National Drought Management Authority

GARISSA COUNTY

DROUGHT EARLY WARNING BULLETIN FOR DECEMBER 2019

A Vision 2030 Flagship Project

DECEMBER 2019 EWS PHASE

Drought Situation & EW Phase Classification

Biophysical Indicators

- Moderate to heavy rainfall was received in most parts of the county during the month.
- The average 3-month vegetation condition index (VCI) increased from 37.3 to 63. 11 indicating very good vci condition.
- The state of water sources was normal in the month under review

Socio Economic Indicators (Impact Indicators)

- All sampled communities reported good livestock body condition
- The term of trade for the month was 57 kg of maize per goat sold which indicate favourable purchasing power.
- The average livestock return distance to water sources was 7km for the reporting period.
- The mid at risk levels for children under five years was 12.2 %

Early Warning Phase Classification

velihood Zone	Phase	Trend
gro-pastoral	Normal	Improving
storal cattle/sheep	Normal	Improving
storal-all species	Normal	Improving
unty	Normal	Improving
ophysical dicators	value	Normal Range/Value
infall (% of Normal)		18.2
I-3Month	63.11	39
rage condition	Good	Good
oduction indicators	Value	Normal
vestock Body ndition	Good	Moderate
lk Production	3.6 litres	1.7 litres
vestock Migration ttern	No-migration	Normal
vestock deaths (from ought)	No death	No death
cess Indicators	Value	Normal
rms of Trade (ToT)	57	>66
lk Consumption	3.1 litres	1.5 litres
turn grazing stance to water urces in km	7km	23km
st of water at source litres)	Kshs 5	<5Kshs
ilization indicators	Value	Normal
trition Status, UAC (% at risk of	12.2	19.1

▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ migrations ▪ Land preparation	▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase ▪ Breeding period	▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks ▪ Kidding (Sept) ▪ Migrations ▪ Herd separations	▪ Short rains ▪ Planting/weeding ▪ High birth rates ▪ Wedding

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- The short rain season which started in the first dekad of October continued into the month of December 2019.
- Moderate to heavy rainfall was received across the county.
- The rains were evenly distributed in time and space

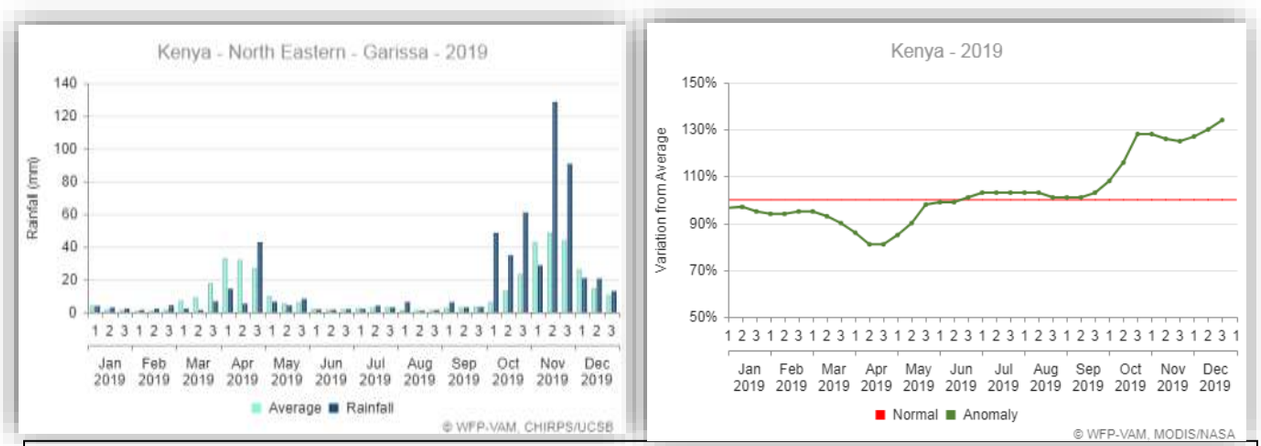

Figure.1a&b. Garissa rainfall and rainfall anomaly

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1. 1 Vegetation Condition Index (VCI)

The vegetation condition index is shown in the table below:

Sub-county	**3Month**
Garissa Balambala	63.11
Garissa Dadaab	57.85
Garissa Fafi	75.85
Garissa Ijara	83.06
Garissa Lagdera	55.32
Garissa Township	72.52
Garissa county average	**69.73**

