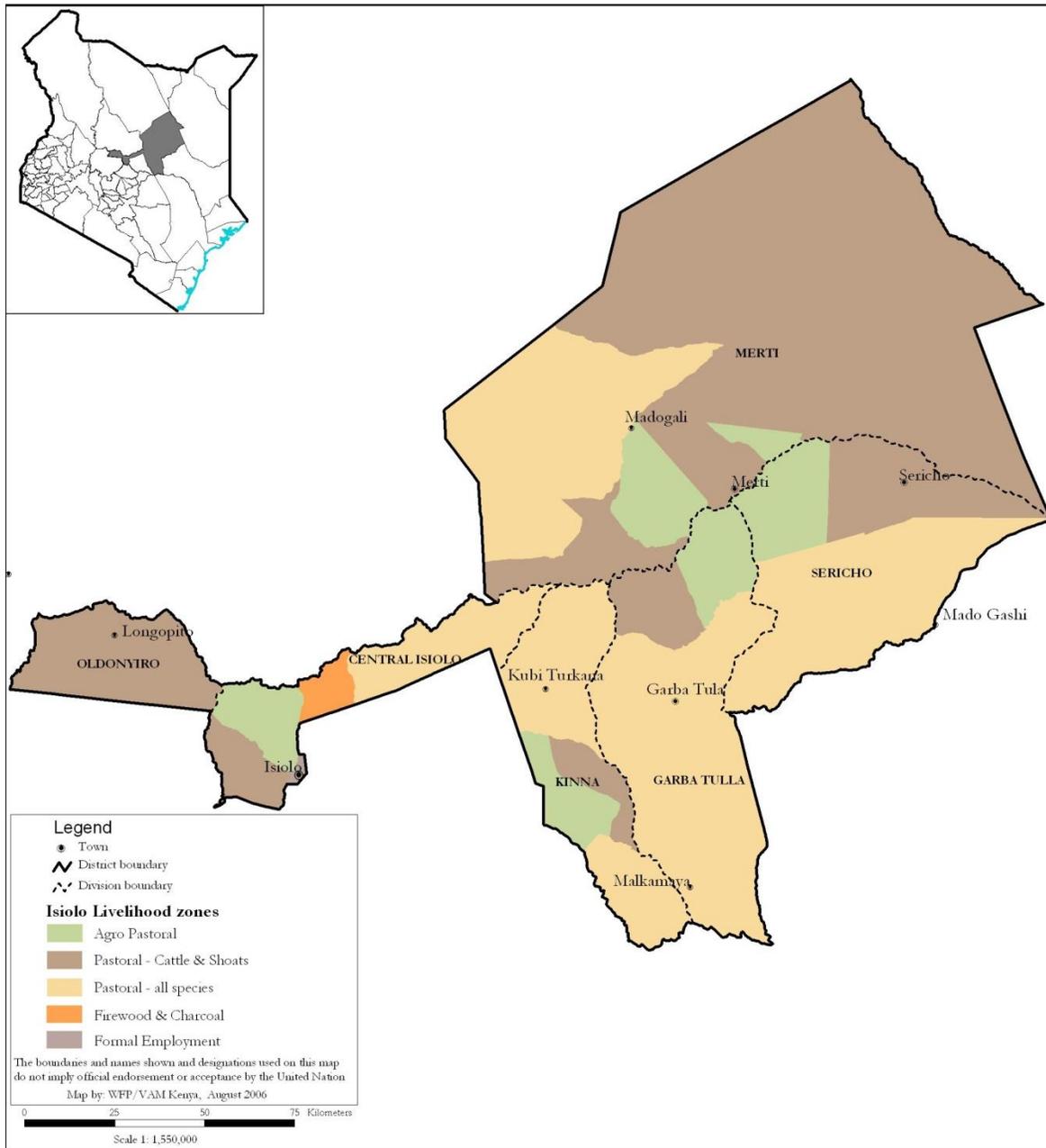


ISIOLO COUNTY 2017 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



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

February 2018

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Executive Summary

The main drivers of food security in the county are three successive failed rainfall seasons, poor terms of trade as a result of high food prices and low goat prices due to below normal livestock productivity which is the mainstay of the households in the county.

The food security phase classification for the county is Crisis (IPC Phase 3) in all the pastoral livelihood zones across the county and some parts of the Agro pastoral in Stressed (IPC Phase 2). The county has experienced three consecutive poor rainfall seasons. Based on the National Drought Management Authority (NDMA) data, as at January 2018, households in the pastoral livelihood zone; having poor, borderline and acceptable food consumption score were 33, 48 and 19 percent respectively. In the Agro pastoral livelihood zone, the households with poor, borderline and acceptable food consumption scores were 17, 50 and 33 percent respectively. According to the food security outcome monitoring (FSOM) data by World Food Programme (WFP), the reduced coping strategy index (rCSI) as at January 2018 was 15.7 and is lower compared to 17.4 and 16.9 reported in January 2017 and February, 2016 respectively. Based on NDMA data, the reduced coping strategy index in January 2018 was 21.3. Households employing stress, crisis and emergency coping strategies as at December 2017 were 51.6 and 41 percent respectively. Nutrition situation was Serious with global acute malnutrition (GAM) at 13.6 percent as per the SMART survey carried out in January 2018. No excessive mortalities were reported for both the under-fives and the general population based on community interviews.

Food availability is low as households across the livelihoods have no food stocks and are relying on markets for food. Livestock body condition is fair to poor for all livestock species and has resulted in reduced livestock productivity. Trekking distances for livestock in search of water and pasture have increased to 15 -30 kilometers and livestock out-migration has led to a reduction in milk availability at household level. There was total crop failure for rain fed crop production.

In terms of food access, all markets were operating except for two livestock markets in Garbatulla Sub County. Market supplies for livestock were high while supplies of food commodities remained normal across the livelihoods. Traded volumes for livestock were within the seasonal norms. High food prices coupled with low livestock prices resulted in poor terms of trade in which the sale of one goat was exchanging for 38 kilograms of maize compared to the typical 69 kilograms. Availability and access to water for domestic use was reduced across the livelihood zones and was at 15 litres per person per day and 7.5 litres per person per day in the agro pastoral and pastoral livelihood zones respectively as majority of the water pans are dry.

Utilization is hindered by the presence of morbidity; however, hygiene and sanitation practices had improved across the county with water treatment being carried out by 60, 70 and 65 percent of households in Merti, Isiolo and Garbatulla sub counties respectively. The proportion of households in the urban that have access to safe water is 71 percent and 37 percent in the rural areas.

1.0 INTRODUCTION

1.1 County background

Isiolo County borders eight counties namely: Marsabit to the North, Wajir to the North East and

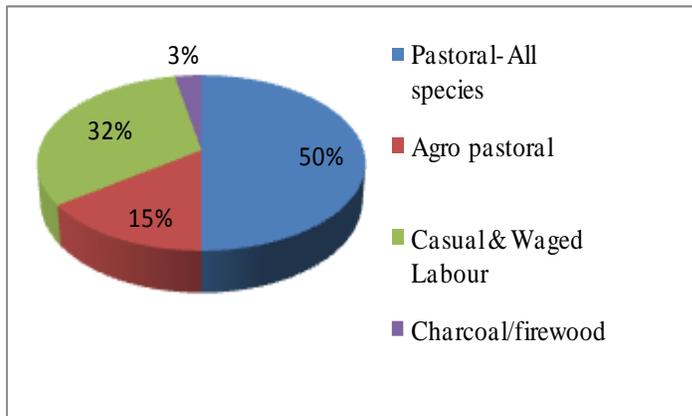


Figure 1: Population by Livelihood

Garissa to the South East, Tana River, Kitui, Meru to the South, Laikipia to the South West and Samburu to the West. According to the Kenya National Bureau of Statistics (KNBS projection, 2016), the county has a population of 155,465 persons and covers 25,605 square kilometres. There are two sub counties namely; Isiolo North and Isiolo South; and nine administrative wards. The four main livelihood zones are; Pastoral-all species (50 percent),

Agro pastoral (15 percent), casual and waged labour (32 percent) and charcoal/firewood/ (three percent) (Figure 1). In the pastoral zone, 50 percent are semi nomadic while 15 percent are fully nomadic. In the agro pastoral livelihood zone, 45 percent of the population is fully settled while 30 percent are semi nomadic.

