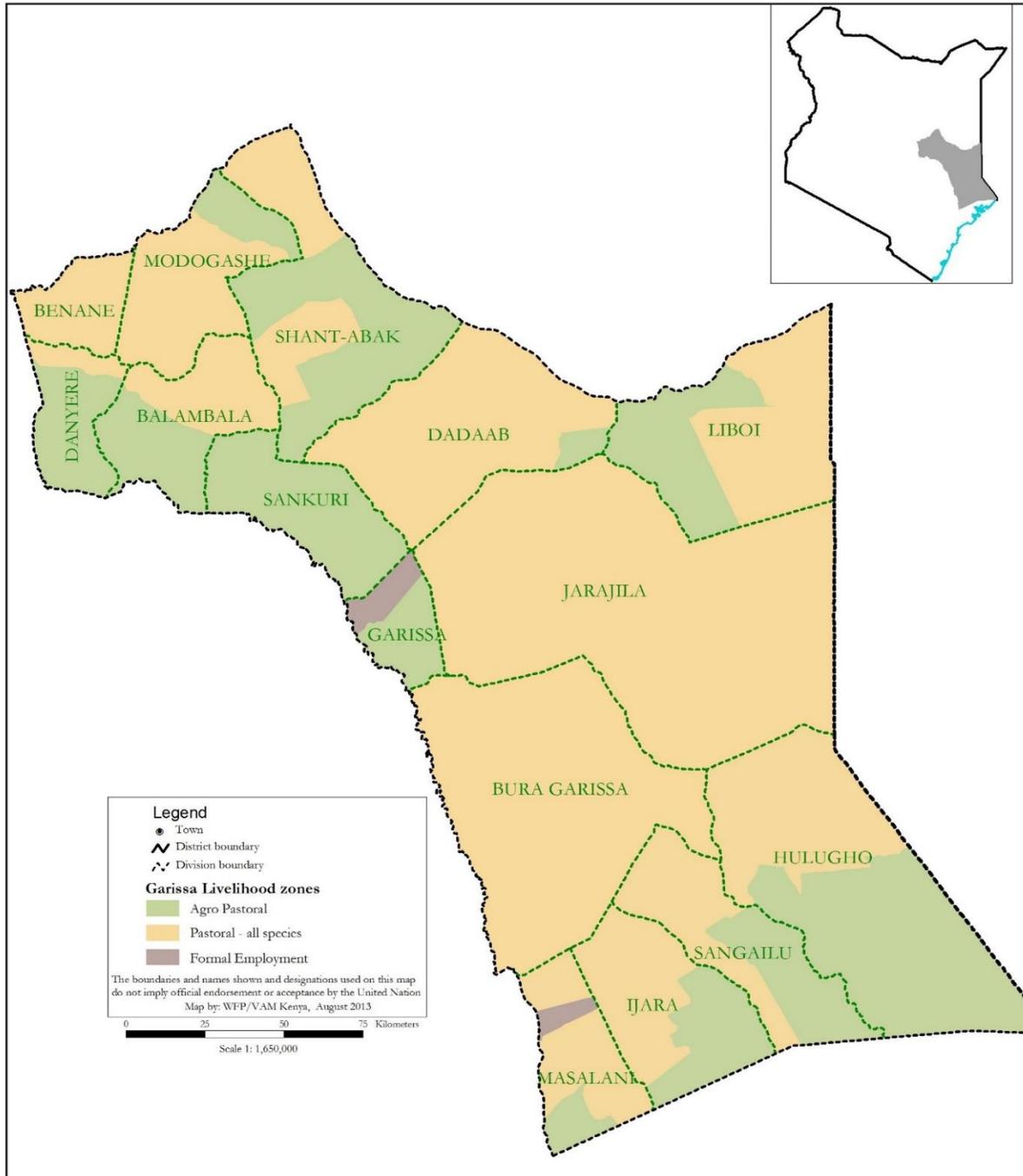


GARISSA COUNTY 2014 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



A Joint Report by the Kenya Food Security Steering Group (KFSSG)¹ and Garissa County Steering Group

February 2015

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1.0 INTRODUCTION

1.1 County Background

Garissa County is located in the North Eastern Region and borders Wajir County to the North, Tana River County to the West, Isiolo County to the North West, Lamu County to the South East and Republic of Somalia to the East. It covers an area of 44,174.5 kilometers square and is divided into seven sub counties namely; Garissa, Fafi, Lagdera, Balambala, Dadaab, Ijara and Huluhgo which are further divided into 30 wards. The population is estimated at 623,060 persons (Kenya National Bureau of Statistic, Census 2009). The County has three main livelihood zones

namely; Pastoral All Species livelihood zone, Pastoral Cattle livelihood zone and Agro-Pastoral livelihood zone which comprise of 85 percent, five percent and seven percent of the population respectively as shown in the Figure 1. Formal Employment/Business livelihood zone is three percent of the population. The sources of income in the Agro Pastoral livelihood zone are food crop production, livestock production and remittance/gift which contributes 50 percent, 15 percent and 10 percent income respectively. In the Pastoral All Species livelihood zone, livestock production and firewood/charcoal contributes 72 and 15 percent of the income. In the Pastoral Cattle livelihood zone, livestock production contributes 80 percent of income.

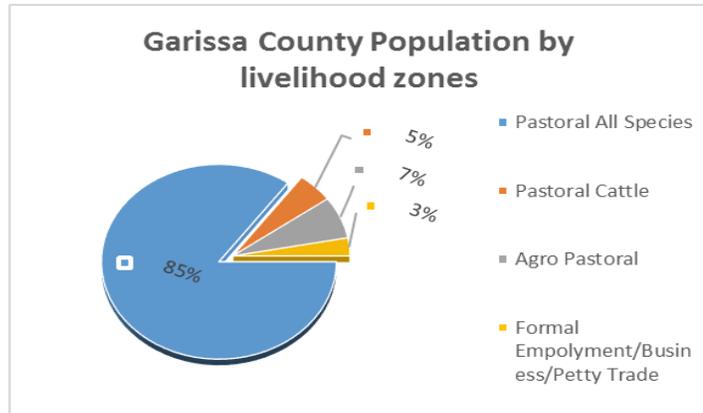


Figure 1: Proportion of Population by Livelihood Zones

1.2 Current Factors Affecting Food Security

Several factors have been observed to affect the food security in the County. They include: poor performance of short rains season, human wildlife conflicts, recurrent resource conflicts, perceived insecurities and prevalence of pests and diseases in crop and livestock such as tomato leaf miner (*Tuta absoluta*) in tomatoes, Foot and Mouth Disease, Lumpy Skin Disease, Contagious Bovine Pleuropneumonia, Contagious Caprine Pleuropneumonia in cattle, sheep and goats and Hemorrhagic septicemia in camels.

