



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

APRIL 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	Worsening
County	Normal	Stable

Biophysical Indicators	Value	Normal range/Value	
VCI-3month (County)	77.19	35-50	
VCI-3month -Samburu East	70.01	35-50	
VCI-3month -Samburu North	83.45	35-50	
VCI-3month-Samburu West	84.93	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)	74.1	>47.92	
Milk Consumption	1.5	>1.61	
Return distance (km)	Household	3.2	<5.4
	Livestock	8.6	<12.8
Acceptable FCS (%)	Pastoral	64.5	100
	Agro pastoral	77.8	100
Utilization indicators	Value	Normal ranges	
MUAC (%)	25	<16.84	
rCSI	Mean	10.81	<56

Drought Situation & EW Phase Classification

Biophysical Indicators

- Rangeland resources are rejuvenating further following the onset of long rains.

Socio Economic Indicators Details

- Household and livestock trekking distances to water points remained below the long-term average.
- All livestock are grazing within the wet season grazing areas.
- Milk production and consumption remained relatively stable at household level.
- Good to fair livestock body condition continued to be observed.
- Market prices for all livestock species remained above normal during the period under review.
- Maize/*posho* prices are stable compared to last month prices.
- Terms of trade remained favourable and above long-term average.
- The proportion of sampled children under five years of age worsened indicating critical situation 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 received heavy rainfall as from 17th of April 2020 that progressed well towards the end of the month.
- The onset was fully realized in the second dekad of the month of April as opposed to normally third dekad of March.

1.2 Amount of Rainfall and Spatial Distribution

- Light showers were received in the first dekad of the month however its peaked with heavy intensity in the last two dekads of the month with onset experienced in the second dekad of the month.
- According to satellite rainfall estimates (RFE), 96.4 mm were recorded in the second dekad against long term average of 34.6 mm and 30.1 mm in third dekad against long term average of 39.7 mm (Figure 1). The Kenya meteorological outlook for May 2020 and weather review for April 2020 indicates that the county generally received 75.1 – 125 percent of the normal rainfall.
- The distribution was good in terms of time and space as rains were received across the livelihood zones.

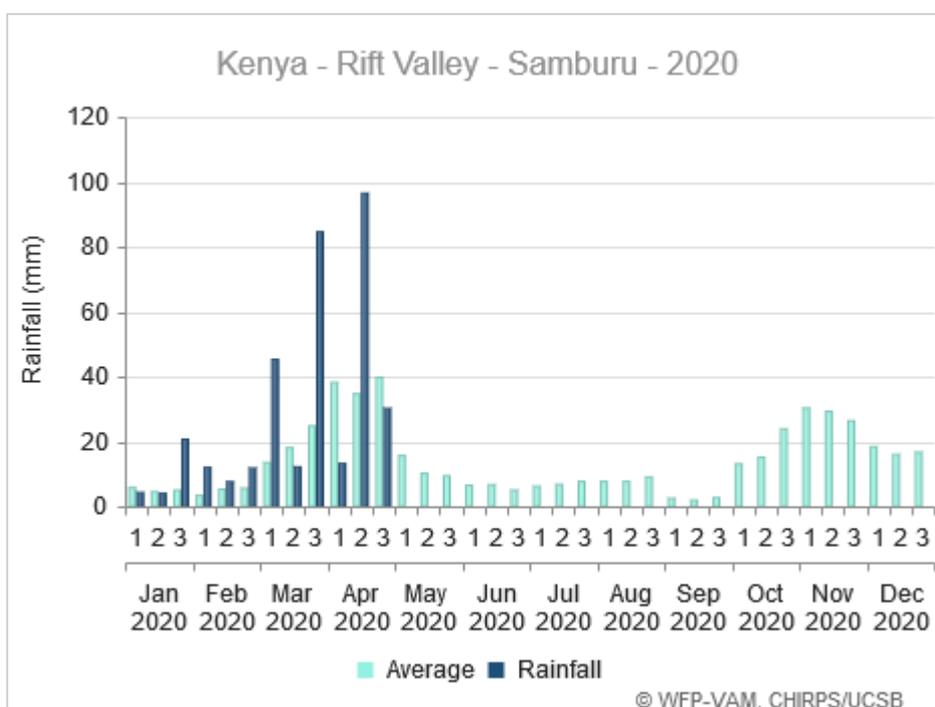


Figure 1: Graph Showing Rainfall Estimates (RFE) Trends for Samburu County (Source : WFP-VAM, CHIRPS/UCSB)

1.3 Other Events

1.3.1 Desert Locust Invasion

- New swarms of locust were experienced across the county mainly in Ndoto, Nyiro, Waso and Wamba west wards. The collaboration of multi-stakeholders managed to spray over 2000 swarms with estimated affected population being around 30,000 households (County locust updates report). The hoppers are a threat to farmers preparing to plant crops in March – May 2020 long rains season.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

2.1.1 Vegetation Condition Index (3 month-VCI)

- Favourable weather conditions have sustained good rangeland resources since November 2019 attributed good performance of the 2019 short rains coupled with off-season rains experienced in January and February 2020. The onset of long rains will likely support further regeneration of vegetation cover.
- The county vegetation condition remained in vegetation greenness above normal band as per satellite imaginary data measured by VCI (Figure 2).

