



National Drought Management Authority
NAROK COUNTY
DROUGHT EARLY WARNING BULLETIN FOR APRIL 2020



APRIL EW PHASE

Drought Situation & EW Phase Classification

Biophysical Indicators

Rainfall

- Above normal rains were received in the county during the month under review.
- The rains were evenly distributed in both time and space.

Vegetation condition:

- The county is experiencing above normal vegetation greenness as depicted by the vegetation condition index (VCI) this month.

Socio Economic Indicators (Impact Indicators)

Production indicators:

- Maize, wheat and beans planting and weeding is ongoing for the Long rains season.
- Livestock body condition remained good across all the livelihood zones.
- Improved milk production ranging from fair to good and within the normal range compared to the long-term average.

Access indicators:

- Terms of trade remained stable across all the livelihood zones.
- Milk consumption improved across all the livelihood zones.
- Water access for both human and livestock consumption remained good across the livelihood zones.
- Distances to water sources is stable and below the normal range.

Utilization Indicators:

- Cases of malnutrition increased compared to last month and is below the normal as indicated by percent of mid upper arm circumference (MUAC).
- Most households were within acceptable food consumption scores and employed normal coping strategies in accessing food.

Early Warning (EW) Phase Classification

Livelihood Zone	Phase	Trend
AGRO PASTORAL	NORMAL	STABLE
MIXED FARMING)	NORMAL	STABLE
PASTORAL	NORMAL	STABLE
COUNTY	NORMAL	STABLE
Biophysical Indicators	Value	Normal Range/Value
VCI-3Month	91.78	>35
Forage condition	Good	Good
Production indicators	Value	Normal
Crop Condition (Maize)	Fair-good	Normal
Livestock Body Condition	Good	Good
Milk Production in litres	3.5	>2
Livestock Migration Pattern	No migration	Normal
Livestock deaths (Drought related))	No death	No death
Access Indicators	Value	Normal
Terms of Trade (ToT)	78.5	>62
Milk Consumption in litres	2.2	>1
Return distance to water sources in km	1.4	<5
Cost of water at source in Kshs (20 litres)	0-5	<5
Utilization indicators	Value	Normal
Nutrition Status, MUAC (% at risk of malnutrition)	5.3	<10

<ul style="list-style-type: none"> ▪ Short rains harvests ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ Land preparation 	<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase 	<ul style="list-style-type: none"> ▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks ▪ Kidding (Sept) 	<ul style="list-style-type: none"> ▪ 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 county continued to receive heavy rainfall during the month under review. There was no significant inter-livelihood variation in terms of amounts recorded during the month.
- The temporal and spatial distribution was good across the livelihood zones.
- The rainfall received were above the normal range.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

