

**National Drought Management Authority**  
**GARISSA COUNTY**  
**DROUGHT EARLY WARNING BULLETIN FOR NOVEMBER 2020**



A Vision 2030 Flagship Project



**NOVEMBER 2020 EWS PHASE**

**Drought Status: ALERT**



**Maandalizi ya mapema**

**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- The short rains season started on the 3<sup>rd</sup> dekad of October which was normal, on the month of November the county received an average of 40mm of rain against a long term average 46.8mm. The spatial distributed was un even across the county and the temporal distribution was poor across all livelihood zones, few rainy days was reported during the month
- The county is in normal vegetation greenness of 36.72 as per the 3 month VCI average for the month as compared to an average vegetation condition index of 58.38. recorded the previous month. The current vegetation condition index is slightly below the long term average and near the base year of 2017. Subcounties of dadaab, township and fafi are in moderate vegetation deficit.
- Pasture condition as observed during the transect drive and interviews with the key informants from communities across all the livelihood zones was generally good to fair to fair though some areas fall under poor pasture condition. The current pasture condition was slightly below the one normally observed at such a time of the year.
- Both household distances and livestock trekking distances to water sources decreased but are slightly above the long term average.

**Socio Economic Indicators (Impact Indicators)**

- Livestock body condition of all species improved exhibiting generally fair to good condition in all the livelihood zones
- 2.1litre/household/day was reported during the month under review as compared to 1.9litres/household/day reported the previous month
- Market prices for all livestock species remained above the long term average
- The terms of trade were 52 kilograms of maize upon sale of a goat which is above the long term average.
- The mean coping strategy index (CSI) was 9.4 for the month
- Proportion of sampled children below five years at risk of malnutrition was 10.6percent.moderatly malnourished stands at 7.6 percent based on the family MUAC.

**Early Warning Phase Classification**

Livelihood Zone	Phase	Trend
Agro-pastoral	Alert	Improving
Pastoral cattle/sheep	Alert	Improving
Pastoral-all species	Alert	Improving
County	Alert	Improving
Biophysical Indicators	value	Normal Range/Value
Rainfall (% of Normal)	<50%	91-110%
VCI-3Month	36.72	>35
Forage condition	fair	Good
Production indicators	Value	Normal
Livestock Body Condition	2-3	1
Milk Production	2.1	>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)	52	29.3
Milk Consumption	1.6	>2.1 litres
Return grazing distance to water sources in km	18.3	17.1 km
Cost of water at source (20 litres)	Kshs 5	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	10.6	10.1%
Coping Strategy Index (CSI)	9.4	<21
Food Consumption Score(mean)	36	35

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 3<sup>rd</sup> dekad of October which was normal, on the month of November the county received an average of 40mm of rain against a long term average 46.8mm
- The spatial distributed was un even across the county and the temporal distribution was poor across all livelihood zones, few rainy days was reported during the month.
- The meteorology field observation reported an average of 50mm of rain during the month against a long term average of 100mm.
- The season is continuing as some rains are expected in the month of December.
- The normalised vegetation index for the month was slightly below the long term average for the period.

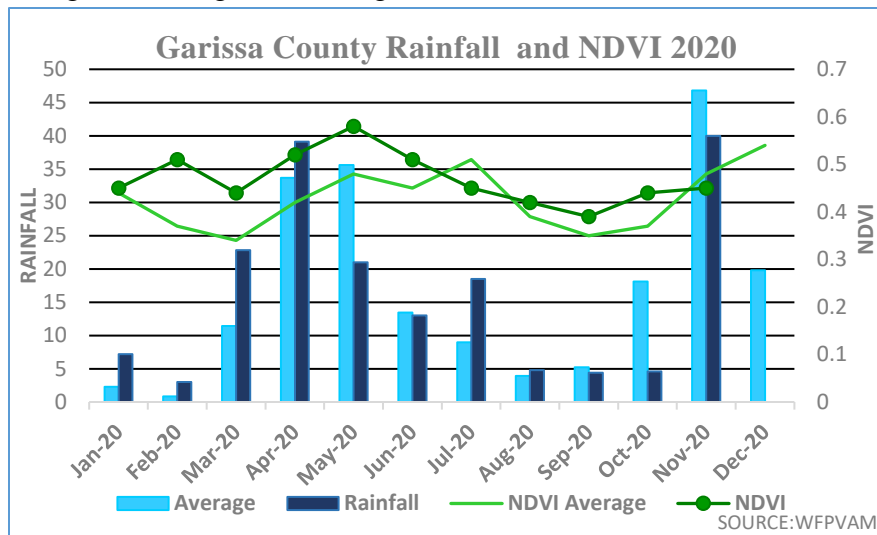


Figure 1: Rainfall & NDVI Trend

## 2.0 IMPACTS ON VEGETATION AND WATER

### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

- The county is in normal vegetation greenness of 36.72 as per the 3 month VCI average for the month as compared to an average vegetation condition index of 58.38. recorded the previous month
- the current vegetation condition index is slightly below the long term average and near the base year of 2017 (figure 2).
- The trend in vegetation condition index is deteriorating which is expected to move to moderate vegetation deficit.
- Subcounties of dadaab, township and fafi are in moderate vegetation deficit
- Balambala and Lagdera subcounties recorded normal vegetation greenness while ijara remained in the above normal vegetation greenness category.