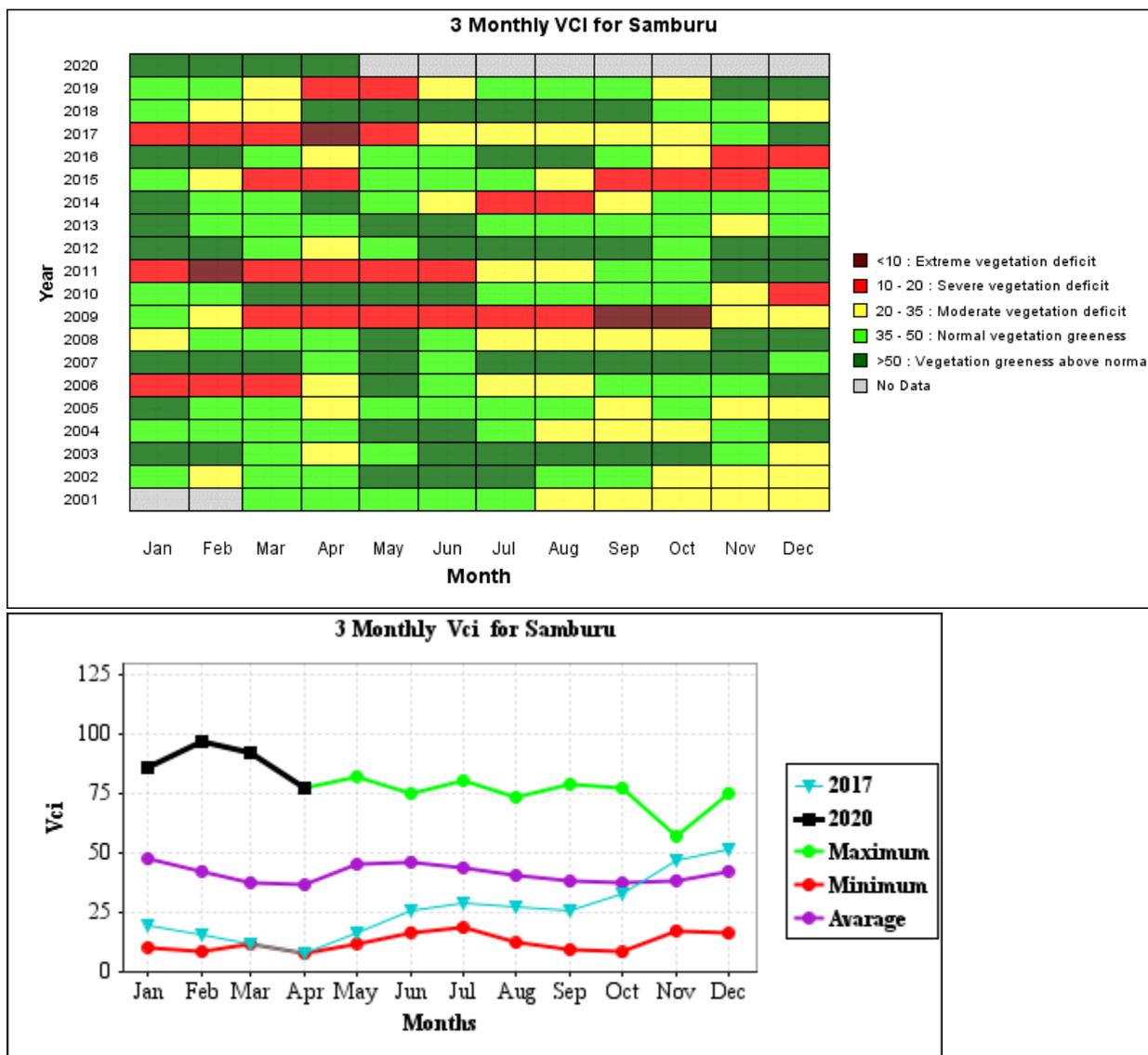


Figure 2: Matrix and Graph Showing VCI Trends for Samburu County
(Source: Boku University)

2.1.2 Field Observations (Pasture and Browse Conditions)

Quality and Quantity

- Vegetation condition has slightly deteriorated in pastoral areas due to desert locust that invaded browse and pastures and utilization by livestock. However, the beginning of long rains is likely to support regeneration of forage in the next month.
- Majority of interviewed key informants reported that both pasture and browse was good. Out of the sampled key informants, 77.3 and 81.8 percent responded that pasture and browse was good respectively.

- The rangeland condition is currently above normal as compared to previous years due to good performance of 2019 short rains coupled with sporadic off – season rains which were received in January, February and March.

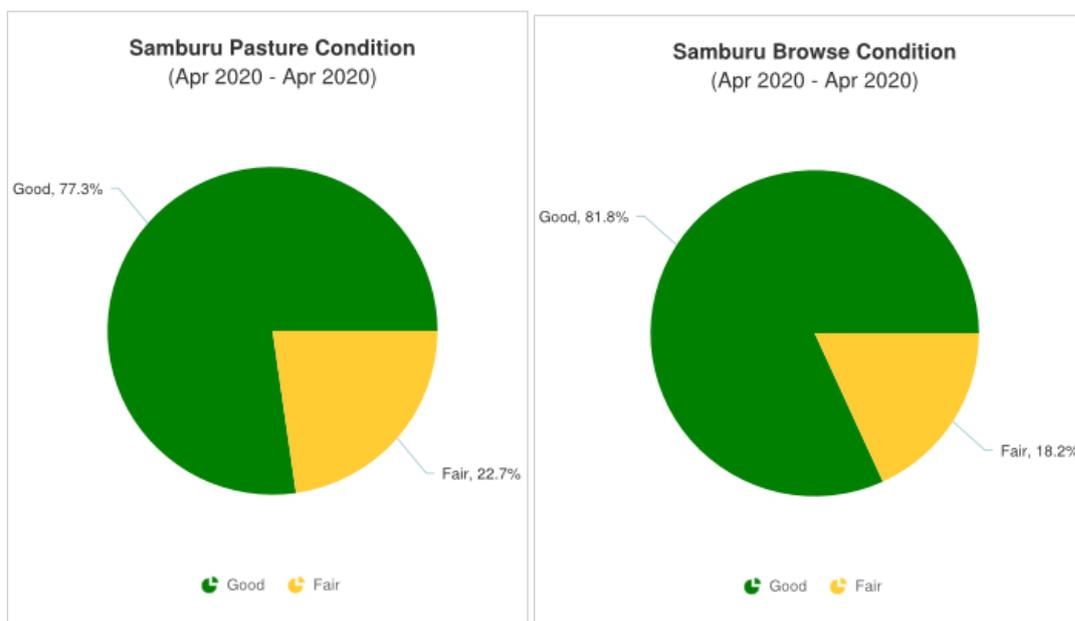


Figure 3: Pasture and Browse Condition

2.2. Water Resource

2.2.1 Sources

- The onset of the long rains has replenished surface water sources to their full capacity resulting in increase in usage of surface water sources. Natural ponds and hand dug wells were relied by approximately 56 percent of the sampled households up from 41.4 percent in the previous month.
- Pans and dam’s usage decreased to 16 percent from 24.1 percent attributed to availability of water in streams and natural ponds closer to homesteads.
- Boreholes were relied by 12 percent of the households while springs and rivers were used by 8 percent of the population each (Figure 4).