2.0 COUNTY FOOD SECURITY SITUATION

2.1 Current Food Security Situation

The County is currently classified under ‘Stressed’ food security phase (IPC Phase 2) across all livelihood zones. However, some parts in the pastoral livelihood zone including Balambala, Banane, Danyare, Modogashe and Shanta-Abak are classified under “Crisis” food security phase (IPC phase 3). The nutrition survey conducted in Lagdera, Dadaab and Balambala in February 2015, revealed Global Acute Malnutrition (GAM) rates of 15.2 (11.9-19.1 95% C.I) and Severe Acute Malnutrition (SAM) of 2.7 (1.7-4.3 95% C.I) respectively. The rates were above County GAM and SAM estimates of 14.6 percent and 2.9 percent as of June, 2014 with current GAM classification at critical levels. Garissa town and Masalani are classified under “Normal” food security phase. The poor performance of short rains resulted to decrease in maize, green grams

and cowpeas production by 17, 10 and six percent compared to the long term averages (LTA). In the Agro Pastoral livelihood zone especially in Abalati, maize crop dried off due low receding water for flooding. The current maize held by households decreased by 44 percent of the LTA due reduced production and poor storage facilities and most households have depleted their stocks. The terms of trade declined from 58 in December 2013 to 35 in same month 2014 which is associated with maize price remaining stable and declining goat prices. On food consumption score (FCS), 28 percent of households had borderline score compared to 33 percent in September 2014. Meal frequencies is two meals per day across the livelihood zones compared to normal of 2-3 meals per day. Milk consumption at household level has reduced from the normal two to three litres a day to 0.75 litres per day in Agro pastoral livelihood zone and from four to five litres a day to half a litre a day in Pastoral cattle livelihood zone. Water consumption is 20-30 litres per person per day compared to the normal 30-40 litres per person per day. The current maize prices is Ksh. 58 per kilogram compared to the LTA of Ksh.41. The proportion of children at risk with Mid Upper Arm Circumference (MUAC<135mm) Garissa was at 16.41 percent in January 2015 compared to 9.6 percent in 2014 same period. Households that consume lowest dietary diversity (≤ 3 foods groups) was 5.1 percent comprising of mainly sugar and cereals. The under-fives death rate and crude mortality rate was 0.48 deaths per 10,000 persons per day and 0.43 deaths per 10,000 persons per day respectively which is below alert thresholds of 2 deaths per 10,000 persons per day and 1 per 10,000 persons per day. The coping strategy index (CSI) for non-beneficiaries was 16 in both September December 2014 while the CSI for beneficiaries was 17 in December compared to 15 in December 2014. This is an indication that beneficiaries employed more frequently the coping strategies in December than in September 2014 due to deteriorating food security at household level.

2.2 Food Security Trends

According to 2014 long rains assessment the County was classified in the stressed IPC phase. The County remained under stressed phase during the short rains assessment 2015. In the Pastoral All Species Livelihood zones, water consumption is 20 litres per person per day while in the Agro-Pastoral livelihood zone water consumption is 30 litres per person per day which is normal at this time of the year; this has not changed since 2014 long rains assessment (LRA) due to water tracking services by the county government. Distance to water sources for domestic range between 0.5 and 15 kilometers while waiting time is ranging below half an hour to three hours at the water kiosks which has not changed from 2014 long rains assessment. Milk availability in Pastoral Cattle livelihood zone, reduced from one litre of milk to half a litre compared to 2014 long rains assessment period. Market operations continued without any disruption though perceived insecurity and closure of cross border trade with Somalia has hindered the supplies to market resulting to high food prices. Maize prices remained relatively stable at Ksh.58 per kilogram. The terms of trade were irregular due to changing from 62 kilograms in November, 35 kilograms in December and 49 kilograms of maize per goat in January 2014. The unstable behavior of the terms of trade is due to fluctuating prices of goats versus a more relative stable maize price. The proportion of children at risk with Mid Upper Arm Circumference (MUAC) of less than 135 millimeters in Garissa increased from 14.76 in July 2014 to 16.41 percent in January 2015. The current GAM rates has increased from 14.6 percent (Serious classification) in June, 2014 to current 15.2 percent (critical classification) in February, 2015. In Pastoral All Species Livelihood zones, 27 percent of households had a poor food consumption score in May 2014 compared to 13 percent in May 2013 while 28 percent of

households had borderline score compared to 33 percent in the month of September 2014 and six percent in May 2014.

2.3 Rainfall Performance

The onset of rains was late in the third week of October, compared to the normal of first week of October. Spatial distribution was uneven with areas in the Northern Garissa receiving 25-50 percent of the normal while most areas in the Southern Garissa receiving 50-75 percent of normal. Other areas such as Galmagala, Kamuthe and Mansabubu received 90-110 percent of the normal while areas like Hara and Fafi received 125-140 percent of the normal. Central Garissa and Benane received 5-25 percent of normal as illustrated in the Figure 2. Temporal distribution was poor in most parts. Cessation was early in the third week of December compared to normal of first week of January.

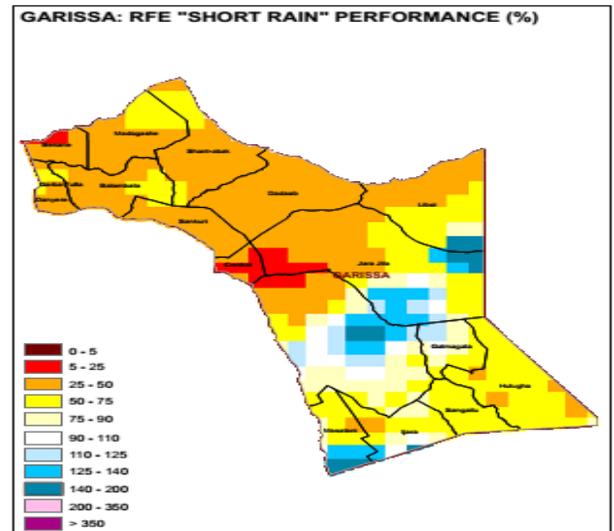


Figure 2 Rainfall performance

2.4 Current Shocks and Hazards

The current shocks and hazards in the County include; poor performance of short rains season, resource based conflicts especially along the riverine and watering points, human and livestock diseases, increasing food prices due to low crop production, closure of cross border trade and recurrent insecurity along the Kenya-Somalia border.

