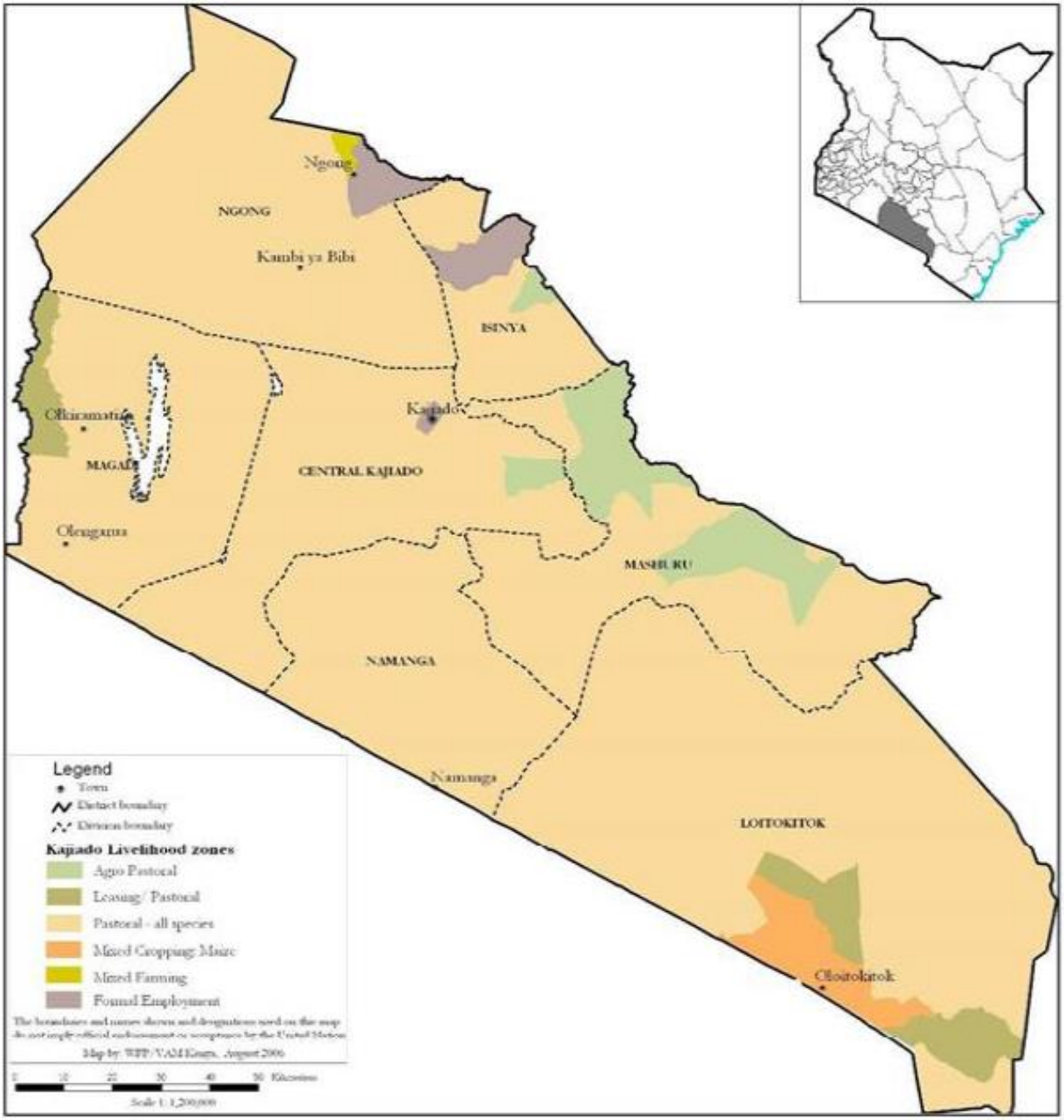
KAJIADO COUNTY
2016 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



A Joint Report by the Kenya Food Security Steering Group[1] and the Kajiado County Steering Group,

February, 2017

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Executive Summary

The county was classified as 'None or Minimal' (IPC Phase I) during the long rains assessment of August 2016 but in the current assessment, the county is classified as 'Stressed' (IPC Phase 2). The proportion of households with acceptable food consumption score decreased by 10 percent compared with the last season pointing to a decline in household dietary diversity and food frequency. The mean coping strategy score increased by 62 percent in the current season compared with last season, implying that households are engaging in consumption-related coping strategies more frequently and employing severe coping strategies more often. Consequently, the proportion of households at risk of mal-nutrition increased by 23 percent compared with last season. The proportion of household maize stocks declined by 27 percent of LTA compared with last season which was attributed to depletion of household stocks and the reported 90 percent crop failure. Current livestock body condition deteriorated from good to fair and poor compared with last season resulting in diminished household milk production and consumption due to water scarcity, long return trekking distances to water sources, forage depletion and early livestock migration. The Terms of Trade deteriorated by 14 percent in the current season compared with previous season and were unfavourable to livestock producers. However, a sharp increase by 35 percent of LTA was recorded in January 2017, which was attributed to under-supply of livestock. The current household water consumption per person per day declined by over 50 percent especially in the pastoral and agro-pastoral areas compared with last season indicating deterioration in household food utilization. The trend is expected to deteriorate further with the progressing dry spell, where water and forage scarcity for livestock and domestic water remained very critical during the period under review. The current factors affecting food security include: late onset and low amounts of rainfall which negatively affected water and forage situation thus triggering early livestock migration hence a decline in household milk production and consumption.

