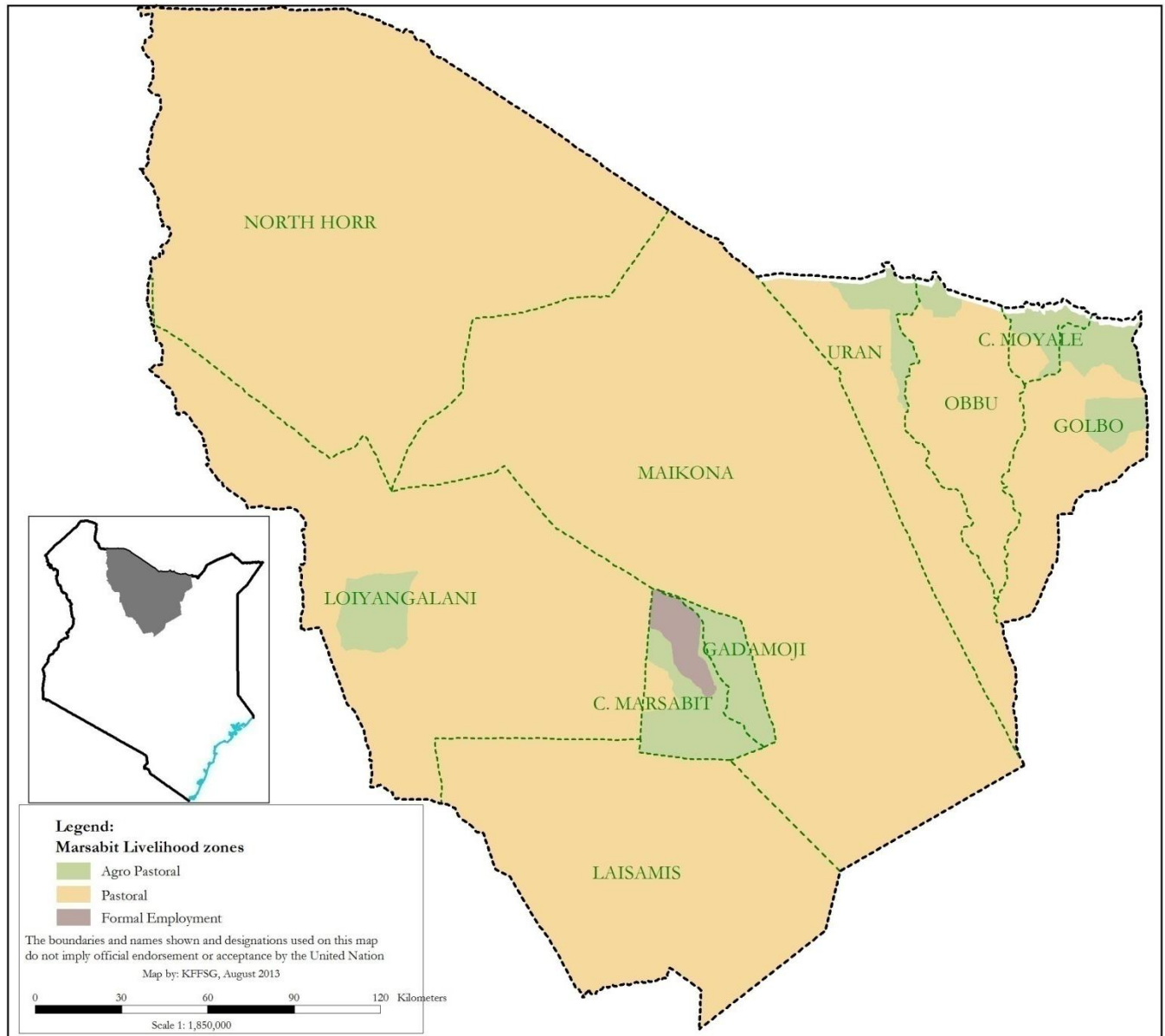


**MARSABIT COUNTY
2016 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT**



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

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EXECUTIVE SUMMARY

Marsabit county is classified as crisis (IPC phase 3) in the pastoral livelihood zones of North Horr, Laisamis and Moyale. The agro pastoral livelihood zones of Moyale and Marsabit central are classified as stressed (IPC phase 2). Food consumption score for poor and border line are 34 and 51 percent respectively compared to 12.5 and 25.7 percent during the long rains 2016. Coping strategies were 29 percent in pastoral livelihood zones while it was 22 percent in agro pastoral zones. Data from the recent SMART survey (January 2017) indicate very critical nutrition situation with Global Acute Malnutrition rates of 31.5 and 24.7 percent in North Horr and Laisamis Sub-counties.

There was limited food available in Marsabit County. Milk and other livestock products were not available in 90 percent of the households in all livelihood zones. This was attributed to reduced livestock productivity, migrations and livestock mortalities of about 10 to 15 percent in small stocks and livestock diseases. Within agro-pastoral areas, households were neither holding food stocks nor anticipate to harvest any crops. Even though, traders within the major markets stocked food, prices for staple food commodities remained high.

Access of food at household level has been hampered in all the livelihood zones due to declining purchasing ability. Low livestock prices and collapse of livestock markets were attributed to poor livestock body conditions and few traders in the markets. The situation was further compounded reduced household incomes and declining terms of trade.

Dietary diversity declined across all livelihoods. Over ninety percent of households in all the livelihood zones mostly consume staples, oils and occasionally proteins. Distances to water for domestic use increased significantly thereby compromising food handling at household and also hindered preparation of meals in schools.

The key drivers of food insecurity are: below normal performance of the short rains, livestock diseases and mortalities and insecurity.

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1.0 INTRODUCTION

Marsabit is one of the largest counties, situated in the northern part of Kenya, bordering Turkana County to the West, Samburu County to the South, Wajir County to the East and Ethiopia to the North. It covers an area of about 75,750 square kilometers with a population of 315,936 (KNBS Projected). Administratively, Marsabit has four sub-Counties: Moyale, North Horr, Saku and Laisamis, which are further divided into 20 wards. The pastoral livelihood zone is the largest which supports approximately 81 percent of the population (Figure 1). The agro-pastoral livelihood zone accounts for 16 percent of the population while the employment, petty trade, casual labor and fisher folk livelihood zone along Lake Turkana accounts for three percent of the population.

