




National Drought Management Authority Baringo County Drought Early Warning Bulletin for September 2021

AUGUST EW PHASE		Early Warning Phase Classification									
		LIVELIHOOD ZONE		EW PHASE	TRENDS						
<p>Drought Situation & EW Phase Classification Drought Phase: Normal- Stable Biophysical Indicators</p> <ul style="list-style-type: none"> The county received some showers during the month mostly in the Mixed farming livelihood zone. The Vegetation greenness as depicted by the VCI is above normal across all sub counties The Water levels in most water sources are below normal at 30-40% capacity. <p>Socio Economic Indicators (Impact Indicators) Production indicators:</p> <ul style="list-style-type: none"> The forage condition is fair to good in both quality and quantity Livestock body condition is fair to good in all livelihood zones. Milk production is below the normal seasonal range across all livelihood zones. <p>Access indicators</p> <ul style="list-style-type: none"> Terms of trade are stable and above long term means Distances to water sources for households are below normal seasonal ranges and a declining trend due to impact of off season rains. <p>Utilization indicators:</p> <ul style="list-style-type: none"> The number of under-five children at risk of malnutrition is stable and below the long term mean 		PASTORAL		NORMAL	STABLE						
		AGRO PASTORAL		NORMAL		STABLE					
		IRRIGATED CROP		NORMAL		STABLE					
		COUNTY		NORMAL		STABLE					
		Biophysical Indicators		Value for the month Baringo	LTA-Monthly Baringo	Normal ranges Kenya %					
		Average rainfall MM (%)		%	46	80-120					
		VCI-3month		66.42		35-50					
		% Of water in the water pan		30%-40%		50-60					
		Production indicators		Value	Normal ranges						
		Livestock Migration Pattern		Normal	Normal						
		Livestock Body Condition		4-5	3-4						
		Milk Production (Ltr /HH/Month)		1.6	1.86						
		Livestock deaths (for drought)		No deaths	No deaths						
		Access Indicators		Value	Normal ranges						
		Terms of Trade (ToT)		59.3	>58.16						
Milk Consumption (Ltr)		1.4	≥1.60								
Water for Households-trekking distance (km)		3.6	≥2.78								
Crops area planted for the season(Maize)		42%	>80%								
Utilization indicators		Value	Normal ranges								
Nutrition status of children 6-59 months at risk of malnutrition by numbered MUAC (% at risk)		13.67%	<14.08								
CSI		13.97	>19.0								
FCS		49	>35								
<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) 							
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1. CLIMATIC CONDITIONS

1.1 Rainfall performance

1.1.1 Amount of rainfall and spatial distribution

- During the month under review, the County did receive sporadic off season rainfall showers across the various livelihoods with the high lands in the Mixed farming livelihood zone receiving the bulk of the rains. The rains were mostly received during the first two dekads of the month.

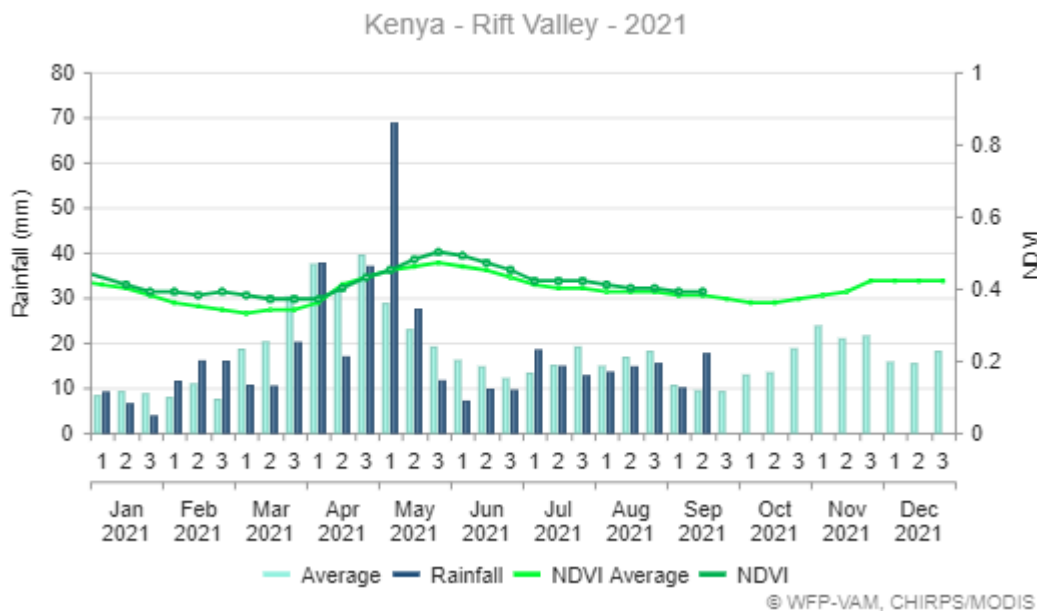


Figure 1: Rainfall performance

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation condition index (VCI)

The vegetation condition index (VCI) is above normal in all the sub counties (Figure 2). The VCI is currently at 66.42. This has been contributed by off season showers experienced in the county for the last few months.

