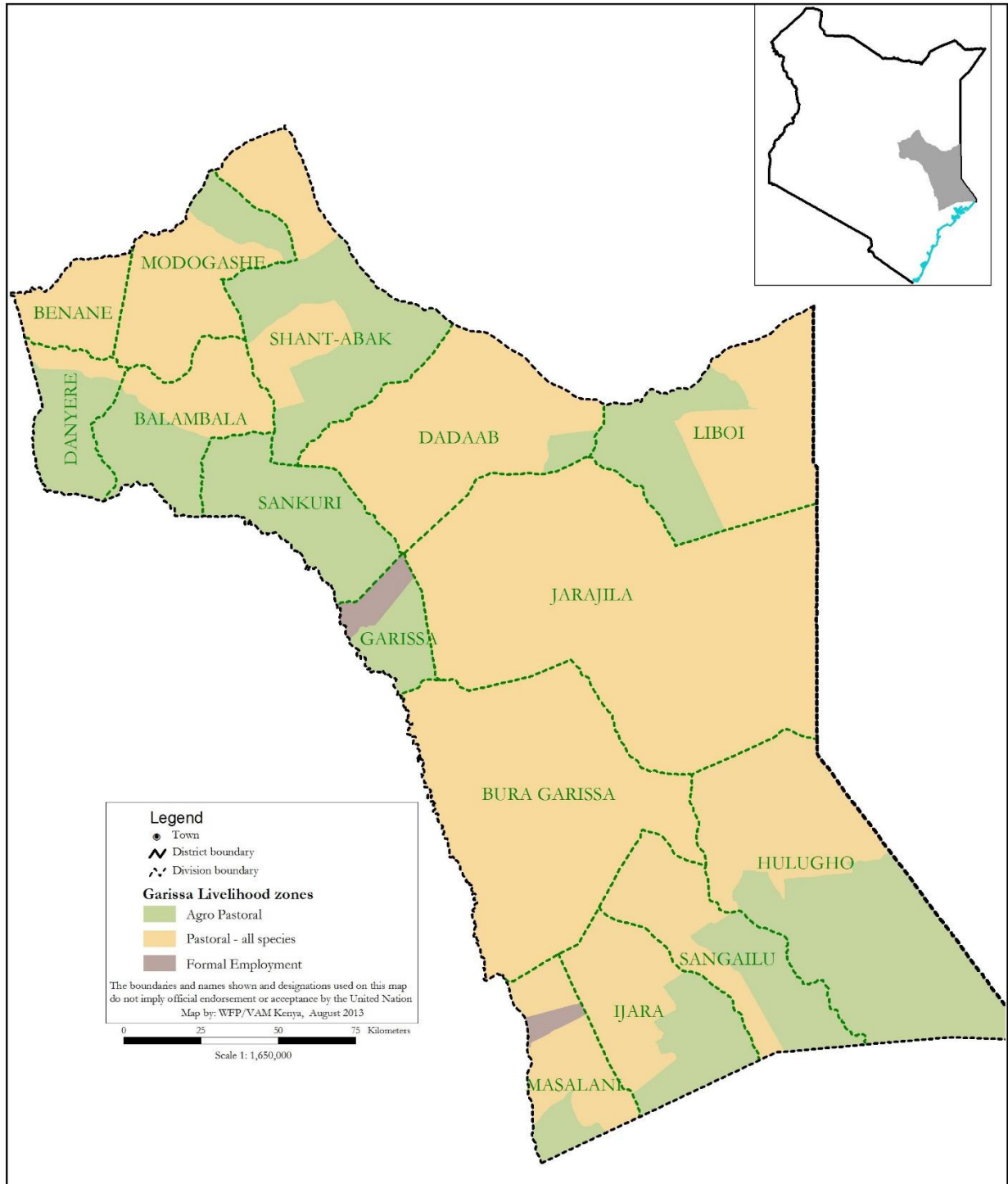


GARISSA COUNTY 2019 LONG RAINS FOOD AND NUTRITION SECURITY ASSESSMENT REPORT



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

¹ Joseph Kamau Swala (Department of Agriculture, Livestock and Fisheries), Feisal Abdi (WVK), Shukri Gure, Joel Okal and Abdimalik Shuria (Garissa Technical Working Group)

EXECUTIVE SUMMARY

Long rains assessment was undertaken by the Kenya Food Security Steering Group (KFSSG), technical members of the County Steering Group (CSG) drawn from agriculture, livestock, water and health and nutrition as well as non-state actors in the county. The assessment is conducted biannually with an aim to develop an objective, evidence based and transparent food and nutrition situation analysis following the end of March-May (MAM) 2019 long rains.

The below average performance of rains for the last two seasons, recurrent insecurity and conflicts, livestock diseases, high prices of food commodities and human diseases among others has impacted negatively on food and nutritional security situation in the county. Increased livestock migration has resulted to limited household access to food. Pasture condition was fair to poor across the zones hence livestock body conditions was fair to poor across the livelihoods. Return distance for livestock water increased across the zones. In pastoral areas, the distances increased from 15-18 km to 26-30 km. Livestock has remained in dry grazing areas contributing significantly to limited access to household milk. An estimated 60 percent of all residing cattle moved out of the county as well as 30-40 and 20-25 percent of small stock and camels respectively. The migration resulted to resource based conflicts especially in Sericho in Isiolo and Garissa border as livestock are driven to Meru National Park. Farmers stocks declined by 76 percent compared to the long term averages.

Despite markets being functional with minimal disruptions, prices of maize remained above the long term average (LTA) by 22 percent as well as 2018 prices. Goat prices were 13 percent below the LTA as compared to same period in 2018. A household was able to access only 41 kg of maize compared to 55 kg in the previous year, from sale of a goat. About 80 percent of water pans in the entire county dried up and the ones with water are likely to dry up in less than a month. Households in the agro pastoral areas were consuming less than 20 litres of water per person per day compared to 30 litres normally. In the pastoral livelihood zones, households consumed 10-15 litres per person per day from 30 litres per person per day normally. On treatment of water, only 28.2 percent of the sampled population treated their drinking water. On hand washing, the SMART survey identified that 78.5 percent of the caregivers were aware of hand washing practices. But only 45.5 percent of the households sampled practiced hand washing in all the four critical times compared to 29.8 percent in July 2018. The survey also identified that 21.3 percent of the household's practices open defecation (in the bush).

The proportion of households with poor and borderline food consumption score was six and 47.8 percent respectively. The reduced coping strategy index (rCSI) in July 2019 indicated that 37.2 percent of the household did not engage in any coping strategies. However, 46 and 16.7 percent of the households engaged in stressed and crisis coping strategies. The proportion of children at risk of malnutrition was 15.3 percent in July 2019 compared to 8.4 percent in the same period in 2018 which was within the LTA. The proportion of under-five mortality rate and the Crude Mortality Rate (CMR) were below the emergency cut offs. According to SMART survey conducted in June 2019, the Global Acute Malnutrition (GAM) was 17.2 percent compared to 13.7 percent in same period in 2018. Children who are severely malnourished (Severe Acute Malnutrition) was 2.3 percent in June 2019 compared to 2.1 percent in similar period in 2018. The county is currently classified as Stressed (IPC Phase 2) with Crisis (IPC Phase 3) in the pastoral areas.

Table of Contents

| | |
|---|----|
| EXECUTIVE SUMMARY | ii |
| 1.0 INTRODUCTION..... | 4 |
| 1.1 County Background | 4 |
| 1.2 Methodology and Approach..... | 4 |
| 2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY..... | 5 |
| 2.1 Rainfall Performance | 5 |
| 2.2 Insecurity/Conflict | 5 |
| 2.3 Other Shocks and Hazards | 5 |
| 3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY | 6 |
| 3.1 Availability..... | 6 |
| 3.2 Access | 10 |
| 3.3 Utilization..... | 16 |
| 3.4 Trends of Key Food Security Indicators | 19 |
| 4.0 CROSS CUTTING ISSUES | 19 |
| 4.1 Education..... | 19 |
| 5.0 FOOD SECURITY PROGNOSIS | 21 |
| 5.1 Prognosis Assumptions | 21 |
| 5.2 Food Security Outlook..... | 22 |
| 6.0 CONCLUSION AND INTERVENTIONS | 22 |
| 6.1 Conclusion..... | 22 |
| 6.2 Ongoing Interventions | 23 |
| 6.3 Recommended Interventions | 26 |

1.0 INTRODUCTION

1.1 County Background

Garissa County is located in the North Eastern part of the Country. The County borders Tana River County to the West, Lamu County to the South, Somalia to the East borders, Wajir County to the north and Isiolo County to the North western. The County covers an approximate area of 45,702 square kilometre (Km²) with an estimated population of 623,060 persons (Kenya National Bureau of Statistics, 2009 Population Census). The county is divided into six administrative sub counties namely: Fafi; Lagdera; Garissa Township; Ijaara; Dadaab; and Balambala. It has three main livelihoods zones namely, pastoral

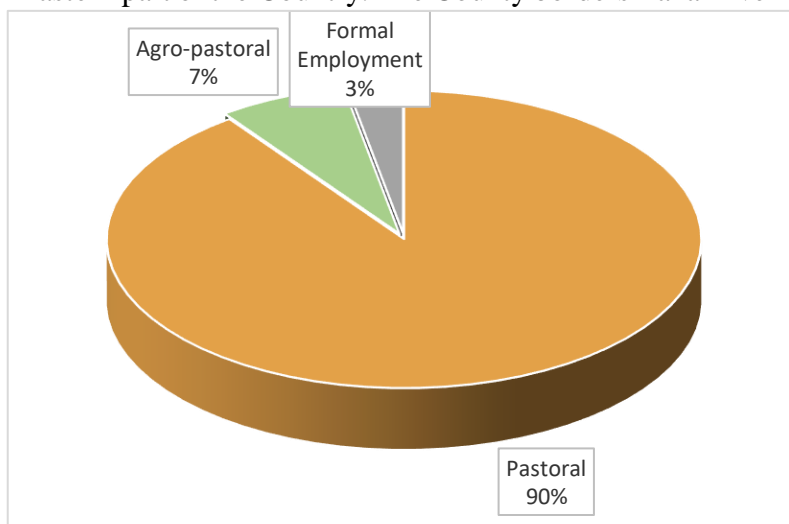


Figure 1: Proportion of Population by Livelihood

all species; agro-pastoral and formal employment with population proportions of 90, seven and three percent respectively (Figure 1). The main sources of income in the pastoral all species are livestock production that contributes 72 percent of cash income; firewood collection/charcoal burning at 15 percent; while food crop production only accounts for five percent of cash income. Food crop production is the major source of income in the agro-pastoral livelihood zone, accounting for 50 percent while livestock production and remittances contributes 15 percent and five percent respectively.

