National Drought Management Authority
GARISSA COUNTY
DROUGHT EARLY WARNING BULLETIN FOR APRIL 2019

NDMA
National Drought Management Authority

A Vision 2030 Flagship Project

KENYA VISION 2030

APRIL   EW PHASE

Drought Situation & EW Phase Classification
Biophysical Indicators

- The expected onset of the long rains season delayed and there was no rainfall reported during the month
- The average greenness for the county as per the vegetation condition index for 3 months increased from 18.34 to 19.07 of severe vegetation deficit category
- Dadaab subcounty is in extreme vegetation deficit category of 9.95 .\
- Lagdera ,Township,Balambala and fafi Sub counties are in severe vegetation deficit
- Ijara sub county is in normal vegetation greeness with improving trend.
- The current water sources are river, boreholes and few water pans.

Socio Economic Indicators (Impact Indicators)

- 75% of sampled communities reported poor livestock body condition with a score of 4 while 7.4% reported fair body condition and 17.9% reported good body condition.
- The terms of trade for the month was 40.6 kg of maize per goat sold, when compared with the previous month the terms of trade slightly increased.
- The average livestock return distance to water sources was remained the same at 22km.
- The mid at risk levels for under five years' children were 21.7% and increased when compared with the previous month.
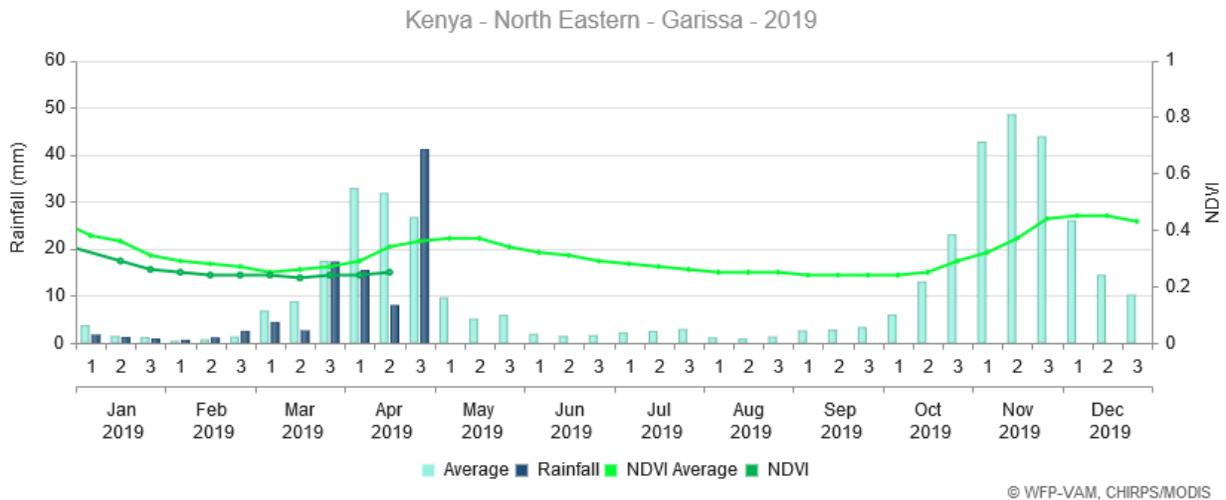
Early Warning Phase Classification

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 (% of Normal)	Nil	80 -120
VCI-3Month	19.07	>35
Forage condition	poor	Good
Production indicators	**Value**	**Normal**
Livestock Body Condition	3-4	1
Milk Production	1.4	2.5litres
Livestock Migration Pattern	There was livestock migration	Normal
Livestock deaths (from drought)	No death	No death
Access Indicators	**Value**	**Normal**
Terms of Trade (ToT)	40.6	>66
Milk Consumption	1.2	2.5 litres
Return distance to water sources	22	<5 Km
Cost of water at source (20 litres)	5	<5Kshs
Utilization indicators	**Value**	**Normal**
Nutrition Status, MUAC (% at risk of malnutrition)	21.7	<13.4
Coping Strategy Index (CSI)	13.83	<20
Food Consumption Score		

- 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 long rains seasons started on the first decad of the month. The onset was late as the start of the season was expected on the 3rd decad of march.
- The amount of rainfall received during the month was between 8- 40mm.
- the areas that received above normal rainfall was Benane and Danyere in the north and Ijara in the southern parts of the county.
- The number of rainy days reported were six scattered within the month
- Hailstorm was reported in Masalani that destroyed several houses and institutions
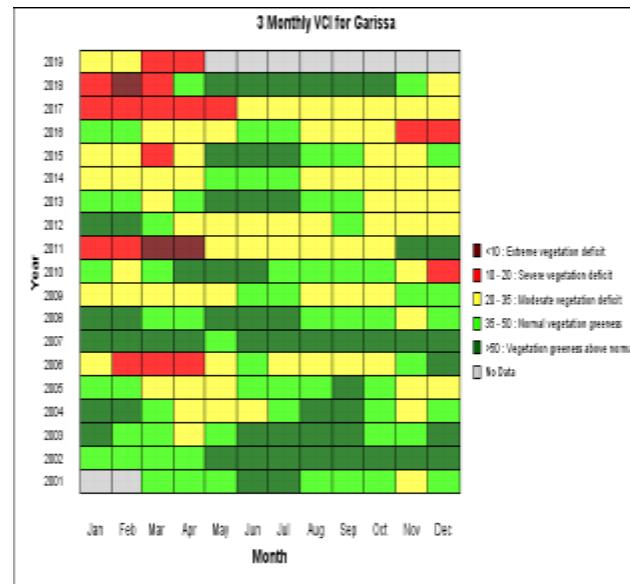

Kenya - North Eastern - Garissa - 2019

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2.   IMPACTS ON VEGETATION AND WATER
2.1 VEGETATION CONDITION
2.1. 1 Vegetation Condition Index (VCI)

- The average greenness for the county as per the vegetation condition index for 3 months slightly increased from 18.34 to 19.07 of severe vegetation deficit category.
- Dadaab subcounty is in extreme vegetation deficit
- Lagdera ,Township,Balambala and Fafi Sub counties are in severe vegetation deficit
- Ijara sub county is in normal vegetation greeness but improving trend.
- When compared with the previous year the vegetation condition index was in the same level but on improving trend.
- Except fafi and ijara subcounty   that have shown improving trend the other subcounties are decreasing trend.The table indicates 3months vegetation condition index for all the sub counties
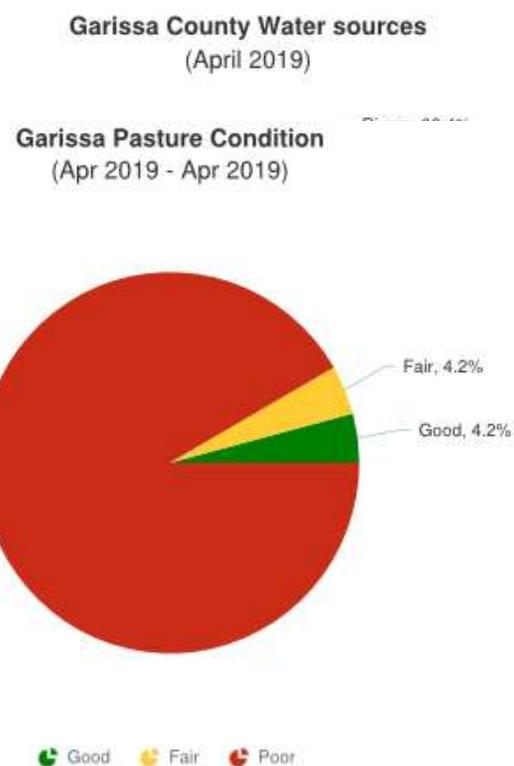

