

National Drought Management Authority

GARISSA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JUNE 2020



A Vision 2030 Flagship Project



JUNE 2020 EWS PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- Some showers were received in few areas on the south while the larger part of the county remains dry as hot dry windy conditions prevailed.
- The average 3-month VCI for the county was 69.17 indicating above normal vegetation greenness condition.
- The water sources were stable and within normal ranges in the month under review

Socio Economic Indicators (Impact Indicators)

- 66.7% of sampled communities reported good livestock body condition with a score of 1(normal) while 33.3% reported fair body condition with a score of 2(moderate)
- In the local markets the terms of Trade recorded was 62.19 kg of maize per goat sold and is within the normal ranges for the month.
- The current average livestock water access as recorded by return trekking distance from grazing areas to water sources was 5.8 km and was within normal ranges.
- The proportion of sampled children under five years at risk of malnutrition was 8.36%

Early Warning Phase Classification

| Livelihood Zone | Phase | Trend |
|--|--------------|--------------------|
| Agro-pastoral | Normal | Stable |
| Pastoral cattle/sheep | Normal | Deteriorating |
| Pastoral-all species | Normal | Deteriorating |
| County | Normal | Deteriorating |
| Biophysical Indicators | value | Normal Range/Value |
| Rainfall (% of Normal) | | 18.2 |
| VCI-3Month | 69.17 | 39 |
| Forage condition | Good | Good |
| Production indicators | Value | Normal |
| Livestock Body Condition | Good | Moderate |
| Milk Production | 2.7 | 1.7 litres |
| Livestock Migration Pattern | No-migration | Normal |
| Livestock deaths (from drought) | No death | No death |
| Access Indicators | Value | Normal |
| Terms of Trade (ToT) | 62.19 | >66 |
| Milk Consumption | 2.3litres | 1.5 litres |
| Return grazing distance to water sources in km | 5.8 | <16.95km |
| Cost of water at source (20 litres) | Kshs 5 | <5Kshs |
| Utilization indicators | Value | Normal |
| Nutrition Status, MUAC (% at risk of malnutrition) | 8.36 | 19.1 |
| Coping Strategy Index (CSI) | 7.0 | 15 |
| Food Consumption Score | 10.2 | >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

- Some showers were received in few areas on the south while the larger part of the county remains dry as hot dry windy conditions prevailed.
- The normalised vegetation index remains higher than the long term average for the period.

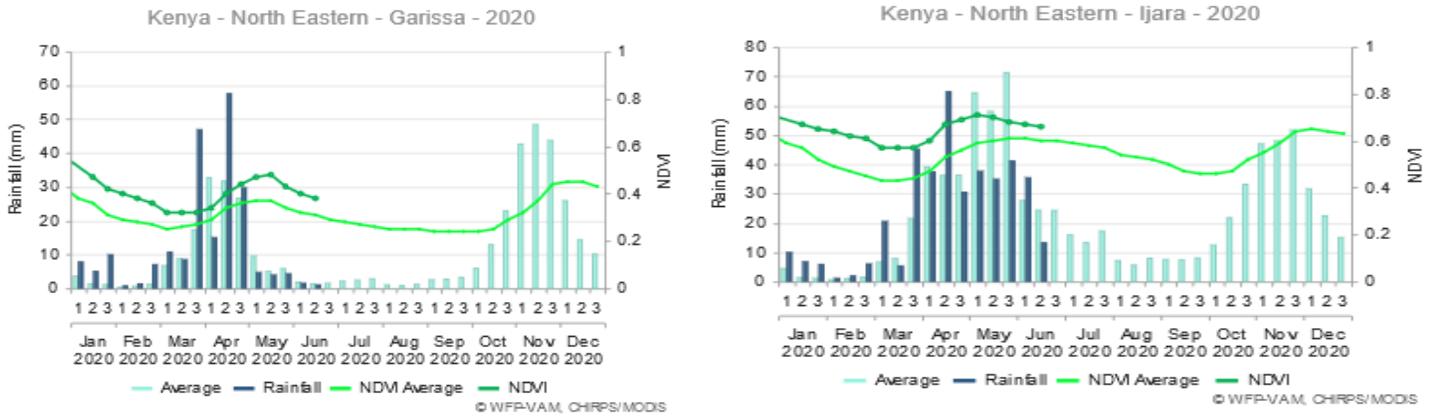


Figure.1a&b. Garissa rainfall and rainfall anomaly

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The average 3-month VCI for the county was 69.17 indicating above normal vegetation greenness condition.
- When compared with average for the previous month the vegetation condition index slightly improved.
- All the sub counties are in above normal vegetation greenness.

