

1. CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- The weather pattern was characterized by long sunny intervals with high day time temperature.
- However, some showers were received in Isiolo South, and some parts of Oldonyiro ward towards Laikipia County.
- The season’s performance has been poor both spatially and temporarily where more than half of the county received insignificant rains over the entire rainy season.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The county received rains of an average amount of 2.5mm. The rains were however skewed to Oldonyiro ward and Isiolo South Sub County.
- Merti sub-county did not receive any rain during the month under review.
- The amount received was significantly higher than the long-term average of less than 1.0mm.
- The rains were poorly distributed both temporarily and spatially.

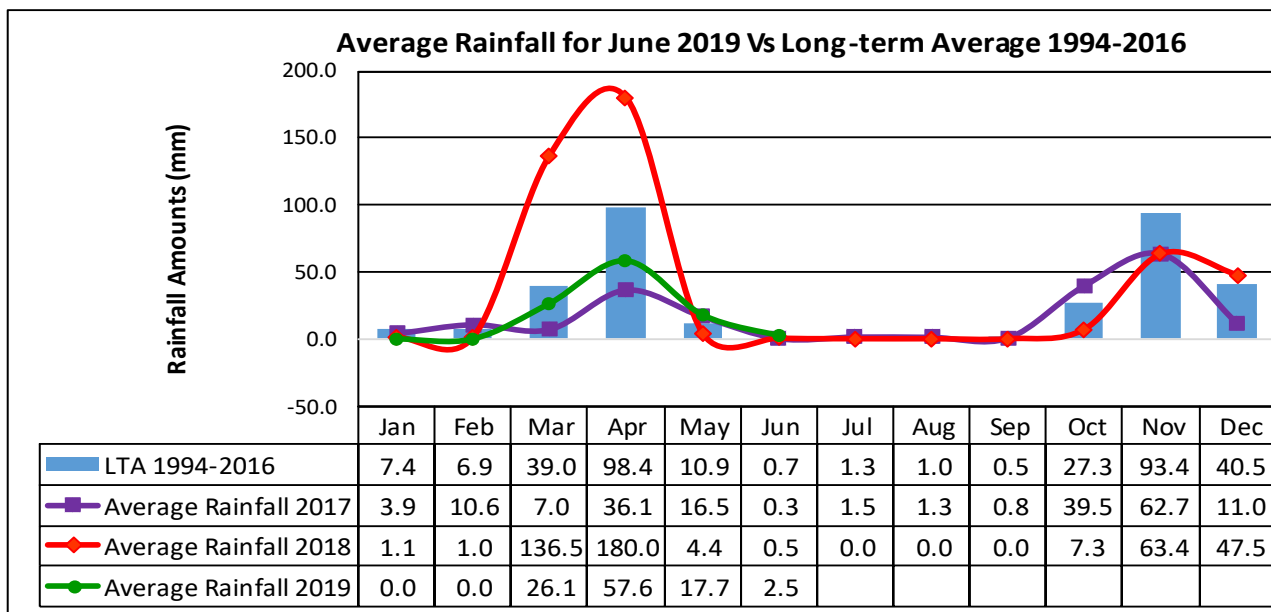


Figure 1a: A graph showing station rainfall performance for Isiolo County

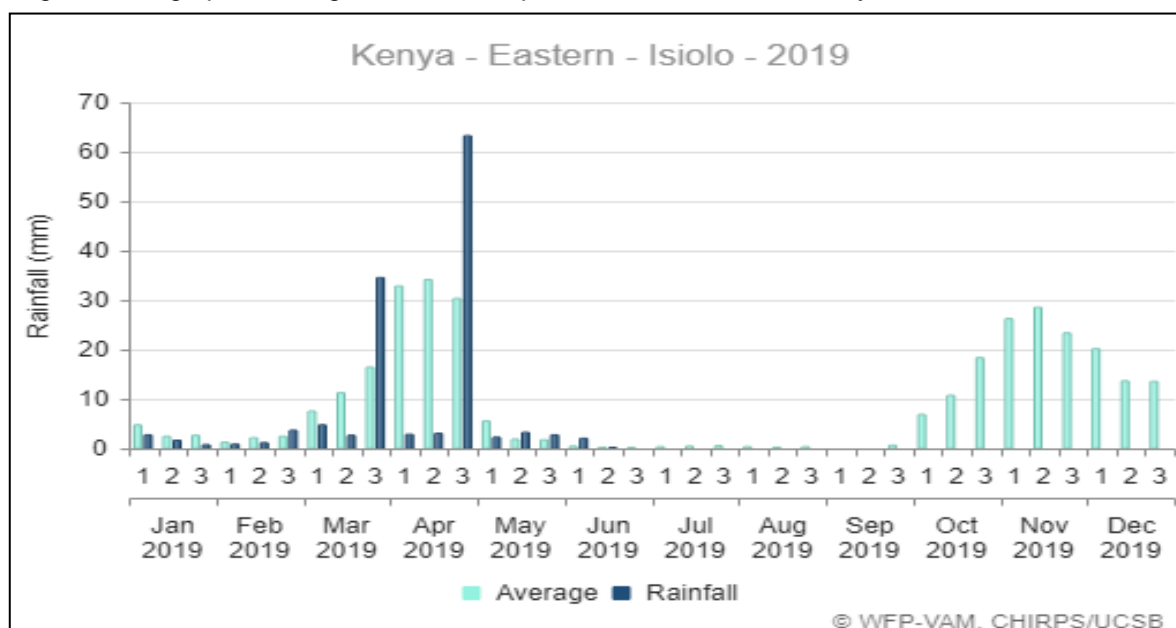


Figure 2b: A graph showing decadal rainfall performance for the current year compared to the long-term average. Source WFP-VAM, CHIRPS

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The matrix below illustrates June 2019 Vegetation Condition Index, classified as agricultural drought based on VCI thresholds. The matrix shows a retrospective analysis of the vegetation condition as related to drought.

