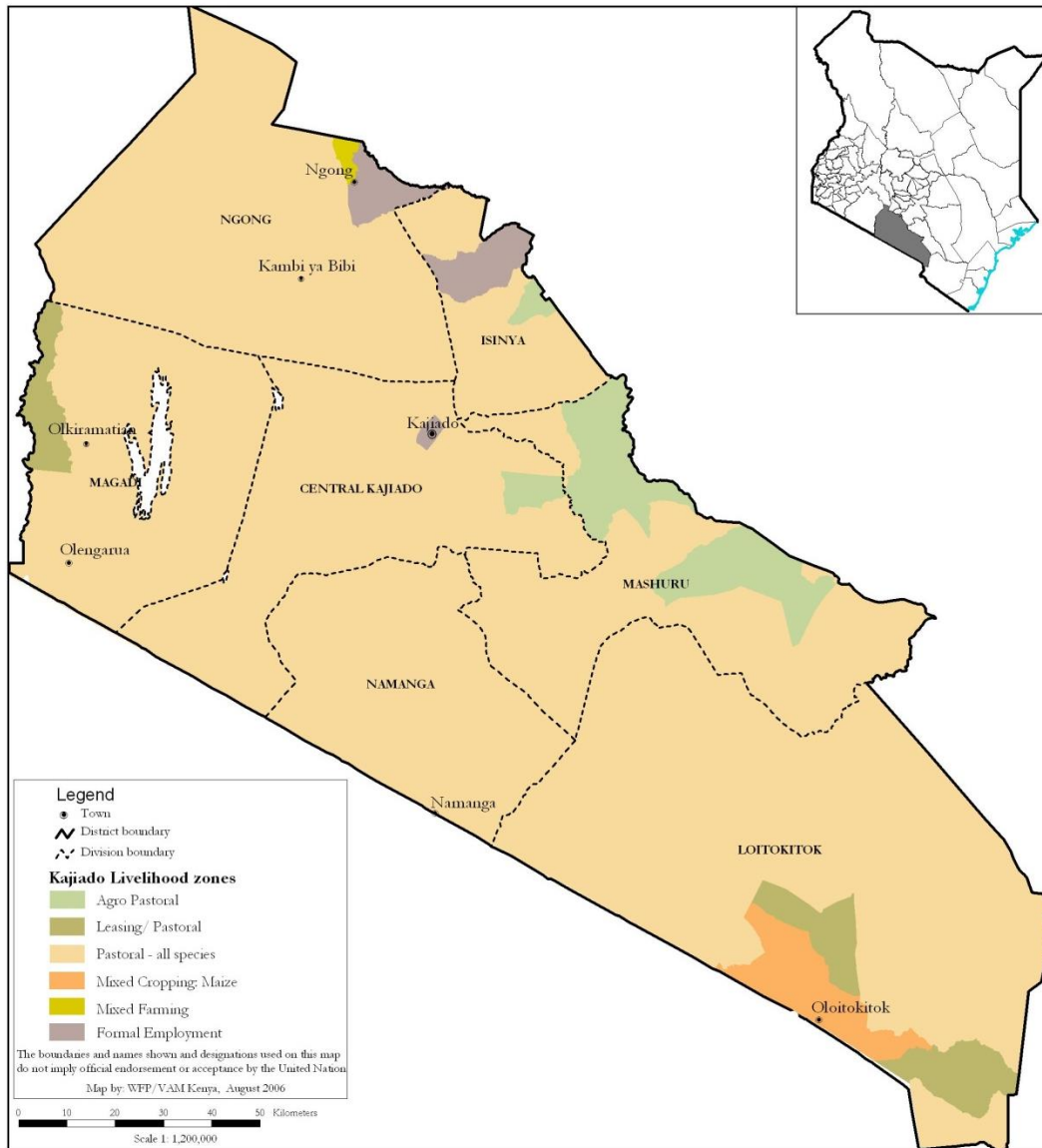


KAJIADO COUNTY

2017 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



A Joint Report of Kenya Food Security Steering Group¹ and Kajiado County Steering Group

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Executive Summary

Kajiado County is classified in the Crisis Food Insecurity Phase (Phase 3) of the Integrated Food Security Phase (IPC), which imply that even with any humanitarian assistance, at least one in five households in the area have the following or worse: Food consumption gaps with high or above usual acute malnutrition or are marginally able to meet minimum food needs only with accelerated depletion of livelihood assets that will lead to food consumption gaps. The main hazards contributing to food insecurity include poor temporal distribution of rain especially in December that led to wilting of maize crop and non-generation of pasture. Human wildlife conflicts have led to loss of livestock. High food prices continue to limit households' access to food. Reduced livestock holdings coupled with encroachment of grazing land has rendered livestock keepers' food insecure. The current drought has led to about 50 percent of cattle deaths among livestock that remained behind after over 80 percent of the overall livestock herd migrated, rendering most households more vulnerable with to low purchasing power. Migration of livestock which started as early as July 2017 has deprived households' access to food.

Stocks held by households in the mixed farming areas are six percent of the long term average (LTA) and are expected to last for 1-2 weeks. Pastoralists are entirely relying on market purchases. The average County maize price in the month of January stood at Ksh. 48 per Kg, which compares well with the LTA. Maize price in pastoral livelihood zone was at Ksh. 60 per Kg. However, maize was scarce in the markets and two kilogram of maize flour was selling at Ksh. 130. A medium-sized goat was selling at Ksh. 2,510 with the lowest price in pastoral livelihood zone selling at Ksh. 2,400 compared to a LTA of Ksh. 2,800.

The proportion of children (6-59 months) acutely malnourished is 10.0 percent (SMART 2018), categorized as serious and deteriorating. According to the NDMA surveillance data, the proportion of children at risk of malnutrition in January 2018 exceeded the LTA with 17.6 percent being at risk in January 2018 compared to the LTA of 8.9 percent. Children under five years consume the same foods as adults with most consuming between 2-3 meals in a day. The leading three common diseases among under-fives are upper respiratory tract infections (URTIs), malaria and diarrhoea whose cases are still high but slightly reduced compared to the same period of 2016. A total of 82 cases of cholera were reported during the season compared to 11 cases reported in the same period in 2016.

Milk production reduced with agro-pastoralists producing less than a litre per day per. No milk was observed in the pastoral zone. A litre of milk was sold at Ksh. 60-70 per liter compared to the normal Ksh. 40-50. Cattle are emaciated in the pastoral and agro-pastoral zones due to diminished pasture and longer trekking distance to watering points while in the Mixed farming, cattle body condition is fair. Goat and sheep are in good body condition across the County.

Averages range of domestic water consumption per person per day was 10-15 and 8-12 litres in the mixed farming and pastoral and agro-pastoral zones respectively. Households are able to collect water between 30-60 minutes as most livestock migrated thereby decreasing competition at water points. Normally when livestock is grazing within, waiting time is up 3 hours in pastoral and agro-pastoral areas. The average return trekking distances from grazing area to watering points is about 40km with livestock watering frequency of 1-2 days. About 80 percent of water pans have dried up. Livestock have migrated to Chyulu Hills of Makueni, Naivasha and Nakuru areas in search of pasture. Outbreaks of Foot and Mouth (FMD) and CCPV was reported.

There is need to monitor availability of maize flour whose scarcity is likely to trigger high food prices. Conflicts with neighbouring counties due to competition of pasture need be well managed. Vulnerable households need to be supported with food to avert human deaths.