3.0 IMPACT OF RAINFALL PERFORMANCE, SHOCKS AND HAZARDS

3.1 Crop Production

The short rains season is more dependent for crop production in the County. The main crops grown in the County are maize, green grams and cowpeas. Other crops grown are bananas, mangoes and tomatoes. In the Agro Pastoral livelihood zone bananas, tomatoes and mangoes contributes to 40, 25 and 12 percent for cash income respectively while contributing to 15, 10 and one percent for food respectively too. In the Pastoral All Species livelihood zone, cowpeas and green grams contributes seven and 10 percent for cash income and food respectively while in the Pastoral Cattle livelihood zone, cowpeas contributes to five percent for food and cash income.

3.1.1 Rain fed crop production

The area under maize, green grams and cowpeas increased by 50, 75 and 85 percent of the Long Term Averages (LTA) which is attributed to increased sensitization and awareness creation on modern crop production in the arid and semi-arid areas, County Government support in farm inputs such as drought tolerant maize, cowpeas and green grams seeds and agrochemicals and implements for spraying. Production of maize, green grams and cowpeas decreased by 17, 10 and six percent respectively compared to the LTA as shown in Table 1 below. The reduction of yields was mainly due to poor performance of short rains season and destruction of crops by wildlife especially in the areas in Agro Pastoral livelihood zone located along the River Tana.

Table 1: Rain-fed crop production

Crop	Area planted during 2014 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2014-15 Short rains season production (90 kg bags) Actual	Long Term Average area production during the Short rains season (90 kg bags)
Maize	180	120	1500	1800
Green Grams	140	80	350	390
Cowpeas	120	65	300	320

3.1.2 Irrigated crop production

Area under bananas, mangoes and tomatoes increased by 47, 44 and 14 percent of the LTA which is attributed to capacity building and support by the County Government in the provision of farm inputs such as horticultural seeds and seedlings (bananas tissue culture and crafted mangoes), agrochemicals and better market prices in Nairobi and Refugee Camps in Dadaab and irrigation pump sets. National Government through National Agriculture, Livestock and Extension Project supported the installation of solar powered technology that has boosted farmer's savings especially on fuel cost.

Production of bananas and mangoes increased by 58 and 67 percent respectively compared to the LTA as illustrated in Table 2 below, as result of irrigation interventions by various stakeholders in supporting farmers in opening up more land. Kenya Red Cross supported the development of 200 acres for irrigation in 10 schemes in Saka ward, Pastoral Girls Initiatives (PGI) also provided farm inputs (seeds) in Abalati in Ijara, and Adeso supported value addition in rice in Balambala. The County Government also provided more support in form of horticultural seeds, seedlings, agrochemicals spraying implements and irrigation pump sets. National Government through National Agriculture, Livestock and Extension Project supported the installation of solar powered technology. Production for tomatoes decreased by 62 percent of the LTA due to infestation of tomato leaf miner (*Tuta absoluta*) and lack of access on recommended agrochemicals for the control of the pest.

Table 2: Irrigated crop production

Crop	Area planted during the 2014 Short rains season (Ha)	Short Term Average area planted during Short rains season (Ha)	2014-15 Short rains season production (90 kg bags/MT) Projected/actual	Long Term Average production during 2014 Short rains season (90 kg bags)
Bananas	588	400	9480 MT	6000 MT
Mangoes	505	350	7535MT	4500 MT
Tomatoes	240	210	900MT	1450MT

3.1.3 Maize stocks

The stocks held by households decreased by 44 percent of the LTA as illustrated in the Table 3 below as result of reduced production over consecutive season and lack of storage facilities. Stocks held by the traders and millers decreased by 70 and 64 percent of the LTA due to preference to rice as well as deteriorating infrastructure which increases the transporting cost.

The volatile market prices has been influenced also by closure of cross border trade with Republic of Somalia. National Cereals and Produce Board (NCPB) stocks increased by 300 percent mainly as it serves as a national strategic grain reserves. The current available stocks in the County are expected to last till end of January compared to normal of one to two months.

Table 3: Maize stocks held

Maize stocks	Quantities held currently (90-kg bags)	LTA quantities held (90-kg bags) at similar time of the year
Households	250	450
Traders	845	1,200
Millers	1,500	2,350
NCPB	18,007	4,500
Total	20,602	8,500

3.2 Livestock Production

The major livestock species are cattle, sheep, goats, camels and a few donkeys. In the Agro Pastoral livelihood zone, livestock production contributes to 15 percent to cash income while in the Pastoral All Species livelihood zone, livestock production contributes to 72 percent to cash income. In the Pastoral Cattle livelihood zone, livestock production contributes to 80 percent to cash income.

3.2.1 Pasture and Browse

Pasture condition is fair along the riverine in the Agro Pastoral livelihood zone. High concentration of livestock is exhibited especially at Dihiley to Maalimin Westwards to Dinas and Dalehele water pan and at Waiyama Jibril exerting pressure on water source. Pasture is expected to last for one to two months in the Agro Pastoral livelihood zone while in the Pastoral Cattle livelihood zone there are few pockets of pasture which is expected to last for less than one month. In the Pastoral All Species livelihood zone, pasture condition is poor and of low quality especially in Ladgera, Balambala, Sankuri, Garissa, Dadaab and Liboi. In some areas such as Bura, Hulugho and Ijara which received some rains in the Pastoral Cattle livelihood zone, condition is fair. Browse condition is fair to poor and may last up to the end of February across all livelihoods.

3.2.2 Livestock Productivity

3.2.2.1 Livestock Body Condition

The body condition for goats and sheep are good while that of cattle fair across all the livelihood zones because livestock have been concentrated near water pans. The body condition for camel is good across all livelihood zones. Body condition of cattle is expected to deteriorate with the poor condition of pastures and increased trekking distances to water especially in the Pastoral All Species and Pastoral Cattle livelihood zones.