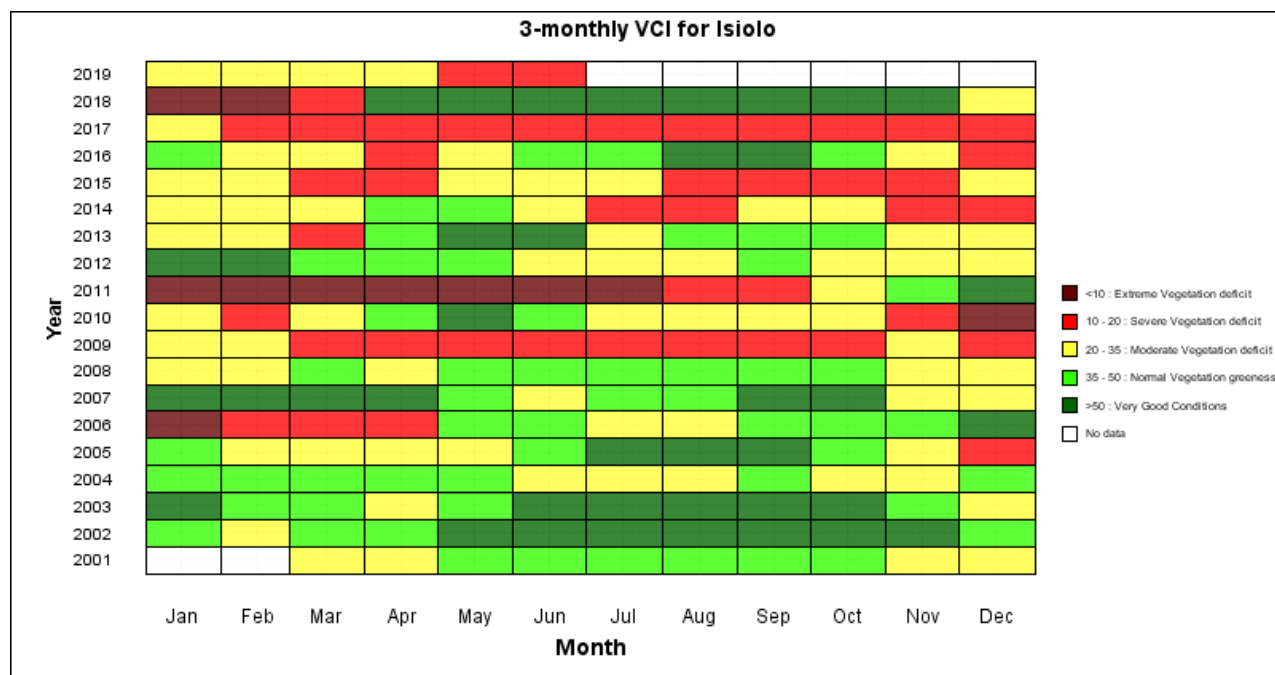


Figure 3: A matrix of 3-Monthly Vegetation Condition Index

- County vegetation condition deteriorated further to record an index of 17 down from 19 in the previous month. The county was in a severe vegetation deficit on a worsening trend.
- The severe vegetation deficit state was attributed to the poor performance of rains during the long rains season that ended with low cumulative amounts being received across the county. The rains were also poorly distributed in space and time.
- There has been very poor and localized natural vegetation regeneration since March 2019 which has seen the vegetation condition for entire Merti sub-county deteriorate significantly to an index of 11. There was however a slight improvement in the vegetation greenness in Isiolo South Sub-county.
- Vegetation condition is expected to deteriorate further as the long dry spell takes shape until October, late in the year.

2.1.2 Pasture

- The general condition of pasture in the zones was poor during the month under review as a cumulative impact of the poor performance of the previous short rains and the just ended long rains season.
- Very few pockets of the larger pastoral livelihood zone had pasture that can provide feed to the county's livestock population for more than a month. Areas with some little pasture include Kinna, and Sericho. Few pockets of Garbatulla ward are the only traditional grazing areas with moderate availability of pasture. The other areas with some significant amounts of pasture are the dry grazing reserves of Cherab wards which will be the only resort for herders from the county and the neighbours.
- Overall pasture availability in the month under review was poorer compared to a long-term condition in a similar time of the year.
- There is a likelihood of pasture depletion in traditional grazing areas before August 2019.

2.1.3 Browse

- The overall condition of browse in the zones was poor during the month under review. This is attributed to the poor performance of the previous short rains and the just ended long rains season.
- Very few pockets of the larger pastoral livelihood zone had browse that can provide feed to the county's livestock population for more than a month. Areas with some little and quality available browse include Kinna, and Sericho. Some few pockets of Garbatulla are the only traditional grazing areas with significant amounts of browse.
- Overall browse availability in the month under review was poorer compared to the long-term condition in a similar time of the year.
- There is a likelihood of browse resources getting depleted in majority of traditional grazing areas before August this year, move that will trigger early and widespread migration.

2.2.1 Water Sources

- Main water sources during the period under review were rivers boreholes, shallow wells and traditional river wells.
- There was an increased recharge of sand dams in Oldonyiro and River Ewaso Nyiro after more rains were received in Mt. Kenya and Aberdare Ranges catchments.
- Availability of water in sand dams improved significantly in Oldonyiro and residents living along River Ewaso Nyiro. However, the river flow did not go beyond Iresaboru in Sericho ward.
- Water yield in many boreholes was moderate across the county, with no recharge experienced in shallow wells in Merti, Garbatulla and Sericho wards for two consecutive seasons. The yield is expected to worsen as the dry spell sets in.
- Water access for households remained stable as majority of households obtained the commodity that is sourced mainly from boreholes and distributed using homestead pipes water kiosks close to their settlements.
- However, a good number of households in Cherab ward fetched water from River Ewaso Nyiro which took them more than 5 hours for one trip. This was to supplement the water received from water truck supplying water for household use in many settlements.

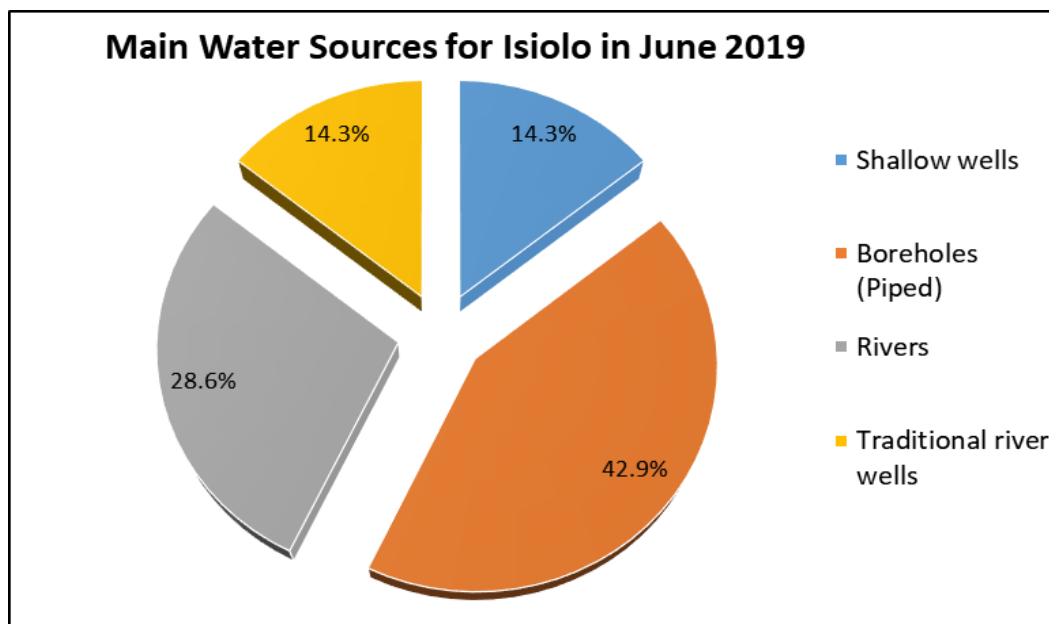
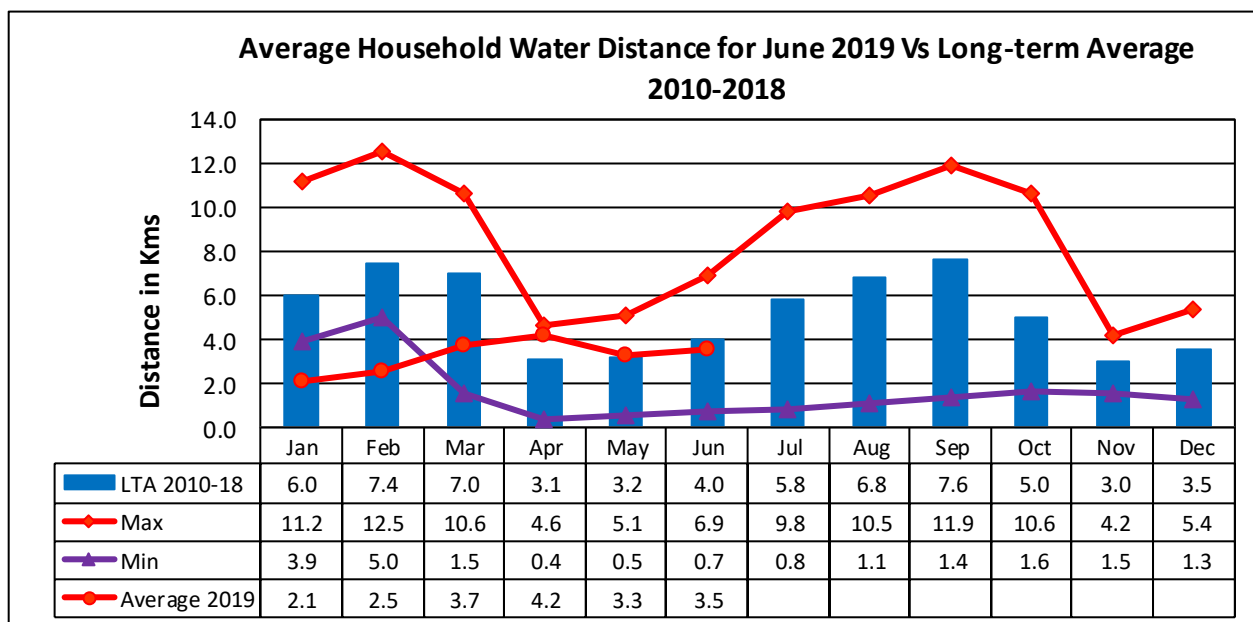


