

**National Drought Management Authority
(Nyeri) COUNTY
DROUGHT EARLY WARNING BULLETIN FOR JUNE 2019**



A Vision 2030 Flagship Project



JUNE 2019 EWS PHASE

Drought Status: ALERT



Maandalizi ya mapema

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Alert	Improving
Agro pastoral	Alert	improving
County	Alert	Improving
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	405%	80%-120%
VCI-3Month	45.1	35-50
Forage	Fair	Good
Production indicators	Value	Normal
Crop Condition (specify crop)	Fair	Good
Livestock Body Condition	Good-fair	Fair
Milk Production	5.4 litres	6.5 litres
Livestock Migration Pattern	No migration	No Migration
Access Indicators	Value	Normal
Milk Consumption	1.5	1.6
Distance to water sources	0.8	1.5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0	1.4
Coping Strategy Index (CSI)	5.28	<5.0

Drought Situation & EW Phase Classification

Biophysical Indicators

- The month of June received offseason rains. During the first dekad amounts received were good and evenly distributed in time and space across all the livelihood zones. However, in the subsequent dekad amounts recorded were poorly distributed in time and space.
- Pasture and browse conditions improved during the month under review compared to the previous month. However, the current conditions were below average.
- Access to water improved across all the livelihood zones. Distances to water sources for household use and grazing purposes reduced across all the livelihood zones.

Socio Economic Indicators (Impact Indicators)

Production Indicators

- In mixed farming livelihood zones, maize was at Knee high to tussling, beans at pod expansion and potatoes at tuber expansion. In agro pastoral livelihood zones, maize was at two leaf stage to knee high while beans and potatoes were at flowering stage.
- Livestock body condition ranged from good to fair for all species.
- Milk production increased from to 5 litres in May to 5.4 litres in June.

Access indicators

- Milk consumption was within the normal threshold.
- Distances to water sources were the same as last month at 0.8 Km .

Utilization Indicators

- No children were reported to be at risk of malnutrition during the month under review.
- Coping strategy Index was above the normal threshold.

<ul style="list-style-type: none"> ▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ Land preparation 	<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase 	<ul style="list-style-type: none"> ▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks ▪ Kidding (Sept) 	<ul style="list-style-type: none"> ▪ Short rains ▪ Planting/weeding 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1.0 CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE.

- The month of June received offseason rains. During the first dekad amounts received were good and evenly distributed in time and space across all the livelihood zones. However, in the subsequent dekads amounts recorded were below normal poorly distributed in time and space. Mixed farming livelihood zones received better rains compared to agro pastoral zones.

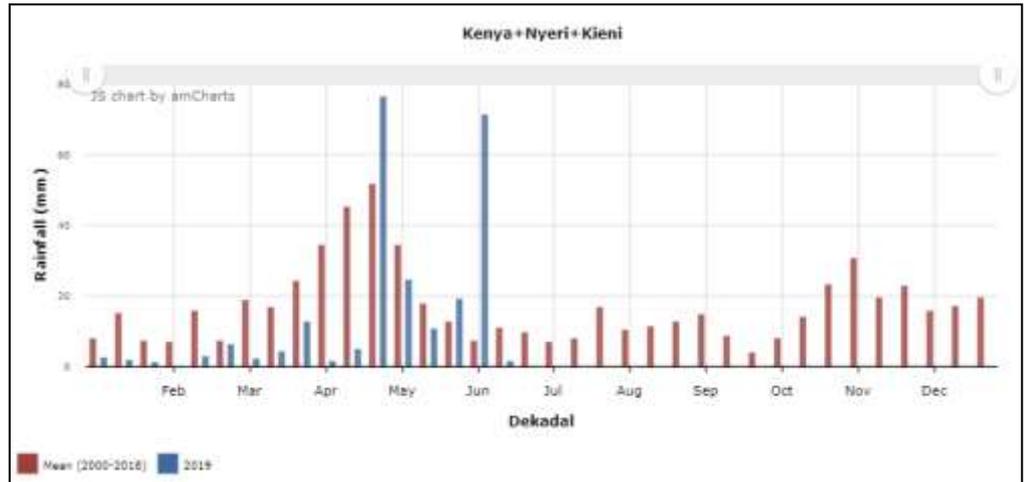


Figure 1: Presentation of the rainfall

- On average, Mixed farming livelihood zones received rains for ten days while agro pastoral livelihood zones recorded rains for an average of three to five days.
- Kieni received 405 percent of the normal rains. In the first and second dekad Kieni received 71.29 mm and 1.28 mm compared to long term averages of 7.05 mm and 10.92 respectively as shown in figure 1 above.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

