



A Vision 2030 Flagship Project
National Drought Management Authority
SAMBURU COUNTY
DROUGHT EARLY WARNING BULLETIN FOR JUNE 2020

JUNE 2020 EW PHASE

Drought Status: NORMAL

Shughuli za kawaida

Early Warning Phase Classification			
LIVELIHOOD ZONE	EW PHASE	TRENDS	
Agro-pastoral	Normal	Stable	
Pastoral (North)	Normal	Stable	
Pastoral (East)	Normal	Stable	
County	Normal	Stable	

Biophysical Indicators	Value	Normal range/Value	
VCI-3month (County)	78.93	35-50	
VCI-3month -Samburu East	71.98	35-50	
VCI-3month -Samburu North	85.39	35-50	
VCI-3month-Samburu West	85.03	35-50	
Production indicators	Value	Normal ranges	
Livestock Migration Pattern	No Migration	No Migration	
Livestock Body Conditions	Moderate to Good smooth appearance	Good Smooth appearance	
Milk Production	1.5	>1.67	
Livestock deaths due to drought	No death.	No death	
Access Indicators	Value	Normal ranges	
Terms of Trade (TOT)	77.5	>45.99	
Milk Consumption	1.1	>1.67	
Return distance (km)	Household	3.9	<5.16
	Livestock	6.6	<12.23
Acceptable FCS (%)	Pastoral	555.2	100
	Agro pastoral	93.3	100
Utilization indicators	Value	Normal ranges	
MUAC (%)	25.4	<15.77	
crisp	Mean	10.18	56

Drought Situation & EW Phase Classification

Biophysical Indicators

- Vegetation condition has remained above the normal ranges according to vegetation condition index.
- Surface water sources remained roughly 60 – 80 percent recharge across the livelihood zones.

Socio Economic Indicators Details

- Distances trekked by household and livestock to water points have remained below the long-term average.
- Minimal internal normal movement of cattle observed in marginal pockets across the livelihood zones.
- Milk production and consumption remained stable at household level.
- Good to fair body condition was observed for all livestock species across the livelihood zones.
- Market prices for all livestock species remained above normal during the period under review.
- Prices for maize/*posho* remained stable compared to last month prices.
- Favourable terms of trade continued to be noticed across the livelihood zones.
- The rate of children under five years of age worsened as measured by Mid Upper Arm Circumference (MUAC).

<ul style="list-style-type: none"> Short rains harvests Short dry spell Reduced milk yields Increased HH Food Stocks Land preparation 	<ul style="list-style-type: none"> Planting/Weeding Long rains High Calving Rate Milk Yields Increase 	<ul style="list-style-type: none"> Long rains harvests A long dry spell Land preparation Increased HH Food Stocks Kidding (Sept) 	<ul style="list-style-type: none"> Short rains Planting/weeding 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1.0 CLIMATIC CONDITIONS

1.1 Rainfall Performance

- The county remained predominantly dry in most parts of the county. The long rains season had a timely cessation occurring in the second dekad of May 2020.

1.2 Amount of Rainfall and Spatial Distribution

- During June 2020, marginal pockets of the county received precipitation with amounts recorded was 118 percent above the long-term average in the first dekad and 21 percent below average in the second dekad according to Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS) (Figure 1).
- The rainfall received in marginal pockets was poorly distributed in terms of space and fair in terms of time.

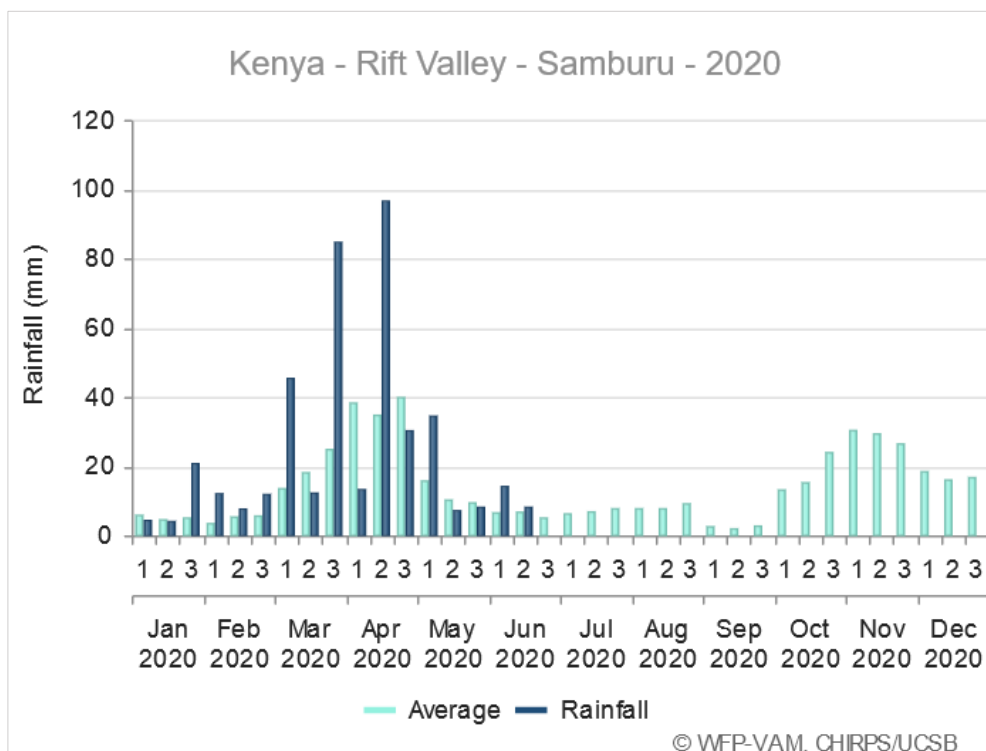


Figure 1: Graph Showing Rainfall Estimates (RFE) Trends for Samburu County
(Source : WFP-VAM, CHIRPS/UCSB)

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

2.1.1 Vegetation Condition Index (3 month-VCI)

- The county forage conditions has been in good condition both in quality and quantity due to favourable performance of the last two rainfall seasons.
- Satellite derived data indicated that vegetation greenness has remained above normal in the county since January as measured by the vegetation condition index.

