



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

FEBRUARY EWS PHASE



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

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

Socio Economic Indicators (Impact Indicators)

- Livestock body condition ranged from good to fair.
- Milk production was below the long-term average.
- Milk consumption was similar to last month.
- Distance to water sources for household use reduced compared to the previous month.
- Terms of trade ratio deteriorated compared to the previous month.
- About 500 heads of cattle have migrated into Kieni West and Kieni East Sub Counties from the neighbouring Laikipia County.
- Locust invasion was reported in Naromoru/Kiamathanga ward and Gakawa ward in Kieni East Sub 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 (%)	169	90-110% of LTA
VCI	61.56	>35
Forage condition	Good - Fair	Fair
Production indicators	Value	Normal
Livestock Body Condition	Good	Fair
Milk Production	5.1 litres	5.7 litres
Livestock Migration pattern	In migration	No migration
Access Indicators	Value	Normal
Terms of Trade (ToT)	92	91
Milk Consumption	1.5 litres	1.4 litres
Return distance to water sources for household use	1 Km	1.5 Km
Return distance to water sources from grazing field.	1.9 Km	2.3 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of	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
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1.0 CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- Offseason rains were received for an average of five to eight days. Amount received were good but poorly distributed in time and space.
- On average Kieni East and west sub counties received 169 percent of the normal rains.
- Nyeri County received 144 percent of the normal rains. The first and second dekad of February recorded 17.8mm and 28.6mm respectively, compared to the LTA of 12.2mm and 19.9 mm as shown in figure 1.

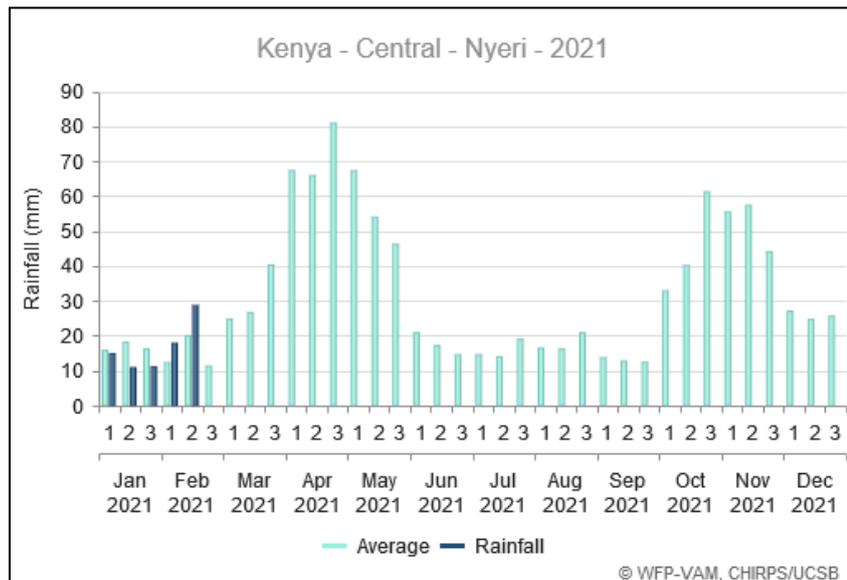


Figure 1: Presentation of the rainfall performance for February

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 VEGETATION CONDITION INDEX(VCI)

- The vegetation condition was above normal vegetation and stood at 61.56 from 66.75 last month as shown in figure 2(a) and 2(b) below.