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1.0 INTRODUCTION

1.1 County Background

Kajiado County covers an approximate area of 21,902 square kilometres supporting an estimated population of 870,721 people (KNBS, Projected 2016). The County is administratively divided into five sub counties namely: Kajiado Central, Kajiado North, Kajiado South, Kajiado East and Kajiado West. The three main livelihood zones in the county are; pastoral all species, agro-pastoral and mixed farming livelihood zones as shown in Figure 1.

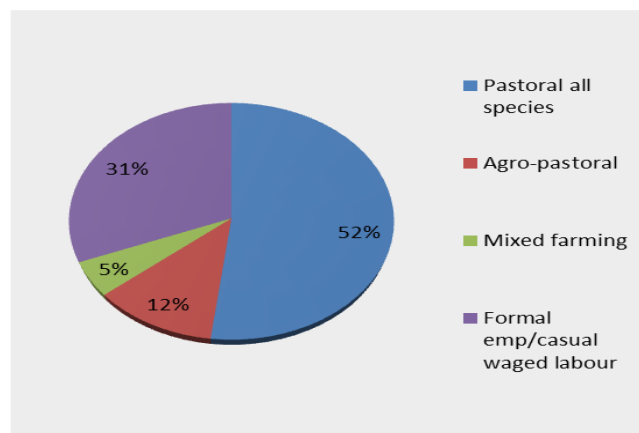


Figure 1: Population by livelihoods

1.2 Objectives and Approach

The main objective of rapid Short Rains Food Security assessment was to develop an objective, evidence-based and transparent food security situation analysis following the short rains season of 2017 October, November and December (OND), taking into account the cumulative effect of previous seasons, and to provide immediate and medium term recommendations for possible response options based on the situation analysis. Primary data was collected during the field visits at the County where community and market interviews were conducted. Technical reports were also provided by the sectoral technical members at the County level. Secondary data collected from the early warning system was relied upon to provide trends for the different food security indicators.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The onset of short rains was timely in the Mixed farming (Ngong area) in the 2nd dekad of October. However, onset was late by 3 weeks in the agro-pastoral, pastoral zones and some parts of mixed farming (Oloitokitok), with heavy downpour experienced in the 1st week of November 2017. Areas such as Singiraini, Olkiramatian, Elangata, El-koroloi (parts of Ewaso) and Saikeri in the Kajiado West (Pastoral zone) did not receive any rains. The amounts received between October and December was 139mm compared to the LTA of 198mm. Depressed off seasons rains were experienced in January totaling to 24mm compared to the LTA of 50mm. Much of the rains were experienced in the eastern and central parts of the county (Kiserian, Isinya to Kinyawapoka and mixed farming zones of Loitokitok). Spatial

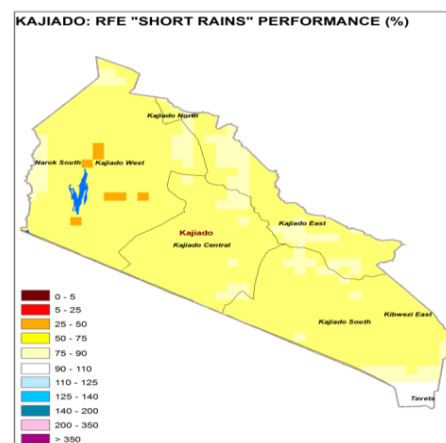


Figure 2: Rainfall performance

distribution was even, but temporal distribution was poor, with most areas (Crop land and Pastoral) receiving between 50-75 percent of normal (Figure 2). Cessation was early in the 2nd week of December compared with the normal end of January.

2.2 Current Shock and Hazards

The main hazards contributing to food insecurity in the county include:

- Poor temporal distribution of rain especially in December which led to the wilting of maize crop.
- Human wildlife conflicts have led to loss of livestock.
- Food prices continue to limit households' access to food.
- High livestock deaths resulting in decreased livestock ownership by household
- Encroachment of grazing land has rendered livestock keeper's food insecure.

3.0 IMPACT OF IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

3.1.1 Crop Production

Rain fed Crop Production

The three main crops in the rain fed areas include maize, beans and Irish Potatoes. Maize, beans and Irish potatoes contribute (70, 15, 6) and (75, 10, 4) percent to food and (35, 20, 15) and (35, 45, 4) percent to income in the agro-pastoral and mixed farming areas respectively. Area under maize has declined by eight percent (2,174 Ha) and the projected yields will fall short of the LTA by 87 percent (Table 1). Low production is attributed to insufficient and early cessation of rains at critical crop development stage. Area under beans has remained stable but production is expected to decline significantly by 93 percent of the long term average. Area under Irish potato has increased by 16 percent, as farmers took advantage of the good returns as compared to both maize and beans. The projected yields of Irish Potatoes is expected to increase significantly by 34 percent because of increased area under production. In both agro pastoral and mixed farming zones, acreage under food crops and expected yields will decrease an attribute of insufficient precipitation to support full physiological development of the food crops.

Table 1: Rain-fed Crop Production

Crop	Area planted during 2018 Short rains season (Ha)	Long Term Average (5 year) area planted during the Short rains season (Ha)	2018 Short rains season production (90 kg bags) Projected/Actual	Long Term Average (5 year) production during the Short rains season (90 kg bags)
1.Maize	23,696	25,870	94,784	710,880
2.Beans	23,302	22,985	46,604	669,060
3.Irish Potato	394	338	15,838	11,750

Irrigated Crop Production

The main crops produced through irrigation in order of priority are tomatoes, maize and kales as illustrated in Table 2. The area under tomatoes and kales has increased by 32 and 25 percent respectively while that of maize has reduced by 10 percent as compared to the LTA, farmers are venturing into more profitable crops with shorter growing seasons.

Table 2: Irrigated Crop Production

Crop	Area planted during the 2017 short rains season (ha)	Long Term Average (3 years) area planted during short rains season (ha)	2017 Short rains season production (90 kg bags/MT) Projected/actual	Long Term Average (3 years) production during 2017 short rains season (90 kg bags/MT)
1.Tomato	1,090	820	13,380	9,140
2.Maize	90	100	1,200	2,400
3,Kales	50	40	400	480

3.1.2 Cereal stock

Stocks held by households and Traders are at six and 48 percent of the LTA respectively (Table 3) as a result of poor harvest of the long rains crop, high post-harvest losses and poor storage facilities used by farmers while the stocks held by millers have increased by 64 percent. Stocks held by NCPB are under the Strategic Grain Reserve in NCPB Kajiado deport while there has been no stocks at NCPB Loitokitok deport since November, 2015.

Due to poor yields from the long rain season, stocks at both agro pastoral and mixed farming zone are lower and worse in pastoral zones hence households solely depend on the markets for food. Stocks held by households are expected to last for 1-2 weeks compared to the long term average of between 2-3 months. Households in the mixed farming zones are readily selling of their stocks due to good prices for major food stuff to cater for other requirements such as school fees. Pastoral and agro-pastoral households are purchasing food stuff entirely from the markets to stock due to poor crop performance the previous season and anticipated severe drought in the coming months. Households in the mixed farming zones are stocking up in expected food shortage as a result to the failed short rains. In normal circumstances these households would be offloading stocks to create room for the new crop harvested in short rains season. With minimal harvest expected, for the next 3 months, the demand for food stuffs will increase leading to increased prices of staple food hence limiting access for most households.