3.2.2.2 Milk availability and consumption

Milk availability at household level varies across the livelihoods. Households that are dependent on camel produces 1.5-2 litres of milk compared to normal of 5-6 litres. In the Pastoral Cattle livelihood zone, households are getting 0.5 litres of milk compared to normal of 4-5 litres. Milk

consumption at household level is 0.75 litres per day compared to normal of 2-3 litres. Most households supplement consumption with processed milk or powdered milk especially in Garissa Central regions. The current price of milk is Ksh.60 for 0.75 litres of milk compared to normal of Ksh.30-40 for 0.75 litres of milk. In the areas of Bura in the Agro Pastoral livelihood, milk prices is Ksh.70-80 for 0.75 litres of milk.

3.2.2.3 Tropical Livestock Units (TLUs) and Birth Rates

The TLUs in the Agro Pastoral livelihood zone is 5-5.5 for the poor households compared to normal of 12.5-13.0 while 13.0-24.5 for medium households compared to 5.5-6.0. In the Pastoral livelihood zones, the TLU, is 1.0-1.5 while for medium households is 2.0-3.0 compared to 6.0-8.0 TLUs. Variations of average number of livestock has been reported mainly as result normal cycle of migration, births mortalities and sales. Livestock birth rate across all the species has declined due to fair to poor livestock body condition.

3.2.3 Water for Livestock

Water sources for livestock currently include; water pan, spring in Benane, boreholes, shallow wells and piped water. Several water pans in the Pastoral All Species livelihood zone, have dried up and large herd of livestock has migrated from Dihiley to Maalimin Westwards to Dinas and Dalehele, Gurufa, Saka, Modogashe and Dertu to Dujis and Waiyama Jibril lagga which has high concentration of livestock. The current trekking distance, from pastures to water points in Agro Pastoral and Pastoral livelihood zone has increased to 10-12 kilometers compared to 5-8 kilometers in normal season. Water frequency for different livestock species such as cattle, goats and sheep is every two to three days compared with daily in normal seasons. Camel water frequency has increased to five days compared to every three days across the livelihoods. Distance to water points is expected to increase further with livestock concentrating in a few water points and which is likely is to result in conflicts before the long rains season.

3.2.4 Migration

Migration of livestock within the County has been experienced especially in search of water and pasture. A large herd of livestock has moved to Dujis, Baraki, Fafi, Abakaile, Yumbis and Harbole in the Pastoral All Species and Pastoral Cattle livelihood zones and along the River Tana in the Agro Pastoral livelihood zone. Herds of livestock have migrated to Tana River County to Tana Delta Sub County. Some in migration have also been reported in Garissa and Balambala towards Fafi and further south of the County. In ward migration has also been observed from Wajir County to Gurufa areas of Garissa County. Conflicts has been reported at Quaobey due to accessing of pasture and water, though a peace meeting was held.

3.2.5 Livestock Diseases and Mortalities

Cases of Hemorrhagic Septicemia in camel has been reported especially in Waiyama Jibril while Anthrax has also been reported in Liboi, Dama Jelev, Welmerer and Kulan. Mange, Trypanosomiasis, Nasal bolt and tick infestation have also been seen in livestock. Lumpy Skin Diseases, Caprine Pleuropneumonia (CCPP), Contagious Bovine Pleuropneumonia (CBPP), Sheep and Goat Pox have also been reported especially in Hulugho, Ijara and Sangailu. Also suspected cases of Foot and Mouth Disease has been reported.

3.3. Water and Sanitation

3.3.1 Major water sources

Poor performance of rains in the consecutive seasons has led to water sources depended upon by community members drying up and leading pressure on the few available sources. Major sources of water for domestic and livestock in the county are boreholes, water pans, Benane springs and the Tana River. At this time of the year the county normally depends on 191 water points (93 boreholes, 81 water pans and 17 river fed water supplies) out of which only 121 water points are currently holding water (89 boreholes, 15 water pans and 17 river fed water supplies) which is about 63 percent of the normal. The worst hit areas include; Nunow, Lago, Hagarjarer, Benane, , Saka Junction area, Balambala junction, Shimbirey, Abdisemet, Togob, Libahlow, Santa Abaq, Gurufa, Modogashe and Sedhagose all in the Northern and Fafi Plains, Galmagalla Southern parts of the county. Several centers are currently under water trucking programme as a result of their water sources drying up such as Diisow 1, Hajjimey, Dekwardei, Abdiyale, Abajot, Sambir, Dadeere and Fafi centre in Fafi Sub County while Diisow 11 and Medina in Garissa Sub County, Hagarbul, Abdigaab and Alango Arba in Dadaab Sub County, Auliya, Ohiyo, Balambala and Saka junctions, Togob and Shimbirey in Balambala Sub County while Hagarjarer, Kiwanya yare, Maalimin and Afwein primary schools, Kadaso, Reeg dam, Aqal Aar, Dinas, Fadweine, Sheikh Hajir, Barfin, Wayama Jibril, Elan, Gailab, Dahlhel, Lebile, Ahmed Tukale and Languyata in Lagdera Sub County. Operational water pans are predicted to dry out in a month's time (end of February). The non-operational boreholes are as a result of breakdown and lack of adequate maintenance. The supply of water in the river fed water supply systems is indefinite as long as the river Tana is flowing.

3.3.2 Distance to water sources

The distance to water sources has increased in all livelihood zones except for formal employment livelihood zone. Distances increased from the normal between 0.5 and 5 kilometers to 0.5 and 15 kilometers in Pastoral All Species and Pastoral Cattle livelihood zones, while in Pastoral zones the normal trekking distances ranges between 0.5 and 5 kilometers and 0.5 and 2 kilometers for Agro Pastoral livelihood zone. Increased trekking distances to water is due to the drying up of water pans and increased distances in search of the diminishing pasture.

3.3.3 Waiting time at the source

The current waiting time at the water source ranges between 10 minutes and three hours for domestic use and between 10 minutes and six hours for livestock compared to the normal 10 minutes and one hour for domestic and 10 minutes and three hours for livestock.

3.3.4 Cost of water

Currently cost of water varies across livelihoods, depending on the location of the facility and the source of water. The cost of water in the boreholes, is Ksh.3 per 20 litres jericane. For livestock the cost of water is Ksh.5 per cattle, Ksh.1 per goat/sheep and Ksh.10 per camel. Along River Tana, water for livestock is free while water for domestic use costs Ksh.5 per 20 litres jericane. Some areas like Ashadin and Geillab where donkey carts are used the 20 litres jericane of water costs between Ksh.20 and 25 respectively.

