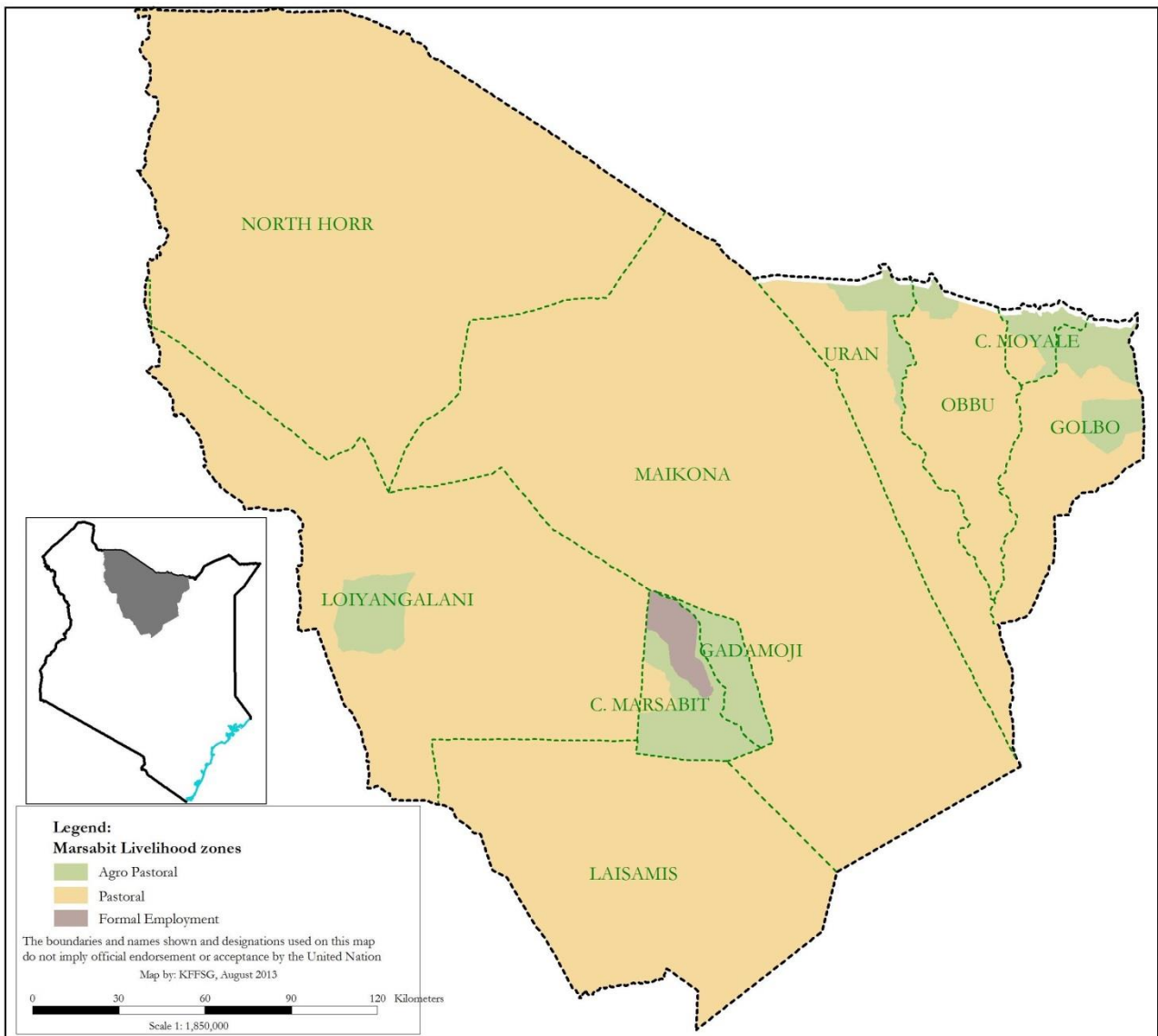


# MARSABIT COUNTY 2017 LONG RAINS FOOD SECURITY ASSESSMENT REPORT



**A joint Report by the Kenya Food Security Steering Group (KFSSG)<sup>1</sup> and the Marsabit County Steering Group**

**July, 2017**

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## **EXECUTIVE SUMMARY**

Marsabit County is classified as crisis (IPC Phase 3) in the pastoral livelihood zone and stressed (IPC Phase 2) in the agro-pastoral livelihood zone. Food consumption score for the county stood at 40.7 percent for poor, 35.7 percent borderline and 23.6 percent acceptable. Coping strategy index for the county was 26.2 in the pastoral livelihood zone and 15.8 in the agro-pastoral livelihood zone compared to 25 recorded six months ago. Household dietary diversity ranged between three and five food groups mainly consisting of cereals and cereal products, Pulses and legumes, milk and milk products and condiments like oils and fats and sweets. Global Acute Malnutrition (GAM) prevalence was very critical in North Horr at 31.0 percent, critical in Laisamis at 24.8 percent and poor for Moyale and Saku with 5.4 percent and 8.2 percent respectively. Both under five and crude mortality rates stood at 0.03/10,000/day in the county.

The long rains started late in the second dekad of April with the larger part of the county receiving between 25 to 50 percent of normal rains while the eastern part including Moyale received relatively good rains of between 75 to 125 percent of normal rains. Temporal distribution was poor with 18-20 rainy days while spatial distribution was uneven. Cessation was timely in the third dekad of May. There were reported cases of resource-based conflict along Laqi-Korondile border and pockets with insecurity issues. Moderate livestock deaths were noted due to flash floods especially in Duakana and Laqi areas and drought in North Horr.

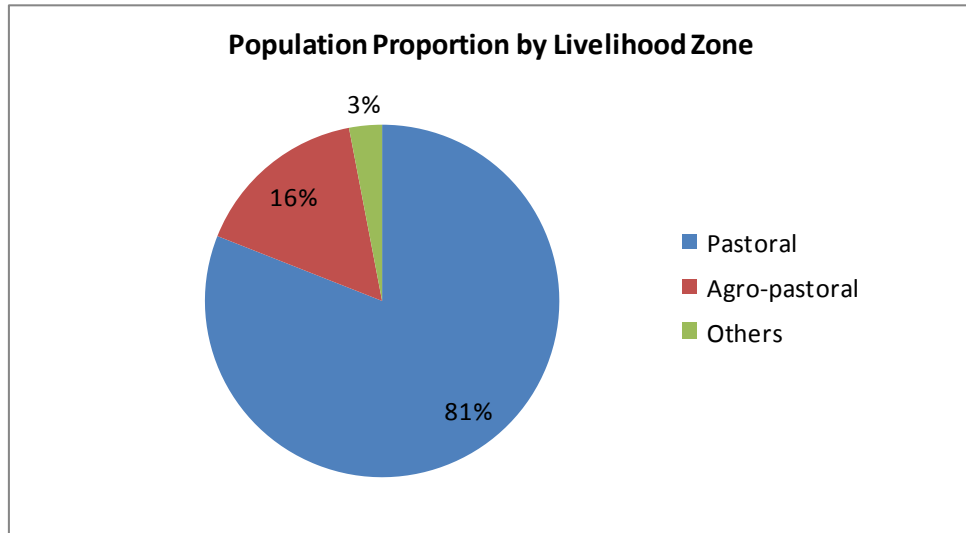
The county recorded lower acreage planted both under rain fed and irrigated agriculture for all the main crops grown with a corresponding decline in projected harvest compared to the long term averages. Household maize stocks amounted to only 19 percent of the long term average in the county. Livestock body condition was fair for all livestock species across all livelihood zones except for cattle that exhibited poor body condition in the pastoral livelihood zone. Return trekking distances to watering points ranged between 15 to 25 kilometres with exceptions of some few pockets in the pastoral areas of North Horr and Laisamis sub counties at 60-80 kilometres. Milk production at household levels was less than two litres per day with consumptions falling below one litre per day.

Market operations remained normal with only Turbi market not functioning due to inadequate livestock for sale. Basic food commodity prices remained high compared with same period last year. Coupled with the low prices of goats, the terms of trade have worsened. Currently the sale of an average goat would buy 59 kilograms of maize compared to 76 kilograms recorded same period last year. A total of 179 public primary schools with 44,566 pupils are under the Home Grown School Meals Programme (HGSMP)

# 1. INTRODUCTION

## 1.1. County Background

Marsabit County is situated in the Northern part of Kenya. The county borders Turkana County to the West, Samburu County to the South, Wajir County to the East and Ethiopia to the North. The county covers an approximate area of 75,750 square kilometres with an estimated population of 315,936 people (KNBS



**Figure 1: Proportion of the Population by Livelihood Zones**

projections 2016). Administratively, the county is divided into four sub counties namely; Moyale, North Horr, Laisamis and Saku. There are three main livelihood zones in the county which include: Pastoral livelihood zone constituting 81 percent of the county population; Agro-pastoral livelihood zone at 16 percent of the county population; and others having a combined population of three percent as shown in Figure 1 above. The main source of cash income in the pastoral and agro pastoral livelihood zones is livestock production contributing 82 percent and 60 percent of cash income in the pastoral and agro-pastoral livelihood zones respectively. Food crop production comes second in the agro-pastoral livelihood zone contributing 20 percent of cash income while in the pastoral zone, formal waged labour and petty trade contribute 11 percent of cash income.