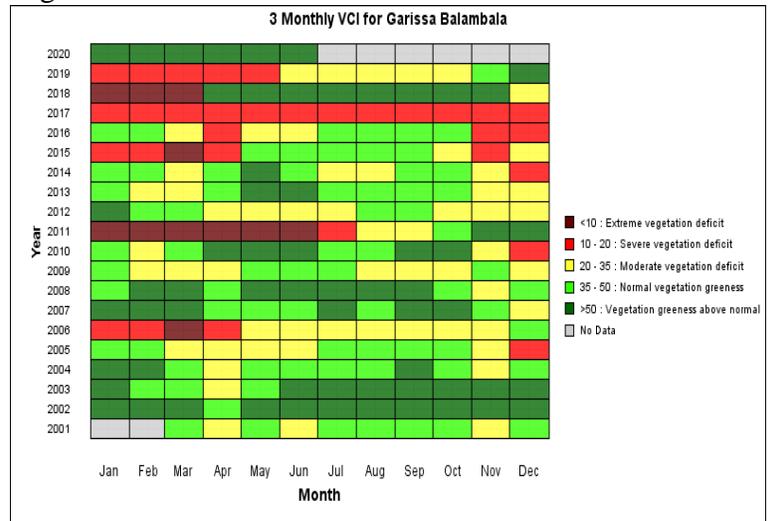
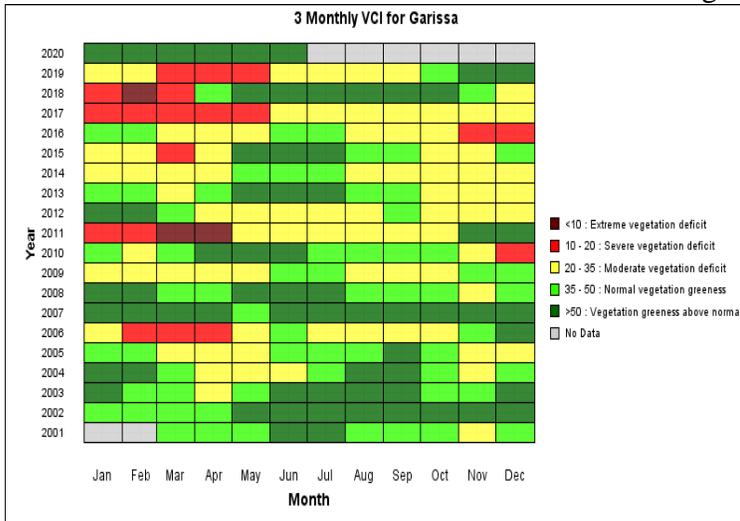


Figure 2 and 3: Garissa 3-month VCI matrix and Dadaab sub county 3-month VCI

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

| Sub-county | 3Month |
|-------------------------------|--------------|
| Garissa township | 68.19 |
| Garissa Balambala | 82.63 |
| Garissa Dadaab | 63.51 |
| Garissa Fafi | 74.06 |
| Garissa Ijara | 69.47 |
| Garissa Lagdera | 56.96 |
| Garissa county average | 69.71 |

2.1.2 Pasture condition

- 91.7% of sampled communities combined with field observation reported good pasture condition while 8.3% reported fair pasture condition
- When compared with previous month, Pasture quality and quantity remained stable.
- The stable condition was as a result of some showers received in some parts of the county during the month.
- Pasture is expected to deteriorate but will abundant for the next two months for livestock but thereafter faster depletion is expected due to prevailing dry windy condition coupled with continued grazing. Livestock will likely move to dry period fall back areas.
- The fig. 4 illustrates the pasture condition in the county:

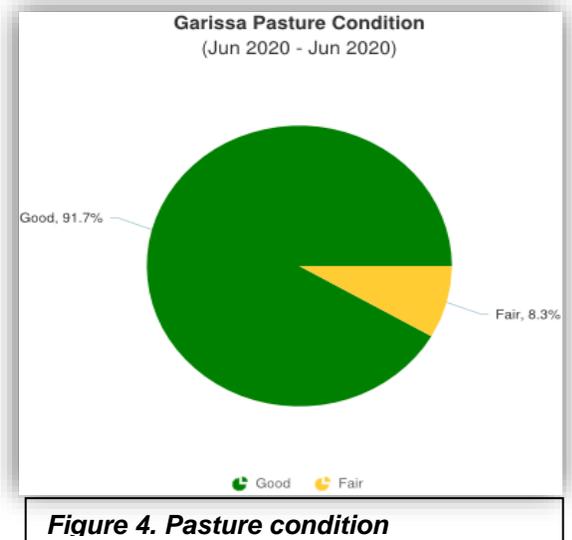


Figure 4. Pasture condition

2.1.3 Browse

- 100% of sampled communities reported good browse condition across all livelihood zones
- The quality and quantity of browse remained stable across all livelihood zones when compared with the previous month.
- The browse condition trend was due to long rains season performance and showers received in some part of the county during the month.
- The browse is expected to last for three months and support livestock till the end of the dry spell.
- The pie-chart below summarises the current browse condition in the county:

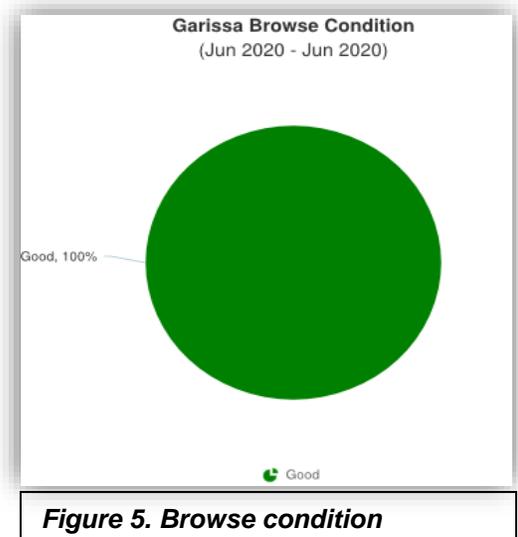


Figure 5. Browse condition

2.2 WATER RESOURCE

2.2.1 Sources

- The main water sources currently in use in the county are pans/dams, boreholes, river, shallow wells and natural ponds
- Both livestock and households are majorly dependent on Pans/dams and boreholes.
- The graph below provides an illustration of the various water sources:

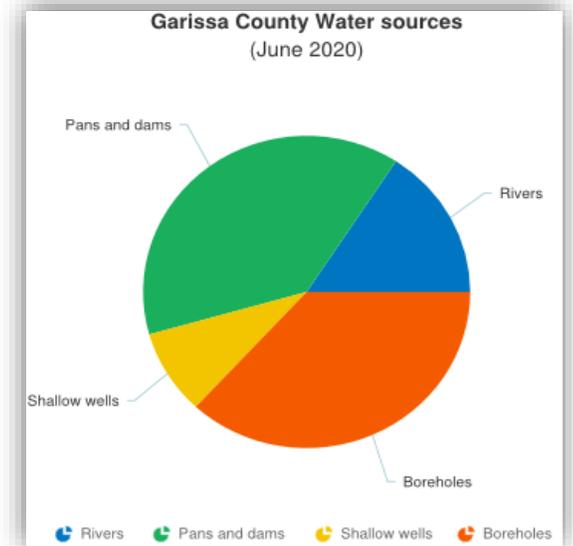


Figure 6. water sources

2.2.2 Household access and Utilization

- Households' return distances to water sources was 3.80km for June as compared to 3.3km recorded during the month of May 2020.
- the current distances when compared with the same period of a good year was above by 47.4%.
- On the same time, it was below the long term average for the month by 44.7%.
- The positive trend was attributed to ongoing long rains season which improved recharge of pans/dams and natural ponds in the county.
- Shown in fig.7 is the trend in return distance for households to water sources

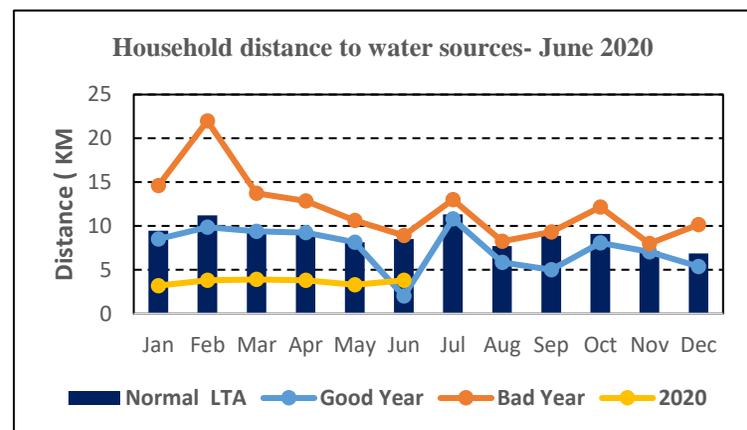


Figure 7 Households' return distance to water

2.2.3 Livestock access

- The current average livestock water access as recorded by return trekking distance from grazing areas to water sources was 5.8 km.
- The current trekking distance was below a good and bad year by 65.1 and 69.8 percent respectively.
- The positive trend was attributed to cumulative effect of the short rains season and long rains season that improved water availability through recharge of surface and subsurface water sources.
- Daily watering interval was reported by all livelihood zones for all livestock species.
- The graphs show trend in livestock access to water fig.8.

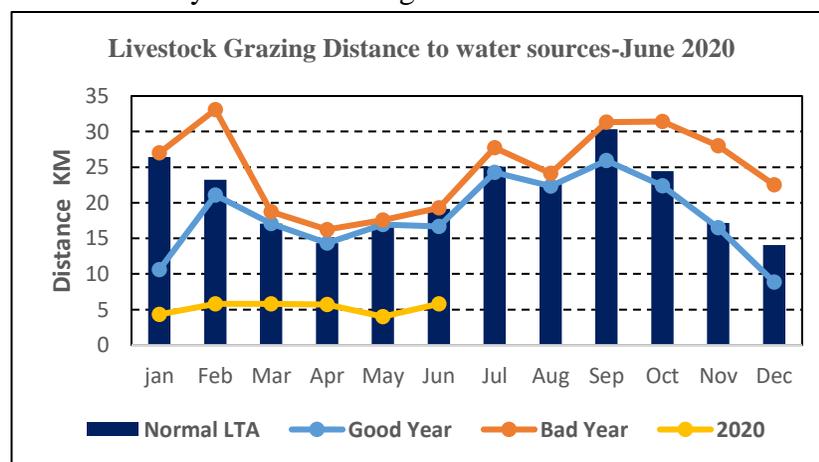


Figure 8. Return distance from grazing areas to water

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- 66.7% of sampled communities reported good livestock body condition with a score of 1(normal) while 33.3% reported fair body condition with a score of 2(moderate).
- When compared with the preceding month some of the livestock body condition reduced from good to fair.
- The body condition is expected to reduce in a slow rate till when stress resulting from water and forage shortage sets in.
- The Fig.9 shows the month livestock body condition
- The table below shows the classification of body condition for livestock