1.2 Methodology and Approach

The main aim of long rains assessment was to develop an objective, evidence based and transparent food and nutritional security situation as result of the performance of long rains in March to May 2019. The assessment was to provide possible recommendations and response mechanism for situation analysis. The assessment took a multi-sectoral and multi-agency approach consisting of members of KFSSG, CSG and non-state actors. The process involved collection of secondary data through livelihood baseline, nutritional smart surveys, NDMA monthly surveillance bulletins, sectoral reports, price data among others. Primary data was collected through field semi-structured interviews in focused group discussions, key informant interviews, community interviews, market surveys as well as sectoral checklists administration. Transect drives, visual inspection techniques were also used as well as observations across the sampled livelihood zones. Sampling was done based on various criteria such as livelihood zones, below or average rainfall performance, conflict areas, sites that had never been visited before, farming/livestock areas, markets, among many other factors. A minimum of four interview sites were sampled across all the livelihood zones. The assessment exercise was conducted from 8th to 12th July 2019. The data was collated, analyzed and triangulated together with the secondary data. The integrated food security phase classification (IPC) protocols were used in the classification of the severity and identification of the causes of food insecurity in the county.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The onset of the long rains was late in the first dekad of April compared to normal of third dekad of March. The cumulative rains received were below the average of the same season by 24 percent. The Spatial distribution was even while the temporal distribution was poor, with hailstones reported in Ijara resulting to destroyed houses and institutions. Ladgera, Balambala and Garissa Township received 25-50 percent of the normal rains while parts of Dadaab, Fafi and Ijara received 50-75 percent of the normal rains. Parts of Benane, Danyere, Bura Golol, Hulugho, Kundi and Liboi (Harehare) received 90-110 percent of the normal rains (Figure 2). The cessation of the long rains was early in the third dekad of May which was normal.

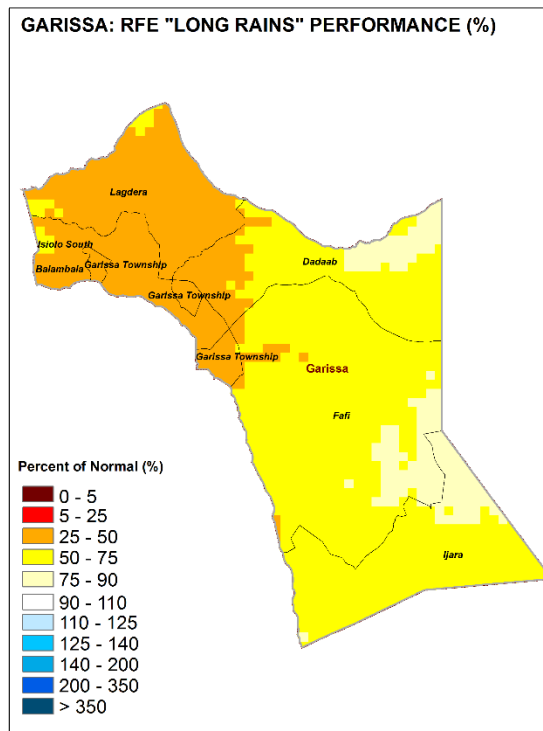


Figure 2: Proportion of Rainfall Performance

2.2 Insecurity and Conflict

Resource based conflicts were reported between farmers and pastoralists. The conflicts were as result of unaccompanied livestock straying into farms, closure of livestock watering corridors by farmers especially along River Tana due to the three mile strip in Masalani, Hara, Kotile and Gababa, the conversion of earlier known communal natural pastures to farms in Saka, Balambala, Balich and Mansabubu is the source of conflict. Inter sub county border disputes especially in Dertu, Bahuri and Abdisamet, Auliya and Lago exist. Border conflicts reported along the neighbouring county of Isiolo due to unmarked boundaries resulted to displacement of households partially. The hot spots were in Kambi Samaki, Eldere, Janju, Sabena and Barquqe. Human-wildlife conflicts were reported in Benane, Jaricot, Muday and Danyere leading to destruction of crop and injuries to human. Conflict resolution activities were reported through chiefs and council of elders. Conflicts resulted to closure of schools, loss of livelihood (livestock) and displacement of households.

2.3 Other Shocks and Hazards

Several human diseases were reported in January to June 2019 (Table 1). Tomato crop was also infected by Tomato blossom end rot resulting to reduced yields.

Table 1: Epidemic Diseases in Human

| Disease | January to June 2019 | |
|---------|----------------------|--------|
| | Cases | Deaths |
| Measles | 32 | |
| Cholera | 41 | 4 |

Tomatoes production is expected to decline in the farms along the River Tana due to infestation of aphids and white flies. Crop husbandry practices and use of chemicals were recommended to control tomato pests. In cattle and camel, infestation of Trypanosomiasis was reported in the southern parts of the county. However, lice infestation has been reported across the county. Vector

control measures had been reported to control the pests in livestock. A total maize crop was experienced in the agro pastoral livelihood zones as a result of late onset and unreliable performance of long rains. Human wildlife conflicts were in reported especially along the riverine farms where farm crops were destroyed resulting to high cost of guarding the crops. High food commodities prices were reported across the county but in Hulugho, Lagdera and Ijara, prices were much higher.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

Crop production was below average except production under irrigation. Stocks held by households were below averages due to failed season, however, according to Crop Department June 2019, stocks held by traders and food aid are high. Households continued to depend on market supplies. The markets were well provisioned with food commodities with minimal disruptions. Livestock migration has been driven by limited rangeland resources which limits access to livestock productivity to households.

3.1.1 Crops Production

Garissa county is short rain dependent for crop production. The main crops grown in the agro pastoral livelihood zone are maize, cowpeas and green grams. Maize and cowpeas contributes 25 and seven percent to food respectively while both contribute one percent each to cash income. Green grams contribute 10 percent to food. About 30 percent of the maize is produced for home consumption while 70 percent is sold as green maize as it attracts high prices. About 55 percent of the green grams and cowpeas produced are mainly for sale to the local markets. The area under the three main crops declined compared to the LTA as farmers ventured in alternative pastoralism due to seasonal change. Maize production declined due to total crop failure and human wildlife conflicts (Elephants and Hippos) where farmers had to guard their crop and the costs for guarding were high. Cowpeas and green grams declined by 22 and 26 percent compared to the LTA (Table 2). Production declined due to late onset and unreliable performance of long rains as well as laggas did not hold water for flood reseeding to sustain the crops to maturity. Lack of certified seeds support for maize, green grams and cow peas also contributed to decline area and productivity.

Table 2: Rain Fed Crop Production

| Crop | Area planted during 2019 Long Rains | Long Term Average (5 year) area planted during the Long rains season (Ha) | 2019 Long rains season production (90 kg bags) Actual | Long Term Average (5 year) production during the Long rains season (90 kg bags) |
|-------------|-------------------------------------|---|---|---|
| Maize | 75 | 145 | 110 | 2,145 |
| Cowpeas | 55 | 70 | 350 | 450 |
| Green grams | 35 | 64 | 240 | 325 |

The area under irrigation for bananas increased by 13 percent compared to the LTA due to opening of more land for irrigation by partners in the county while area under mangoes remained stable. The area under tomatoes declined by 31 percent compared to the LTA (Table 3). Production of bananas increased by 11 percent compared to the LTA as result of County Government support with farm inputs and certified seeds and promotion campaigns to grow more food for self-reliance that has led to farmer's willingness to undertake irrigation farming. Production of water melon and tomatoes declined by seven and 51 percent respectively due to high temperatures in resulting to

flower abortions, farmers also diversified to other crops such as capsicum and chilies and high cost of hybrid seeds resulted to farmers using local seed that are prone to pests (infested with aphids and white flies) and diseases (tomato disease- blossom-end rot) thereby low yielding. Change of River Tana course has resulted to the damage of the irrigation infrastructure leading to reduced productivity.

Table 3: Irrigated Crop Production

| Crop | Area planted during the 2019 Long rains season (ha) | Long Term Average (3 years) area planted during Long rains season (ha) | 2019 Long rains season production (90 kg bags/MT) Actual | Long Term Average (3 years) production during Long rains season (MT) |
|-------------|---|--|--|--|
| Bananas | 860 | 760 | 10,180 MT | 9,140 MT |
| Mangoes | 610 | 578 | 7,850 MT | 7,470 MT |
| Watermelons | 220 | 230 | 4,450 MT | 4,775 MT |
| Tomatoes | 125 | 180 | 620 MT | 1,260 MT |

3.1.2 Cereals Stock

Table 4: Stocks Held in the County

| Commodity | Maize | | Rice | | Sorghum | | Green gram | | TOTAL | |
|-----------|---------|-------|---------|--------|---------|-------|------------|-------|---------|--------|
| | Current | LTA | Current | LTA | Current | LTA | Current | LTA | Current | LTA |
| Farmers | 40 | 1,070 | 250 | 300 | 20 | 50 | 75 | 155 | 385 | 1,575 |
| Traders | 2,155 | 3,640 | 28,400 | 19,900 | 1,500 | 1,800 | 850 | 1,500 | 32,905 | 26,840 |
| Millers | 2,500 | 1,340 | - | - | - | 20 | - | - | 2,500 | 1,360 |
| NCPB | 4,167 | 5,500 | 1,500 | - | - | - | - | - | 5,667 | 5,500 |
| Food Aid | 1,555 | 2,000 | 1,000 | 1,500 | 14,230 | 1,500 | - | - | 16,785 | 5,000 |

Stocks held by traders, millers, NCPB and Food Aid increased compared to LTA except farmer's stocks. Stocks held by farmers declined by 76 percent compared to the LTA as result of low production (Table 4). Rice stocks held by traders increased by 43 percent as rice is a key staple food in the county. Traders continue to hold more stocks in anticipation of high staple prices due to limited supplies. Stocks under food aid increased compared to the LTA due to Sustainable Food Systems Programme under World Food Programme (WFP) and managed by Relief Rural Development Organization. High sorghum stocks were held as food aid for distribution as food aid.