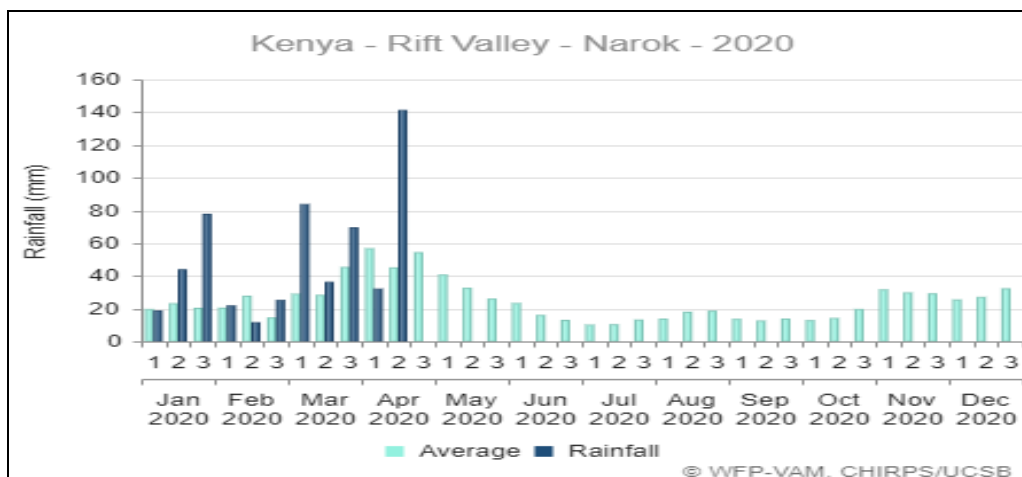


Figure 1: Rainfall performance-Narok County

- The above satellite image (Figure 1) highlights the general performance of the rains in the county for the month of April, 2020 in comparison with the long-term averages.
- Rainfall performance in the second dekad of April was above normal in terms of amount received compared to the long-term seasonal range.
- The county registered relatively above normal rains during the month under review as shown in figure 1.

2.0 IMPACTS ON VEGETATION AND WATER

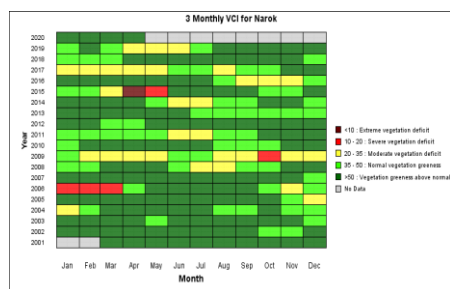


Figure 2: VCI: Narok County

2.1 VEGETATION CONDITION

The vegetation greenness as depicted by the vegetation condition index (VCI) shows above normal vegetation greenness across the county (Figure 2) in respect to historical minimum and maximum VCI values. The improved vegetation condition is as a result of the enhanced rainfall recorded in the county.

2.1.1 Field observations

2.1.1.1 Pasture

- The pasture quantity and quality in all livelihood zones remained good across all the livelihood zones.
- The available pasture is likely to last for more than four months in mixed farming and agro-pastoral livelihood zones and three months in the pastoral livelihood zone. This is attributed to rains received in the county.
- The current pasture situation is above the normal range.

2.1.1.2 Browse

- The quantity and quality of browse in across all the livelihood zones remained good compared to the previous month. The available browse is expected to last for 4-5 months in mixed farming livelihood zone while in pastoral livelihood zone, it is likely to last for three to four months.
- The current browse situation is above the normal range.

2.2 Water resources

2.2.1 Sources

- The main sources of water for livestock and human consumption in the county were rivers, pans/dams, boreholes, traditional river wells and shallow wells as shown by Figure 3.
- The quantity and quality of water ranged from fair to good in the mixed farming and agro-pastoral livelihood zones with the pastoral livelihood zone having fair quality. Pans and dams were the most used sources in the pastoral and agro-pastoral livelihood zones.
- The current water sources are expected to last for 5-6 months in mixed farming and agro-pastoral livelihood zones. In pastoral livelihood zone, the water is likely to last for 4-5 months. The current water situation is above the normal range at this time of the year.

