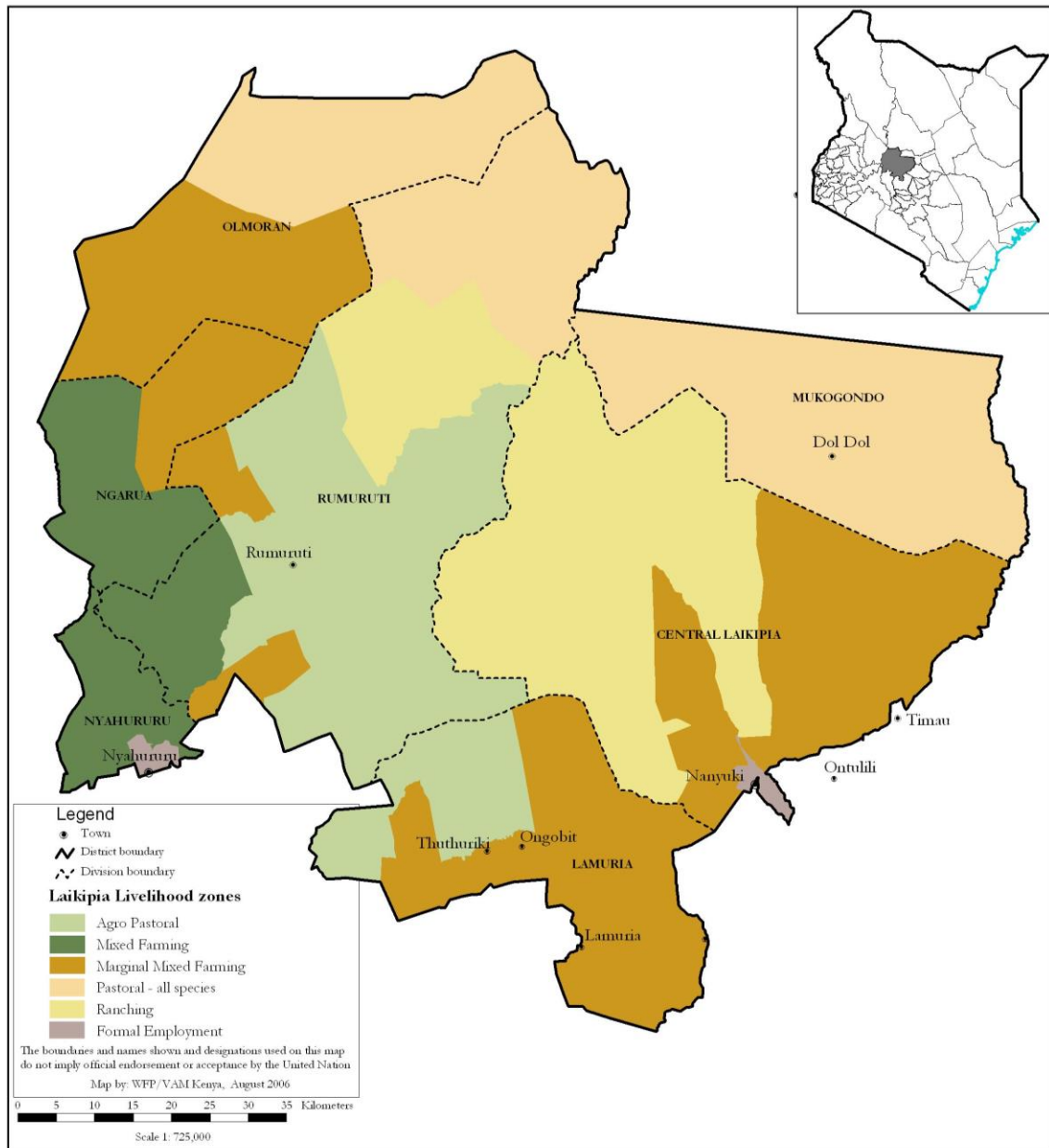


LAIKIPIA COUNTY 2019 LONG RAINS FOOD AND NUTRITION SECURITY ASSESSMENT REPORT



A Joint Report by the Kenya Food Security Steering Group ¹(KFSSG) and the Laikipia County Steering Group (CSG)

August, 2019

¹Hellen Omondi MOALF&I (State Department of Crop Development), Albert Mulwa MOALF – (State Department of Livestock)

EXECUTIVE SUMMARY

The assessment was carried out by a team, comprising Kenya Food Security Steering Group (KFSSG) and the Laikipia County Steering Group. The assessment is a bi-annual exercise carried out after the long and short rains season. The aim of the assessment was to develop an objective, evidence based and transparent food security situation analysis following the long rains season of 2019 taking into account the cumulative effect of previous seasons, in order to make recommendations for possible response options based on the situation analysis. The main drivers of food insecurity in the Laikipia county included the poor performance of both the October to December 2018 short rains season and the March to May 2019 long rains.

The area under maize and beans reduced by 23 and 30 percent respectively compared to the long term average (LTA). The projected production of maize, beans and potatoes will reduce by 60, 58 and 39 percent respectively compared to LTA. The expected late harvest in February-March 2020 is attributed to delayed onset of rainfall. Maize household stocks were 23 percent above LTA due to carry over stock of the 2018 long season.

The body condition of cattle was fair across all the livelihood zones which was attributed to reduced quality and quantity of pastures compared to normal. Milk consumption was within normal in Pastoral and Mixed Farming zones but was 25 percent below the long term average in the Marginal Mixed Farming zone. The markets were operational and well provisioned with food commodities. The average maize price was ksh 56 in July which was above the long term average by 30 percent due to constrained supply in the markets. When compared to the five-year average, the terms of trade (ToT) was slightly above the normal which was favourable for Pastoralists.

Majority of the households in the Mixed Farming, Pastoral All and Marginal Mixed Farming zones had an acceptable food consumption score of 100, 97 and 50 percent respectively. When compared to the 2018 long rains season, the household dietary diversity remained stable which indicated availability of food at household level. Households with poor food consumption also remained below one percent which was comparable to 2 percent in 2018 long rains season. The proportion of children under five years at risk of malnutrition, based on mid upper arm circumference (MUAC) of <135 mm, was 2.4 which was within the LTA. The mean coping strategies index (CSI) for July was 7.8, 3.4 and 2.6 percent in the Mixed Farming, Pastoral and Marginal Mixed livelihood zones respectively which was high compared to 2018 season. Majority (63 percent) were using stress livelihood coping strategies.

The region's food security situation is classified in the 'stressed phase (IPC Phase 2) since households were using more severe food and livelihood coping strategies.

TABLE OF CONTENTS

- 1. INTRODUCTION 4
 - 1.1 County background..... 4
 - 1.2 Methodology and approach..... 4
- 2. DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY..... 5
 - 2.1 Rainfall Performance 5
 - 2.2 Fall Army Worm..... 5
 - 2.3 Insecurity/Conflict 5
 - 2.4 Other Shock and Hazards..... 5
- 3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY 6
 - 3.1 Availability 6
 - 3.2 Access 12
 - 3.3 Utilization 15
 - 3.4 Trends of key food security indicators..... 18
- 4.0 CROSS CUTTING ISSUE 18
 - 4.1 Education 18
- 5.0 FOOD SECURITY PROGNOSIS 20
 - 5.1 Prognosis Assumptions 20
 - 5.2 Food security Outlook..... 21
- 6.0 CONCLUSION AND INTERVENTIONS 21
 - 6.1 Conclusion 21
 - 6.2 Ongoing Interventions 23
 - 6.3 Recommended Interventions 25

1. INTRODUCTION

1.1 County background

Laikipia County comprises 3 administrative sub-counties namely Laikipia East, Laikipia North and Laikipia West. It covers an area of 9,462 square kilometres and supports a population of 505,712 people (Projected KNBS, 2016). The county has four main, livelihood zones as indicated in Figure 1 with proportion of the population: Mixed Farming (43 percent), Marginal Mixed Farming (35 percent), Formal Employment (13 percent) and Pastoral all Species (9 percent).