1. Introduction

1.1County Background

Kajiado County covers an approximate area of 21,902 square kilometres supporting an estimated population of 687,312 people (KNBS 2009). 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 (Figure 1).

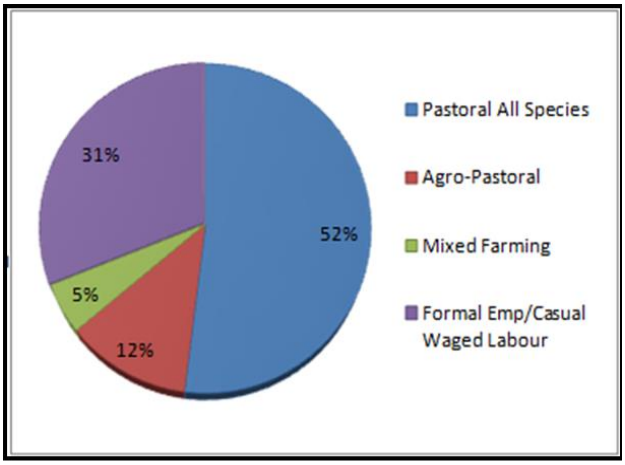

Figure 1: Proportion of population by livelihood zones

1.2 Objectives and approach

The overall objective of the assessment was to develop an objective, evidence-based and transparent food security situation analysis following the short rains season of 2016 taking into account the cumulative effect of the previous seasons; as well as provide recommendations for possible response options based on the situation analysis. The specific objective was to review existing data on the current situation analysis as provided by the sectors and determine the food security trends for previous seasons. The assessment methodology employed included an initial county status briefings which was conducted on Monday the 16th of January 2017, presentation of sectoral checklists from agriculture, livestock, water, health and nutrition and education sectors. To have a quick assessment of filed situation as well as ground truth on the performance of the season, transect drives were organized and conducted for two days by two teams covering Mixed, pastoral and agro-pastoral areas. Team one visited the western parts of Kajiado (Bissil, Torosei, Magadi, Shampole, Nguruman, Olekirman, Kiserian Ngong and Kitengela); while team two covered (Lenksim, Mashuru, Sultam-Hamild, Kimana, Oloitokitok, Rombo and Kuku. The visit coincided with market days at Olokirman, Kiserian, Kimana and Rombo. During the transect drives, the teams collected sector-wide food security data using community and household interviews, focus group discussions and key informant interviews. Review and analysis of primary and secondary data and the county food security draft report was compiled on day four in readiness for sharing during the de-briefing in the County steering group meeting on day five.

2. Drivers of Food and Nutrition Security in the County

2.1 Rainfall performance

The county experiences bimodal rainfall patterns, characterized by two seasons of long and short rains. The short rains are the most significant to the county. Onset of the short rains was normal in the 2nddekad of November. Temporal distribution was good in most parts, where most of the rains were received in the month of November. Spatial distribution was even with pastoral areas of Kajiado South recording the lowest rains of between 50 - 75 percent of the normal, while the agro-pastoral and mixed farming zones Oloitokitok, Rombo, Kuku, Njukini, Emali, Masimbaand Kiboko, Sholinke, Kitenkela, Isinya, Olekirmatian and Nguruman received between 75-90 percent of normal. A section of the pastoral areas of Mashuru, Nkama and Esselenkei received 90-110 percent of normal. Cessation was early in the 1stdekad of December compared with the normal 3rd dekad of December (Figure 2).

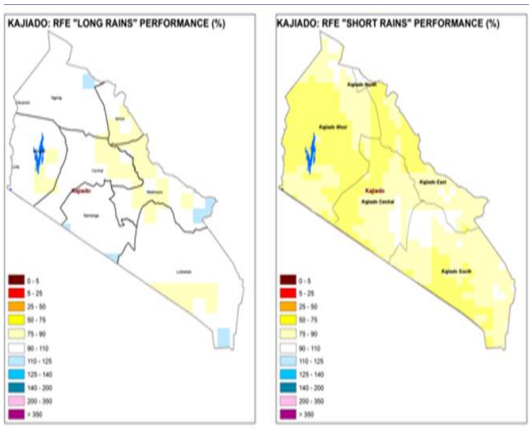

Figure 2: Rainfall performance

3. Impacts of drivers on Food and Nutrition Security

3.1 Availability

Food availability is one of the pillars of food security. Food availability was influenced by livestock and crop production indicators as well as food stocks at household level and also market supplies. Market infrastructure facilitated steady supplies of necessary food commodities in the markets.

3.1.1 Crops Production

Rain-fed crop production

Crop production is significant in the agro-pastoral and mixed farming areas. 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. The area under maize remained similar to the LTA, but the projected yields declined by 83 percent of LTA due to early cessation of rains at critical crop stage. The area under beans decreased by 20 percent of the LTA and production was projected to decrease by 80 percent of LTA. Beans suffered moisture stress during flowering while maize suffered moisture stress before tussling. Maize and beans crops have dried up in the agro-pastoral areas of Kimana, Rombo and Oloitokitok. Overall less than 10 percent of crop yield is anticipated. Area under Irish potato increased by 23 percent, as farmers took advantage of the good returns as compared with both maize and beans. The projected yields are expected to increase significantly by 125 percent of LTA (Table 1), because of good gross margins, shorter time to mature (3 months) and has two cropping seasons. Acreage under food crops and expected yields in the agro pastoral and mixed farming zones, decreased due to to insufficient precipitation to support full physiological crop development. Rain-fed crop yields are estimated at 50 percent thus affecting household food availability and hence impacting negatively on food consumption.

