National Drought Management Authority
NYERI COUNTY
DROUGHT EARLY WARNING BULLETIN FOR AUGUST 2020

AUGUST EWS PHASE

Drought Status: NORMAL

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Drought Situation & EW Phase Classification
Biophysical Indicators

☐ August was generally dry, windy and cold. Offseason rains was reported in some pockets for an average of four to five days. Amounts received were poorly distributed in time and space

☐ Above normal vegetation conditions were also observed.

☐ A decline in water access was evident when compared to July. Water holding structures were 60 to 50 percent full. River registered minimum base flows, due to over abstraction by upstream user.

Socio Economic Indicators (Impact Indicators)

☐ Livestock body condition for cattle was fair to poor in Kieni East and good to fair in Kieni West.

☐ Harvesting of beans and potatoes is still ongoing in both livelihood zones.

☐ Milk production was above the long-term average while consumption was within the threshold.

☐ Distances to water sources for households' use was below the long-term average.

☐ Terms of trade ratio declined compared to July.

☐ 1.3 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	87.13	>35
Forage condition	Good-Fair	Fair
Production indicators	**Value**	**Normal**
Crop Condition (Maize, beans and potatoes)	Good	Poor
Livestock Body Condition	Fair	Fair
Milk Production	6.0	5.1 litres
Access Indicators	**Value**	**Normal**
Terms of Trade (ToT)	106	93
Milk Consumption	1.6 litres	1.5 litres
Return distance to water sources for household use	1.2Km	1.3 Km
Return distance to water sources from grazing field.	2.2 Km	2.6 Km
Utilization indicators	**Value**	**Normal**
Nutrition Status, MUAC (% at risk of malnutrition)	1.3	1.2
Coping Strategy Index	4.69	>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**

1.0 CLIMATIC CONDITIONS
1.1 RAINFALL PERFORMANCE

☐ The said month was dry, windy with cold nights with occasional off-season showers averaging four to five days

☐ However, offseason rains were received, an average of four to five days. Received rains were poor in time and space.

☐ In total, 113 percent rainfall was realised compared to normal of rains.

☐ Generally, Nyeri County received 10 mm and 27.1 mm in the first and second dekad compared to the Long-Term Average of 16.4 and 16.1 respectively as shown in figure 1.
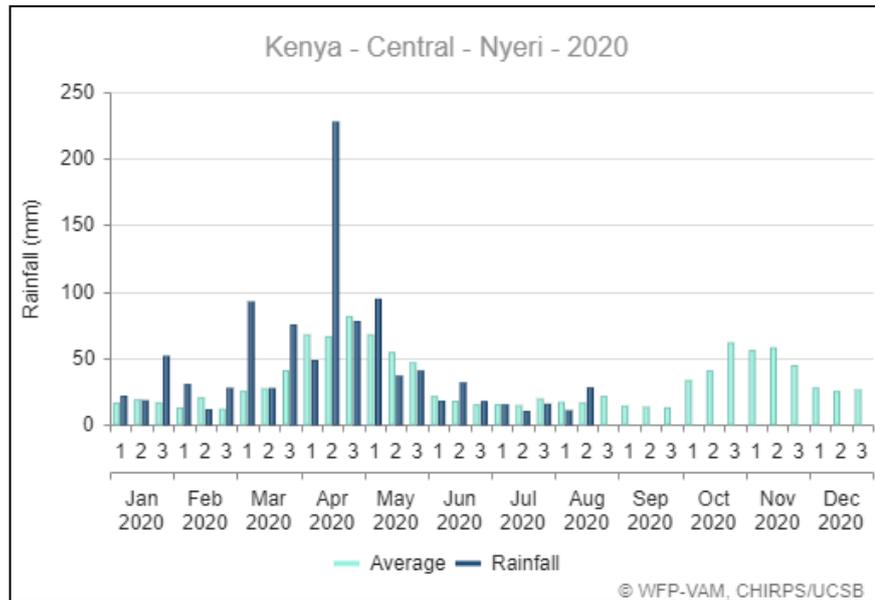
Figure 1: Presentation of the rainfall performance for August

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 good performance rains that were experienced through the long rain season up to the month of June and the effects of the 2019 short rain season that had performed equally well.

