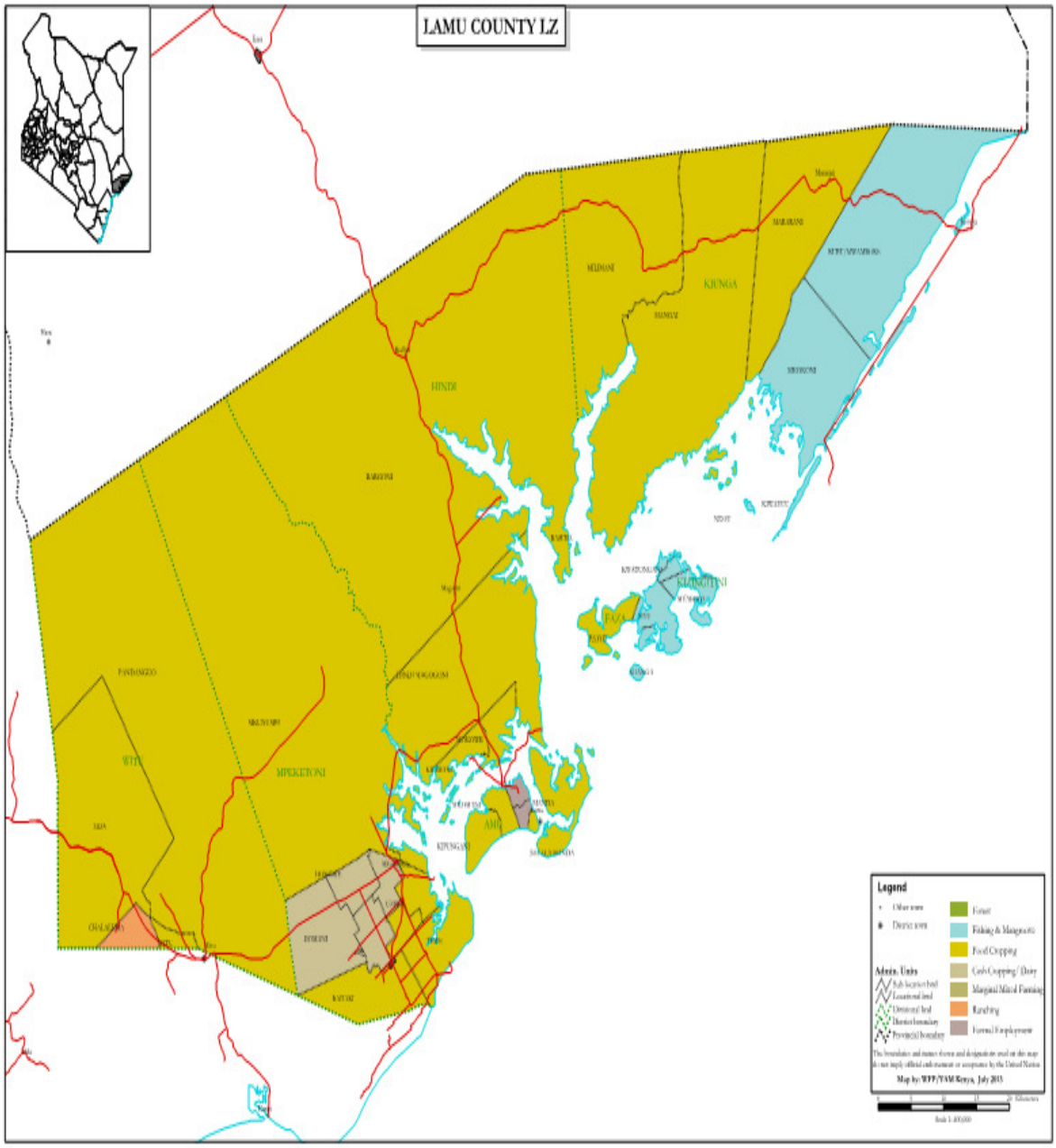
LAMU COUNTY
2013 LONG RAINS FOOD SECURITY ASSESSMENT REPORT
3RD - 9TH AUGUST 2013



Assessment Team

Dr Charles M Wanjigi	Ministry of Agriculture, Livestock and Fisheries
Nelson A. Mutanda	National Drought Management Authority
County Steering Group	Lamu

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1.0 INTRODUCTION

1.1 County background information

Lamu county comprises of two sub-counties; Lamu East and Lamu West. These are further subdivided into seven divisions namely Kiunga, Kizingitini, Faza and Amu in Lamu East and Hindi, Mpeketoni and Witu in Lamu West. The county borders the Indian Ocean to the south, Tana River county to North West, Garissa county to the north and the Republic of Somalia to the northeast. It lies between latitudes 1^0 40' and 2^0 30' south and longitude 40^0 15' and 40^0 38' east. The county is approximately 6,273.1 Km^2 in area, including the mainland and over 65 Islands, which form the Lamu Archipelago. The estimated population of Lamu currently stands at 113,110 people based on KNBS projections for 2012. The county has four main livelihood zones namely; mixed farming food/cash crop/livestock livelihood, fishing and mangrove harvesting livelihood; mixed farming food/cash crops livelihood; and formal employment/casual waged labour/business livelihood zone as illustrated in Figure 1.0. The county receives a bimodal type of rainfall with long rains accounting for 80 percent total annual crop production. There are 3 major rainfall zones in the county: the arid zones along the northern border (Kiunga) receives between 550 – 700 mm of rainfall, the semi arid areas of Amu, Faza and Kizingitini divisions receive between 550 to 850mm and the sub humid zones covering Witu, Hindi and Mpeketoni divisions receive 850mm to 1100 mm of rainfall annually.

