



**National Drought Management Authority
NYERI (KIENI) COUNTY
DROUGHT EARLY WARNING BULLETIN FOR JANUARY 2021**

JANUARY EWS PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- Offseason rains were received for an average of two to eight days. Amount received were fair but poorly distributed in time and space.
- Above normal vegetation condition was recorded.
- Access to water for domestic and livestock use deteriorated during the month under review compared to the previous month.

Socio Economic Indicators (Impact Indicators)

- Livestock body condition deteriorated during the month of January compared to the previous month.
- Milk production reduced compared to the previous month.
- Milk consumption was similar to last month.
- Distance to water sources for household use increased compared to the previous month.
- Terms of trade ratio deteriorated compared to the previous month.
- About 400 heads of cattle have migrated into Kieni West and Kieni East Sub Counties from the neighbouring Laikipia County.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Deteriorating
Marginal Mixed Farming	Normal	Deteriorating
County	Normal	Deteriorating
Biophysical Indicators	Value	Normal Range/Value
Rainfall (%)	75	90-110% of LTA
VCI	66.75	>35
Forage condition	Fair	Good
Production indicators	Value	Normal
Crop Condition (Maize)	poor	Good
Livestock Body Condition	Moderate	Normal
Milk Production	5.3 litres	5.5 litres
Livestock Migration pattern	In migration	No migration
Access Indicators	Value	Normal
Terms of Trade (ToT)	104	93
Milk Consumption	1.5 litres	1.4 litres
Return distance to water sources for household use	1.1 Km	1.4 Km
Return distance to water sources from grazing field.	2.1 Km	2.0 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0.0	1.1

- 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

- Kieni received offseason rains for an average of two to eight days. Amounts received were below normal and poorly distributed in time and space.
- Nyeri County received 75 percent of the normal rains. The first and second dekad of January recorded 14.8mm and 10.8mm respectively, compared to the LTA of 15.8mm and 18.1mm as shown in figure 1.

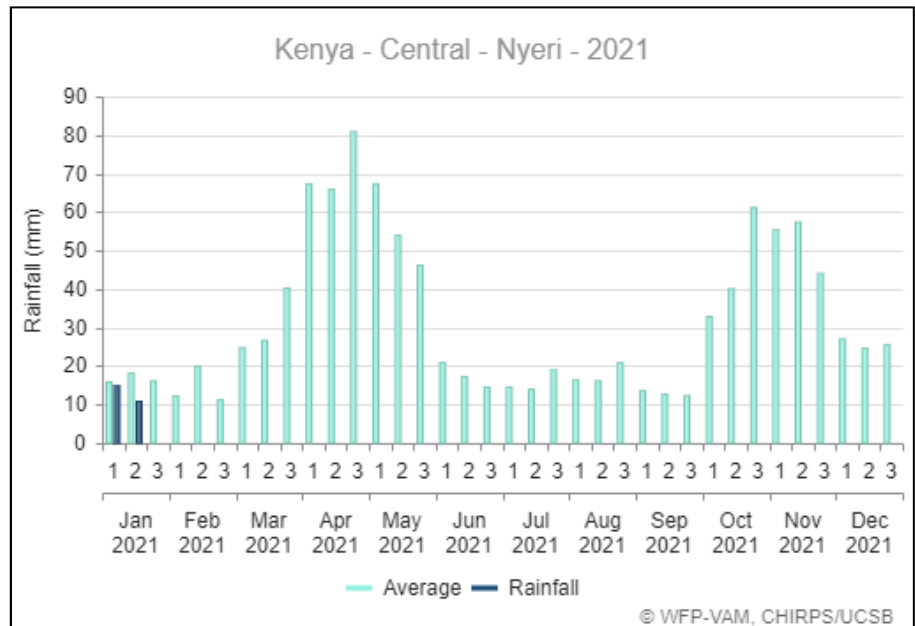


Figure 1: Presentation of the rainfall performance for January

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 VEGETATION CONDITION INDEX(VCI)

- The three-monthly Vegetation Condition Index stood at 66.75, indicative of above normal vegetation condition greenness.