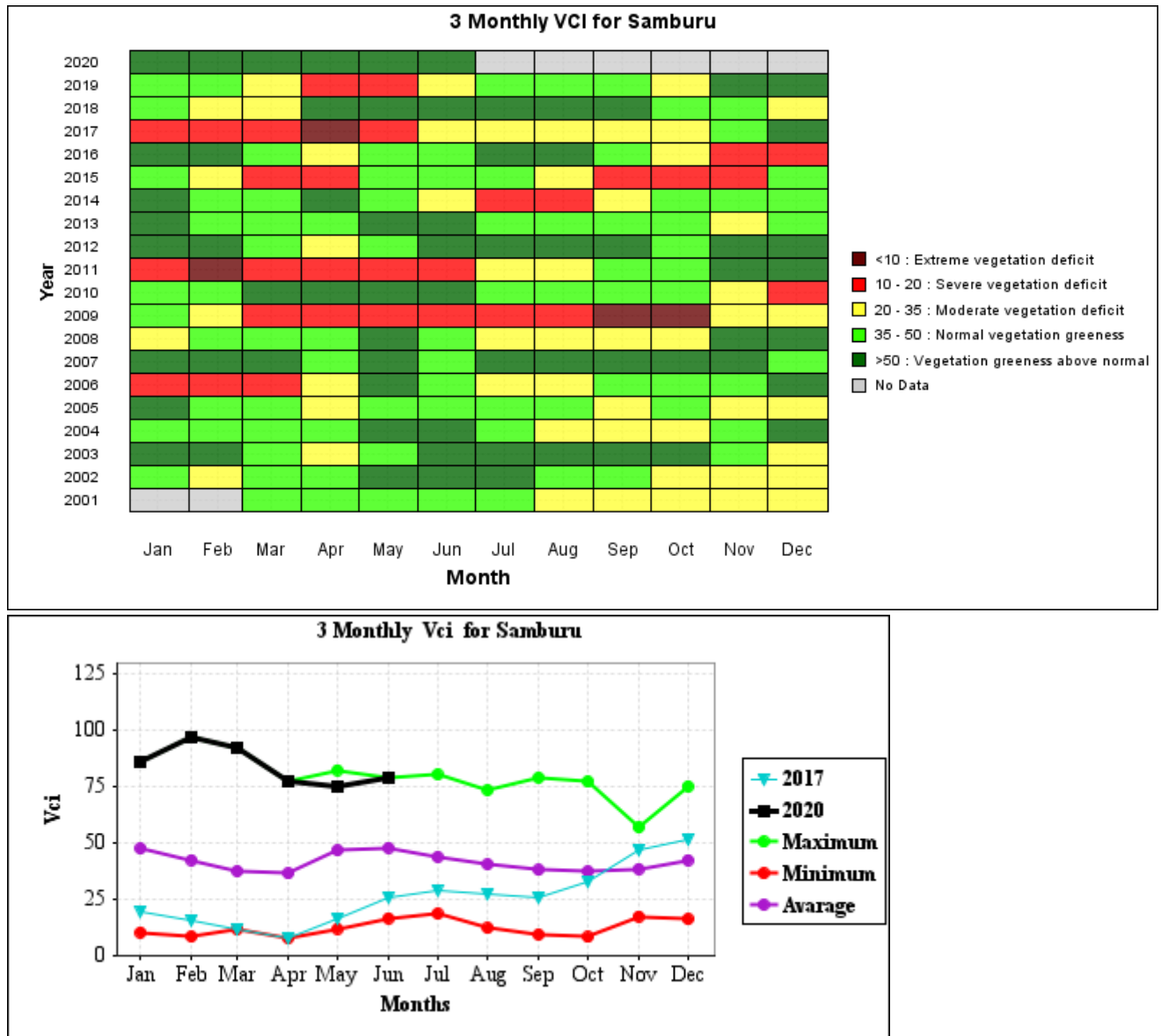


Figure 2: Matrix and Graph Showing VCI Trends for Samburu County
(Source: Boku University)

2.1.2 Field Observations (Pasture and Browse Conditions)

Quality and Quantity

- The forage condition was good however the quality is slightly deteriorating in terms quality in marginal pockets of pastoral livelihood zone. The good forage condition was supported by enhanced 2020 long rains performance coupled with showers received in May and June in some areas.
- Huge substantial amount of pasture is available in dry season grazing areas especially in conflict prone parts of Samburu north which include Suiyan, Angata Sikira, Kawop and parts of Charda.

Out of sampled key informants, a larger proportion of about 90.9 percent reported that pasture is good and 9.1 percent responded that pasture is fair.

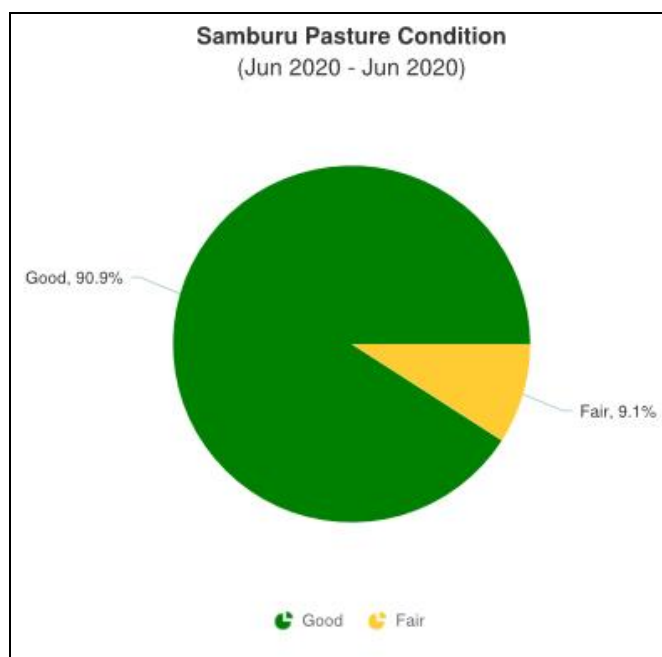


Figure 3: Pasture and Browse Condition

2.2. Water Resource

2.2.1 Sources

- Open surface water sources have remained relatively full in major parts of the county although deterioration has been noticed in marginal pockets of the pastoral livelihood zone. The recharge was attributed to enhanced 2020 long rains season.
- The most used water sources by households and livestock were hand dug and natural wells relied by 65.5 percent of the households and pans and dams at 20.7 percent. Water turbidity is high in open water sources as a result of wading by livestock and wildlife animals.
- Boreholes and springs were used by 3.4 and 10.3 percent of the households (Figure 4).
- The current water sources used both by livestock and household are normal at this time of the year.