3.3.5 Water consumption

The current water consumption varies across the livelihood zones to another but averagely the consumption ranges between 20 and 30 litres per person per day compared to 30 and 40 litres in a normal situation. This may reduce further as more water sources dry up and trekking distances increase.

3.3.6 Hygiene and Sanitation

Increased awareness and training on the use of sanitary facilities has reduced the level of contamination of water sources. The main contaminant of water sources is open defecations attributed to low latrine coverage and runoff water collected at the water pans during the rain seasons. The caving-in of a few of the available latrines and sharing of water points by both livestock and human population also contribute to contamination of water sources. The open storage tanks are subject to contamination as birds often fall into them and decay, wind pollution consumption of untreated water as well as poor water handling practices are contributing factors to further contamination across all livelihood zones. Nutrition survey in June 2014, revealed that 40.9 percent of households use unsafe water sources for drinking and further 74.6 percent of households do not treat water before consumption. Majority of households use chemicals (chlorine), 9.8 percent boil water, 6.1 percent use traditional herbs, 11.14 percent use pot filters and 4.6 percent wait water to settle. Low water treatment at household level has been linked to increased incidences of watery diarrhea among the under-fives. Hand washing, only 47.2 percent of the households use soap and water. The latrine coverage was at 34.8 percent.

3.4 Markets and Trade

3.4.1 Market Operations

The main markets are Garissa, Balambala, Dagehaley, Hagadera, Danyere and Dadaab. Other markets include; Sangailu, Masalani, Ijara, Hulugho and Modogashe. In Ijara Sub County the market was closed in 2006 due to outbreak of Rift Valley Fever and has never been revived and operationalized. Perceived insecurities in the areas around Boni forest in Ijara Sub County led to reduced market supplies by hindering the transportation of food items to various market hence increasing their prices. The major food items traded in the market include; posho/maize, rice, beans, wheat flour, green grams, sugar and milk. Major livestock traded included goats, sheep, cattle and camel. The traded volumes for food items in the market was stable mainly as food items is transported from Thika, Mwingi and Nairobi. Long distances and poor road networks has contributed to high food prices. Other food items like rice come from Mombasa. Livestock traded volumes have reduced due to migration of livestock keepers, presence of notifiable diseases such as Lumpy Skin Disease and Foot and Mouth. About 70 percent of the households in the Pastoral All Species and Pastoral Cattle livelihood zones depends on the market for food supplies. The operations in the markets are expected to continue normally for the next three months.

3.4.2 Market Prices

3.4.2.1 Maize Prices

Maize price in January 2015 was Ksh.58 per kilogram compared to the LTA of Ksh. 36 per kilogram as shown in the Figure 3. The price increase was mainly attributed to reduced maize production, destruction of maize crop by wildlife and low market supplies hindered by perceived insecurity and closure of cross border trade. Maize prices are expected to continue increasing in the next three months due to low market supplies hindered by recurrent insecurities issues.

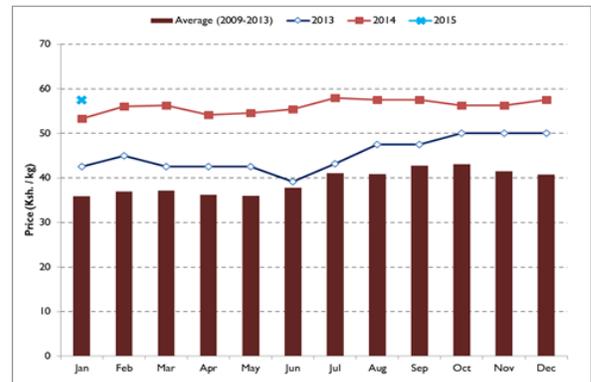


Figure 3. Maize prices in the County

3.4.2.2 Goat Prices

Goat prices increased marginally from Ksh.2732 in July 2014 to Ksh.2839 in January 2015 as shown in Figure 4. Increase in market prices were as result of current good body condition since browse is still good. High prices were recorded in agro pastoral livelihood zone. The prices are expected to go down in the next one month as pasture and browse depletes.

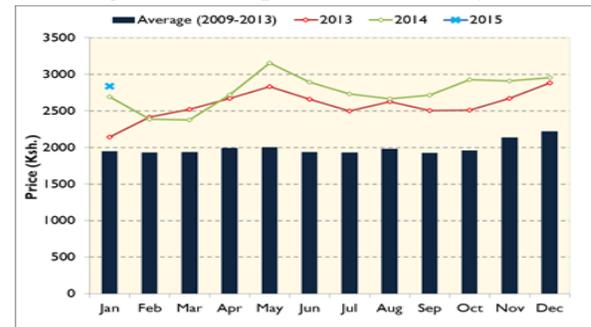


Figure 4. Goat prices in the County

3.4.2.3 Terms of Trade

The terms of trade declined from 52 in July 2014 to 42 in January 2015 which is mainly attributed to relative increase in maize price with slightly increasing goat prices as illustrated in the Figure 5. Sale of one goat was able to purchase 42 kilograms of maize in January 2015 compared to 64 kilograms of maize during similar period in 2014. Terms of trade are likely to remain unfavorable until the long rains starts.

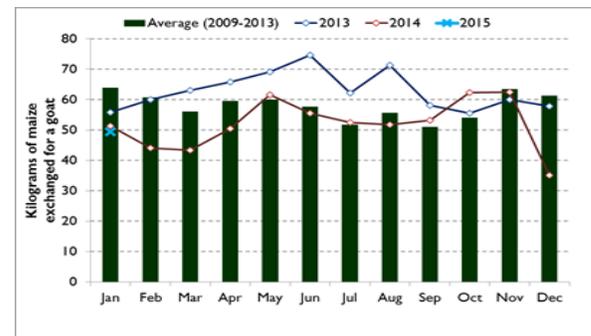


Figure 5. Terms of trade in the County

3.5 Health and Nutrition

3.5.1 Morbidity and Mortality Patterns

The top five diseases among under-fives include; acute respiratory infections, diarrhea, pneumonia, ear infections and Urinary Tract infections while in general population leading diseases are: Upper Respiratory Tract Infections (URTIs), Urinary Tract Infections (UTIs), skin diseases, pneumonia and typhoid fever. The under-fives death rate and crude mortality rate was 0.48 deaths per 10,000 persons per day and 0.43 deaths per 10,000 persons per day respectively which is below alert thresholds of 2 deaths per 10,000 persons per day and 1 per 10,000 persons per day. High cases of epidemic and water borne diseases resulted to 13 deaths mainly due to diarrhea and malaria in July to December 2014 compared to nine deaths in the same period in 2013. No epidemics were reported in the reference period.

