



National Drought Management Authority
ISILOLO COUNTY
DROUGHT EARLY WARNING BULLETIN FOR JUNE 2020

JUNE 2020 EW Phase

Drought Cycle Stage: Normal



Drought Situation & EW Phase Classification

Biophysical Indicators

- June was characterized by minimal cloud cover, long sunny intervals and an onset of strong winds. No rains were received during the period under review.
- The county Vegetation Condition was above normal with deterioration from May a signal for poor regeneration during the long rains.
- Condition and availability of forage was good to fair, with a steady rate of depletion recorded.
- 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 in all livelihood zones.
- Overall milk production slightly declined in all livelihood zones.

Access Indicators

- Livestock prices reduced slightly due to impacts of market interruptions associated with outbreak of COVID-19. Food prices stabilized over the period under review. Vegetable prices stabilized prices due to a steady supply.
- Household milk consumption was good but reduced slightly over due to reduced production.

Utilization Indicators

- Proportion of households with acceptable food consumption reduced significantly as those had poor and borderline consumption stabilized.

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)	0mm	>3.2mm
VCI-3month (Isiolo)	53.6	>42
Water Sources	6	6
Production Indicators	Value	Normal
Livestock Body Condition	Good	Fair to Good
Milk Production	1.8 Litres	>1.63 Litres
Livestock deaths (from drought)	None	No deaths
Livestock Migration Pattern	No migration	Normal
Access Indicators	Value	Normal
Terms of Trade (ToT)	64.3	>49.1
Milk Consumption	1.3 Litres	>1.31 Litres
Return distance to water households	2.3 km	<8.2 km
Cost of water at source (20 litres)	Ksh 2.00	<Ksh. 5.00
Utilization indicators	Value	Range/Value
GAM (WHZ)	16.7 percent	
Coping Strategy Index (CSI)	10.9	<14.5
Food Consumption	72 Percent Acceptable	>51 Percent Acceptable

Seasonal Calendar

<ul style="list-style-type: none"> ▪ Short rains start ▪ 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

- There was no rainfall received in the county during the period under review.
- The long rains ceased first in the third and fourth week of April in the larger pastoral livelihood zone and in the first and second week of May in the agro-pastoral livelihood zones.
- The long rains performance was below normal with limited impact on the county rangelands. There was a skewed performance, where the season largely failed except in a few pockets in Isiolo central.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The county did not receive any rainfall during the period under review marking an onset of the long dry spell that is expected to last until early October.

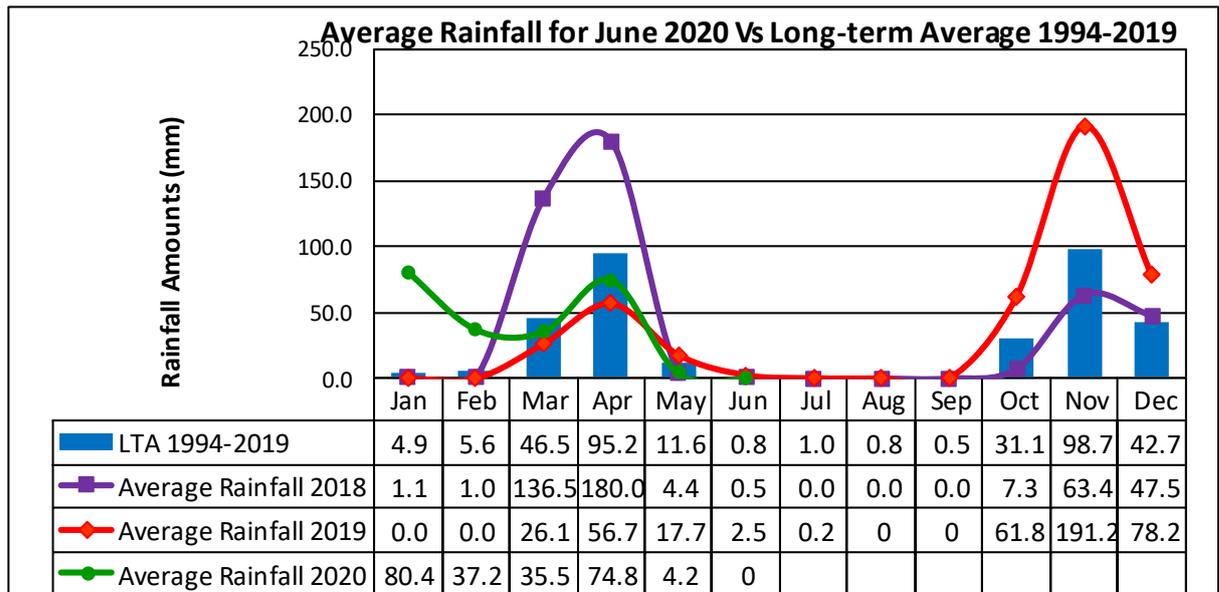


Figure 1a: A graph showing station rainfall performance for Isiolo County

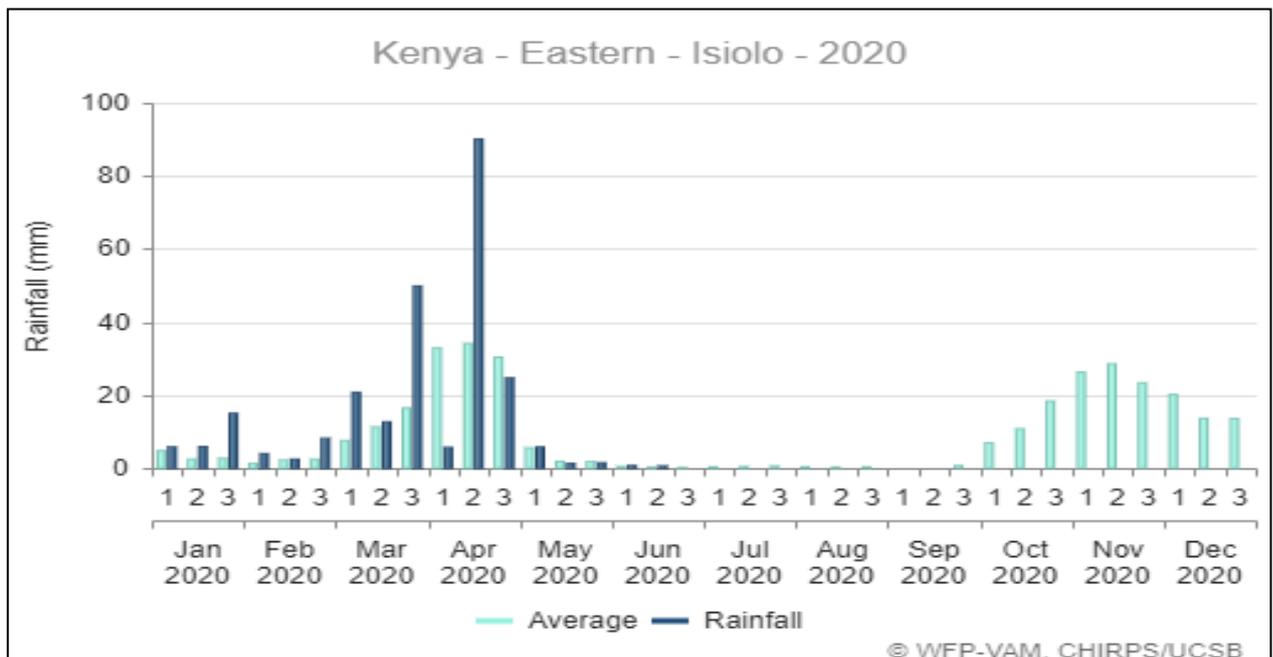


Figure 1b: A graph showing decadal rainfall performance for the current year compared to the long-term average. Source WFP-VAM, CHIRPS

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The matrix below illustrates June 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.