## 1.2. Objectives and Approach

The broad objective of this Long Rains Assessment (LRA) was to develop an objective, evidence-based and transparent food security situation analysis following the performance of long rains season of 2017, taking into account the cumulative effect of previous seasons, and to provide recommendations for possible response options based on the situation analysis. Specifically the assessment was aimed:

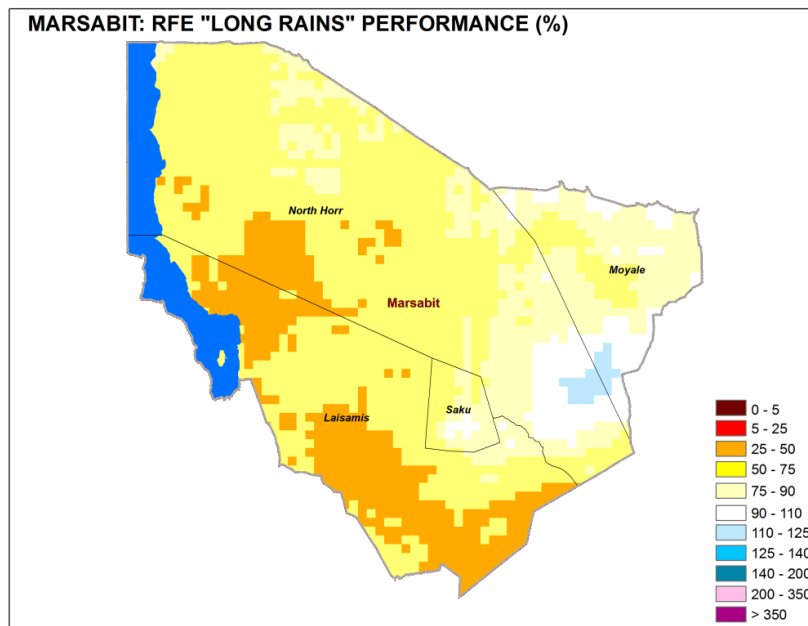
- ❖ To ascertain at the livelihood level the quality and quantity of the 2017 March to May long rains and assess their impact on all key sectors including crop agriculture, livestock, water, health and nutrition and education.
- ❖ To establish the impacts of other compounding factors on household food 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**

The 2017 LRA assessment was multi-agency, multi sectoral approach that involved an in-depth analysis and review of checklists from various sectors that impact on the food security namely: Agriculture, livestock, water, health and nutrition, and education. The assessment was conducted from 3<sup>rd</sup> July to 14<sup>th</sup> July, 2017 and involved the county steering group drawn from the sectors mentioned and various non-state actors including: World Food Programme (WFP), World Vision, CIFA; Kenya Red Cross Society (KRCS) among others. The process began with the initial CSG briefing of the aims and objectives followed by sector presentations on the status of various indicators. This was followed by the review of the sector checklists which was the main data collection tool with the aim of identifying the gaps among others. The technical teams then proceeded to the field for a fact-finding mission with the aim of triangulating the information in the checklists with the actual situation on the ground. The mission included focussed group discussions, community interviews and key informant interviews in selected sites across all livelihood zones. During the transect drives, visual inspection techniques were employed and observations noted. The data collected was analysed at the sub-county and livelihood zone levels and sectoral county reports generated. Further analysis was done using the Integrated Food Security Phase Classification (IPC) reference tool. The team later compiled and drafted county report whose preliminary findings were presented to the CSG for adoption and ownership as the true reflection of the county food security status.

## 2. DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

### 2.1. Rainfall Performance



**Figure 2: Percent of Normal Long Rains**

county received between 50 to 75 percent of normal long rains with exception of Gas and Mt. Kulal regions in the western part of the county and South Horr and Merile regions in the southern part of the county that received depressed rainfall ranging between 25 to 50 percent of normal rains. The eastern parts of the county mainly Moyale received relatively good rains ranging between 75 and 90 percent of long rains while pockets around Sololo received enhanced rains of between 90 to 125 percent of normal rains as shown in Figure 2 above. Overall, Agro-pastoral livelihood zone received near normal rainfall amounts whereas Pastoral livelihood zone received depressed and below normal rainfall amounts. The amounts were unevenly distributed in space with the northern parts of Moyale, Saku receiving relatively enhanced rains while areas including El-hadi, Balesa, Amballo, Burgabo, Turbi, Dabel and Bubisa received depressed rainfall. Temporal distribution was poor with the county experiencing two to three rainy days in March, nine to 11 rainy days in April and six rainy days in May giving a total of 17 to 20 rainy days in the agro-pastoral livelihood zones. However, in the pastoral zones, there were two to six rainy days with long dry spell intervals. Most parts of the lowlands (pastoral livelihood zone) experienced two to four rainy days in May. The rains ceased normally in the third dekad of May.

### 2.2. Insecurity/Conflict

There was reported case of resource based conflict (pasture) in May along Lagi- Korondille border. In the month of June, there were reported cases of banditry attacks in Laisamis, Songa, and Sarima. However, the situation had since been contained.

### 2.3. Other Shocks and Hazards

Flash floods were reported in May that resulted in loss of nine human lives in Illeret and further displacement of people in Bori and Godoma. Earlier on in March, over 17,000 small stocks

Marsabit County is short rains dependent contributing 70 percent to season performance while the long rains contribute 30 percent to season performance in the county. The onset of the long rains was late in the second dekad of April compared to the normal onset in the first dekad of April. However, in Moyale the rains started in the third dekad of March. The county received a cumulative amount of 181.5 mm of rains in Marsabit areas and 177.5 mm in Moyale.

The larger part of the

were killed in Dukana due to erratic rains received in the areas and which also affected more than 40 households. In April, livestock deaths as a result of drought were reported in parts of North Horr, Loiyangalani, Barambate, Qorqa, Maikona and Gas. On the other hand, more than 200 cattle died as a result heavy downpour in Malbebal and Laqi in Moyale sub County during the week of 18<sup>th</sup> April. Approximately 10,000 small stocks died across the county (Karare, Huri Hills, Elgade, Olturot, Toricha, Maikona, Bori, Mt Kulal, Laqi, Sololo, Gas) as a result of another heavy downpour received on 30th April 2017.



### 3. IMPACTS OF DRIVERS ON FOOD AND NUTTRION SECURITY

#### 3.1. Availability

##### 3.1.1. Crop Production

Marsabit County is short rain dependent accounting for 80 percent of the county food security while the long rains which is considered to be the least suitable for food crop production only accounts for 20 percent of the county food security. The three main crops grown during the long rains are maize, beans and green grams. Maize contributes 30 percent to food and 22 percent to cash income in the agro-pastoral livelihood zone while beans contribute 20 percent each to food and cash income.

##### Rain-fed crop production

The area planted under maize during the 2017 long rains was only 290 hectares which was 61 percent below the long term average of 745 hectares (Table 1). The area planted for beans and green grams also reduced to 220 hectares for beans and 25 hectares for green grams representing a decline of 71 and 40 percent respectively compared to the long term averages of 761 hectares for beans and 42 hectares for green grams. The reduced area under cultivation was attributed to; little rains during the onset of the rain season, near total crop failure of the previous season that discouraged farmers to cultivate and the lack of certified seeds for pulses in the local markets.

A projected production of 280 bags of maize is expected denoting a decline of 94.6 percent compared to the long term average production of 5,220 bags of maize. 600 bags of beans have been realized from the 220 hectares planted which represented only five percent of the long term average of 11,140 bags. A projected production of 55 bags from green grams is expected from the long rains season against the long term average of 210 bags which represent a decline of 74 percent. The below long term average production realized for beans and expected for maize and green grams are attributed to: Inadequate and poorly distributed rainfall, reduced acreage cultivated under food crops, late planting that led to withering, expensive farm labour which resulted to untimely weed control, invasion of army worms and maize stalk borer on maize plantation, and massive crop destruction by elephants in Karare ward in Saku sub-county. However, significant variations were noted in various areas within the same agro-pastoral livelihood zone. For instance, fair harvest was realized in areas like Songa and Badassa whereas foot slopes areas of Kubi Bagassa, Goro Rukesa and Parkishon recorded very dismal harvests in Saku sub county.

**Table 1: Crop Production under Rain-fed Agriculture**

Crop	Area planted during 2017 long rains season (Ha)	Long Term Average area planted during the long rains seasons (Ha)	2017 long rains season production (90 kg bags) Projected/Actual	Long Term Average production during long rains seasons g bags)
Maize	290	745	280 (Projected)	5,220
Beans	220	761	600 (Actual)	11,140
Green grams	25	42	55	210

## Irrigated crop production

There was a decline in areas put under irrigation for all the major irrigated crops of maize, tomatoes and kales. The area cultivated for maize was two hectares against the long term average of 30 hectares representing a 93 percent decline while that of tomatoes and kales were five and seven hectares respectively representing a decline of 67 percent for tomatoes and 56 percent for kales. The below LTA acreage for maize production under irrigation was due to stalling of the Kurungu irrigation scheme in Laisamis sub-county leaving only Kinisa irrigation scheme within Moyale put on maize. The decrease in areas put under irrigation for tomatoes and kales decreased due to non-operation of most greenhouses; breakages of piping to most irrigation farms that have since stalled; inadequate knowledge on greenhouse management; unavailability of the right type of agro-chemicals and improved seed varieties; and increased importers that have flooded the local markets. In Walda irrigation scheme, water melons and butter nuts have been put under irrigation for the first time on a 16 hectares for water melon and 8 hectares for butter nuts and a projected production of 80 and 40 metric tonnes for water melon and butter nuts respectively is expected (Table 2).

