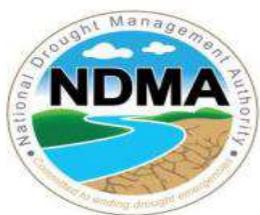


National Drought Management Authority

GARISSA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR DECEMBER 2021



A Vision 2030 Flagship Project



DECEMBER 2021 EWS PHASE

Drought Status: **ALARM**



Mipango ya kukabiliana na ukame

Biophysical Indicators

- Onset of the rains was in the 3rd dekad of November which was late as compared to normal .In the month of December an average of 42 mm of rainfall was received against a long term average 50mm.
- The distribution was poor in terms of time and space, the northern parts of the county remained dry during the month.
- The 3-monthVCI of 17.45 was in severe vegetation deficit conditions and reduced as compared to the previous month
- Lagdera sub county was in the extreme vegetation deficit category with a score of 9.09
- The condition of pasture and browse slightly improved in the southern and south-eastern parts of the county and remained depleted in northern parts (Balambala and Lagdera subcounties), pasture and browse remain below the seasonal levels due to poor performance of the short rains season so far
- Livestock trekking distances to water sources reduced but was above the long term average.
- Household trekking distances reduced and were below the long term average for the month

Socio Economic Indicators (Impact Indicators)

- Livestock body conditions slightly improved for all species due to regeneration of pasture and browse. Cattle are in very poor to poor body condition Sheep, goats and camels as well have poor to fair body conditions in most parts of the county
- Average milk production per household per day was 1.45 litres, which remained the same as compared to previous month but was below by 21 percent the same period of a bad years.
- The average milk consumption improve but was below the long term average by 30 percent.
- Market prices for all livestock species was below the normal ranges due to depressed markets and very poor body condition.
- The terms of trade were 27.6 which was below the long term average of 33.6
- The mean coping strategy index (CSI) was 12.4 for the month against a long term average of 11.2
- Proportion of children below five years at risk of malnutrition was 13.4 percent which was above the long term mean by 308 percent.
- The mean food consumption score was 28 which was below the long term average of 39.4

Early Warning Phase Classification

Livelihood Zone	Phase	Trend
Agro-pastoral	Alarm	Improving
Pastoral cattle/sheep	Alarm	Improving
Pastoral-all species	Alarm	Improving
County	Alarm	Improving
Biophysical Indicators	Value	Normal Range/Value
Rainfall amount	42mm	50 mm
VCI-3Month	17.45	45
Forage condition	Poor	Fair
Production indicators	Value	Normal
Livestock Body Condition	4-5	2
Milk Production	1.45 litres	2.3 litres
Livestock Migration Pattern	Out-migration reported	No migration
Livestock deaths (from drought)	2 percent	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	27.6	33.6
Milk Consumption	1.1 litres	1.57 litres
Return grazing distance to water sources in km	16.9km	14.0km
Cost of water at source (20 litres)	Kshs 10	<5Kshs
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	13.4	8.38
Coping Strategy Index (CSI)	15.4	11.2
Food Consumption Score(mean)	28	39.4

<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

- Onset of the rains was in the 3rd dekad of November which was late as compared to normal .In the month of December an average of 42 mm of rainfall was received against a long term average 50mm.
- The distribution was poor in terms of time and space, the northern parts of the county remained dry during the month.
- The cessation was on the 3rd dekad of December which was late compared to normal of 1st dekad of the month.
- The temperatures ranged between 24.6 C⁰ - 31.4 C⁰ which was slightly above the normal ranges.

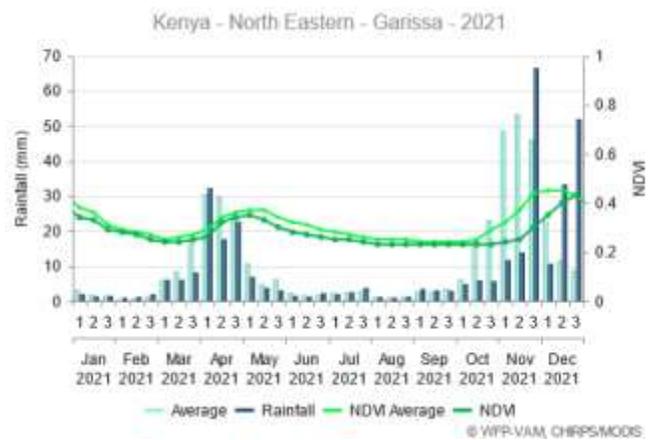
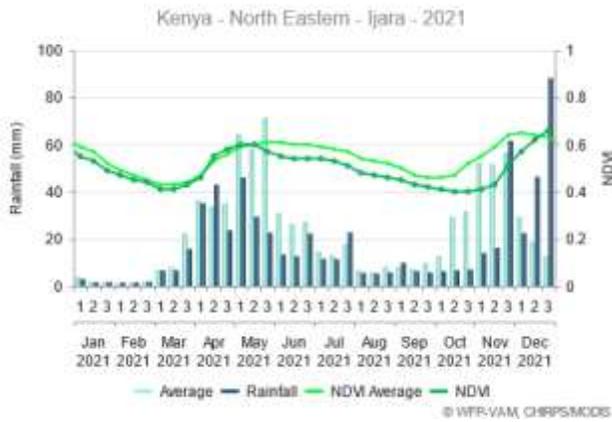