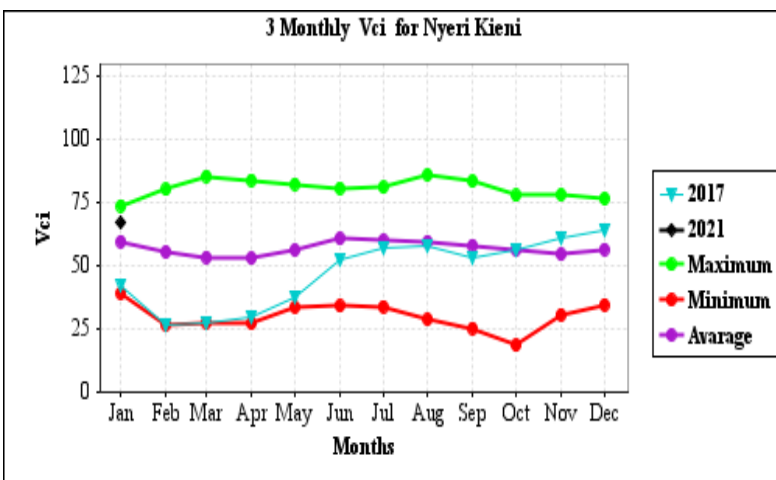


Figure 2(a): 3 monthly VCI for Kieni

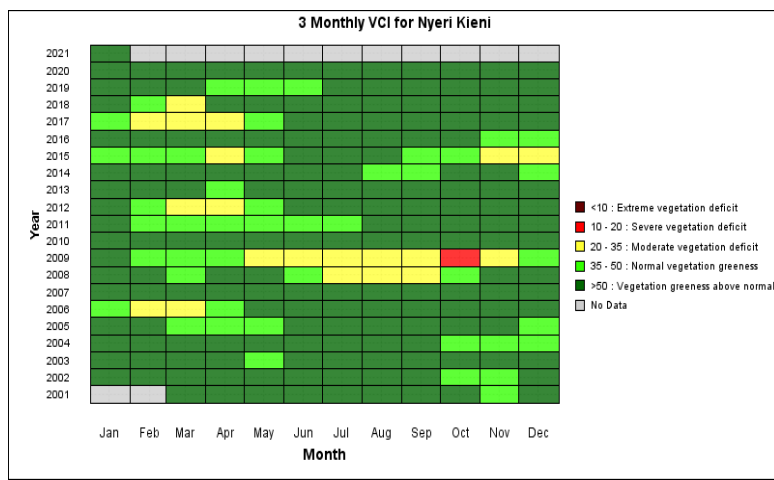


Figure 2(b): 3 monthly VCI for Kieni

Pasture

- Pasture condition deteriorated during the month of January compared to the previous month, attributed to the poor performance of the rains and frequent frost attacks.
- 15.4 percent, 46.2 percent and 38.5 percent of the respondent reported good, fair and poor pasture conditions respectively as indicated in figure 3(a).
- The current situation is expected to deteriorate further since the March-April-May (MAM) rains are expected to start in Mid-March.
- Areas that recorded poor pasture conditions were Karemeno and lamuria in Mugunda Ward in Kieni West Sub County and Kahurura in Gakawa ward in Kieni East Sub County.

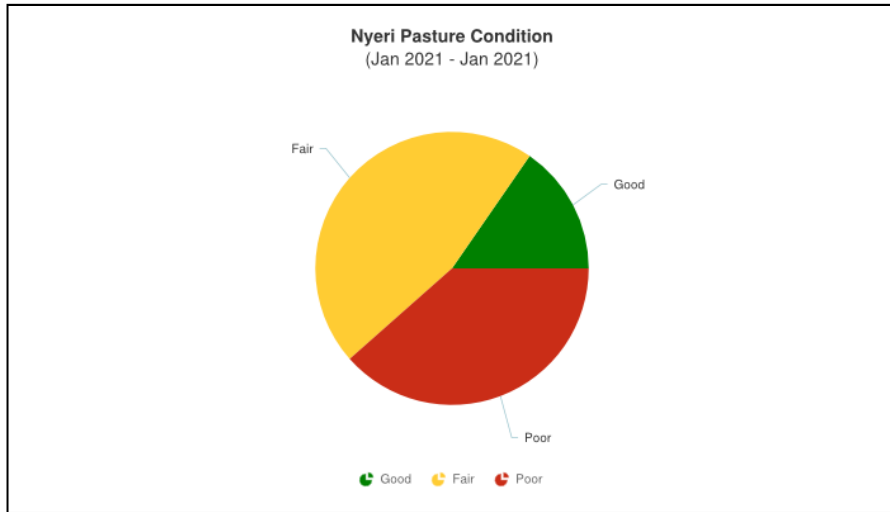


Figure 3(b): presentation of pasture condition for Nyeri (Kieni) County

2.1.2 Browse

- Consequently, browse condition also deteriorated during the month of January compared to the previous month.
- 15.4, 61.5 and 23.1 percent of the respondent reported good, fair and poor pasture conditions respectively as indicated in figure 3(b).

