



**National Drought Management Authority
(NYERI) COUNTY
DROUGHT EARLY WARNING BULLETIN FOR MAY 2020**

MAY EWS PHASE



**Drought Situation & EW Phase Classification
Biophysical Indicators**

- The March-April-May (MAM) rains progressed into May. Amounts received were above normal in the first dekad. The second and third dekad registered below normal amounts. Temporal and spatial distribution was good. Floods were reported in the areas of Mugunda and Endarasha/Mwiyongo in Kieni west sub county and Gakawa in Kieni East sub county.
- Above normal vegetation condition continued to be recorded as a result of ongoing MAM rains.
- Water availability and utilization is still good as water harvesting from the rains was ongoing, further open water sources were full to capacity.

Socio Economic Indicators (Impact Indicators)

- Livestock body condition and health was impressive.
- Milk production was above the long-term average while consumption was within normal thresholds.
- Distances to water sources for households remained similar to the previous month.
- Terms of trade ratio increased by four percent compared to the previous month.
- 0.7 percent of children under the age of five years were at a risk of malnutrition.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Agro pastoral	Normal	Stable
Biophysical Indicators	Value	Normal Range/Value
Rainfall (%)	101	90-110% of LTA
VCI	79.34	>35
Forage condition	Good	Good
Production indicators	Value	Normal
Crop Condition (Maize, beans and potatoes)	Good	Good
Livestock Body Condition	Good	Good
Milk Production	9.1	5.8 litres
Access Indicators	Value	Normal
Terms of Trade (ToT)	112	100
Milk Consumption	1.7 litres	1.6 litres
Return distance to water sources for household use	0.2 Km	1.3 Km
Return distance to water sources from grazing field.	0.5 Km	1.9 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0.7	1.1
Coping Strategy Index	5.15	>5

- Short rains harvests
- Short dry spell
- Reduced milk yields
- Increased HH Food Stocks
- Land preparation

- Planting/Weeding
- Long rains
- High Calving Rate
- Milk Yields Increase

- Long rains harvests
- A long dry spell
- Land preparation
- Increased HH Food Stocks
- Kidding (Sept)

- Short rains
- Planting/weeding

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

1.1 RAINFALL PERFORMANCE

- The March-April-May (MAM) rains progressed into the month of May.
- Amounts received in Kieni were above normal, averaging 101 percent of the normal rains for an average of seven to eight days. The bulk of the rains were recorded in the first dekad. The second and third dekad received below normal amounts.
- Temporal and spatial distribution was good across the livelihood zones.
- Heavy rains caused floods in the areas of Mugunda, Enderasha/Mwiyongo and Gakawa wards leading to destruction of crops.
- Generally, Nyeri County received 94 mm and 35.9 mm in the first and second dekad compared to the Long-Term Average of 67.2 and 53.9 respectively as shown in figure 1.

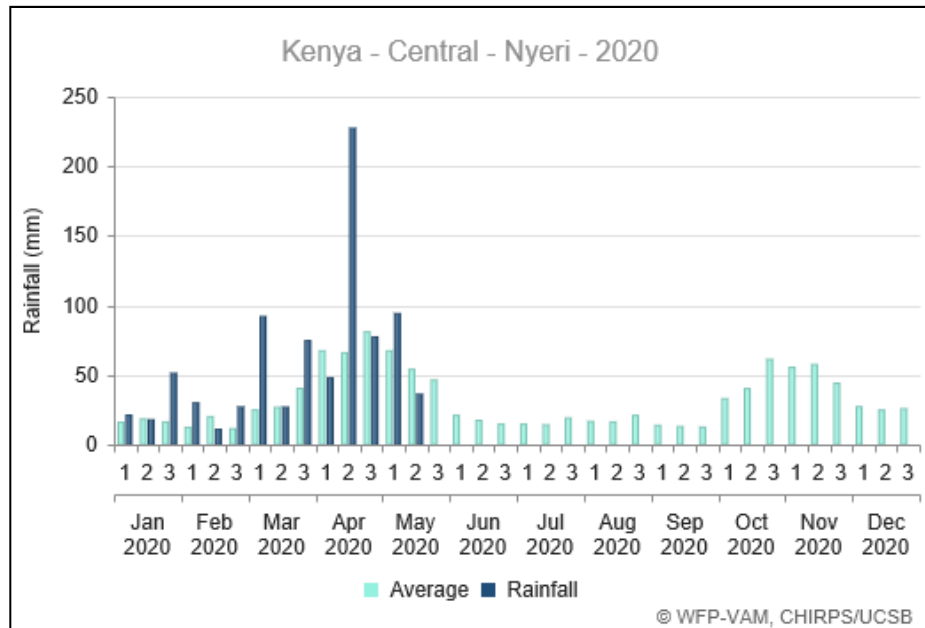


Figure 1: presentation of the rainfall performance for May

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 VEGETATION CONDITION INDEX(VCI)

- The ongoing MAM rains have aided in sustaining the vegetation condition. The 3 monthly vegetation condition index is 79.34 indicative of above normal vegetation greenness as shown in figure 2 (a) below. The current vegetation condition is the best that has been recorded over the years as shown in the figure 2 (b) below. The vegetation condition is expected to remain stable in the next three months.