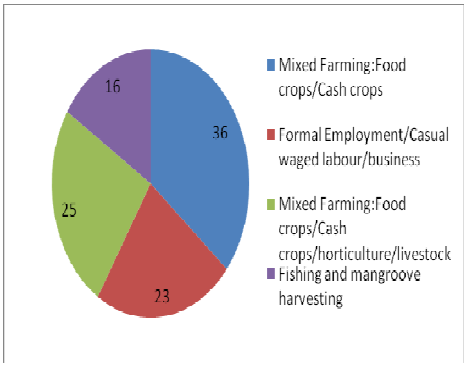

Figure 1:Percentage population Per Livelihood zone

1.2 Current relief operations

Lamu county has not benefitted from any ongoing relief operations. The Governor Lamu County recently donated food aid worth KSh. 500,000 to the Boni community following the long rains in collaboration with the Kenya Red Cross. The county commissioner's office intends to distribute 200 (90Kg) bags of maize and 150 (90 kg) bags of beans to Lamu East soon.

1.3 Food security trends

The county continued to remain in the "stressed food security phase" as reported in February 2013. With the onset of the long rains, the high precipitation realized caused flooding resulting in food crops earlier planted being submerged during the April – May rainy period. Even though replanting took place in most areas when floods receded, the crops are now water-stressed as rains ceased prematurely. Most water sources were recharged at least 75 percent compared to the 50 percent reported during the short rains which shows an improvement in terms of rain water harvesting and recharge of aquifers. Pasture and browse condition was good across the entire County unlike during the short rains period which reported the forage condition as being good in certain livelihood zones but fair in localized parts of the mixed livelihood zones in Kiunga, Kizingitini, Faza, Mukunumbi and Pangani. The livestock body condition remained good across all livelihood zones and all species as reported in February 2013. Milk availability ranged between one and three liters per household compared to production of two to three litres reported in February. Milk consumption currently ranges between one and two litre per household as compared to one litre reported in February 2013. Average milk prices range between forty and fifty shillings across the County for August while prices in February averaged at forty shillings.

The average distance to water points currently ranges from half to two kilometres across all livelihood zones compared to one to two kilometres as reported in February 2013. The terms of trade currently are more favourable as households could purchase 80 kilograms compared to 73 kilograms of maize from the sale of a goat in February. There was a decrease in levels of percentage of children at risk of malnutrition in August 2013 which reported 8.5 percent as compared to 10.4 percent in February 2013.

1.4 Current factors affecting food security

- Increase in price of food commodities
- High cost of farm inputs
- In-migration of livestock and pastoralists from Taita Taveta County
- Human – wildlife conflicts
- Disruption of fishing livelihood due to strong winds

1.5 Summary of recommendations

Food interventions

- Strengthen the school meals programme
- Introduce cash/food for asset programme
- Introduce social safety net programmes for the aged and Orphaned and Vulnerable Children (OVC)
- Enhance General Food Distribution

Non food intervention

- Provision of appropriate fishing vessels and gear for the fisherfolk
- Provide appropriate farm implements, seed and agro-chemicals in marginal mixed farming zones
- Promote growing of Nerica rice farming
- Introduction of green house horticultural production
- Exploit irrigation potential along rivers Mangai, Milimani & Chalaluma/ L. Moa
- Revitalization of cashewnut orchards
- Promotion of drought resistant crops
- Resolve cotton marketing
- Distribute water treatment chemicals and filters
- Construct appropriate water harvesting structures
- Intensify health education on proper waste disposal
- Construct more classrooms and provide for additional teachers
- Increase number of desalination plants across the County.
- Defining, demarcation and protection of wildlife corridors
- Improvement of infrastructure (roads, schools and bridges)
- Improve livestock productivity, marketing, disease control and surveillance system,

2.0 COUNTY FOOD SECURITY SITUATION

2.1 Overall current food security situation

The County is currently in the “stressed food security phase” and the situation is likely to worsen in the next three months due to poor harvests attributed to floods, early cessation of rains and wildlife crop damage. Farmers replanted in most areas after floods receded but the new crop is

now water-stressed as rains ceased prematurely. The impacts of the long rains of April to May, 2013 were positive to the water sector since most of the water sources were at least 75 percent recharged. Compared to the last three years, the year 2013 saw an improvement in terms of rain water harvesting and recharge of aquifers. Pasture and browse conditions have improved resulting in improved livestock body condition. Pastures are predicted to last up to the next short rain season. The current weather conditions have affected fishing in that fishermen are unable to access traditional deep sea fishing areas due to strong winds causing turbulence. Most of the families are consuming between one and two meals per day. School enrolment is normal but retention has declined as schools did not receive provision for the School Meals Programme (SMP) during the second term. The nutritional status for children under-five has improved from the status of June 2013.