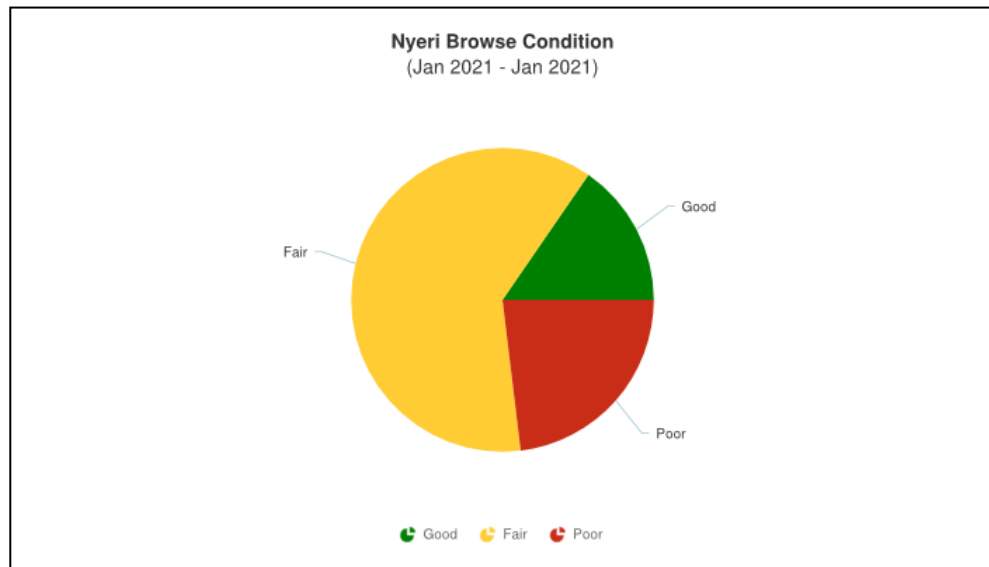


Figure 3(b): presentation of browse condition for Nyeri (Kieni) County

2.2 WATER RESOURCE

Sources

- Rivers remained the main source of water in Kieni at 50 percent, followed by pans/dams at 27 percent and boreholes/springs each at 4.5 percent.
- Rivers and streams registered below normal flows.
- Open water sources were about 50 percent to 60 percent full.

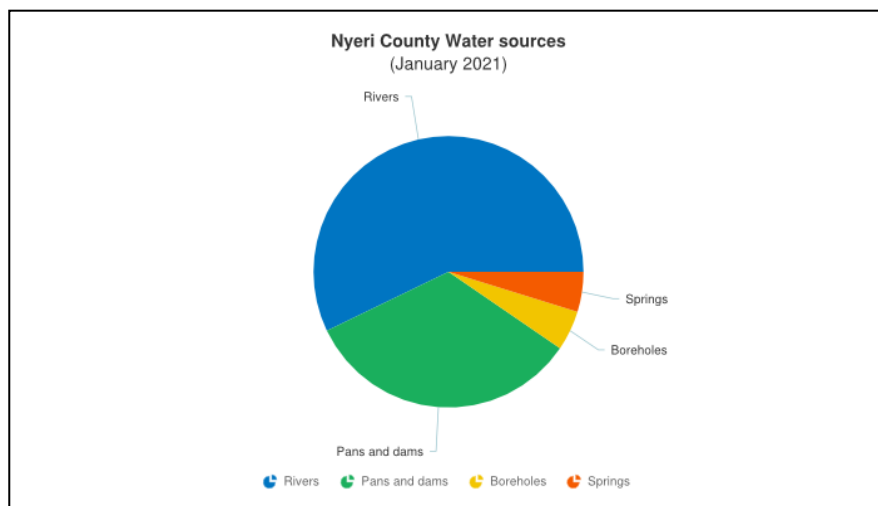


Figure 4: Shows main water sources for Kieni

2.2.1 Household access and Utilization

- Access to water for household use deteriorated slightly this month compared to the previous month as households had to walk a longer distance of 1.1 Km in January from 1 Km in December.
- The distance was shorter by 21 percent, compared to the 2016-2020 long term average of 1.4 Km as indicated in figure 5.

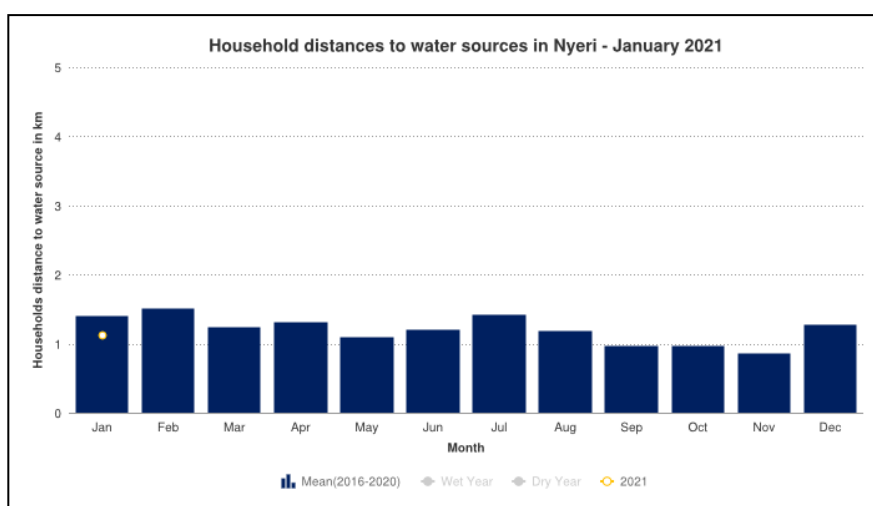


Figure 5: presentation of average household distances to water

2.2.2 Livestock access

- Access to water for livestock use also deteriorated, with livestock trekking an average distance of 2.1 Km from the grazing areas to water sources in January compared to 1.7 Km in December.
- Registered distances were higher by five percent compared to the 2016-2020 long term average of two Km as shown in figure 6.

