



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

SEPTEMBER EWS PHASE



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

- The month of September was characterised by hot and windy weather conditions. Off seasonal rains were received for an average of three to four days. Amounts received were poorly distributed in time and space.
- Vegetation condition was above average greenness.

Socio Economic Indicators (Impact Indicators)

- Livestock body condition for cattle was fair to poor in Kieni East and fair in Kieni West.
- Majority of the farmers were undertaking land preparation and planting.
- Harvesting of maize was still ongoing.
- Milk production was above the long-term average while consumption was within the threshold.
- Distances to water sources for households' use was above the long-term average.
- Terms of trade ratio improved during the month under review compared to the previous month.
- 3.8 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	Deteriorating
Marginal Mixed Farming	Normal	Deteriorating
Biophysical Indicators	Value	Normal Range/Value
Rainfall (%)	113	90-110% of LTA
VCI	85.85	>35
Forage condition	Fair-poor	Fair
Production indicators	Value	Normal
Crop Condition (Maize)	Good	Poor
Livestock Body Condition	Fair	Fair
Milk Production	5.4	4.7 litres
Access Indicators	Value	Normal
Terms of Trade (ToT)	109	95
Milk Consumption	1.6 litres	1.4 litres
Return distance to water sources for household use	1.4Km	1.2 Km
Return distance to water sources from grazing field.	2.3 Km	2.6 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	3.8	2.1
Coping Strategy Index	4.79	>10

- 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)

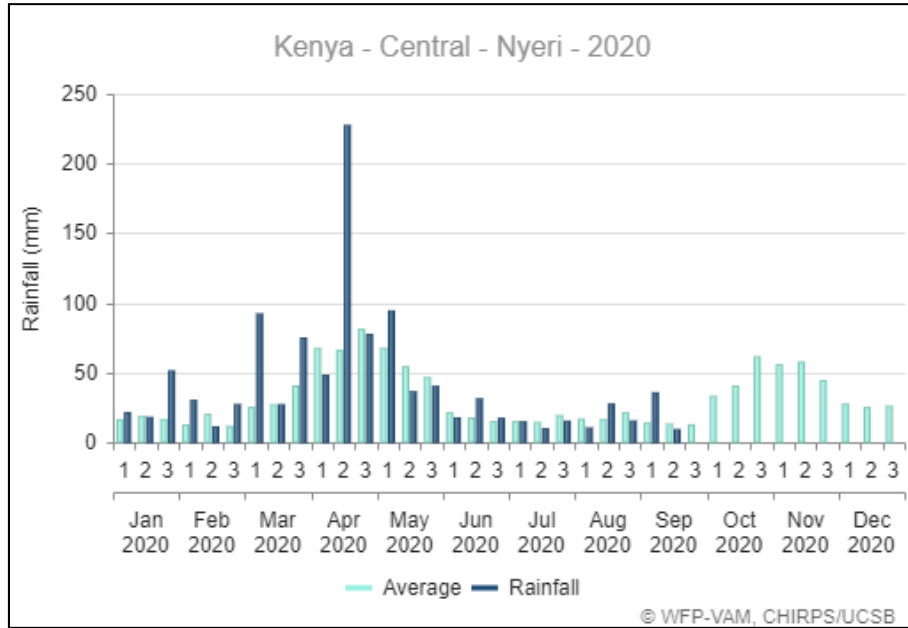
- Short rains
- Planting/weeding

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 month of September was characterised by hot and windy weather conditions.
- Off seasonal rains were received for an average of three to four days.
- Amounts received were poorly distributed in time and space. Thegu ward and Naomoru/Kiamathaga wards in Kieni East Sub County did not record any rains during the month under review.
- Kieni East and Kieni West sub counties received 113 percent of the normal rains



- According data World Food Programme WFP VAM CHIRPS/UCSB, Nyeri County received 468 percent of the normal rains in the first and second dekad as shown in figure 1.

Figure 1: Presentation of the rainfall performance for September CHIRPS/UCSB, Nyeri County received 468 percent of the normal rains in the first and second dekad as shown in figure 1.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 VEGETATION CONDITION INDEX(VCI)

- Above normal vegetation greenness was reported as shown in figure 2 (a) below, attributed to high soil moisture contents.
- The current 3 monthly VCI of 85.85 is the best to have been recorded for the month of September over the years as shown in figure 2(b) below.

