



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

AUGUST 2020 EW PHASE

Drought Status: NORMAL

Shughull 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)	82.46	35-50	
VCI-3month -Samburu East	81.76	35-50	
VCI-3month -Samburu North	82.33	35-50	
VCI-3month-Samburu West	86.15	35-50	
Production indicators	Value	Normal ranges	
Livestock Migration Pattern	Minimal Migration	No Migration	
Livestock Body Conditions	Moderate to Good smooth appearance	Good Smooth appearance	
Milk Production	1.6	>1.82	
Livestock deaths due to drought	No death.	No death	
Access Indicators	Value	Normal ranges	
Terms of Trade (TOT)	75	>46.17	
Milk Consumption	1.3	>1.57	
Return distance (km)	Household	5.6	<5.93
	Livestock	9.5	<13.95
Acceptable FCS (%)	Pastoral	53.4	100
	Agro pastoral	79.3	100
Utilization indicators	Value	Normal ranges	
MUAC (%)	21.9	<16.06	
rCSI	Mean	9.14	56

Drought Situation & EW Phase Classification

Biophysical Indicators

- Satellite imagery indicated that vegetation condition has remained above the normal ranges according to vegetation condition index.
- Level of water in open water sources in pastoral areas deteriorated and remained 80 – 100 percent full in agro pastoral livelihood zone.

Socio Economic Indicators Details

- Households and livestock trekking distances are stable compared from last month but 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.

<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 month under review recorded off season showers that were above normal as compared to the long-term average for the month. The showers were more pronounced in the highlands of Agro pastoral livelihood zone.

1.2 Amount of Rainfall and Spatial Distribution

- The county on average recorded rainfall of 29 percent, 90 percent above normal in the first and second dekads respectively and 23 percent below the long term in the third dekad of the month. The distribution was uneven in terms of space as the areas of Agro pastoral livelihood zone received rains. In terms of time, distribution was fair as rains were recorded across the three dekad of the month as per Climate Hazards Group InfraRed Precipitation with Station data (CHIRPS) (Figure 1).

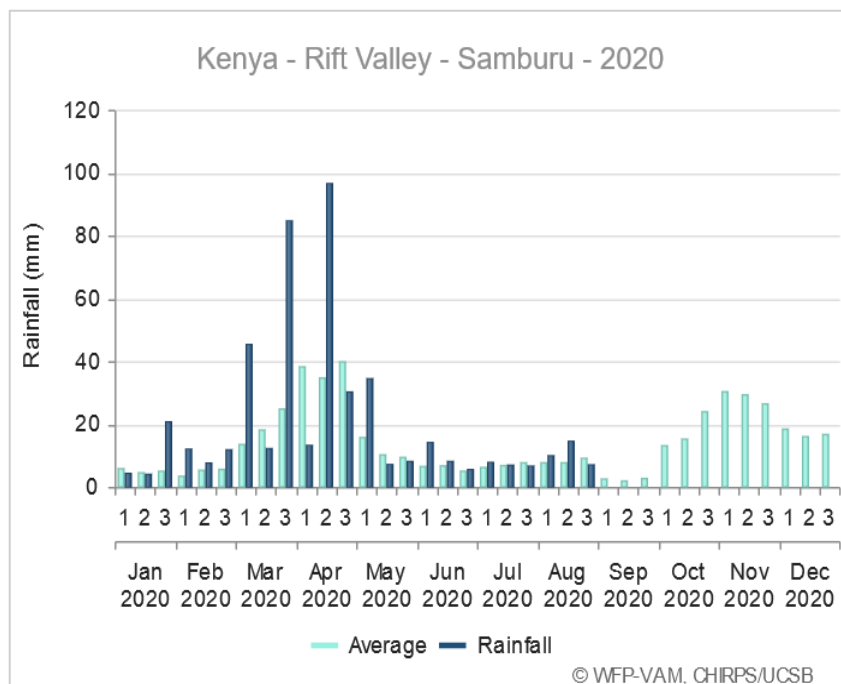


Figure 1: Graph Showing Rainfall Estimates (RFE) Trends for Samburu County: (Source: WFP-VAM, CHIRPS/UCSB)

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1.3 Other Shocks and Hazards

1.3.1 COVID-19 Pandemic

- As at 30th August 2020, the county has reported a cumulative total of 49 positive cases for COVID-19. The pandemic has had negative economic impacts on businesses and workers. The situation has witnessed job cuts across various sectors, and incomes of businesses and available working hours for staff have fallen significantly due to curfews.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 Vegetation Condition

2.1.1 Vegetation Condition Index (3 month-VCI)

- The vegetation cover has remained in good condition both in quality and quantity in agro pastoral livelihood zone and parts of pastoral livelihood especially in Samburu north sub county. The forage condition in Samburu east is fair however it was above the long-term average as per the satellite imagery.
- Satellite derived data indicated that vegetation greenness has remained above normal range in the county since January as measured by the vegetation condition index.