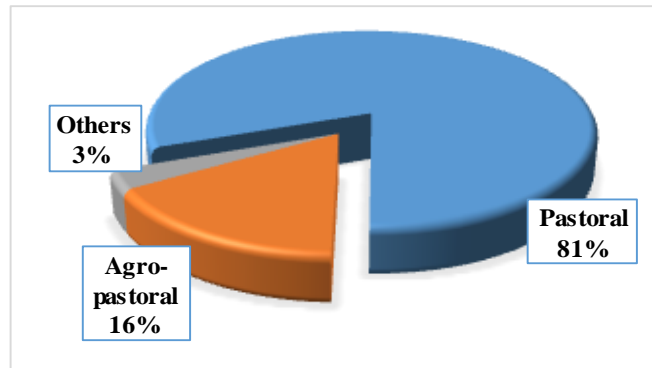


Figure 1. Population by livelihood zone

1.2 Objectives and approach

Broad Objective

To develop an objective, evidence-based and transparent food security situation analysis based on the performance of the Short Rains Season of 2016, taking into account the cumulative effect of previous seasons, and to provide recommendations for possible response based on the situation analysis.

Specific objectives

- ❖ To ascertain at the livelihood level the quality and quantity of the 2016 October to December short rains and assess their impact on all key sectors including crop agriculture, livestock, water, health and nutrition and education.
- ❖ To establish the impacts of other compounding factors on household food security, such as livestock diseases, Livestock mortality, crop failures and Market food prices.
- ❖ To establish required non - food intervention, with particular emphasis on programmes that promote preparedness and build household resilience.
- ❖ To assess potential food needs, including options for appropriate transfer modalities including food for assets, cash and vouchers, safety nets and general food distribution.

Approach

Short rains assessment is a multi-agency and multi-sectoral approach that involves an in-depth analysis and review of sector plans namely agriculture, livestock, education, water, health and nutrition. At the county level, the process starts with briefing the CSG of the aims and objectives. Technical teams review sector checklists and proceed to the field for a fact-finding mission. This includes focus group discussions in sampled communities/areas, key informant interviews and observations, with the aim of triangulating the information in the checklists with the actual situation on the ground. The team compiled the field reports, analyzed data and drafted a report which was presented to the CSG for adoption and ownership as the true reflection of the county food security status.

2.0 Drivers of Acute Food and Nutrition Security in the County

2.1 Rainfall Performance

The onset of the 2016 short rains was late, starting in the third dekad of October mainly in Marsabit and Moyale towns and their surroundings. Most areas received 50-75 percent of normal rainfall. The spatial distribution was uneven, with areas in the northern parts such as Dukana and El-adi receiving 120 – 140 percent of normal rainfall but erratically.

However, the north-west parts of Gas, Qorqa, Sarimo and Mt Kulal received only 25 – 50 percent of normal rainfall (Figure 2). The temporal distribution was poor, with the county receiving most rains

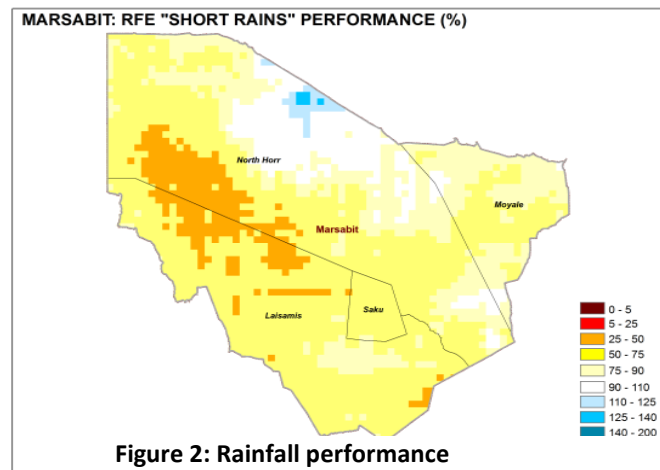


Figure 2: Rainfall performance

in the second and third dekad of November. Some areas such as Bubisa, Loiyangalani and Gas received no rainfall during the period.

2.2 Insecurity/ Conflict

The security situation was generally apart from two incidences: one was reported in Behai (Laisamis Sub County) where three children and a woman were killed in November 2016. The raiders drove away with an unknown number of livestock although they have since been recovered. The other case was in Dabel along the Wajir/Marsabit border. However, conflict is likely to arise in areas with a high concentration of livestock. Areas perceived as hot spots include QubiQallo, Leyai, Buluk, Darade, Gudas, Hawaye, Badanrero, Yamicha/Duma, Kom and Chari Ashe.

2.3 Other shocks and hazards

Flash floods and erratic rains also contributed to livestock mortality in Ngororoi, Uran-Lataka and Dukana.

Livestock diseases greatly affect livestock production across the County. Poor body condition coupled with livestock diseases contributed to increased livestock mortality thereby reducing the purchasing power and availability of food at household level.

3.0 Impact of Drivers on Food and Nutrition Security

3.1 Availability

There was limited food available in the county. Milk and other livestock products were not available, which was attributed to reduced livestock productivity, migrations and livestock mortalities and diseases. Households were neither holding food stocks obtained from the Long rains season nor anticipating harvesting any crops due to poor short rains performance resulting to crop failures in all agro pastoral zones. However, traders within the major markets stocked food.

3.1.1 Crop production

The main food and cash crops grown are maize and beans. Other crops are fruit trees such as bananas, mangoes, avocados, while major vegetables are kales and tomatoes. The short rains season is considered to be the most suitable for crop production in the county. This is largely practised in the agro-pastoral zone and accounts for less than 20 percent of total cash income in the county. In the agro-pastoral livelihood zone, food crop and cash crop production contribute to less than 20 per cent and 10 percent respectively to households' cash income. Maize contributes 22 percent and 30 percent to cash income and food respectively, while beans contribute 20 percent to both cash income and food.

