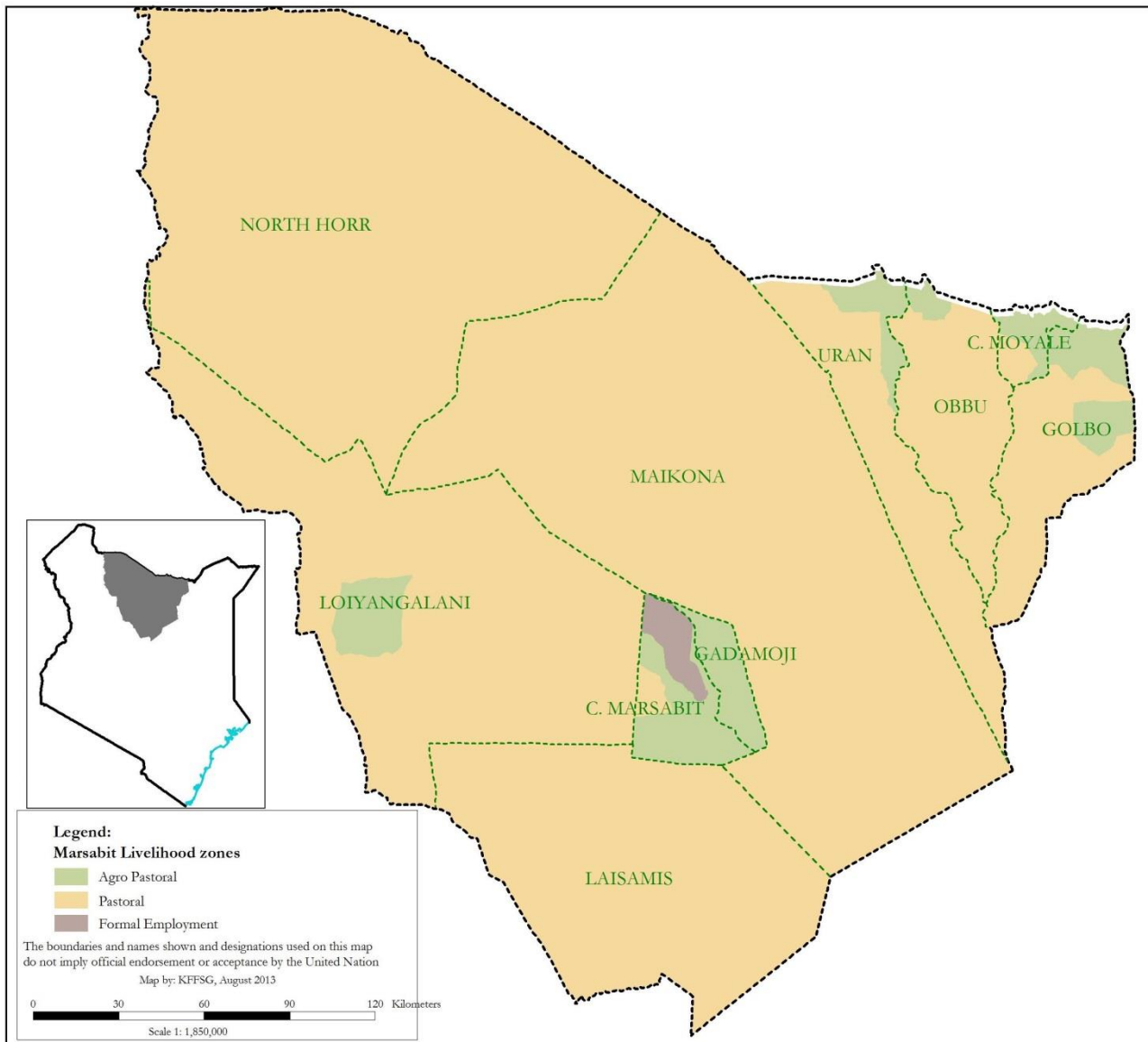


MARSABIT COUNTY 2017 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



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

February, 2018

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EXECUTIVE SUMMARY

Marsabit County is classified as Stressed (IPC Phase 2) with exception of Laisamis sub-county which is classified under crisis (IPC Phase 3). Food consumption score in the agro-pastoral livelihood zone indicated 67.9 percent of the household had acceptable consumption while 18.5 percent had borderline and 13.6 percent had poor consumption score. In the pastoral livelihood zone, 55.2 percent had acceptable consumption score, 22.8 percent had borderline while only 3.5 percent had poor consumption score. The mean coping strategy index was 22.3 with only three percent of the households not adopting any coping strategies. Nine percent of the households employed emergency coping strategies, 54 percent adopted crisis coping strategies while 32 percent of the households adopted stress coping strategies. Pastoral livelihood zones of North Horr and Laisamis had GAM rates of 21.8 percent and 21.2 percent respectively. Children at risk of malnutrition in North Horr and Laisamis were 3.4 and 6.8 percent respectively. Crude mortality rate and U5MR is below the cut off points for the period July up to December 2017.

The onset of the short rains was timely in the second dekad of October. Generally, the northern parts of the county received enhanced rainfall amounting to 125 to 200 percent of normal while the eastern parts received between 75 to 110 percent of normal rains. Depressed rains were received in the lower parts of the county including Loyangalani and Laisamis which received below normal rains at 50 to 75 percent. Spatial distribution was even but poor temporal distribution characterized by 10-17 rainy days across various parts of the county. The rains ceased early in the third dekad of November compared to the normal second dekad of December.