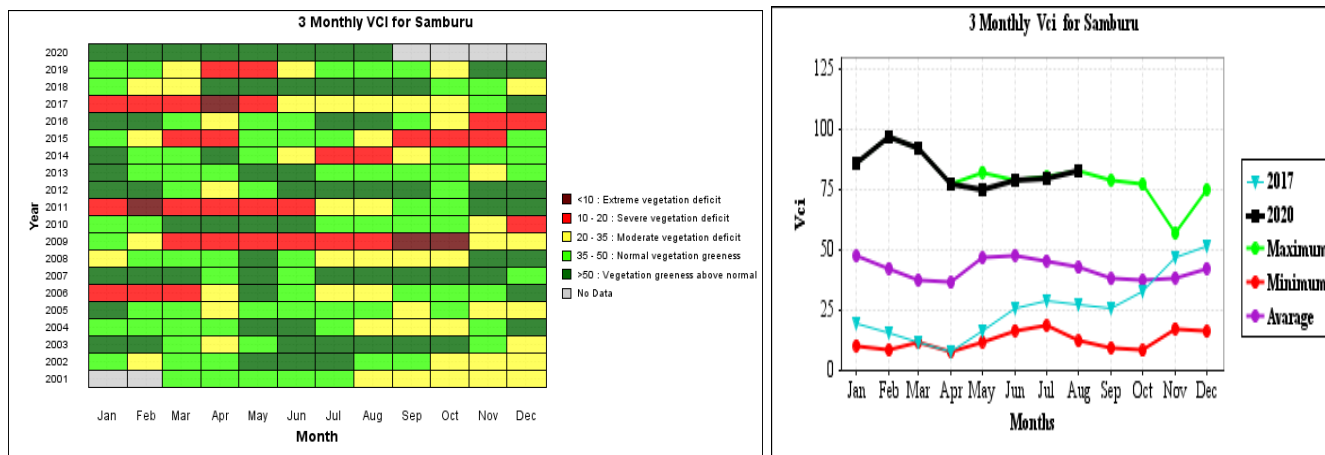


Figure 2: Matrix and Graph Showing VCI Trends for Samburu County
(Source: Boku University)

2.1.2 Field Observations (Pasture and Browse Conditions)

Quality and Quantity

- The condition of pasture and browse was good in the highlands of Samburu central and parts of Samburu north driven by continued offseason rains experienced in the month of July and August 2020. In pastoral areas of Samburu east, pasture and browse condition is ranging between fair to poor. The deterioration of forage in Samburu east is attributed to desert locust effects, dryness coupled with high temperatures.
- Huge standing hay 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. According to sampled key informants, about 52.9 percent and 58.8 percent reported that pasture and browse is good. The remaining key informants around responded that pasture and browse is fair.

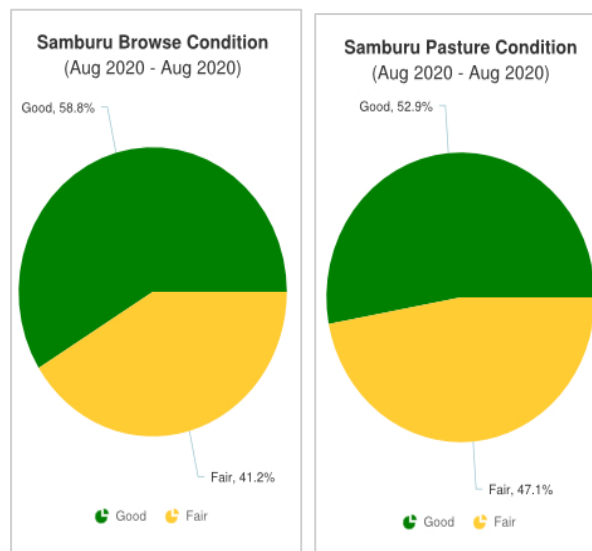


Figure 3: Pasture and Browse Condition

2.2. Water Resource

2.2.1 Sources

- During the month of August, the most commonly used water sources include wells, pans/dams and boreholes. Open surface water sources in the Agro pastoral livelihood zones remained 80 – 100 percent full driven by the off-season rains.
- Hand dug and natural wells were used by 50 percent of the households across the county, pans/dams and boreholes were relied by 22.2 percent and 11.1 percent of the households across the livelihood zones (Figure 4).
- Households are storing drinking water in closed 20 litres jerrican and in process decantation occurs hence water turbidity reduces.

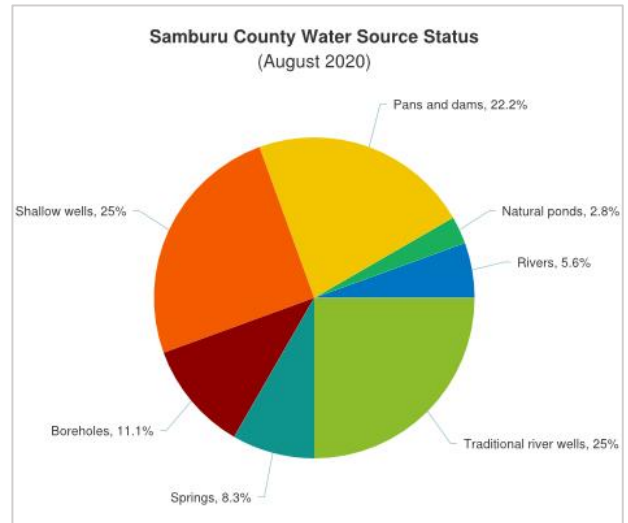


Figure 4: Common Water Sources

2.2.2 Household Access and Utilization

- The current average return distance to nearby water sources by households remained stable compared to last month average distance. Currently household walked 5.6 km to and back in search of water for domestic use.
- Long distances continued to be observed in Wamba west and Waso ward standing at 10 km and 13 km respectively. The long distances are attributed to breakdown of Kiltamany boreholes thus households are forced to walk to Ewaso Nyiro river and drying up of open surface water sources in Samburu east sub county.
- In comparison to short term average, the current return average distance is within the short-term average at the same period of the year (Figure 5).