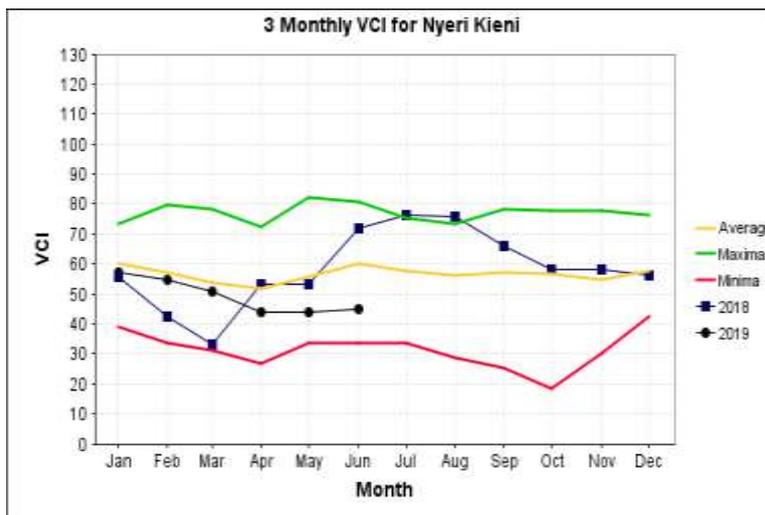


Figure 2: 3 monthly VCI for Nyeri

long term average and worse compared to the same period last year as shown in figure 2.

- The vegetation condition improved during the month under review compared to the previous month. This could be attributed to receding of immigrant herders to their counties of origin and the off season rains that were received. The three monthly VCI stood at 45.1 in June which was a slight improvement from May. The situation is expected improve if the rains continue.

- However, the current condition was still below the

2.1.2 Pasture

□ Pasture condition improved during the month under review compared to the previous month. This is attributed to the offseason rains that were received. The situation was fair across the livelihood zones with an exception Mugunda ward that registered poor conditions.

□ The current condition is still below normal compared to a normal year and compared to the same period last month. The available pastures are expected to last for two months in mixed farming livelihood zones and one month in agro pastoral livelihood zones.

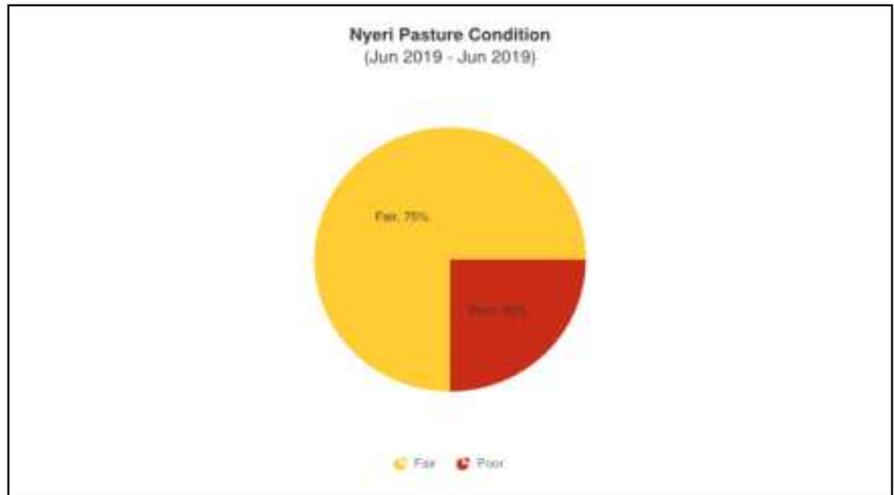


Figure 3: Pasture conditions for Nyeri County

2.1.3 Browse

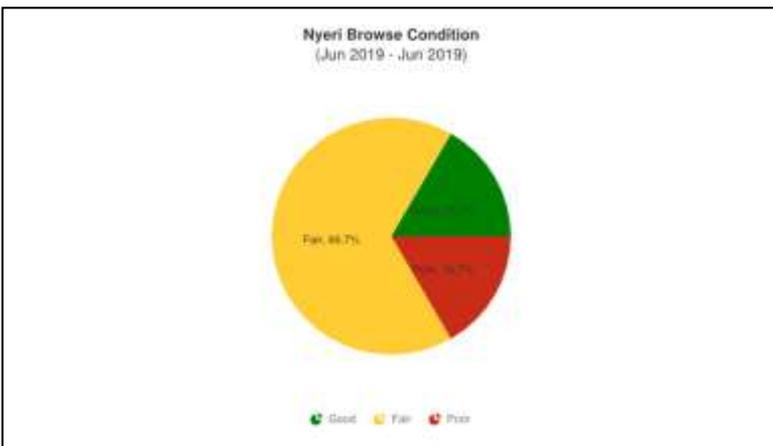


Chart 4: Browse condition for Nyeri County

□ Due to the off season rains that were received, browse conditions improved during the month under review compared to the previous month. The situation ranged from good to fair across all the livelihood zones with an exception of Karemeno and Lamuria in Mugunda ward that registered poor conditions. Conditions were better in mixed farming livelihood zones compared to agro-pastoral livelihood zoned.

