



National Drought Management Authority
ISIOLO COUNTY
DROUGHT EARLY WARNING BULLETIN FOR OCTOBER 2020

OCTOBER 2020 EW Phase

Drought Status: NORMAL



Shughull za kawaida

Early Warning Phase Classification

Livelihood Zone	EW PHASE	TRENDS
Pastoral-All Species	Normal	Worsening
Agro-Pastoral	Normal	Worsening
Casual Waged Labour /Charcoal burning	Normal	Worsening
County	Normal	Worsening
Biophysical Indicators	Value	Normal Range/Value
Rainfall (% of Normal)	42.1mm	>0.7mm
VCI-3month (Isiolo)	49.7	>37.3
State of Water Sources	4	5
Production Indicators	Value	Normal
Livestock Body Condition	Good	Fair to Good
Milk Production	1.60 Litres	>1.43 Litres
Livestock deaths (from drought)	None	No deaths
Livestock Migration Pattern	Internal migration	Normal
Access Indicators	Value	Normal
Terms of Trade (ToT)	68.7	>38.8
Milk Consumption	1.10 Litres	>1.12 Litres
Return distance (water sources to households)	2.8 km	<5.4 km
Cost of water at source (20 litres)	Ksh 2.00	<Ksh. 5.00
Utilization indicators	Value	Range/Value
Moderately malnourished	3.1 percent	<3.1 percent
Severely malnourished	4.2 percent	<1.0 percent
Coping Strategy Index (CSI)	10.2	14.5
Food Consumption	42.6	>40.3

Drought Situation & EW Phase Classification

Biophysical Indicators

- The month of October was characterized by sunny and hot weather. Rainy season onset came late at end month.
- The county Vegetation Condition declined but maintained an above normal vegetation greenness.
- Majority of accessible forage was fair, with a steady rate of depletion. Dry grazing reserves have good forage with limited accessibility due to water access challenges.
- Water availability was on a declining trend as there was no significant recharge during the long rains.

Socio Economic Indicators (Impact Indicators)

Production Indicators

- Body condition of camel, small stock and cattle was good to fair in all livelihood zones. However, majority are deteriorating.
- Household milk production declined marginally in the pastoral and agro-pastoral livelihood zones.

Access Indicators

- Livestock prices declined slightly amid easing of travel restrictions as food commodities prices stabilized.
- Household milk consumption reduced slightly over the period due to low production but within the normal range.

Utilization Indicators

- Proportion of households with poor and borderline food consumption stabilized.
- Proportion of children who were moderately and severely malnourished was 3.1% and 4.2% respectively.

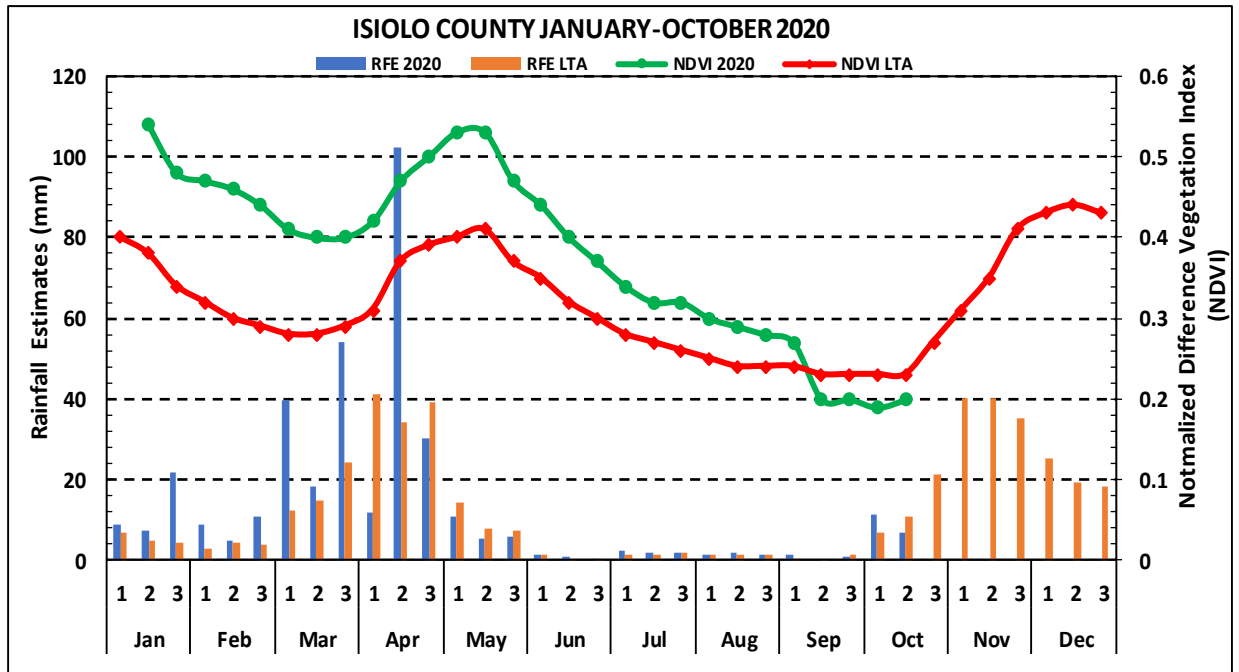
Seasonal Calendar

<ul style="list-style-type: none"> ▪ Short rains starts ▪ Short dry spell ▪ Reduced milk yields ▪ Migration to dry season area ▪ Land preparation 	<ul style="list-style-type: none"> ▪ Migration to wet grazing areas ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase ▪ Reduced pasture/water stress (Normal Scenario) 	<ul style="list-style-type: none"> ▪ Long rains harvests ▪ A long dry spell ▪ Increased distances to water and pasture ▪ Reduced water levels ▪ Kidding (Sept) ▪ Community/HH coping measures taken 	<ul style="list-style-type: none"> ▪ Short rains ▪ Planting in Agro-pastoral LZ ▪ Migration from dry season area ▪ Increased milk yield ▪ Reduced pasture/water stress (Normal scenario) 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- From Figure 1 below, decadal rainfall estimates (RFE) amounts for the first, second and third dekad were normal when compared to their respective long-term decadal rainfall for estimate (RFE) averages. Generally, current decadal rainfall amounts followed a similar trend when compared to the previous month's decadal rainfall amounts.
- Normalized Difference Vegetation Index (NDVI) for the first, second and third dekad were above normal when compared to their respective long-term decadal NDVI values.



1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The county experienced onset of the short rains season. The average amount of rainfall was 42.1mm though with a poor spatial and temporal distribution.
- Most parts of the county, mainly the pastoral livelihood zones experienced the short rains onset during the last week of the period under review. However, most of the rains were received in Isiolo central, mainly in Ngaremara and Burat wards.