2.2 Current shocks and hazards on food security.

2.2.1 Rainfall performance.

The long rains fell on the third dekad of March in Lamu West but in Kiunga rains started in the second dekad of May 2013. The entire county received 50 to 80 percent of the normal rainfall. The rains were evenly distributed and ceased in early July.

The above rainfall trends translated to fair temporal distribution across all livelihood zones.

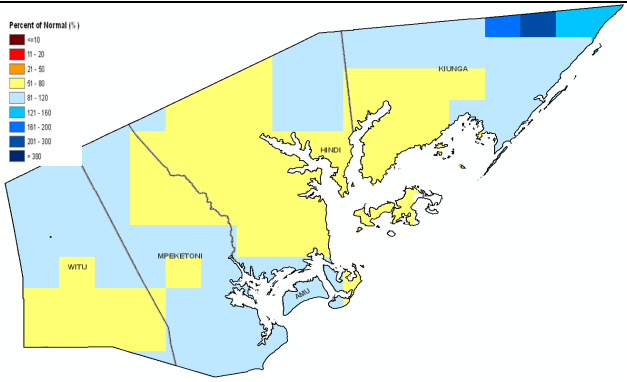

Figure 2.0. Rainfall estimates percent of normal

2.2.2 Other shocks and hazards

Other shocks and hazards contributing to food insecurity include wildlife and pests menace. Wildlife remains a chronic problem and threat to food security in the county. Natural forests, bushes, idle ranches, Dodori game reserve and unfarmed land owned by absentee landlords remain the major habitats for wildlife. Pests are also responsible for pre- and post-harvest losses especially in maize crop. The major pests reported in the county are mainly rodents, stock borers, grain borer, aphids and weevils.

3.0 IMPACTS OF SHOCKS AND HAZARDS ON FOOD SECURITY

3.1 Crop production

3.1.1 Introduction

Main crops grown in the county include maize, cowpeas and cassava. Those grown for commercial purposes include coconut, cotton and simsim. Farmers have harvested or are in the process of harvesting their crops especially for maize, green grams simsim which is normal at this time of the year.

3.1.2 Crop performance.

The total area under cultivation is 25,875 hectares with maize accounting for 17,155 hectares while cotton account for 7,922 hectares, with the rest being other crops. Around 30 to 40 thousand hectares have been opened up for rain-fed farming. The acreage under maize consequently increased beyond the long-term average (LTA). Approximately 300 hectares were opened up for irrigation which is less than 2 percent of the total area available for cultivation. Harvesting is ongoing across the county. Production on the other hand is lower than LTA due to

the realized short-lived rainfall (May-June) .The same scenario has occurred for green grams and cowpeas. Lamu county is long rains dependent with the long rains contributing about 80 percent of agricultural production. Food crops contribute about 25 percent to cash income. Crops grown for commercial purposes include mangoes, coconut, cotton, bixa and simsim. Maize and coconut contribute 37 and 20 percent respectively to food in the fishing and mangrove zone, while maize contributes 80 percent of food in marginal mixed farming zone. In the cash crop/dairy livelihood zone, maize, cowpeas and bananas contribute up to 50, 25 and 10 percent of food respectively. Maize and cowpeas contribute 40 and 35 percent to food in the mixed farming food/cash and informal/formal employment livelihood zones respectively. In all livelihood zones, actual production was lower than projected due to the short-lived rainfall experienced during the long rain season. The long rains harvest was higher compared to LTA. Farmers supplemented rainfall with irrigation in areas with irrigation potential.

3.1.3 Rain-fed crop production

Table 1.0.Area under rain-fed crop production

Crop	Area planted (Ha)		Production (90 kg bags)	
	Current year	5-year-average	Current year	5-year-average
1.Maize	17,155	11,974	205,860	143,688
2.Greengrams	1,748	1,500	15,732	13,500
3.Cowpeas	1,480	2,500	14,850	25,075

3.1.4 Irrigated crop

The main irrigated crops in the district are tomatoes, kales and bananas. The area put to crop for tomatoes, kales and bananas was 180, 280 and 102 percent of the LTA respectively. The achieved production was 179, 282 and 104 percent of the LTA for tomatoes, kales and bananas respectively. The increased production is due to increased area under irrigation. Provision of banana cuttings by partners has contributed significantly to the current increased production.