3.1.3 Livestock Production

The major livestock types in the county included cattle, sheep, goats, camels and 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. The poor performance of long rains has impacted negatively on livestock productivity leading to below average milk production. Livestock remained in dry grazing areas thereby declining household purchasing power.

Pasture and browse condition

The pasture conditions were fair to poor across all the livelihood zones compared to fair to normal condition expected normally at this time of the season (Table 5). The poor rainfall performance of both short rains in 2018 and long rains in 2019 impacted negatively on the rangeland resources. There areas that have pasture and browse significantly below average are in Lagdera (Benane

ward): Balambala (Danyere and Balambala wards) and Garissa township. Due to early season dryness and above average land surface temperatures, pastures and browse continue to diminish both in quality and quantity. Pasture is expected to last for one month (until mid-August) compared to normal of 3 months (till early October). Browse conditions ranged from fair to poor across the livelihood zones and are expected to last until end of August compared to September normally.

Table 5: Pasture and Browse Condition

| Livelihood zone | Pasture | | | | | Browse | | | | |
|-----------------|-------------------|-----------|---------------------------|--------|-------------------------|------------------|--------|---------------------------|--------|-------------------------|
| | 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 | |
| Pastoral | Fair-Poor | Good-Fair | 1-1.5 | 3 | None | Fair-Poor | Good | 2 | 3 | None |
| Agro Pastoral | Fair-Poor | Good-Fair | 1-1.5 | 3 | None | Fair-Poor | Good | 2.5 | 3 | None |

Livestock Productivity

Livestock body condition

The body condition of grazers (cattle and sheep) in both livelihood zones, were fair to poor compared to good to fair at this time of the year (Table 6). Lactating cattle around households were in poor body conditions. Goat and camel body conditions were good to fair across the livelihood zones which was normal at this time of the year. The body condition of grazers is likely to deteriorate further due increased trekking distances in search of water and pasture.

Table 6: Livestock Body Condition

| Livelihood zone | Cattle | | Sheep | | Goat | | Camel | |
|-----------------|-----------|-----------|-----------|-----------|-----------|----------|-----------|----------|
| | Current | Normally | Current | Normally | Current | Normally | Current | Normally |
| Pastoral | Fair-Poor | Good Fair | Fair-Poor | Good Fair | Good-Fair | Good | Good-Fair | Good |
| Agropastoral | Fair-Poor | Good Fair | Fair-Poor | Good Fair | Good-Fair | Good | Good-Fair | Good |

Tropical Livestock Units and Birth Rates

Livestock herd sizes changes were minimal across the livelihood zones. In pastoral livelihood zone, tropical livestock units for both poor and medium households declined by 18 and 20 percent respectively compared to the normal (Table 7). While in the agro pastoral areas, the herd sizes in medium income households declined by 28 percent compared to the normal. Birth rates were slightly above normal for cattle as result of above average performance of long rains in 2018 where conception rates were high. However, birth rates in the small stock are normal at this time of the year.

Table 7: Tropical Livestock Units

| Livelihood zone | Poor income households | | Medium income households | |
|-----------------|------------------------|--------|--------------------------|--------|
| | Current | Normal | Current | Normal |
| Pastoral | 4-5 | 5-6 | 7-9 | 9-11 |
| Agro-pastoral | 4-5 | 5-6 | 5-8 | 8-10 |

Milk Production and consumption

Milk production was estimated to be 45-70 percent below average in both pastoral and agro pastoral livelihood zones (Table 8). Consumption of milk at household level declined by almost half the average as a result of livestock remaining mostly in the dry grazing areas as well as herders driving further away from homesteads. Prices of milk was more than twice the average across the livelihood zones with significant household depending on processed milk.

Table 8: 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 |
| Pastoral | 1.5-1.8 | 3 | 1-1.5 | 2.5 | 100-130 | 50-60 |
| Agropastoral | 1.8 | 3-3.5 | 1.5 | 3 | 100-130 | 50-60 |

Migration

With the limited rangeland resources, livestock migration within and across the counties has intensified. Livestock has remained typically in the dry grazing areas as well as moving out of the county and even across to Somalia. Large congregation of livestock has been observed in few watering pans. In the north, livestock moved to Maalimin, Modogashe and Baraki wards leading to depletion of water at Shimbirey and Sheikh Hajir. An estimated 5000 heads of cattle, 10,000-20,000 heads of small stocks and 1000 camels had congregated at the water pan. Towards the east, migration moved to Liboi, Damajalley and Kulan areas while in the south, livestock moved to Ijara sub county to Tana Delta. Other routes of livestock migration were Balambala to Lagdera sub county, from Dadaab to Somalia and Wajir south, from Fafi to Hulugho and Ijara sub counties. There is out migration to Somalia, Wajir south and Lamu. Existing tension in Sericho in Isiolo has restricted livestock migration through those routes. From Balambala other livestock moved to Meru National Park and Mwingi. An estimated 60 percent of all residing cattle moved out of the county. About 30-40 percent and 20-25 percent of small stocks and camels had migrated out of the county. Livestock migration is expected to be elevated across the county resulting to likelihood of resource based conflict and spread of susceptible livestock diseases.

Livestock Diseases and Mortalities

There were no major outbreaks of livestock diseases across the livelihood zones. However, lice infestation has been reported across the county. Disease surveillances and vaccinations has been conducted by the veterinary department from time to time. An estimated 969,000 heads of small stocks were vaccinated against Peste des Pettis Ruminants (PPR), 300,000 heads of small stock against Contagious Caprice Pleuropneumonia (CCPP), 163,000 heads of cattle against Contagious Bovine Pleuropneumonia (CBPP) and 22,000 camels against Blackquarter. Mortality has remained within normal ranges of 0.7-1 percent for cattle, 0.5-0.7 percent for small stock and 0.1-0.3 percent for camels.

Water for Livestock

The main sources water for of livestock were River Tana, boreholes, Benane Spring and shallow wells of Togweine and Rahole as permanent water sources for livestock. About 80 percent of water pans have dried up henceforth livestock trekked for long distances in search of water. Livestock return distance increased by 48-70 percent in both agro pastoral and pastoral livelihood zones (Table 9). Watering frequencies across the livelihood zones decreased to once after 2-3 days in cattle, sheep and goats from once daily.

Table 9: Water for Livestock

| Livelihood zone | Return distances (km) | | Expected duration to last (months) | | Factors Limiting access |
|-----------------|-----------------------|--------|---|--|-------------------------|
| | Current | Normal | Current | Normal | |
| Agro Pastoral | 20 | 12-15 | Permanent | Water pans last 1 month | Long distances to water |
| Pastoral | 26-30 | 15-18 | The remaining 10 % water pans will last 1-2 weeks at most | Water pans last for next 2-3weeks up to mid of august. | Long trekking distances |

Livestock productivity is below average due to fair to poor livestock body condition, livestock migrations across the livelihood zones as well as limited purchasing power. The condition will eventually affect household's food security.

3.1.4 Impact on Availability

The below average performance of long rains impacted negatively on food availability. Crop production declined to below average thereby households are depending on market supplies. The failed son influenced livestock to remain in the dry grazing areas as well as livestock being driven further out of the county. The migration has resulted to unavailability of milk and income from labour reduced, hence forcing households to engage in coping strategies.

3.2 Access

3.2.1 Markets

Market Operations

The main markets for staple food commodities in the county is Garissa Township market. Other market includes Modogashe, Balambala, Bura, Fafi and Masalani. The markets were well provisioned with food commodities with minimal disruptions. Key food commodities available in the markets included rice, maize, posho, bananas and tomatoes. The main sources of food commodities were Nairobi, Mombasa and local farms along the riverine areas. The livestock markets included Garissa Town, Dagahaley, Hagadera, Balambala, Modogashe and Masalani. The livestock types sold in the market include cattle, sheep and goats. Other markets, camels were sold. The traded volumes of livestock experienced in the markets were low as result of migrated livestock.

Market Prices

Maize price

In July 2019, the average maize prices were Ksh.68 per kg compared to LTA of Ksh.56. The maize prices were above the LTA by 22 percent in same period of July 2019 and 2018. In July 2019, the

prices of maize were 13 percent above the July 2018 prices (Figure 3). The above trends were due to increased demand of maize grain which was used to feed weak livestock and unavailability of the product in the peripheral markets. The price of maize was highest in pastoral all species livelihood zone at Ksh.70 per kg. The average price of sifted maize meal was Ksh. 90-100 per kg across the livelihoods. The prices of maize are likely to remain above the long term average across the livelihoods as result of high demand and limited surplus. Most households in the county are market depended.