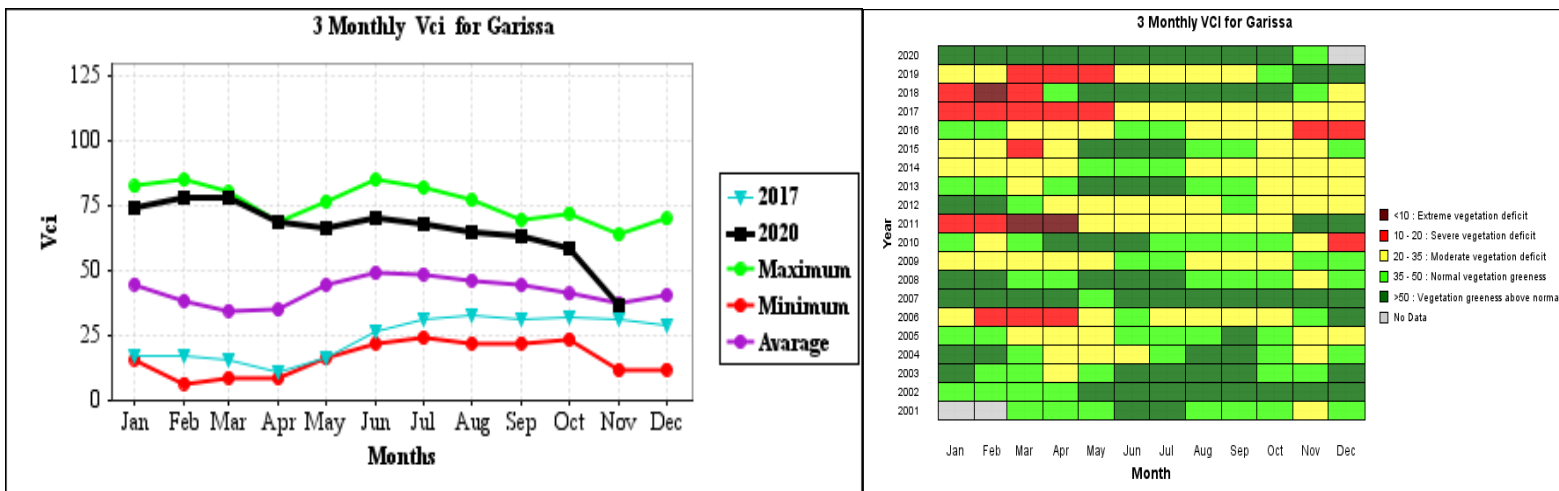


Figure 2: VCI matrix and graph

- The above normal vegetation greenness in Ijara sub county was as a consequence of the cumulative effect of the short rains season received during the month and the previous month.

#### 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 good to fair to fair though some areas fall under poor pasture condition. The current pasture condition was slightly below the one normally observed at such a time of the year.
- With the continuity and extended short rains season the pasture condition is expected to improve but with expected normal cessation there is likelihood of pasture remaining stable or deteriorating.
- Browse condition was generally good to fair across all livelihood zones, both quality and quantity improved as compared to the previous month but is lower than normally observed browse

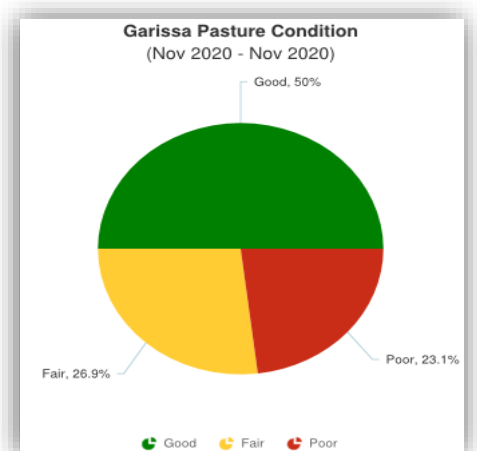


Figure 3: Pasture & Browse condition

condition during this period of the year. the pastoral livelihood zone recorded highest improvement in forage condition. Pasture and browse are expected to last for two month though faster depletion may occur

## 2.2 WATER RESOURCE

### 2.2.1 Sources

- In the month under review, the proportion of sampled population using main water sources for both households and livestock are; 33.3 percent for boreholes 26.7 percent for river ,22.2 percent for pans and dams and 17.8 percent for shallow wells.
- The recharge was good in all surface water sources in comparison to that of October.
- Water recharge may improve with the continuity of the short rains season but with expected normal cessation as forecasted recharge may remain the same .
- The chart below provides an illustration of the various water sources:

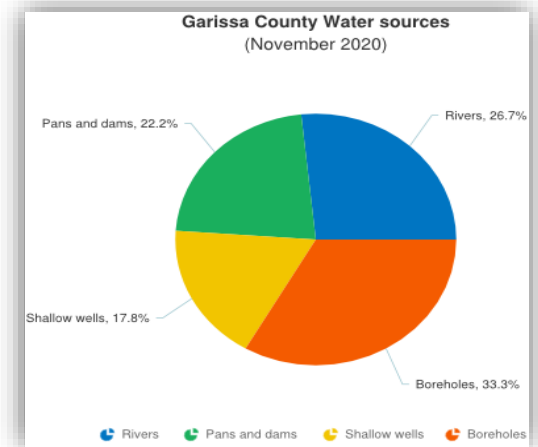


Figure 4:water sources

### 2.2.2 Household access and Utilization

- During the month, the return distance to water source from the household was at 7.7 km as compared to 10.6 km recorded the previous month.
- Compared to the five-year average household trekking distance to water source was slightly higher by seven percent and equally above for a similar period during the wet years by 8percent. (figure5).
- The Current waiting time improved in all the livelihood zones and are within the long term average for the month.
- Additionally, the average water consumption per person per day increased to 20litres in pastoral livelihood zones and 30 litres for households in the agro pastoral livelihood zone.

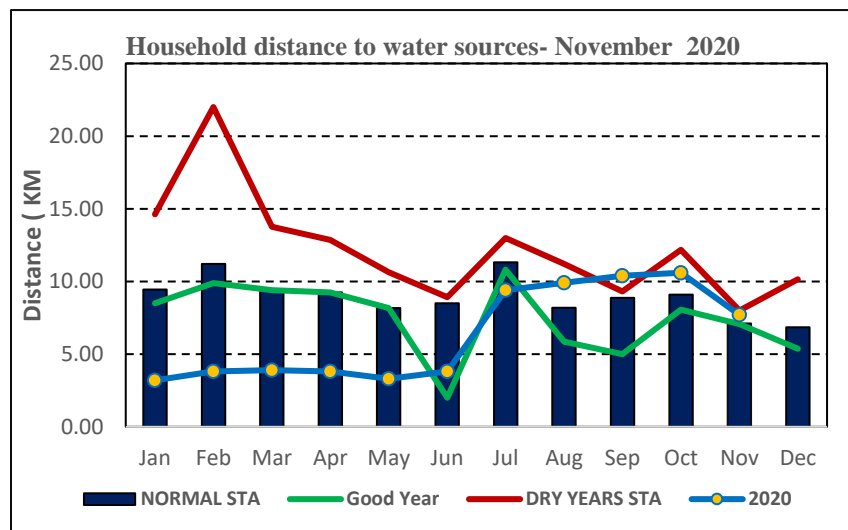


Figure 5:household return distance to water sources

### 2.2.3 Livestock access

- The trekking distance from grazing sites to water sources was 18.3km as compared to 25.4km recorded the previous month.
- The pastoral all species livelihood zone recorded the longest trekking distance of 15km. livestock returned to wet season grazing zones which may trigger faster depletion of water within the rangeland due to congestion.
- The current trekking distance was slightly above the normal long term average for the month by 6 percent and similarly above the same period of a wet years by 10 percent. (figure 6)
- The trend was attributed to ongoing short rains season that improved water availability within the rangeland.
- Livestock watering frequencies improved due to increased water sources within grazing areas. Small stocks and cattle are watered daily and camels after 2-3 days in all the livelihood zones.

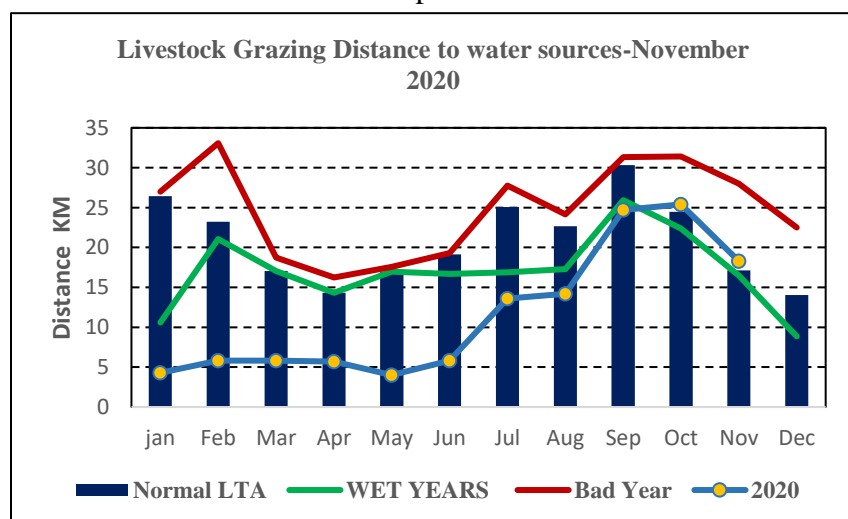


Figure 6:Return distance from grazing areas to water sources

### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

- Livestock body condition of all species improved exhibiting generally fair to good condition in all the livelihood zones, with the ongoing short rains season though below the long-term average is expected to improve forage condition which will in turn is expected to continue improving livestock body condition.
- The observed livestock body condition for all species was below the one normally observed for similar periods during the previous years.

