



A Vision 2030 Flagship Project



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

JANUARY EWS PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- Contrary to the norm, the month of January received widespread offseason rains for an average of 10 to 15 days. Amounts received were good, averaging 119 percent of normal.
- Above normal vegetation condition continued to be recorded as a result of the offseason rains.
- Water access is satisfactory as households were still harvesting rain water and all water sources were reliable and within reach.

Socio Economic Indicators (Impact Indicators)

- Livestock body condition was good.
- Crops condition at the farms was good. Projected production for maize will be above average
- Milk production was above the long term average while consumption was within long term average.
- Distances to water sources for households remained unchanged from last month.
- Distances to water sources from the grazing field reduced by 12.5 compared to the previous month.
- Terms of trade ratio improved in the month of January compared to the previous month.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
Mixed Farming	Normal	Stable
Agro pastoral	Normal	Stable
Biophysical Indicators	Value	Normal Range/Value
Rainfall (%)	119	90-110% of LTA
VCI	72.46	>35
Forage condition	Good	Good
Production indicators	Value	Normal
Crop Condition(specify crop)	Good	Good
Livestock Body Condition	Good	Good
Milk Production	6.7	5.2 litres
Access Indicators	Value	Normal
Terms of Trade (ToT)	116	85
Milk Consumption	1.6 litres	1.6 litres
Return distance to water sources for household use	0.6 Km	1.8 Km
Return distance to water sources from grazing field.	0.7 Km	2.7 Km
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	0	1
Coping Strategy Index	5.12	0.0

- 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

- Kieni experienced off season rains during the month of January. However, this was contrary to the norm, considering the month of January is usually characterised by dry and hot weather conditions.
- The amounts received were good, averaging 119 percent of the normal. The rains were received for an average of 10 to 15 days.
- The rains impacted positively on livestock and crop production.
- Generally, Nyeri County received 20.9 mm and 17.5 mm in the first and second dekad compared to the Long Term Average of 15.7 and 18.1 respectively as shown in figure 1.

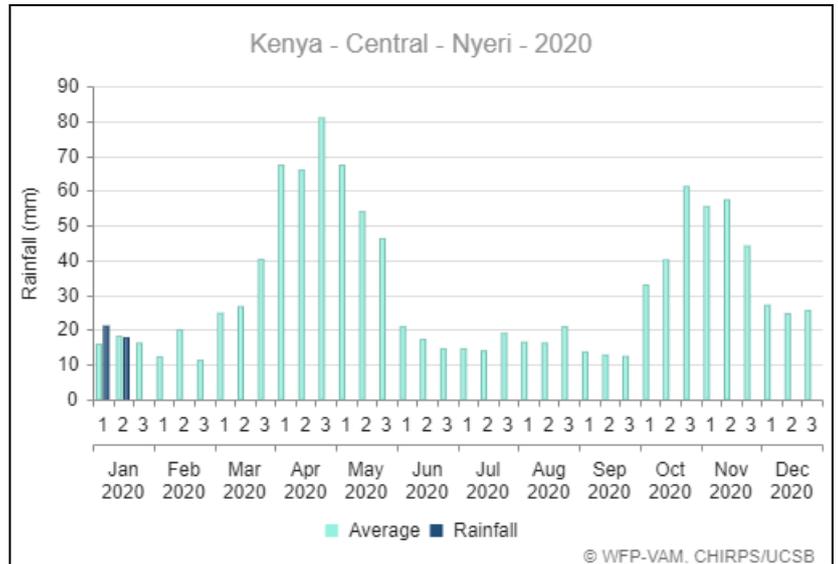


Figure 1: Presentation of the rainfall performance for January.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 VEGETATION CONDITION INDEX(VCI)

- The offseason rains received in January assisted to further boost the already good vegetation condition across the livelihood zones. The 3 monthly vegetation condition index was 72.46 indicative of above normal vegetation greenness as shown in figure 2 (a) and 2 (b) below.