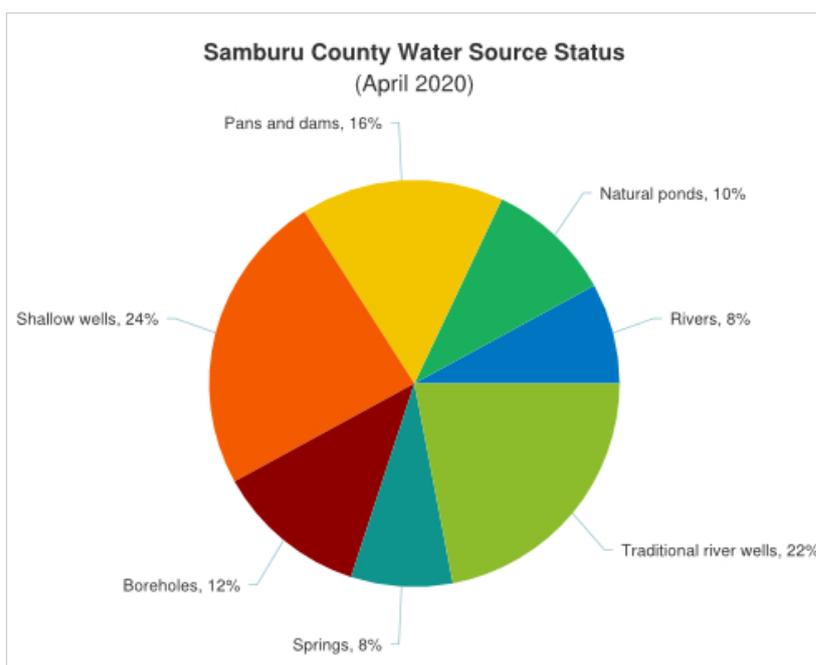


Figure 4: Common Water Sources

2.2.2 Household Access and Utilization

- The beginning of the long rains has relief household water stress as the surface water sources have been recharged to full capacity. The recharge has resulted in decrease in trekking distances to 3.2 km from 4.6 km recorded in last month.
- Compared to 2015-2019 average, current average household trekking distance was 40 percent below the long-term average at the same period of the year (Figure 5).

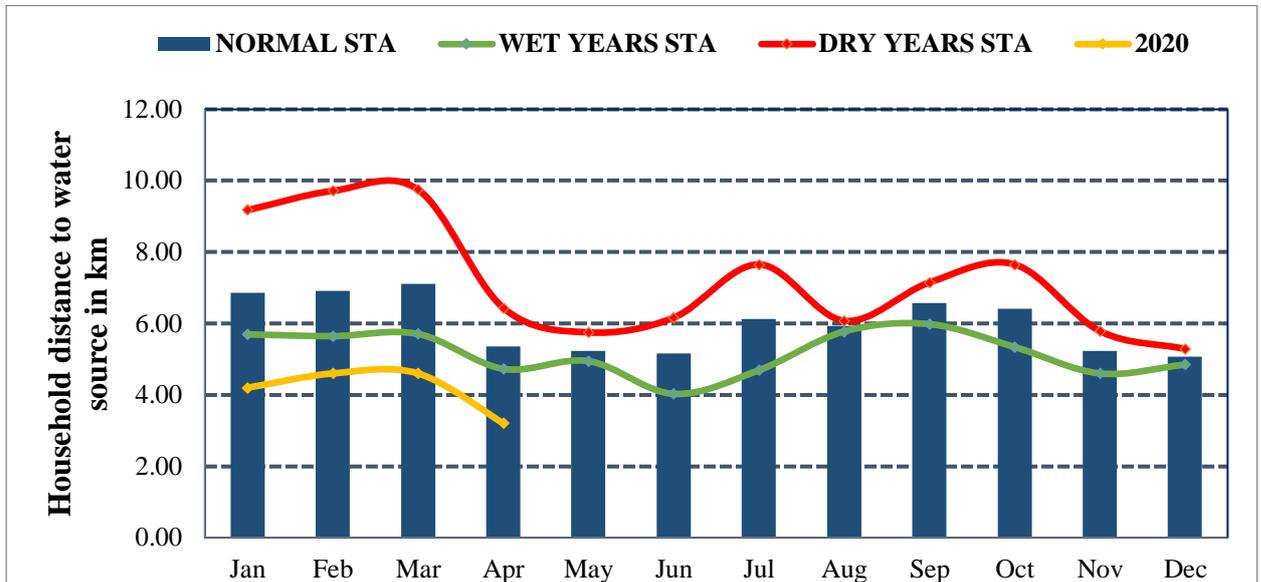


Figure 5: Average Distance Travelled by Households in Search of Water

2.2.3 Livestock Access (Grazing Distances to Water Points)

- The heavy rainfall recorded in most parts of the county in the second dekad of April resulted in recharge of surface water sources thus livestock water access improved consequently stabilizing grazing distances.
- The current average return distance was 8.6 km compared to 9.4 km recorded in the month of March.
- Livestock from Wamba west and Waso wards trekked longest distances from grazing fields to watering points of about 12 km each.
- The situation currently remained below the short-term average by 33 percent at similar time of the year