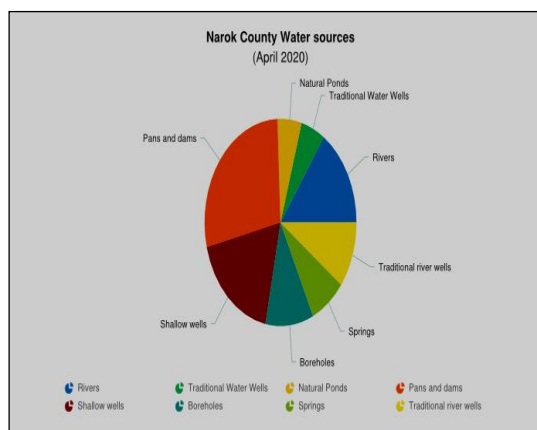


Figure 3: Water sources

2.2.2 Household access and Utilization

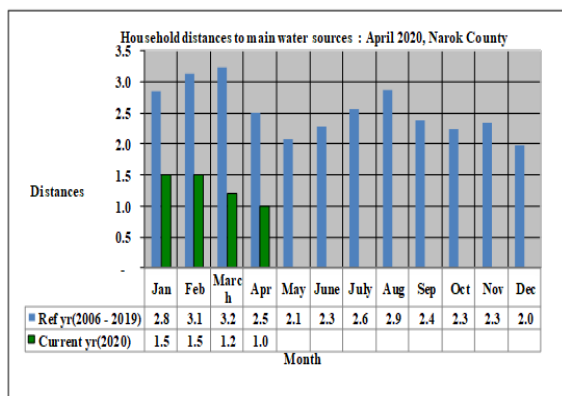


Figure 4: Water access by households

- The average distance to watering points for households reduced by seventeen percent compared to the previous month.
- Pastoral livelihood zone recorded the longest average distance at 1.5 km while the shortest average distance was recorded in mixed farming livelihood zone at less than half a kilometre. The reduced distance is attributed to enhanced rains during the month under review.
- The current trekking distances to water points are below normal compared to the long term means as shown by Figure 4.

2.2.3 Livestock access

- The average distance to main water sources from grazing areas remained the same compared to the previous month.
- The pastoral livelihood zone recorded the longest distance of 2.0 kilometres while the shortest distance was recorded in the mixed farming livelihood zone at less than a kilometre.
- The current average trekking distance is below the normal range at this time of the year as shown in Figure 5.

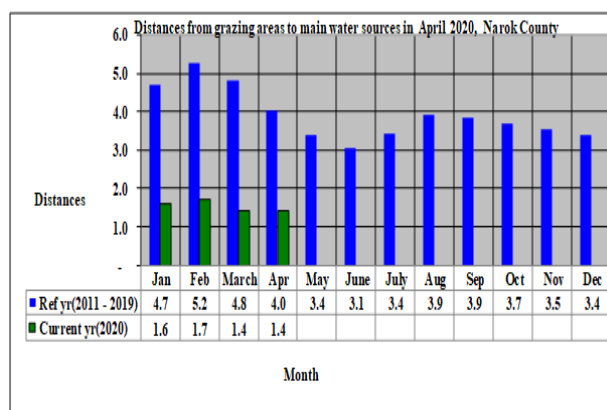


Figure 5: Water access by livestock

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Livestock body conditions for cattle, sheep and goats remained good across all the livelihood zones which is attributed to availability of forage coupled with reduced trekking distances to water sources.
- The body condition is anticipated to remain good for the next five months as forage and water accessibility continue improving across the livelihood zones.
- The current livestock body condition is above normal range at this time of the year.

3.1.2 Livestock Diseases

- There were reported cases of Bluetongue disease, anthrax, persistent cases of Foot & Mouth Disease (FMD), Foot rot and contagious caprine pleuro-pneumonia (CCPP) and contagious bovine pleuro-pneumonia (CBPP) in Trans Mara West, Trans Mara East, Narok East and Narok South sub counties.

- Treatment and vaccinations measures were done upon request by farmers and own arrangements with animal practitioners.

3.1.3 Milk Production

- The average milk produced per household per day increased slightly compared to the previous month as shown by Figure 6.
- Milk production is 0- 7 litres in the pastoral areas, 1-12 litres in the agro-pastoral areas and 1-15 litres in the mixed farming livelihood zone.
- The improved milk production is attributed to improved livestock body conditions.
- The current milk production is above the normal range.