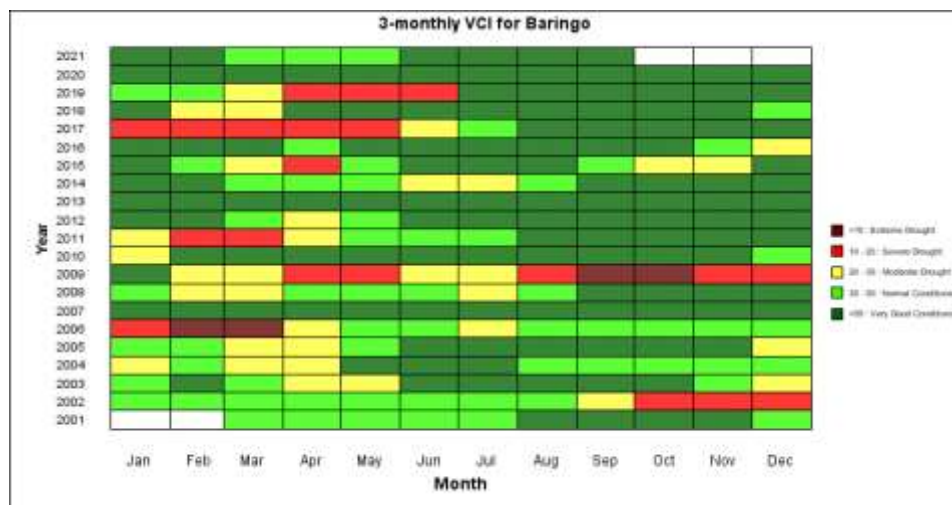


Figure 2. Vegetation Condition Index

2.1.1 Field observation

2.1.1.1 Pasture

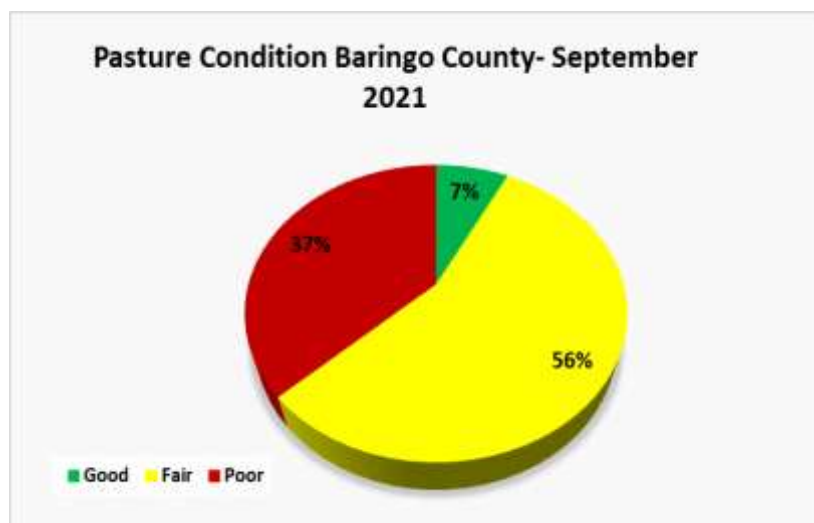


Figure 3: Pasture conditions

The pastures in Pastoral and Agropastoral livelihood zones are mostly fair to poor condition. (Figure 3). The most affected subcounties are Baringo South areas of Kiserian, kinyach in baringo North and Tiaty where the pastures are poor due to minimal and poorly distributed rains received and invasive species that have suppressed the growth of pastures. In the Irrigated livelihood zone the pastures are in fair to good conditions. The current pastures are expected to last for more than one month in Pastoral and Agro pastoral livelihood zones and two to three months in Irrigated livelihood zone .

2.1.1.2 Browse

The browse condition during the month under review was fair both in quantity and quality in Pastoral and Agropastoral livelihood zones while good in the Irrigated livelihood zone (Figure 4). The condition is slightly below normal as compared to seasonal range at this time of the year. The available browse is expected to last for two to three months in Pastoral and Agro pastoral livelihood zones and four months in Irrigated cropping livelihood zone.