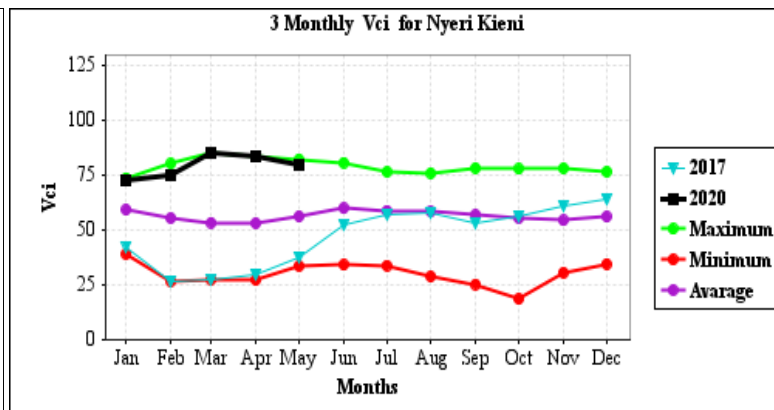
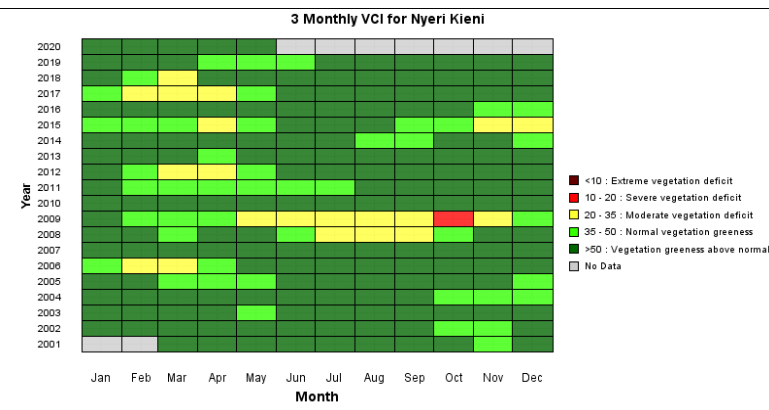
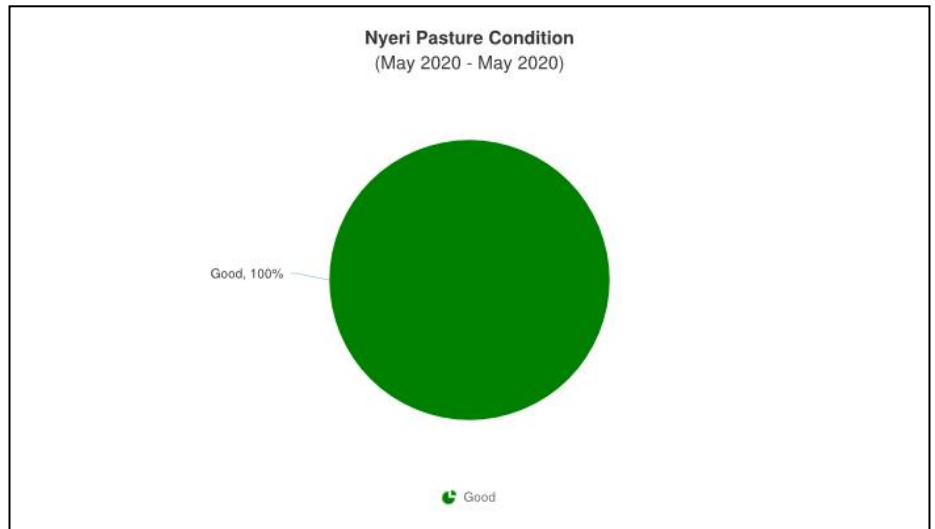


Figure 2 (a): Presentation of 3 monthly VCI for Kieni

Figure 2 (b): Presentation of 3 monthly VCI for Kieni

2.1.2 Pasture

- Pasture condition remained good and above normal across the livelihood zones, owing to the ongoing MAM rains (Figure 3a).
- Harvesting of cultivated pastures and Napier grass was still ongoing.
- Available pastures are expected to last for the next three months.



2.1.3 Browse

- Browse condition equally remained good across the livelihood zones and was still above normal compared to a similar period, in the previous years.
- The available browse is expected to last for four months.