Figure 1: Rainfall and NDVI

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The 3-month VCI of 17.45 was in severe vegetation deficit conditions and reduced as compared to the previous month
- Lagdera sub county was in the extreme vegetation deficit category with a score of 9.09
- All other sub counties were classified in the severe vegetation deficit band and the situation except ijara Sub County which recorded moderate vegetation deficit.
- Current 3-month VCI was below the long term mean by 59 percent and similarly was below the base year 2017 by 50 percent.

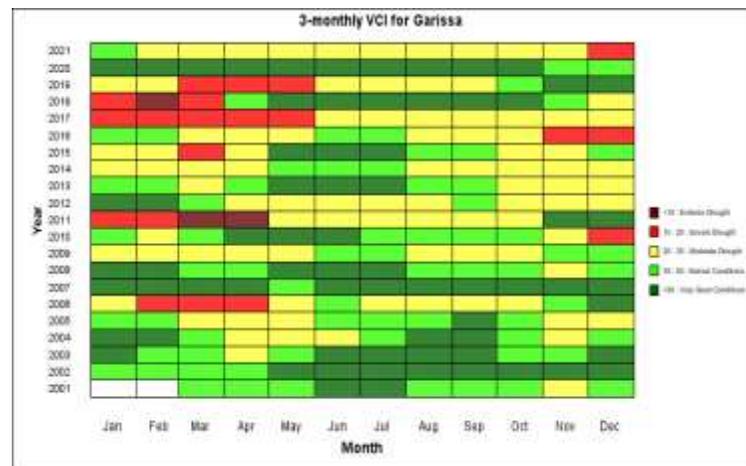
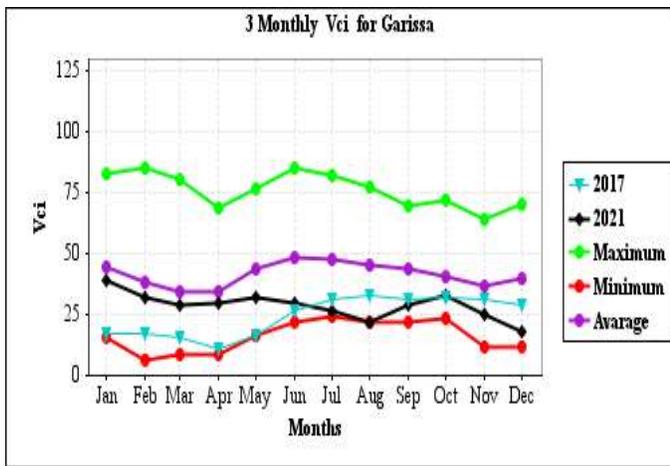


Figure 2: VCI graph and matrix

2.1.2 Pasture and browse condition

- The condition of pasture and browse slightly improved in the southern and south-eastern parts of the county and remained depleted in northern parts (Balambala and Lagdera subcounties), pasture and browse remain below the seasonal levels due to poor performance of the short rains season so far.
- Pasture and browse condition is expected to improve as the season extends and the likelihood of off season received during the month of January.

2.2 WATER RESOURCE

2.2.1 Sources

- Main sources of water currently are boreholes, water-pans and shallow wells
- As a result of continued rains during the month 20 percent of all water pans in the county recharged
- It is expected that more water pans will recharge as the season continues during the month of December.

2.2.2 Household access and Utilization

- The average return distances from households to water sources was 6.4 km and reduced as compared to the previous month. This is attributed to the performance of the short rains season which increased water availability and accessibility.
- The current distance was below the long term mean for the month by 28 percent but was above the same period of good years 18 percent.
- The average water consumption per household per day was 15 liters in pastoral livelihood zones and 20 liters for households in the agro-pastoral livelihood zone against a normal of 25 to 30 liters/household per day.