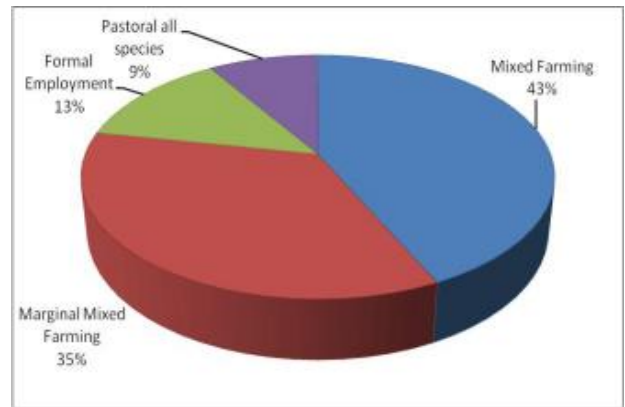


Figure 1: Proportion of population

1.2 Methodology and approach

The assessment involved the use of both quantitative and qualitative methods. Primary data collection was done using pre-designed checklist that was administered by county sector heads from agriculture, livestock, water, health and nutrition and education prior to the actual assessment. The assessment methodology employed included an initial county status briefing which was conducted from 9th July, 2019. This included presentation of sectoral checklists from agriculture, livestock, water, health and nutrition and education sectors. The team, comprising Kenya Food Security Steering Group (KFSSG), and Laikipia County Steering Group, conducted transect drives across the various livelihood zones to carry out a rapid assessment of the field situation on the performance of the season for two days. A transect drive to conduct interviews was done in the following sites: Ngobit, Tigithi, Ithare dam, Ng`arua Kinamba, Olmoran, Ilmotiok, Loshaki and Kimanjo. Household interviews were conducted, focused group discussions, market interviews and key informants for adequate data triangulation. Secondary data review was done from NDMA bulletins and SMART surveys 2017. The field data was collated, reviewed and triangulated to produce a food security assessment report, which was presented before the CSG for validation and approval.

2. DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The onset of the long rains (MAM) was in the last dekad of the April compared to the first dekad of March normally. The rainfall amounts ranged between 75-90 percent of normal across all livelihood zones except the upper parts of Laikipia North and the lower part Laikipia East that received 90-110 percent of the normal rains. Spatial distribution was uneven across all livelihood zones (Figure 2) and the temporal distribution was poor and erratic throughout the season. Above normal rains were recorded in the third dekad of April and first dekad of June. The

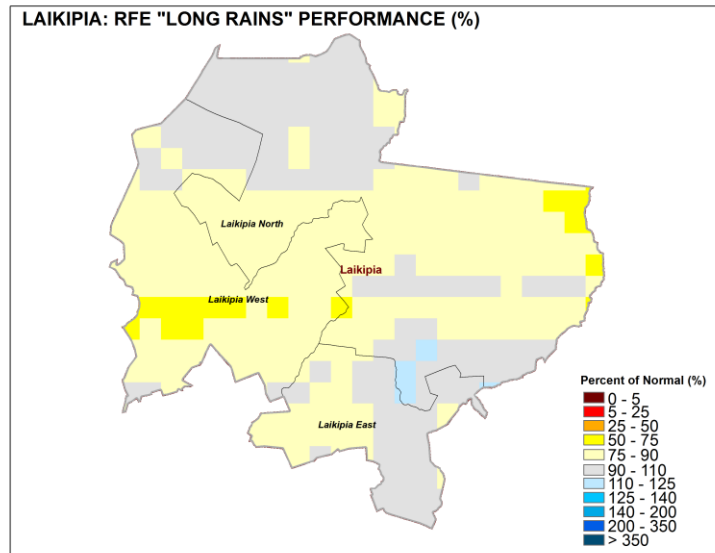


Figure 2: Rainfall Performance

low rainfall was experienced in Tigithi, Ngobit, Githiga, Rumuruti, Salama, Thingithu and Mukogodo East. The rainfall cessation was in the first dekad of July compared to the normal first dekad of June.

2.2 Fall Army Worm

Fall Army Worm (FAW) infestations negatively affected maize production in the Mixed Farming and Marginal Mixed Farming livelihood zones as a result of the dry spell especially for the earlier planted crops.

2.3 Insecurity/Conflict

Cases of human-wildlife conflict were reported in farms at Kijabe in Ngobit ward (Marginal Mixed Farming zone) whereby food crops especially maize and beans were destroyed.

2.4 Other Shock and Hazards

Other hazards contributing to food insecurity in the county include livestock in migration from neighbouring Counties of Samburu and Isiolo and in Githinga ward neighbouring Baringo county resulting in tension among the communities.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

Food availability in the County is largely from both crop and livestock production. The county has high potential areas in the Mixed Farming livelihood zone in which most of the food crops are produced through rain fed and irrigated agriculture. Livestock production is practiced in all the livelihood zones in the county and the main livestock products contributing to food availability are milk and meat.

3.1.1 Crops Production

The main crops planted in the county during the long rains are maize, beans, wheat and potatoes. The Marginal Mixed Farming and Pastoral livelihood zones are both short and long rains dependent while the Mixed Farming livelihood zone is long rains dependent. (Table 1). Food crop production contributes to 40 and 20 percent of cash income to Mixed Farming and the Marginal Mixed Farming livelihood zones respectively. Some cash crop production is done in the Mixed Farming livelihood zone and accounts for 10 percent of cash income.

Table 1: Contribution to Cash Income and Food

Crop Type	Livelihood Zone					
	Mixed Farming		Marginal Mixed Farming		Formal Employment	
	Cash Income (%)	Food (%)	Cash Income (%)	Food (%)	Cash Income(%)	Food (%)
Maize	55	65	12	66	20	10
Beans	8	15	40	11	30	30
Irish potatoes	4	10	24	8	0	0
Local vegetables	5	5	0	0	50	60

Rainfed Crop

The area under maize and beans reduced by 23 and 30 percent respectively compared to the Long term average while Irish potatoes was within the LTA. The projected production of maize, beans, potatoes will reduce by 60, 58 and 39 percent respectively compared to LTA (Table 2). This is attributed to reduced acreage under maize and beans, poor crop germination as well as total crop failure due to dry spells affecting a total of 6,426 Ha. The areas affected by the total crop failure are Tigithi, Ngobit, Githiga, Rumuruti, Salama, Thingithu, Mukogodo East. Fall army Worms affected 1,285 Ha across all the livelihood zones. Harvesting of beans in both the Mixed Farming and Marginal Mixed Farming is expected between November and December compared to the normal period in September while maize crop which is currently about knee high is expected to be harvested by February-March 2020 compared to the normal period in November and December. The late harvest is attributed to delayed onset of rainfall and to poor germination that led to farmers replanting late in the season. Some crops are also unlikely to reach physiological maturity as the rains ceased. Increased adoption of new Irish potato varieties under contract Farming has encouraged production of the crop as a source of income and food.

Table 2: Crop Production under Rain-fed Agriculture

Crop	Area planted during 2019 Long rains season (Ha)	Long Term Average area planted (Ha)	2019 Long rains season production (90 kg bags) Projected	Long Term Average production during the (90 kg bags)
Maize	21,242	27,668	424,840	1,023,715
Beans	11,060	15,702	132,720	314,040
Potatoes	4,045	4,173	26,292 MT	41,730 MT
Wheat	11,200	10,000	336,000	350,000

Irrigated crop production

The area under tomato reduced significantly by 30 percent and there was a slight reduction of area under cabbages and onions by seven and six percent respectively compared to the LTA. The production is expected to reduce by 21, 25 and 15 percent respectively (Table 3). The decline in area and productivity was mainly due to low rainfall and hence low water volumes for irrigation in rivers and dams. Wildlife destruction was experienced across all the irrigation areas in Kiamariga, Mutaro and south Imenti in Ngobit, Segeera, Marmanet (squirrels, hares, dikdiks, mouse birds and guinea fowls) as well as and pest infestation by millipedes.

Table 3: Crop Production under Irrigated Agriculture

Crop	Area planted during 2019 Long rains season (Ha)	Long Term Average area planted during the Long rains season (Ha)	2019 Long rains season production (90 kg bags) Projected	Long Term Average production during the Long rains season (90 kg bags)
1. Tomatoes	70	100	4,000MT	5,100MT
2. Cabbages	84	90	3,520 MT	4,700 MT
3. Onions	55	65	495MT	585 MT

3.1.2 Cereal Stocks

The main cereal stock in the county are maize, rice sorghum and millet. Maize household stocks were 23 percent above LTA. The above average household stocks was attributed to the cumulative stock carried over from the 2018 long and short rains season. Most of the maize stocks are with the farmers in the Mixed Farming livelihood zone while majority of the households in the Marginal Mixed Farming and Pastoral zones have depleted their stocks and depend on the markets. Maize stock with households is likely to last 4 months (consumption per month is 45,955 bags of maize). Maize stock with traders and millers' stocks are 77 and 57 percent of the LTA. Other commodities such as rice and sorghum are mainly stoked by traders. Rice held by traders was about 63 percent of LTA while sorghum remained within the LTA (Table 4). Most of the maize stock is supplied to the markets from other regions such as Busia.