Rain-fed Crop Production

The acreage under maize and beans increased by 63 and 68 percent respectively above the LTA for two reasons: first, because communities tend to prepare more land during the short rains season; second, because of the measures taken by county government to subsidize tractor services and offer free land preparation to extremely vulnerable farmers and selected institutions. Despite increased acreage, delayed onset and poor rainfall performance led to total crop failure which may lead to decline in food availability mainly in agro pastoral households.

Table 1: Rain-fed crop production

Crop	Area planted during 2016 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2016 Short rains season production (90 kg bags) Projected	Long Term Average production during the Short rains season (90 kg bags)
1.Maize	896	550	0	10,400
2.Beans	470	280	55	2,580

Micro Irrigated Crop

There was no maize crop under irrigation since Kurungu scheme in Laisamis Sub County, the Walda irrigation scheme in Moyale Sub County, and the Songa irrigation scheme in Saku Sub County all stalled due to breakdown and insufficient water to support irrigation. The area under kales and tomatoes was 58 and 50 percent respectively below the LTA. The projected production of irrigated kales and tomatoes was 53 and 40 percent respectively below the LTA. These deficits greatly compromise household incomes, food availability, dietary diversity which impacts negatively nutritional status for those households dependent on irrigation

Table 2: Irrigated crop

Crop	Area planted during the 2016 Short rains season (ha)	Long Term Average (3 years) area planted during Short rains season (ha)	2016 short rains season production (MT) Projected/actual	Long Term Average (3 years) production during 2016 short rains season (MT)
1.Tomatoes	4	7.4	4.8	8M
2.Kales	7	10.2	8.3	18MT

Maize stocks

The stocks held by households in the agro- pastoral livelihood zone were 7.9 percent of the LTA (Table 3)Traders' stocks were 71 percent of the LTA since they were stock piling in anticipation of making profits due to rising demand as the drought situation worsens. Stocks at household level were expected to decrease further pushing prices higher since households will depend on markets. However with reduced household incomes resulting from low livestock prices, some households may not afford to purchase food.

Table 2. Maize stocks in the county

Maize stocks held by	Quantities held currently (90-kg bags)	Long Term Average quantities held (90-kg bags) at similar time of the year
House holds	950	12,000
Traders	3,540	5,000
Millers	0	0
NCPB	0	0
Total	4,490	17,000

3.1.2. Livestock Production

The main livestock species are cattle, camels, goats, sheep and donkeys. In the pastoral livelihood zone, livestock production contributes 81 percent to cash income. While in agro pastoral livelihood it contributes to 50 percent to cash income.

Pasture and Browse Condition

The pasture and browse condition was poor in agro-pastoral and pastoral livelihood zones (table 4).

Table 4: pasture and browse condition by livelihood

Livelihood zone	Pasture condition			Browse condition		
	Current	Situation at this time of year	Projected duration to last (months)	Current	Situation at this time of year	Projected duration to last (months)
Pastoral	Poor	Good	Depleted	Poor	Good	One month
Agro pastoral	Poor	Good	One month	Fair	Good	One month

Pasture is completely depleted in some places in the pastoral livelihood zone such as Forakoren, Gas, Mbarambate, Qorqa, Kargi, Kurkum, El-hadi, Balesa, Funan-Kumbi, Burgabo, Ambalo, Dabel and Dukana which was not normal attributed to poor regeneration of the rangelands and overstocking. Where little pasture is available, like in areas around Mt. Marsabit, Hurri hills, Shurr, Badanrero pastures are expected to last for one month. Consequently, milk availability has declined since livestock has migrated in search of pasture.

Livestock Productivity

Livestock Body Condition

Livestock body condition was poor in sheep, cattle and goat while it was fair for camels in all livelihood zones which is not normal at this time of the year (Table 5).

Table 5: livestock body condition by livelihood

Livelihood zone	Cattle		Sheep and goats		Camel	
	Current	Normally	Current	Normally	Current	Normally
Pastoral all species	Poor	Good	poor	Good	fair	Good
Agro pastoral	Poor	Good	poor	Good	Fair	Good
fisher folk			Poor	Good	Fair	Good

Body condition is worsening in all the species attributed to insufficient pasture and browse availability as well as long trekking distances. In some areas such as Farakoren, Arge, Gas, Gatab, Burgabo, Dukana, Eleborr, Illeret, Barambate and Balesa livestock body condition was emaciated

with deaths reported. As a result, livestock prices have significantly declined thus households purchasing ability has declined.

Tropical Livestock Units (TLU) and Birth Rates

Livestock birth rates for all species were normal across all livelihood zones but coincided with drought period thus several kids and calves died. The average TLUs In pastoral livelihood zone was seven while in agro pastoral it was four. TLUs are below normal and will likely reduce as livestock mortalities increase. Households' asset and livelihood may be affected due to high mortality rate.

Milk Availability and Cost

Milk availability was reported in approximately 10 percent of the households in the county as opposed to normal where most households have milk. Where available, 0.5 – 1.0 litres per household per day in pastoral and agro pastoral livelihood zones was reported which is below normal. Milk prices are higher than normal in all livelihood zones (Table 6).

Table 6: Milk production, consumption and prices

Livelihood zone	Milk Production (Litres)/Household		Milk consumption (Litres)/Household		Prices (Ksh)/Litres	
	Current	LTA	Current	LTA	Current	LTA
Pastoral all species	0.5-1	2-3	0.5-1	2	70-80	50-60
Agro pastoral	0.5-1	2-3	0.5-1	2	80-100	60-70
Others (fisher folk)	0.5-1	1-2	0.5-1	1-2	80-100	60-70

Decline in milk production has negatively affected dietary diversity as depicted by worsening food consumption scores and rising malnutrition levels. Additionally, increase in milk price limits quantity purchased and deprive households disposal income to buy other food stuffs.