##### 3.1.2 Livestock Diseases

- cases of small stock enterotoxaemia, contagious bovine pleuropneumonia and contagious caprine pleuropneumonia was reported during the month.
- Mange in small stock was reported in the southern parts of the county combined with the increase in prevalence of endemic trypanosomiasis in parts of fafi sub county and entire ijara sub county reported during the month.

##### 3.1.3 Milk Production

- 2.1litre/household/day was reported during the month under review as compared to 1.9litres/household/day reported the previous month.
- the slight increase in production was due to calving and kidding realized during the month.
- When compared to similar periods of wet years, the current milk production of 2.1litres is below normal by 12.5percent.
- when compared to the long term average, milk production for the month was equally below by 8 percent.
- Milk retailed at an average of Kshs 50-60 per litre in all the livelihood zones compared to Kshs 30-35 per litre normally which is 35 percent above the normal price attributed to low milk production.

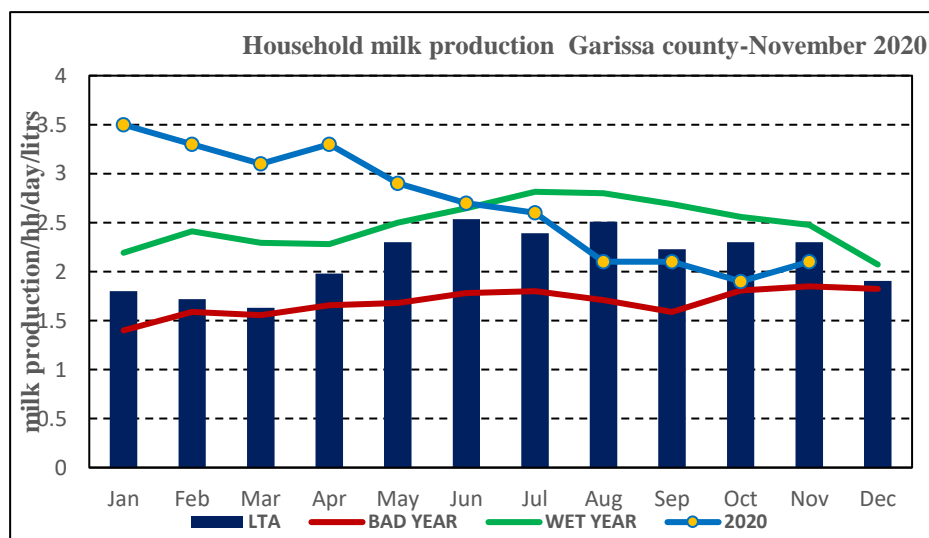


Figure 7: Current household milk production against the long term average

### 3.2 RAIN-FED CROP PRODUCTION

#### 3.2.1 Stage and Condition of food Crops

Crops planted were mainly maize, cow peas and sorghum, currently some are at knee height but due to low precipitation the crops are expected to wilt and may be used as livestock feed

### 4.0 MARKET PERFORMANCE

#### 4.1 LIVESTOCK MARKETING

##### 4.1.1 Cattle Prices

- The price of a 4-year medium sized bull was kshs.18681 as compared to kshs.16258 recorded the previous month in the local markets
- This was due to slightly improved livestock body condition and increased demand from traders in anticipation of good season performance.
- The reported market price of cattle for the month under review was 14 percent higher than the one posted for the same month during the wet years.
- Similarly, was above the long term average price for the month by 23 percent (figure8).
- The current price is expected to improve with continuity of the short rains season that will continue improving livestock body.
- The markets in pastoral livelihood zone recorded the highest price of kshs19,500
- Current traded volumes of cattle in the livestock markets slightly increased as compared to the previous month.