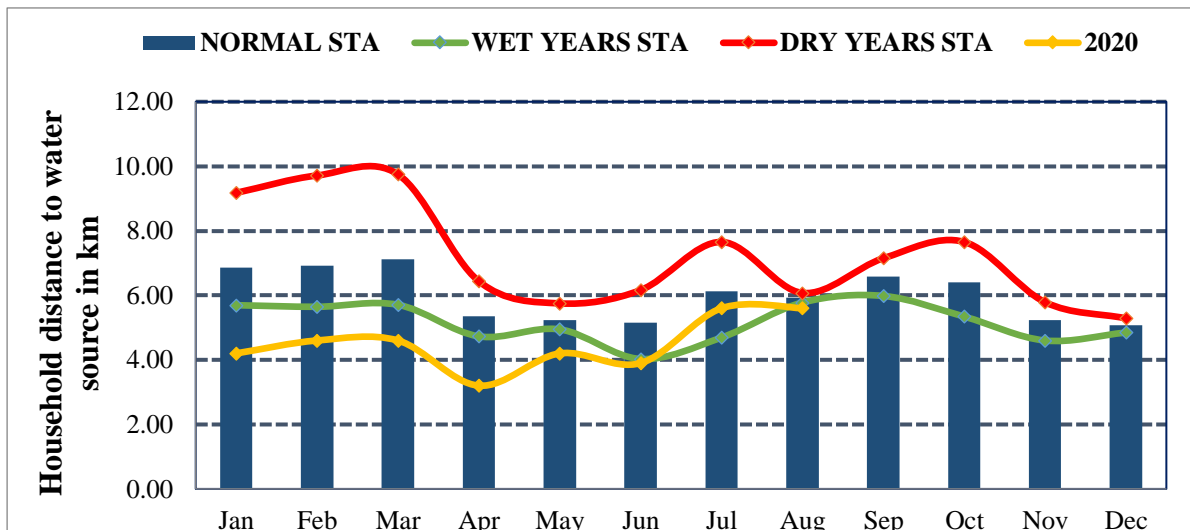


Figure 5: Average Distance Travelled by Households in Search of Water

2.2.3 Livestock Access (Grazing Distances to Water Points)

- Distances travelled by livestock from grazing fields to watering points was stable compared to last month distances. The current average return distance was 9.5 km compared to 9.9 km recorded in July.
- Like households' distance, livestock trekked longest distances in Waso, Wamba west and Wamba north ranging between 10 -15 km.
- The current average trekking of 9.5 km was below the short-term average by 30 percent at similar time of the year (Figure 6).

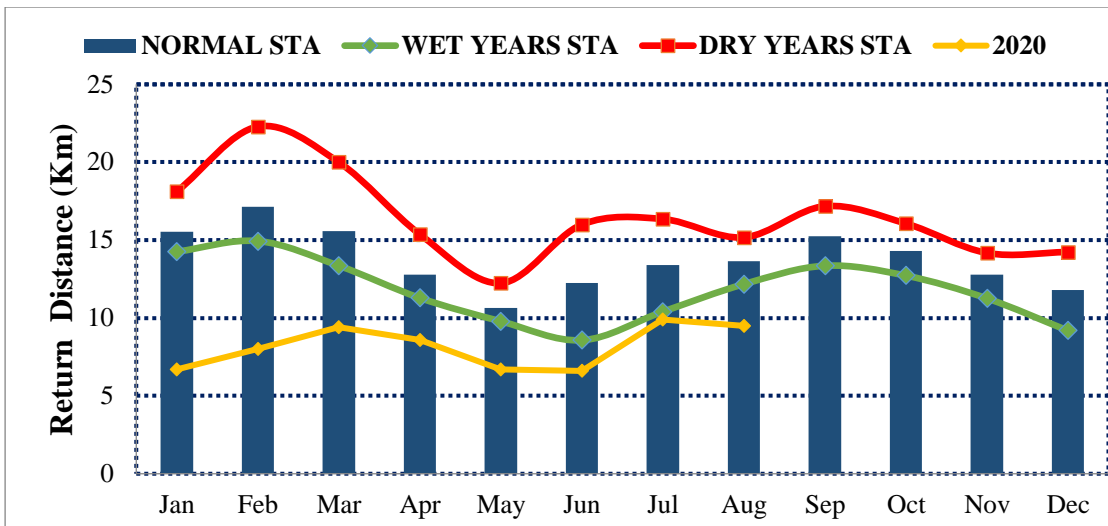


Figure 6: Distance Travelled from Grazing Areas to Water Points

3.0 PRODUCTION INDICATORS

3.1 Livestock Production

3.1.1 Livestock Body Condition

- The body condition for all livestock species was ranging between very good smooth with fat over back and good smooth appearance body condition across the livelihood zones (Annex 1). The good body condition was attributed to above normal performance of the last two consecutive rainfall season. In addition, availability of nutritious Acacia pods (*Sagaram*) in Pastoral Livelihood has also supported good body.

3.1.2 Livestock Diseases and Deaths

- Lumpy Skin Disease continued to be reported in Baawa and marginal pockets of Suguta ward. Community members in Samburu central have reported cases of East Coast Fever (ECF) and Anaplasmosis few reported fatalities of cattle. Endemic diseases such as contagious caprine pleuropneumonia (CCPP), Sheep and goat Pox, Trypanosomiasis and Mange were reported across the county. No unusual occurrence of livestock mortalities reported across the livelihood zones.

3.1.3 Milk Production

- Milk production slightly improved averaging at 1.6 litres per household per day from 1.4 litres recorded in last month. The slight improvement is attributed to the calving being experienced across the livelihood zones.
- Despite the increase, the current production still remained below the long-term average at the same time of the year by 12 percent.