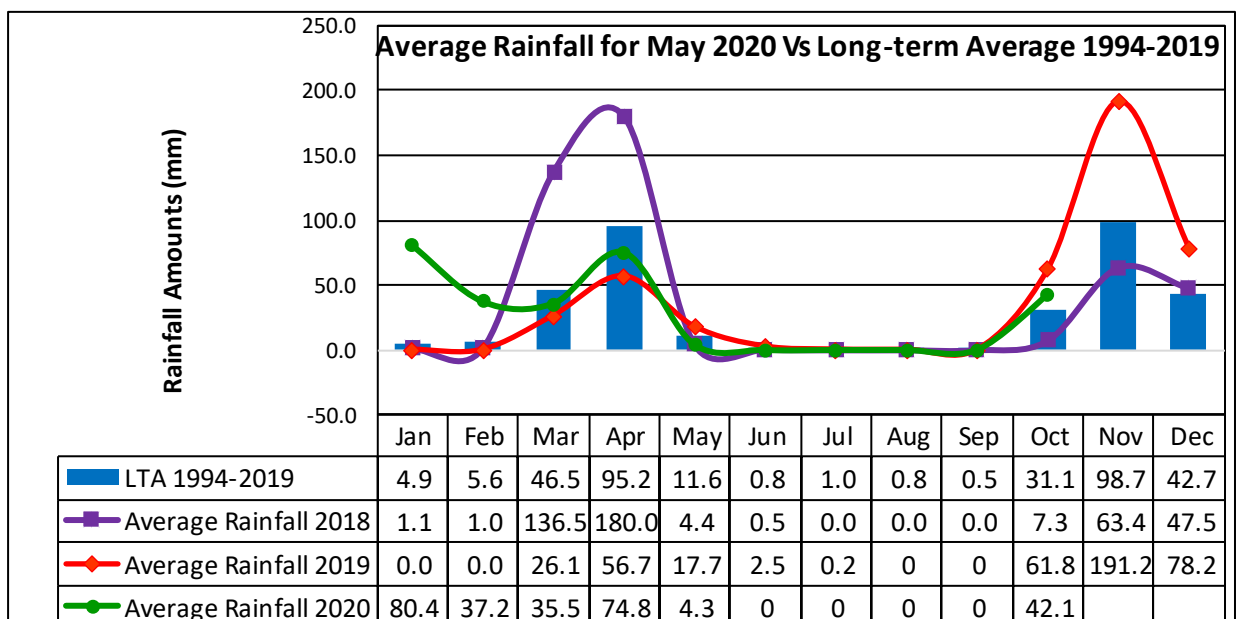


Figure 1: Average amount of rainfall in mm (Station data)

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The matrix below illustrates October 2020 Vegetation Condition Index, classified as agricultural drought based on VCI thresholds. The chart shows a retrospective analysis of the vegetation condition as related to drought.

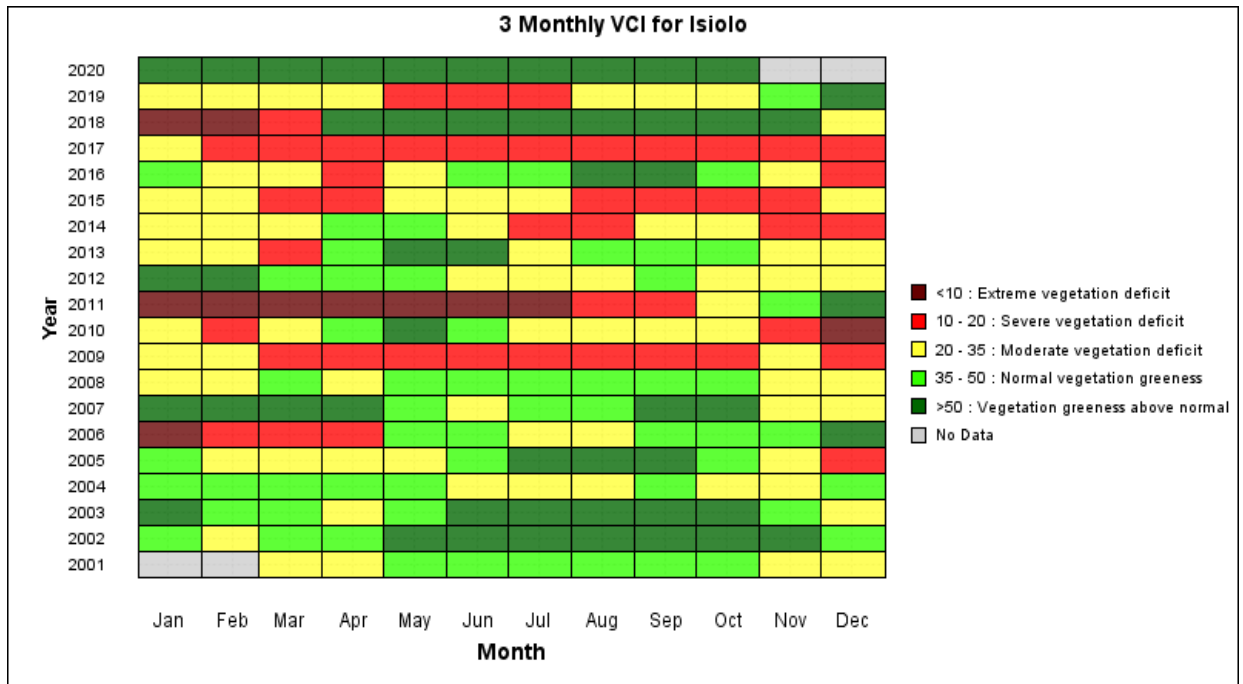


Figure 2: Vegetation Condition Index for Isiolo County

- The overall 3-Month vegetation condition index decreased significantly to 49.7 in the period under review from 76.59 in the previous month. At this index, the county maintained an above normal vegetation greenness.
- The index has been on a declining trend, a phenomenon that could be attributed to the delayed onset of rains which is usually in the month of October.
- Moreover, the overall vegetation condition remained above normal both sub-counties.
- The vegetation condition is expected to improve significantly in the following month of November which is the peak month of the short rains season.

2.1.2 Pasture

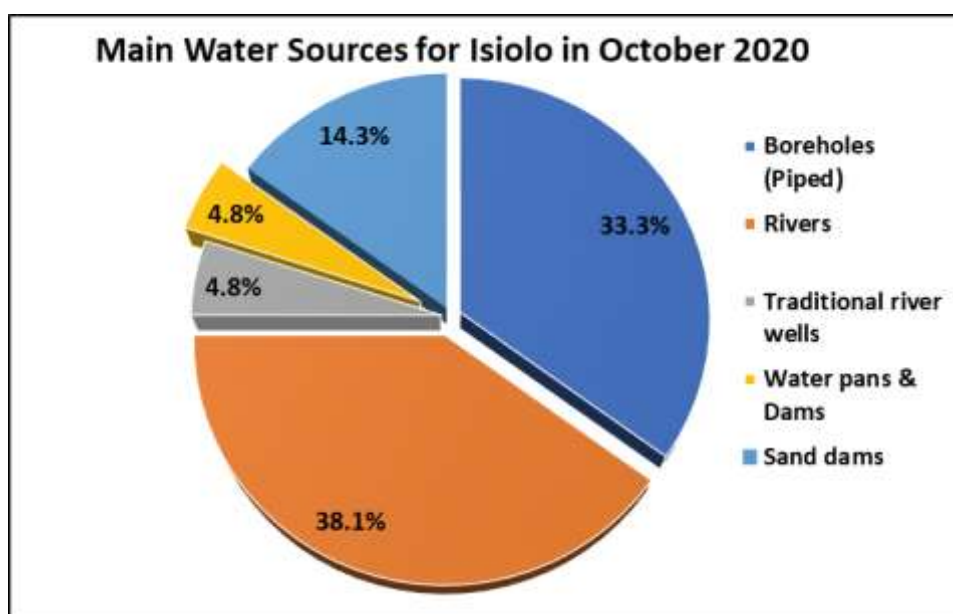
- The general condition of pasture in majority of grazing areas ranged from fair to poor in majority of traditional grazing areas and on a deteriorating trend as exhaustion continued. However, the condition started improving following regeneration in selected parts of the county where off-season rains were received.
- The gradual exhaustion of pasture resources in majority of grazing areas has been attributed to exhaustion by livestock though in some areas it was due to poor regeneration due to poor regeneration during the long-rains season.
- Quality of available pasture was fair as majority was dry with very little moisture content and hence nutrients.
- Overall pasture condition in the month under review was good though at a better condition compared to a similar period in the previous year and in the long-term.
- The amount and quality of pasture is expected to improve considerably following onset of the short rains season but to a limited extent as it was received in selected parts.