There was a decline in the acreage planted for crops both for the rain-fed agriculture and also irrigated agriculture with a corresponding decline in projected harvest compared to the long term averages. The current household maize stocks amounted to only four percent of the long term average in the county. Even though the livestock body condition ranged from good to fair as a result of movement to fall back grazing areas, the forage condition was fair to poor in various parts of the county. Average return trekking distances to watering points ranged between 15 to 25 kilometres in the pastoral livelihood zones and five to 15 kilometres in the agro-pastoral livelihood zones. Due to previous droughts, there were low birth rates across the county resulting into low milk availability at household levels with milk consumption ranging between 0.5 to one litres per day.

Market operation remained normal in most markets across the county. Maize prices stabilized for the period under review but increasing goat prices were observed resulting into favourable terms of trade especially for the pastoralists where households were able to purchase 66 kilograms of maize from the sale of an average size goat.

1. INTRODUCTION

1.1. County Background

Marsabit County is located 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.

The county covers an approximate area of 75,750 square kilometres (km²) with an estimated population of 315,936 people (KNBS projections 2016). The county is divided into four administrative units namely; Moyale, North Horr, Laisamis and Saku sub-counties. There are two main livelihood zones in the county namely: Pastoral

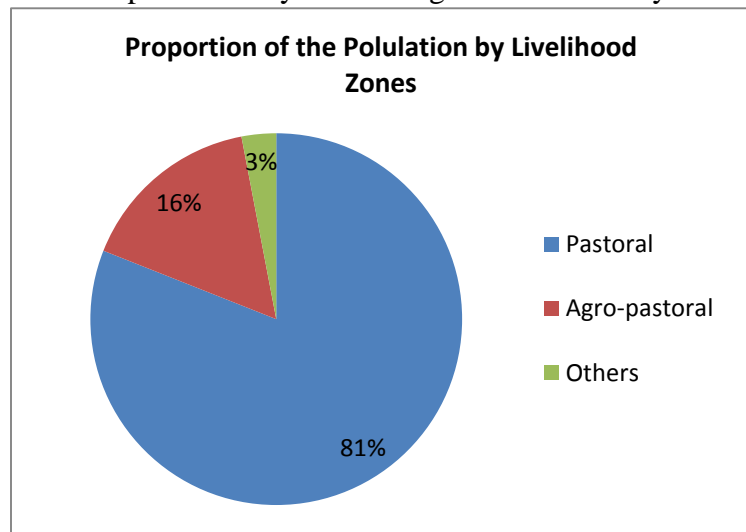


Figure 1: Proportion of the Population by Livelihood Zones

constituting 81 percent and Agro-pastoral with 16 percent of the

county population while other livelihood zones have a combined population of three percent as shown in figure 1 below. The main source of cash income in the county is livestock production contributing 82 percent in the pastoral livelihood zone and 60 percent in the agro-pastoral livelihood zone. 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 to 11 percent of cash income.