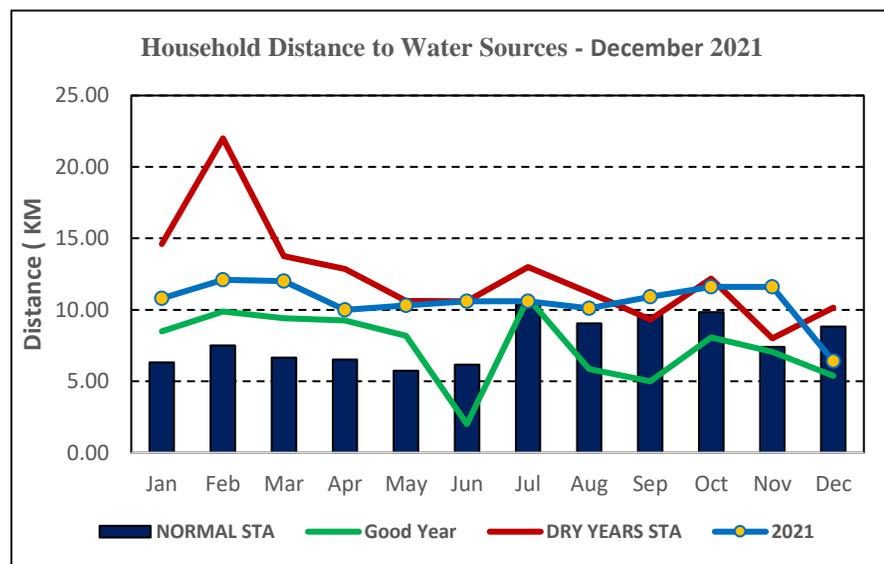


Figure 3: Household return distance to water sources

2.2.3 Livestock access

- The average return trekking distance from grazing areas to water sources was 16.9km and reduced as compared to the previous month.
- The current trekking distance was above the long term mean by 48 percent and was similarly above the same period of wet years by 56 percent
- The condition was attributed to late onset of the short rains season and poor performance reported both in time and space
- Livestock watering frequencies was daily for all livestock species.
- The waiting time for water in pastoral and agro pastoral livelihood zones reduced though there is heavy livestock concentration in areas that received rains

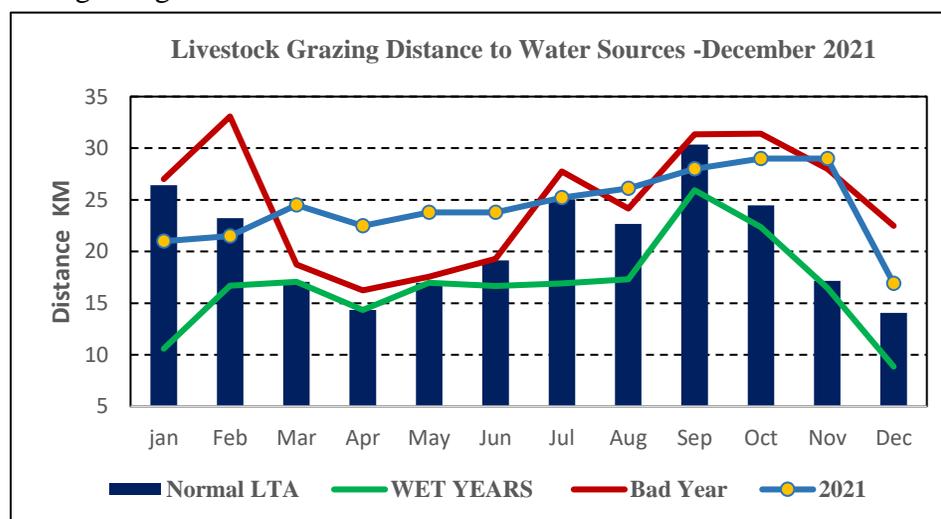


Figure 4: Livestock return distances to water sources

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body conditions slightly improved for all species due to regeneration of pasture and browse. Cattle are in very poor to poor body condition Sheep, goats and camels as well have poor to fair body conditions in most parts of the county.
- The improving trend in livestock body condition was attributed to improving pasture and browse condition in the rangelands.

3.1.2 Livestock Diseases

- Livestock disease incidences reported was endemic anaplasmosis, babesiosis, contagious caprine pleuropneumonia and other metabolic diseases.
- With Poor performance of the short rains season the morbidity rates are likely to increase in the current high livestock concentration.

3.1.3 Milk Production

- Cows remain the main producers, average milk production per household per day was 1.45 litres and slightly improved as compared to previous month but was below by 21 percent the same period of a bad years and similarly was below the long term average for the month by 23 percent.
- The low milk production levels is attributed to slow recovery of livestock from the drought and livestock concentrations in the rangelands away from homes.
- The cost of milk was Kshs 70 and Kshs. 90 in agro pastoral and pastoral livelihood zones respectively.

