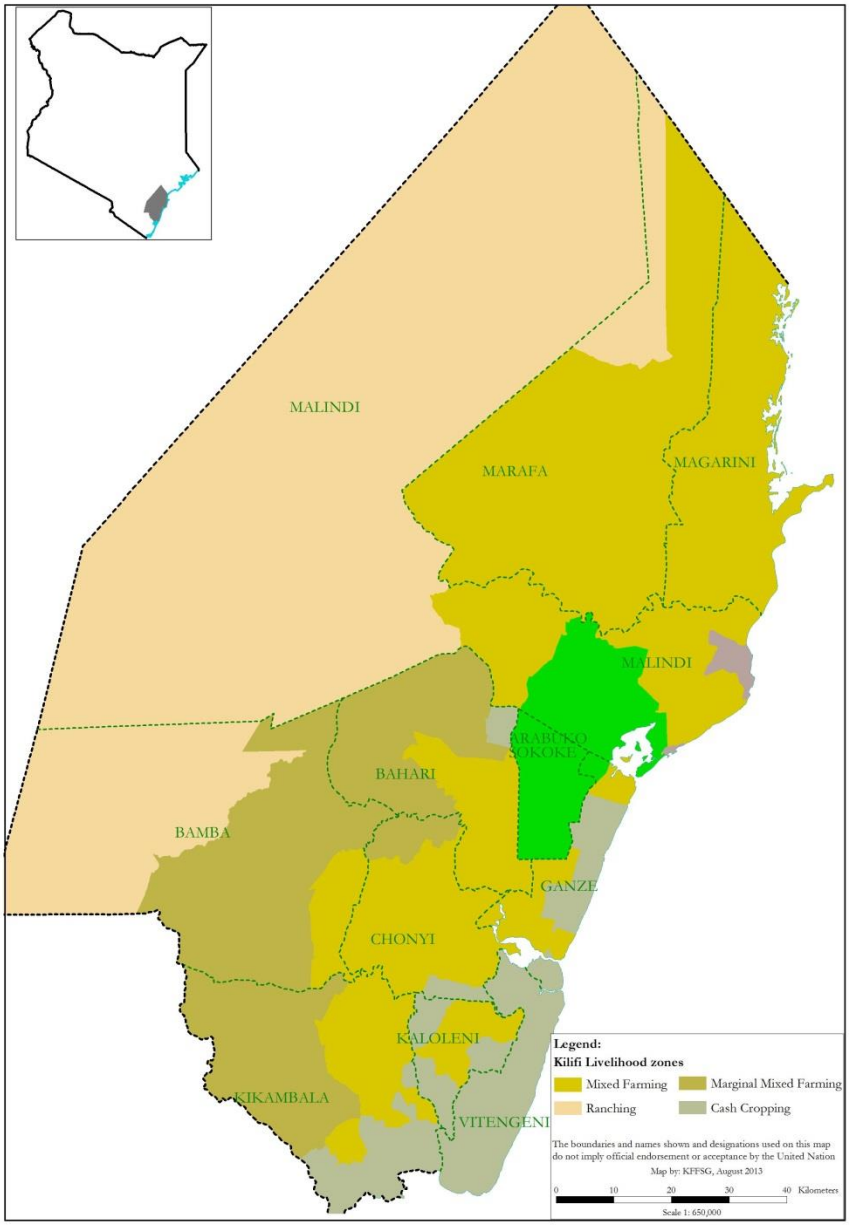
KILIFI COUNTY

2019 LONG RAINS FOOD AND NUTRITION SECURITY ASSESSMENT REPORT



July, 2019

A Joint Report of Kenya Food Security Steering Group[1] and Kilifi County Steering Group

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Executive Summary

The rapid food security assessments are bi-annual, conducted during the March to May long rains and after the October to December short rains. The 2019 long rains food security assessment (LRA) was conducted by the Kenya Food Security Steering group and covered the Mixed Farming, Marginal Mixed and Cash Cropping/ Dairy Farming livelihood zones of Kilifi County. The main objective of the assessment was to develop an objective, evidence-based and transparent food security situation analysis following the 2019 March to May (MAM) long rains season, taking into account the cumulative effect of previous seasons, and to provide immediate and medium-term recommendations for possible response options based on the situation analysis. The long rains delayed by three weeks instead of the expected first week of April with poor temporal and spatial distribution across the county. Rains ceased as expected in the second dekad of June.

The main drivers to the current food insecurity are human-wildlife conflicts in areas neighbouring Tsavo National Park limiting access to forage and access to domestic water sources and destruction of water pans. Food prices remain high lowering household purchasing power. In-migration of livestock from Tana River may accelerate depletion of pasture. Maize stocks held by farmers in the Cash Cropping/ Dairy farming and Mixed Farming Livelihood zones and are estimated to last for a month but normally last into the next long rains harvest. The total cereal stocks held by farmers is 51 percent below the LTA due to low production realized during the short rains season. However, traders have about 17 percent above the LTA stocks compared to the long-term average due to higher demand as most households are relying on market purchases. Food prices remain high with a kilogram of maize selling at Ksh. 48 compared to the long-term average (LTA) of Ksh. 44 per Kg. The body condition for all livestock species is good across the county. Milk production has stabilized with the households in the Agro-pastoral zone producing 2-3 litres per day and between 5-6 litres per day in the Mixed farming and Cash Cropping/Dairy farming livelihood zone.

Average market goat price in the month of July was Ksh. 4,191 which was 61 percent higher than the LTA of Ksh.2,610. With a sale of a medium-sized goat, a household is able to buy between 87 kilograms of maize instead of the normal 59Kgs of maize. Distances to water sources have declined to less than a kilometre due to good recharge in the Mixed farming zones. However, return distances in the Marginal Mixed zone remain between two and six kilometres which is normal at this time of the year. There has been stability in nutrition status with the proportion of children at risk of malnutrition in the month of June 2019 at 2.9 percent compared to the LTA of four percent. Highest cases of children at risk of malnutrition were reported in Ganze, Magarini and Kaloleni sub counties.

About 86 and 1.9 percent of households have acceptable and poor food consumption score respectively. Most households applied reduced consumption-based coping strategies, of which the mean CSI was 4.03 in July 2019 compared to 2.9 in January 2019 with most households employing reversible strategies. No livelihood change is expected while the crude mortality rate reduced to 0.012 compared to 0.029 recorded in the same period of 2018.

The Mixed farming and the Cash cropping/ Dairy farming livelihood zones has maintained the previous Stressed (IPC Phase 2) food insecurity phase while the Marginal Mixed farming zone has improved from the previous Crisis (IPC Phase 3) food insecurity phase observed during the short rains assessment.

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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 Livelihood Zone comprising 44 percent of the population, Cash Cropping/ Dairy farming 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.