1.2. Objectives and Approach

The overall objective of the Short Rains Food Security Assessment (SRA) was to develop an objective, evidence-based and transparent food security situation analysis following the performance of short 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 October to December short rains and assess their impact on all key sectors including crop; livestock; water and sanitation; 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.

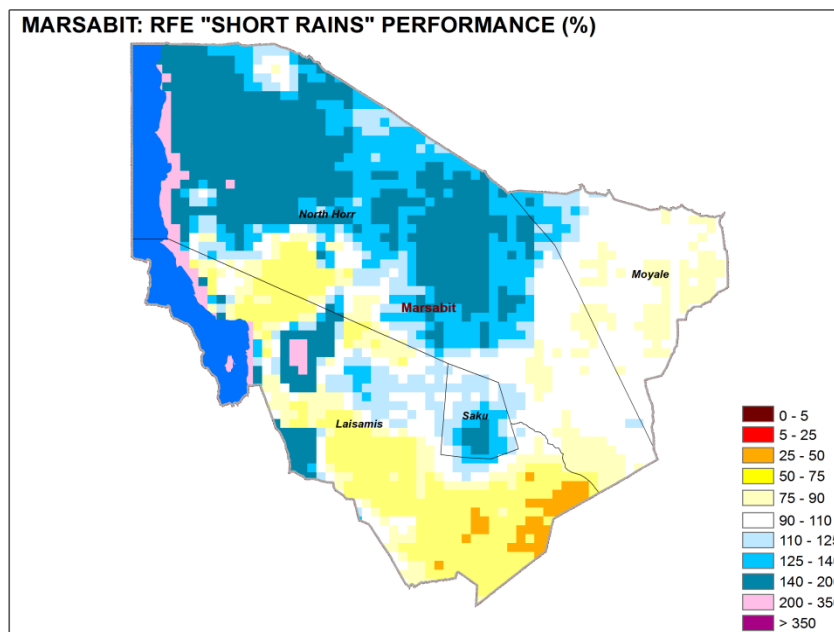
Approach

The 2018 SRA assessment which was a multi-agency and multi sector approach consisted of representatives from the Kenya Food Security Steering Group (KFSSG); the County Steering Group (CSG) drawn from all the key government sectors and various non-state actors. The assessment was conducted from 5th to 16th February, 2018 and involved an in-depth analysis and review of checklists from various sectors that impact on the food security. The process began with the initial CSG briefing of the aims and objectives of the assessment followed by sector presentations and later a review of the sector checklists. 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 approach included focussed group discussions, community and key informant interviews and market surveys 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 sector 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

Marsabit County is short rains dependent contributing 70 to 80 percent to season performance while the long rains contribute 20 to 30 percent. The onset of the short rains was timely in the



second dekad of October in most parts of the county with exception of, Badanrero in Moyale sub-county which had a late onset in the first dekad of November. Cumulatively, the county received 265mm of rains in Marsabit Mountains and 254mm of rains recorded in Moyale township rainfall station. The Obbu lowlands of Moyale sub-county (Ambalo, Malbebali and Laqi) did not receive any rainfall during the season. Generally, the northern parts of the

Figure 2: Rainfall distribution as a percent of normal

county including North Horr, Maikona, Illeret and Dukana and central part of Saku sub-county received enhanced rainfall amounting to 125 to 200 percent of normal short rains while the eastern parts of the county including Moyale, Turbi and Shurr regions received between 75 to 110 percent of normal rains. However, the lower parts of the county including Loyangalani and Laisamis received below normal rains at 50 to 75 percent as shown in figure 2. Spatial distribution was even but temporal distribution was poor since most parts of the County received rainfall of varied intensity at different periods. In Moyale sub-county (Uran, Sololo,