2.1.3 Browse

- The condition of browse in the pastoral and agro-pastoral livelihood zones ranged from good to fair in the pastoral and agro-pastoral livelihood zones though on a deteriorating trend.
- Browse deterioration was partially attributed to consumption by livestock and wildlife as well as seasonal shedding of leaves during the dry spell.
- Overall browse condition in the month under review was good though at a better condition compared to a similar period in the previous year and in the long-term.
- Its condition is expected to improve in the following month after some showers were received in the last week of the month under review.

2.1.4 Water Sources

- Main water sources during the period under review included rivers and boreholes. Other sources include sand dams, water pans and dams.
- Yield in boreholes and shallow wells were normal at this time of the year.
- The number of boreholes on normal usage went down to 43.5 percent out of the 23 installed with sensors. The boreholes with low use comprised of 13 percent while 17.4 percent were not used at all in the last of the month under review.

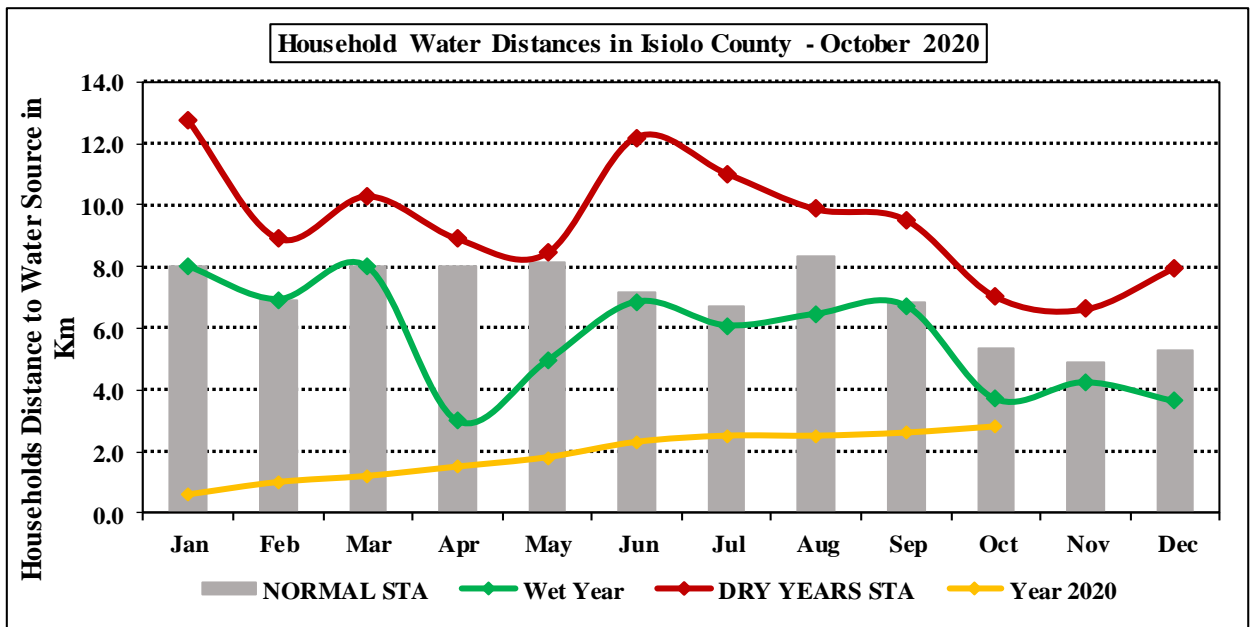


Households in established settlements accessed water from boreholes supplied through household taps and/or community water kiosks which is normal at this time of the year. Water supply for Isiolo town residents was normal with minor pipeline interruptions.

Figure 4: Main water sources

2.1.5 Household access and Utilization

- Household water access distance to main sources increased slightly to an average of 2.8km during the period under review. A large proportion of households accessed water from community distribution points or household taps.
- Pressure on boreholes was moderate as communities' accessed water from rivers, shallow wells, water pans and sand dams that were significantly recharged.
- Water availability in majority of semi-permanent sources such as rivers, sand dams, traditional river wells and shallow wells is expected to increase considerably in the period between August and October as the long dry season continues.
- The average cost of water from piped distribution points (*kiosks*) was Ksh.2.00 per 20 litre jerrican which is normal at this time of the year.
- Waiting time at main sources in the pastoral livelihood zones settlements stabilized between 5 and 15 minutes.
- The longest one-way distance was in Cherab ward where household walked an average of 4.0km to River Ewaso Nyiro. The lowest average distance of about 0.3km was recorded in the casual-waged labour livelihood zone.



2.1.6 Livestock Access

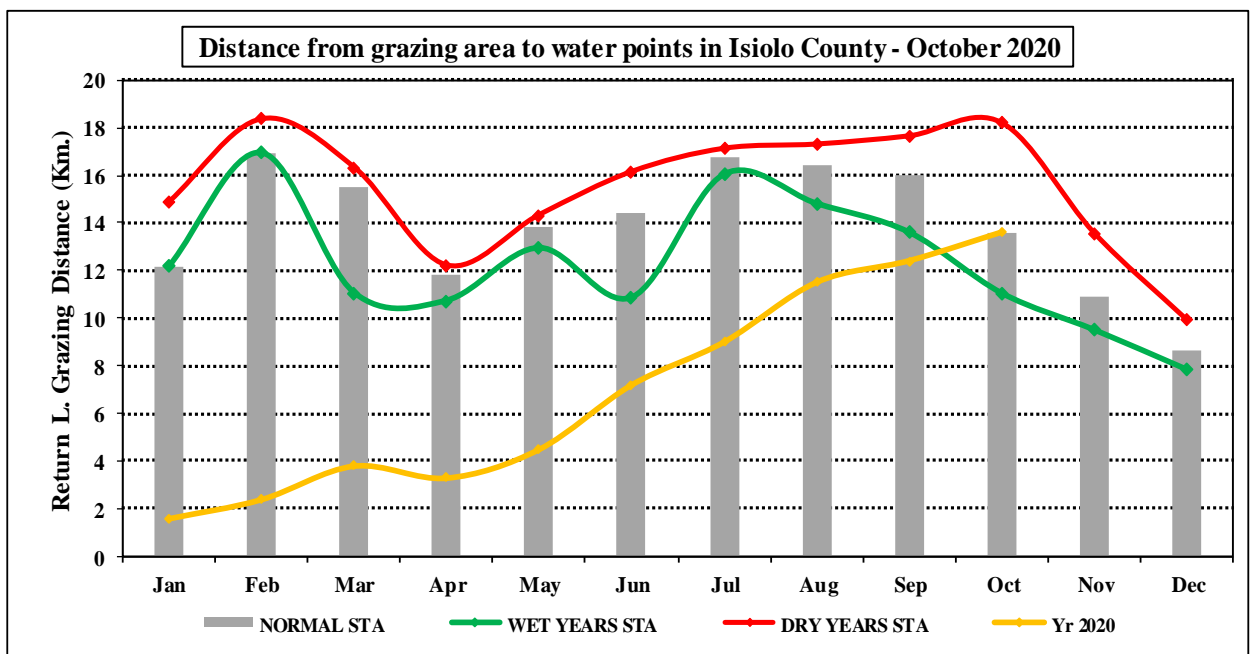


Figure 4: A graph of distance to grazing areas from water points

- The average distance to water sources from the grazing areas recorded a significant increase to 13.6km in the month under review from 12.4km in the previous month.
- The increase in distance was mainly attributed to decline in availability of forage mostly in the pastoral livelihood zone.
- The month's average livestock watering distance was equal to the long-term average of 13.5km at a similar period of the year.
- All livestock animals were mainly watered at boreholes and open water sources such as rivers, sand dams and water pans.
- Livestock watering interval ranged from one to two days for cattle, sheep and goat and four to six days for camels. The interval is likely to increase as rangeland resources decline during the long dry spell until onset of this year short rains season.
- Watering distance from grazing areas expected to decline considerably following onset of the short rains season late in the month under review.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Body conditions for all livestock species ranged from good to fair in the pastoral and agro-pastoral livelihood zones.
- This is attributed to the fairly adequate availability of feed thereby providing a favourable environment for livestock production.
- The livestock body condition is expected to have slight deterioration at the peak or end of the dry spell.
- The current livestock body condition was better compared to a similar period in the long-term.