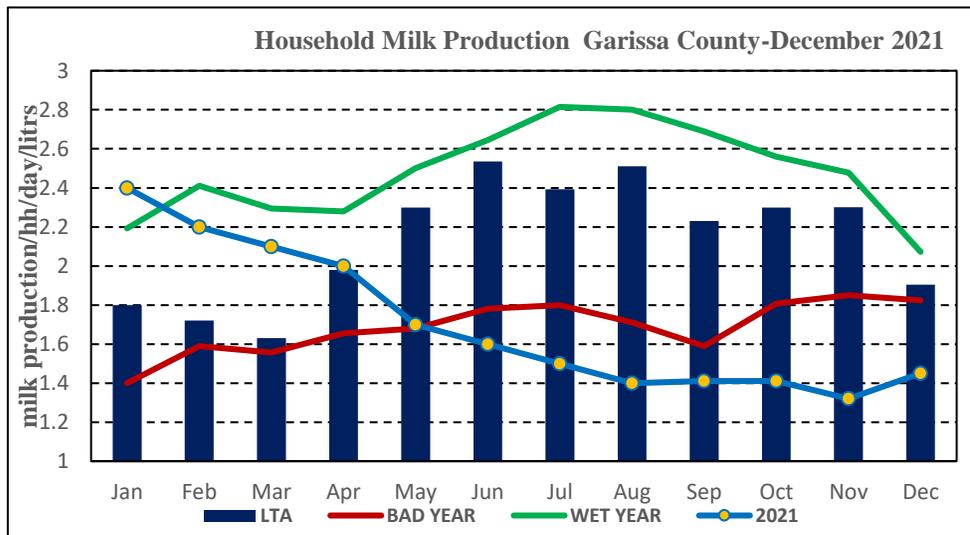


Figure 5: Current milk production against long term averages

3.1 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- The three main crops grown under rain fed production include maize, cowpeas and green grams
- No farming activities reported during the month,

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- The average market price of a 4-year medium sized bull was kshs: 13450 as compared with Kshs. 13600 recorded in the month of November in the local markets.
- The current selling prices were 24 percent less than the wet years' prices of Kshs. 17500 and similarly 6 percent less than the short term average prices
- The markets price in pastoral livelihood zone recorded the highest price of Kshs 15500 while Kshs. 11300 was recorded in agro pastoral livelihood zones.
- Generally markets are depressed and volumes of cattle traded in the livestock markets slightly increased as compared with the previous month.

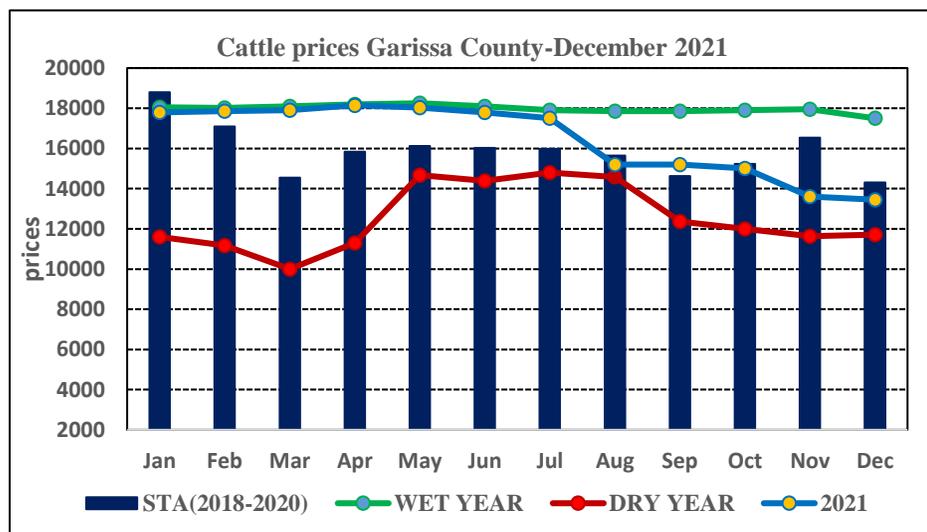


Figure 6: Current cattle prices

4.1.2 Small Ruminants Prices (Goats)

- The average trading price of a medium-sized goat slightly Kshs 2350 this reporting month.
- The current goat prices were below the short term average and the same period of a bad year by 18 and 5 percent respectively.
- The trend was due to poor body condition presented by goats and depressed markets coupled with poor demand of traders resulting from poor performance of the ongoing short rains seasons
- The prices are expected to improve as goats body condition improve and as market start functioning normally.