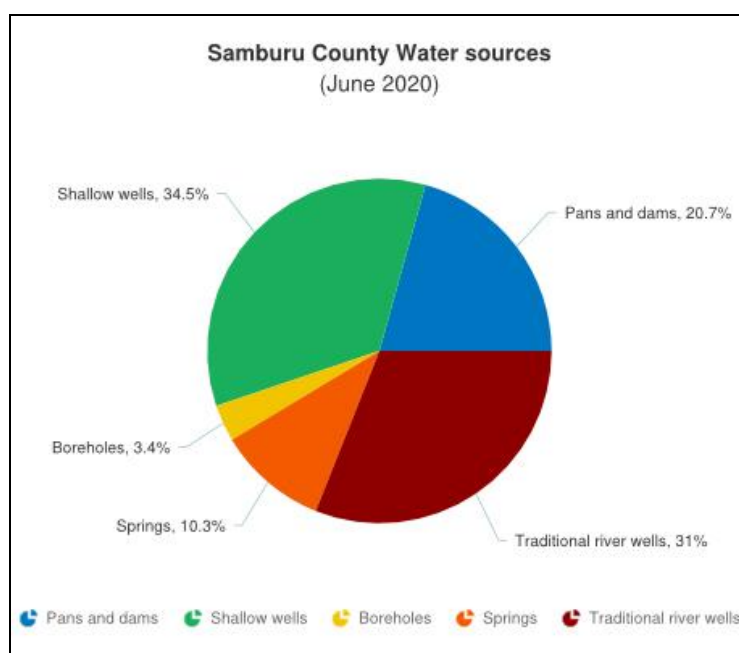


Figure 4: Common Water Sources

2.2.2 Household Access and Utilization

- Stability was noticed in households average trekking distances to water points with current average return distance standing at 3.9 km down from 4.2 km in the month of May. The stability can be attributed to improved recharge levels and drilling and equipping of more boreholes by government and partners.
- In comparison to long term average, the current return average distance remained below the long-term average by 25 percent and stable compared to wet years average at the same period of the year (Figure 5).

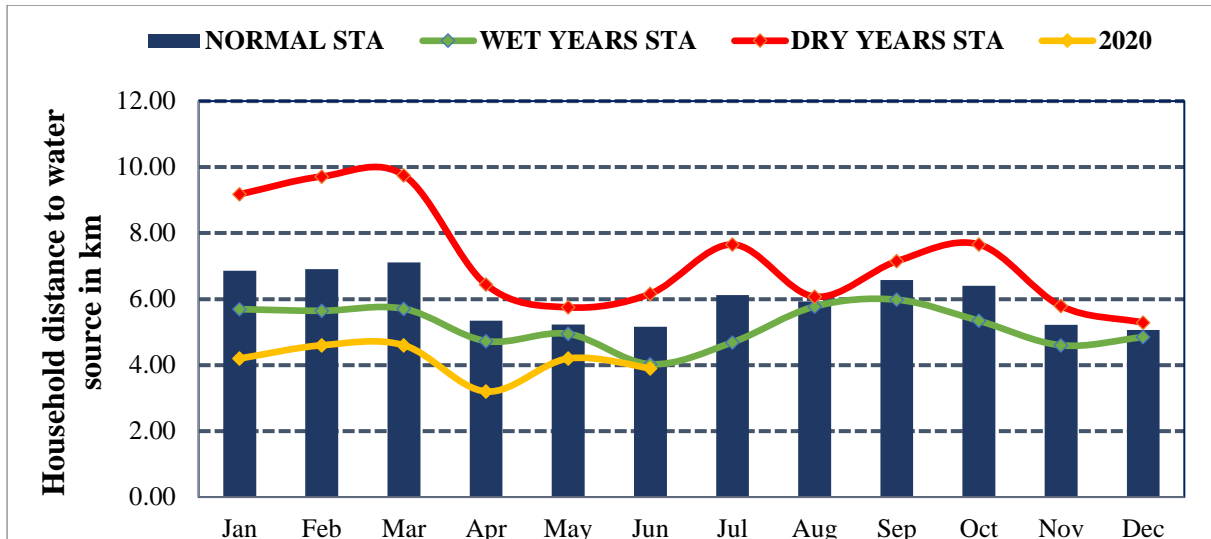


Figure 5: Average Distance Travelled by Households in Search of Water

2.2.3 Livestock Access (Grazing Distances to Water Points)

- Livestock average trekking distances remained stable compared to average distance recorded in the month of May 2020. Majority of households are watering cattle seven days a week save in Nachola ward watering after every other day.
- Current average trekking distance from grazing fields to watering points was 6.6 km compared to 6.7 km recorded last month as reported by community key informants.
- The current average trekking of 6.6 km remained below the short-term average by 46 percent at similar time of the year (Figure 6).