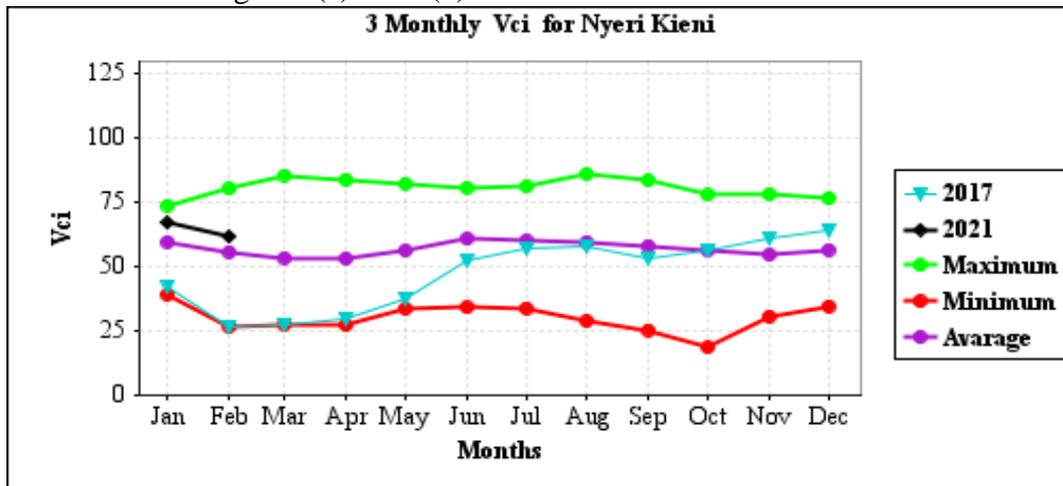


Figure 2(a): 3 monthly VCI for Kieni

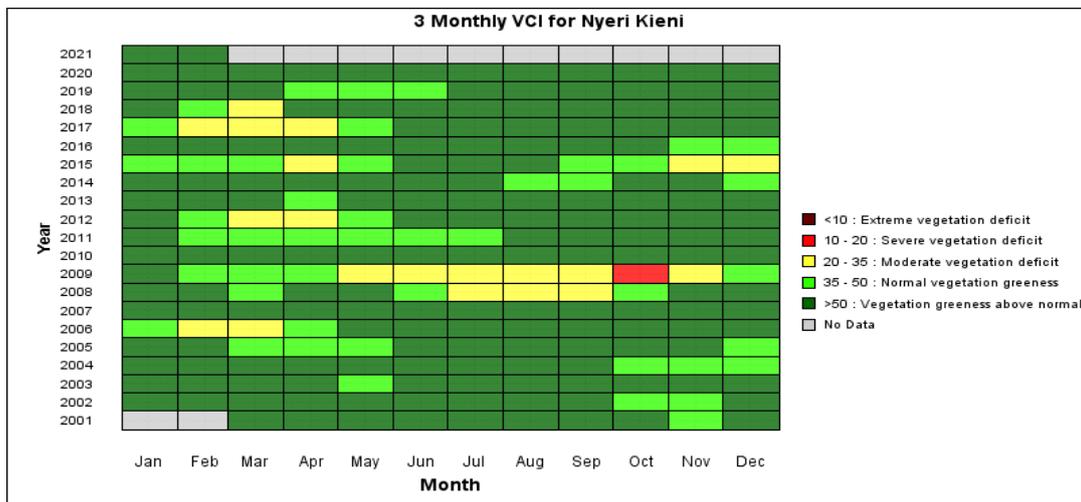


Figure 2(b): 3 monthly VCI for Kieni

Pasture

- The pasture condition improved this month compared with last month as 33.3 percent of the households reported good condition compared to 15.4 percent last month.
- 41.7 percent and 25 percent of the respondent reported fair and poor pasture conditions respectively as indicated in figure 3(a).
- The current situation is expected to improve 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.

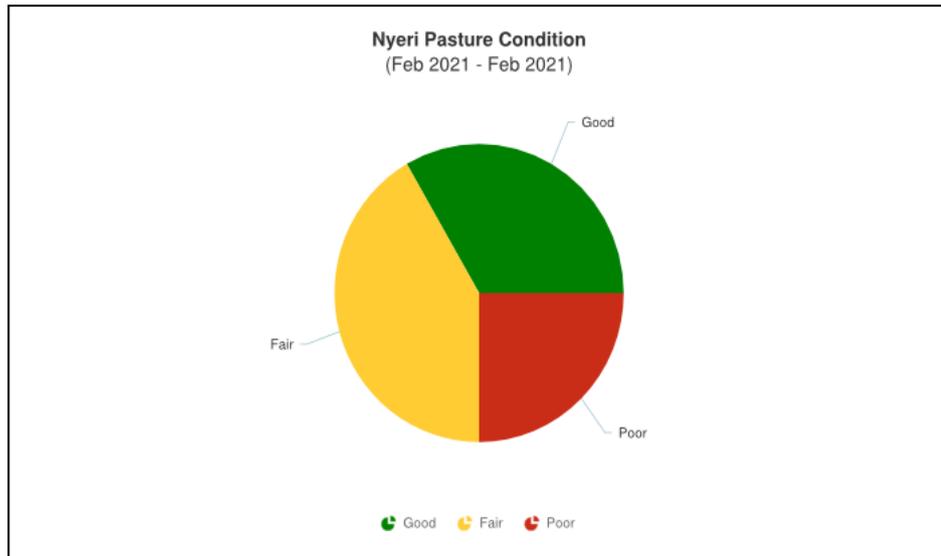


Figure 3(b): presentation of pasture condition for Nyeri (Kieni) County

2.1.2 Browse

- Consequently, browse condition also improved this month as approximately 41.7 percent of the respondent reported good pasture condition, compared to 15.4 percent in January.
- 41.7 and 16.7 percent of the respondent reported fair and poor pasture conditions respectively as indicated in figure 3(b).