Table 2.0 shows the area under irrigation and achieved production compared to their short-term averages

Crop	Area planted (Ha)		Production (90 kg bags)	
	Current year	Short Term Average (3 years)	Projected/actual production	Short Term Average (3 years)
1.Tomatoes	180	100	14,325 tons	8,000tons
2. Kales	112	40	3,047 tons	1,080tons
3. Bananas	1,481	1,450	18,112 tons	17,400 tons

3.1.5 Maize stocks

Available maize stocks are mainly in households in the mixed and marginal mixed farming livelihoods. Fishing and livestock rearing areas have little or no stocks. The NCPB has no stocks held while stocks with traders are distributed across the county. Available stock at household level is expected to last between three to five months.

Table 3.0 shows the stock held at Household, NCPB, Traders and millers

Maize stocks	Quantities held currently (90-kg bags)	Long Term Average quantities held (90-kg bags)
House Holds	14,850	250,000
Traders	455	1,000
Millers	0	0
NCPB	0	3,000
Total	15,305	254,000

3.2 Livestock production

3.2.1 Introduction

The major livestock species in the district are goats, sheep, cattle and free range poultry.
Livestock production contributes about 70 percent to cash income in the marginal mixed farming zone. Marine and inland fishing contributes about 55 percent to cash income in the county.

3.2.2 Pasture and browse condition

The pasture and browse condition is good across all livelihood zones. The trend has been stable due to relatively good long rains received and low rate of livestock in-migration. Flooding was experienced in some areas of Lamu west and pastures were submerged for a short while but the water quickly subsided. Due to fairly good rains this season, it is expected that pastures will last between four and five months which is fairly normal.

3.2.3 Livestock productivity

3.2.3.1 Livestock body condition

Livestock body condition is good for all livelihoods in all species of livestock. This is normal for this period of the year and is predicted to remain stable for only three months if livestock from adjacent counties move in the county.

3.2.3.2 Birth rate

The lambing/kidding and calving seasons for cattle, goats and sheep is normally between October/December and March/May seasons. The current average birth rates of all livestock species in livestock farming and mixed farming livelihood zones (Witu, Mpeketoni and Hindi) is 20 percent while it remains at 15 percent in fish and mangrove livelihood zone (Faza/Kizingitini and Kiunga).

3.2.3.3 Tropical livestock units (TLUs)

The current average livestock holding per household is one to two TLU in fishing and mangrove livelihood zones, three TLUs in mixed food/cash crop livelihood zone and seven TLUs in the livestock farming livelihood zone compared to the normal of one, three and six TLUs in fishing and mangrove, mixed food/cash crop and livestock farming livelihood zones respectively. This is an increase brought about by the improvement in the pasture and browse condition as well as the lambing/kidding and calving seasons for cattle, goats and sheep normally between March and May.

3.2.3.4 Milk availability

The current milk production is mainly from goats and cattle. Average milk production ranges between one and three liters per household which is normal at this time of the year.

3.2.3.5 Milk consumption

Household milk consumption averages between one and two litre per household across the county except for Kiunga where milk consumption is three litres. Average milk prices range between forty and fifty shillings across the county.

3.2.4 Water for livestock

The current return trekking distance from grazing areas to watering points ranges between a half and one-and-a-half kilometres as compared to one kilometre during normal times. The trend of trekking distances is likely to increase as the volume of water decreases. All livestock are currently watered daily in the livestock farming livestock and mixed food/cash crop/livestock farming livelihood zones. This is likely to change as the volume of water declines.

3.2.5 Migration

The county is experiencing minimal in-migration of cattle and goats. The county often experiences in-migration from Garissa county. Some livestock are reaching the county as a result of eviction of pastoralists from ranches in Taita Taveta county and Galana Ranch in Tana River county.

3.2.6 Livestock diseases and mortalities

Rabies broke out in the Island of Faza in the month of June whereby vaccination for dogs was conducted. Other diseases reported were Contagious Caprine Pleuropneumonia in goats in Kiunga where vaccinations for the same were conducted together with that for Rift valley fever. Animals were also dewormed. A Contagious Pustular Dermatitis outbreak was also reported in some areas of the county but this was immediately brought under control. Cross-border monitoring detected the outbreak of a disease suspected to be Anthrax in neighbouring Ras Kamboni area of Somalia. Trypanosomiasis being endemic is still a threat to livestock rearing. Outbreaks of poultry diseases were also reported in the mixed farming and livestock farming livelihood zones.