Water for Livestock

The major sources of water for livestock were boreholes, which was not normal at this time of the year as the main source is usually pans. In some places such as Moyale, Kalacha, Dukana and Gatab shallow wells, water pans and springs were being used. The return trekking distances from grazing areas to water points were 50-70kilometres for camels, 20-30 kilometres for cattle and 15-25 kilometres for small stock in agro pastoral and pastoral livelihood zones. Watering frequency for livestock was 4 – 5 days for small stock and cattle, and 10 – 14 days for camels, which were not normal at this time of the year (Table 7). The average waiting time at watering points was 6-8 hours for camel, 3-5 hours for both cattle and small stock with the exception of areas such as Luai, Arge, Burgabo, and El-Hadi where waiting times were up to 10 hours.

Table 7: water for livestock, return trekking distances by livelihood zone

Livelihood zone	Return trekking distances in km		Expected duration to last in months		Watering frequency			
	Current	Normal	Current	Normal	Species	days	Normal	Days
Agro Pastoral	20-30	15-20	1	2-3	Camel	12	Camel	6
					Cattle	4	Cattle	1
					Small stock	5	Small stock	2
Pastoral	50-70	20-30	1	1-2	Camel	12	Camel	6
					Cattle	4	Cattle	2
					Small stock	5	Small stock	3
Fisher folk	50-70	20-30	1	1-2	Camel	12	Camel	6
					Small stock	5	Small stock	2

Livestock Migration

In-migration was reported to Shurr, Badan-Rero and Ntursi areas from Wajir County and southern Ethiopia. Out migration to south-east Ethiopia from El hadi, Dukana and Illeret, to Yamicha and Kom in Isiolo from Kargi, Merille and Jaldesa, and to Baragoi and Seera areas in Samburu county from South Horr, Ngurnit and Illaut. Within the county, livestock are concentrated around Aradhe and Badhanrero in Moyale sub county; Shurr, Gudas, Kom, Ntursi and Thorongong' in Laisamis sub-county; Elboji, Huri hills, Chari Ache and Sibilo in North Horr sub-county; Songa and Sabarwawa for Saku sub county. These livestock movements were not normal for this time of the year. Pasture was inaccessible in Koom, Buluk and Isiolo/Marsabit border due to conflict incidences reported in October 2016 raising tension among surrounding communities.

Livestock Diseases and Mortalities

There were no reported outbreaks of livestock diseases. However endemic diseases reported included, Contagious Caprine Pleuropneumonia (CCPP), Contagious Bovine Pleuro-pneumonia (CBPP) and Peste des Petits Ruminants (PPR) across the county. Foot and Mouth disease was reported in Songa, Karare and Mt. Kulal.

Livestock mortality rates due to drought were 15-20 percent for small stock and 3-5 percent of Bcattle. However, in areas such as Gas, Dukana, Balesa, Barambate and Qorqa, mortality rates were approximately 25-30 percent.

3.2 Access

Food commodities were accessible in major markets despite slight price increase. Major food supply is stable from usual sources such as Meru, Isiolo, Ethiopia and Marsabit. Some livestock markets are not functional due to lack of buyers and livestock migration affecting households'

sources of income especially in pastoral livelihood zone. Livestock prices have significantly decreased in all markets in turn reducing purchasing power.

3.2.1 Markets

Market Operations

The main markets for food commodities are Moyale and Marsabit in the agro-pastoral livelihood zone and Laisamis and North Horr in the pastoral livelihood zone. The key livestock markets include Moyale, Marsabit, Sololo and Merille. Other terminal markets for livestock include Nairobi and Ethiopia. All markets were operating normally without disruption except Turbi and sololo due to conflict between buyers, sellers and brokers. The main livestock sold in the markets include goats and sheep while food commodities include maize, beans, kales, cabbages and potatoes. The supply and traded volumes for food commodities were stable but very low for livestock. This was attributed to poor livestock body condition, few buyers in the livestock markets and low demand in the terminal markets.

Market Prices

Maize Prices

The average price of maize was Ksh 47 per kg which was nine percent lower than the LTA of Ksh 51 per kg (Figure 3). Maize prices are stable with supplies obtained from major markets including Ethiopia, Isiolo, Nyahururu and Meru. Lower maize Prices were noted in Saku (agro-pastoral livelihood zone) and the border towns of Moyale Central, Forolle, Elhadi and Dukana where the price of a kilo was for Ksh 30 - 40. The highest prices were recorded in Elmolo, Sarima and Olturot where the price of a kilo was Ksh 60 - 70. In far flung villages, food commodity prices were 20 - 30 percent higher than market point price due to rough terrain and poor infrastructure. The price of maize is likely to increase slightly in the next three months.