1.2 Objectives and approach

The main objective of the short rains assessment was to develop a food and nutrition security situation analysis that is objective, evidence-based and transparent following the October-December (OND) 2017 rains, taking into account the cumulative effect of previous seasons and to provide recommendations for possible response options based on the situation analysis. The exercise was done from 5th to 9th February 2018. The national team and technical county steering group formed a multi-sector team comprising of experts from the departments of agriculture, livestock, water, education and health and nutrition. Other agencies that participated in the exercise were: Action Aid International- Kenya (AAIK), Action Against Hunger (ACF) and Mercy Corps. Checklists that were filled by the sector technical experts and sector reports presented provided secondary data which was then collated, analyzed and triangulated with primary data collected from the community during transect drives, focus group discussions and key informant interviews. Sampling included two sites for community interviews, two markets interviews and key informant interviews being done ensuring representation of the main livelihoods in the county. Analysis was done at livelihood zone level using the Integrated food security Phase Classification (IPC) protocols.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The onset of the short rains was normal in the 3rd dekad of October across the livelihood zones. Majority of the county received 50-75 percent of normal rains with the northern parts of Merti where Duma, Urura and Malkagalla received depressed rains of 25-50 percent of normal. The western part of the county which is largely the pastoral-cattle and goats livelihood zone received 90-110 percent of normal rains. Temporal distribution was poor and affected crop production significantly. Spatial distribution was uneven (Figure 2). Cessation was early in third dekad of November compared to the third dekad of December normally.

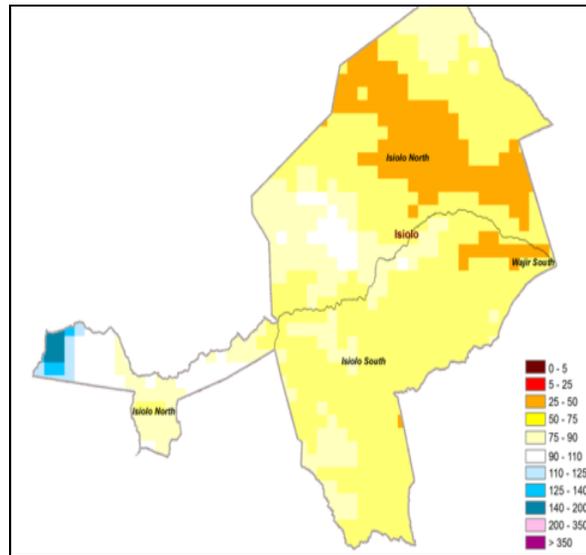


Figure 2: Rainfall Performance as a Percent of Normal in Isiolo County

2.2 Insecurity/Conflict

Inter-clan conflicts were reported in Garbatulla area that led to the death of two people. Resource based conflicts and insecurity were also reported in areas of Kinna where there was high livestock concentration. There were three reported deaths due to conflicts related to rangeland resources access in Kinna area. The available pasture in the conflict prone areas mentioned above is currently inaccessible due to the tension.

2.3 Other shocks and hazards

Crop pests and diseases such as Fall Armyworm in maize were reported to have invaded several farms in the agro pastoral areas. There were floods experienced along Ewaso Nyiro River which attracted the households to move closer to the river with their animals after the September-October dry spell in search of water and pasture for the livestock. As a result, there was an upsurge in Kalazaar cases among human beings while there were also minimal livestock deaths reported due to sudden weather changes.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

Food availability in the county is largely driven by livestock production in terms of milk and meat and is also supplemented by small-scale subsistence crop production within agro-pastoral zone. Pastoral and Agro pastoral livelihood zones rely on markets for food commodities although those in the latter occasionally rely on household stocks. Milk production is currently one litre per household per day compared to a normal of 2-3 litres per household per day in the Pastoral and Agro pastoral livelihood zones. Food availability is low across the livelihoods.

3.1.1 Crop Production

The short rain season is the main season in the county and more reliable. It accounts for 50-60 percent of the annual rainfall in the county. Food crop production contributes to 23 and 15

percent of cash income to agro pastoral and casual waged labour livelihood zones respectively. Crop production is carried out in the Agro pastoral areas where mainly maize, beans and green grams are grown under rain-fed production. Maize contributes to 45 percent to food and 15 percent to cash income in the agro pastoral livelihood zone. Beans contribute to 25 and 19 percent of cash income and food respectively in this livelihood zone. Maize and beans contribute to 69 and 20 percent of food respectively in the charcoal/firewood livelihood zone.

Rain fed Crop Production

Table 1: Rain fed Crop Production in Isiolo County

Crop	Area planted during 2017 Short rains season (Ha)	Long Term Average (5 year) area planted during the Short rains season (Ha)	2017 Short rains season production (90 kg bags) Actual	Long Term Average (5 year) production during the Short rains season (90 kg bags)
1.Maize	130	280	0	5400
2.Beans	80	165	5	4300
3.Green grams	96	58	8	244

The area planted for maize and beans was 46 and 49 percent respectively of the long-term average (Table 1). The reduction in area planted was attributed to fears farmer had over previously experienced losses. Some of the farmers could not get certified seeds due to low purchasing power. The area under green grams increased and was 65 percent above the average. The increase in acreage for green grams was attributed to the fact that the county government supported farmers with certified seeds. Production for all the three main crops was not realized as there was total crop failure as a result of the below normal rainfall performance.

Irrigated Crop Production

Table 2: Irrigated Crop acreage and Production for Isiolo County

Crop	Area planted during the 2017 Short rains season (ha)	Long Term Average (3 years) area planted during Short rains season (ha)	2017 Short rains season production (90 kg bags/MT) Actual	Long Term Average (3 years) production during 2017 Short rains season (90 kg bags/MT)
1.Maize	202	330	1805	4200
2.Tomatoes	58	80	1504	1440
3.Onions	75	79	1129	1074

Irrigation is practiced in the Agro pastoral livelihood zone in Merti, Garbatulla and parts of Isiolo Central ward. The main crops grown under irrigation include maize, tomatoes and onions. Tomatoes and onions contribute to 20 and 18 percent of cash income in the agro pastoral livelihood zone. In the charcoal/firewood livelihood zone, the contribution to cash income is 35 and 42 percent for tomatoes and onions respectively. Area cultivated under maize, tomatoes and onions reduced and were 62, 72 and 50 percent of the short-term average (STA). Production for maize decreased and was 43 percent of the short-term average which was attributed to the poor cumulative amounts of rainfall which was also poorly distributed in time. Production for tomatoes and onions increased and was 64 and 55 percent above the long-term average respectively (Table 2). The increase in production for these crops was attributed to support to irrigation infrastructure in the county, support to farmers with certified seeds and good crop husbandry.

3.1.2 Livestock Production

The main livestock types kept across the livelihood zones were sheep, goats, cattle and camel. Livestock production contributes to 80, 45, 44 and 27 percent of cash income in the pastoral, Agro pastoral, charcoal/firewood and casual/waged labour livelihood zones respectively. In the pastoral and agro pastoral livelihood zones, sheep and goats contribute to 40 and 30 percent each to cash income respectively 20 and 30 percent to food respectively. Livestock production activities such as grazing as well as decisions on their utilization and sale are mainly carried out by men. The small ruminants are mainly herded by young children.