Figure 4: A chart of main water sources in the county

2.2.2 Household access and Utilization



- Household water access distance to main sources increased marginally to an average of 3.5km over the period under review from 3.3km in the previous month.
- Access was relatively stable in majority of the settlements where supply is mainly from boreholes. Moreover, there was some significant recharge of sand dams mainly in Oldonyiro and River Ewaso Nyiro. This partially improved access during the month under review.
- However, water availability in majority of semi-permanent sources such as rivers, sand dams, traditional river wells and shallow wells that experienced partial recharge are expected to deteriorate and deplete early.
- A bigger proportion of households obtained water from taps at kiosks and homestead pipes sourcing water from rivers and boreholes. However, Cherab residents will continue long trekking long distances to supplement the amount delivered by water trucks.
- The cost of water from piped distribution points (*kiosks*) was Ksh. 2.00 per 20 litre jerrican.
- Waiting time at the source stabilized too in majority of pastoral settlements to a range 10 to 20 minutes with exception of urban set ups and the entire casual/waged labour livelihood zone where households waited for less than 10 minutes.
- The average water distance in the agro-pastoral and pastoral livelihood zones was 2.5km and 6.3km respectively. The lowest average distance of about 0.5km was recorded in the casual-waged labour livelihood zone.

2.2.3 Livestock access

- Average distance to water sources from grazing areas increased slightly to 12.1km over the period under review from 11.6km in the previous month.
- The slight increase was partially attributed to diminishing forage in majority of the county's grazing areas. The shallow wells in Hawaye in Sericho ward which are key to herders grazing in the forage rich section of the Ewaso Nyiro flood plain are running deeper every single day as there was no recharge at all during the past two seasons.
- Water access distance increased in some areas such as Garbatulla, Kinna and Merti and Sericho mainly due to deterioration of pasture and a widespread low recharge to water sources.
- However, the access to water for livestock remains a challenge due to the insignificant recharge in majority of grazing areas in open surface sources and rivers following a poorly performed rainfall season and diminishing availability of forage.
- The average distance to water sources is expected to increase given that no more rains are expected till late in the year.
- Livestock watering interval was normal where goats, sheep and cattle were watered after an average of one to two days. Camels were watered after an interval of 7 to 10 days.

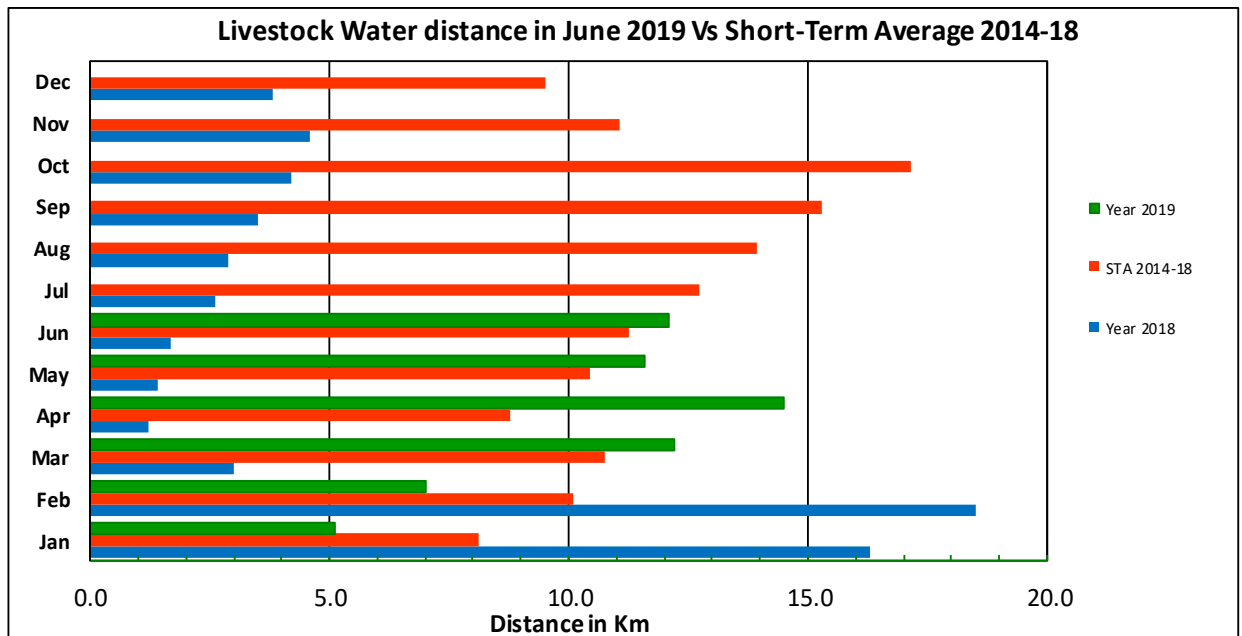


Figure 5: A graph of average distance for livestock water access

2.3 IMPLICATION TO FOOD SECURITY

- The poor temporal and spatial performance of the long rains has resulted to poor regeneration of range resources and poor development of crops.
- Pasture availability was poor in more than 75% of the county's grazing areas. The remaining proportion has attracted large number of livestock from neighbouring counties a factor that will facilitate a high rate of depletion and prompt early migrations into dry season grazing reserves.
- Moreover, water availability was poor and the long distances long distance to water points from grazing areas have had an impact on the animals' health status and is likely to get worse as pasture and brose resources get scarcer.
- In that regard, livestock markets are likely to face closure as migration looms and animal body condition bears the impact of poor and limited forage. This will directly hit the farmers ability to fetch good income from sale of his animals and consequently their purchasing power. This will negatively affect the pastoral communities' food security status.
- On the same note, crop production suffered a blow as the rain fed farming faced moisture shortage which prevailed throughout the rainy season where rains distribution were poor in terms of time. This therefore implies that the overall harvest will be depressed, a factor that will result into low supplies into the market with a ripple effect on prices offered.
- Consequently, earnings to food crop and animal farmers would be low and are therefore prone to adoption of severe coping mechanisms due to limitations in accessing foods.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

- Body condition for all livestock species ranged from good to fair and on a gradual worsening trend in all the livelihood zones.
- A considerable proportion of livestock animals' body condition deteriorated to some extent largely contributed to the lack of insufficient feed following a prolonged dry spell as a result of partial to complete lack of moisture since January this year.
- Livestock animals' wellbeing is now at risk of malnutrition as the scarcity of feed takes shape following the meagre regeneration of natural vegetation due to poor performance of the long rains season.
- The risk is intensified by the diminishing availability of pasture and browse as well as low water levels in major resources which are expected to deteriorate further as the long dry spell sets in.

3.1.2 Livestock Diseases

- No notifiable livestock diseases were reported during the month under review.