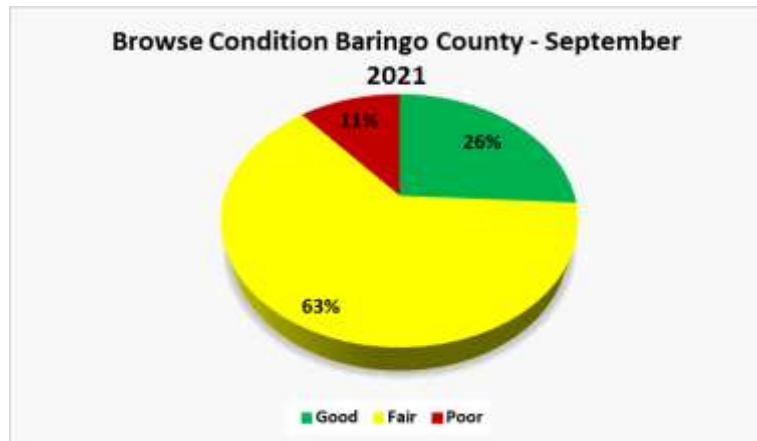


Figure 4: Browse conditions

2.2 Water resources

2.2.1 Source

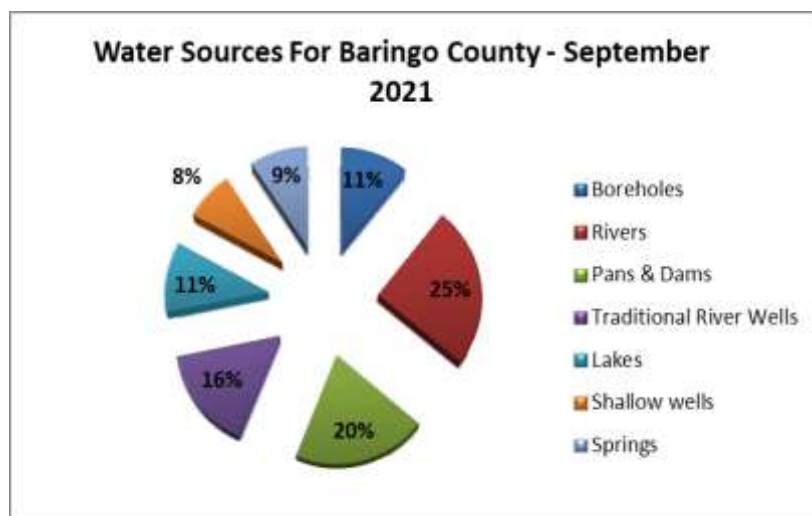


Figure 5: State of water sources

The main water sources for both livestock and human consumption across all livelihood zones were rivers and water pans, (Figure 5). Most water pans and dams were at 30 to 40 percent of their full capacity in the Pastoral livelihood zone due to siltation. Water quality and quantity across Pastoral and Agro-pastoral livelihood zones is fair to poor, which is not normal at this time of the year. The current open water sources are expected to last for one to two months in Pastoral and Agro pastoral livelihood zones and three months in Irrigated livelihood zone.

2.2.2 Household access and Utilization

The average household trekking distance to water sources was 3.8km, which was a slight increase of three percent in comparison to the previous month at 3.7km (Figure 6). The distances are above the long term average (LTA) by 21 percent. Irrigated cropping livelihood zone recorded the least trekking distance of 1.8 kilometres while Pastoral livelihood zone recorded the highest average of 4.9 km.

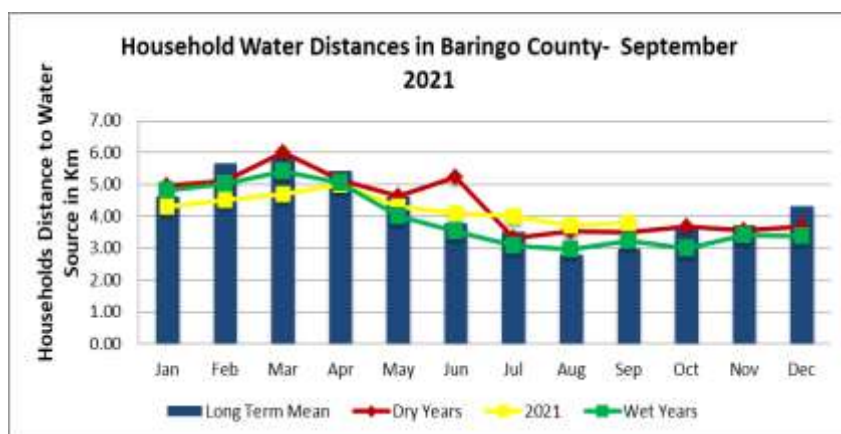


Figure 6: Water access

2.2.3 Livestock access

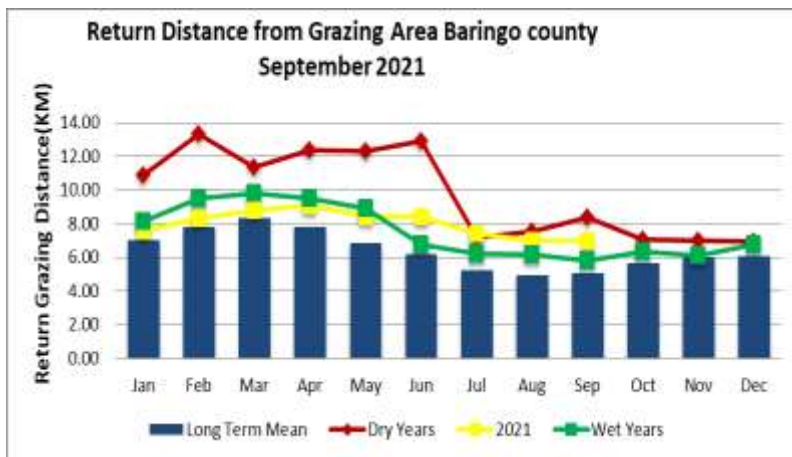


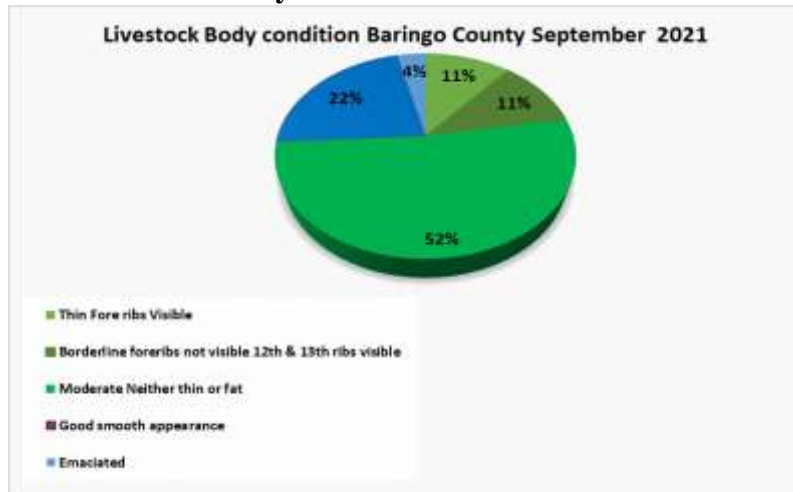
Figure 7: Grazing distances

The average return distance for livestock from grazing fields was at seven kilometres, which was similar compared to the previous month (Figure 7). The current distances are above the long term mean by 39 percent. The Pastoral livelihood zone recorded the longest average distance of 8.6 km while Irrigated livelihood zone recorded the shortest average distance of 2.4 kilometres. The stability in return distances are attributed to the ongoing pasture regeneration in the county.