3.1.2 Livestock Diseases

- CCPP as an endemic livestock disease was reported in several areas across the county.
- Also reported was sheep and goat pox mainly in Garbatulla and Sericho.
- Enterotoxiemia was reported among sheep in Burat and parts of Ngaremara.

3.1.3 Milk Production

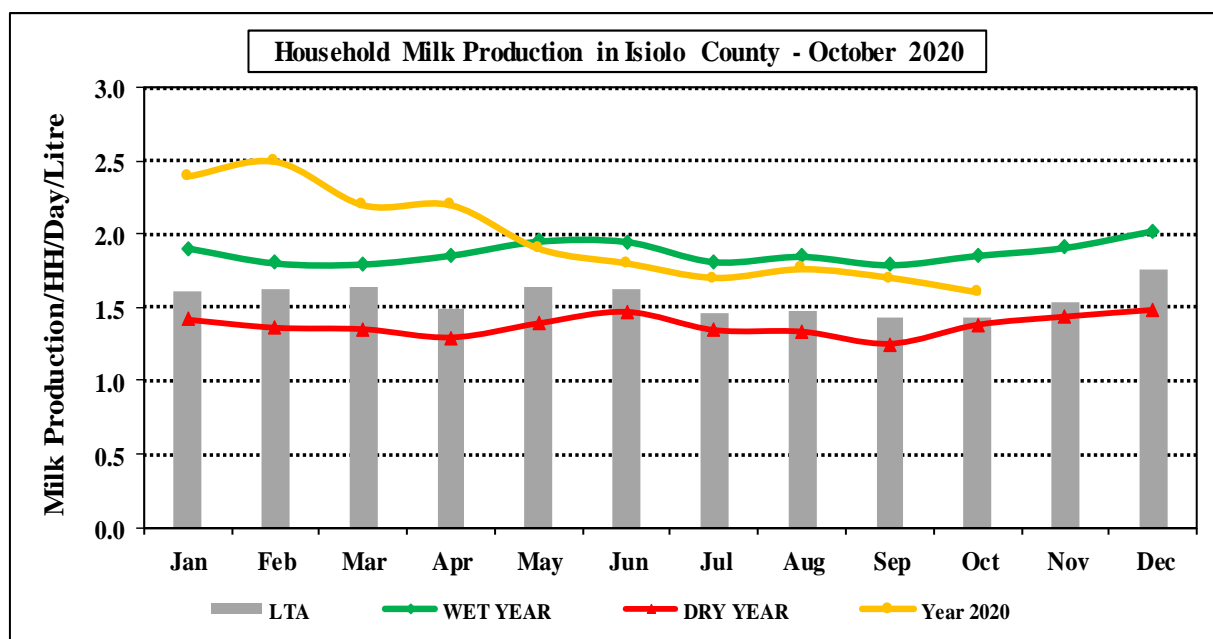


Figure 5: A graph of average milk production in litres

- Milk produced in milking households recorded had a marginal decline to 1.60 litres in the month under review from 1.76 litres in the previous month.
- The relative stability recorded in the pastoral and agro-pastoral livelihood zones could be attributed to slight increments in hardship associated with increasing watering distances, deteriorating quality and quantity of forage as the prevailing dry weather conditions persist.
- Kinna, Burat and Garbatulla wards are the biggest producers of milk that is supplied to Isiolo markets where camel population is higher compared to other areas.
- The amount produced is expected to increase in the following month as the quality of pasture and browse is expected to improve following onset of the short rains season.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of Food Crops

- Farmers carried out farm preparation as well as early planting as advised by the department of agriculture and meteorological departments.
- However, small scale irrigation went on along the rivers which are still flowing with water.
- Crops grown are fruits, vegetables, maize, onions and tomatoes.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

Cattle Prices

- Average cattle price increased slightly to Ksh.28,900 in the month under review from Ksh. 28,300 in the previous month.
- Cattle price increase could be partly attributed to holding of cattle as the short rains beckon in addition to good livestock body condition, good performance of livestock markets.
- The easing of travel and social restrictions for control of Covid-19 transmission has significantly enabled a near normal return of normal red meat demand in the country as livelihoods experience the much-awaited recovery.
- The highest average price was recorded in Isiolo town market at Ksh.34,000 while the least was Ksh.26,000 in Bisan Biliqo market.
- The period's price was however 35 percent above the long-term average of Ksh.21,400.

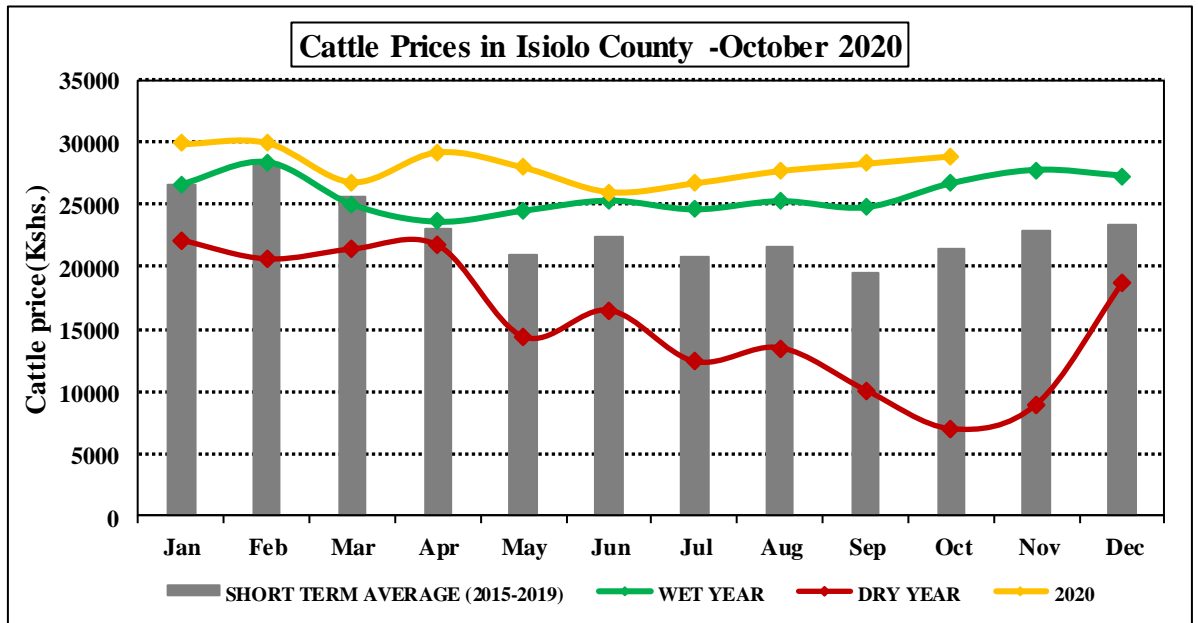


Figure 6: A graph of average market price of cattle

Small Ruminants Prices (Goat)