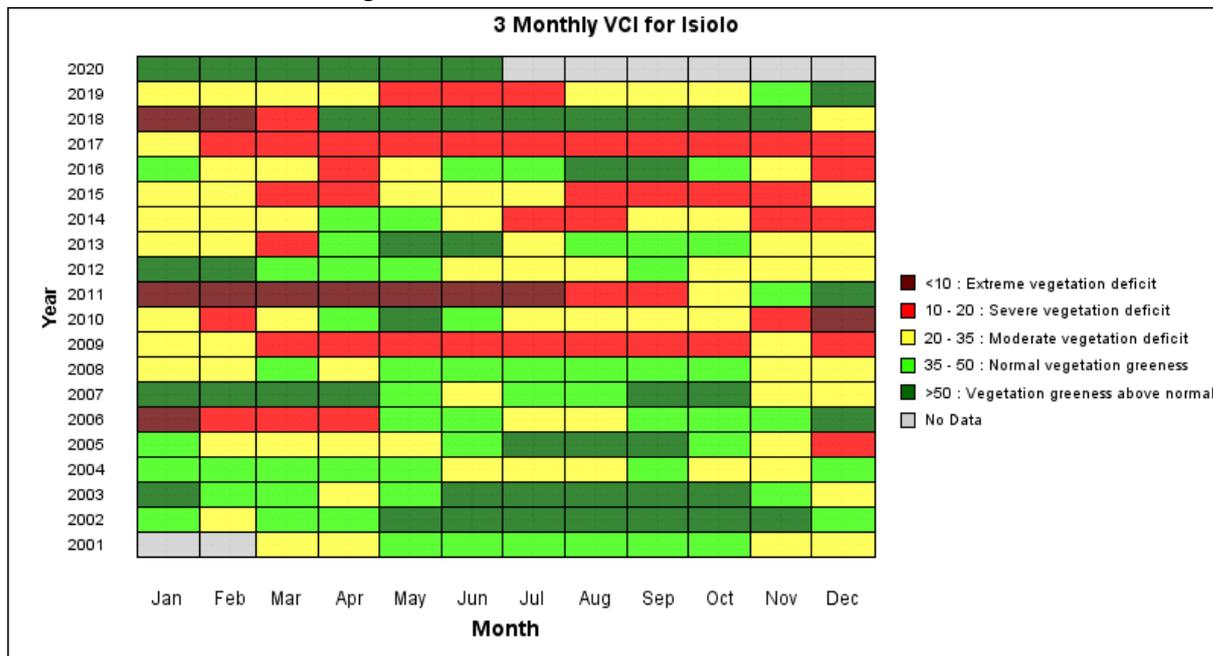


Figure 2: A chart of 3-Monthly Vegetation Condition Index

- The 3-Month vegetation condition index decreased significantly to 53.6 in the month under review from 63 in the previous month. The steady declining trend for four successive months in a row indicates that the impact of the just ended long rains season on vegetation regeneration and greenness was minimal and none in majority of areas.
- However, the overall vegetation condition remained above normal >vegetation in greenness status in both sub-counties.
- The decline in the vegetation condition status was attributed to none/minimal regeneration following the below normal performance of long rains season in the entire county.
- The vegetation condition is expected to decrease further in the coming months as the long dry spell continues.

2.1.2 Pasture

- The general condition of pasture in majority of grazing areas ranged from good to fair in the pastoral and agro-pastoral livelihood zones. The condition of pasture was reportedly deteriorating steadily especially in the tradition grazing areas.
- The current condition was attributed to poor regeneration of pasture during the long rains season whose performance was below normal and as such, livestock animals are utilizing pasture stocks of the 2019 OND short rains season.
- There were movements of herders from areas with low and/or poor pasture stocks deeper into the traditional grazing areas. These areas are characterized by high rate of land degradation by wind and water hence very poor regeneration of pasture which has since been depleted.
- Quality of available pasture was poor as majority was dry with very little moisture content and nutrients as the long dry spell sets in.
- Overall pasture condition in the month under review was good at a better condition compared to a similar period in the previous year and in the long-term.

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.
- The current condition was partially due to shedding of leaves by trees and shrubs as the dry spell took shape during the month under review amid the poorly performed long rains season.
- Just as pasture, traditional grazing areas are steadily being depleted prompting movements targeting grazing areas deeper into the traditional grazing areas. This has resulted in an increase in watering trekking distances across the livelihood zones.
- Browse availability in the month under review was better compared to the long-term condition in a similar period of the year.

2.1.4 Water Sources

- Main water sources during the period under review included rivers, boreholes, sand dams, water pans and dams.

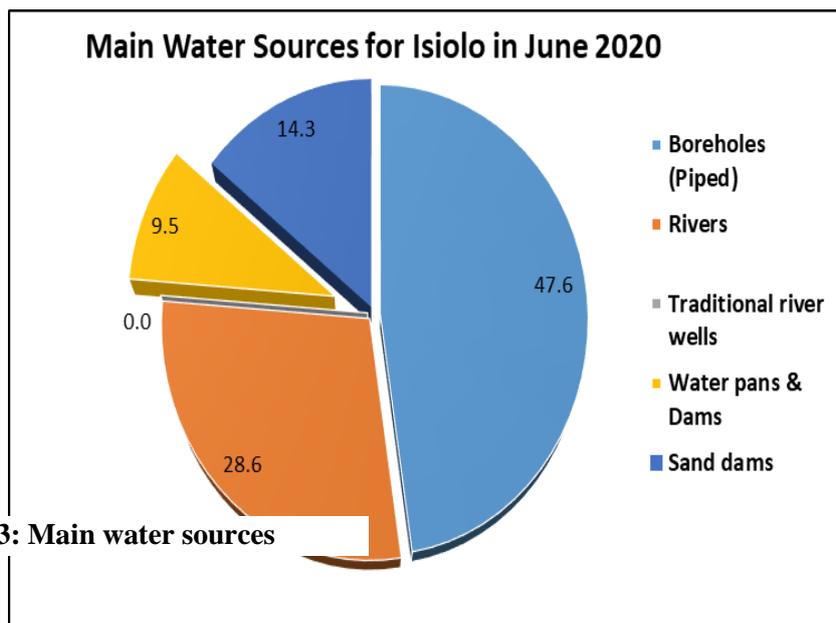


Figure 3: Main water sources

- Yield in boreholes and a shallow well was good.
- There was a normal usage of 58 percent of boreholes installed with sensors with a few being in a state of seasonal disuse.
- Households in established settlements accessed water from boreholes supplied through household taps

and/or community water kiosks. Water supply for Isiolo town residents was normal with minor line interruptions.