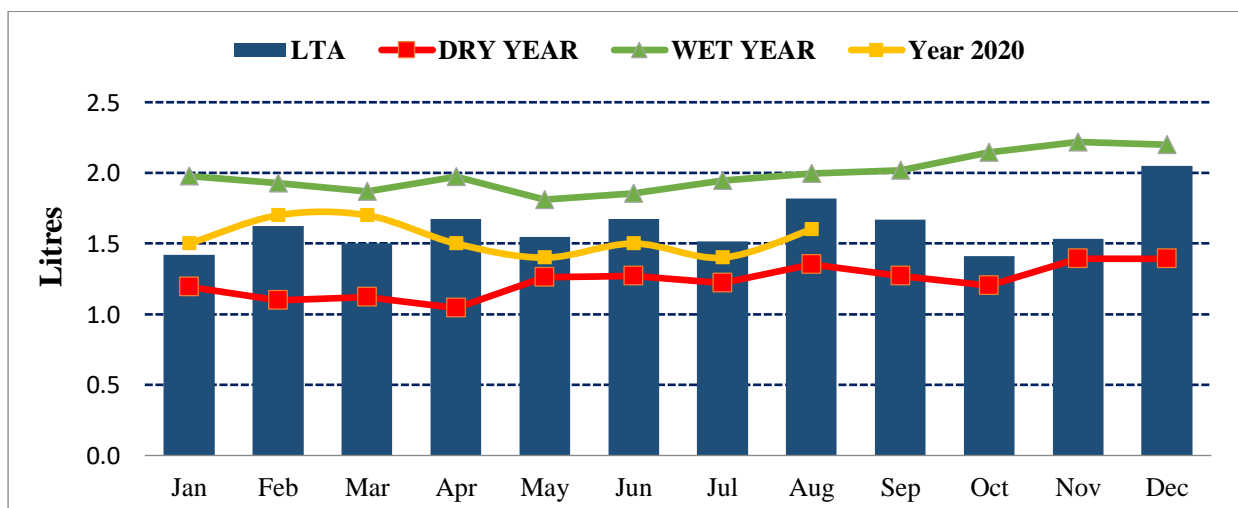


Figure 7: Trends in Milk Production per Household

3.2 Rain Fed Crop Production

3.2.1 Stage and Condition of Food Crops

- Maize crops in the field are of good conditions and are now in tussling and grain filling stages while beans are at maturity to dry stage.

3.2.2 Harvest of Crop

- Majority of farmers have harvested beans and few farmers that dry planted are currently utilizing the green maize in their farms for household consumption.

4.0 MARKET PERFORMANCE

4.1 Livestock Prices

4.1.1 Cattle Prices

- Cattle market prices have maintained above long term trends since the beginning of the year attributed to above normal forage condition. The good forage condition is attributed to favourable weather conditions.
- Current average price for a medium size bull decreased by 10 percent averaging at Ksh 20,340 down from Ksh 22,500 recorded in the month of July. The decrease could be linked slight deterioration in cattle body condition especially in pastoral livelihood zone.
- High prices continued to be reported in Lolkuniani market which is a terminal market to pastoral feeder markets at Ksh 26,500 and Lpus market at Ksh 25,00.
- In comparison to 2015-2019 average of Ksh 15,984, the current price of Ksh 20,340 was 27 percent above LTA at the same period of the year (Figure 8).

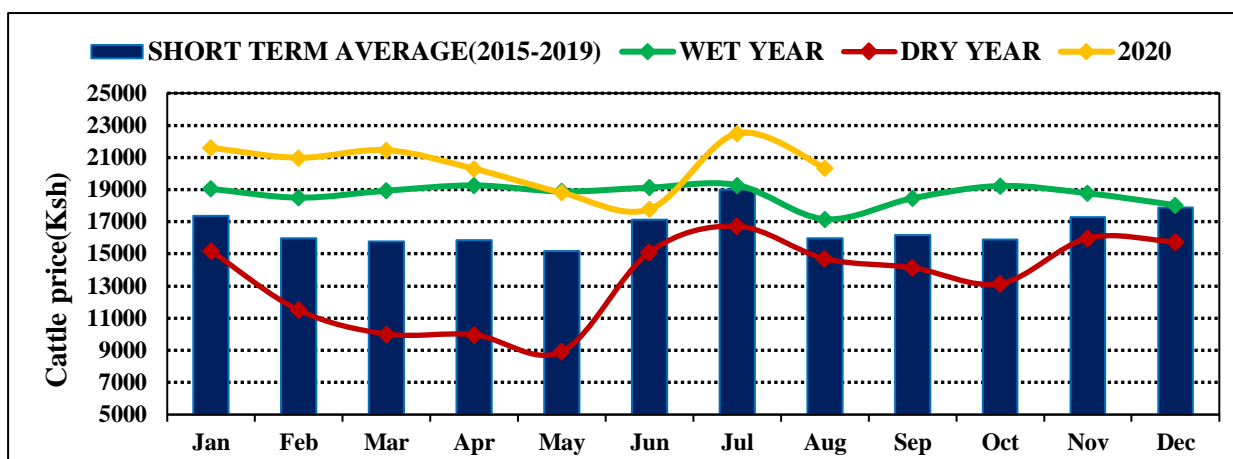


Figure 8: Graph Showing Cattle Selling Price Trends at Market Level

4.1.2 Goat Prices

- The current market selling price for a medium sized goat increased from Ksh 3,394 reported in last month to Ksh 3,617. The increase is attributed to good body conditions driven by good browse and preference of goats by external traders.
- Goat's prices were higher in Lolkuniani market averaging at Ksh 5,100 while the lowest average price was reported in Illaut market at Ksh 2,000.
- The current average price still remained above the 2015-2019 average by 29 percent at the same time of the year (Figure 9).