□ Available browse was expected to last for one month in agro pastoral livelihood zones and two months in mixed farming livelihood zones. The situation is expected to improve if the current situation persists.

2.2 WATER RESOURCE

2.2.1 Sources

- The main sources of water during the month under review were rivers, pans, dams and springs as shown in figure 5. Access to water had improved slightly during the month under review compared to the previous month. Rivers were flowing at normal levels across all the livelihood zones. Open water source are 40 percent full. Water rationing has eased with household accessing water daily.
- However, in Mugunda Ward in Kieni West sub county majority of the open water sources were still dry.

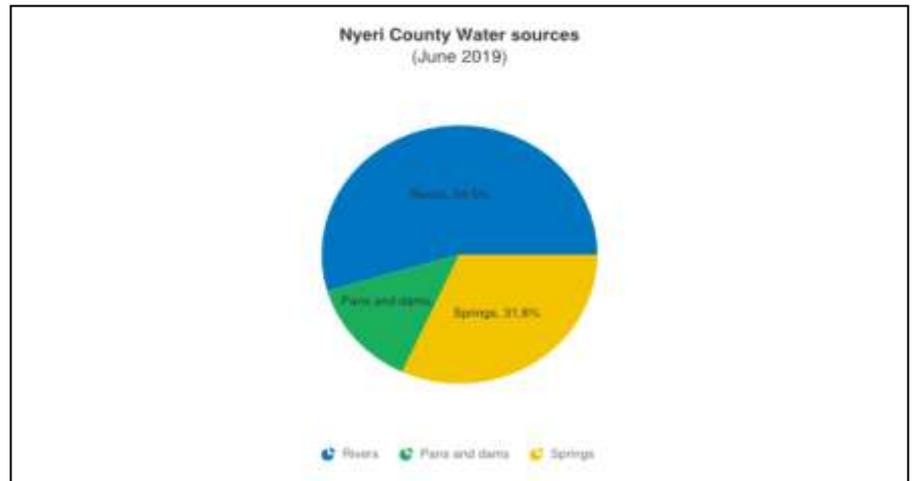


Chart 5: Nyeri (Kieni) water sources

2.2.2 Household access and Utilization

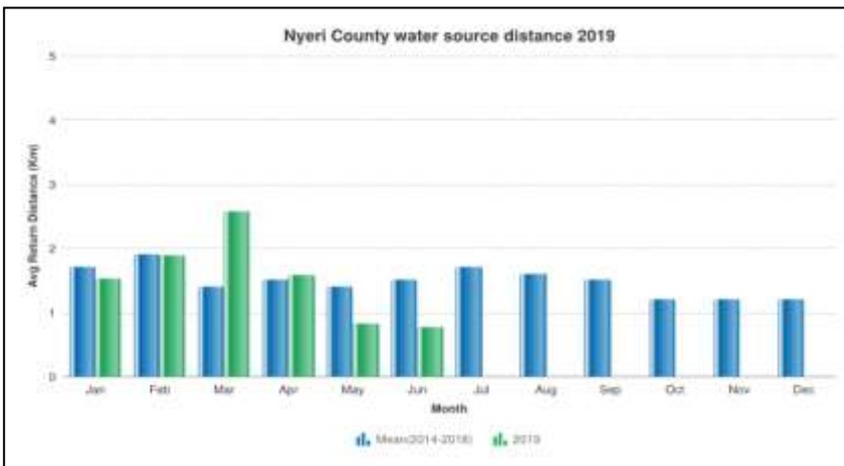


Figure 6: Presentation of average return distances to water sources

- Distances from the household to water sources remained the same as last month at 0.8 Km. This can be attributed to the off season rains that were received. Recorded distances to water sources increased by 9.5 percent in agropastoral livelihood zones from 3.7 Km in may to 3.8 Km in June while in mixed farming livelihood zones distances reduced by 5 percent from 1.9 Km to 1.8 Km in June respectively.
- Registered distances were lower by 46.7 percent compared to the 2014-2018 long term averages of 1.5 Km as shown in figure 6.

2.2.3 Livestock access

- Average distances from grazing field to watering points dropped by 14.3 percent from 2.1 Km in May to 1.8 Km in June. Compared to 2014-2018 long term average of 2.3 Km, reported distances were lower by 21.8 percent as shown in figure 7.
- Current watering frequency for animals is twice daily in mixed farming livelihood zone and once in agro pastoral livelihood zones.