2.1.5 Household access and Utilization

- Household water access distance to main sources increased slightly to an average of 2.3km during the period under review from 1.8km in the previous month majority of households accessing from community distribution points or household taps.
- Pressure on boreholes was low as there was ample amount of water in rivers, springs, water pans and sand dams following significant recharge by rains in the short rains and the just ended long rains season.
- Water availability in majority of semi-permanent sources such as rivers, sand dams, traditional river wells and shallow wells is expected to decline in the period from July to September as the long dry 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 10 minutes.
- The longest return distance was 4.0km in Cherab ward where household fetched water from River Ewaso Nyiro. The lowest average distance of about 0.2km was recorded in the casual-waged labour livelihood zone.

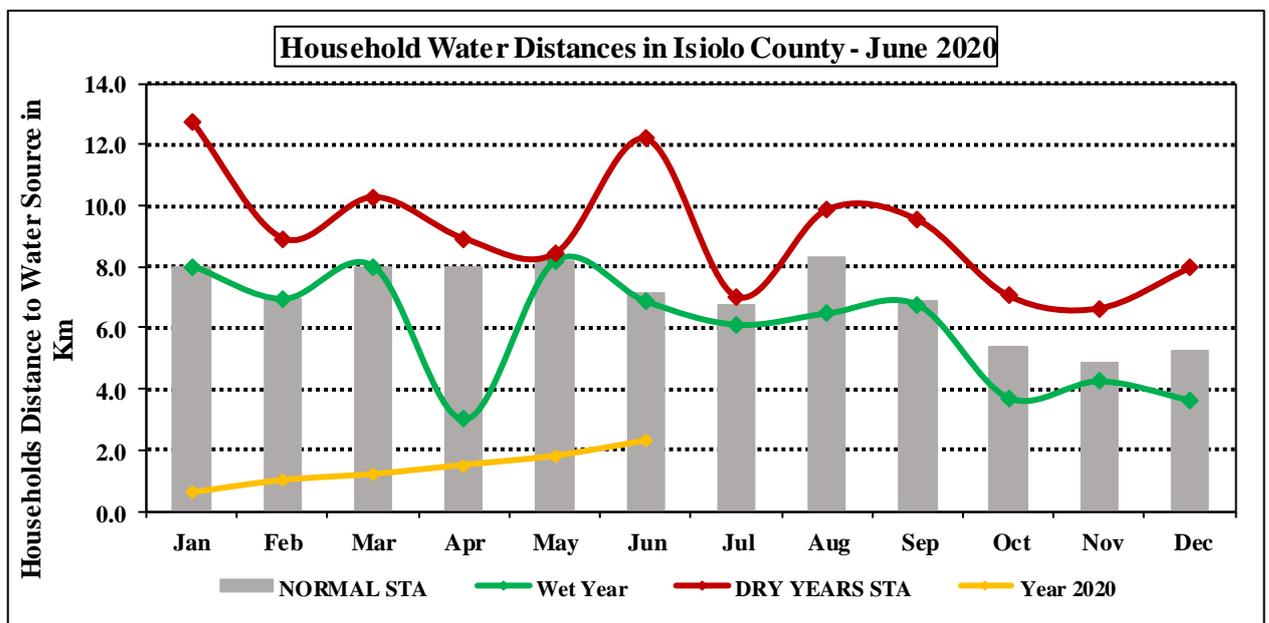


Figure 4: Household distance to water sources

2.1.6 Livestock access

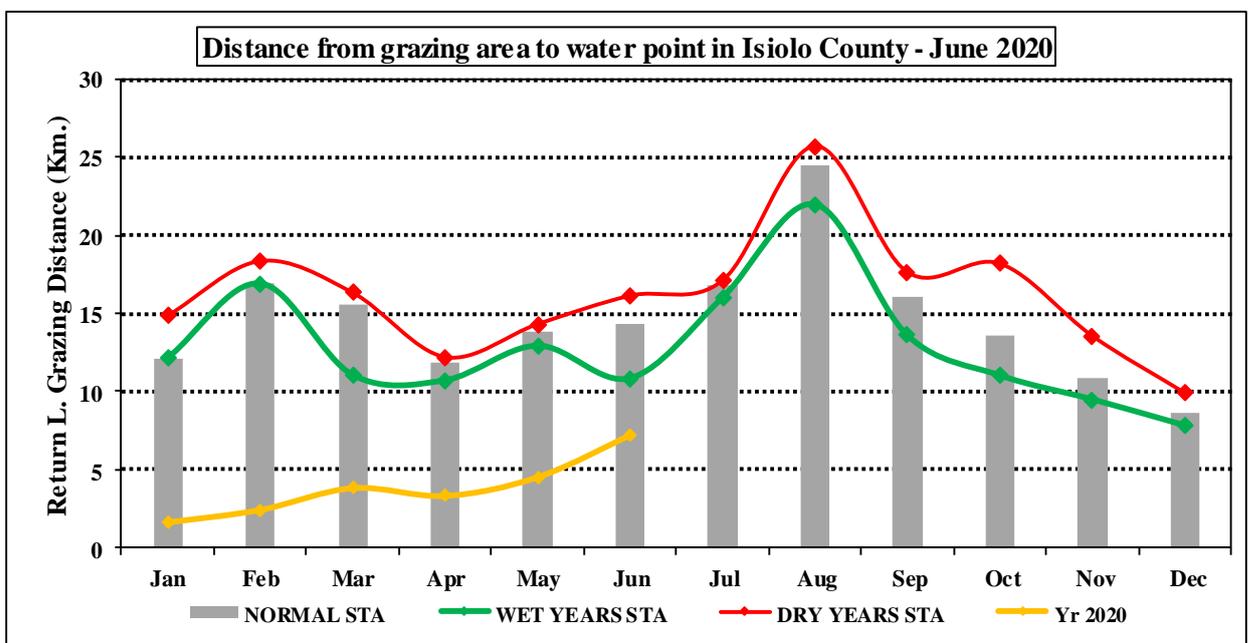


Figure 5: A graph of distance to grazing areas from water points

- The average distance to water sources from the grazing areas recorded a significant increase to 7.2km in the month under review from 4.5km in the previous month.
- The increase in distance was mainly attributed to the recorded decline in availability of pasture in traditional grazing areas as well as depletion of temporary water sources.
- The month's average livestock watering distance was 50 percent below the long-term average of 14.4km at a similar period of the year.
- All livestock animals were mainly watered at open water sources such as rivers, sad dams, boreholes and water pans.
- Watering distance from grazing areas expected to increase in the following month as the long dry spell continues attributed to the below normal performance of the long rains season.
- Livestock watering interval was one to two days for cattle, 2 days for sheep and goat and three to five days for camels. The interval is likely to increase as rangeland resources decline during the long dry spell all the way to October.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Body conditions for all livestock species was good in the pastoral and agro-pastoral livelihood zones and are expected to show minor deterioration before the end of the dry spell.
- This is attributed to good availability of feed and water thereby creating a complimentary environment for livestock production.
- The livestock body condition is expected to be somehow stable following current good availability of livestock feed in the pastoral and agro-pastoral livelihood zones.
- The current livestock body condition was better compared to a similar period in the long-term.