A production of 30 bags of maize is expected against the long term average of 240 bags denoting a 87 percent decline. Breakdowns and high maintenance costs for the irrigation infrastructure; and inadequate water for irrigations occasioned by low recharge of surface water sources are the main factors that are attributed to the decline in the projected production of maize. The decline in the expected production of tomatoes and kales by 73 and 65 percents respectively is attributed to attacks of the irrigated crops by variety of pests and diseases that were occasioned by inadequate pests and diseases control schedule measures; inadequate water supply; and also the effects of delayed harvesting which resulted in losses.

**Table 2: Crop Production under Irrigated Agriculture**

Crop	Area planted during the 2017 long rains season (Ha)	Long Term Average (3 years) area planted during long rains seasons (Ha)	2017 short rains season production (90 kg bags) / Projected actual	Long Term Average (3 years) production during long rains season (90 kg bags)
<b>Maize</b>	2	30	30	240
<b>Tomatoes</b>	5	15	120 MT	450 MT
<b>Kales</b>	7	16	280 MT	800 MT
<b>Water Melon</b>	16	Xxx	80 MT	xxx
<b>Butter Nuts</b>	8	Xxx	40 MT	xxx

## Maize Commodity Stock in the County/Sub-county

The current maize stocks held by households in the county is only 2,490 bags which represent 19.2 percent of the long term average of 13,000 bags (Table 3). The significant variation is attributed to poor crop performance and reduced household purchasing power due to increased food prices and declining livestock prices. On the other hand, traders are currently holding 8,400 bags compared to the long term average of 15,000 bags representing 56 percent of the long term average as shown in table 3 below. The below average stocks held by the traders are attributed to poor crop production within the county and inadequate supply and increased prices from external markets mainly from Meru, Isiolo and cross border trade from Ethiopia. There

are no millers within Marsabit County while NCPB only holds stocks temporarily for relief agencies (WFP). The available stock held by households in the agro-pastoral livelihood zone is expected to last for less than a month compared to the normal of three months. Households within the pastoral zones do not hold stocks and as such rely heavily on the market for their purchases.

**Table 3: Maize Stock by Various Actors**

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	2,490	13,000
Traders	8,400	15,000
Millers	0	0
NCPB	0	0
<b>Total</b>	<b>10,890</b>	<b>28,000</b>

### 3.1.2. Livestock Production

The main livestock species in the county are Camels, Cattle, Goats and Sheep. Livestock production is the main source of income contributing 82 percent of cash income in the pastoral livelihood zone and 60 percent of cash income in the agro-pastoral livelihood zone. Among the different species of livestock in the county, cattle contribute the highest percentage of cash income both in the pastoral and agro-pastoral livelihood zones at 40 and 35 percents respectively. Small stocks follow second at between 25 percent and 32 percent of cash income across the livelihood zones.

### Pasture and Browse Condition

**Table 4: Pasture and Browse Condition**

Livelihood zone	Pasture					Browse				
	condition		How long to last (Months)		Factors Limiting access	condition		How long to last (Months)		Factors Limiting access
	Current	Normal	Current	Normal		Current	Normal	Current	Normal	
Pastoral	poor	fair	<1	3	Insecurity	Fair	Good	2	4	Accessible
Agro-pastoral	Fair	Good	1	3	Insecurity	Good	Good	2	4	Accessible

The forage condition is below normal across all the livelihood zones in the county as shown in table four above. The below normal condition is mainly attributed to the prolonged drought and below normal rains experienced in the county. Besides there was poor pasture regeneration due to sporadic rainfall across all the livelihood zones except parts of Moyale Sub County. However from the observation there was regeneration of invasive weeds and plants that are not palatable for all livestock species. In Shurr, Jaldesa, Buluk, Sabarre, Sarima and parts of Laisamis have limited access to pasture due to inter-tribal clashes (Borana/Gabra, Borana/Rendile, Gabra/Dasanach and Turkana/Samburu) insecurity. The available forage is

expected to last for one month for pasture and two months for browse against the normal 3 months and 4 months for pasture and browse respectively.

### Water Availability and Access

**Table 5: Water Availability and Access**

Livelihood zone	Sources		Return average trekking distances (km)		Expected duration to last (months)	
	Current	Normal	Current	Normal	Current	Normal
Pastoral	Borehole, shallow wells and water pans in Moyale ,Namarei	Seasonal rivers and pans	15-25 (exceptions in Merile 60-80)	11-20	Less than 1 month for Pans	3 months
Agro-pastoral	Shallow wells, Springs and Pans, Boreholes	Shallow wells, Springs and Pans, Boreholes	15-25	11-20	2 months	3 months

The main water sources for livestock use are: Boreholes, shallow wells and water pans in the pastoral livelihood zones as shown in table five. Normally, seasonal rivers and pans would be part of the main sources. The rainfall was erratic hence no enough water was collected in water pans. However most boreholes are operational but many shallow wells have low recharge level. The available water in the pans is expected to last for less than a month compared to the normal 3 months at similar period. Insecurity and longer trekking distances are some of the factors limiting access especially in areas of Bubisa, Shurr, Jaldesa, Kargi, Farakoren, Malabot, Gas, Qorqa, El-hadi, Balesa, Dukana among others. The average return trekking distances to watering points ranges from 15 kilometres to 25 kilometres across the livelihood zones against the normal 11-20 kilometres. However, in the pockets of the pastoral zones, like Merille, the return trekking distance was reported to range from 60-80 kilometres.

### Watering Frequency

The variations in watering frequency shown in table six below was attributed to limited pasture and fair browse conditions occasioned by the little amount of rains received

**Table 6: Watering frequency in (Intervals)**

Livelihood zone	Cattle		Camels		Goats		Sheep	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral	4	2	10	14	4	3	4	3
Agro-pastoral	2	1	5	7	4	3	4	3

**Table 7: Livestock Body Condition**

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
pastoral	Poor	Fair	Fair	Good	Fair	Good	Good	Good
Agro-pastoral	Fair	Good	Fair	good	Fair	Good	Good	Good

Across all livelihood zones body condition of all livestock species with exception of camels have deteriorated and range from poor to fair for cattle and sheep/goats as shown in table seven above. The body condition of camels is good across all livelihood zones.

There was minimal kidding, lambing and calving across all livelihood zones due to the fact that the animals had just come out of a severe drought period and there was no breeding which took place during the drought for most of the livestock species. Further, most breeding stocks including bulls, rams and bucks had been lost to the prevalence of drought.

**Table 8: Milk Production, Consumption and Pricing**

Livelihood zone	Milk Production (Litres)/Household		Milk consumption (Litres) per Household		Prices (Ksh)/Litre	
	Current	LTA	Current	LTA	Current	LTA
pastoral	1	4	<1	3	100-120	80
Agro-pastoral	2	6	<1	2	100-120	60

Table 8 above shows the variations in milk production, consumption and prices across the livelihood zones. The below normal milk production in the agro-pastoral zone was attributed to the fact that there was minimal calving for all livestock species as a result of the drought which prevented the pastoralists from breeding most of their livestock; hence the birth rates were still low. Subsequently the below normal production have pushed up the prices as shown in table eight above to retail at between Ksh. 100 to Ksh. 120 per litre.

#### Average Number of Livestock (Tropical Livestock Units -TLUs)

**Table 9: Tropical Livestock Units**

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Pastoral	Less than 1	3 and above	3	5 and above
Agro Pastoral	Less than 1	2 and above	2	3 and above

Table 9 above shows variations in the average livestock holding per households across the livelihood zones. From the table, current average TLUs per household in the pastoral zones is less than one for the low income households and three for the medium income households. In the agro-pastoral livelihood zones, the low income household hold and average of less than one TLU against the normal two while for the medium income households, their average TLU is

two compared to the normal of three. The variations observed were mainly attributed to the moderate loss of livestock due to drought and flash floods experienced in the county.

### **Livestock Migration**

There was intense livestock migration reported from Waso in Isiolo County to Saku, Badanrero, Laqi and Amballo. About 70 percent of the livestock have migrated to satellite camps while only 30 percent have remained in homesteads. In-migration from southern Ethiopia to Badan-Rero, Bori and Laqi, Wajir to Moyale was noted. Other in-migration routes included Southern Ethiopia to Moyale, and Samburu County to the southern parts of Marsabit County. On the other hand, out migration routes include Malabot to Sabare and Tao in southern Ethiopia among others. Most livestock from North Horr are concentrated around Darade, Bulluk, Hurri Hills, Dukana, Shurr and Hawaye, Lalesa whereas livestock in Laisamis sub-county are concentrated in Koya, Gudas, Behai, Mount Kulal, South Horr, Ogicho and Nyiro ranges. Massive Increase in livestock migration mainly in Moyale sub-county will likely lead to faster depletion of forage and water sources.