☐ The current 3 monthly VCI of 85.85 is the best to have been recorded for the month of August over the years as shown in figure 2(b) below.
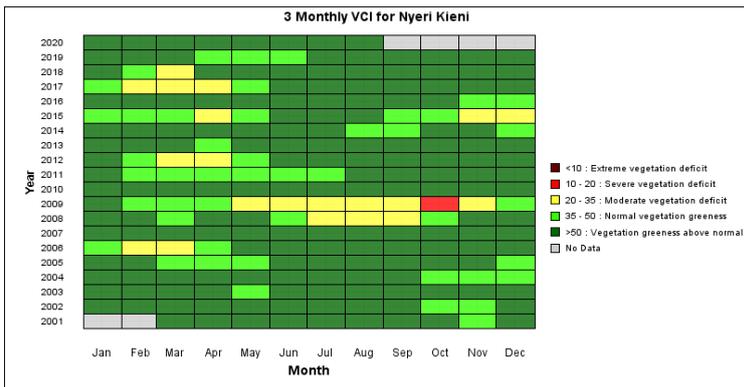

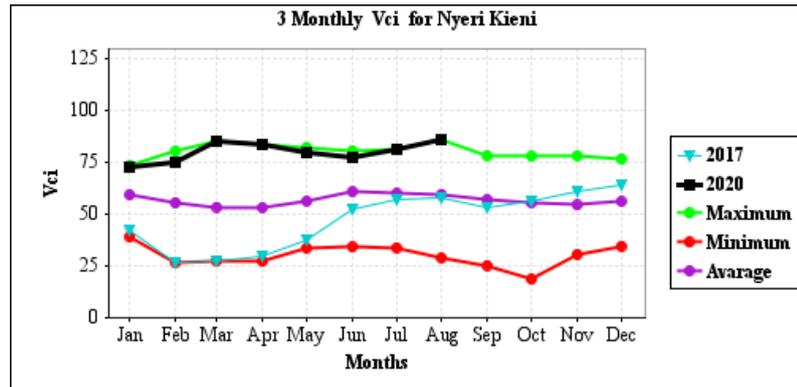**Figure 2(a): 3 monthly VCI for Kieni**

Figure 2(b): 3 monthly VCI for Kieni

Pasture

 Pasture condition was fair across the livelihood zones, with an exception of few pockets bordering the mountain that realised some showers as shown in figure 3(a).

 Pastures were on a deteriorating trend in quality and quantity as it was dry and windy besides frost attacks.

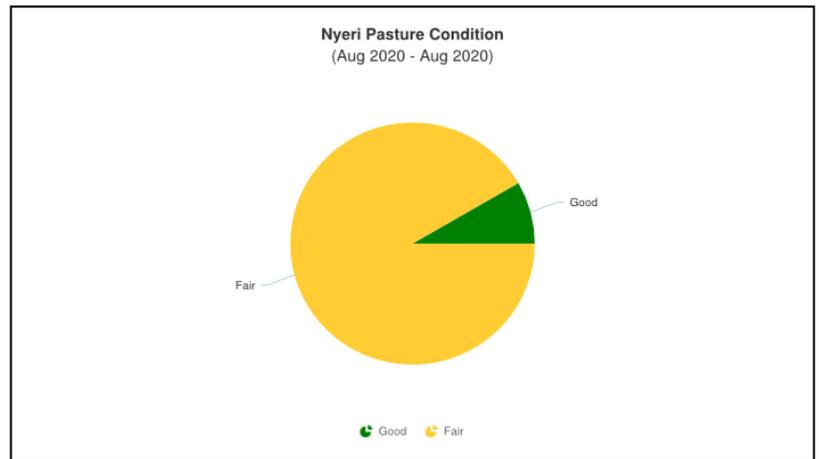 Pasture quantity remained above normal across the livelihood zones.

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 58.3 percent of the browse was fair while 41.7 percent was good.

 Browse condition had deteriorated during the month under review compared to the previous month.
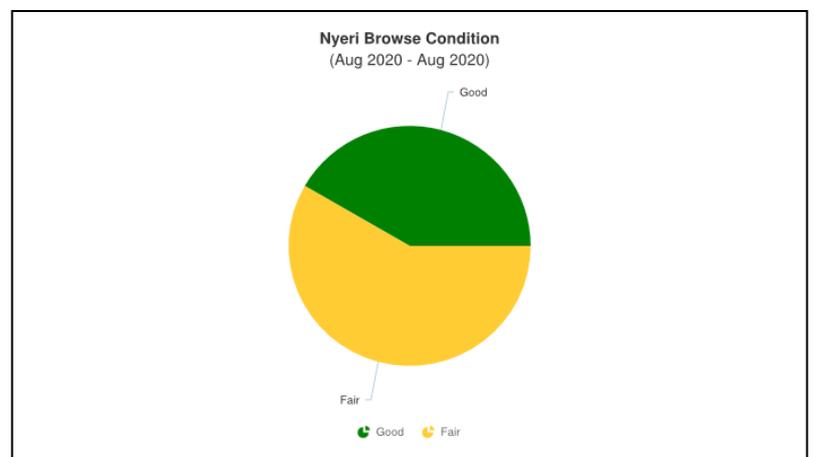
 Quantity remained good in both livelihood zones.