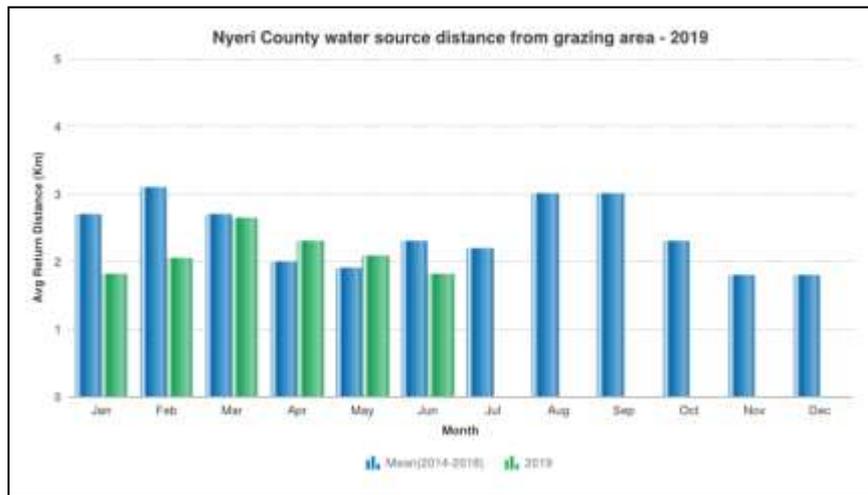


Figure 7: Presentation of average grazing distances to water sources

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The livestock body conditions improved during the month under review compared to the previous month. The body condition ranged from good to fair across all the livelihood zones. This could be attributed to improved pastures conditions and reduced distances in search of water.
- However, in Mugunda ward in Kieni west sub county livestock body conditions were still poor. This could be attributed to the poor pasture regeneration as this area has recorded poor rains.

3.1.2 Livestock Diseases

- No contagious livestock disease outbreaks were reported in the region for the period of monitoring.

3.1.3 Milk Production

- Milk production increased slightly by 7.4 percent from 5 litres in May to 5.4 litres in June. The increment in milk production can be attributed to improved pasture conditions and reduced distances in search of water and pastures.

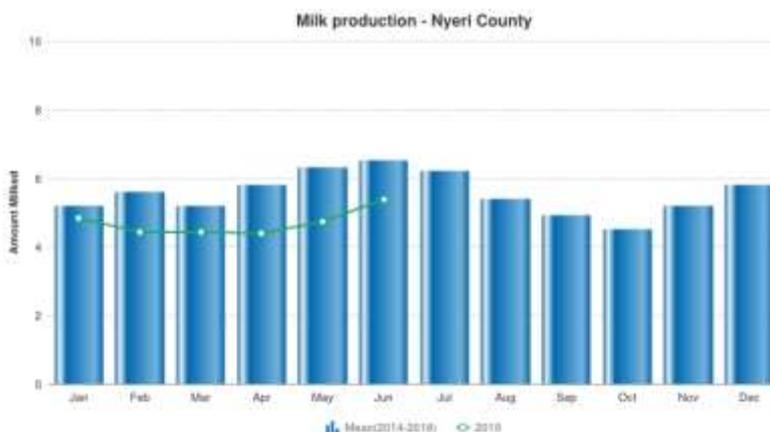


Figure 8: Presentation of average milk production

- Household daily milk production increased by 22.9 percent and 41 percent in mixed farming livelihood zones and agro pastoral livelihood zones from 4.7 litres and 3.4 litres in May to 6.1 litres and 4.8 litres in June respectively. The month's production was lower by 17 percent compared to

the 2014-2018 long term average of 6.5 litres as shown in figure 8.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- Crops at the farms were at different stages of development. In mixed farming livelihood zones, maize was at Knee high to tussling, beans at pod expansion and potatoes at tuber expansion. In agro pastoral livelihood zones, maize was at two leaf stage to knee high while beans and potatoes were at flowering stage. Some of the farmers were harvesting the premature tubers for consumption.
- Harvesting of potatoes under the Plantation Establishment Livelihood Improvement System (PELIS) was on-going.
- In Mugunda ward in Kieni west Sub County, where the performance of the rains was poor and farmers had replanted, crops were at germination stage.
- A notable observation is that acreage put under crop production has significantly reduced compared to the last cropping season. This is attributed to the poor seasonal rains in back to back seasons that saw farmers experience little or no harvest.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Prices

- Cattle price remained relatively stable during the month compared to the previous month. A mature four year old bull sold for Ksh 23,200 in June which was quite comparable to Ksh 24,400 in May.
- The month's price was lower by 16.5 percent compared to the 2016-2018 short term average of Ksh 27,775 as shown in figure 9.