Table 4: Cereal Stocks

Commodity	Maize		Rice		Sorghum	
	Current	LTA	Current	LTA	Current	LTA
Farmers	104,553	84,400	0	0	120	50
Traders	38,588	50,000	1330	832	160	160
Millers	54,574	96,000	0	0	120	250
Food Assistance	0	0	0	0	0	0
NCPB	5,853	7800	32	3600	0	0
Total	203,568	238,200	1,362	4,432	400	910

3.1.3 Livestock Production

Livestock production is the main economic activity in Laikipia County. The main livestock types found in the county are cattle, sheep, goats, camels and donkeys. The small stock (sheep and goats) are mainly reared for provision of basic household commodities like food and cash while the large stock (cattle and camels) are reared for the provision of food and income for major investments and donkeys are used as a means of transport (Table 5).

Table 5: Livestock contribution to cash income

Livelihood Zone	Livestock average percentage of cash income contribution
Mixed Farming	30
Marginal Mixed Farming	52
Pastoral All species	90

Pasture and browse situation

Pasture condition in the Mixed Farming and Marginal Mixed Farming livelihood zones was fair whereas in Pastoral All livelihood zones it was poor as opposed to the good condition in a normal season. The browse condition for both the Mixed Farming and Marginal Mixed Farming zones was good which is normal at this time of the year while in the Pastoral All zone it was fair compared to good in a normal season. In the Pastoral All and Marginal Mixed Farming, the pasture is expected to last up to the end of July and end of August respectively compare to September in a normally in each livelihood zone. In the Mixed Farming zone, pasture is expected to last up to mid-September compared to October normally.

Browse is projected to last between 2.5-3 months for both Mixed Farming and Marginal Mixed Farming livelihood zones (end of October). The duration is comparable to normal three months in the Marginal Mixed Farming zone while in the Mixed Farming zone it will not last for the normal four months (November). In the Pastoral All zone browse will last up to mid-September (1.5-2 months) as opposed to three months normally in October. In a normal season, crop residues from vegetable and bean straws is available to supplement livestock feed in both Marginal Mixed Farming and Mixed Farming zones which was not the case in this season (Table 6). Constraints to pasture and browse access were reported due to in migration of livestock from neighbouring Baringo county and cases of conflicts were reported in Kamwenje area of Githiga ward.

Table 6: Pasture and Browse condition

Livelihood zone	Pasture				Browse			
	Condition		How long to last (Months)		Condition		How long to last (Months)	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral All	Poor	Good	< 1	2	Fair	Good	1.5 - 2	3
Marginal Mixed Farming	Fair	Good	1	2	Good	Good	2.5 - 3	3
Mixed Farming	Fair	Good	1.5	3	Good	Good	2.5 - 3	4

Livestock Productivity**Livestock body condition**

The body condition of all cattle was fair across all the livelihood zones which was attributed to reduced quality and quantity of pastures compared to normal (Table 7). Sheep, goats and camels the body condition was good which was comparable to normal. The body condition of cattle in Pastoral All zones is expected to further deteriorate by August which may lead to early migration of cattle in search of pastures and water. In the Marginal Mixed and Mixed Farming zone cattle body will start deteriorating by end of October if the short rains delay. The body condition of sheep, goats and camel will be sustained by the available pasture until the short rains.

Table 7: Livestock body condition

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral All	Fair	Fair	Good	Good	Good	Good	Good	Good
Marginal Mixed Farming	Fair	Fair	Good	Good	Good	Good	Good	Good
Mixed Farming	Fair	Fair	Good	Good	Good	Good	Good	Good

Tropical livestock units (TLUs)

The average number of TLUs for poor and medium income households in the Pastoral zone reduced due to previous consecutive devastating droughts which wiped out most of the livestock. In the Marginal Mixed Farming zone the TLUs remained for all households remained the same and was normal at this time in the season. In the Mixed Farming zone the TLU reduced for both poor and medium income households due to diminishing land sizes and farmers reducing their livestock as a result of uncertainty in the availability of pasture due to the poor rainfall performance (Table 8).

Table 8: Tropical Livestock Units (TLUs) by household income groups

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Pastoral	4	5	12	15
Marginal Mixed Farming	3	3	4	4
Mixed Farming	3	6	8	10

Birth rate

Cattle are expected to calve down during the months of March- April 2020 as compared to the normal expected December-January period while kidding /lambing is expected in December-January unlike the normal situation in November-December. Delay in calving and kidding is likely to disrupt the normal calving pattern and therefore affect the availability of milk and the number of TLUs among households leading to low milk and income in November-December thus impacting negatively on food security.

Milk Production and consumption

The average milk production was below the long term average across all livelihood zones which was attributed to reduced quality and quantity of pasture across the livelihood zones before the resumption of rainfall in May. Milk consumption was within normal in Pastoral and Mixed Farming livelihood zones but 25 percent below the long term average in the Marginal Mixed Farming zone due to reduced production and high demand in the community. Although the production of milk reduced, the average milk prices across the livelihood zone remained within the LTA. Most of the milk in both Marginal Mixed and Mixed Farming zones is sold to processor and the prices remain constant during this period (Table 9).

Table 9: Milk production, consumption and prices

Livelihood zone	Milk Production (Litres)/Household		Milk consumption (Litres) per Household		Prices (Ksh)/Litre	
	Current	LTA	Current	LTA	Current	LTA
Pastoral All	2	4	1	1	50	50
Marginal Mixed Farming	4	6	1.5	2	35	35
Mixed Farming	5	7	2	2	35	35

Migration

In the Pastoral zone, there was minimal migration of about 5 percent of cattle from the area towards Mukogodo forest, Rumuruti and Sosian wards from both Mukogodo West and East in search of pastures. There was also reported in migration of livestock from Baringo county.

Mortalities

There were no mortalities reported as a result of disease out breaks or due to drought stress. Improved disease management was attributed to vaccination campaigns against Foot and Mouth disease (FMD) and Pestes des Petits Ruminants (PPR) which were conducted county wide by the County Government of Laikipia and partners. The normal mortality rates were estimated at 1-2 percent for all livestock species one percent for Cattle, two percent for Sheep, two percent for goats and below one percent for camel.

Water for Livestock

The main water sources include rivers, pans, dams, boreholes, springs and wells across the livelihood zones. There was a slight shift towards surface water sources due to improved recharge as a result of the above normal rains received in the first dekad of June. The average return trekking distance of the animals to water sources was comparable to normal across the livelihood zones (Table 10). The expected duration for the open surface water sources is 2-3 months which is normal during this season.

Table 10: Water Sources and Availability

Livelihood zone	Sources		Return distances (km)		Expected duration to last (months)	
	Current	Normal	Current	Normal	Current	Normal
Pastoral	Borehole, dams, water pans, river, springs, wells	Borehole, dams, water pans, river, springs, wells	5-10	5-10	2	2
Marginal	Borehole, dams, water pans, river, springs, wells	Borehole, dams, water pans, river, springs, wells	3-6	3-6	2	3
Mixed Farming	Borehole, dams, water pans, river, springs, wells	Borehole, dams, water pans, river, springs, wells	2-3	2-3	3	3

Watering Frequency

The watering frequency is once daily across all livelihood zones for all livestock species attributed to the increased water availability and access in the month of June (Table 11). Watering of cattle, sheep and goats in the Pastoral and Marginal Mixed Farming livelihood zones is done by adult men who are occasionally relieved during weekends and school holidays by the male youth. In Mixed Farming livelihood zones, it is done by either gender with a higher participation of women and youth.

Table 11: Watering frequency in days per week

Livelihood zone	Cattle		Camels		Goats		Sheep	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral All	7	7	7	7	7	7	7	7
Marginal Mixed Farming	7	7	7	7	7	7	7	7
Mixed Farming	7	7	7	7	7	7	7	7

3.2 Access

3.2.1 Market operations

The main markets in the county are Nyahururu and Sipili in the Mixed Farming zone, Rumuruti, Nanyuki and Olmorani in the Marginal Mixed Farming zone and Doldol, Kimanju and Chumvi in the Pastoral all species zone. Major markets across the livelihood zones were operational without any disruptions. The major livestock traded included goats, sheep, cattle and camels. The food commodities available in the market were maize, maize flour, rice, sugar, milk, pulses, and wheat flour.