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

2.2 WATER RESOURCE
2.2.1 Sources

 Rivers remained the main source of water in Kieni at 52.9 percent, followed by pans/dams and springs at 24 percent each.

 Rivers are flowing at the minimum base level due to over abstraction and diversion of rivers by residents in the upper zones reducing flows for downstream users. Occasioning rationing program for residents was reported Thegu, Naromoru/Kiamathaga, Mugunda and Mwiyogo Endarasha wards. Open water

Figure 4: Shows main water sources for Kieni

sources are still holding adequate amounts and were about 50 – 60 percent full.

2.2.2   Household access and Utilization

☐ The average distance from the household to water sourcess increased by 20 percent from a Kilometre in July to 1.2 Km in August.

☐ The month's distances were lower by eight percent compared to the 2015-2019 long term average of 1.3 Km as indicated in figure 5.
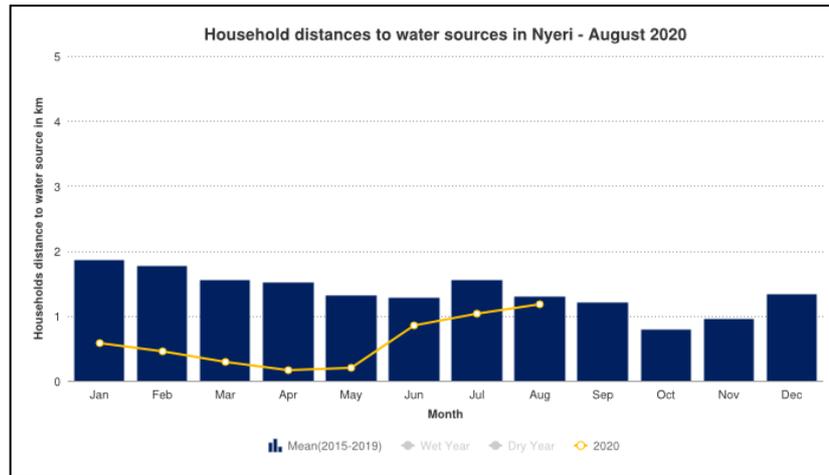

Figure 5: presentation of average return distances

2.2.3   Livestock access

☐ The average distances from the grazing field to water sources increased by 16 percent from 1.9 Km in July to 2.2 Km in August.

☐ Registered distances were lower by 21 percent compared to the 2015-2019 long term average of 2.6 as shown in figure 6.
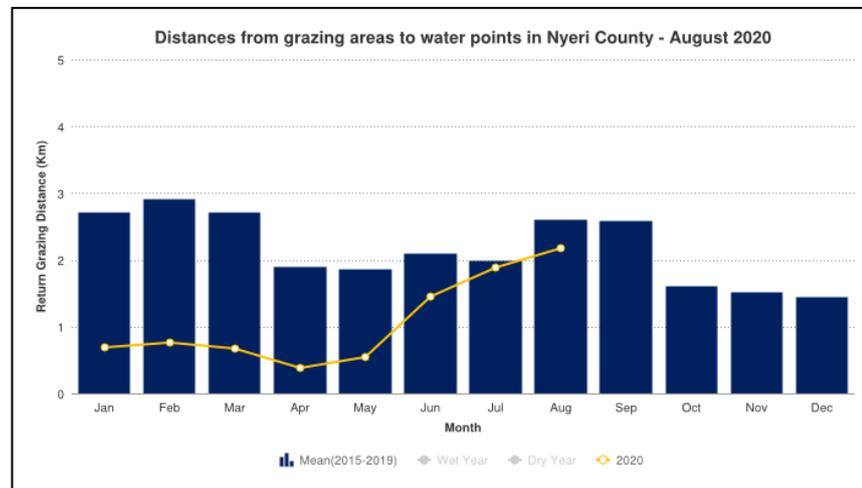

Figure 6: presentation of average grazing distances to water

3.0 PRODUCTION INDICATORS
3.1 LIVESTOCK PRODUCTION
3.1.1   Livestock Body Condition

☐ Livestock body condition, have been impacted by the deteriorating pasture quality and increased distances to water sources.