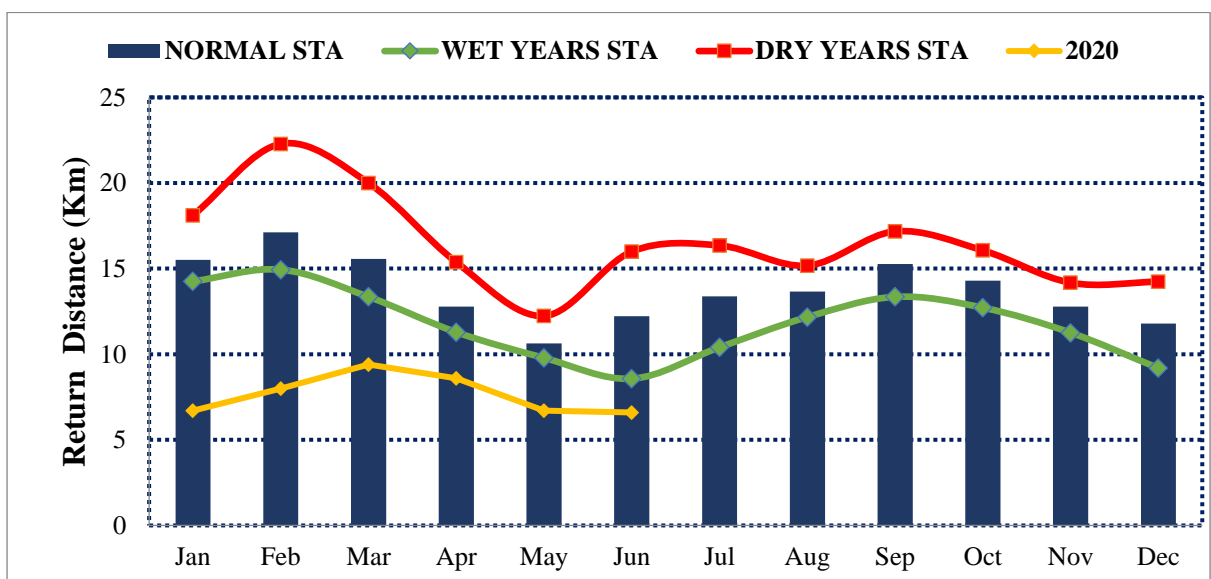


Figure 6: Distance Travelled from Grazing Areas to Water Points

3.0 PRODUCTION INDICATORS

3.1 Livestock Production

3.1.1 Livestock Body Condition

- Majority of interviewed community key informants reported that all species have good smooth appearance across the livelihood zones driven good forage condition and availability of water. The enhanced 2020 long rains performance has resulted to full recharge of surface water sources and improved vegetation condition.
- Body condition for all livestock species remained in good smooth with fat over back and tail head as per the livestock body condition scoring chart (Annex 1).

3.1.2 Livestock Diseases and Deaths

- Cases of East Coast Fever (ECF) continued to be reported in Samburu central with few reported fatalities of cattle. Endemic diseases such as contagious caprine pleuropneumonia (CCPP), Trypanosomiasis and Mange were reported across the county. No unusual occurrence of livestock mortalities reported across the livelihood zones.

3.1.3 Milk Production

- Majority of interviewed households reported stability in milk production with an average of 1.5 litres per household per day from 1.4 litres recorded in last month. Kidding and lambing have been noticed while cattle are currently weaning the calves. The current production was 10 percent below the long-term average.

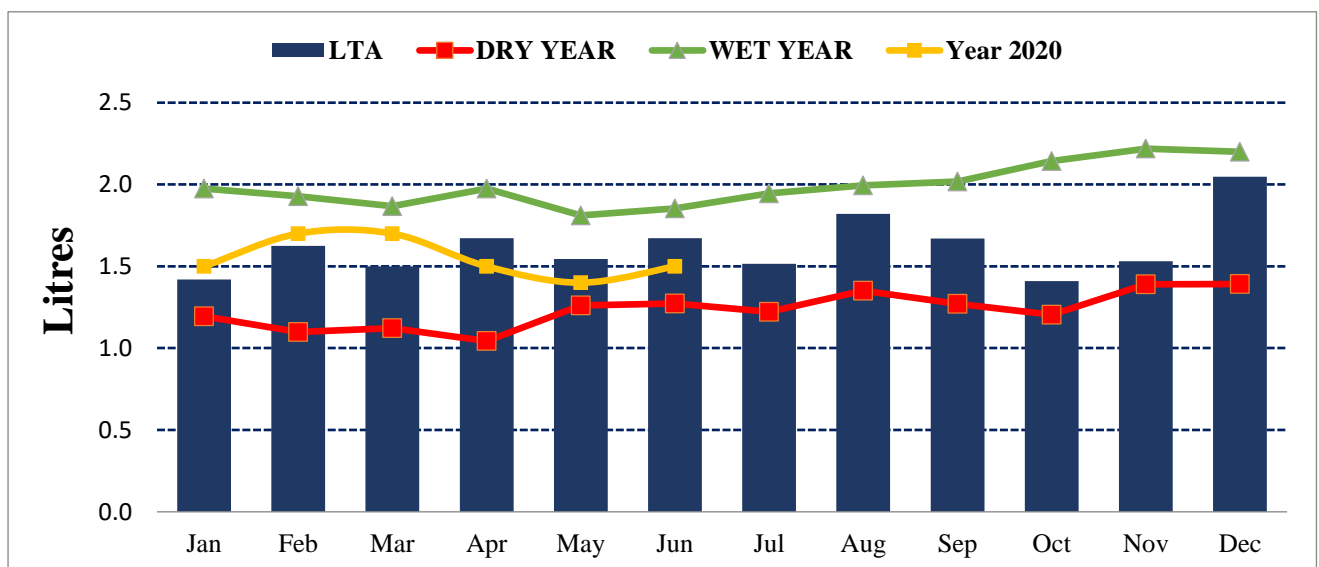


Figure 7: Trends in Milk Production per Household

3.2 Rain Fed Crop Production

3.2.1 Stage and Condition of Food Crops

- Crops in the farms are of good conditions in the Agro pastoral. Maize and beans that were dry planted are now in tussling and pods filling stage respectively while late planted are past the knee-high stage.

3.2.2 Harvest of Crop

- Few farmers that dry planted are currently utilizing the green beans in their farms for household consumption.

4.0 MARKET PERFORMANCE

4.1 Livestock Prices

4.1.1 Cattle Prices

- Cattle average price continued to gradually decline attributed to imperfect market operations due to limited livestock buyers resulting from COVID 19 movement restrictions in some towns and prohibition of public gatherings.
- During the month of June, the average price for a mature bull stands at Ksh 17,785 down from Ksh 18,800 reported in last month. High prices continued to be reported in Lolkuniani market which is a terminal market to pastoral feeder markets at Ksh 25,167 and Baragoi market situated in conflict prone zone had the lowest price of Ksh 13,000.
- In comparison to 2015-2019 average of Ksh 17,115, the current price of Ksh 17,785 was stable at the same period of the year (Figure 8).

