

National Drought Management Authority

GARISSA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR AUGUST 2020



A Vision 2030 Flagship Project



AUGUST 2020 EWS PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- No rainfall was received during the month under review
- 3-months Vegetation Condition Index for the month under review was 64.81 across the County and fell within the above normal vegetation greenness band but decreased as compared to the previous month.
- Both household water distances and livestock trekking distances was slightly above normal. Boreholes and water pans were the main sources of water

Socio Economic Indicators (Impact Indicators)

- During the reporting period 62% of livestock species had fair body condition with a score of 2 (moderate- Moderate, neither fat nor thin), while 38% reported good body condition with a score of 1 (normal- Good smooth appearance)
- The average household milk production was 2.1 litres as compared to 2.6 litres recorded the previous month. However, it was below the normal ranges.
- Market prices for all livestock species reduced.
- The county average terms of trade recorded for the month was 54.90 kg of maize per goat sold against a normal of >66kg per goat sold.
- Proportion of sampled children below five years at risk of malnutrition was 12.9 percent in August against a normal of <7.35%. The severely malnourished was at 1.5%.

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Normal	Deteriorating
Pastoral cattle/sheep	Normal	Deteriorating
Pastoral-all species	Normal	Deteriorating
County	Normal	Deteriorating
Biophysical Indicators	value	Normal Range/Value
Rainfall (% of Normal)	No rainfall	91-110%
VCI-3Month	64.81	>35
Forage condition	Good to fair	Good
Production indicators	Value	Normal
Livestock Body Condition	2-1	1
Milk Production	2.1	>2.5 litres
Livestock Migration Pattern	No-migration	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	54.9	>66
Milk Consumption	1.7	>1.7 litres
Return grazing distance to water sources in km	14.2	<12.3km
Cost of water at source (20 litres)	Kshs 5	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	12.9	<7.35%
Coping Strategy Index (CSI)	11.84	<21
Food Consumption Score	3.8	>35

<ul style="list-style-type: none"> ▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ migrations ▪ Land preparation 	<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase ▪ Breeding period 	<ul style="list-style-type: none"> ▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks ▪ Kidding (Sept) ▪ Migrations ▪ Herd separations 	<ul style="list-style-type: none"> ▪ 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

- No rainfall was received during the month under review.
- The normalised vegetation index was slightly above the long term average for the period.

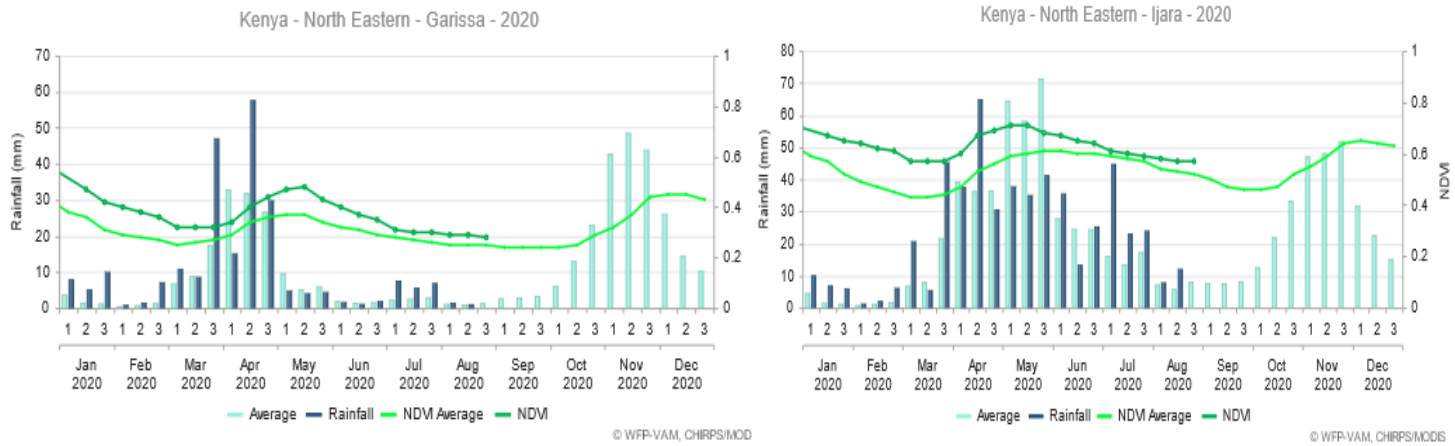


Figure.1a&b. Garissa rainfall and rainfall anomaly

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The county reported an average 3-month VCI value of 64.81 indicating above normal vegetation greenness condition.
- When compared with the average for the previous month the vegetation condition index slightly reduced.
- All the sub counties are in above normal vegetation greenness.