3.2.7 Fishing

The district is divided into three main fishing zones; marine capture fishing, fresh water capture fishing and aquaculture fishing. The main activities are found in marine waters accounting for 95 percent. The inland capture fisheries are found in Witu and Mpeketoni divisions of Lamu county though fish farming activities are still at infant stage despite vast potential for the same. The estimated total annual production is 2,200 metric tonnes. Marine fishing account for 80 percent of total fish production amounting to 1,800 metric tonnes valued at Ksh. 137 million annually. Marine fishing is predominantly practiced along the 130 kilometers coast line of Lamu stretching from Dar Salaam point in Kiunga to Ras Tenewi. Annual fresh water production from the oxbow lakes of the Tana delta and Lake Kenyatta is estimated at over 300 metric tonnes accounting for 19 percent of the county's total production. Fishing is predominantly restricted within the sheltered areas and up to five nautical miles offshore. Aquaculture contributes to one percent (5,398 kg of cultured fish harvested by December 2012) of the total annual production. The current weather conditions has affected the fishing in that fishermen now harvest less due to strong winds affecting accessibility to the deep sea. The Government supported the funding of 400 fish ponds in Lamu county under the economic stimulus program. The project had some challenges in some areas. The soils were porous and have problems with water retention.

3.3 Water and sanitation

3.3.1 Major water sources

The main sources of water in the county are natural ponds, small lakes, boreholes, shallow wells, djabias (underground water harvesting structures), rivers, water pans and dams. Shallow wells, boreholes and djabias constitute 66 percent of household water sources while natural ponds, small lakes, seasonal rivers and piped water constitute 34 percent. The temporal water sources were recharged to about 95 percent of their capacity due to the relatively good performance of the long rains. However, in fishing and mangrove zone, the open water sources were recharged to nearly 60 percent. Water desalinators have also been introduced in some islands.

3.3.2 Distance to water sources

The average distance to water points currently ranges from a half to two kilometres across all livelihood zones. However, in the fishing and mangrove zones, distances to domestic water sources are up to three kilometres. These distances are normal at this time of the year

3.3.3 Waiting time

The current waiting time ranges between 15 and 30 minutes which is considered normal waiting time around this time of the year.

3.3.4 Water consumption and prices

The current water consumption on average ranged between 60 and 100 litres per household. The current cost of a 20-litre jerry can of water was retailing at three shillings in Lamu West and ten shillings on average in Lamu East. This is considered normal at this time of the year

3.3.5 Hygiene and sanitation

Water treatment involves use of treatment chemicals. Treatment chemicals are largely not available although a significant number has no idea where to access them. Latrine coverage is on an increasing trend averaging 67 percent with Witu recording the lowest at 25 percent. Latrine coverage has increased by three percent from the previous 64 percent. Water handling practices are not the best and more often than not, impact negatively on the health of the community during harvesting, treatment and storage.

3.4 Market performance

3.4.1 Market operations

The main markets in the county are Lamu Island, Mpeketoni and Mokowe. Key market outlets are functional. The markets play a crucial role towards realization of the accessibility pillar of food security in terms of availing the food and income from the sales of food and other commodities, farm produce (mainly cash crop) and livestock. The county has no organized markets for livestock. Majority of the communities in all the livelihood zones depended on imported food supplies from outside the county during this period.

3.4.2 Maize prices

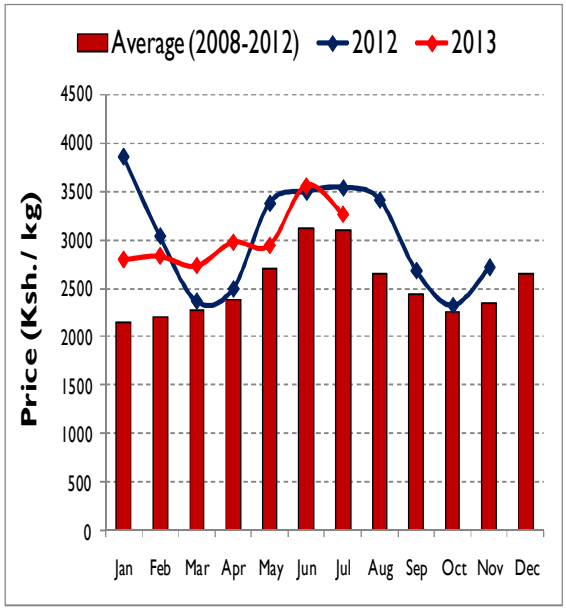

Figure 3: Maize price trends

A 90-kg bag of maize is currently retailing at an average of Ksh. 3,260 (July 2013) translating to Ksh. 35 per kilogram. Generally, maize prices have consistently remained above Long Term Average possibly as a result of the flooding effect on most crops. The long term average price for maize is Kshs 3,100**.**

3.4.3 Livestock prices

Livestock prices remained high in most areas. Prices for goats averaged at between Ksh 2,700 and Kshs.3500 which is above the long term average of Ksh 1,782. This can be attributed to improved livestock body condition due to pasture and browse availability. However, in-migration of livestock from other areas can cause a major threat to pasture availability within the county through depletion.

3.4.4 Terms of trade (TOT)

Terms of trade in August 2013 were less favourable than the same period last year for households could currently purchase 42 kilograms of maize compared to 64 kilograms in February. The terms of trade are still lower than the five-year average as normally a household would purchase 50 kilograms of maize with proceeds from the sale of a goat across all livelihood zones. The county suffers from lack of operational livestock markets as pastoralists rely on middlemen to dispose off their livestock whose price offers are erratic hence affecting the terms of trade.