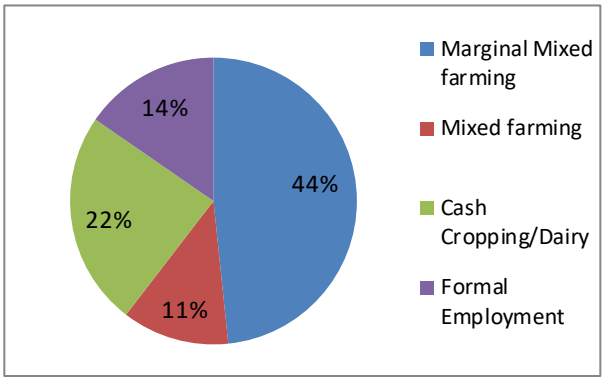

Figure 1: Proportion of population in Kilifi County

1.2 Methodology and Approach

The assessment used both qualitative and quantitative data. Primary data was collected during the field visits at the county where community and market interviews were conducted. Secondary data was collected using structured questionnaires for each sector that were sent two weeks prior to the field visits. Technical reports were also provided by the sectoral technical members at the county level. Secondary data collected from the early warning system and nutrition survey were relied upon to provide trends for the different food security indicators.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The onset of the long rains was in the third dekad of April which was a three weeks delay compared to the normal first dekad of April. The rains were unevenly distributed with most rains being experienced in the month of May. Most areas in the Mixed farming and Cash cropping/Dairy farming zones received good rainfall amounts ranging from 90 to 110 percent of normal rainfall. The Western and the Northern part of the County received depressed rains ranging between 50 and 75 percent of normal rainfall. Some of the areas in the Marginal Mixed farming zones that received very little rains of less than 50 percent of their normal include Bamba and Bofu. Rains ceased as expected in the second dekad of June.

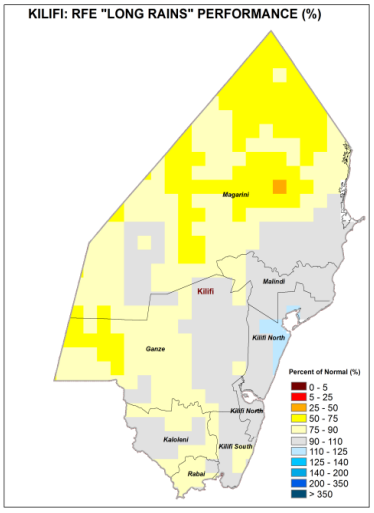

Figure 2: Rainfall performance

2.2 Conflict

Human-wildlife conflicts were reported in areas neighbouring Tsavo National Park. Such areas include Tsangatsini and Midoina in Ganze sub-county and Bofu in Magarini sub-county mainly limiting access to domestic water sources and destruction of water pans.

2.3 Other Shock and Hazards

Other main hazards contributing to food insecurity in the county include high food prices which have continued to lower household purchasing power, In-migration of livestock from Tana River triggering conflicts between herders and farmers and Fall army worm infestations which are expected to reduce the overall maize production.

3.0 IMPACT OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

Food availability is one of the pillars of food and nutrition security. It's affected by livestock and crop production, food assistance and market supplies. In this section, availability of food from own farm produce and livestock productivity are discussed. Provision of cereals by traders has also been analyzed.

3.1.1 Crop Production

The long rains season is the most reliable season in the Mixed Farming and Cash Cropping/ Dairy Livelihood Zone. The long rains season contributes to about 60 percent of the total annual agricultural production. The major crops grown in the County are maize, cow peas, cassava and green grams. In the Cash Cropping/Dairy farming and Food Cropping Livelihood Zone, maize and cassava contribute 40 and 20 percent to food respectively. Maize and cassava contribute 25 and 18 percent to income in the food cropping livelihood zone. In the 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.

Rain fed Crop Production

The area planted under maize was 23 percent below the long term average (LTA) while area planted under cassava and green grams was 50 percent below the LTA (Table 1). The decline in area planted was due to delayed onset of rains which led to farmers who had dry planted maize being forced to replant. Due to difficulty in weeding during the heavy rains, a significant acreage was abandoned. In addition, some farmers who were yet to plant gave up after the rains ceased. Maize crop is at different stages but most of are in the tasseling and silking stage. Production of maize and green grams is expected to decline by 30 and 44 percent respectively. Due to reduced area planted and ceasing of rains at critical crop development stages, crop production is expected to be below average. Early maturing maize varieties have succumbed to moisture stress, water logging and lack of soil fertility hence production low production.

Table 1: Rain fed Crop acreage and Production for Kilifi County

Crop	Area planted during 2019Longrains season (Ha)	Long Term Average area planted during the Long rains season (Ha)	2019 Long rains season production (90 kg bags) Projected	Long Term Average production during the Long rains season (90 kg bags)
1. Maize	43,064	56,098	305,984	436,755
2. Cow peas	1,750	1,855	9,875	11,452
3.Green grams	2,718	5,400	42,563	75,673
4.Cassava	2,110	3,890	30,083 MT	32,400 MT

Irrigated Crop Production

Area planted under amaranthus, watermelons, brinjals and green maize increased compared to the LTA due to availability of water. Production of amaranthus and green maize increased by 41 and 27 percent compared to LTA respectively due to increased market demand. Production of watermelons is higher than LTA owing to lucrative business opportunities with the hotel industries, supermarkets and the hawking fraternity in towns. Proportion of farmers doing irrigation is still very low mainly the male gender doing maize, watermelon, brinjals and okra while amaranthus business is done mainly by women. Due to increased acreage, production would have increased for most crops. However, delayed onset disrupted irrigation schedule in most farms since irrigation farmers strategically plan to plant their crops late to ensure their harvest don't coincide with those of rainfed farmers hence fetching better prices.

Table 2: Irrigated Crop acreage and Production for Kilifi County

Crop	Area planted during 2019 Long rains season (Ha)	Long Term Average area planted during the Long rains season (Ha)	2019 Long rains season production (90 kg bags) Projected	Long Term Average production during the Long rains season (90 kg bags)
1.Amaranthus	138.5	130.1	804.5	812
2.Okra	8	10	86	118
3.Brinjals	10.75	9.2	193	198
4.Maize	430	400	4,924	3,493
5. Watermelon	110	78	1,660	1,310

Cereal Stocks

The total cereal stocks held by farmers is 51 percent below the LTA due to low production realized during the short rains season. Traders have relatively higher stocks (17 percent above the LTA) while millers have doubled their normal maize stocks to take advantage of the increasing demand. Maize stocks left are mainly in the Cash Cropping/ Dairy Farming and Mixed Farming Livelihood zones and are estimated to last for a month. Normally, household

stocks from the short rains season last into the next harvest usually in September. No cereal stocks are available in the Marginal Mixed Farming zones.

Table 3: Cereal Stocks

Commodity	Maize		Rice		Sorghum		Millet	
	Current	LTA	Current	LTA	Current	LTA	Current	LTA
Farmers	35,552	70,257	0	0	0	0	0	**0**
Traders	43,050	51,855	31,861	28,383	1,065	1352	763	461
Millers	3,886	1,910	298	2,465	0	0	0	**0**
Food Aid/ NCPB	35,117	-	-	-	-	-	-	-
TOTAL	**117,605**	**124,022**	**32,159**	**30,848**	**1,065**	**1,352**	**763**	**461**

3.1.3 Livestock Production

The main livestock species kept in this county are cattle, sheep goats, and different types of poultry. Camels from Tana River and Garissa are grazed in Ganze Sub-County in leased group ranches or communal areas. Livestock contributes about 12 percent of household livelihoods in the county. Income from livestock increased in the Agro-Pastoral Livelihood Zones due to greater dependency on livestock. The long rains had a positive impact on the sector with pasture and browse and livestock body condition being in good condition across all the livelihood zones.

Pasture and Browse Condition

Forage was good in all livelihood zones except in the north-west of the county where regeneration was poor. This is normal compared to the previous years. Both pasture and browse will last for 2.5 to 3.5 months and are likely also to be regenerated by the current showers and last up to the October to December rains. Crop residues especially maize stovers are normally used for livestock feed in the Agro-Pastoral and Mixed Livelihood Zones. This is done for own livestock and for other livestock in the community. The failed maize crop is likely to have a lesser contribution as livestock feed.