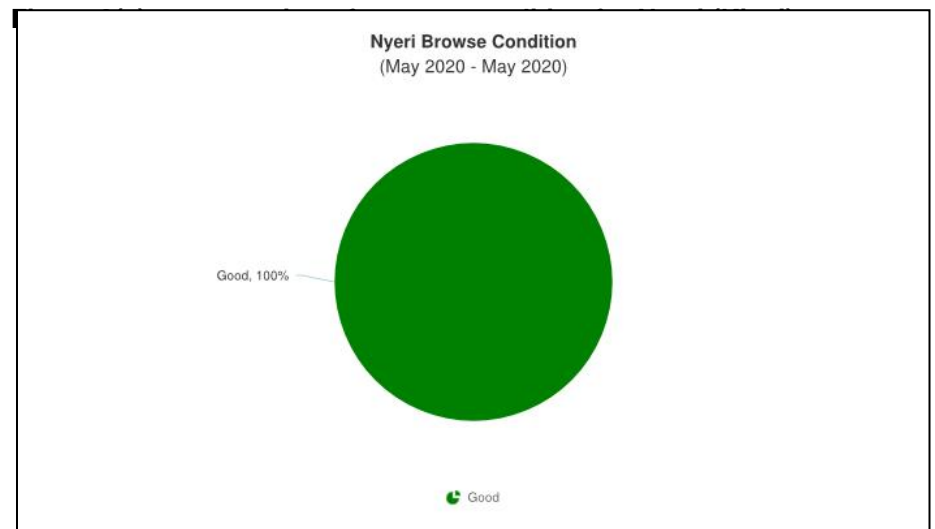


Figure 3(b): presentation of browse condition for Nyeri (Kieni) County

2.2 WATER RESOURCE

2.2.1 Sources

- The main sources of water for Kieni were rivers at 62.5 percent, pans and dams at 33.3 percent and springs at 4.2 percent as shown in figure 4.
- Water access and availability was still good across the livelihood zones, due to the ongoing MAM rains.
- Open water sources have impounded water to full capacity. Rivers were flowing at above normal base flows. Open water sources are expected to last for the

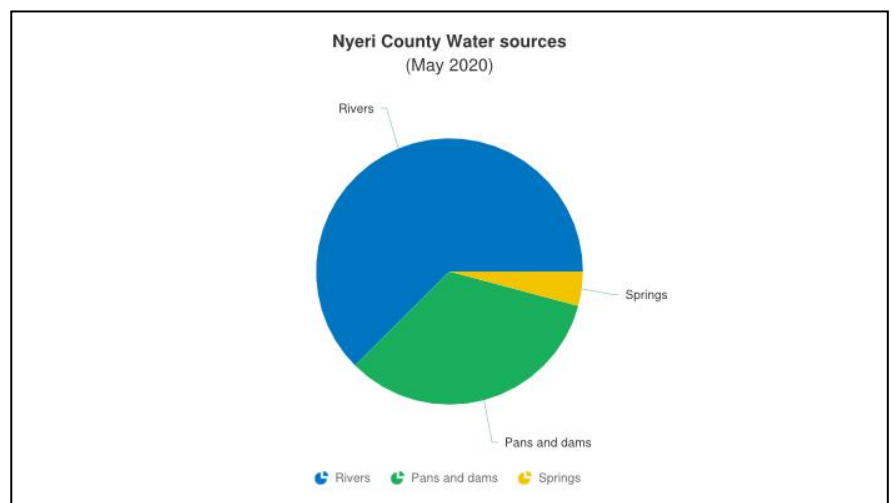


Figure 4: Shows main water sources for Kieni

next three months.

2.2.2 Household access and Utilization

- Distance from the household to water sources remained unchanged to last month at 0.2 Km.
- The low distances to water sources could be attributed to the ongoing rains that assisted in recharge of water sources and steady supply of piped water to households.
- The month's distances were lower by 85 percent compared to the 2015-2019 long term average of 1.3 Km as indicated in figure 5.

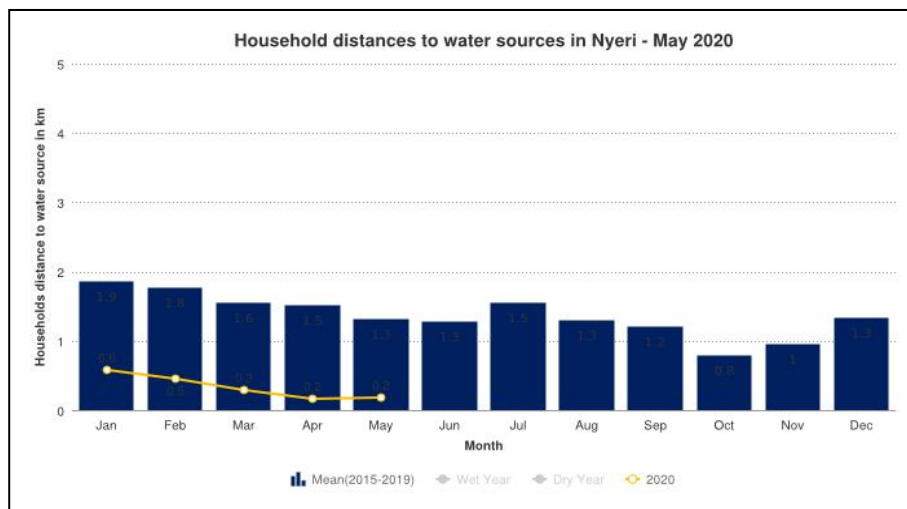


Figure 5: presentation of average return distances

2.2.3 Livestock access

- The average distances from the grazing fields to water sources increased slightly by 25 percent from 0.4 Km in April to 0.5 Km in May.
- Registered distances were lower by 74 percent compared to the 2015-2019 long term average of 1.9 as shown in figure 6.