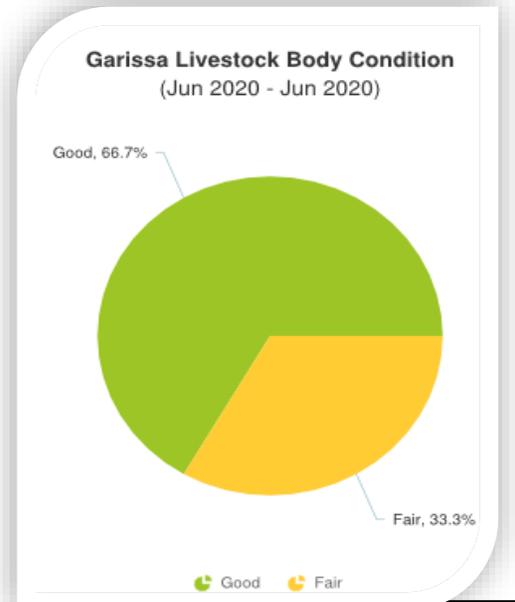


Figure9. Livestock body condition

| 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

- Outbreak of Lumpy skin disease in cattle with mortalities continue to be reported across the county during the month.
- Enzootic trypanosomiasis affecting cattle continue to reported in the southern sub counties.
- Cases of sheep enterotoxaemia was reported in the northern parts of the county.

3.1.3 Milk Production

- The average household milk production for the month of June 2020 was 2.7 litres as compared to 2.9 litres reported the previous month.
- the current production was above the long term average for the month and the same period of a good, by 6.3 and 3.8 percent respectively.
- The declining trend was attributed to drying of milking herds and diseases incidences affecting production.
- The average market price of milk was ksh.60 per litre.
- The highest milk production was reported in agro pastoral livelihood zone.

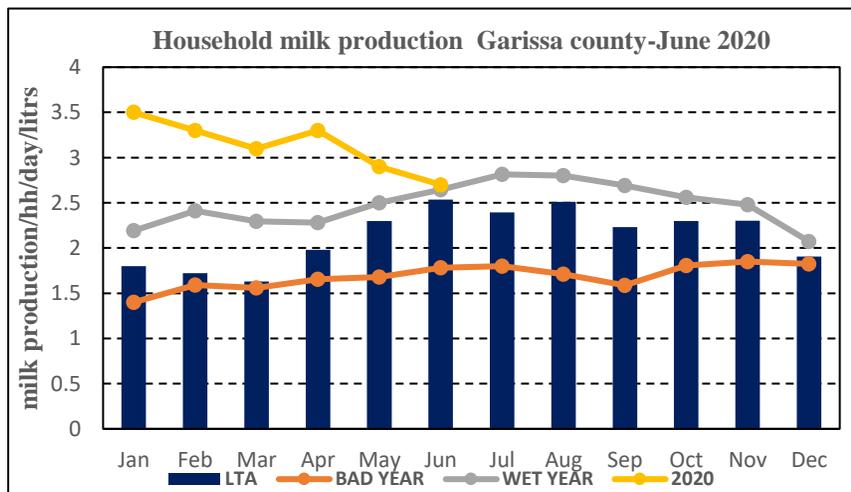


Fig.10: trend in milk production

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Maize and sorghum planted in rain fed areas were harvested during the month
- Some of the planted crops didn't reach maturity and were used as livestock feeds.

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.16533as compared to ksh.17238 recorded the previous month.
- The current prices were above the short term average for the month and same period of a wet (good) year by 6.1 and 10.4 percent respectively.
- This was attributed to market dynamics, reduced markets demands and increased supply to the markets to offload before the long dry spell affects body condition.
- The pastoral livelihood zone recorded the highest price of ksh. 20667.
- Figure 11 shows the trend in cattle prices

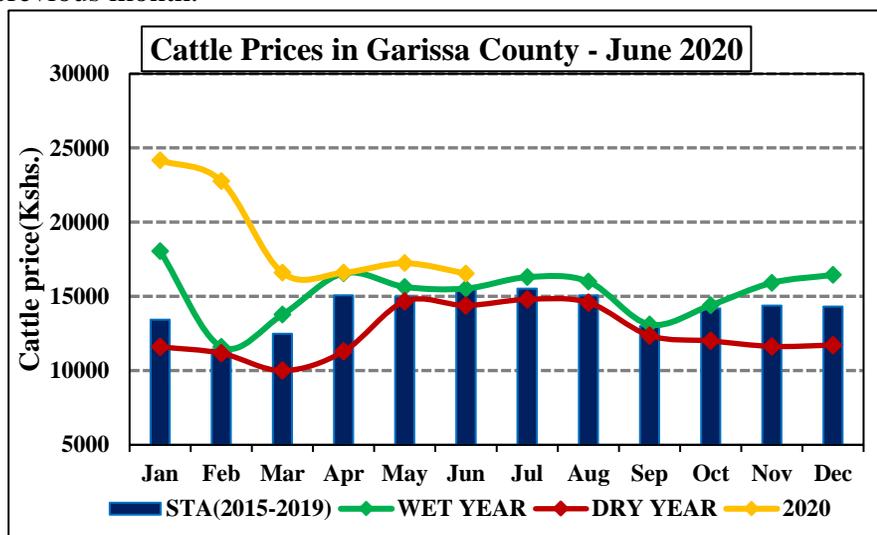


Figure11.Trend of cattle prices

4.1.2 Small Ruminants Prices (Goats)

- For the month June the average goat price was ksh.4229 as compared to ksh.4404 recorded the previous month.
- When compared with the short term mean for the month the current price was above by 23.7 %.
- Similarly, when compared with the same period of a good year the current price was below by 5.2%.
- The reducing price trend was due to reducing body condition and increased supply leading to reduced demand.
- The price is expected to decrease further with the as long dry spell continues.
- Figure 12. Summarizes the trend in goats' prices