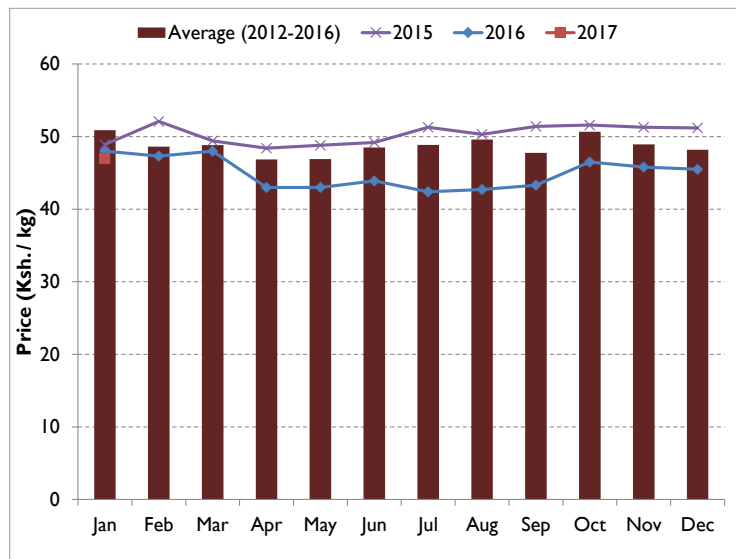


Figure 3: Maize prices

Goat Prices

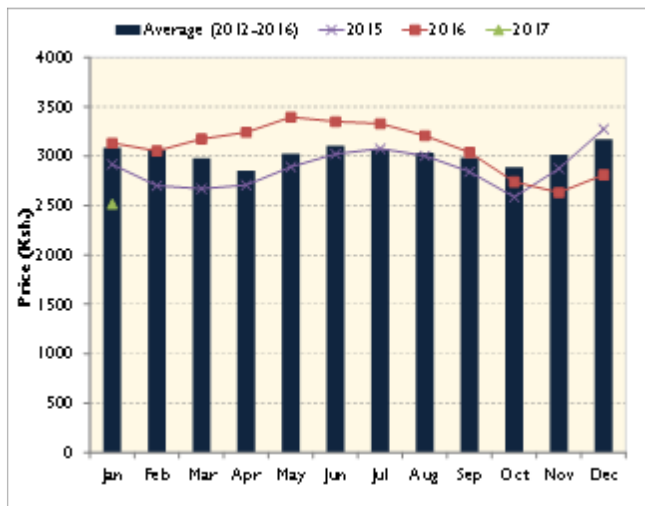


Figure 4: Goat prices

The current average goat price was Ksh 2,515, which was 18 percent below the LTA of Ksh 3,086 and 20 percent lower than the price in January 2016 (Figure 4). The decrease in goat prices may be attributed to poor body condition resulting from the poor quality of pasture and browse. In addition, pastoralists are trying to dispose off their livestock due to their deteriorating condition but there are no buyers. Goat prices are likely to decline drastically in the next three months. Consequently, purchasing power at households will likely deteriorate thereby limited access to food.

Term of trade

The current terms of trade were not favourable to pastoralists but were within the LTA due to decrease in goat prices in January 2017. Households could purchase of 54 kilograms of maize from the sale of one goat compared with 61 kg normally. The current TOT are lower than same time last year when households could purchase 65 kg of maize (Figure 5). The TOT are expected to gradually decrease from January due to decreasing livestock prices and increasing maize prices.

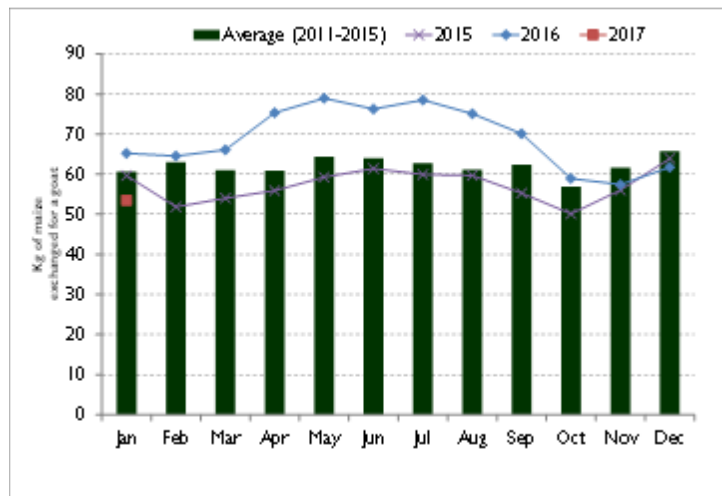


Figure 5: Terms of trade

3.2.3 Income Sources

The sources of income for each livelihood zone are shown in Table 8. Livestock and livestock produce contributes 81, 50 and 50 percent to income in pastoral, agro – pastoral and fisher folk livelihood respectively (Table 8). The deteriorating livestock body condition has led to decline in prices thus reducing the purchasing power.

Table 8: Sources of income

Livelihood Zone	Source of Income	% Contribution to Income
Agro Pastoral	Food crop	30
	Cash crop	10
	Livestock & livestock produce	50
	Employment & casual labour	10
Pastoral	Livestock & Livestock produce	81
	Petty trade	11
	Employment and casual labour	5
	Remittances	3
Fisher fork	Fishing and Fish products	50
	Livestock and Livestock Produce	50

3.2.4 Water Access and Availability.

The main water sources were boreholes, springs, shallow wells, pans dams and water trucking. In the pastoral livelihood zone, the main water sources were natural ponds, boreholes, shallow wells, pans and dams, while in the agro-pastoral livelihood zone they were roof catchments, boreholes, pans, springs, earth dams and shallow wells.

Major water sources

With the poor performance of rainfall across the county, the recharge of most open water sources was very low at between 20 to 35 per cent. However, pans in Moyale Sub County had better recharge of up to 60 - 80 per cent although 70 percent are currently holding water at 40 to 50 percent as large number of migrating livestock pass through area and high evaporation rates. The remaining 30 percent of the pans in Moyale have dried up and those currently having water are expected to last for one. In the remaining agro pastoral (Saku sub county) and pastoral (North horr and Laisamis sub counties) livelihood zones, all the pans have already dried up. All the existing borehole water supplies which fall in pastoral livelihood zone are fully operational to the maximum despite frequent breakdowns which are promptly repaired by Borehole Rapid Response team.

Household Distance to Water Sources and Waiting Time

The current average return distances for households were 10 – 15 and 6 - 10 kilometres for pastoral and agro pastoral livelihood zones respectively compared to the normal distances of 2 – 5 kilometres at this time of the year. In the agro pastoral area of Sagante and pastoral areas of Farakoren and Lekuchula Tigo and Qattamurr among others, exceptional return distances of 20 to 24 kilometres were experienced. Longer distances were attributed to the drying of pans countywide across all livelihood zones except Moyale Sub-County where the pans have water and where distances remain normal.

Waiting time ranged between 60 to 120 minutes across all livelihood zone which is above the normal period of 20 to 30 minutes at this time of year. Exceptional high waiting times of 2 to 3 hours were reported in Sagante, Gatab and Elebor.

Table 9: Distance, cost, waiting time and average household use by livelihood zone.