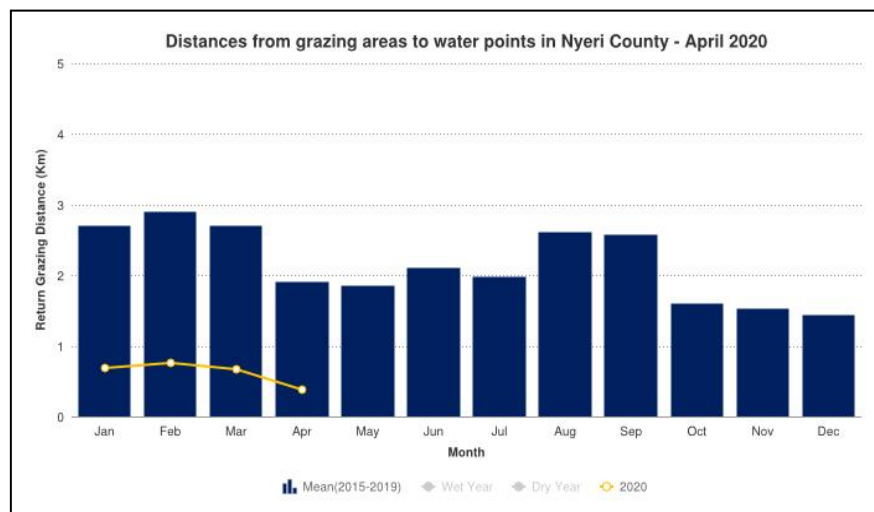


Figure 6: presentation of average grazing distances to water

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Body condition for all the three livestock species (Cattle, Sheep and goats) is good across the livelihood zones. This can be attributed to adequate pastures, browse and other feed resources like Napier and crop residue which were readily available.
- Body condition for all livestock species are likely to remain good for the next three months.

3.1.2 Livestock diseases

- No contagious livestock disease outbreaks were reported in the region during the month under review.

3.1.3 Milk Production

- The average milk production increased by ten percent from 8.3 litres in April to 9.1 litres in May, attributed to adequate and good quality livestock feeds, low distances to water sources and good livestock body conditions and health
- The month's production was higher by 57 percent as compared to the 2015-2019 LTA of 5.8 as shown in figure 8.

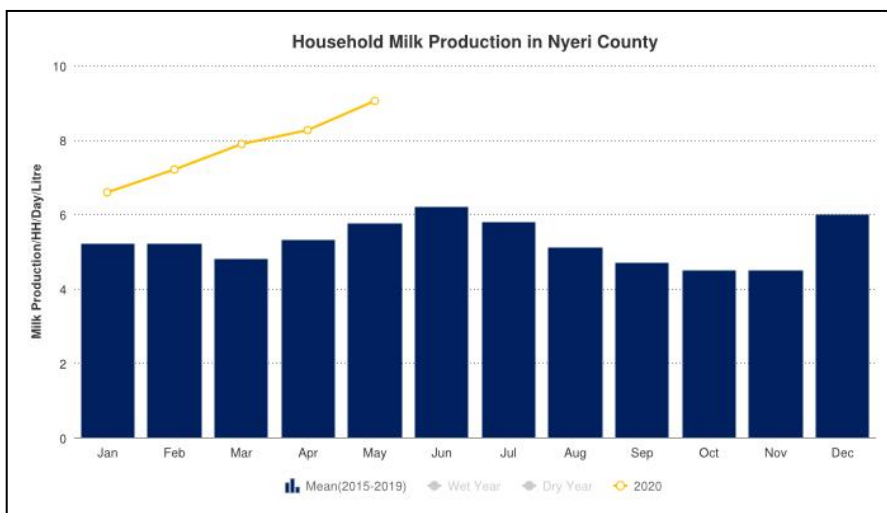


Figure 8: Presentation of average milk production for the region

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- The main rain fed crops grown in Kieni East and Kieni West sub counties include: Maize, beans and potatoes. Crops at the farms were in different stages of development, maize was at tussling, beans at pod formation and potatoes at earth filling.
- For late planters late, maize was at Knee high to below knee high. Harvesting of potatoes under plantation Establishment Livelihood system (PELIS) was still ongoing. Beans growth and development was affected by excessive moisture and water logging.
- Currently, farmers who planted late were undertaking second weeding and top dressing.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Price

- Livestock prices were still on an upward trend, attributed to good livestock body condition and health.
- A mature four-year-old bull retailed for Ksh 34,667 in May from Ksh 33,400 in April, four percent increase.
- Compared to the 2017-2019 short term averages of Ksh 23,233 reported prices were higher by 49 percent, as indicated in figure 9.