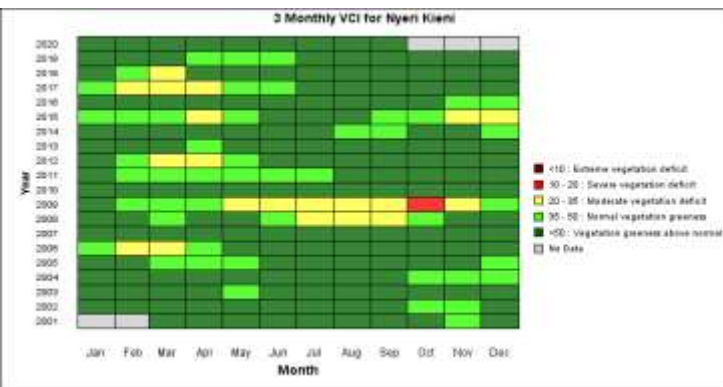


Figure 2(a): 3 monthly VCI for Kieni

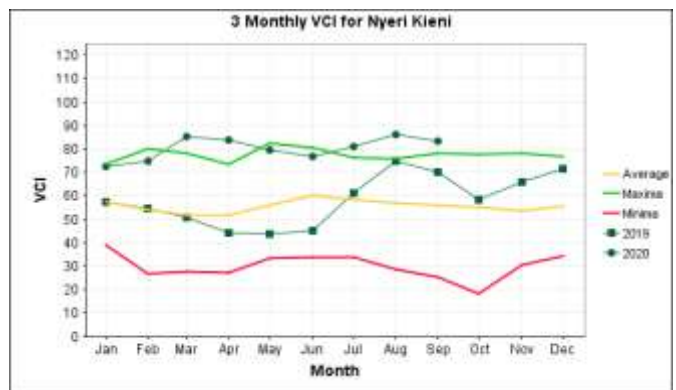


Figure 2(b): 3 monthly VCI for Kieni

Pasture

- Pasture condition was fair across the livelihood zones with an exception of Thegu and Naromoru/kiamathaga wards in Kieni East sub County that recorded poor pasture condition as shown in figure 3(a)
- Poor conditions recorded in these areas, could be attributed to frequent frost attacks and lack of rains.
- Pasture quantity was above normal in both livelihood zones. The situation is expected to improve given that the October-November-December (OND) rains are projected to start by the 3rd to 4th week of October.

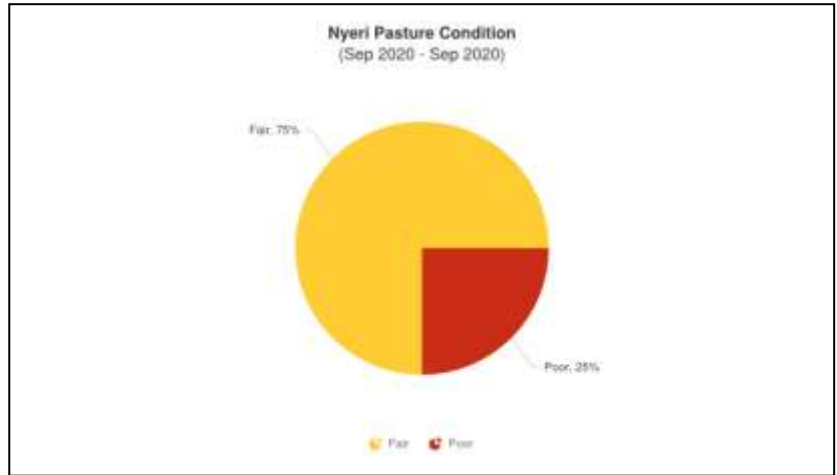


Figure 3(a): presentation of pasture condition for Nyeri (Kieni) County

2.1.2 Browse

- From our monthly monitoring, and according to our Key Informant respondent's 75 percent of the browse was fair while 25 percent was good.
- Browse condition had deteriorated during the month under review compared to the previous month.
- Quantity remained good in both livelihood zones.