☐ Cattle body condition was fair to poor in Kieni East and good to fair in Kieni West. Body condition for shoats was good to fair across the livelihood zones.

3.1.2 Livestock diseases

☐ There was no disease outbreak reported during the month under review. However, Vaccinations against Foot and Mouth was ongoing, with about 1,500 heads of cattle having been vaccinated so far in Kieni East.

3.1.3 Milk Production

☐ The average milk production dropped by 12 percent from 6.8 litres in July to 6.0 litres in August, attributed to declining pasture quality coupled with increased distances to water sources.

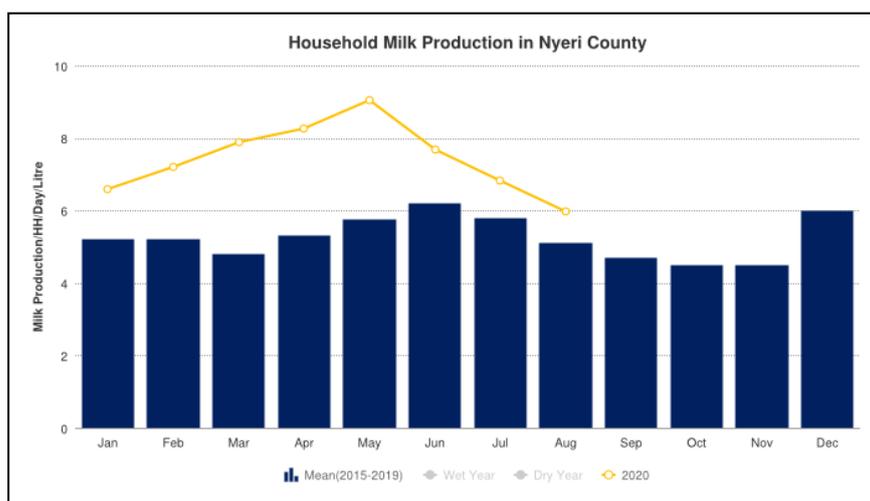☐ The month's production was above as compared to the 2015-2019 LTA of 5.1 by 18 percent as shown in figure 8.

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. Maize at the farm was at green to dough stage. Harvesting of maize is projected to start in September.

☐ Harvesting of beans and potatoes is still ongoing.

☐ Some of the farmers are preparing their farms in readiness to the October-November-December (OND) rains.

4.0 MARKET PERFORMANCE
4.1 LIVESTOCK MARKETING
4.1.1 Cattle Price

☐ Livestock prices dropped during the month under review compared to the previous month, attributed to deteriorating livestock body condition.

☐ A mature four-year-old bull retailed for Ksh 32,165 in August down from Ksh 38,000 in July, registering 18 percent drop.

☐ Compared to the 2017-2019 short term averages of Ksh 25,192 reported prices were higher by 28 percent, as indicated in figure 9.
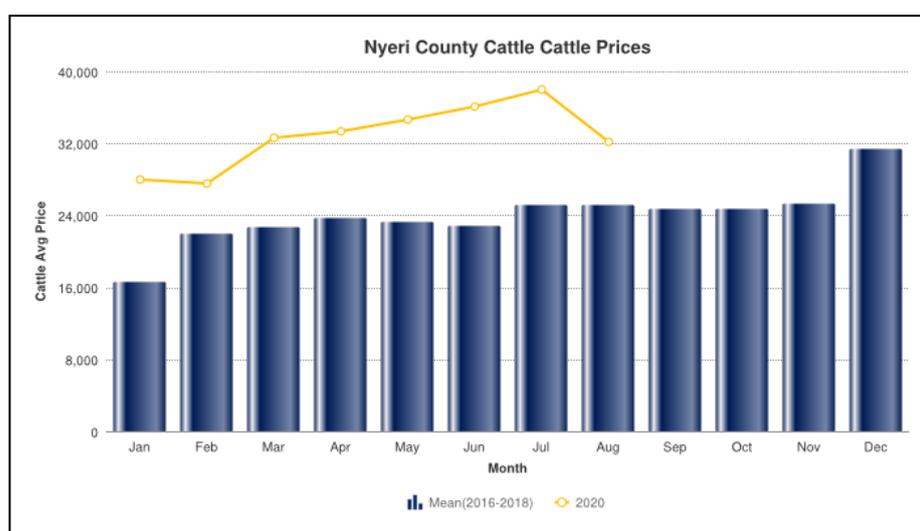

