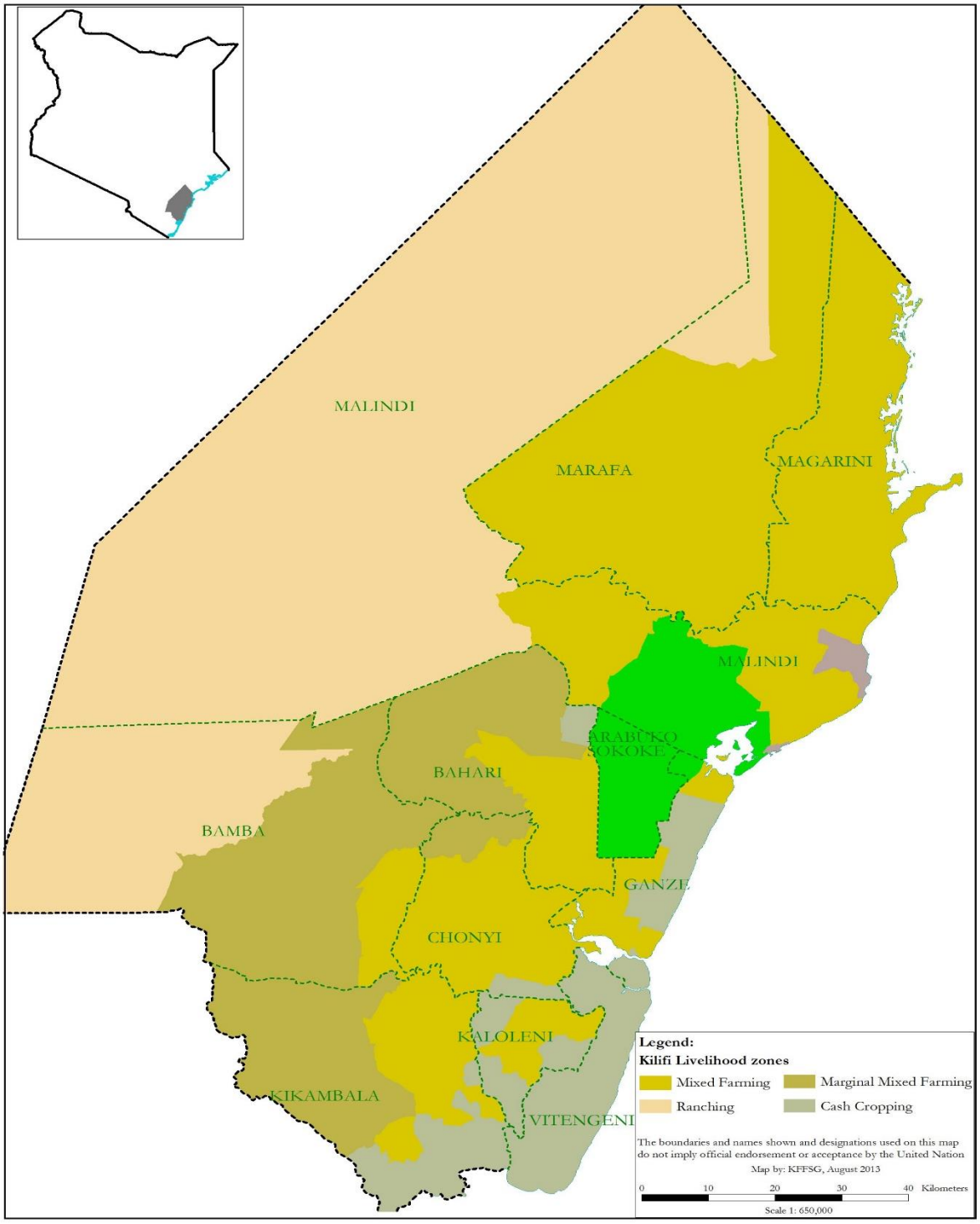
KILIFI COUNTY 2018 LONG RAINS FOOD SECURITY ASSESSEMENT REPORT



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

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Executive Summary

The 2018 Long Rain Assessment was conducted from 13th to 17th August 2018. The assessment was led by the government through Kenya Food Security Steering Group (KFSSG) in conjunction with Kilifi County Steering Group (CSG). The process takes a multi-agency composition with government departments supported by UN agencies and Non-governmental organizations in the county who have a stake in food and nutrition security. The process was coordinated by National Drought Management Authority (NDMA) and chaired by the office of county commissioner. The assessments are conducted bi-annually together with the CSG which are multi sectoral and multi-agency in composition and coordinate the food security activities in the county.

The overall objective aimed at analyzation and determination of the extent and impact of 2018 long rains on food and nutrition security taking into account the cumulative effects of previous seasons and other shocks and hazards. The assessment explored the impact of season on availability of food, access, utilization and looking at their stability, contributing factors and effects on the sectors. The assessment also informed response and interventions that would address the issues arising in each sector, including agriculture, livestock, water, health and nutrition, education, peace and security and markets and trade.

The above average long rains performance resulted in floods leading to loss of livelihoods and homes were submerged downstream. Crop losses due to flooding and infestation of pest (FAW) were also reported. Human wildlife conflicts were reported especially in the marginal farming areas. Cases of epidemic and water borne diseases increased in humans. While in livestock outbreak of RVF led to closure of markets thereby affecting the household incomes. Availability of food improved despite crop loss pest through infestation and flooding. Maize stocks held by farmers increased compared to previous seasons. Household milk consumption remained low.

However, quarantine imposed in some parts of the county limited access to household income. Access to food also improved, with households being able to access 92 kilograms of maize from a sale of a goat. Water consumption also improved due to reduced distances and high recharge rates of open water sources. Food utilization was negatively affected by increased cases of epidemic and water borne diseases caused by poor water and sanitation practices. The proportion of households with acceptable food consumption improved from 40.6 percent in May 2017 to 53.9 percent implying that improvement in meal frequency and dietary diversity. The mean coping strategy index remained relatively stable from 18.13 in May 2017 to 20.75 in same period of 2018. The proportion of children under five years at risk of malnutrition, based on the mid upper arm circumference (MUAC >135mm) in June 2018, was 5.6 percent which was stable compared with same time in 2017. The crude mortality rate was at 0.07/10,000/day and 0.05/10,000/day for under-fives and general population respectively.

Kilifi County is classified as None (IPC Phase 1) with improvement in the livestock ranching livelihood from Stressed (IPC Phase 2) in the previous season short rains.

1.0 INTRODUCTION

1.1 County background

Kilifi County is located in the coastal region of Kenya. It borders Kwale County to the South West, Taita Taveta to the West, Kilifi to the North, Mombasa to the South and the Indian Ocean to the East. Kilifi covers an area of approximately 12,609.7 square kilometres and has a population of 1,399,975 (KNBS 2016 Projections). It comprises of seven Sub Counties namely; Malindi, Magarini, Ganze, Rabai, Kaloleni, Kilifi South and Kilifi North. The county has four main livelihoods zones including marginal mixed farming comprising 44 percent of the population, cash cropping/dairy 22 percent, mixed farming 11 percent and ranching two percent (Figure 1). Other livelihood zones include fishing and mangrove three percent, formal employment (14 percent) and forest/tourism and casual labour two percent each.