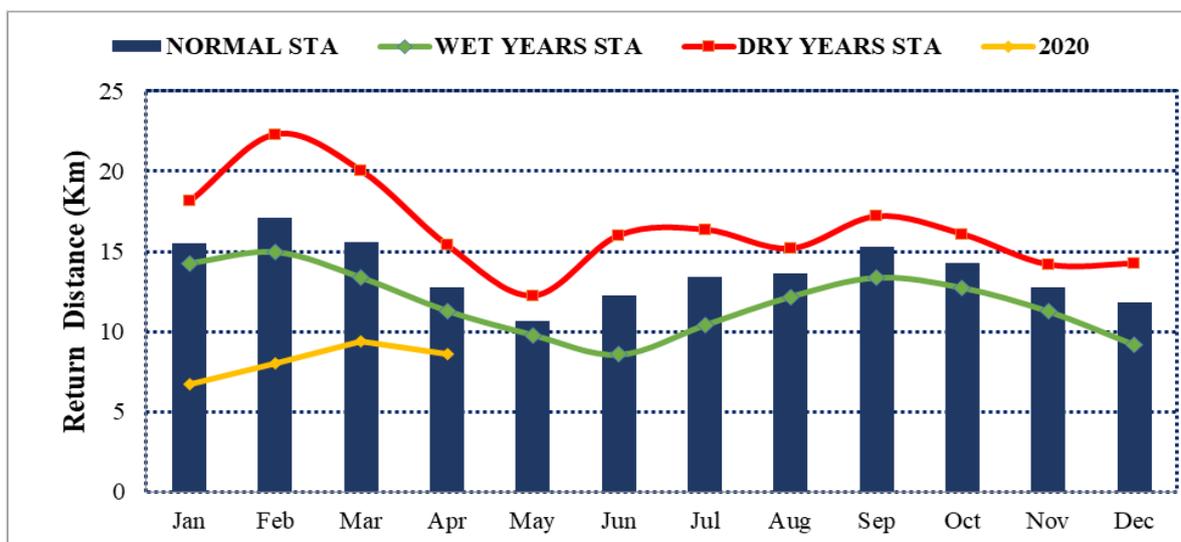


Figure 6: Distance Travelled from Grazing Areas to Water Points

3.0 PRODUCTION INDICATORS

3.1 Livestock Production

3.1.1 Livestock Body Condition

- Availability of forage and water resources have supported good livestock body conditions although smaller proportion of livestock had fair body condition due to effects of diseases such as foot and mouth in cattle and foot rot in goats. The current body condition is very 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

- Foot rot for goats and sheep continued to be reported in Samburu central sub-county affecting particularly goats and sheep. Foot and mouth also reported in Loosuk wards and the department of veterinary is currently vaccinated cattle in Suguta, Lodokejek, Loosuk, Maralal, Poro, Angata Nanyukie and Baawa wards. Other endemic diseases reported include contagious caprine pleuropneumonia (CCPP) and goat pox. No unusual occurrence of livestock mortalities reported across the livelihood zones.

3.1.3 Milk Production

- Current milk production was 1.5 litres per household per day which was 24 percent below the long-term average. Community interviews indicated that the milk produced are majorly from cattle and in some cases camel in the pastoral areas.

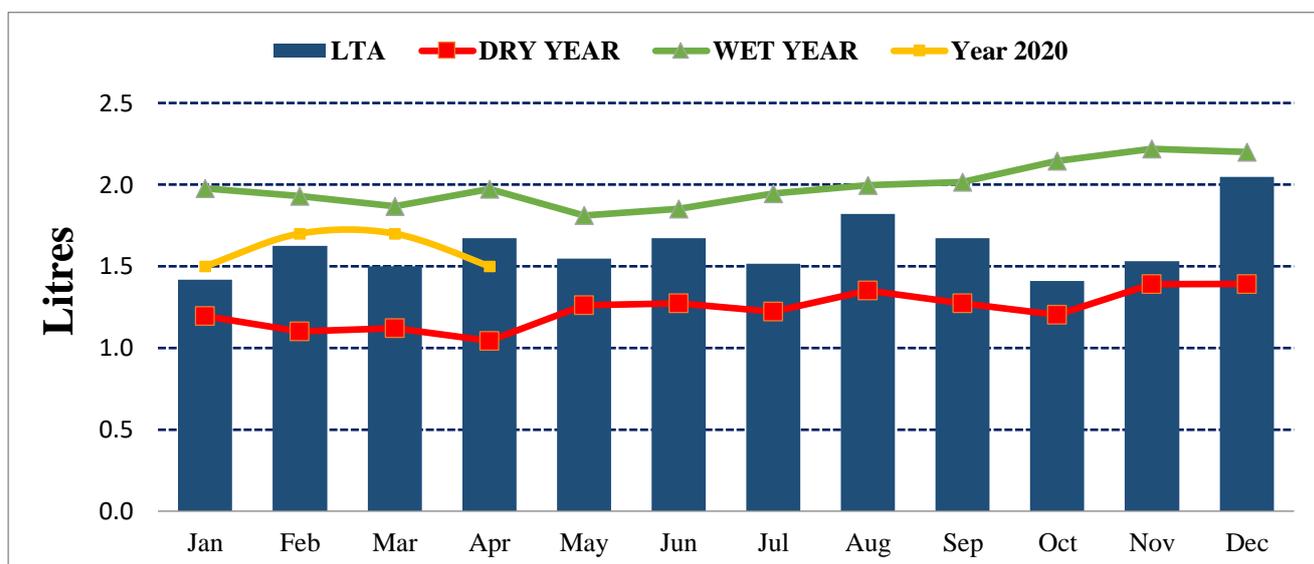


Figure 7: Trends in Milk Production per Household

3.2 Rain Fed Crop Production

3.2.1 Stage and Condition of Food Crops

- Most farmers are currently planting with a few that dry planted maize and beans are currently doing first weeding.

3.2.2 Harvest of Crop

- No harvest reported during the period under review.

4.0 MARKET PERFORMANCE

4.1 Livestock Prices

4.1.1 Cattle Prices

- Cattle average selling price remained high supported by good body condition however there was a slight decrease of about by 5 percent from last month price. The decrease is attributed to few buyers due to government directives that affected market operations.
- The current price was Ksh 20,300 for a medium sized bull which was stable compared to last month price of Ksh 21,455.
- High prices were recorded in Lolkuniani market which is a terminal market to feeder markets with an average price of Ksh 26,250 which is decrease compared to last month price of Ksh 30,333.
- Despite the price decrease, the current price of Ksh 20,300 was above the 2015 – 2019 long term average by 28 percent at the same time of the year (Figure 8).