3.0 PRODUCTION INDICATORS

3.1 Livestock Production

3.1.1 Livestock Body Condition



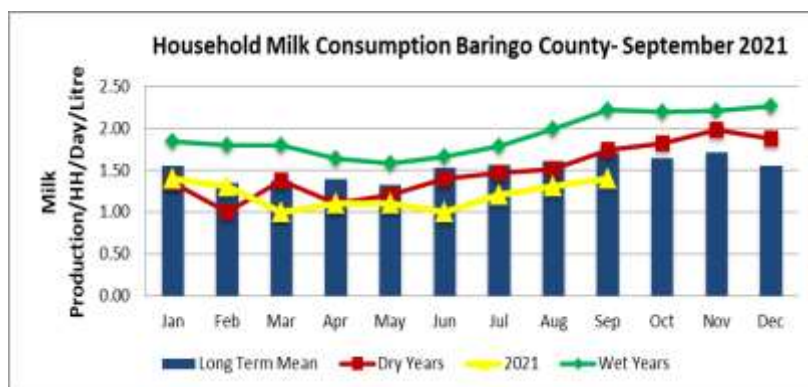
The livestock body condition is mostly moderate in all livelihood zones for the cattle species (Figure 8). This has been occasioned by gradual regeneration of pasture, browse and improved water availability across the livelihood zones. The body condition is likely to continue improving due to the recently received off season rains.

Figure 8: Livestock body condition

3.1.2 Livestock Diseases

Some cases of livestock diseases have been reported and include pestes des petits ruminants (PPR), Contagious caprine pleuropneumonia (CCPP), East coast fever, foot and mouth (FMD) and lumpy skin disease across all the livelihood zones. FMD was reported in Kollowa, Loiwat, Sirinyo and parts of Ravine. A few cases of goat deaths in the Pastoral livelihood zone were picked by the NDMA surveillance system which are associated with these diseases.

3.1.3 Milk Production



The average milk produced per household per day during the month was 1.6 litres, an increase of 14 percent as compared to the previous month at 1.4 litres (Figure 9). The milk was mainly from cattle and goats. Agro pastoral livelihood zone had the highest average of 3.2 litres while Irrigated cropping livelihood zone has the least average of 1.8 litres.

The current milk production is below LTAs by 16 percent though there is an increasing trend due to the prevailing fair livestock body

Figure 9: Milk production condition.

3.2 Rain fed crop production

3.2.1 Stage and Condition of food Crops

- The poor performance of the rainfall season led to less than 50 percent of the acreage being put under cultivation for various crops compared to the long term means. The maize in the Irrigated livelihood zone have been harvested, while in the mixed farming livelihood zone farmers are harvesting maize crop..

4.0.0 MARKET PERFORMANCE

4.1.0 Livestock marketing

4.1.1 Cattle prices.

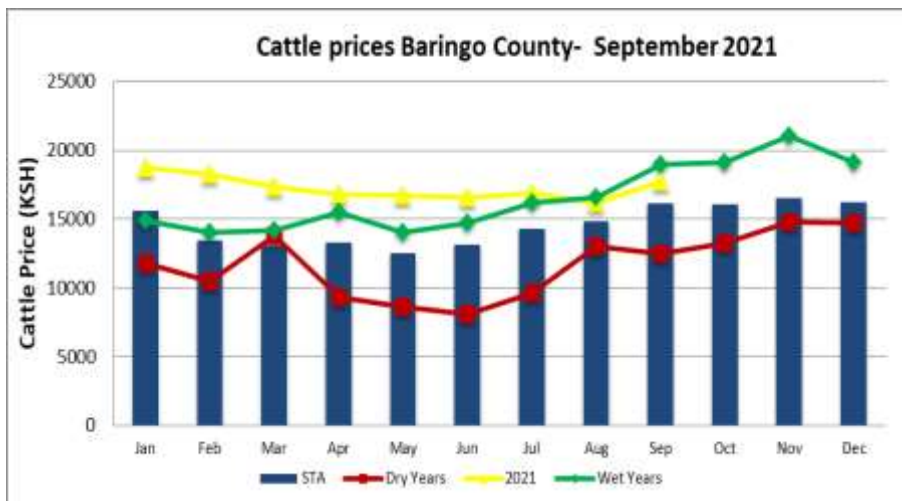


Figure 10: Cattle prices

4.1.2 Goat Prices.

The average price of a medium sized goat was stable at Ksh.2,635, as compared to the previous month at Ksh. 2,624 (Figure 11). The price was slightly below the short term average (STA). The prices were highest in Fishing livelihood zone at Ksh. 3,500 and lowest in Agro pastoral livelihood zone at Ksh.2,100. The stability in price is as a result of resumption of markets operations in the Pastoral zones mostly in Tiaty areas coupled by the good body condition of goats..