Township, Walda, Dambala Fachana, Dabel, Heillu and Guduma) received enhanced rainfall in 17 rainy days. However, areas such as Bori, Badanrero, Antut, Rawana, Funanyatta, Somare and Golbo lowlands received rainfall in only one to three rainy days. North Horr sub-counties received rains in 15 rainy days. However, Laisamis and Saku sub-counties received rainfall in 10-11 rainy days. In the month of December, the county experienced depressed rainfall which was generally light showers. Cessation of the rains was early in the third dekad of November compared to the normal second dekad of December.

2.2. Insecurity/Conflict

There were few cases of insecurity reported in the county for the period under review. However, cross border conflict between Moyale-Ethiopia and Moyale-Mandera borders have limited access to markets and affected livelihoods. In the pastoral zones of Merille, banditry attack was noted but has since been contained. Reported cases of insecurity were also noted in Arapal and Olturot along the northern part of Laisamis sub-county.

2.3. Other Shocks and Hazards

In the month of October, flash floods were reported in the northern parts of North Horr sub-county, southern Laisamis, central Marsabit and the lowlands of Moyale where a total of 742 households were affected with 268 (36%) households from Moyale sub-county. There were also livestock deaths reported and submersion of houses resulting from ravages of flash floods in the month of November. Seasonal rivers of Malgis and Lag Balal swelled and hindered access to markets in the month of November. There were also observed cases of Internally Displaced Persons (IDPs) at Watiti in Moyale sub-county that had been displaced from Mandera due to clashes. As a result of the influx of IDPs, the available resources such as learning facilities and water are being over-stretched. From the interviews conducted between the assessment team, the IDPs and the area chief, it was reported that 420 households were in the camp.

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1. Availability

3.1.1. Crop Production

Crop production is one of the key sectors under availability pillar of food security that assesses indicators such as acreage planted vis-a-vis the corresponding production; and the commodity stocks held by various actors in the county. Short rains contribute to 70-80 percent of crop production in Marsabit County with long rains only accounting for 20-30 percent of crop production. Food crop production contributes 20 percent of cash income in the agro-pastoral livelihood zones. Maize contributes 30 percent to food and 22 percent to cash income in the agro-pastoral livelihood zone while beans contribute 20 percent to food and cash income each.

Rain-fed crop production

The three main crops grown under rain-fed agriculture during the short rains are maize, beans and wheat. The area put under maize during the season under review was only 542 hectares representing 37 percent decline compared to long term average of 860 hectares. The area planted for beans and wheat also reduced by 47 and 87 percents compared to the long term averages of 628 and 160 hectares for beans and wheat respectively. The reduction in areas planted was mainly attributed to continuous shifting preferences from food crop to miraa majorly in Saku sub-county; effects of land sub-division where more and more land is used for residential plots especially in Sagante ward; and reluctance by farmers to prepare land due to unpredictable weather condition and failures of the previous seasons.

Table 1: Crop Production under Rain-fed Agriculture

Crop	Area planted during 2018 short rains season (Ha)	Long Term Average area planted during the short rains seasons (Ha)	2018 short rains season production (90 kg bags) Projected/Actual	Long Term Average production during short rains seasons (bags)
Maize	542	860	30	10,400
Beans	332	628	58	2,500
Wheat	20	160	45	250

Total crop failure was experienced in all areas of agro-pastoral livelihood zone with worst affected areas being foot slopes like Gororukesa and Dub Gomba in Saku sub-county, Gatab in Laisamis sub-county and all parts of Moyale sub-county. A projected production of 45 bags from wheat is expected from the short rains season against the long term average of 250 bags which represent a decline of 82 percent as shown in Table 1 above. The low volumes of projected harvests for maize and wheat are attributed to: Delay and distribution of inadequate of seeds in the second through to third dekad of October compared to the normal second dekad of September which also led to late planting, early cessation of rains in the first dekad of December leading to withering of plants before tussling, expensive farm labour resulting to untimely weed control.