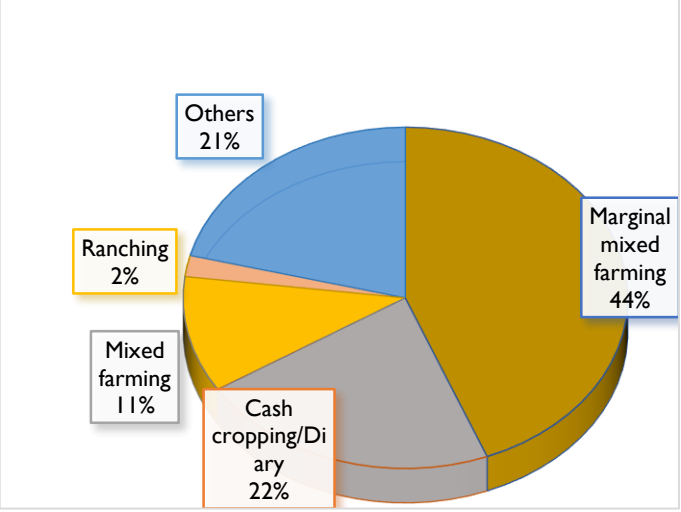

Figure 1: Population by livelihood

1.2 Methodology and Approach

Long rains assessment was aimed at developing an objective, evidence based and transparent food security situation. The overall methodologies were coordinated by Kenya Food Security Steering Group. The collection of data from various sources such as livelihood baseline, nutritional smart surveys, NDMA monthly bulletins, sectoral reports, price data and Food Security Outcome Monitoring (FSOM) data were used as secondary data. Field teams were constituted representing various sectors and partners in the county. Field semi structured interviews with officials and experts, market interviews, community interviews, visual inspection techniques were used in collection of data. The use of sectoral checklist tools was administered to key informants and focus group discussions in order to collected primary data. Various factors such as below or average rainfall performance, conflicts areas, sites that had never been visited before, farming areas, livelihood zones, markets, hospitals, schools, water stress or and flooding areas, livestock concentrations among others were used to select the sample sites, transect drive routes and interview sites covering all the livelihoods.

The initial CSG was conducted on 13th August, 2018 with the presentation of preliminary county report by the technical sector working group and discussions were held. After the discussions, field teams were constituted comprising of livestock, agriculture, health and nutrition, water and sanitation, education and partners. Two transect routes and interview areas were drawn as Malindi, Garashi (Internal Displaced Persons Camp), Kamale, Boraimani/Mereni, Goshi, Shakahola, Baolala and Vitengeni. The other route went through Kilifi, Majajani, Ng'ombeni, Lutsangani, Jibana, Kambe Ribe, Bondora, Mkapuni, Kaliang'ombe, Mariakani. Field assessment was conducted between 14th and 15th August, 2018. While in the field; the team conducted a minimum of two communities, two key informants and two market interviews in each of the four sampled sites. The assessment teams also visited schools and health facilities to collect more relevant information. Visual

inspections were also used during the transect drives to obtain qualitative data. The field data was collected, reviewed, analyzed and triangulated to verify its validity. A multi sectoral and multiagency approach was used. Livelihood zone was used as a unit of analysis in order to understand changes in food security and overall identify populations affected and in need of assistance. The results from sampled sites were discussed in the CSG and used to infer other areas not visited. The findings and recommendations were provided for planning purposes.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The onset of the long rain season was early in the first dekad of March compared to the normal third dekad of March. Most parts of the county received above average rains of 350 percent of the normal rainfall (Figure 2). A few in the livestock ranching received 200-350 percent of the normal rains, though these parts largely depend on the short rains. Spatial distribution was even with good temporal distribution across the county. Cessation was late in the third dekad of June compared to the third dekad of May normally. The above average rains led to floods caused by excessive rainfall received in the upstream of the Galana River culminating to loss of livelihoods and homes submerged in the downstream along Galana and Sabaki in Malindi and Magarini Sub Counties. The rains supported regeneration of pasture and recharged open water sources which are used by both human and livestock.

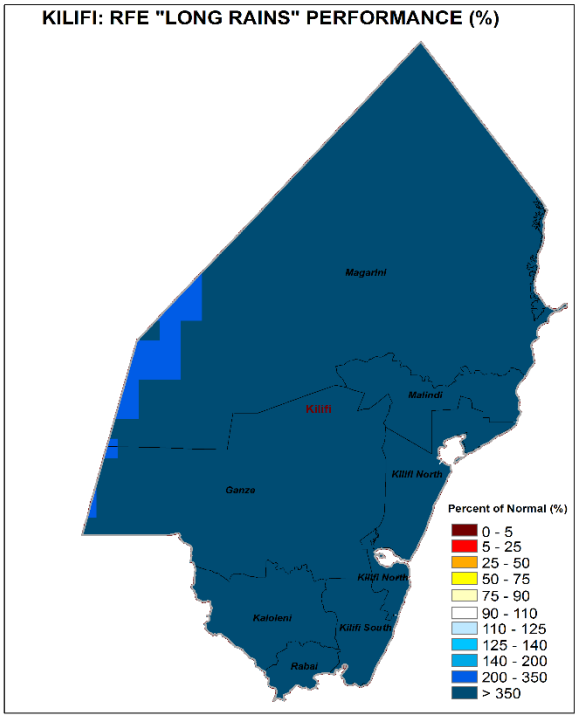

Figure 2: Rainfall performance

2.2 Floods

The above average long rains resulted to flooding due to bursting of River Galana and Sabaki leading to displacement of households. Households were relocated to camps and some households were integrated by their members. According to Kenya Inter-Agency Rapid Assessment Report (KIIRA) of May 2018, about 2,508 households (14,943 (Male-7,796 and Female -7,147) were affected by floods (Table 1). The National Government, County Government, international organizations, UN agencies, and religious organizations have supported the county to intervene on the negative impacts of the massive floods. The interventions include; water trucking, food and non-food items distribution, supply of tents, water treatment chemicals, integrated health and nutrition outreaches, nutritional supplements and essential drugs provision.

Table 1: Households affected by floods

S/County	Total affected HHs	Total Population
Magarini	1,380	8,071 (Male-4,083 and Female -3,988)
Malindi	1,128	6,872(Male-3,713 and Female -3,159)
Total	**2,508**	**14,943 (Male-7,796 and Female -7,147)**

The flooding also led to loss of livelihoods and homes were submerged downstream along the Galana River and Sabaki in Malindi and Magarini sub counties. About seven wards were affected by floods in the two sub counties which were Kakuyuni, Ganda, Adu, Garashi, Magarini, Jilore and Sabaki. The crops and infrastructure destroyed were estimated (Table 2). Additionally, cases of Fall Army Worm (FAW) in maize crop is expected to result to below average production.

Table 2: Estimated crop and infrastructure losses through flooding

Crop Enterprise	No. of acreage	No. of crop plants	Value per crop	Total Value
Bananas	49.8	7,975	350	2,791,250.00
Coconut palms (acres)	906.4	25,380	4,500	114,210,000.00
Sugarcane (acres)	39.5	2,370,000	80	189,600,000
Watermelon (acres)	95.5	152,000	150	22,800,000
Chillies (acres)	14.25	105450	40	4,218,000
Maize (acres)	2,350.5	34,820,011	10	348,200,110
Green grams (acres)	329	19,476,800	8	155,814,400
Cow peas (acres)	142.25	3,157,950	5	15,789,750
Tomatoes (acres)	155.5	1,244,000	30	37,320,000
Kales (acres)	389.75	4209300	20	84,186,000
Cassava (acres)	3.25	13,000	25	325,000
cassava (number of plants)	65	65	25	1,625
Mangoes trees (acres)	69.5	1946	5,000	9,730,000
mango trees (number)	132	132	5,000	660,000
Beans (acres)	1.5	133,333	5	666,666
Okra (acres)	95	1,026,000	20	20,520,000
Eggplant (acres)	80.5	579,600	30	17,388,000
Amaranth (acres)	43.5	772,560	3	2,317,680
Groundnuts (acres)	1.5	100,000	10	1,000,000
Bell peppers (acres)	24.5	181,300	30	5,439,000
Butternut (acres)	152	270,195	50	13,509,750
Onions (acres)	7	875,000	10	8,750,000
Pumps	34		60,000	2,040,000
Pipes (pieces)	1,619		2500	4,047,500
Pipes (m)	5000(833PCS)		2500	2,082,500
Hoes/Pangas/spades	2,106		250	526,500
Generator	20		40,000	800,000
			Total	**1,064,733,731**

2.3 Rift Valley Fever

Rift Valley Fever (RVF) in livestock was reported in the marginal mixed farming and parts of the livestock ranching in Magarini and Malindi sub county resulting to imposed quarantine and closure of all livestock markets. The outbreak led to several abortions and deaths of various livestock types.

2.4 Other Shocks and Hazards

2.4.1 Insecurity/Conflicts

No reported cases of conflicts across the county in relation to resources. Minimal movement of livestock to Msimba, Kone and Tsavo East National park from Chakama in Magarini sub county in search of pasture. Human wild conflicts have been reported.

2.4.2 Other Diseases

Several human diseases were reported during the period January to June 2018 (Table 3).