## Livestock Diseases and Mortalities

**Table 10: Current Livestock Mortality Rates**

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral	Moderate	Low	Moderate	low	Moderate	low	Moderate	low
Agro Pastoral	Moderate	Low	Moderate	low	Moderate	low	Moderate	low

There were cases of Lumpy Skin Disease for cattle, diarrhoea in goats; Contagious Caprine Pleuropneumonia (CCPP), and Contagious Bovine Pleuro-Pneumonia (CBPP) across the county. There were moderate cases of livestock mortalities across all livelihood zones as shown in table 10 above due to severe drought experienced during the period which worsened the livestock body conditions combined with sudden change in temperature during the onset of rains. In some areas, cases of flash floods experienced in some parts of the County like Dukana and Laqi contributed to the deaths.

### 3.2. Access

#### 3.2.1. Markets

The main markets in the county include Moyale, Marsabit, Sololo, Loiyangalani, Maikona, North Horr, Dukana, Illaut and Merile serving both as food commodity and livestock markets. Other market like Korr is purely livestock market while Laisamis only serves as a food commodity market. Most markets operated normally in the county with only Turbi market not functional due to inadequate livestock for sale following the reduction in household holdings and deaths from droughts.

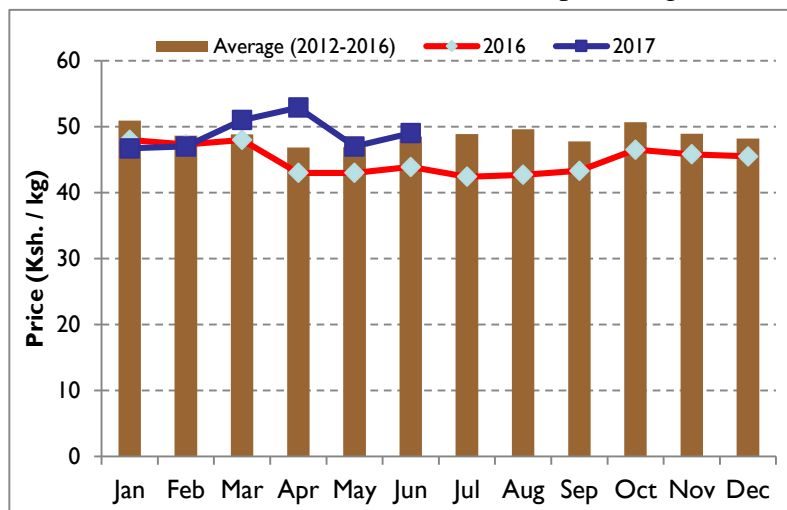
#### Market Supplies and Traded Volumes

Market supplies for food commodity come from traders within the county and also across the border from Ethiopia as well as from Meru, Isiolo and Nairobi. Normally farmers would supply the market at this time of the year in the agro-pastoral livelihood zones but due to crop failures, most market supplies come from traders. Vegetables supplied to the market come from Nyahururu. Livestock supplies to the market mainly come from within the county and across the border in Ethiopia. Livestock demand for cattle, sheep and goats come mainly from Ethiopia and within the county. The traded volumes in the market for livestock are below normal across the county due moderate livestock deaths as a result of drought and flash floods in some areas and also insecurity and fairer body condition. Most Cattle and Camels find their way into Ethiopia's markets where they fetch better prices. Demand for food commodity is high due to crop failure in most areas of the agro-pastoral zones.

### 3.2.2. Market Prices

#### Maize Price

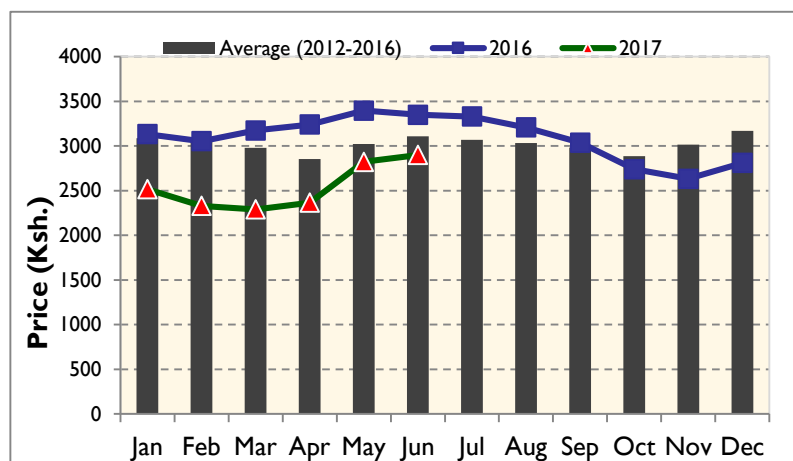
The average price of maize for the month of June retailed at Ksh. 49 per kilogram with variations reported across the livelihood zones. In the agro-pastoral livelihood zones of Moyale Township, Saku and Sololo maize retailed fairly at between Ksh. 38 to ksh 45 per kilogram. High maize prices were noted in the pastoral livelihood zones of Turbi and Loiyangalani where maize retailed at Ksh. 60. The current price compares normally with the long term average price of Ksh. 49 per kilogram as shown in figure 3 below. However, the prices are five shillings higher compared to same period last year which represent 11.4 percent increase and a four percent increase from the previous month of May when maize retailed at Ksh. 47 per kilogram.



**Figure 3: Average Maize Price per kilo in the County**

#### Goat Prices

There has been a gradual increase in the goat prices from the month of March when an average goat price retailed at Ksh. 2,290 to the current price of Ksh. 2,900. The current price is however below the same period last year when an average goat retailed at Ksh. 3,349 representing a 13 percent decline over the 12 months period as shown in figure 4. The decline in prices was mainly attributed to the severe drought experienced in the county.



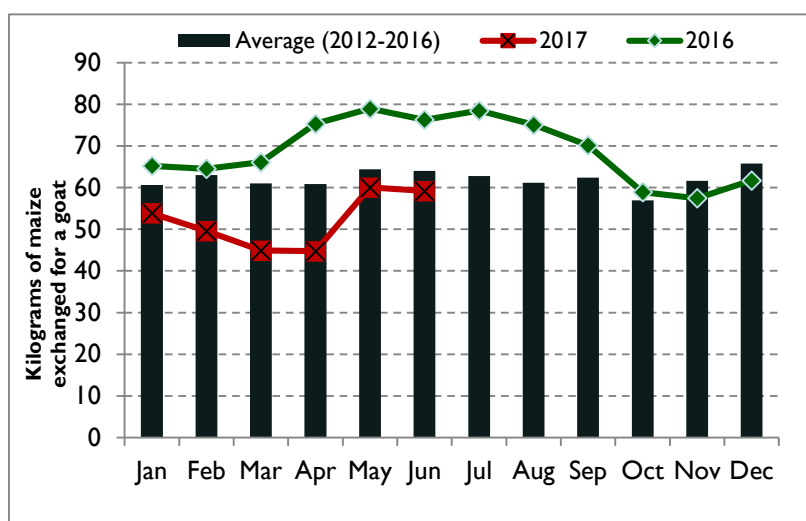
**Figure 4: Average Goat Prices in the County**

long term average, the current price is only seven percent below the long term average of Ksh. 3,107. In the livestock market of Merille and Moyale the prices were favourable at Ksh. 3,000 as opposed to the pastoral zones of North Horr sub-county which posted unfavourable goat prices due to the severe drought situations that impacted on the body conditions of the livestock.



### 3.2.3. Terms of Trade

The terms of trade have been declining from January to April and picked up and stabilized in the month of May and June when the sale of one average goat would buy 59 kilogram of maize



**Figure 5: Comparable Terms of Trade in the County**

higher maize prices and the lower goat prices compared to same period last year.

as shown in figure 5. Compared to the long term average, the current terms of trade is unfavourable and below the long term average of 64 kilogram of maize which represented a decline of 8 percent. Again, the current terms of trade fell below the same period last year when a sale of goat would purchase 76 kilograms of maize depicting a 22 percent decline compared to same period 12 months ago.

The unfavourable terms of trade was attributed to the

### 3.2.4. Income Sources

The main sources of income in the county are livestock production, food crop production, petty trade, casual waged labour among others as shown in table 11 below. 81.3 percent of household heads do not have income in North Horr Sub County while 6.8 percent engage in petty trade as their main source of income. In Moyale Sub County, 41.4 percent engage in petty trade; 2.5 percent in Laisamis and 35.9 percent in Saku sub-counties engage in petty trade.

**Table 11: Main Sources of Cash Income**

Sources of Income	Contribution to Cash Income per Livelihood Zone (%)		
	Pastoral	Agro-pastoral	Others
Livestock Production	82	60	-
Food Crop Production	-	20	-
Cash Crop Production	-	10	-
Petty Trade	4	-	30
Casual Waged Labour	1	5	20
Formal Waged Labour	7	-	10

### 3.2.5. Water Access and Availability (Including Cost and Consumption)

The main water sources in the county are surface water (shallow wells, water pans and springs); boreholes/tube wells serving the agro-pastoral, pastoral and fisher folk livelihood zones. Springs are mainly in the fisher folk and agro-pastoral livelihoods. Other sources include rain water and public tap/stand pipe. Poor rains have led to 40 percent of the water pans drying up and low yielding rates in majority of the shallow wells. A number of boreholes have broken down like Godoma, Wayegotha, and Rawana in Moyale, Burgabo, Thekuku, and Kambinyoka in North Horr, Soriadi, and Sakaldera in Laisamis while the salinity levels in Hidido and

Merille boreholes are high for human consumption. Currently there are fewer water sources compared to normal with open water sources expected to last one month.