Table 1: Rain-fed crop production

Crop	Area planted during 2016 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2016 Short rains season production (90 kg bags) Projected/Actual	Long Term Average production during the Short rains season (90 g bags)
1. Maize	19,872	19,675	97,872	596,160
2. Beans	18,917	23,635	47,415	236,463
3. Irish potatoes	154	125	9,034	4,000

The main irrigation areas include Nguruman, Kimana, Rombo and Oloitoktok. The area under Tomatoes and Kales increased by 34 and 50 percent of LTA respectively since farmers opened up new land for these more profitable crops with shorter growing seasons. Yields for tomatoes and kales are expected to increase by 17 and 50 percent respectively. The area under irrigated maize decreased by 40 percent of LTA and yields are projected to decline by 74 percent of LTA (Table 2) which was attributed to low volumes of irrigation water following the below normal short rains. Irrigated crop yields are estimated at 50 percent thus affecting household food availability and hence impacting negatively on food consumption.

Table 2: Irrigated crop production

Crop	Area planted during the 2016 Short rains season (ha)	Short Term Average (3 years) area planted during Short rains season (ha)	2016 Short rains season production (90 kg bags) Projected/actual	Short Term Average (3 years) production during 2015 Short rains season (90 kg bags)
1.Tomatoes	1,100	820	23,000	19,640
2.Maize	120	200	1,160	4,500
3.Kales	60	40	1,920	1,280

The current total stocks held by households, Traders, Millers and the NCPB were 83 percent of the LTA (Table 3); and are expected to last for about 7 months, which is normal. Households stocks stand at 74 percent of LTA as a result of the poor harvest of the short rain crop, high post-harvest loses and poor storage facilities by farmers. Stocks held by millers increased by 34 percent of LTA which was attributed to increased maize imports from other counties and across the border of Tanzania. Pastoral households continued to sell livestock to purchase food items (such as maize) from local markets across the county.

Table 3: Maize stocks

Food stocks held by	Quantities held currently (90-kg bags)	Long Term Average quantities held (90-kg bags)
House Holds	22,949	31,358
Traders	14,270	14,910
Millers	1,242	930
NCPB	1,000	0
Total	**39,461**	**47,198**

3.1.2 Livestock Production

The major livestock in the county are cattle, goats, sheep and donkey. The contribution of livestock production to cash income in the, pastoral, agro-pastoral livelihood and mixed farming zones is 70, 48 and 30 percent. Pasture and browse condition was fair to depleted in the pastoral areas but fair in the agro-pastoral and mixed farming livelihood zones, which is not normal and are expected to last for about 1 month (Table 4), which is not normal. Access to pasture and browse was limited by tsetse infestation in the pastoral areas of Chyulu hills in Kajiado South.

Table 4: Pasture and browse situation

Livelihood	Current	Normal	Duration	Factors affecting accessibility
Pastoral	Fair-depleted	Good	<1 month	Tsetse infestation
Agro-pastoral	Fair	Good	1 month	None
Mixed farming	Fair	Good	1 month	None

Livestock Productivity

Livestock body condition was fair across all the livelihood zones 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 who rely on markets for food commodities . The short rains season is usually the season for peak lambing and kidding across all livelihood zones but limited kidding, lambing and calving were reported due to the below normal performance of forage as occasioned by the poor rainfall recorded. Birth rates during the season under review were below normal range, hence stable household food security trends form stable tropical livestock units.

Table 5: Livestock body condition

Livelihood	Species	Condition	Normal	Remarks
Pastoral	Cattle	Fair-Poor	Good	Diminished pasture and longer trekking distance. Browse available at deteriorating trend
	Goats	Fair	Good	
	Sheep	Fair	Good	
	Donkey	Fair	Good	
Agro-pastoral	Cattle	Fair-Poor	Good	
	Goats	fair	Good	
	Sheep	Fair	Good	
Mixed farming	Cattle	Fair	Good	
	Goats	Fair	Good	
	Sheep	Fair	Good	

Milk production, consumption and prices

Households in the pastoral and agro-pastoral areas are relying on milk from goats and sheep since most of the cattle have migrated. In the mixed farming zone livestock are currently grazing within the proximity of homesteads since pasture, browse and water are available and accessible. The average milk production per household per day declined by between 40 and 100 percent of normal across all livelihood zones thus limiting household food availability (Table 6).

Table 6: Household milk production

Livelihood zone	Current milk production (Litres)/per household/ day	Normal	Remark
Pastoral	0-3	12	Inadequate pasture & most cattle migrated
Agro-Pastoral	0-2	10	
Mixed farming	2	20	

Household milk consumption reduced by between 40 and 80 percent of normal across all livelihood zones; while milk prices increased by 33 percent compared with a normal season which constrained household food access (Table 7).

Table 7: Household milk consumption and prices

Livelihood	Per household/ day (Litres)	Normal(Litres)	Price per litre	Normal price
Pastoral	<1	5	60	45
Agro-Pastoral	<1	4	60	45
Mixed farming	1-2	5	60	45

The average TLUs declined by 30 and 50 percent compared with normal for poor and medium household groups respectively across all the livelihood zones (Table 8); and are projected to decline with current progressing dry spell.