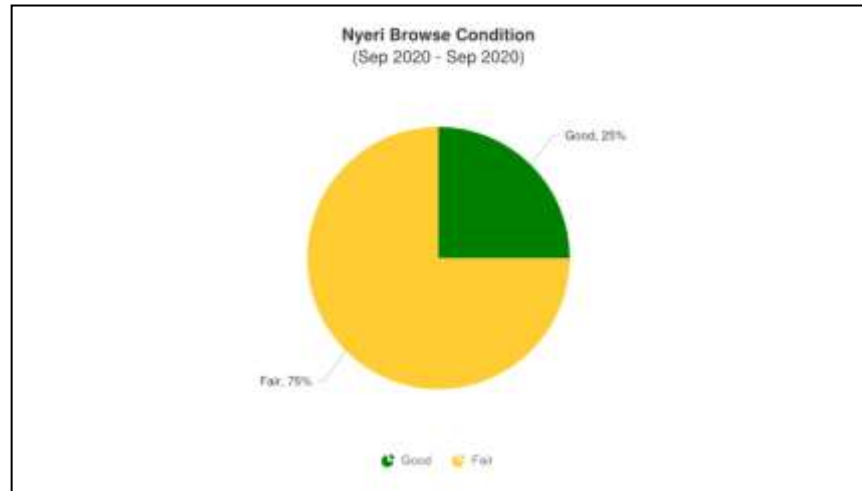


Figure 3(b): presentation of browse condition for Nyeri (Kieni) County

2.2 WATER RESOURCE

Sources

- Rivers remained the main source of water in Kieni at 50 percent, followed by pans/dams and springs at 22 percent each and boreholes at six percent.
- Rivers were flowing at normal levels. However, at the tail ends, rivers flow were at the minimum base flows due to over abstraction and diversion by residents in the upper zones .
- Occasional rationing program for residents was reported in Thegu, Naromoru/Kiamathaga, Mugunda and Mwiyoogo Endarasha wards. Open water sources are still holding some amounts and are about 30-40 percent full.

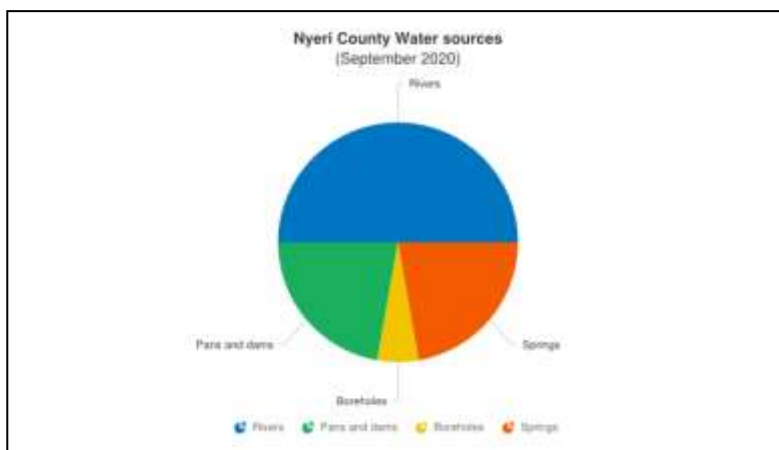
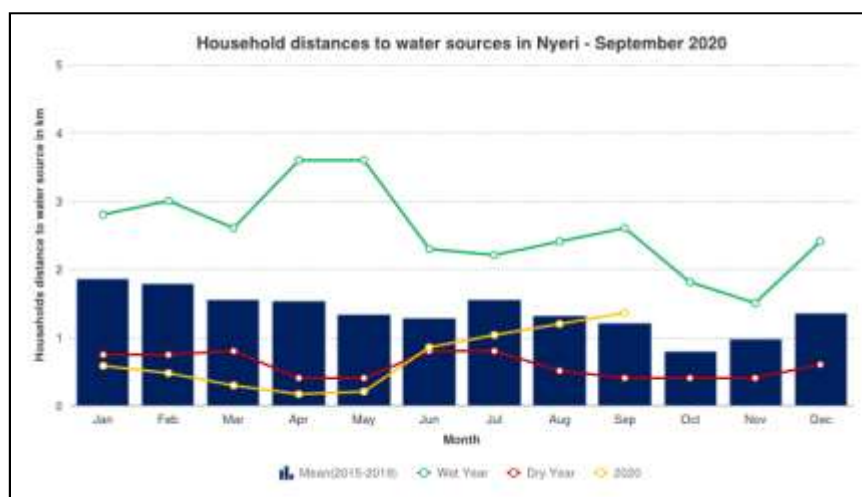


Figure 4: Shows main water sources for Kieni

2.2.1 Household access and Utilization

- The average distance from the household to water sources stood at 1.4 Km in September which was quite comparable to 1.3 Km in August.
- Households distances to water sources were higher in the marginal mixed farming livelihood zones compared to mixed farming livelihood zones.
- The month's distances were within the threshold compared to the 2015-2019 long term average of 1.2 Km as indicated in figure 5.



2.2.2 Livestock access

- The average distances from the grazing field to water sources stood at 2.3 Km in September, which was quite comparable to 2.2 Km previous month.
- Registered distances were lower by 12 percent compared to the 2015-2019 long term average of 2.6 as shown in figure 6.