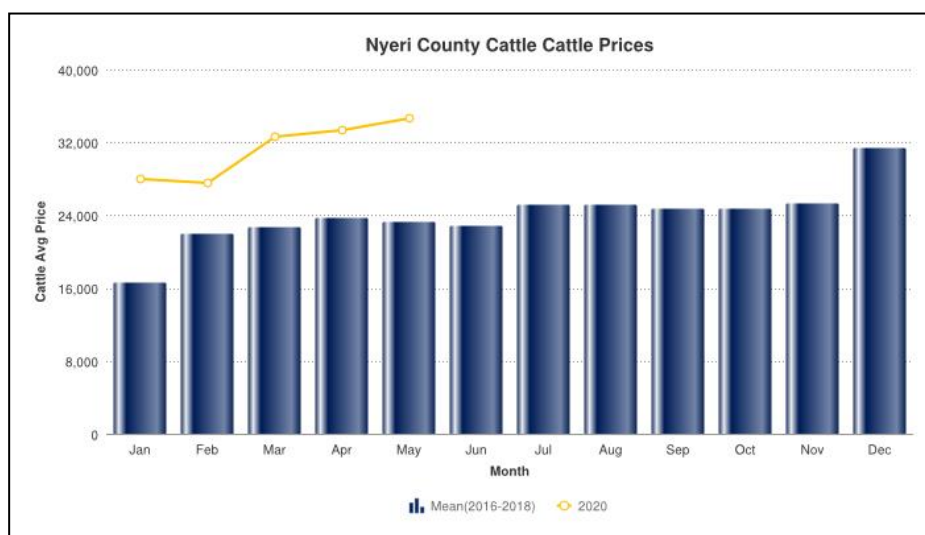


Figure 9: Outline average price trends for cattle

4.1.2 Sheep prices

- A two-year-old medium size Sheep sold for Ksh 4,750 same as was reported last month.
- The month's prices were higher by 27 percent, compared to the 2017-2019 short term averages of Ksh 3,733 as shown in figure 10.

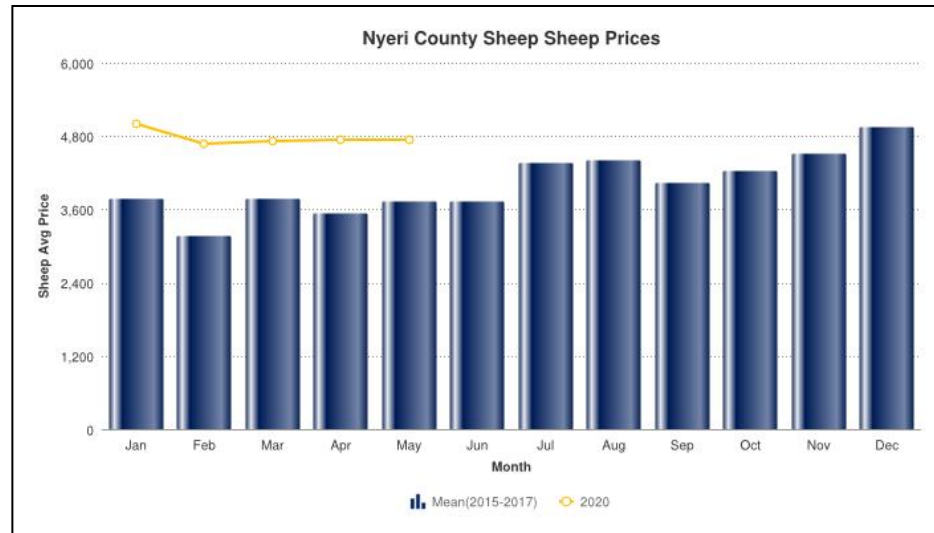


Figure 10: Outline average price trends for sheep

4.2 CROP PRICES

4.2.1 Maize

- Maize prices were relatively stable during the month under review compared to the previous month. This could be attributed to availability of maize stock at the household level.
- A kilo of maize retailed for Ksh 42.5 in May from Ksh 43.5 in April.
- Compared to the short-term averages of Ksh 46, the registered price was lower by eight percent as shown in figure 11.

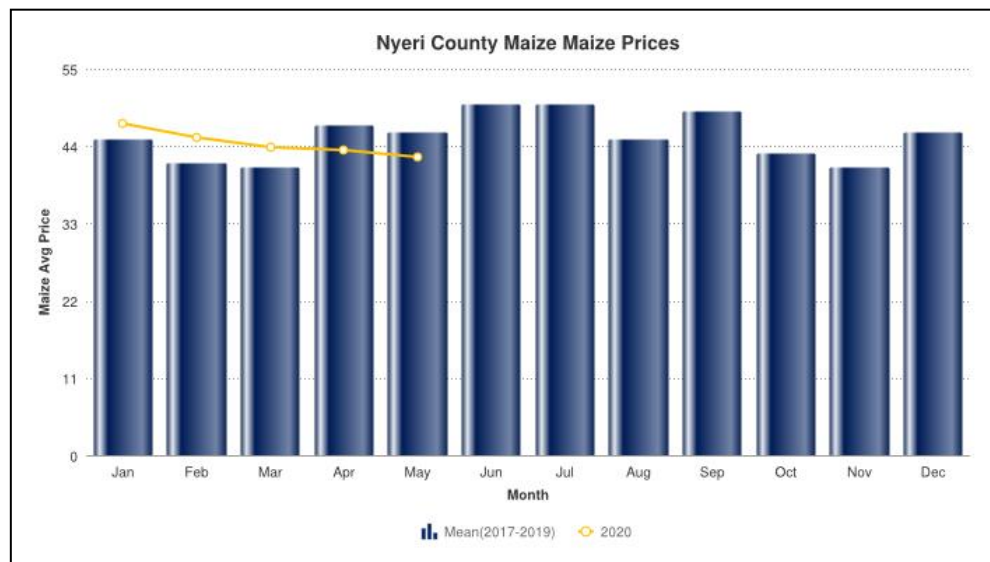


Figure 11: Outlines average price trends for Maize

4.2.2 Beans

- A kilo of Beans retailed for Ksh 90 in May from Ksh 87 in April, registering three percent increase.
- The increase in prices could be attributed overreliance of markets for supply. Households do not have beans stocks from OND season.
- The month's prices were lower by six percent, compared to the 2017-2019