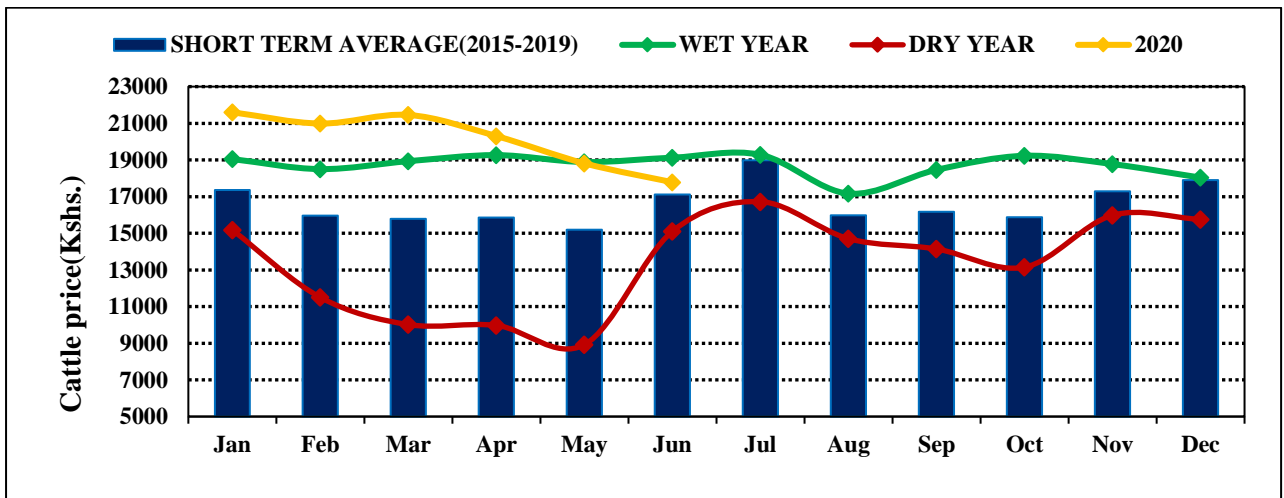


Figure 8: Graph Showing Cattle Selling Price Trends at Market Level

4.1.2 Goat Prices

- Unlike cattle, goat average market selling price increased from Ksh 3,570 to Ksh 3,785 attributed to good body condition coupled with locally available market from butcher shops.
- Lolkuniani market has the highest prices goats at Ksh 5,000 and lowest average price of Ksh 3,000 was recorded in Baragoi and Lpus markets.
- Current average price of Ksh 3,785 was 39 percent above long-term average at the same time of the year (Figure 9)

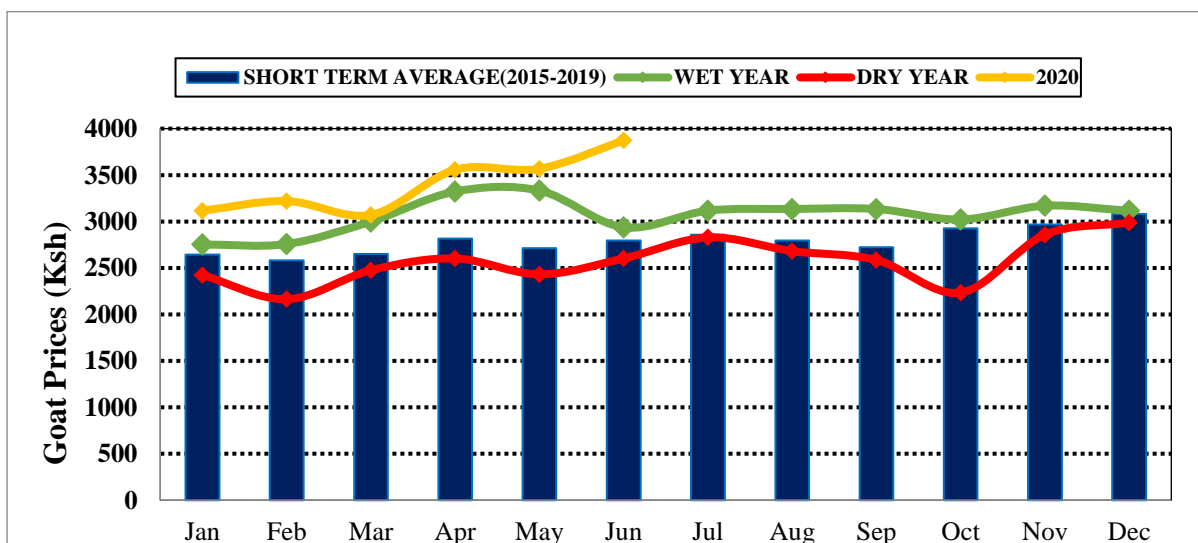


Figure 9: Graph Showing Goats' Selling Price Trends at market Level

4.1.3 Sheep Prices

- Like goats' prices, sheep prices also increased from Ksh 2,900 to Ksh 3,080 in the month of June. The increase is attributed to good body condition coupled with locally available market from butcher shops.
- Lolkuniani markets also recorded the highest prices for sheep with an average price of Ksh 3,500 and lowest in Baragoi market at Ksh 2,250 for a mature sized ram.
- Comparison to 2015 – 2019 long term average, the current price was 27 percent above the long-term average at the same time of the year.