3.5.2 Immunization and Vitamin A supplementation

Immunization coverage for the fully immunized child between the months of July and December 2014 was 64 percent which is below national target of 80 percent and which is 16 percent higher than in April 2013. The increment is attributed to additional health staff by the county government and routine outreaches supported by the partners. Vitamin A supplementation for children less than one year old was 49 percent in July to December 2014, a decreased from 70 percent in April 2013 which was due to stock out for vitamin A 1000IU experienced in the County and supplementation was not scaled up during Malezi Bora week. Supplementation of Vitamin A for children aged 6-11 months in June 2014 was 71.6 percent compared to 84.7 percent in April 2013 while that for children aged between 12-59 months was 30.30 percent in June 2014 compared to 75.5 percent in April 2013. The decrease is attributed to poor documentation in most health facilities. Deworming for children aged 12-59 months in June 2014 was 59.8 percent compared 61.10 percent in April 2013.

3.5.3 Nutrition Status and Dietary Diversity

The rapid nutrition survey conducted in Lagdera, Dadaab and Balambala in February 2015, revealed Global Acute Malnutrition (GAM) rates of 15.2 (11.9-19.1 95% C.I) and Severe Acute Malnutrition (SAM) of 2.7 (1.7-4.3 95% C.I) respectively. The rates were above County GAM and SAM estimates of 14.6 percent and 2.9 percent as of June, 2014 with current GAM classification at critical levels. According to the NDMA, the proportion of children under-five years at risk of malnutrition (Mid Upper Arm Circumference <135 millimeters -MUAC) in Garissa was at 16.41 percent in January 2015 compared to 9.6 percent in 2014 as shown in the Figure 6. The January 2015 MUAC at risk rates were above LTA of 10.1 percent. According to December 2014, food consumption score (FCS), 28 percent of households had borderline score compared to 33 percent in September 2014 and six percent in May 2014. Meal frequency varies across the livelihoods with most households consuming 1-2 meals per day compared to normal 2-3 meals per day. Children consumed 3-5 meals per day inclusive of snacks. Households that consume lowest dietary diversity (≤ 3 foods groups) was at 5.1 percent which comprises of mainly sugar and cereals mainly attributed to poor performance of short rains, low accessibility of food items and low diversification livelihoods.

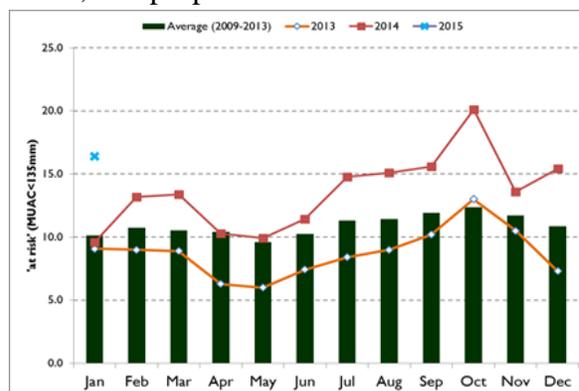


Figure 6. Child malnutrition status in the County

3.6 Education

3.6.1 Enrolment

The county has 215 public and 62 private Early Child Development Centres (ECD), 159 public and 51 private primary schools. The total enrolment in schools was 41,364 boys and 27,347 girls in 2014 compared to 41,362 boys and 27,295 girls in 2013. Some pupils are enrolled in low cost boarding schools and mobile schools, which are also under the Regular School Meals Programme (RSMP) with a total population of 14,137 pupils (13,179 boys and 1,138 girls). There was no significant increase in enrolment between 2013 and the close of 2014 which is

associated with migration of households in search of pasture and water. Enrolment was expected to increase significantly after the enrolment drive conducted towards the end of 2013 by the Education department, though out migration of households affected the general enrolment in schools.

3.6.2 Drop out

Drop-out rates are 33 percent. For both boys and girls, dropout rates remained at 18 and 32 percent respectively as reported in the Long Rains Assessment 2014. Migration of households in search of pasture and water, madrassa lessons, lack of basic social amenities and negative cultural practices like early marriages are some factors contributing to drop outs. Pastoral All Species livelihood zones of Fafi, Lagdera and Daadab recorded the highest rates of 43, 40 and 25 percent respectively due to herding activities practiced by the boys as well as migration with parents. Agro pastoral livelihood zones of Hulugho and Balambala reported dropout rates of 16 and 12 percent respectively with lowest rate of 11 percent reported in formal Employment livelihood zone.

3.6.3 Transition Rates

Transition rate from primary to secondary schools has gradually been increasing from 80.16 percent in 2013 to 90 percent in 2014. This is attributed to the cash transfer programme by Save the Children which targets parents with more than two children in public schools and the Department of Children supporting orphans and vulnerable children with bursary to secondary schools.

3.6.4 School Meals Programme

All public primary schools and their attached ECD Centers are under Regular School Meals Programme (RSMP) by the Ministry of Education and World Food Programme. The regular meals programme by GoK/WFP covers 386 public primary schools and attached ECD centers supporting 97,191 pupils (58,433 boys and 38,758 girls) in 2014. Delays in food delivery, lack of water, fire wood, shortage of cooking utensils and inability to employ/retain school cooks for lack of remunerations are some of the factor that results to pupils missing meals. RSMP results to attracting and retaining pupils in schools, reduces absenteeism, improves on nutritional status of pupils and finally improving the performance of academics and co-curricular activities. However, the SMP is currently not in ECDs that are not within regular primary schools and this may affect the enrolments and attendants in those ECDs.

3.7 Coping Mechanisms

The current coping strategies being employed by households include skipping of meals, reduction in number and size of meals, charcoal burning especially in the Southern parts of the County and engagement in casual labor for household around the Central region of the County. In the Pastoral All Species and Pastoral Cattle livelihood zones, credit/borrowing, migration and division or separation of herds is mainly practiced. Remittance contributes 10 percent in Agro Pastoral livelihood zone, while in Pastoral All Species livelihood zone, it contributes to two percent. The coping strategy index (CSI) for non-beneficiaries was 16 in both September December 2014 while the CSI for beneficiaries was 17 in December compared to 15 in December 2014. This is an indication that beneficiaries employed more frequently the coping

strategies in December than in September 2014 due to deteriorating food security at household level.