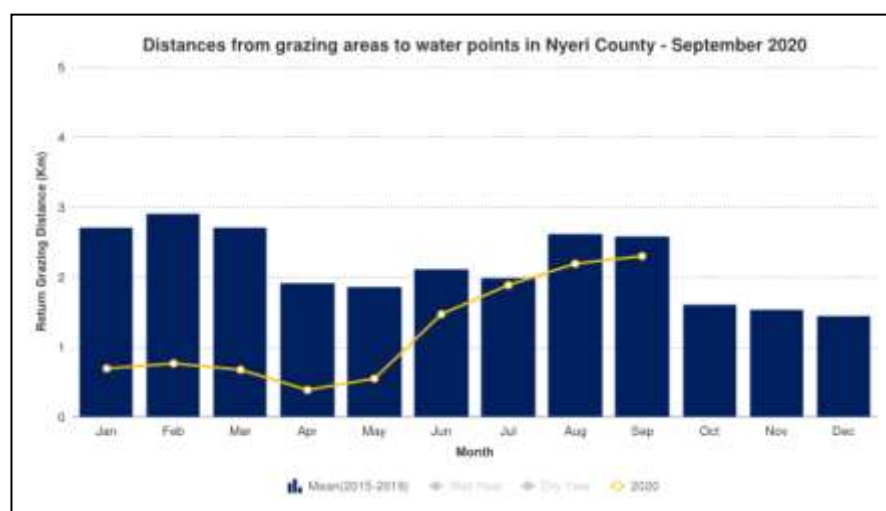


Figure 6: presentation of average grazing distances to water

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body condition, deteriorated during the month under review compared to the previous month, attributed to declining pasture conditions and increased distances to water sources.
- Body condition for cattle was fair to poor in Kieni East and fair in Kieni West. Body conditions for shoats was fair across the livelihood zones.

3.1.2 Livestock diseases

- Confirmed cases of lumpy Skin Disease (LSD) were reported in Gakawa ward in Kieni East Sub County and in Mugunda ward in Kieni West Sub County.

3.1.3 Milk Production

- The average milk production dropped by 10 percent from 6.0 litres in August to 5.4 litres in September, attributed to declining pasture quality coupled with increased distances to water sources. Majority of the animal were also in the in-gestation period.
- However, the month's production was higher by 15 percent compared to the 2015-2019 long term of 4.7 as shown in figure 8.

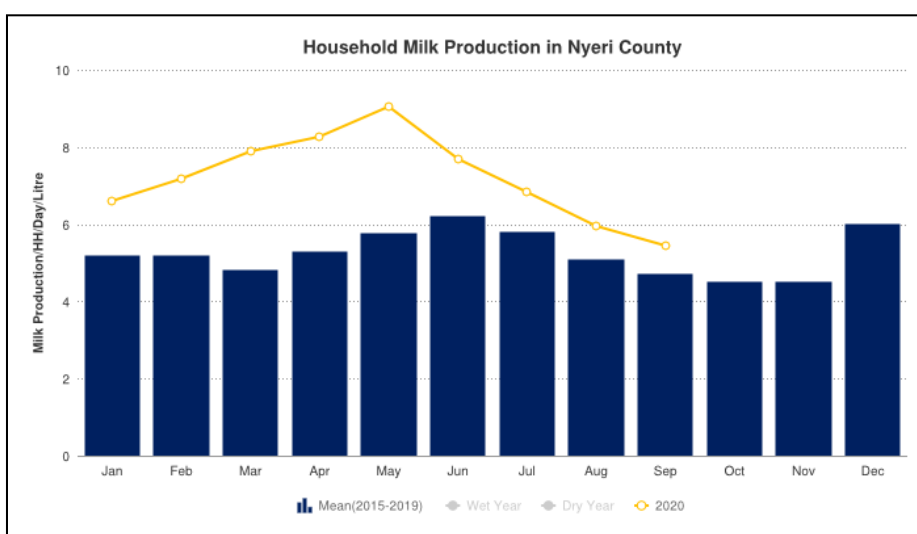


Figure 8: Presentation of average milk production in Nyeri (Kieni)

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. Majority of the farmers were undertaking land preparation and planting in readiness of the October-November-December (OND) rains.
- Maize at the farms was at green to dough stage. Harvesting of maize was also ongoing.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Price

- Livestock prices were on a downward trend, attributed to deteriorating livestock body condition.
- A mature four-year-old bull retailed for Ksh 31,000 in September down from Ksh 32,167 in August, registering four percent drop.
- Compared to the 2017-2019 short term averages of Ksh 24,684 reported prices were higher by 25 percent, as indicated in figure 9.