Table 4: Pasture and Browse Conditions

Livelihood zone	Pasture condition		How long to last (Months)		Factors Limiting access	Browse condition		How long to last (Months)		Factors Limiting access
	Current	Normal	Current	Normal		Current	Normal	Current	Normal	
Agro-pastoral	Good	Good to fair	2.5	2	Thorny bushes, wildlife	Good	Good	3	3	Wildlife, thorn bushes
Mixed farming	Good	Good	2.5	3	Encroachment of livestock routes	Good	Good	3	3	Land ownership
Cash Cropping/ Dairy farming	Good	Good	2.5	3	None	Good	Good	3.5	3	None

1.3.1 Livestock Productivity

Livestock Body Condition

The livestock body condition of all livestock species was generally good across the county this is due to favorable pasture and browse patterns. However, few cases of poor body conditions were noticed in few areas, this was due to worm infestation which is normal. Good body condition is likely to reflect on better production and more milk and income for improved food security.

Table 5: Livestock body condition

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normally	Current	Normally	Current	Normally	Current	Normally
Agro-pastoral	Good	Good	Good	Good	Good	Good	Good	Good
Mixed farming	Good	Good	Good	Good	Good	Good	Good	Good
Cash Cropping/Dairy farming	Fair - Good	Good	Good	Good	Good	Good	N/A	N/A

Tropical livestock units (TLUs)

Tropical Livestock Units (**TLU**) is a convenient method for quantifying a wide three range of different livestock types and sizes in a standardized manner. The standard used for one TLU is one cattle with a body weight of 250 Kg. The variation in herd sizes across the livelihood zones is a factor of land size and the livestock breeds. Animals in the Agro-Pastoral Zone enjoy large tracts of land unlike in the Cash Cropping/ Dairy farming livelihood zone. On the other hand, fewer higher production animals are kept in smaller land sizes in the Cash Cropping/ Dairy farming livelihood zone. The variation between the poor and the medium income households in the Mixed and Marginal Mixed Farming Zones is due to the different rates at which each group is recovering from the previous drought conditions. The medium households are quickly bouncing back unlike the poor households.

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

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Agro-pastoral	5	6	11	9
Mixed farming	3.4	3.6	7	6.4
Cash Cropping/ Dairy farming	2	1	3	3

Birth Rates

Birth rates for all livestock species were normal since livestock body condition was supportive to breeding as pasture was available in during the previous season.

Milk production and consumption

Prices were low in the Agro-Pastoral Zone because of low demand while in the Cash Cropping/Dairy zone there is high demand for milk in the urban centers, thus higher prices. Also cattle in the Cash Cropping/ Dairy farming livelihood zone are higher producers due to better breed and management compared to those in the Mixed farming and Agro-pastoral Livelihood zones. The current consumption was lower than the LTA and is just picking up since it rained and livestock production is improving.

Table: 7: Milk Production, Consumption and Prices

Livelihood zone	Milk Production (Litres)/Household		Milk consumption (Litres) per Household		Prices (Ksh./Litre)	
	Current	LTA	Current	LTA	Current	LTA
Agro-pastoral	2 - 3	2	1 - 2	1- 2	45	35
Mixed farming	5	5.5	1	1.5	50	45
Cash Cropping/Dairy	6	7	1.5	2	60	70

Livestock Diseases and Mortalities

A case of Anthrax was noted in Kilifi North which could have been occurred from livestock procured outside the County but it was successfully contained. Quarantine was imposed during the anthrax incidence and surveillance and vaccination were stepped up. Quarantine was short lived and did not have a significant impact. There were cases of tick-borne diseases across the livelihood zones which were mitigated through treatment. Training of livestock farmers on tick control practices contributed to reduction of tick prevalence. Mortality rates of cattle, sheep, goats and camels are normal and there was no major variation across the livelihoods. However, there were some cattle deaths during the onset of rains in some parts of the Cash Cropping/ Dairy farming livelihood zone of Kilifi North that were associated with poor nutrition.

Migration

There is minimal in migration of cattle, sheep and goats from Tana River through Adu and Camels from Taita Taveta through Tsangatsini. The migrations are not normal at this time of the year. Cattle, sheep and goats from Tana River are normally expected from the month of August and the early migration is attributed to the earlier drought in that county. Camels from Taita Taveta migrated due to the on-going conflict between the camel owners and the local people of the host county. There is out-migration of less than 5 percent of the cattle population from Bamba ward, Ganze Sub-County, to areas of Samburu in Kwale County in search of water and pasture.

Projected trends of migration by livelihood zone are that in the coming months there could be a possibility of a higher influx from the neighboring Tana River depending on the pasture conditions. There could also be internal movement as some strategic water pans may dry up and deteriorating pastures.

The following are the current migration routes:

- Tana-River County - Adu and Marafa Wards in Magarini Sub-County
- North eastern - through Kilifi DAC to Tsangatsini area of Kaloleni

The routes are normal, but the migrations have started too early, one month ahead of the normal times. Out migration of livestock will impact negatively on milk at household level.

Water for Livestock

The main sources of water were water pans, bore-holes, shallow wells, River Galana/Sabaki River, piped water and one dam in Jaribuni, Ganze Sub-County. Most water pans had water except in Bamba and Sokoke wards in Ganze Sub-County and the lower parts (Adu Ward) of Magarini. Bofu area of Magarini, Tsangatsini in Kaloleni and Bamba in Ganze Sub-County are facing severe water stress due to drying up of water pans and access to available water pans with water is restricted by wildlife such as elephants and buffalos. Trekking distances varied due to the distribution of watering points, rain patterns and state of water development in the county. The Agro pastoral Livelihood Zones received less rains and some water facilities, such as Giriama and Mshongoleni water pans in Bamba, were not filled. In the Dairying zones livestock keepers relied on piped water. In the Agro pastoral Livelihood Zones the animals have started to skip days for watering as the distance has increased in areas where less precipitation was received whereas in the mixed and dairying livelihood animals were watered daily and in some cases twice in a day in areas with wells and piped water. The camels, in Gede in Ganze Sub-County and Tsangatsini in Kaloleni Sub-County were able to water every day due to easy access to boreholes. Livestock from the neighboring Tana River County have started to migrate into the northern parts of the Kilifi County to access the better pasture. However, off season rains has started in both Tana River and Kilifi counties and the situation is likely to improve to an extent.

Table 8: Sources and availability of water for livestock

Livelihood zone	Return trekking distances (Kms)		Expected duration to last (Months)		Watering frequency in a week (no. of times)	
	Current	Normal	Current	Normal	Current	Normal
Agro pastoral	2.5 - 5	2.8 - 15	1 – 3	2 – 3	- Cattle, sheep and goats 5-7 - Camels 7	- Cattle, sheep and goats 4-7 - Camels 7
Mixed	1 - 5	1 - 8	1 – 4	2 – 3	- Cattle, sheep and goats 5-7	- Cattle, sheep and goats 5-7
Dairy	<1	<1	>2	>2	- Cattle, sheep and goats 7	- Cattle, sheep and goats 7

3.2 Access

3.2.1 Market Operations

The main food markets in Mixed farming livelihood zones and Cash Cropping livelihood zones were Mtwapa, Kaloleni, Kongowea, Mariakani and Mazeras. Those in marginal mixed livelihood zones were Mariakani, Tsangatisi, Marafa, Gongoni and Marereni. Markets for livestock were Lurok, Bamba, Vitengeni, Mariakani, Tsangatsini, Goteni and Mariakani. Food markets were functioning normally without any disruptions. Traders sourced for food commodities from Loitoktok, Nakuru and Kericho. Over 70 percent of the households relied on markets for supply. Food commodities available in the markets were maize, green grams, cowpeas, vegetables and rice. Livestock markets were disrupted by low supply and high prices attributed to households holding on stocks due to favorable weather conditions. Main livestock in these markets were Cattle, Sheep, goat and poultry.