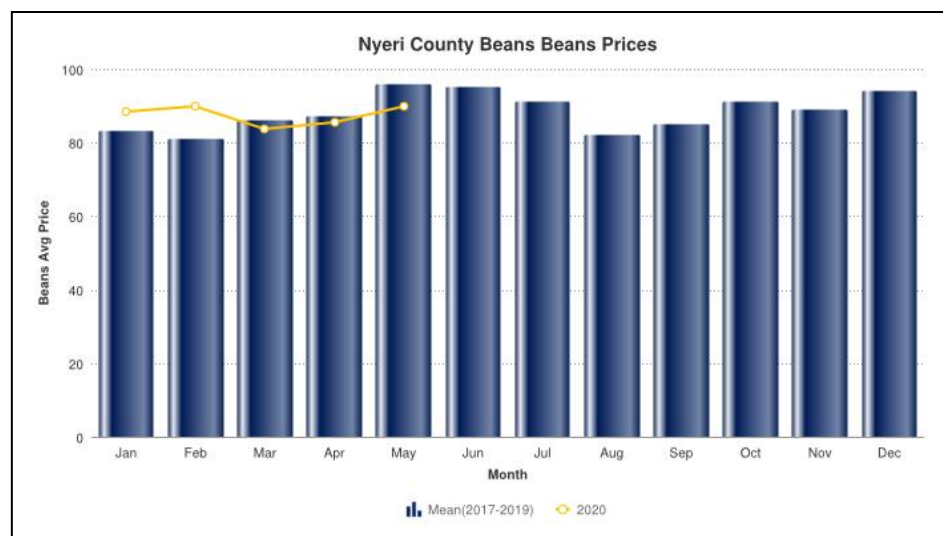


Figure 12: Outlines average price trends for Beans

short term average of Ksh 90.

4.2.3 Livestock Price Ratio/Terms of Trade

- Terms of trade ratio registered an increase attributed to an increase in livestock prices as food commodities prices remained stable.
- A kilo of sheep was equivalent to 112 kilograms of maize accounting for four percent rise from last month value of 108 kilograms.
- Compared to the 2017-2019 short term average of 100 current TOT was higher by eight percent as outlined in figure 13.

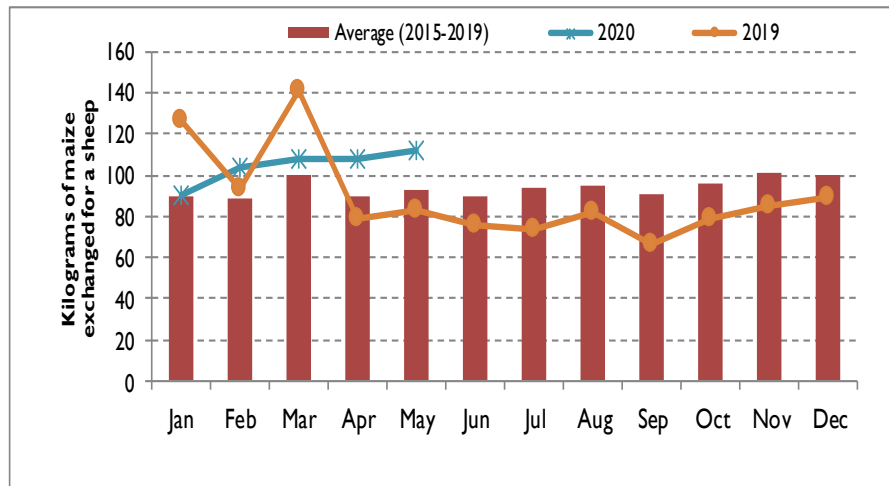


Figure 13: Outlines terms of trade in Kieni

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption has been stable since January. Consumption stood at 1.7 litres in the month of May which was quite comparable to 1.6 litres in the previous month.
- Households in marginal mixed farming consumed more milk at 1.8 litres per day compared to 1.6 litres in mixed farming livelihood zones.
- Households sold the reminder to the various co-operatives that are operating in the region.