Table 8: Average Tropical Livestock Units per household

Livelihood Zone	Poor HH group		Medium HH group	
	Current	Normal	Poor Income	Medium Income
Pastoral	3	10	8-10	25
Agro pastoral	1	4	5-10	20
Mixed farming	1	1	3-5	3-5

Livestock Migration

Livestock migration was experienced due to inadequate pasture and water especially in the pastoral and agro-pastoral zones. An estimated 70 percent of the cattle population from Matapato, Lenkism, Imbirikani, and Rombo has migrated to Chyulu Hills. Cattle from Tanzania have also moved to Chyulu hills. Cattle from Kajiado West have migrated towards Nakuru and Naivasha areas. The migrations were normal in pattern and routes but abnormal in the timing since they started earlier (October-November) than normal (January-February).

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. An advance county-wide livestock vaccination against FMD was conducted before the onset of the migrations. The reported mortality rates for the season are within the normal ranges.

Water for Livestock

The main water sources for domestic and livestock are Rivers, springs, Pans, Dams and boreholes. The quantity and quality of water has declined in all the livelihood zones as a result of decreasing water levels. The pastoral areas of Imbirikani and Torosei recorded the highest return trekking distances of 40 km to watering points. Watering frequency was after every 3 days compared with once per day during normal seasons. Water availability is projected to last for less than 1 to 2 months across all the livelihood zones (Table 9).

Table 9: Water for livestock

Livelihood zone	Return trekking distances (Kms)		Expected duration to last (Months)		Watering frequency	
	Current	Normal	Current	Normal	Current	Normal
Pastoral	20-30	10-20	<1	6	After 3 days	Once
Agro pastoral	5-10	2-5	1	3	After 3 days	Once
Mixed farming	1-2	1-2	2	4	Once	Once

3.2 Access

Access to food is dependent on household purchasing power. The access pillar is build around household income sources from productive assets, fluctuation of market prices of livestock and food commodities, domestic water supply and food security outcomes namely food consumption score and coping strategy index-consumption related.

3.2.1Markets

Most trading activities are concentrated in the main livestock and foodstuff markets in the county which include; Bissil, Maili 46, Sultan Hamud, Emali, Mashuuru, Kiserian and Shompole. All markets were functioning with free access and flow of commodities into and out of the county. However, the markets were depressed and prices low due to oversupply of livestock during the first and second week of January 2017.The main products traded in the markets were livestock and livestock products, crop produce and other household items sourced locally and from the neighbouring Narok, Nakuru, Machakos and Nairobi counties as well across from Tanzania. Traded volumes were normal for the season. Market purchases are an important source of food, and the declining livestock prices contributed to limited access to food among pastoral and agro-pastoral households.

Maize prices

The pastoral zone recorded the highest maize price of Kshs. 60 while the lowest price of Ksh. 40 was reported in the agro-pastoral and mixed farming areas. Maize prices have been on an increasing trend for the last six months but lower than the LTA. Current maize price has increased by 9 percent compared with LTA in January 2017 (Figure 3). Prices are projected to increase gradually until the next season following depletion of household stocks and reliance in market supplies of food commodities.

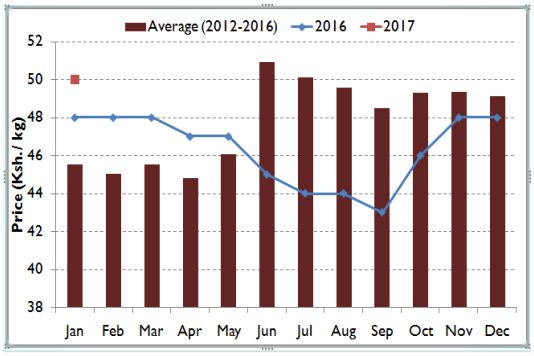

Figure 3: Average maize prices

Goat prices

The December goat prices in the county were similar to the LTA and same time 2015 respectively (Figure 4). The price has been declining for the last six months due to the current deteriorating body condition of goats in the pastoral and agro-pastoral areas as well as the gradual high supply to the markets as the current dry spell progresses and the early preparations for school fees. However, January 2017 goat prices recorded a low of Kshs 2,400 and a high of Kshs 6,000, resulting in an increase in average price by 50 percent compared with normal. The price is expected to further decrease as the current dry spell continues in the next 1-2 months before the onset of the long rains season.

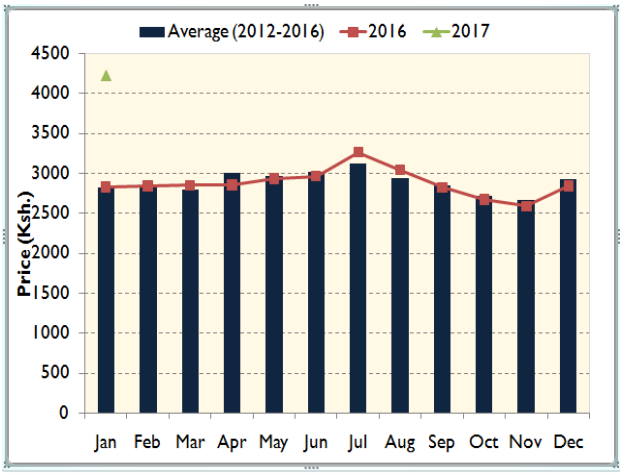

Figure 4: Average goat prices

3.2.2Terms of trade

The terms of trade (ToT) improved by 35 percent compared with the LTA (Figure 5). The observed increase was due to the relatively stable maize and sharp increase in goat prices in January 2017. The Terms of Trade (ToT) are favourable to livestock producers since the sale of a goat could purchase 84 kg of maize compared with LTA of 62 kg. Following the on-going dry spell, the ToT are expected to decrease due to deteriorating livestock body condition as occasioned by water scarcity and forage. However, the on-going migrations may stabilize the situation since few animals are likely to be supplied to the markets.