Figure 9: Outline average price trends for cattle

4.1.2 Sheep prices

- A two-year-old medium size Sheep retailed for Ksh 4,500 in August from Ksh 4,758 in July, recording five percent drop.
- The month's prices were higher by three percent, compared to the 2017-2019 short term averages of Ksh 4,400 as shown in figure 10.
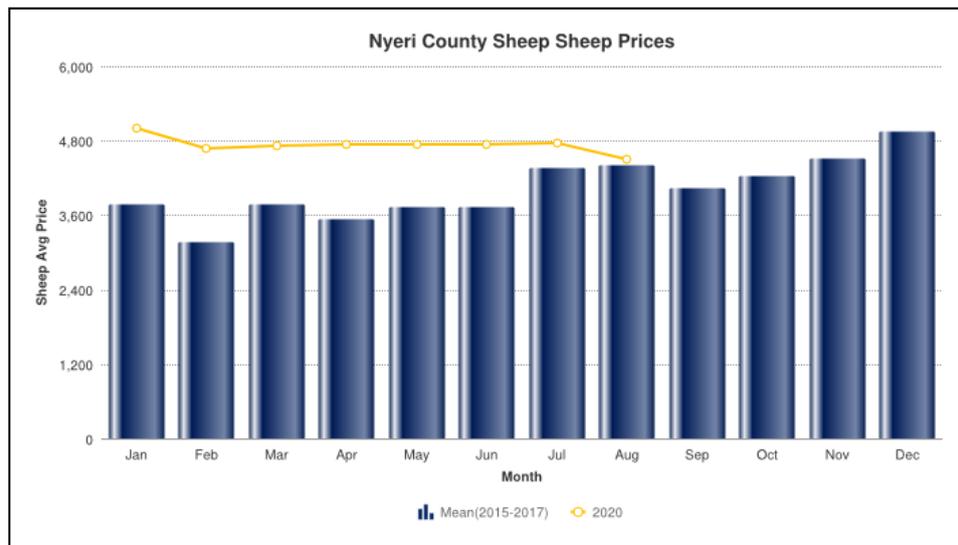
Figure 10: Outline average price trends for sheep

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 OND season. Households were also consuming green maize from the March-April-May season.
- A kilo of maize retailed for Ksh 42.2 in August, which was quite comparable to 42.8 the previous month
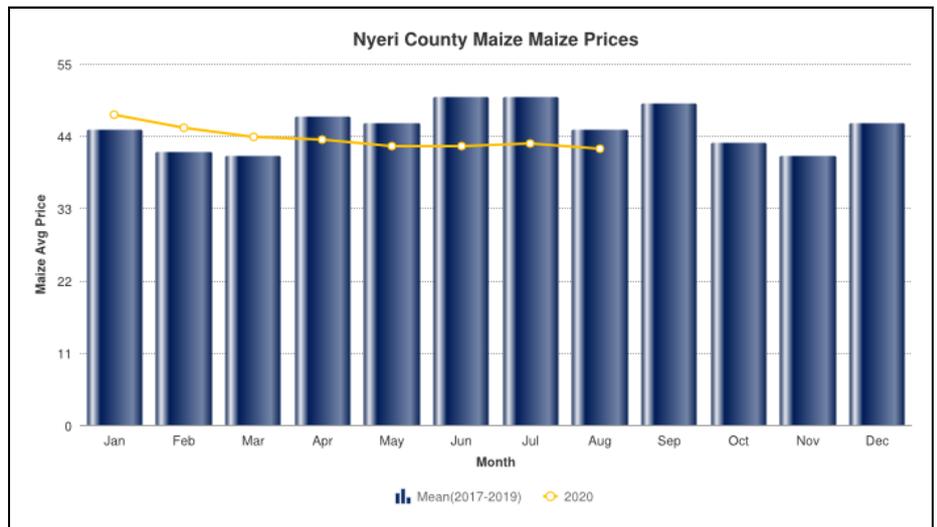
Figure 11: Outlines average price trends for Maize

- Compared to the short-term averages of Ksh 45, the registered price is lower by five percent as shown in figure 11.