3.1.2 Livestock Diseases

- Lumpy Skin Disease and Foot and mouth diseases that were reported in the pastoral livelihood zone majorly in Garbatulla sub-county.
- Endemic livestock diseases reported during the month under review were CCPP and PPR in Garbatulla, Kinna and Oldonyiro wards.

3.1.3 Milk Production

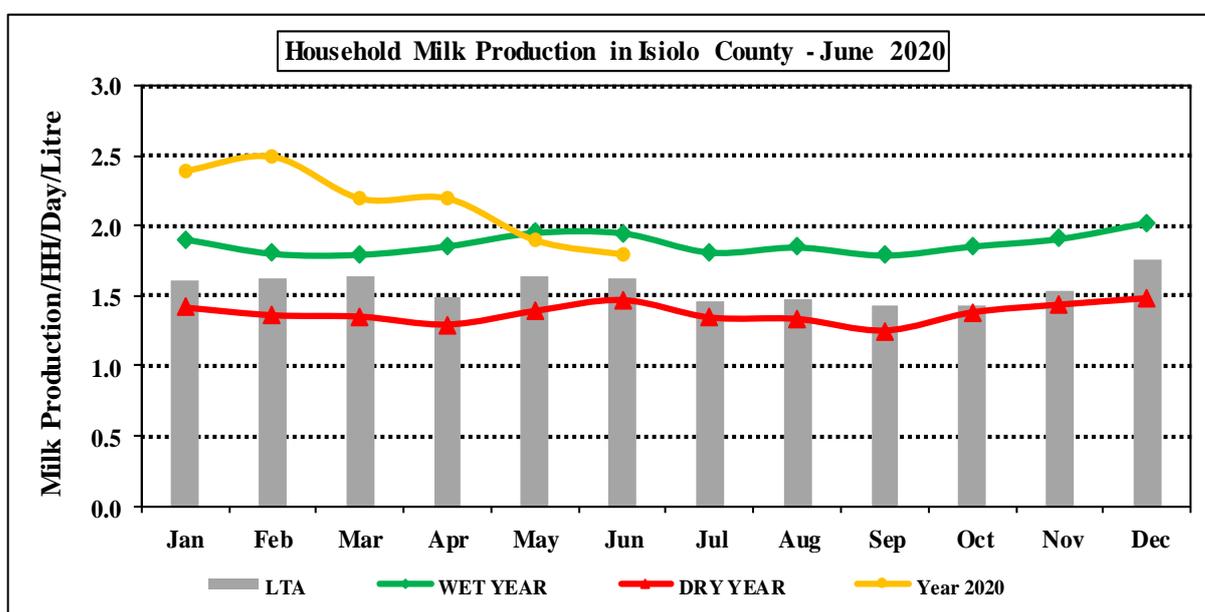


Figure 6: A graph of average milk production in litres

- Milk produced in milking households recorded a marginal increase to an average of 1.80 litres in the month under review from the previous month's amount of 1.92 litres.
- The reduction could be attributed to the onset of dry conditions which have led to diminishing quality of pasture in the pastoral and agro-pastoral livelihood zones.
- A greater proportion of the milk was produced in Kinna and Garbatulla wards where camel population is high when compared to other areas.
- The amount produced is expected to decrease in the following month as the quality of pasture and browse declines following onset of long dry spell conditions.
- Milk production per household was 10 per cent higher than the long-term average amount of 1.63 litres.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of Food Crops

- Major food crops under rainfed farming systems were poorly developed due to moisture stress during middle stages of development leading to near total crop failure.
- Majority of small-scale farmers planted food crops such as maize, beans, cowpeas under the rainfed conditions.
- Farms along the rivers were watered to support food crops' development to maturity.

- Fruits, green maize and vegetable crops such as onions, tomatoes, and kales under small-scale irrigation along the rivers are developing well with river water that is still flowing.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

Cattle Prices

- Average cattle price decreased significantly to Ksh.26,200 in the month under review from Ksh 28,000 in the previous month.
- The price decline could be attributed to the unstable marketing environment amid the government socio-economic restrictions that have led to loss of income to a significant proportion of households in the entire country. This has led to a reduction in meat demand in the country as household purchasing power reduced following loss of livelihoods in the formal employment sectors.
- The highest average price was recorded in Isiolo town market at Ksh 28,000 while the least was Ksh.20,000 in Merti market.
- The period's price was however 17 percent higher than the long-term average of Ksh.22,380.