Table 3: Epidemic and water borne diseases

Disease	Number of cases: January to June 2018
Measles	68
Cholera	1
Dysentery	2,981
Diarrhea	49,228
Malaria	66,811
Typhoid	512

Tick borne diseases, endo parasites, vectors and poultry diseases were reported across the county. Newcastle diseases in poultry was reported especially in Mawesa and Mwarakaya in Rabai and Kilifi south sub counties. Cases of endemic diseases such as Contagious Caprine Pleuro Pneumonia (CCPP) in sheep and goats were also reported. Diseases surveillance has been scaled up with increased restriction in livestock movements.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

Food commodities presence in households and in the market provides the opportunity for household to access food. Households depend on own production and market for their food commodities.

3.1.1 Crop Production

The long rains contribute about 60 percent of the total annual production while 40 percent is drawn from short rains. In cash cropping/dairy and food cropping, maize and cassava contributes 40 and 20 percent to food respectively. Maize and cassava contribute 25 and 18 percent to income in the food cropping livelihood zone. In marginal mixed farming livelihood zone, maize and cassava contribute to 70 and 20 percent to food respectively. Cassava and cashew nuts contribute 30 and 50 percent to income in the marginal mixed farming livelihood zone. Other crops that contribute to income across the livelihoods include coconut, cassava, tomatoes, green vegetables and cowpeas.

The floods led to destruction of an estimated 4,495 acres of land under crop. The crops affected include; maize, green grams, cowpeas, water melon, bananas, tomatoes, onions, coconut palms, kales, cassava, beans and mangoes. The area under rain fed cropping for maize, cowpeas and cassava decreased by eight, 23 and 39 percent respectively compared to the long term averages (Table 4). The decline in acreage was attributed to lack of farm inputs especially certified seeds, water logged farms that prevented access to tractors for ploughing and fear of the infestation of FAW. The projected production for all the three main crops is expected to decline by 28, 66, and 25 percent compared to long term averages. The decline was associated with above average long rains resulting in leaching and water logging of farms especially in mixed farming areas such as Kisurutini, infestation of FAW in maize crop, cowpeas became vegetative rather than producing pods. Limited access to planting materials and low acreage resulted to decline in cassava production.

Table 4: Rain fed crop production

Crop	Area planted during 2018 Long rains season	Long Term Average (5 year)	2018 Long rains season production (90 kg bags) Projected/Actual	Long Term Average (5 year) production during the Long rains season

	(Ha)	area planted during the Long rains season (Ha)		(90 kg bags)
1. Maize	57,371	62,184	450,598	578,202
2. Cowpeas	4,944	6,403	12,826	40,268
3. Cassava	3,634	5,949	95104 (tons)	126,722 (tons)

The main irrigated crops were Amaranthus, watermelon and green maize. The acreage under Amaranthus, watermelon and green maize, declined by four, three and 15 percent respectively compared to the long term averages. The decline was associated to crop loss through flooding to crops that were planted earlier. Replanting of the second crop was done as the water receded. Irrigation infrastructure in Burangi, Zia ra Wari, Balagha that are supported by the County Government, were washed and damaged by floods. An estimated 20 generators, 2,000 hoes/pangas/spades and over 1,600 pieces of pipes were washed away. Water melon was grown along the River Sabaki as cash crop. Men took up water melon farming more compared to women which due to its labour intensiveness and requirement of inputs which women could not afford. Amaranthus, was preferred by women more compared to men, due to its short cycle to maturity and low input requirements.

3.1.2 Cereals stock

Maize stocks held by famers were about 200 percent above the long term averages, due to previous stocks held. Increase in stock was also associated with some households in the mixed farming and food cropping areas had last year's stocks. Maize stocks held by traders have declined by 10 percent compared to the long term averages (Table 5). The reduction was occasioned by on-going harvesting. Green grams stock held by traders also declined by 15 percent which was attributed to reduction in production and preference of households to beans. A kilogram of beans was sold at Ksh.70 per kilogram compared to green grams Ksh.120 per kilogram thus household's preference.

Table 5: Cereal stocks in the county

Commodity	Maize		Rice		Sorghum		Green Gram		Total	
	Current	LTA	Current	LTA	Current	LTA	Current	LTA	Current	LTA
Farmers	39,192	19,027	0	0	49	45	429	400	39,670	19,472
Traders	67,687	75,000	33,978	40,000	1,959	1,500	11,113	13,000	114,737	129,500
Millers	23,051	30,000	0	0	0	0	0	0	23,051	30,000

3.1.3 Livestock Production

The main livestock types are cattle, sheep, goats and poultry. In the ranching areas, cattle, goat and poultry contributes 15, 20 and 50 percent to food while in the marginal mixed farming areas they contribute 10, 82 and three percent respectively (Table 6).

Table 6: Proportion of livestock contribution to cash income

Livelihood zone	% contribution to cash income
Ranching	75
Marginal mixed farming	30
Cash cropping/dairy	15

Pasture and Browse Situation

Pasture and browse condition was good except in parts of the ranching livelihood zone where the pastures were fair (Table 7). Pockets of fair pasture were observed in Chakama, Shaka Hola, Langobaya and Garashi where regeneration of pastures was fair. Thorny bushes and wildlife conflicts are limiting access to pastures and browse in parts of the ranching livelihood

zones. The land tenure system has been observed to limit access to pastures in the cash cropping/dairy and mixed farming livelihood zones.

Table 7: 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	
Ranching	Good	Fair	2.5 months up to end of October	2 months up to end of October	Thorny bush, wildlife	Good	Good	3 months up to end of November	3 months up to end of November	Thorny bush, wildlife
Marginal Mixed farming	Good	Fair	5 months to end of January	4 months to end of December		Good	Fair	6 months up to end of February	4 months to end of December	
Mixed farming	Good	Good	3 months up to end of November	3 months up to end of November	Land tenure system, poor regeneration of pastures	Good	Good	3 months up to end of November	3 months up to end of November	Land tenure system
Cash cropping /dairy	Good	Good	3 months up to end of November	3 months up to end of November	Land tenure system	Good	Good	4 months to end of December	3 months up to end of November	Land tenure system

Livestock Productivity

Livestock body condition

Livestock body condition was good across all the livelihood zones which was normal at this time of the year (Table 8). The availability of pastures and shorter return distances from grazing areas to water sources resulted to good livestock body condition. A few herds in the ranching livelihood zone were good to fair compared to good normally at this time of the year. Routine husbandry practices have also been seen to affect the livestock body condition. The livestock body condition is expected to remain stable for next 2-3 months.

Table 8: Livestock body condition

Livelihood zone	Cattle		Sheep		Goat	
	Current	Normal	Current	Normal	Current	Normal
Ranching	Good-Fair	Good	Good	Good	Good	Good

Marginal Mixed farming	Good	Good	Good	Good	Good	Good
Mixed farming	Good	Good	Good	Good	Good	Good
Cash cropping/dairy	Good	Good	Good	Good	Good	Good

Tropical livestock units (Tropical Livestock Units) and Birth Rates

Recovery from the previous droughts resulted in diminished livestock numbers per household (Table 9). The birth rates are normal across all the livelihood zones expect in the north east in ranching livelihood zone where below average long rains was received thereby impacting on livestock productivity.

Table 9: Livestock ownerships

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Ranching	3	5	8	10
Marginal Mixed farming	2	4	6	8
Mixed farming	2	3	3	5
Cash cropping/dairy	1	1	3	3

Milk Production and consumption

Milk production remained relatively low due to slow recovery of livestock from the previous drought. Production of milk in cash cropping/dairy was higher due to availability of dairy cattle. Household milk consumption ranges between 1-2 litres which was normal at this time of the year. The cost of a litre of milk in the ranching and marginal mixed was Ksh.40 compared to normal of Ksh.30 per litre. In the mixed farming and cash cropping/dairy, the cost of a litre of milk ranged between Ksh.50 and 60 compared to the normal of Ksh.40 and 50 (Table 10).