4.2.2 Beans

- Beans prices dropped by 12 percent to retail at Ksh 85 per kilo in August from Ksh 97 in July.
- Drop in prices is attributed to availability of yields from the MAM season.
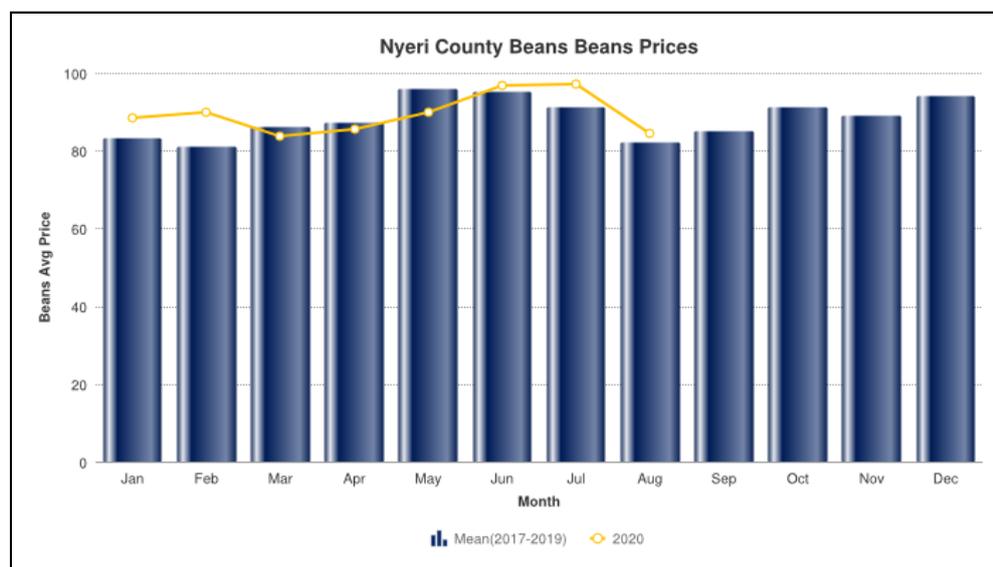- The month's prices were higher by four

Figure 12: Outlines average price trends for Beans

percent, compared to the 2017-2019 short term average of Ksh 82

4.2.3 Livestock Price Ratio/Terms of Trade

☐ Terms of trade ratio decreased during the month of August compared to the previous month, attributed to a decrease in livestock prices, as food commodities prices remained stable.

☐ A mature sheep was equivalent to 106 kilograms of maize accounting for five percent decline from last month of 112 kilograms.

☐ Compared to the 2017-2019 short term average of 93 kgs current TOT was higher by 13 percent as outlined in figure 13.
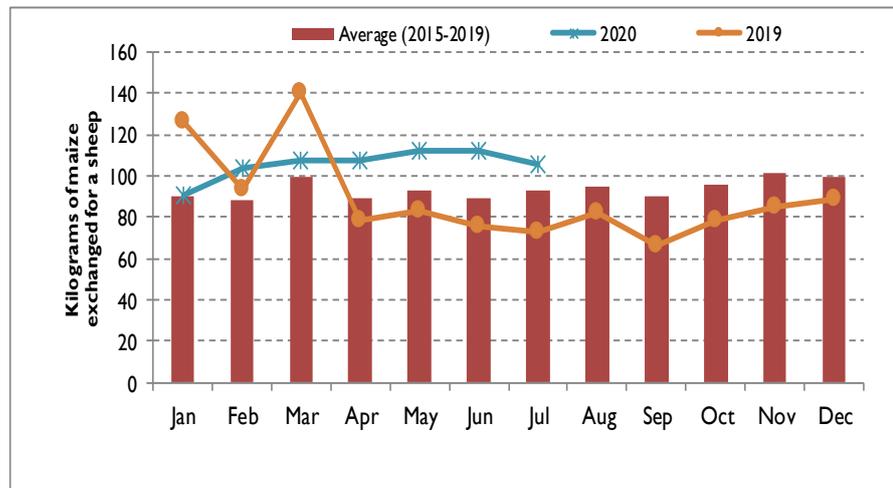