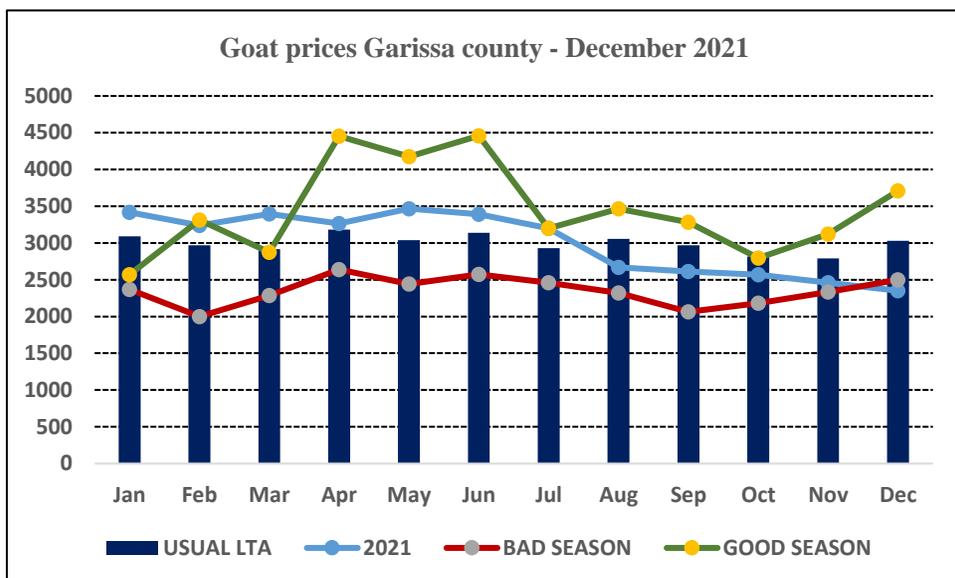
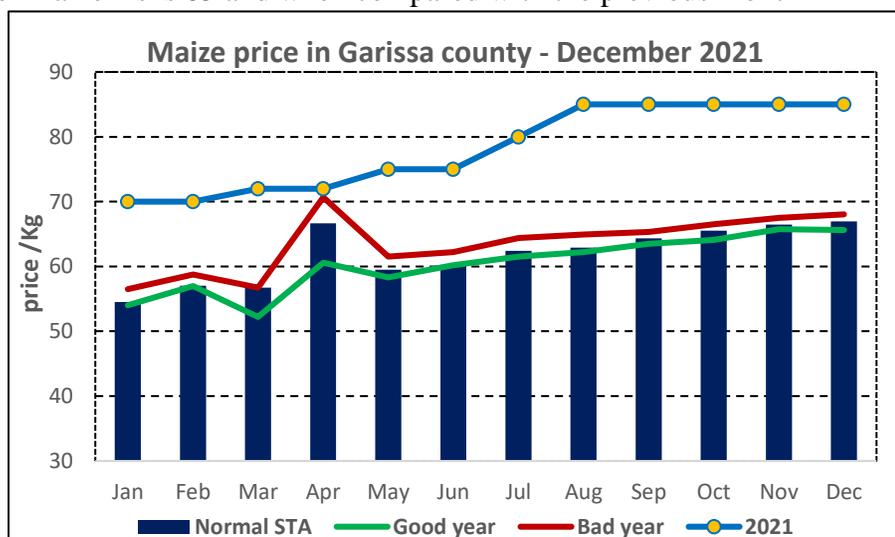