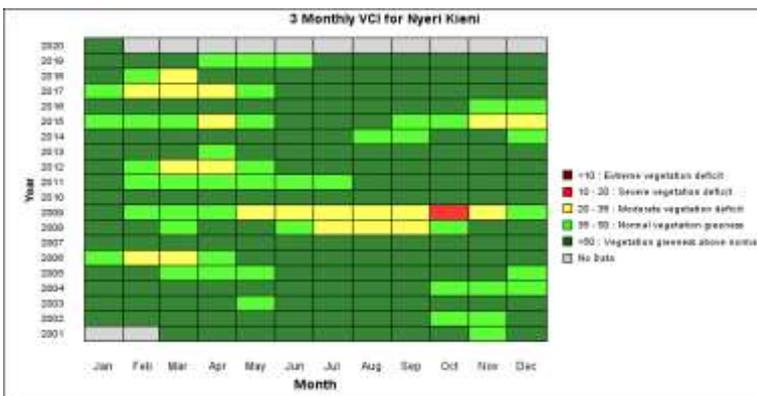


Figure 2 (a): Presentation of 3 monthly VCI for Kieni

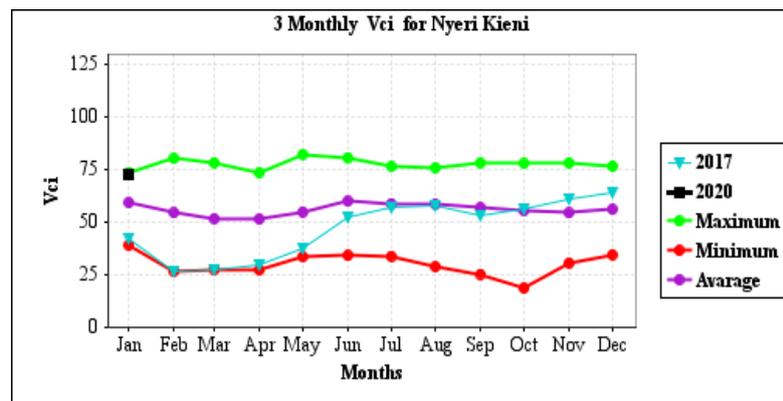


Figure 2(b): Presentation of the Vegetation Condition Index (VCI)

2.1.2 Pasture

- The off seasonal rains assisted to enrich the pasture conditions further. The condition was good across the livelihood zones. However, this was abnormal; at this time of year.
- The situation is expected to remain stable till May if the current situation persist.

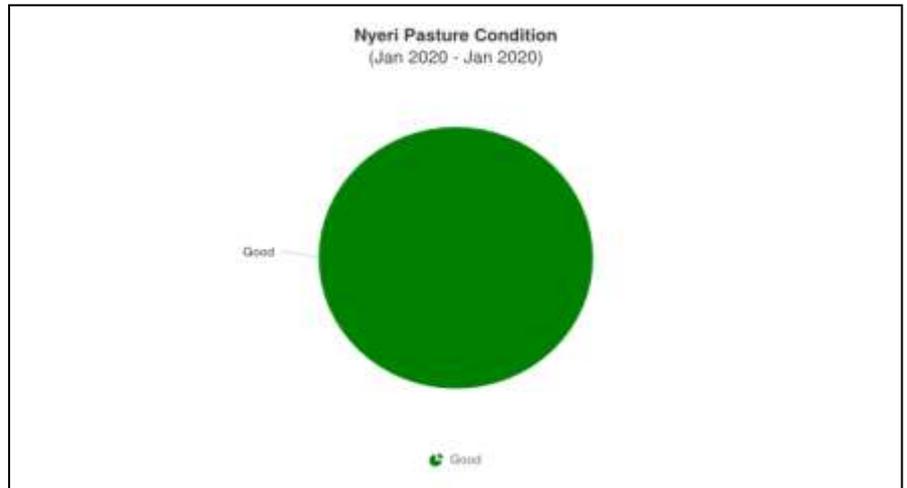


Figure 3(a): Presentation of pasture condition for Nyeri

2.1.3 Browse

- Browse condition remained good across the livelihood zones attributed to the off season rains that were received in the month under review.
- The current condition is abnormal compared to a normal year.
- The situation is expected to remain stable till May if the current situation persist