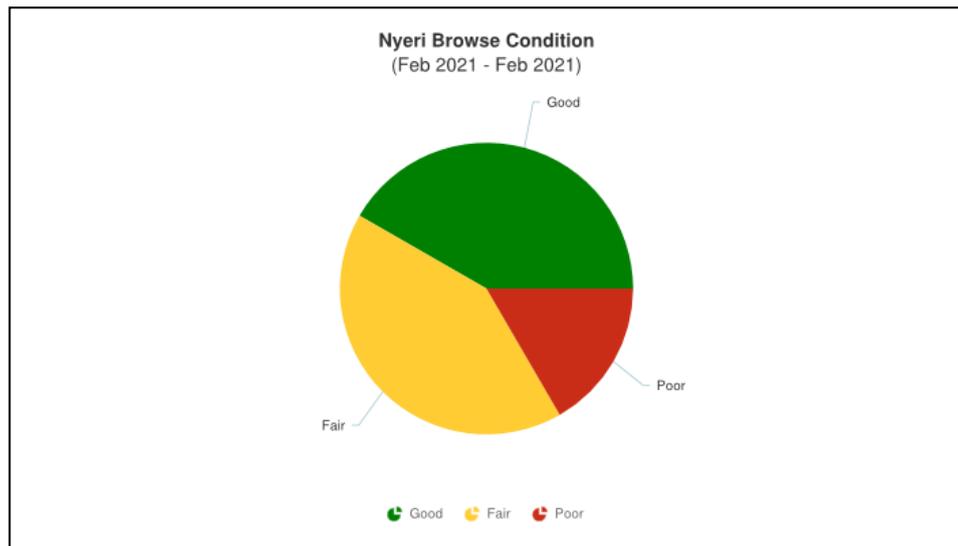


Figure 3(b): presentation of browse condition for Nyeri (Kieni) County

2.2 WATER RESOURCE

Sources

- Rivers remained the main source of water in Kieni at 55.3 percent, followed by pans/dams at 28.9 percent and springs at 15.8 percent.
- The sources were normal at this time of the year.
- Access to water for domestic and livestock use improved during the month, compared to the month of January.
- Open water sources were about 50 percent to 60 percent full.

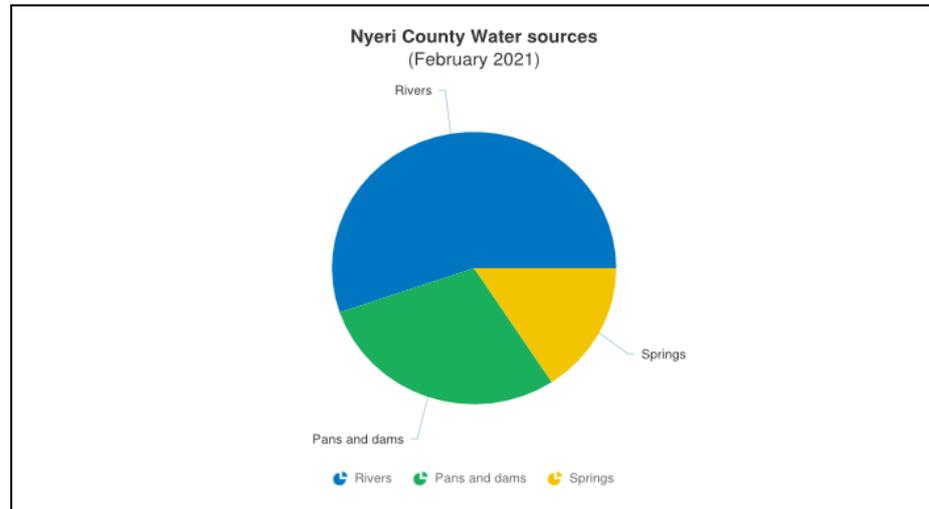


Figure 4: Shows main water sources for Kieni

2.2.1 Household access and Utilization

- Access to water for household use improved slightly this month compared to the previous month as households had to walk a shorter distance of 1 Km in February from 1.1 Km in January.
- The distance was shorter by 33 percent, compared to the 2016-2020 long term average of 1.5 Km as indicated in figure 5.