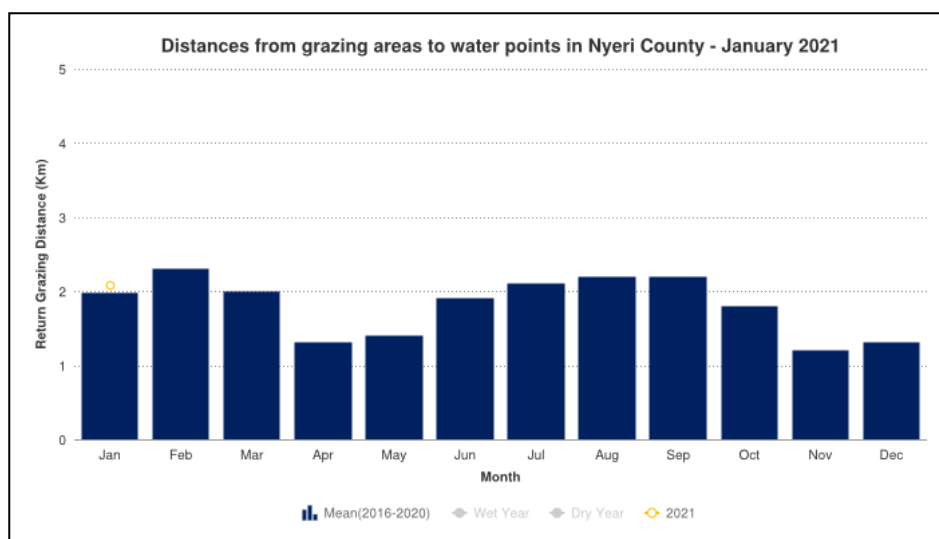


Figure 6: presentation of average grazing distances to water

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body condition deteriorated during the month of January compared to the previous month, due to declining pasture conditions and increased trekking distances to water sources.
- The larger portion of livestock was moderate, neither fat nor thin.

3.1.2 Livestock diseases

- Suspected cases of Foot and Mouth Disease (FMD) were reported in Gakawa ward in Kieni East Sub County.

3.1.3 Milk Production

- The average household milk production in the month of January was 5.3 litres from 5.7 litres in December, registering seven percent drop.
- The month's production was lower by four percent compared to the 2016-2020 long term of 5.5 litres as shown in figure 8.

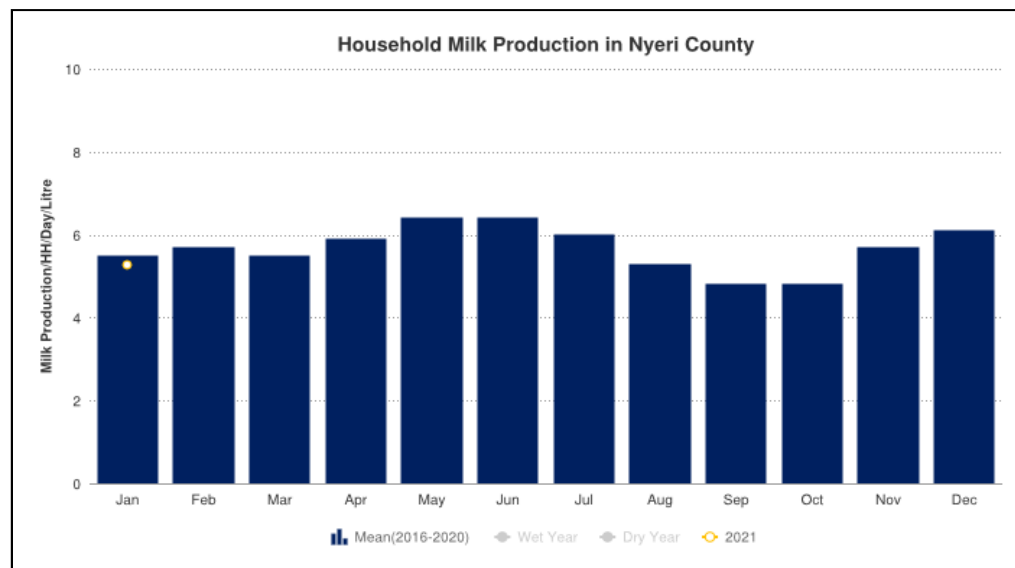


Figure 8: Presentation of average milk production in Nyeri (Kieni)

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. Expected production for the October-November-December (OND) season is projected to be below normal.
- Currently, farmers are preparing their farms in readiness to the March-April-May (MAM) season.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Price

- Livestock prices were on a downward trend, attributed to the deteriorating livestock body conditions coupled with forces of demand and supply.
- The trading price of a mature four-year-old bull was Ksh 35,800 in January from Ksh 39,375 in December, registering nine percent drop.
- Compared to the 2018-2020 short term averages of Ksh 20,433, prices were higher by 75 percent, as indicated in figure 9.