Pasture and Browse

Table 3: Pasture and Browse condition of livestock in Isiolo County

Livelihood zone	Pasture condition		How long to last (Months)		Factors limiting access	Browse condition		How long to last (Months)		Factors limiting access
	Current	Normally	Current	Normally		Current	Normally	Current	Normally	
Pastoral	Poor	Fair	1	2	Insecurity, Water availability	Poor	Fair	1-2	3	Insecurity, water
Agro-pastoral	Poor	Fair	1	2	insecurity	Poor	Fair	1-2	3	Insecurity

The 2017 short rains were below normal and as such pasture and browse regeneration was minimal across the livelihood zones. The pasture and browse is currently poor in the pastoral and agro pastoral livelihood zones and is deteriorating especially in areas with high livestock concentrations such as Kinna. The available pasture is expected to last for one month while browse is expected to last for one and a half to two months (mid-March to April) across the livelihood zones (Table 3). Areas around Garbattulla have insecurity issues and as a result there are livestock migrations that are further stressing the animals as they search for pasture elsewhere.

Livestock body condition

Table 4: Livestock Body condition

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normally	Current	Normally	Current	Normally	Current	Normally
Pastoral	Fair to Poor	Good to Fair	Fair to Poor	Fair-good	Fair to good	Good	Fair to good	Good
Agro-pastoral	Fair to Poor	Good - Fair	Fair to Poor	Fair-good	Fair to good	Good	Fair to good	Good

The livestock body conditions for all species has deteriorated across the main livelihood zones and is currently fair to poor compared to normal when the body condition would be good (Table 4). The livestock in fair body condition are about 70 percent while those in good condition about 30 percent. Increased trekking distances to watering points coupled with reduced pastures have continued to affect the body conditions of the animals. The livestock body condition is expected to deteriorate until the onset of the long rains when pasture regeneration is expected.

Birth rate

The average livestock birth rate is currently less than 10 percent of the normal for all livestock species. According to the seasonal calendar, it is expected that calving and kidding would be at its peak in March- April, however, this may not be the case due to the cumulative below average previous season's performance.

Milk availability

Milk production has reduced by more than half in pastoral areas and is 0.5 litres compared to two litres normally while in the agro pastoral areas currently there is one litre compared to the normal three litres. The decrease in milk production was attributed to the poor body condition of livestock and migrations in search of pasture and water.

Tropical Livestock Units -TLUs)

Table 5: Tropical Livestock Units

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Pastoral	3	6	7	15
Agro-pastoral	3	6	7	15

The tropical livestock units held per household have decreased over time to about 50 percent of normal (Table 5) for both the poor and medium income households due to the successive poor rainfall seasons as from the long rains of 2016. Households have sold off their animals during offtakes, while those that were not bought died due to deteriorated body conditions. Other livestock have succumbed to diseases outbreak such as contagious caprine pleural pneumonia (CCPP) while at the onset of the short rains season as they could not withstand the sudden weather changes.

Livestock diseases, Mortalities and Migrations

There is reported occurrence of contagious caprine pleural pneumonia (CCPP) disease in Sericho and Cherab wards. Ring vaccination supported by Regional Pastoral Livelihood Resilience Project (RPLRP) has been planned and shall be done in the targeted wards by mid-February and is targeting 84,000 small stock (Sheep and goats). Mortality rates for all the livestock species are within the normal at less than five percent across the livelihood zones and are as follows: cattle (2 percent), goat (3 percent), sheep (2 percent) and camel (1 percent). The slightly higher mortality for goats was attributed to CCPP disease.

There is out migration of cattle due to insecurity and search of pasture and water to Laikipia and Samburu from Oldonyiro ward, Meru from Isiolo central and outmigration from Merti to Wajir and Marsabit counties. There is pasture in the ranches in Laikipia and also in Meru counties where the animals have moved to. In migration has been reported from Garissa and Wajir to Merti and Garbatulla sub counties. Movement of livestock within the county is from pastoral areas of Garbatulla and Merti to the agro pastoral areas of Kinna and the boundaries of Meru County. Some of the livestock are also moving to the lower Ewaso Nyiro flood basin and are expected to move to dry grazing areas in Kom, Chachis and Sabarwawa which are already conflict prone. The in-migrations are likely to have a negative impact as pasture will be depleted earlier than normal and also resource based conflicts are likely to erupt in the areas where there are livestock concentrations. Currently, in most places there are no cattle left at home for milk

production, and the little available milk is largely from camels that return occasionally and particularly from the small number of goats (2-4) that are left behind for milking.

3.1.3 Impact on availability

The poor performance of the season has reduced both crop and livestock production across the livelihood zones. The total crop failure has resulted in depletion of household food stocks in both the agro pastoral and pastoral livelihood zone. The poor body condition of livestock which has impacted negatively on milk production coupled with the intensive migrations has led to lack of milk at the household level. Generally, food availability is a limiting factor to food security at household level at the two main livelihood zones.

3.2 Access

3.2.1 Markets

Market operations

The main markets for food items were operational across the livelihood zones. Most of the major livestock markets in the area were also operational save for two markets in Garbatulla sub-county which are not accessible due to inter-clan conflicts in the area. The main markets for livestock and food include Isiolo town centre, Oldonyiro, Kipsing and Merti which is only for livestock. These markets supply food commodities to all the other small centres in the county where households access the commodities from the shops. The main livestock sold in the market were sheep and goats which were sourced locally except for Isiolo market in which livestock comes from Samburu, Marsabit and Wajir. The supply for food commodities remained the same and main sources were from local supply, Meru and Trans Nzoia counties. Market supplies for livestock were high and traded volumes were fluctuating but within the seasonal norms. The high sales are due to people selling off livestock to meet other needs. Supplies and demand for the main staple food commodities such as rice, maize and beans were normal across the livelihood zones. Over 98 percent of the households in all the livelihood zones are currently relying on markets for their food. Market supplies for livestock are expected to increase in the next three months due to fear of deterioration of the body condition as a result of drought and as such farmers are likely to destock while that for food commodities is expected to remain normal.

Maize Prices

The maize price as at January 2018 was four percent higher than the price of Ksh. 53 recorded in January 2017 and was 29 percent above the long term average of 2012-2016 (Figure 3). The prices from July to December 2017 were generally stable and above the (2012-2016) five-year average in the same period. The high prices were attributed to cumulative effect of inflation and also the reduced local supply due to the failed successive seasons. Prices were highest in the pastoral livelihood zones of Merti and Garbatulla sub county where a kilogram of maize was selling at Ksh. 100 as per

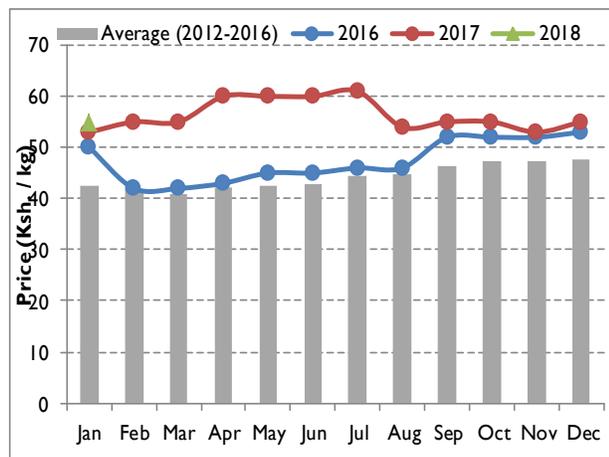


Figure 3: Maize Prices in Isiolo County

interviews conducted however, in these areas, maize is largely bought for livestock for the well able. Maize prices are expected to increase marginally in the next three months due to the likelihood of low supply.