3.1.3 Milk Production

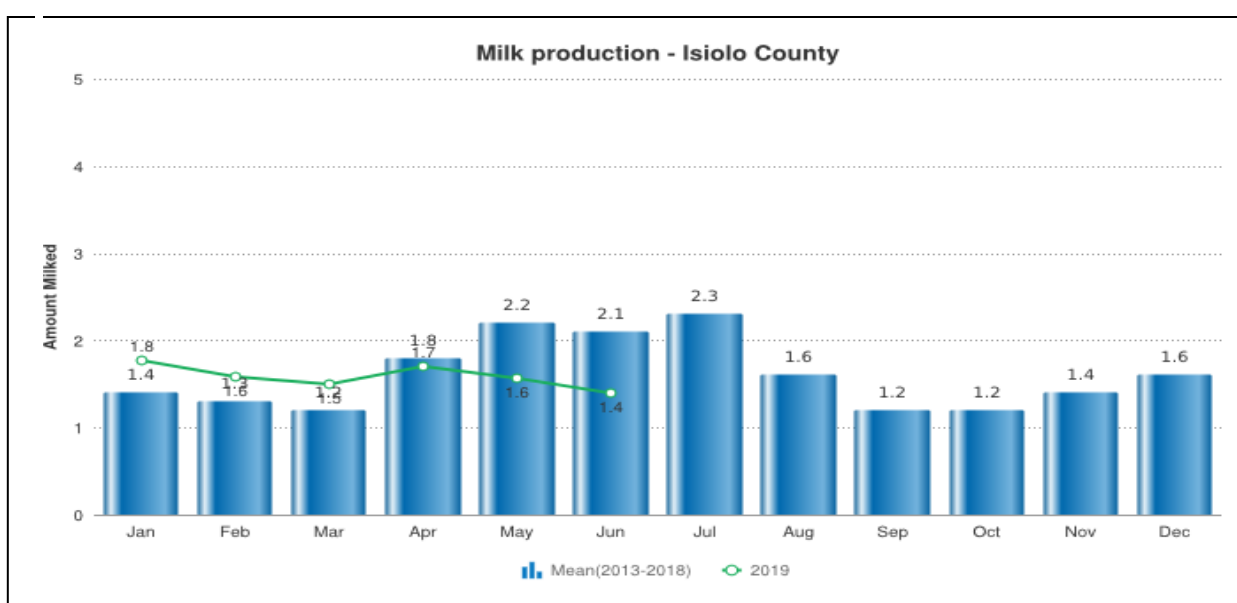


Figure 6: A graph of average milk production in litres

- Milk production in milking households has been reducing steadily to record an average of 1.4 litres for the month under review from 1.6 litres in the previous month.
- Majority of the milk was produced in Kinna sentinel site where the population of camel is highest when compared to all other sites.
- The recorded decline in milk produced was attributed to the deteriorating condition of range resources in majority of grazing areas across the county.
- Milk production for the period under review was poorer when compared to the long-term average and the previous year due to the prevailing scarcity of forages and water resources.
- The level of production is expected to reduce further as the long dry spell set in and might worsen in August and September.
- Milk was mainly obtained from camels and cattle though the two species.
- Milk production per household was 30 per cent lower than the short-term average amount of 2.1 litres.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of Food Crops

- Cereal crops such as maize and sorghum were at a grain filling stage with their growth rate significantly hampered by the poor temporal distribution of the long rains across the entire season. Majority are weak and poorly developed.

- Some of legumes planted early in under good farm practices such as beans, cowpeas, and green grams were observed to be mature but the yield was weak when compared to last year.
- Farmers close to reliable rivers resorted to pump water to their farms to support development of their crops.
- Vegetable crops planted under small-scale irrigation included onions, tomatoes, and kales.
- Overall state of crop production was poor with quite a good proportion of food crops stunting a factor that will sign be significantly depressed.

3.3 IMPLICATION OF THE ABOVE INDICATORS TO FOOD SECURITY

- The state of livestock body condition ranged from fair to good though on a worsening trend in all livelihood zones as an impact of the poor performance of the long rains season.
- The general animal body condition is fair and expected to worsen moving forward as forage quality and quantity diminish following failure of rains in the two consecutive seasons, short rains and long rains.
- The dominant livelihood, livestock production will experience a period of hardship and rampant migration as forage resources are expected to decline fast following encroachment by neighbours whose rangeland resources were already exhausted. Migrations and poor animal body conditions have harmful effects to livestock and food commodities markets access which are so crucial for their food security.
- Crop production though only a source of livelihood to a small proportion of the county population, contributes heavily to availability of fresh produce and now stands at a risk of low productivity as there will be reduced level of activity following low recharge in rivers.
- This would also imply reduced income for farmers who rely on crops for their earnings implying that their food security situation may be stressed.
- The county's main livelihoods are therefore at a high risk of poor productivity a situation that poses a threat to food security.

4.0 MARKET PERFORMANCE

4.1 Livestock Marketing

4.1.1 Cattle Prices

- Average cattle price had an insignificant increase to Ksh 26,800 in the month under review from Ksh 26,500 in the previous month. The stability observed could be attributed to a general fair body condition in all livelihood zones.
- The price remained relatively high and stable compared to the long-term average due to a sustained demand for cattle in local markets and neighboring counties. Supply of cattle to the market was moderate compared to a similar period in the previous year.
- Price expected to decline should their body condition weaken as expected in the long dry spell which contributes to poor health due to species high vulnerability to malnutrition.
- The highest average price was recorded in the pastoral livelihood zone at Ksh.35,000 in Isiolo market and the least was Ksh.22,700 in Oldonyiro market exhibiting a worthy level of stability.
- The period's price was almost 52 percent higher than the long-term average of Ksh.17,800 mainly attributed to fair body condition and a relatively stable demand.