Table 10: Milk production and consumption

Livelihood zone	Milk Production (Litres)/Household		Milk consumption (Litres) per Household		Prices (Ksh)/Litre	
	Current	LTA	Current	LTA	Current	LTA
Ranching	0.5-2	1-2	1	1-2	40	30
Marginal Mixed farming	2-3	3-4	1	1-2	40	30
Mixed farming	2-6	5	1	1-2	50	40
Cash cropping/dairy	4-7	5-8	2	1-2	60	50

Livestock Migration and Livestock Diseases and Mortalities

No livestock migration was reported into the county which is abnormal at this time of the year. Livestock from Tana River would have migrated to Kilifi in search of pastures and water. Livestock movements are observed from one place to another as they graze and look for water. Livestock migration is likely to start by the end of September due to depletion of pastures from Tana River County. Rift Valley Fever was reported in parts of Magarini and Malindi Sub Counties here there were 18 confirmed cases leading to imposition of the quarantine. The quarantine led to closure of livestock markets in Malindi and Magarini and suspension of slaughter houses activities since end of July to date. The outbreak resulted to an estimated 73 abortions in goats in Malindi and Magarini. Several deaths were reported with 10 deaths in goats, sheep two deaths and eight in cattle. Endemic diseases cases such as CCPP in sheep and goats were also reported. Tick borne related diseases, endo-parasites and poultry diseases (Newcastle) were also reported across the county. Livestock disease surveillance, vector control, livestock movement restrictions/slaughter houses suspension and routine treatment are

some of interventions carried out by the veterinary department in the county in collaboration with non-government organization to control and prevent spread of diseases.

Water for Livestock

The main sources of water in the ranching and marginal mixed farming livelihood zones were water pans, bore holes, rivers and natural ponds which were normal sources at this time to the year. In the mixed farming and cash cropping/dairy, the main sources were water pans, bore holes, rivers, natural ponds, tap and pipelines, roof catchment, rivers and dams. Water for livestock is likely to last until the next rainy seasons except in the ranching areas where water pans may dry up. The return distance to water for livestock has reduced by almost half of the normal distances which was attributed to above average long rains performance in the county (Table 11). Increase in trekking distance to the water sources was observed in Magarini and parts of Ganze sub counties, where the distances from grazing to water were 5-8 kilometres compared with the normal of 8-10 kilometres.

Table 11: Livestock water

Livelihood zone	Return trekking distances (Km)		Expected duration to last (Months)		Watering frequency	
	Current	Normal	Current	Normal	Current	Normal
Ranching	2-5	5-10	2-3	2	Once	Once
Marginal Mixed farming	2-3	4-5	2-3	2	Twice	Twice
Mixed farming	1-2	2-3	2	3	Twice	Twice
Cash cropping/dairy	Less than 1	1	4	4	Twice	Twice

3.1.4 Impact on availability

Food availability improved despite crop losses through pest infestation and flooding compared to previous seasons. Livestock productivity improved though milk availability remained low due to slow recovery of livestock from the previous drought.

3.2 Access

Household access to food commodities improved especially with reduced maize prices and on-going local harvests. Improvement in food consumption was noted due to improved own farm production of food commodities. Consumption of water improved despite poor water and sanitation practices.

3.2.1 Markets

Market Operations

Commodity markets in the county include Mtwapa, Bamba, Mariakani, Malindi and Mazeras. Other markets are Gongoni and Marereni. Other markets that support the county in food commodities included Kongowea and Oloitiptip. The food commodities available in the market were maize, green grams, cowpeas, cassava, vegetables and rice. Food commodities were available in far flung areas in the county as result of businesses set up by the Somali community. Livestock markets include Bamba, Vitengeni, Tsangatsini, Mariakani, Gotani Malindi, Mkapuni, Bondora, Kaloleni, Langobaya and Mazeras. All markets were functioning normally without any disruptions except in mixed farming livelihood areas in Malindi and Magarini sub counties, where the slaughter houses were closed due to RVF outbreak. Livestock movements have since been restricted. In other markets, sheep, goats and cattle were available.

The traded volumes of livestock were below normal due to fattening as result of good pastures and short distances to water where farmers are holding their livestock resulting in increased prices. Livestock buyers were few in the markets mainly due to high goat prices, thereby traders preferred other markets in the country. Improved road access to markets such as Bamba led to improved access of food items. Low supply of livestock in the markets resulted in increased livestock prices.

Maize prices

Maize prices in July were Ksh.40 compared to Ksh.61 at a similar period in 2017. The average maize prices were 10 percent below the long term averages and 34 percent lower than the price in 2017 (Figure 3). The highest average price was recorded in Adu and Jilore in livestock ranching livelihood zone, where maize was selling at Ksh.50 per kilogram due scarcity of the commodity and lowest in Mwarakaya in the mixed farming areas traded at Ksh.35 per kilogram (traders don't stock dry maize because the cost of flour was affordable compared to buying dry maize, shell and then mill to obtain flour). The average maize prices per kilogram remained relatively stable from March. The stability in average price was attributed to on-going harvest and high demand for sifted maize meal than maize. The price is expected to decline further with the ongoing harvests.

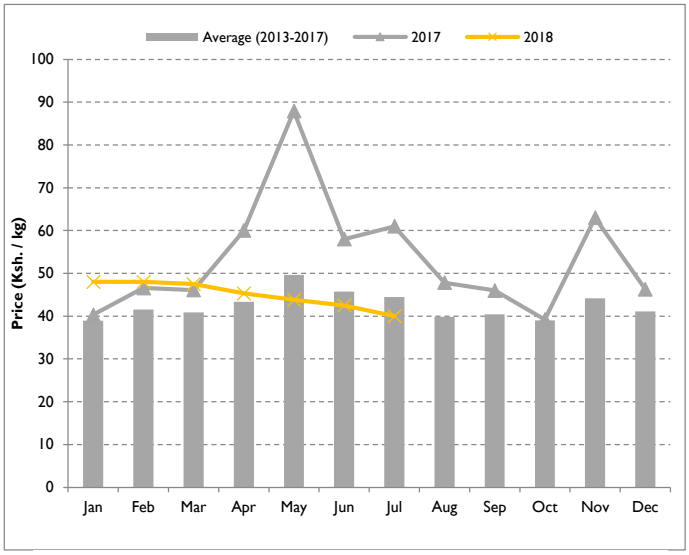

Figure 3: Maize prices in the county

Goat prices

Goat prices in July 2018, were Ksh. 3,676 compared to Ksh. 2,531 at a similar period in 2017. The goat prices were 61 percent above the long term average and 45 percent above similar period in 2017 (Figure 4). The highest average price was recorded in the livestock ranching zone, in Ganze at Ksh. 4,500. The price increase was due to improved goat body conditions attributed to availability of good pasture and browse and water availability within short trekking distances. Goat price is expected to remain above long term averages and 2017 prices due to good body condition.

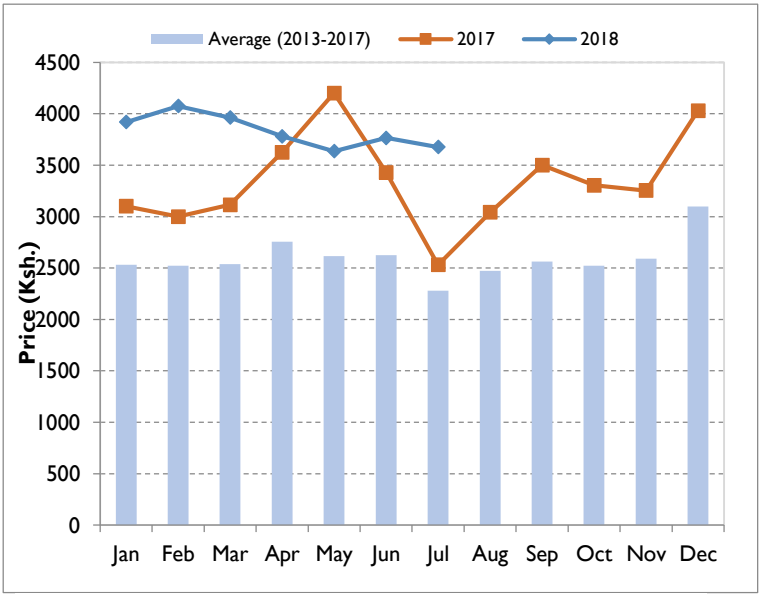

Figure 4: Goat prices

3.2.2 Terms of trade (ToT)

In July 2018, households were able to access 92 kilograms of maize from a sale of a goat compared to 41 kilograms of maize at similar period in 2017. The terms of trade were 79 percent above the long term averages (Figure 5). In July, 2018 the terms of trade were 54 percent below ToT in same period in 2017. The increase in the ToT was due to improved goat prices and lower maize prices. The terms of trade were favourable for the households selling goats to purchase maize as goat prices were high.