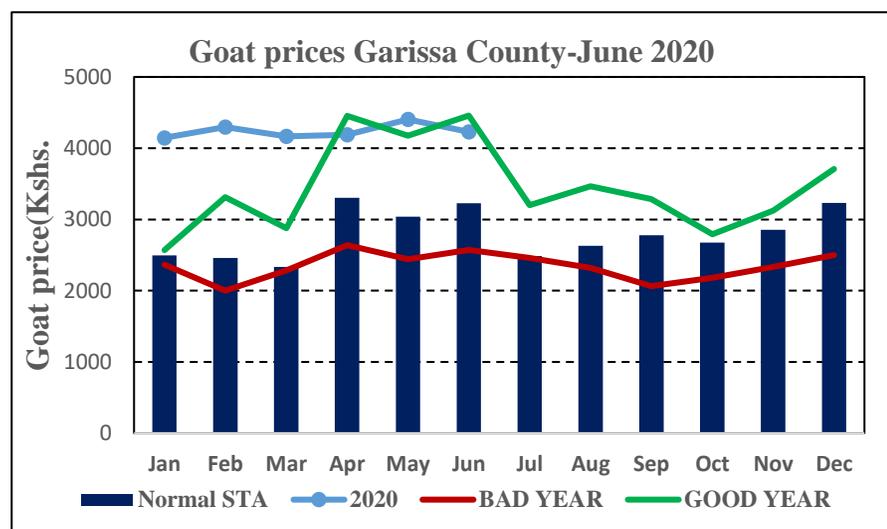


Fig12: Trend in goats' prices

4.2 CROP PRICES

4.2.1 Maize

- A kilogram of maize was traded at ksh.68 per kg for the month of June and remained stable when compared with the preceding month.

- The current price as compared to short term average for the month and the same period of a bad year was above 11.5% and 8.5 % respectively
- The trend was due to limited availability of maize grain stock in the local markets resulting from poor demand and availability of other staple cereals in the local market.
- Maize price is expected to remain stable till when others needs for the grains increases.
- The trend in maize prices in the county is displayed in the figure13.

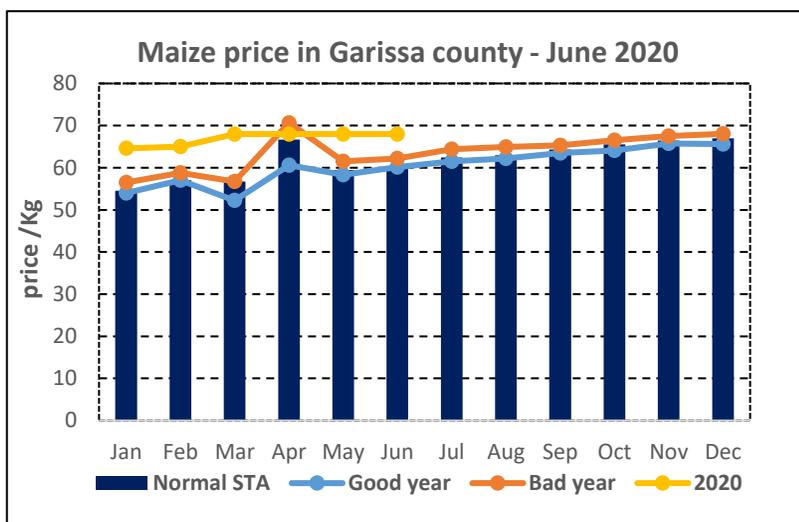


Fig 13: Trends of Maize grain prices

4.2.2 Sifted Maize Meal

- A kilogram of sifted maize flour was traded at Kshs100 per kg for the month and remained stable for the last six months across all livelihood zones.
- But when compared with the short term average for the month the current price was above by 15%
- Similarly, when compared with the same period of 2019 (bad year) the price remained the same.
- Sifted maize meal is key household commodity in all livelihood zones, the commodity is available in the local markets is expected to remain stable for a longer period.
- Figure 14. shows trend of sifted maize meal