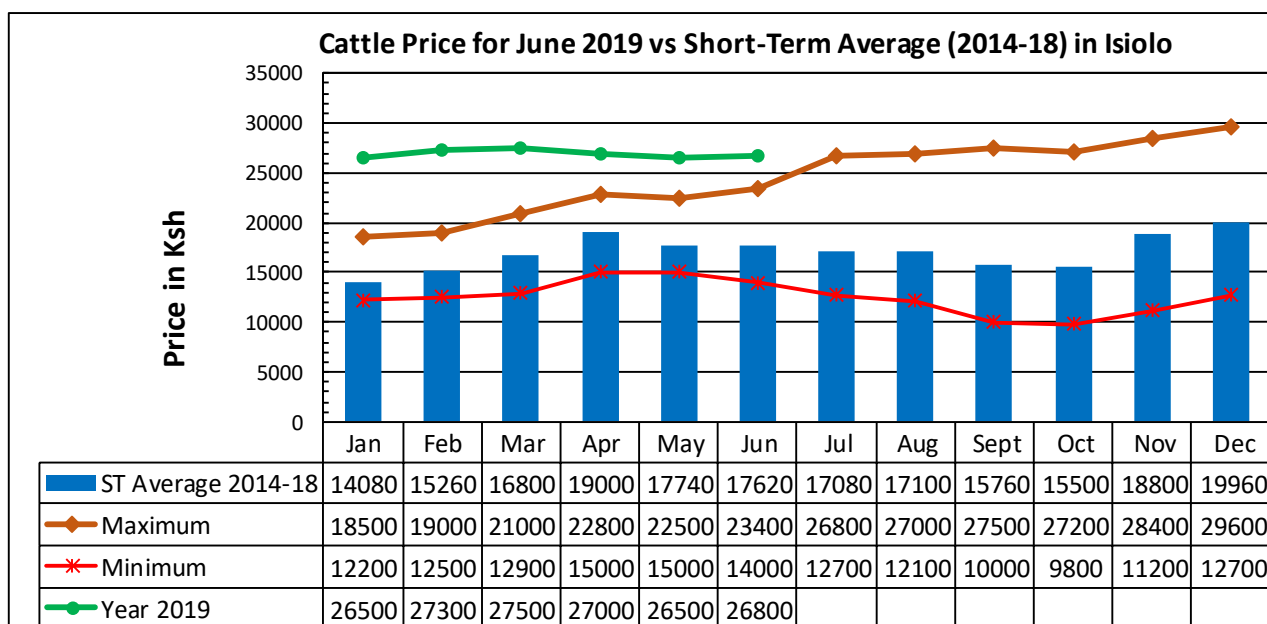


Figure 7: A graph of average farm-gate cattle price

4.1.2 Small Ruminants Prices (Goat)

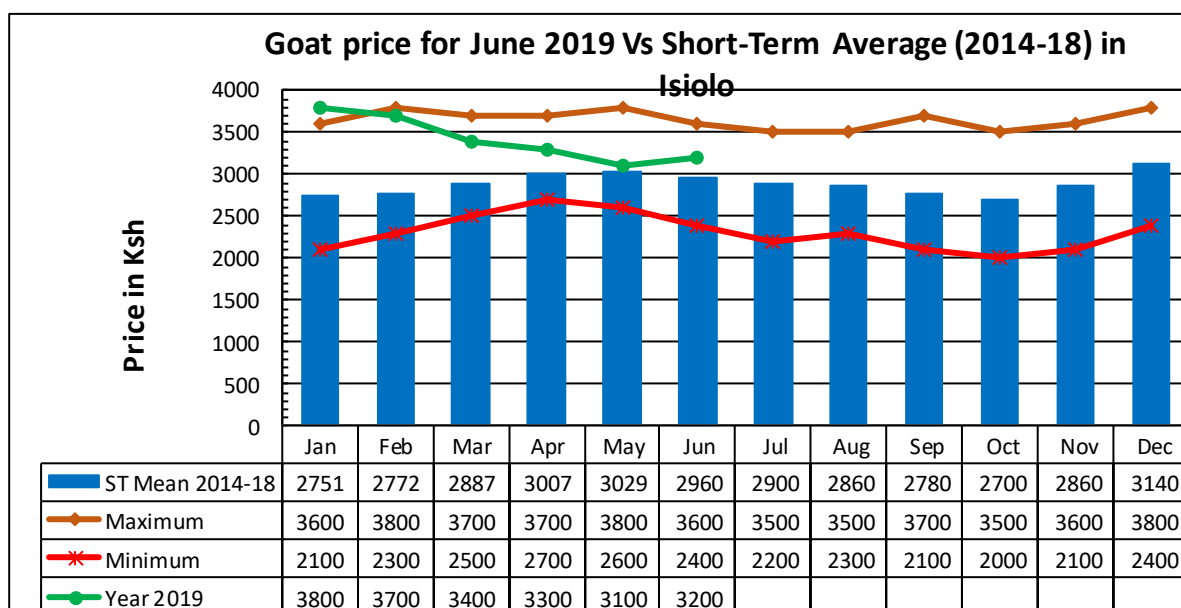


Figure 8: A graph of monthly average farm-gate goat price

- Average goat price stabilized at Ksh.3,200.00 in the month under review.
- The stability was partially attributed to a temporary increase in demand during the Islamic religious festivities, Eid ul Fitr, at the beginning of the month under review.
- There is however a likelihood of the small stock price reducing into the future should their body conditions weaken further due to the prevailing feed shortage in most grazing areas of the county.
- The least and highest market prices recorded were Ksh.3,300 and Ksh.4,000 in Oldonyiro and Isiolo Central markets respectively.
- Average goat price was 22 percent higher than the short-term average of Ksh.2,900 and equivalent to the period's maximum price of Ksh. 3,800.

4.2 CROP PRICES

4.2.1 Maize

- The market price of a kilogram of maize stabilized at an average of Ksh 55.00 during the month under review.

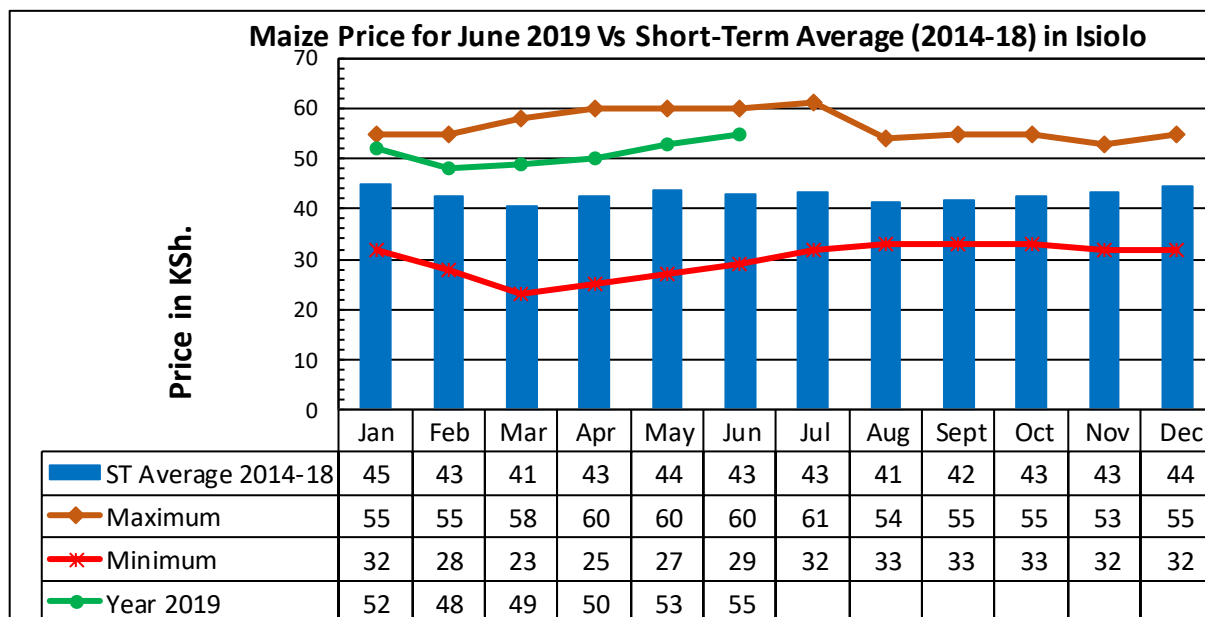


Figure 9: A graph of average maize (cereal) market price in the county

- The staple food commodity's price remained high for the third month in a row attributed to the low stocks of maize in the county.
- The cereals lowest price was Ksh. 45.00 in Isiolo town market and highest in Merti at Ksh.70. The cereal's price in rural markets including Merti, Bisan Biliqo and Sericho was relatively high as supplies were not consistent attributed to long distances and community cereal preferences.
- The price remained relatively low in the main markets such as Isiolo with a projected probability of increase due to expected poor yields as the harvest season beckons.
- Average price of maize was 27 percent higher than the three-year average of Ksh.43.00.

4.2.3 Beans

- The average price of beans increased slightly to Ksh.113.00 in the month under review from Ksh. 110.00 in the previous month.
- The relatively high price was attributed to the reducing stocks held by traders within and outside the county. The rise observed in the past few months was instigated by poor harvests in the previous short rains season.
- The pulse's price is expected to increase further as minimal harvests are expected in the current growing season following poor performance of this years long rains season.
- The highest price was recorded in Merti market in Merti sub-county which lies in the pastoral livelihood zone at an average of Ksh 130.00 while the lowest price was in Isiolo Cetnral and Kinna at Ksh. 100.

- The price was 22 percent higher than the short-term average price of Ksh. 90 during a similar period of the year.