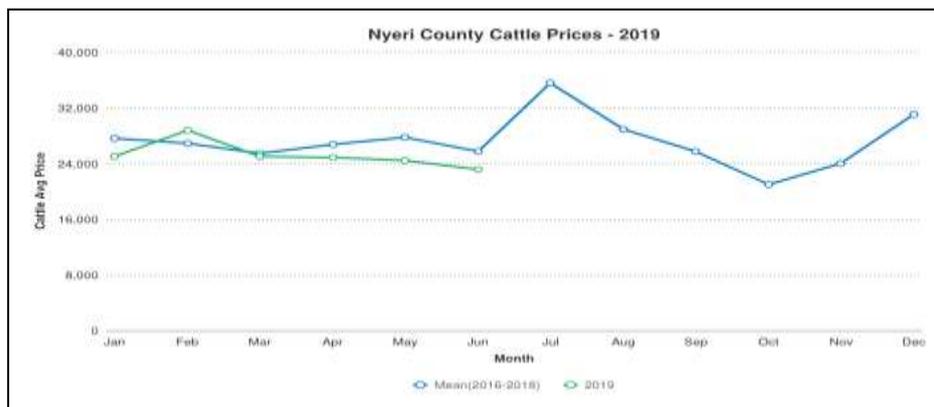


Figure 9: presentation of the cattle prices

4.1.2 Sheep prices

- Sheep prices remained relatively stable during the month under review compared to the previous month. A two year old medium size sheep sold for Ksh 3,800 same as was reported last month. The registered prices were lower by 25 percent compared to the 2016-2018 short term averages of Ksh 4,000 as shown in figure 10.

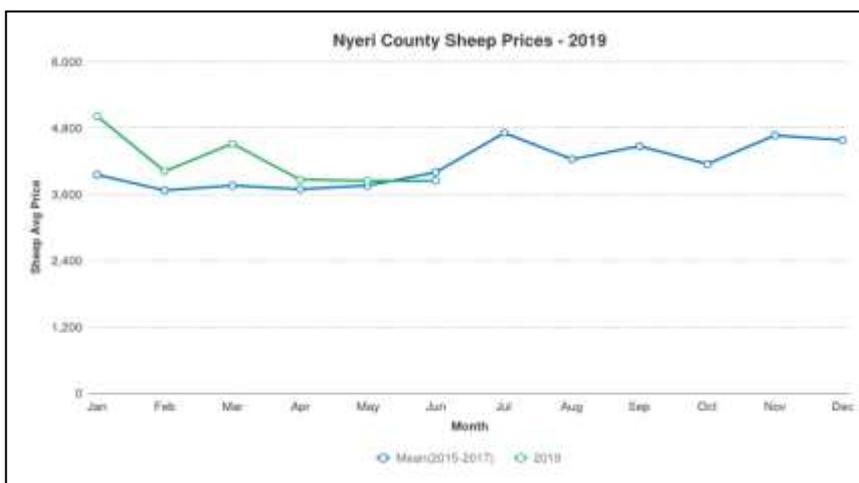


Figure 10: presentation of the sheep prices

4.2

CROP

PRICES

4.2.1 Maize prices

- Maize prices remained relatively stable during the month under review compared to the previous month. A kilo of maize retailed for Ksh 50 in June which was quite comparable to Ksh 48 in May.
- Compared to the 2016-2018 short term averages of Ksh 43.5, current price was higher by 15 percent as shown in figure 11.