Table 3: Grain Stocks held compared to LTA

Maize stocks held by	Quantities held currently (90-kg bags)	Long Term Average quantities held (90-kg bags) at similar time of the year
House Holds	2029	31,358
Traders	7240	14,910
Millers	2582	930
NCPB	66,200 (Kajiado Depot)	0
Total	11,851	16,418

3.1.3 Livestock Production

Pastoralism is the major livestock economic activity carried out in the county. Other livestock enterprises coming up in the county are; dairy, poultry, rabbit and bee production. These economic activities contribute considerably to food security. Sales of milk, meat, eggs and livestock enable households to acquire other foods commodities like maize, beans and wheat flour. Livestock trade is an important source of income to farmers/pastoralists, livestock traders and also contributes to the County revenue that is attained through livestock movement permits, cess at livestock markets, licenses and permits on livestock related businesses.

Pasture and Browse Condition

The conditions of pasture and browse is deteriorating and depleted (Table 4) attributed to below normal and poorly distributed rainfall experienced in the county during the OND short rains season. Currently most of the livestock especially cattle have migrated to neighboring counties.

Table 4: Pasture and Browse Condition

Livelihood zone	Pasture					Browse				
	Condition		How long to last (Months)		Factors Limiting access	condition		How long to last (Months)		Factors Limiting access
	Current	Normal	Current	Normal		Current	Normal	Current	Normal	
Pastoral	Poor	Good	None	2-3	Depletion	Fair	Good	None	2-3	Depletion
Agro-pastoral	Poor	Good	None	2-3	Depletion	Fair	Good	None	2-3	Depletion
Mixed	Fair	good	4	4	Drought	good	good	4	4	Drought

Livestock Body Condition

All the livestock conditions across all the livelihood zones were deteriorating due to the prolonged drought experienced in the County. Livestock body condition in the mixed farming zones was good to fair compared with good under normal seasons. However, the condition of cattle in the pastoral zone was deteriorating to poor due to increasing trekking distances to water points as well as decreasing

watering frequency (Table 5). Forage and water situation is expected to deteriorate with progressing dry spell resulting in decreased livestock prices for the pastoralist households. The long rains season is usually the season for peak lambing and kidding across all livelihood zones. Low birth rates were reported since most of the livestock were recovering from the prolonged previous season drought, thus affecting household milk availability. Most of the livestock did not conceive, hence there were very low birth rates.

Table 5: Livestock body condition

Livelihood zone	Cattle		Sheep		Goat	
	Current	Normal	Current	Normal	Current	Normal
Pastoral	Poor/Emaciated	Good	Fair	Good	Good	Good
Agro-pastoral	Poor/Emaciated	Good	Fair	Good	Good	Good
Mixed	Good – Fair	Good	Fair	Good	Good	Good

Tropical livestock units (TLUs)

Livestock ownership (TLUs) declined by about 50 and 30 percent in the pastoral and agro-pastoral livelihood zones for the poor and middle-income households respectively compared with the normal (Table 6). The situation is projected to continue deteriorating up to the onset of next season.

Table 6: Tropical Livestock Units (TLUs) by household income groups

Livelihood Zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Pastoral	1-2	10	12	25
Agro-pastoral	2-3	4	10	20
Mixed	1	1	3-5	3-5

Milk production and consumption

Households in the pastoral and agro-pastoral areas experienced very low milk production. The average household milk production per day was less than one litre compared with LTA of two to five (Table 7). Most households consumed all the milk that was produced and household milk consumption declined by about 100 percent compared with LTA. Households continued to rely on long life milk supplies from shopping centres in pastoral and agro-pastoral areas.

Table 7: 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	0 – 1	20 – 50	<1	4	60	40-50
Agro-pastoral	0-1	20 - 50	<1	2	60	40-50
Mixed	20 – 40	20 – 50	1-2	5	60-70	40-50

Migration

Early intra-county and inter-county migration was reported in areas such as Chyulu Hills, Makueni, Naivasha and Nakuru in search of forage and water. An estimated 80 percent of livestock migrated during with the season. The migrations triggered inter-community conflicts at Chyulu Hills in Makueni County and hostility at the Tanzania borders thus limiting access to forage and water. Some 50 percent of the livestock returned to the county earlier than normal and consequently, 50 percent of the livestock population was reported to have died due to lack of forage and water availability.

Livestock Diseases and Mortalities

The main livestock diseases reported were, Foot and Mouth Disease (FMD), lumpy skin disease (LSD), Sheep and Goat Pox and Contagious Caprine Pleuro-Pneumonia (CCPP), Contagious Bovine Pleuro-Pneumonia (CBPP), and Trypanosomiasis. Routine animal health practices continued throughout the season under review. However, extensive livestock migration is expected to result in livestock disease challenges in the grazing zones. The reported mortality rates for the season were abnormally high (estimated at 50%).

Water for Livestock

The main water sources for domestic and livestock are rivers, springs, pans, dams and boreholes. About 80 percent of the open water sources were dry during the season thus reducing availability of water for livestock across all the livelihood zones. However, in parts of Kunchu, Mbirikani and Mosiro, return trekking distance of about 40km were reported. Households are mainly relying on boreholes for water supply which explains the stabilized duration for water availability (Table 8). Return trekking distances increased by more than 50 percent of normal, thus reducing watering frequency to 1-2 days compared with the normal daily.

Table 8: Water for livestock

Livelihood zone	Return trekking distances (Kms)		Expected duration to last (Months)		Watering frequency	
	Current	Normal	Current	Normal	Current	Normal
Pastoral	10-30	5	3	3	Once/2 days	Daily
Agro pastoral	8-15	3	4	4	Once/2 days	Daily
Mixed	<1	<1	Unlimited	Unlimited	Once/2 days	Daily

3.2 Access

3.2.1 Markets Operations

The major markets in the County are Kimana, Emali, Mashuru, Kitengela and Shompole in pastoral livelihood zone, Rombo, Kiserian, Kajiado, Bisil and Namanga in agro-pastoral livelihood zone and Loitokitok, Ngong, Soko Mjinga and Ongata Rongai in mixed farming livelihood zone. In the pastoral zone, cattle were only traded in Shompole market. Market operations have been disrupted by low cattle prices of livestock due to their poor body condition. Loitokitok market has been closed for renovations. Lack of purchasing power is evident with very few traders available to buy livestock. Market purchases are the sole source of food for the Pastoralists. The main food stuff observed in the markets were maize flour, beans, rice, potatoes, tomatoes, vegetables (cabbages and kales). Most horticultural produce are supplied from Kimana while cereals are mainly from Tanzania. Pastoralists have limited access to vegetables.

Maize prices

The average County maize price in the month of January stands at Ksh. 48 per Kilogram (kg), which is comparable to the long term average of Ksh.50 per Kg as illustrated in Figure 3. The average price of maize in the mixed farming is Ksh. 35 per Kg, Ksh. 50 in the agro-pastoral and Ksh. 60 in pastoral livelihood zones. The main source of maize is supply by traders.

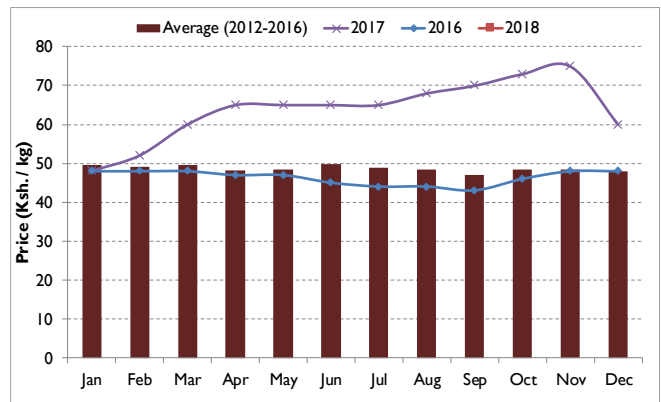


Figure 3 Maize Price Trends

Goat price

The average County farm gate price of a medium-sized goat ranges Ksh. 2,510. The current price is 10 percent below the long term average of 2,800 (Figure 4) in the month of January. Goat prices average Ksh 3,000 in the mixed farming zone, Ksh. 2,700 in agro-pastoral zones and Ksh. 2,400 in the pastoral zones. During community interviews, livestock demand was reported to be very low with few traders in the market. Goat prices are expected to stabilize due to available browse.