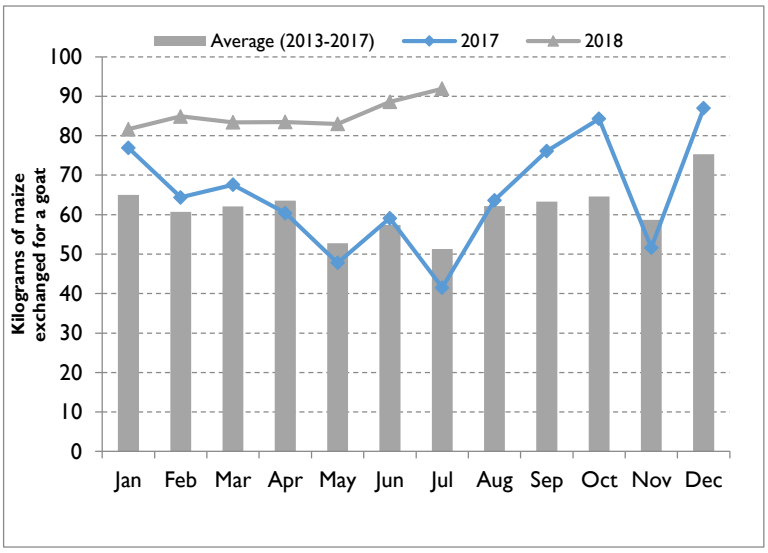

Figure 5: Terms of trade in the county

3.2.3 Income sources

Food cropping and livestock production are the main sources of income in the ranching and food cropping livelihood zones (Table 12). Cash cropping farming also supports household in terms of income. Though cash transfer has ended, it supported 12,200 households (Male headed households -1098, Female headed households -11,102) in Malindi, Magarini, Kaloleni, Ganze and Rabai Sub Counties.

Table 1 Proportion of income sources by livelihood

Livelihood Zone	% Cash Income Contribution						
	Livestock Production	Food Crop Production	Casual Wage	Cash crop production	Firewood collection/ charcoal burning	Remittance and Gifts	Small Businesses such farm produce sale
Cash cropping /Dairy	15	15	5	30	0	0	5
Food cropping	0	50	10	10	0	0	5
Marginal mixed farming	30	0	5	20	15	2	15
Ranching	75	0	2	0	10	0	5

3.2.4 Water availability and access

Major water sources

The major water sources in the county include water pans/dams, rivers, natural ponds, shallow wells, springs, boreholes and pipeline extensions across all livelihood zones. The performance of long rains resulted in 100 percent recharge of open water sources. Boreholes with extended pipeline network were not fully operational as they were damaged by floods. Some water pans

were damaged by extensive flooding or seepage due to poor retention of the soil. Baricho and Mzima Spring pipelines were operational but had frequent interruptions due to power outages resulting in water rationing.

Distance to water sources

The return distance to water source was normal ranging from as low as one km to three km in mixed farming, formal employment and cash cropping livelihood zones. In marginal mixed farming and livestock ranching, household are covering 2-6 km which was normal. Most people are accessing water at their normal water points or even nearer due to the recharge of surface water bodies.

Waiting time at the source

The waiting time was normal across all livelihood zones ranging from 5 to 10 minutes. Most community water points were fully operational with only a few damaged by flooding such as along the Bungale–Marafa pipeline extension.

Cost of water

The average cost of water per 20-liter jerry ranges from Ksh. 2 to 5 compared to Ksh.11 during the same season last year. In the livestock ranching zone, the cost of 20 litre jerrycan was Ksh.10 compared to the normal of Ksh.5 (Table 13). Lower cost of water was due to increased availability of water at reduced distances. Majority of the households were accessing water at the source by themselves being at close proximity thus foregoing the vendor services.

Water consumption

The average consumption ranges from 15 to 20 litres per person. Water availability was normal to above normal in the ranching and marginal farming livelihood zones, while in the mixed farming and food cropping/dairy, the availability of water was near normal due to above average performance of long rains.

Table 13: Water availability and access

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
Mixed farming zone	1-2	1- 2	2	2	5	5	20	20
Marginal Mixed Farming	2-6	2-6	5	5	10	10	15	15
Formal Employment	2	2	3	3	10	10	15	15
Cash Cropping	3	1-2	3	3	5	5	20	20
Livestock Ranching	2-6	2-6	10	5	10	10	15	15

3.2.5 Food consumption

In May 2018, World Food Programme FSOM data, the proportion of households with acceptable food consumption improved from 40.6 percent in May 2017 to 53.9 percent implying an improvement in meal frequency and dietary diversity (Figure 6). About 20.4 percent of the female headed households had poor food consumption compared with 13.7 percent of the male headed households as result of access and control of food and money. Most households are consuming an average of 1-2 meals per day across the livelihood zones. The dietary diversity score in May 2018 was 4.2 while the households were able to consume cereals and tubers five times in a week. The households consumed vegetables five times in a week. Households were able to access a variety of foods equally for both female and male headed households.

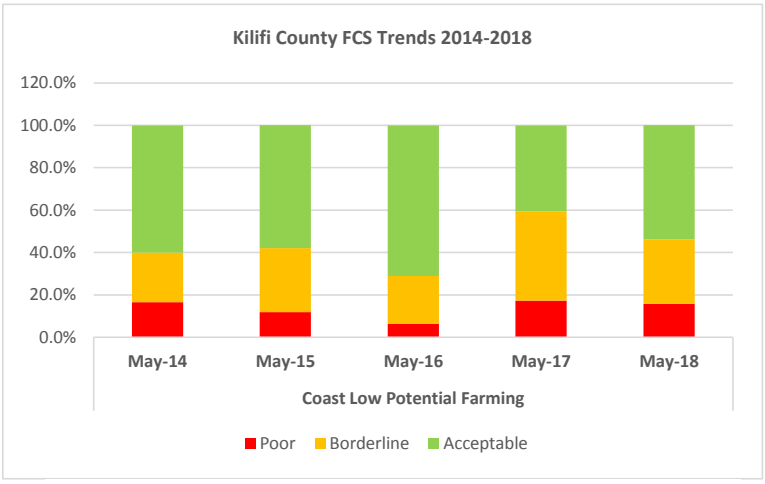

Figure 6: Food consumption trends

Milk consumption

Household milk consumption ranges between 1-2 litres across all the livelihood zones which is normal at this time of the year. In the cash cropping/dairy, milk production was higher but almost 80 percent of the milk is sold for cash income.

3.2.6 Coping strategy

The mean coping strategy index remained relatively stable from 18.13 in May 2017 to 20.75 in same period of 2018 (Figure 7). The stability implies that households relatively maintained their frequency or severity in use of consumption based coping strategies to bridge their food gaps. The mean coping strategy was 23 and 19 in female and male respectively implying that female headed households engaged in severe coping strategies to meet their food gaps than male headed households. About 16.8 percent of the household borrowed food, or relied on held from a friend or relative while 24.4 percent reduced the quantity of food consumed by adults/mothers to ensure that children had enough to eat. In coping strategies, male relied on borrowing and reducing the quantity of food for children to eat more than the female headed households. Aloe vera and sisal harvesting are some of the coping strategies employed by women to meet their income needs. Men on the other hand searched for casual labour in quarries, sand harvesting, sale of charcoal and in farms and bush clearing.