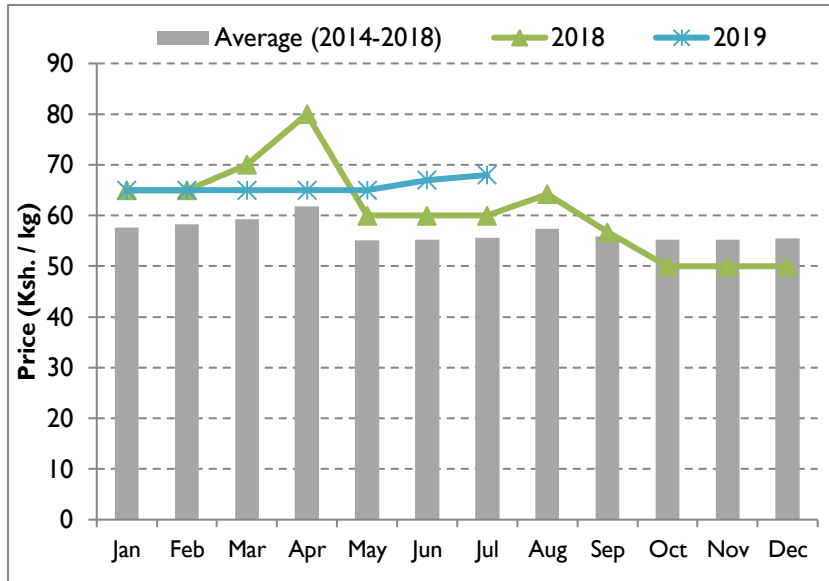


Figure 3: Average Maize Prices

Goat price

The average goat price in July 2019 was Ksh. 2,769 compared to LTA of Ksh. 2,891 (Figure 4). The price of a medium sized goat in July 2019 was 13 percent below the same period in 2018, however, the prices were relatively stable compared to the LTA. The decline in prices was associated with deteriorating livestock body condition, increased trekking distances to water sources and poor forage conditions. Goat prices vary across the livelihoods with formal employment livelihood recording the highest prices of Ksh. 3,116 while Ksh. 2,996 was recorded in pastoral areas. The increasing trend in goat's price was due to reducing supplies to the market and stable demand by traders.

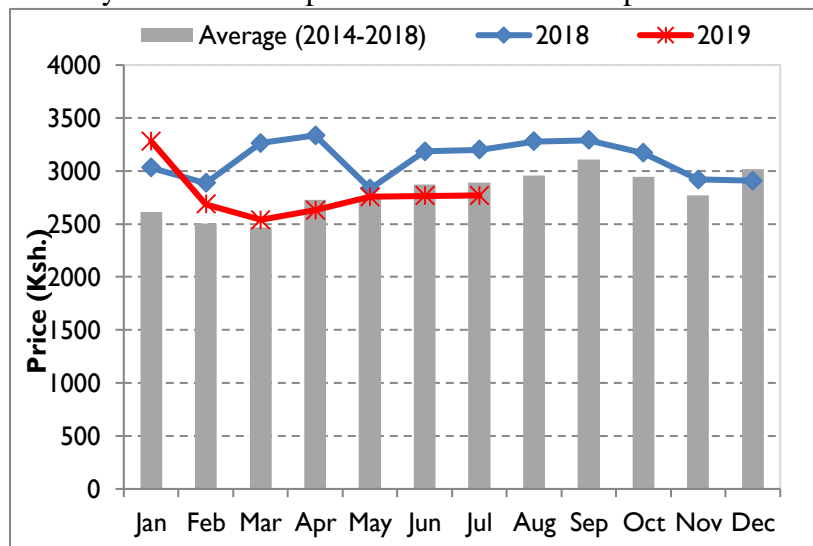


Figure 4: Average Goat Prices

3.2.2 Terms of Trade

In July 2019, a goat exchanged for 41 kg of maize compared to 55 kg in the same period in 2018 (Figure 5). The terms of trade were 22 percent below the long term average between July 2019 and 2018 which was associated with declining goat prices and increasing maize prices. The ToT was highest at 47 kg for a sale a goat in the agro pastoral areas while lowest in the pastoral areas at 42 kg. The terms of trade were not favourable for pastoralists. The ToT are expected to further decline and remain consistently below the long term averages as result of deteriorating goat body conditions with increased maize prices.

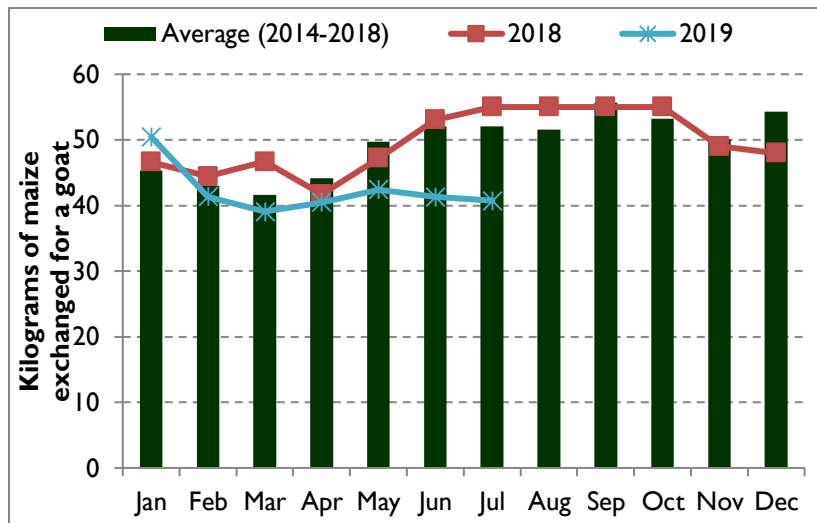


Figure 5: Terms of Trade

3.2.3 Income Sources

The main source of income was livestock production (Table 10). Livestock production contributed 72 percent to cash income while in agro pastoral areas food crop contributed 50 percent to cash income.

Table 10: Sources of Income in the County

| Source of Income | Contribution to cash income by livelihood (%) | | |
|----------------------|---|---------------|-------------------|
| | Pastoral All Species | Agro pastoral | Formal Employment |
| Livestock production | 72 | 15 | 1 |
| Food crop production | 5 | 50 | 5 |
| Casual waged labour | - | 5 | 17 |
| Small businesses | - | 5 | 25 |
| Formal waged labour | - | 1 | 22 |
| Petty trading | 5 | 5 | 15 |

3.2.4 Water Access and Availability

Major Water Sources

The major water sources in the county include; boreholes, water pans, dams, Benane spring, shallow wells and River Tana which are the normal sources of water at this time of the season (Figure 6). Despite below average performance of long rains, recharge of water open sources was below 50 percent but the sources were short lived or dried up. Most open water sources did not impound water. About 80 percent of water pans in the entire county

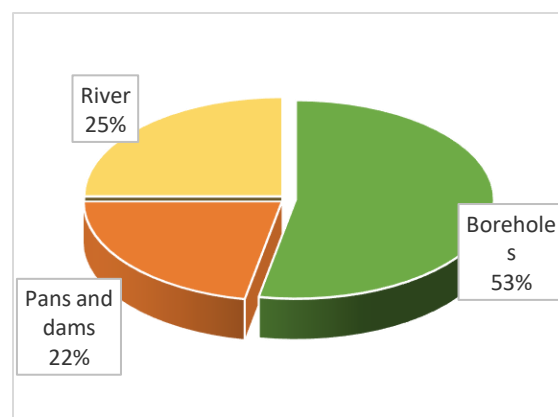


Figure 6: Sources of Water in the County

have dried up and the ones with water are likely to dry up in four weeks' time. Some boreholes in Hadley in Balambala, Mathaamarub and Warable in Fafi and Gurufa in Lagdera are not functioning due to breakdowns of gen-sets or blowing up of submersible pumps (Table 11). There was high concentration on permanent water source with boreholes registering high dependence (Table 12).

Table 11: Status of Water Sources in the County

| Ward/ Livelihood zone | Water Source (Three major sources) | No. of Normal Operatio nal | No. of Current Operati onal Sources | Projected Duration (Operation al Sources) | Normal Duration that water last in months | % of full Capacity Recharge d by the Rains | Locality of Non- operational Water Sources |
|--|--|-------------------------------------|---|--|---|--|---|
| Balambala /Agro- Pastoral | 1.Tana River | 1 | 1 | Indefinite | indefinite | | Operational but accessing water directly from the river and is not treated |
| | 2.water pans | 7 | 1 | 1 week | 6 months | | Ohiyo, Ashadinomar Muhumed |
| | 3.Boreholes | 9 | 7 | Indefinite | Indefinite | | |
| Balambala /Pastoral | 1.Boreholes | 11 | 9 | Indefinite | Indefinite | | Shimbirey one borehole is not operational |
| | 2.Water Pans | 50 | 5 | Dry in 1 week | 6 months | 50 | Ohiyo, Dujis, Abdigaab, Abdisamad, Auliya, Nunow, Hagarjareer, Ashadin, Togob, Hiffow, Libahlow |
| | 3. Tana River | 1 | Nil | Nil | | | Danyere |
| | 4.Benane Springs | 1 | 1 | Indefinite | Indefinite | | |
| Modogash e/Pastoral | 1 Water Pans | 34 | 2 | In a weeks' time | 6-months | | Barfin, gailab, shabel, dula, Malimin,WayamaJibril,Alsagar Dinas, elan, Orahey gunje, Guyo Bombay Afwein Languyata, Afweine, lolool, Gurow Bahuri, hagarbul |
| | 2. shallow well | 1 | | People drawing water from hand dug wells | | | |
| | 3.Boreholes | 27 | 13 | Indefinite | Indefinite | | Skanska, dehle, Barfin, gailab, shabel, dula, Gubader Fan Oil, gurufa, Baraki, Aqal Aar |
| Dadaab/ Pastoral | 1). Boreholes | 65 | 51 | Indefinite | Indefinite | | |
| | 2).Water Pans | 42 | Nil | Dry | Dry | | All water pans |
| | 1).Boreholes | 18 | 18 | Indefinite | Indefinite | | |

| | | | | | | | |
|---------------------------------|----------------------------|----|----|------------|------------|----|------------------------|
| Fafi /Pastoral | 2). Water Pans | 70 | 40 | 2-weeks | 3-months | 70 | Diisow dadere, harbole |
| Fafi/Bura /Agro-pastoral | 1). Boreholes | 7 | 7 | Indefinite | Indefinite | | |
| | 2). Water Pans | 15 | 4 | 2-weeks | 3-months | 70 | |
| | 2. Boreholes | 1 | 1 | Indefinite | Indefinite | | |
| Hulugho /Pastoral | 1). Boreholes | 4 | 2 | Indefinite | Indefinite | | Hulugho |
| | 2). Water Pans | 30 | 30 | 2-weeks | 3-months | 80 | |
| Ijara/Agro-pastoral | 1). river fed water supply | 1 | 1 | Indefinite | Indefinite | | |
| | 2). Water Pans | 15 | 15 | 2-weeks | 3-months | 80 | |
| Ijara /pastoral | 1). Boreholes | 7 | 2 | Indefinite | | | Saline |