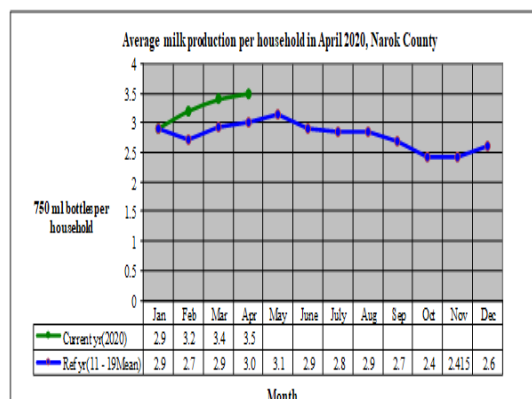


Figure 6: Milk Production

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

- The crops planted in the County include beans, sorghum, maize, wheat and potatoes in Narok North, Kilgoris and Emurua Dikirr sub-counties.
- The on-going farm activities include planting and weeding in Mau and Melili in Narok North, Sogoo and Oloolulunga in Narok South, Elenerai and Mulot in Narok West, Emurua Dikirr and Kilgoris.
- Beans and potato production might be affected due to excessive rains that may result into leaching of nutrients, water logging, rotting and increased incidences of pests and diseases during the long rain seasons.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

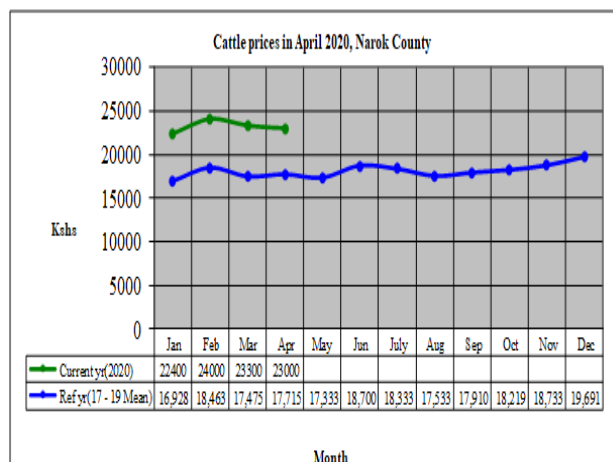


Figure 7: Cattle prices

current cattle price is above normal compared to such at this time of the year as shown by (Figure 7).

4.1.2 Goat Prices

- The average goat prices marginally increased compared to the previous month.
- The highest price was recorded in the mixed farming livelihood zone at Kshs 4,500 per head while the lowest price was recorded in the pastoral livelihood zone at Kshs 3,500 per head.
- The stability in price is due to good body condition.
- The average goat price was above the normal range at this time of the year as shown in Figure 8.

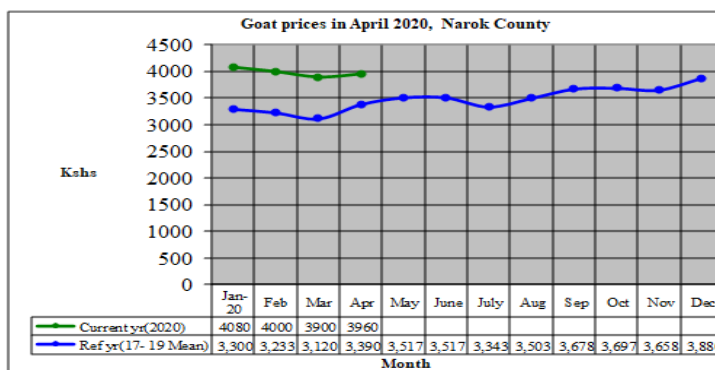


Figure 8: Goat Prices

4.2 CROP PRICES

4.2.1 Maize

- The average price of maize per kilogram increased by twenty percent compared to the previous month. The highest price was recorded in the pastoral livelihood zone at Kshs. 55 while the lowest price was recorded in the Mixed farming zone at Kshs. 30. The increase in price is owned to closure of markets and poor market accessibility by the pastoralist.
- The current price is below the expected long-term average as shown by Figure 9.