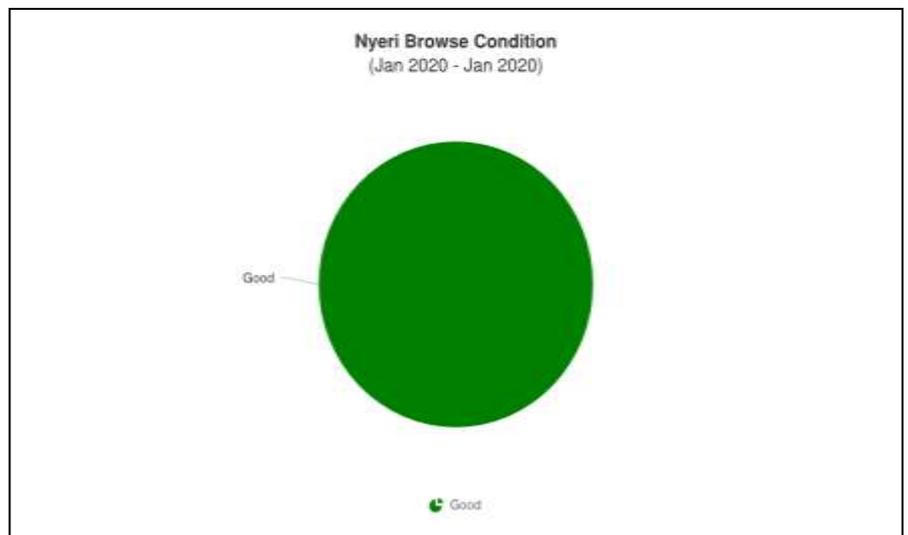


Figure 3 (b): Presentation of browse condition for Nyeri County.

2.2 WATER RESOURCE

2.2.1 Sources

- Access to water was satisfactory across the livelihood zones. The current situation is abnormal at this time of the year and could be attributed to the off seasonal rains that were received.

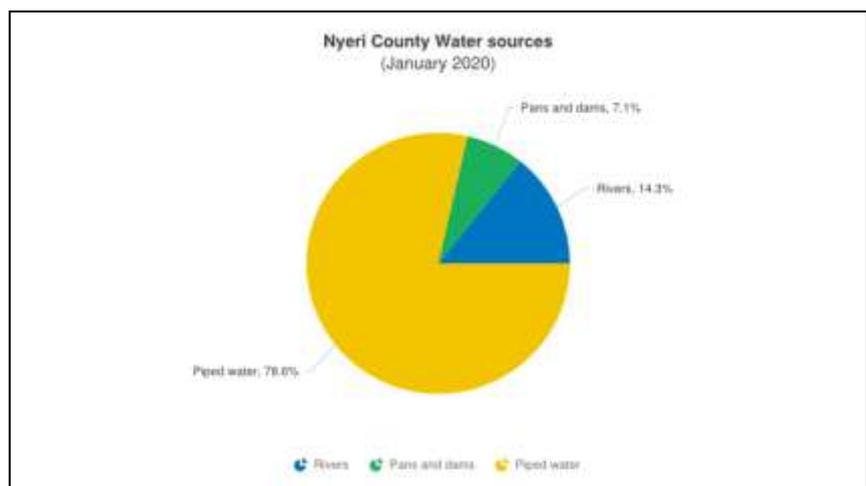


Figure 4: Shows main water sources for Kieni

- Rivers are flowing at above normal flows. Open water sources are fully recharged while some are overflowing.
- Trekking distances to water sources for both livestock and livelihoods are minimal as most of the households are relying on harvested rain water and piped water system.
- The main sources of water for Kieni were piped water system at 78.6 percent, rivers at 14.3 percent and pans and dams at 7.1 percent as shown in figure 4.

2.2.2 Household access and Utilization

- Distances from the household to water sources were minimal as households relied on harvested rain water and piped water system.
- Distance from the household to water sources stood at 0.6 Km similar to last month.
- The reported distances were abnormal at this time year and could be attributed to the offseasons that that were received
- The month's distances were lower by 68 percent compared to the 2015-2019 long term average of 1.8 Km.

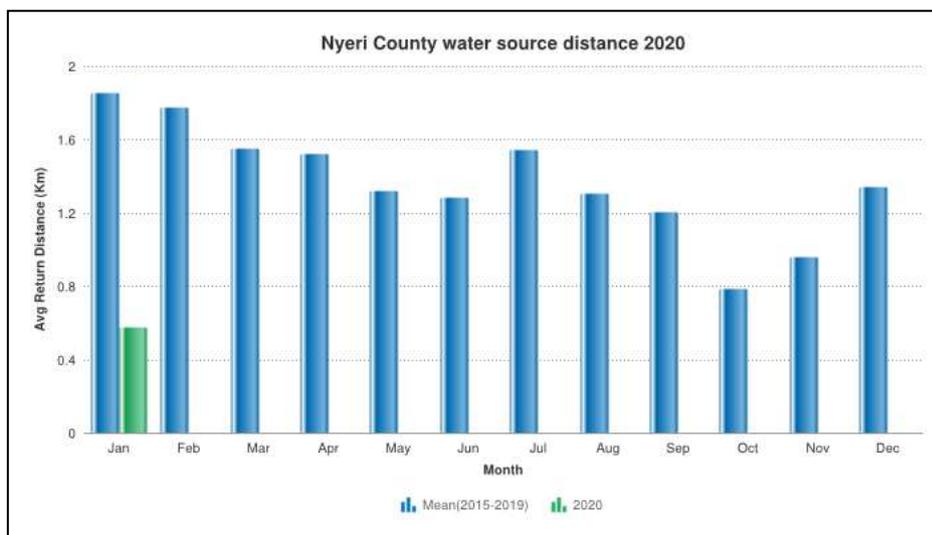


Figure 5: presentation of average return distances

2.2.3 Livestock access

- The average distance from the grazing field to water sources dropped by 12.5 percent from 0.8 Km in December to 0.7 Km in January.
- The recorded distances were not normal at this time of year.
- The current distances were below the long term average of 2.7 Km by 74 percent as indicated in figure 6.