3.8 Ongoing Interventions

3.8.1 On-Going Food Interventions

Currently, 386 schools are under the Regular School Meals Programme supported by the Ministry of Education and World Food Programme benefiting 97,191 pupils (58,433 boys and 38,758 girls). General Food Distribution (GFD) that is implemented by Kenya Red Cross is targeting 83, 500 beneficiaries while Food for Assets (FFA) is targeting 49,900 beneficiaries. World Food Programme (WFP) and the Ministry of Health on Supplementary Feeding Programme (SFP) are supporting 3,600 beneficiaries and 6,000 beneficiaries on Protection Ration.

3.8.2 Non Food Interventions

Table 1: On-Going Medium to Long Term Interventions

Sub County	Intervention	Location	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
Agriculture							
All Sub Counties	Distribution of drought tolerant seeds and agro-chemicals	Countywide	2300	County Gvt/MOA	Improve food Security	6.5 M	Nov-Jan2014
Garissa, Balambala Ijara & Fafi	Procurement of 40 Irrigation pump sets for farmers and Development of 200 acres for irrigation for 10 Schemes, Installation of Solar powered pump set technology. Revival of irrigation schemes	All riverine sub counties Kasha Sankuri and Gababa	3300	County Gvt/National Govt/MOA/KR CS	Improve food Security and incomes. Reduce cost of irrigation.	105 M	2014-2015
Garissa and Ijara	Excavation of 7000m ³ water pan and Installation of drip lines for crop production. Riverbank protection and conservation-4 Km	Bothai	2200	Njaa Marufuku Kenya and National Water Corporation/W ARMA/MOA	Improved food security Flood mitigation	12.2 M	2014-2016
Livestock							

County Wide	Disease surveillance, Livestock vaccination, Deworming	67 sub locations	152,073 herds of livestock 111,071 small stock 7941 camels 27,061 cattle (623 House hold)	Vet dept	Reduced livestock loses	18.0M	2014-2015
Fafi, Balambala, Garissa	Fodder production & conservation	Balambala, Sankuri, Central Bura		livestock production dept	improve forage situation	1.0M	2014-2015
Education							
County Wide	Installation of water gutter (Water harvesting structures)	County wide	63 schools	Northern Water Service Trust Fund	Improve s water accessibility for pupils at school	12.6M	2014-15
Fafi, Balambala, Lagdera, Dadaab	Food for fees	12 secondary schools	50	NDMA/MOEST	Improve s education (retention)	3.0M	2014-15
Water							
Balambala Danyare/Siqley Hadley, Shabah, Bulla Salam, Jiroto, Hara Jambelle, Abaqdera, Mudey, Hulugho Liboi Hagal Jarir	Construction of new water supply	Banane, Danyeri, Balambala Saka, Sankuri, Kamuthi, Jambelle, Nanighi, Central, Hara, Hulugho Liboi Banane	25,900	County Government and MEWNR	Improves water access and quality	480.0M	2014-15
Sabena, Fadweyne, Bahuri, Maalimin	Drilling and equipping of borehole & extension of pipeline	Sabena, Fadweyne Dertu, Maalimin Amuma	18,283	County Government and MEWNR	Improves water access and quality	22.0M	2014-15

Masalani, Garissa	Rehabilitation/argu mentation & extension of water supply to Modika	Masalani Central	12,000	County Government and MEWNR	Improves water access and quality	240.0M	2014-15
Health and Nutrition							
County wide	Management of Acute Malnutrition (IMAM)	County wide	16,900	MOH Partners and	Prevent mortality in children	246M	2014-15
County wide	Vitamin A Supplementation	County wide	115,758	MOH Partners and	Improves growth	0.6M	2014-15
County wide	IYCN Interventions (EBF and Timely Intro of complementary Foods)	County wide	9296	MOH Partners and	Improves immunity	10.6M	2014-15

3.9 Sub County Ranking

Table 5: Sub Counties Food Security Ranking (Worst to Best)

Sub County	Food security rank (1-10)	Main food security threat (if any)	Remarks
Lagdera	1	Poor rainfall performance, Stress due to inadequate water supply, Increased out migration of human and livestock, Poor pasture and browse situation, poor road infrastructure, high concentration of livestock, high incidences of livestock diseases, perceived conflicts, High malnutrition cases	
Balamabala	2	Poor rainfall performance, perceived conflicts, poor pasture/No pasture, high concentration of livestock, poor road infrastructure,	
Hulugho	3	High malnutrition cases, High livestock disease incidences, Outward livestock migration	
Dadaab	4	Depressed rainfall, High malnutrition, Increased distance to watering points	
Fafi	5	Poor rainfall performance, fair pasture and browse situation,	
Ijara	6	High incidences of livestock diseases, Market Price fluctuation, Depressed rainfall performance, Fair pasture conditions especially along the River Tana	
Garissa	7	Moderate livestock market price fluctuations, moderate stress due to inadequate water supply	
Very Good (9-10)	Good (7-8)	Fair (5-6)	Poor (3-4) Very Poor (<2)

4.0 FOOD SECURITY PROGNOSIS

4.1 Prognosis Assumptions

The food security outcomes in the next six months are influenced by the following assumptions:

- It is expected the March-May long rains to start on time, have typical spatial and temporal distribution, and near average cumulative rainfall.
- Rangeland resources are expected to deteriorate faster than normal between January to March dry season, mainly due to low rainfall during the last season, early cessation of short rains and the likely warmer than normal temperature during the dry season. However, after March, the resumption of rains is likely to lead to normal improvement of the rangeland resources, which is expected to lead to increased livestock productivity.
- Maize prices are expected to marginally increase between January and March though ample supplies will ensure only marginal price increases. Goat prices are expected to decrease due to deteriorating rangeland resources, livestock migration and recurrent diseases which will affect the livestock body conditions.
- The number of livestock migration is likely to continue to increasing through end of February, from the areas with poorer pasture and browse to areas with more pasture, browse and water availability.