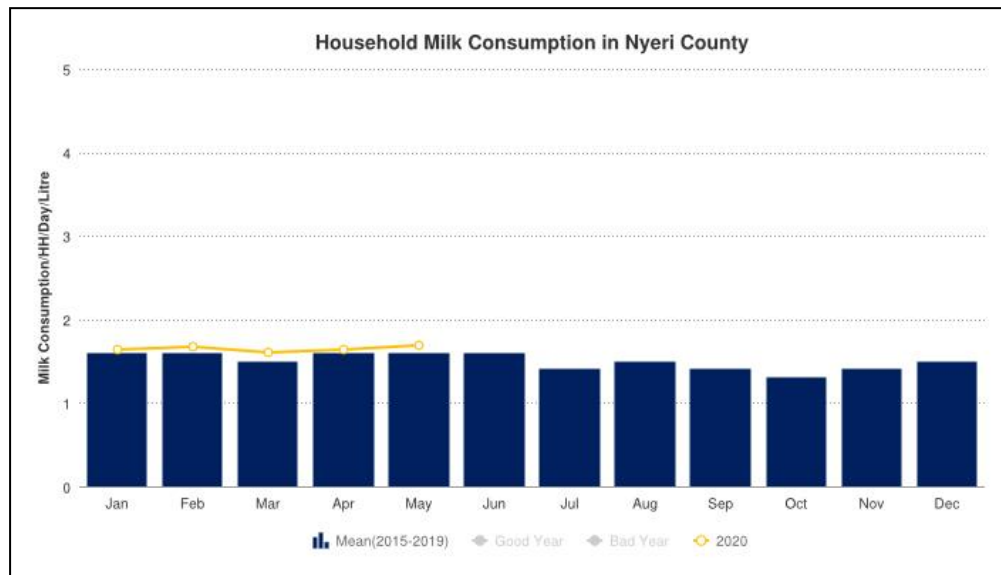


Figure 14: Outlines milk consumption for the county

- Compared to the 2015-2019 short term average of 1.6 litres, the month's consumption was within the threshold as shown in figure 14.

5.2 FOOD CONSUMPTION SCORE

- The food consumption score for Kieni improved during the month under review compared to the month of March. This is attributed to availability of adequate maize stocks from the OND season coupled with accessibility of tradition vegetables and other short cycle maturing crops from the MAM rains. Proportion of households with acceptable and borderline food consumption score in the sampled population was 47

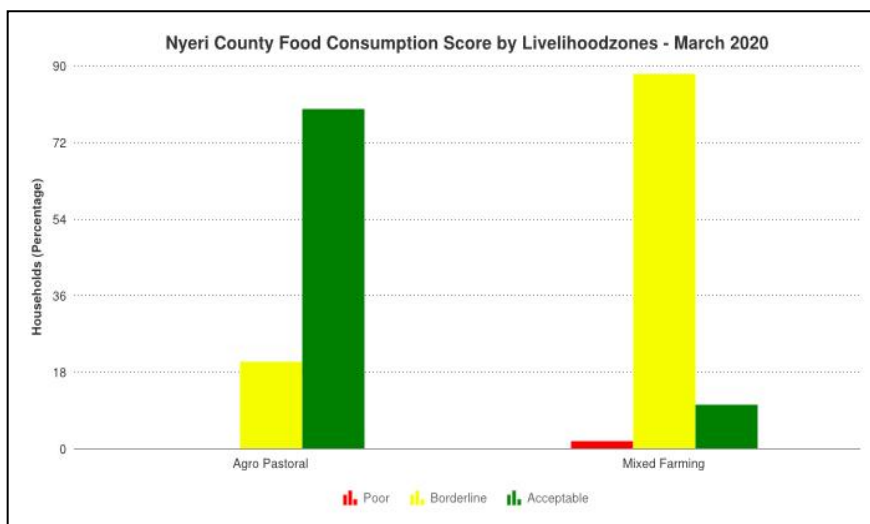


Figure 15: Presentation of food consumption score by livelihood

- percent and 53 percent respectively compared to 43 percent, 56 percent and one percent at acceptable, borderline and poor respectively in March.
- The marginal mixed farming livelihood zones fared better, since 77 percent of the households had acceptable food consumption score compared to 23.3 percent in mixed farming livelihood zones, attributed to poor dietary diversity in mixed farming zones.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- Percent of children under the age of five years at risk of malnutrition stood at 0.7. The cases were reported in Mugunda ward in Kieni West Sub county.
- Compared to the 2013-2019 long term average of 1.1, percent at risk of malnutrition was lower by 27 percent.