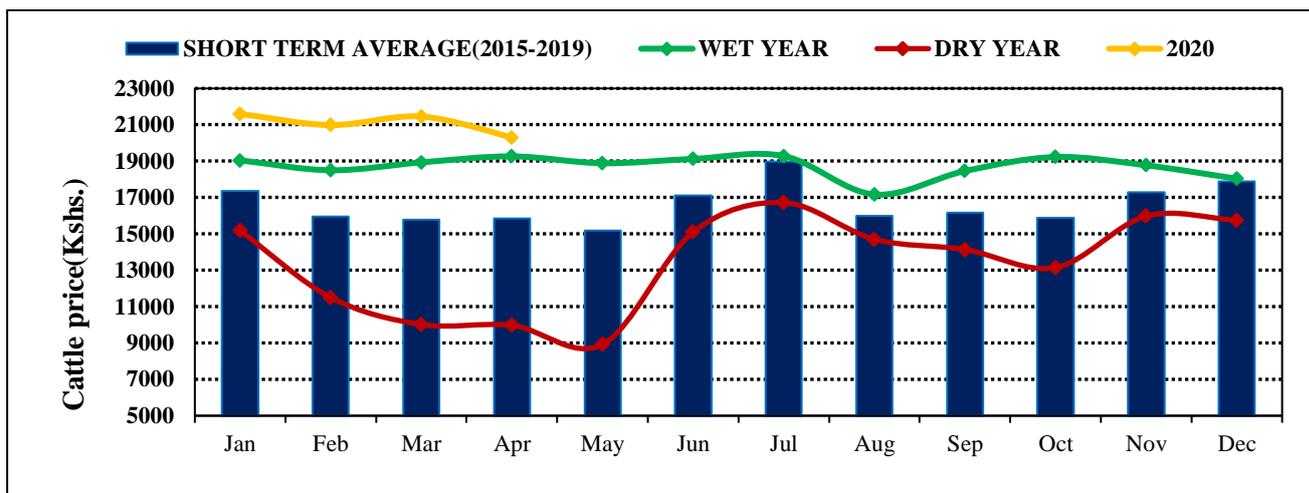


Figure 8: Graph Showing Cattle Selling Price Trends at Market Level

4.1.2 Goat Prices

- Goats selling prices increased to Ksh 3,560 from Ksh 3,070 recorded in the month of March. The increase was attributed to good body conditions and less supply as to markets as directives to avoid gathering were issues thus hindering supply to the main markets.
- Like cattle, high prices for goats were recorded in Lolkuniani at Ksh 4,875 and lowest in Baragoi at Ksh 2,500 for a medium sized goat.

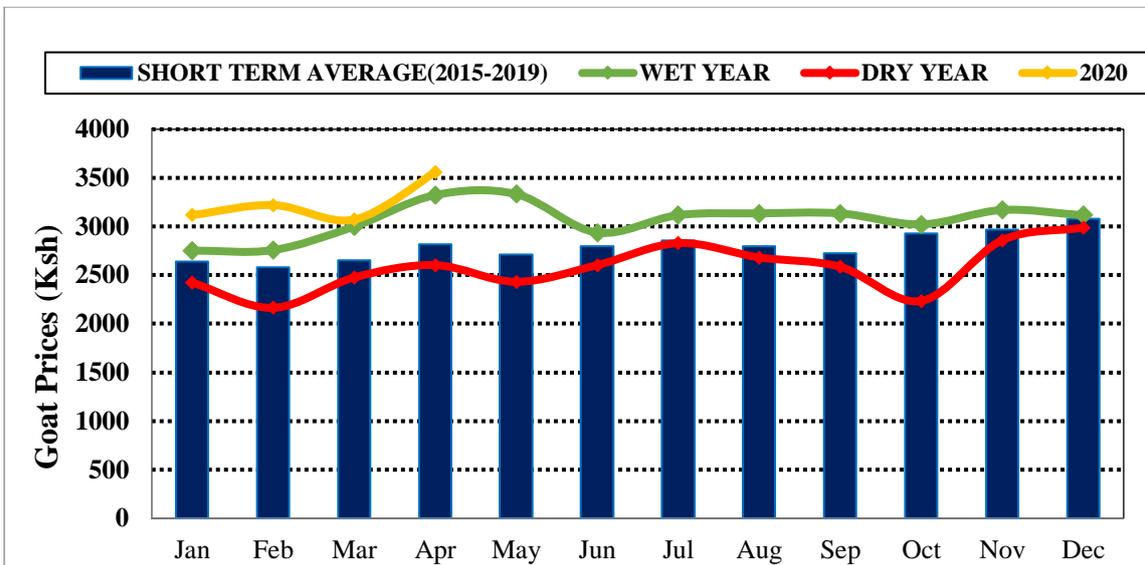


Figure 9: Graph Showing Goats' Selling Price Trends at market Level

4.1.3 Sheep Prices

- Price stability was noticed in sheep market selling prices as compared with the last three months. The current average price was Ksh 2,730 which is stable compared to last month price of Ksh 2,625 recorded in last month.
- The current price remained above the short-term average by approximately 16 percent at the same time of the year.