3.5 Health and nutrition

3.5.1 Morbidity and mortality patterns

The leading cases of morbidity for the general population as well as for the under fives in the county are Upper Respiratory Tract Infections (URTI), diarrhoea, diseases of the skin, pneumonia and clinical malaria in that order. Morbidity trends for both under fives and the general population increased during the period March to June 2013 for the first three diseases. Reduction in other morbidity cases may be as a result of increased health education, promotion of hygiene practices at household level (hand washing) and increase in food production in 2013.

3.5.2 Immunization and Vitamin A supplementation

Immunization coverage dropped in 2013 from 97 percent to 81percent in 2012; however coverage was above the recommended 80 percent national target. The coverage in 2012 was achieved as a result of mass campaigns and support from partners (AMREF, APHIA PLUS). Vitamin A supplementation has been ongoing though coverage is below 80 percent national target.

3.5.3 Nutrition and dietary diversity

The percentage of children at risk of malnutrition in July 2013 was 8.1 percent up from 7.9 percent in the previous month which is higher than the long term average of 4.9 percent. The number of underweight children was high especially in the month of January, February, April and May when the County received displaced families with children under-five years from Tana Delta. Most households are currently consuming two to three meals in a day which is considered normal at this time of the year.

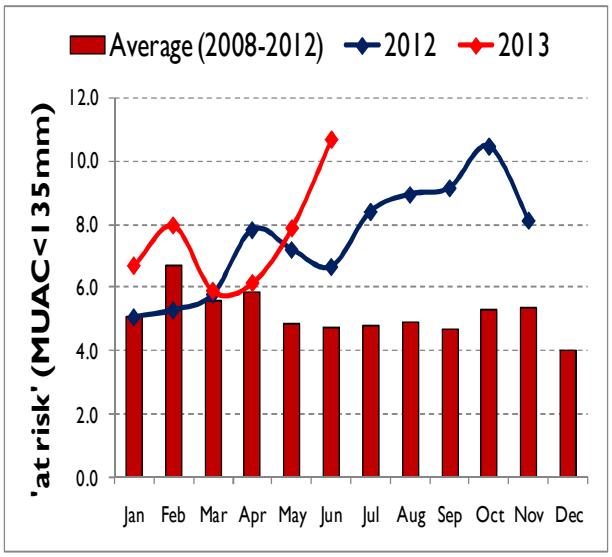

Figure 4: Percentage of children at risk

3.6 Education

3.6.1 Enrolment

Enrolment for both ECD and primary school has increased for the past one year which is attributed to sensitization campaigns on free primary school education, partly as a result of immigration into the county and the enforcement of the basic education act. Enrolment in lower levels is skewed to favour girls than boys while at higher levels, the trend is the reverse. This is as a result of a comparatively higher dropout rate in boys than in girls.

3.6.2 Drop out

There are minimal cases of drop-outs for ECD centers. Most of school drop-out in the county is temporary and occurs during farming and fishing periods of the season. Girls tend to be more at risk than boys as seen by the increase in drop-out trends resulting from child marriages and pregnancies. In Witu division, boys are at a higher risk of dropping out of school as they go in search of pasture in higher grounds as a result of the flooding that occurs during the long rains. There were cases where children were displaced in seven schools after flooding. This occurred in Majembeni, Mtondoni, Moa, Chalaluma, Pandanguo, Mavuno and Didewaride.

3.6.3 Transition and dropout rates

Transition rates from ECD to primary were at 98 percent and from class eight to secondary have remained at between 75 and 85 percent. Faza, Kizingitini and Kiunga divisions have lower transition rates with more girls transiting to the next level compared to boys due to quick money earned from fishing, while in Witu division more boys transit to the next level due to the emphasis given to boy child and early marriages to girls. There are minimal drop-out cases for ECD centers. This is due to the distances between homes and the ECD centres. Most of school drop-out phenomenon in the county is temporary and occurs mainly during farming and fishing periods of the season. More boys than girls drop out to go fishing or guard shambas against wildlife especially in the minority communities. Other reasons for early drop outs include early marriages, pregnancy, and continuous repetition and drug abuse. The de-worming programme is on-going in all public schools across the county which has contributed to improved health status and performance in schools.

3.6.4 School meals programme

The county has been under the home grown school feeding programme for the last two years. A total of 23 schools are currently under the school meals programme. This has improved the regular attendance, performance, retention and completion rates. Pupils miss food due to delays in funds disbursement. Influx of IDPs from Tana Delta has added pressure to the current schools under SMP.

3.7 Coping mechanisms

The county has an average coping index of 0.12. This implies that only 12 percent of households are employing reversible coping mechanisms. Some of the coping mechanisms being employed by the community include skipping of meals and burning of charcoal. No distress coping mechanisms are currently being employed.