Table 12: Concentration areas in the county

| Most Concentrated Water Points | | | | |
|---------------------------------------|---------------------------------------|-----------------------------------|-----------------------------------|--|
| Ward/ Livelihood zone | Actual Name of the Water Point | Normal No. Served | Current No. Being Served | Reason(s) for Variation |
| Hulugho | Elkambere | People 6,850 Livestock 254,032 | People 7,970 Livestock 380,310 | Inward migration due to the presence of one water pan |
| | Kulubow | People 2,350 Livestock 123,036 | People 3,550 Livestock 224,017 | The other water pans around are highly silted. Garabey water pan only source hence households have moved to this area. |
| | Sarirah | People 1,820 Livestock 97,160 | People 2,440 Livestock 143,230 | |
| Sangailu | Handaro | People 4,950 Livestock 160,008 | People 5,760 Livestock 254,430 | Some of the area around don't have water. Gololbele so since most of the people are pastoralist they move to Handaro area. |
| Fafi | Mathaamarub | 1,500 | 2,000 | Inward migration due to the presence of pasture |
| | Welmerel | 2,500 | 3,000 | |
| Lagdera | Baraki | 2,500 | 3,200 | |
| | Santa Abaq | 3,000 | 3,500 | |
| Dadaab | Dadaab | 50,000 | 60,000 | Due to intra-migration |
| | Hamaey | 10,000 | 20,000 | Migration from Somalia |
| | Dertu | 15,000 | 20,000 | |
| Garissa Township | River | | 300,000 | Nearby residents come to look for water |
| | Borehole | 250,000 | | |

Distance to water sources

The distances to water sources in agropastoral areas increased from five kilometers normally to 10 km. In the pastoral livelihood zones, distance increased to 15 km from 10 km normally (Table 13). Drying up of water pans has resulted to increased distances and some households migrating to where pans have water. Water trucking interventions was being implemented in Maalimin (Skanska and Eldere), Sankuri, Fafi (Fafi and Diisow), Dujis (Dujis and Sheikh Hassan), Dadere, Dela Sigar, Harbole, Fafi I and II, Mathaamarub, Dadbilal, Dadbule, Hargarbul, Degwawdey and Mathaages.

Table 13: Distances, Consumption and Cost of Water

| Livelihood zone | Return Distance to Water for Domestic Use (Km) | | Cost of Water at Source (Ksh. Per 20litres) | | Waiting Time at Water Source (Minutes) | | Average Water Consumption (Litres/person/day) | | Projected duration of water in weeks |
|-----------------|--|--------|---|--------|--|--------|---|--------|--------------------------------------|
| | Current | Normal | Current | Normal | Current | Normal | Current | Normal | |
| Agro-pastoral | 10 | 5 | 5 | 5 | 120 | 5 | 20 | 30-40 | 1-2 |
| Pastoral | 15 | 10 | 5 | 5 | 180 | 10-20 | 10-15 | 30 | 1-2 |

Waiting time at the source

The waiting time at the source increased in the pastoral livelihood zones from 10-20 minutes normally to 180 minutes due to high concentration of both human and livestock. In the agro pastoral livelihood zones, the waiting time also increased from five minutes normally to 120 minutes (Table 13).

Cost of water

The cost of water has remained at Ksh.5 per 20 litre jerrycan across all the livelihood zones (Table 13). However, water from vendors was Ksh. 20-50 depending on the distances from the sources especially in Modogashe, Barfin, Jilango, Jarajara, Kone, Hulugho, Shabel Dulla, Gailab and Elan sold a 20 litre jerrycan at Ksh.20-50. Households depending on water pans accessed water for free.

Water consumption

Water consumption in the agro pastoral areas was below 20 litres per person per day compared to 30-40 litres normally (Table 13). In the pastoral livelihood zones, water consumption reduced from 30 litres per person per day normally to 10-15 litres due to increased trekking distances and reduction of water sources.

3.2.5 Food Consumption

In July 2019, the proportion of households with poor in agro pastoral and pastoral all species was 18.5 and 6.8 percent respectively (Figure 7). However, 44.4, 96.7 and 59.6 percent of the households had acceptable food consumption in agropastoral, formal employment and pastoral respectively. According to SMART Survey in June 2019, 93.4 percent of the households had acceptable food consumption compared to 86.1 percent in July 2018.

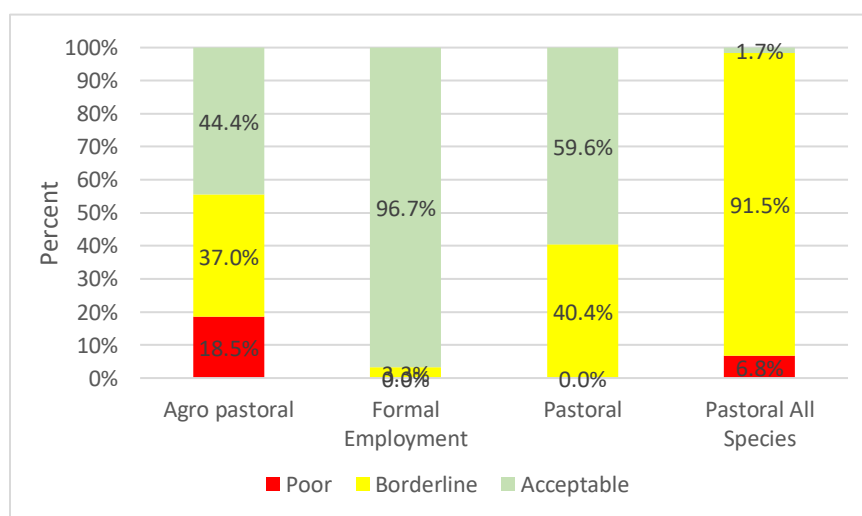


Figure 7: Food Consumption as at July 2019

Milk consumption

Household milk consumption in pastoral and agro pastoral livelihood ranged between 1-1.5 litres compared to the normal of 2.5-3 litres. Milk prices in both pastoral and agro pastoral livelihood

zones ranged between Ksh.100-130 per litre compared to the normal average of Ksh.50-60 per litre.

3.2.6 Coping Strategy

In agro pastoral, pastoral and pastoral all species, 30-55 percent of the households did not engage in any coping strategy. However, 44.1, 55.1 and 54.1 percent of the households engage in stressed coping strategies. The trends in CSI indicated that there were no significant changes in the severity except in formal employment livelihood zone where the CSI reduced but still remained high indicating that households were employing more coping

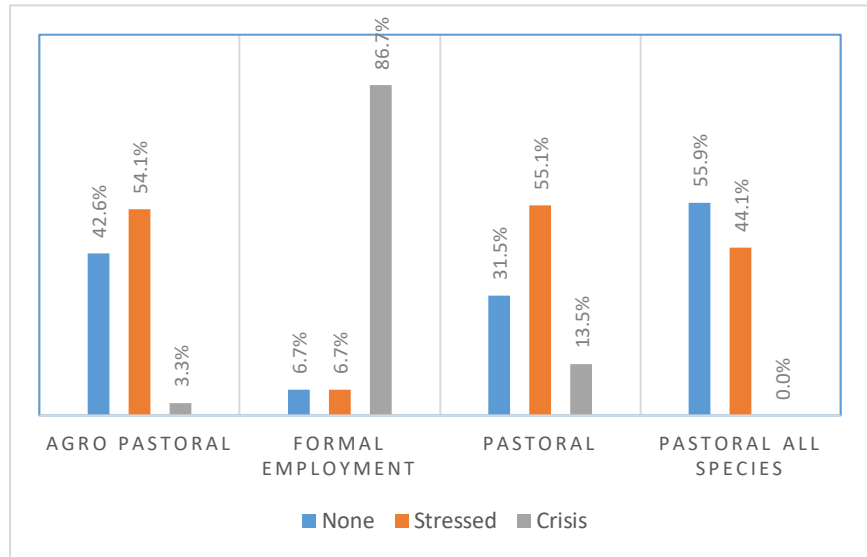


Figure 8: Reduced Coping Strategy

strategies due to increased food commodities price and reduced return from waged labour (Figure 8). The strategies employed mostly by households include reliance on less preferred and less expensive food as well as reduced portion or size of meals. More households in formal employment livelihood zone were employing more coping strategy while households in pastoral all species livelihood zone were employing less coping strategy.