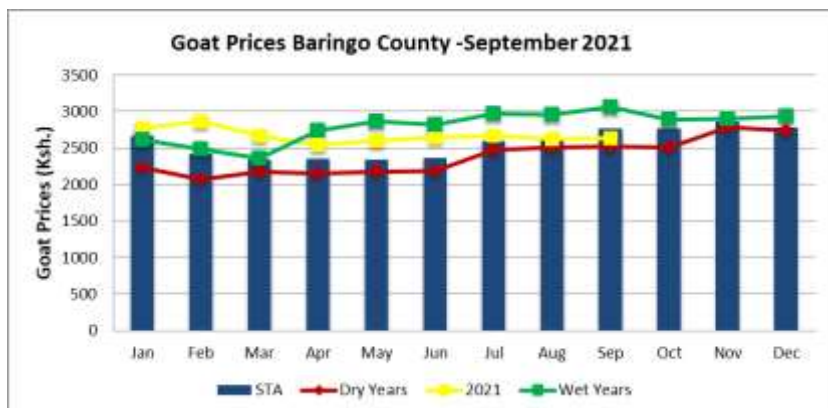


Figure 11: Goat prices

4.2.0. Crop prices

4.2.1 Maize

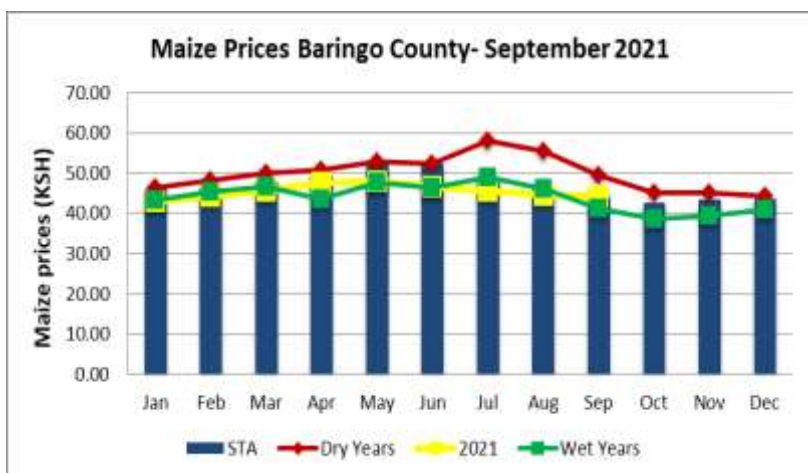


Figure 12: Maize prices

The current average price for medium-sized cattle was Ksh. 16,722 a minimal increase of eight percent in relation to the previous month at Ksh. 16,203. (Figure 10). The price was above the short-term average by 10 percent. Irrigated livelihood zone posted the highest prices of Ksh.28,333 while Pastoral livelihood zone recorded the least average price of Ksh.13,639. The low prices in the Pastoral livelihood zone is due to poor livestock body condition resulting from poor regeneration of pastures.

The current maize prices are stable in comparison to the previous month at Ksh 44/kg (Figure 12). The current prices are slightly above the short-term average at this time of the year by one percent. The stability in maize prices can be attributed to harvesting season in the county . Pastoral livelihood zone recorded the highest average price of Ksh.46 per kg while Irrigated livelihood zone recorded the lowest at Ksh.38 per kg.

4.2.2 Posho (Maize meal)

The average household posho price was at Ksh 50/kg compared to the previous month at Ksh 51/kg (Figure 13). The price was above the short-term average by two percent. The stability in prices was attributed to stable maize prices. The Pastoral livelihood zone recorded the highest average price of Ksh. 52 while the Irrigated cropping zone had the least average price of Ksh. 42.

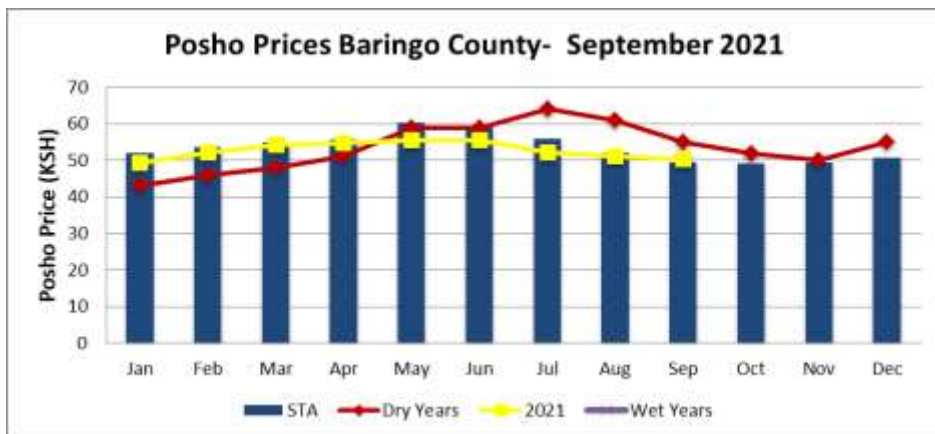


Figure13: Posho prices

4.2.3 Beans Prices

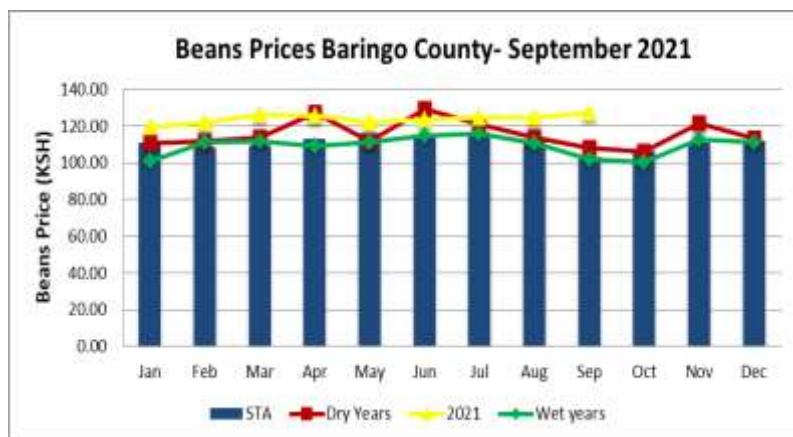


Figure 14: Beans prices

The average price per kilogram of beans increased by two percent as compared to the previous month, a kilogram of beans retailed at Kshs.127 from Ksh.124 (Figure 14). The current prices are above the short-term average by 23 percent.