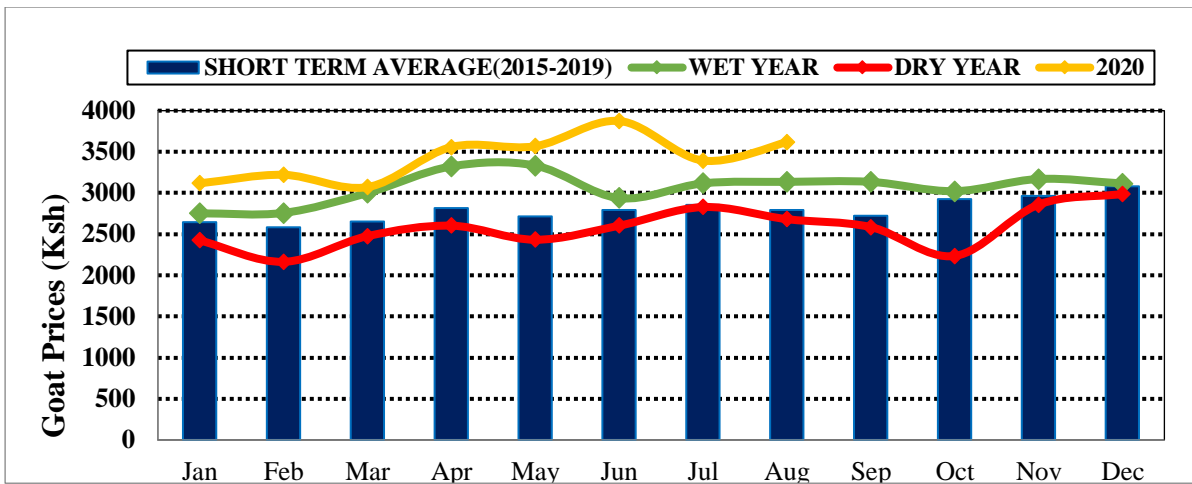


Figure 9: Graph Showing Goats' Selling Price Trends at market Level

4.1.3 Sheep Prices

- Like goat prices, sheep average price increased to Ksh 3,030 up from Ksh 2,850 recorded in the previous month.
- Highest average price was recorded in Lekuru market in Samburu central at Ksh 3,800 while lowest price reported in Illaut at Ksh 2,000.
- In comparison to 2015 – 2019 average, the current price was 32 percent above the long-term average at the same time of the year.

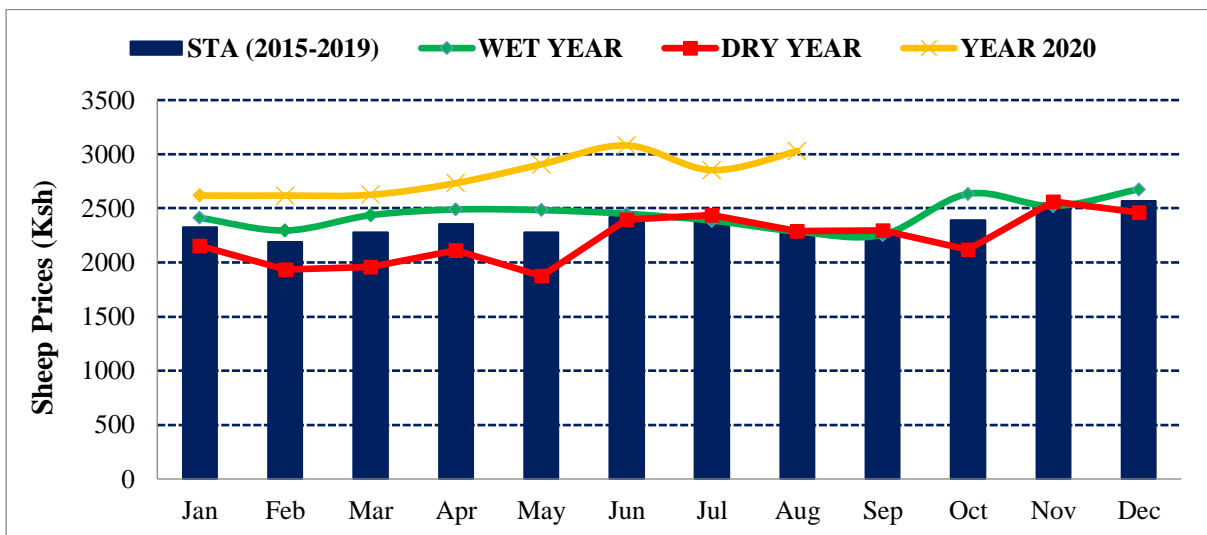


Figure 10: Graph Showing Sheep Selling Price Trends at Market Level

4.2 Crop Prices

4.2.1 Posho (Milled Maize)

- Maize selling prices have maintained stable trends 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.
- The current average price was Ksh 48.2 per kilogram compared to Ksh 48.9 per kilogram recorded in last month. According to market interviews, sampled markets recorded a selling price of Ksh 50 per kilogram across the livelihood zones save for Archers Market with a selling price of Ksh 35 per kilogram. Archer market recorded low prices due to its close proximity to terminal markets in central Kenya and its location along the Moyale – Isiolo highway.
- The current average price per kilogram price is stable compared to the 2015-2019 long-term average at the same time of the year (Figure 11).