Livelihood zone	Distance to water for domestic use		Cost of water		Waiting time at water source (minutes)		Average HH use (litres/person/day)		Projected duration of water in (months)
	Current	Normal	Current	Normal	Current	Normal	Current	Normal	
Agro Pastoral	6-10	2-4	3-5	3-5	60-120	20-30	4-6	15-20	Less than one month
Pastoral	10-15	3-5	3-5	3-5	60-120	20-30	4-8	15-20	Less than one month

Cost of Water and Water Consumption

The average cost of water was Ksh 3 – 5 per 20-litre jerrican across all livelihoods which was normal. In the urban areas of Moyale and Marsabit, water from vendors cost Ksh 25 – 50 per 20-litre jerrican. The increased cost in urban centres is mainly due to the drying of shallow wells and damage caused by ongoing road construction in the two towns. A higher cost of Kshs.50 to 70 per 20 litre jerrican was observed in the pastoral areas of Huri Hills, Elle Borr and QattaMurr where private water trucking is carried out by individuals. Average household water consumption in the pastoral livelihood zone was 4 – 8 litres per person per day while in the agro- pastoral livelihood zones it was 4 - 6 litres per person per day compared with the normal of 15 – 20 litres per person per day across all livelihood zone. A few areas such as Arge, Lekuchula, Marime, Torricha and Amballo in the pastoral livelihood zone had lower consumption of less than 4 litres per person per day.

The low availability of water at household level across all livelihood zones has greatly affected utilization thus resulting to poor hygiene and sanitation hence increased cases of malnutrition and morbidity.

3.2.5 Food consumption

The Food Consumption Score (FCS) has significantly deteriorated.34 percent of the households in the county had poor consumption score,51 percent border line and 14.5 acceptable compared to 12.5 percent , 25.7 percent borderline and 61.8 percent acceptable in LRA 2016.

This implies that a majority of the population are consuming one food group mostly cereals and occasionally consume pulses, milk, meat and meat products. Consequently, dietary diversity is poor across all livelihoods although worse in pastoral all species .Households reported having one meal per day in both livelihoods as opposed to 2-3 meals per in agro pastoral and 1-2 meals in pastoral.

3.2.6 Coping Strategies

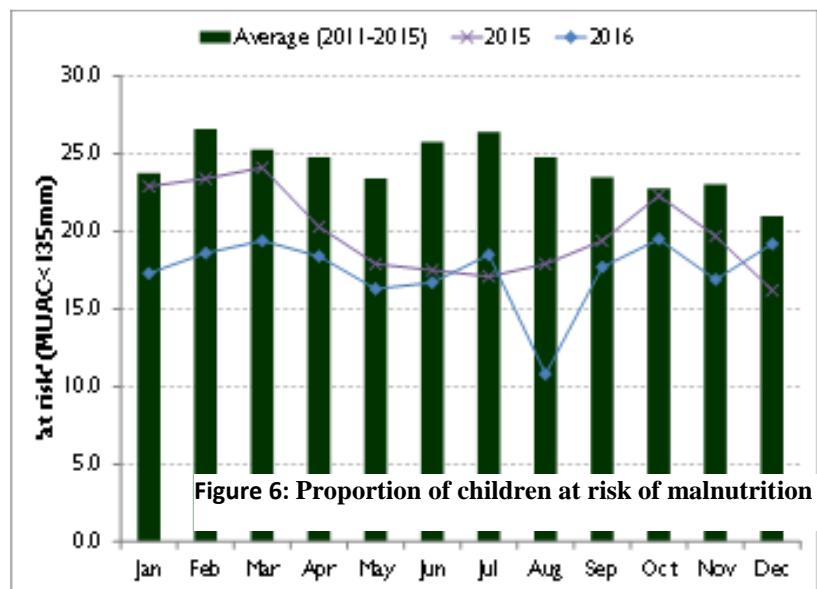
Coping strategy in December 2016 was 25 while it was 19 in December 2015. Pastoral livelihood zone CSI was 29 while it was 22 for agro pastoral livelihood. Overall, more households are engaging in many coping strategies more frequently compared to the same time last year. Additionally, pastoral all species are applying coping strategies more frequent than agro pastoral livelihood. Coping strategies used include skipping of meals, reducing portion size of meals, relied on less preferred and/or less expensive foods, borrowing food or relying on help from neighbors, friends and relatives and restricting consumption by adults so as children can feed.

3.3 Utilization

Food consumption score show most households fall within poor and borderline category while coping strategies are increasing. This depicts quality food inadequacy in the households as well as low food groups intake. Water access and availability remains low with increasing distances to water resulting to poor hygiene and sanitation.

3.3.1 Nutritional Status

Slight decrease in children at risk of malnutrition was noted in December compared to previous months. Children at risk of malnutrition in the County were 19.2 percent in December which is 8.6 percent below the LTA. Despite the improvement, malnutrition levels are still very high in Laisamis and North Horr sub Counties with children (6-59 months) with global acute malnutrition (GAM) showing critical (24.7%) and very critical (31.5%) respectively (SMART Survey Jan 2017). The hot spot areas were Illeret, Loiyangalani, Dabel and North Horr.



3.3.2 Morbidity

Morbidity trends in the county were stable with no diseases outbreak reported. Major diseases for under-fives and general population were URTI, Diarrhoea, malaria, diseases of the skin and pneumonia.

3.3.3 Sanitation and Hygiene

Contamination of open water sources was mainly caused by open defecation and humans sharing water sources with livestock. The county's latrine coverage averaged 58.9 percent as at August 2016 which is 9.3 percent above the same period in 2015. Only 10.4 percent of household practiced hand washing at critical time with Moyale having the highest of 17.9 percent while Laisamis has the lowest of 4.0 percent. Water treatment practices were low at 20 percent countywide mainly due to inadequate access to water treatment chemicals. Poor human waste disposal and low water treatment level raised the exposure to disease out-breaks which had led to the prevalence of water-related diseases such as diarrhea.