- The average 3-month VCI for the county increased from 37.3 to 69.73 which indicates very good VCI condition.
- All the sub counties are in very good VCI condition above 50 and on improving trend.
- Ijara sub county has the highest VCI condition of 83.06.
- When compared with the previous month the VCI improved and is expected to improve further.
- The trend in VCI is shown in the graph and matrix below:

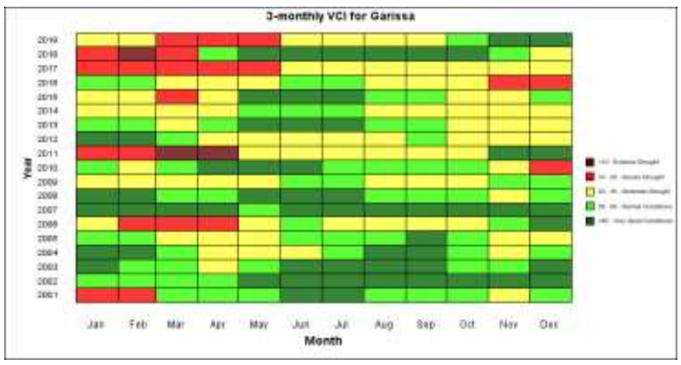

Figure 2 and 3: Garissa 3-month VCI matrix and Fafi sub county 3-month VCI

2.1.2 Pasture condition

- 100% of households sampled reported good pasture condition
- The quality and quantity of pasture greatly improved when compared with the previous month
- The remarkable improvement was attributed to the positive impact of the short rains season
- The trend was observed across all the livelihoods
- The pie-chart below illustrates the pasture condition in the county:

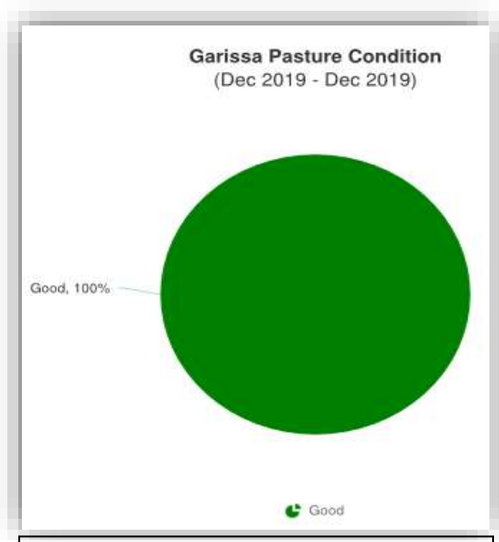

Figure 4. Pasture condition

2.1.3 Browse

- 100% of sampled households reported good browse condition
- When compared with the previous month the quantity and quality of browse condition improved.
- The positive trend was attributed to the impact of the short rains received
- The pie-chart below summarises the current browse condition in the county:

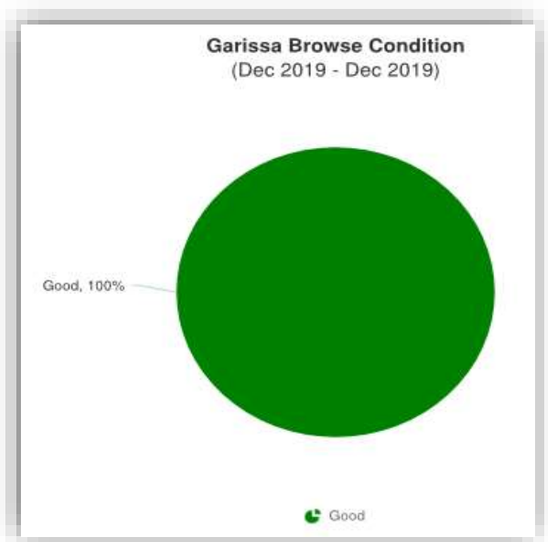

Figure 5 Browse condition

2.2 WATER RESOURCE

2.2.1 Sources

- The current main water sources are pans/dams, boreholes, shallow wells, natural ponds and River Tana.
- All water pans/dams and natural ponds have recharged substantial volumes of water during this short rain season.
- The graph below provides an illustration of the various water sources:

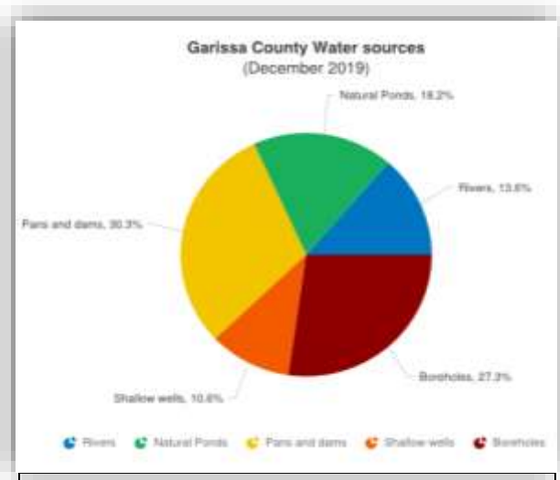

Figure 6. water sources

2.2.2 Household access and Utilization

- The average households' return distances to water sources decreased from 7km to 4.2 km
- When compared with the previous month the distance reduced by 40%
- The positive trend was attributed to the impact of the short rains that recharged water pans/dams and natural ponds with adequate water.
- The return distance is however 33% above the long term average distance for the month.

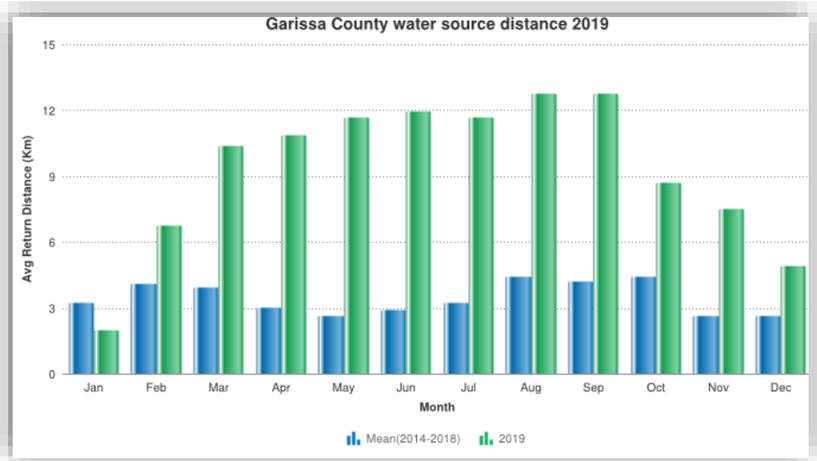

Figure 7 Households' return distance to water sources

2.2.3 Livestock access

- The average trekking distance from the main water sources to grazing areas reduced from 18km to 7km in the month under review
- When compared with the previous month the trekking distance reduced by 61%
- The positive trend was attributed to increased water sources and availability of adequate forage within the rangeland.
- The current trekking distance was below the long term mean distance by 42%
- The watering interval for all species increased and on need based within a day.
- The trend in the county grazing distances is shown in the graph.

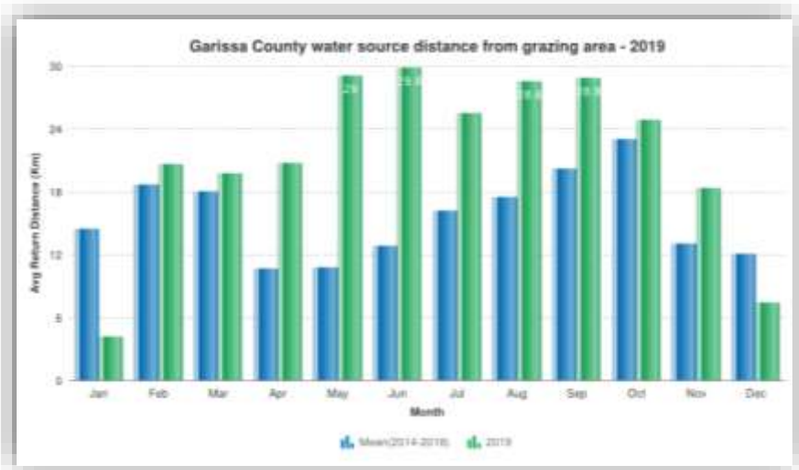

Figure8. Return distance from grazing areas to water sources

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- 100% of the sampled communities reported good livestock body condition with a score of 1
- When compared with the preceding month livestock body condition improved
- The positive trend was attributed to improved forage and availability of water following the short rains received

- The early warning classification for the livestock body condition is 1, very good smooth with fat over back and tail, and will likely continue to improve with forage regeneration enhanced short rains season.