Maize Prices

The average market maize price in the month of July was Ksh. 48 which was nine percent above the LTA of Ksh. 44 per Kg as illustrated in Figure 3. Stable prices could be attributed to steady supply by traders who are sourcing maize from Nakuru and Kericho. Households had also shifted their preference from the dry grain to sifted maize meal which is selling between Ksh. 120 and 140 per two kilogram packet. Prices were higher in Mixed farming zone averaging at Ksh. 50 per kilogram and lowest in Marginal mixed farming livelihood zones at Ksh. 44 per kilogram. Prices are expected to stabilize in the next three months due to little harvests that will be experienced.

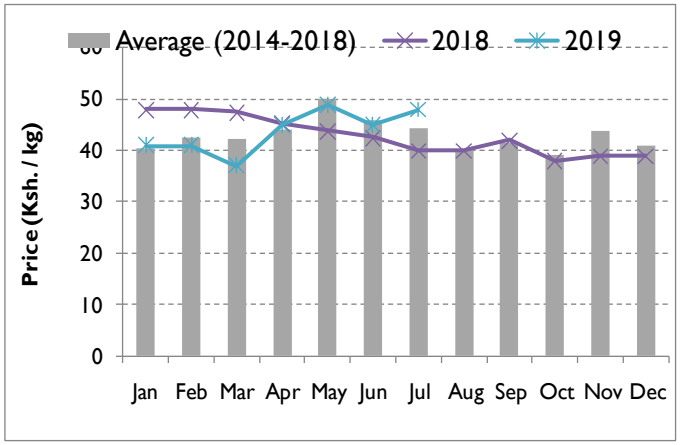

Figure 3: Average maize prices

Goat Prices

Average market goat price in the month of July was Ksh. 4,191 which was 61 percent higher than the LTA of Ksh2,610 as illustrated in Figure 4. This could be attributed to good livestock body conditions due to availability of browse. Households are not willing to sell their livestock due to the favorable body condition and on-going off-season rains which may improve forage leading to a drop in supply. Highest price was noted in the Cash Cropping / Dairy farming livelihood zone with a goat selling at Ksh. 5,333 while the lowest price of Ksh. 3,500 was noted in the marginal mixed livelihood zone. Price of a goat in the mixed farming livelihood zones was averaging at Ksh 5,000. Prices are expected to stabilize in the next three months as the current body condition is good.

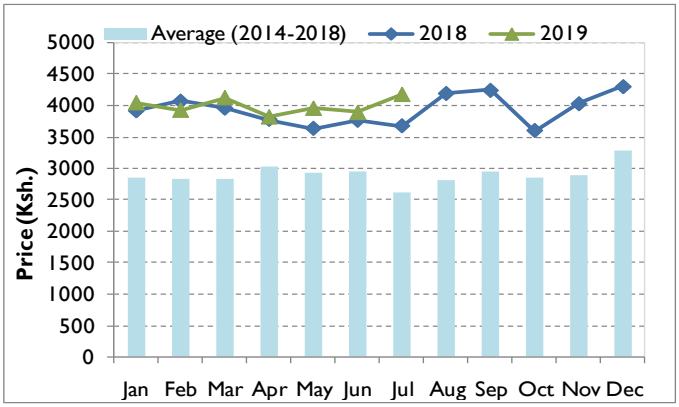

Figure 4:Average goat prices

Terms of Trade

The current terms of trade (ToT) are favorable to livestock keepers. Households are able to purchase about 87 Kgs of maize with the sale of one medium-sized goat. Normally, households would access about 59Kgs of maize with the sale of a medium sized goat as indicated in the Figure 5. The current ToT are above the LTA by 48 percent. Households were able

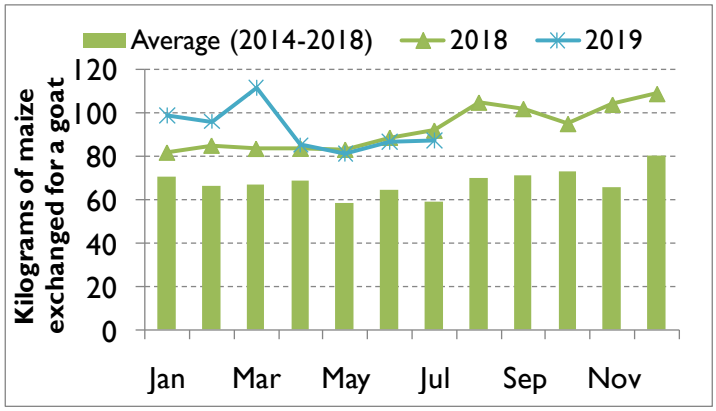

Figure 5: Average terms of trade

to access 92Kg of maize with sale of a goat. Households in the Marginal Mixed and Cash Cropping / Dairy farming livelihoods are able to access 80Kgs and 106Kgs with the sale of a goat.

3.2.3 Income Sources

The main source of income in pastoral and agro pastoral livelihood zones was sale of livestock and livestock products. In mixed farming the main source of income was crop production. Other sources of income include sale of firewood/charcoal and casual labour.

3.2.4 Water Access and Availability

The major water sources in the County include boreholes, water pans and piped water. Most sources are at normal at this time of the year. All water pans in the Mixed farming and Cash Cropping/ Dairy farming zones were well recharged. However, 20 percent of water pans in Tsangatsini, Midoina, Ruruma ward, Bofu, Changoto, Mbuuni, Midoini, Mwahela and Mwangeain the Marginal Mixed farming zones which received rains for about two weeks are already dry. Areas such as Palakumi received piped water about twice in a month. Areas under water trucking include Midoina and Tsangatsini. Conflicts between human and wildlife were reported in Tsangatsini, Midoina and Bofu. Neither high concentration of humans nor livestock has been observed. Non-operational pipelines include Jeuri-Lutsanga pipeline, Jipemoyo pipeline, Batani-Mwanjama and Rabai pipelines. Non-operational water pipelines are due to water rationing and power bills. Most water pans are of small capacity and have silted-up.However, the County is experiencing off season rains which will recharge water sources thereby improving water availability.

Distance to Water Sources

Distances to water sources have declined due to good recharge in the Mixed farming zones. Return distances are normal at less than a kilometre in the Mixed farming zones. However, return distances in the Marginal Mixed zone remain between two and six kilometres which is normal at this time of the year. Areas where water pans have dried up are relying on other water sources such as pipelines, rivers and water trucking. Highest distances to water sources were observed in Bofu where motorbikes collect water from River Galana, which is about 18Km away.

Cost of Water and Waiting Time at the Source

The average cost of water at source ranges from Ksh. two to five shillings per 20 litres jerrycan. Water vending is evident especially in severe water scares areas such as Tsangatsini, Midoina, Ruruma ward, Bofu, Changoto, Mbuuni, Midoini, Mwahela, Mwangeain the Marginal Mixed farming livelihood zone with a 20 litres jerrycan selling at Ksh. 30 to 100. About 30 percent of hosehold are buying water which is mainly supplied by motorbikes or private water vendors. Cost of water in Tsangatsini borehole is Ksh. 5 but the salinity levels are high forcing some households to buy water at Ksh. 30 per 20 litres jerrycan. The average cost of water in the Mixed farming and Cash Cropping / Dairy farming zones average Ksh 2-5 per 20 litresjerrycan. Areas that rely on vendors throughout the year include Gongoni town and its environs (Kadzuhoni and Marereni), Muyeye town and its environs (Maweni and Ngala). The cost for a 20 litre jerry can in the above-mentioned areas has increased from Ksh. 2-5 to 15-20 shillings. Waiting time is still normal with most households collecting water within 15 minutes across the County.