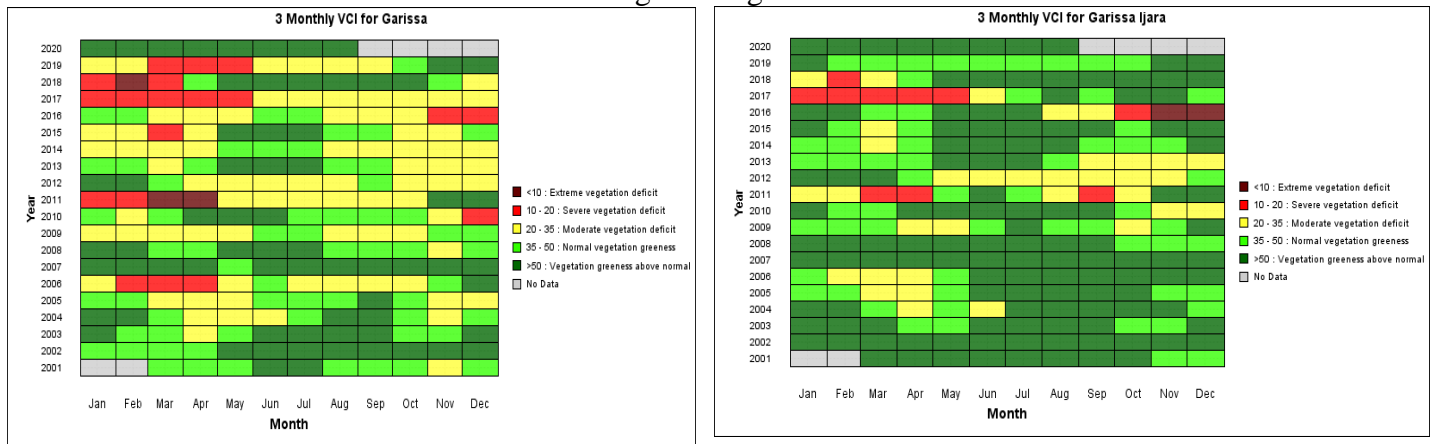


Figure 2 and 3: Garissa 3-month VCI matrix and Dadaab sub county 3-month VCI

- The average vegetation condition index for the month of April is shown in the table below:

Sub-county	3Month
Garissa township	72.18
Garissa Balambala	93.45
Garissa Dadaab	66.62
Garissa Fafi	60.41
Garissa Ijara	51.68
Garissa Lagdera	69.15
Garissa county average	64.81

2.1.2 Pasture condition

- 50% of sampled communities reported good pasture condition while 50% reported fair pasture condition. Field observation places pasture condition to be more of fair condition across livelihood zones (Figure.4)
- When compared to similar periods, the quality and quantity of pasture in all the livelihood zones is above normal. Pasture is expected to last 2months in all the livelihood zones against the normal of 1 month.
- Pasture is expected to decline in quality and quantity at a faster rate due to prevailing dry windy condition in the next one month

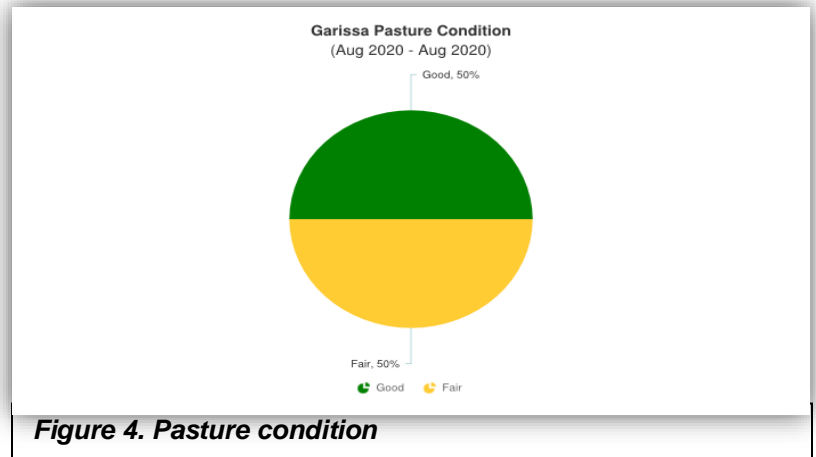


Figure 4. Pasture condition

2.1.3 Browse

- 48.3% of sampled communities reported good browse condition across all livelihood zones while 41.7% of sample communities reported fair browse condition this was confirmed by field observation.
- The quality and quantity of browse deteriorated across all livelihood zones when compared with the previous month.
- The browse is expected to last for two months and support browsers (camel and goats) till the next rainy season.
- The pie-chart below summarises the current browse condition in the county:

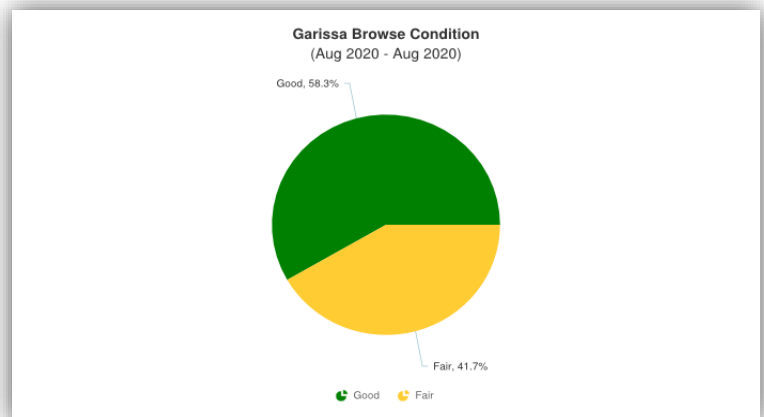


Figure 5. Browse condition

2.2 WATER RESOURCE

2.2.1 Sources

- The main water sources currently in use in the county are boreholes, Water pans, river, shallow wells and Benane spring.
- boreholes use by both households and livestock increased as some pans and shallow wells dried up during the period
- The graph below provides an illustration of the various water sources:

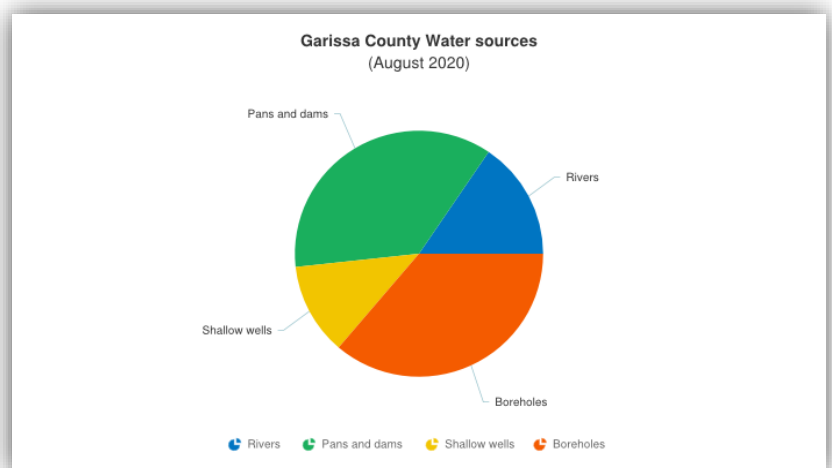


Figure 6. water sources

2.2.2 Household access and Utilization

- In the month of August, the average return distances to water sources was 9.90kmas compared to 9.4km recorded the previous month.
- The current distances for households was above the long term average for the month by 17.2%.
- Similarly, when compared with a dry/bad year it was below by 11.7%
- The negative trend was attributed to reducing water availability due to drying of water pans and breakdown of some boreholes.
- Shown in fig.7 is the trend in return distance for households to water sources

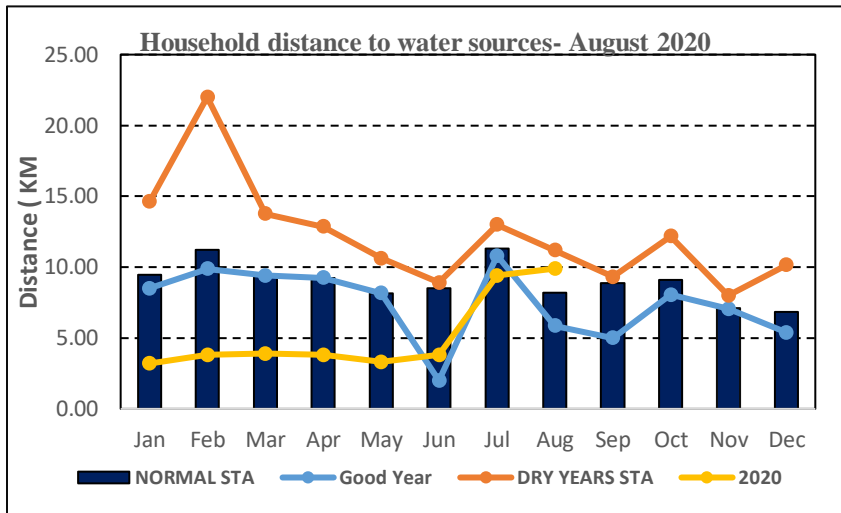


Figure 7 Households' return distance to water sources

2.2.3 Livestock access

- The average return trekking distance from grazing areas to water sources for different livestock species was 14.2 km as compared to 13.6km recorded the previous month.
- The normal long term average for the month was above the current trekking distance by 37.2%
- The current trekking distance was below a good and bad year by 18 and 41.3 percent respectively.
- The increasing trend from the previous three months was attributed reduced availability within the rangeland together with livestock moving to dry period grazing areas and increasing dependent on permanent water sources
- livestock watering interval was reported to be every other day for small stock and after 2 days for cattle and camels twice a week. As pastoralist have to pay for water in the boreholes.
- The graphs show trend in livestock access to water fig.8.

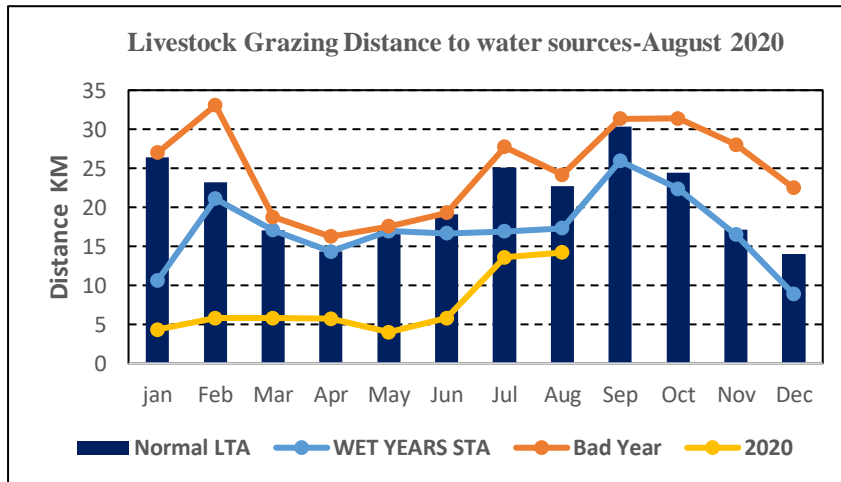


Figure 8. Return distance from grazing areas to water sources

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- during the reporting period 62% of livestock species had fair body condition with a score of 2 (moderate- Moderate. neither fat nor thin). while 38% reported good body condition with a score of 1 (normal- Good smooth appearance) (Figure.9)
- A higher percentage camel and goats have good body condition than cattle and sheep.
- With the progression of the long dry spell, the body condition is expected to deteriorate further as the trekking distance to water sources increases and forage availability decreases.
- The table below shows the classification of body condition for livestock