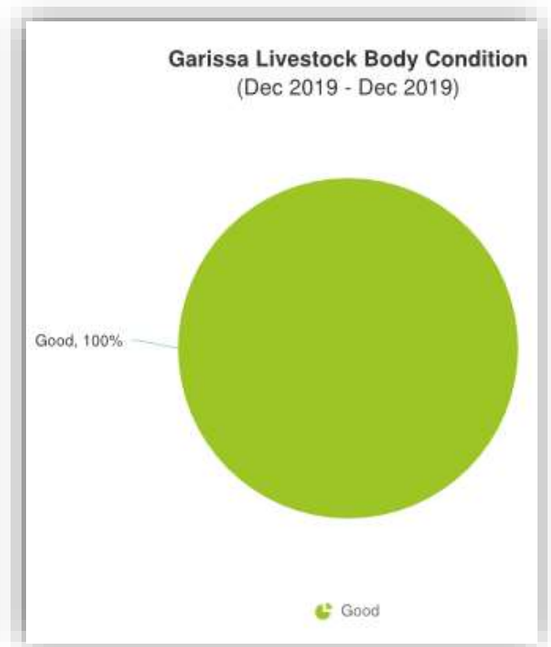

Figure9.Livestock body condition

The table below shows the classification of body condition for livestock:

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

- There was no livestock disease outbreak reported in the county in the month under review
- However, there were suspected cases of PPR diseases reported in parts of Lagdera and Balambala sub counties
- Common contagious caprine pleuropneumonia was reported across the county.
- An upsurge of vectors was reported in All the livelihoods.

3.1.3 Milk Production

- The average household milk production for the month under review increased from 3.4 litres to 3.6 litres
- When compared with the preceding month the production increased by 6%
- The positive trend was attributed to improved livestock body condition because of good forage
- The current milk production level is 50% more than the long-term mean.
- Camel and cattle were the main producers of milk in the entire county.
- The market price of one litre of milk was ksh60 and reduced from kshs80

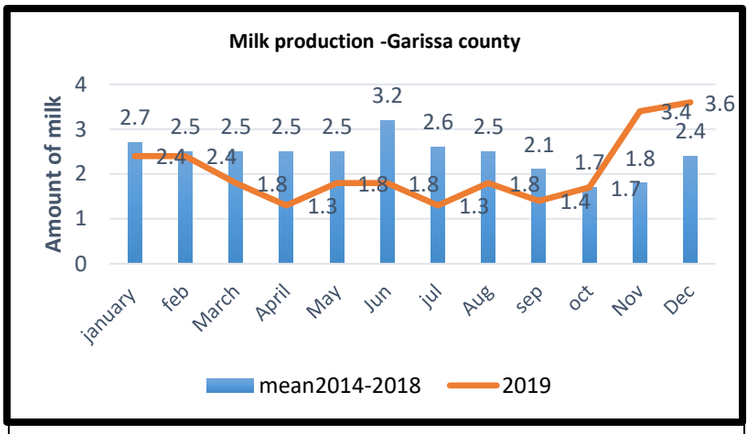

Fig.10: trend in milk production

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Planting was done and some of the crop are at knee height

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- The average price of a four-year old bull increased from Kshs 15800 to 16,080 in the month under review
- The price when compared with the previous month increased by 2%.
- The trend was attributed to improved livestock body condition occasioned by good pasture following the short rains received
- The current price is 19% higher than the long-term average
- The pastoral livelihood zone recorded the highest price of kshs19,200