3.8 Food security prognosis

It is projected that food security may remain stable for the next three to four months. Fish landing is currently very low due to the current strong winds which have impacted negatively on the fishing and fish breeding. Water for human and livestock as well as forage for livestock is estimated to last for two to three months. The situation may deteriorate if the short rains delay.

3.9 Ongoing interventions

Sub county	Intervention	Division	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
Agriculture							
Lamu East	Promotion of Drought – tolerant crops	Vumbe, Faza Division	2,000	MoALF NDMA, Faza Farmers Association	Reduction in food insecurity	347,000/	June 2013 – March 2014
Lamu East	Promotion of Drought – tolerant crops	Mangai, Basuba, Mararani	3,000	MoALF, NDMA, Farmers	Reduction in food insecurity		July 2012 – July 2013
Lamu East	Coconut establishment	Kiunga, Faza,	90	MoALF, Kenya Coconut Devpt Authority	Reduction in food insecurity		July 2012 – July 2013
Lamu East	Cashewnut establishment	Kiunga, Faza,	150	MoALF,	Reduction in food insecurity		July 2012 – July 2013
	Livestock						
Lamu	Vaccination campaigns	Kiunga, Faza	4,000	MOLD, NDMA	Protection against losses	700,000	2 weeks
Nutrition							

All Divisions in Lamu County	Vitamin A and Zinc Supplementation	ALL	16,131	MOH	Improved immunity hence less frequencies of illnesses resulting in having more hours to work	-	July 2013-June 2014
	Management of Acute Malnutrition (IMAM)	Amu, Mpeketoni, Faza, Witu		MOH,NHP/USAID, REDCROSS	„		
	IYCN Interventions (EBF and Timely Introduction of complementary Foods)	All facilities in the county		MOH	„		
	Iron, Folate Supplementation among Pregnant Women	All facilities in the county	„	MOH	Improved birth outcome thus saving family money to buy medication		
	Deworming	All	16,131	MOH			

3.10 Divisional ranking (from worst to best)

Division	Food security rank (1-10)	Main food security threat
Kiunga	1	Low precipitation, human-wildlife conflict, insecurity, mainly in the livestock farming zone
Kizingitini	2	Low precipitation, shallow soil, poor accessibility by sea due to increased turbulence
Faza	3	Low precipitation, poor accessibility by sea due to increased turbulence, water logging
Amu	4	High population in the island coupled with limited livelihood options and lack of access to alternatives
Witu	5	Mainly dependent on livestock but has also agricultural activities, pastures available
Hindi	6	Relies on agricultural activities and has plenty of pastures, area cosmopolitan and precipitation was high
Mpeketoni	7	Relies on agricultural activities and has plenty of pastures, area cosmopolitan and precipitation was high, area has irrigation potential

4.0 RECOMMENDATIONS

4.1 Monitoring required

- Conflicts over resources

- Pasture and browse condition
- Human wildlife conflicts
- Domestic and livestock water sources
- Nutrition status of children under five years
- Disease surveillance and vaccinations
- Prices of major food commodities

4.2 Recommended interventions

Subcounty	Intervention	Division	No. of beneficiaries	Proposed Implementers	Resources required	Available resources	Time Frame
Agriculture							
Lamu East	Nerica Rice farming	Vumbe, Faza, Mangai, Pate Island	1,200	Min of Agric, NDMA, Farmers	Seed, Tractor with plough & Planter, Labour, Skills, Land, Fertilizers, Fungicides & Pesticides	Tractor with plough, Labour, Skills, Land, Inadequate fertilizers, Fungicides & Pesticides	August 2013 – August 2014
Lamu East	Promotion of Drought – Resistant Crops	Vumbe, Pate Island, Kiunga, Basuba, Mangai, Mararani, Faza	1,400	Min of Agric, NDMA, Farmers, KARI	Seed & Cuttings, Tractor with plough, Labour, Skills, Land, Fertilizers, Fungicides & Pesticides	Tractor with plough, Labour, Skills, Land, Inadequate fertilizers, Fungicides & Pesticides	August 2013 – August 2014
Lamu East	Establishment of Cashew orchards	Vumbe, Pate Island	500	Min of Agric, NDMA, Farmers, KARI	Seedlings, Fungicides, Motorized sprayers, Land, Skills, Labour	Land, Skills, Labour	August 2013 – August 2014
Lamu East	Drip Irrigation promotion for High Value Horticultural crops production	Faza, Pate Island, Vumbe, Mararani, Basuba, Mangai, Kiunga	140	Min of Agric, Min of Water, NDMA, Farmers, Amiran Kenya	Net houses, Seeds, Spraying equipment, Fertilizers, Fungicides and pesticides, Market linkages, Skills, Labour, Land	Skills, Labour, Land	August 2013 – June 2014