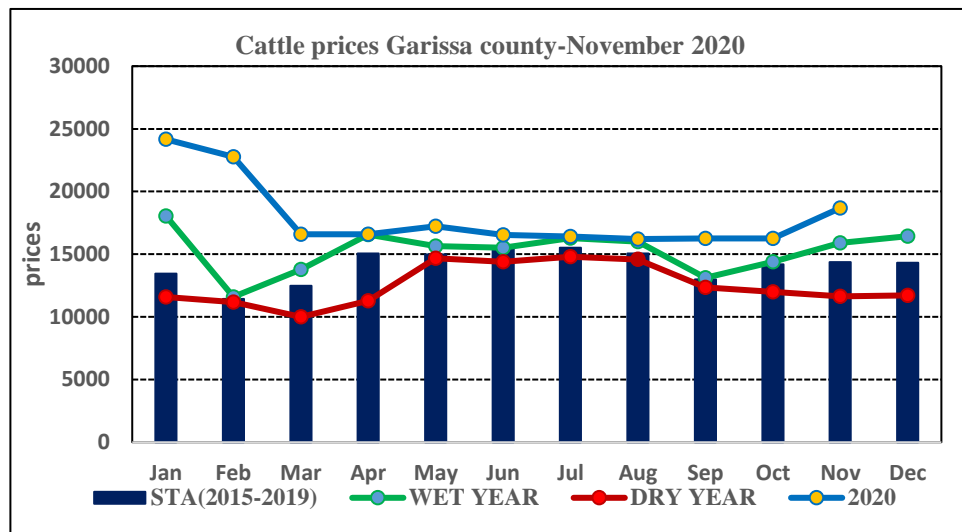


Figure 8: Trend in cattle prices

##### 4.1.2 Small Ruminants Prices (Goats)

- Goat price for the month under review was Kshs. 3,670 which tremendously improved when compared to the preceding months' goat price of Kshs. 3,250
- the price trend was in relation to improving body condition recorded and market dynamics, goat prices.
- The recorded price for the month was above the normal short term average for the month and the same period of a good years by 22 and 15 percent respectively.
- There was marginal price variation across the livelihood zone with the markets in pastoral livelihood zone recording an average of kshs.3800.
- The market price is expected to continue increasing during the short rains season that will likely continue improving body condition.
- Current traded volumes of cattle in the livestock markets slightly increased as compared to the previous month

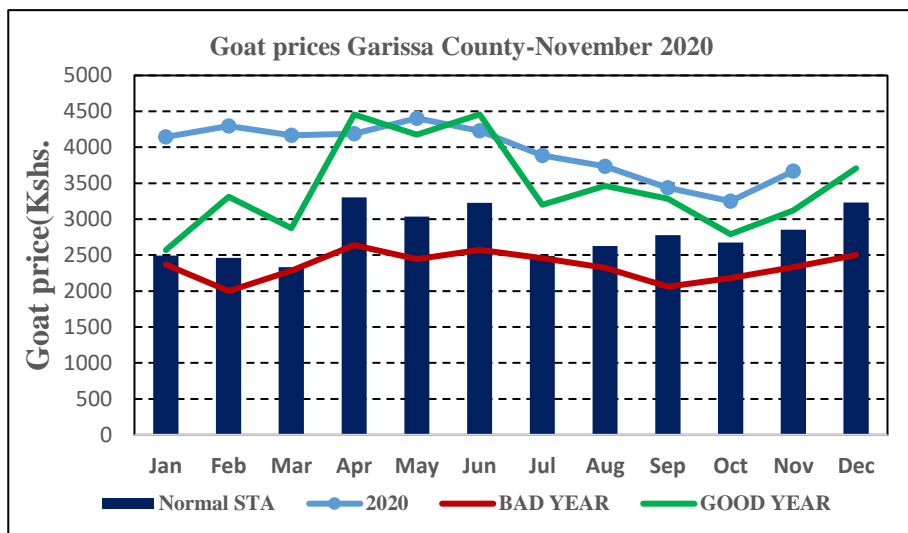


Figure 9: Trend in goat prices



## 4.2 CROP PRICES

### 4.2.1 Maize

- During the month of November, a kilogram of maize retailed at Kshs. 70 across all the major markets and remained stable in comparison to the month of October and September.
- Compared to a similar period during the wet years, the reported price during the month was higher by seven percent and similarly higher than the normal long term average price for the month under review by five percent (figure10).
- Availability of substitute cereals such as sorghum through relief food distribution and occasioned 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 poor road network that increased transportation cost.
- The lowest maize grain price was recored in agro pastoral livelihood zone due to relief food distribution and availability of other other cerials commodities in the markets.

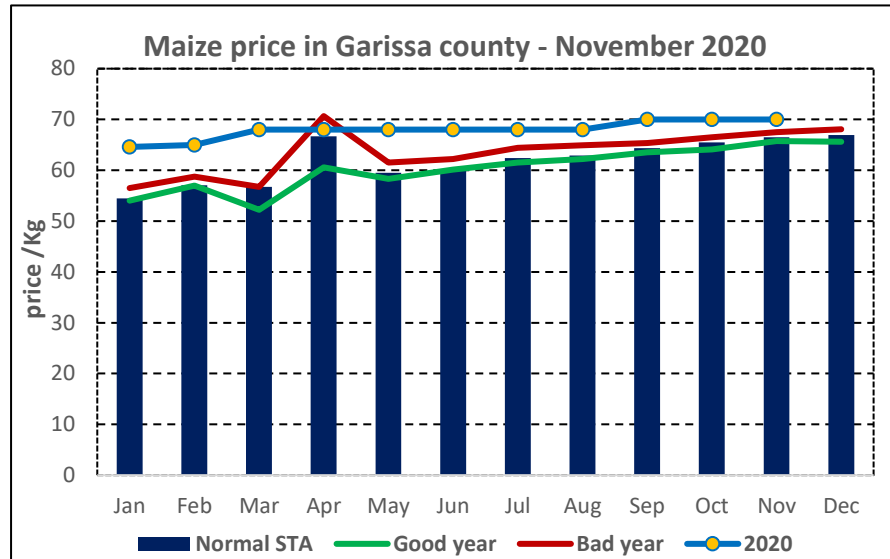


Figure 10: Trend in maize grain prices

### 4.2.2 Sifted Maize Meal

- An average price of kshs.100 per kilogram was reported during the month under review. Generally, the price of the commodity remained stable for long due to high use by pastoralist resulting from its ease of preparation.
- when compared with the normal short term average for the month the current price was above by 8 percent (Figure11) but was below the same period of 2019 (wet year) by 10 percent.
- Price variability across the livelihood zones was reported but remained the same as previous month, 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
- if the short rains season performs well will likely damage road infrastructure leading to increased cost of transportation thus the product price may increase.