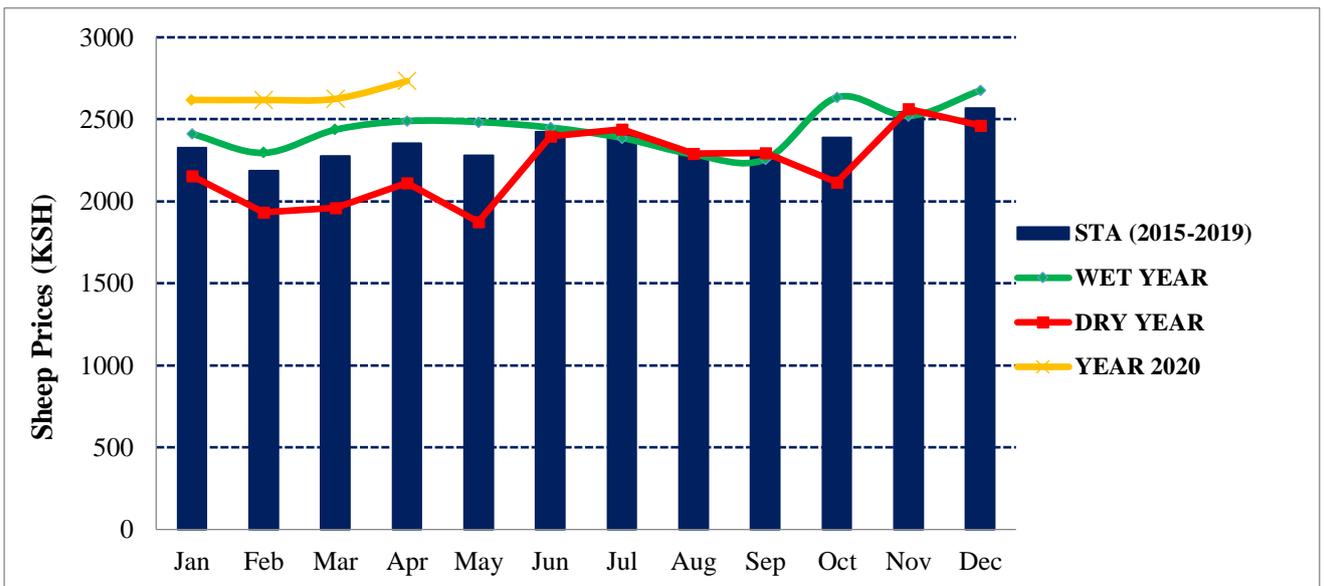


Figure 10: Graph Showing Sheep Selling Price Trends at Market Level

4.2 Crop Prices

4.2.1 Posho (Milled Maize)

- The current maize price of Ksh 48 per kilogram (Kg) remained relatively similar to Ksh 49 per Kg recorded last month prices.
- Most markets reported a price of Ksh 50 per Kg save for Archer post market that reported a price of Ksh 42 per Kg attributed to its close proximity to Meru and Nanyuki connected by a tarmac road.

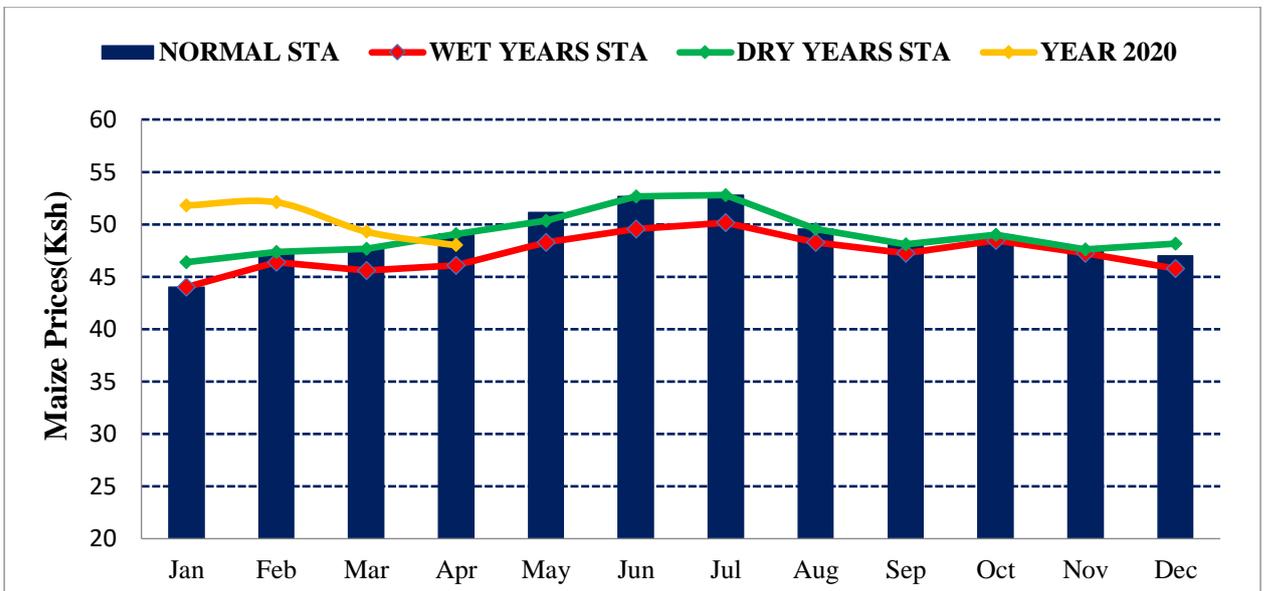


Figure 11: Graph Showing Maize Meal Price Trends

4.3 Livestock Price Ratio/Terms of Trade (TOT)

- The terms of trade have consistently been above the short-term average since January attributed to good body conditions for all livestock species thus fetching higher price at the market.
- Currently households are getting on average 74.1 kilograms of cereals from income obtained by selling one medium sized goat which is an increased compared to 62 Kgs purchased in last month.
- Terms of trade have remained favourable as they stand 55 percent above the long term at the same period of the year (Figure 12).