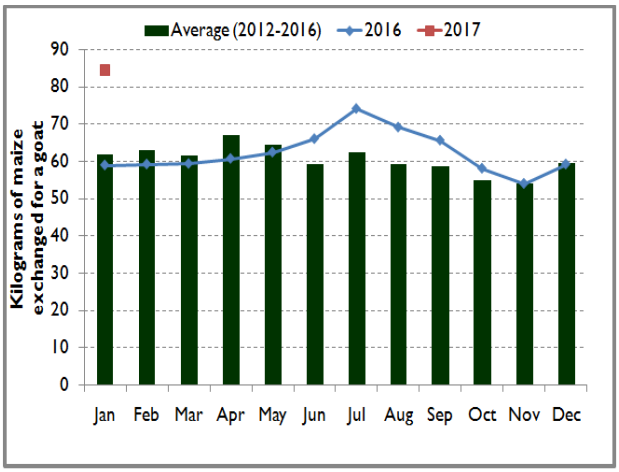

Figure 5: Trends of Terms of Trade

3.2.3 Income sources

Crop production is significant in the agro-pastoral and mixed farming areas. 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, thus households rely on own stocks for food. The contribution of livestock production to cash income in the, pastoral, agro-pastoral livelihood and mixed farming zones is 70, 48 and 30 percent and as such pastoral households mainly relied on sale of livestock to purchase food commodities.

3.2.4 Domestic water supply

Major water sources

The main sources of water for domestic use are dams, pans, ponds, boreholes, shallow wells and rivers (Figure 6). Recharge rates for open water sources was about 40 percent of their capacities. Distance to water sources for domestic use increased by between 50 and 75 across all the livelihood zones following the early drying of open water sources due to poor rainfall performance, seepage and competition between humans livestock and wildlife. The cost of water increased by between 10 and 30 percent compared with a normal season across all the livelihood zones. Some households rely on free water from earth pans, shallow wells and roof catchments. Current waiting time at water source increased by 5, 2 and half hours for pastoral, agro-pastoral and mixed farming livelihood zones respectively compared with normal, and the situation is projected to deteriorate further in the next 1-2 months. Water consumption per person per day declined by between 50 and 75 percent across all the livelihood zones compared with the normal for the season (Table 10). Consumption in the pastoral areas was below the sphere standards, which is below normal at this time of the year. The on-going water sector interventions by the county government and development partners are limited in addressing the current water scarcity situation.

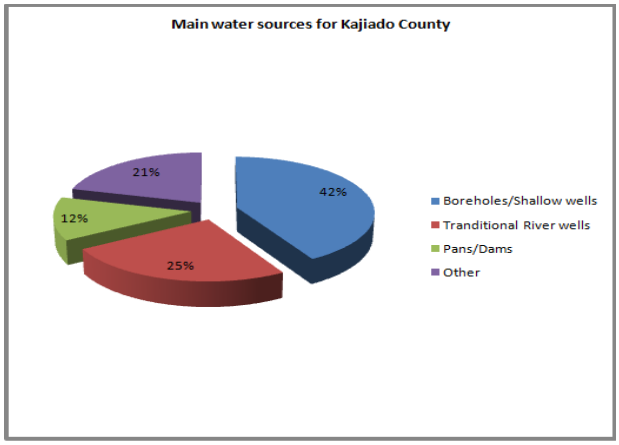

Figure 6: Common water sources

Table 10: Water for domestic use

livelihood zone	Distance to Water for Domestic Use (Km)		Cost of Water (Kshs./20litres)		Waiting Time at Water Source (Minutes)		Average HH consumption (Litres/person/day)	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral	20-30	5-10	0-30	0-3	360	60	2-10	20
Agro-pastoral	10-20	5-10	0-30	0-3	120	30	5-20	20
Mixed-farming	1-2	<1	0-10	0-3	30	5	10-30	20

Food Consumption

The proportion of households (HH) with acceptable food consumption score declined by 46 percent during the short rains season compared with last season (Figure 7), indicating that household dietary diversity and food frequency deteriorated following the decline in own food production and the gradual decline in livestock productivity over the last three months. Many households across all livelihood zones continued to rely on porridge, ugali, potatoes and tomatoes as the main foods. Minimal vegetables were consumed in the mixed faming zone. Currently households are consuming two to three meals per day comprising 2-3 food groups which is normal for this time of the year.

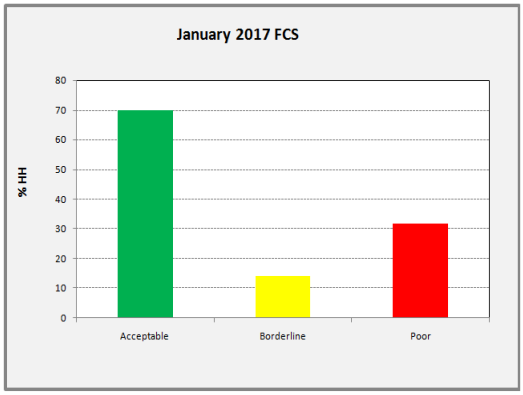

Figure 7: Trends of Food Consumption Score

Coping strategy

The mean coping strategy index increased by 62 percent in between December 2016 compared with same time 2015 (Figure 8), implying that households were more frequently engaging in consumption-based coping strategies and the coping strategies were more severe compared with last season. Most common consumption related coping strategies employed by households were; relying on less preferred and less expensive food and skipping of meals.