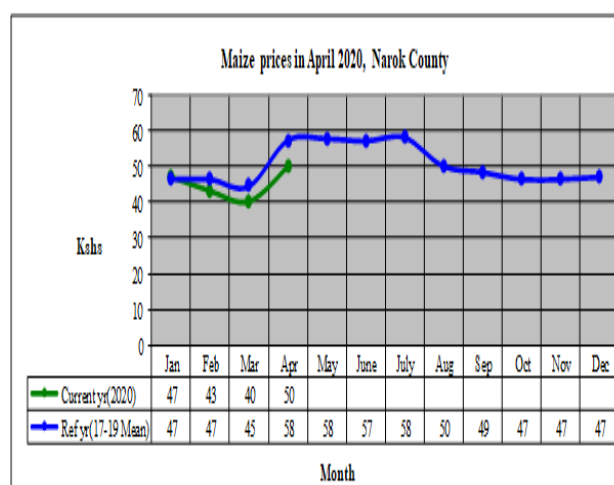


Figure 9: Maize prices

4.2.2 Beans

- The average price of beans increased by seven percent compared to the previous month. The lowest price was recorded in the mixed farming zone at Kshs. 80 while the highest was recorded in the pastoral livelihood zone at Kshs.120
- Beans were affected by rotting of beans due to water logging which led to below harvest coupled with poor accessibility to markets.
- The current price is within the normal range at this time of the year as shown by Figure 10.

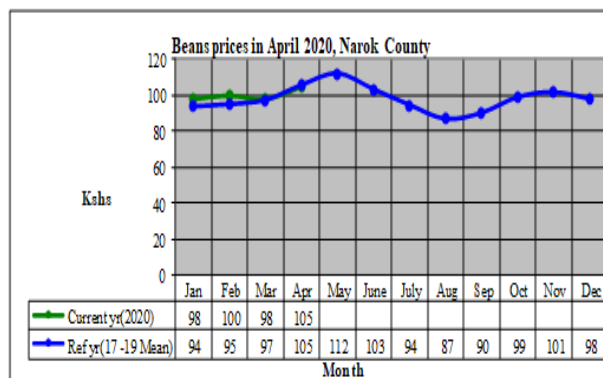


Figure 10: Beans prices

4.3 Livestock Price Ratio/Terms of Trade

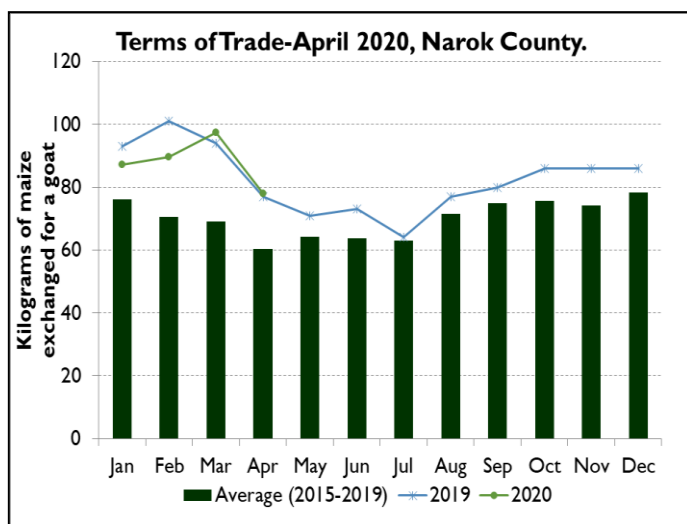


Figure 11: Terms of trade

The Terms of Trade (ToTs) based on the cereal/meat prices reduced by eighteen percent compared to the previous month. The decrease in ToTs is due increased maize prices. This implies that a sale of one goat fetched 78.5 kgs of cereals. The ToTs were less favourable in the agro-pastoral and mixed farming livelihood zones compared to pastoral livelihood zone. The current cereal/goat price ratio is above normal range as shown in Figure 11.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

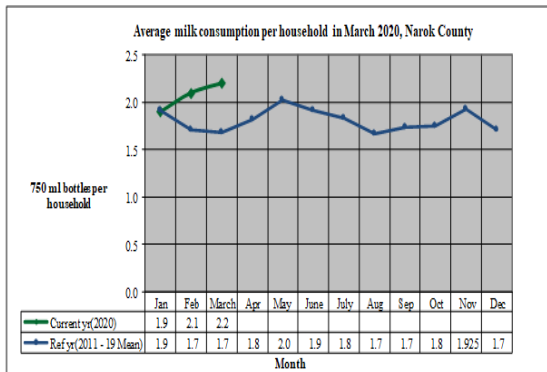


Figure 12: Milk consumption

consumption rate is above the normal range at this time of the year as shown by Figure 12.