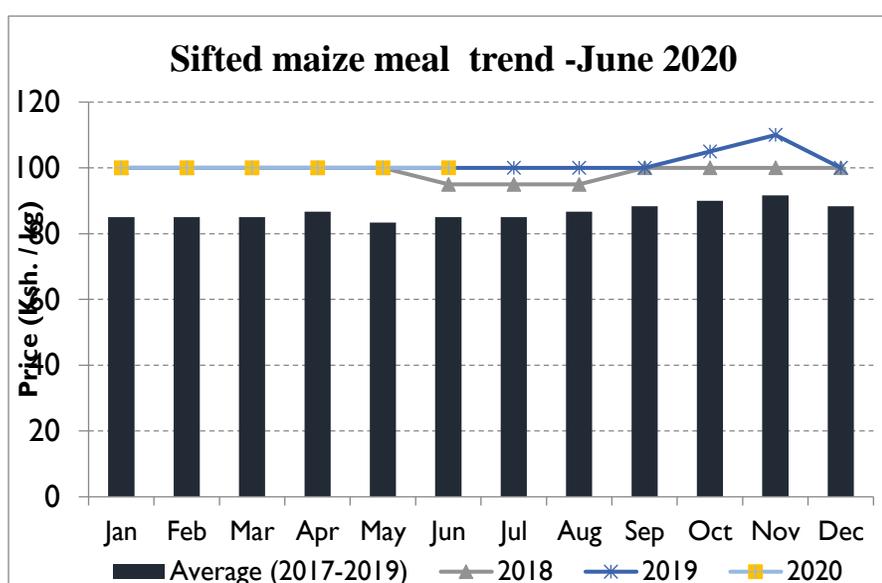


Fig 14: Trends of sifted maize meal prices

4.2.3 Livestock Price Ratio/Terms of Trade

- In the local markets the terms of Trade recorded was 62.19 kg of maize per goat sold in the month under review as compared to 64.70kg recorded the previous month.
- The current term of trade was below the same period of a good year by 18.9% but above the short term average by 37.8%.
- The trend was attributed to good goat's prices and stable maize grain prices in the local markets.
- The terms of trade are currently favourable for pastoralist, but it is expected to deteriorate as goat's price decline and maize prices remain stable.
- The graph shows the trend in term of trade

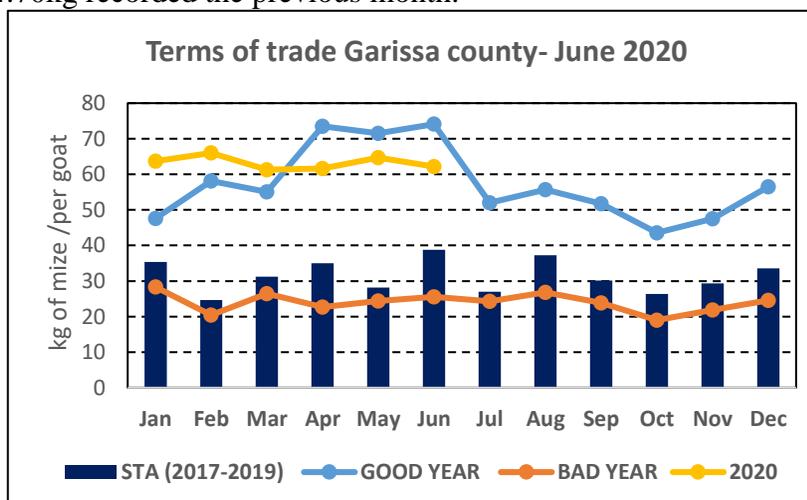


Fig 15: Trends of terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION SCORE

- The average milk consumption per household per day was 2.3litres in June 2020 and remained stable as compared to May 2020.

- Equally, when compared with the same period of a good year, the current household milk consumption was below by 6.54%
- In the same way, the current consumption was within the long term average for the month,
- Milk consumption was high in the agro pastoral livelihood zone.
- The trend in milk consumption is indicated in figure 16.

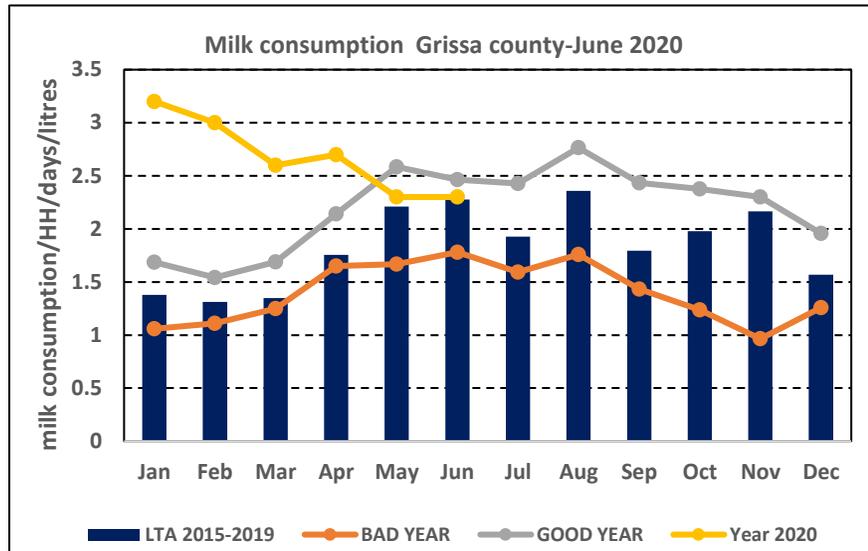


Fig 16: Trends of milk consumption 2016 -2018

5.2 FOOD CONSUMPTION SCORE

- The current proportion of households with poor food consumption score was at 10.2%.and reduced when compared with the previous month. food sources are purchased from the markets, the proportion of households with poor food consumption score was attributed to flooding, Low income and loss of labour.
- Households with poor food consumption were recorded in agro pastoral and pastoral all species livelihood zone.
- The proportion of households in the borderline and acceptable categories was 19.3% and 70.5% respectively.
- The food consumption score per livelihood zone and sub-county is shown in the graphs below