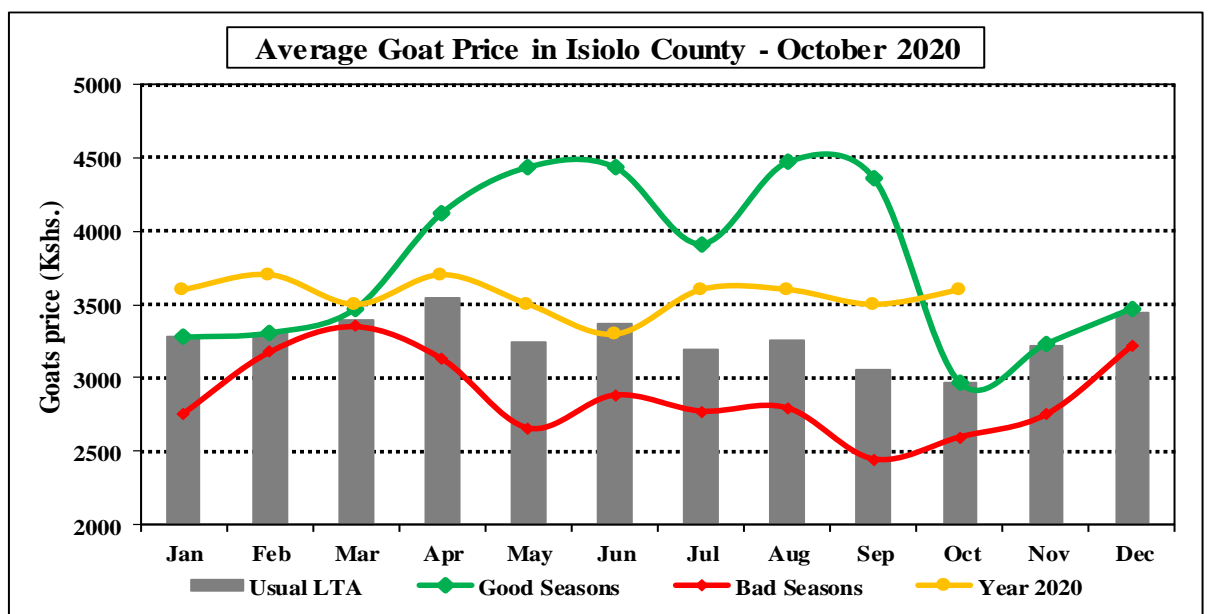


Figure 7: Monthly average market price of goats

- Average goat price rose marginally to Ksh.3,600 in the period under review from Ksh.3,500 in the previous month.
- Price stability increment recorded could be attributed to a steady demand for goat amidst withholding of stock by herders as the rains onset gets closer. Demand was however high within and outside the county. The further easing of COVID-19 restrictions imposed by the government to control its spread have boosted the livestock trade and markets.
- There is a high likelihood of a continue rise in the small stock price as the Christmas and New Year festivities approach. The stable body condition will also boost the price significantly.
- The least and highest market prices recorded were Ksh.3,200 and Ksh.4,200 in Oldonyiro and Isiolo town markets respectively.
- Average goat price for the period was 21 percent lower than the long-term average of Ksh.2,970 during the same period of the year.

4.2 CROP PRICES

Maize

- The market price of a kilogram of maize stabilized at Ksh.52 in the month under review.
- The relative cereal price stability was attributed to a consistent supply of cereals to the markets from traders based in the county and outside.
- The cereal's price is expected to have significant price increments towards end of the year when supplies are expected to decline as stocks go down.
- Cereals lowest price was Ksh.45 in Isiolo town and Oldonyiro markets and highest in Merti at Ksh.60. The cereal's price in rural markets including Merti, Bisan Biliqo and Sericho was relatively high as supplies were not consistent attributed to the long distances and community cereal preferences.
- Average price of maize was eight percent lower than the long-term average of Ksh.57 at a similar period of the year.

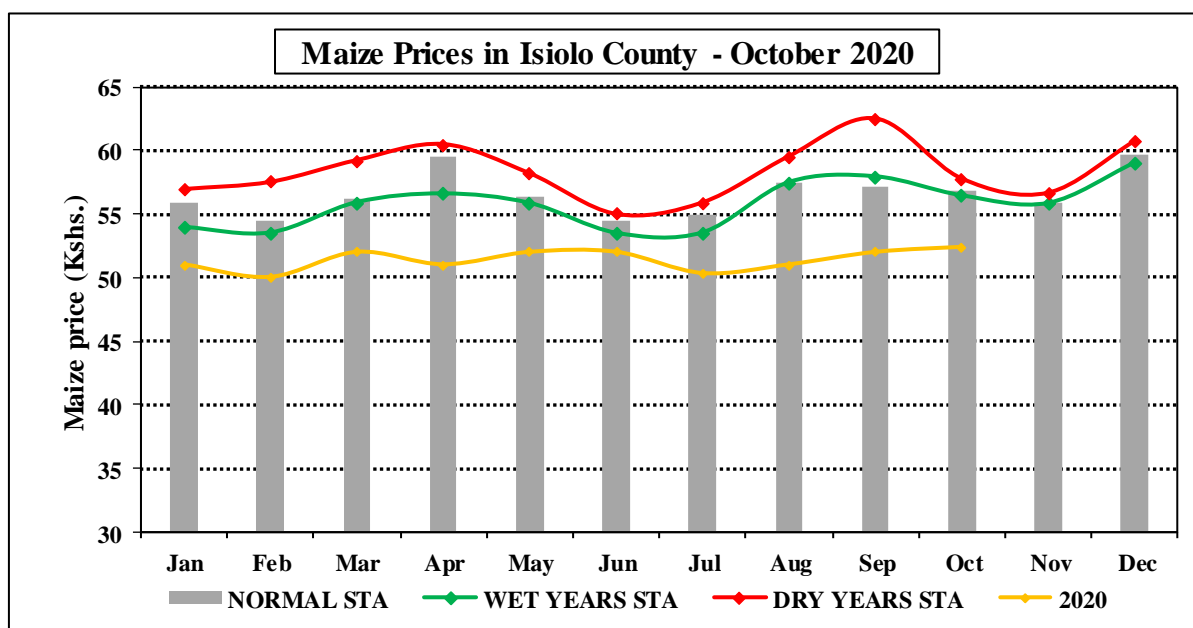


Figure 8: A graph of average maize (cereal) market price in the county

Beans

- Average price of beans increased slightly to Ksh. 111 in the month under review from Ksh 109 in the month under review.
- The pulse's price increment could be attributed to a higher demand triggered by the planting as well as reducing stocks with households and traders.
- This is partially attributed a relative stability of demand for food commodities following substantial recovery of households purchasing power triggered by the continued easing of COVID-19 control restrictions.

- The pulse's price is expected to increase significantly towards the end of the year as supplies decline.
- The highest price was recorded in Merti market in the pastoral livelihood zone at an average of Ksh.120 while the lowest price was in Isiolo at Ksh.90 in Isiolo central market.
- The price was five percent lower than the long-term average price of Ksh.117 during a similar period of the year.