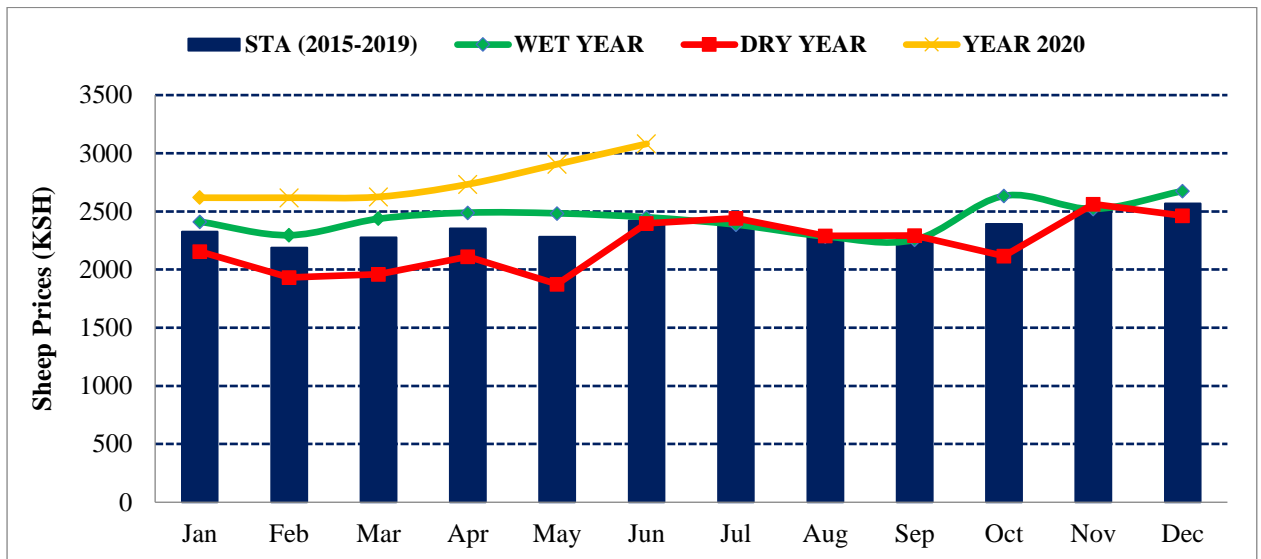


Figure 10: Graph Showing Sheep Selling Price Trends at Market Level

4.2 Crop Prices

4.2.1 Posho (Milled Maize)

- Stable trends have been noticed for maize prices since April attributed to availability and access to cereals due to last two seasons harvest and imports by traders from Meru, Nakuru and Uasin Gishu counties.
- According to market interviews, majority of markets reported a selling price of Ksh 50 per kilogram across the livelihood zones. The current average per kilogram price was five percent below the long-term average at the same time of the year (Figure 11).

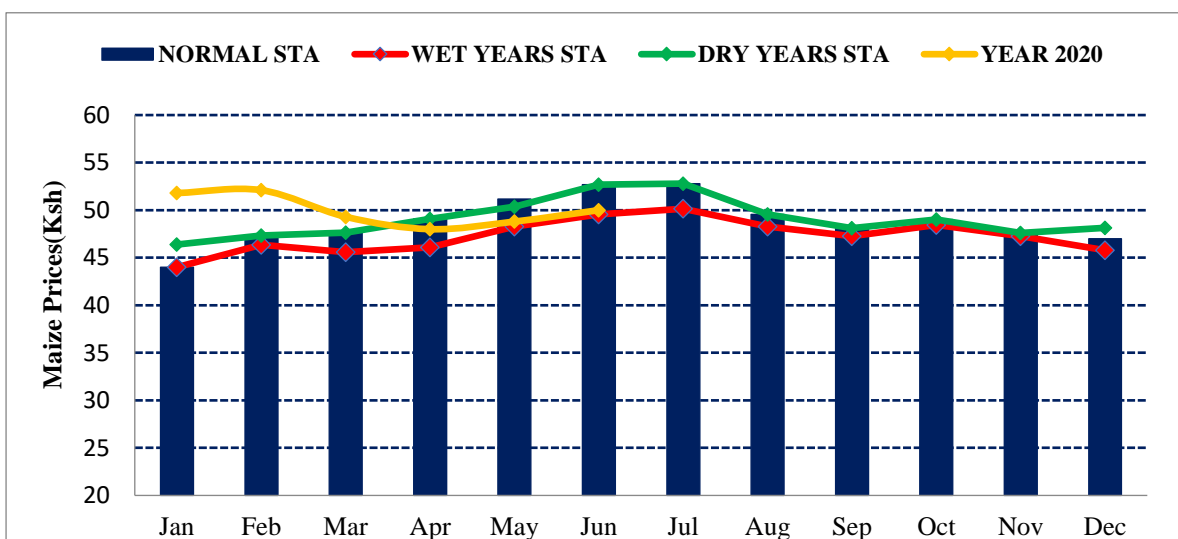


Figure 11: Graph Showing Maize Meal Price Trends

4.3 Livestock Price Ratio/Terms of Trade (TOT)

- The improved body condition for goats has resulted in better prices thus supporting improved household income access. The current term of trade was 77.4 kilograms of cereals fetched from sale of one mature goat up from 73.2 kilograms recorded in the month of May.
- Terms of trade are favourable as they remained above the long-term average and even the good year average at the same time of the year.
- The current goat to maize ration of 77.5 kilograms is above the long-term average by 69 percent at the same period of the year (Figure 12).

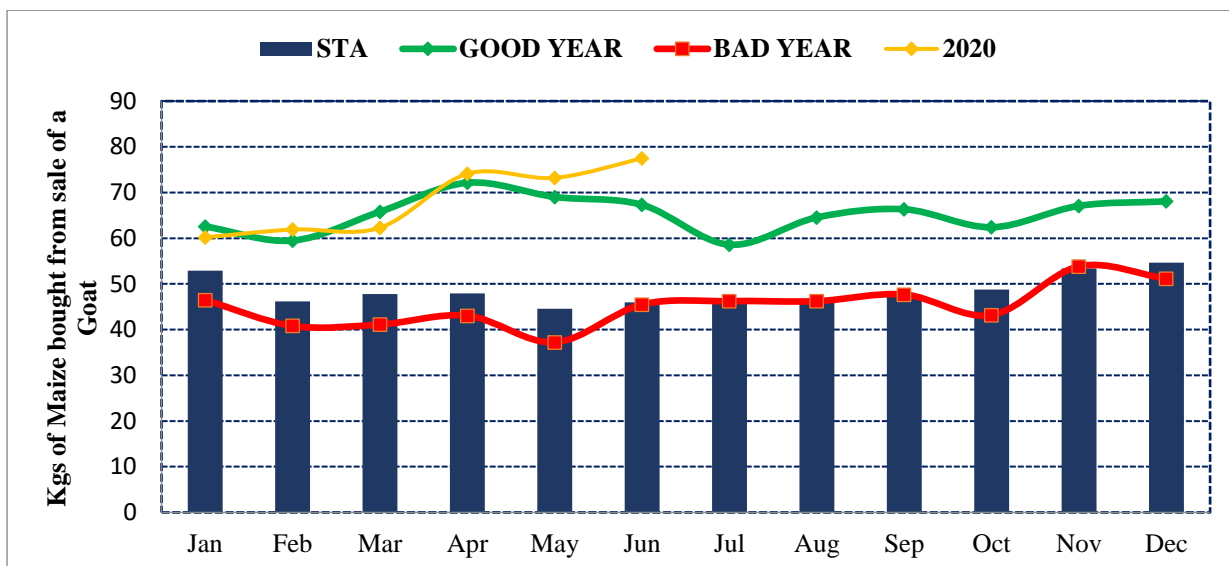


Figure 12: Trends in Terms of Trade (TOT)

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- Majority of households are consuming the milk produced at the household level average at 1.5 litres per households. The below normal milk production has resulted in low milk consumption at the household levels. Milk was mainly consumed by children under five and the elderly. The remaining amount of milk was sold at around Ksh 60 – 70 per litres and in some areas, camel milk is sold at Ksh 80 – 100 per litre.