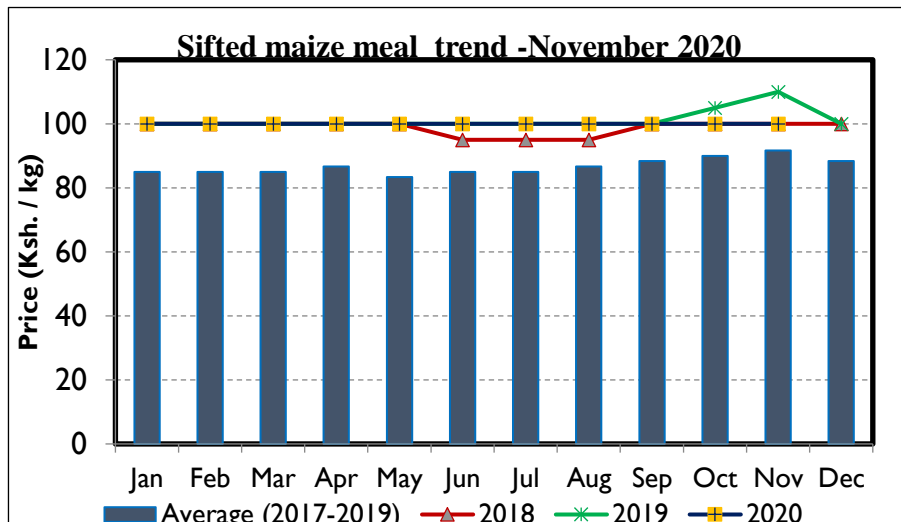


Figure 11: Trend of sifted maize meal price

### 4.2.3 Terms of Trade

- During the month under review, the terms of trade were 52 kilograms of maize upon sale of a goat which increased as compared to the previous month of 46kg of maize per goat sold. (Figure 12).
- The current reported terms of trade were above the same period of Good years and the normal short term average for the month by 7and 58 percent correspondingly. Therefore, the purchasing power of Pastoral households slightly increased during that period and households were able to purchase basic essential food stuffs.
- The performance of terms of trade was due to increasing goat's prices against stable maize grain prices in the local markets.
- The terms of trade are expected to continue increasing with the expected performance of the short rains season

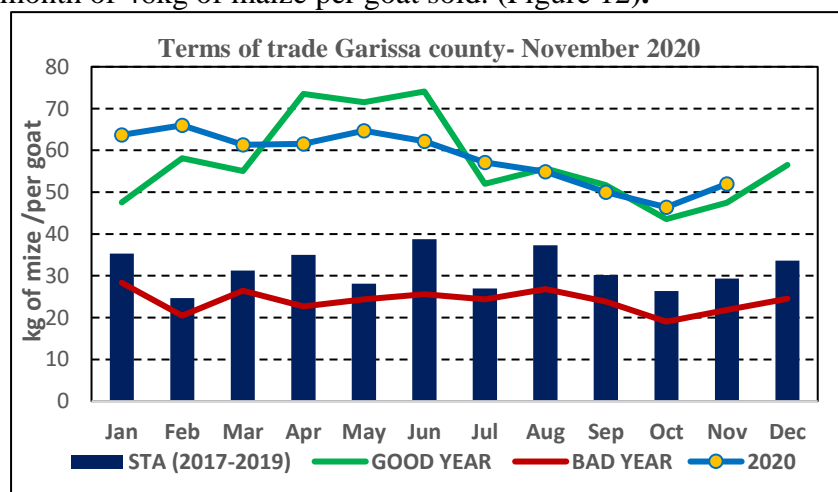


Figure 12: Terms of trade

## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 MILK CONSUMPTION

- 1.6 litres of milk / household/ day was consumed by pastoral households during the month under review and slightly improved when compared with the previous month.
- The current consumption was below the long term average and the same period of Good years for by 24 and 30 percent accordingly. (Figure13.)
- The below average consumption was as a result of below average production realized during the month.
- consumption is projected to slightly increase with expected increase in production due to more calving/kidding expected across the livelihood zones.