Trekking distance to water points is less than five kilometres in the Pastoral and Agro Pastoral zones. 42 percent of the households in North Horr; 41.7 percent in Moyale; 32.9 percent in Laisamis; and 42.0 percent in Saku reported a distance less than 0.5 kilometres. Longer distances of more than two kilometres were also noted with 35.9 percent in Saku and 30.0 percent in North Horr. The current waiting time ranges between 20-30 minutes in the Pastoral zones and 30-45 minutes in Agro Pastoral livelihood zones as shown in table 12 below. About 39 percent of households in Saku; 30 percent in North Horr; and 26 percent in Laisamis reported waiting time of more than one hour. Current water consumption stands at 20-30 litres per person per day (p/p/d) within the Agro pastoral while in the pastoral is 15-20 litres p/p/d. Cost of water ranges between Ksh. 0-5 per 20 litres jerry can across the county, with exception of Marsabit and Moyale towns where water retailed at Ksh. 50 per 20 litres jerry can.

**Table 12: Distances to Water Sources, Cost and Consumption**

Livelihood zone	Distance to water for domestic use (Kms)		Cost of water (KES)		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	1-5	2-4	5	5	30-45	20-30	15-20	15-20	< one month
Pastoral	1-5	3-5	5	5	20-30	20-30	15-20	15-20	< one month

### 3.2.6. Food Consumption

About 41 percent of the population in the county have poor food consumption score implying that these household are not eating at least staple and vegetables on a daily basis. The proportion of households with borderline food consumption score is 36 percent implying the households consuming staple and vegetables complemented by a frequent four days per week consumption of oil and pulses. Only 24 percent of the population have acceptable consumption score in the county.

### 3.2.7. Coping Strategy

According to the SMART survey of July 2017, there were more severe coping strategies being employed by the household compared to the same period last year (Figure 6). In North Horr Sub County, the coping strategy index was 18.48 compared to 6.92 last year. Moyale recorded an index of 17.81 against 4.75 last year while Laisamis and Saku recorded 17.75 and 19.2 respectively compared to 15.3 and 5.78 recorded last year.

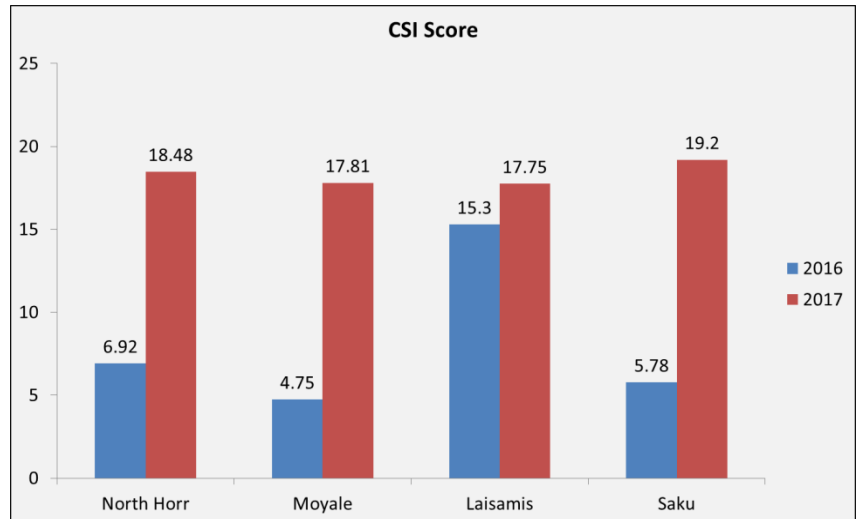


Figure 6: Coping Strategy Index SMART Survey July 2017

Some of the common coping strategies employed in the county include: Reliance on less preferred and/or less expensive food; borrowing food, or relied on help from a friend or relative; reducing the number of meals eaten per day; reducing the portion size of meals; and reducing the quantity of food consumed by adults to ensure that children had enough to eat.

### 3.3 Utilization

#### 3.3.1 Morbidity Trends

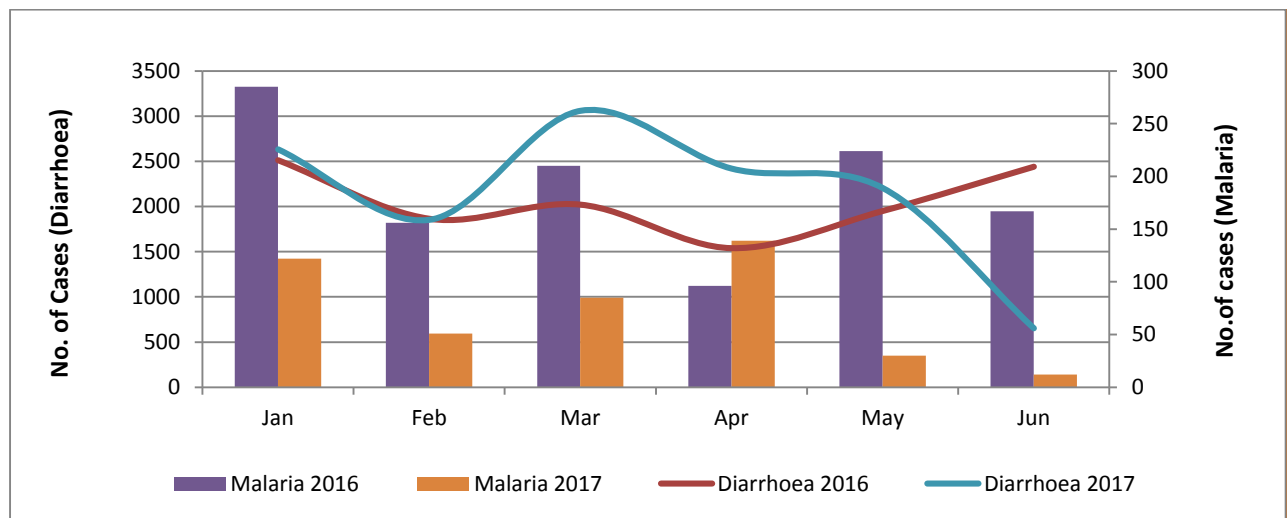
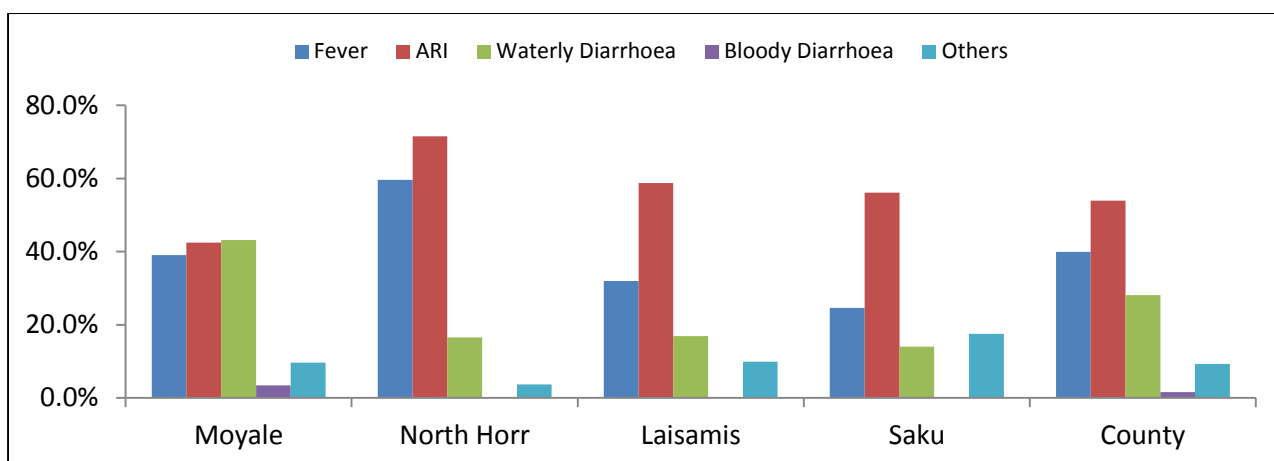


Figure 7: Morbidity Trends for Malaria and Diarrhoea amongst Under 5's in Marsabit County

Analysis of Ministry of Health, District Health Information Software (DHIS) data indicates that Malaria trends remained stable with higher cases noted in 2016 compared to 2017 (Figure 7). However, there was a spike noted for malaria cases in April 2017 that could be attributed to the rains while diarrhoea cases were also noted to be on the rise in the months of March to April 2017 with a decline from the month of May and June 2017 that is attributed to the current health workers strike which has significantly affected service delivery in the county. According to the July 2017 SMART survey, 34.8 percent of children in the county were reported to be ill in the two weeks preceding the survey (Figure 8).