Goat Prices

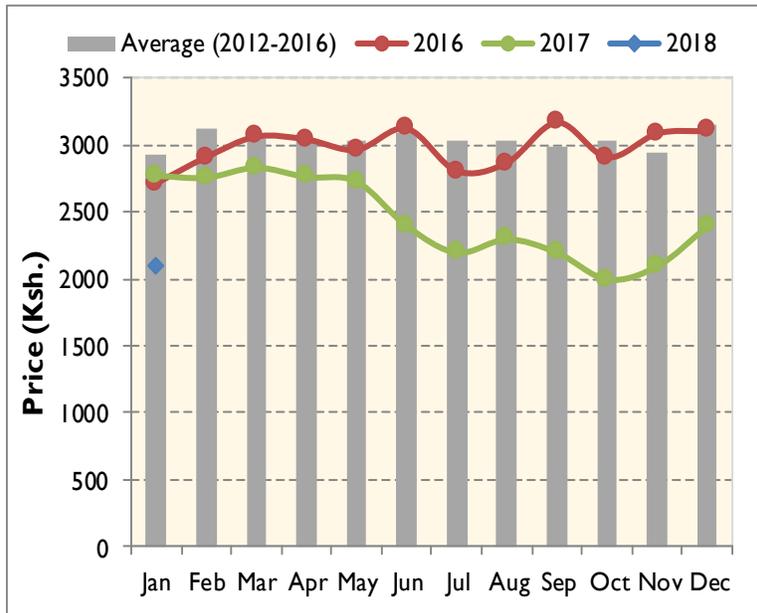


Figure 4: Goat Prices in Isiolo County

least average price of Ksh. 1,900 while a higher price of Ksh. 2,500 was reported in the agro-pastoral livelihood zone. Goat prices are likely to marginally reduce further in the next three months as the body condition of livestock continues deteriorates.

3.2.2 Terms of trade

The terms of trade in January 2018 were 45 percent below the 2012-2016 long term average and

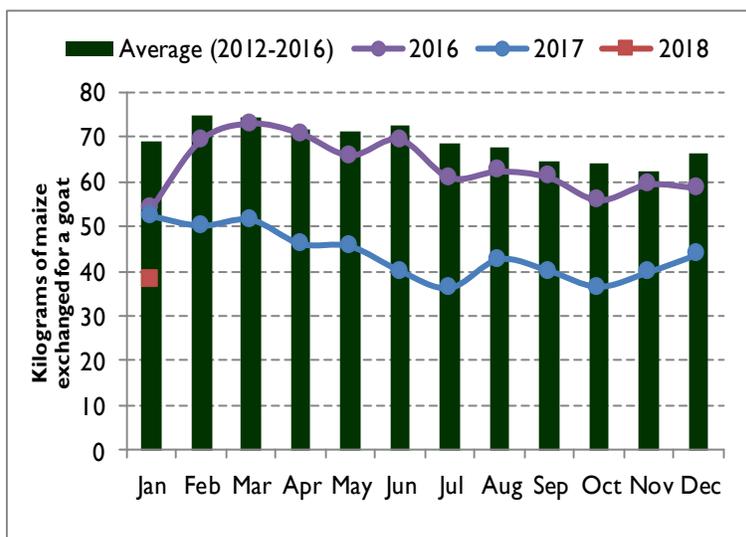


Figure 5: Terms of Trade in Isiolo County

The goat prices as at January 2018 were 28 and 24 percent below the 2012–2016 LTA and the price recorded at same period in 2017 respectively. The prices remained below the LTA from July to December, 2017, with a slight increase noted in the months of November and December owing to the festive season (Figure 4). The goat prices were significantly low in the July to December due to poor body condition while in January; the drop noted is due to the high supply of livestock in the market. The pastoral livelihood zone recorded the

currently the sale of a goat can be exchanged for 38 kilograms of maize. From July to December, 2017, the terms of trade were below the long term average of 2012-2016 (Figure 5). A slight increase noted in October through to December was attributed to the slight increase in goat prices while the prices for maize remained relatively stable. The terms of trade are lowest in pastoral

livelihood zone, where households can purchase 34 kilograms of maize after the sale of a goat while in the agro-pastoral livelihood zone; households are able to access 41 kilograms of maize in exchange for the sale of one goat. The terms of trade are expected to remain deteriorate in the next three months.

3.2.3 Income sources

The main source of income for most households across the livelihood zones normally is the sale of livestock and livestock products (Table 6). Other sources of income include sale of firewood/charcoal, largely in the firewood/charcoal livelihood zone, together with social protection through cash transfer programmes implemented by National government, Kenya Red Cross Society (KRCS) and Action Aid International- Kenya.

Table 6: Income Sources for Households in Isiolo County

Livelihood Zone	Source of Income	% Contribution
Pastoral- All Species	Livestock production (including meat, milk, hides, skins and by-products)	80
Agro pastoral	Livestock production (including meat, milk, hides, skins and by-products)	45
	Food crop production	23
Firewood and Cattle	Livestock production (including meat, milk, hides, skins and by-products)	44
	Firewood collection/charcoal burning	30

3.2.4 Water access and availability

Major Water Sources

Currently, the major sources of water for domestic consumption across the livelihood zones are boreholes, shallow wells along the river bank and water pans compared to normally when households would source from *laggas*, rivers, and springs; developed surface water such as earth dams, sand/subsurface dams, and pans; developed groundwater such as shallow wells. The variation is due to poor recharge/dried up wells and low river flows. The level of flow for main rivers is very low flows to dry (at Archers 5ED01, Ewaso Nyiro river is at alert at 0.02 meter compared to normal flow of 0.1-0.15metre gauge height as at end of January, 2018.Downstream the rivers have dried up. Non-operational water sources has been occasioned by; low recharge to the natural water bodies, low flows, poor yielding boreholes, operations and maintenance challenges at the boreholes, poor water quality (saline water) and conflict with other neighboring communities as seen in the areas of Garbatulla.

Currently, water trucking is being done by the County government of Isiolo to Mertisub county (Maatarba, Saleti, Lakole, Badanraro, Makagalla, Awarsitu), Garbatulla sub county (Modogashe, Bililki-Serichoareas and parts of Sericho) and Oldonyiro area (Mokorri, Lenguruma, Lekiji, Ndugu Zangu, Labarishereki) as from January. The cost of water trucking is high due to water truck hire and the frequency of trucking due to increased centres such as Badanraro, Makagalla, Rigga, Belgesh, and entire Oldonyiro town nine schools (Nooloroi, Lengwenyi, Lenguruma,

Twale, Longopito ECD, Oldonyiro, Rap, Ndugu Zangu, Labarishereki, Kawalash, Parkishon, Kipsing Secondary, Oldonyiro Secondary, Oldonyiro Girls) Longopito, Kawalash, Lenguruma and Twale. In Merti, new areas are Korbesa and Biliki-Merti.

Distance to water sources and waiting time at the source

The trekking distances have increased from an average of 3-5 kilometres to 10 kilometres return, and the distances are expected to increase until the onset of the long rains. About 40 percent of residents in Isiolo have access to piped water system while another 34 percent have access to boreholes during dry season. The waiting time in Cherab and Kinna has increased to 120 minutes compared to the normal 30 minutes due to concentration. In Sericho, the waiting time has doubled from the normal 60 minutes. Normally, there would be 500 persons to currently 2000 persons) at the permanent water sources.

Cost of water and household consumption

The price of water has not changed and is Ksh. 5 per 20 litre per jerrican across the livelihood zones, however in Cherab, Kinna, and Sericho, the prices have remained as high as Kshs 50 when water is sold by the water vendors from Ksh.20 previously due to lack of permanent water source. Water consumption in the pastoral livelihood zones has reduced to an average 7.5 litres per person per day compared to 11 liters per person per day while in the agro pastoral livelihood zone, the households are currently consuming 15 litres per person per day compared to 20 litres normally.

3.2.5 Food Consumption

Milk Consumption

Table 7: Milk consumption and Prices in Isiolo County

Livelihood zone	Milk consumption (Litres) per Household		Prices (Ksh)/Litre	
	Current	LTA	Current	LTA
Pastoral	0.5	1	100	60
Agro-pastoral	0.5	1	100	60

Currently, less than five percent of households have access to milk and as such milk consumption where available is half a litre in the pastoral and agro pastoral livelihood zones compared to one litre normally (Table 7). Low milk consumption is largely due to unavailability of milk which is attributed to reduced milk production together with livestock migrations. The available milk in pastoral areas was mainly from camels. Milk prices in some places such as Garfasa have risen to Ksh. 100 per 500 millilitre packet. The available camel milk was majorly for sale to traders from Nairobi retailing at Ksh. 100 per litre due to high demand for camel milk in the market (Table 7).