- Average household milk consumption per day increased marginally compared to the previous month.
- There were inter-livelihood variations in milk consumption with mixed farming livelihood zone having the highest consumption rate at 1-5 litres, followed by agro-pastoral livelihood zone at 0-5 litres. The pastoral livelihood zone had the least consumption rate at 0-3.5 litres. The current milk

5.2 FOOD CONSUMPTION SCORE

- Approximately 99% and 1 % of the sampled households fell within the acceptable and borderline food consumption categories respectively in the month under review.
- The acceptable implies that households are consuming staples, protein (milk and meat) and vegetables every day and frequently accompanied by pulses. Borderline implies that households are consuming staples and vegetables every day accompanied by oil and pulses a few times in a week. The poor food consumption score implies households

are not consuming balanced diet and rarely consuming food rich in protein and energy giving food. There was insignificant variation across the livelihood zones as shown in Figure 13.

- A few of the sampled households in the Agro-Pastoral livelihood zones fell under borderline food consumption category.

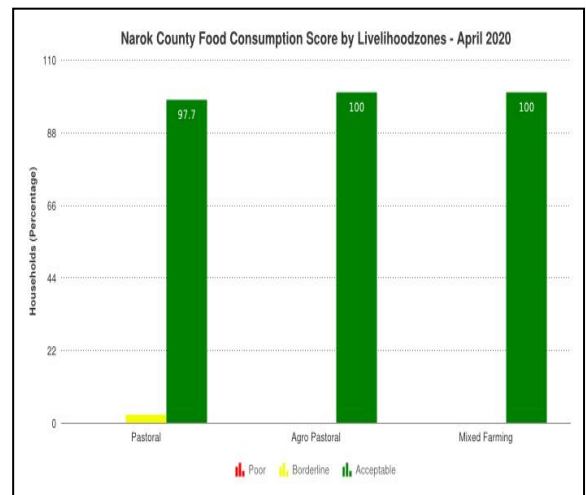


Figure 13: Food consumption score

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

The children under five years of age who are at risk of malnutrition as indicated by the Mid-Upper Arm Circumference (MUAC) increased slightly to 5.3 percent compared to the previous month as shown by Figure 14. Mosiro, Naroosura and Koyiaki wards in the pastoral livelihood zone still had some children with moderate malnutrition cases owing to increased cereal prices due to poor accessibility to market and fever condition owing to chilly weather conditions coupled with diarrhoea cases due to poor sanitation.

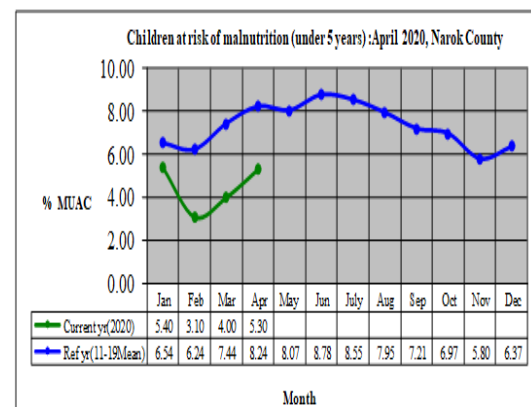


Figure 14: Children at risk of malnutrition

The current rate of malnutrition is below the normal range compared to the long-term average as shown by Figure 14.

5.3.2 Health

The county recorded cases of fever and diarrhoea in the pastoral and the agro-pastoral livelihood zones during the month under review.

5.3 COPING STRATEGIES

The CSI for the County in April remained at 3.1 compared to the previous month. Households employed normal coping strategies in accessing food across all the livelihood zones as shown by Figure 15. The pastoral livelihood zone had higher CSI compared to mixed farming livelihood zones.