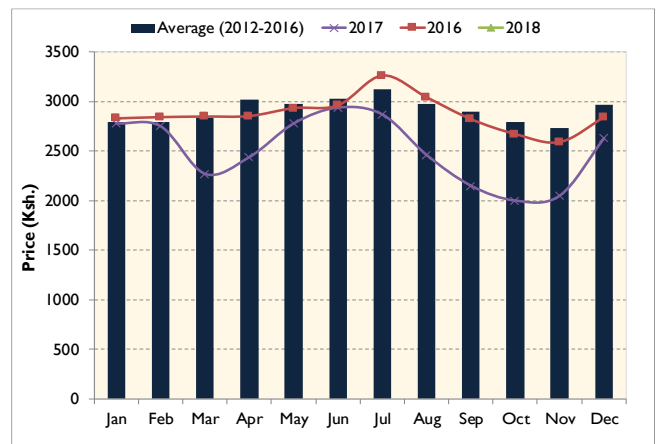


Figure 4 Goat Price Trend

3.2.2 Terms of trade

The terms of trade (ToT) are unfavorable to livestock keepers. Households are able to purchase 52kg of maize with the sale of one medium-sized goat. Normally, households would access about 56 kilograms of maize with the sale of a goat as indicated in the Figure 5. With sale of a goat, pastoralists are able to access about 40kg, 54kg for agro-pastoral and 86kg of maize for mixed farming zones. Due to low demand, livestock prices have gone down hence the ToT is expected to deteriorate as maize prices increase with livestock fetching lower prices.

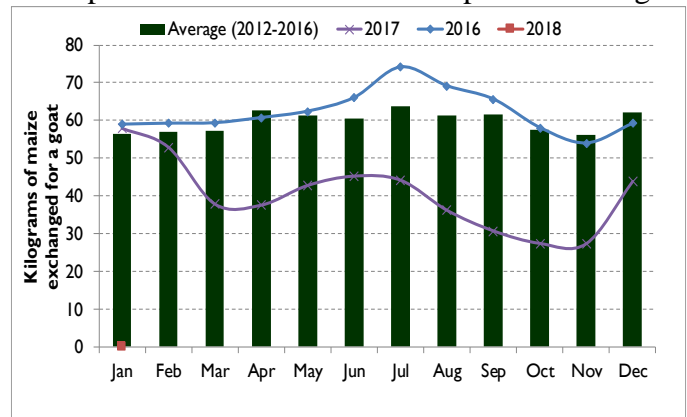


Figure 5 Terms of Trade

3.2.3 Income Sources

The current main income source of income in the Pastoral zone is sale of goat and sheep. While massive deaths of cattle have occurred, the remaining cattle out-migrated to other areas. A few cattle left behind are emaciated and nobody not attracting buyer. Farmers in mixed farming areas such as Ngong, Kimana and Ngurumani are able to sell horticultural produce such as onions, tomatoes, mangos and vegetables from own farm.

3.2.4 Water Access and Availability

The three main sources for domestic water in the County are boreholes, piped water and water pans. Dams are mainly in Kiserian while springs and shallow wells are mainly in the mixed farming areas. Perennial rivers include Nolturesh and Ewuaso whose water levels are very low. About 36 percent of population is relying on boreholes, 28 on piped water and 13 percent on water pans. Most water pans did not recharge during the short rains due to low rainfall amounts and high siltation. Coupled by high evaporation rates, over 80 water pans have dried up in Kajiado west, Kajiado Central, Kajiado South and Kajiado East. Few water pans with water are expected to last until mid-March. Normally, water pans hold water until the next rainy season.

Boreholes are experiencing increased breakdowns of the pumping equipment due to prolonged hours of operation leading to increased concentration at the water points. Water points experiencing high concentration include Il-Kilorit in Saikerim, Namanga borehole (serving 6,000 persons), Mailitisa borehole (serving 1,500 persons), Olootikoshi and Oseki serving 400 households. Among non-operational boreholes include Enkutoto BH (Osilalei location), Lenkishon BH (Ilbissil), Enkolili BH (Lorngosua), BH 2 (Ilbissil), Orkungu pipeline (Namanga), Singiraini BH (Singiraini), Ilkilorit BH (saikeri), Ilmisigiyoil BH (Entonet), Sholinke BH (Oloosirikon), Olng'arua (Olosirikon), Olturoto and Enkilele BH in Kaputiei, Nkamaoiti BH and Umbilical BH in Kenyewapoka, Oiti BH, Erankau and EnkuseroArroi in Imaroro. Springs from the Kilimanjaro slopes are flowing but demand for water along the dry area is very high for both irrigation and domestic consumption. Maparasha springs, Ewuaso /ngurumani springs and springs along Oldoronyokie (Namanga) have greatly reduced yields. Water level in shallow wells along Olkejuado and other seasonal rivers has lowered.

Distance to Water Sources

The average return distance in the pastoral and agro-pastoral zones more than doubled while return trekking distances in the mixed farming was normal. The highest return distances of up to 40 km were reported in Kunchu, Mbirikani, Mosiro and Torosei areas. Distances are higher at this time of the year due to low recharge though off season rains in month of January, 2018 brought some relieve in a few areas.

Waiting Time at the Source

Most households are able to fetch water within 30-60 minutes in most areas as observed during the community interviews (Table 9). However, villages such as Il-Kilorit in Saikeri had very high waiting time up to five hours as water for both human and livestock is pumped only when fuel is available mainly after every one day. Most boreholes have a separate collection point for human and livestock hence reducing waiting time.

Cost of Water

The average cost of a 20 litre jerry can range from 2-5 shillings (Table 9) mainly at a water kiosk in the peri-urban areas, which is normal. However, most rural communities relying on boreholes pay a monthly fee to cater for fuel meant for pumping water from boreholes. For instance, in Saikeri, pastoralists are paying Ksh. 100 per household for every three days to access water both for domestic and livestock. Singiraini community is heading to a very severe condition, where they are expected to pay Ksh. 3,000 per family per month to cater for fuel hence this is likely to limit access to water for most of the households.

Water Consumption

The average household water consumption per person per day reduced by about 40 percent compared with the previous season (Table 9). The current consumption level is expected to deteriorate further as more water dry up coupled by frequent breakdowns of pumps especially in the Pastoral areas.

Table: Water consumption

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)	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral	20-30	5-10	0-30	0-3	300	60	10-15	20
Agro Pastoral	10-20	5-10	0-30	0-3	120	30	8-12	20
Mixed farming	1-3	<1	0-10	0-3	30	5	10-30	20

3.2.5 Food Consumption Score

About 73 percent of households have acceptable food consumption score (FCS) in the mixed farming zone while 59 and 36 percent of households have acceptable FCS in agro-pastoral and pastoral zone respectively. In pastoral livelihood zone, 43 percent have poor FCS while 30 percent in agro-pastoral have poor FCS (Figure 6). Acceptable score implies that households were consuming at least a staple food and vegetables on a daily basis complemented by frequent consumption of pulses and oil.