Food consumption score

According to the NDMA data, as at January, 2018, households in the pastoral livelihood zone, having poor, borderline and acceptable food consumption score were 33, 48 and 19 percent respectively. In the agro pastoral livelihood zone, the households with poor, borderline and acceptable food consumption scores were 17, 50 and 33 percent respectively (Figure 6).

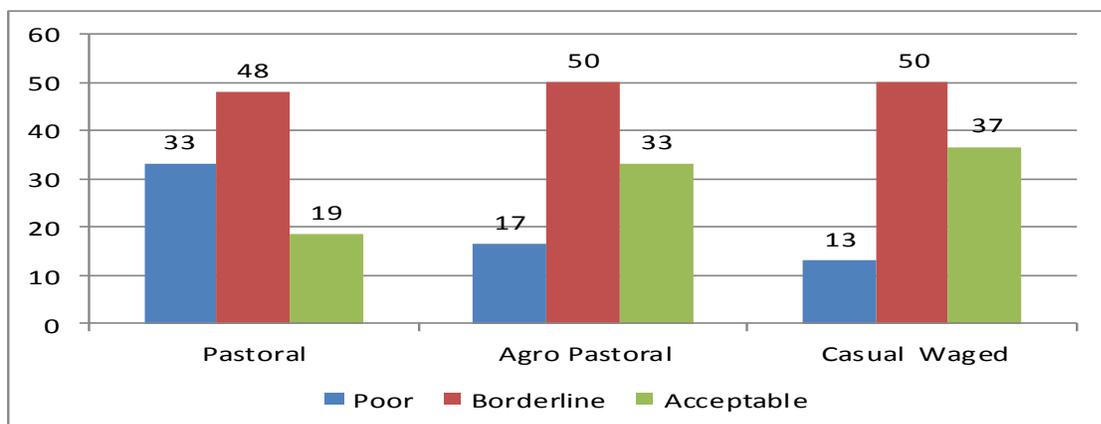


Figure 6: Food Consumption Score by Livelihood

According to the NDMA data, as at January, 2018, households in the pastoral livelihood zone, having poor, borderline and acceptable food consumption score were 33, 48 and 19 percent respectively. In the agro pastoral livelihood zone, the households with poor, borderline and acceptable food consumption scores were 17, 50 and 33 percent respectively (Figure 6).

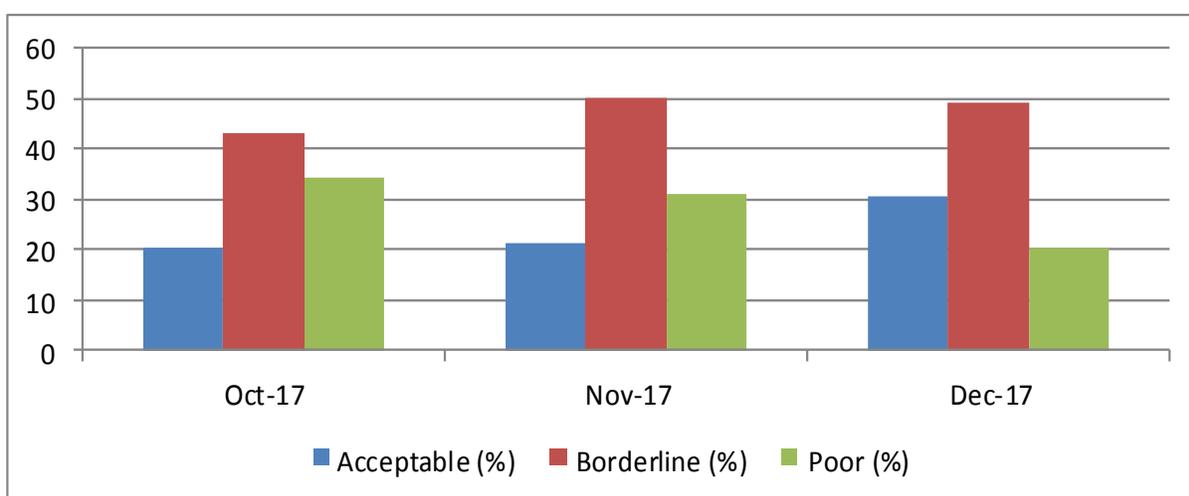


Figure 7: Food Consumption Trends for Isiolo County

According to FSOM data, the proportion of households across the county having poor, borderline and acceptable food consumption score are 10.6, 16.9 and 72.4 percent respectively.

3.2.6 Coping strategy

According to food security outcome monitoring data by World Food Programme (WFP), the reduced coping strategy index (rCSI) as at January, 2018 was 15.7 percent and is lower compared to 17.4 and 16.9 reported in January, 2017 and February, 2016 respectively. Based on NDMA data, the reduced coping strategy index in January, 2018 was 21.3. The most employed food consumption related strategies were:-reduction in the number of meals consumed per day(73.1 percent), reduction of the portion size of meals (93.1 percent), relied on borrowing food, or help from a friend or relative (90.7 percent) and relying on less preferred/ less expensive

food (89.4). In terms of livelihood strategies, households employing stress, crisis and emergency coping strategies as at December, 2017 being 51, six and 41 percent respectively (FSOM data).

3.3 Utilization

Utilization of food at household level is mainly in terms of food preferences, preparation, feeding practices, storage and access to improved water sources. Most households prefer rice as their staple food, however, the high prices and poor access to the commodity in the markets have led households to largely consume “*githeri*” which supplied as relief food during this time even when it is not their most preferred food. About 63 percent of the households in the rural areas have no access to improved water sources; however, households continue to practice good hygiene practices with the little water available as indicated by the improving indicators in sanitation and hygiene. Utilization is therefore a minor limiting factor to food security.

3.3.1 Morbidity trends

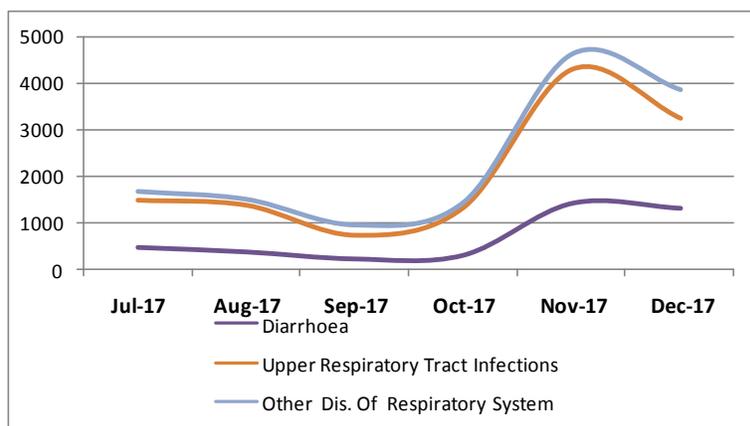


Figure 8: Morbidity Trends for Under-fives for Jul-Dec, 2017

Trends for upper respiratory tract infections (URTI) among children under-five years and the general population from July to December 2017 were stable with notable increases reported in the month of November. The increase was attributed to the resumption of nurses to work following the ending of the strike that had lasted for five months. The stability in morbidity therefore for this period ought to be

interpreted with the same caution as it may be as a result of lack of reports during the strike period (Figure 8). The slight decrease in all morbidity noted in December was attributed to the resumption to normality in terms of provision of health services.

3.3.2 Immunization and Vitamin A supplementation

The proportion of fully immunized children between July and December 2017 was 30 percent compared to the same period in 2016 when it was 60.6 percent. However, it is still below the national target of 80 percent. The decrease in immunization coverage is attributed to nurses’ strike that lasted for five months and as such the integrated outreach services were not done (There were 18 outreach services per quarter across the county).