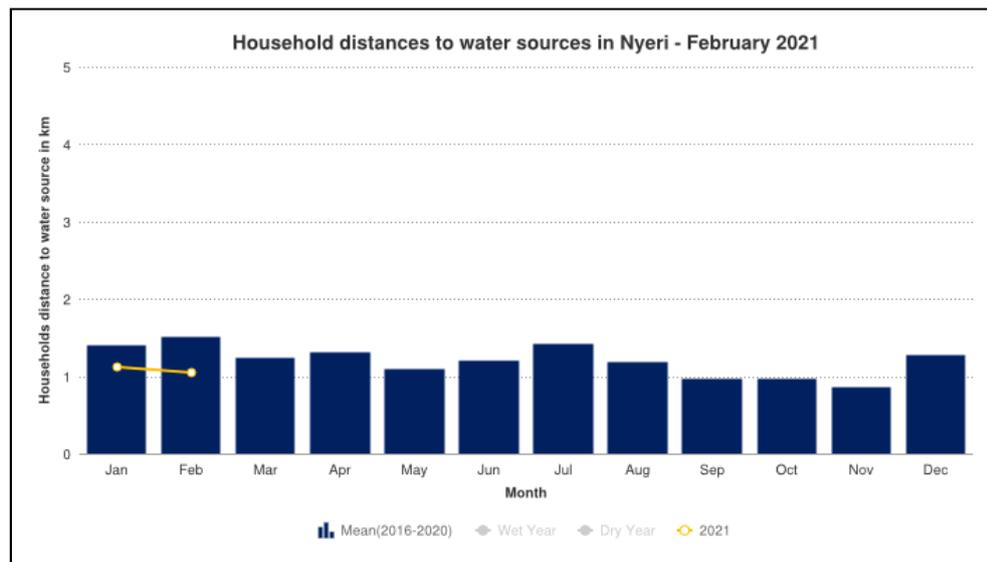


Figure 5: presentation of average household distances to water

2.2.2 Livestock access

- Access to water for livestock use also improved, with livestock trekking an average distance of 1.9 Km from the grazing areas to water sources in February compared to 2.1 Km in January.
- Registered distances were lower by 17 percent compared to the 2016-2020 long term average of 2.3 Km as shown in figure 6.

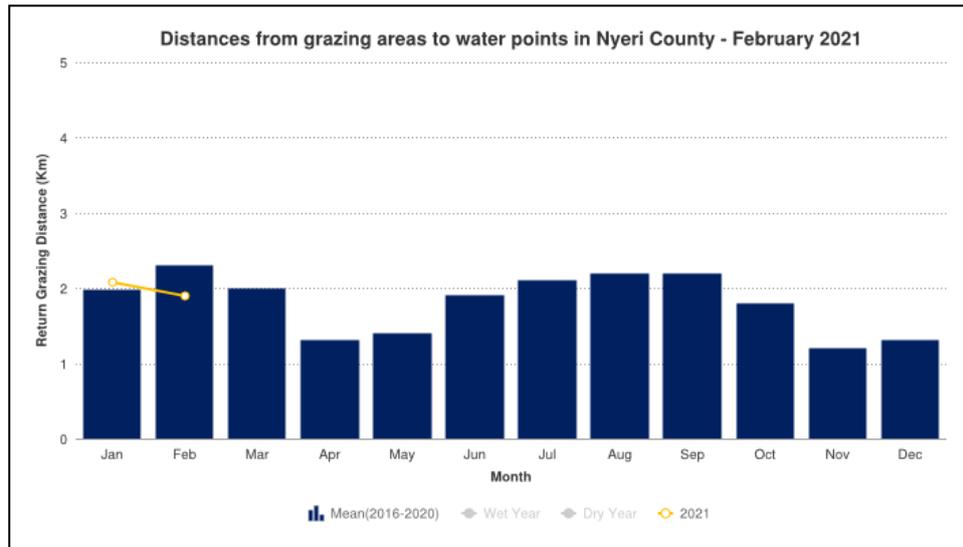


Figure 6: presentation of average grazing distances to water

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- The larger portion of livestock was good with an exception of livestock in Mugunda ward that were fair.

3.1.2 Livestock diseases

- Suspected cases of Lumpy Skin Disease (LSD) were reported in Mwiyyongo/Endarasha ward in Kieni West Sub County.

3.1.3 Milk Production

- The average household milk production this month is 5.1 litres which is quite comparable to 5.3 litres in January.
- The month's production was lower by 11 percent compared to the 2016-2020 long term of 5.7 litres as shown in figure 8.

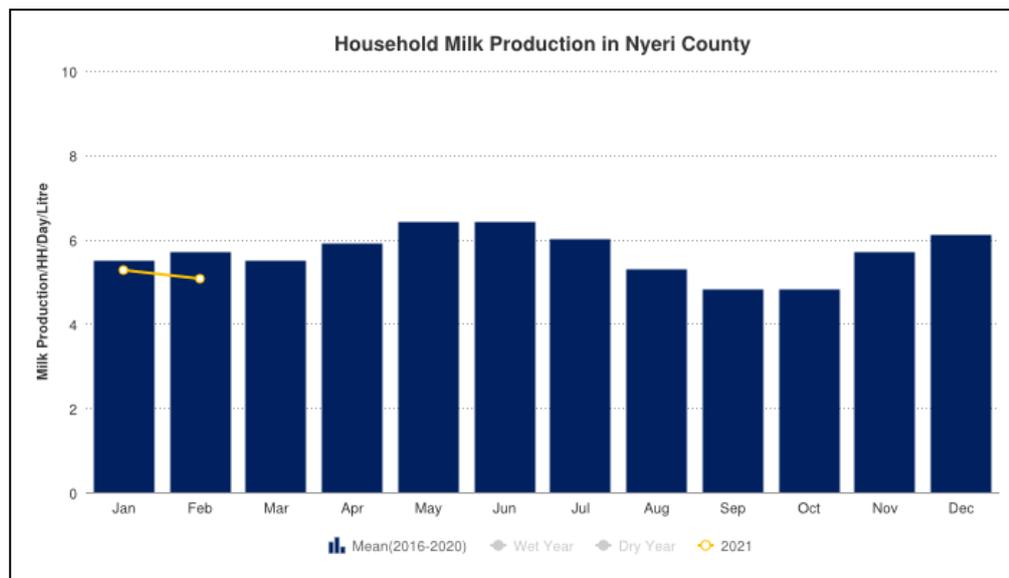


Figure 8: Presentation of average milk production in Nyeri (Kieni)

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.
- Currently, majority of the farmers are preparing their farms in readiness to the March-April-May (MAM) season. For farmers who planted early crops were at germination stage.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Price

- The trading price of a mature four-year-old bull was Ksh 30,000 in February from Ksh 35,800 in January, registering 16 percent drop.
- Compared to the 2018-2020 short term averages of Ksh 23,650, prices were higher by 27 percent, as indicated in figure 9.