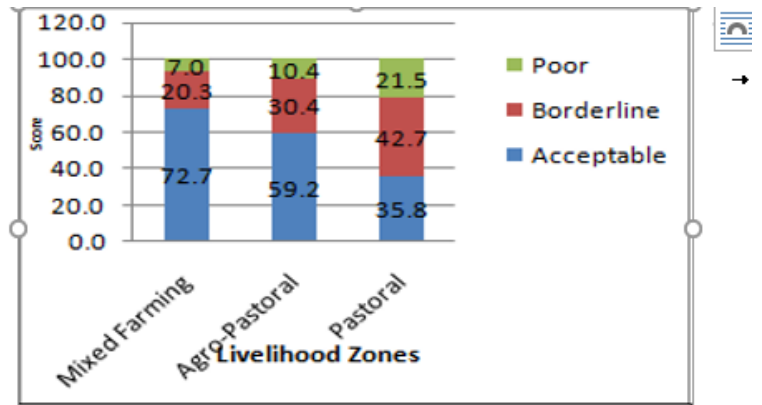


Figure 6 Food Consumption Scores

3.2.6 Coping Mechanisms

The coping strategy index for the county in January 2018 remained stable at 19.0 (SMART 2018) with the Pastoral and Agro-pastoral recording 7.4 and 4.8 respectively. The index implies that about six percent of the population is engaging in consumption-related coping strategies. Main coping mechanisms include relying on less preferred or less expensive food, borrowing, limiting portion sizes, restricting consumption by adults so that children can eat first and reducing number of meals.

3.3 Utilization

3.3.1 Health and Nutrition

The three most common diseases among under and the general population are upper respiratory tract infections (URTIs), malaria and diarrhoea. The prevalence of URTI, diarrhea and malaria progressively decreased from July – September 2017 for all the 3 diseases in under 5 years and general population.

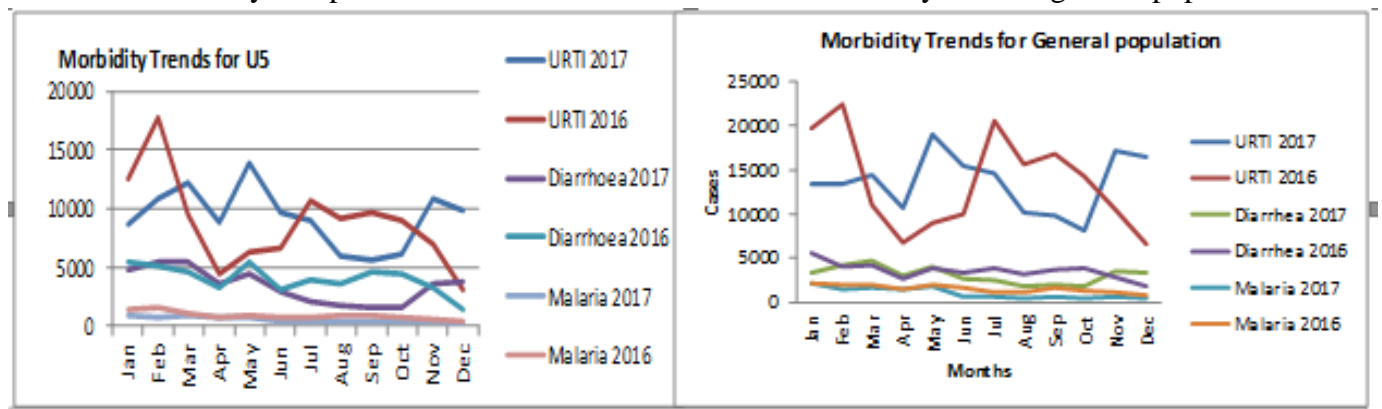


Figure 7 Morbidity Trends for Under Fives and General Population

A sharp increase noted in the month of November for URTI and diarrhoea for under five years while in the general population (Figure 7) there was an increasing trend noted in October- December 2017 for URTI and diarrhoea.

Further, a significant increase in the number of cholera cases (82 cases) were reported in reference period of July-Dec 2017 as compared to a similar period in 2016 (11 cases). On the other hand, there were reduced for dysentery, diarrhoea and typhoid cases reported in the same period of 2017 compared

to a similar period in 2016. The prevalence of malaria was also lower in 2017 as compared to 2016. This general decline is attributed to anational nurses’ strike that occurred over a period of 5 months (June to October 2017) thusaffecting primary healthcare service delivery and reporting thus resulting in reduced cases reported.

Immunization and Vitamin A supplementation

There was a reduction by 18 percent in the proportion of children fully immunized in the county during the 2nd trimester of 2017 (July-December) (70.2 percent) compared to 2016 (88.6 percent).An increase in Vitamin A supplementation coverage in a similar period of July – Dec 2017 for children 6-11 months (70 percent) and 12-59 months (29 percent) is attributed to outreach and Malezi Bora campaigns. However, the coverage is still below the national targets (80 percent) as shown in figure 8.

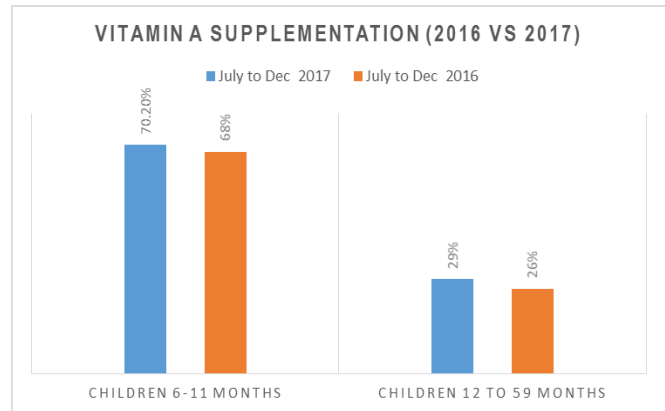


Figure 8. Vitamin A supplementation coverage

Nutrition Status and Dietary Diversity

The nutrition situation in Kajiado County is serious with GAM of 10% and SAM of 1.4% (SMART 2018) and is likely to deteriorate in the projected period. The proportion of children (6-59 months) at risk of malnutrition in January 2018 increased to 17.6 percent, above the LTA of 8.9 percent (Figure 10). TFrom July-December 2017, the proportion of children who were underweight has been on the increase with the exception of August where it decreased slightly. Areas marked for higher risk of malnutrition include; Mbirikani, Lorn’osua, Torosei, Meto, Esoit, Maisikiria, Lenkism, Mashenani, Lolakir, Esineti, Oloirero, Inchakita, Magadi, Ewuaso, Enkaroni and Mosiro. Additionally, 2017 saw a much higher percentage of underweight children as compared to similar period in 2016 and 2015. The proportion of households with poor and borderline food consumption score is 14.2% (SMART 2018). Kajiado west, central and south (mainly Lenkism, Mbirikani, Kuku and Rombo wards) are hard hit by drought. Under-fives, pregnant and lactating mothers in these areas are more likely to be malnourished in the projected period.