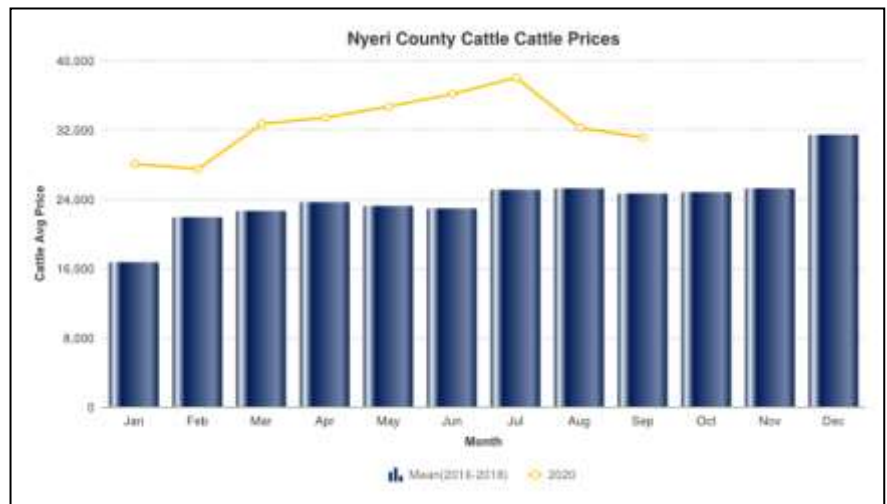


Figure 9: Outline average price trends for cattle

4.1.2 Sheep prices

- A two-year-old medium size Sheep retailed for Ksh 4,375 in September from Ksh 4,500 in August recording three percent drop.
- The month's prices were higher by eight percent, compared to the 2017-2019 short term averages of Ksh 4,042 as shown in figure 10.

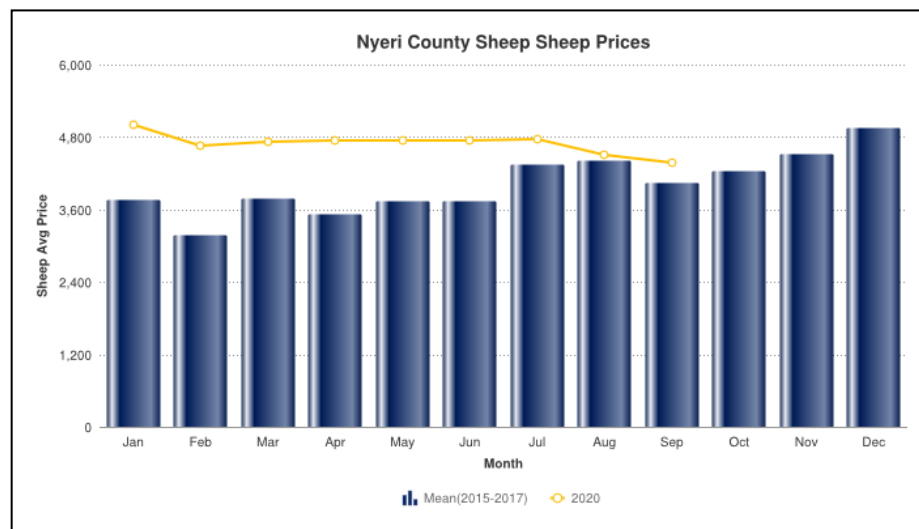


Figure 10: Outline average price trends for sheep

4.2 CROP PRICES

4.2.1 Maize

- Maize prices were relatively stable during the month under review compared to the previous month. This is attributed to availability of maize stock at the household level from the March-April-May (MAM) season.
- A kilo of maize retailed for Ksh 40 in September, which was quite comparable to 42 the previous month
- Compared to the short-term averages of Ksh 49, the registered price is lower by 18 percent as shown in figure 11.

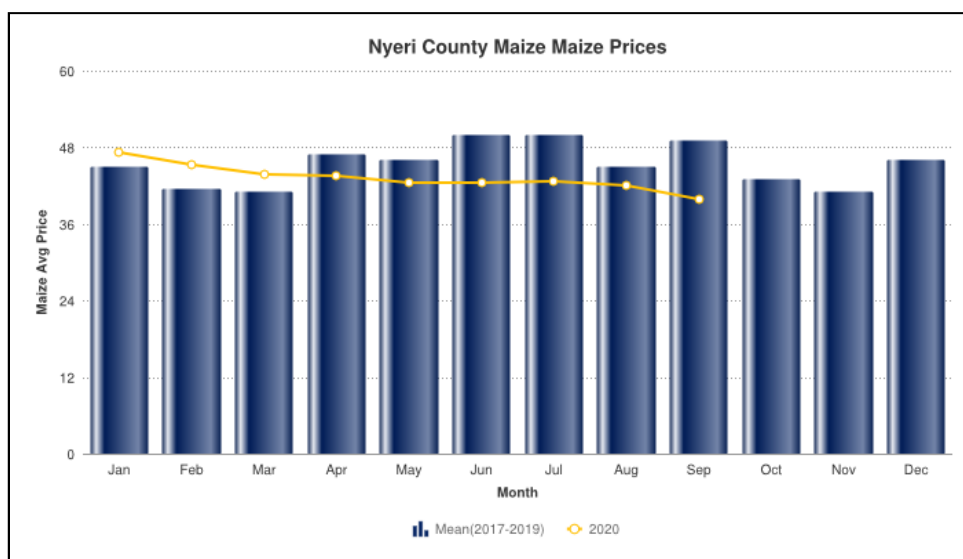


Figure 11: Outlines average price trends for Maize

4.2.2 Beans

- Beans prices were also stable compared to the previous.
- A kilo of beans retailed for Ksh 83 in September, which was quite comparable to Ksh 85 the previous month.
- Compared to the 2017-2019 short term averages of 85, the month's price was within the threshold as shown in figure 12