**Figure 8: Child Morbidity Trends**

Of the children who were sick, 65.8 percent of caregivers sought treatment services for their sick children which indicates fairly acceptable health seeking behaviour.

### 3.3.1. Epidemic Prone Diseases

Over the period January to June 2017, the county has reported 105 cases of Kalaazar with 3 deaths recorded. Majority of the cases were in Laisamis [45 cases] and North Horr [41 cases] Sub Counties. Three Measles cases were reported compared to 129 cases same time last year as a result of increased routine measles immunization, disease surveillance and introduction of second dose of measles vaccine.

**Table 13: Epidemic cases in the County**

Disease	January to June 2016		January to June 2017	
	Cases	Deaths	Cases	Deaths
Measles	129	0	3	0
Kalaazar			105	3
Cholera	3	0	0	0

### 3.3.2. Immunization and Vitamin A supplementation

The proportion of children under one year who are fully immunized (FIC) in the county from January to June 2017 is 61.8 percent compared to 78 percent same time last year. Analysis of routine data from the DHIS indicates a Vitamin A coverage of 41 percent for children aged 6-59 months for the period January to May 2017. Comparing this with the Survey data for 2017, Vitamin A coverage is at 73.1 percent for children aged 6-59 months. The variance can be attributed to poor documentation of routine data in the health facilities.

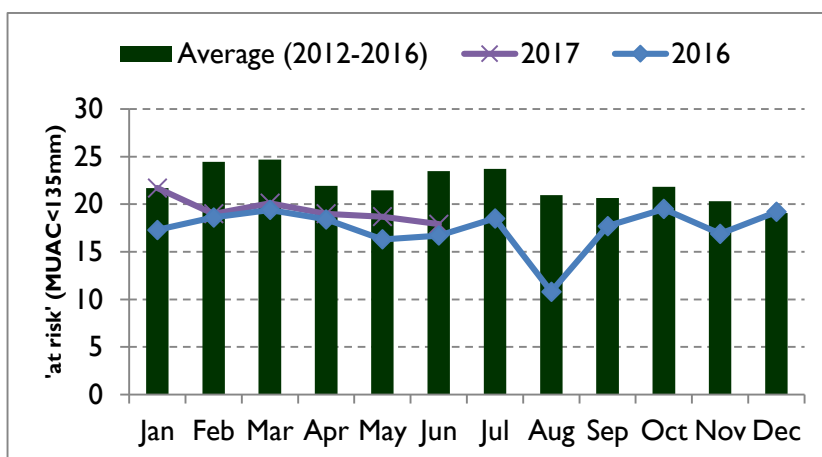
The county immunization coverage and vitamin A supplementation has dropped compared to the same period the previous year. This is also linked to the ongoing health workers strike that has affected service delivery in the county.

**Table 14: Immunization Coverage**

Year	Percentage of fully immunized children in the county Source DHIS MOH 710.	Percentage of children immunized in the county Source: Nutrition Survey
January to June 2017	61.8%	1. OPV 1 _____ 97.7%
		2. OPV 3 _____ 95.3%
		3. Measles _____ 92.4%
January to June 2016	78%	1. OPV 1 _____ 106.1%
		2. OPV 3 _____ 85.2%
		3. Measles _____ 77.1%

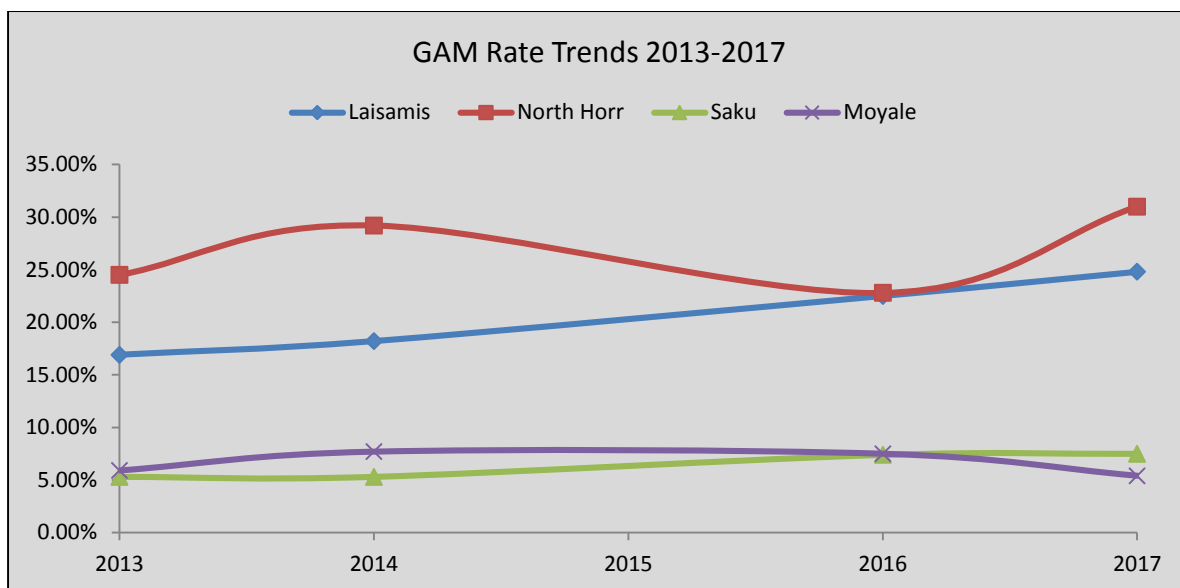
**3.3.2 Nutrition Status and Dietary Diversity**

Global Acute Malnutrition (GAM) prevalence for the county based on the weighted average was 16.9 percent which classifies the county as Critical, Nutrition IPC Phase 4. However there were significant variances across the sub counties. North Horr had a GAM of 31.0 percent which is IPC Phase 5: Extremely critical,



**Figure 9: Proportion of children with MUAC less than 135mm**

Laisamis GAM was 24.8 percent IPC Phase 4: Critical, Moyale GAM of 5.4 percent IPC Phase 2 and Saku 7.5 percent IPC Phase 2. Notably, there was an increase in GAM prevalence in North Horr compared with the same period last year when 22.8 percent was recorded. According to sentinel data from the NDMA, the proportion of children with Mid Upper Arm Circumference (MUAC) less than 135 mm was 17.9 percent and the percentages have been above the 2016 values (Figure 9). The high trend in 2017 could be attributed to the low dietary intakes resulting from the food insecurity in the county. The 2017 GAM rates are at 16.9.



**Figure 10: Trend in GAM Marsabit County 2013 -2017**

Figure 10 shows the Global acute malnutrition trends for different sub counties. Notably, Laisamis shows a steady increase in the GAM level while North Horr displays a fluctuating trend that is nonetheless critical to extremely critical over the last 4 year period

North Horr and Laisamis are mostly affected by food insecurity, water shortage, frequent socks, poor access to health services that are confounded by perennial drought episodes. Drought continues to impact heavily on the livelihoods of the communities. While communities are engaging in other forms of livelihood opportunities, they are often more destructive and earn them less in terms of economic returns.

Food insecurity is the main driver of acute malnutrition in the County. The proportion of households across the county consuming less than 5 food groups was 26.6 percent however this varied across the sub counties. In North Horr Sub County, the proportion was much higher at 54 percent and 33.9 percent in Laisamis which indicates that households were not able to diversify their food options adequately.

Marsabit County has low literacy levels compounded further by high poverty rates. Compared with the escalating food prices in the county, households are faced with a challenge to access food from markets that are also far apart and poorly stocked especially those that are rural based. Across Marsabit, there are sub counties where cash transfer programmes are not being implemented as is the case of Saku and Moyale. Conflict has also been cited as a hazard that has continued to affect the county especially along the border areas.

On average 72 percent of the population cannot read and write. Maternal workload has been cited in recent surveys to be a factor that affects care practices in particular optimal feeding of young children which predisposes them to malnutrition. Health seeking behaviour while relatively acceptable is affected by the distance to facilities and most recently the health workers strike. The integrated management of acute malnutrition program is operational in the county with enhanced services through outreaches in hard to reach areas (Table 15).

**Table 15: Number of Children in Integrated Management of Acute Malnutrition Programme**

	North Horr	Laisamis	Moyale	Saku
Malnourished Children	123	99	19	19
Number in Program	59	67	12	9
Nutrition Program Coverage (percent -proxy)	48%	67.7%	63.2%	47.4%
Number in OTP	42	12	1	2
Number In SFP	89	55	11	7
Number IN BSFP	349	9	0	6
Coverage for BSFP	85.5%	2.2%	0.0%	2.4%

Cases of upstream water contamination were reported especially within the open water sources with diarrhoea and typhoid as the main water borne disease noted. The latrine coverage in the county stood at 14.8 percent with 49.9 percent using open defecation method. Majority of households in North Horr 64.8 percent and Moyale 86.7% percent use chemicals as a way of water treatment method while boiling is mainly used in Laisamis and Saku sub counties at 64.5 percent and 54.5 percent respectively. Most of the households across all livelihood zones store water in closed containers/jerry can. Hand washing practices in the county was noted to be low with only 7.3 percent washing hand at four critical times in Saku sub-county; 8.0 percent in Laisamis; 13.6 percent in North Horr; and 25.5 percent in Moyale. The results also reflect the water situation as relates to stress and recharge of existing water sources which was inadequate especially in the pastoral areas where depressed rainfall was recorded.