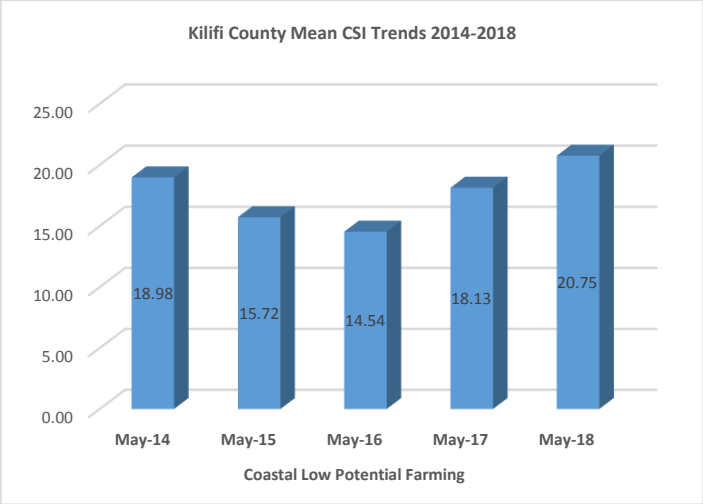

Figure 7: Mean coping strategy index trends

3.3 Utilization

3.3.1 Morbidity and mortality patterns

The most prevalent diseases for children aged below five years and the general population for the period January to June 2018 included upper respiratory tract infections (URTI), diarrhoea and malaria. The prevalence of URTI was high in the period of January to June 2018 compared to the similar period in 2016 and 2017 (Figure 8). The increase in URTI in under five years was associated with cold weather experienced during the rainy season. Diarrhea also increased due to floods leading to poor sanitation and hygiene practices especially in parts of Magarini and Malindi. In January to June 2018, measles and cholera cases reduced by 28 and 86 percent respectively compared to the similar period in 2017 due to community sensitization on proper water and sanitation practices. Dysentery, diarrheal, malaria and typhoid increase by 135, 117, 77 and 41 percent respectively in January to June 2018 compared to similar period in 2017. Increase in epidemic cases was attributed to floods and poor water and sanitation practices. The mortality the crude mortality rate was at 0.07/10,000/day and 0.05/10,000/day for under-fives and general population respectively.

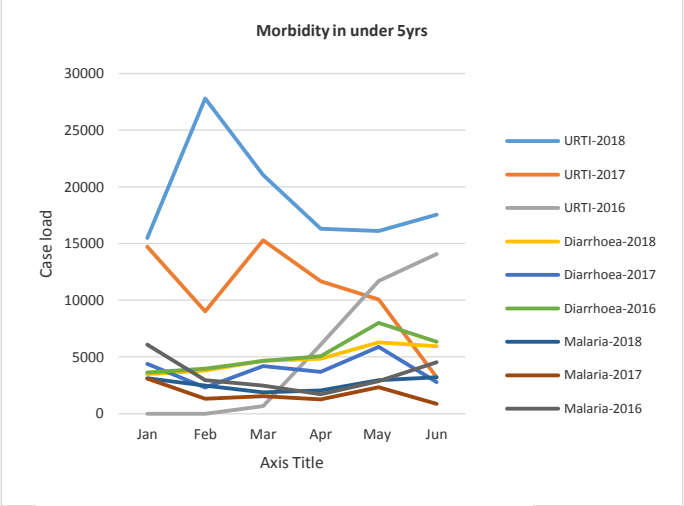

Figure 8: Morbidity in under five year children

3.3.2 Immunization and Vitamin A supplementation

The proportion of fully immunized child in the period January to June 2018 dropped from 84.6 in the similar period in 2017 to 77.6 percent which was below the national target of 80 percent (Table 14). The decrease was associated with poor documentation at health facilities.

Table 14: Proportion of fully immunized child

Period	Proportion of fully immunized children
January to June 2018	77.6
January to June 2017	84.6

In January to June 2018, Vitamin A supplementation for 6-11 months was 85 percent compared to 56 percent in the same period in 2017. The coverage for 12-59 months in January to June 2018 was 80 percent compared to 49.6 percent in the similar period in 2017. The coverage was above the national target of 80 percent. The increase in coverage was associated with attributed integrated nutrition, Malezi bora weeks targeting the community and health outreaches especially in early child development centres and activated community units thus boosting the coverage.

3.3.3 Nutritional status and dietary diversity

The proportion of children under five years at risk of malnutrition, based on the mid upper arm circumference (MUAC) of >135mm in June 2018, was 5.6 percent which remained stable at 5.2 percent in the same time in 2017 (Figure 9). The proportion was 37 percent above the long term average in the period between June 2018 and 2017. Poor infant and child feeding practices and poor water and sanitation were the likely causes of child malnutrition.

According to February 2018 Knowledge, Attitude, Practices and Behavior (KAPB) survey, the rate for early initiation and practice of Exclusive Breast Feeding (EBF) was 45.8 percent and 68.1 percent respectively. The minimum meal frequency and minimum dietary diversity and minimum acceptable diet of children aged 6-23 months was 65, 35.5, and 25.1 percent respectively. For children 6-23 months, the most consumed foods were roots and tubers by 95.6 percent of the children followed by cereals at 93.8 percent and then vitamin A-rich foods by 66.2 percent. About 36.2 percent of the children consumed milk and milk products while the least consumed food was eggs at 15 percent. The KAPB also indicated that maternal nutritional status, 1.9 percent of women were wasted based on MUAC measurement. The indication implied that women were probably getting adequate macronutrients but inadequate micronutrients as just one-third of them consumed the recommended minimum dietary diversity. The rate of wasting among the children (MUAC<125mm) was high as 15.4 percent were wasted with 2.4 percent being severely wasted.

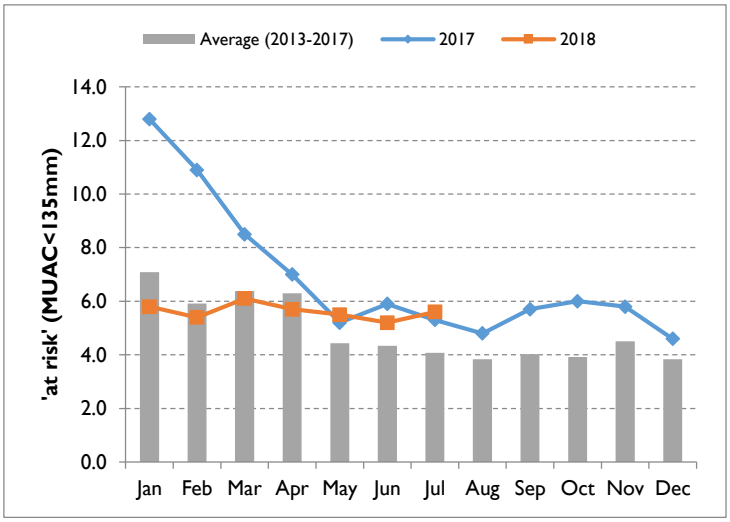

Figure 9: Proportion of children at risk of malnutrition

3.3.4 Sanitation and Hygiene

The average latrine coverage in the county was at 58 percent which is a decrease from 67 percent posted during the short rains assessment. This is largely attributed to flooding in Malindi and Magarini areas which swept away/sank the sanitation facilities available. From focus group discussions and key informant data collected during the field excursions, more than 83 percent of the households obtained their water from protected sources such as piped water system, protected boreholes while more than 10 percent of the households treated their water using chemical such as water guard and PUR. Handwashing during the recommended 4 critical times was reported at 37 percent. Open defecation was practiced by 28.9 percent of the households while latrine ownership remained low at 58 percent while others shared sanitary facilities or used neighbor's toilets.

3.4 Trends of key food security indicators

Table 15: Food security trends

Indicator	Short Rains Assessment 2017	Long Rains Assessment 2018
% of maize stocks held	19	200 (Previous stocks in mixed farming areas)
Livestock body condition	Good	Good
Water consumption (litres per person per day)	15-20 litres per person per day	15-20 litres per person per day
Price of maize (Ksh per kg)	48	40
Distance to grazing (km)	Ranching-2-10 Marginal mixed farming-0-7 Mixed farming-0-4 Cash crop/dairy-0-2	Ranching-2-5 Marginal mixed farming-0-3 Mixed farming-1-2 Cash crop/dairy-Less than 1
Terms of trade	85	92

Mean coping strategy index (WFP FSOM May)	20.5 (December 2017)	20.75 (May 2018)
Food consumption score (FSOM WFP)	Poor-25.3% Borderline-34.9% Acceptable-39.8% (December 2017)	Poor-15.8% Borderline-30.4% Acceptable-53.9% (May 2018)
Proportion of children at risk of malnutrition (MUAC <135mm)	5.4	5.6

4.0 CROSS – CUTTING ISSUES

4.1 Education

4.1.1 Enrolment

Enrolment in Term 1 and 2 increased in ECD, primary and secondary schools (Table 16). The recorded increment in enrolment was associated with government subsidy especially on free day secondary schools and availability of school meals programme.