Table1:3 months VCI value

Sub county	Jan_28_VCI3M
County Average	19.07
Balambala	15.86
Dadaab	9.95
fafi	15.22
Ijara	38.87
Lagdera	16.48
Township	14.38

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2.1.2 Pasture condition

- 91.7 % of the sampled communities reported poor pasture condition,4.2% reported fair pasture condition and 4.2% reported good pasture condition.
- The pasture condition slightly improved when compared with the previous month in parts of pastoral livelihood zones.
- The trend was attributed to some rains received during the month the southern parts.
- The current pasture condition is expected to improve further as the long rains is continuing in parts of the county. However, if the long rains season cession comes early the pasture condition is expected to reduce and may be able to support livestock production.

Garissa County Water sources
(April 2019)

Garissa Pasture Condition
(Apr 2019 - Apr 2019)
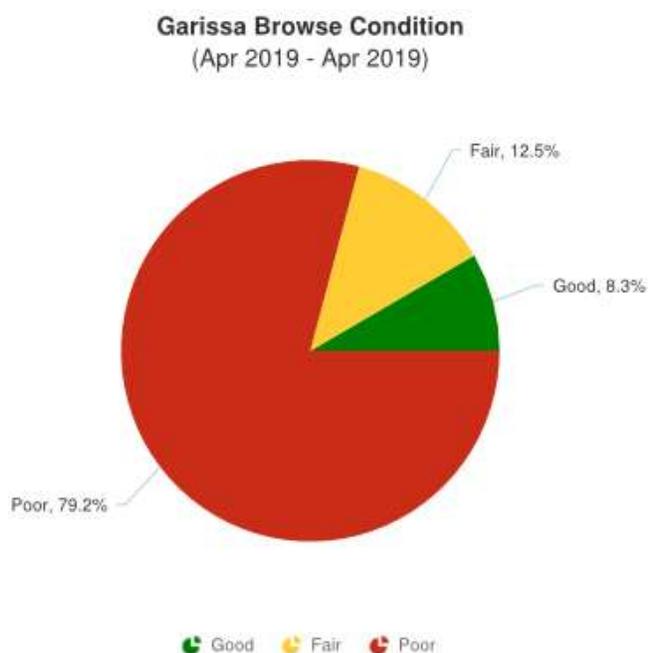
Fair, 4.2%
Good, 4.2%
Poor, 91.7%

● Good ● Fair ● Poor

Fig. 2. Pasture condition

2.1.3 Browse

- 79.2% of sampled communities reported poor browse condition,12.5% reported fair browse condition and 8.3% reported good browse condition.
- The browse condition slightly improved in quality and quantity in the southern parts of the county and few areas that borders the kora national park.
- The trend was due to some rains received in parts of the county during the m month.
- The browse condition is expected to improve further if the long rains season distribution improves and its cession will be late.
- Pastoral All species livelihood zone is yet to recover from the drought condition.

Garissa Browse Condition
(Apr 2019 - Apr 2019)

Fair, 12.5%
Good, 8.3%
Poor, 79.2%

● Good ● Fair ● Poor

Fig. 3. Browse condition
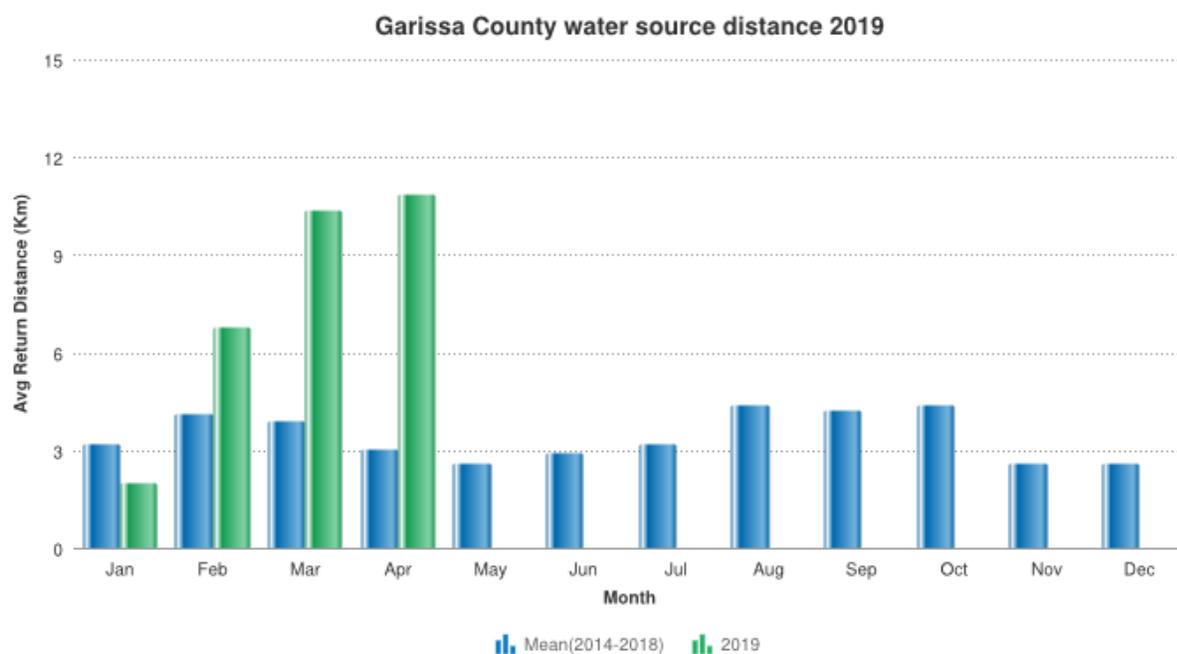
2.2   WATER RESOURCE

2.2.1   Sources

- The current water sources are river, boreholes and pans/ dams.
- Higher percentage of households and livestock are dependent on boreholes and rivers which are the permanent water sources in the county
- The number of water with water improved when compared with the previous month.