Maize prices

The average maize price in July was Kshs. 56 per kilo which was an increase by 30 percent compared to the month of June. The prices remained lower than average but on an increasing trend from March to June due to sustained supply from the above average harvests long rains 2018. The prices in July were above the long term average by 30 percent due to constrained supply in the markets.

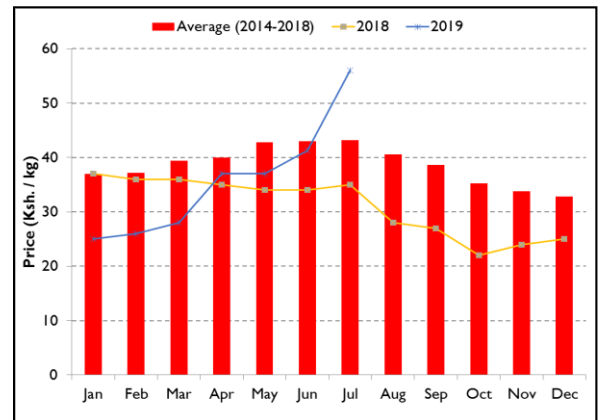


Figure 3: Maize Prices

Goat prices

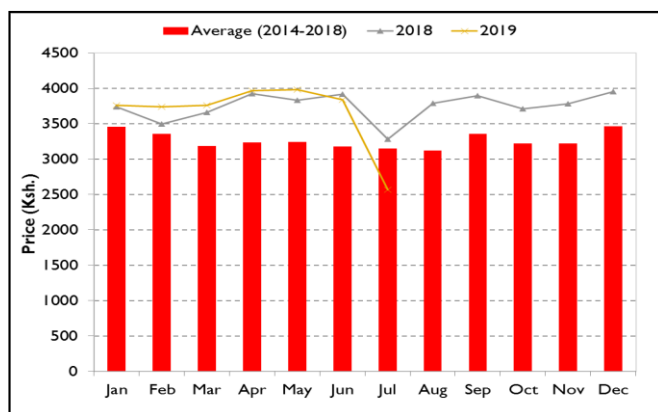


Figure 4: Goat prices

Average price of a goat in July was at Kshs. 2,564 compared to Kshs. 3,842 in the month of June. The goat prices were above average during this period by 19 percent compared to the long term average. This was attributed to rejuvenated browse across the livelihood zones. Goat prices are expected to reduce slightly in the Pastoral All zone due to decline in body condition as browse deteriorates by Mid-September, however the prices will remain

above the LTA.

Terms of trade

In July the sale of a goat was able to purchase 76 Kg of maize, a significant decrease compared to the previous month at 107 Kg. The current deteriorating trend in the ToT (Terms of Trade–(ToT) can be attributed to the increase in maize prices across all livelihood zones. However, the terms of trade has been favourable and above the five year average from January and is about average levels in July as shown in Figure 5.

3.2.3 Income sources

In the Formal employment/business trade livelihood zone, petty trade and formal waged

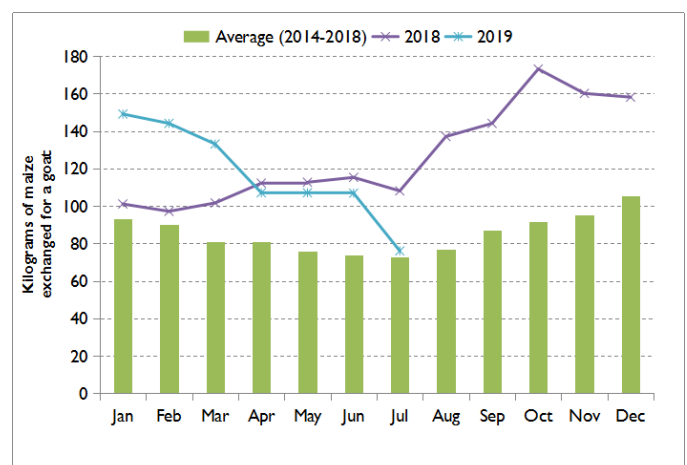


Figure 5: Terms of Trade

labor contribute about 60 and 30 percent of income respectively. In the Mixed Farming zone, livestock, food crop and poultry production contribute 52, 20 and 10 percent of income respectively. In the Marginal Mixed Farming zone, food crop, livestock and cash crop production contribute 40, 30 and 10 percent of income respectively. Livestock production and remittance/gifts contributes 90 and 5 percent of income respectively in the Pastoral all species zone.

3.2.4 Water access and availability

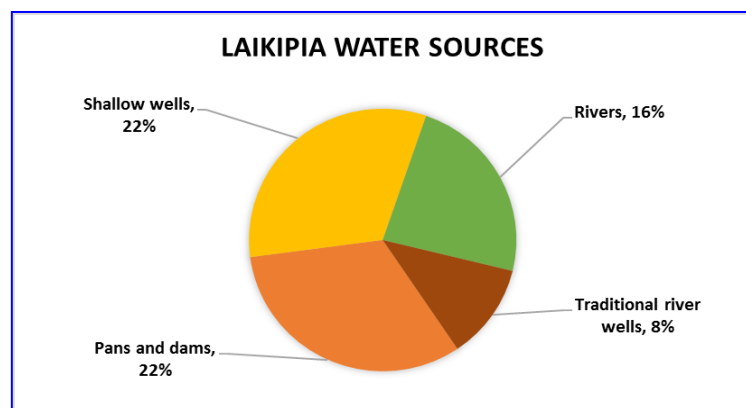


Figure 6: Water sources, Laikipia County

The main water sources for domestic and livestock use in the County were water pans and dams (22%), boreholes (32%), shallow wells (22%) and rivers (16%). Others were traditional river wells (8%). The June rains contributed to moderate recharge of the water sources which was between 60 and 90 percent for surface water sources. There were no incidences of conflicts reported because of shared water points since alternative sources of water in the county were available.

Access to water from boreholes was reported to be occasionally disrupted by

breakdown of pumping systems and poor management by the project management committees. The dams were at 65 percent of their normal at this time while the rivers were at 60 percent their normal level. All the dams across the livelihood zones were operational due the June rainfall which was fairly distributed county wide.

About 60 percent of the boreholes in the county were functional during the reporting period while all the rivers were flowing making it possible for households to access water. All the dams in the county had water and were operating at normal levels across all the livelihood zones in the county. The non-operational boreholes were due to vandalism, lack of equipping, non-functional pumping systems especially in Laikipia East and North sub counties. The non-operational dams were due to siltation, breach of embankment and undefined spillways. As a result of the June rains, there was no serious migration of people and their livestock since pastures and water was available across all parts of the county. In this regard, there were no areas with high population concentration, which normal during this period (Table 15).

Distance to water sources

Average distance to domestic water was three km which was normal for Marginal Mixed and Mixed Farming zones and for Pastoral zone the distance was five km which is also the normal situation.

Waiting time at the source.

Water sources were well distributed across all the livelihood zones hence there was no much variation to normal in terms of waiting time.

Cost of water

There was a general reduction in prices per 20 litre jerry can across all livelihood zones leading to below normal prices due to the above normal month of June rains. Almost all households across all the livelihood zones have access to surface water so there was no reported water vending in the county (Table 12).

Water consumption

The enhanced access to water in the county across all livelihood zones has led to an average water consumption per person that is comparable to that of normal times (Table 12)

Table 12: Water Accessibility and Utilization:

Ward / livelihood zone	Return Distance to Water for Domestic Use (Km)		Cost of Water at Source (Ksh. Per 20litres)		Waiting Time at Water Source (Minutes)		Average Water Consumption (Litres/person/day)	
	Normal	Current	Normal	Current	Normal	Current	Normal	Current
Mukogodo east	4.0	3.0	10	5	10	5	20	20
Mukogodo west	4.5	3.5	20	5	10	5	20	20
Segera	3.5	1.5	10	5	15	5	30	25
Sosian	2.0	1.0	10	5	9	5	20	20
Githiga	1	1	10	5	15	10	25	20
Marmamet	1	1.0	5	5	10-15	5-10	20	20
Igwamiti	0.5	0.5	5	5	5-10	0-5	30	30
Rumuruti	3	1	10	5	5-10	0-5	20	15
Olmoran	3	1	10	5	10-15	5-10	20	20
Sosian	2-3	1-2	10	5	10-20	5-10	15	10
Tigithi	3.5	2.0	10	5	30	15	15	15
Ngobit	4.5	3.0	10	5	30	10	15	15
Umande	5	3	10	5	30	20	15	15
Thingithu	4	2	10	5	30	15	15	10
Nanyuki	Tap water	0	Metered	metered	5	1	20	15

3.2.5 Food Consumption

According to the NDMA sentinel site data, 100 percent of the households in the Mixed Farming livelihood zone maintained acceptable food consumption levels in July. The Pastoral all species zone had 97 and three percent of households with acceptable and borderline food consumption respectively. In the Marginal Mixed Farming zone, 50 percent of households had acceptable food consumption and 48 percent had borderline food consumption. Overall in the county, households with acceptable, borderline and poor scores were 73, 26 and one percent respectively. The food consumption score has remained stable compared to the long rains 2018 which is an indication of food availability and dietary diversity at household level across all the livelihood zones. However, the Marginal Mixed Farming zone maintained lower food consumption score due to low dietary diversity which is attributed to low production in the area.