Flash floods caused by heavy rains in the month of November that swept and eroded young crops from the farms. In the Agro-pastoral area of Moyale and Saku sub-counties, 100 acres of farms were affected through soil erosion and water logging of farms. Maize stock borer was a major challenge in the Agro-pastoral areas of Moyale sub-county.

Irrigated crop production

The main crops under irrigated agriculture were kales, tomatoes and spinach. The areas cultivated for kales and tomatoes was reported at 10 and five hectares compared to the short term average of 22 and nine hectares respectively mainly due to inadequate water for irrigation, breakdowns and high maintenance costs for the irrigation infrastructure especially in areas like Songa and Kituruni. However, there was an increase in the area cultivated under spinach by 100 percent from 1.5 hectares to three hectares due to the shift in preference for spinach farming because of its hardy nature to water stress and pests; and also increase in its demand.

There was a decrease in production of kales and tomatoes by 53 and 61 percent against the short term averages of 100 and 18 metric tons respectively which was attributed to the decline in acreages cultivated and high incidence of pests and diseases. On the other hand, eight metric tons of spinach was harvested against the short term average of six metric tons denoting a 33 percent increase against the short term average mainly attributed to the increase in the areas cultivated. In Moyale sub-county (MadoAdhi, Dirdima and Kinisa) irrigation infrastructure was destroyed by the floods through clogging of money maker pipes and siltation of the irrigation canals.

3.1.2. Cereals Stock

The county recorded low volumes of commodity stocks held by various actors. The current maize stock held by households stand at 470 bags which is only four percent of the long term average of 12,000 bags. The low volumes of maize stocks held by households is attributed to near total crop failure and also poor harvest from the previous season that led to reduced stocks. Traders currently hold 85 percent of the long term average of 5,400 bags as shown in Table 2

below. However, this volume is expected to increase in anticipation of increased demand due to worsening drought situation and total crop failure. There were low volumes of rice held by the households compared to the long term average at 46 percent, mainly due to limited access to markets especially in Moyale, reduced household's purchasing power occasioned by down scaling of social protection interventions by partners such as PACIDA, CARITAS, Red Cross, Concern Worldwide, Care, VSF German and wealth Hunger W. Generally, there were no significant variations in the stocks held by households across all the livelihood zones. Other relief agencies such as World Vision and World Food Program hold varied volumes of stocks in the NCPB such as 780 metric tons of Sorghum, 140 metric tons of rice, 182 metric tons of pulses and 23 metric tons of vegetable oil. There are no millers in the county.

Table 2: Commodity Stocks in the County

Commodity	Households		Traders		Relief		Total	
	Current	LTA	Current	LTA	Current	LTA	Current	LTA
Maize (90 kg bags)	470	12,000	4,600	5,400			5,070	17,400
Rice (50 kg bags)	900	1,950	2,800	3,450			3,700	5,400
Sorghum (50 kg bags)	200		50	100	799MT		250	100
Pulses					182MT			
Vegetable oils					23MT			

3.1.3. Livestock Production

The major livestock species kept are cattle, camels, sheep and goats. Livestock production contributes to 80 percent of household cash income in the pastoral livelihood zone and 60 percent to the agro-pastoral livelihood zone.

Pasture and Browse Condition

Pasture condition is poor in most of the normal grazing areas and livestock are migrating towards drought fall back areas in pastoral livelihood zones such as Huri Hills, Gatab, Sololo, Sibilo, Buluk, Durusi and Lalesa where pasture condition is fair. Browse condition is poor across the county with few pockets such as South Horr and Ngurnit where browse is fair. Agro pastoral livelihood zone are mostly depending on fallen leaves and crop residuals as livestock feeds.