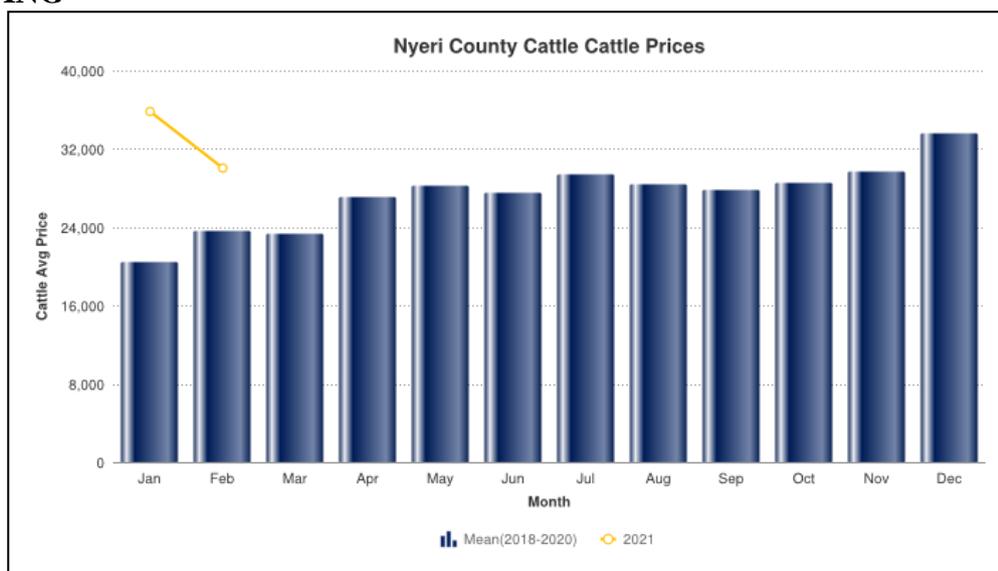


Figure 9: Outline average price trends for cattle

4.1.2 Sheep prices

- A two-year-old medium size Sheep retailed for Ksh 3,958 in February from Ksh 4,400 in January, recording 10 percent drop.
- The month's price was higher by 21 percent compared to the 2018-2020 short term averages of Ksh 3,277 as shown in figure 10.

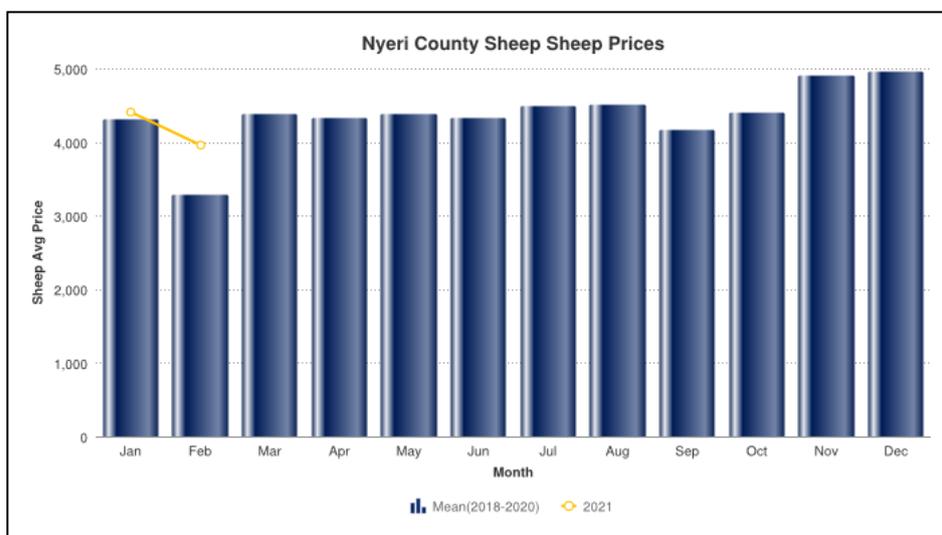


Figure 10: Outline average price trends for sheep

4.2 CROP PRICES

4.2.1 Maize

- Food prices are relatively stable in both livelihood zones.
- A kilo of maize retailed for Ksh 43 in February, which is quite comparable to Ksh 44 the previous month.
- The month's price was above the seasonal norms compared with Kshs 41 posted in the 2018-2020 long term averages as shown in figure 11.