3.2.6 Coping strategy

According to the NDMA sentinel site data the mean coping strategies index (CSI) for July was 7.8, 3.4 and 2.6 percent in the Mixed Farming, Pastoral and Marginal Mixed livelihood zones respectively. CSI increased in the Mixed Farming zone and reduced in the Marginal Mixed Farming and Pastoral livelihood zones compared to the long rains 2018 at the same time implying that households in the Mixed Farming zone are using more food consumption coping strategies (Table 13).

The proportion of households not adopting livelihood coping strategies was at 30 percent with 63 percent employing stress coping strategies and seven percent employing crisis coping strategies. Poor crop performance for two consecutive seasons impacted negatively on the Mixed Farming zone that rely more on crop production for food and cash income. The most common types of strategies employed were borrowing and purchasing food on credit, relying on well off relatives and reduced number of meals.

Table 13: Coping Strategy Index

Livelihood zone	2018	2019
Mixed Farming	2.2	7.8
Marginal Mixed Farming	3.8	3.4
Pastoral	4.7	2.6

The proportion of households using no coping strategies was 30 percent while those using stress crisis and emergency strategies was 63, 6.3 and one percent respectively.

3.3 Utilization

Household food utilization is a mainly influenced by morbidity prevalence of under-fives and general population, levels of completion of immunization and vitamin A coverage, nutritional status among households and level of sanitation and hygiene practices among households. Dietary diversity by most households was influenced by the availability and access of food items in the markets.

3.3.1 Morbidity and mortality patterns

The most common diseases reported in Laikipia were Upper Respiratory Tract Infections (URTI), diarrhoea and malaria. For both general population and children under five years URTI and diarrhoea cases were reported across the county with exception of Laikipia North where prevalence of skin diseases and eye infections were reported during community interviews. Morbidity trends for under-fives remained stable with URTI being the most common while in the general population, URTIs remained relatively high with an observed decline this year (Figure 7 and 8).

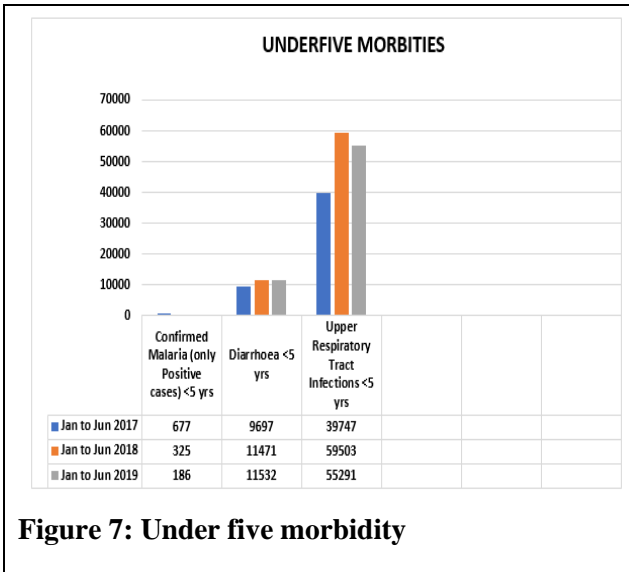


Figure 7: Under five morbidity

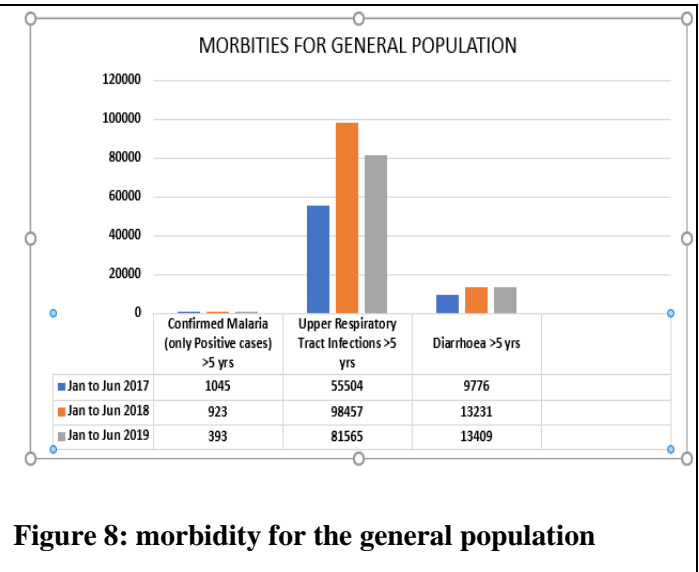


Figure 8: morbidity for the general population

Epidemic and waterborne diseases

For the case of epidemic and waterborne diseases, diarrhoea is on an increasing trend in 2019 as compared to 2017 and 2018, this could be attributed to water shortage due to the prolonged dry spells before the rains peaked in June in most areas across the county. All other diseases were on a declining trend.

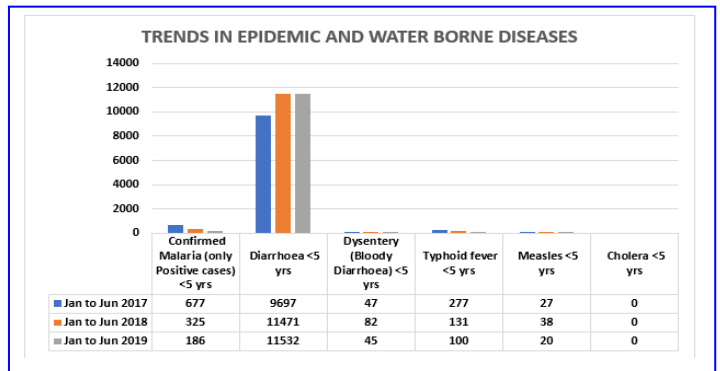


Figure 9: Epidemic and waterborne diseases

3.3.2 Immunization and Vitamin A supplementation

Fully Immunized Child (FIC) at 9-month coverage has slightly increased (85.2 percent) in 2019 compared to same period last year (78.9 percent). This has been attributed to intensified integrated outreaches in every ward. Vitamin A Supplementation Coverage (6 – 59 Months) slightly decreased to 89 percent between January to June 2019 compared to 90 percent same time last year. However, the coverage has been above the national target in the two years (2018 & 2019). This has been attributed to financial support by the County government of Laikipia. Immunization per sub county shows that Laikipia west has performed well more than 80 percent in all vaccines, followed by Laikipia East and last Laikipia North. Laikipia North has poor road network making some areas inaccessible. In addition, this is a Pastoral zone whereby the families migrate from one area to another in search of pastures hence children not reachable for immunizations which compromises their health and therefore affecting their nutrition status.

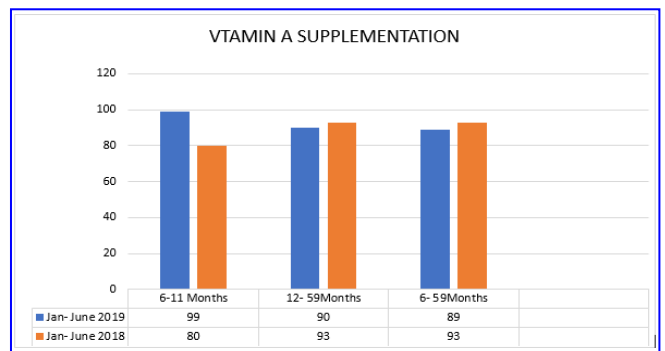


Figure 10: Vitamin A Supplementation Coverage

Coverage for specific antigens

The coverage of all antigens in 2019 are above the national target of 80 percent except for measles which is 78 percent. The coverage is higher when compared to 2018. This was attributed to intensified integrated outreaches in every ward.