2.2.2 Household access and   Utilization
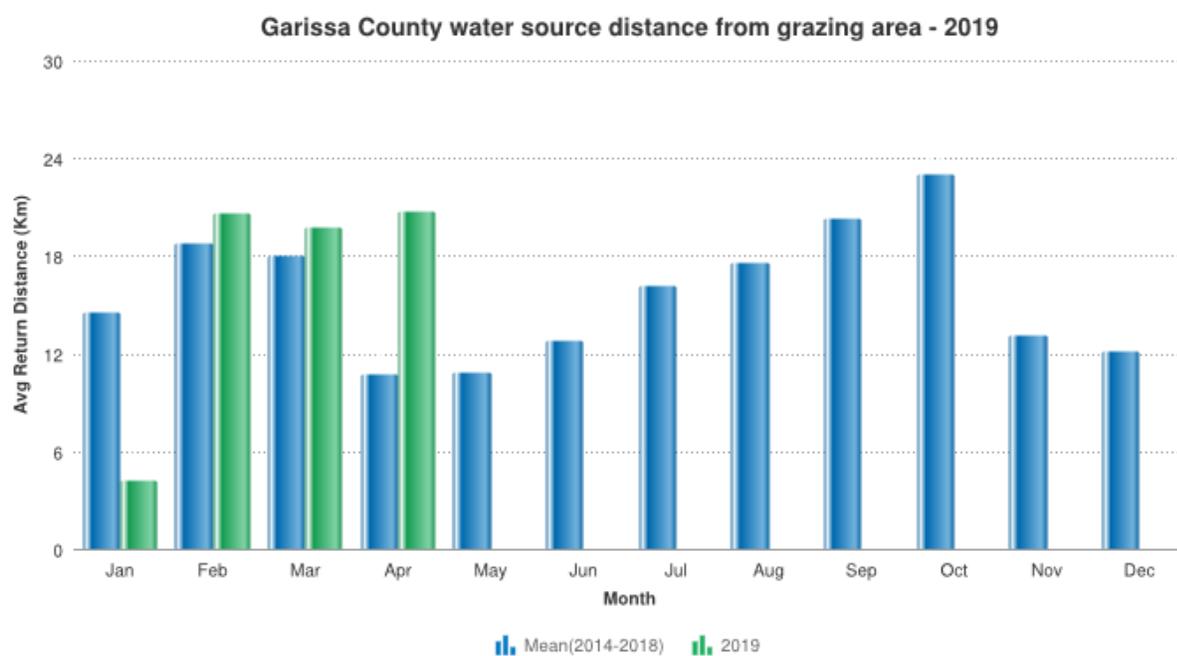
- The average return distances from household to water sources was 11km.
- The current distance when compared with the previous month increased by 10%
- The current distance is above the long term average by 69 % which is attributed to late onset and poor performance of the long rains season.
- The water distance by sub county, Dadaab sub county recorded the highest distance of 16km while ijara recorded the lowest at 5km.

Fig 5: Distance to water sources February 2019

2.2.3 Livestock access

Fig 6: Water source distance from grazing area, February 2019

- The average livestock return distance to water sources was 22km
- When compared with the previous month the distance slightly increased.
- The trend was attributed to poor distribution and late onset of the long rains season.
- The current trekking distance was above the long term average recorded by 50%
- The trekking distance by sub county, Lagdera sub county recorded the highest distance of 38.7km while ijara sub county recorded the lowest of 7.5km

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3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- 75% of sampled communities reported poor livestock body condition with a score of 4,7.1% reported fair livestock body condition with a score of 3 and 17.9% reported good body condition.
- The good body condition is an indication of a moderate with a score of 2.
- The slightly improving trend was attributed to improving forage condition due to ongoing long rains season.
- Communities reported camels are mainly the livestock in good body condition in all the livelihood zones.
- The livestock body condition is expected to continue improving but due to poor performance of the long rains so far that did not impacted well on the forage condition, the situation may remain the same or get worse.
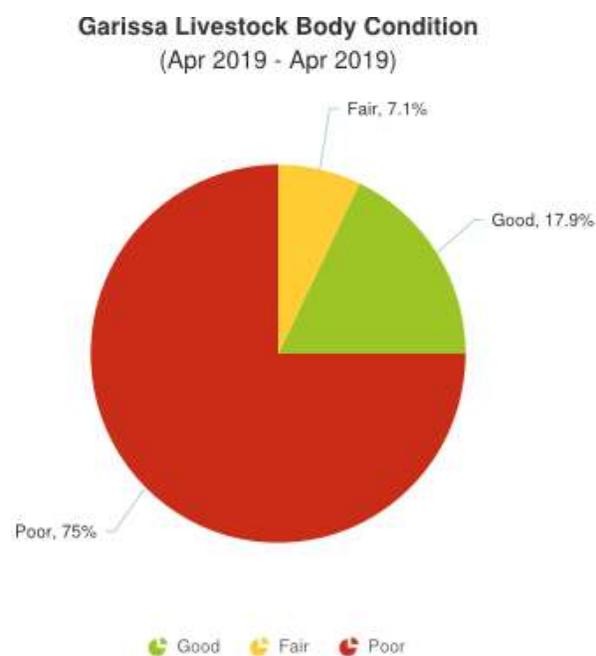

Fig.7. Livestock body condition
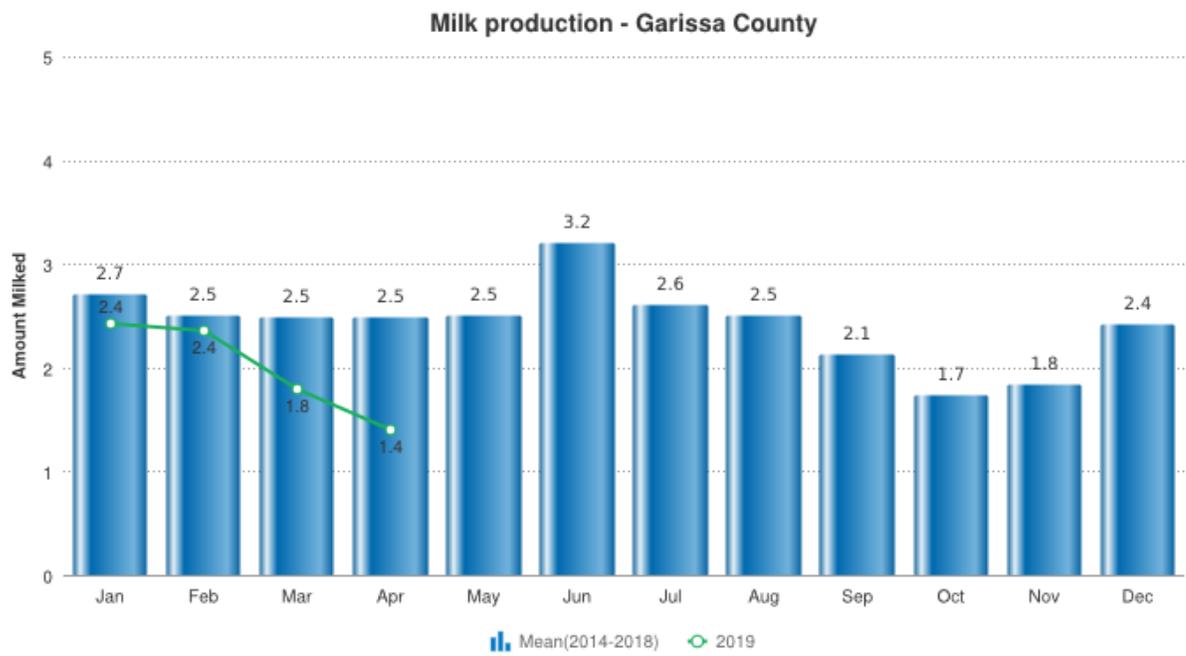
Below is a table indicating the classification levels.