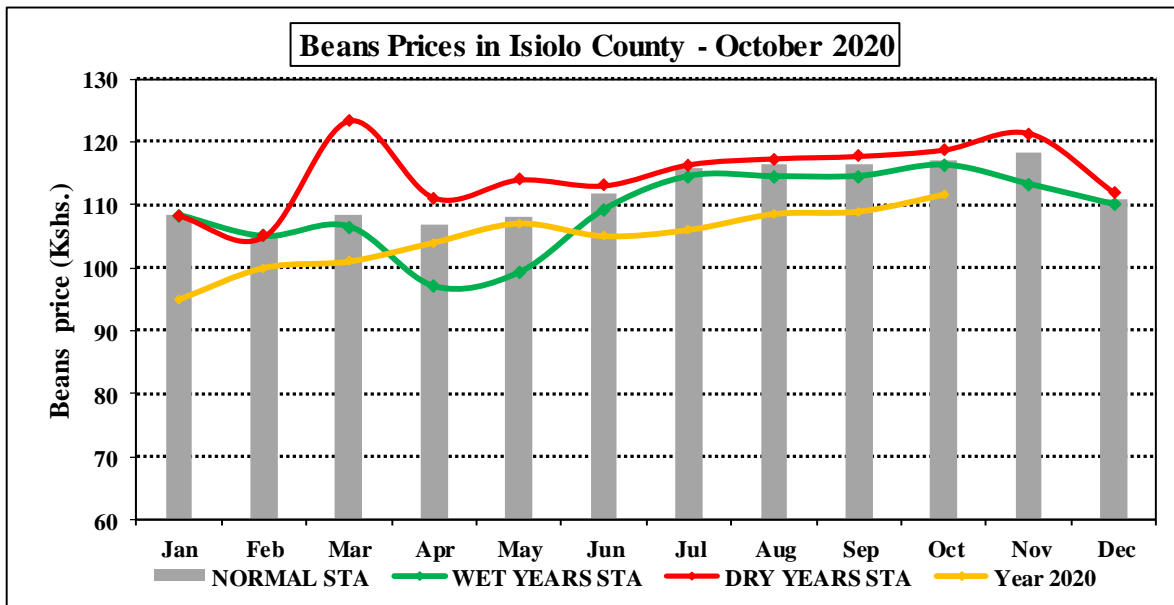


Figure 9: A graph showing average market price for pulses (beans)

4.3 Livestock Price Ratio/Terms of Trade

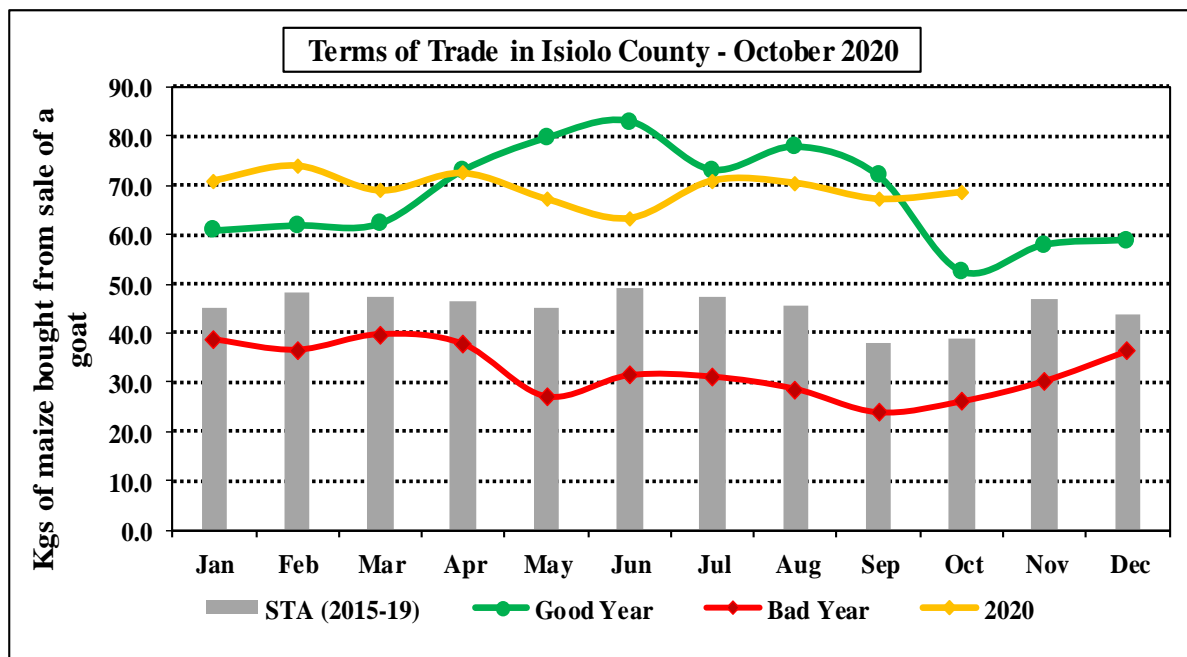


Figure 10: A graph showing the typical pastoralist households Terms of Trade in the county

- Terms of Trade (the number of kilograms of maize a pastoralist would purchase after a sale of one goat) stabilized at 68.7kg/goat in the period under review.
- The ratio was 77 percent higher than the long-term average of 39 kg/goat at a similar period of time in a year.
- Stability in the TOT reflected that households purchasing power was stable attributed to a normal productivity of the major livelihoods.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

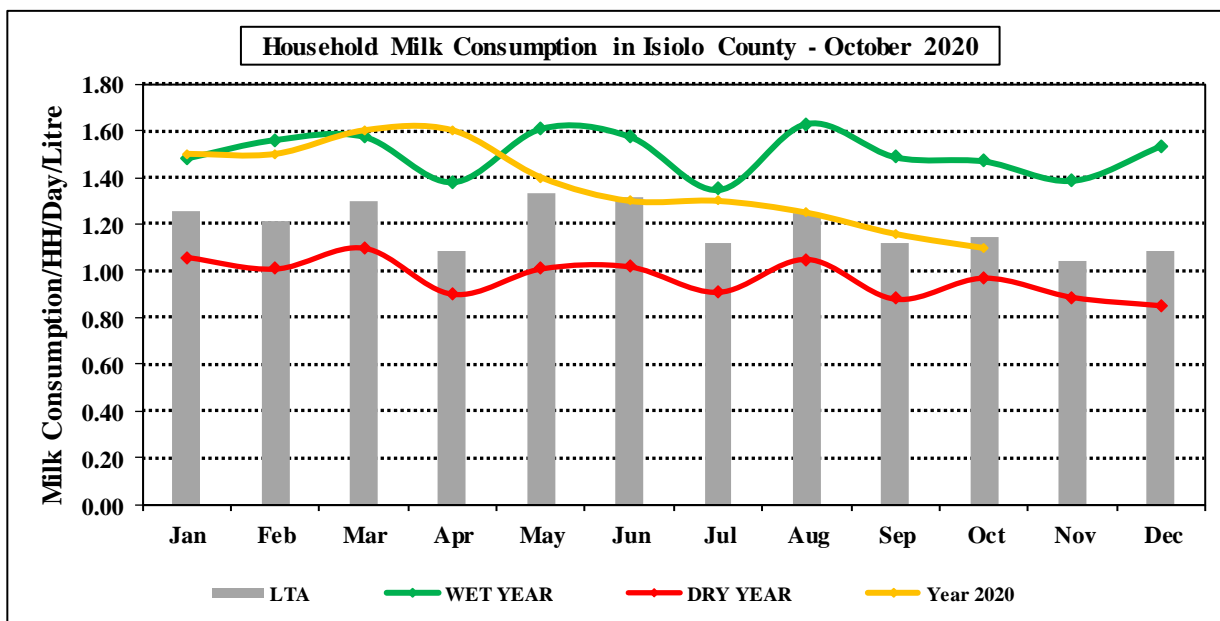


Figure 11: Average milk consumption in litres

- Average milk consumption per household reduced slightly to 1.10 litres in the month under review from 1.16 litres in the previous month.
- The low amount of fresh milk consumed at the household level was attributed to the a reduction in the amount produced.
- Average consumption was almost equal to the long-term average during a similar period of the year.
- Consumption was higher in the pastoral livelihood zone when compared to the agro-pastoral and casual-waged labor/employment livelihood zones.

5.2 FOOD CONSUMPTION SCORE

- Patterns of household food consumption deteriorated marginally as shown in Figure 13 where an estimated 5.5 percent of households had poor food consumption. At the same time, another 22 percent of households had borderline food consumption.