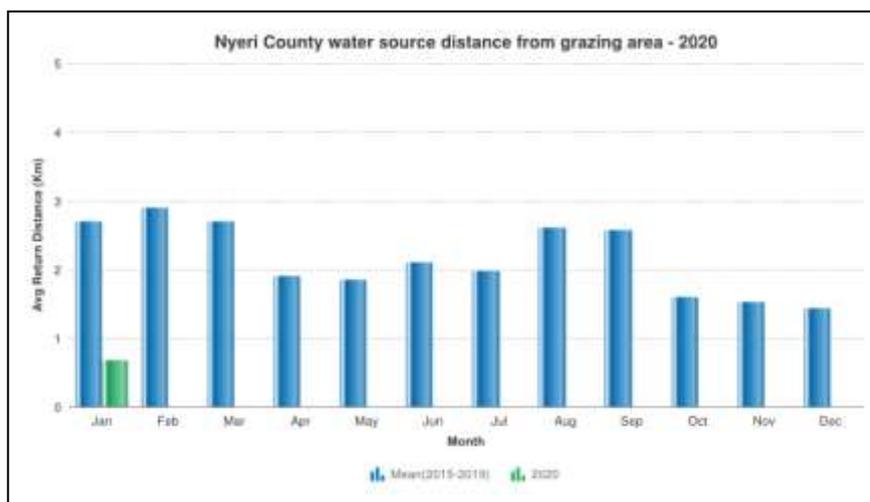


Figure 6: presentation of average grazing distances to water

- In the Marginal Mixed farming livelihood zones distances reduced by 60 percent from 0.5 Km in November to 0.2 Km in December while in the mixed farming distances remained unchanged from previous month at 0.8 Km.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Body conditions for all species were good during the month of January, attributed to availability of adequate pastures and low distances to water sources. Compared to a normal year the current body conditions were abnormal.

3.1.2 Livestock diseases

- An outbreak of Pleuro Pneumonia Respiratory (PPR) in shoats was reported in Gatei in Thegu ward in Kieni East Sub County.

3.1.3 Milk Production

- The month's production remain unchanged from last month at 6.7 litres.
- Production was higher in the Mixed farming livelihood zones and stood at 3.6 litres compared to 3.2 litres in Marginal Mixed farming livelihood zones.
- The month's production was higher by 29 percent compared to the 2015-2019 LTA of 5.2 as shown in figure 7.
- The above average production could be attributed to good animal health and reduced cost of managing the productive stock.

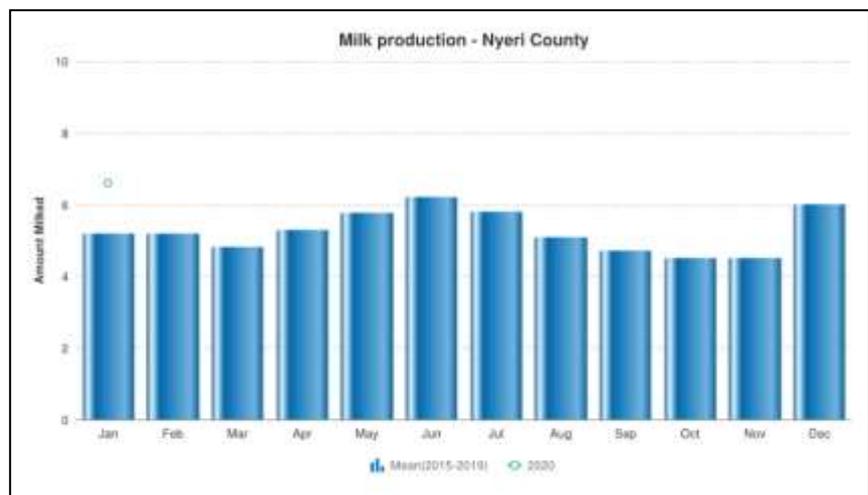


Figure 7: Presentation of average milk production for the region

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- The performance of the crops at the farms was good, attributed the offseason rains that were in January. Expected Production for maize will be above average. However, the current situation is not normal compared to a normal year.
- Currently, maize crop at the farms are at grain filling stage to dough hardening. Piece meal harvesting of beans was ongoing.