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 during the month. But trypanosomiasis in camel was reported in parts of fafi sub county.

3.1.3 Milk Production

- The average household milk production recorded was 1.4litres
- The current production when compared with the previous month the production levels reduced by 22.3%.
- The main producers of the milk for the month were camel and cattle
- The deteriorating trend was attributed to low forage availability and high trekking distances to water sources. Most of the lactating herds has been drying and new calving /kidding expected for all categories of livestock in the month May.
- The current milk production is below the long term average recorded by 44%
- The Agro pastoral livelihood zone recorded the highest production of 2.5 litres while pastoral All species, recorded the lowest production of 1.2litres
- The milk market price of 750ml bottle increased and was trading at Ksh100.

Fig 8: Trends of average milk production per households for Garissa County

3.2 RAIN-FED CROP PRODUCTION
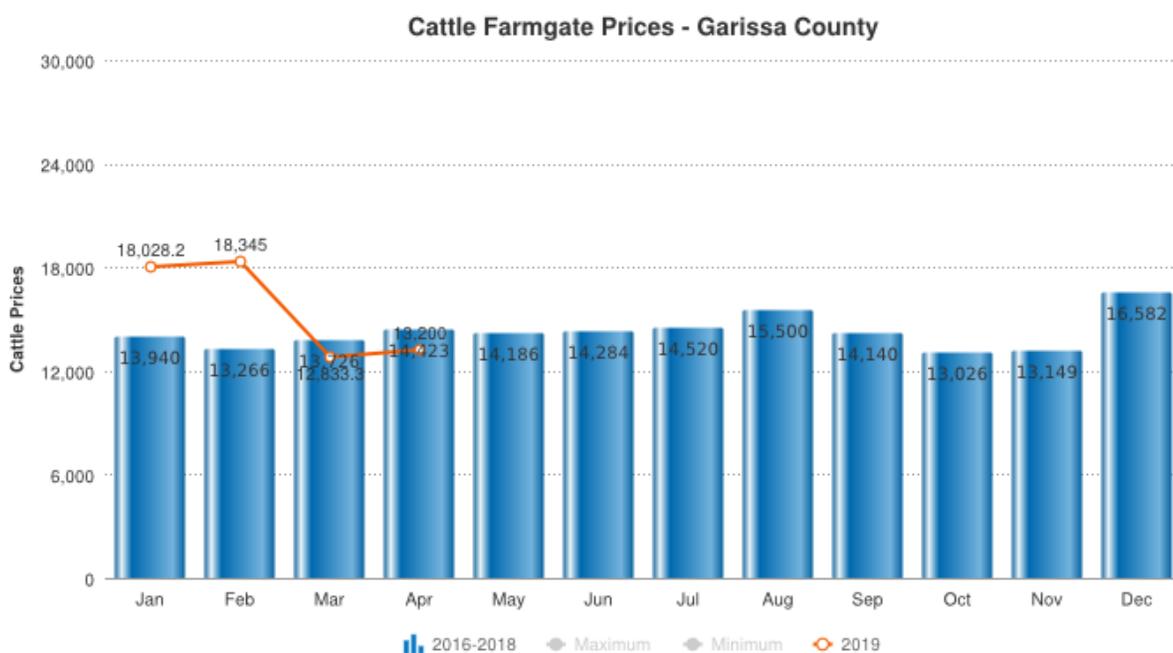
3.2.1 Stage and Condition of food Crops

There were no crops planted in the month under review as there were no rains received

4.0   MARKET PERFORMANCE

4.1   LIVESTOCK MARKETING
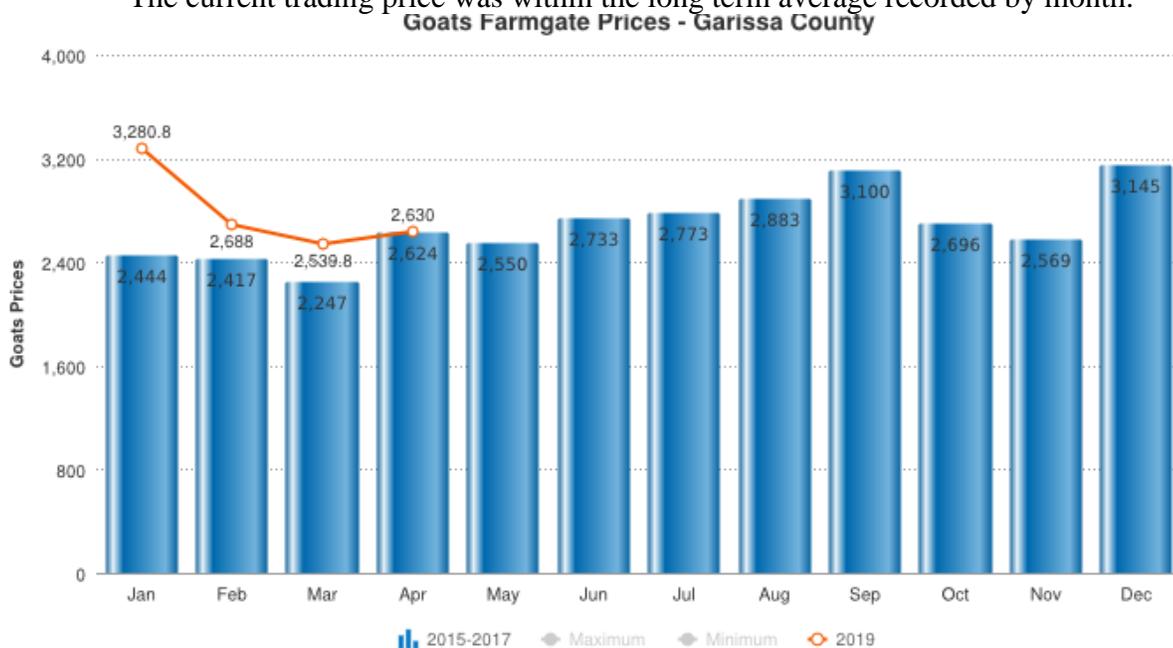
4.1.1 Cattle Prices
- The average price of 4-year-old medium size bull was Kshs 13,200
- The current average price when compared with the previous month increased by 2.8%
- the current price was below the long term mean by 7.2%.
- the trend was attributed to poor body condition due to late onset and poor distribution of the ongoing long rains season.
- The pastoral species livelihood zone recorded the highest price of Kshs 18,246, pastoral all species livelihood zone recorded the lowest at Kshs 15,200.

Figure:9. Trend of cattle prices compared with long-term mean.