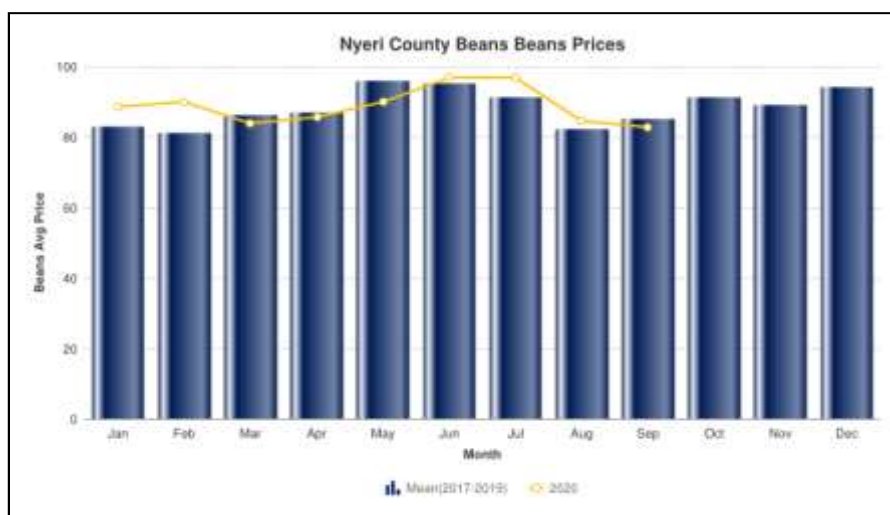


Figure 12: Outlines average price trends for Beans

4.2.3 Livestock Price Ratio/Terms of Trade

- Terms of trade ratio improved during the month of September compared to the previous month, attributed stable food prices even as livestock prices dropped.
- A mature sheep was equivalent to 109 kilograms of maize accounting for two percent increase from last month of 107 kilograms.
- Compared to the 2017-2019 short term average of 95 kgs current TOT was higher by 14 percent as outlined in figure 13.

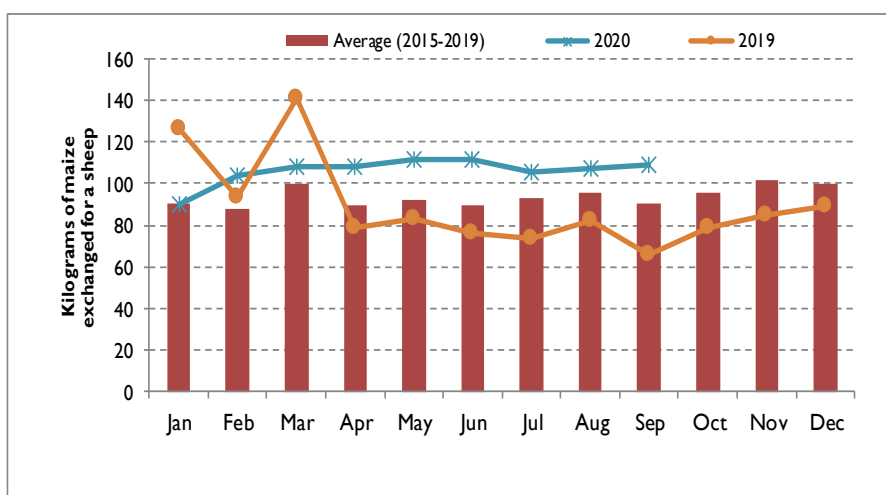


Figure 13: Outlines terms of trade in Kieni

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption has been stable since January. Consumption stood at 1.6 litres which was similar to the previous month.
- Households in marginal mixed farming consumed more milk at 1.7 litres per day compared to 1.5 litres in mixed farming livelihood zones.
- Compared to the 2015-2019 short term average of 1.4 litres, the month's consumption was within the threshold as shown in figure 14.