Pasture and browse condition is deteriorating fast due to ongoing dry spell and over-concentration of livestock where pasture/browse is available. Pasture is available in Loiyangalani escarpments, Cheri Ashe and slopes of Mt Kulal although not accessible due to insecurity between neighbouring communities in the mentioned areas. In Huri Hills, pasture and browse is available but not utilized due to lack of water. Where available, Pasture is expected to last for a month in the agro-pastoral and two months in the pastoral zone compared to three months for each respective livelihood zones. Available browse will last for 1-2 months instead of the normal four months in the pastoral zone and 2 months in the agro-pastoral zone compared to the normal three months as indicated in Table 3 below.

Table 3: Pasture and Browse Condition

Pasture	Browse
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Livelihood zone	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	2	3	Insecurity	Fair	Good	1-2	4	Insecurity
Agropastoral	Fair	Good	1	3	None	Fair	Good	2	3	None

Livestock Body Condition

Livestock body condition is good to fair for small stock and cattle while camel have good body condition in all livelihood zones as shown in Table 4 below. Body conditions are expected to worsen due to diminishing pastures and browse, reduced water availability and increased trekking distances. Current body condition is below normal compared to previous seasons due to poor regeneration of pasture and browse.

Table 4: Livestock Body Condition

Livelihood zone	Cattle		Sheep		Goat		Camel	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
pastoral	Fair	Good	Fair	Good	Fair	Good	Good	Good
Agropastoral	Fair	Good	Good	Good	Good	Good	Good	Good

Water Availability and Access

Table 5: Water Availability and Access

Livelihood zone	Sources		Return trekking average distances (km)		Expected duration to last (months)	
	Current	Normal	Current	Normal	Current	Normal
Pastoral	Boreholes; Shallow wells	Water pans, shallow wells	15-25	10-15	1-2	2-3
Agropastoral	Water pans and boreholes	Water pans	5-15	5-10	2-3	2-4

Current water sources were boreholes, shallow wells and springs in pastoral livelihood zone while in agro pastoral zone, the main water sources were water pans and boreholes. Use of boreholes started earlier than usual in pastoral livelihood areas due to drying up and/or poor recharge of shallow wells, pans and dams. The current return distance to watering points is 15-25 km in the pastoral zone compared to a normal of 10-15 km and for agro pastoral, return trekking distances is 5-15 km against a normal of 5-10 km (Table 5). Camels were reported as trekking longer distances (30-50 km return distance) since they were grazing further compared to small stocks. Distances have significantly increased due to drying up semi-permanent water sources (shallow wells, pans and dams) as well as depletion of pasture forcing the livestock to migrate further away. In Gatab, livestock were trekking 30-40 km return to access water.

Watering Intervals

Table 6: Watering frequency in (Intervals)

Livelihood zone	Cattle		Camels		Goats		Sheep	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral	3-4	2	8-10	6	3-5	3	3-5	3
Agro-pastoral	2-3	1	7-10	6	3-4	2	3-4	2

Current watering interval for cattle is 3-4 days, 8-10 days for camels and 3-5 days for small stock in pastoral livelihood zone. For agro pastoral livelihood zones, watering intervals are 2-3 days for cattle, 7-10 days for camels and 3-4 days for small stock as shown in Table 6 above. Watering intervals are slightly above normal in all livelihoods which is attributed to increasing distances to grazing areas and drying up of semi-permanent water sources (pans and dams, shallow wells). Open water sources are expected to last less than one month in pastoral livelihood zones while those in agro pastoral (majorly in Moyale) will last for 1-2 months.

Table 7: 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	0.5	2	0.5	1	100	80
Agro-pastoral	1	3	1	2	120	120

Milk production was reported in less than 20 percent of the households in all livelihoods which is below normal. Where available, production ranged from 0.5 - 1 litre per household per day compared to normally 2-3 litres per household per day across all livelihoods as indicated in Table 7 above. In the agro-pastoral zone, production was from cattle while in pastoral production was mainly from goats and camels. Higher milk production is noted in grazing areas although the milk does not get to the households as herders consume the milk in the field. The decrease in milk production is attributed to below normal birth rates, inadequate pasture and browse and migration of livestock to drought fall back areas. The birth rate of all livestock species was below normal due to the prolonged drought in both agro pastoral and pastoral livelihood zones. Kidding and calving is normally in October and November which found the livestock recovering from prolonged drought since January 2017. The most affected were small stock and cattle.