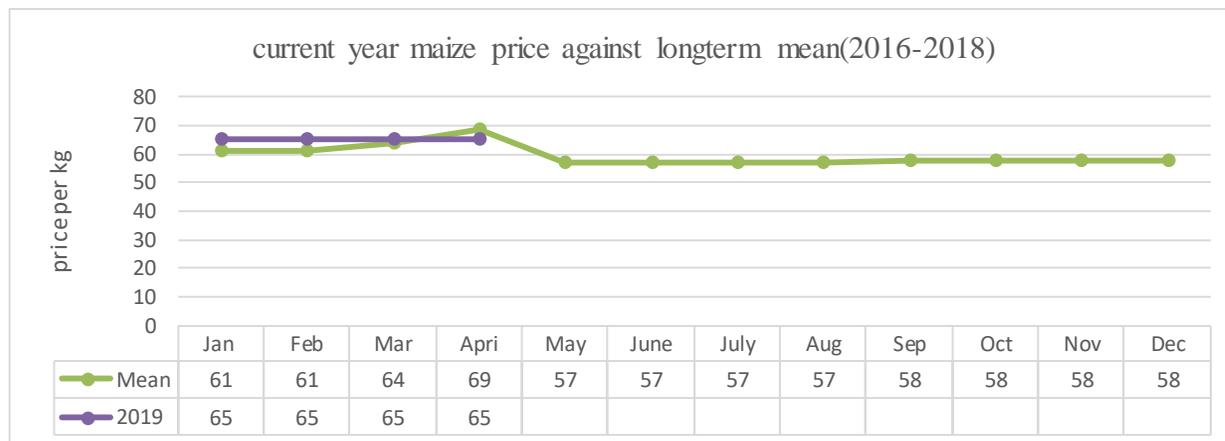### 4.1.2 Small Ruminants Prices (Goats)

- The average price of 2-year old medium size goat was Kshs 2,630
- The current price when compared with the previous month the price increased by 4.5%
- The deteriorating trend was attributed slightly improving goats body condition and increase in demand of traders.
- The prices by livelihoods were Agro pastoral ash 3339, All species ash 2550, formal employment Kshs 2865 and pastoral cattle/sheep ash 3122
- The current trading price was within the long term average recorded by month.

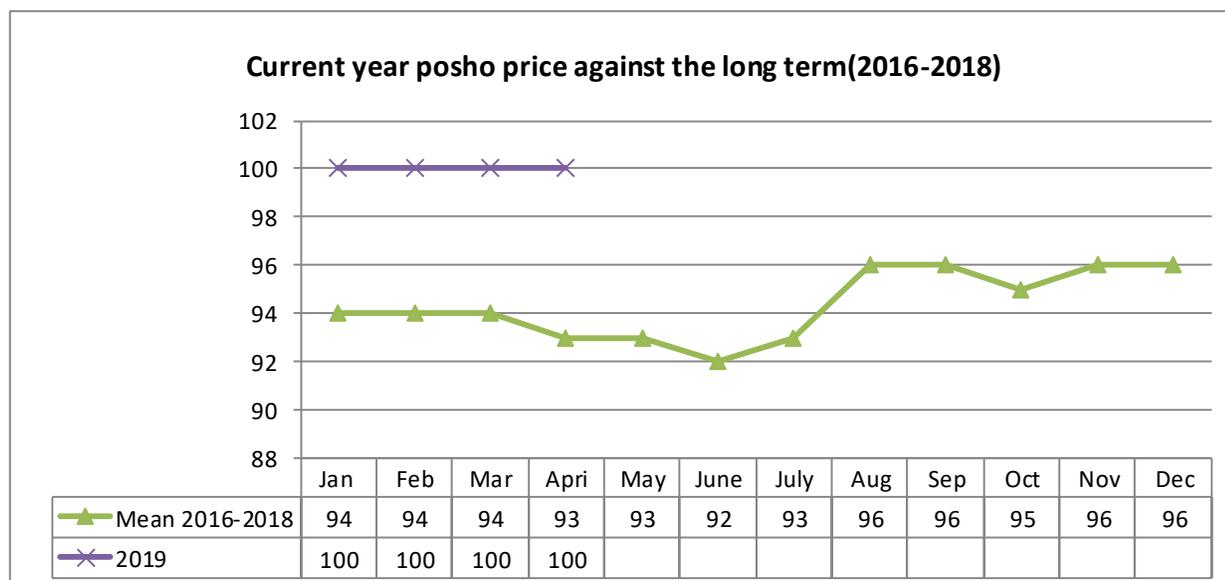*Figure:10. Trend in goat prices against the current year*

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4.2 CROP PRICES

4.2.1 Maize

current year maize price against longterm mean(2016-2018)

	Jan	Feb	Mar	Apri	May	June	July	Aug	Sep	Oct	Nov	Dec
Mean	61	61	64	69	57	57	57	57	58	58	58	58
2019	65	65	65	65								

y-axis: price per kg

Fig 11: Trends of Maize prices for Garissa County, 2015-2018

- The average price of a kilogram of maize was Kshs 65 in the month under review
- When compared with the preceding month the price remained the same, however it was on high demand to feed the week and lactating herd.
- The current price was below the long term mean for the month by 12.4%
- The price of maize was the same across all the livelihood zones

Current year posho price against the long term(2016-2018)

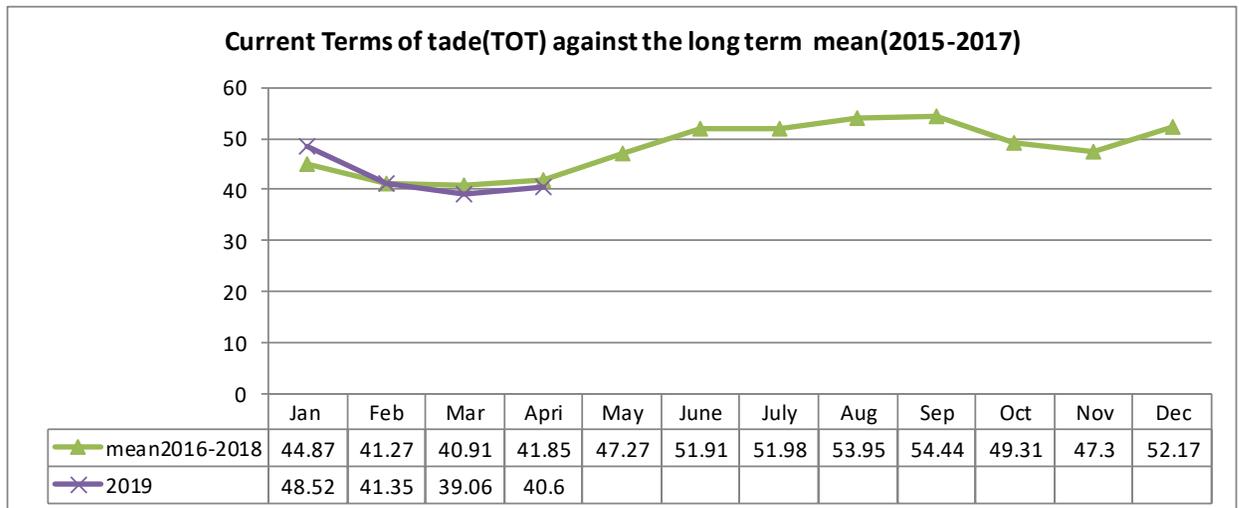|	Jan	Feb	Mar	Apri	May	June	July	Aug	Sep	Oct	Nov	Dec
Mean 2016-2018	94	94	94	93	93	92	93	96	96	95	96	96
2019	100	100	100	100								