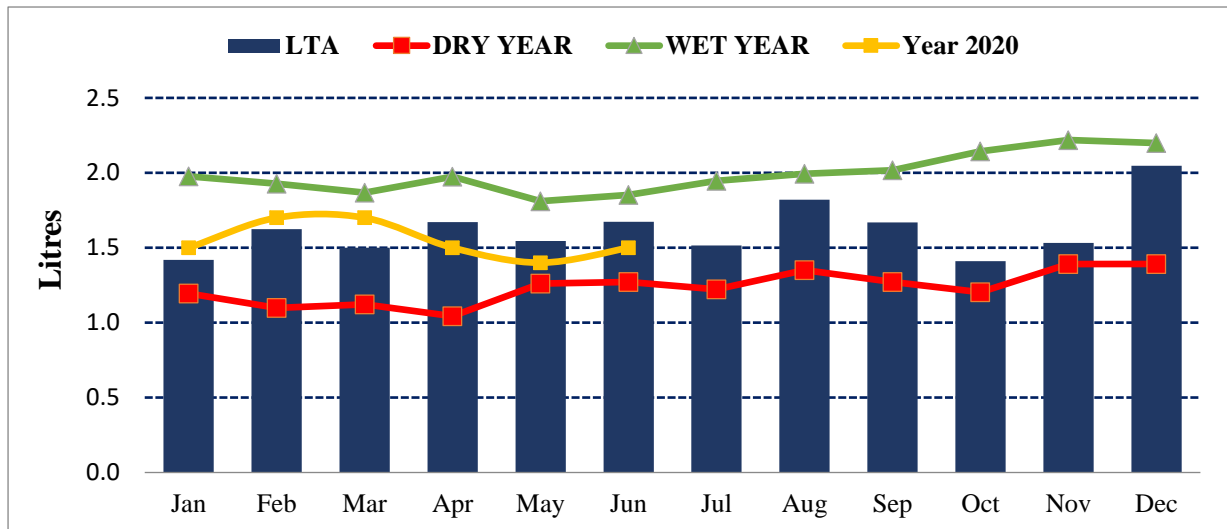


Figure 13: Trends in Milk Consumption per Household

5.2 Food Consumption Score (FCS)

- The food consumption at the household level remained relatively stable across the livelihoods driven by access to diverse food groups such as cereals, traditional green vegetables and milk. Additionally, the enhanced household purchasing power is also supporting household access to food commodities at the market level. Out of the sampled households, a larger proportion of about 93.3 and 55.2 percent remained in acceptable food consumption band in Agro pastoral and pastoral livelihood respectively.

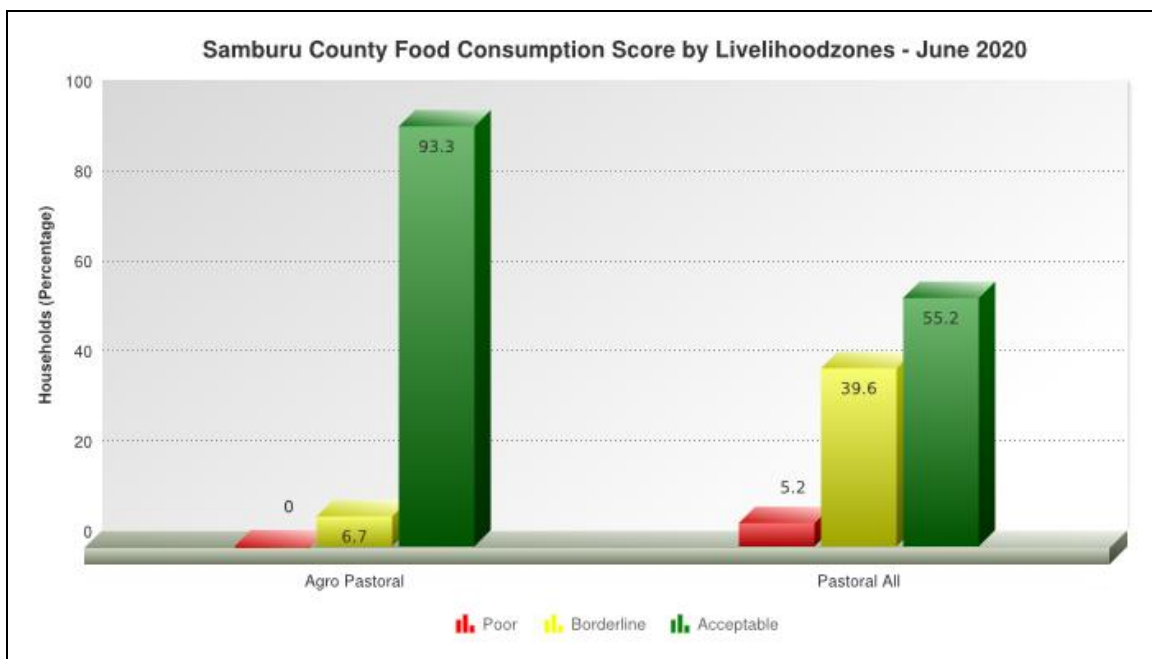


Figure 14: Bar Chart Showing FCS Per Livelihood zone

5.3 Health and Nutrition Status

5.3.1 MID Upper-Arm Circumference (MUAC 125-134 mm)

- Prevalence of children at risk of malnutrition have remained high since the month of January attributed to poor maternal child practices coupled with poor health care seeking services due to fear of COVID 19.
- The current proportion of sampled children under five of age at risk of malnutrition was 25.5 percent compared to 26.2 percent reported in last month.
- Ndoto and Nachola continued to reported high rates of children at risk of malnutrition standing at 31.3 and 29 percent respectively.