3.4 Trends of Key Food Security Indicators

Table 10: Food security trends in Marsabit County

Indicator	Long rains assessment, July 2016	Short rains assessment, Feb 2017
% of maize stocks held by households (agro-pastoral)	28%	7.9%
Livestock body condition	All species = GOOD except Elhadi areas where cattle was Fair	Sheep & Goat = Poor Camel & Cattle = Fair
Water consumption (litres per person per day)	10 litres/person/day	4-8 litres/person/day
Price of maize (per kg)	51	47
Distance to grazing	All species agro pastoral = 15-20km All species pastoral = 20-30	Agro-pastoral = 20-30 Pastoral = 50-70
Terms of trade (pastoral zone)	65	54
Coping strategy index	21	25
Food consumption score	Poor : 12.5 percent Borderline: 25.7 percent Acceptable: 61.8 percent	Poor : 34 percent Border line: 51 percent Acceptable: 14.5

3.5 Education

3.5.1 School Feeding Program

School feeding program was not fully operational since some school did not have food while others were operating on last year's carry over. The consignment for this term was yet to be delivered to schools. However, carryover stocks from last year are expected to last only for two weeks.

Low cost boarding primary schools have not received funding thus facing challenges in feeding the children which in turn might lead to closure of the facilities. All Early Childhood Development centre have feeding program operational though faced with challenges. Equally secondary schools in all livelihoods are experiencing challenges in feeding children due to the fact that most of the children returned to school without fees or bear minimal.

3.5.2 Water Availability

Most schools in all livelihood zones lack water and have difficulty in accessing water despite having adequate storage facilities. The hardest hit are Lekuchula, Gatab, Ngurunit, Elle Borr and Mado Adhi which might close if water is not availed soon. Secondary schools in agro pastoral area of Sakuu are also faced with water shortages.

3.5.3 School Drop outs

School drop outs have been noted in both agro pastoral and pastoral livelihood zones due to lack of food and migration with parents to drought fall back areas. In agro pastoral Goro Rukesa primary was affected while in pastoral livelihood zone Nairibi, Loglogo, Barambate and Qorqa were the affected primary schools. An increase of 38 percent was recorded in ECD enrollment from February 2016 to January 2017.

4.0 Food Security Prognosis

4.1 Assumptions

- ❖ Price of major food commodities are likely to remain high as household will depend more on markets
- ❖ Performance of long rains 2017 are most likely to be below normal
- ❖ Conflicts are most likely to occur as competition for rangeland recourses heightens

4.2 Food security outlook for February to April 2017.

The food security situation is expected to worsen across all the livelihood zones. Household food stocks are expected to diminish further thereby causing gradual increase in the market price of staple food commodities. Browse and pasture in fall- back grazing areas where livestock are currently concentrated will deplete by the end of February, with ever increasing distances to water, livestock body conditions for all species in all the livelihood zones will worsen leading to ,intense migration, further decline in livestock prices , livestock mortality and continued loss of other livelihood assets. Milk production is expected to cease completely, which will further lower dietary diversity and food consumption. Coupled with reduced water intake, continued deteriorating sanitary situation this will lead to increased malnutrition and disease outbreaks for children under five years.

Most households across the county are expected to remain in crisis phase (IPC Phase 3) while a few households may slide into Emergency phase (IPC Phase 4) if the drought continues until April.

4.3 Food security outlook for May to July 2017.

Long rains are mostly likely to be below normal. The county would most likely go through three successive seasons of poor rains, range land resources will most likely fail to rejuvenate, more livestock mortality in all species, and more households more likely to enter Emergency phase if the droughts are to continue until July. Conversely, if long rains will be normal, will most likely improve, pasture and browse will rejuvenate, surface water sources will recharge, livestock body condition will improve, milk will be available, market operation will restore and Terms of trade will increase resulting in improved purchasing power and improved food consumption scores. Most households mainly in pastoral livelihood zones will move back stressed phase (IPC Phase 2), while some households within agro pastoral and fisher folk livelihood zones will remain in the Crisis phase (IPC Phase 3) since crops will not have matured and fish markets will not be back to normalcy by this time.

5.0 Conclusion and Interventions

5.1.1 Phase classification

The food security phase classification for the county is Crisis (IPC Phase 3) in all livelihood zones with high possibility that some households/ areas may slide to emergency (IPC phase 4) if the drought continues until April.

5.1.2 Summary of Findings

- ❖ The county experienced livestock mortality estimates of 15-20 percent of small stocks and 3-5 percent of cattle. However, areas that were worst affected such as Dukana, Gas, Qorka, Mbarambate and El-hadi could have lost 20-25 percent of their goats and sheep due inadequate pastures and water result of poor performance of the short rains
- ❖ The county experienced near total crop failures in food crops planted during the short rains period
The proportion of population requiring immediate relief assistance is 35-45 percent, 25-35 percent, 45-55 percent and 25-35 percent respectively in Kaisaris, Moyale, North Horr and Saku sub-counties.

5.1.3 Sub – County Ranking

Table 9. Sub-county food security ranking (worst to best)

Sub County	Food security rank (1-10)	Main food security threat (if any)	Remarks
North Horr	1	Poor distribution of short rains, Depletion of pasture, livestock diseases, high livestock mortality, acute shortage of water, limited access to livestock market, intra and out migration of livestock, low underground water recharge for boreholes and shallow wells, water pans, breakdown of boreholes	Dukana, Qorqa, Balesa, Baranbate, Hurr Hills, Burgabo, Gus and
Laisamis	2	Low rangeland regeneration, Pasture and browse depletion, limited access to livestock markets, reduced milk, livestock disease, acute water shortage.	Kurungu, Farakoren, Argee, Gatab
Moyale	3	Poor performance of rainfall, pasture and browse depletion, total crop failure	ElleBorr, FunanQumbi, Amballo, MadoAdhi.
Saku	4	Poor rainfall performance, total crop failure, livestock diseases, distance to water points, poor livestock market.	Sagante, Jaldesa, GoroRukesa
Very Good (9-10) Good (7-8) Fair (5-6) Poor (3-4) Very Poor (<2)			