Water Consumption

Water consumption in the Mixed farming and Cash Cropping/ Dairy farming livelihood zone remain stable with most households consuming about 30-40 litres per person per day. The average water consumption has increased in the Marginal Mixed farming zones from the normal 20 litres to 30 litresper person per day. However, consumption level has reduced from the normal 30 litres to 15-20 litres per person per day in Ruruma, Mwawesa, Kambe Ribe and Rabai-Kisurutini in the marginal mixed livelihood zone of Rabai sub-county due to water rationing and drying up of water pans.

3.2.5 Food Consumption Score

The month of July 2019 NDMA bulletin indicates that food consumption score (FCS) was relatively stable compared to the previous month attributed to availability of vegetables, cash transfers to vulnerable households, drop in maize prices and availability of cash income crops (mangoes, coconuts). The proportion of households with poor, borderline and acceptable consumption score in June was 1.9percent, 11.9 percent and 86 percent respectively. During the same period of 2018, about 95 percent of households with acceptable FCS were 95 while those having borderline FCS were five percent. All the households in marginal mixed farming livelihood zone had acceptable food consumption. In Livestock farming livelihood zones 6.7 percent of the household had a poor consumption score attributed decreased milk consumption as most cattle has migrated away.

3.2.6 Coping Mechanisms

As per the NDMA June 2019 bulletin, the mean coping strategy index (CSI) has remained stable from 3.9 in June to 4.03 in July 2019, indicating application of same coping strategies applied by households in order to meet food needs. The stability in the application of the coping mechanism could be attributed to availability of vegetables, improved household purchasing power through cash transfers to vulnerable households and availability of cash income crops (mangoes, coconuts). Households in Livestock farming livelihood zones applied the highest mean coping strategy index of 7.5 with the Mixed farming zone have an index of 1.6. About 60 percent of households are not coping while 38.6 percent are employing stress coping strategies.

16.1.1 Health and Nutrition

Morbidity and Mortality patterns

The most common illnesses for both the under-fives and the general population were upper respiratory tract infections (URTI), diarrhea and malaria. Except for malaria, cases for the general population which stabilized, all other cases, the total number of caseloads for both the under-fives and the general population increased compared to the same period of 2018. Highest cases of malaria were recorded in Kaloleni while the lowest caseloads were recorded in Malindi. Cases of diarrhoea and malaria have shown an increasing trend from April for both the under-fives and the general population across all sub-counties. High caseloads of diarrhea were recorded in areas with poor access to water. However, URTI declined in the month of June 2019.

Total cases of measles declined to 36 between January and June 2019 compared to 68 cases reported between January and June 2018. Highest cases of measles were mainly in Ganze. A few suspected measles cases were also reported in Magarini sub-county. However, no deaths were reported. One case of typhoid and cholera outbreak was reported. Under-five mortality rates between January and June 2019 have stabilized at 0.02 compared to the same period of

2018 while Crude Mortality Rate (CMR) have significantly reduced to 0.012 compared to 0.029 recorded in the same period of 2018.

Immunization and Vitamin A Supplementation Coverage

The proportion of fully immunized children between January and June 2019 increased to 80.3percent compared to 77.6 percent coverage during the same period of 2018. According to a Nutrition Survey conducted in November 2016, coverage for OPV 1, OPV 3 and measles was 97, 95.9 and 94 percent respectively. Vitamin A coverage between January and June 2019 was 66 percent compared to 86 percent during the same period of 2018. The decrease in immunization and Vitamin A coverage may be attributed to the poor child-care practices during farming seasons, whereby caregivers give priority to farming and end up neglecting child-care duties. However, Vitamin A coverage (12-59 months) between January and June 2019 declined compared to similar period of 2018. This may be due to high defaulter rates experienced as a result of competing tasks, coupled with time taken to and from the nearest health facility. The coverage for fully immunized children has met the national target of 80 percent while that of Vitamin A is still below the national target.

Nutrition Status

Children at risk of malnutrition

The Integrated Phase Classification for Acute Malnutrition is Acceptable *(Phase 1)* based on GAM by MUAC from analysis of June 2019 MUAC data from sentinel sites and historic trends of GAM by WHZ and GAM by MUAC. MUAC data from sentinel sites for children 6-59 months indicates a GAM of 0.0%. The acute malnutrition situation has remained the same compared to the same season during the Long Rains Assessment (LRA) in 2018. The proportion of children with MUAC less than 135mm has reduced in the month of June 2019 at 2.9 percent compared to the LTA of four percent. Highest cases of children with MUAC less than 135mm were reported in Ganze, Magarini and Kaloleni sub counties. The higher proportion of children with MUAC less than 135mm could be attributed to high diarrhea incidence.

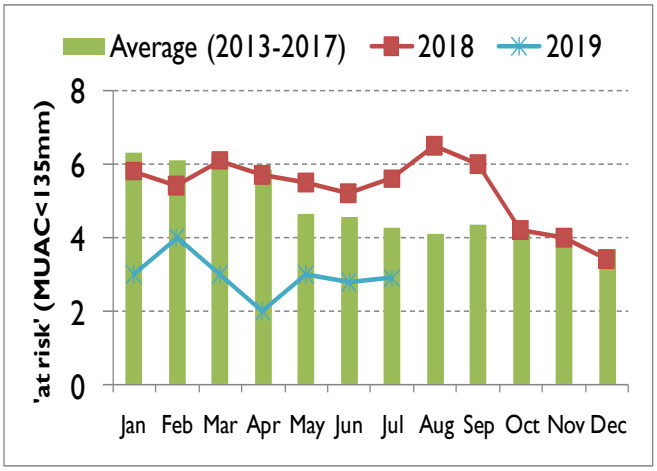

Figure 6: Proportion of children at risk of malnutrition

Dietary Diversity

Dietary diversity remains low in most parts of the county, including the mixed farming zones, with people consuming 2-3 meals in a day, consisting of less than three food groups. However, in some parts of Ganze and Magarini, households are consuming an average of 1-2 meals in a day, with most of them consuming strong tea in the morning. Children under five years are fed with porridge in between the meals. Meal composition includes mostly *ugali* and beans and sometimes *omena*. Very few areas had households that consumed vegetables, with populations going for weeks without vegetables. Most areas accessing vegetables were those near the markets.

According to the December 2017 maternal, infant and young child nutrition (MIYCN)knowledge, attitude, beliefs and practices (KABP) survey in Kilifi, minimum dietary diversity (MDD), minimum meal frequency (MFF) and minimum acceptable diet among children 6-23 months is at 35.5 percent, 65 percent and 25.1 percent respectively. Minimum dietary diversity among women is at 35.1 percent. This indicates poor maternal infant and young child feeding practices in the county and this is one of the possible factors associated with both acute malnutrition and stunting in the county. Cases of underweight according to CHANNIS data are at 1.5 percent, far much below the last three years LTA of 11.2 percent. Under-weight cases were slightly higher compared to 1.15 in June 2018. Most of the underweight cases were reported in Ganze, Kaloleni and Magarini.

Admissions into Supplementary Feeding Programs

Admissions to both Supplementary Feeding Program (SFP) and Outpatient Therapeutic Program (OTP) have shown a decline compared to the same period of previous three years. A spike in admissions for both OTP and SFP was noted in April, after which a decline was noted as from May to June. The spike may be attributed to the dry spell experienced at the beginning of the year, after which availability of milk and vegetables improved after the rains. Admissions into SFP were high in Ganze, Kaloleni and Kilifi North. The situation is expected to remain stable with the off-season rains.