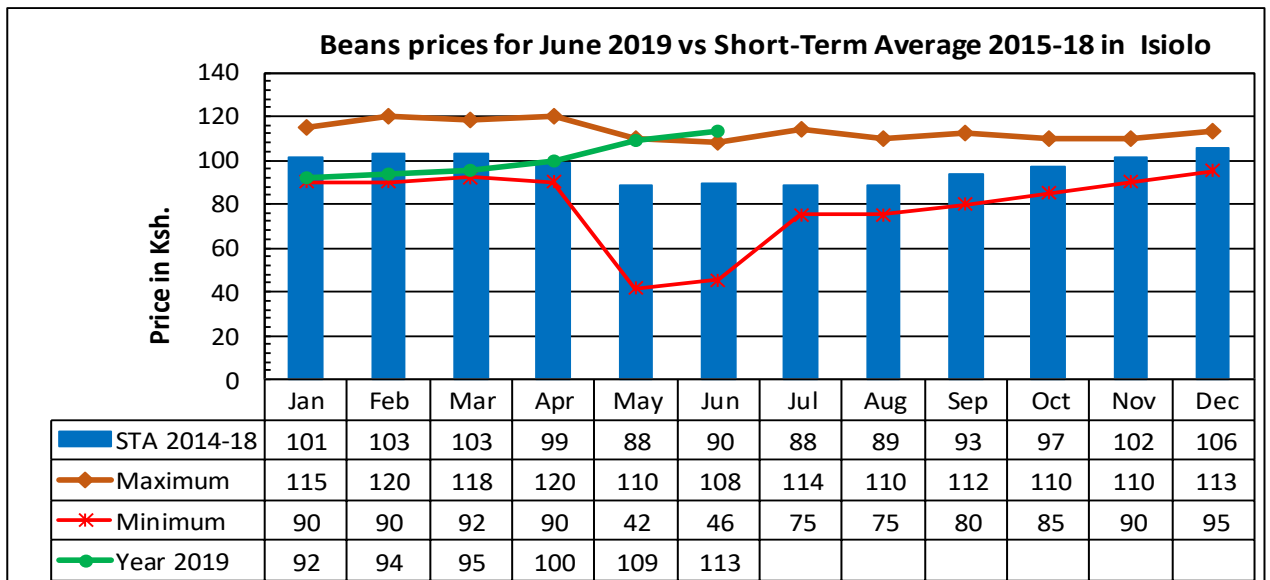


Figure 10: A graph showing average market price for pulses (beans)

4.3 Livestock Price Ratio/Terms of Trade

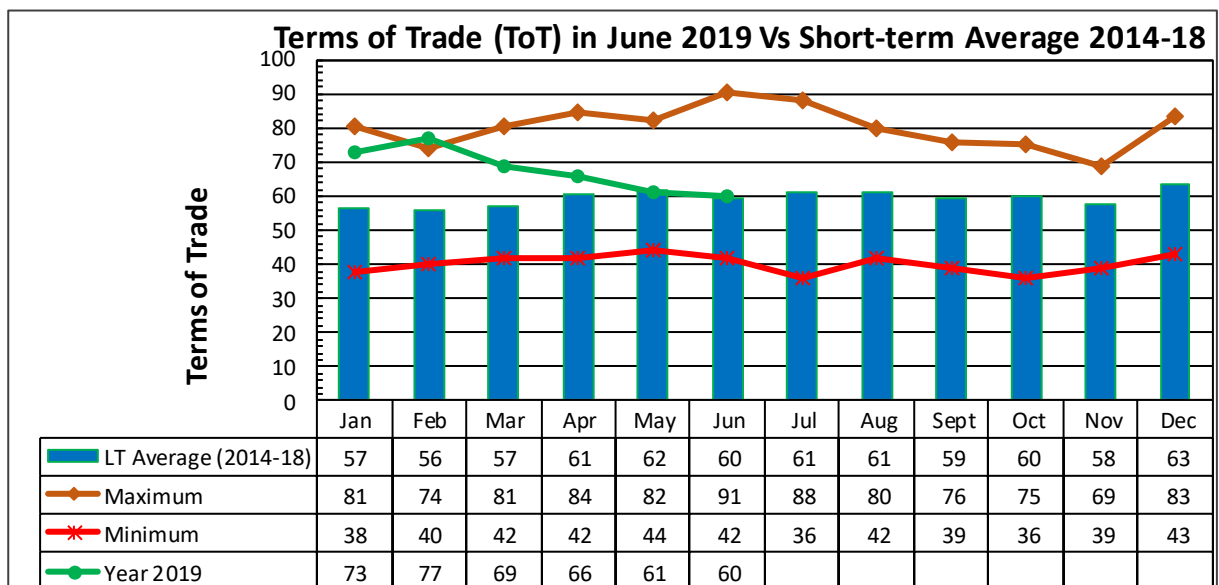


Figure 11: A graph showing the typical pastoralist households Terms of Trade in the county

- The Terms of Trade (the number of kilograms of maize a household would purchase after a sale of one goat) stabilized at 60kg/goat in the month under review which was equivalent to the short-term average of 60 kilograms of maize per goat.
- There has been a steady decline in the indicator that shows the purchasing power of a typical pastoral household.
- Purchasing power of pastoral households is expected to deteriorate moving forward as maize prices are expected to increase against a reverse trend for all livestock species.
- The period's slight increment in the level of purchasing power was mainly influenced by the temporal increment in goat prices occasioned by the high demand that was exhibited during the beginning of the month.
- The trend is expected to reverse beginning in the month of July henceforth.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

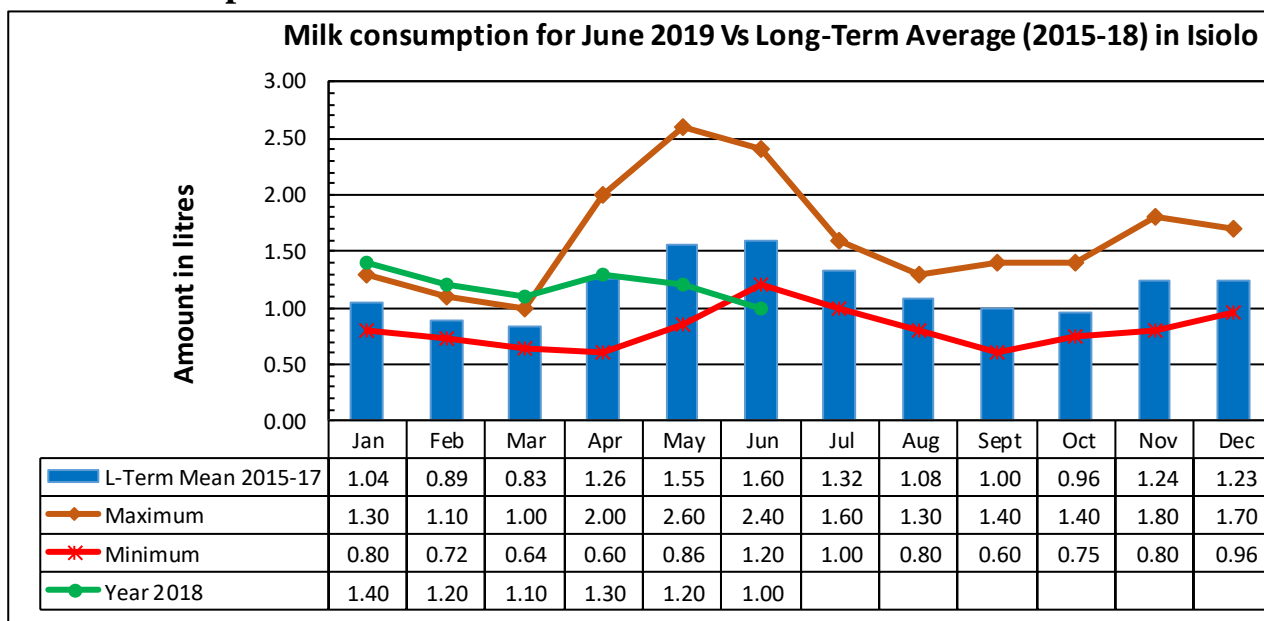


Figure 12: A graph showing the average milk production in the county

- Average milk consumption per household reduced slightly to 1.0 litres during the period under review from 1.20 litres in the previous month.
- The reduction in the amount consumed was partially be attributed to the declining rate of production attributed to the diminishing availability rangeland resources.
- The average consumption was 38 percent lower than the short-term average of 1.6 litres.
- Majority of the milk consumed at the households was from cattle and camel. Consumption was high in the pastoral livelihood zone litres as compared to the other two zones.