3.2.2 Pest and Diseases

- Fall Army Worm (FAW) has been reported in Kieni East and Kieni West sub counties.
- A swam of locusts invaded farms in Kieni East and Kieni West sub counties.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle Price

- A mature four year old bull retailed for Ksh 33,714 in January from 32,900 in December, 2.5 percent increase.
- Rise in prices could be attributed to good body livestock condition and health.
- Compared to the 2017-2019 short term averages of Ksh 16,650, reported prices were higher by 102 percent, as indicated in figure 8.

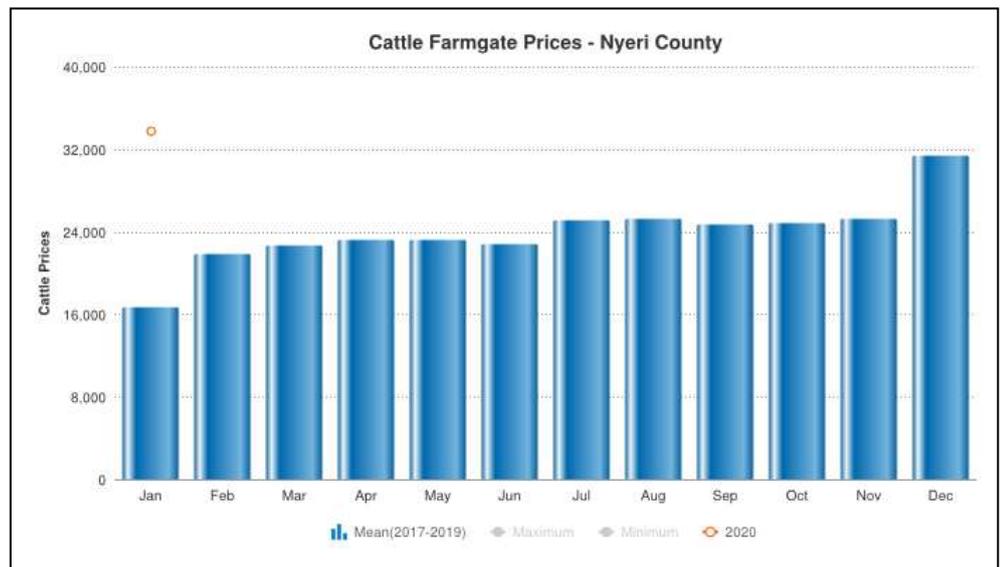


Figure 8: Outlines average price trends for cattle

4.1.2 Sheep prices

- A two year old medium size Sheep sold for Ksh 4,250 in January from Ksh 4,792 in December, registering 11 percent drop.
- Drop in prices could be attributed to market forces of demand and supply.
- The month's price was higher by seven percent, compared to the 2017-2019 short term averages of Ksh 3,967 as shown in figure 9.



Figure 9: Outlines average price trends for sheep.

4.2 CROP PRICES

4.2.1 Maize

- A kilo of maize grain sold for Ksh 47 in January from Ksh 54 last month, registering 13 percent drop.
- Decrease in prices could be attributed to imports from the neighbouring counties of Nyandarua, Laikipia and Nakuru.
- Compared to the short term averages of Ksh 45, the registered price was higher by four percent as shown in figure 10.