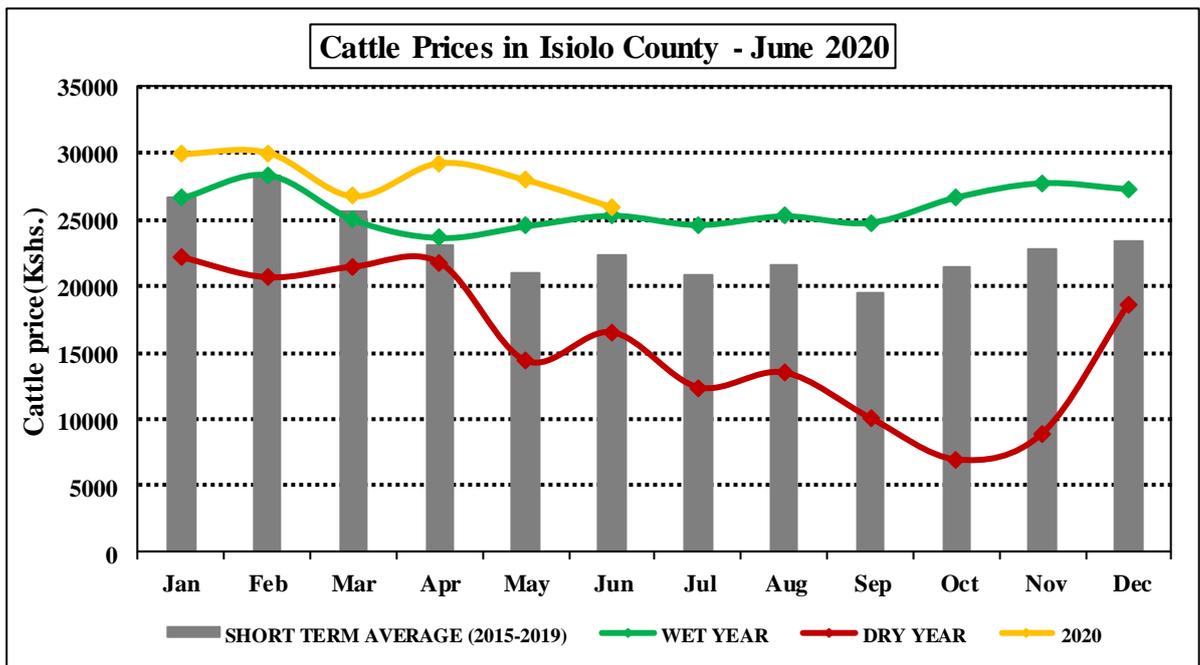


Figure 7: A graph of average market price of cattle

Small Ruminants Prices (Goat)

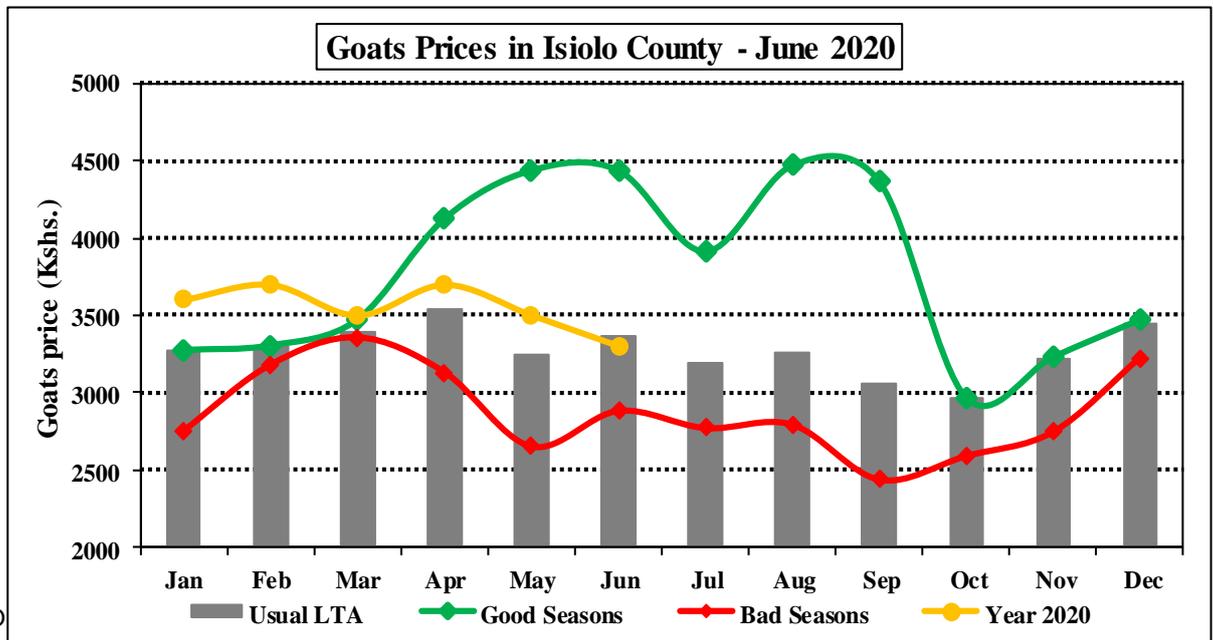


Figure 8: Monthly average market price of goats

- Average goat price decreased slightly to Ksh.3,300 in the month under review from Ksh.3,500 in the previous month.
- The decline could partially be attributed to the prevailing instability in the marketing environment which have led to a decrease in demand for meat locally and nationally due to COVID-19 socio-economic restrictions. Demand has been low due to substantial loss of livelihoods in a variety of sectors in the country.
- There is a high likelihood of the small stock price declining in the event that the restrictions continue being imposed in the following month.
- The least and highest market prices recorded were Ksh.3,000 and Ksh.3,900 in Merti and Isiolo town markets respectively.
- Average goat price was two percent lower than the long-term average of Ksh.3,360 during the same period of the year.

4.2 CROP PRICES

Maize

- The market price of a kilogram stabilized at Ksh. 52.00 in the month under review
- The cereal price increment was attributed to a stable of the commodity in the market from local production and neighbouring counties during the period under review.
- The price is expected to have slight price increments towards end of the year when majority of supplies would be expected from other counties with surplus production after failure of local production.
- Cereals lowest price was Ksh.40.00 in Isiolo town and Oldonyiro markets and highest in Merti at Ksh 65.00. 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 five percent lower than the long-term average of Ksh.54.00 at a similar period of the year

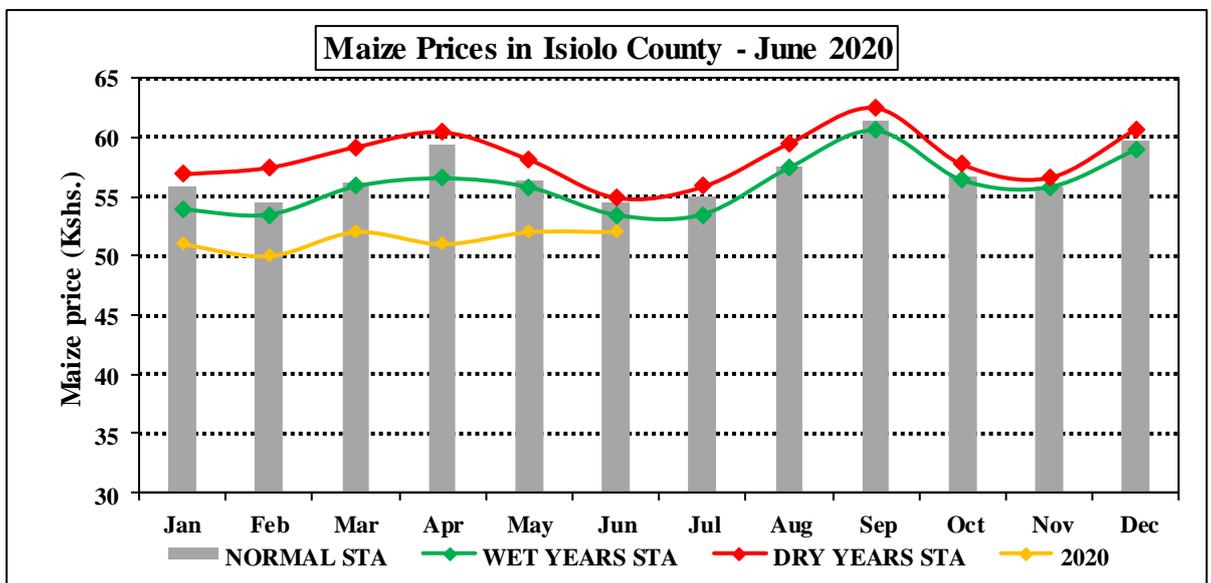


Figure 9: A graph of average maize (cereal) market price in the county

Beans

- The average price of beans was stable at Ksh. 105 when compared to the previous month.
- The pulse’s price stability could partially be attributed to a relative consistency in supply of the pulses to the local markets from neighboring counties and beyond, being among areas that experienced near to above normal rainfall performance in the long rains season.
- The price is expected to stabilize for one or two months then increase steadily towards the end of the year as supplies decline. The expected price hike will be contributed to an

expected quick depletion of local supplies following a poor harvest of pulses in the agro-pastoral livelihood zones.