3.3 Utilization

3.3.1 Morbidity and Mortality Patterns

The most prevalent diseases for children under five years and the general population for the period January to May 2019 was upper respiratory tract infections (URTI) which was attributed to environmental conditions, a lot of wind blowing across the county with a lot of dust. URTI cases in under five years were stable from February to May 2019 (Figure 9). Diarrhea cases were attributed to lack of

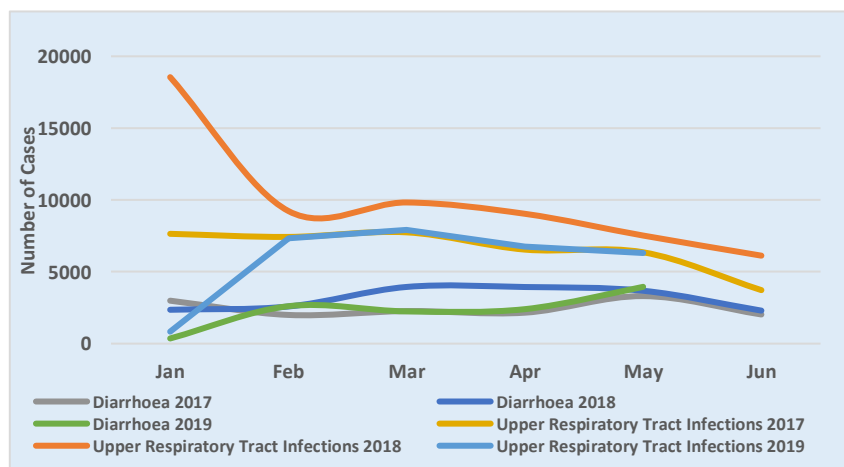


Figure 9: Morbidity Patterns in Under Five Years

access to clean water which are not treated. In general population, the trends of morbidity in January to June 2019 indicated that URTI remained persistently high compared to same period in 2018. In the period between January to June, 2019, there were 41 line listed cases of Cholera

resulting to four deaths. A decrease in dysentery, diarrhea and malaria cases was reported in January to June 2019 compared to similar period in 2018. There were no exceptional deaths across the county thereby both under-five mortality and the crude mortality rate were below the emergency thresholds.

3.3.2 Immunization and Vitamin A supplementation

The proportion of fully immunized children in January to June 2019 was 74.9 percent compared to 83.4 percent reported same time last year as result of insecurity where six facilities were closed (Handaro, Jalish, Bultehama, Yumbis, Fafi and Baraki). According to SMART Survey conducted in July 2019, vitamin A supplementation coverage for 6-11 months was 73.3 percent compared to 61.2 percent in the similar period in 2018 as a result of enhanced outreaches. Supplementation of vitamin A for 12-59 months in the same period was 33.7 percent compared 70.3 percent in similar period in 2018. About 55.3 percent (468) children 12-59 months were dewormed in the past one year, with 15.6 percent (136) dewormed at least twice. Oral Polio Vaccine (OPV) 1 and OPV 3 was 97 and 94 percent respectively. Measles coverage was 93 percent in the county.

3.3.2 Nutritional Status and Dietary Diversity

The surveillance data from NDMA indicated that the proportion of children under five years with Mid Upper Arm Circumference (MUAC<135mm) was 15.3 percent in July 2019 compared to 8.4 percent in the same period in 2018 (Figure 10). In July 2019, the proportion of children with MUAC < 135 was within the LTA of 16 percent in the similar period. This rise in malnutrition is attributed to limited access to food at household as well as upsurges of child related illness, limited knowledge on water and sanitation hygiene practices.

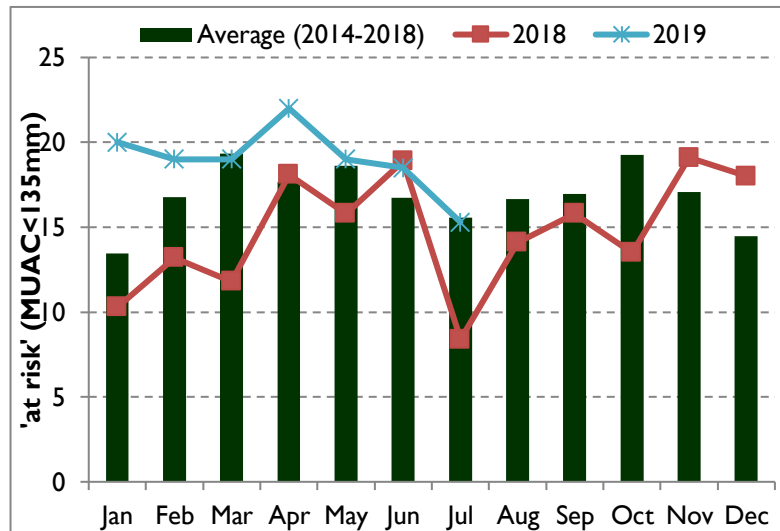


Figure 10: Proportion of Children at Risk of Malnutrition

From the month of April, the proportion of children at risk of malnutrition declined from 22 percent to 18.5 percent in June 2019, however the proportion consistently remained above the LTA. According to SMART survey conducted in June 2019, the Global Acute Malnutrition was 17.2 percent compared to 13.7 percent in same period in 2018. with severe acute malnutrition was 2.3 in June 2019 compared to 2.1 percent in similar period in 2018. The prevalence of underweight according to SMART survey

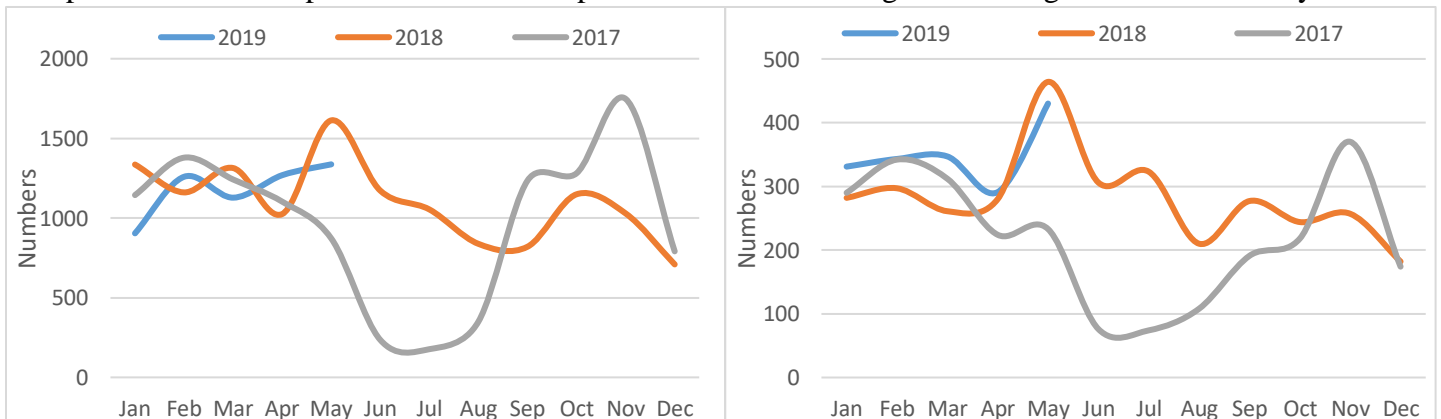


Figure 11: Trend in SFP and OTP

was 14.5 percent from 14.2 percent in 2018. The prevalence for stunting was 8.8 percent in June 2019. On household dietary diversity, 78.6 and 73.3 percent consumed cereal and milk respectively while 58.1 percent consumed pulses and legumes. The number of meals consumed in the pastoral livelihood zone was 1-2 meals per day which was normal at this time of the year. In the agro-pastoral livelihood consumed 2-3 meals per day which was normal but with minimum variations. Admission to supplementary feeding programs (SFP) increased from March to May 2019 while Outpatient Therapeutic Programme (OTP) has increased from April 2019 (Figure 11).

3.3.2 Sanitation and Hygiene

The main water sources in the county include; piped water system, boreholes/protected spring and shallow wells, water trucking, unprotected shallow wells, water vendors and earth pan/dam with infiltrated well. According to SMART survey in June 2019, 76.6 percent of water sources were safe while the rest got water from unsafe sources. About 12.2 percent of the households accessed their sources of water through water trucking compared to five percent in July 2018 (Table 14). The survey, also reported that only 28.2 percent treated their drinking water with majority of the households boiling their water (Table 15). In water storage, 24 percent of the households in June 2019 used open container/jerrycan compared to 25 percent in July 2018.

Table 14: Proportion of Household accessing different water sources

| Period | Earth pan/dam with infiltrated well | Unprotected shallow wells | Water trucking | Boreholes/protected spring/Protected shallow wells | Piped water system | Other sources |
|--------|-------------------------------------|---------------------------|----------------|--|--------------------|---------------|
| Jul-18 | | 16 | 5 | 16 | 56 | 1.1 |
| Jun-19 | 0 | 10.3 | 12.2 | 26 | 50.6 | 0.3 |

Table 15: Water Treatment

| Water Treatment method | Jul-18 | Jun-19 |
|------------------------|--------|--------|
| Use of chemicals | 37.10% | 32.90% |
| Boiling | 61.40% | 64.00% |
| Use of herbs | 0.00% | 2.30% |
| Use of filter | 1.40% | 0.90% |
| Other | 0.00% | 0.00% |

Awareness of hand washing was high in Garissa at 78.5 percent, with 45.5 percent washing their hands at least four critical times, an increase from what was reported in 2018 at 29.8 percent (Table 16). Latrine coverage was high at 78 percent with only 21.3 percent of the households practicing open defecation.