Infant and Young Child Nutrition

According to the Kilifi MIYCN KABP Survey of 2017, early initiation currently is at 45.8 percent while exclusive breastfeeding is at 68.1 percent. The minimum meal frequency for children 6-23 months fed in a day is at 65 percent while the minimum dietary diversity for children 6-23 months day stands at 35.5 percent. However, a great challenge posed to proper MIYCN practices was food insecurity, whereby during the dry season, mothers would start mixed feeding early due to lack of 'enough' milk to sustain exclusive breastfeeding for the entire six months.

Hygiene and Sanitation

The average latrine coverage in the county was 70 percent compared to 65 percent in 2018. The increase is attributed to enhanced integrated health programs supported by county government and partners in the community. However, in Adu ward, latrine coverage stood at 40 percent compared to 23 percent in November 2018. The low coverage is attributed to community cultural practices on latrine usage. Open defecation was practiced by 8.6 percent of the households and latrine ownership was at 58 percent. Hand washing during the recommended four critical times was low at nine percent. At least, 85 percent of the households obtained water from protected sources such as piped water system, protected boreholes while at least 18 percent of the households treated water using chemicals

4.0 CROSS CUTTING ISSUES

4.1 Education

Enrollment

Enrolment in ECD and secondary schools increased by 11 percent and 12 percent from term I to Term II. In primary schools, enrolment for girls from Term I to Term II increased by 10 percent while for boys dropped by four percent. Increase in enrolment rates is attributed to free primary school education while increase in secondary schools may be attributed to free day secondary schools.

Table 10: Enrollment Levels

	Term I 2019			Term II 2019			Comments (reasons for increase or decrease)
Enrollment	№ Boys	№ Girls	Total	№ Boys	№ Girls	Total	
ECD	37,477	35,556	73,033	38,886	42,502	81,388	Increased
Primary	156,547	152,557	309,104	141,024	166,983	308,007	Decreased
Secondary	34,728	34,373	69,101	35,978	41,854	77,832	Increased

Participation

The average monthly school attendance was stable across the ECD, primary and secondary which was attributed to back to school campaigns, free primary and secondary education initiatives, provision of infrastructure and learning resources.

Table 11: Participation during Term I and Tern II

	Term I 2019						Term II 2019				
Indicator	January 2019		February 2019		March 2019		May 2019		June 2019		Comments (reasons for increase or decrease)
School attendance	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls	№ Boys	№ Girls	
ECD	34,089.71	32,343.8	53,546.95	33,365.37	35,157.79	34,600.61	34,00.51	33,45772	43,110.17	34,087.76	Stable
Primary	14,0464	13,2465.2	53,546.95	13,3527.1	13,8642.8	13,1314.7	13,9643.7	13,550.6	13,9644.6	13,5491.7	Stable
Secondary	29,801.51	27,406.62	29,717.72	26,670.61	30,021.9	27,743.95	31,48.32	27,808.73	31,152.78	27,831.51	Stable

Retention (Dropout rate)

ECD recorded a drop out of 134 children (70 boys and 64 girls) in term I which was lower compared to Term II where 576 children dropped out. The drop out could be attributed to lack of the school meals programme, parent do not see the need for education and lack of school fees. In primary school 302 pupils (149 boys and 153 girls) dropped Term II compared to 211 (105 boys, 106 girls) in Term I. The high cases of dropouts in Term II could be due to lack of school meals programme, early marriages/pregnancy and household chores. A total of 87 students dropped out in secondary school due to lack of schools, household chores and early marriages.

Table 12: Drop outs in term I and term II

Indicator	End of Term I 2019	End of Term II 2019

Students dropped out from school	№ Boys	№ Girls	№ Boys	№ Girls
ECD	366	210	70	64
Primary	105	106	149	153
Secondary	23	36	43	44

School Feeding Programme

During the assessment, it was noted that all the schools in Kilifi County did not have any schools meals programme in Term I and Term II.

Trends of key food security indicators

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

INDICATOR	SRA 2018	LRA 2019
Distance from source(km)	2-10 Km	2-6 Km
Waiting time (min)	15 mins	15 mins
Cost	Ksh. 5-10	Ksh. 30-100
Consumption (Litres per person per day)	15-20 litres	15-20 litres
Goat Prices		Ksh. 4,191
Maize prices/Kilogram	Average County price: Ksh. 40	Average County price: Ksh. 48
Terms of Trade	Average County ToT: 98.8 Kgs	Average County ToT: 83Kgs
Livestock Body condition	• Cattle: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good	• Cattle: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good
Livestock Body condition	• Sheep: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good • Goat: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good	• Sheep: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good • Goat: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good
Milk Production (Litres per household per day)	Mixed Farming:3 Marginal Mixed Farming: 2 Cash Cropping/ Dairy Farming:3.5	Mixed Farming:5 Marginal Mixed Farming: 5 Pastoral:2-3
Migration (Out/In migration)	None	In migration from Tana river Outmigration to Kwale Migration within the county
Livestock Disease outbreak	• New castle disease,	• Anthrax

	• East coast fever, • Trypanomiasis, • Anaplasmosis and • Worm infestation	• Tick bone
Livestock Body condition	• Sheep: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good • Goat: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good	• Sheep: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good • Goat: Cash Cropping/ Dairy Farming: Good • Marginal Mixed Farming: Good • Mixed Farming: Good
School Attendance	Stable	Stable
Food Consumption Score (NDMA)	Acceptable: over 95%	Acceptable:86%
	Borderline: 5%	Borderline: 11.9%
	Poor: 0%	Poor: 2%
MUAC<135mm	3.5%	2.9%

5.0 FOOD SECURITY PROGNOSIS

5.1 Prognosis Assumptions

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

- The October to December short rains are expected to be timely with good spatial and temporal distribution.
- The on-going off-season rains in both Kilifi and Tana River will improve forage condition hence no further in-migration of livestock will continue.
- Due to total crop failure in the Marginal Mixed farming zone and about 60 percent maize crop failure in the Mixed farming & Cash Crop/ Dairy farming zone, an estimated 70 percent of the total population will continue to depend on market purchases.
- Food prices are expected to remain high until short rains early harvests in December 2019 when the early maturing crops will be ready for harvest.
- Livestock body condition is expected to remain good leading to improved milk availability to average levels, hence improving nutrition status.

5.2 Food Security Outcomes (August to October)

The below average harvest expected in the Mixed farming and Cash Cropping/ Dairy farming livelihood zone will cushion households until September hence improving households' food consumption. However, food consumption may deteriorate in Marginal mixed farming livelihood zones and ranching livelihood zones forcing households to apply consumption based coping strategies. Nutrition status for under-fives may stabilize at below average levels in the Mixed farming and Cash Cropping/ Dairy farming livelihood zones. However, due to reduced dietary diversity in the Marginal Mixed farming zone, nutrition status for under five may deteriorate. Food insecurity is expected to increase but households are expected to remain in the Stressed (IPC Phase 2) phase. Majority of the households will continue to rely on markets for supply. Current high food prices may prevail due to reduced agricultural production which will also negatively impact households' purchasing power. Households' purchasing power will be mitigated by good goat prices which are fetching higher prices.

Casual labour opportunities will be available from October in anticipation for the short rains season improving household income and household purchasing power.