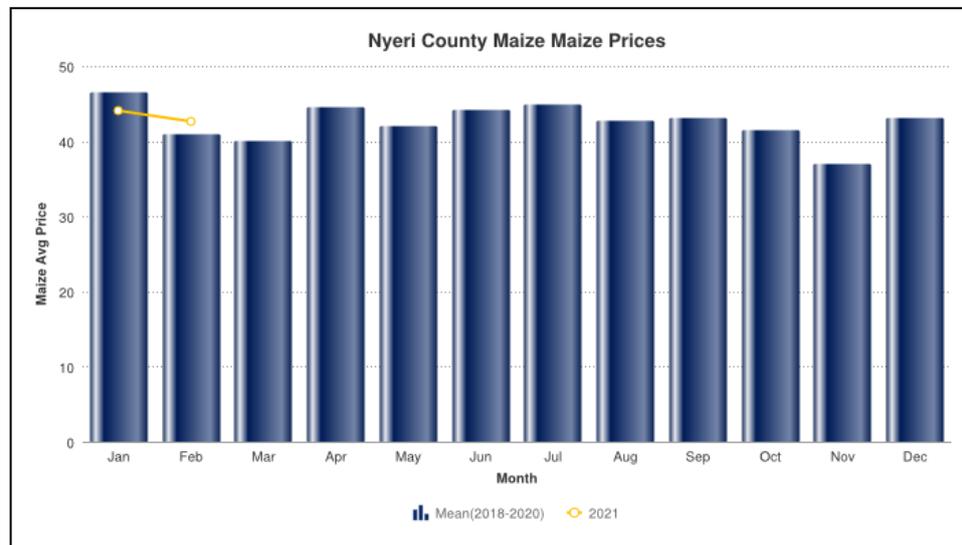


Figure 11: Outlines average price trends for Maize

4.2.2 Beans

- Beans prices were above the seasonal norms compared to the 2018-2020 short term average of Ksh 82. 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 February, same as the previous month.

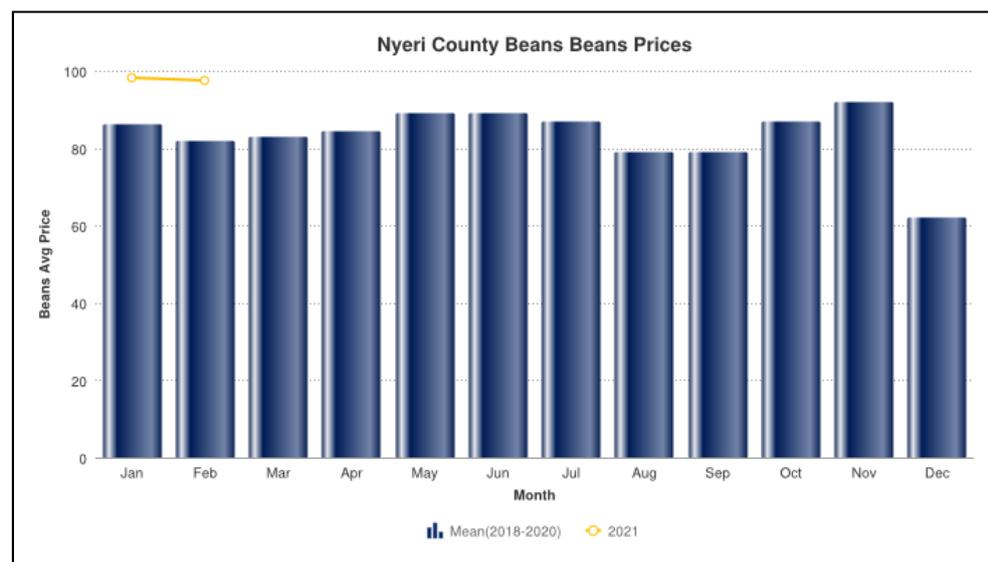


Figure 12: Outlines average price trends for Beans

4.2.3 Livestock Price Ratio/Terms of Trade

- Terms of trade ratio deteriorated during the month of February compared to the previous month, attributed to a drop in sheep prices even as maize prices remained stable.
- A mature sheep was equivalent to 92 kilograms of maize accounting for 13 percent drop from last month