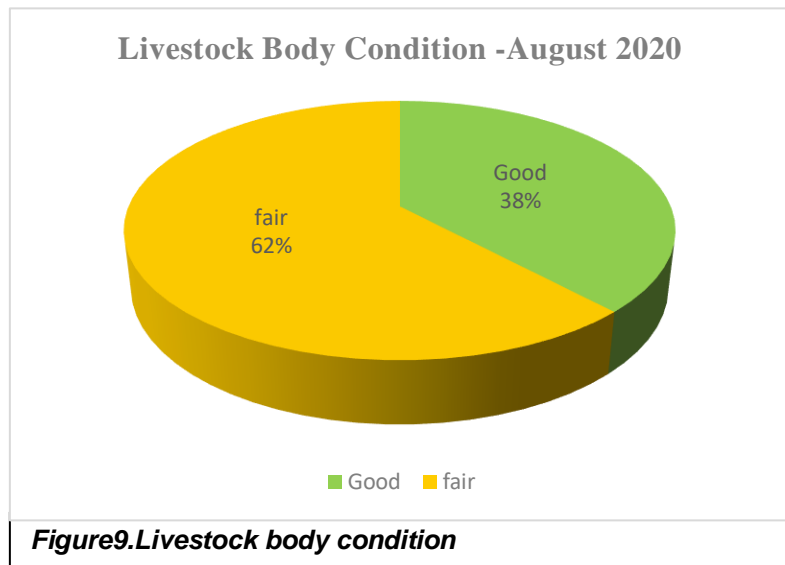


Figure9.Livestock body condition

Level	Classification	Characteristics (this describes majority of the herd and not individual isolated Stock)
1	Normal	Very Fat Tail buried and in fat
		Fat, Blocky. Bone over back not visible
		Very Good Smooth with fat over back and tail head
		Good smooth appearance
2	Moderate	Moderate. neither fat nor thin
3	Stressed	Borderline fore-ribs not visible. 12th & 13th ribs visible
4	Critical	Thin fore ribs visible
5	Emaciated	Very thin no fat, bones visible
		Emaciated, little muscle left

3.1.2 Livestock Diseases

- No major disease outbreak was reported. However common diseases like, contagious caprine pleuropneumonia in goats was reported and tick-born diseases across the county.
- Mortalities are generally within normal ranges resulting either from disease or predation.

3.1.3 Milk Production

- The average household milk production was 2.1 litres as compared to 2.6 litres recorded the previous month.
- The declining trend was attributed to livestock moving to dry period grazing areas and reduced lactating herds coupled with diseases and pest incidences affecting production
- The current production was below the long term average for the month and the same period of a good year by 16.4% and 15% respectively.
- The average market price of milk increased to ksh.70 per litre.
- The highest milk production was reported in agro pastoral livelihood zone at 2.5 litres.

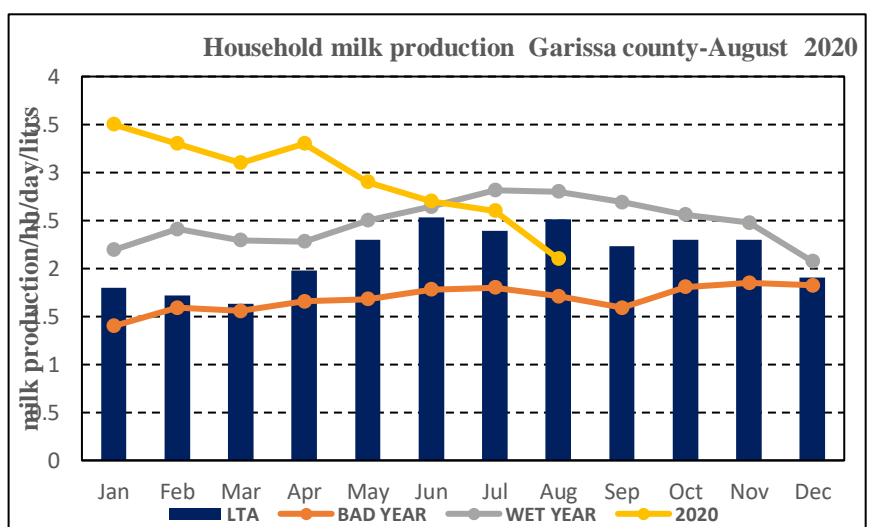


Fig.10: trend in milk production

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

No crops were planted during the month.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- The average price of cattle (four-year old bull) in the local markets was ksh.16210 as compared to ksh.16420 recorded the previous month.
- The current prices above the short term average by 7.9% but when compared with the same period of a wet (good)year it was within same value.
- The deteriorating cattle price trend was attributed to slightly reducing body condition to fair and reduced markets demands due to dry spell being realised coupled with the effect of COVID19 resulting in few traders in the market.
- The pastoral livelihood zone recorded the highest price of ksh. 18000.
- Figure 11 shows the trend in cattle prices