Fig 12: Trends of Sifted Maize Meal prices for Garissa County, 2015 -2018

4.2.2 Sifted Maize Meal

- The average price of sifted maize meal was Kshs100 per kg
- The current price when compared with the preceding month the price remained stable, the price though stable is considered high for the pastoralist as it makes percentage in pastoralist diet.
- The average price was the same in all the livelihoods except the formal employment/waged labour livelihood zone which recorded lower at kshs85 per kg.
- The current trading price was above the long term mean recorded by 7%

4.2.3 Livestock Price Ratio/Terms of Trade

- The terms of trade for the month was at 40.6 Kg of maize per goat sold,
- The current terms of trade when compared with the previous month remained the same
- The terms of trade were highest in the agro pastoral livelihood zone at 51.3kg per goat sold and lowest in the formal employment livelihood zone at 38.4kg per goat sold.
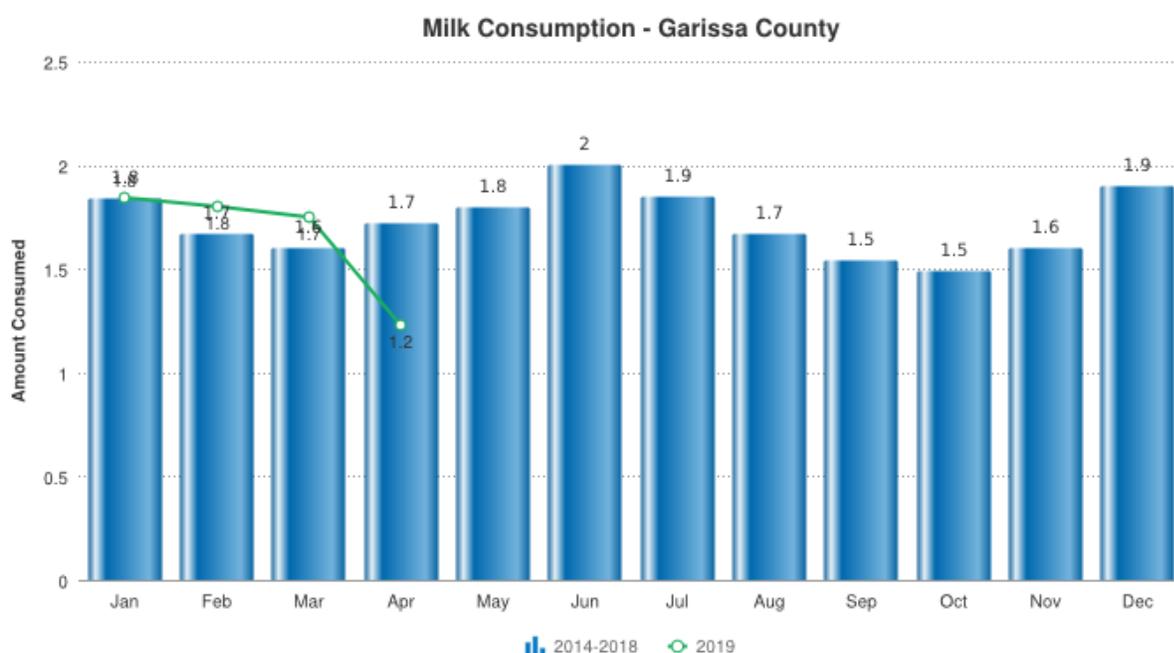- The current term of trade was not favourable to livestock farmers

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Current Terms of tade(TOT) against the long term mean(2015-2017)

	Jan	Feb	Mar	Apri	May	June	July	Aug	Sep	Oct	Nov	Dec
mean2016-2018	44.87	41.27	40.91	41.85	47.27	51.91	51.98	53.95	54.44	49.31	47.3	52.17
2019	48.52	41.35	39.06	40.6								

Fig 13: Trends of terms of trade for Garissa County, 2015-2017

5.0 FOOD CONSUMPTION AND NUTRITION STATUS
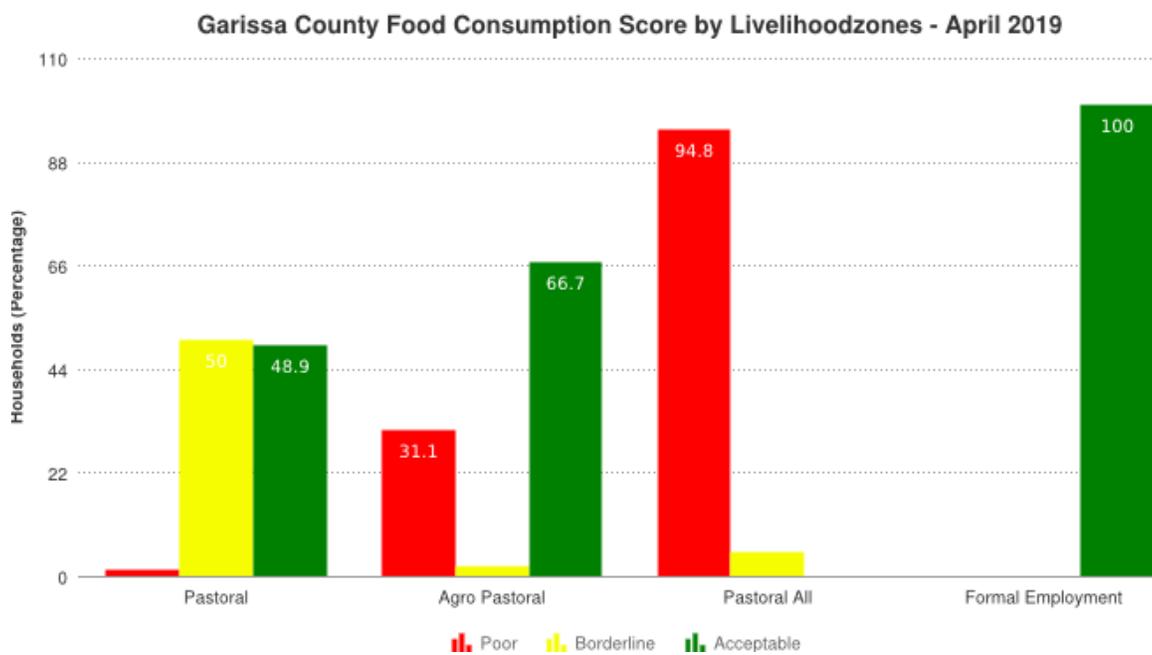## CONSUMPTION
5.1 MILK CONSUMPTION SCORE