At the most basic of causes, Marsabit County is affected by perennial drought. However there is limited coherence between policies and processes across various sectors that would enable the county tackle drought effectively. It is documented that the county is utilizing most of its development funds to cater for emergencies. Markets are also a major limitation as is poor environmental management and regulation that predisposes the county to further climatic shocks.

### 3.3. Trends of Key Food Security Indicators

**Table 16: Food Security Trends in Marsabit County**

<b>Indicator</b>	<b>Short rains assessment, February 2017</b>	<b>Long rains assessment, July 2017</b>
% of maize stocks held by households (agro-pastoral)	7.9%	19.2%
Livestock body condition	Sheep and Goat Poor Camel and Cattle Fair	Camel/Sheep/Goat: Fair Cattle: Poor
Water consumption (litres per person per day)	4-8 litres/person/day	15-20 litres/person/day
Price of maize (per kg)	47	49
Distance to grazing (km)	Agro-pastoral 20-30 Pastoral 50-70	Agro-pastoral 15-25 Pastoral 15-25
Terms of trade (pastoral zone)	54 kg	59 kg
Coping strategy index	25	Agro-pastoral 15.8 Pastoral 26.2
Food consumption score	Poor: 34 percent Borderline: 51 percent Acceptable: 14.5 percent	Poor: 40.7 percent Borderline: 35.7 percent Acceptable: 23.6 percent

### 3.4. Education

#### Access (Enrolment)

Enrolment in public ECDs, Primary and Secondary schools within the county is at 63,215 (30,908 girls) the enrolment of boys is higher than that of the girl in all sub counties except in Laisamis Sub County, with average female enrolment for the county at 40 percent (Table 17). The low enrolment of girls could be attributed to cultural perceptions of girl's education. Minimal transfer cases in and out of the county were noted. Between Term I and Term II, there was a ten percent decrease in enrolment noted across the county.



**Table 17: Enrolment**

Sub-County	Enrollment First term (2017)			Enrollment Second term (2017)		
	№ Boys	№ Girls	Total	№ Boys	№ Girls	Total
Laisamis	6,198	6,652	12,850	6,081	6,582	12,663
Moyale	11,895	9,937	21,832	11,644	9,405	21,049
North Horr	5,216	5,163	10,379	5,291	5,223	10,514
Saku	9,436	9777	19,213	9,291	9,698	18,989
Totals	32,745	31,529	64,274	32,307	30,908	63,215

**Participation (Attendance)**

North Horr and Laisamis top the list with the highest percentage of children not attending school at 47 percent and 45.4 percent respectively. Some of the reasons for not attending school were reported as: Family labour responsibilities; lack of nearby schools; migration away from school areas; and the perception of no value for schooling.

**Retention-(Drop out)**

Second and first term have an enrolment difference of 1,059 cases possibly dropouts resulting from the current drought mostly for the nomadic households, and lack of school fees for the secondary school students.

**School meals programme**

A total of 179 public primary schools with 44,566 pupils are under the Home Grown School Meals Programme (HGSMP) supported by the World Food Programme (WFP) (Table 18). The food basket includes maize, beans, vegetable oil and salt. Occasional water shortages and lack of firewood have constrained the provision of meals to pupils. Public ECD pupils have a snack in the form of enriched porridge supported by the county government

The Homegrown School Meals Programme supported by World Food Programme and GOK is the only programme in all public primary schools in the county. This programme has contributed to an increased and sustained enrolment in all public primary schools within the county by attracting children to school, improving learners' attendance and boosting their retention rate while in class. Water and firewood shortages remained the challenges experienced in the programme leading to pupils missing meals occasionally. Overall, it was reported that 5,322 students in 23 schools are missing meals due to lack of water to cook with and a lack of firewood in some schools.

**Table 18: School Meals Programme**

Sub-County	HGSMP Beneficiaries		
	No. of Schools	No. of Boys	No. of Girls
Laisamis	47	4,754	5,163
Moyale	35	8,271	6,901
North Horr	62	3,656	3,832
Saku	35	5,812	6,177
<b>Totals</b>	<b>179</b>	<b>22493</b>	<b>22073</b>

## **4. FOOD SECURITY PROGNOSIS**

### **4.1. Assumptions**

- Normal market operations but high basic commodity food prices
- Deteriorating body condition of livestock
- Lower goat prices
- Intense Influx of Livestock around Moyale and Saku sub counties
- Depletion of open water resources and forage
- Peaceful general elections

### **4.2. Outlook for 3 and 6 months**

The food security situation in the county is projected to deteriorate across all livelihood zones. Households maize stocks are expected to decline as the projected harvest is only five percent of the long term average. Households' dietary diversity is projected to remain stable but with a significant amount of meal size reduction. As most open water sources are expected to dry in the next three months, pasture and browse are expected to get depleted. Livestock body condition is expected to deteriorate across all the livelihood zones for the next six months due to expected forage depletion. The terms of trade is expected to worsen further with the expected fall in goat prices and high maize prices.

## 5. CONCLUSIONS AND INTERVENTIONS

### 5.1. Conclusion

#### 5.1.1. Phase Classification

The food security phase classification for the county is Stress (IPC Phase 2) for the agro-pastoral livelihood zone with potential to deteriorate and Crisis (IPC Phase 3) for the pastoral livelihood zone.

#### 5.1.2. Summary of Findings

Food consumption score for the county stood at 40.7 percent for poor, 35.7 percent borderline and 23.6 percent acceptable. Coping strategy index for the county was 26.2 in the pastoral livelihood zone and 15.8 in the agro-pastoral livelihood zone. Household dietary diversity ranged between three and five food groups mainly consisting of cereals and cereal products. Pulses and legumes, milk and milk products and condiments like oils and fats and sweets. GAM rates prevalence ranged between 5.4 percent for Moyale and 31 percent for North Horr sub-counties. Both under five and crude mortality rates stood at 0.03 in the county.

#### 5.1.3. Sub-County Ranking

**Table 13: Ranking of Sub-County in order of Food insecurity Severity**

Sub-County	Sub-County Ranking (1=Most food insecure, ...4=Least food insecure)	Main food security threats
North Horr	1	Massive deaths of livestock Depressed rainfall Severe vegetation condition Conflict between various communities Low recharge levels and High malnutrition rates
Laisamis	2	Massive livestock deaths High food prices Depressed rainfall Increased distances to grazing areas High malnutrition rates
Saku	3	Total crop failure In migration of livestock High poverty levels
Moyale	4	Massive in migration of livestock Insecurity at Wajir border

### 5.2. Ongoing Interventions

#### 5.2.1. Food Interventions

- 20,320 households are under the Hunger Safety Net Program (HSNP) in the county
- Food for Asset program is covering 4,067 households in Moyale sub-county
- 179 public primary schools are under the WFP supported school feeding program through cash transfers.
- The Ministry of Health in collaboration with the World Food Programs and Concern Worldwide is implementing Blanket Supplementary Feeding Program (BSFP) in North Horr targeting 15,474 children (6-59 months), 5,602 pregnant and lactating women.

Plans are underway to expand the BSFP to Laisamis sub-county targeting 13,539 children and 3,563 pregnant and lactating women starting this month of July to be implemented by MoH, WFP, World Vision

### 5.2.2. Non-Food Interventions

Sub county	Intervention	Ward	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
<b>Agriculture</b>							
All	Provision of early mature seeds. Maize 8.4 distributed , 5 tonnes in store for next season	All	3000	County Government	About 1200 farm families reached	3M	2 Months
All	Subsidized tractor ploughing services @1500 /acre	All	270 vulnerable HH	County Government	Increased area under cultivation	4.5M	Continuous
Saku Moyale Laisamis North Horr	Continued provision of agriculture extension services	All agro pastoral	3500 farming household reached	County Government & other stakeholders	Continued adoption of agriculture as an alternative livelihood.		Continuous
Saku Moyale Laisamis North Horr	Provision of assorted farm inputs, pumps, agro chemicals ,herbicides	All	300 HH	County Government	Reduced crop loss due	1.1M	3 months
Saku	Farmers Field School	- Sagante – Jaldessa	280	CARITAS & DoALF	Availability of vegetable for home consumption	0.6M	Continuous

Sub county	Intervention	Ward	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost	Time Frame
Saku	Construction of Shade Net structures to groups	Central and Sagante	300 HH	CIFA, Caritas & DoALF	Availability of vegetable for home consumption	3.5M	Continuous
Moyale	Rehabilitation of Walda Irrigation Farm	Sololo	100 HH	KRC	Availability of vegetable and other food crops for home consumption	===	6 months
All	Kales value chain up scaling	whole	62 farmer groups	ASDSP DoAL&F	Adoption of most suitable varieties	1.2M	Continuous
Moyale	FFA	all	4067HH	WFP & WVK	Micro water harvesting structures for crop production		Continuous
Laisamis & North Horr	Feasibility studies and development of designs for establishment of spate irrigation	Kurungu Elgadde	1200 HH	County Government	Flood water harvesting for crop production	21M	2 Months
<b>Livestock</b>							
Marsabit	Vaccination	All	Ongoing	RPLRP and CDoALF	Increased immunity to diseases		3Months
<b>Water</b>							
All sub counties	Drilling, rehabilitation and equipping of Boreholes	All sub counties	23,000	County Gov. of Marsabit	Improved water availability and access	96.5M	2017
All sub counties	Construction of water pans and dams	All sub counties	13,800	County Gov. of Marsabit	Improved water availability and access	54.0M	2017