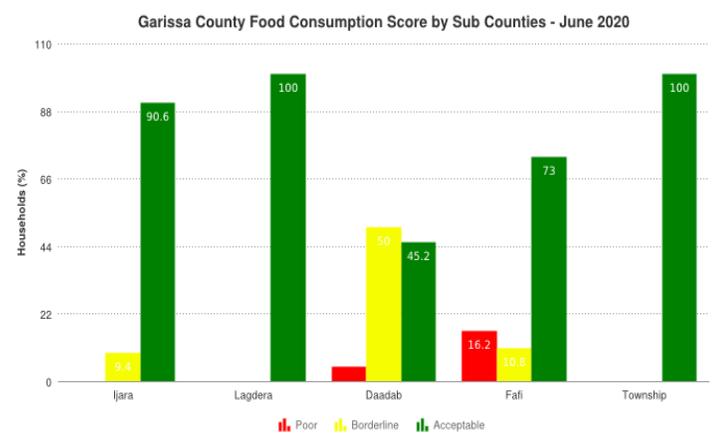
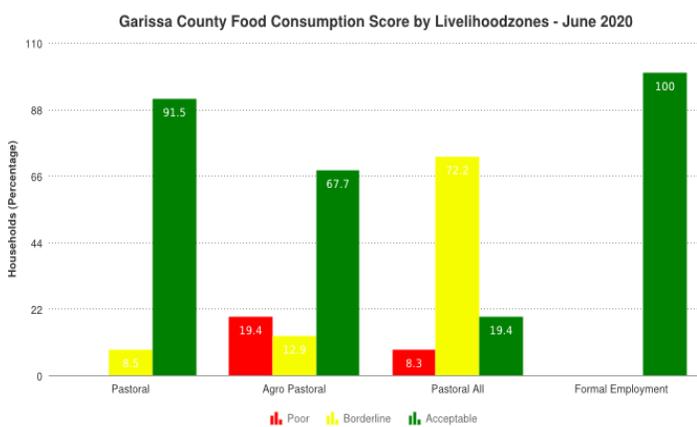


Fig 17&18: food consumption score by sub counties and livelihoods zones

5.3 HEALTH AND NUTRITION

5.3.1 Nutrition Status

- The proportion of sampled children under five years at risk of malnutrition was 8.36% for the month under review.

- The current at risk rates was below the normal long term average and the same month of a good and bad year by 34.2%,40.2% and 23.3% respectively.
- From April 2020 the trend in at risk to malnutrition was decreasing but it is expected to increase with expected upsurge of upper respiratory tract diseases resulting from prevailing windy dusty dry spell

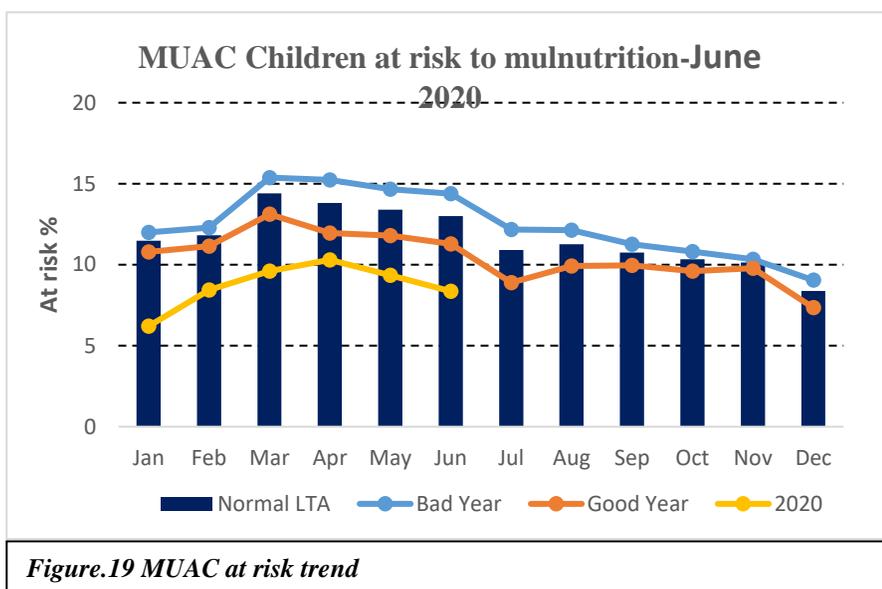


Figure.19 MUAC at risk trend

5.3.2 Health

- There was no outbreak of disease reported during the month.
- Upsurge of upper respiratory tract infection was reported in the all the livelihood zones
- Other disease incidences reported were, skin diseases, diarrhoea and urinary tract infection.
- In addition to the above, there are such non-communicable diseases as cancer, diabetes, and multi-drug resistance tuberculosis (MDR-TB) among others that are reported.

5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) was 7.0 for the month of June as compared to 7.36 reported the previous month.
- Households in formal employment/waged labour livelihood zone recorded the highest of 27.5. the trend was due to loss of labour due to the pandemic (corona) restrictions and destruction of farms by flooding.
- The coping strategies employed mostly by households in the month under review was Borrowed food, or relied on help from friends or relatives and relief food from government and other stakeholders.
- Figure.20: shows coping strategy index in different livelihood zones.