The Pastoral livelihood zone recorded the highest average prices of Ksh.132 while the Irrigated livelihood zone recorded the least prices of Ksh.100. The change in prices was attributed to scarcity of the commodity with the Pastoral livelihood zone depending on the neighbouring Elgeyo marakwet county for the supply.

4.3 Terms of Trade

The terms of trade was at 59.3 which was a marginal increase in comparison to the previous month at 58.8 (Figure 15). This has been attributed to stability in maize and goat prices. The current terms of trade are below the long-term average by nine percent. Irrigated cropping livelihood zone had the highest terms of trade of 84.6 while Agro pastoral livelihood zone had the least at 46.7.

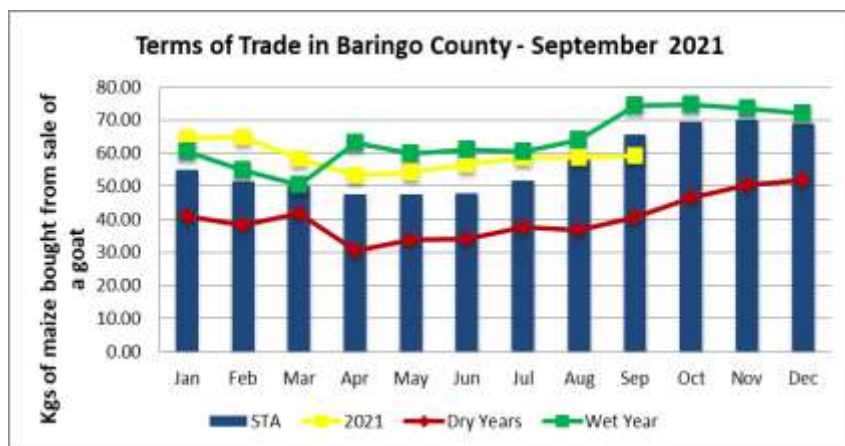


Figure15:Terms of trade

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

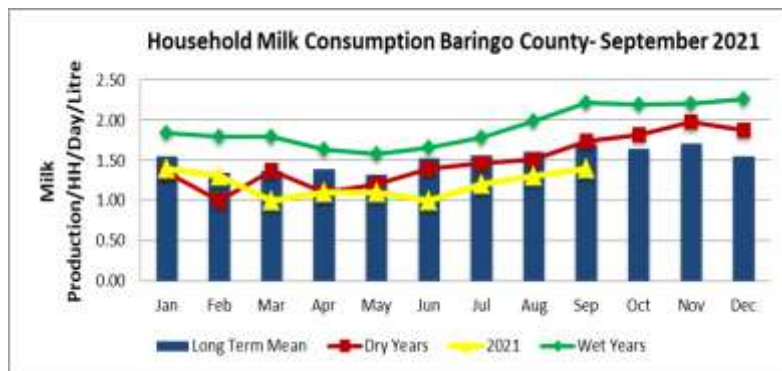


Figure16: Milk consumption

The average milk consumption per household per day was at 1.4 litre, a rise of eight percent as compared to the previous month, which was below the long term average by 18 percent (Figure 16). Milk consumption was highest in the Agro pastoral and Pastoral livelihood zones at 1.9 litres and lowest in Irrigated livelihood zone at 1.8 litres.

Food Consumption Score

Generally, the county had an acceptable food consumption score of 49 which was a minimal rise as compared to 48.25 for the previous month. A proportion of 0.4, 25.6 and 74 percent of the sampled households across the livelihood zones have poor, borderline and acceptable food consumption scores respectively. The Pastoral, Fishing, Irrigated and Agro pastoral livelihood zones had 45.9, 54.3, 50 and 64.9 average food consumption Score respectively (Figure 17). This has been contributed by ongoing interventions by partners especially in the Pastoral zone.