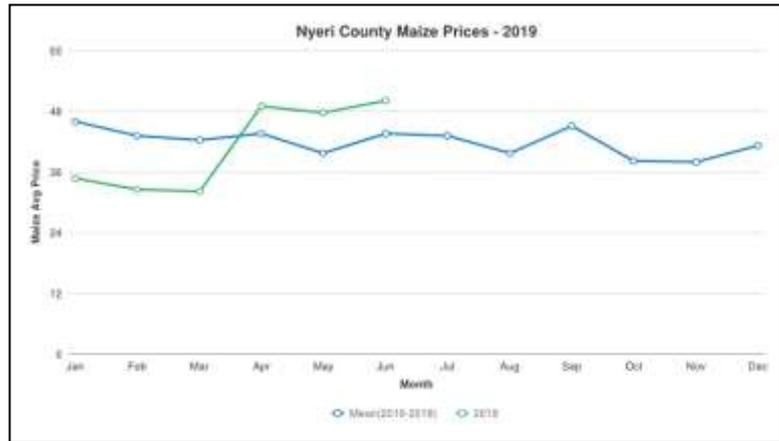


Figure 11: Presentation of the average maize prices for Nyeri County

4.2.2 Beans prices

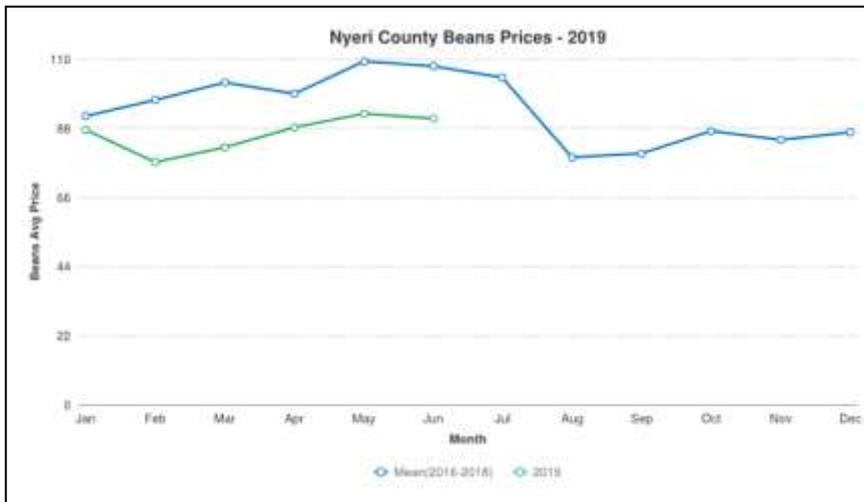


Figure 12: Presentation of the average beans prices for Nyeri County

figure 12.

- Beans prices were also fairly steady during the month under review compared to the previous months. A kilo of beans sold for Ksh 90.5 in June which was quite comparable for Ksh 92.5 in May.
- The month's price was lower by 15.7 percent, compared to the 2016-2018 short term average of Ksh 107.7 as shown in

4.3. Livestock price ratio/Terms of trade ratio

- During the month of June a farmer would exchange a medium size goat for 70 Kg of maize.

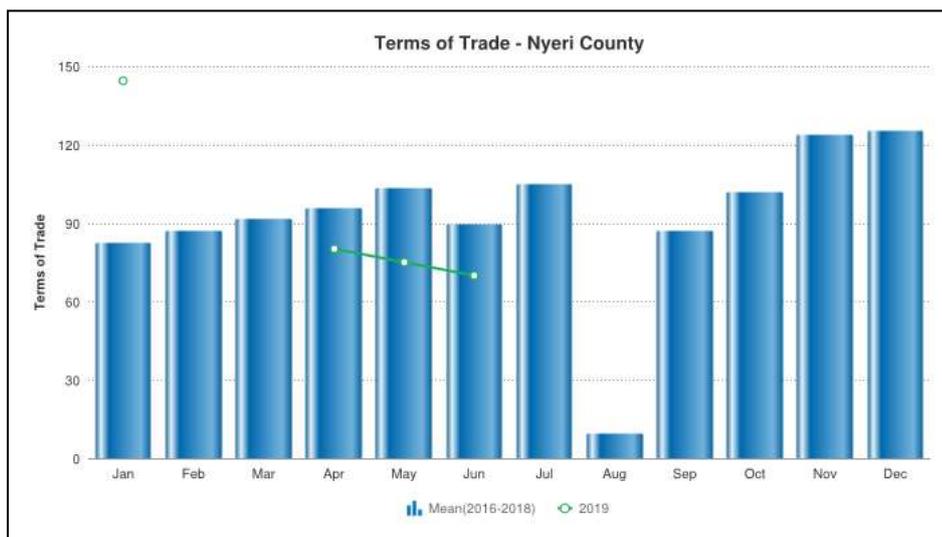


Figure 13: Outlines the terms of trade

the long term average of 89.4 kg of maize for a goat.

This was 6.5 percent less compared to last month as one would exchange a goat for 74.9 Kg of maize as shown in figure 13.

- Decrease in goat prices against increasing prices of food prices led to unfavourable terms of trade to livestock keepers.
- The month's TOT was lower by 22 percent compared to

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption at the household level remained same as was reported last month at 1.5 litres.
- The month's consumption was within the normal threshold, compared to the 2014-2018 long term average of 1.6 litres as shown in figure 14.