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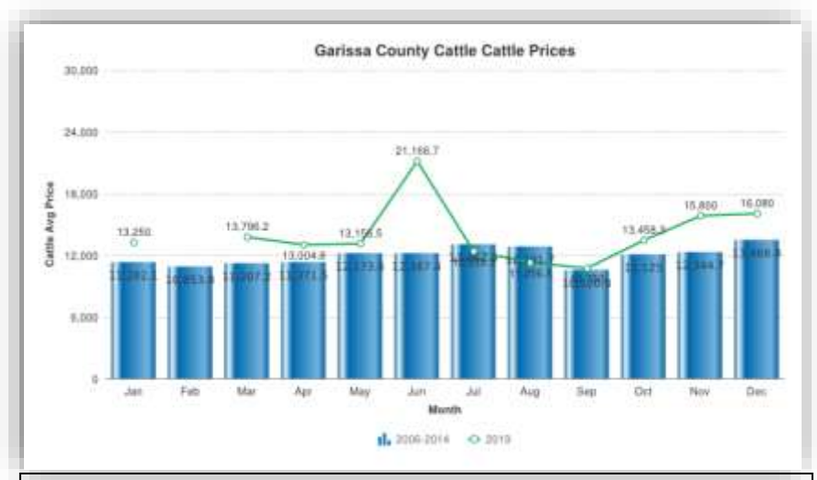
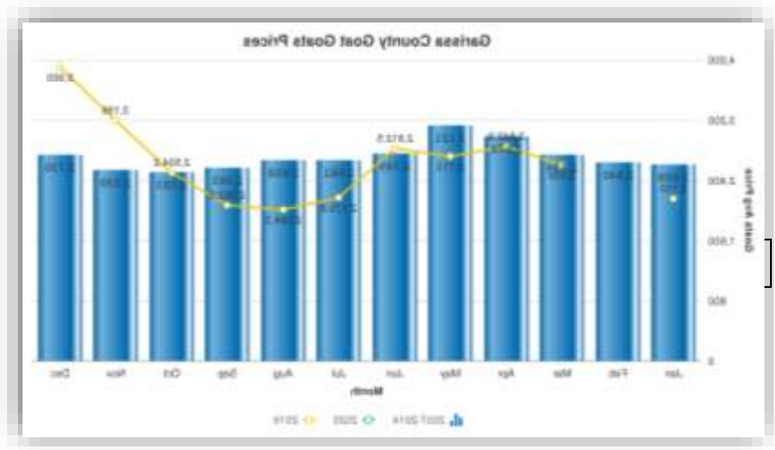


Figure11.Trend of cattle prices

4.1.2 Small Ruminants Prices (Goats)

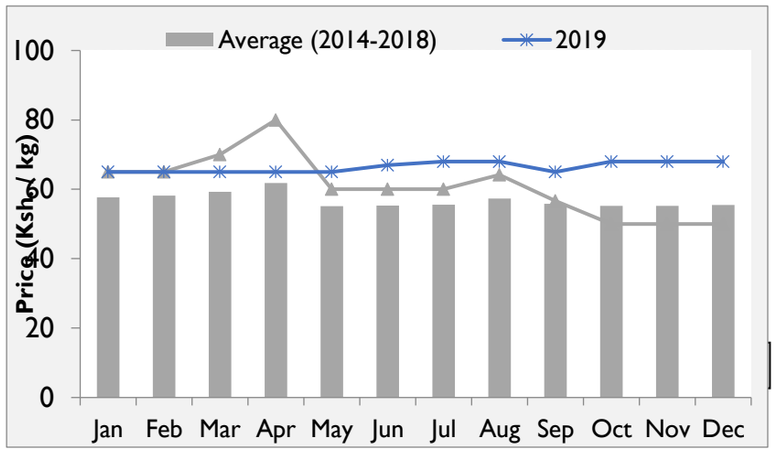
- The average price of 2-year old medium size goat increased from Kshs 3196 to Kshs 3900 in the month under review.
- When compared with the previous month the price increased by 22%.
  - The increased goat's price was attributed to improved body condition occasioned by quality forage availability and accessibility following the short rains received
  - The Agro pastoral livelihood zone reported the highest price of Kshs 3750



4.2 CROP PRICES

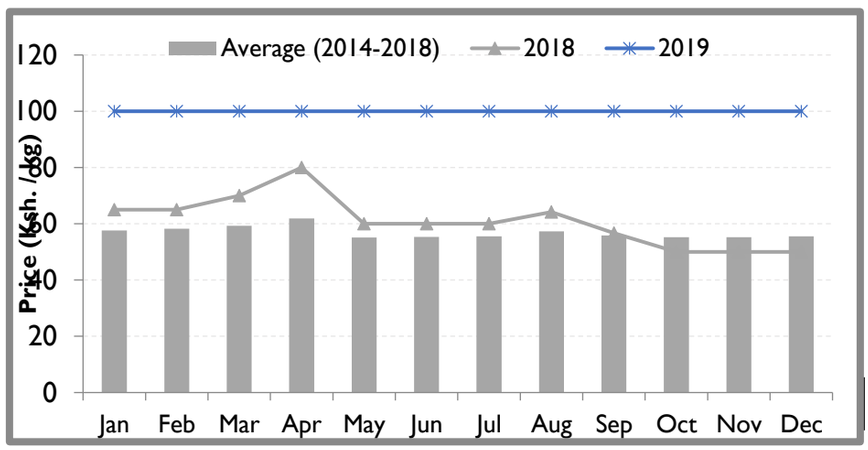
4.2.1 Maize

- The average market price of a kilogram of maize was Kshs. 68 similar to the previous month.
- The price when compared with the previous month remained the same.
- The current price was above the long term mean by 36%
- The trend in maize prices in the county is displayed in the graph