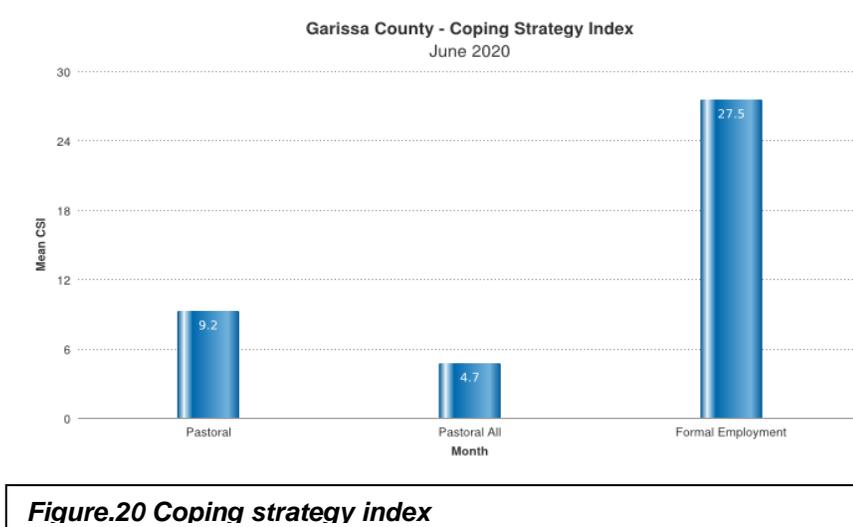


Figure.20 Coping strategy index

6. CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTION

Table 1 Non-food interventions

| Activity | Beneficiaries | Implementers |
|--|----------------------------|---|
| Distribution of assorted households items | Flood displaced households | Kenya red cross, county government |
| Drilling of boreholes | Libahlow | County government ,water |
| Locust surveillance and Spraying of tree locust | Dagahaley location | County government Agriculture |
| Capacity building of health workers and volunteers on covid 19 | 1100 | Kenya redcross, save the children |
| Training of youth on surveillance and scouting of locust | 30 youths | County government agriculture |
| Grants to farmers(common interest group) | 150 groups | Kenya climate smart agriculture |
| Training of groups on proposal development for grants | 100 groups | Agriculture sector support development. |
| Integrated management of acute malnutrition | Health facilities | Unicef and WFP |

6.2 FOOD AID

- food aid distribution to vulnerable and flood displaced households in the county was done by different stakeholders.
- Supplementary and therapeutic food for under-fives and lactating/pregnant mother distribution was done in the health facilities on need based.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

Conflicts over land resources and ownership was reported in areas of raya, attheyley within Garissa township sub county. Threats from extremist exist along the border with Somalia.

7.2 Migration

No migration was reported during the month

7.3 locust invasion

Tree locust invasion was reported in parts of dadaab sub county.

7.3 FOOD SECURITY PROGNOSIS

- With the onset of long windy dry spell rangeland resources (water and forage) are expect to reduce and will likely reduce livestock productivity. Milk production and livestock prices are expected to deteriorate till the next season.
- No crop harvest is expected in both the irrigated and rain fed areas.
- In the likelihood of locust invasion as forecasted it's highly probable that a certain proportion of the rangelands will be destroyed leading to faster depletion in the next three month affecting livestock production negatively.
- Livestock migration to dry period fall back areas is expected to occur in the month of September.
- The food security situation is expected to remain decline in the next three months.
- There are no flagged areas.

8. RECOMMENDATIONS

Table 2. Recommended interventions

| Sector | Sub County | Recommended Intervention |
|-------------|--|---|
| Livestock | Lagdera /Balambala/Dadaab /Fafi | Provide support for livestock vaccination and treatment |
| | Lagdera /Balambala/Dadaab /Fafi /Ijara | Capacity build communities on general livestock husbandry practices . |
| | Lagdera /Balambala/Dadaab /Fafi /Ijara | Support breed improvement for improved production and resistant to drought and diseases |
| Agriculture | Township/Balambala /fafi /Ijara | Capacity strengthening of the local communities on locust identification and reporting of the areas where eggs have laid, hoppers and adults sighted. |
| | Lagdera /Balambala/Dadaab /Fafi /Ijara | Extension support for rain fed farmers. |
| Health | Ijara//Lagdera/Hulugho/township | Upscale integrated management of acute malnutrition programme. |
| | Dadaab/Lagdera/Balambala/Ijara /Hulugho | Provide PPE to health care workers |
| | Township/Balambala /fafi /Ijara Dadaab/Lagdera | Start screening and Increase preparedness and sensitization for the COVID-19 pandemic |
| | All sub counties | Conduct countywide nutrition assessment to feed into the food security assessment. |
| | Township/Balambala /fafi /Ijara Dadaab/Lagdera | Support management of acute malnutrition and mass screening. |
| Water | Lagdera /Balambala/Dadaab /Fafi | Rehabilitate water infrastructures and systems |
| | Ijara//Lagdera/Hulugho/township/Dadaab | Provide water treatment chemicals to communities that are dependent on open water sources. |
| | Lagdera /Balambala/Dadaab /Fafi | Drilling of new boreholes |
| Security | dadaab /Ijara /Township /Hulugho/fafi | Conduct counter extremism/violence sensitization |

| | | |
|--------------|-------------------------------------|---|
| Education | Balambala/Lagdera/dadaab/fafi/ijara | Provide food and bursaries as schools reopen |
| Coordination | All sub-counties | Strengthen coordination through sectoral meetings (Twgs). |
| | Ijara /township/Balambala/Lagdera | Provide relief food and shelter to flood displaced households |