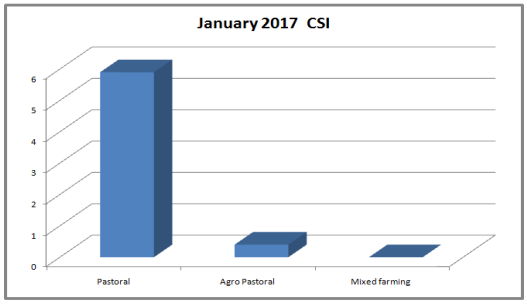

Figure 8: Trends of coping strategy index

3.3 Utilization

Household food utilization is a function of morbidity prevalence for the under fives and the general population, level of completion of immunization and vitamin A coverage, nutritional status among households and the level of sanitation and hygiene practices among communities.

3.3.1 Morbidity patterns

The morbidity prevalence among children under five years of age included; Upper respiratory tract infections (URTIs), diarrhea, pneumonia, skin disease and Malaria. Although, there was generalized increase in disease prevalence in both under five and general population in 2016 compared with 2015, reported cases of URTIs declined by 44.6 percent (Figure 9). Health services have been affected by the on-going health workers strike. No human disease outbreak was reported during the reporting season. Crude mortality rate (CDR) was 0.36/10,000/day and under-fives mortality rate (U5DR) was 0.48/10,000/day which is below the alert cut off point.

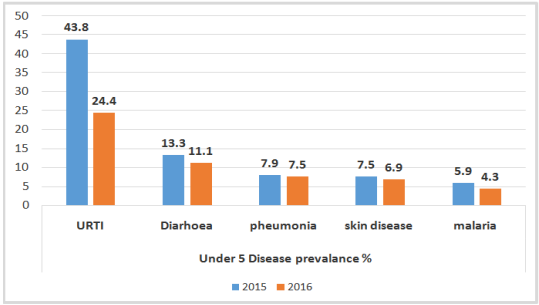

Figure 9: Morbidity patterns for the under 5s

3.3.2 Immunization and vitamin A coverage

Fully immunized child (FIC) coverage for the county was 78 and 79 percent in 2015 and 2016 respectively, indicating stabilization due to enhanced reporting from health facilities. Vitamin A supplementation for children aged 6 – 59 months, from the period of July to December 2016 was 31 percent compared with 11 percent for same period in 2015, but below the national target of 80 percent. The observed improvement was attributed to strengthened reporting at the health facility and also intensified Malezi Bora activities. Vitamin A coverage in the county is very low due to poor reporting and non attendance of child welfare clinic after the last measles vaccine at 18 months.

3.3.3 Nutritional status

The proportion of children under five years at risk of malnutrition, based on mid upper arm circumference (MUAC) of < 135 mm, increased by 23 percent compared with the LTA of 10 (Figure 10). The decline in nutritional status may be attributed to decreased household access to quality food and health care. The trend is expected to deteriorate further particularly in the pastoral and agro-pastoral areas due to out-migrations of livestock hence decreased household milk consumption among children.

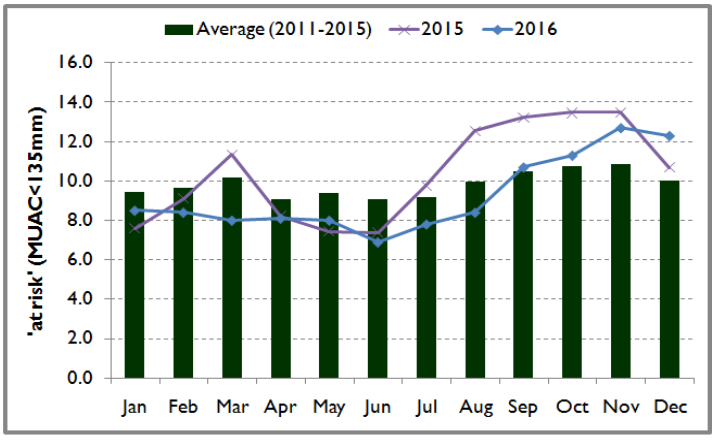

Figure 10: Proportion of under 5s at risk of malnutrition

3.3.4 Sanitation and Hygiene

The average latrine coverage in the county was 28 percent. Latrine coverage and utilization is low in the pastoral areas (Figure 11) due to low sensitization, nomadic lifestyle and cultural beliefs. Water sources may be contaminated through surface run-off washing away agro-chemicals, human waste and refuse, polluting water sources. Most rural households are not treating water, according to information from the community interviews.

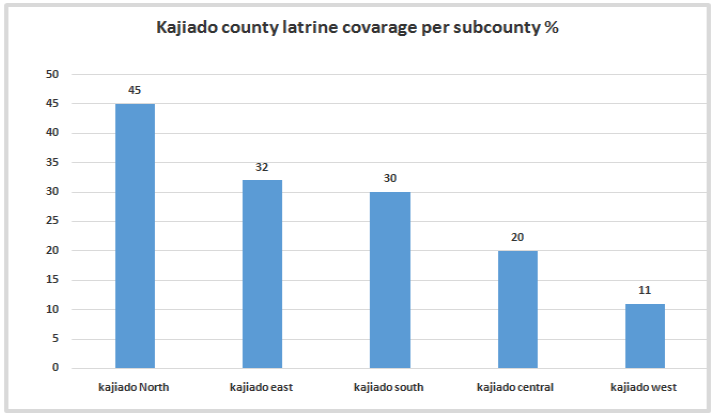

Figure 11: Latrine coverage by sub-county

3.4 Trends of key food security indicators

The county was classified as 'None or Minimal' (Phase I) during the long rains assessment of August 2016 but in the current assessment, the county is classified as 'Stressed' (Phase 2). The

performance of food security indicators comparing the long rains and short rains seasons are shown in Table 11.