5.2 FOOD CONSUMPTION SCORE

- The proportion of households who were persistently food insecure increased insignificantly to 40.7 per cent in the month under review from 39 percent in the previous month.
- The relatively high proportion of households in the two categories is an indication of an overall fragile access and utilization of food commodities.
- There was an overall increase the proportion of households that are unable to meet their minimum dietary requirements; that is, slightly more than 40 per cent of the county's households.

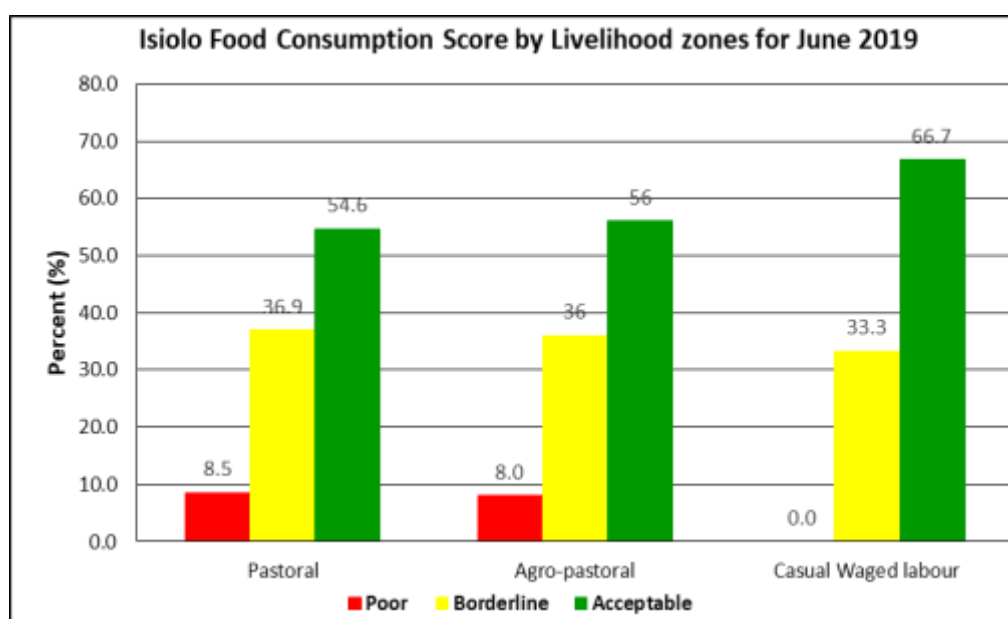


Figure 13: A graph showing the households' food consumption score

- The poor food consumption pattern was attributed to the relatively low Terms of Trade implying that household had limited access to a diverse and consistent availability of key food commodities in their meals.
- Similarly, there was a significant decline in household milk consumption in all pastoral and agro-pastoral livelihood zones following a reduction in the amount produced.
- Food consumption score is likely to worsen given the poor state of the production systems, especially the major livelihood zone, livestock production.
- *“A poor score implies households are consuming staples and vegetables every day and rarely consuming protein rich food while borderline FCS imply that households consumed staples and vegetables every day accompanied by oil and pulse 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 proportion of children at risk of malnutrition (whose MUAC measurement was below 135.0mm threshold) stabilized at 10.7 percent in the month under review.
- The stable trend could be attributed to a fairly sustained food availability and access capacity from the local markets. There was also a fair (though reduced when compared to the previous months) consumption of milk at the household.
- A greater proportion of children at risk of malnutrition were victims of poor meal frequency and limited dietary diversity. Incidence of endemic diseases was also a major factor in children getting into risk of malnutrition.
- The proportion of children at risk of malnutrition was 43 percent lower than the long-term average of 19.2 percent indicating a better nutrition situation compared to the past.
- The level of nutrition is currently better mainly attributed to a considerable level of natural resilience among communities aided by curative and therapeutic interventions by the department of health.
- The level of malnutrition is expected to increase considerably as the county enters into a period of a possible stressed livelihood productivity following poorly performed long rains season.

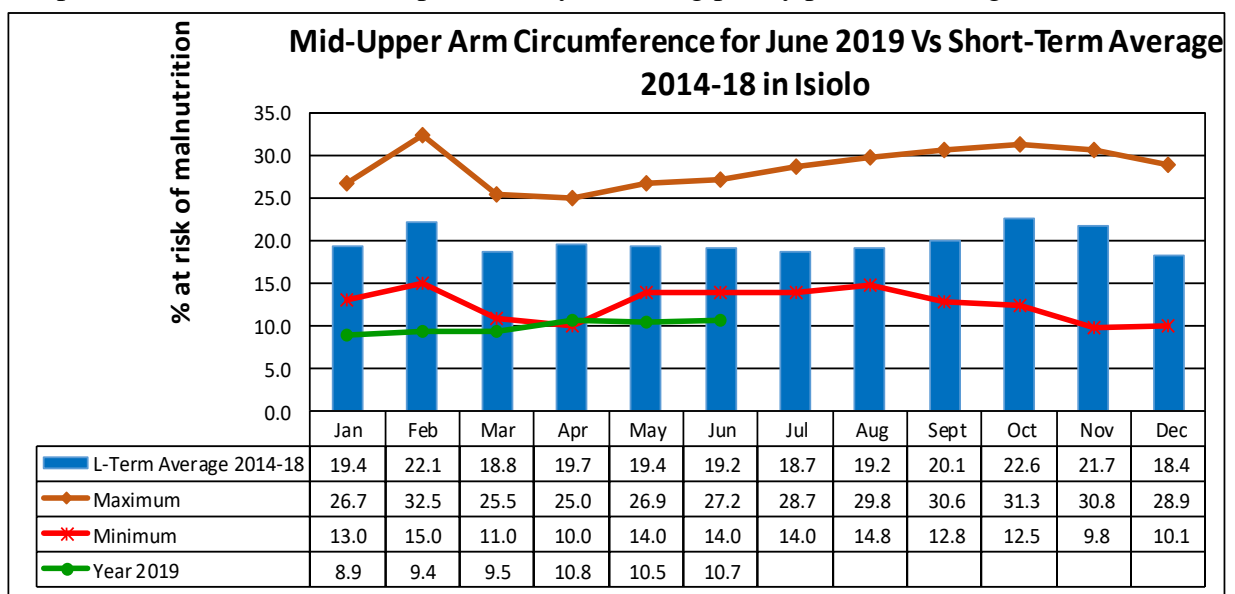


Figure 14: A graph showing the Mid-Upper Arm Circumference for children under 5 years of age

5.3.2 Health

- 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, malaria, intestinal worms and skin disease.

5.4 COPING STRATEGIES

- Coping Strategy Index (CSI) increased slightly to 10.2 in the month under review from 9.8 in the previous month.
- The observed slight increment in the index is an indication that households employed more coping strategies when compared to the previous month. This implies that the level of food security decreased considerably for a number of households across the county.
- The most commonly employed coping mechanisms over the period included reliance on less preferred and or expensive food, reduction of the number of meals, reduction in portion or size of meals.