- The average household milk consumption for the month was 1.7 litres.
- The current average consumption when compared with the previous month it decreased by 29.5%
- The reducing trend was related to low milk production realised during the month.
- The agro pastoral livelihood zones recorded the highest while the pastoral all species recorded the lowest consumption level.
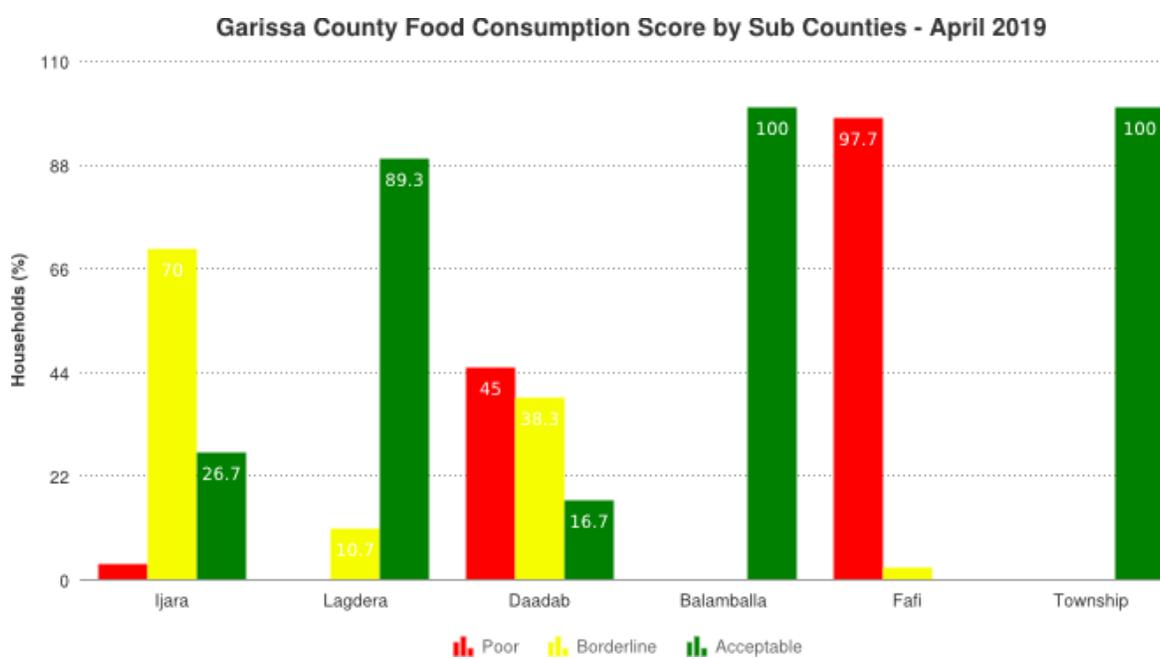

Fig 14: Trends of Milk consumption for Garissa County, 2013-2017

5.2 FOOD CONSUMPTION SCORE

- The proportions of households in poor food consumption score was 32.2%
- when compared with the previous month the percentage of poor household category increased
- The proportion of households in borderline and acceptable food consumption scores was 22.01% and 45.87% respectively.
- Fafi sub county had the highest households with poor food consumption score 97.7%.
- The pastoral all species livelihood zone recorded the highest households with poor food consumption score category at 94.8%.
- The charts below indicate the comparison of the food consumption score based on livelihood zones and by sub counties:

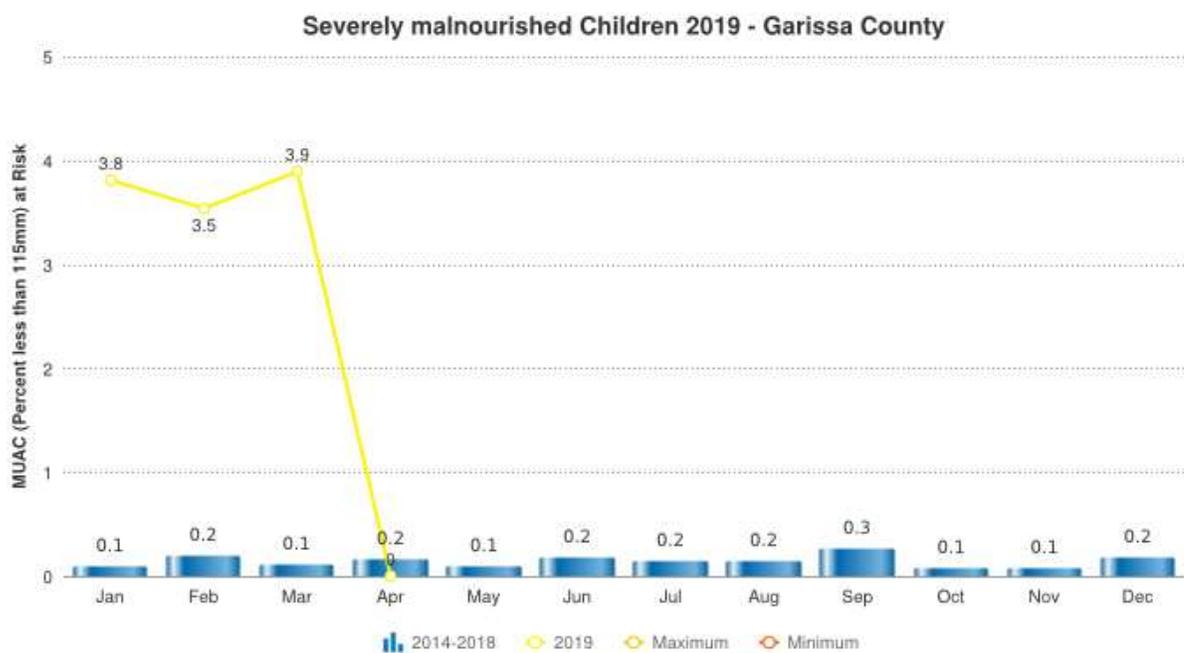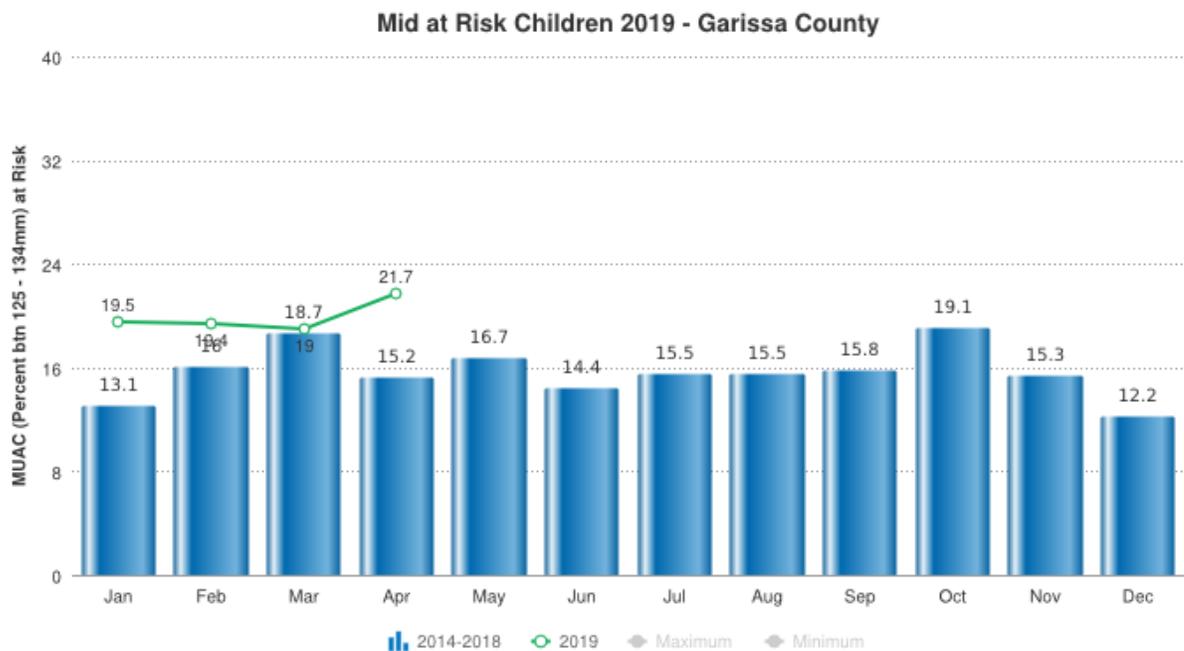**Fig 15: Garissa County food consumption score by livelihood zone**