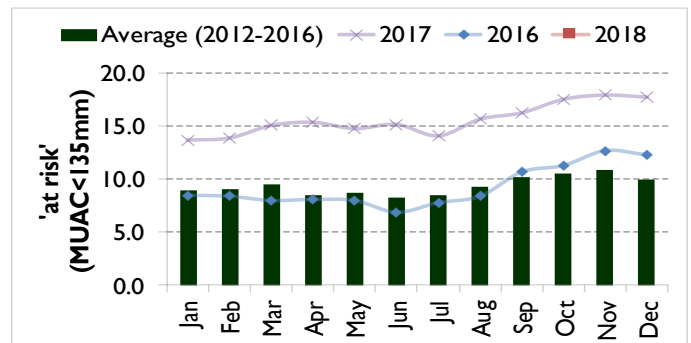


Figure 9: percent of Children at risk of malnutrition

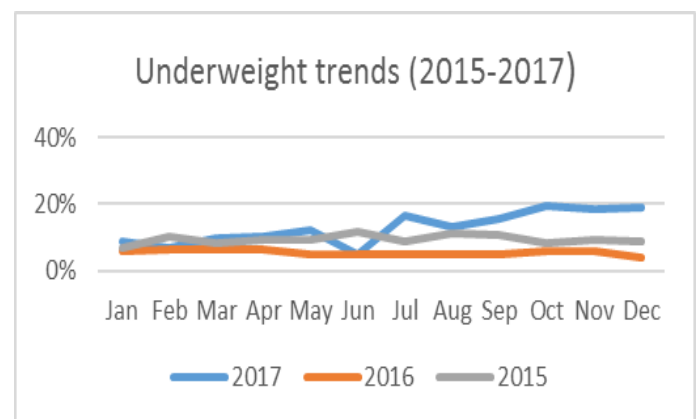


Figure 10: Trends of underweight cases

Admission trends for selective feeding programmes (OTP/SFP).

The SFP and OTP admission trends in July - December 2017 have been increasing and are higher than similar periods in 2016 and 2015. The highest recorded IMAM (SFP & OTP) admissions were in the month of November 2017 which can be attributed to morbidity (diarrhea peaked in November), increased vulnerability as well as household food insecurity (Figure 11). The ongoing integrated outreaches in response to drought coupled by Malezi Bora activities in the month of November is also a contributory factor as access to services in hard to reach areas was increased.

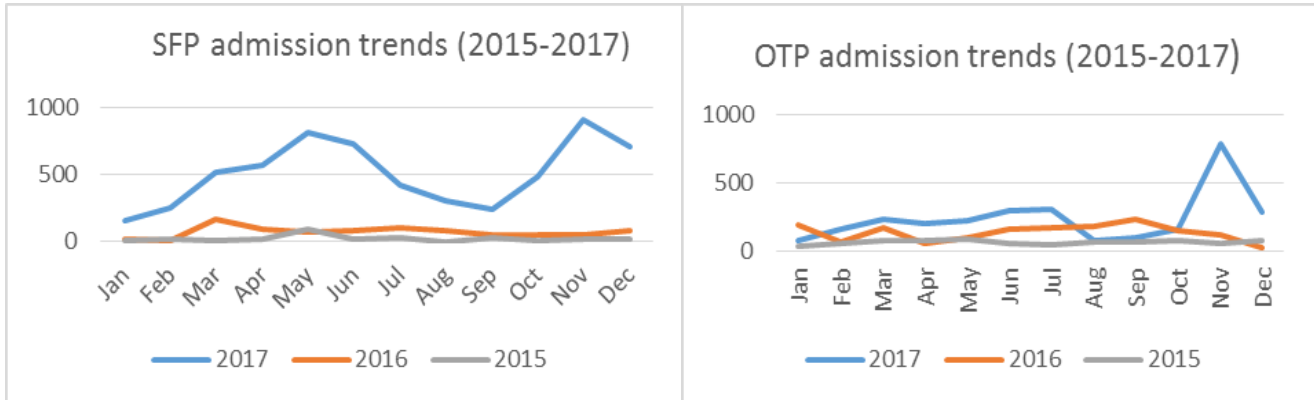


Figure 11: Admission trends under SFP and OTP

3.3.2. Hygiene and Sanitation

The main sources of water in the County are boreholes, piped water and water pans. 36 percent of populations are relying on boreholes, 28 on piped water and 13 percent on water pans.

While nearly all household are aware of good hygiene practices just about a half of them were washing hands after visiting toilet and before cooking. SMART survey conducted in January 2018 showed that latrine coverage stands at 41 percent with 59 percent relieving themselves in the bush which could have led to contamination of water sources hence cases of water borne diseases. For those who have access to latrine, 93 percent of them wash hands with water and soap while 64 percent wash hands after visiting toilet. However, 11 percent don't wash hands before eating while 80 percent don't wash hands after taking the child to toilet. Only 15 percent wash hands in all four critical times.

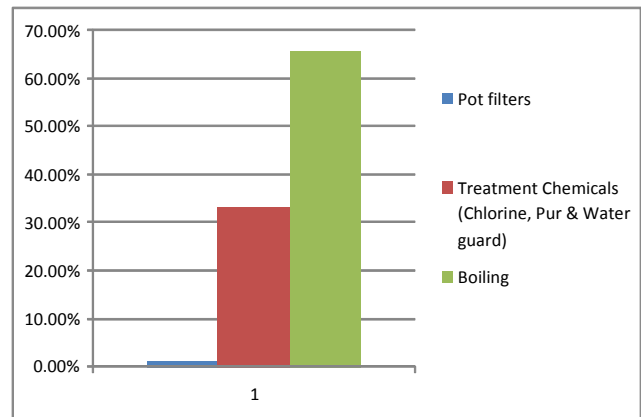


Figure 12: Hygiene and sanitation

About 31 percent of households reported to treat their drinking water by either boiling, pot filters or use of treatment chemical such as water guard, chlorine or Pur (Figure 12). Water treatment is mainly in the mixed farming and agro-pastoral zones.

Most cases of water related diseases have declined when compared with the same period of 2016 except for cholera outbreaks and malaria where 82 cases and 5,349 cases of were reported respectively. A total of 902, 29,336 and 2013 of dysentery, diarrhoea and typhoid cases respectively were reported between July and December, 2017. Isinya flower farms discharge effluent into water courses while horticultural farmers in Kajiado South use chemicals that are swept into Nolturesh during the rains.

4.0 CROSS CUTTING ISSUES

4.1 Education

Access

About 80 percent of children are enrolled in school. The main reasons for non-enrollment are due to children is due to lack of a nearby school, being too poor to buy school items and engagement in family responsibilities. Enrolment for ECD, primary and secondary school level increased between term III of 2017 and term I of 2018. Highest school enrolment was noticed in schools with school meals program (Table 9, 10 and 11).

Table 9: ECD Enrolment

SUB-COUNTY ECD	NO OF SCHS	2017			2018		
		BOYS	GIRLS	TOTALS 2017	BOYS	GIRLS	TOTALS 2018
Kajiado West	137	-	-	-	-	-	8850
Kajiado Central	164	-	-	-	4906	4763	9669
Kajiado North	14	-	-	-	949	811	1760
Kajiado East/Isinya	106	-	-	-	2436	2151	4587
Loitokitok	113	-	-	-	3765	3480	7245

Table 10: Primary School Enrolment

SUB-COUNTY	NO OF SCHS	2017			2018			DEV
		BOYS	GIRLS	TOTALS 2017	BOYS	GIRLS	TOTALS 2018	
Kajiado Central	111	14410	13729	28139	15606	14734	30340	2201
Kajiado North	14	7739	7949	15688	8475	8821	17296	1608
Loitokitok	87	19088	19382	38470	21475	20052	41527	3057
Mashuuru	80	6081	5906	11987	7991	6617	14608	2621
Isinya	31	4258	4229	8487	4632	4571	9203	716
Kajiado West	108	13477	12133	25610	14181	12182	26363	753
Total	431	65053	63328	128381	72360	66977	139337	10956

Table 11: Secondary School Enrolment

SUB-COUNTY	NO OF SCHS	2017			2018			DEV
		BOYS	GIRLS	TOTALS	BOYS	GIRLS	TOTALS	
Kajiado Central	16	2606	1641	4247	2614	1617	4231	-16
Kajiado North	14	3172	1975	5147	3628	2277	5905	758
Loitokitok	19	2912	2225	5137	3209	2593	5802	665
Mashuuru	7	720	572	1292				
Isinya	11	539	1539	2078	910	1822	2732	654
Kajiado West	13	1614	1842	3456	1767	2208	3975	519

Participation

Though no data on participation was provided, it was confirmed from the community interviews that participation was irregular with many children at home taking part in household chores.