- The highest price was recorded in Merti market, Merti sub-county in the pastoral livelihood zone at an average of Ksh 120.00 while the lowest price was in Isiolo at Ksh. 90.00 in Isiolo central market.
- The price was 5 percent lower than the long-term average price of Ksh.112.00 during a similar period of the year.

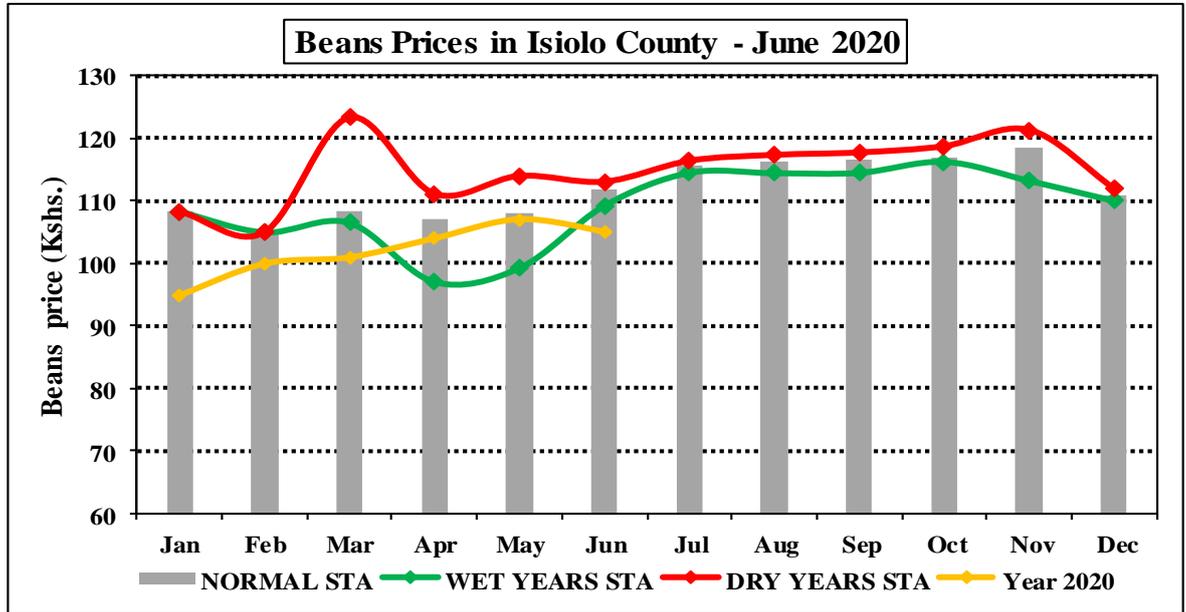


Figure 10: A graph showing average market price for pulses (beans)

4.3 Livestock Price Ratio/Terms of Trade

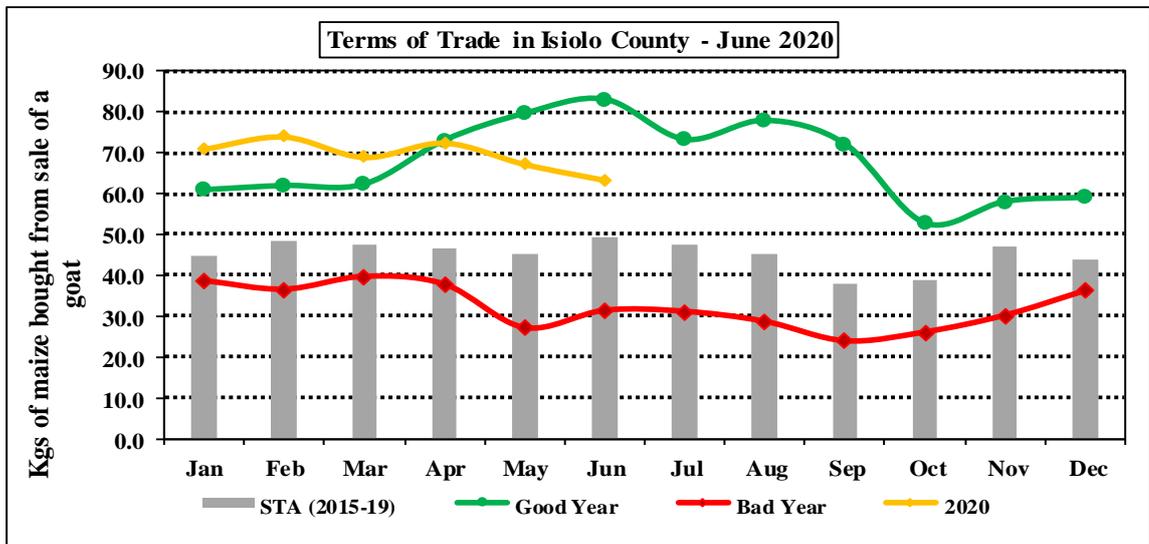


Figure 11: A graph showing the typical pastoralist households Terms of Trade in the county

- Terms of Trade (the number of kilograms of maize a pastoralist would purchase after a sale of one goat) decreased slightly to 64.3 kg/goat in the period under review from 67kg/goat in the previous month.
- The ratio was 29 percent higher than the long-term average of 49.1 at a similar period of time in a year.
- The recorded decrease in the ratio reflecting the household purchasing power could be attributed to the unstable livestock marketing environment and high cereals' price. Purchasing power of pastoral households is expected to decline in the following two to three months as the socio-economic impacts prompted by COVID-19 restrictions continue to be felt across the country