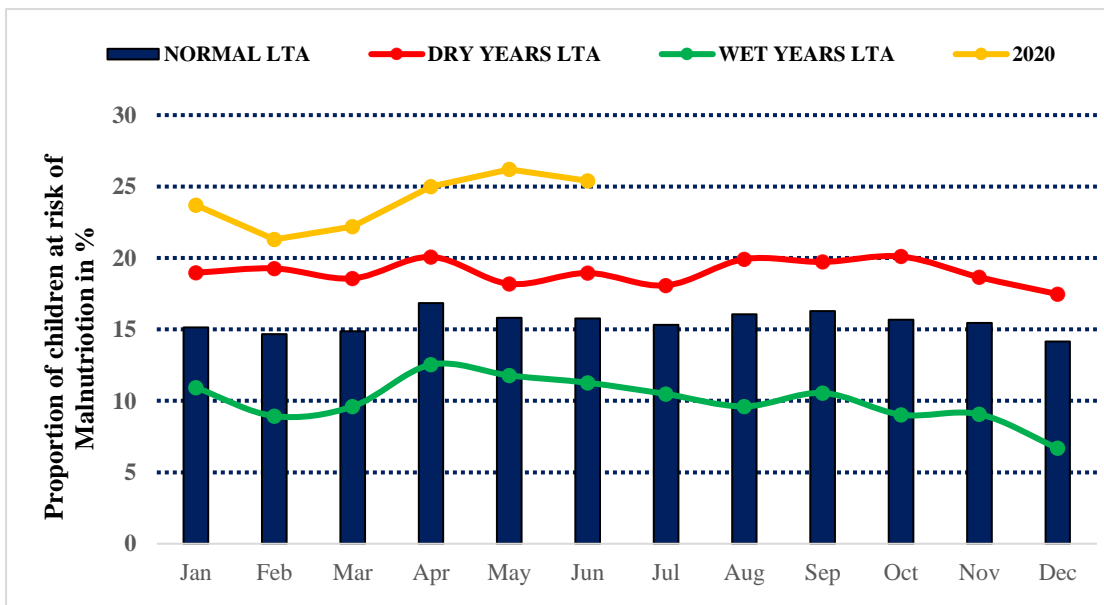


Figure 15: Graph showing average Nutritional status (MUAC)

5.3.2 Health

- The most common reported illness at facility level include upper respiratory tract infections (URTI), diarrhoea and pneumonia for both under five and general population as per Kenya Health Information System (KHIS) monthly data.

5.4 Reduced Coping Strategies Index (rCSI)

- Current mean coping mechanism was 10.18 down from 11.05 with pastoral households engaging in more coping strategies due to reliance to markets.
- Households reported frequently employing the following which include relied on less preferred and/or less expensive food and reduced the portion of meals taken in a day and borrow from the neighbours.

6.0 CURRENT INTERVENTIONS AND RECOMMENDATIONS

6.1 Non-Food On-going Interventions

Table 1: Non-food On-going Interventions

SECTOR	INTERVENTION	IMPLEMENTERS
	<ul style="list-style-type: none"> Provision of Bee hives to Samburu bee keepers cooperative society. Livestock Vaccinations against PPR across the county and FMD in north and east sub counties. Provision of rams for breeding to vulnerable households in Samburu central. 	World Vision, Kenya RPLRP, County department of Livestock
Water	<ul style="list-style-type: none"> Drilling of boreholes and ongoing equipping of drilled boreholes 	County Government
Agriculture	<ul style="list-style-type: none"> Monitoring of desert locust across the county. 	County Government, National Government, FAO, NYS, KDF
Health	<ul style="list-style-type: none"> Continuation of awareness creation for communities on prevention of COVID 19 pandemic and government directives 	MOH and Partners
Public Works	<ul style="list-style-type: none"> Ongoing grading and gravelling of Marram roads 	County Government, KeRRA

6.2 FOOD AID

- Provision and distribution of relief food of 5000 bags of maize and 500 bags beans each of 90 kgs by county department of special programs supported by World Food Program (WFP).

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- Isolated cases of livestock theft were reported in Samburu north and along Loosuk ward and Baringo County.

7.2 Migration

- Normal internal movement of cattle were noticed as the new initiates (*morans*) take the lead in cattle herding. Land demarcation in the highlands of Samburu central and eviction from Kirisia forest have led migration of cattle to Laikipia north sub county.
- Majority of livestock in other areas are currently grazing within the homesteads in the wet season grazing areas.

7.3 Food Security Prognosis

- The expected dry weather conditions in major parts of the county are likely to result in dry up of rangeland resources especially in pastoral livelihood zone.
- Majority of livestock are expected to continue grazing in wet season grazing areas through end of July.
- Harvesting of green beans in highlands of Samburu central is likely to reduce household reliance on markets for legumes.
- Maize market prices are likely to remain typically stable and near average to above average for the next one month.
- Slow operation of markets due to fears of COVID 19 pandemic is likely negatively affect livestock market prices.

8.0 RECOMMENDATIONS

Table 2: Proposed Interventions per Sector

SECTOR	INTERVENTION	Areas
Agriculture	<ul style="list-style-type: none">• Upscaling aerial and ground spraying of desert locust across the county to control spread of Nymphs (Hoppers)	<ul style="list-style-type: none">• County wide
Livestock	<ul style="list-style-type: none">• Vaccination against FMD, CCPP and Enterotoxaemia diseases	<ul style="list-style-type: none">• Pastoral livelihood zones
Health	<ul style="list-style-type: none">• Sensitization of good hygiene (hand washing), social distancing and symptoms of COVID 19.• Sensitization on treatment of drinking water as most households are accessing water from unprotected sources	<ul style="list-style-type: none">• County wide

Annexes

Table 3: Livestock Body Condition Scoring Chart

Score	Body Condition	Warning Stage
1	Emaciated, little muscle left	Emergency
2	Very thin no fat, bones visible	
3	Thin fore ribs visible	Alert Worsening/Alarm
4	Borderline fore-ribs not visible. 12th & 13th ribs visible	Alert
5	Moderate. neither fat nor thin	Normal/Alert
6	Good smooth appearance	
7	Very Good Smooth with fat over back and tail head	Normal
8	Fat, Blocky. Bone over back not visible	
9	Very Fat Tail buried and in fat	