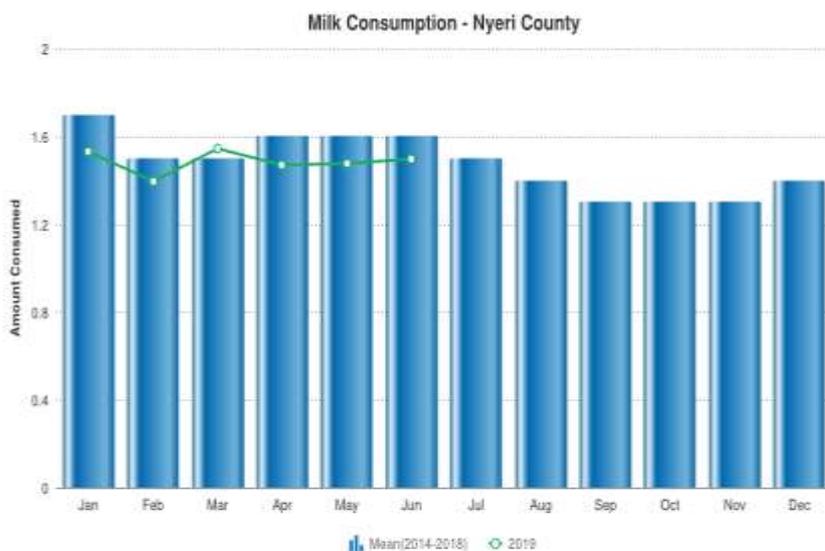


Figure 14: Presentation of the average milk consumption

5.2 FOOD CONSUMPTION SCORE

- The food consumption score for Kieni improved slightly during the month of June compared to the previous month. The off season rains enabled growth of indigenous vegetables, availability of early maturing crops and stable milk consumption. Proportion of household at poor, borderline and acceptable food consumption score was 0 percent, 38 percent and 62 percent compared to 2 percent, 38 percent and 60 percent in the previous month.
- There were discrepancies in food consumption patterns at the livelihood zones. 3.3 percent and 96.7 percent of the households in agro pastoral

livelihood had a borderline and an acceptable food consumption score respectively compared to those in mixed farming livelihood zones where 73.3 percent and 26.7 percent of the households had a borderline and an acceptable food consumption score respectively as shown in figure 15. This is an indication that households in agro pastoral livelihood zones had a better dietary diversity and consumption frequency.

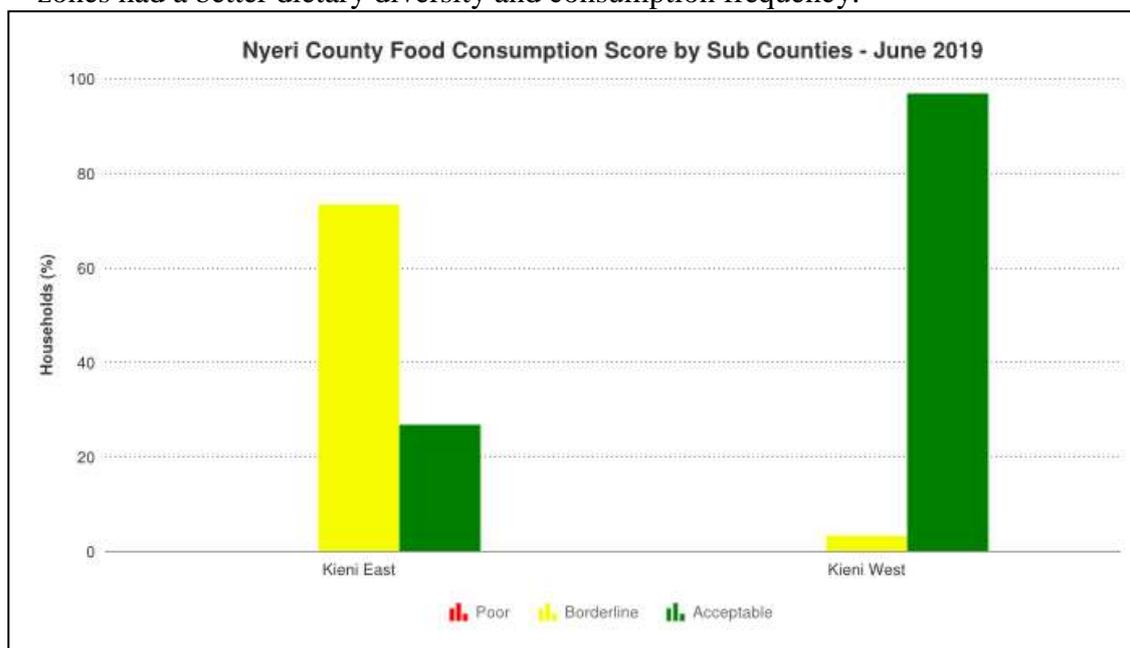


Figure 15: Outlines the FCS by livelihood zones

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- No children were reported to be at a risk of malnutrition during the month under monitoring as shown in figure 16. This was an improvement from last month, where 0.5 percent of those monitored were at risk of malnutrition. This can be attributed to a availability of short term cycle crops and steady milk consumption.