3.3.3 Nutritional status and dietary diversity

According to the NDMA sentinel site data for July the percentage of children under-five years of age who are at risk of malnutrition have been decreasing since April and in June was 2.4 percent. The reduction was slightly below the long term average (percent) and was attributed to increased outreach programs leading to better health care. There were no reported cases of children falling under Severe acute malnutrition (SAM) and Moderate acute malnutrition (MAM) for the current month across the livelihood zones.

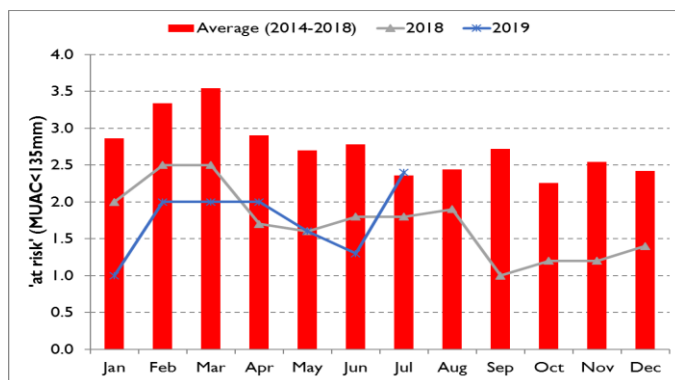


Figure 11: Percentage of children at risk of Malnutrition

Trend in weight for under-fives

The trend in weight for under-fives shows a decrease in number of underweight children in the month of June. The high number in the month of May was attributed to increased number of children with diarrhoea cases and to low milk availability due to the dry spell in the previous months. The improvement in nutritional status is attributed to improved outreach programs leading to better health care. Hot spot areas for malnutrition included Sosian, Mukogodo East west and West and some parts of Laikipia West and East depleted food stocks.

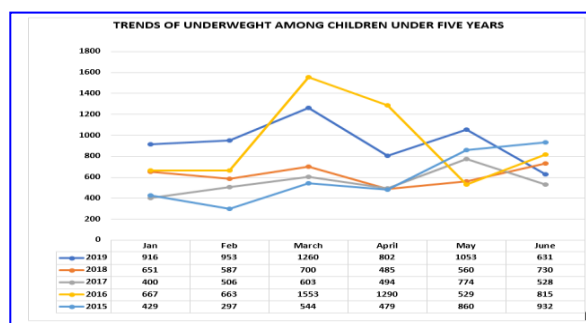


Figure 12: Trend in weigh for under-fives

3.3.4 Sanitation and Hygiene

Latrine coverage in the county was 46 percent in the Pastoral livelihood zone and 98 percent in the Mixed Farming livelihood zone. Coverage and usage are low in the Pastoral areas due to nomadic lifestyle and cultural beliefs and practices. According to a SMART survey carried out in 2017, only 26 percent of the households treat water, of which 22 percent boil while three percent use treatment chemicals. Only two percent of the population practice hand washing at four critical times. Open defecation was still practiced in Pastoral livelihood zone in Laikipia North with 46 percent of the households lacking latrines. The low latrine coverage is attributed to nomadic lifestyle of the Pastoral population leading to contamination of water sources and increased prevalence of diarrhoea. (Table 14).

Table 14: Latrine Coverage and Utilization

Sub County	Latrine Coverage		Household Relieving Points in		
	January to June 2019 % Coverage	July to December 2018 % Coverage	Own Latrine (%)	Shared Latrine (%)	Open defecation (bushes) (%)
Laikipia East	98	96	98	0	2

Laikipia North	54	46	31	15	54
Laikipia west	85	82	85	9	6

Source: Sub county Public Health Office, SMART Survey

3.4 Trends of key food security indicators

Table 15: Trends of key food security indicators

Indicator	Short rains assessment 2018		Long rains assessment 2019	
Percentage of maize stocks held by households	45 percent of LTA		23 percent above LTA	
Livestock body condition	Cattle	Good to fair	Cattle	Fair
	Sheep	Good	Sheep	Good
	Goats	Good	Goats	Good
	Carmel	Good	Carmel	Good
Water consumption (Litres per person per day)	Pastoral All	10	Pastoral	20
	Marginal Mixed Farming	15	Marginal	20
	Mixed Farming	20	Mixed Farming	20
Price of goats (Ksh)	Average County price: Ksh. 3,455		Average County price: Ksh.3800	
Price of maize (Ksh per kg)	Average County price: Ksh. 25		Average County price: Ksh. 50	
Terms of trade (Pastoral zone)	Average County ToT: 150		Average County 76	
Coping Strategy Index	Pastoral All	2.5	Pastoral	3.8
	Marginal Mixed Farming	5.1	Marginal Mixed Farming	3.3
	Mixed Farming	4.2	Mixed Farming	6.8
Food Consumption Score (%) NDMA	Pastoral	Acceptable-93.6% Borderline-poor	Pastoral	Acceptable-97% Borderline-3%
	Marginal Mixed Farming	Acceptable 50% Borderline -50% Poor-0	Marginal Mixed Farming	Acceptable 50% Borderline 48%
	Mixed Farming	Acceptable-100% Borderline -0 Poor-0-	Mixed Farming	Acceptable-100 Borderline -0.3
Proportion at risk of malnutrition (MUAC<135mm)	1.3 percent		2.4 percent	
GAM	11.4%			

4.0 CROSS CUTTING ISSUE

4.1 Education

4.1.1 Enrolment

The County has 286 public and 84 private primary schools with a total of 84,467 and 16,183 pupils respectively; 44,509 and 44,958 are girls and boys for public schools. It has 83 public and 16 private

secondary schools with 33,663 and 2,170 students whereby 17,797 and 18,036 are boys and girls respectively. Primary and secondary school enrolment rate is at 93.4 and 81.5 percent respectively. The low enrolment in secondary schools is attributed to high costs required during admissions especially in boarding schools, high poverty levels and a few day secondary schools. There are 428 public and 148 private ECDE centres in the County with a population of 23,172 and 6,613 children respectively. These ECDE centres are linked to public primary schools in the County. Where school feeding programs exists the enrolment rate is relatively higher though the teacher: pupil ratio is low; this adversely affects the quality of education (Table 16)

Table 16: Enrolment for Early Learning and Basic Education in the County

Level/ Cycle	2019 Term I			2019 Term II			Overall Change percent
	Boys	Girls	Total	Boys	Girls	Total	
ECDE	-						
Primary	45286	43230	88,516	44,958	44,509	84,467	-5
Secondary	17,372	18,643	36,015	18,018	18,581	36,599	1

Participation

Attendances in schools have been on an upward trend beginning January at all levels across the county. the attendance rate at primary schools is fairly good at 87 percent. Completion rate for primary schools is at 79 percent however, the transition rate from primary to secondary school is above minimum targets of 70 percent at 94 percent.

Table 17: Attendances in Schools

Indicator	Term I 2019						Term II 2019			
	January 2019		February 2019		March 2019		May 2019		June 2019	
School attendance	No Boys	No Girls	No Boys	No Girls	No Boys	No Girls	No Boys	No Girls	No Boys	No Girls
ECD	-									
Primary	45282	45228	45286	43231	45286	43230	44950	45286	44958	44509
Secondary	16599	17001	17300	18640	17372	18643	17370	18630	18018	18531

Retention

School dropout rates were high in Term I for both primary schools compared to secondary. Dropout rates for boys and girls are at 0.5 and 0.7 percent respectively which was attributed to inadequate supply of water, lack of school feeding programs, cultural practices, and preference for boys' education to girls and forced marriages among girls. Laikipia East and Central recorded the highest number of drop out for both primary and secondary school. Completion rate for primary schools is at 79 percent however, the transition rate from primary to secondary school is above minimum targets of 70 percent at 94 percent.

School dropout is attributed to inadequate supply of water, lack of school feeding programs, cultural practices, and preference for boys' education to girls and forced marriages among girls.

High levels of school dropout rates are usually noted, especially in Pastoral livelihood zones due to migration in search of pasture and water. Boys are withdrawn to herd livestock away from home. As a result of influx of Pastoralists from outside the county (Baringo, Samburu and Isiolo) learning is disrupted and schools closed due to conflict and insecurity. The schools most affected by drought are in the Pastoral and in the Marginal Mixed Farming livelihood zones.

Table 18: Drop outs

Indicator	End of Term I 2018		End of Term II 2018	
	No Boys	No Girls	No Boys	No Girls
Students dropped out from school				
ECD				
Primary	15	16	9	10
Secondary	9	8	10	10

School meals programme

131 primary schools are under the homegrown school meals program benefiting 43,745 pupils. The general challenges affecting the school meal programme include delay in funding of schools which are under home grown school feeding programme or meal exhaustion due to high population in some schools before the end of the school term and food delivery delays. No schools had received funding for HGSMP for 2019. Laikipia Central- Shalom Primary school IDPs camped inside while Suguroi Primary school has IDPs camped around the school. Classrooms are congestion which affects the performance of learners.