Table 16: Handwashing Practices

| Hygiene | Jul-18 | Jun-19 |
|--------------------------------------|--------|--------|
| After toilets | 81.2% | 82.0% |
| Before cooking | 60.0% | 70.3% |
| Before eating | 93.1% | 92.9% |
| After taking children to toilet | 42.1% | 49.2% |
| Hand-washing in all 4 critical times | 29.8% | 45.4% |
| Handwashing by soap and water | 45.2% | 58.7% |

3.4 Trends of Key Food Security Indicators

Table 17: Trends in Food Security Indicators

| Indicator | Short rains assessment, Feb 2019 | Long rains assessment, July 2019 |
|--|--|---|
| % of maize stocks held by households (agro-pastoral) | 69% | 24% |
| Livestock body condition | Fair to Good for all livestock species across all livelihood zones | Fair-Poor for cattle and sheep across all the livelihood zones Good-Fair for goats and camels across all the livelihood zones |
| Water consumption (litres per person per day) | Pastoral: 15-20/p/d Agro-pastoral: 30/p/d | Pastoral: 10-15l/p/d Agro-pastoral: 20l/p/d |
| Price of maize (per kg) | Ksh. 65 | Ksh. 68 |
| Return Trekking Distance (km) | Agro Pastoral: 17 Pastoral: 21 | Agro Pastoral: 20 Pastoral: 26-30 |
| Terms of trade (kg) | 39 | 41 |
| Coping strategy index | Mean: 15.3 Agro-pastoral 20.8 Pastoral 3.0 | Pastoral: Crisis-13.3%, Stressed 55.1% and None-31.5% Agro pastoral: 3.3%, Stressed 54.1% and None-41.6% Pastoral All Species: Stressed 44.1% and None-55.9% Formal Employment/waged labour: Crisis 86.7%, Stressed 6.7% and None-6.7% |
| Food consumption score | Poor: 15 % Borderline: 19% Acceptable: 66% | Poor: 6.0% Borderline: 47.8% Acceptable: 46.1% |

4.0 CROSS CUTTING ISSUES

4.1 Education

4.1.1 Enrolment

Enrollment in ECD decreased by six percent from Term I to Term II 2019 (Table 18). The enrolment in ECDE for both boys and girls declined by six percent between Term I and Term II 2019. The decrease was as a result of inefficient out of school program, migration of households from school areas (including displacement) looking for water and pasture of animals, instability due to conflicts and insecurity such as Lagdera (Eldera, Janju and Medina), Balambala (Nunow), lack of value in education as attached by some households, lack of teachers since ECDE was devolved though the county government has taken the initiative to employ enough teacher, dilapidated/poor physical facilities which are not all inclusive, lack of water and food to keep children at school as well as high distance which learners have to covered to access education. In primary and secondary school enrolment was relatively stable. Enrolment in primary and secondary schools for both boys and girls remained relatively stable between Term I and Term II 2019. There were more boys enrolled than girls in Term II 2019 across all the levels by 53, 58 and 60 percent for ECDE, primary and secondary schools respectively. The was associated with increased teacher learner ratio, free primary education that motivated and built the moral of learners, well developed schools, good supply of food and water by the government on time, low cost boarding facilities.

Table 18: Enrolment in Schools

| Enrolment | Term I 2019 | | | Term II 2019 | | | Comments (reasons for increase or decrease) |
|-----------|---------------------|----------------------|--------|---------------------|----------------------|--------|---|
| | N _o Boys | N _o Girls | Total | N _o Boys | N _o Girls | Total | |
| ECD | 8,374 | 7,414 | 15,788 | 7,868 | 6,958 | 14,826 | |
| Primary | 30,911 | 22,761 | 53,672 | 30,464 | 22,357 | 52,821 | |
| Secondary | 7,543 | 4,975 | 12,518 | 7,425 | 4,897 | 12,322 | Result of free day secondary. |

4.1.2 Participation

The monthly school participation was high for boys than girls across the levels (Table 19). Girls participation was below 50 percent as result of early marriages, cultural beliefs against girl education, household chores and migrations. Boys participation was affected by migration of parents as well as herding of livestock and engaging in income generating activities.

Table 19: Participation in schools

| Indicator | Term I 2019 | | | | | | Term II 2019 | | | | Comments (reasons for increase or decrease) |
|-------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---------------------|----------------------|---|
| | January 2019 | | February 2019 | | March 2019 | | May 2019 | | June 2019 | | |
| School attendance | N _o Boys | N _o Girls | N _o Boys | N _o Girls | N _o Boys | N _o Girls | N _o Boys | N _o Girls | N _o Boys | N _o Girls | |
| ECD | 5404 | 5242 | 6306 | 5271 | 5506 | 5111 | 5447 | 4074 | 5542 | 5161 | |
| Primary | 2309 1 | 1698 4 | 2094 9 | 1638 6 | 2335 1 | 1545 9 | 2303 0 | 1171 8 | 2321 3 | 1155 8 | |
| Secondary | 6218 | 4284 | 6214 | 4064 | 5742 | 4162 | 5864 | 4081 | 6111 | 4378 | Result of free day secondary |

4.1.3 Retention

In Term II 2019 more boys dropped out in ECDE and secondary schools compared to girls. In the same term more girls dropped out in primary than boys (Table 20). Dropout rate in Term II 2019 for ECDE, primary and secondary was seven, three and three percent respectively. Dropout in ECD was as a result of teacher absenteeism, households not seeing any value for schooling and migration or moving from the school areas. While drop out in primary was associated with migration or moving from the school areas, teacher absenteeism and insecurity and violence. Drop out in secondary was as a result of lack of school fees, insecurity and violence and households not seeing any value for schooling.

Table 20: Retention

| Indicator | End of Term I 2019 | | End of Term II 2019 | |
|----------------------------------|---------------------|----------------------|---------------------|----------------------|
| | N _o Boys | N _o Girls | N _o Boys | N _o Girls |
| Students dropped out from school | | | | |
| ECD | 284 | 366 | 577 | 514 |
| Primary | 567 | 208 | 715 | 805 |
| Secondary | 408 | 206 | 249 | 147 |

4.1.4 School Meals Programme

There are 197 schools benefiting on Home Grown School Meals Program (HGSM) targeting 53,447 pupils (30,833 boys and 22,614 girls) (Table 21). About 20 schools (3209 pupils-2061 boys and 1148 girls) in the county (5 schools in Fafi, 10 schools in Garissa Town, 5 schools in Lagdera) that pupils are not eating as a result of delays in food delivery, lack of water to cook and limited

food for all the pupils and surplus ECDE pupils been supported. School meals program improves enrolment, retention and child nutrition.

Table 141: School Meals Program

| Name of sub-county | № of schools with school feeding | HGSM | | Total number of beneficiaries | |
|-----------------------------------|----------------------------------|---------------|---------|-------------------------------|---------|
| | | № Boys | № Girls | № Boys | № Girls |
| Garissa county | 197 | 30,833 | 22,614 | 30833 | 22614 |
| Subtotal | | | | | |
| Grand total (boys + girls) | | 53,447 | | 53,447 | |

4.1.5 Inter Sectoral Links

Several schools closed for more than one day since the start of Term 1 in the county. The schools were Gubis, Yumbis and Bula Golol in Fafi sub county and Janju, Medina and Hagarjerer centre in Lagdera sub county. These schools were closed due to migration of households, insecurity and violence and lack of food at school. There were schools that offer health and nutrition services. (Table 22). In the county, 82 schools had no functional latrines, 148 had no handwashing facilities and 135 had not drinking water facilities.

Table 152: Schools with Health and Nutrition Programs

| Name of sub-county | № schools with de-worming | № schools with communicable disease prevention programmes |
|--------------------|--|--|
| FAFI | Three (3) schools Bura primary school Nanigh primary school Kamuthe primary school | Five (5) schools Bura primary school Nanghi primary school Kamuthe primary Fafi primary Fafi girls primary |
| LAGDERA | Two (2) schools Medina primary school Hagarjerar primary | Five (5) schools Medina primary Haagarjerar primary Ilaan primary Afwein primary Benane primary |

5.0 FOOD SECURITY PROGNOSIS

5.1 Prognosis Assumptions

The food security prognosis will be on the following assumptions:

- The October to December short rains season is forecasted to be average by seasonal ensemble forecast National Oceanic and Atmospheric Administration's National Weather Service/ Climate Prediction Center (NOAA/CPC).
- Monthly land surface temperatures are likely to be above average 0.25-0.5 C° especially through September.
- Through August-September livestock migration is likely to increase due to below-average rangeland resources availability. Herders are likely to drive further livestock outside the county.
- Resource based conflicts are likely to escalate with increasing livestock migration and declining rangeland resources.
- Maize prices are expected to be slightly to moderately above average.

- With fair to poor livestock body condition, prices of livestock are likely to decline further to below 2018 prices and 5-year averages.

5.2 Food Security Outlook

5.2.1 Food Security Outlook (August to October)

Rangeland resources deterioration are likely to affect livestock productivity. Livestock migration are likely to continue as pastoralists drive further away the livestock outside the county and towards out of the country. Prevalence of resource based conflicts and susceptibility of livestock to diseases are likely to increase through September. Purchasing power for poor households are expected to continue due to below average income from livestock production. Distressed sales of livestock and anticipated livestock losses are expected due to continued drought, hence livestock offtake will likely save the livelihoods. Households food access is likely to be strained due to reduced incomes eventually forcing households to intensify coping strategies. The malnutrition levels are likely to rise above normal levels. Households are likely to experience Crisis (IPC Phase 3) and Stressed (IPC Phase 2) food security outcomes.

5.2.2 Food Security Outlook (November to January)

With average performance of short rains, rangeland resources such as pasture and water is likely to be regenerated thereby allowing livestock to move back to their wet grazing areas. Livestock body conditions are likely to be improve which will eventually improve productivity of livestock. Livestock prices will gradual improve as well as improvements in labour opportunities will likely to increase thereby supporting household's incomes. Food commodities prices are likely to gradually reduce through December thereby providing opportunities for most households to meet the food consumption. The prevalence of malnutrition will likely remain high. Households are likely to Stressed Phase (IPC Phase 2) outcomes.

6.0 CONCLUSION AND INTERVENTIONS

6.1 Conclusion

6.1.1 Phase Classification

The county is classified in the Crisis (IPC Phase 3) across the livelihood zones an indication that households are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis coping strategies

6.1.2 Summary of Findings

The below average performance of the last two seasons coupled with recurrent insecurity and conflicts, has resulted to declined food availability. Crop production was below average, though traders continue to increased their stocks from outside the county. Households will continue to rely on market supplies. Livestock productivity was below average as most of the livestock has remained in dry grazing areas as well as being driven out of the county to even the neighbouring country. Access to livestock products has been significantly declined. Labour opportunities has deteriorated across the zones. Water consumption has declined across the livelihood zones thereby resulting to significantly increased water trucking. The terms of trade have continued to decline and has remained below the long term averages as a result of declining goat prices and increased maize prices. Marked dropout rates were reported in ECDE, primary and secondary. The proportion of households with poor food consumption score increased across the livelihood zones.

The mean coping strategy remained relatively stable indicating households continue to engage more in coping strategies. The proportion of malnutrition status (GAM) worsen to critical situation.