Table 26: Enrolment in term I and II

Enrolment	**TERM 1**			**TERM 2**			**Comments (reasons for increase or decrease in enrollment.)**
	Boys	**Girls**	**Total**	**Boys**	**Girls**	**Total**	
ECD	35,971	34,571	70,542	39,579	37,429	77,008	School meal programme
Primary	120,701	145,701	279,782	145,837	137,704	28,8541	School meal programme
Secondary	29,492	24,965	54,463	31,443	25,931	55,310	Free day secondary schools

4.1.2 Participation

Daily attendance in ECD, primary and secondary schools improved in Term 1, but slightly decreased in Term 2 due to floods experience in Malindi and Magarini areas thus displacing people thus making schools inaccessible (Table 17). School infrastructure including; classroom and sanitation blocks were destroyed by the stormy winds and floods.

Table 37: Participation in schools

	Term 1						**Term 2**						
Indicator	**Jan.18**		**Feb.18**		**March.18**		**May.18**		**Jun.18**		**July 18**		**Comments (reasons for in**
School attendance	Boys	Girls	Boys	Girls	Boys	Girl	Boys	Girls	Boys	Girls	Boys	Girls	Floods Adequate food.
ECD	3,1806	30,776	31,678	31213	32,541	32,026	10,8191	30,448	27,592	30,509	32,778	37,701	
Primary	132,337	133,196	137390	135,553	136,264	137,038	142,924	138,935	143,145	138,328	121,625	133,535	
Secondary	28,925	27,627	29,353	27,516	29,813	27,878	32,325	29,598	32,529	28,650	32,535	29,329	

4.1.3 Retention

Generally, girls dropped out of school more than boys in ECD, primary and secondary schools. The drop out was as result of early marriages/pregnancy, long distances to school especially areas where flooding occurred, teacher absenteeism, peer pressure, parent's negative attitude towards education, unaffordable school levies, child labour, parental responsibilities handed over to older children, family conflict and disease/disability incidences.

4.1.4 School meals programme

All 618 schools in the county are under school meals programme with beneficiaries of 268,218 pupils. The county government of Kilifi and Ministry of Education implemented school meals programme. The availability of meals at school has resulted to improved learner's enrolment, attendance, retention and thereby influencing to improved performance in examination. The county government supports all 166 ECD in the provision of school meals program (Table 18).

Table 18: School meals programme

Feeding Programme	No. of Schools	Total No. of beneficiaries		
		Male	Female	Total
HGSMP	165	30,655	31,178	61,833
RSMP	21	15,157	14,722	29,879
CSMP	266	76,854	83,166	160,020
ECD SFM	166	8,205	8,281	16,486
TOTAL	**618**	**130,871**	**137,347**	**26,8218**

4.1.5 Inter Sectoral

Water, sanitation and hygiene coverage in schools was found below average with most having inadequate facilities. About 49 schools had no functioning latrines while 199 and 249 schools had no hand washing facilities and access to safe drinking water respectively. The inadequacy has been seen to compromise the hygiene and sanitation standards resulting to frequent outbreak of water borne diseases. This eventually affects the attendance of pupils at schools. The resultant effects are seen in child performance in schools leading to poor results. Schools along the river Sabaki where flooding occurred, toilet facilities was washed away or sand was deposited in the pit latrines. The coverage on deworming on pupils at schools was low with about 542 pupils benefitting in the period under review.

5.0 FOOD SECURITY PROGNOSIS

5.1 Prognosis Assumptions

The food security prognosis will be based on the following assumptions:

- According to NOAA and USGS, given the most likely scenario is for El Niño conditions, there is an elevated probability that cumulative rainfall for the October to December short rains will be above average over eastern and western Kenya.
- During the dry season through September, in eastern and northern Kenya, there is an increased likelihood for hotter-than-normal land surface temperatures.
- Based on an analysis of current prices and their drivers, price projections show that maize prices are unlikely to follow seasonal trends due to crop losses from flooding and infestation of FAW and cutworms. Prices are likely to rise with absence of local harvest.
- Through September, increased risk of outbreaks and spread of RVF in areas that experienced flooding thereby affecting households and livestock. Continuous disease surveillance, response, quarantines and other interventions are likely to assist control the spread of the disease.
- Humanitarian responses toward IDPs are likely to continue through September until crop are harvested. Through September, households are likely to move back to their home after acquisition of land and reconstruction of shelters for flood victims.

5.2 Food Security Outlook

5.2.1 Food Security Outcomes (August-October)

Towards September, local crop harvests from long rains is likely to improve the household food security. The production of maize crop will likely lower prices of maize further. With above average forage and water resources are likely to sustained and support livestock productivity. Through September, in parts of ranching livelihood zone, forage and water resources are likely to be depleted thereby resulting in increased livestock movements. Milk production is likely to improve to near average due to improved forage and water resources. Local crop harvest after replanting is likely to be realized through end of September, after initial crop was destroyed by floods. The FAW is likely to persist due spread of the army worm. The RVF is likely to be contained with continued restriction of livestock movements coupled with diseases surveillance and vector control. Household food security is likely to remain stable up to October. Food security is likely to be None (IPC Phase 1).

5.2.2 Food Security Outcomes (November-January)

Crop production activities are likely to increase to near average thereby increasing labor opportunities which will improve household income. Maize prices are likely to decline further as harvest is realized thus improving food availability and access at household level. Rangeland resources are likely to improve further thereby increasing household milk availability and consumption for improved nutrition status. In December, short cycle crops in marginal areas are expected, and together with improving milk availability, these will improve the dietary diversity and food consumption at the household level. The food security is likely to remain in None (IPC Phase 1).

6.0 CONCLUSION AND INTERVENTIONS

6.1 Conclusion

Long rains performance improved food security situation. Consecutive above average performance of rains resulted to improved food security at household level despite flooding in riverine areas. Key factors such as incidence of resource-based conflicts as a result of migration of livestock particularly from Tana River County. Epidemic cases of human and livestock diseases such as RVF especially with forecasting of above average short rains RVF is likely to increase further, crop losses through spread of FAW and cutworms, high commodity prices, malnutrition levels and human wildlife conflicts need to be monitored.

6.1.1 Phase classification

Kilifi County is classified in None/Minimal (IPC Phase 1) with improvements in the livestock ranching from Stressed (IPC Phase 2) in the previous short rains season.

6.1.2 Summary of Findings

The above average long rains led to flooding along the riverine households, this resulted to destruction of crops, infrastructure and eventually IDPs. Consecutive improvement of the seasons, impacted positively to average forage and water resources across the county. Above average crop production was received which is expected to improved household food stocks despite FAW infestation. Maize food stocks with farmers are above average though in the mixed farming and food cropping areas while harvesting is still ongoing. Maize prices are within average as goat prices remain elevated providing favourable terms of trade of about 92 kilograms of maize for households. Above to near normal rangeland conditions improved livestock body conditions leading to increase milk production. Closure of livestock markets

and suspension of slaughter house activities has affected the household purchasing power. Internally displaced households continue to receive food and non-food assistance and as rebuilding of shelters being undertaken by partners so that the communities may rebuild their livelihoods. Malnutrition remains poor despite improvement in food security. Improvements in water consumption at household level were noted due to reduced distances and availability of water.

6.1.3 Sub-county ranking

Table 19: Sub county ranking

Sub County	Food Insecurity Rank (1-10 from worst to best)	Main Food security Threats
Magarini	1	• Flooding leading to IDPs, loss of lives/livelihoods, infrastructure destroyed, service delivery hampered. Epidemic outbreaks like URTI, FAW, RVF which caused market disruptions and reduced income level. Poor rainfall distribution thus poor crop production. High malnutrition cases.
Malindi	2	• Flooding leading to IDPs, loss of lives/livelihoods, infrastructure destroyed, farm land submerged, farm equipment washed away, service delivery hampered. Epidemic outbreaks like URTI, FAW, RVF which caused market disruptions and reduced income levels. Poor rainfall distribution thus poor crop production.
Ganze	3	• Poor rainfall distribution, Intra-county livestock migrations, diseases like FAW leading to low crop production, pasture near depletion
Kaloleni	4	• Water logging and FAW infestation led to poor crop production, pollution from yards partially contributing to this. Water pollution leading to water related diseases like bilharzia and rampant URTI cases.
Kilifi South	5	• Water logging and FAW infestation led to poor crop production, formal employment opportunities available
Rabai	6	• Water logging led to reduced crop production. Alternative sources of livelihood like fishing, formal employment, diary/cash cropping production. Above average rainfall received.
Kilifi North	7	• Alternative sources of livelihoods like fishing and formal employment. Above average rainfall received.