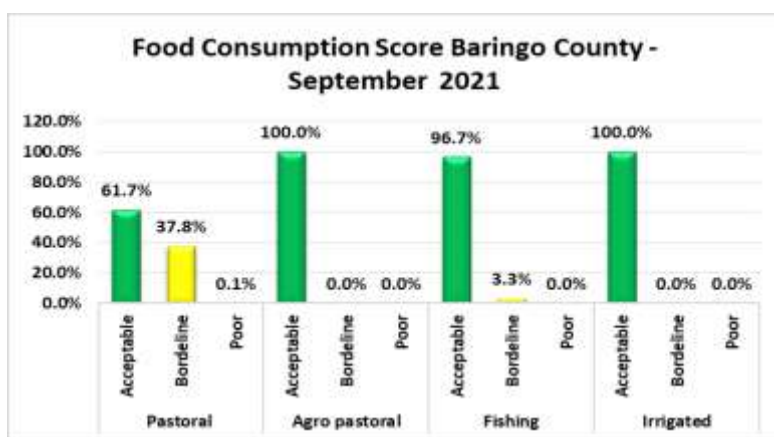


Figure17: Food consumption score

5.3. Health and Nutrition Status

5.3.1 Nutrition status

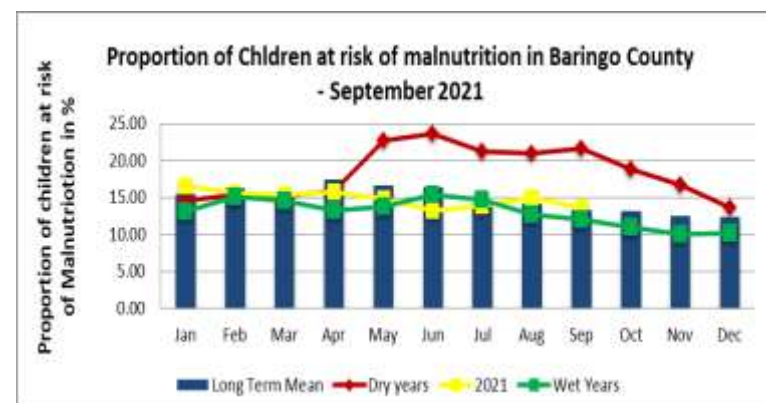


Figure 17: proportion of children at risk of malnutrition

The proportion of children sampled who are at the risk of malnutrition during the month was 13.67 percent (Figure 17). This was a minimal decrease as compared to the previous month. The current proportion is above the LTA by three percent. The improving nutrition status is attributed by increasing milk consumption at household level and intervention by partners especially in the Pastoral livelihood zone.

By family MUAC, the proportion of children malnourished was 8.3 percent; this was a decrease of 1.6 percent as compared to the previous month at 9.9 percent. (Figure 18). The current proportion is above the long term average by 2.2 percent.

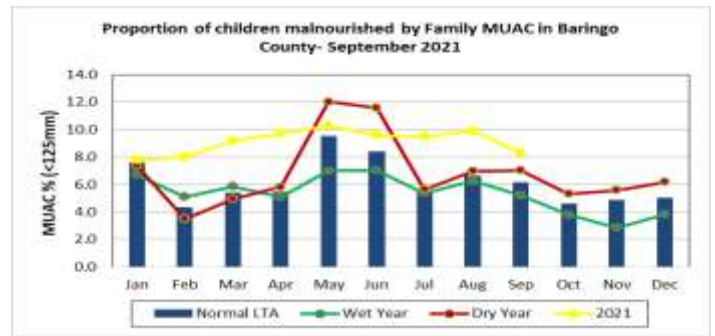


Figure 18: Children at risk of malnourished by family MUAC

5.3.2 Health

- During the reporting period, the illnesses that were reported were malaria and diarrhoea across livelihood zones. The diarrhoea cases were due to use of water from open sources and poor hygiene practices at household level. Water quality is poor mostly in Baringo South and Tiaty sub counties.
- Senzitation campaigns and Vaccination against COVID 19 pandemic are still ongoing across the county led by the County health teams.

5.4 Coping strategies

5.4.1 Coping Strategy Index

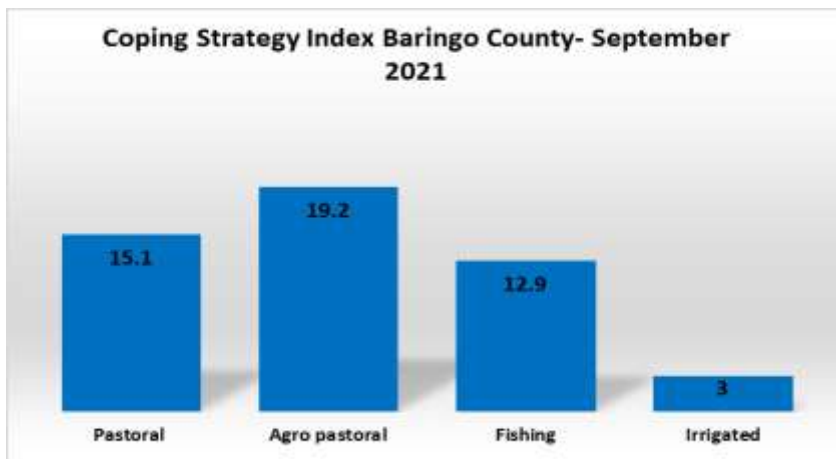


Figure 19: Coping strategy index

The current average coping strategy index was at 13.97 which was stable compared to the previous month at 13.46. Households in Agro pastoral livelihood zone employed more coping strategies at 19.2 followed by Pastoral livelihood zone at 15.1 while the Irrigated zone employed the least coping mechanisms at three (Figure 19). Overall, households in Agropastoral livelihood zone have recorded relatively higher CSI values for the past three months followed by those in Pastoral livelihood zone.