Figure 7: Trend in goat prices

4.2 CROP PRICES

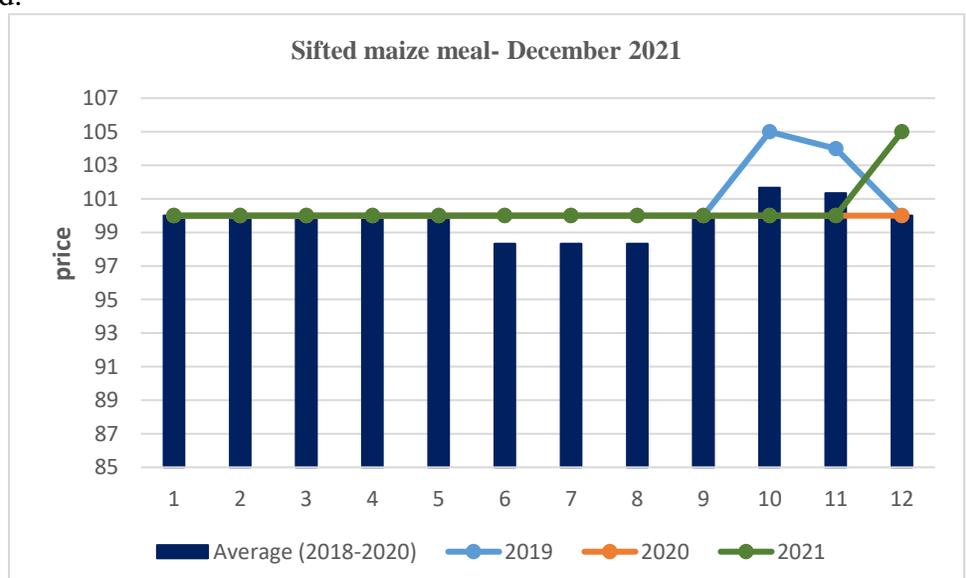
4.2.1 Maize

- The average maize price of a kilogram of maize Kshs 85 and when compared with the previous month the price remained the same.
- The high maize price was due to continued use of the product as livestock supplementary feeds.
- The current price was 4 percent below the normal short term average price for the month.
- The agro pastoral livelihood zone reported the lowest price of Ksh.80 per kilogram and highest at Ksh. 90 in pastoral livelihood zones.
- The price is expected to drop as the demand reduces with the continuity of the long rains season.



4.2.2 Sifted Maize Meal

- The average selling price of a kilogram of sifted maize flour was Kshs 105 as compared to the previous month the price slightly increased.
- The price was above the short term average by 5 percent. This was due to limited supply of the product to the markets
- The highest prices were recorded at pastoral livelihood zones at Kshs. 115 and lowest at agro-pastoral zones at Kshs. 95
- It is expected that the price will remain stable for long until when cost of production and transportation cost changes.



4.2.3 Terms of Trade (Goat prices vs Maize prices)

Figure 9: Sifted maize meal trend

- The terms of trade was 27.6kg of maize for the sale of a goat and when compared with the previous month the current terms of trade slightly decreased
- The terms of trade was 18 percent below the short term average price for the month implying communities employing depressed purchase powers in accessing basic essential food stuffs
- The terms of trade is expected to improve with the expected improve in goats body condition .This negative trend may continue till the long rains performance improve and regeneration of pasture and browse is realised that will likely improve livestock market operations.
- The current terms of trade was within the same period of bad years.

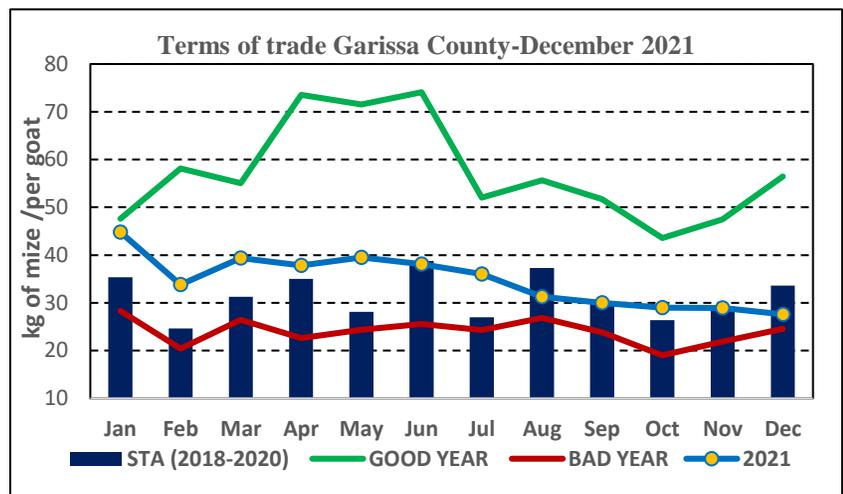


Figure 10: Terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- The average household milk consumption was 1.1 liters and as compared to the previous month the consumption slightly improved.
- The average milk consumption was below the long term average and the same period of bad years by 30 and 13 percent respectively.
- Milk consumption trend was due to poor milk production recorded during the month
- Households continue to depend on powdered milk from the markets which are expensive.