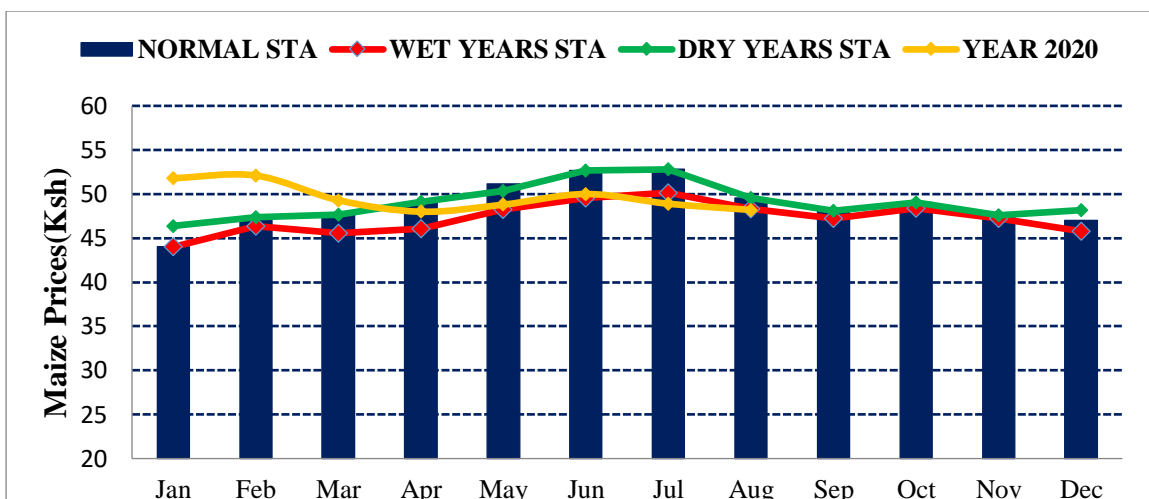


Figure 11: Graph Showing Maize Meal Price Trends

4.3 Livestock Price Ratio/Terms of Trade (TOT)

- The good body condition for goats have attracted better market prices resulting in improved household purchasing power.
- Households terms of trade have been favourable with households able to buy 75 kilograms of cereal from proceeds of one medium sized goat. The current goat to maize ratio is stable compared to last month ToT of 69.4 kilograms exchanged for a goat.
- In pastoral livelihood zone, households can buy approximately 83.3 kilograms of maize by selling one mature goat and households in agro pastoral livelihood zone are able to purchase around 86.8 kilograms of maize from income of one mature goat.
- Terms of trade have been above the long-term average since January with the current goat to maize ration of 75 kilograms being marginally above the long-term average by 62 percent at the same period of the year (Figure 12).

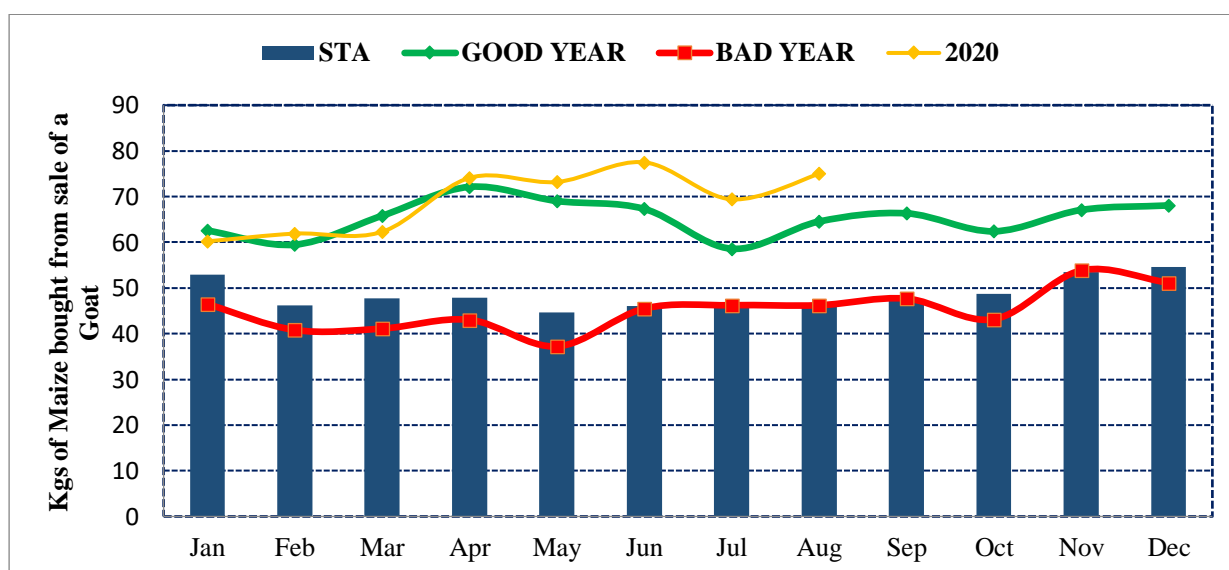


Figure 12: Trends in Terms of Trade (TOT)

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 Milk Consumption

- Out of the milk produced at household level, 81 percent of the milk produced is consumed by the household’s members. The current average milk consumption stands at 1.3 litres per household per day compared to 1.2 litres reported in July.
- Community responded that milk is largely 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 – 120 per litre.