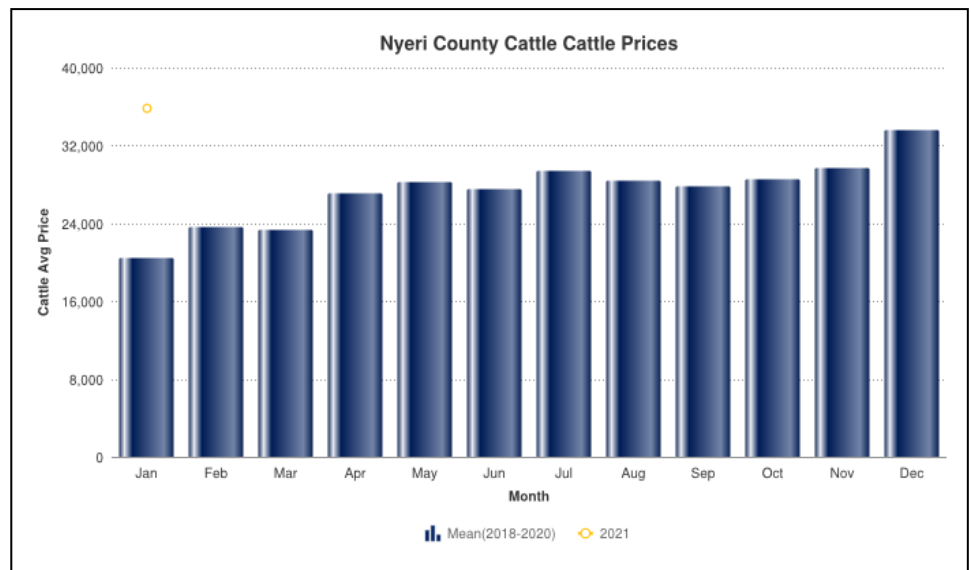


Figure 9: Outline average price trends for cattle

4.1.2 Sheep prices

- A two-year-old medium size Sheep retailed for Ksh 4,400 in January from Ksh 5,000 in December, recording 12 percent drop.
- The month's price was within the threshold compared to the 2018-2020 short term averages of Ksh 4,300 as shown in figure 10.

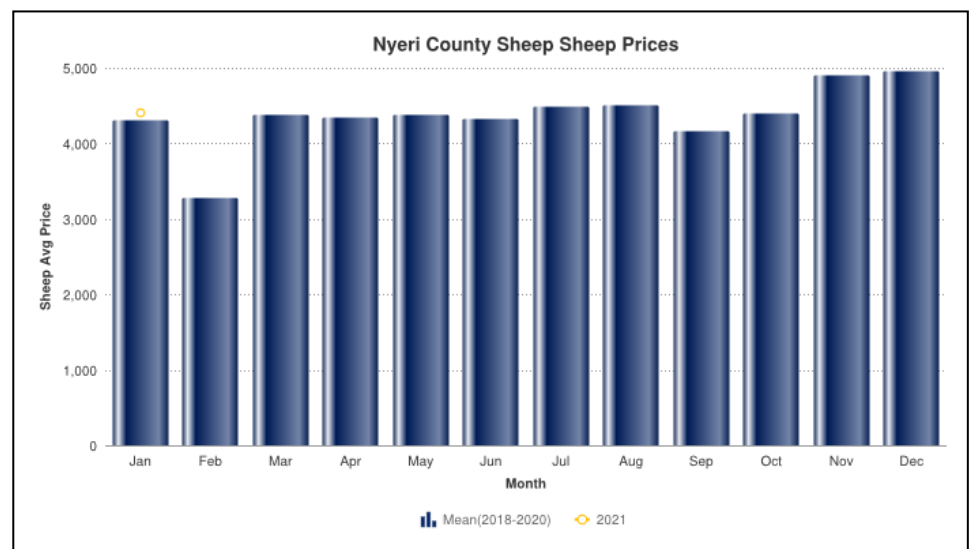


Figure 10: Outline average price trends for sheep

4.2 CROP PRICES

4.2.1 Maize

- A kilo of maize retailed for Ksh 44 in January, same as the previous month.
- Compared to the 2018-2020 short-term averages of Ksh 46.50, the month's price was lower by five percent as shown in figure 11.