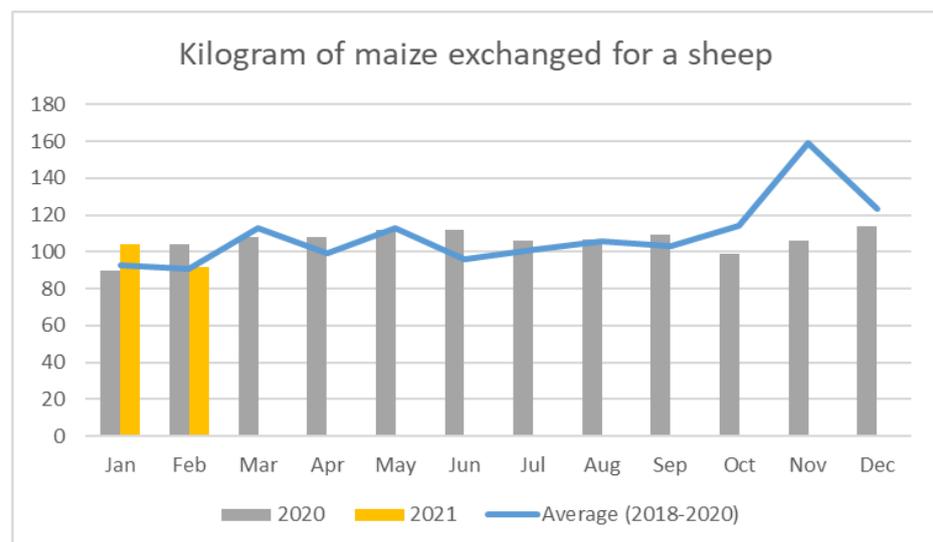


Figure 13: Outlines terms of trade in Kieni

of 104 kilograms.

- Compared to the 2018-2020 short term average of 91 kgs current TOT was within the threshold as outlined in figure 13.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption stood at 1.5 litres in February, 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 2016-2020 short term average of 1.4 litres, the month's consumption was within the threshold as shown in figure 14.

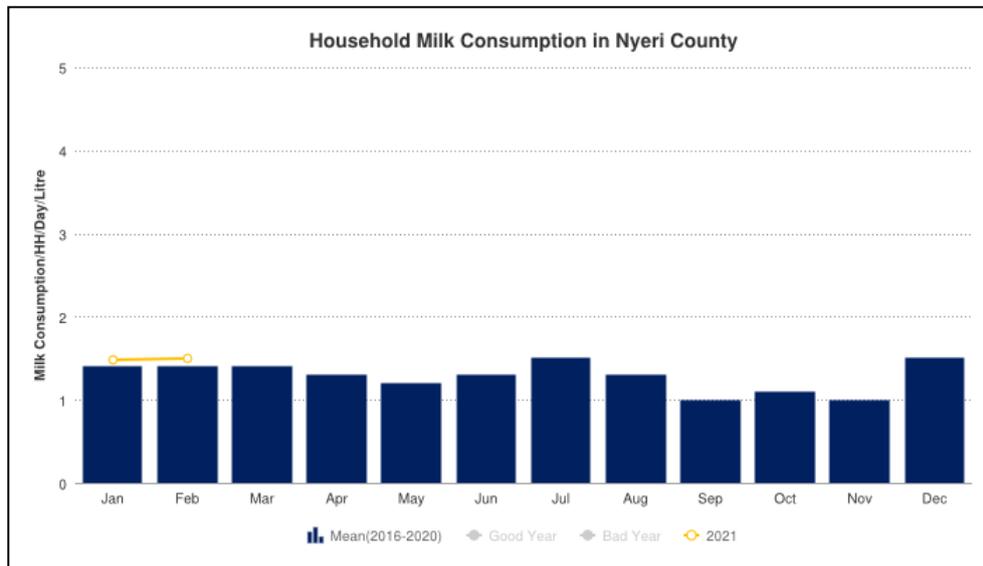


Figure 14: Outlines milk consumption for the county

5.2 FOOD CONSUMPTION SCORE

- The food consumption score remained stable during the month under review compared to the previous month. Proportion of households with acceptable and borderline food consumption score in the sampled population was 52 and 45 percent respectively compared to previous month where 57 percent and 43

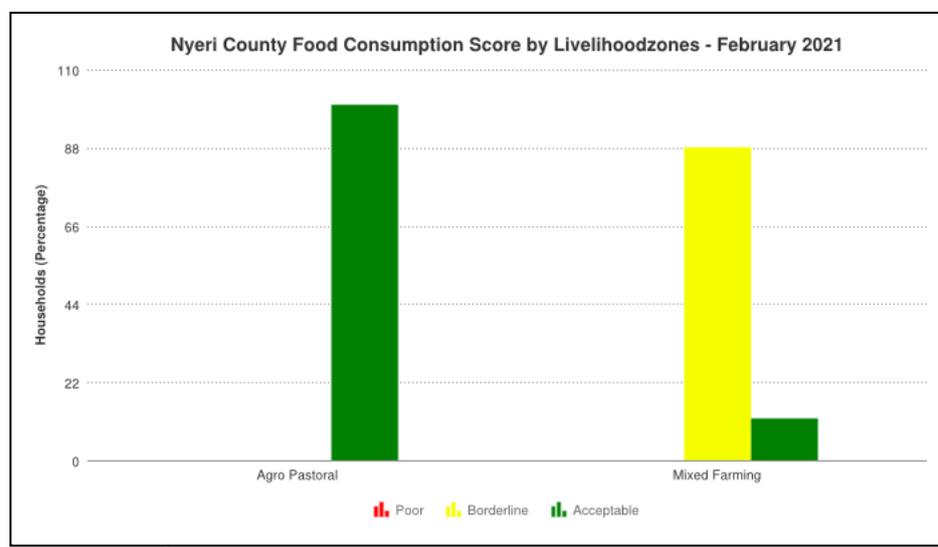


Figure 15: Presentation of food consumption score by livelihood zones

percent of the households had acceptable and borderline food consumption score respectively as shown in figure 15.