Figure 13: Outlines terms of trade in Kieni

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 1.5 litres, the month's consumption was within the threshold as shown in figure 14.
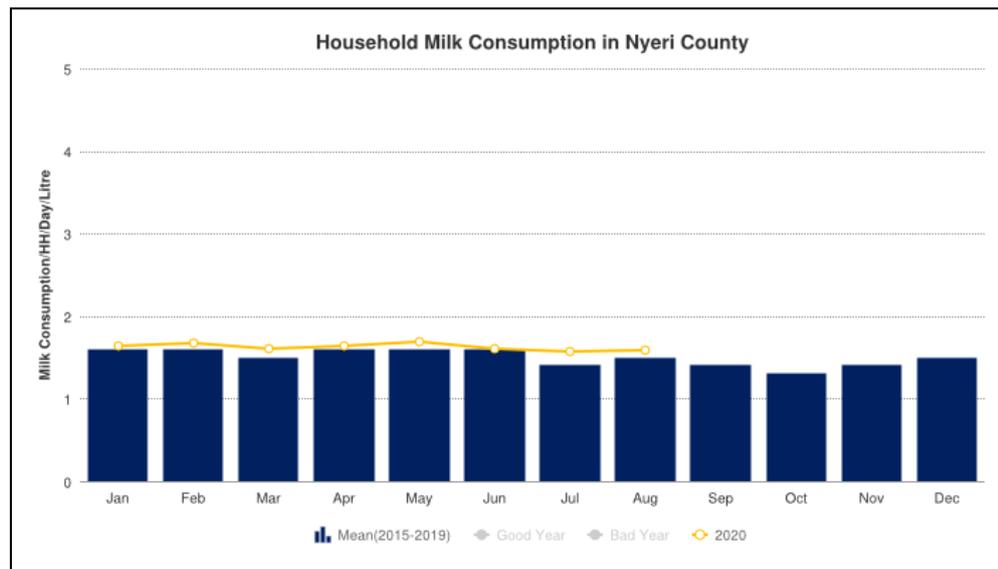

Figure 14: Outlines milk consumption for the county

5.2 FOOD CONSUMPTION SCORE

☐ The food consumption score improved. This is attributed to availability of harvests from the MAM season. Proportion of households with acceptable and borderline food consumption score in the sampled population was 64 percent, and 53 percent respectively compared to 43 percent, 54 percent and three percent at acceptable, borderline and poor consumption score respectively.
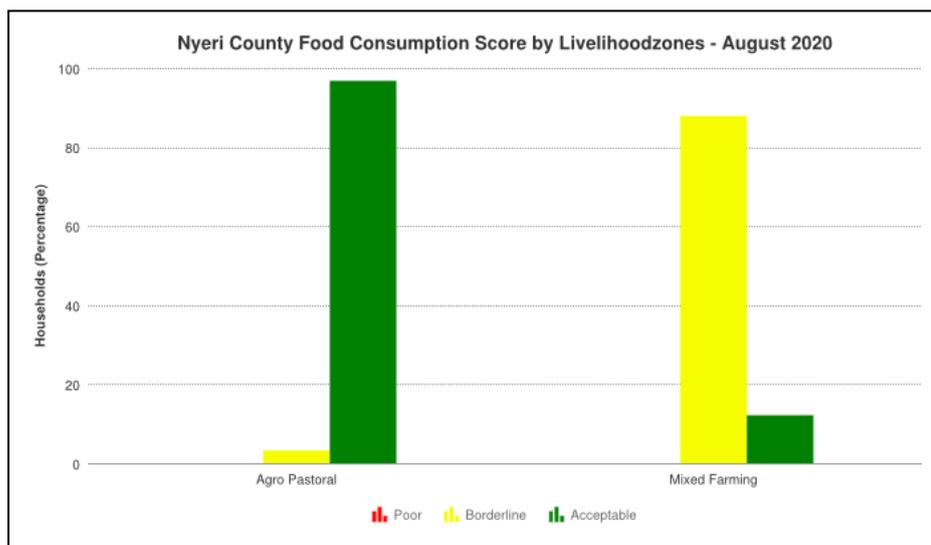

Figure 15: Presentation of food consumption score by livelihood zones

☐ The marginal mixed farming livelihood zones fared better, since 96.6 percent of the households had acceptable food consumption score compared to 12.1 percent in mixed farming livelihood zones.

5.3 HEALTH AND NUTRITION STATUS
5.3.1   Nutrition Status

☐ Number of children at risk of malnutrition decreased by 13 percent from 1.5 percent in July to 1.3 percent in August. The decrease is due to availability of yields from the MAM season.

☐ Reported cases were in Mwiyogo/Endarasha ward in Kieni West Sub County.