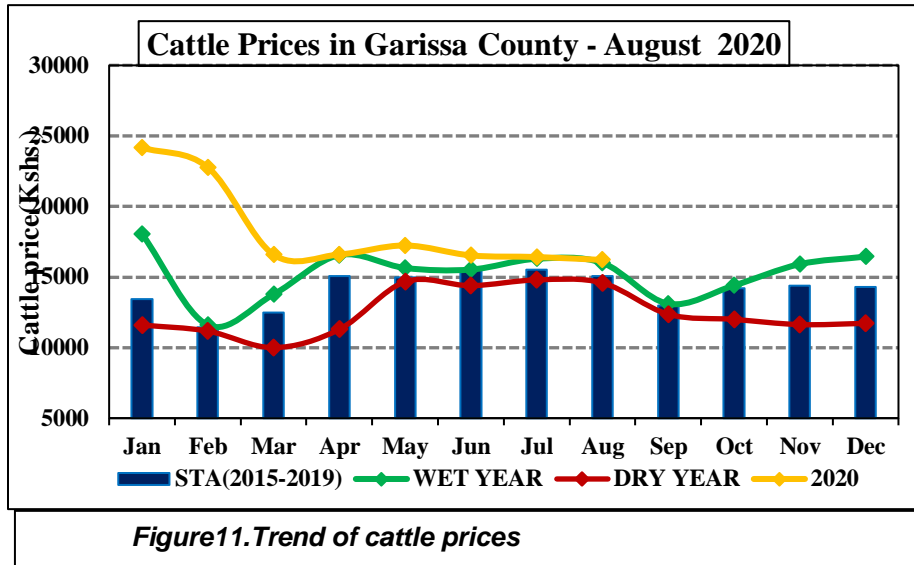


Figure11.Trend of cattle prices

4.1.2 Small Ruminants Prices (Goats)

- In the month of August,the average price goats for the month was ksh.3734 as compared ksh.3886 recorded the previous month.
- When compared with the normal short term mean for the month the current price was above by 29.7 %.
- Similarly, when compared with the same period of a good year the current price was above by 2.9%.
- The reducing price trend was due to fall in body condition form good to fair and few traders in the markets
- The price is expected to continue decreasing with the continued dry spell creating water stress and reducing forage condition leading to declining body condition.
- Figure 12. Summarizes the trend in goats' prices

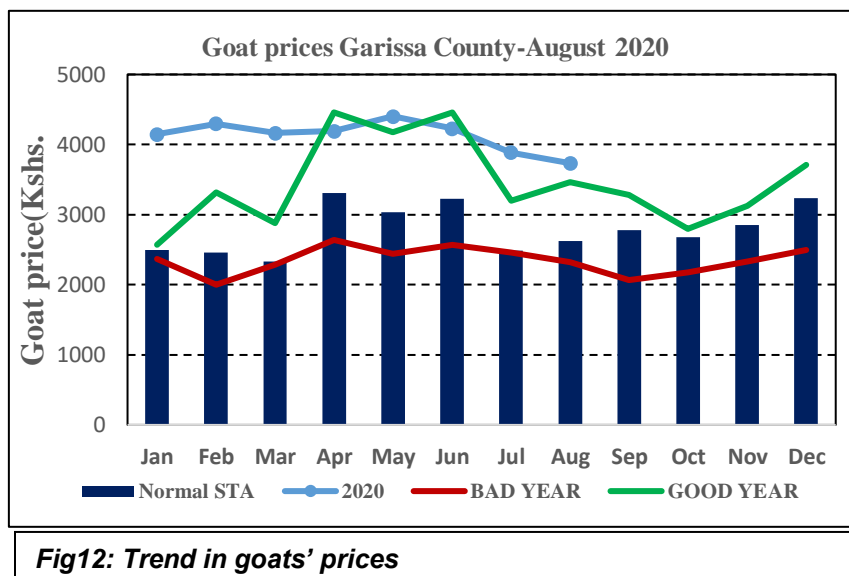


Fig12: Trend in goats' prices

4.2 CROP PRICES

4.2.1 Maize

- The price of a kilogram of maize was ksh.68 per kg for the month of August and remained stable as compared to the preceding month.
- The current price was above the normal short term average for the month and the same period of a bad year by 7.5% and 4.6 % respectively
- The stable trend of maize was due to availability of other staple cereals in the local market and preferences for other cheaper cereal substitutes.
- other cereals readily available in the markets are sorghum and rice.
- figure13. Summarises maize price trend.

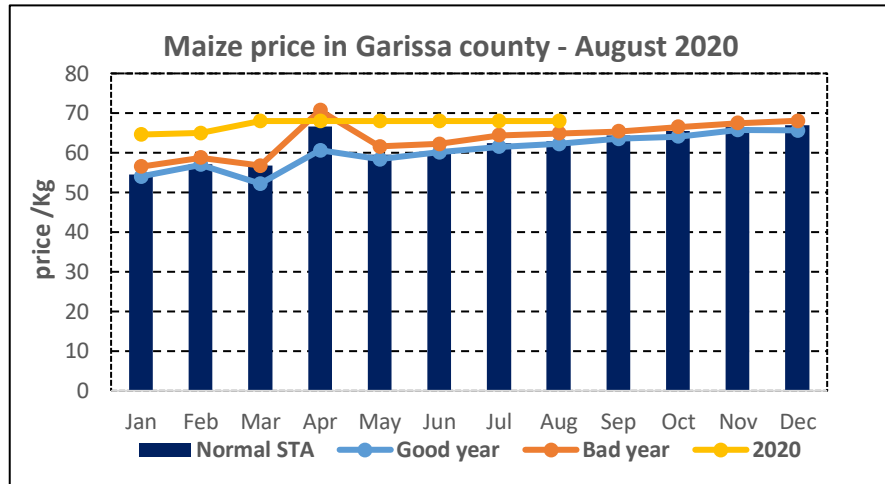


Fig 13: Trends of Maize grain prices

4.2.2 Sifted Maize Meal

- The average price for sifted maize meal was Kshs100 per kg for the month and when compared with the previous month the price remained stable.
- The current price was above the short term average for the month by 13% (Figure14)
- But remained within the same period of 2019 (bad year)
- Sifted maize meal remains key staple food for pastoral households due to its faster preparation.
- Agro pastoral livelihood recorded the lowest price per kg of kshs. 95