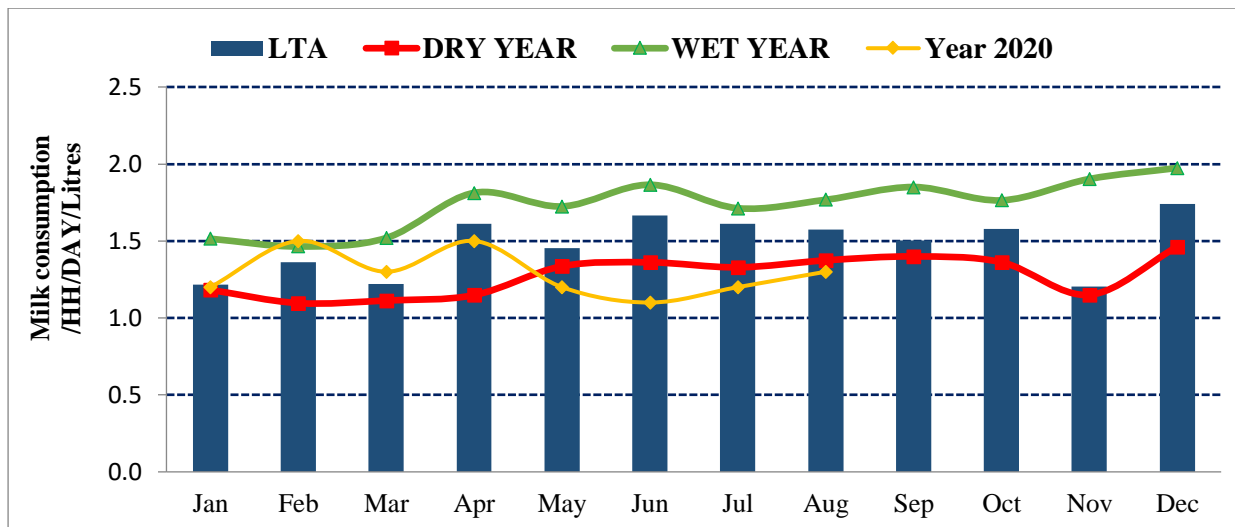


Figure 13: Trends in Milk Consumption per Household

5.2 Food Consumption Score (FCS)

- The consumption patterns at the household level varied across the livelihood zones. In the Agro pastoral, the proportion of households in acceptable band shifted by 16.4 percent to 79.3 percent down from 95.7 percent.
- The percentage of households in borderline changed from 4.3 percent to 20.7 percent. The shift can be linked to low diversification of food groups at the household level coupled with cultural food taboos and beliefs.

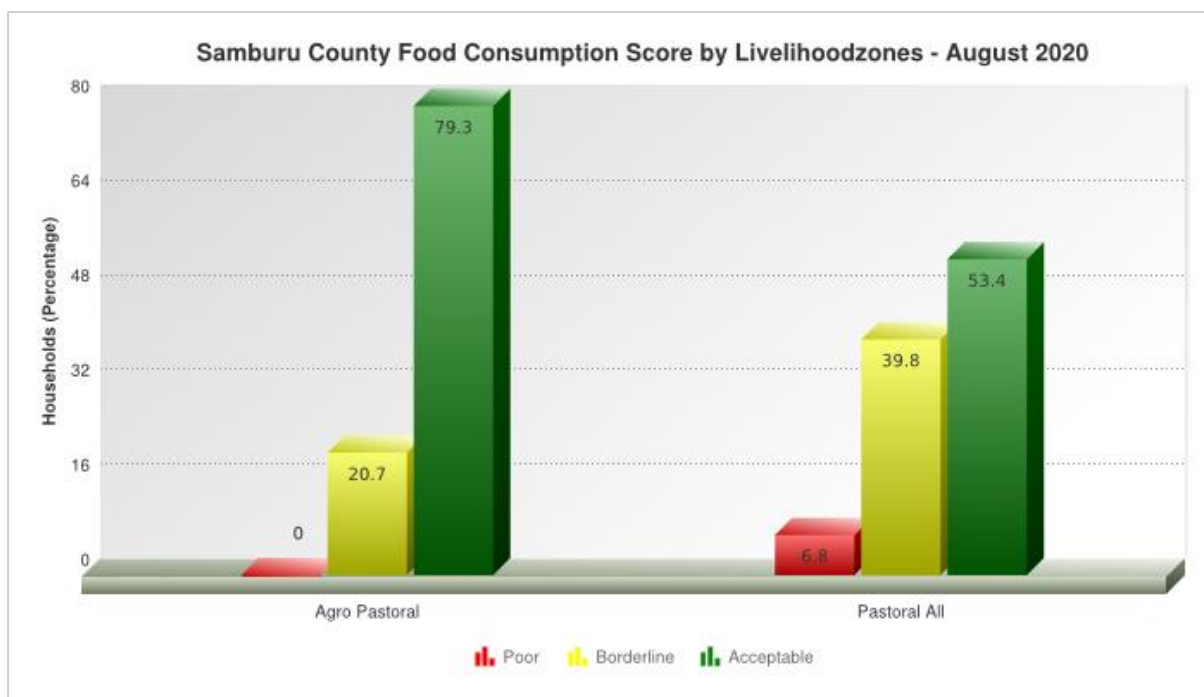


Figure 14: Bar Chart Showing FCS Per Livelihood zone

5.3 Health and Nutrition Status

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

- The percentage of children at risk of malnutrition based on MUAC improved to 21.9 percent from 26.7 percent recorded in last month. The prevalence of children at risk of malnutrition have remained high above normal attributed to poor maternal child practices coupled with poor health care seeking services due to fear of COVID 19.
- High rates of children at risk of malnutrition continued to noticed in Ndoto, Nachola and Wamba West wards at 33.3 percent, 32.7 percent and 20.7 percent respectively.
- The current proportion of sampled children under five of age at risk of was 36 percent above the long-term average at the same time of the year.