The coping strategies are normal at this time of the year.

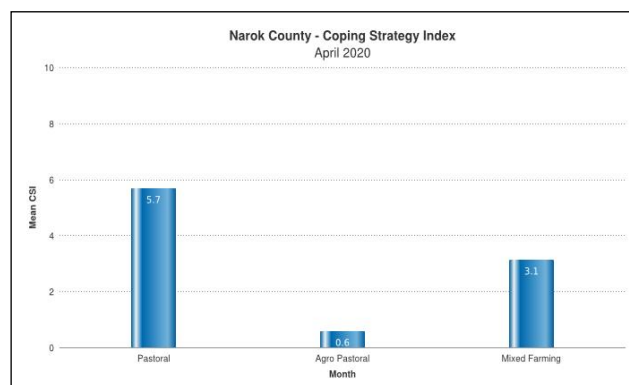


Figure 15: Coping strategies

6.0 CURRENT INTERVENTION MEASURES (ACTIONS)

6.1 NON-FOOD INTERVENTIONS

- Construction of Kichechi Water Pan with a Capacity Of 50,000m³ in Ilkerin ward, Transmara East Subcounty, Fencing of Mosiro Sale Yard in Mosiro Ward, Narok East Sub-county, Olesere Community Water Pipeline in Sianas ward in Narok west subcounty by NDMA funded by European union.
- The County government is implementing the National Agricultural and Rural Inclusive Growth project (NARIGP). The project is funded by the World Bank covering 20 wards in the county and aims at increasing agricultural productivity and profitability of targeted beneficiaries.
- Rapid Food Security Assessment was carried out in April funded by Regional Pastoral Livelihoods Resilience Project,
- Regular Covid-19 surveillance and sensitization by Ministry of Health.

6.2 FOOD AID

- No food aids.

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement/Floods

- Massive floods was witnessed in the county causing road network disruption along major roads, bridges and homestead were also reported to have been swept away, crop destruction and loss of livelihoods and livestock.
- As of April 30 2020, no cases of COVID-19 have been confirmed in Narok County. However, in response to the threat, authorities in the county have enacted control measures, including night curfews, closure of major livestock markets and restaurants among other measures. If such measures persists, they will likely lead to delay in the movement of goods and this could result in lower market supply.
- No major conflict issues that are related to drought were reported during the month under review.

7.2 Migration

- Most livestock grazed within their wet season grazing areas.

7.3 FOOD SECURITY PROGNOSIS

- The ongoing rains will have a positive impact on crop, nutrition, water and livestock sectors. Crop conditions particularly for maize crop will improve and therefore resulting into better yield. However, beans and tomatoes production might be affected adversely by water logging and diseases.
- Forage and water conditions will continue to improve and therefore livestock body condition and productivity is expected to perform well which may result to improved milk consumption at household level. Improved milk consumption and the above-average goat-to-maize terms of trade is likely to drive a relative improvement in dietary quality and quantity among most poor households. As a result, the number of children at risk of malnutrition is likely to remain stable. However, WASH component mostly pastoral livelihood zone might be affected negatively due to contamination of water sources and massive floods causing siltation of open water sources.

8.0 RECOMMENDATIONS

- Provision of sanitizers to the community and intensive sensitization of Covid-19.
- Livestock disease surveillance should be enhanced across the county. This is due to the persistence of foot and mouth disease, blue tongue and PPR in the county especially in the pastoral livelihood zone.
- Surveillance of water sources to be enhanced due to possibility of contamination by flood waters.
- Regular weather advisories should be enhanced to avoid loss of lives and livelihood owing to the above normal rains in the county.
- Establishment of preparedness activities especially in water and livestock sectors will boost the resilience level of the vulnerable communities to cope better in future against the effects of drought.
- Provision of planting farm inputs e.g. seeds, fertilizers, pesticides and other implements
- Continued support to strengthen community livelihood and adaptation