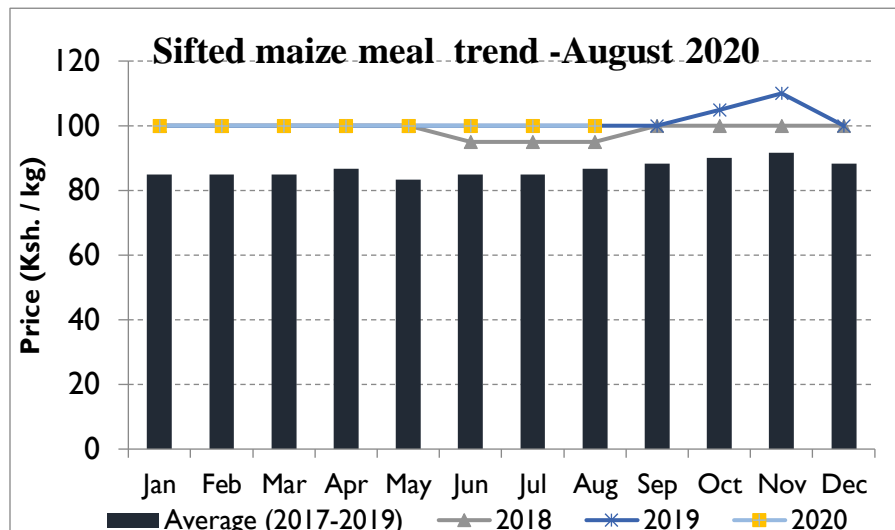


Fig 14: Trends of sifted maize meal prices

4.2.3 Livestock Price Ratio/Terms of Trade

- The county average terms of trade recorded for the month was 54.90 kg of maize per goat sold as compared to 57.14kg recorded the previous month.
- The current terms of trade were within the value of the same period of a good year but above the normal short term average by 32.2%.
- The declining 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 to reducing with fall in goat's prices.
- The graph shows the trend in term of trade

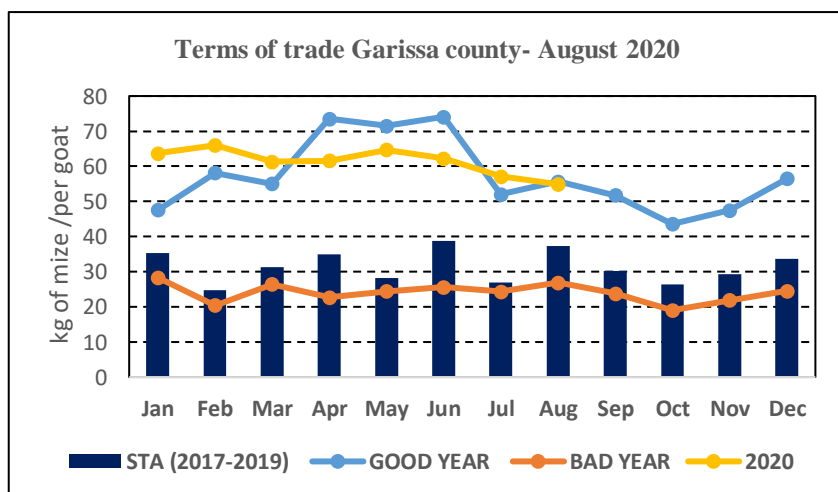


Fig 15: Trends of terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION SCORE

- Reduced milk production subsequently led to reduced consumption. Household milk consumption for the month was 1.7 litres per day as compared to 2.4 litres recorded in July 2020.
- consumption was below the long term average for the month by 26.1%. (Figure16.)
- Equally, when compared with the same period of a good year, the current household milk consumption was below by 37%.
- Milk was consumed by children mainly with tea