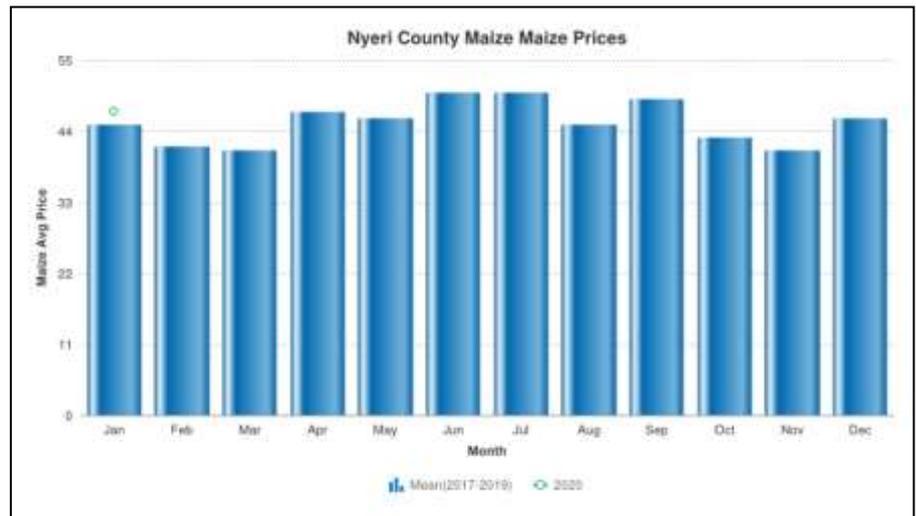


Figure 10: Outlines average price trends for Maize

4.2.2 Beans

- A kilo of bean grain retailed for Ksh 88.6 in January from Ksh 100 in December, recording 11.4 percent drop.
- Drop in prices could be attributed to the ongoing piece meal harvests and imports from the neighbouring counties of Nyandarua, Laikipia and Nakuru.
- Compared to the short term average of Ksh 83 the month's price was higher by seven percent as outlined in figure 11.

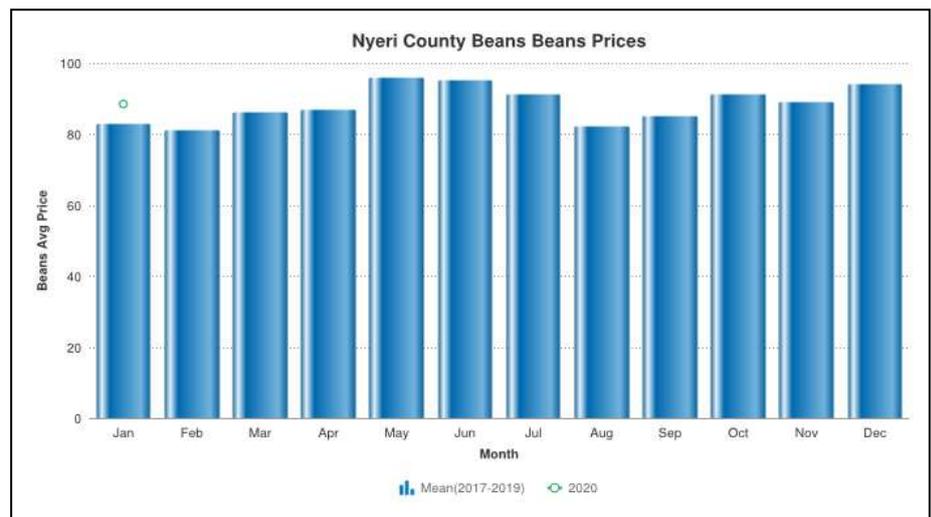


Figure 11: Outlines average price trends for

4.2.3 Livestock Price Ratio/Terms of Trade

- Terms of trade ratio registered a significant improvement attributed to the increase in livestock prices as food prices dropped.
- Households are able to purchase 116 kilograms of maize from a sale of one kilogram of goat meat. This was 32 percent increase from last month where households could purchase 87.9 kilograms of maize from the sale of the same.

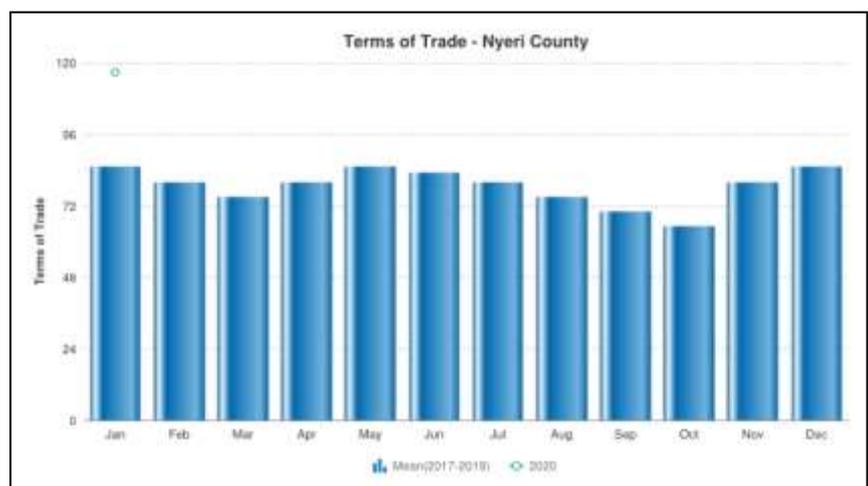


Figure 12: Outlines terms of trade in Kieni

- Compared to the 2016-2018 short term average of 85 current TOT was higher by 36 percent as outlined in figure 12.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption at the household level remained unchanged from last month at 1.6 litres.
- Households in marginal mixed farming consumed more milk at 1.7 litres per day compared to 1.5 litres in mixed farming livelihood zones.
- Households sold the remaining milk to the various co-operatives that are operating in the region.
- Compared to the 2015-2019 short term average of 1.6 litres, the month's consumption was within the threshold as shown in figure 13.