5.2 Ongoing Interventions

5.2.1 Food Interventions

Intervention	Objective	Specific Location	Quantity	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
Food aid/Distribution		All sub counties	Maize=782.3MT Beans =395MT Oil =3150		31,323HH	November 2016– January 2017	County Government
		Moyale	Cereal =183.1 MT Pulses=36.65MT Oil=		4,067HH	December	WFP (FFA)
			Rice=13.77MT Sugar =2.754MT Oil=1.377MT		427 HH	Completed	CARITAS
			Rice= 3500 Maize =3300		77,000 HH	In the pipeline	National Government

Intervention	Objective	Specific Location	Quantity	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
			Beans = 1400 Oil=350 CSB=140				/Special programme. v
			Maize=49.5 Beans =9MT Rice =3MT Veg. oil=3MT		3,000HH	Completed by December	African Muslim agency (AMA)
Cash transfers		All sub counties			30,721	Ongoing	Partners
Livestock							
Vaccination of Livestock		Moyale & North Horr	330,000 animals				RPLP-WORLD BANK
Livestock diseases surveillance							VSF
Vaccination of Livestock		Moyale & North Horr	330,000 animals				RPLP-WORLD BANK

5.2.2 Non Food Interventions

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
Cash transfers		All sub counties	==	=	30,721 HH	Ongoing	NDMA-DFID COUNTY GOVERNMENT RED CROSS CHILDREN DEPARTMENT CONCERN UK
Livestock							
Vaccination of Livestock		Moyale & North Horr	330,000 livestock	=		Ongoing	RPLP-WORLD BANK

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
Livestock diseases surveillance			500,000 livestock	=	720 HH	Ongoing	VSF
Vaccination of Livestock		Moyale & North Horr	330,000 livestock	=	30,000 HH	Ongoing	VFS-G
Slaughter off take		Maikona	1,950	=	2,861	Completed	Concern worldwide UK.

5.3 Recommended Interventions

5.3.1 Food Interventions

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Agriculture							
County wide	Provision of relief food	Across the County	25,000 HH	County Government of Marsabit, National Govt and other Non state actors	363M	20.0M	Feb – April 2017

5.3.2 Non Food Interventions

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Agriculture							
County wide	Provision of relief seeds	In agro pastoral livelihood zone	2500 HH	County Government of Marsabit, National Govt and other Non state actors	4.0M	Nil	March – April 2017
Livestock							
County wide	Support livestock	All sub counties	20,000 cattle,	Government of Marsabit,	900M	Nil	Feb – Mar 2017

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
	commercial off take program		200,000 small stock	National govt, non-state actors			
County wide	Support livestock slaughter off take program	All sub counties	Cattle 5000, small stocks 100,000	Government of Marsabit, National govt, non-state actors	327M	Nil	Feb – Mar 2017
County wide	Feed supplement	All sub counties	5000 HH	National Government, County Government of Marsabit and Individual pastoralists	50M	2.0M	Feb – Mar 2017
County wide	Provision of essential veterinary drugs, vaccines and other inputs	All sub counties	500,000 small stocks and cattle	Government of Marsabit, National govt, non-state actors	40M	3.0M	Feb – July 2017
Water							
County wide	Water trucking to acute water shortage areas	County wide	53,268	County Government of Marsabit and Partners	65.0M	0	Feb – April 2017
County wide	Fuel subsidy for strategic boreholes	County wide	41,600 Human 2.45m livestock	County Government of Marsabit and Partners	35.0M	0	Feb – April 2017
County wide	Provision of fast moving spare parts for borehole repair	County wide	232,000	County Government of Marsabit and Partners	26.0M	0	Feb – April 2017
County wide	Support to borehole rapid response team	County wide	232,000	County Government of Marsabit and Partners	34.0M		Feb – April 2017
County wide	Provides storage facility, plastic tanks, collapsible tanks for	County wide	53,268	County Government of Marsabit and Partners	30.0M		Feb – April 2017

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
	water trucking						
County wide	Provision of water treatment chemical	County wide	168,400	County Government of Marsabit and Partners	3.0M		Feb – April 2017
County Wide	Provision of standby gen – sets and pumps of boreholes	County wide	232,000	County Government of Marsabit and Partners	50.0M		Feb – April 2017
Health and Nutrition							
Moyale	Upscaling outreaches Mass screening HINI Interventions	Moyale	19627	MOH/CWW	10.6M	Nil	Feb – April 2017
North Horr	Up scaling outreaches, Mass screening, HINI	North Horr	13555	MOH/CWW/FH K/AMREF HNP/MALTZ	15.5M	Nil	Feb – April 2017
Saku	Mass screening HINI outreach	Saku	9309	MOH/CWW/FH/ HNP	13.6M	Nil	Feb – April 2017
Laisamis	Up scaling outreaches, Mass screening, HINI	Laisamis	10501	MOH/CWW/FH/ HNP	13.1M		Feb – April 2017
County wide	Provision of water treatment chemical and water filters	All 4 sub counties	50 health facilities	MOH/CWW/FH/ HNP	20.0M	2.0M	Feb – June 2017

Sub County	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Education							
All the 4 sub counties	Fast tracking of food to schools for the school feeding program	177 primary schools	48,670	County Government of Marsabit, WFP,	Nil	Nil	Feb 2017
All the 4 sub counties	WATER TANKS	50 SCHOOLS	10,000	COUNTY GOVT. National govt , Non state actors	4000000 /=-	NIL	Feb – June 2017
County wide	Water trucking	4 sub counties	50 schools	Partners, County and National Government	5.0M	Nil	Feb – April 2017
County wide	Food for low cost boarding	Schools with low cost boarding 58 schools	2900 students	Partners, County and National Government	13.5 M	Nil	Feb – April 2017

6.0 Annexes

Population in need

Division/Ward name	Population in the division (projected 2016,KNBS)	Pop in need (% range min – max)	Proposed mode of intervention
North Horr	81593	45-55	CFA/FFA
Laisamis	71256	35-45	CFA/FFA
Moyale	112629	25-35	CFA/FFA
Saku	50458	25-35	CFA/FFA