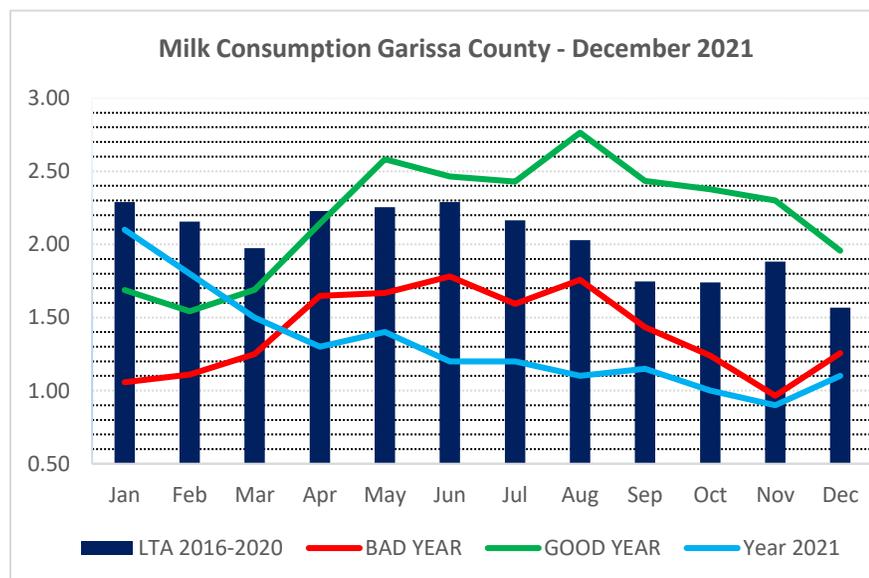


Figure 11: Milk consumption trend

5.2 FOOD CONSUMPTION SCORE

- The proportion of households categorized as having poor, borderline and acceptable food consumption scores was 9percent, 35 percent and 56 percent respectively.
- 16.4,9.1, 6 and 2 percent of households in, pastoral, formal employment ,agro pastoral and pastoral all species livelihood zones respectively had households with poor food consumption score.
- Households were consuming at least staples and vegetables every day, accompanied by oil and pulses a few days per week.
- The mean food consumption score for the month was of 28

5.3

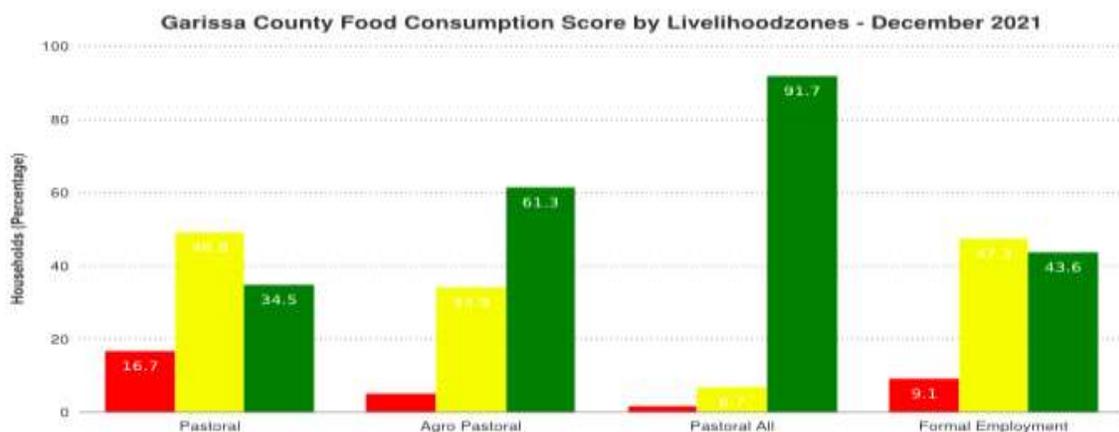
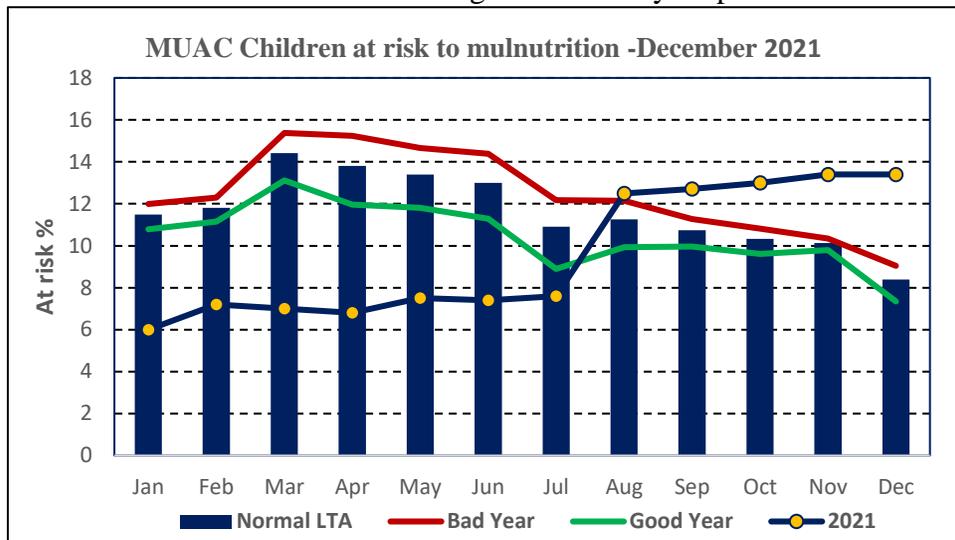