6.0 CURRENT INTERVENTION MEASURES.

6.1 Non-food interventions

NDMA

- NDMA in collaboration with Kenya Food Security Steering Group (KFSSG) and the County Government of Baringo jointly participated in the review of the county livelihood zones. Data analysis is ongoing and the updated livelihood maps will be ready for use next year.
- NDMA supported the DPP sustainability review consultant mission,
- NDMA participated in Joint M&E activities for the call for proposal (CfP) projects

World Food Program

- WFP through the Sustainable food systems programme supported 4500 households with cash Transfers amounting to 22,500,000

Self Help Africa

- They are supporting the revival of eight irrigation projects in the county. They are also supporting pasture harvesting and conservation whereby targeted beneficiaries are being supported with pasture seeds. The targeted beneficiaries are being supported with livestock breed improvement whereby they intend to offer some galla goats and Sahiwal cattle breeds. They are also supporting rangeland rehabilitation and development of four irrigation projects.
- Self Help Africa distributed two tons of green grams, 700 kg of sorghum and 400 kg of millet. About 400 lead farmers were also trained in different value chains
- SHA supported organized training for selected FPG representatives

Action Aid

- There was a training for village agents for financial inclusion in Tngulbay ward. CMDRR trainings were done in Churo/Amaya ward

Agriculture Sector

- Resilient building program to households invaded by DL- Supply of farm inputs(Seeds, Fertilizer, Pond Liners, Kitchen Garden materials

Livestock sector

- Livestock breed upgrading through use of galla goats and Sahiwal bulls is ongoing targeting over 400 groups in the county.
- Vaccination against CCPP disease is ongoing
- Range land reseeding is ongoing in Ilchamus ward, Baringo South sub county.
- There is rehabilitation of several boreholes and drilling of new ones in the county. Those undergoing rehabilitation include Chemorogion, Sibilo and Kagir while those being drilled include karimo, usonachun and Barameres

Health and Nutrition

- Dissemination of Nutrition messaging through vernacular FM stations.
- Activation of radio listener groups through wind up radios.
- Conduct quarterly cooking demonstrations for complementary feeding at the community through organized community groups
- BFCI-A community-based initiative to promote and support maternal child nutrition, environment hygiene, food security and referrals
- Community sensitization on hand washing practices and nutrition messages(wash-CLTS and nutrition at community level
- Capacity building of caregivers on child caring practices-ongoing
- Advocacy meeting with WFP programme to support Nutrition commodities for treatment of moderate acute malnutrition, support refresher training of health workers
- Training of 100 community health volunteers from Tiaty west/East, Mogotio, Baringo south, and Baringo North supported by SHA to support nutrition education sessions at the community level
- School health and nutrition clubs started in Tiaty west –Pupils are trained on health and nutrition modules to train parents at home-supported by WVI-Lokis (BMZ project)

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- The spill over effect of conflict in the neighbouring Laikipia county are being felt in parts of Tiaty and Baringo South sub counties. In Baringo South, the most affected area is Mukutani ward where a number of livestock have been stolen by cattle rustlers. This is likely to affect livestock access to pastures and water due to the prevailing insecurity challenges.

7.2 Migration

- There were no livestock migration during the month. However the livestock that migrated to Komolion in Tiaty sub county and those from Kiserian areas to Loruk area surrounding Lake Baringo are still there.

7.3 Food security prognosis

- The off season rains that were experienced in the month under review are expected to stabilize availability of pastures and water for livestock for the next one month and therefore sustaining favourable livestock body condition. Milk production and consumption is expected to remain below long term mean but with an improving trend for the next one month.
- The current insecurity challenges in Laikipia county are expected to spill over to Tiaty and Baringo South sub counties and consequently affecting livestock access to pastures and water. This is therefore likely to affect market operations leading to a decline in livestock prices in the Pastoral livelihood zone.
- The food consumption score will likely improve in the next one month due to improvement in household milk consumption while application of coping strategies are expected to be normal compared to the current month under review.
- In the pastoral areas, cases of malnutrition will continue to persist due to poor dietary diversity as households will find it difficult to access nutritious food stuffs from the markets due to the existing low purchasing power and poor market functionality.

8.0 RECOMMENDATIONS

8.1.0 Proposed Recommendations

8.1.1. Water Sector

- Provision of water treatment drugs at water sources and household level to minimise outbreak of water borne diseases

8.1.2. Nutrition and Health

- Prepositioning of supplies for the management of malnutrition cases should be undertaken especially in the pastoral areas that are witnessing rising cases of malnutrition.
- Support of Intergrated outreaches where community travel long distance to get health services
- Improve resilience of the vulnerable groups through nutrition education to care givers
- Continuous health, Nutrition surveillance.
- Social behaviour changes and communication for improved dietary practices among children and women of reproductive health-.
- Training of care givers in the sentinel sites on how to use family MUAC tapes for monitoring of nutrition status of children in line with COVID-19 protocols.

8.1.3. Livestock and Veterinary sector

- Vaccination against, CCPP, LSD and PPR should be enhanced
- Establishment of strategic livestock feed reserves is recommended mostly in the pastoral and agro pastoral areas.
- Sustained security survailance in the county with the aim of minimizing conflict that is resulting from livestock migration among pastoral communities
- Farmers to be educated the farmers the type of animals that can survive during drought season in arid areas - Continuous extension services among livestock farmers are needed
- Provision of pasture seeds for rangeland reseeded.
- Upgrading and improvement of local indigenous breeds of cattle, sheep and goats

8.1.4. Agriculture Sector

- Inputs provision (Seeds, Kitchen Garden Materials, Fertilizers) including capacity building on post-harvest and safe use of chemicals
- Value addition of produce cereals (Maize, Sorghum and Millet) through milling and fortification of flour and Market linkages
- Enhance asset creation for households especially Farm ponds and water pans for food production especially Kitchen Gardening
- Enhance irrigated Agriculture by conducting Soil analysis and crops suitability surveys in all irrigation schemes and canaling.
- Support household with water harvesting skills which can be used for small scale food production