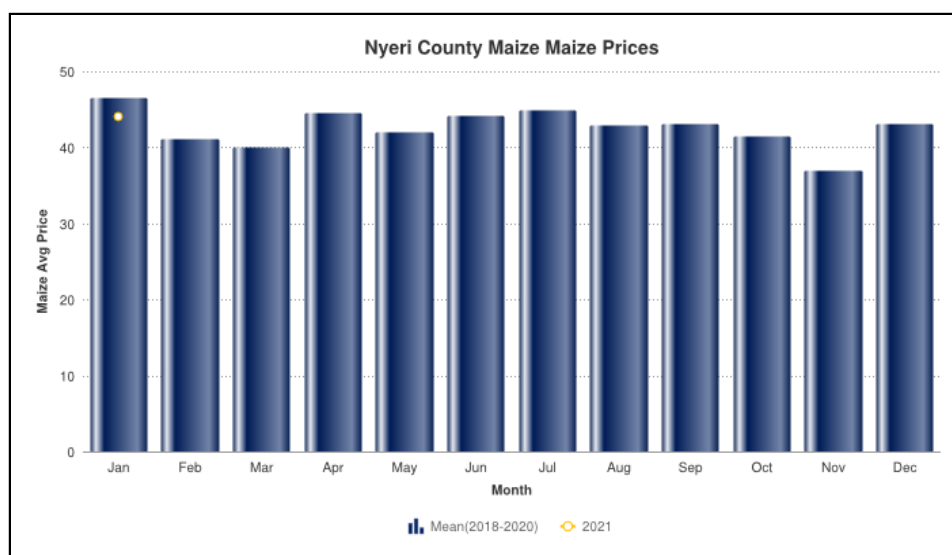


Figure 11: Outlines average price trends for Maize

4.2.2 Beans

- Beans prices were above the seasonal norms compared to the 2018-2020 short term average of Ksh 86. This is attributed to the fact that majority of the households were relying on markets for supply.
- A kilo of beans retailed for Ksh 98 in January, same as the previous month.

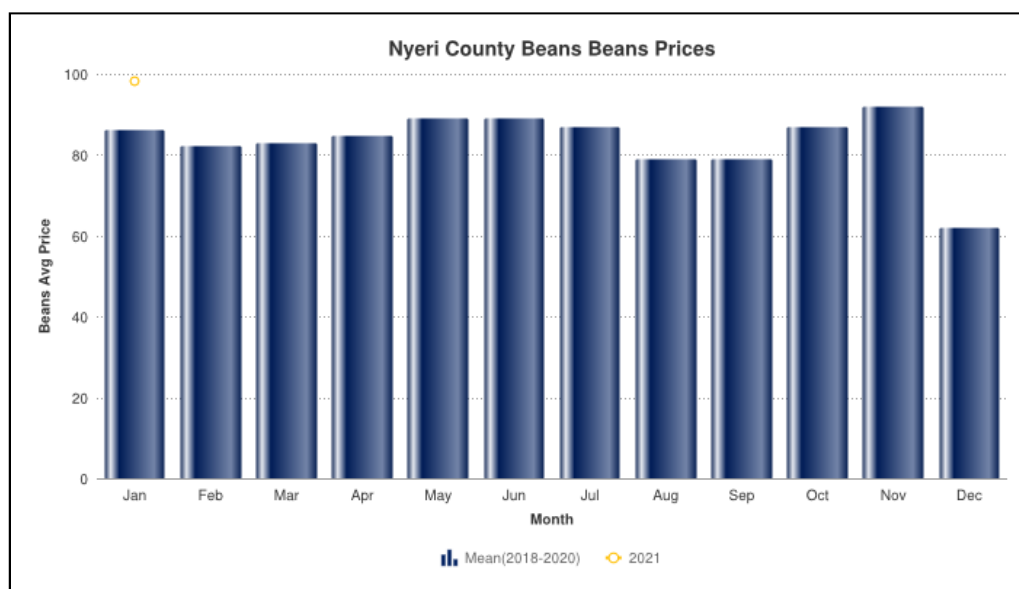


Figure 12: Outlines average price trends for Beans

4.2.3 Livestock Price Ratio/Terms of Trade

- Terms of trade ratio deteriorated during the month of January compared to the previous month, attributed to a drop in sheep prices even as maize prices remained stable.
- A mature sheep was equivalent to 104 kilograms of maize accounting for eight percent drop from last month of 114 kilograms.
- Compared to the 2018-2020 short term average of 93 kgs current TOT was higher by 12 percent as outlined in figure 13.

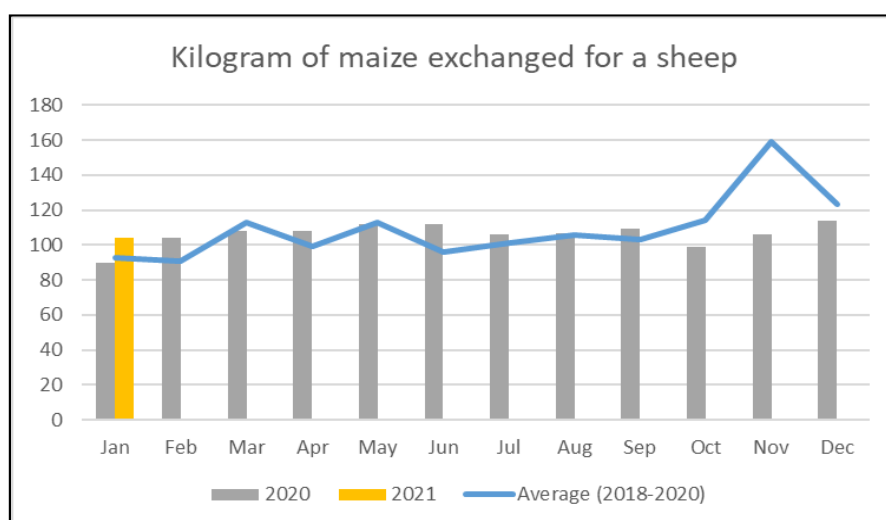


Figure 13: Outlines terms of trade in Kienvi

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption stood at 1.5 litres in January, which was similar to the previous month.
- Households in marginal mixed farming livelihood zones consumed more milk at 0.9 litres per day compared to 0.7 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.