4.2.2 Sifted Maize Meal

- The average price of sifted maize flour was stable at Kshs100 per kg, the same as the previous month.
- The current sifted maize average price was extremely higher than the long-term mean prices recorded at Kshs 50per kg
- The price increase was attributed to general inflation and poor road network that compelled traders to hike the price of the commodity



4.2.3 Livestock Price Ratio/Terms of Trade

- The terms of trade increased from 49kg to 57kg of maize per goat sold.
- When compared with the previous month the price increased by 16%.
- The improved terms of trade were attributed to increased goats' prices because of good body condition
- The positive trend had favoured the purchasing power of pastoralist
- The current terms of trade were above the long term average by 19%

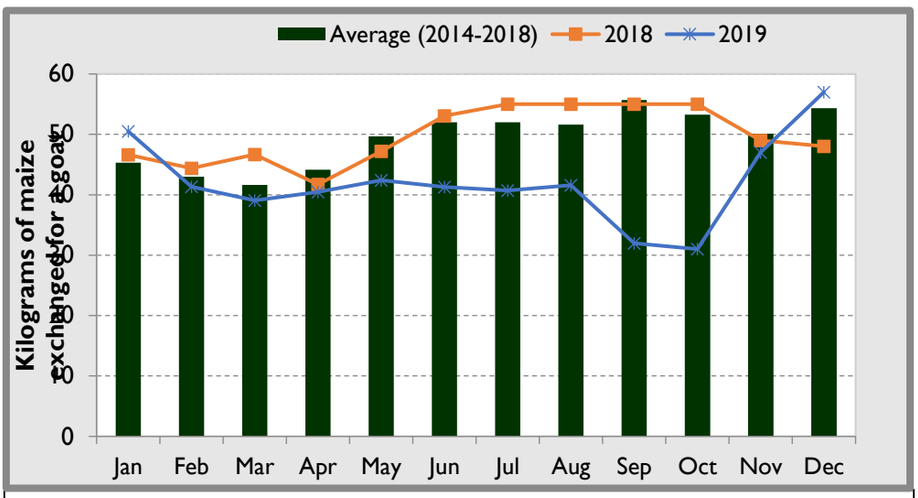


Fig 15: Trends of terms of trade 2016 -2018

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION SCORE

- The average household milk consumption in the month under review increased from 3 litres to 3.1 litres
- Milk consumption increased by 3.3% when compared with the preceding month
- The current household milk consumption was 63% more than the long-term mean.
- The rise in milk consumption is attributed to increased milk production as a result of availability of pasture.

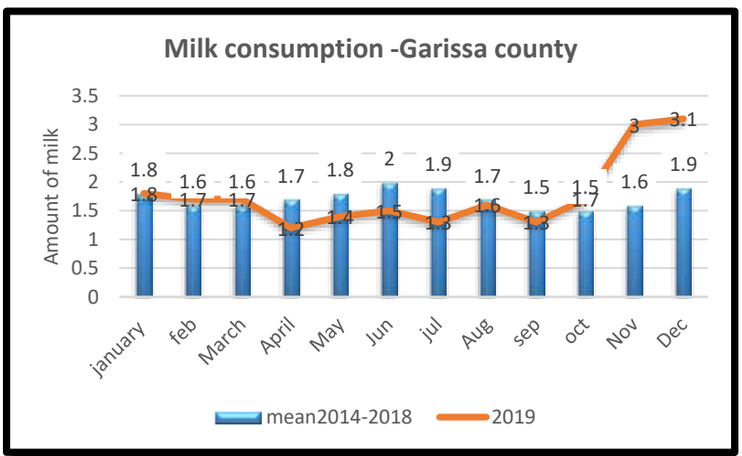
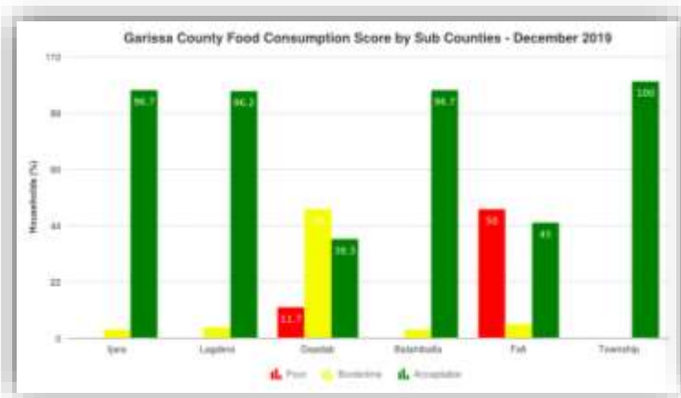