Vitamin A supplementation for children 6–11 months was 44.4 percent in July to December, 2017 while that for children aged 12–59 months was 22.8 percent. Overall, for children aged 6-59 months, vitamin A supplementation was at 25.4 percent (DHIS, 2017). The low coverage in Vitamin A supplementation was attributed to the nurses’ strike that was there from June to November and also data from the integrated blanket supplementary feeding programme which

started in October, 2017 has not been fed into the DHIS. Documentation challenges were also being experienced in some facilities across the county.

3.3.3 Nutritional status and dietary diversity

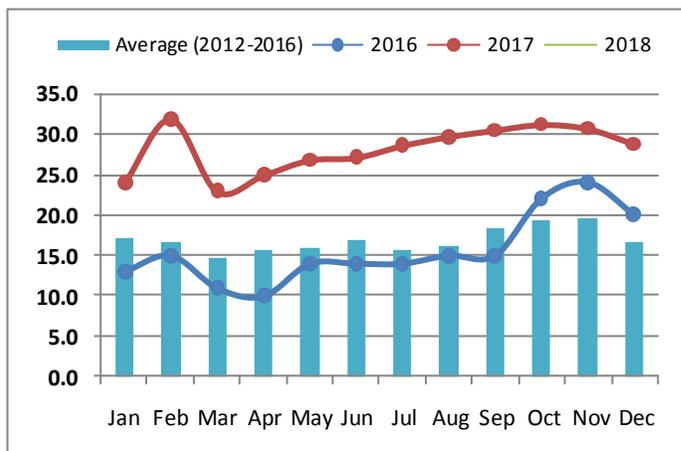


Figure 9: Proportion of children at risk of Malnutrition (MUAC<133mm)

NDMA data indicated that the proportion of children under five years with MUAC (<135mm) was 26.8 percent in January 2018 compared to 24 percent in same period in 2017 (Figure 5). The current proportion of children at risk of malnutrition was 57 percent above the five-year average of 2013-2017. The upward trend in children at risk is indicative of a deteriorating nutrition status attributed to reduced milk consumption, reduced amounts of food and reduced meal

frequencies especially across the livelihood zones. Households are consuming 1-2 meals across the livelihood zones, however, dietary diversity is limited as households are consuming 3-4 food groups across the livelihood zones consisting of starches, legumes, oils and sugars.

According to the SMART survey done in January 2018, the global acute malnutrition rate was 13.8percent (10.9 - 17.3 95% C.I.) and had reduced from those reported in January, 2017were 18.2 (14.6-22.5, 95% CI) percent (SMART survey; January 2017). The severe acute malnutrition (SAM) was 2.6 (1.6 - 4.2 95% C.I.) percent in January 2018 from 3.3 percent during the same period last year. Based on the survey data, there was no significant change in the nutrition status. The reduction in the global acute malnutrition rate is largely attributed to the ongoing interventions on management of malnutrition and the current blanket supplementary feeding programme for the children aged less than five years and the pregnant and lactating women.

3.3.4 Sanitation and Hygiene

There was a general increase in latrine coverage across the county and was 50 percent from 48 percent in Merti sub-county, 78 from 60 in Isiolo and 68 percent from 55 percent in Garbatulla sub-county. The increase is attributed to community led total sanitation (CLTS) programme being implemented in the county. The proportion of households in the urban that have access to safe water is 71 percent and 37 percent in the rural areas. Water treatment chemicals are available at household level. The public health department has issued 600,000 water purifiers and 200,000 chlorine tablets to the households for the last one year in an effort to improve availability to clean safe water. Water treatment is carried out by 60, 70 and 65 percent in Merti, Isiolo and Garbatulla sub counties compared to 58, 62 and 60 percent of households reported in the same period in 2016. Under the community led total sanitation programme, 18 community units in the county have been triggered for behavior change in hand washing practices and

discouraging open defecation. 600 and 400 water jerrycans and water buckets respectively were distributed to household in all the wards for safe water storage. Distribution of 600 “panga” soaps was done in schools and health facilities with an aim to improve the practice of hand washing with soap.

The proportion of households practicing hand–washing at critical times (after visiting toilets, before cooking, before eating, and after changing small children), had increased to 58, 78 and 68 percent in Merti, Isiolo and Garbatulla compared to 50, 68 and 60 percent of households reported in the same period in 2016. Despite the water shortages experienced in the county, households continue to practice good hygiene practices with the little water available.

3.4 Trends of key food security indicators

Table 8: Food security trends in Isiolo County

Indicator	Long rains assessment, July 2017		Short rains assessment, Feb 2018	
	% of maize stocks held by households (agro-pastoral)	Nil		Nil
Livestock body condition	Cattle and Sheep	Poor - Fair	Cattle and Sheep	Fair to poor
	Goat and Camel:	Fair	Goat and Camel:	Good to Fair
Water consumption (litres per person per day)	Pastoral	Less than 10 litres per person per day	Pastoral	7.5 litres per person per day
	Agro pastoral	20 litres per person per day	Agro pastoral	15 litres per person per day
Price of maize (per kg)	60Ksh		55Ksh	
Distance to grazing	Pastoral	15 kilometres	Pastoral	Above 20 kilometres
	Agro pastoral	10 kilometres	Agro pastoral	15 kilometres
Terms of trade (pastoral zone)	40		38	
Coping strategy index	17 as at June		15.7 as at January, 2018	
Food consumption score	71% of households had acceptable		31% of households had acceptable	
Proportion of children at risk of malnutrition (MUAC <135mm)	29.6%		26.8%	
Global Acute Malnutrition (GAM)	18.2%		18.2%	

4. CROSS CUTTING ISSUES

4.1 Education

The education sector is affected by the food security situation of households in a county especially in the areas of access and participation. The participation is assessed based on school attendance and enrolment. Access is checked based on transition and dropout rates.

Enrolment

Enrolment in primary schools in Term 1, 2018 remained the same when compared to term III, 2017 possibly due to the ongoing school feeding programme funded by the World Food Programme (WFP). It however, reduced by five percent to 8,976 (Table 12) in Term I of 2018 in the Early Childhood Development (ECD) centres due to the lack of teachers and the fees charged for lunch and the teachers. The secondary school’s enrollment increased by 13 percent in Term I of 2018 compared to term III of 2017 and this is attributed to free day secondary school government policy in which the school fees has been waived.

Table 9: Enrolment in Schools in Isiolo County

Enrollment	Term III 2017			Term I 2018 (includes new students registered and drop-outs since Term III 2017)			Percent of Total	Percent change for Boys	Percent change for Girls
	N _o Boys	N _o Girls	Total	N _o Boys	N _o Girls	Total			
ECD	4,894	4,590	9,484	4,675	4,301	8,976	5	-4	-2
Primary	14,064	14,067	28,131	13,979	14,197	28,176	0	-1	5
Secondary	2,470	2181	4,651	2,767	2,508	5,275	13	12	13

There was a decrease in the enrolment for boys in the primary in term I, 2018 compared to term III, 2017 attributed to boys going out as a result of migration of the animals particularly in Garbagarse, Kinna, Kulamawe and Kinna. Other boys were reported to engage in the motorcycle taxi “*bodaboda*” business to help fend for the families due to the effects of drought. There was a 12 and 13 percent increase noted at secondary school level for both girls and boys.

Attendance

Average monthly attendance was at 96 and 91percent in primary and secondary schools respectively and was averagely 96 percent in the ECD centres. The general high attendance in primary was attributed to the presence of school meals programme and as such pupils are motivated to attend school so as to get some food. With regard to the attendance in secondary schools, the issue of students being chased for school fees has contributed and as such it is lower compared to the primary attendance.

School Meals Programme

School feeding programme is on-going in all the 111 public primary schools in the county with a total of 28,176 pupils benefitting (13,979 boys and 14,197 girls). During the term there were some schools in Merti which would not cook due to lack of water. There were two schools (Tama and Belgesi) in Garbatulla Sub-county that were closed due to clan conflicts in that area and the children moved to Dida Daaba and Gafarsa. The hosting school suffers from congestion in classrooms.