Retention

Retention was within the seasonal norm with no drop outs reported in schools that have a school meals program in place.

School Meals Programme

There are 147 public primary schools under homegrown school meals program (Table 12) targeting 47,053 in the County. Presence of SMP has contributed to improved enrolments, retention and performance. At the moment, 284 schools are not under SMP.

Table 12: School Meals Programme

SUB-COUNTY	NO OF SCHS	2017			2018		
		BOYS	GIRLS	TOTAL	BOYS	GIRLS	TOTALS
Kajiado Central	37	7906	7085	14694	5782	4917	10699
Kajiado West	42	8650	8272	16922	13778	12443	26263
Loitokitok	22	6596	5861	12457	5171	4929	10100
Mashuuru	39	4527	4197	8724	4527	8724	8724
Isinya	7	1439	1374	2813	1030	1105	1966
Total	147	21212	19704	40916	24506	27201	47053

Trends of key food security indicators

Table 13: Comparison of the Current Food Security Indicators with LRA 2017

INDICATOR	LRA 2017	SRA 2018
Distance from source(km)	10-30km (pastoral zones)	20-40 km in Pastoral
Waiting time (min)	30 minutes	30-60 minutes
Consumption LPPPD	<15 litres	10-25lppd in MF, 8-12lppd in Agro-p & Pastoral zones
Goat Prices	Average Ksh.2,950	Average Ksh. 2,510
Maize prices/Kilogram	65 (30% above LTA)	53 (15% above LTA)
Terms of Trade	74Kgs	52Kgs
% of maize stocks held by HH	32%	6.5%
Livestock Body condition	Cattle: Poor in pastoral, fair in mixed farming and agro-pastoral. Shoats: Fair in pastoral	Poor
Milk Production	Pastoral: 1-2 Litres Agro-p: 1-3 Litres Mixed farming: 2-3 Litres	No milk is available in pastoral and agro-pastoral
Migration	Out-migration, earlier than normal	Out-migration, some have returned earlier due to conflicts
Livestock Mortality		About 50%
School Attendance	Regular	Irregular, absenteeism noted
Coping Strategy Index	6.63%	6.1%
Food Consumption Score (SMART Survey Feb, 2018)		Acceptable = 59%
		Borderline = 29%
		Poor = 11%
Food Consumption Score	55% acceptable	Acceptable 56%
	32% borderline	Borderline: 20%
	Poor 13%	Poor: 24%
Food Security Phase	Stressed	Crisis
MUAC<135mm	15.2%	17.6%

5.0 FOOD SECURITY PROGNOSIS

5.1 Prognosis Assumptions

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

- The onset of the Long rains will be timely and performance will be good in terms both spatially and temporal distribution.
- The County is not likely to experience influx of livestock from neighbouring Counties
- Maize deficit in the County is likely to be met through imports by traders, and this is likely to stabilize prices of maize
- The Government will provide relief supplies in good time to save lives

5.2 Food Security Outcomes for February, March and April

Food security situation across all livelihood zones is expected to deteriorate further given that there is very little harvest expected. Pasture and browse conditions are likely to deteriorate as the dry spell progresses. Food prices are likely to remain high, while livestock prices likely to deteriorate further with expected increased trekking distances to water sources. Terms of trade likely to decline further with further deterioration of livestock body condition due to long trekking distances and deteriorating pasture and browse. Food consumption gaps are likely to continue with more households expected to fall under poor and border line food consumption. The proportion of households employing emergency coping strategies is likely to decrease following the onset of the long rains.

5.3 Food Security Outcomes for May, June and July

With long rains projected to be near normal to normal food security outcomes are likely to improve. The effect of the onset is likely to be seen in the regeneration of pasture and browse if the onset is timely and with good temporal distribution. Livestock body condition is likely to improve significantly and this shall also impact on milk production and consumption as well. Livestock market prices are expected to improve slightly thus improving the terms of trade and access to food. Some improvement in water availability and access is expected across the livelihoods following the onset of the long rains. Milk production is expected to increase thus, improving the nutrition status of the under-fives. Crop production is likely to improve, with the County expected to experience further increase in acreage covered under agriculture for both rain fed and irrigated cropping. The projected scenario is likely to stabilize food consumption gaps and consequently result in fewer households employing emergency coping strategies, and hence a slight decline in GAM rates. Nevertheless, the slight improvement in food security is not likely to last long and hence more households likely to go back to food consumption gaps.

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

6.1.1 Phase Classification

Kajiado County could be classified under Crisis Food Insecurity Phase (IPC Phase 3). The phase classification has deteriorated since the previous assessment when the County was under Stressed Food Insecurity Phase (Phase 2).

6.1.2 Summary of the Findings

The main drivers to food insecurity in Kajiado County include poor temporal distribution of rain especially in December led to wilting of maize crop and non-generation of pasture. Human wildlife conflicts have led to loss of livestock. Food prices continue to limit households' access to food. Reduced livestock holdings coupled with encroachment of grazing land has rendered livestock keepers food insecure. 82 cases of cholera outbreaks were reported during the season. The number of children at risk of malnutrition has deteriorated with about 17.6 percent being at risk in January 2018 compared to the LTA of 8.9 percent. Purchasing power has significantly reduced due to reduced livestock prices. Cattle deaths averaging to 50 percent has rendered some households sliding to poverty. Migration of livestock which started as early as July 2017 has deprived households' access to food. Vulnerable households need to be supported with food to avert human deaths.

6.1.3 Sub-County Food Security Ranking

Table 14: Sub-County Food Security Ranking (Worst to best)

Sub-County	Sub-County Ranking (1=Most food insecure,....6=Least food insecure)	Main food security threats		
Very Good (9-10)	Good (7-8)	Fair (5-6)	Poor (3-4)	Very Poor (<2)
1.Kajiado West	2	<p>Most part is pastoral (including Mosiro), no pasture available,</p> <ul style="list-style-type: none"> -Few opportunities for diversification -Very little or no rainfall during OND in some areas -Very high malnutrition rates, poor hygiene -High distances to water sources and health facilities -Most water pans dry & frequent breakdown of gensets -Pupils migrating with parents in search of water and pasture for livestock -Poor access to market -Human wildlife conflicts -50% livestock mortality 		
2.Kajiado South	4	<p>High malnutrition rates</p> <ul style="list-style-type: none"> -High distances to health facilities -Most water pans dried -Severe vegetation condition index <p>High livestock mortality, depleted pasture</p> <ul style="list-style-type: none"> -Human wildlife conflicts 75% of livestock migrated, 80% of what remained behind died -Severe vegetation deficit 		
3.Kajiado Central	5	<ul style="list-style-type: none"> -Similar to Kajiado West -100% crop failure in agro-pastoral zone such as Enkorika -Livestock migrating to Kajiado East -50% livestock mortality 		
Kajiado East	6	<ul style="list-style-type: none"> -Encroachment into grazing through urbanization -Most issues similar to Kajiado North, include agro-pastoral areas of Mashuru and Masimba 		
Kajiado North	7	<ul style="list-style-type: none"> -Mostly peri-urban, encroachment into grazing through urbanization -Food stocks available, good body condition for livestock, good terms of trade, diversification due to many income opportunities 		