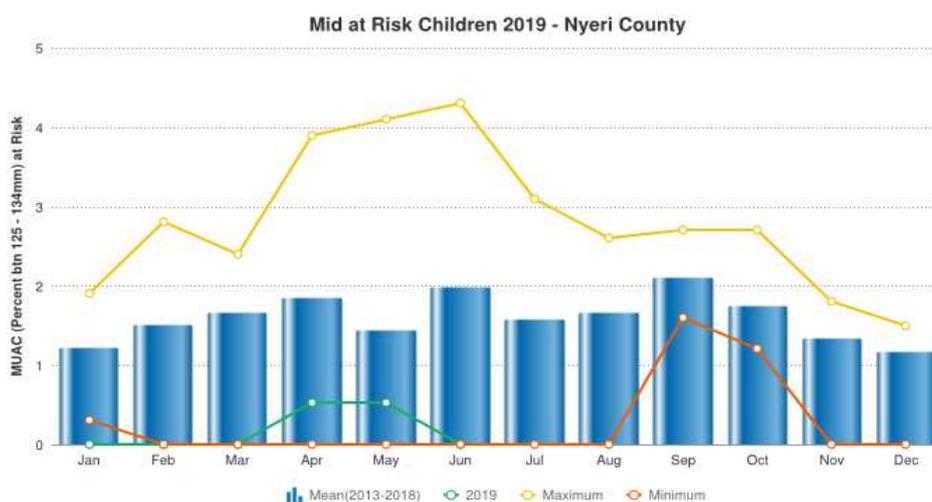
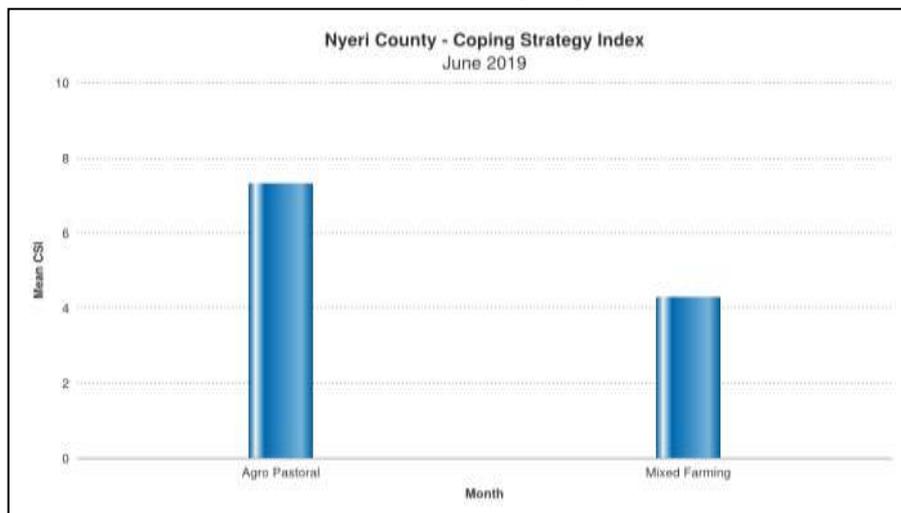


Figure 16: Percentage under-fives at risk of malnutrition in Nyeri

5.4 COPING STRATEGIES

- Due to the off season rainfall , majority of the households in mixed farming and some in agro



pastoral livelihood zones had access to early maturing crops. Income from agricultural labour has also increased. These have led to decrease in the application of coping strategies at the household level.

- The mean CSI for Kieni decreased by 13.8 percent from 6.26 in May to 5.80 in June.

Figure 17: outlines the mean Coping strategies

6.0 CURRENT INTERVENTION MEASURES

6.1 NON-FOOD INTERVENTIONS

- There were no non-food interventions during the month under review.

6.2 FOOD AID

- There was no food relief in the month under review.

7.0 EMERGING ISSUES.

7.1 FOOD SECURITY PROGNOSIS

- The offseason rains have assisted in the restoration of the grazing fields and water sources. Livestock body condition has improved leading to an increase in milk production. Households are making more milk sales while consumption was relatively stable. The situation is likely to improve further if the current situation continues.
- Market prices for main food crops in Kieni are high, the prices are expected to increase further given the next harvest is expected in July will be delayed. Consequently, the household purchasing power at the household level is low and will most likely decrease further given that most of the households have exhausted food stocks will be relying on markets for supply.

7.2. LIVESTOCK AND MIGRATION.

- During the month under monitoring, most of the livestock that had migrated into Kieni East and Kieni West sub counties receded back to their counties. Currently, only about 100 herds of cattle are still in Kieni.

7.3 CONFLICTS.

- Human wildlife conflict was reported in Gathiuru and Kahurura locations in Gakawa ward in Kieni East sub county.

7.3. RECOMMENDATIONS

- Activation of sectoral working groups to prepare for response plans (Action: NDMA)
- Rehabilitation of strategic water points and de-siltation of pans and dams (Action: CGN)
- Encourage surface water harvesting (Action: CGN)
- Provision of supplementary feeds for livestock (Action: CGN)
- Activation of peace committees in anticipation of likely conflict arising from scarce of resources (Action: NDMA)
- Provision of relief food to needy households (Action: Department of special programmes)
- Undertake a rapid assessment (Action: NDMA)
- Support livestock with drought pellets. (Action: NDMA)
- Provision of water treatment tablets (aqua tabs) (Action: CGN NDMA NIB stakeholders).
- Supply of water using tankers for domestic and livestock at strategic points for pastoralist for temporary use. (Action: CGN NDMA NIB stakeholders).
- Up scaling on Preventive Vaccination against FMD, CCPP and NCD in livestock (Action: NDMA, DALF/County government).