Subcounty	Intervention	Division	No. of beneficiaries	Proposed Implementers	Resources required	Available resources	Time Frame
Lamu East	Construction of produce store at Vumbe jetty for grain handling	Vumbe	300	Min of Agric, NDMA, County Govt, Farmers, Min of Works	Construction materials, Designs and BQ's, Skilled Labour, Unskilled labour, Technical Supervision	Skilled Labour, Unskilled labour, Technical Supervision	August 2013 – June 2014
Livestock							
lamu	Vaccination campaigns	Witu, Mpeketoni, Kiunga	10,000	MOLD,NDMA	Vaccines Ccpp-10,000 @kshs 15 doses Cbpp-10,000 @kshs 15 doses Drugs-antibiotics-5000 doses DSAs 500,000 Fuel, 50,000	Vehicles	3 weeks
Lamu	Promotion of altenative livelihoods e.g bee keeping	Witu,hindi, kiunga, amu. Faza, kiwayu	6,000	MOLD, NDMA	Beehives 30No x6 @ kshs 5000 =900,000 Capacity building Equipments DSAs, 500,000 Fuel 100,000	vehicles	1 month
Lamu	Strategic pasture reserves	Faza amu	800 farmers	MOLD, NDMA	Haybarn-2000 bales capacity @kshs 1,000,000 2Haybaler @460,000 6 Cutters @ 50,000 Capacity building DSAs 500,000 Fuel 100,000	vehicles	1 month
Lamu	Desilting of watepans	Kiunga , koreni	400	Mold ndma	500,000		

Subcounty	Intervention	Division	No. of beneficiaries	Proposed Implementers	Resources required	Available resources	Time Frame
Nutrition							
ALL	Scale up Vitamin A Supplementation	ALL	16,131	MOH,UNICEF.APHIA PLUS,AMREF	Lunches,	Health worker, Chew	ALL
Kiunga,Witu, Mpeketoni, Amu,Hindi ,Kizingitini	Scale up screening of malnutrition in all hot spot areas	ALL	5,000	MOH & Partner	Transport, Lunches	,,	Kiunga,Witu, Mpeketoni, Amu,Hindi ,Kizingitini
Education							
Amu, Witu, Mpeketoni	Expansion of SMP to cover more vulnerable children		5,000 male, 5,000 female	MoE,NDMA			
Witu, Peketoni, Amu	Provision of inputs to YFC in schools to cultivate school arable land		3,000 male, 3,000 female	MoE,NDMA,other line ministries			
Fisheries							
Lamu County	Provision of pond liners	Witu and Mpeketoni Division	250 house holds	MoALF Development partners	Dam liners, Fingerlings Funds: 95,000	Technical staff	2013-2014
Lamu County	Modern fishing gear and outboat	Amu, Faza, Pate, Kizingitin	10 fishing vessel	MoALF Development partners	Funds: 5,000,000	Boats, Fishermen, Technical Staff	2013-2014

Subcounty	Intervention	Division	No. of beneficiaries	Proposed Implementers	Resources required	Available resources	Time Frame
	engines for	i	s in 10 Beach management units				

4.4 Recommended interventions (from 2013 SRA).

Division	Intervention	Location	No. of beneficiaries	Implementers /actors	Impacts in terms of food security	Cost in Ksh	Remarks ✓ Implementation status (ongoing, completed, not completed) % completion status
Lamu West	Post harvest management trainings and demonstration Irrigation Farming Technologies	Lamu County	18,850	Ministry of Agriculture	Safe stocked maize		Trainings and demonstrations done
Lamu West	Agriculture department to monitor the crop in the field and train farmers on crop Management				Reduce field crop losses and ensure adequate crop produce harvests		Done
Lamu West	The department to provide planting materials early enough				Ensure produce harvested		Complete
Lamu West	Water harvesting technologies for crop production to be devised				Maximize crop production and productivity through rain-fed agriculture		Techonologies promoted but low uptake
Lamu West	Food for work strategies be devised				Cushion resource poor farmers from food insecurity		Not achieved

Division	Intervention	Location	No. of beneficiaries	Implementers /actors	Impacts in terms of food security	Cost in Ksh	Remarks ✓ Implementation status (ongoing, completed, not completed) % completion status
					at HH level		
Water (SRA)							
Faza	Rehabilitation of more djabias	Faza	2,000 beneficiaries	DWO/ Horn of Africa	Improve water storage	6M	Complete
Kiunga/Kizingitini	Water trucking and desalination	Kiunga/ Kizingitini	Kiunga (5,000) Kizingitini (3,000)	DWO NDMA	Enhance provision of clean of water	0.5M	Complete
Water (Non-SRA)							
Faza	Vumbe/Faza water supply	Faza	2,500 beneficiaries	DWO, Iranian Government	Enhance clean source of water	30M	25% complete
Hindi	Bobo pipeline extension	Hindi	1,200 beneficiaries	World Bank, CDF, HIMWA	Enhance provision of clean and portable water	9.8M	Complete
Mpeketoni	Koreni Pipeline extension	Mpeketoni	1,500 beneficiaries	CDF	Enhance provision of clean and portable water	6M	Complete