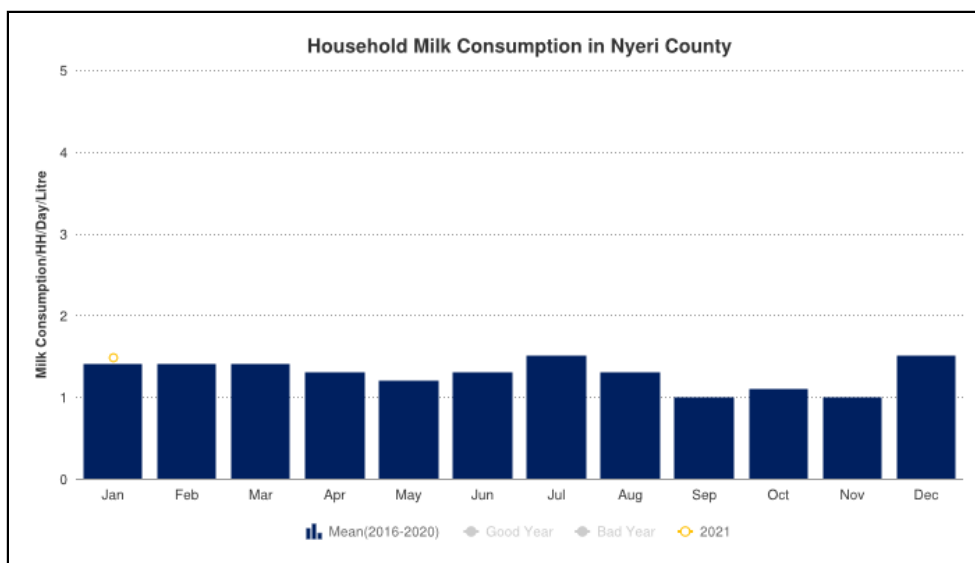


Figure 14: Outlines milk consumption for the county

5.2 FOOD CONSUMPTION SCORE

- The food consumption score deteriorated during the month under review compared to the previous month. Proportion of households with acceptable and borderline food consumption score in the sampled population was 57 and 42 percent respectively compared to previous month where all the households had acceptable food consumption score.

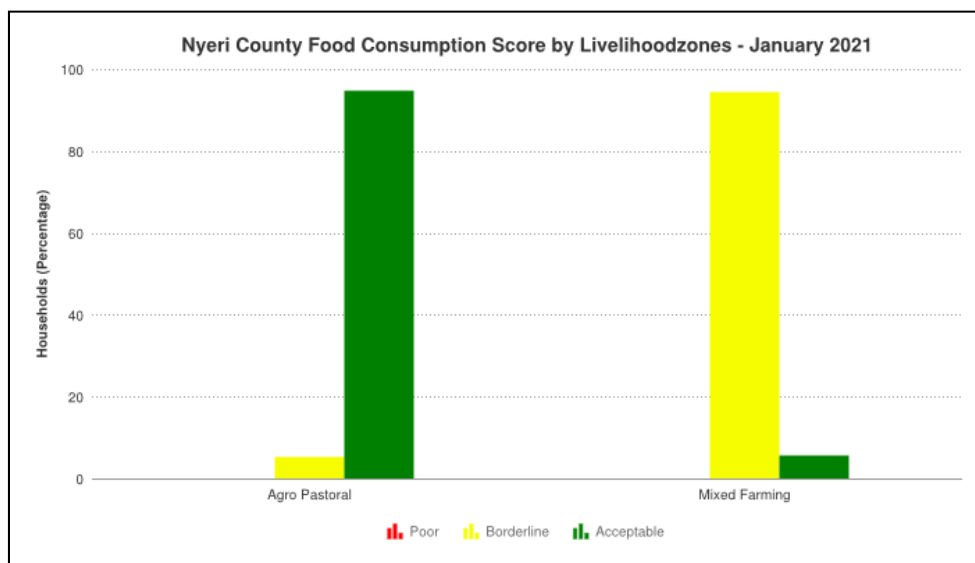


Figure 15: Presentation of food consumption score by livelihood zones

- The marginal mixed farming livelihood zones fared better, since all the households had acceptable food consumption score compared to 5.5 percent in mixed farming livelihood zones.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- There were no reported cases of under-fives at risk of malnutrition during the month under review.