Overall, the participation and access to education has been affected positively in the primary section as most pupils attend school and more have enrolled as a result of the presence of the school meals programme. On the other hand, some of the pupils are dropping out of school as they move with their livestock in search of pasture and water.

5.0 FOOD SECURITY PROGNOSIS

5.1 Assumptions

- According to FEWS NET/USGS preliminary forecast, there is likelihood that the long rains (March to May 2018) are likely to be below average over northeastern with a delayed onset.
- According to FEWS NET/USGS preliminary forecast there is also an increased likelihood for hotter-than-normal temperatures in February and March and also later in June through August.

- Based on trends of long term prices from the NDMA sentinel site data, maize prices are expected to increase From March through May.
- Livestock are likely to remain in their dry–season grazing grounds until the onset of the long rains in late March
- Resource based conflicts are likely to occur along the borders with other neighboring counties in the 1-2 months until after the onset of the long rains

5.2 Food Security Outlook

5.2.1 Food Security Outcomes for February, March and April

In the months of March to May, household food consumption is expected to remain stable as a result of the ongoing interventions which include food and cash transfers that will help the households to access food. Pasture regeneration is also expected to occur after the onset of long rains in late March which is likely to improve forage and livestock productivity. The nutrition status is expected to remain serious. Households are expected to continue employing food consumption–related coping mechanisms until early April. There will likely be no significant changes expected in mortality levels as they remain within acceptable levels as the interventions are implemented. Moderate improvements in food security are expected after March even with below average rains however, the food security Phase classification is not likely to change and will remain in Crisis (IPC Phase 3).

5.2.2 Food Security Outcomes for May, June and July, 2018

There are expected short-lived improvements that will be realized from May and June in terms of water availability and pasture regeneration despite the below–normal long rains performance. As from July, households are expected to experience food consumption gaps as forage and livestock productivity deteriorates. Household income levels are expected to decline and drive down food consumption. Nutrition status is likely to remain serious as the utilization aspect in terms of water access and disease continue to be eminent amongst the households and particularly the children under five years of age. The proportion of households employing food consumption related coping strategies is expected to marginally increase; however, no significant changes are expected in mortality rates. There is therefore a high likelihood of more households in the county drifting into Crisis (IPC Phase 3).

6.0 CONCLUSION AND INTERVENTIONS

6.1 Conclusion

The current food security situation in the county has continued to deteriorate compared to the situation after the long rains assessment as shown by the current indicators. Monitoring for key factors needs to continue as responses and sector recommended interventions are implemented in the main livelihood zones. The factors to be monitored include the onset and performance of the long rains, food and livestock prices, forage situation, livestock body condition and migration, water availability and access for livestock and domestic consumption, malnutrition levels, absenteeism in schools and possible resource-based conflicts and insecurity

6.1.1 Phase classification

Based on the Integrated food insecurity phase classification (IPC), most of the Pastoral livelihood zone particularly Merti, Sericho and Oldonyiro wards are classified as Crisis (IPC 3) while some parts of Kinna and Central wards in the Agro pastoral livelihood zone are classified as Stressed (IPC Phase 2)

6.1.2 Summary of findings

The performance of rainfall has been below average over three consecutive seasons thereby resulting in low food availability as a result of low livestock and crop production. Households have continued to rely on market supplies and relief food supplies especially and other interventions such as “*Chakula kwa Jamii*” to access food. Access to income has further been limited due to livestock migration due to limited access to pastures and water hence affecting the overall food security at household level. Migration of livestock has led to frequent resource-based conflicts and insecurity. Malnutrition levels of children are likely to be high as indicated by the upward trend of children at risk of malnutrition. The proportion of households engaging in food consumption related coping mechanisms is likely to increase.

6.1.3 Sub-county/ Ward ranking

Table 10: Ward ranking for food Security

Ward	Rank	Sub County Ranking (Worst to Best)
Sericho	1	<ul style="list-style-type: none"> - High Malnutrition rates - Poor food consumption scores (33 percent) - Successive poor rainfall performance - Very active intertribal conflicts- 3 people were killed - 3 boreholes functional and thus minimal water availability and accessibility - High food prices
Oldonyiro	2	<ul style="list-style-type: none"> - High Malnutrition rates - Poor food consumption scores - Pasture regeneration is poor - Minimal water availability and accessibility (3boreholes are broken (Gurma is broken down). High seepage - High malnutrition rates - High food prices
Merti (Cherab and Charri)	3	<ul style="list-style-type: none"> - Water availability and accessibility (6 Permanent water boreholes) - Pasture regeneration is poor - Increased cases of Kalazaar due to human migrations - High Malnutrition rates - Poor food consumption scores - Livestock deaths - Livestock diseases e.g. CCPP - High food prices
Garbatulla	4	<ul style="list-style-type: none"> - Lack of access to the little available pasture - Very active interclan conflicts/ Insecurity - Some of the areas are AP has affected irrigation - Water is available though access is limited and broken down boreholes - High food prices
Kinna	5	<ul style="list-style-type: none"> - Fair rainfall performance - Pasture is slightly available which has led to in migrations from Garissa, Oldonyiro - Water availability and accessibility - Resource based conflicts and wildlife causing crop destruction - Crop failure - Food is available and accessible from Maua

Central (Ngaremara, Burat)	6	<ul style="list-style-type: none"> - Meal frequency normal - Fair rainfall performance - Pasture is slightly available - Food prices are fair - Access to markets and food - Water availability and accessibility
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6.2 Ongoing Interventions

6.2.1 Food interventions

Currently, a total of 103,000 persons are benefiting from relief food in the general food distribution (GFD) programme by the national government in all the wards in the county except Burat and Ngaremara wards. Cash transfer programme through the “*Chakula Kwa Jamii*” programme which was there for the months of November through to January and benefitted 83,920 persons across all the wards except Wabera and Bula Pesa wards in the county. The Kenya Red Cross Society is currently implementing cash transfers in Oldonyiro, Cherab, Sericho, Charri wards in which a total of 3,657 households are benefitting. Each of the household are receiving Ksh 3000 per month in this programme, which will continue until April, 2018. The World Food Programme (WFP), NDMA and Action Aid International Kenya supporting 40,000 beneficiaries in assets creation in five wards namely:- Garbatulla and Kinna wards in Isiolo South and Ngaremara, Burat, Oldonyiro wards in Isiolo North Sub county. The FFA programme ends in the month of May. There is a Blanket Supplementary Feeding Programme (BSFP) in which 7,773 pregnant and lactating women and 29,538 children under-fives respectively are currently enrolled across the livelihoods. The programme is used for management of malnutrition in which the beneficiaries are given supplementary feeds in the form of ready to use supplementary food and fortified flour for porridge. The program targets preventing further deterioration in the nutrition status of households.