Fig 16: Trends of milk consumption 2016 -2018

5.2 FOOD CONSUMPTION SCORE

- The proportion of households with poor food consumption score was stable at 15 %.
- The proportion of households in the borderline and acceptable categories were 15% and 70% respectively which indicated the same as previous month
- The pastoral all livelihood zone recorded the highest households with poor food consumption category.
- The food consumption score per livelihood zone and sub-county is shown in the graphs below:



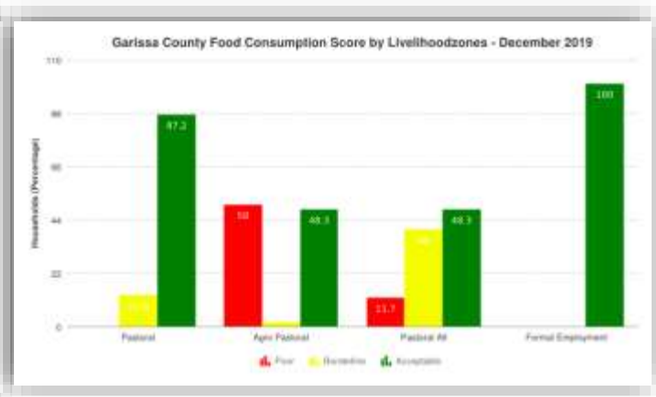
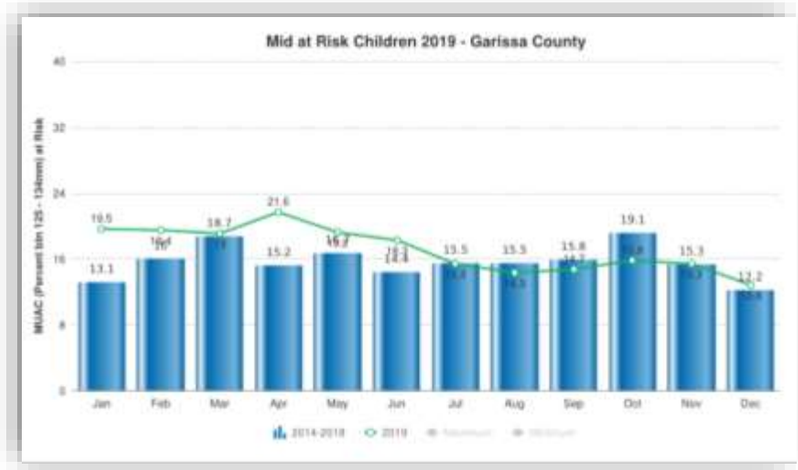


Fig 17&18: food consumption score by sub counties and livelihoods zones

5.3 HEALTH AND NUTRITION

5.3.1 Nutrition Status

- The proportion of children below five years of age at risk of malnutrition based on the MUAC measurement decreased from 15.6% to 12.2%
- When compared with previous month the malnutrition at risk level decreased by 22%
- . The improved malnutrition status of children under five years was due to availability of milk and interventions undertaken by stakeholders to address food insecurity among vulnerable households.
- The proportion at risk was lower than the long-term average by 4.7%



5.3.2 Health

- There was confirmed cholera outbreak in Dertu town in Dadaab sub county in the reporting month where four people died
- Other common diseases reported during the month were increased cases of upper respiratory tract infection and pneumonia.