6.2 Ongoing Interventions

6.2.1 Food interventions

Table 20: Food interventions

County	Intervention	No. of beneficiaries (Males and Females Breakdown)	Implementers	Remarks
Malindi. Magarini. Kaloleni , Ganze, Rabai, Kilifi North and Kilifi South	School meal programme	378 schools –Total= 225974 (118712-Boys -107262-Girls)	Ministry of Education and County Government of Kilifi	Need for sustainable and reliable school feeding programme –Government supplied food to schools

Malindi. Magarini Kaloleni , Ganze and Rabai	Cash transfer	Male headed households -1098, Female headed households -11,102	World Vision. Kenya Red Cross	The programme has ended new targeting to start in Sep. 2018
Malindi. Magarini. Kaloleni , Ganze, Rabai, Kilifi North and Kilifi South	Outpatient therapeutic Feeding Programme (OTP)	Female-6-59 months-836 Male-6-59 months-590		
Malindi. Magarini. Kaloleni , Ganze, Rabai, Kilifi North and Kilifi South	Supplementary Feeding Programme (SFP)	Female-6-59 months-1418 Male-6-59 months-1003		

6.2.2 Non-food interventions

Table 21: Non-food interventions

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
Agriculture							
Crop insurance	Reduce crop losses and associated risk	County wide	3 activities (sensitization and crop cutting	5M(trainings only	70HH	2018/2019	Department of agriculture
Support with pesticides to control FAW	Prevent crop losses and improve crop yields	All wards	175 tons assorted	4.6M	1000HH	2018/2019	Department of agriculture & other stakeholders
Provision of farm inputs (maize and cowpeas seeds)	Improve maize and cowpea yields	County wide	70 tons for maize, green grams and cowpeas seeds	21.3M	10000 farm families	2018/2019	Department of agriculture
Conservation agriculture	Crop production and domestic use and agribusiness	County wide	560 groups training	25M	200 groups	2018/2019	Department of agriculture and other stakeholders
Livestock							
Pasture establishment and conservation	Improve livestock feed access to be used during dry seasons	County wide	200	5M	200 farmer groups	2018/2019	Department of Livestock and other stakeholders

Disease surveillance, vaccination and vector control	Control spread of livestock disease	County wide	200000 head of livestock	10M	200000 head of livestock	2018/2019	Department of Livestock and other stakeholders
Health and Nutrition							
Iron Folate Supplementation among Pregnant Women	Prevent diseases	County wide		17M	324,873	2018/2019	MOH/UNICEF/KRCS
IYCN Interventions (EBF and Timely Intro of complementary Foods)	Improve health & Nutrition status of under 5 years	County wide		4M	125,832 Male 116,619 -Female	2018/2019	MOH/UNICEF/KRCS
Management of Acute Malnutrition (IMAM)	Improve/adjust the nutrient status of the affected community	County wide		14M	5,788-Male 5364-Female	2018/2019	MOH/UNICEF/KRCS
Zinc And Vitamin A Supplementation	Prevent diseases	County wide		2.9M	113,249 male 104,957 female	2018/2019	MOH/UNICEF/KRCS
Integrated Outreaches and mass screening in 45 sites	Screen for malnutrition	Kalolenii , Ganze and Magarini sub counties	Children < 5, PLW with malnutrition	6.3M		2018/2019	MOH/UNICEF/KRCS
Education							
Deworming	Improve pupil health	All schools		1M	378 schools – Total= 225974 (118712-Boys - 107262-Girls)	2018/2019	MoE, County Govt of Kilifi
Milk school program	Improves health	All schools		20M	378 schools – Total= 225974 (118712-Boys - 107262-Girls)	2018/2019	MoE, County Govt of Kilifi

Home grown school meal Programme	Increase enrolment of pupils	30 schools		200M	378 schools – Total= 225974 (118712-Boys - 107262-Girls)	2018/2019	MoE, County Govt of Kilifi
Water							
Pipeline extensions, installation of tanks	Improves access to water	County wide		450M	300000	2018/2019	GoK, KCG & Partners
Bulk mains	Improves access to water	County wide		1B	200000	2018/2019	GoK, KCG & Partners
Excavation water pan	Improves access to water	County wide		50M	15000 persons	2018/2019	GoK, KCG & Partners
Water treatment chemical and WASH sensitization	Safe water use	County wide		20M	500000 persons	2018/2019	GoK, KCG, MOH & Partners

6.3 Recommended Interventions

6.3.1 Food interventions

Table 22: Food recommended intervention

Sub county	Pop (KNBS Projected pop in 2016	Pop in need (% range Min-Max)
Magarini	223,597	30-35
Malindi	205,268	20-25
Ganze	173,669	25-30
Kaloleni	175,735	15-20

6.3.2 Non-food interventions

Table 4: Non-food interventions

County	Intervention	Location	Number of Beneficiaries	Implementers	Required Resource	Available Resource	Time frame
Agriculture							
County wide	Post-harvest handling of maize-Purchase of hematic bags and maize shellers	County wide	1000HH	Department of Agriculture And partners	10M	1M	2018-2019
County wide	Farm input (certified seeds and fertilizers)	County wide	2000HH	Department of Agriculture and partners	10.5M	5M	2018-2019
County wide	Post-harvest handling	County wide	2000HH	Department of Agriculture	15M	1M	2018-2019

				and partners			
County wide	Purchase of pesticides for FAW control and capacity building	County wide	5000HH	Department of Agriculture and partners	10M	4M	2018-2019
Health and Nutrition							
County wide	Scale up of HiNI services to all the health facilities	Countywide	143 HFs	MoH, UNICEF,	1.1M	1.1M	2018-2019
County wide	Capacity building of frontline health workers and sub county managers on MIYCN	County wide	100 HCWs	MoH, UNICEF, Afya Pwani, World Vision	0.6M	0.6M	2018-2019
County wide	Sensitize frontline Health Care Workers on IFAS	County wide	100 HCWs	MoH, UNICEF,	0.44M	0.44M	2018-2019
County wide	Institutionalize Vitamin A supplementation and deworming through ECD	County wide	218,207	MoH, UNICEF, Afya Pwani, Map International	1.5M	1.5M	2018-2019
Livestock							
County wide	Pasture/fodder production & conservation – including bush control	County wide	5000ha 10000bales of pasture	Department of Livestock and other stakeholders	5M	0.1M	2018-2019
County wide	Revamping of ranches / Setting up of Feedlots	County wide	10 feedlots	Department of Livestock and other stakeholders	5M	0.1M	2018-2019
County wide	Livestock disease, vector, control, quarantine and vaccination	County wide	200000 heads of livestock	Department of Livestock and other stakeholders	10M	0.5M	2018-2019
Education							
County wide	School meal program (Milk)	All schools	365, 549 pupils	MoE, County Govt of Kilifi	650M	1M	2018-2019
County wide	Purchase and distribution of water treatment chemicals (PUR, tabs)	All schools	365, 549 pupils	MoE, County Govt of Kilifi	5M	1M	2018-2019
County wide	Construction of toilets in schools	All schools	365, 549 pupils 600 toilets in 300 schools	MoE, County Govt of Kilifi	300M	1M	2018-2019
Water							
Ganze, Kaloleni, Magarini	Expansion of water pans	Ganze, Kaloleni, Magarini	100,000	GoK, KCG & Partners	50M	20M	2018-2019
County	Purchase of water bowser	County	200000	GoK, KCG & Partners	20M	20M	2018-2019

County wide	Storage tanks for schools	County wide	30000	GoK, KCG & Partners	5M	1M	2018-2019