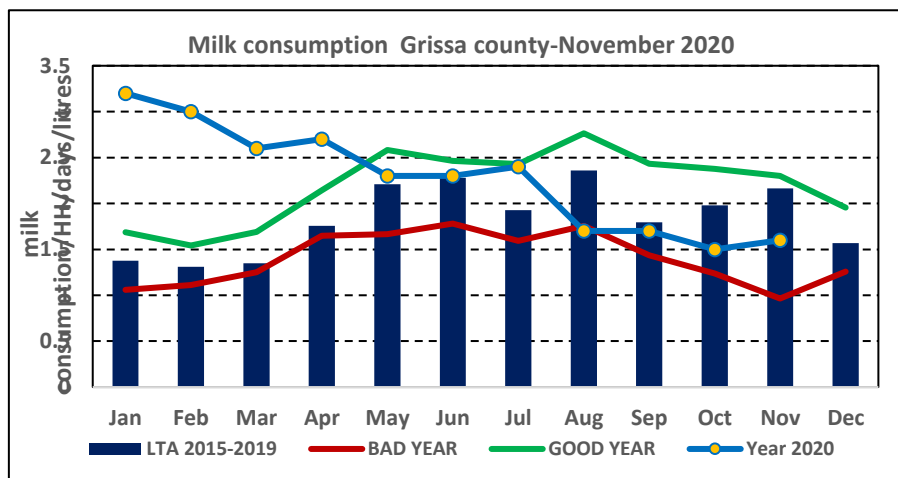


Figure 13: milk consumption trend

### 5.2 FOOD CONSUMPTION SCORE

- In the month under review, the proportion of households classified as having poor, borderline and acceptable food consumption scores was 9 percent, 36 percent and 55 percent respectively.
- Pastoral all livelihood zone had the highest proportion of households with poor and borderline food consumption score at 11.7 and 69 percent respectively (Figure.14).
- The food consumption pattern as supported by the relatively reduced food consumption score of 36 indicates majority of households are consuming staples and vegetables every day, accompanied by oil and pulses a few per week.
- The agro pastoral livelihood zone has 5 percent of households in poor food consumption score while pastoral livelihood zone recorded 11.5 percent of households in poor food consumption category
- Formal employment livelihood zone recorded the highest proportion of households with acceptable food consumption score of 100 percent
- The mean food consumption score for the month was of 36 percent.

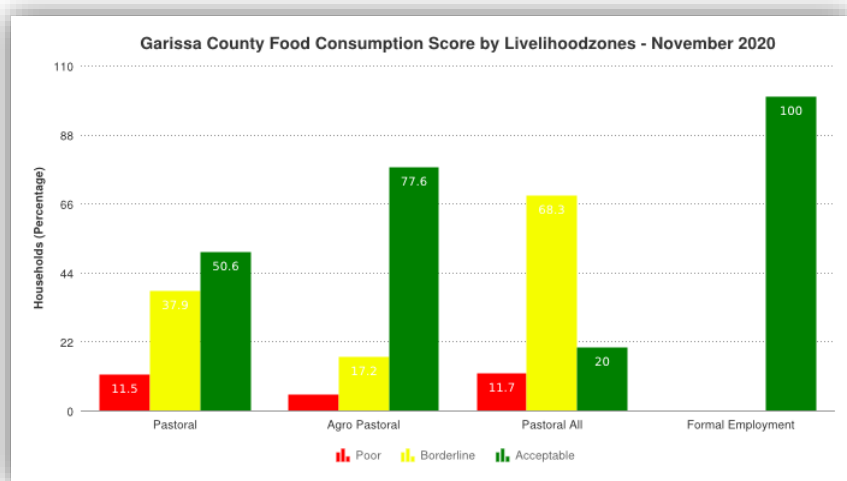


Figure 14: food consumption by livelihood zone

## 5.3 HEALTH AND NUTRITION

### 5.3.1 Nutrition Status

- The Proportion of children at risk of malnutrition was 10.5 percent as compared to 13.3 percent recorded the previous month which depicts a decrease of 22 percent.
- The current proportion as compared to the same period of a good years and the normal long term average was slightly above by 7 and 4 percent respectively(Figure.15).

- Poor child care practices, reduced milk consumption, poor dietary diversity occasioned by the reduced purchasing power, poor health seeking behavior, and minimal number of integrated health outreaches delivering essential nutrition services to the interior malnutrition hotspots were some of the factors driving the observed trend during the period under analysis
- Based on family MUAC, proportion of children moderately at risk was 7.6 percent
- The severely malnourished children were at 0.6%.
- Increased admission trend for malnutrition cases were reported in ijara sub county hospital

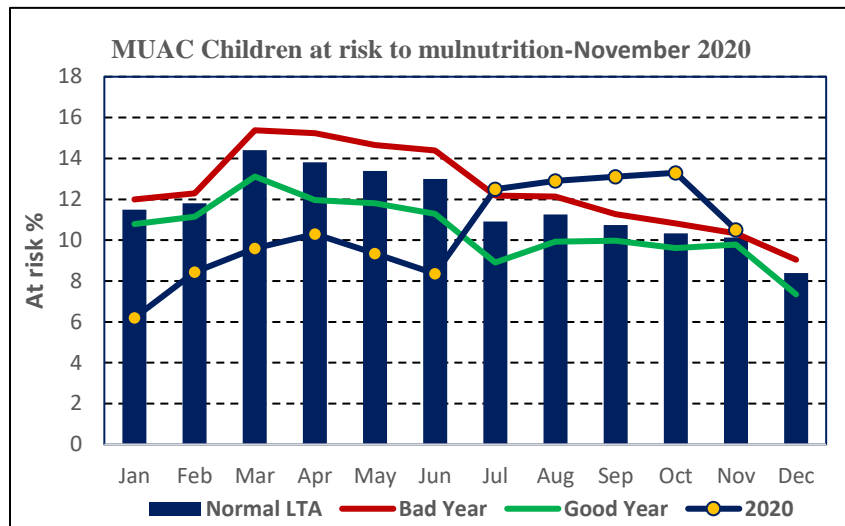


Figure 15:MUAC at risk trend

### 5.3.2 Health

- Upsurge of diarrhoea was reported in urban centres related to poor water quality during the rainy season. Other diseases reported from the health facilities were Upper respiratory tract infections (URTIs) and urinary tract infections.
- Cases of Covid 19 pandemic are reported in the main health facilities