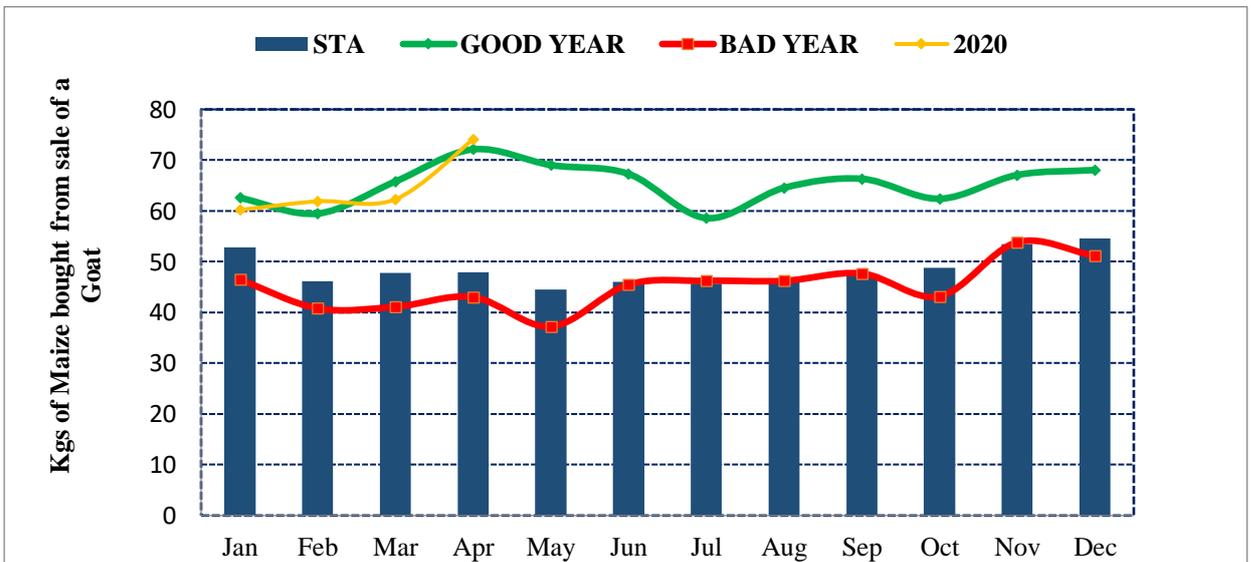


Figure 12: Trends in Terms of Trade (TOT)

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- Household milk consumption relatively remained stable compared to last month at 1.5 litres per household compared to 1.3 litres per household. Households reported that a number of livestock are in weaning stage as they approach gestation period.
- Milk produced at household level was mainly consumed by the children under five and the elderly. The remaining amount of milk were retailed at Ksh 60 – 70 per litres and in some areas, camel milk is sold at Ksh 80 – 100 per litre.

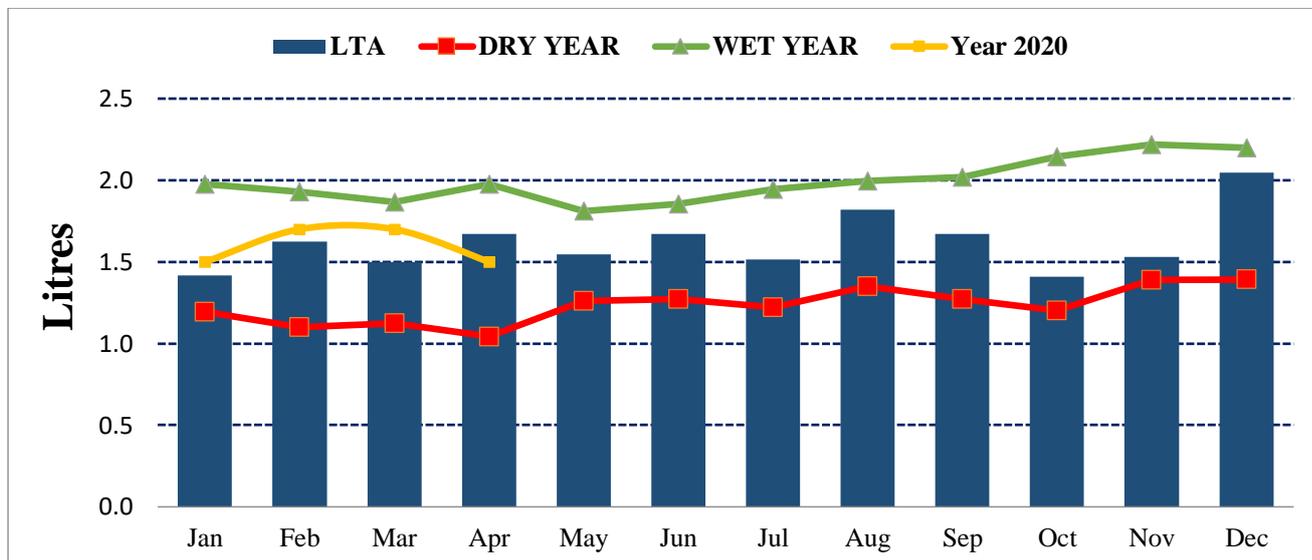


Figure 13: Trends in Milk Consumption per Household

5.2 Food Consumption Score (FCS)

- Food consumption at household level remained relatively stable across the livelihood zones with majority of households remaining within the acceptable band. Out of the sampled households, 67 percent had acceptable food consumption indicate access to more food groups thus diverse dietary intake. In agro pastoral livelihood, 77.8 and 22.2 percent had acceptable and borderline food consumption while in pastoral 64.5 percent had acceptable, 26.8 percent with borderline and 8.7 percent in poor food consumption implies frequent access to starch in a week.

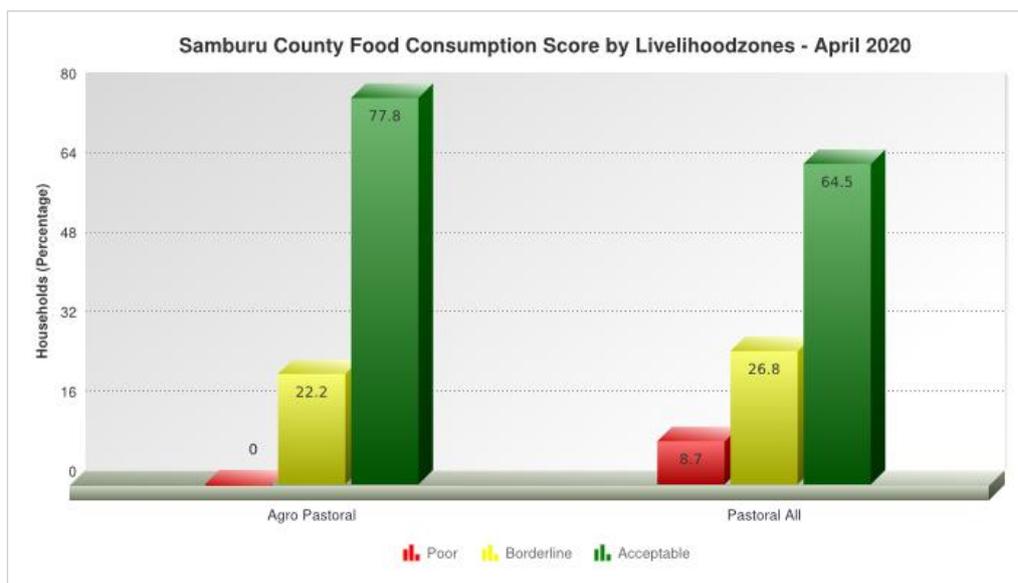


Figure 14: Bar Chart Showing FCS Per Livelihood zone

5.3 Health and Nutrition Status

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

- Gradually increase has been observed in number of children of children at risk of malnutrition since March.
- The prevalence of sampled children at risk of malnutrition worsened to 25 percent up from 22.2 percent. The increase can be linked to limited access to health services as some caregivers are not taking their children for routine services because of fears of COVID 19 pandemic.
- Most of the sentinel sites reported high rates of children at risk of malnutrition ranging between 27.2 and 33.3 percent.