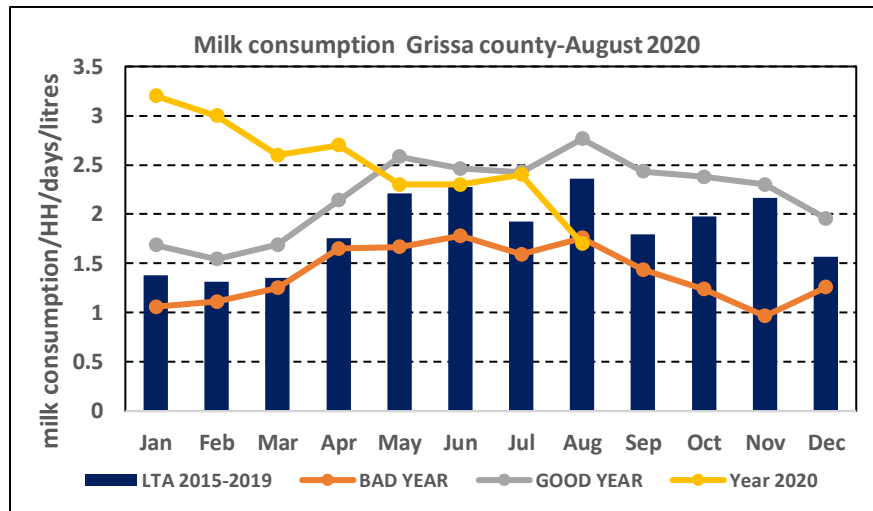


Fig 16: Trends of milk consumption 2016 -2018

5.2 FOOD CONSUMPTION SCORE

- In the reporting period 100% of households in agro pastoral livelihood zone ,96.7 percent in formal employment livelihood zone and 71.4 pastoral livelihood zones recorded acceptable food consumption score and consumed staples and vegetables everyday occasioned by meat or dairy.
- 49.1 percent of households in the pastoral livelihood had borderline FCS an indication also their diet consisted of staples and vegetables but lacked milk or dairy.
- 3.8 percent of pastoral households had poor food consumption score implying households were not consuming staples and vegetables every day and seldom consumed dairy (Figure.17)
- 3.8 percent of households with poor food consumption score were recorded in Dadaab sub county. (figure18)

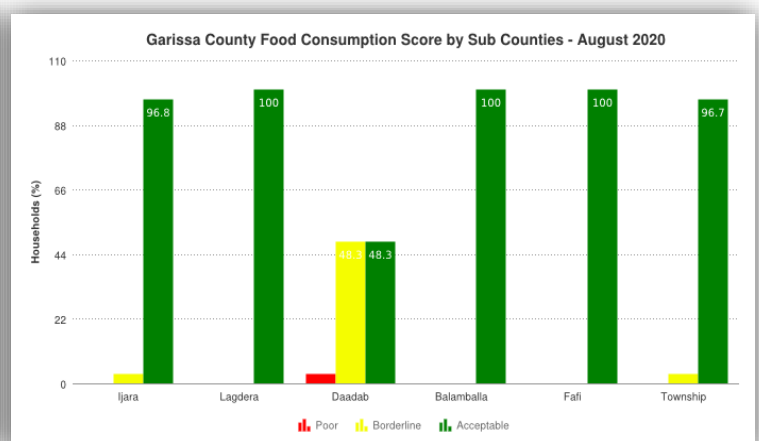
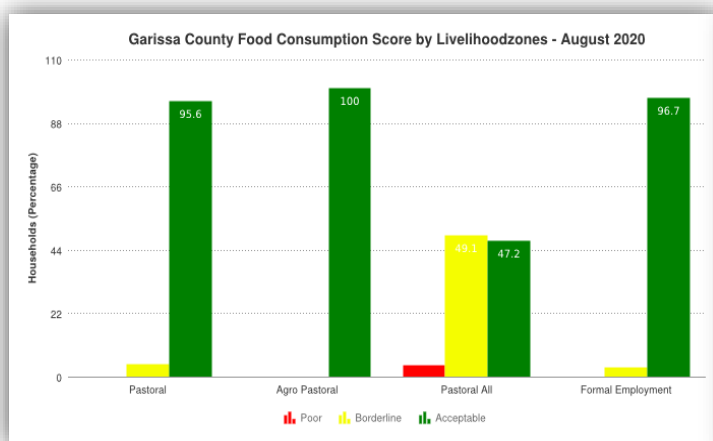


Fig 17&18: food consumption score by sub counties and livelihoods zones

5.3 HEALTH AND NUTRITION

5.3.1 Nutrition Status

- Proportion of sampled children below five years at risk of malnutrition slightly increased by 4 % from 12.5% in July to 12.9 % in August. The increase may be attributed to high diseases prevalence and poor maternal practices and low nutrition interventions in the county. The increasing trend of at risk was also attributed to low health coverage, reduced health seeking behaviours and disruptions of health programmes by COVID 19 restrictions
- The current at risk rates was above the same period of a bad year and the normal long term average by 6.3 and 22.8 percent respectively. (Figure.19)
- The severely malnourished children were at 1.5%.

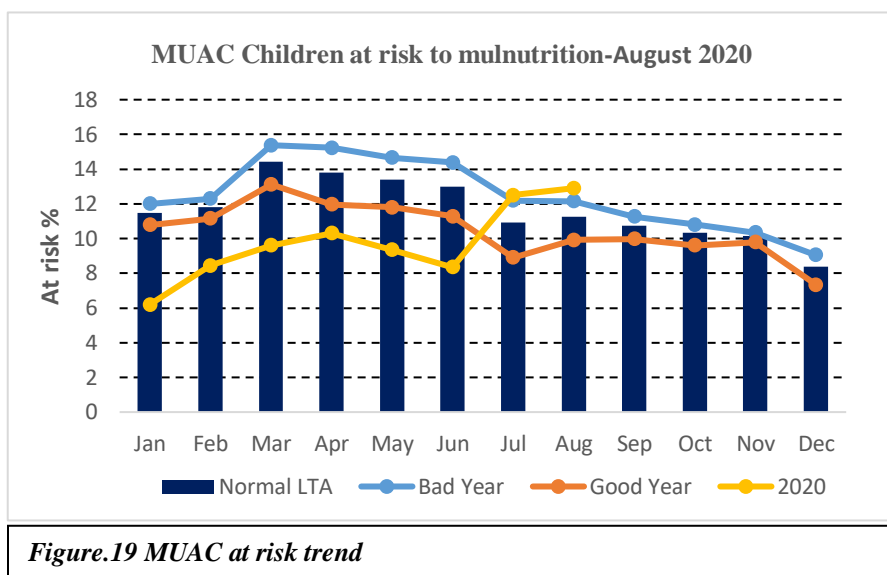


Figure.19 MUAC at risk trend

5.3.2 Health

- There was no outbreak of disease reported during the month.
- The reported diseases were increasing cases of Upper respiratory tract infections (URTIs) and diarrhoea. The trend was attributed to windy condition experienced during the month.