Table 11: Food security trends in Kajiado County

Indicator	**Long rains assessment, August 2016**	**Short rains assessment, Feb 2017**
Maize stocks held by households % LTA (mixed and agro-pastoral)	109.23	73.2
Livestock body condition	Good	Fair-poor
Water consumption (litres per person per day) Pastoral : Agro-pastoral: Mixed farming	 20 20 25	 2-10 5-20 10-30
Price of maize (per kg)	45	48
Distance to grazing (km)	5	Migrated
Terms of trade (pastoral zone)	69	84
Coping strategy index	13	21
Food consumption score Poor: Borderline: Acceptable:	 1.3 8 90.7	 14 32 69

3.5 Education

School enrollment and transition are within normal range (Table 12). No schools were closed down due to water or food shortage. However, the school attendance rates declined as some pupils accompanied their parents during migration signifying a decline in household food access. Home Grown School Meals Program (HGSMP) targeting 55,800 pupils at schools in Kajiado Central, Kajiado North, Loitkitok, Mashuru and Isinyi sub-counties is on-going, hence enhanced food consumption in schools.

Table 12: Performance of schools

TERM III 2016						
Indicators	**ECD**		**Primary**		**Secondary**	
	Boys	**Girls**	**Boys**	**Girls**	**Boys**	**Girls**
Total enrollment	18,165	15,335	86,695	82,150	-	-
School dropout (%)	negligible		3		-	-
Transition rate (%)	90		67	58	6	
Growth rate (%)	3.06	2.71	0.72	3.0		
School Meals Programme (SMP)	Target = 147 schools		28,976 boys 26,824 girls			

4. Food Security Prognosis

4.1 Assumptions

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

- The long rains of 2017 are likely to be below average.
- Resource-based conflicts are likely to arise
- Market prices are likely to increase
- Agricultural farm inputs are likely to be unavailable

4.2 Outlook for next 3 months of 6 months (February, March, April)

The overall food security situation across the county is expected to deteriorate over the next three months. The next maize harvest is expected in May-June; and since the county recorded total crop failure and with HH maize stocks declining, it is expected that maize price in the market is likely to increase thus limiting HH access to food. Water and forage are expected to deteriorate due to high land surface temperature and pressure from grazing by livestock from other parts of the county and country. Thereafter, forage regeneration is expected following the start of the long rains season in March. The livestock body condition is expected to deteriorate across all the livelihood zones. Terms of trade are expected to decline and thus become unfavorable to livestock keepers. The nutrition status of children under five is expected to decline due to lack of milk following out-migration especially in the pastoral and agro-pastoral livelihood zones. Food consumption patterns are expected to decline in the pastoral areas where milk availability is expected to decline and hence decreased household consumption. Frequency of meal consumption is expected to decrease across all livelihood zones. Mortality rates for both children under five and the general population are expected to remain below the alert cut off points.

4.3 Outlook for the last 3 months of 6 months (May, June, July)

With the projected below average performance of the long rains, modest rejuvenation of pasture and browse is expected across all livelihood zones and thus the body condition of livestock is expected to improve. Maize stock supply in the markets will increase leading to reduced or stable market price. At the same time, goat prices will increase steadily until end of July as farmers hold their stocks following the good body conditions and own farm food production. Therefore the terms of trade are likely to remain favorable to the livestock keepers. Water sources are expected to recharge by over 50 percent leading to improved water availability and accessibility. Increased milk production is expected to improve the nutrition status of the children under-five years. The proportion of HH with acceptable FCS is expected to increase. The CSI is also expected to improve with HH employing severe mechanisms to access food less frequently.

5. Conclusion and Interventions

5.1 Conclusion

The county was classified as 'None or Minimal' (Phase I) during the long rains assessment of August 2016 but in the current assessment, the county is classified as 'Stressed' (Phase 2).The situation is expected to continue deteriorating up to the next season. However, key factors that need close monitoring in the next six months; especially in the pastoral and agro-pastoral areas, include stocks of staples, pasture and browse situation, livestock body condition, human and livestock diseases, livestock and food prices, under-five nutritional status, distances to water sources, availability and access to forage and water, resource-based conflicts.

5.1.1 Phase classification

The county was classified as 'None or Minimal' (Phase I) during the long rains assessment of August 2016 but in the current assessment, the county is classified as 'Stressed' (Phase 2).

5.1.2 Summary of Key Recommendations

- Up scaling of drought escaping crops in agro-pastoral livelihood zone
- Promotion of water harvesting for irrigation
- Range land rehabilitation
- Breed improvement
- Restocking in the pastoral livelihood
- Manage human-wildlife conflicts and Agro-pastoralists conflicts
- Increased livestock disease surveillance
- Repair and rehabilitation of non-functional water facilities.
- Upgrading of water facilities to be solar powered.
- Drilling of boreholes and excavation of water pans to increase access to water
- Provision of water treatment chemicals
- Scale up integrated outreaches in hard to reach areas to increase immunization coverage and ensure nutrition surveillance
- Increase the number of community units to improve nutrition program coverage