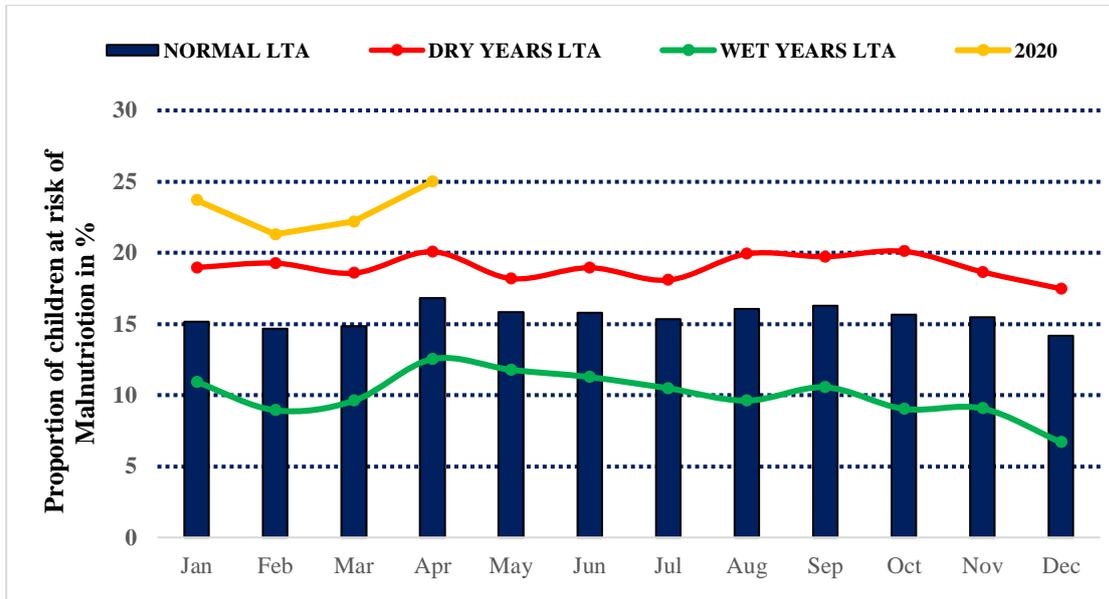


Figure 15: Graph showing average Nutritional status (MUAC)

5.3.2 Health

- Endemic diseases such as upper respiratory tract infections (URTI), diarrhoea and pneumonia were reported for both under five and general population as per Kenya Health Information System (KHIS) March data. The cases of diarrhoea are attributed to high open defecation and increased usage of untreated open water sources mainly replenished from the surface water runoff.

5.4 Reduced Coping Strategies Index (rCSI)

- The household coping strategy index remained relatively stable with current rCSI standing at 10.81 from 11.09 recorded in March.
- Households in pastoral livelihood had a coping index of 11 while households in agro pastoral livelihoods employing less severe strategies with an index of 9.8.
- 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
Livestock	<ul style="list-style-type: none"> Vaccination of cattle against foot and mouth disease in Samburu central 	County department of veterinary, RPLRP
Agriculture	<ul style="list-style-type: none"> Aerial and ground spray of desert locust in Samburu east sub county Sensitization on crop planting, spacing and distribution of certified seeds 	County Government, National Government, FAO, NYS, KDF
Health	<ul style="list-style-type: none"> Community sensitization on prevention of COVID 19 pandemic Distribution of masks and sanitizers 	MOH and Partners
Public Works	<ul style="list-style-type: none"> Grading and gravelling of Marram roads 	County Government, KeRRA, Municipal Board

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- Flash floods have been experienced in marginal pockets of the county resulting into death of two people in Nkuronit and occasioning overflow of streams across the county.
- Recurring community conflicts and isolated cases of road banditry continued to be reported in Baragoi and its environs leading to death of one child.

7.2 Migration

- All livestock species are grazing within the homesteads in the wet season grazing areas.

7.3 Food Security Prognosis

- Kenya Meteorology outlook for May 2020 indicates that several parts of the Lake Victoria Basin region and Western Kenya; Central & Southern Rift Valley; Central Kenya including Nairobi and North Western Kenya are likely to experience slightly enhanced rainfall.
- The ongoing long rains season is expected to be sustained and further improvement is likely in rangeland conditions across the county.
- The long rains and the expected progression of the rains in May 2020 is likely to be conducive for agricultural production in high potential areas (agro pastoral livelihood zones).
- Slow operation of markets due to fears of COVID 19 pandemic is likely negatively affect livestock market prices.
- Maize market prices are likely to remain typically stable and near average to above average for the 2 – 3 months.
- The availability of moisture may provide conducive breeding ground for Locusts in the Northern parts of Kenya.
- The ongoing locust invasion that laid eggs and hatched nymphs is projected to cause ravage to forage and expected long rains crops to be planted in March.

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) • Sensitization for early planting in Samburu central as the long rains season sets in 	<ul style="list-style-type: none"> • County wide
	<ul style="list-style-type: none"> • Provision of subsidized certified seeds and tractor fuel 	<ul style="list-style-type: none"> • Suguta, Loosuk, Poro, Maralal, Lodokejek, Baawa
Livestock	<ul style="list-style-type: none"> • Vaccination against FMD, CCPP, 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	