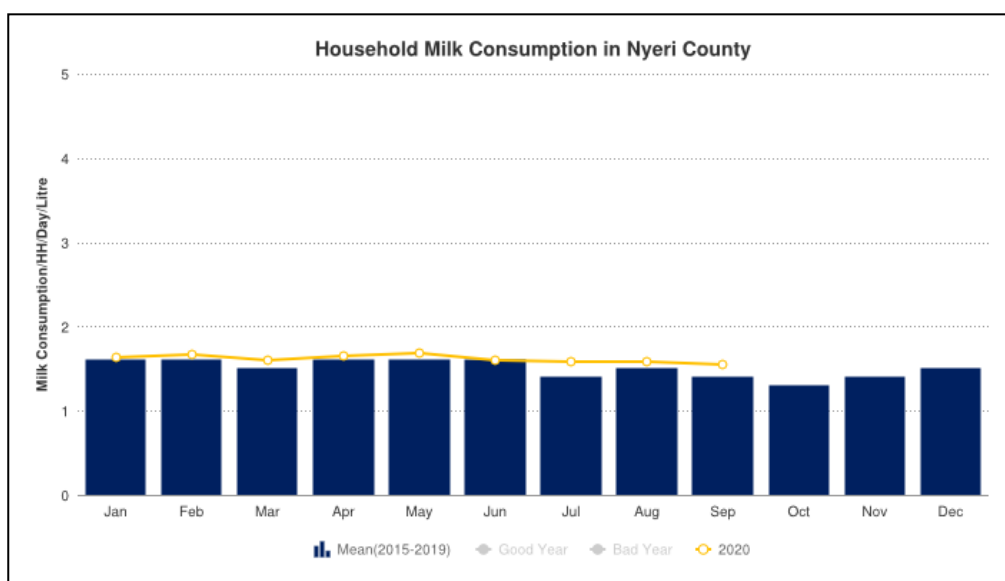


Figure 14: Outlines milk consumption for the county

5.2 FOOD CONSUMPTION SCORE

- The food consumption score remained stable during the month under review compared to the previous month. This is attributed to availability of harvests from the MAM season, income from crop sales coupled with increased agriculture waged labour opportunities. Proportion of households with acceptable and borderline food

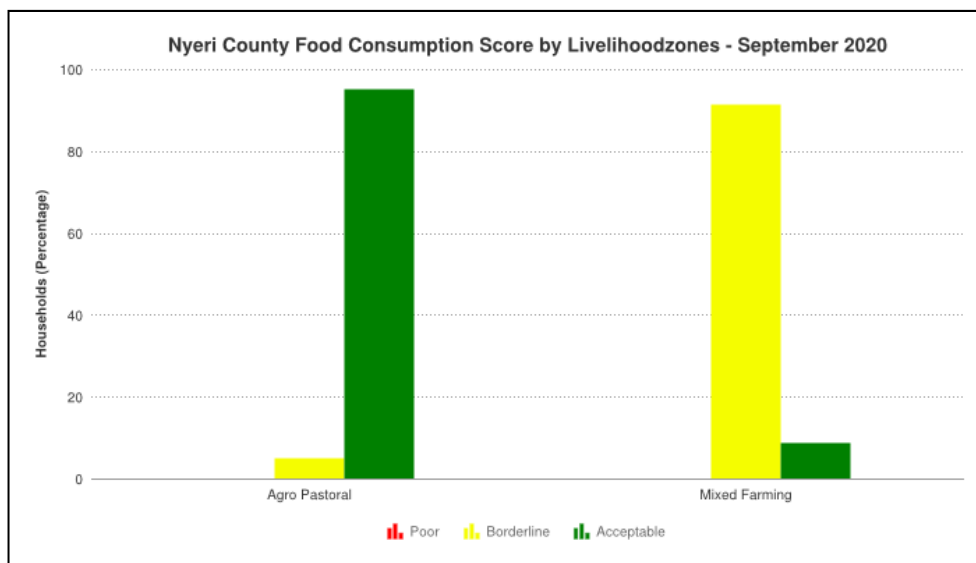


Figure 15: Presentation of food consumption score by livelihood zones

consumption score in the sampled population was 52 percent and 47 percent respectively compared to 55 percent and 45 percent at acceptable and borderline consumption score respectively in the previous month.

- The marginal mixed farming livelihood zones fared better, since 94.9 percent of the households had acceptable food consumption score compared to 8.6 percent in mixed farming livelihood zones.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- Number of children at risk of malnutrition increased by 13 percent from 1.3 percent in August to 3.8 percent in September, this could be attributed to majority of the mothers not visiting the health facilities for the normal child growth monitoring due to the covid 19 pandemic.