Figure 12: Food consumption score

5.4 HEALTH AND NUTRITION

5.3.1 Nutrition Status

- The proportion of children at risk of malnutrition based on MUAC was 13.4 percent and remained stable when compared with the previous month. But was above the normal long term mean by 38 percent.
- The proportion of moderately malnourished of children 6-59 month slightly reduced to 4.1 percent based on family MUAC.
- The current at risk rates was above the same period of a bad years by 33 percent.
- The poor nutritional status of the under-fives is attributed to poor milk consumption and poor dietary diversity and upsurge of child related illness.
- The number of meals consumed in the pastoral and agro pastoral livelihood zone remained 1-2 meals per day that was not normal at this time of the



Health

- There is upsurge of Upper Respiratory Tract Infection (URTI) and diarrhea reported among under-fives in the county.
- Other diseases reported were metabolic disease resulting from low uptake of nutrients and water quality related such as scabies and typhoid.
- Cases of Covid-19 infections continue to be reported in the county.

5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) for the month was 12.4 and when compared with the previous month the mean csi reduced.
- Formal employment/waged labour livelihood zone recorded the highest CSI at 29 while pastoral livelihood zone recorded the lowest at 5
- Households in all livelihood zone employed reduced number of meals eaten per day and reliance on less preferred or less expensive food and borrowing from friend and relatives.

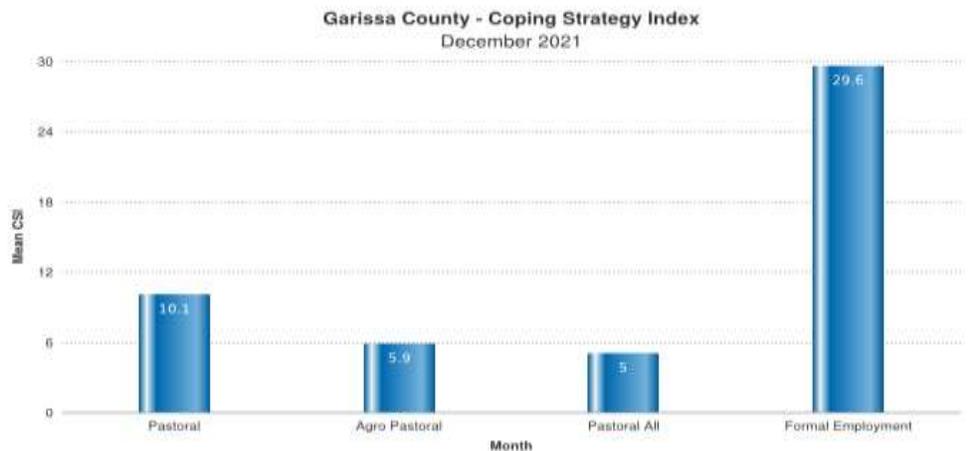


Figure 14: Coping strategy index

6. CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTION

Table 1 Non-food interventions

Activity	No. of Beneficiaries	Implementers
Unconditional and regular Cash transfers to Vulnerable Households,	4500 households	Save the children ,PGI, Islamic relief ,KRCS
Registration of households for hunger safety net programme	Dadaab, Lebisigale and parts of Damajale wards	NDMA

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- No resource-based conflicts were reported during the month, however terror related threats continued to be experienced in areas bordering the Republic of Somalia resulting to limited livelihood activities.

7.2 Migration

No outmigration was reported during the month, however most of the livestock that have migrated earlier remain outside the county.

7.3 FOOD SECURITY PROGNOSIS

- Rangelands resources are expected to improve as the season continues. This is in turn expected to improve livestock body condition and production.
- Households with poor food consumption score are expected to reduce with the likely improvement in milk production and increased livestock prices improving the purchasing powers of pastoral communities.
- Communities and households are expected to employ less coping mechanisms as the season progress.

8. RECOMMENDATIONS

Table 2. Recommended interventions

Sector	Sub County	Recommended Intervention
Livestock	All sub-counties	Rangeland reseeding
	All sub-counties	Upscale of livestock insurance programme
	Fafi ,Township and Balambala	Large scale fodder production in riverine areas
Agriculture	Balambala, Township, Fafi and Ijara	Provision of assorted certified seeds
	Balambala, Township, Fafi and Ijara	Support expansion of area under irrigation
	All sub counties	Provide relief food and cash transfers to affected households
Health	All sub-counties	Provision of water treatment chemicals to areas prone to water borne diseases
	All sub-counties	Scale up integrated health and nutritional outreaches
Water	Lagdera, Balambala, Dadaab and Fafi	Repair and maintenance of strategic boreholes
Coordination	All sub counties	Update contingency plan