Table 19: Home-grown School Meals Programme

Sub County	No. Of Schools Benefiting	Boys	Girls
Laikipia Central	25	3561	3207
Laikipia East	4	634	617
Nyahururu	11	1910	1712
Laikipia West	72	13207	12603
Laikipia North	23	3255	3039
Total	131	22,567	21,178
		43745	

Inter Sectoral links where available

Most of the schools have no handwashing facilities and though most of the schools had functional latrines 50 percent of the latrines were in poor condition across the county. Almost all schools have water tanks however water was not adequate throughout the term. Generally, challenges related to hygiene and sanitation outcomes were cited in most schools. There is improved participation and low school dropout due to availability of water pasture and food commodities and minimal migration.

5.0 FOOD SECURITY PROGNOSIS**5.1 Prognosis Assumptions**

Laikipia County food security prognosis for the next six months is based on the following assumptions:

- Also according to the NOAA/CPC seasonal ensemble forecast, the October to December short rains season 2019 is forecast to be average. However, there is uncertainty associated with the likelihood of El Niño and positive Indian Ocean Dipole.
- Given the below average projected production and delayed harvest of maize between February and March 2020, maize prices are expected to be slightly to moderately above average until the next harvest and as supply from other regions increase.
- Accelerated deterioration of rangeland resources is expected to drive atypical livestock migration and increased resource-based conflict between Pastoralists and between Pastoralists and farmers until the start of the short rains in October

- The livestock body condition is expected to deteriorate during the August to September dry period hence livestock prices are expected to decline through to October.
- The terms of trade are expected to decline due to increasing maize prices and reducing goat prices until end of October when pasture and browse will improve with the short rains

5.2 Food security Outlook

Food Security Outcomes (August – October)

Dry conditions in the August-September period are expected to increase deterioration of pasture in Laikipia especially the Pastoral All zone. This will negatively affect the livestock body condition and productivity until the start of the short rains season in October. Driven by below-average income from livestock production and rising staple food prices, poor households' purchasing power and food access are anticipated to considerably decline across the livelihood zone. The population with acceptable food consumption is expected to reduce across the livelihood zones with more falling in the borderline and poor consumption groups increasing especially in the Marginal Mixed Farming and Pastoral zone. This will be due to reduction in the milk production and low dietary diversity as a result of reduced income. Prevalence of acute malnutrition is anticipated to slightly increase especially for under-five children due to low milk and food diversity in the malnutrition hot spot areas.

Most parts of the county will be classified in Stressed (IPC Phase 2) until October when the rains start, and pasture starts improving.

Food Security Outcomes (November 2019 – January 2020)

With the regeneration of forage and water resources, November is expected to gradually lead to food security improvements. As livestock return to wet season grazing areas near homesteads, livestock body conditions and productivity are expected return to normal from late October 2019 to January 2020. Although low birth rates will continue to impact livestock-related labour, household income will increase as livestock prices and goat and camel milk production return to normal levels.

However, milk from cattle is likely to remain below average due to slow recovery and likely fewer births. Household purchasing power is anticipated to improve with the availability of long rains harvest of beans and vegetable in November, which will drive staple food prices slightly downward even though prices of maize and potatoes are likely to remain at slightly elevated levels until the end of January when harvesting of maize starts. As a result of increased milk availability and income and improved terms of trade, many poor households are expected to be able to meet their minimum food needs and the prevalence of malnutrition among children is anticipated to decline.

Most parts of the county will be classified in Minimal (IPC Phase 1.) The Pastoral areas and Marginal Mixed Farming areas that were in IPC Phase 2 will move to Minimal (IPC Phase 1) as the population with poor food consumption score declines due improved food availability and dietary diversity.

6.0 CONCLUSION AND INTERVENTIONS

6.1 Conclusion

6.1.1 Phase classification

The County is in Stressed (IPC Phase 2) food security phase classification meaning that households have minimally adequate food consumption but are unable to afford some essential non food expenditures without engaging in stress coping strategies

6.1.2 Summary of key findings

The performance of the season during the long rains was below normal across the county resulting to a slightly declining food security situation. Food availability is currently within normal due to food stock still available with households in the Mixed Farming and parts of the Marginal Mixed Farming zones. Maize household stocks were 23 percent above LTA while traders and millers stocks were 77 and 57 percent of the LTA respectively. Livestock productivity was average across the livelihood zones. Most households had maize stocks from previous harvests. Presence of pasture and browse ensured good body condition for livestock resulting in stable market prices and availability of milk at household level. Markets were normal with no disruptions. The maize prices was on an upward trend but lower compared to the LTA due to availability at the markets. The ToT was slightly above the normal range for the period due to good livestock body condition that was favourable to Pastoralist.

Approximately 97 percent of the households in the Mixed Farming livelihood zone maintained acceptable food consumption. Households in the Pastoral zone had an acceptable food consumption of about 88 percent, a borderline food consumption of 7 percent and a poor food consumption of five percent indicating a slightly lower dietary diversity compared with the Mixed Farming zone. About 39 percent of the households in the Marginal Mixed Farming - zone had an acceptable consumption, 60 percent had a borderline score and two percent had a poor food score. Households had adequate water availability and access and most households were having two to three meals a day, resulting in improved health care with MUAC levels at 1.3 percent. There are lower dropout rates in schools attributed to low migration of the Pastoral communities and availability of food in the community.

Labour opportunities has enabled households to continue having access to food. In terms of utilization, there are poor hygiene practices especially in the Pastoral livelihood zone. Malnutrition levels are likely to increase across all livelihood zones due to declining access to food and reduced milk production as a result of diminishing quantity of pasture and browse as the dry period sets in. The number of households with acceptable food consumption score is likely to reduce with more households relying on stress coping strategies.

6.1.3 Sub-county ranking

Ranking of sub counties was done using pairwise ranking from the least food insecure to the worst as shown in Table 20.

Table 20: Sub-county ranking

Sub county	Rank	reasons
Laikipia West	1	-Reliable rains -Employment opportunities -Food storage facilities present -High income levels
Laikipia East	2	-Low food stocks with households -Unreliable rainfall
Laikipia North	3	-Less diversification of incomes -Insecurity from neighbouring counties -Unreliable rainfall

6.2 Ongoing Interventions

6.2.2 Non-food interventions

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
Agriculture sector							
KAIP-Maize Insurance Program	To improve productivity	All Sub Counties	All sub counties		305 beneficiaries	Long rain season	National and County Government Insurance company
NCPB Subsidized fertiliser	Increased yields	All wards	All wards			ongoing	National Government County Government
Value Addition/ Utilization	Increased profitability	All wards	All wards			ongoing	County Government
Climate smart technologies (CA, Agro forestry, soil & water conservation, Drips and water pans, DECs crops)	Increased profitability and productivity	All wards	All wards			ongoing	County Government
Livestock sector							
Rehabilitation of existing dams	To increase water availability for home consumption livestock and crop use	Umande, Mukogodo East and Olmoran Wards	3 dams rehabilitated			2019/2020	KCSAP, World Bank, County and National Govt
Reseeding of degraded areas	To rehabilitate and increase feed resources for livestock	Tiemamut and Musul community ranches in Mukogodo West ward	300 acres reseeded	1,250,000	1600 group members	2019/2020	County govt of Laikipia, community
Health and Nutrition sector							
Vitamin A Supplementation	To increase vitamin A coverage among children 6-	All sub counties	All sub counties	1,702,900	M-39,703 F-40,022	MoH- CGL. Nutrition International	JAN- DEC, 2019

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
	59 months, hence reduce childhood morbidity and mortality						
Zinc Supplementation	To reduce severity and duration of diarrhea diseases	All subcounties	All sub counties	1,863,720	M-44,114 F-44,469	MoH- CGL	JAN-2019 DEC,
Management of Acute Malnutrition (IMAM)	To treat and prevent complication of malnutrition	All subcounties	All sub counties	15,865,000	M-3520 F-3548	MoH- CGL UNICEF	JAN-2019 DEC,
IYCN Interventions (EBF and Timely Intro of complementary Foods)	To ensure proper growth and development among infants and young children hence reach their potential	All subcounties	All sub counties	1,384,000	M-8,373 F-8440	MOH - CGL	JAN-2019 DEC,
Iron Folate Supplementation among Pregnant Women	To improve health and nutrition status among pregnant women and fetus	All subcounties	All sub counties	9,351,180	F-17,317	MoH- CGL. Nutrition International	JAN-2019 DEC,
Deworming	To reduce worm related illness among children, improve their immunity	All subcounties	All sub counties	283,468	M-35,292 F-35,575	MOH - CGL	JAN-2019 DEC,
Education sector							
Homegrown school meals programme		Laikipia north, east, central, west and	Laikipia county	27,538,200	43,745	MOE	Jan to Dec.