5.3 Food Security Outcomes (November 2019 to January 2020)

The expected OND rains will contribute to the regeneration of the rangeland and recharge of water sources from October. Labour opportunities from farm activities will boost households' income. Livestock productivity will improve hence increase in milk production. Milk consumption will improve leading to an improvement of the nutrition status for the under-fives from November. Availability of the early maturing crops in the Mixed farming, marginal mixed farming and Cash Cropping/ Dairy farming livelihood zones in the month of November will cushion the households; however, households will still rely on markets for supply. In December early maturing crops will be available for harvesting improving household food security and income earning opportunities through casual labor.

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

6.1.1 Phase Classification

Kilifi County is classified under Stressed (IPC Phase 2) food insecurity phase. The Mixed farming and the Cash Cropping/ Dairy farming livelihood zones have maintained the previous Stressed (IPC Phase 2) food insecurity phase while the Marginal Mixed Farming Livelihood Zone has improved from the previous Crisis (IPC Phase 3) food insecurity phase.

6.1.2 Summary of the Findings

The onset of the rains was late by three weeks; distribution was also poor in time and space. The long rains season is the most reliable season in the Mixed farming and Cash Cropping/ Dairy farming livelihood zone and contributes to about 60 percent of the total annual agricultural production. The area planted for maize decreased by 23 percent while for cassava and green grams declined by more than half. Due to the delay in the onset of the rains and poor distribution, mixed farming and marginal mixed farming livelihood zones are likely to experience a crop failure of 60 percent and 70 percent respectively. Stocks held by farmers were below the long-term average by 51 percent while those held by traders were higher by 17 percent compared to the LTA.

Distances to water sources have declined to less than a kilometer in mixed farming livelihood zones and 2-6 Km in Marginal Mixed Farming Livelihood Zone, Ranching and Cash Cropping/ Dairy farming livelihood zones. Water consumption was normal at 30-40 litres per person per day with an exception of Ruruma, Mwawesa, Kambe-Ribe and Rabai-Kisurutini where consumption was 15-20 litres per person per day. Body condition for all livestock species is good across the county due to good forage. Minimal in migration of cattle and shoat from Tana River through Adu and Camels from TaitaTaveta through Tsangatsini was reported. Percent of children at risk malnutrition were lower by 44 percent compared to the LTA of five percent. Food consumption was good, about 85 percent of the household had an acceptable food consumption score. Food markets were functioning normally without any disruptions. Traders sourced for foodstuffs from Loitoktok, Nakuru and Kericho.

Over 70 percent of the households relied on markets for supply. Livestock markets were disrupted by low supply and high prices attributed to households holding on stocks due to favorable weather conditions. The household purchasing power was relatively stable. The

food security situation is expected to deteriorate till the realization of the next seasonal rains unless the on-going off seasonal rains continue.

6.1.3 Sub-County Food Security Ranking

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

Sub-County	Sub-County Ranking (1=Most food insecure,…. 6=Least food insecure)	Main food security threats
Very Good (9-10) Good (7-8)	Fair (5-6)	Poor (3-4) Very Poor (<2)
Ganze	1	• About 20 percent of water pans have dried up, some areas relying on water trucking • Near total crop failure, • Human-wildlife conflict • Out-migration of livestock from Midoina to Kwale county • Higher malnutrition rates • Low attendance due to lack of SMP • High food prices – maize floor is Ksh. 140/2Kgs • Cost of water by vendors up to Ksh. 30 • Low student-teachers ratio e.g Midoina Pry • Rampant charcoal burning in Midoina as the major source of income
Magarini	2	• Water pans in Bofu is dry leading to long distances to water sources • Human-wildlife conflict • Low attendance due to lack of SMP • Near total crop failure in Bofu and Gilore • Higher malnutrition rates in Adu ward • Disease outbreaks in Adu • Low latrine coverage – zero latrines in Adu, • High food prices – maize floor is Ksh. 120/2Kgs, Adu buying maize at Ksh. 4,800 per 90Kgs from Gongoni and Marereni, • No green grams, cowpeas available in the market with beans being the main stable food, • Cost of water Ksh. 20, Bofu paying Ksh. 50 per 20 litres, Bofu Primary School borehole not functioning
Malindi	4	• High food prices especially in Lango Mbaya where cost of 2Kgs maize floor is Ksh. 120.
Kaloleni	3	• Water scarcity especially in Tsangatsini

		• Poor pasture and maize crop failure • High morbidity cases – malaria & skin infections • Water contamination • High cases of under-weight • Low latrine coverage • Low student-teachers ratio e.g Midoina Pry • Rampant charcoal burning in Tsangatsini,
Rabai	6	• Severe water scarcity in Mkapuni-Ruruma ward • Low latrine coverage, crop failure,
Kilifi North	5	• Fair cattle condition, fair pasture condition • Stunted maize crop • High URTI cases and high underweight cases,
Kilifi South	7	• Low harvests expected, army worm infestation

6.1.4 On-going Non Food Interventions

Table 15: On-going Non Food Interventions

County	Intervention	Sub County	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost (M)	Time Frame
Livestock							
Kilifi	Training farmers on pasture conservation, Poultry, Beekeeping, dairy cattle	Magarini, Kilifi North, Kilifi South, Rabai	1840	Farmers, World Vision, National and County Government	Improved livestock body condition & production		On going
Kilifi	Dairy value chain trade fair	Malindi&Kilifi north	600	USTUDI	Significant	2.0	By 30thjuly 2019
Kilifi	Beekeeping Value chain	Ganze, Malindi	200	NARIGP, KRCS, CGK	Significant		By 30thjune 2020
Kilifi	Meat goat upgrading - breeding stock	Malindi, Sokoke, Ganze	875	Caritas, KRCS, County Government of Kilifi	Improved live weight. Enhanced prices		On-going
Kilifi	Dairy cattle promotion - purchase and supply of dairy cows	Malindi, Rabai, Kilifi North, Magarini	171	County Government of Kilifi	Improved nutrition and income		On-going

Kilifi	Supply of 2kg mineral blocks	Kaloleni, Ganze	400	Caritas	Improve the health of the cattle to withstand harsh condition		Completed
Kilifi	Beef cattle Improvement	Malindi	100	County Government of Kilifi	Improved live weight and enhanced prices.		On-going
Education							
Kilifi	Pipelines extensions, developments of water pans, drilling of boreholes	all sub counties	500	County Government of Kilifi	Improved access to water	70M	6MONTHS-1YR
Kilifi	Extensions of pieplines	Jilore, Ganda	200	County Government of Kilifi	Improved access to water	50M	6 months
Kilifi	Extensions of pipeliens, construction of storages	Ruruma, Kambe, Kisurutini	300	County Government of Kilifi	Improved access to water	50M	6 months
Kilifi	Extensions of pipelines, dams expansions	Watamu, Dababso, Kokotoni	200	County Government of Kilifi	Improved access to water	70M	6 months
Water							
All subcounti	Pipelines extensions, dams	Magarini, Malindi,	200000	County Government of	Improved access to water	200M	1 year

es	rehabiltations and development increase of storages	Kilifi North, rabai		Kilifi			
Agriculture							
Kilifi County	Farm input subsidy (certified seeds)	All	12580	County Government of Kilifi	Increased production	21M	1 year
Kilifi County	Provision of agrochemicals for Control of Fall army Worm, crop diseases and Migratory pests	All	1000	County Government of Kilifi	Increased production	5M	1Yearr
Kilifi County	Provision of cassava cuttings	All	500	County Government of Kilifi	Food sources diversified	1M	1Yr
Health and nutrition							
Kilifi county	Vitamin A Supplementation	All	113,249	County Government of Kilifi	To boost immunity	800K	On going
Kilifi county	Zinc Supplementation	All	Children with diarrhea	County Government of Kilifi	To boost immunity	1M	On going
Kilifi county	Management of Acute Malnutrition (IMAM)	All	5,788	County Government of Kilifi	To boost immunity	14M	On going