4.2 Food Security Outcomes (March-May)

Continued rangeland resources deterioration, recurrent outbreaks of contagious livestock diseases with increased clustering of weakening livestock, conflicts over grazing resources and decline in terms of trade are factors that would likely lead to increased food insecurity between especially February to March. In the Pastoral livelihood zones, households are likely to become more food insecure especially the Northern parts of the County that are likely to be the worst affected as they had least rains during October to December short rains. Household food consumption is likely to reduce with less income. Water availability will decrease through April, which may lead to increased water prices and further constraint the household purchasing power. Livestock products like milk will become less available at household level. Livestock prices will decrease and households will have below average incomes from livestock and its products. Terms of trade are likely to decrease from March through April as goat prices decrease and cereal prices increase. Households are likely to use poor quality water resulting to increased incidence of diseases and subsequently poor utilization of food and increased cases of malnutrition. Majority of the household will remain in Stressed (IPC Phase 2).

4.3 Food Security Outcomes (June-August)

The start of the long rains in March is expected to improve the rangeland resources by April, which eventually will lead to improving livestock body conditions. Milk yield and birth rates are expected to be below normal due to low conception levels during the below average short rains. With improved livestock productivity, households will access food through typical livelihood strategies such as livestock sales which may eventually lead to increased food consumption. Majority of the households will be in Stressed (IPC Phase 2).

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

The food security status of Garissa County is stressed with the likelihood of some areas in Lagdera stripping to Crisis. The situation may deteriorate further thereby leading to more households being food insecure. The factors to be monitor include; Increased livestock migration, food prices, livestock and human diseases, nutritional status, recurrent livestock conflicts over grazing resources, and distance to water source and increased water tracking.

5.2 Summary of Recommendations

The recommended interventions by sectors are classified as emergency, medium to long term and they include:

- Excavation of water pans and support expansion of area under irrigation, procurement and distribution of green houses, drip kits, certified seeds/agrochemicals/farm implements, pump sets and construction of concrete canals for irrigation.
- Fodder establishment and conservation, livestock improvement, disease surveillance and vaccination.
- Maintenance of generator set/pump, drilling, rehabilitation, distribution and extension of pipeline systems and water pans construction.
- Provision of food for fees, Vitamin A supplementation, deworming and water harvesting structures in schools.
- Integrated outreach services, micro nutrients powder supplementation for under five years and rapid assessment.

6.0 ANNEXES

Annex 1 Food Interventions

Table 6: Proposed population in need of food assistance

Sub County	Population in sub county	Pop in need (% range min – max)	Proposed mode of intervention	Remarks
Lagdera	92,636	35-40	GFD/FFA	Target Waiyama Jebril, Benane, Shantabak, Baraki
Balambala	73,109	25-30	GFD/FFA	Ashandin, Danyere, Dujis, Quobey
Hulugho	20,953	15-20	GFD/FFA	Sangailu, Hulugho,
Dadaab	152,487	25-30	GFD/FFA	Kumahumato, Liboi
Fafi	95,212	25-30	GFD/FFA	Harbole, Disow
Ijara	92,663	10-15	GFD/FFA	Abalatilo, Warsame, Bodhai, Gababa
Garissa	116,953	15-20	GFD/FFA	Disow

Annex II. Non-food Interventions

Table 7: Specific food security related recommended - medium to long term

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Agriculture							
Daadab, Balambala	Excavation of 2 water pans and support expansion of area (300 acres) under irrigation	Dujis Liboi	78,000	County Gvt/MOA	140.0M	Land, Human resource	2015/2016
Ijara, Fafi /Dadaab/Lagd era, Garissa	Procurement, distribution & installation of 4 Green house & open field drip line kits and assorted farm inputs(certified seeds, seedlings, farm implements and agro-chemicals) Construction of Concrete irrigation canals-(4000m) in irrigated group farms Procurement of pump sets	Riverine group farms and all seven sub counties	7500	County Gvt/MOA	42.0M	Water pans, Land, Human labour, Personnel	2015-2016
Garissa, Balambala, Fafi	Rehabilitation of access roads from farms-15KM	Riverine group farms	2000	County Gvt/MOA/MOPW	40.0M	Land, Human labour, Personnel	2015/2016
Education							
County Wide	Food for fees	County Wide	16 schools	County Gvt/MOES T/NDMA	5.07M	Personnel, Labor, Human	2014-15
County Wide	Water harvesting structures for schools	County Wide	10 schools	County Gvt/MOES T/NDMA	2.0M	Personnel, Labor, Human	2014-15
County Wide	Vitamin A supplementation and Deworming	County Wide	40,000	UNICEF/MOEST/MOH	0.5M	Personnel, Labor, Human	2014-15
Livestock							
County wide	Disease surveillance, vaccination and treatment	All divisions	40000	County Govt. Vet dept., NGO partners	18.0M	Transport /vehicles 3No.	2014-15
County Wide	Promotion of commercial livestock offtake	All divisions	10,000 HH	County Govt. livestock production	6.0M	3 vehicles	2014-15
County Wide	Fodder production and conservation and excavation of water pans for livestock	All division (Balambala, Garissa and Fafi)	60,000 cattle, 100,000	County Govt. livestock production	4.0M	3 vehicles	2014-15

			small stock.				
Water							
Korakora Liboi Shanta Abaq Dadaab Lago	Repair gen-set Extend distribution pipeline, Replace submersible pumps Train operators Construct water pan	Korakora, Damajale, Hamey Kulan, Harehar Saretho, Abakailie Kumahumato, Alkune, Dertu Shanta Abaq Baraki, Gurufa Lago Sankuri Shimbirey Abdisemet Saka	23,751	CGG & other stake holders	30.8M	vehicles and personnel	2014-15
Abaqdera, Hulugho	Drill and operationalize borehole, Fuel subsidy	Sangailu Hulugho Handaro	3780	CGG & other stake holders	45.0M	vehicles and personnel	2014-15
Sankuri Masalani Mbalambala	Rehabilitation and construction of all existing water supplies	Sankuri Shimbirey Abdisemet Balich, Kotille Hara Mbalambala Dujis	4735	CGG & other stake holders	64.0M	vehicles and personnel	2014-15
Health and Nutrition							
County wide	Integrated outreach services to all wards	County wide		Partners and MOH	0.5M	vehicles and personnel	Continuous
County wide	Micro nutrients powder supplementation for all under 5 years.	County wide		WFP, MOH and partners	30M	vehicles and personnel	Continuous
Daadab/Balambala/Lagdera	Rapid Assessment	County wide		MOH and partners	2M	vehicles and personnel	February 2015