5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) was 11.84 for August as compared to 10.77. recorded the previous month.
- Informal employment/waged labour livelihood zone recorded the highest of 34.1 against 2.7 in pastoral all species livelihood zone (Figure.20).
- The condition in formal employment/waged labour was occasioned by loss labour in farms and main urban centres
- the common strategy was reduction of meal portions and consumption of less preferred/cheaper food and Borrowed food, or relied on help from friends or relatives and relief food from government and other stakeholders.

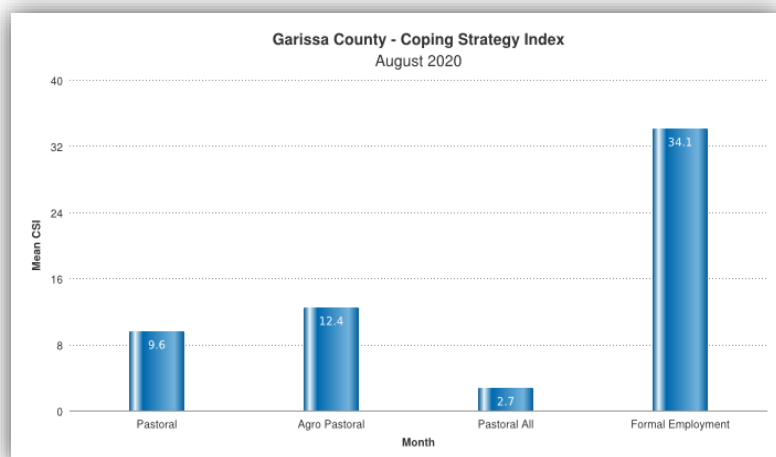


Figure.20 Coping strategy index

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
General livestock extension services	Livestock owners	Livestock production
Installation of submersible pump and borehole protection	Jarajara 3500hh	County government water Department
Drilling of new boreholes	4000 HH in Iftin ward	Water department

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No resource based conflicts was reported, however it is anticipated as resources reduces there is likelihood of conflicts arising.
- Insecurity due to threats of terror attacks exists in areas bordering the Republic of Somalia as a result of some health facilities remain closed.

7.2 Migration

No out migration was reported during the month, however normal inter sub county migrations and to dry period fall back areas were reported and areas with permanent water sources.

7.3 locust invasion

No locust invasion was reported during the month.

7.3 FOOD SECURITY PROGNOSIS

- Reducing forage and water condition are expecting to reduce livestock productivity. Milk production is expected to reduce.
- With expected persistence of the drier than normal condition, household and livestock trekking distances are likely to increase further, watering frequencies are expected to decline for all the livestock species in all the livelihood zones.
- Milk production is below normal attributed drying up of lactating herds. Generally, kidding and lambing is expected to increase across all the livelihood zones with exception of camels that may continue till the next season.
- With expected decline in goat prices due to weaker demand coupled with likely expected gradual increase in maize prices, terms of trade are expected to decline further in the next one month
- In the Agro pastoral livelihood zone, irrigated crop production is expected to pick a slow rate thus remain below the long term average.
- The food security situation is expected to decline in the next two months.
- The flagged areas with water stress that require immediate intervention are Hagarjarir of Benane ward and Dallehele Wayama jibril of Maalimin ward Afweyne in Baraki ward Lagdera sub county, Dogob, Ashadin in Balambala sub county and Diiso in Fafi sub county.

8. RECOMMENDATIONS

Table 2. Recommended interventions

Sector	Sub County	Recommended Intervention
Livestock	Lagdera /Balambala/Dadaab /Fafi	Support ring vaccination
Agriculture	Lagdera /Balambala/Dadaab /Fafi /Ijara	Provision of assorted seeds and seedlings for post flood recovery.
Health	Township/Balambala /fafi /Ijara Dadaab/Lagdera	Scale up of Mother MUAC Sensitization and CHVs
	All sub counties	Strengthen maternal practices and IYCN
	Township/Balambala /fafi /Ijara Dadaab/Lagdera	Support management of acute malnutrition and mass screening.

Water	Lagdera /Balambala/Dadaab /Fafi	Activate the rapid response teams for boreholes repairs and maintenance.
	Ijara//Lagdera/Hulugho/township/Dadaab	Provide water treatment chemicals to communities that are dependent on open water sources.
	Lagdera /Balambala/Dadaab /Fafi	Desilting of existing water pans
Security	Balambala /Lagdera /fafi/ijara	strengthen the conflict early warning systems and ensure they have effective links with traditional systems for conflict early warning and early response.
	Dadaab /Ijara /Hulugho/fafi	Support counter violence extremism training for youth
\Education	Balambala/Lagdera/Dadaab/Fafi/Ijara	Rehabilitate schools infrastructures damaged by floods and internally displaced households
	Balambala/Lagdera/Dadaab/Fafi/Ijara	Fumigate schools used as isolation centre for Covid 19
Coordination	All sub-counties	Strengthen coordination through sectoral meetings (TWGS).
	County	Develop response plan from the county contingency plan