6.2 Ongoing Interventions

6.2.1 On-going Food Interventions

- County Government supported vaccination of cattle against Food and Mouth Disease in Kajiado East and South sub-counties.
- Integrated outreaches in Kajiado South (Mbirikani, Lenkism, Rombo), Kajiado Central (Dalalekutuk, Matapato North and South, Purko) and Kajiado West (Magadi, Loondokilani, Mosiro).
- Provision of Fortified flour for porridge for 10 primary schools in Magadi ward by New Life Mission

6.2.3 On-going Non Food Interventions

Table 15: On-going Non Food Interventions by Sector

Sub County	Intervention	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost (KSH)	Time Frame
Four pastoral sub-counties	Distribution of livestock supplementary feeds	4,000 HH	CGK, NDMA	Livelihood support	-	
Four pastoral sub-counties	Emergency livestock vaccination and treatment	400 HH	CGK, NDMA	Livelihood support		
All sub-counties	Provision of demand driven extension services	All farmers in the sub-counties	Livestock department staff	Enhance food security through provision of information and interventions for maximum livestock production.	as per county livestock extension budge	Continuous
Kajiado Central and East	Capacity building and sensitization on invasive weeds, rangeland reseeding and pasture conservation	100 community members	Livestock production ASDSP Kajiado RPLRP	Ensure livestock feed security	as per project budget	December 2016
All sub-counties	Regional Pastoralist Livelihood Resilience Project	All farmers/pastoralists in the sub-counties	Livestock department and RPLRP staff	Enhance food security through provision of information and interventions for maximum livestock production.	As per project budget	As per project time frame
Kajiado North	Promotion of drought tolerant crops (Normal extension work)	Not implemented	MOA	Improved food availability at household level	As per project budget	continuous
Kajiado North	Capacity building	400	MOA/ASDSP and	improves food	As per	Continuous

	on utilization and post-harvest handling of crops		other partners	availability	project budget	
Kajiado South All wards	Distribution of 5 tonnes of drought tolerant crops	2,000	MOA/KEFRI	Improved food availability at H/H	As per project budget -	5 year programme
All Sub-County	Drilling and equipping of new boreholes		CGK, National government, stakeholders	Technical staff Vehicles, finances	Technical staff	Feb 2018- April 2018
	Rapid response for repair and Rehabilitation of boreholes		CGK, Stakeholders, National government	Vehicles, Technical staff, finances	Vehicles, Technical staff, finances	-
South	Rehabilitation of existing canals and construction of new ones.		CGK	-	-	12 months

6.3 Recommended Interventions

6.3.1 Recommended Food Interventions

Sub-County	Population in the Sub-County	Pop in need (percent range min – max)	Proposed mode of intervention
Kajiado West	114,448	25-30	Cash Transfers/ Food distribution
Kajiado South	134,741	15-20	Cash Transfers/ Food distribution
Kajiado Central	102,819	10-15	Cash Transfers
Kajiado East	133,179	5-10	Cash Transfers
Kajiado North	191,565	-	-

6.3.2 Non-Food Interventions

Sub County	Intervention	wards	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Agriculture Sector							
Kajiado	Relief seed		2,000 farmers	MOA at National and CGK, Other Partners	Funds	Manpower	Feb - March 2017
Kajiado	Capacity building of water harvesting technologies	County wide	1,000 farmers	MOA and Water Dept at National and CGK	Funds	Skilled manpower	Feb - March 2017
Kajiado	Excavation and De silting of Dams	County wide	2,000	National and CGK	Funds	--	Feb - March 2017
Kajiado	Capacity build on efficient water utilization technologies	County wide	20 groups	CGK	Funds	-	Feb 2017 to March 2017
	Supplementary Food supplies	County wide		MOA, Dept of Nutrition, at National and CGK, Other Partners	Funds	--	Feb 2017 to March 2017
Livestock							
Kajiado East, West, South and Central Sub-counties	Emergency distribution of livestock supplementary feed (range cubes, salts, hay molasses)	All Wards	5000 Households	CGK, NDMA, RPLRP and other Partners	Funds	Officers	February – April 2018
Kajiado East, West, South and Central Sub-counties	Accelerated livestock offtake	All Wards	5000 Households	CGK, NDMA, RPLRP and other Partners	Funds	Officers	February – April 2018
All sub-counties	Facilitate farmers with hay baling	All Wards	Farmers /pastoralists within the sub-	Livestock production department & the	Funds	Land and labour	June, July August, November,

	facilities.		counties	beneficiaries			December, January of every year.
All sub-counties	Establishment of livestock feed reserves		Farmers /pastoralists within the sub-counties	Livestock production department & the beneficiaries	Funds	All sub-counties	Farmers /pastoralists within the sub-counties
All sub-counties	Capacity build farmers on pasture production and conservation		Farmers/pastoralist within the sub-county	Livestock production department	Funds	Casual staff, Extension staff	continuous
Water Sector							
Kajiado	Drilling and equipping of new boreholes	1.Olchor o oibor	1500	CGK	Funds	7M	2 months
		2.Elerai – Dalalekut uk ward	1500	CGK	Funds	7M	2 months
		3.Tikoishi	1500	CGK	Funds	7M	2 months
		4.Muntarakwa	1500	CGK	Funds	7M	2 months
	Equipping of borehole	5.Oloolera	1000	CGK	Funds to repair the equipment	2M	1 month
		6.Olgos	1000	CGK	Funds	7M	2 months
	Upgrading of shallow well to borehole	7.Oloibor	1200	CGK	Funds	0.5M	1 month
		8.Olasit	2000	CGK	Funds	2M	2 month
	Repair of Genset	9.Oloibor	1500	CGK	8M	1.5M	2 month
		10.Oloolera	1500	CGK	8M	1.5M	2 months
Desilting of water pans	“	“	“	“	“	“	“
	“	“	“	“	“	“	“
	“	“	“	“	“	“	“
	“	“	“	“	“	“	“
Kajiado	Drilling and equipping of new boreholes	1.Kiwanja	1500	CGK	7M	7M	2 months
		2.Njukini	1500	CGK	4M	4M	1 month
	Equipping of borehole	3.Loolakir/Eiti	1500	CGK	4M	4M	1 month
		4.Olepolos	1500	CGK	4.5M	4.5M	1 month
Kajiado	Desilting of pan	1.Singiraini	2000	CGK, National Govt, stakeholders	8M	2M	2 month
	Equipping of	2.tikoishi	1500 800	CGK	5M 2M	5M 2M	1 month 1 month

	borehole Rehabilitation of borehole Drilling and equipping of borehole Equipping of borehole	3.Naning oi girls 4.Imarian i 5.Oreteti	1500 1500	CGK CGK CGK	7M 2.8M	7M 2.8M	2 month 1 month
Kajiado	Drilling and equipping of borehole	1.Kunchu 2.Napuku det 3.Enkone rei 4.Esilalei 5.Enkeju- Oolowara k	1500 1500 1500 1500 1500	CGK CGK, stakeholders CGK, stakeholders CGK, stakeholders CGK	7M 7M 7M 7M 7M	7M 4M 5M 4M 7M	2 month 2month 2 months 2 months 2 months