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

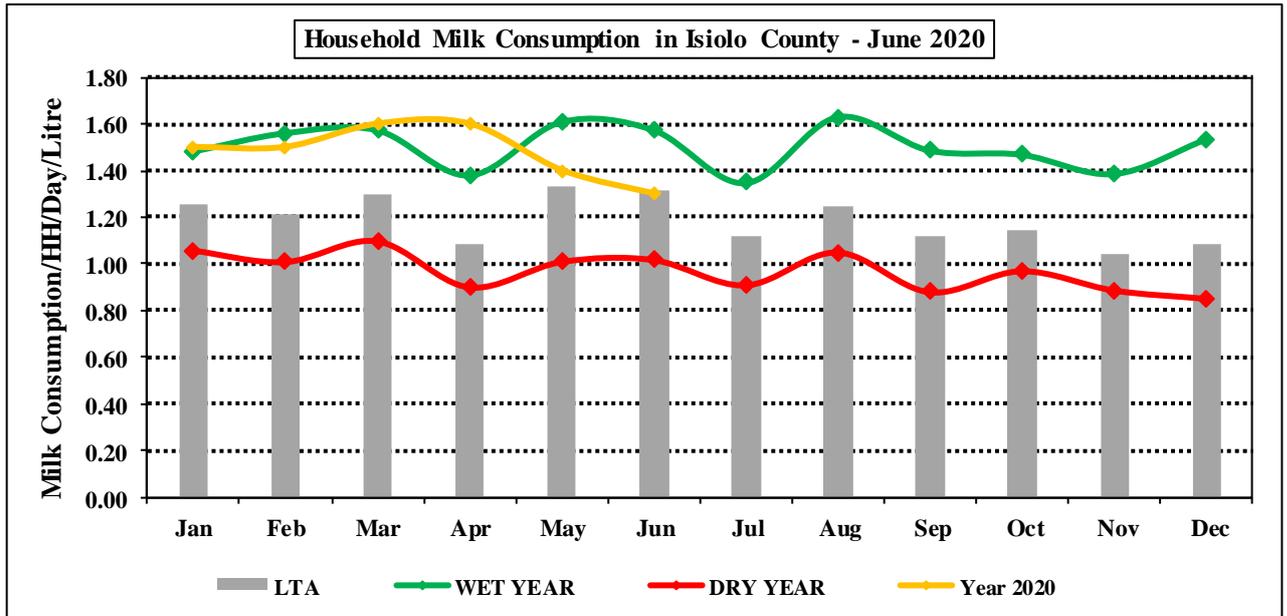


Figure 12: Average milk consumption in litres

- Average milk consumption per household decreased slightly to 1.3 litres in the period under review from 1.4 litres in the previous month.
- The marginal reduction in the amount consumed at the household level was attributed to the recorded reduction in the amount produced.
- The average consumption was equivalent 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 labour/employment livelihood zones.

5.2 FOOD CONSUMPTION SCORE

- Patterns of household food consumption stabilized as shown in figure 12 where 72 percent of households had acceptable food consumption as opposed to five percent and 23 percent who had poor and borderline food consumption respectively.

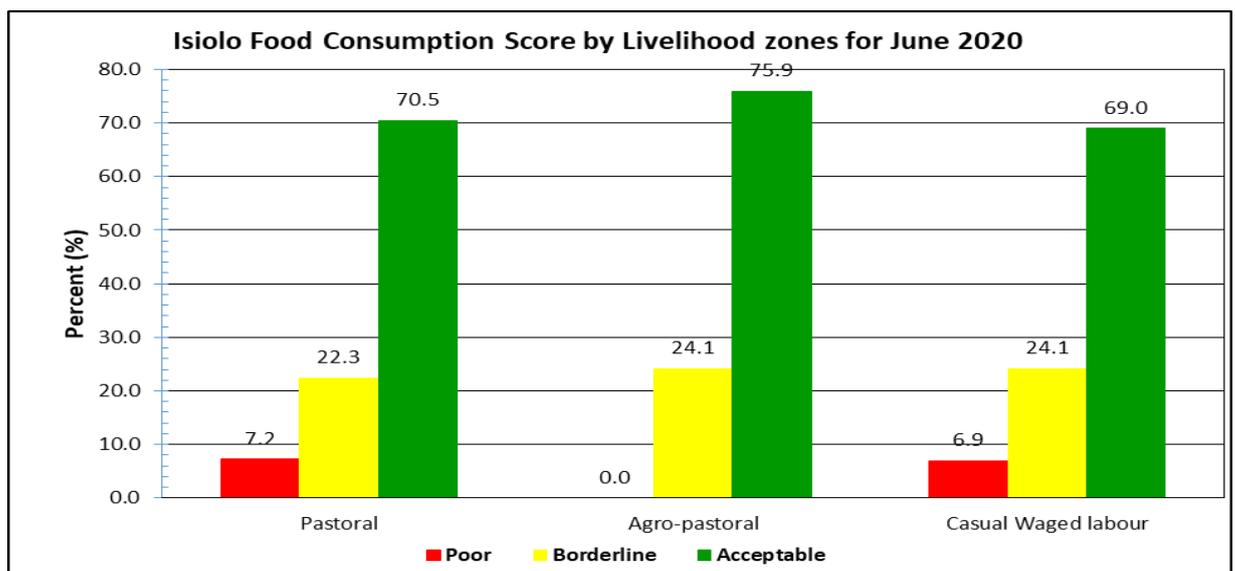


Figure 13: A graph showing the overall households' food consumption score

- The proportion of households with acceptable food consumption was stabilized during the month under review.

- Though food consumption was good in the pastoral livelihood zone, the dietary diversity was considerably poor, a scenario that is blamed on scarce availability of a variety of important food commodities in the rural markets.
- Food consumption patterns are expected to deteriorate significantly as the long dry spell sets in and as the effect of the novel coronavirus disease continue to impact on households purchasing power.
- *“A poor score implies households consumed staples and vegetables every day and rarely consumed protein rich food while borderline FCS imply that households consumed staples and vegetables every day accompanied by oil and pulses a few times in a week while the acceptable imply that households are consuming staples, vegetables every day, and frequently accompanied by pulses and some meat and milk”.*

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- The prevailing rate of Global Acute Malnutrition based on Weight-for-Height (standardized scores) was 16.7 percent (SMART Survey 2020).
- The prevailing rate of children at risk of malnutrition is attributed to poor young children nutrition among pastoral households as well as high prevalence of endemic diseases such as rising cases of intestinal worms, upper respiratory tract infections and diarrheal ailments among the under-fives.
- The proportion of moderate acute malnourished and those at risk of malnutrition is likely to worsen due to respiratory illnesses brought about by change of weather during the cold season
- 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 substantiate the malnutrition trends.

5.3.2 Health

- The health seeking behavior in the county has suffered from fear of contracting the novel coronavirus disease where the county recorded two cases in the month under review.
- 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.
- The rate of infections of acute respiratory tract infections is expected to rise due to change of weather during the rainy season ending in May and the subsequent cold season running from June to July.

5.4 COPING STRATEGIES

- Coping Strategy Index (CSI) stabilized at 10.9 in the month under review.

