure 13:Trend of milk consumption

5.2 FOOD CONSUMPTION SCORE

- The proportion of households classified as having poor, borderline and acceptable food consumption scores was 13 percent, 51 percent and 36 percent respectively during the month of September.
- Pastoral livelihood zone had the highest proportion of households with poor food consumption score of 17.6. percent (Figure.14)
- The pastoral all species livelihood zone recorded the highest proportions of household with borderline food consumption score at 75 percent.
- Formal employment livelihood zone recorded the highest proportion of households with acceptable food consumption score of 96.7percent
- The mean food consumption score for the month was of 39.3 percent.

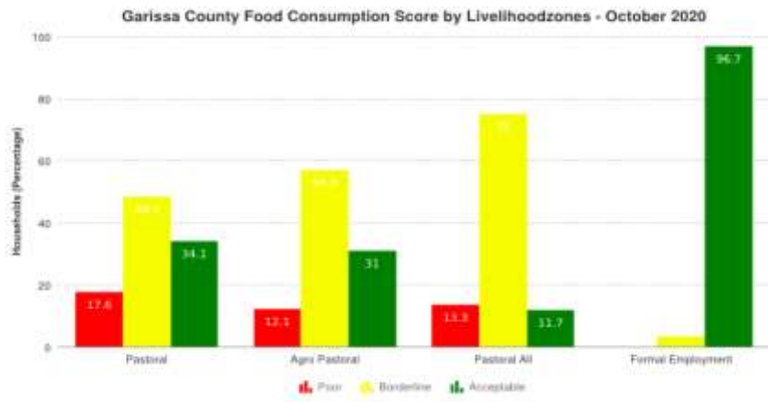
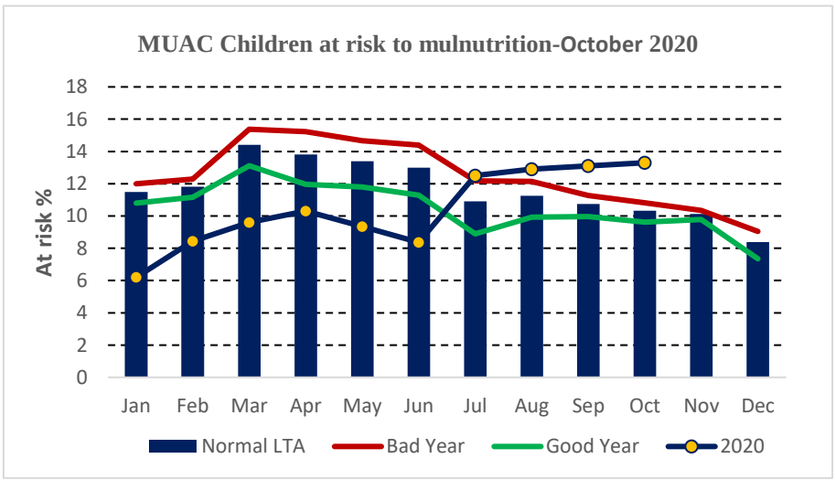


Figure 14:Food consumption by livelihood zone

5.3 HEALTH AND NUTRITION

5.3.1 Nutrition Status

- From the sampled children aged five years and below across all the sentinel sites, the Proportion of children at risk of malnutrition was 13.3 percent as compared to 13.1 percent recorded the previous month.
- The current proportion as compared to the same period of a good and the normal long term average was above by 19 and 22 percent respectively(Figure.15).
- The observed deteriorating trend was attributed to decreased milk consumption, poor dietary diversity, high diseases prevalence, poor health seeking behaviours and low nutrition interventions in the county.
- Based on family MUAC, proportion of children at risk was 11.4 percent
- The severely malnourished children were at 1.%.



5.3.2 Health

There was no outbreak of disease reported during the month. Upper respiratory tract infections (URTIs) and diarrhoea were the major diseases reported by health facilities with upward trend

5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) for the month of was13.2 as compared to 12.3 recorded in the month of September which depicts an increase of 7 percent.
- Formal employment/waged labour livelihood zone recorded the highest of 24.5 while Agro pastoral livelihood zone recorded the lowest at 8.2 (Figure.16).
- The households in formal employment/waged labour livelihood zone were initially pastoral drop outs that were dependent on labour from farms and urban centres, the upstream floods from the previous season greatly affected farms production leading to labour loss, the condition was acerbated by restriction of the corona virus pandemic.