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
		Nyahuru					
Water tankering		Mukogodo east and west	Laikipia North		6881	County government of Laikipia	January to march
Food supplements		Laikipia North	Laikipia North		all	African Education Trust	Jan. 2019 March 2019

6.3 Recommended Interventions

6.3.1 Food Interventions

Sub county	Population in of Food need % range Min - Max	Population	Reasons
Laikipia West	0-5	9917	-Reliable rains -Employment opportunities -Food storage facilities present -High income levels
Laikipia East	8-10	8661-10827	-Low food stocks with households -Unreliable rainfall
Laikipia North	10-15	7878-11817	-Less diversification of incomes -Insecurity from neighbouring counties -Unreliable rainfall

6.3.2 Non-food interventions

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
Agriculture sector							
Assist vulnerable groups open up new lands	Improve food security status of the vulnerable groups	14 wards	All subcounties		1400	Feb 2019	CGL Tractor owners
Supply seed to vulnerable groups	Improve food security status of the vulnerable groups	14 wards	All subcounties		1400	March 2019	CGL
Supply fertilizer to vulnerable groups	Improve food security status of the vulnerable groups	14 wards	All subcounties		1400	March 2019	CGL
Excavate farm water pans for irrigation	Increase access to water for irrigation	15	All subcounties		300	2019	CGL and partners
Livestock sector							
Removal of invasive species (sansiviela and ipomeas) and reseeded	To reclaim and increase pastures	1000 acres	All subcounties	5,000,000	5000	2019/2022	County govt, NDMA, KEFRI, Pastoralists
Health and Nutrition sector							
i) Immediate Recommended Interventions							
Provision of water treatment chemicals at community level	Ensure clean water availability	All 3 subcounties	L. North and targeted areas in East & west	3,360,000	500 HH	JAN - DEC, 2019	MOH - CGL NDMA
Carry out Active case finding at community	Reduce malnutrition	All 3 subcounties	The whole of Laikipia North & targeted	2,636,800	79,725	JAN - DEC, 2019	MOH - CGL NDMA

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
level and refer the malnourished cases to health facility			areas in East & West				
Enhance Health education in all health facilities	Create awareness	All 3 sub counties	All 3 Sub-Counties	-	84 Health Facilities	JAN - DEC, 2019	MOH CGL NDMA
Conduct Health and Nutrition SMART Survey		All 3 sub counties	All 3 Sub-Counties	6,500,000	Sampled population	JAN - DEC, 2019	MOH CGL NDMA
ii) Medium and Long term Recommended Interventions							
Carry out OJT on identification and management of malnutrition among Health care providers		All 3 sub counties	All 3 sub counties	856,800	84 facilities	JAN - DEC, 2019	GCL- MOH
Carry out integrated outreaches in hard to reach areas in all sub counties		All 3 sub counties	All 3 sub counties	1,318,400	78 sites	JAN - DEC, 2019	GCL- MOH
Capacity build CHV on IMAM screening & WASH (Water, Sanitation and Hygiene)		All 3 sub counties	All 3 sub counties	1,950,000	650 CHVs	JAN - DEC, 2019	GCL- MOH
Capacity build ECD teachers on Vitamin A supplementation		All 3 sub counties	All 3 sub counties	525,000	350 ECD Teachers	JAN - DEC, 2019	GCL- MOH
Water sector							
i) Immediate recommended interventions							
Repair of Kuri and Kurum bh	Improve water accessibility	Makurian	Mukogodo east	1,000,000	3000	CGL/NDM A GOK	2 months
Repair of Ewaso bh	Improve water accessibility	Ewaso	Mukogodo west	500,000	1000	CGL/NDM A GOK	1 month
Repair of Naibor bh	Improve water	Naibor	Segera	500,000	2000	CGL/NDM A GOK	3 months

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
	accessibility						
Muwarak bh pipeline extension	Improve water accessibility	Posta	Sosian	1,000,000	3000	CGL/NDMA /GOK	3 months
ii) Medium and Long Term recommended Interventions							
Routine inspection of all boreholes systems	Ensure boreholes are operational	All wards	All wards	2,000,000	20,000	CGL/NDMA /GOK	2019-2020
Community trainings and empowerment Availability of fast moving parts	Well maintained bore holes and pumping systems	All wards		10,000,000		CGL/NDMA /GOK	2019-2020
Desilting existing dams Drill boreholes Develop springs	Improve water availability and reliability	Kinamba Ndindika Mwenje Mithiga	Githiga	40,000,000	8,000	NDMA/cou nty govt/GOK	2019-2020
Desilting existing dams Drill boreholes Develop springs Improve roof catchments' and storages	Improve water availability and reliability	Thigio Gituamba Karaba Melwa	Marmanet	40,000,000	5,000	NDMA/cou nty govt/GOK	2019-2020
Pipeline extensions from existing water supplies Drill boreholes Develop springs Rehabilitate dams Improve roof catchments' and storages	Improve water availability and reliability	Igwamiti Mahianyu	Igwamiti	50,000,000	15000	NDMA/cou nty govt/GOK	2019-2020
Pipeline extensions from existing water supplies Drill boreholes Develop springs Rehabilitate dams Improve roof catchments' and	Improve water availability and reliability	Wangwaci Demu ndune	Olmoran	50,000,000	4000	Cgl	2019-2020

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
storages							
Pipeline extensions from existing water supplies Drill boreholes Rehabilitate dams Improve roof catchments' and storages	Improve water availability and reliability		Rumuruti	50,000,000			2019-2020
Pipeline extensions from existing water supplies Drill boreholes Rehabilitate dams Develop spring Improve roof catchments' and storages	Improve water availability and reliability	Nambaire spring	Sosian	50,000,000	350	cgl	2019-2020
Pipeline extensions from existing water supplies Drill boreholes Develop springs Rehabilitate dams Improve roof catchments' and storages	Improve water availability and reliability	Rumuruti dam Mutara bh ,roda bh Nguo bh	Salama	50,000,000	30,000	Cgl /gok	2019-2020
Constructing a new water supply	Improve water availability and reliability	Ngobit	Ngobit	25,000,000	800	County govt	2019-2020
Education sector							
Expanded feeding programme	To enhance access, participation and retention in schools	Laikipia north, east, central ,west and Nyahuru	Laikipia east, north, west,central and Nyahuru.	Funds 40,722 x 10x 40days= 16,288,800	40,722	MOE, WFP, NDMA and other actors	july to october 2019

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
Water storage facilities & gutters	Help in rain Water harvesting and water availability	Laikipia north, central, east and west	Laikipia north, central, east and west	Plastic tanks and gutters	84,467	Water services board, NDMA, LCG	July to October 2019
Establishment of boarding schools in Asal areas.	Create availability learning institution in the ASAL areas.	Laikipia north, east, central and west	Laikipia North, laikipia east, central and west	Boarding facilities 5000,000 x3= 15,000,000	1,500	MOE, NDMA other actors	2019/2020
Improved Sanitation facilities	Creates a healthy leaning environment for learners.	Laikipia north, east, central and west	Laikipia north, east, central and west.	Sanitation facilities 20 latrines @ 100,000= 2,000,000	4,000	MOH, CGL,MOE, NDMA and other actors	2019/2020
Sustainability projects eg. Bee keeping, crop Farming, livestock Farming etc.	Income generation and for learning as well	Laikipia north, central, east, west nyahururu	Laikipia county	Initial funding and support 10 schools @ 200,000= 2,000,000	2,000	MOE, NDMA and other actors	2019/2020
Mid-day fortified porridge	To enhance access, participation and retention in schools	Laikipia North, segera, solio, Rumuruti	Laikipia county	Funding 3000 pupils @20/= x 40 days= 2,400,000	3,000	MOE, MOH, CGL, NDMA, other actors	Sept to November 2019
Food for fees (secondary)	Help to prevent school dropouts due to lack of school fees.	Laikipia east,west, central, west and Nyahururu	Laikipia county	Funding 500 Students@ 10,000 =5,000,000	500	NDMA, MOE and other actors	Sep to November 2019