<b>Sub county</b>	<b>Intervention</b>	<b>Ward</b>	<b>No. of beneficiaries</b>	<b>Implementers</b>	<b>Impacts in terms of food security</b>	<b>Cost</b>	<b>Time Frame</b>
All sub counties	Construction and rehabilitation of pipeline and infrastructure and construction of tanks, purchase of plastic tanks and storage	All sub counties	17,000	County Gov. of Marsabit	Improved water availability and access	71.0 M	2017
<b>Education</b>							
All sub counties	School Meals	All 179 Public primary schools in the county	44566	WFP/GO K	Increased access and retention		2017
<b>Health</b>							
All sub counties	Vitamin A Supplementation	All	5,1837	MOH/C WW/FH/ WV			
All sub counties	Zinc Supplementation	All	12,130	MOH/C WW/FH/ WV			
All sub counties	IYCN Interventions (EBF and Timely Intro of complementary Foods)			MOH/C WW/FH/ WV			
All sub counties	Management of Acute Malnutrition (IMAM)	All	12,034	MOH/C WW/FH/ WV			
All sub counties	Iron Folate Supplementation among		9413	MOH/C WW/FH/ WV			

<b>Sub county</b>	<b>Intervention</b>	<b>Ward</b>	<b>No. of beneficiaries</b>	<b>Implementers</b>	<b>Impacts in terms of food security</b>	<b>Cost</b>	<b>Time Frame</b>
	Pregnant Women						
All sub counties	Deworming			MOH/C WW/FH/ WV			
Laisamis North Horr	Blanket Supplementary Feeding (BSFP)			WFP/WV /CWW			

### **5.3. Recommended Interventions**

#### **5.3.1. Food Interventions**

Following the assessment of the long rains on the impact on various sectors in Marsabit county, the team recommended reduction in the population in need of immediate food aid as shown in table 20 below.



**Table 14: Population in need of Food Assistance**

S/No.	Sub-County	Population in need (% range min – max)	Proposed mode of intervention
1.	North Horr	45-50	
2.	Laisamis	40-45	
3.	Saku	30-35	CFA/FFA
4.	Moyale	30-35	CFA/FFA

**5.3.2. Non-Food Interventions**

SUB COUNTY	Intervention	Sub county	No.of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
<b>Agriculture</b>							
All	Early mobilization of farmers for land preparation	All	2000 HHs	DoALF	0.75 M	-	Continuous
All	Support vulnerable farmers with certified seeds	All	1000HHs	DoALF	3.5 M	-	Continuous
All	Expansion of land under cultivation through subsidized tractor services	All	1500 HHs	DoALF	1.1 M	-	Continuous
All	Continued support to water harvesting for crop production	All	20 community groups	DoALF	21 M	-	Continuous
All	Continued support to capacity building of farmers	All	300HHs	DoALF	1.2 M	-	Continuous
<b>Water</b>							

SUB COUNTY	Intervention	Sub county	No.of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
County wide	Support preparedness program for the current long dry spell -Support emergency borehole rapid response team (Fuel and allowances)	22 strategic boreholes county wide	14	County Government of Marsabit	4.5 M	0	By start of July to end of October, 2017
	Procurement of major spare parts for rehabilitation and repair of existing gen – set.	22 strategic boreholes county wide.	12,000	County Government of Marsabit	25.0 M	0	By start of August to end of October, 2017
	Procurement of fast moving parts for routine servicing of gen - sets	All boreholes county wide	80,000	County Government of Marsabit, NDMA, Stakeholder	7.0 M	0	By start of August to end of October, 2017
	Procurement of 4No standby gen - sets	22 strategic boreholes county wide.	12,000	County Government of Marsabit, NDMA, Stakeholder	20.0 M	0	By start of August to end of October, 2017
	Procurement of 6No	22 strat	12,000	County Governme		0	

SUB COUNTY	Intervention	Sub county	No.of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
	submersible pumps	egic bore holes county wide.		nt of Marsabit, NDMA, Stakeholder	3.6 M		By start of August to end of October, 2017
	Provide fuel subsidy to boreholes	All bore holes county wide	80,000	County Government of Marsabit, NDMA, Stakeholder	5.0 M	0	August to October, 2017
	Support water trucking to worst affected areas	All sub-counties	10,000	County Government of Marsabit, NDMA, Stakeholder	5.0 M	0	August to October 2017
County wide	Augmentation and expansion of existing piped water supply systems.	County wide	34,000	County Government of Marsabit/ Stakeholders	42.0 M	0	2017/2018
	Drilling, rehabilitation and equipping of boreholes	County wide	14,000	County Government of Marsabit/ Stakeholders	80.0 M	0	2017/2018
	Construction, de-silting and expansion of pans and dams	County wide	18,000	County Government of Marsabit/	70.0 M	0	2017/2018

SUB COUNTY	Intervention	Sub county	No.of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
				Stakeholders			
	Capacity building for water service providers	County wide	3000	County Government of Marsabit/ Stakeholders	15.0 M	0	2017/2018
	Provision of water treatment chemicals	County wide	60,000	County Government of Marsabit/ Stakeholders	6.0 M	0	2017/2018
	Rehabilitation and protection of shallow well	County wide	21,000	County Government of Marsabit/ Stakeholders	35.0 M	0	2017/2018
ALL	Supply of water	All Schools in Saku and Moyale Sub-counties	27,101	GOK/Partners	97 M	NIL	July 2017 to July 2018
ALL	Provision of energy saving Jikos	All schools in the county	44,566	GOK/Partners	89.5 M	NIL	July 2017 to July 2018
ALL	Supply of food to low cost boarding primary school	Public primary schools boarding schools	3000	GOK/Partners	6M	Nil	July 2017 to March 2018

<b>SUB COUNTY</b>	<b>Intervention</b>	<b>Sub county</b>	<b>No.of beneficiaries</b>	<b>Proposed Implementers</b>	<b>Required Resources</b>	<b>Available Resources</b>	<b>Time Frame</b>
		in the county					
ALL	Provision of food for fees for secondary schools	schools	2000	GOK/Partners	6M	Nil	July 2017 to March 2018
<b>Health</b>							
Laisamis	Micronutrient supplementation		All under-fives	GOK and non-state players			2017/2018
Laisamis	Growth monitoring and promotion			GOK and non-state players			2017/2018
All Counties	Multi sectorial collaborations( agri- nutrition)			GOK and non-state players			2017/2018
All Counties	Coordination (SCNTF, CNTF)			GOK and non-state players			2017/2018
All Counties	Supportive supervision and data quality audit			GOK and non-state players			2017/2018

## ANNEXES

### 6.1. Implementation Status of the of the Proposed Interventions from LRA 2016

Intervention description/type	Location	No of beneficiaries		Cost in Ksh	Implementers /actors	Remarks Implementation status (ongoing, completed, not completed) % completion status
		Male	Female			
<b>Agriculture</b>						
Ploughing for vulnerable HHs	ALL	400 HH		-	County Government	Completed
Provision of certified seed	All sub counties	1400 HH		-	County Government	Completed
Subsidized tractor services	All sub counties	800 HH		-	County Government	Completed
<b>Livestock</b>						
Support livestock commercial off take program	All sub counties	20,000 cattle,		900M	Government of Marsabit	
Support livestock slaughter off take program	All sub counties	Cattle 5000, small stocks 100,000		327.0M	Government of Marsabit, National Govt, non-state actors	
Feed supplement	All sub counties	5000 HH		50.0M	National Government, County Government of Marsabit and Individual pastoralists	
Provision of essential veterinary drugs,	All sub counties	500,000 small stocks		40.0M	Government of Marsabit, National Govt, non-state actors	

vaccines and other inputs		and cattle				
<b>Health</b>						
Upscaling outreaches Mass screening HINI Interventions	Moyale	19627		10.6M	MOH/CWW	Done
Up scaling outreaches, Mass screening, HINI	North Horr	13555		15.5 M	MOH/CWW/F HK/AMREF HNP/MALTZ	Done
Mass screening HINI outreach	Saku	9309		13.6 M	MOH/CWW/F H/ HNP	Done
Up scaling outreaches, Mass screening, HINI	Laisamis	10501		13.1 M	MOH/CWW/F H/ HNP	Done
Provision of water treatment chemical and water filters	County wide	50 health facilities		30 M	MOH/CWW/F H/ HNP	Done
<b>Education</b>						
Fast tracking of food to schools for the school feeding program	All the 4 sub counties	48,670		Nil	County Government of Marsabit, WFP	Done to 100%
Water Tanks	50 Schools)	10,000		4M	COUNTY GOVT. National govt , Non state actors	2 tanks by non-state actors
Water trucking	50 Schools)			5 M	Partners, County and National Government	Done to 70%
Food for low cost boarding	58 schools	2900 students		13.5 M	Partners, County and National Government	Done to 10% of the schools