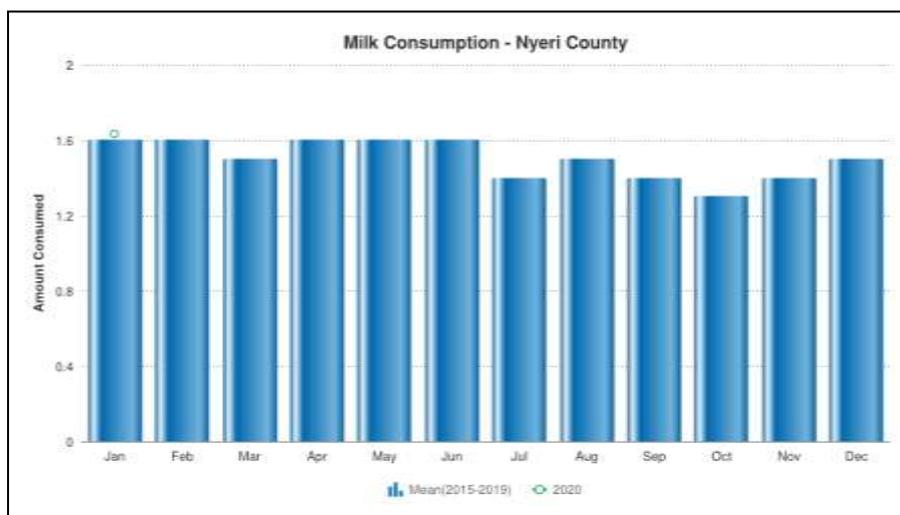


Figure 13: Outlines milk consumption for the county

5.2 FOOD CONSUMPTION SCORE

- The food consumption score for Kieni was relatively stable. Proportion of households with borderline and acceptable food consumption score in the sampled population was 42 percent and 57 percent in January compared to one percent, 35 percent and 64 percent at poor, borderline and acceptable respectively in December.

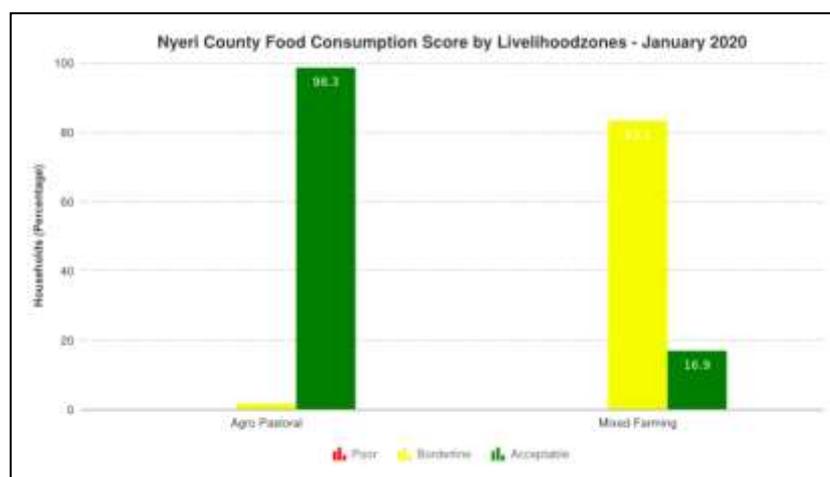


Figure 14: Presentation of food consumption score by livelihood zones

- The marginal mixed farming livelihood zones fared better since 98 percent of the households had acceptable food consumption score compared to 16.9 percent in mixed farming livelihood zones.
- Percent of households at acceptable food consumption score in mixed farming livelihood zones dropped by 43 percent.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