5.4 COPING STRATEGIES INDEX

- The mean coping strategy index (CSI) for the month was 9.7
- When compared with the previous month the coping strategy index remained the same.
- The mean coping strategy for
- county was within the normal ranges
- Formal /waged labour livelihood zone reported the highest of 31 while pastoral All species employed lowest copy strategy of 2.5
- The coping strategies employed mostly by households in the month under review was borrowing of credit.

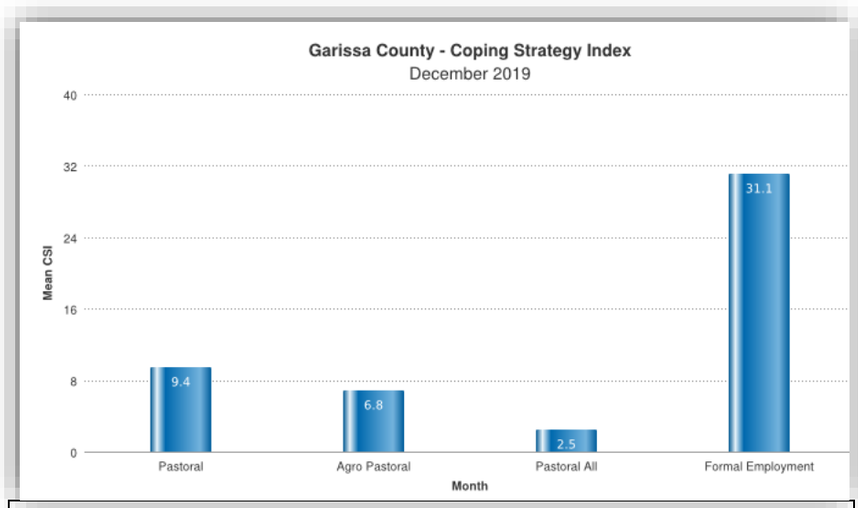


Figure.20 Coping strategy index

- The indices at livelihood zone level are shown in the graph:

6. CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTION

Table 1 Non-food interventions

Activity	Beneficiaries	Implementers
Distribution of non-food item	7,286cattle .	KRCS/CG
Distribution of water treatment chemicals	60 hots pots	HEALTH/SAVE THE CHILDREN

6.2 FOOD AID

- Food distribution to households affected by floods by Kenya red cross, County government and other partners
- Provision of supplementary feeding programme for the management of malnutrition in the health facilities targeting 1380 children.
- GOK food aid distribution to vulnerable households in the county.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

Displacement of households from floods along tan river was reported, households are camping in schools and open higher grounds

7.2 Migration

No migration was reported during the month

7.3 FOOD SECURITY PROGNOSIS

- The short rains received impacted positively on forage, water sources and livestock body condition
- Major water pans/dams and natural water ponds recharged substantial volumes of that is expected to last for three months
- The quantity and quality of forage condition tremendously improved and expected to sustain the livestock farmers up to the next long rains season
- The livestock body condition, production and market is anticipated to register further improvement because of good forage
- No migration is expected during the next month as the performance of short rains is normal / above.

8. RECOMMENDATIONS

Table 2. Recommended interventions

Sector	**Sub County**	**Recommended Intervention**
Livestock	Lagdera /Balambala/Dadaab /Fafi	Support fodder production and conservation along river Tana
	Lagdera /Balambala/Dadaab /Fafi /Ijara	Support rangeland management and activate rangeland committees
	Lagdera /Balambala/Dadaab /Fafi /Ijara	Support breed improvement and herd multiplication
Agriculture	Township/Balambala /fafi /Ijara	Undertake food distribution to flood affected households
	Lagdera /Balambala/Dadaab /Fafi /Ijara	Support rain fed farmers with seeds and equipment's
Health	Ijara//Lagdera/Hulugho/township	Provide water treatment chemicals
	Dadaab/Lagdera/Balambala/Ijara /Hulugho	Upscale Integrated disease surveillance and outreach services

Water	Lagdera /Balambala/Dadaab /Fafi	Support rainwater harvesting in public facilities and individual homes
	Ijara//Lagdera/Hulugho/township/Dadaab	Capacity build water users association on managements
Security	Lagdera /Ijara /Township	Conduct peace and conflict resolution meetings in mapped hot spots
Education	Balambala/Lagdera/dadaab/fafi/ijara	Rehabilitate schools damaged by floods and flood victims
Coordination	All sub-counties	Increase frequency of sub county steering group meetings.
	Ijara /township/Balambala/Lagdera	Undertake flood assessment and support flood victims