Fig 16: Garissa County food consumption score by Sub County

5.3 HEALTH AND NUTRITION
5.3.1   Nutrition Status

Fig 17: Trends in the proportion of U5 mid at risk of malnutrition in Garissa County,

- The mid at risk level of children under-five was 21.7%
- The mid at risk levels increased by 23.9% when compared with previous month.
- The trend was attributed to low milk consumption by under five years within the pastoral and agro pastoral livelihood zones.
- The severely malnourished levels reduced from 3.9% to 0.5% indicating some improvement but to moderate and mid at risk levels.
- The current average malnutrition level was highly above t the long term mean (2014-2018)

Mid at Risk Children 2019 - Garissa County

Severely malnourished Children 2019 - Garissa County

Fig 18: Trends in the proportion of severely malnourished children in Garissa County,

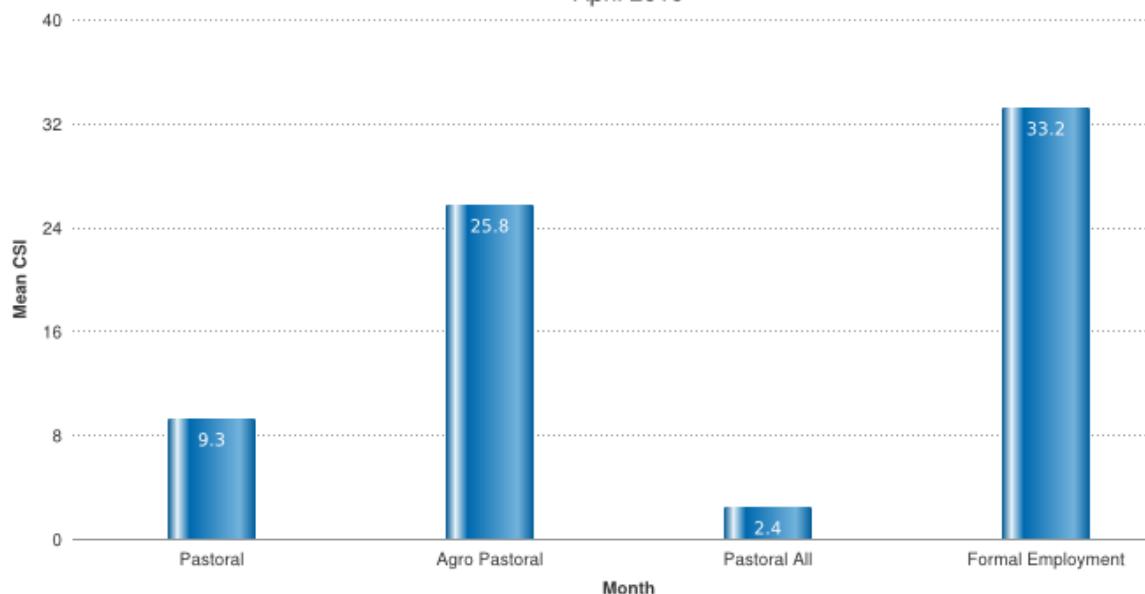### 5.3.2   Health
- There was no major outbreak of human disease reported in the month under review
- Water related illness was reported in areas dependent on water pans.
- The four major diseases reported from the health facilities were upper respiratory tract infection, urinary tract infection, pneumonia and diarrhoea were reported.

5.4 COPING STRATEGIES INDEX
- The average coping strategies index was 13.83 in the month under review.
- The coping strategies index decreased when compared with the previous month by16.8%
- Some households have either exhausted their coping strategies or supported through cash transfers.
- The graphs below indicate the mean copying strategy based on the livelihood zones
- The formal employment livelihood zone recorded the highest coping strategies of 33.2.

Garissa County - Coping Strategy Index
April 2019

Fig 19: Trends in Coping strategy index

6. CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTION

Table 1 Non-food interventions

Activity	Beneficiaries	Implementers
Cash transfer for Orphans in Garissa, Dadaab and refugee camp (If).	1300	Islamic Relief
Vaccination, deworming and pest control	250000 herds (All species)	FAO
Water trucking	48,000hhs	NDMA/COUNTY GOVERNMENT
Cash transfer programme of vulnerable households	4050	Islamic Relief, KRCS
Repair of `boreholes	18,000 households	Mercy USA, orcs, Islamic relief and UNHCR,unicef
Mapping resource based conflict hotspots and Grazing contract agreement	8 communities	NDMA
Excavation of water pan	Dertu	KCSAP
Health Outreach services		Islamic relief , mercy USA

6.2 FOOD AID
- Provision of supplementary feeding programme for the management of malnutrition in the health facilities targeting 1230 children.
- Gok food aid distribution to vulnerable households in the county.

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

There was no conflict reported during the month under review.

7.2 Migration
No livestock migration was reported during the month.

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7.3 FOOD SECURITY PROGNOSIS

- The few water pans that impounded water is expected to improve the water situation, this is in turn expected to reducing the trekking distances to water sources. The long rains season is yet over and we are anticipating more water pan to impound water hence improving availability and accessibility.
- The browse and pasture condition is expected to improve in some parts and may further improve if the season continue till the end of May. The livestock body condition is expected to slightly improve grazers and total improve for the browsers. Most animals that conceived during the 2018 long rains season started calving and were are expecting milk production to improve. The forage is expected to last for one month if the current trend remains, but may last till next season of the season continues and good distribution is realised.
- Dadaab sub county is currently in extreme vegetation deficit need to be monitored closely.

8. RECOMMENDATIONS

- Increase frequency of outreach health services to areas with no health facilities
- Support continuous livestock and human disease surveillance
- Provide fuel subsidy to strategic high yielding boreholes
- Develop preparedness plan in anticipation of the long rains season.
- Strengthen provision of school meals program
- Update contingency plans as the performance of the long rains was poor.