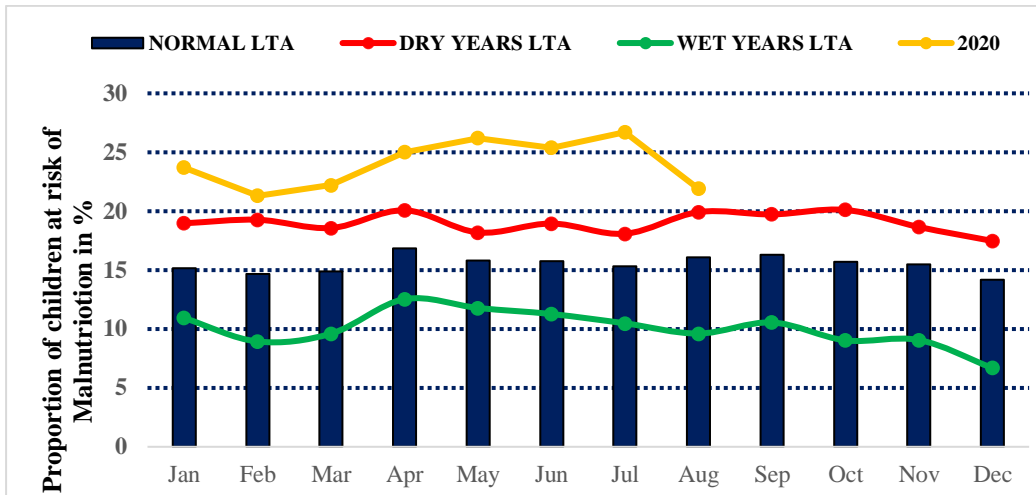


Figure 15: Graph showing average Nutritional status (MUAC)

5.3.2 Health

- Upper respiratory tract infections (URTI), diarrhoea and pneumonia continued to be reported 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 9.14 with pastoral households coping mean of 9 and agro pastoral households with a mean coping of 9.7.
- 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.

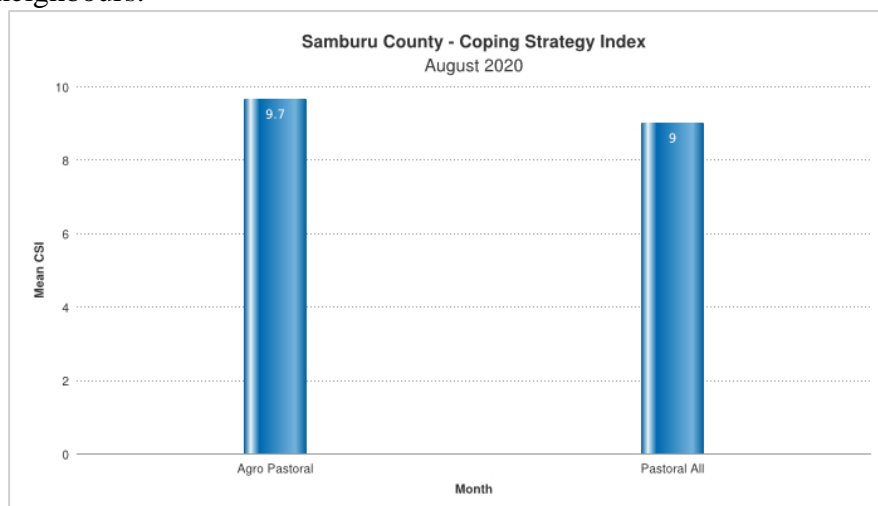


Figure 16: rCSI per Livelihood Zone

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 in parts of Samburu central against LSD.• Vaccination of goats and sheep in parts of Samburu east and north against PPR	County department of Veterinary
Water	<ul style="list-style-type: none">• Repair and servicing of the non-functional boreholes	County Government
Agriculture	<ul style="list-style-type: none">• Land preparation for Lulu irrigation system	County Government
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

6.2 FOOD AID

- No provision of food aid distributed in the county during the month of August.

7.0 EMERGING ISSUES

7.1 Insecurity/Conflict/Human Displacement

- Isolated cases of livestock theft were reported in Samburu north sub county resulting limited access to grazing fields.

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 IGAD Climate Prediction and Application Centre (ICPAC), indicates probability of below average to above average October to December 2020 rainfall season for the eastern region
- According to Astrocat vegetation outlook, the vegetation greenness for the month of September 2020 is likely to remained above normal across the county as per the satellite prediction images.
- The COVID-19 cases have been dropping significantly indication of a remarkable progress in flattening the curve attributed to strict compliance to regulations by the Health Ministry.
- Maize market prices are likely to remain typically stable and near average to above average for the next one month.

8.0 RECOMMENDATIONS

Table 2: Proposed Interventions per Sector

SECTOR	INTERVENTION	Areas
Agriculture	<ul style="list-style-type: none"> • Upscaling of Lulu irrigation scheme • Sensitization on post-harvest practices in Samburu central 	<ul style="list-style-type: none"> • Lulu • Loosuk, Suguta, Poro, Maralal
Livestock	<ul style="list-style-type: none"> • Vaccination against PPR 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
Social Protection	<ul style="list-style-type: none"> • Upscaling of cash transfers to more vulnerable households 	<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	