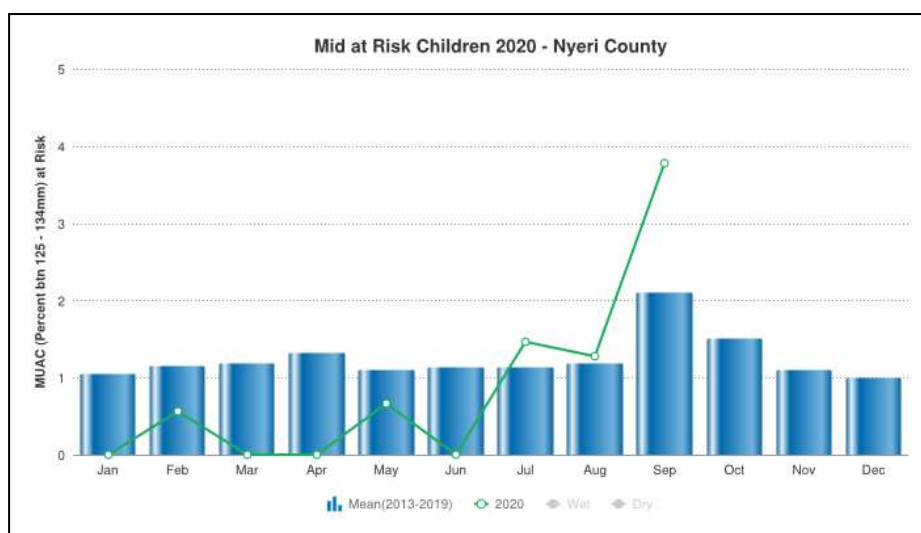
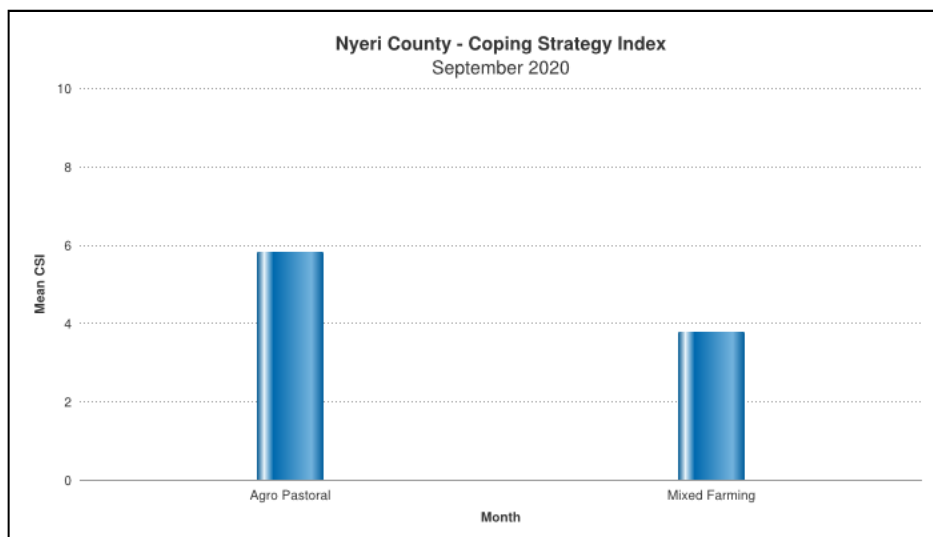


Figure 16: Presentation of nutrition status of children below five years

Compared to the 2013-2019 long term average of 2.1 percent, percentage of under-fives at risk of malnutrition during the month of September was higher by 80 eight percent.

5.4 COPING STRATEGIES

- The coping strategy index stood at 4.79 in the month of September which was quite comparable to 4.69 the previous month.
- 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

- Vaccination of livestock against LSD, FMD and BQ.

6.2 FOOD AID

- Cash transfers under the Inua Jamii programme is still ongoing. The target was persons above 70 years, the disabled and the most vulnerable in Kieni constituency. At least 5,149 persons above 70 years and 149 disabled persons have benefitted from the programme so far.

7.0 EMERGING ISSUES

- There were no emerging issues during the month under review.

7.1 FOOD SECURITY PROGNOSIS

- According to the Kenya Meteorology Department forecast, the onset of the OND rains is expected in the 3rd to the 4th week of October. Kieni is likely to experience occasional rainfall during the season with a likelihood of below normal amounts. Distribution is expected to be poor in time and space.
- Household food security is expected to remain stable for the next two months attributed to availability of yields from the MAM season. Food commodity prices are likely to decline further due to availability of commodities locally. In November, short cycle maturing crops will also be readily available at the household level leading to improved food consumption score. Frequency in the application of the coping mechanism is likely to reduce.
- The forage and water sources are expected to improve with the start of the OND season. Livestock body condition is likely to improve, leading to an increase in milk production and consumption. This will most likely lead to an increase in livestock prices. Terms of trade are likely to be favorable for livestock keepers.

8. RECOMMENDATIONS

- 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).
- Provision of subsidized seeds and fertilizer to farmers (CGN).
- Capacity building on water harvesting and storage (CGN)