### 5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) for the month of was 9.4 as compared to 13.2 recorded in the month of October which indicates a decrease of 29 percent.
- Formal employment/waged labour livelihood zone recorded the highest of 18.3 while pastoral all livelihood zone recorded the lowest at 6.2 (Figure.16).
- the improving condition was supported by cash transfers programme from different partners either in support of dessert locust or post previous season.
- In pastoral livelihood zones reduced income from the main income sources contributed to the increased coping strategy index.
- The prevalent coping strategies in place during the month under review across all the livelihood zones were reduced number of meals eaten per day and reliance on less preferred /less expensive food

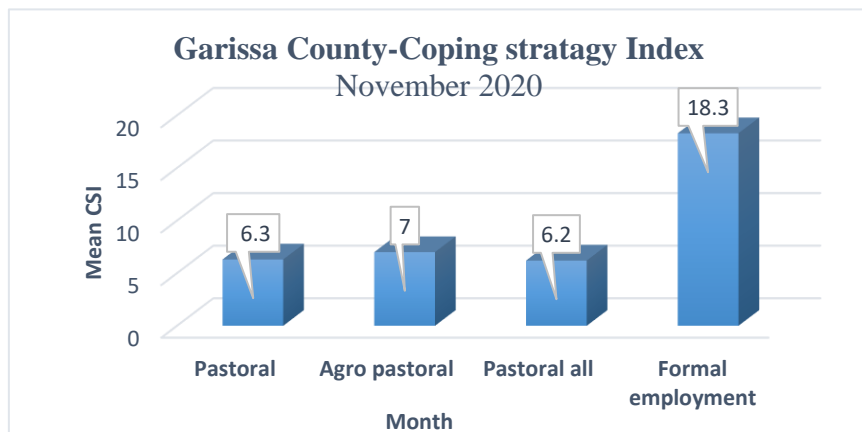


Figure 16:coping strategy index

## 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
Cash transfers	3000 households	FAO ,PGI
Active and Passive disease surveillance	Livestock owners	Veterinary services
Training of farmers on value meat ,milk and tomato value chains	Groups	ASDSP,KCSAP
Livestock vaccination	50,000 households	Veterinary department

## 7. EMERGING ISSUES

### 7.1 Insecurity/Conflict/Human Displacement

- There was resource based conflicts reported between communities in Lagdera sub county and the neighbouring isiolo south sub county, so far livestock and several lives were lost



- 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 returned to wet season grazing areas.

## 7.3 FOOD SECURITY PROGNOSIS

- The forecast from meteorology department, indicates that there is likely of depressed rains during the month of December and the likely hood of 1<sup>st</sup> dekad to second dekad cessation combined with an average of 40mm of rains received during the month of November against a long term average 46.8mm. it is expected that fully recharge of surface water sources didn't occur slightly improving water availability and forage regeneration, this may relatively improve livestock productivity. Milk production and consumption at the household level is expected to greatly improve with kidding /calving realized during the month which might better the nutrition status of the under-fives.
- Livestock prices is projected increase due to anticipated improvement of livestock body conditions resulting from ongoing short rains season.
- Household food stocks will likely continue being on the bottom across December owing to the poor harvest from the previous season and floods in the county. However, commodity price is projected shall remain stable due to supply from external markets and cross border imports that will maintain availability at a desirable level.
- Apart from the expected positive impacts of the on-going short rains, a sizeable proportion of the population especially in the Pastoral all livelihood zones will most likely continue experiencing 'crisis' and may be in need of support.
- There is likelihood of some areas being flagged as having water crisis in the next one month due to limited water recharge or totally no rains.

## 8. RECOMMENDATIONS

*Table 2. Recommended interventions*

Sector	Sub County	Recommended Intervention
Livestock	Lagdera /Balambala/Dadaab /Fafi	Mass vaccination, disease surveillance, targeted treatment and mass deworming (Camel-Trypanosomiasis, Mange and HS), (Shoats-PPR, CCPP, Sheep and Goats Pox)and (cattle-CBPP)
	All sub counties	Conduct active disease surveillance
Agriculture	Lagdera /Balambala/Dadaab /Fafi /Ijara	Provision of relief food/ cash transfer targeting vulnerable households' (affected by COVID-19 outbreak and upstream floods from river tana )
	Lagdera /Balambala/Dadaab /Fafi /Ijara	Strengthen extension service provision to farmers
Health	Township/Balambala /fafi /Ijara Dadaab/Lagdera	Enhance hygiene promotion through health education while providing water treatment chemicals such as Aqua tabs and Purr targeting households resident in hot spot zones.
	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.
	Lagdera/fafi/Dadaab	Provide fast moving spare parts for the high yielding boreholes
Coordination	Lagdera .Balambala	Intensify inter-county and cross border peace dialogue and awareness creation meetings for resource sharing.