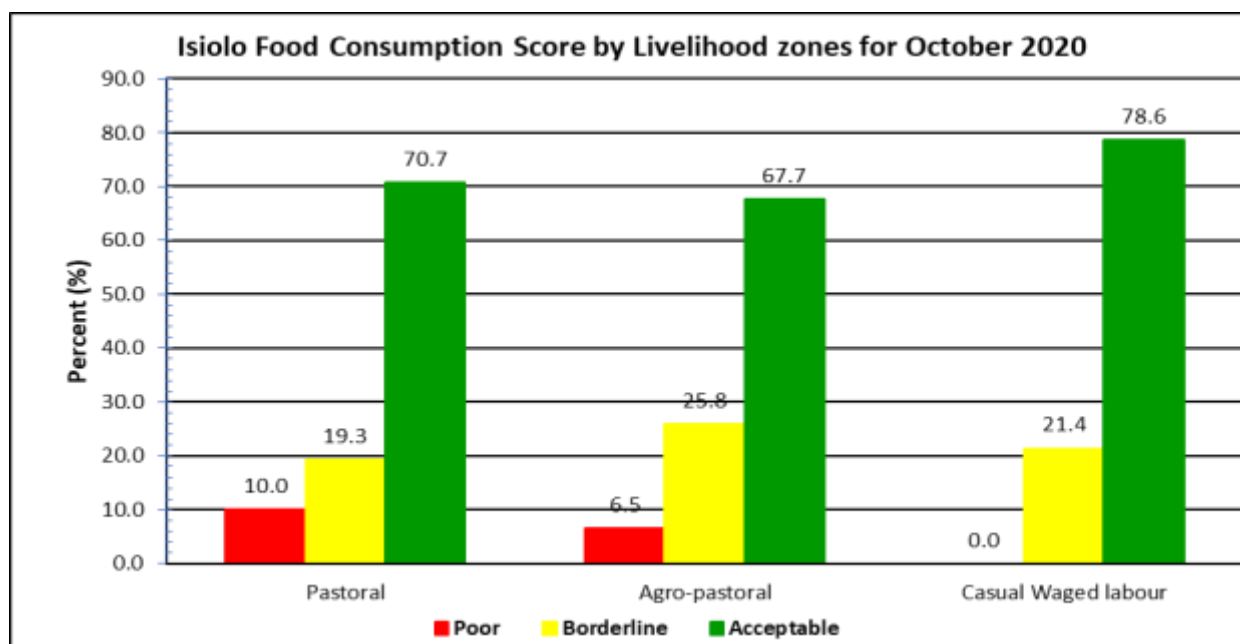


Figure 12: Households' food consumption score

- The pastoral livelihood zone had the highest proportion with poor food consumption.
- Though food consumption was good in the pastoral livelihood zone, the dietary diversity has remained considerably poor, a scenario that is blamed on poor availability of diverse food types in far flung rural markets.
- Food consumption situation are expected to improve substantially following onset of short rains dry spell nears its end with onset of the OND rainy season even as impacts of Covid-19 outbreak continue to manifest in reduced households purchasing power.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- In the month of October, 3.1% and 4.3% of children were severely malnourished and moderately malnourished respectively. This indicated an improvement from September where the moderately malnourished children formed 7% of the total children population.

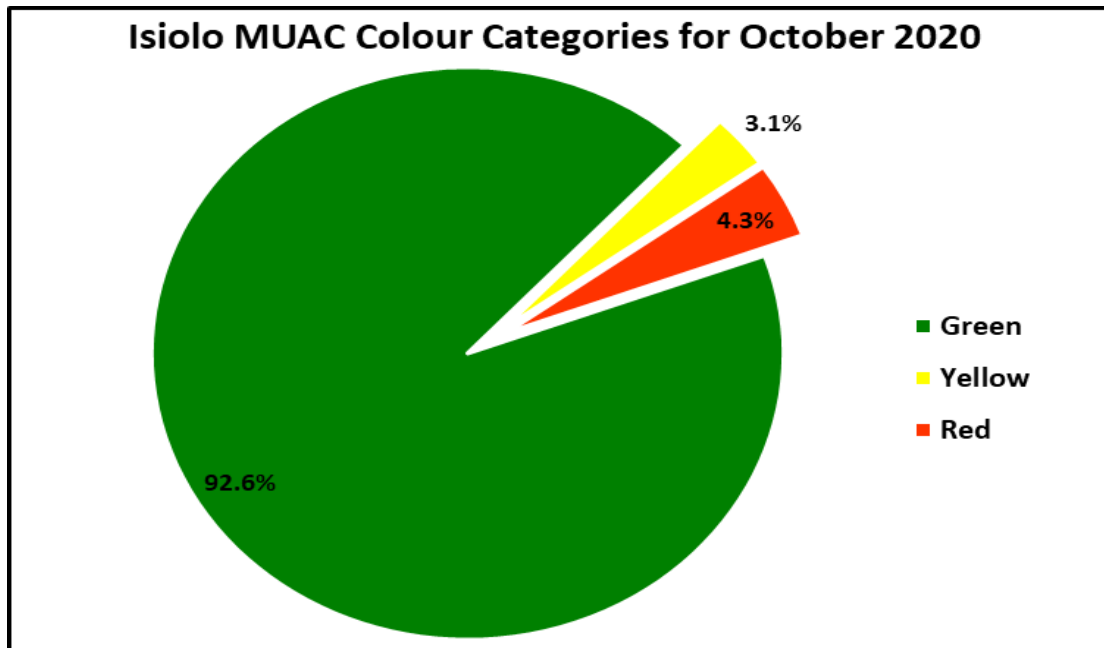


Figure 13: Proportion of under five years who are moderately and severely malnourished

- The proportion of children who are moderately malnourished reduced significantly when comparing to the previous month. This could be attributed to the substantial increase in provision of supplementary feeding programmes in health facilities.
- The prevailing rate of children at risk of malnutrition is attributed to poor young child nutrition among pastoral households as well as high prevalence of endemic diseases such as upper respiratory tract infections, malaria and diarrheal ailments among the under-fives.
- However, routine screening of children by health service providers has suffered a blow due to fear of contracting the novel coronavirus disease and authorities cannot adequately substantiate malnutrition trends.

5.3.2 Health

- The health seeking behavior in the county has gone down blamed on fear of contracting the Covid-19 disease.
- However, the general populations' most prevalent diseases included acute upper respiratory tract infections (URTI), malaria, skin disease, urinary tract infections and rheumatism.
- Children under five years' most prevalent diseases included the acute respiratory tract infections, pneumonia, diarrheal, intestinal worms and skin disease.