5.1.3 Sub-county ranking

Table 13: Sub-County ranking

Sub County	Food security rank (Worst to best)	Main food security threat (if any)
Kajiado South	1	▪ Extreme water scarcity ▪ Human wildlife conflicts ▪ Early migration ▪ Tses tse infest station
Kajiado West	2	▪ Water scarcity ▪ High surface temperatures Poor infrastructure
Kajiado Central	3	▪ Fair forage supply ▪ Good infrastructure ▪ Access to markets
Kajiado East	4	▪ Fair forage supply ▪ Good infrastructure ▪ Access to markets
Kajiado North	5	▪ Fair forage supply ▪ Good infrastructure ▪ Access to markets

5.1.4 Estimated proportion of population in need of food aid

- It was recommended that some 10-15 percent of total population need food aid

5.2 Ongoing Interventions

5.2.1 Food interventions

Division	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources in KES	Available Resources	Time Frame
Education							
Countywide	Home Grown School Meals Programme	Countywide	55,800	GoK County government Donors			

5.2.2 Non-food interventions

Division	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
Livestock							
Kajiado	Provision of Demand Driven Extension Services	all sub-counties	all farmers in the sub counties	livestock department staff	Provision of information and interventions for maximum livestock production.	as per county livestock extension budget	continuous
	Capacity building and sensitization on invasive weeds, rangeland reseeding and pasture conservation	Kajiado Central and East	100 community members	Livestock production ASDSP Kajiado RPLRP	Ensure livestock feed security	as per project budget	December 2016
	Regional Pastoralist Livelihood Resilience Project	all sub-counties	all farmers/pastoralists in the sub counties	livestock department and RPLRP staff	Provision of information and interventions for maximum livestock production.	as per project budget	as per project timeframe
Agriculture							
Kajiado North	Promotion of drought tolerant crops (Normal extn work)	All wards		MOA	Improved food availability at household level	---	continuous
	Capacity building on utilization and post-harvest handling of			MOA/ASDSP and other partners	improves food availability	----	Continuous

	crops						
Kajiado South	Distribution of 5 tonnes of drought tolerant crops	All wards	2,000	MOA/KEFRI	Improved food availability at H/H	---	5 year programme
Health and Nutrition							
	Vitamin A Supplementation	Heath facility	169,985	MOH	Improves immunity and facilitate growth and development		Twice every year
	Zinc Supplementation	Health facility	21336	MOH	Quicken recovery		continuous
	Management of Acute Malnutrition (IMAM)	Health facility	5100	MOH	corrects malnutrition		continuous
	IYCN Interventions (EBF and Timely Intro of complementary Foods)	Heath facility	34267	MOH	Prevents anaemia		continuous
	Iron Folate Supplementation among Pregnant Women	Health facility	34267	MOH	Prevents anaemia		continuous
	Deworming	Health facility	136879	MOH	Controls anaemia		continuous
	Food Fortification	none					
Water							
Countywide	Fuel subsidy						
Countywide	Rehabilitation of boreholes						

5.3 Recommended Interventions

5.3.1 Food interventions

Division	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources in KES	Available Resources	Time Frame
Education							
Countywide	Feeding Programme	Countywide	113,045	GoK County government Donors	55.8M 221.34M	Firewoods cooks	1 years

5.3.2 Non-food interventions

Division	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Livestock							
County wide	Destocking	Countywide					
County wide	Provision of forage and feed supplements	Countywide					
	Facilitate farmers with hay baling facilities.	all sub-counties	Farmers /pastoralists within the sub-counties	Livestock production department & the beneficiaries	Tractor, mechanized hay baler & mower.Ksh.4.5M	Land &labour	June, July August, November, December, January of every year.
	Establishment of livestock	all sub-counties	Farmers /pastoralists within the sub-	Livestock production			

	feed reserves		counties	departme nt & the beneficia ries			
	Capacity build farmers on pasture production and conservati on	all sub-counties	Farmers/pastor alist within the sub-county	Livestock productio n departme nt	Demonsrationplots,pastures eeds,stationery, casuals & water	casual staff,Exte nsion staff	contin uous
Agriculture							
County	Relief seed	County wide	2,000 farmers	MOA at National and CGK, Other Partners	Funds	Manpow er	Feb - March 2017
County	Capacity building of water harvestin g technolo gies	County wide	1,000 farmers	MOA and Water Depts at National and CGK	Funds	Skilled man power	Feb - March 2017
	Excavati on and De silting of Dams	County wide	2,000	National and CGK	Funds		Feb - March 2017
	Capacity build on efficient water utilization technolo gies	County wide	20 groups	CGK			Feb 2017 to March 2017
Health and Nutrition							
	Mass screenin g in the	Mbirikani,Lenkism, Rombo, Mosiro and Magadi	66,000	CDH and NDMA	Personnel Vehicles	Personn el	Februa ry 2017

	flaged areas				Funds		
	Scaling up of nutrition services through intergrated outreaches	Hard to reach areas in the County	238,519	CDH and NDMA & partners	Personnel Vehicles Funds Medical supplies	Personnel Nutritional supplements	Feb to April 2017
	Scaling up of children supplementary feeds						
	Sensitization of Health workers on IMAM	Facilities	100	CDH & Partners	Personnel, Funds, Training materials	personnel	Feb & March
Water							
	De-silting of pans/dams	Lolngosua, Torosei, Oltepesi, Mile 46, Singiraine, NkulukokNaibor, Ololainyamok	8,360	NDMA, CGK, Donor partners	28m	N/A	1month
	Provision of water tanks and guttering into institutions						
	Pipeline	EnkeresunaTorosei/		NDMA,			

	extension from high productive boreholes to needy areas	Emurkea UsuaEsonoru -Mile 46 Kamukuru	6,090	CGK, Donor partners			
	Fuel subsidy	All boheholes		NDMA, CGK, Donor partners			