☐ Compared to the 2013-2019 long term average of 1.2 percent, percentage of under-fives at risk of malnutrition during the month of August was higher by eight percent.
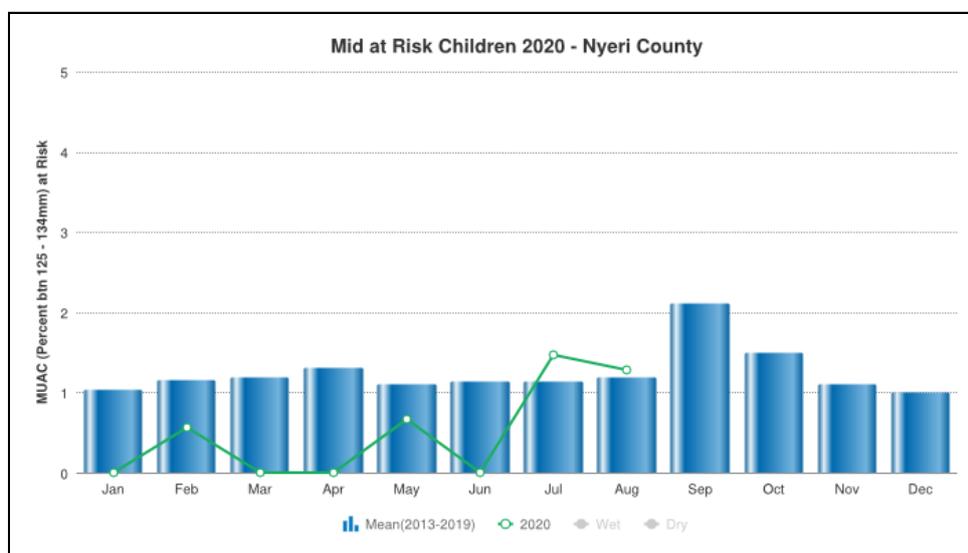

Figure 16: Presentation of nutrition status of children below five years

5.4 COPING STRATEGIES

- The coping strategy index stood at 4.69 in the month of August which was quite comparable to 4.67 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.
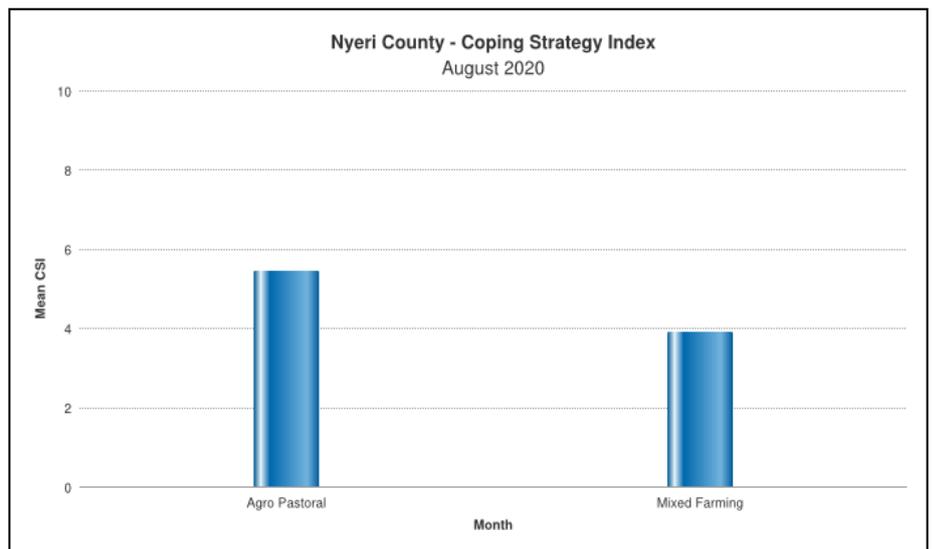

Figure 17: Presentation of the CSI for Kieni by livelihood zones

6.0 CURRENT INTERVENTION MEASURES (ACTION)
6.1 NON-FOOD INTERVENTIONS

- Offering HINIYC services at the health facilities.
- Rehabilitation of Kiguru dam in Mweiga.
- Upgrading of Endarasha water project.
- Supporting 30 farmer groups with local poultry.
- Supporting 20 farmer group with French and Kenya Alpine dairy goat breeding stocks.
- Vaccination of cattle, sheep and goat 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 incidences of human wildlife conflict in Gakawa, Kabaru and Thegu warrd in Kieni East Sub County. Farmers are counting huge losses after elephants invaded their farms leaving a trail of destruction.

7.1 FOOD SECURITY PROGNOSIS

- According to the Kenya Meteorology Department forecast, the OND rains are expected by mid-October with a predicted below normal performance.
- Household food security is expected to remain stable for the next two months attributed to availability of yields from the MAM season
- Further decline in forage and water resources is expected to lead to further deterioration in livestock body condition, decrease in milk production and increased

trekking distances to water sources. This will most likely lead to a decline in livestock prices.

☐ Food commodity prices are likely to decline due to availability of commodities locally. Livestock prices are also projected to decline.

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).