- The marginal mixed farming livelihood zones fared better, since all the households had acceptable food consumption score compared to 11.9 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.

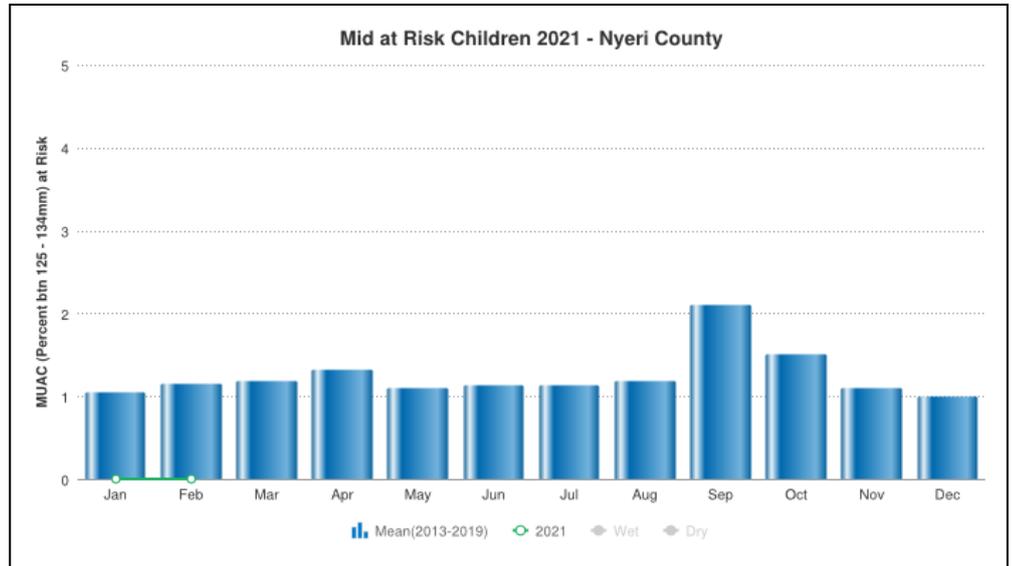


Figure 16: Presentation of nutrition status of children below five years

5.4 COPING STRATEGIES

- The coping strategy index increased from 6.51 in January to 7.14 in February, an indication that households were coping more frequently during the month of February compared to January.
- The month's CSI was higher compared with 5.36 recorded during the same time last year.

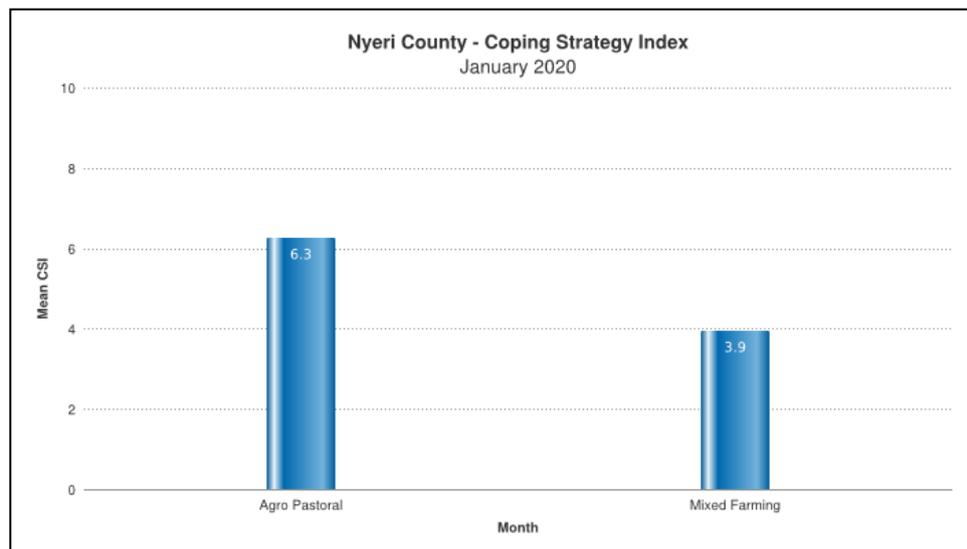


Figure 17: Presentation of the CSI for Kieni by livelihood zones

- Households in marginal mixed farming livelihood zones registered a higher index of 12.5 compared to those in the mixed farming livelihood zones who recorded an index of 4.
- 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, 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.
- Excavating 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 500 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 likely to deteriorate further given that insignificant harvests were realised from the MAM season. Prices for food commodities are likely to increase, given that majority of the households will be relying on markets for supply and traders will be sourcing for commodities from outside the County. It is further projected that with reduced households' purchasing power, adoption in food consumption related coping mechanisms will be enhanced including reduction in daily meals uptakes and rations.

8. RECOMMENDATIONS

- 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)