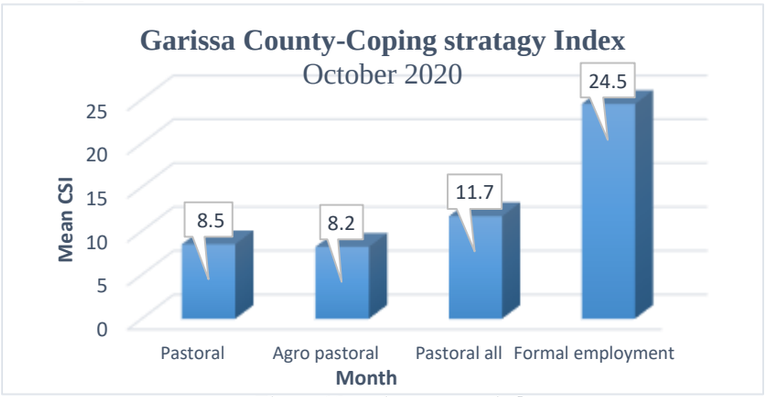


Figure 16:coping strategy index

- In pastoral livelihood zones reduced income from the main income sources contributed to the increased coping strategy index.
- The most commonly applied consumption based coping strategies across the three livelihood zones in October were reduced portion size of meals. Reliance on less preferred/less expensive food and reduced number of meals.
- Households expected to apply more consumption based strategies.

6. CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTION

Table 1 Non-food interventions

Activity	Beneficiaries	Implementers
Routine maintenance of broken-down boreholes	Households and All livestock species	Water department
Water trucking	Areas with acute water shortage	NG-CDF and water department
Active and Passive disease surveillance	Livestock owners	Veterinary services
Training of farmers on value meat ,milk and tomato value chains	Groups	ASDSP,KCSAP
Registration for cash transfers for 1000 households	1000households in Sabena, sankuri and nanighi	Food and Agricultural organization
Livestock feeds distribution	2500 households	Food and Agricultural organization

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- There was no resource based conflicts reported during the month.
- Insecurity due to threats of terror attacks exists in areas bordering the Republic of Somalia

7.2 Migration

No livestock out migrations was reported during the month. However, livestock remained in the dry period fall back areas.

7.3 FOOD SECURITY PROGNOSIS

- The shorts rains season started as predicted on the 3rd dekad of October but with a likely false start. Few water pans impounded water. With the likely good performance of the season expected livestock productivity is projected to slightly improve due to expected increase in forage and water availability in the rangelands. Milk production and consumption at the household level is expected to slightly improve with expected kidding /calving within the season which might better the nutrition status of the under-fives.
- Livestock prices will likely increase due to likely improvement of livestock body conditions in the next two months.
- The likelihood of commodity (maize) prices remaining stable due to availability of other cereals substitutes and anticipated reduced demand of the commodity for use as livestock feed supplementation.
- The food security situation is expected to slightly increase in the next one months.
- With the ongoing short rains season performing above normal, there is likelihood of upstream flooding expected in areas along river tana.

.

8. RECOMMENDATIONS

Table 2. Recommended interventions

Sector	Sub County	Recommended Intervention
Livestock	Lagdera /Balambala/Dadaab /Fafi	Support livestock vaccination against PPR, and vector control
	All sub counties	Conduct active disease surveillance
Agriculture	Lagdera /Balambala/Dadaab /Fafi /Ijara	Provide early maturing/drought resistant crop seeds/seedling
	Lagdera /Balambala/Dadaab /Fafi /Ijara	Strengthen extension service provision to farmers
Health	Township/Balambala /fafi /Ijara Dadaab/Lagdera	Strengthen and support to outreach services
	Township/Balambala /fafi /Ijara Dadaab/Lagdera	Support management of acute malnutrition and mass screening.
Water	Lagdera /Balambala/Dadaab /Fafi	Capacity build water resource users association on management.
	Ijara//Lagdera/Hulugho/township/Dadaab	Provide water treatment chemicals to communities that are dependent on open water sources.
	Lagdera/fafi/Dadaab	Provide fast moving spare parts for the high yielding boreholes
Education	Township/Dadaab	Fumigate schools used as isolation centre for Covid 19 as schools are opening.
Coordination	All sub-counties	Dissemination of climate information and Participatory drought scenario planning advisories at ward level