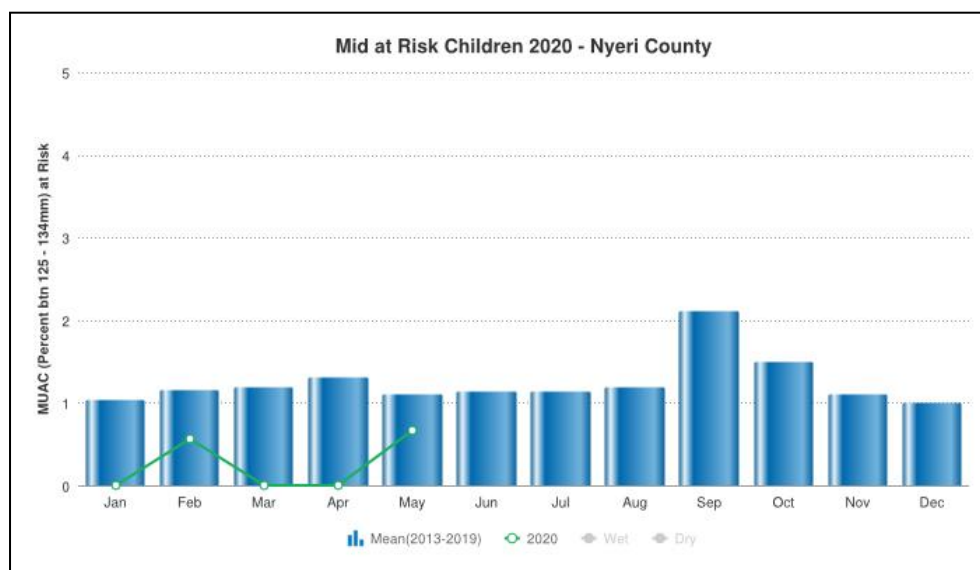


Figure 16: Presentation of nutrition status of children below five years

5.4 COPING STRATEGIES

- The coping strategy index stood 5.15 in May, 14.5 percent drop from the month of March. This is an indication that households were coping less frequently, attributed to availability of adequate maize stocks from the OND season coupled with accessibility of tradition vegetables and other short cycle maturing crops from the MAM rains as well as adequate milk.

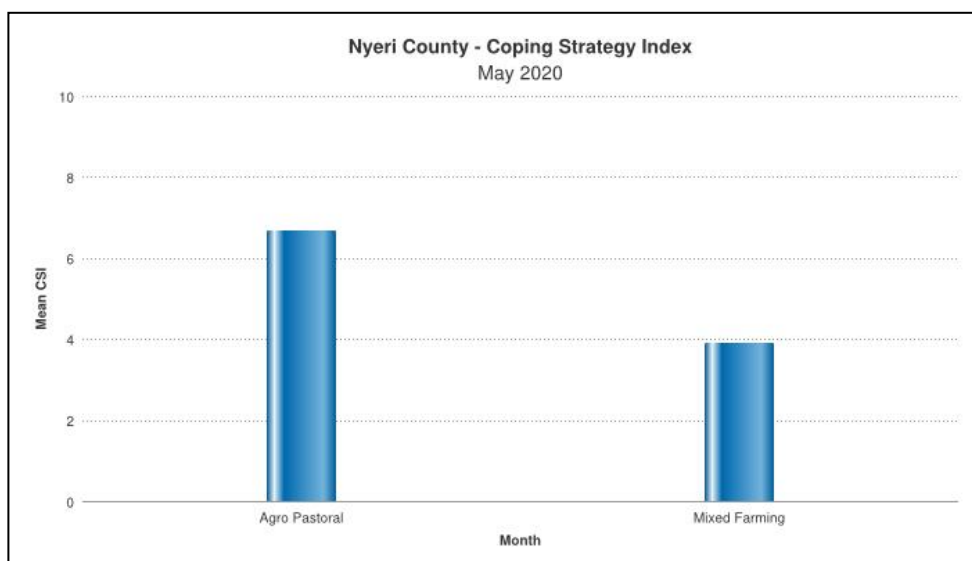


Figure 17: Presentation of the CSI for Kieni by livelihood zones

- Households in Marginal mixed farming livelihood zones applied coping mechanisms more frequently compared to those in Mixed farming livelihood zones as indicated in figure 17. The main coping strategies applied by vulnerable households were reliance on less preferred food, restricting adult consumption for children to eat and reducing daily meals intake.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTIONS

- Iron and folate supplementation among pregnant women.
- Offering HINIYC services at the health facilities.
- Public awareness on the covid 19 pandemic.

6.2 FOOD AID

- Cash transfers for persons above the age 70 years, the disabled and the most vulnerable in Kieni was ongoing. At least 744 persons in Kieni East sub County have benefitted from the programme.

7.0 EMERGING ISSUES

- There were no reported cases of Human-Wildlife conflict during the month under review.

7.1 FOOD SECURITY PROGNOSIS

- According to Kenya Meteorological Department MAM 2020 forecast, central Kenya is among areas that will continue to receive rains till the end June.
- Household food security is expected to remain stable attributed to adequate maize stock from the OND season. The stocks are expected to last for two to three months. Availability of traditional vegetable and other short cycle maturing crops due to the ongoing MAM rains are expected to cushion the households further.
- Given the ongoing MAM rains livestock productivity is expected to remain good due to availability of adequate forage and water sources.
- Market disruptions will be inevitable due to effects of Covid 19 pandemic. In return, terms of trade are expected to decrease due to increase in food prices and decline in livestock prices.

- The proportion of children at risk of malnutrition is likely to reduce due to replenishment of household stocks from short rains harvest and availability of adequate milk.

8. RECOMMENDATIONS

- Sensitize households on water harvesting methods, modern irrigation technologies and storage harvesting (CGN).
- Capacity building on post-harvest management. (NDMA).
- Sensitize farmers on soil fertility management (CGN).
- Livestock disease surveillance and deworming (CGN).
- Sensitize farmers on fodder modern harvesting and storage (CGN)