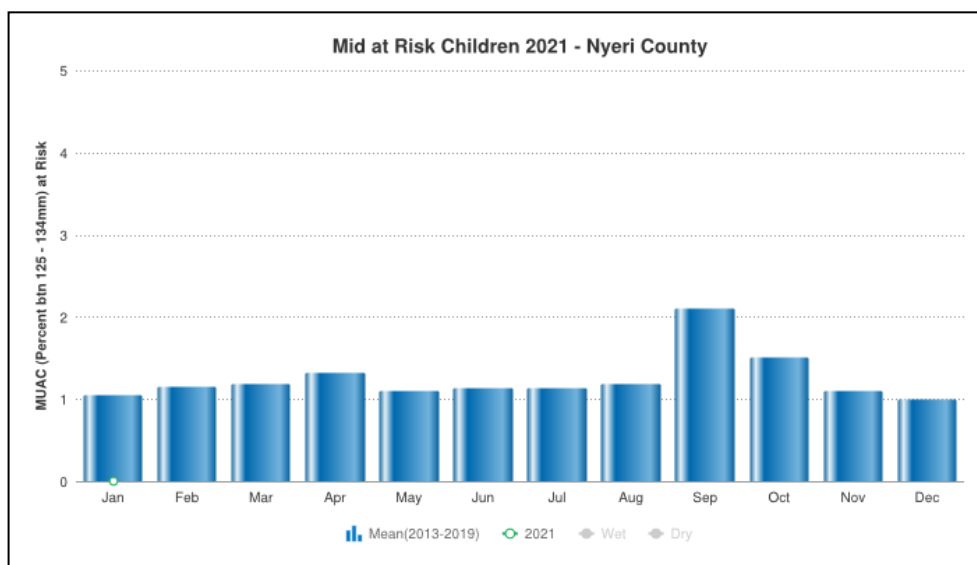


Figure 16: Presentation of nutrition status of children below five years

5.4 COPING STRATEGIES

- The coping strategy index increased from 5.12 in December to 6.51 in January, an indication that households were coping more frequently during the month of January compared to December
- The month’s CSI was higher compared with 5.12 recorded during the same time last year.
- Households in agro pastoral livelihood zones registered a higher index of 6.3 compared to those in the mixed farming livelihood zones who recorded an index of 3.9.

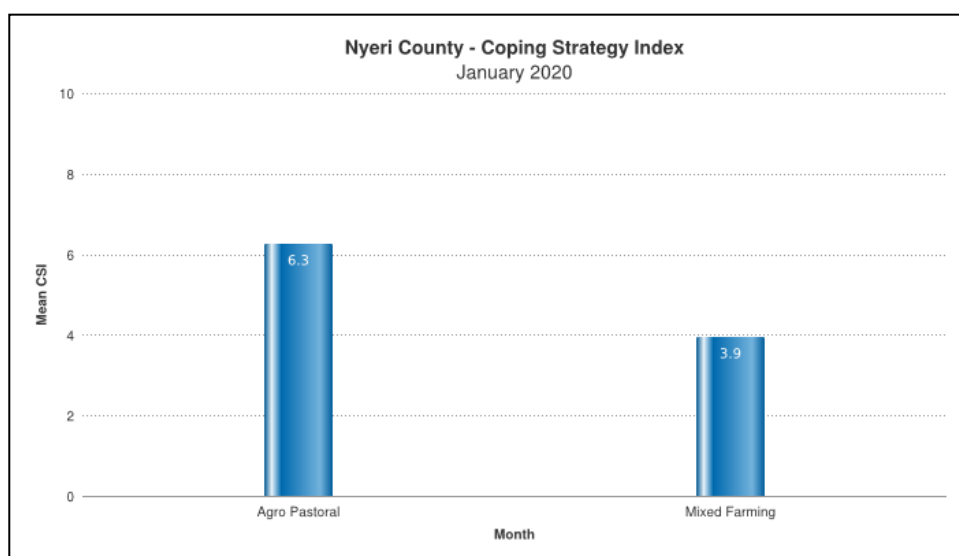


Figure 17: Presentation of the CSI for Kieni by livelihood zones

- 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 cattle against Lumpy Skin Disease (LSD)
- Vaccination of cattle, sheep and goat against Lumpy Skin Disease (LSD), Foot and Mouth Disease (FMD) and Black Quarter (BQ).
- Five farmer groups supported with French and Alpine dairy goat breeding stock.
- Subsidised Artificial Insemination (AI) for 900 animals.
- Solarization of boreholes in Gatuamba Karichen, Kimahuri Secondary School, kaaga Water project, Lusoi water project, Mureru water project and Naromuru girls by the County Government of Nyeri.
- Laying of pipes in Warazo – Lusoi water project, Guaraga water project, Chereti (A and B) water project and Kinaki water project by the County Government of Nyeri.
- Distilling of Lusoi dam and Mikumbuni dam by KCSAP and the County Government of Nyeri.
- Digging of water pans in Naromoru/Kiamathaga by the County Government of Nyeri, with about 300 households expected to benefit.
- KCSAP supporting groups with alternative income generating activities, by providing them with dairy goat, poultry, bananas and Irish potatoes.

6.2 FOOD AID

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

7.0 EMERGING ISSUES

7.1 Migration

- About 400 heads of cattle have migrated into Kieni West and Kieni East Sub Counties from the neighbouring Laikipia County.

7.2 FOOD SECURITY PROGNOSIS

- The food security situation is expected to deteriorate further given that the projected production for the OND season is below normal. Households are expected to continue relying on markets for supply hence food prices are expected to increase.
- Forage and water sources are expected to deteriorate further until the start of the MAM rains in mid-March. Milk production will also reduce leading to a decline in consumption at the household level. Livestock prices are likely to drop while malnutrition cases for under-fives are expected to increase.
- According to the Astrocast forecast, Kieni is expected to maintain above normal vegetation greenness for the next three months.

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