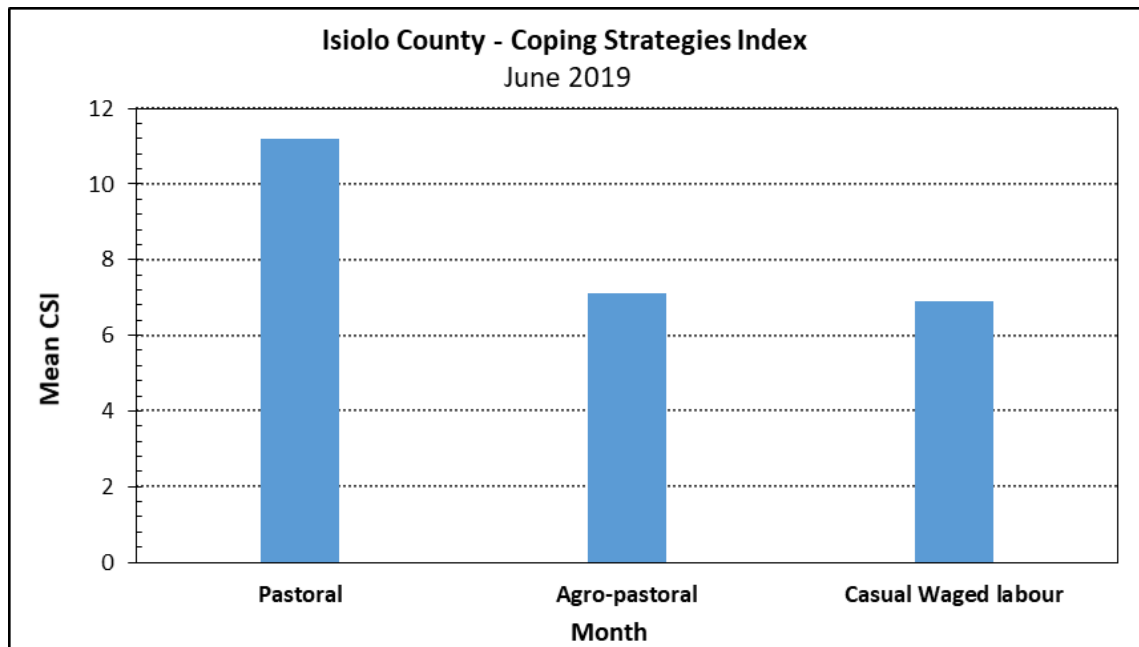


Figure 15: A graph showing the monthly reduced Coping Strategies Index

6.0 CURRENT INTERVENTION MEASURES (ACTION)

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
Peace talks in Kom Triangle, Sericho, Merti and Loruko	Charri	Isiolo North	NDMA, GoK,	1,500,000
Provision of fuel subsidy to 8 strategic boreholes	Cherab, Sericho and Burat	Isiolo North and Isiolo South	NDMA, County Government	100,000 goats and sheep and 50,000 cattle
Water Trucking in Cherab and Qurri	Cherab and Sericho	Isiolo South and Isiolo North	County Government NDMA	8,000 Households
Repairing of boreholes	Lenguruma, Urura and Badana	Isiolo North and Isiolo South	County Government	2,700 Households
Sensitization on commercial off-take	Cherab, Kinna, Oldonyiro and Sericho	Isiolo North and Isiolo South	NDMA	4 Livestock Markets
Drilling of 5 Boreholes	Cherab, Sericho and Oldonyiro	Isiolo North and Isiolo South	County Government DRSLP	3 in Cherab, 1 in Sericho and 1 in Oldonyiro
Cash Transfer programme	Cherab and Oldonyiro	Isiolo North and Isiolo South	WFP	6,600 Households
	Oldonyiro, Kinna, Burat and Ngaremara Garbatulla, Ngaremara, Burat, Oldonyiro		World Vision Kenya	1,000 Households

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	All wards	Garbatulla, Merti and Isiolo	National Government	55,000 beneficiaries 700 bags of maize in Garbatulla, Merti and Isiolo sub-counties

7. EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- Pressure is building up in Garbatulla, Sericho, Kinna and Oldonyiro wards following entry of herder groups from Merti, Marsabit, Samburu, Garissa and Wajir, as they seek to utilize the available forage.
- The ensuing competition for the available pasture and water has a high likelihood of fanning resource-based conflicts.

7.2 Migration

- Herders from Isiolo North, Garissa, Marsabit and Wajir moved their herds into Garbatulla sub-county, especially Sericho ward to utilize the partially regenerated pasture and browse in the area. The area was fortunate to receive some showers during the month.
- Herders from Samburu and Marsabit counties were reportedly migrating with their herds to Oldonyiro and Laikipia grazing areas which received late rains, most notably in May and June.
- There were noticeable internal movement of herders from other parts of the county to Isiolo Central, Burat and Ngaremara wards which received some showers, which led to a better regeneration of pasture when compared to other grazing areas of the county.

7.3 FOOD SECURITY PROGNOSIS

- The overall productivity of the pastoral and agro-pastoral livelihood zones was poor as occasioned by the poor performance of the long rains which has resulted insignificant forage development and water availability except in small sections of Sericho, Garbatulla, Burat, Kinna and Oldonyiro wards.
- Signs of a declining productivity in livestock were visible in both pastoral and agro-pastoral livelihood zones, where a declining trend in milk production was recorded. This trend is expected to worsen as the long dry spell sets in.
- In addition, livestock markets performed dismally compared to a similar period in the previous year, a risky trend that will lead to erosion of the relatively weak households' purchasing power in the face of deteriorating livestock body condition due to poor and declining pasture and water resources.
- On the other hand, crop production especially the rain fed system performed poorly following late onset and poor performance of the rains where very little harvest would be realized. The prolonged dry spell and inconsistent rains have had significant negative impacts on small-scale farming due to poor recharge in rivers and springs.
- Water availability in several parts of the county worsened following cessation of long rains season. In that regard, residents of majority of the pastoral livelihood zones in Merti and Garbatulla sub-counties are at risk of facing acute shortages following total failure of rains over the entire season.
- Access to food commodities was relatively stable during the month under review but expected to decline gradually as the dry spell sets in. The observed increment in coping strategies index was an indication of declining purchasing power and/or challenges in access to the commodities. Dietary diversity also declined slightly as shown by the increasing proportion of households in poor and borderline consumption groups.
- On the other hand, imbalanced bio-physical conditions would be a likely trigger of internal and out-migrations and resource-based conflicts. This may hinder livelihoods recovery, hence a threat to the already poor county food security situation.
- The overall county food security situation is fair and expected to deteriorate into the long dry season given the already declining terms of trade and the poor state of the main productive factors of the environment.

8. RECOMMENDATIONS

- Support peace building, conflict resolution and cohesion mechanisms in all sub-counties. Areas of major focus are Garbatulla, Burat, Sericho, Kinna and Oldonyiro where majority of herders have moved into to utilize the partially regenerating forage.
- Provision of fast moving spares.
- Purchase of water treatment kits.
- Support to water rapid response teams.
- Provide support for an active and continuous human and livestock disease surveillance for all possible disease pandemics.
- Sensitization of commercial livestock off-take in all wards but more focus should be given to Cherab, Charri, Sericho and Oldonyiro wards.
- Pre-positioning of livestock feeds in all wards.
- Scale up of water trucking in water shortage hot spots focusing on Cherab and Qurri which did not receive any rains.
- Continue the provision of relief food to the vulnerable households (those in Poor and Borderline consumption groups) in all wards.
- Support cash transfer programmes to vulnerable groups.
- Support pastoral communities in rangeland management to ensure that pastoral communities are able to utilize the available forage resources in organized grazing patterns and be able to prevent and control bush fires.
- Promotion of hygiene and sanitation practices especially the Community Led Total Sanitation (CLTS).