6.2.2 Non Food interventions

Intervention	Objectives	Specific Location	Cost (Ksh.)	No. of beneficiaries	Implementation Stakeholders	Implementation Time Frame
Agriculture						
Agri nutrition education-utilization and storage	Good utilization and storage of the available food, reduced malnutrition	Merti, Garbatulla and Isiolo	429,000	1040	County Government (Agriculture and Health) ILRI Kenya Rapid	January –April 2018
Sensitization on climate smart Agriculture interventions	Good use of land, increased productivity	Merti, Garbatulla and Isiolo	532,800	1920	County Government (Agriculture)	January –April 2018
Livestock Sector						
Restocking	Increased	Merti and	1,050,000	825	Caritas	31 st January

	livestock unit	Isiolo				2018
Supplementary feeds provision	Improved body condition	Merti and isiolo	6,000,000	825	Caritas	Jan-June 2018
Sensitization meetings on commercial destocking	Livelihood resilience	Merti, Garbatulla and Isiolo	1,000,000	2000	Department of livestock,	Jan- June 2018
Disease surveillance	Preparedness	Isiolo, merti and Garbatulla	2,000,000	-	Department of veterinary	Jan- June 2018
Peace meetings	Preparedness	Isiolo, merti and garbatulla	2,000,000	-	County government and provincial administration	Jan-June, 2018
Health and Nutrition						
Vitamin A Supplementation, Zinc Supplementation, Iron Folate Supplementation among Pregnant Women, Food fortification and deworming	To reduce prevalence of Micronutrient deficiencies	All health facilities	Ksh. 1,415,000	88,772	MoH and implementing partners	Jan-June, 2018
Management of Acute Malnutrition (IMAM) and IYCN Interventions (EBF and Timely Introduction of complementary Foods)	Improved access to quality curative nutrition services and improve nutritional status of children under five	All health facilities	Kshs. 129,600	66512	MoH and implementing partners	Jan-June, 2018
Integrated outreaches,	To improve access to essential health and nutrition services	All health facilities	1,200,000	MoH and Partners	MoH and implementing partners	Jan-June, 2018
Provision of Water treatment chemicals	Safe guards to health	Merti, Garbatulla, Isiolo	Done	11,000	Kenya Rapid, Public Health, UNICEF	Oct 2017

Water Sector							
Water Trucking services using 5 water browsers to serve communities/institutions facing acute water shortage for 100days	Safe guards to health	Merti, Garbatulla, Isiolo	8,300,000	30,000 Humans	County / National (Northern Water Services Board) Regional/ National level WASH partners	November - April 2018	
Provision of Fuel subsidy for drought mitigation for drought reserve boreholes and other boreholes serving highly vulnerable communities	Water for livestock	Merti, Garbatulla, Isiolo	7,370,000	15,000 livestock	County / National (Northern Water Services Board) Regional/ National level WASH partners e.g. NRT	Jan-April 2018	
Purchase 20KVA Perkins Generating set (standby)	Water for livestock	Merti	2,000,000	2,000	Isiolo County Govt	Jan-April 2018	
Provision of plastic water tanks and portable steel platforms for areas receiving water using trucks	Improved livelihoods	Merti, Garbatulla, Isiolo	8,000,000	10,000	Isiolo County Govt	Jan-April 2018	
Drilling of Boreholes	Resilience	Merti, Garbatulla, Isiolo	70,000,000	8,000 Humans and 2,000 animals	County Govt, National Govt, Water Sector Trust Fund (WSTF) and other Partners	FY 2017/2018	
Modogashe Water supply construction 100Km pipeline and storages	Resilience	Garbatulla, Isiolo	103,000,000	5,000 humans	County Govt, National Govt, AfDB	FY 2017/2018	
Education Sector							
School feeding programme	Improved number of school going kids	Merti, Garbatulla and Isiolo	5,000,000	10,000	County government and national government	Jan-June, 2018	

6.3 Recommended Interventions

6.3.1 Food interventions

Continued home grown school meals programme in all the public schools across the county. Upscale the blanket supplementary feeding programme for the children under-fives and the pregnant and lactating women.

Table 11: Recommended Proportion of People in need of food assistance

Sub County	Population (KNSB Projection 2016)	Pop in need (% range min-Max)	Mode of intervention
Isiolo North	108,685	65-70	FFA/CFA
Isiolo South	46,780	55-60	FFA/CFA

6.3.2 Non-food interventions

Intervention/activity	Objective	Specific Location	No beneficiaries targeted	Implementation Stakeholders	Cost	Implementation Timeframe
Agriculture Sector						
Certified seeds	To crop production	All wards	8000	National Government County Government Partners	5,000,000	January – April 2018
Crop protection	Reduce crop losses	10 wards	12000	County Government(Agriculture) National Government CARITAS and other Partners	500,000	January – April 2018
Climate smart agriculture technology	Increase crop production	All wards	12000	County Government & Partners	Ksh.100 m	2018-2020
Construction of Gubi-Qalo Irrigation water dam for irrigation 150HA	Open up more land for crop production	Charri (Gafarsa, Bilikumarara)	5,000	County & National Govt and WASH Actors	500,000,000	FY 2018-2019
Livestock Sector						
Commercial destocking by Transport subsidies		Isiolo. Merti and Garbatulla	6000HH	Development partners, county government and national government	20 million	Feb-April
Supplementary livestock feeds provision (40,000 bags of range cubes)	Prevent livestock mortalities	Isiolo. Merti and Garbatulla	5000HH	Caritus, NDMA, National Government and County government	120Million	Feb-April
Vaccination and deworming	Reduce livestock diseases and thus improve production	Isiolo. Merti and Garbatulla	10,000 LTU	Department of veterinary, FAO, Caritus	10 million	Feb-April

Peace meetings	To ensure peaceful coexistence	Isiolo. Merti and Garbatulla	3,000	County government and provincial administration, NDMA, Partners	3 million	Feb-April
Increasing of livestock insurance coverage	Resilience	Isiolo. Merti and Garbatulla	20,000TLU	County government	200million	Feb-April
Health and Nutrition Sector						
Strengthen community Health Units		All wards- 18 units	54,000	County government, MOH local partners	1,800,000	Feb-June
Scale up BSFP	To treat and manage malnutrition	All wards	55,000	County government, MOH local partners	60,000,000	Feb- June
Distribution of insecticides and ITNS for control of sand flies	Prevent Malaria	Merti and Garbatulla sub-counties	30,000	County government, MOH local partners	2,500,000	Feb-June
Scale up of High Impact Nutrition Interventions and Strengthen response of health and nutrition coordination and feed back	Reduce Malnutrition and other diseases	All wards	150,000	MOH,NDMA ACF	1,400,000	Feb- June
Strengthen community based surveillance system	Improve case identification	All wards	60,000	MOH, NDMA ACF	1,500,000	Feb- June
Scale up integrated outreaches services across the county	Reduce disease incidences	All wards	45,000	MOH/Partners	2,600,000	Feb- June
Intensify CLTS initiatives	Improve sanitation	All ten wards	100,000	MOH/PARTNERS	2,100,000	Feb- June
Water Sector						
Provision of 4new borehole generators, Fastmoving spare parts (Assorted); Repair of solar pumping system and repair of Water supply pumping systems and engines	To improve water availability	Kula mawe Garbatulla Machalo Duma \ Mlango Burat II BilikuBurat Garfasa Garbatulla	25,000 LTU 10,000 persons	County / Regional/ National level WASH partners	20,400,000	Jan-June 2018

Drilling of reliable borehole.	To improve water availability and access	Markagala	3,500 people	County	15,000,000	Feb- June 2018
Provision of Fuel subsidy	To improve water availability and access	All wards (Targeting 13 boreholes)	12,000	County / Regional/ National level WASH partners	6,375,000	Jan-Apr 2018
Support to rapid response team (borehole maintenance team DSAs)	Ensure regular	County		County / Regional/ National level WASH partners	1,112,400	Jan-Apr 2018
Provision of collapsible tanks to pastoralists	To improve water availability and access	Lakole, Mataarba, Awarsitu, Kulamawe, Sericho, Bertume, Dogogicha, Belgesh, Oldonyiro	5,000 persons	County / Regional/ National level WASH partners	8,000,000	Jan-Apr 2018
Construction of new rural water supplies.	To improve water availability and access	Cherab, Oldonyiro, Sericho, Kinna	10,000 persons	County / Regional/ National level WASH partners	30,000,000	FY 2017/2018
De-salination of Water points to improve water quality	To improve water availability and access	Dogogicha, Bambot/Mado-Urura, Belgesh, Malkadaka	4,000 persons and 30,000 livestock	County / Regional/ National level WASH partners	8,000,000	FY 2018-2019
Construction of Rumate sand dam	To improve water availability and access	Oldonyiro	1,000 persons	County / Regional/ National level WASH partners	4,500,000	FY 2017-2018
Education Sector						
School feeding programme (secondary)	Improve attendance & retention in schools	Isiolo	Secondary school 5,275 ECD 8,976	County government	14,251,000	Feb- December