Kilificou nty	IYCN Interventions (EBF and Timely Intro of complementary Foods)	All	125,832	County Government of Kilifi	To boost immunity	15M	On going
Kilifi county	Iron Folate Supplementation among Pregnant Women	All	All pregnant mothers	County Government of Kilifi	To boost immunity	1M	On going
Kilifi county	Deworming	All	100,665	County Government of Kilifi	To boost immunity	3.5M	On going
Kilifi County	Integrated Outreaches and mass screening in 45 sites	All	Children < 5, PLW with malnutrition.	County Government of Kilifi	To boost immunity	6.5M	On going

6.2 Recommended Interventions

6.2.1 Recommended Food Interventions

Table 16: Proposed population in need of food assistance

Sub-County	Population in the Sub-County (Projected 2016)	Pop in need (percent range min – max)	Proposed mode of intervention
Kilifi North	261,879	10 - 15	Cash Transfers /Asset creation Programs
Kilifi South	216,489	5 - 10	
Ganze	173,669	30 - 35	
Kaloleni	175,735	20 - 25	
Rabai	143,339	5 - 10	

Magarini	223,597	25 - 30	
Malindi	205,268	15 - 20	

6.2.2 Recommended Non-Food Interventions

Table 17: Proposed non-food interventions

County	Intervention	Sub County	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost (M)	Time Frame
Livestock							
Kilifi	Farmer trainings	All sub counties	6300	County government and Stakeholders		2.5M-	Jul,2019 to Mar, 2020
Kilifi	Pasture production and conservation	Ganze, Malindi, Kilifi South	1300	County government and stakeholders		Funds	By 30th june 2020
Kilifi	Supply of dairy cattle	Magarini	50	County Government		10,000,000	Ju,l 2019 to March, 2020
Kilifi	Supply of range cubes	Magarin, Malindi	1300	National and County Government NDMA		1,440,000	Oct, 2019 to April, 2020
Kilifi	Supply of Galla Breeding Bucks	Magarini, Ganze, Malindi	1650	CGK and Stakeholders		18M	Jul, 2019 to June, 2020
Kilifi	Bee keeping	Ganze		County government and		Money	By 30th june 2020

				stakeholders			
Kilifi	Boran / Dairy crosses bulls - 20	Malindi, Ganze, Magarini, Kaloleni	600	Partners, County government		2M	By Dec 2020
Kilifi	Supply of breeding cocks	Magarini, Ganze	3000	County government, NARIGP and Stakeholders		4,500,000	Jul.2019 to March, 2020
Kilifi	Construction of 4 strategic water pans	Rabai, Ganze, Kaloleni, Magarini	3200	Stakeholders &CGoK		Funds	2yrs
Education							
Kilifi	Drilling of more bore holes and extension of pipelines	Adu, garash	30000	County government NGOS		Funds	
Kilifi	Water pans development & Rehabilitation	Adu, Garash, Marafa, Rabai, Kilifi, Malindi		County government NGOS		Funds	
Kilifi	Development of sufficient storages(tanks)	Adu, Marafa, Gongoni		County government NGOS		Funds	
Kilifi	Electrification of some water sources	Adu, Makumba, Mnarani		County government NGOS		Funds	

		Sokoni					
Water							
Kilifi	Rainwater harvestings structures, pipelines extensions, exploration of new water sources, pumping equipment. Rehabilitation of old pipelines	Magarini, Rabai, Kilifi,	180000	County Government of Kilifi Funds, personnel		Funds	1yr
	Water pans development & Rehabilitation	Adu, Garash, Marafa, Rabai, Kilifi, Malindi		County government NGOS	funds		5yrs
	Development of sufficient storages(tanks)	Adu, Marafa, Gongoni		County govt NGOS	funds		5YRS
	Electrification of some water sources	Adu, Makumba Mnarani Sokoni		County govt NGOS			
	Water pans development & Rehabilitation	Adu, Garash, Marafa, Rabai, Kilifi, Malindi		County government NGOS	funds		5yrs

	Development of sufficient storages(tanks)	Adu, Marafa, Gongoni		County govt NGOS	funds		5YRS
Agriculture							
County	Establishment of Agribusiness Development Centre	Tezo Ward	3,000	Department of agriculture		20M	2018-2019
County	Procurement of FAW chemicals	County wide	2000HHs	Department of Agriculture, Partners		10M	2018-2019
County	Farmer capacity building on FAW and other emerging pests and diseases	County wide	2000HHs	Department of Agriculture, Partners		5M	2018-2019
County	Rehabilitation of irrigation infrastructure destroyed by floods	Malindi and Magarini	5000HHs	Department of Agriculture		100M	2018-2019
Health and nutrition							
Kilificou nty	Twice a month Integrated health and nutrition outreaches , mass screening and follow up	All wards	Children < 5 years, Pregnant and Lactating women	MoH with support from partners - UNICEF, KRSC, WVK		7,300,000	As soon as possible

	visits						
All sub counties of Kilifi county	Scale up BFCI in other sub counties as well	All sub counties of Kilifi county	Pregnant and Lactating Women, Infants 0-6 months, Children 6-23 months, Children 12-59 months	MoH, UNICEF, AfyaPwani, WVK			Ongoing in some sub-counties
All sub counties of Kilifi county	Scale up integrated management of acute malnutrition	All the 81 health facilities implementing IMAM in the seven sub counties	County-11,627 Kilifi North-2155 Kilifi south -1782 Ganze-1460 Kaloleni-1852 Rabai-1009 Malindi-1698 Magarini-1880	MoH, UNICEF, WVK			On going
Magarini and GanzeSub counties	Sensitize community health workers on screening and referral of malnutrition.	7 community health units in Magarini 5 Community units in Bamba	150CHVs	MoH , UNICEF, KRSC		250,000	
County	Strengthen	Kilifi County	-	MoH, MoE,		-	On going

wide	multi-sectorial collaboration with other sectors eg Agriculture ,Education ,Water			MoALF, UNICEF, IMC, CISP, NDMA			
County	Establish and conduct quarterly County Food and Nutrition Security multi-stakeholder platform meetings	Kilifi County	-	Members of FNS MSP		400,000.00	On going
County wide	Link malnourished clients to the GoK/WFP funded Cash Transfer Program	Kilifi county	11,627	WVK, KRSC, WFP			October 2018
Entire county	Roll out BFCI and Train CHVs and HCWs on baby friendly community initiative and roll out of BFCI in 83	83 community units	83 CUs	UNICEF, KRSC, KCG , WVK, Afya Pwani		5,000,000	On going

	CHUs						
Entire county	Scale up of HiNI services to all the health facilities	Countywide	143 HFs	MoH, UNICEF,		-	On going
Entire county	Capacity building of frontline health workers and sub county managers on MIYCN	Countywide	100 HCWs	MoH, UNICEF, Afya Pwani, World Vision		600,000.00	On going
Entire county	Sensitize frontline Health Care Workers on IFAS	Entire county	100 HCWs	MoH , UNICEF		440,000.00	January 2019
Entire county	Institutionalize Vitamin A supplementation and deworming through ECD	Countywide	218,207	MoH, UNICEF, Afya Pwani, Map International		1,500,000	On going
Entire county	Strengthen the nutrition commodity management systems through LIMS integration	Countywide	-	MoH, UNICEF,	-	-	On going