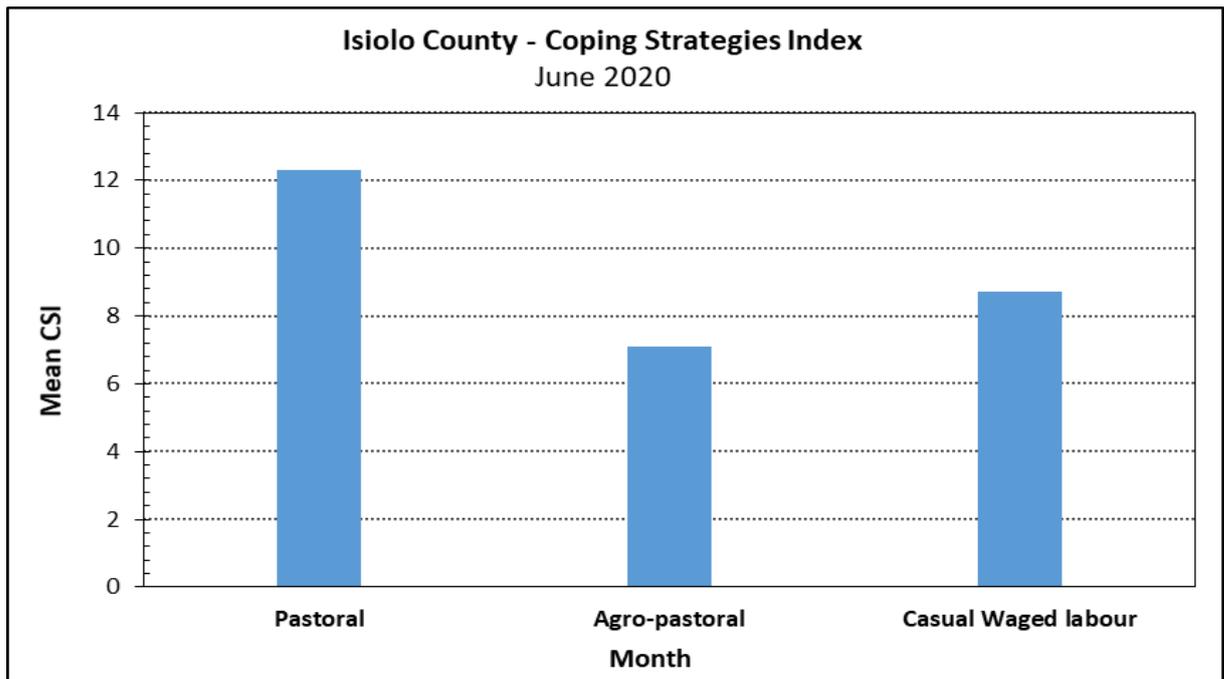


Figure 14: A graph showing the monthly reduced Coping Strategies Index

- The stability in the coping strategies index was attributed to an increase in the frequency of employing food and livelihood based coping strategies by households partially attributed to livelihood hardships occasioned by the ongoing restrictions imposed by the government to curb spread of novel Coronavirus disease.
- 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.

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 locust invasion	Oldonyiro(Kipsing and Lenguruma location	Isiolo North and Isiolo South	World Vision	150HHS
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	Burat	Isiolo North	World Vision	150HH
Provision of water purifiers	Iresaboru	Isiolo South	County government and partners	132,000pieces
Livestock vaccination against Rift valley fever	Sericho, Merti	Isiolo South Isiolo North	VSF SUISSE	45,000HHS 85,000 sheep /goat
Livestock disease surveillance	All wards	All sub county	RPLRP and VSF SUISSE	All wards
Drilling of Boreholes	Biliqo Marara and Merti town	Isiolo North	Isiolo County Government	Two Boreholes
Rehabilitation of Manyata Zebra and Yamicha Borehole	Ngaremara and Cherab	Isiolo North	Isiolo County Government	Two Borehole
Rehabilitation of Parkuruk water pan	Oldonyiro	Isiolo North	Isiolo County Government	One pan

6.2 FOOD AID

Table 2: A table showing the food interventions ongoing in the county

Type of Intervention	Ward	Sub-county	Implementer	Target/ Amount
Relief food distribution to vulnerable HHS	All wards	Garbatulla, Merti and Isiolo	National Government	Bags of (50kg) of rice

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- Tension has been high following resurgence of resource-based conflicts have been reported along Isiolo South-Garissa border where score of people have died and others injured.
- There was fear of spread of Coronavirus (Covid-19) within the county where two cases were reported in the month under review.

7.2 Migration

- There are internal movements of herders deeper into remaining traditional grazing within the county as forage depletes steadily.
- Internal migration of especially small stocks from Dogogicha to Kuro Bisan Owo hot spring was reported where the water has some elements of minerals which is important for animal nutrition and health.
- No outmigration was experienced in the period under review.

7.3 FOOD SECURITY PROGNOSIS

- The level of food security in the county is good mainly attributed to the impact of above normal performance of the OND 2019 short rains season after a below normal performance of the long rains season.
- Livestock production directly or indirectly contributed a greater proportion of the food available in all the livelihood zones including the casual-waged labor zone. Livestock productivity was good with majority of animals' body condition being good and expected to remain relatively stable towards end of the ongoing dry spell. However, milk production has declined and the trend is likely to continue during the dry spell.
- Crop production in farms under rainfed systems has been poor in the long rains season whose performance was below normal in most parts of the county and will therefore not contribute much to the household food stocks. However, there will be relatively good food availability in the county due to supplies from neighboring counties and local small-scale irrigated farms which have sustained production due to good availability of water along rivers.
- Market performance was normal with relatively strong terms of trade that played a key role in ensuring household access to food commodities in a population that largely depends on markets to access and meets most of their food requirements. Imposition of restrictions meant to control spread of the novel coronavirus (COVID-19) disease had a more impact on livestock marketing than on food commodities. It's expected that access to food commodities will continue bearing impacts of the restrictions in case their enforcement will continue into the next two or three months.
- Food consumption was largely good in all the livelihoods with slightly over 70 percent of households having acceptable food consumption. Food availability is expected to decline along the dry spell with a high likelihood of affecting consumption. Food utilization was greatly enhanced by the improved water availability in all livelihood zones. Water availability is expected to decline steadily as temporary sources dry and lead to increased distances to water sources as the dry spell progresses.
- There was minimal competition over rangeland resources as majority of the grazing areas have good amounts of available feed stocks. This situation has led to a continued moment of calmness among pastoral communities apart from few areas where conflicts have been reported.
- The overall food security situation remains in the stressed phase (IPC 2) and on a declining trend.

8. RECOMMENDATIONS

- Sensitize the pastoral communities especially owners of cattle, sheep and goat to do commercial off take while the livestock are still in good body condition.
- Engage and support grazing committees to enable them come up with appropriate communities grazing patterns so as to ensure the diminishing forage resources are sustainably utilized and prevent or minimize resource-based conflicts.
- Initiate cash transfers programs to caution vulnerable households against impact of the livelihood losses following the nationwide imposition of restrictions aimed at controlling the spread of coronavirus disease (COVID-19). This will protect loss of lives.
- Sensitize the community on the safety precaution measures against corona virus (COVID-19).
- Sensitize caregivers at the family 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)