6.1.3 Sub-County Ranking

Table 163: Sub County Ranking

| Sub-County | Sub-County Ranking (1=Most food insecure, 7=Least food insecure) | Current main food security threats |
|------------------|--|---|
| Lagdera | 1 | Below average performance of long season Increased trekking distance for livestock and domestic Insecurity and clan conflict along Garissa Isiolo boarder. Poor water quality Livestock diseases Lack of markets which hinder accessibility to food commodities Limited Water availability at the source High price of food commodities Poor forage condition |
| Hulugho | 2 | Insecurity as a result of terror attacks High concentration of livestock Fair forage condition Long trekking distances to watering points |
| Balambala | 3 | Limited Water availability at the source Resource based conflict Clan conflict limiting access to available resources Livestock migration |
| Ijara | 4 | Insecurity Limited water availability at the source Resource based conflict Long trekking distances to watering points |
| Fafi | 5 | Insecurity Water stressed Livestock out migration Poor forage condition |
| Dadaab | 6 | Long trekking distances to watering points Human diseases (cholera), poor forage conditions Livestock migration |
| Garissa Township | 7 | High price of food commodities |

6.2 Ongoing Interventions

6.2.1 Food Interventions

Table 174: Food Interventions

| Sub County | Interventions | No. of beneficiaries | Implementers | Remarks |
|-----------------------------|-----------------|----------------------|-----------------------------------|---------------------------------------|
| Lagdera, Balambala and Fafi | Cash Transfer | 1460 | Kenya Red Cross | Ksh.3500 each household |
| Lagdera, Balambala and Fafi | Cash Transfer | 1000 | Islamic Relief | Ksh.4000 each household |
| Ijara | Micro Economics | 50 | Kenya Red Cross and International | Ksh.50,000 for startup for businesses |

| | | | | |
|--|-------------------------|--------|----------------------------------|--------------------------------------|
| | | | Committee of Red Crescent (ICRC) | |
| 2 Wards in Balambala, 2 in Lagdera, 1 in Fafi and 2 in Ijara | Sustainable Food System | 70,000 | WFP | Provision of pulses, sorghum and oil |

6.2.2 Non-food Interventions

Table 25: Ongoing Non Food Interventions

| Intervention | Objective | Specific Location | Activity target | Cost | No. of beneficiaries | Implementation Time Frame | Implementation stakeholders |
|--|---|----------------------------|-----------------|------|----------------------|---------------------------|--|
| Agriculture | | | | | | | |
| Tractor Ploughing, Vegetable Seed support and farmer trainings | Farmers will have increased incomes hence purchase staple food commodities | Saka | 200 farmers | 3 M | 200 farmers | 2019-2020 | Kenya Red Cross |
| Tomato value chain promotion | increased incomes hence purchase staple food commodities | Balambala, Saka | 4000 | 4M | 4000 | ongoing | Kenya Climate Smart Agricultural Programme |
| Nutrition interventions and support 2 groups with equipments for closed canals | Improved nutrition to communities hence improved production, health population and improved incomes | Saka, township, Balambala, | 400 | 2M | 400 | closing | Kenya Rapid |
| Food systems approach | increased food production, incomes hence purchase staple | All sub county (20wards) | 0 | 10M | | ongoing | World Food Programme |

| | | | | | | | |
|---|---|---------------------------------------|--------------------|-------------|---------------------------|----------|--------------------------------|
| | food commodities | | | | | | |
| Education | | | | | | | |
| School meals programme | increased retention, improved health and enrollment rate | All county schools | All county schools | 100M | All school going children | ongoing | National and County government |
| Water | | | | | | | |
| Repair of pumping sets and replacement of submersible pumps, Rehabilitation of water supplies, Drilling of boreholes, Construction of new water pans, Desilting of water pans | | Alkune, Gurufa, warable, mathaamarub, | | | 20,000 | ongoing | CGG |
| Rehabilitation of water supply | | Mansabubu, Abajot, Nadir | | | 3500, 1500,12 | | Kenya Red Cross, Mercy USA |
| Livestock | | | | | | | |
| Disease control- Vaccinations and treatments | Facilitates livestock trade and movements to terminal markets | 7 sub counties | | 4M | 18,000 HH | July-Dec | Veterinary department |
| Health and Nutrition | | | | | | | |
| Vitamin A Supplementation | | Garissa county | | 1,181,718 | 541912 | 1 year | MOH/ Partners |
| Zinc Supplementation | | Garissa county | | | 35020 | 1 year | MOH/ Partners |
| Management of Acute | | Garissa county | | 134,465,239 | 15432 | 1 year | MOH/ Partners |

| | | | | | | | |
|---|--|----------------|--|------------|--------|--------|--------------|
| Malnutrition (IMAM) | | | | | | | |
| Baby friendly community initiative (BFCI) (EBF and Timely Intro of complementary Foods) | | Garissa county | | 13,323,000 | 61243 | 1 year | MOH/Partners |
| Iron Folate Supplementation among Pregnant Women | | Garissa county | | 507250 | 168130 | 1 year | MOH/Partners |
| Deworming | | Garissa county | | 650,786 | 152000 | 1 year | MOH/Partners |
| blanket supplementary feeding | | Garissa county | | 3,113,550 | 30000 | 1 year | MOH/Partners |

6.3 Recommended Interventions

6.3.1 Food Interventions

Table 18: Recommended Population for Food Assistancess

| S/No. | Sub-County | Population in need (% range min – max) | Proposed Mode of Intervention |
|-------|------------|--|-------------------------------|
| 1. | Lagdera | 40 – 45 | CFA |
| 2. | Hulugho | 35 – 40 | CFA |
| 3. | Balambala | 30 – 35 | CFA |
| 4. | Ijara | 25 – 30 | CFA |
| 5. | Fafi | 25 – 30 | CFA |
| 6. | Dadaab | 25 – 30 | |
| 7. | Township | 25 – 30 | |

6.3.2 Non-food Interventions

Table 27: Non Food Recommended Interventions

| Intervention | Objective | Specific Location | Activity target | Cost | No. of beneficiaries | Implementation Time Frame | Implementation stakeholders |
|----------------------------------|-----------|----------------------|-----------------|--------------------|----------------------|---------------------------|-----------------------------|
| Agriculture | | | | | | | |
| Procurement of more pump sets | | Riverine group farms | 6000 | 30M | 6000 | 2019-2020 | County Gvt/MOA/Donors/NGOS |
| Food for asset Program upscaling | | Countywide | 10,000 | Relief food/seeds, | 10,000 | 2019-2020 | WFP/MOA |

| | | | | | | | |
|--|---|---|--------|---------------|---|-----------|--|
| | | | | Cash for work | | | |
| Provision of assorted certified seeds | | Countywide | 4000 | 10M | 4000 | 2019-2020 | County Gvt |
| Rehabilitation of Irrigation Infrastructure | | Riverine group farms | 5000 | 50M | 5000 | 2019-2020 | County Gvt/MOA |
| Support expansion of area under irrigation | | Riverine group farms | 75,000 | 100M | 75,000 | 2019-2020 | County Gvt/MOA/N GO'S |
| Excavation of 5 water pans for Crop production | | Dadaab, Lagdera | 3000 | 50 M | 3000 | 2019-2020 | County Gvt/MOA |
| Education | | | | | | | |
| Scaling up feeding programmes for all school going children including ECDs | no meals provided for ECD learners by the county government | All public primary schools and ECD learning centres | | | 49,336 | One year | MOE, NDMA, UNICEF, GOK, Red Cross, Faida |
| Water | | | | | | | |
| Water trucking , Storage facilities, Repair of pumping sets | | Skanska, eldere, Sankuri, shimbirey, ligo, Fafi,diisow, Dujis , sheikh Hassan | | 24M | 16000 | 3-months | NG/CGG/ND MA and other WASH actors |
| Construction and desilting of water pans, Drilling of boreholes | | Balambala, Fafi | | 100M | 8500 | 3-months | NG/CGG/ND MA and other WASH actors |
| Provision of water treatment chemicals, Storage facilities | | Ohiyo,adbiwa ab,omar muhumed , Afwein | | 12M | 12,000 | 3-months | NG/CGG/ND MA and other WASH actors |
| Livestock | | | | | | | |
| Feed supplementation | | Lagdera,balambala,dadaab fafi and Garissa. | | 40M | 18,400HH | July-Oct | Livestock dept., NDMA |
| Commercial destocking | | Lagdera,balambala,dadaab fafi and Garissa. | | 4M | 18,000 HH(2,000 CATTLE) 8,000 small stock | Aug 2019 | Livestock dept., NDMA, KRC |

| | | | | | | | |
|---|--|--|--|-------------|--|----------------------|-----------------------|
| Slaughter destocking | | Lagdera, bala mbala, dadaab fafi and Garissa. | | 21M | 12,000 HH(6,000 small stock) | Sept- Oct | Livestock dept., NDMA |
| Disease surveillance, vaccination and pest control | | Lagdera, dadaab and ijara (areas of livestock concentration) | | 22M | 24,000 HH(30,000-50,000 small stock) 25,000 cattle: 10,000 camel | Jul-sept | Livestock dept., NDMA |
| Health and Nutrition | | | | | | | |
| Vitamin A Supplementation | | Countywide | | 1,181,718 | 541912 | July 2019- July 2020 | MOH/ Partners |
| Zinc Supplementation | | Countywide | | 2.0M | 35020 | July 2019- July 2020 | MOH/ Partners |
| Management of Acute Malnutrition (IMAM) | | Countywide | | 134,465,239 | 15432 | July 2019- July 2020 | MOH/ Partners |
| Baby friendly community initiative (BFCI) (EBF and Timely Intro of complementary Foods) | | Countywide | | 13,323,000 | 61243 | July 2019- July 2020 | MOH/ Partners |
| Integrated health and Nutrition | | Countywide | | 10M | 156800 | July 2019- July 2020 | MOH/ Partners |
| Mass screening | | Countywide | | 5M | 126848 | July 2019- July 2020 | MOH/ Partners |