5.4 COPING STRATEGIES

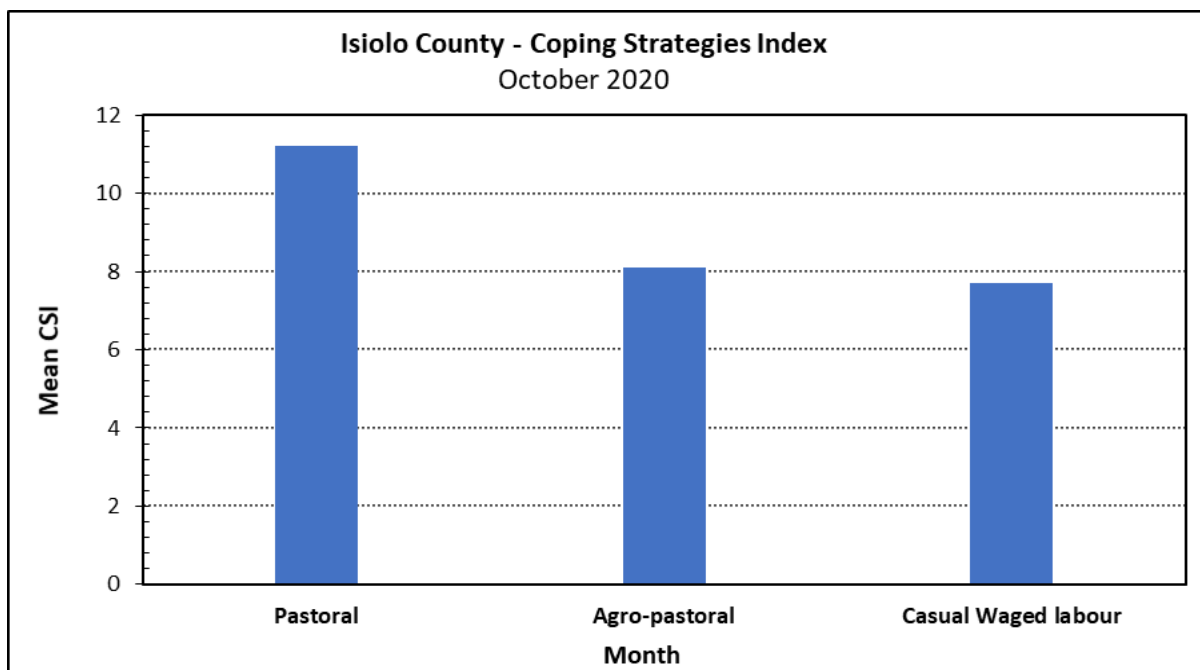


Figure 14: Household Reduced Coping Strategies Index

- Coping Strategy Index (CSI) stabilized at 10.2 during the month under review implying that there were no significant changes in employment of livelihood and food-based coping strategies compared to the previous month.
- The stability could be attributed to a normal status of food availability of at household level following continued productivity of major livelihoods as well as the continued easing of travel and marketing restrictions previously imposed to curb spread of Covid-19.
- However, a small proportion of households continued to employ quite a number of food livelihood-based coping strategies attributed to hardships brought by economic hardships occasioned by the impacts of Covid-19 and partially due to ongoing dry spell.
- The most commonly employed coping mechanisms over the period was skipping of meals, reliance on less preferred and/or less expensive foods as well as taking credit from neighbours and shops.
- Other commonly employed coping strategies are reduction of the number of meals and reduction in portion or size of meals and borrowing.
- The most commonly employed livelihood based coping strategy was spending of savings.

6.0 CURRENT INTERVENTION MEASURES (ACTIONS)

6.1 NON-FOOD INTERVENTIONS

Table 1: A table showing the current non-food interventions in the county

Type of intervention	Ward	Sub-county	Action	Amount/ Targets
Cash transfer to HHS affected by Desert locust invasion	Oldonyiro (Kipsing and Lenguruma and Longopito locations), Gotu, Godha, Bassa, Barambate, Kulamawe Yaqbarsati, Malkadaka, Gafarsa Iresaboru.	Isiolo North and Isiolo South	Mid-P	1792 HHS
	Ngaremara ward Cherab ward	Isiolo North	CRS-NAWIRI	200HHs Ngaremara 400HHs Cherab
	Kinna, Oldonyiro and Cherab	Isiolo North and	FAO	1000 HHs
Prepositioning of drugs and medical equipment in health institutions	All wards	Isiolo North and Isiolo South	Isiolo County Government	36 Health facilities
Support vulnerable household with drought tolerant seeds and tools	Burat, Cherab and Kinna	Isiolo North	CRS-NAWIRI Isiolo County Government Caritas-Isiolo	500HH
Provision of reusable facemask to livestock market actors	Oldonyiro, Eskot, Ngaremara, Isiolo, Duse and Merti	Isiolo North and Isiolo South	Livestock Market Systems (LMS)	12,600 face masks
Livestock disease surveillance	All wards	All sub county	RPLRP and VSF SUISSE	All wards

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- The major insecurity incident was reported along Laikipia-Isiolo pitting herders from Oldonyiro and Laikipia counties. A peace meeting was called and the matter resolved amicably.

7.2 Migration

- Movements in search of forage were mainly internal with a few immigrants from neighbouring counties such as Wajir and Garissa. There were internal movements of herders deeper into traditional grazing and dry season grazing reserves within the county as forage depleted further.
- There were internal migration of small stocks from Dogogicha to Kuro Bisan Owo hot spring where the water has some elements of minerals which is important for animal health and nutrition.
- However, herders from the pasture depleted grazing areas of Oldonyiro ward moved to Laikipia in search of pasture and browse where more than 50% of herds have migrated.

7.2 Food Security Prognosis

Assumptions

- The short rains season of 2020 will be below average.
- The rate of insecurity will be low.
- Covid-19 restrictions will not be imposed in the next three months.

Prognosis

- The level of food security in the county is good mainly attributed to the cumulative impact of the above normal performance of (OND) 2019 short rains season and a relatively below normal long rains (MAM) 2020 season with the situation likely to deteriorate.
- Livestock production contributed a greater proportion to food availability in all livelihood zones. While animal body condition is stable for most of livestock population, milk production has been declining steadily during the dry season but expected to improve following onset of the short rains season though expected to last for a short while.
- Crop production was below normal during the long rains season and led to low production and hence low food stocks that are now depleted. Crop production is likely to be depressed as an impact of the short rains hence households will have poor food stocks at the end of the harvesting season expected early next year. On the other hand, supply of fresh farm produce including vegetables and fruits from small-scale irrigated farms has been consistent mainly boosted by continued availability of water from rivers and thereby boosting food availability to the local markets.
- Accessibility to livestock and farm produce markets was normal with the continued easing of Covid-19 control restrictions. Household access to food commodities from the markets was normal in a population largely dependent on them to access and meet most of their food requirements. The situation is expected to remain for the next three months.
- Food consumption has been stable in all livelihoods with majority of households having acceptable food consumption. However, consumption may decline as availability may be affected by low production is expected during the short rains season.
- Food utilization was greatly enhanced by the relatively stable availability of water in all livelihood zones. However, water availability is expected to decline steadily as temporary sources dry and lead to increased distances to sources as the dry spell progresses.
- There was minimal competition over rangeland resources as majority of the grazing areas are still remaining with fair amounts of feed stocks though on a declining trend.
- The overall food security situation remains in the stressed phase (IPC 2) and on a declining trend.

8. RECOMMENDATIONS

- Provision of certified seeds of early maturing varieties of food crops to farmers in agro-pastoral livelihood zones.
- Support communities to carry out participatory scenario planning to utilize the weather forecast in readiness for the worst outcome should the short rains fail.
- Upscale where necessary cash transfer programs to caution vulnerable households against impacts of the livelihood losses that emanated from imposition of Covid-19 restrictions aimed at controlling the spread of coronavirus disease (COVID-19). This will aid in supplementing households diminished incomes to sustain their food consumption.
- Promote commercial destocking of cattle and sheep while the livestock are still in good body condition to ease pressure on available forage resources and in case the short rains fail.
- Support re-opening of schools with water storage facilities, construction of additional sanitation facilities, desks, provision of hand sanitizers and face masks.
- Engage and support grazing committees to enable them come up with appropriate community grazing patterns so as to ensure the diminishing forage resources are sustainably utilized and prevent or minimize resource-based conflicts.
- Sensitize the community on safety precautionary measures to stem spread of coronavirus disease (COVID-19).
- Sensitize caregivers at the household level on disease and malnutrition identification in children under five years of age to enhance screening during the prevailing period where public health measures have been enforced to control spread of COVID-19. This will help formulate appropriate nutrition interventions.
- Provide support for an active and continuous human and livestock disease surveillance for all possible disease pandemics.
- Promotion of hygiene and sanitation practices especially the Community Led Total Sanitation (CLTS).
- Promote peace building and conflict resolution among neighbouring communities in the county and outside the county Viz. Garissa, Wajir, Samburu and Laikipia.