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

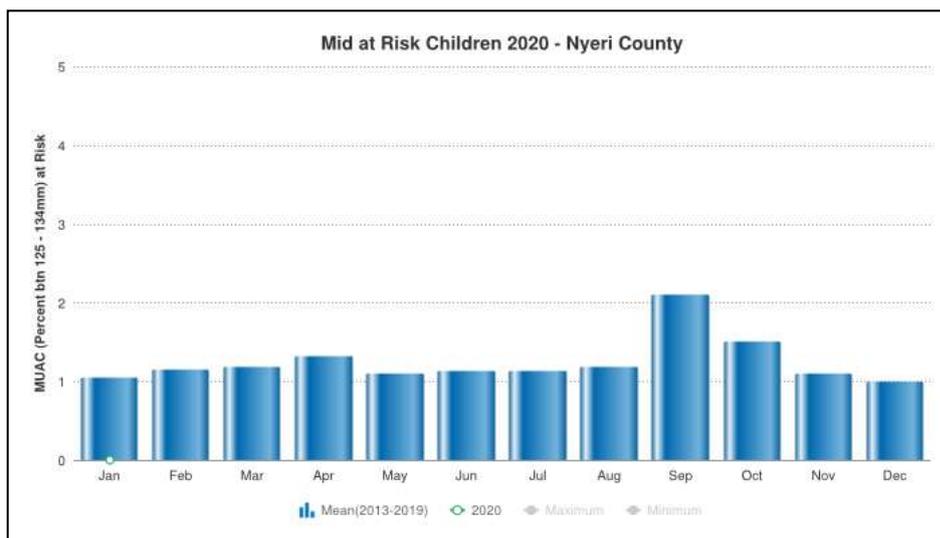


Figure 15: Presentation of nutrition status of children below five years

5.4 COPING STRATEGIES

- Coping Strategy Index (CSI) for the month of January stood at 5.12 in January which was quite comparable to 5.10 the previous month.
- In Marginal mixed farming livelihood zones the CSI stood at 6.3 same as was reported last month while in mixed farming livelihood zones the index stood at 3.9 in January which was quite comparable to 3.8 the previous month as indicated in figure 16.

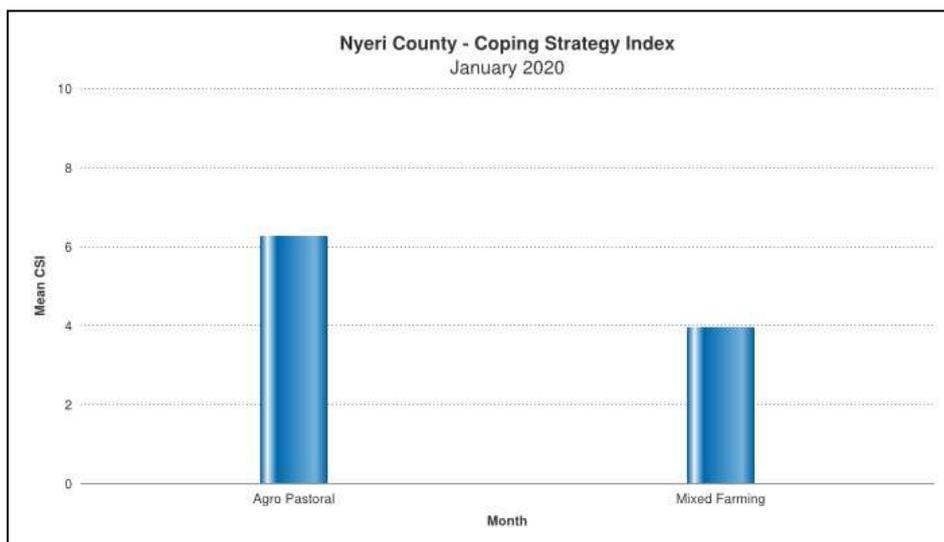


Figure 16: presentation of the region coping strategies

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD INTERVENTIONS

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

6.2 FOOD AID

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

7.0 EMERGING ISSUES

- Incidences of human wildlife conflict were reported in Gakawa, Thegu and Naromoru/Kiamathanga ward in Kieni East Sub County.

7.1 FOOD SECURITY PROGNOSIS

- The food security is expected to improve further in the next three months given the good performance of the OND, the ongoing offseason rains and the expected onset of the March-April-May (MAM) rains by mid-March.
- Harvesting of maize will likely begin next month, production is expected to be above average in both livelihood zones. Prices for maize and other food stuffs are expected to decline further leading to improved purchasing power at the household level. The forage and water resources are expected to remain above normal leading to sustained good livestock body conditions, above-average milk production, and a reduction in trekking distances to domestic and livestock water sources. Livestock prices also are expected to increase further due to favourable terms of trade for livestock keepers.

8. RECOMMENDATIONS

- Review of county drought contingency plans. (N.D.M.A).
- Sensitization households on water harvesting (CGN).
- Vaccination and deworming of livestock against trade sensitive diseases.(CGN)
- Support preparedness activities to enhance resilience in communities and other livelihoods diversification activities. (NDMA)
- Support to ward level CP through scenario creation and simulation. (NDMA)
- Capacity building on post-harvest management. (NDMA)