Most of the milk produced is consumed within the households which reported a consumption of less than 0.5 litres per household per day. Majority of the households are depending on processed or powder milk sold in local kiosks if they can afford it. In the few areas such as Moyale town, Marsabit town, Turbi and Karare where milk was sold, a litre was retailing at Kshs. 100 -120 compared to the normal Kshs. 70-80. The increase in price is attributed to reduced milk production, low birth rates, and migration of livestock.

Average Number of Livestock (Tropical Livestock Units -TLUs)

Table 8: Tropical Livestock Units

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Pastoral	4	10	5	20
Agro Pastoral	3	5	5	8

In pastoral livelihood zone, poor income households have four TLUs compared to the normal 10 while medium income households have five compared to normal 20. In agro pastoral livelihood zone, a poor household has three TLUs compared to normal five while medium households has five compared to normal eight as indicated in Table 8. The drastic reduction in TLU is attributed to previous drought where significant livestock deaths were reported in the County. However, the households are recovering slowly.

Livestock Migration

Uncontrolled In-migration and out-migration of livestock was noted to be on the rise mainly in search of water and pasture. In-migration of camels, cattle, sheep and goats from Wajir, Mandera Counties and parts of Southern Ethiopia to Dabel, Bandan Rero (Moyale sub County) was reported. North Horr Sub County is also currently experiencing migration of livestock to fall back areas in Buluk, Huri Hills and Sibilo. Livestock from Laisamis are migrating towards Mt. Kulal, Yel, Behaye and Durusi. Out migration was reported towards Baragoi, Sereolipi (Samburu County,) Kom and Waso in Isiolo county. The current migration patterns are unusual and are expected to continue as livestock search for water and pasture/browse as the dry spell continues. As a result, availability of livestock products especially milk is very low greatly affecting household food security negatively.

Livestock Diseases and Mortalities

There were no outbreaks of livestock diseases reported. However, there have been sporadic cases of Lumpy Skin Disease (LSD) in El-Dimtu- Kalacha and Laqi (pastoral livelihood zone) reported. Also CCPP, CBPP and worms infestation have been reported across the two livelihood zones. No unusual livestock deaths were reported in the County. However, 800 small stock and 1,500 cattle died in Ngurnit due to cold weather. Few camels died precipitated by the outbreak of Hemorrhages septicemia in Ngurunit and neighbouring villages in Mpagas and Imoti in Laisamis sub-county. In Badanrero, Rawana, Laqi and MadoAdhi in Moyale sub-county, 130 small stocks and 40 calves were reported to have died as a result of floods.

3.2 Access

3.2.1. Markets Operations

The main food commodity markets in the county include: Moyale and Marsabit in the agro-pastoral livelihood zone and Laisamis and North Horr in the pastoral livelihood zone. The main Livestock markets were Jirime, Merille and Moyale. Others include Turbi, Illaut, Korr, Olturot, Forolle and Arge. The county government in collaboration with national government and other actors are implementing flagship projects to provide markets for the livestock. These include setting up modern markets in Moyale and Merille. Market operations remained normal except in the agro-pastoral livelihood zone of Mt. Kulal where market operations were disrupted due to floods. Furthermore, the cross border insecurity in Moyale has affected market operations especially for livestock, pulses and cereals. The main livestock sold in the markets included cattle, goats and sheep while food commodities included maize, posho, rice, beans, kales, cabbages and potatoes.

Market Supplies and Traded Volumes

The main livestock supplies to the market were from, Ethiopia, Merille, Moyale and Jirime to terminal markets in Nairobi, Naivasha, Isiolo, Meru, Nanyuki and Ethiopia. Food commodities supplies come from Nairobi, Meru, Nyahururu, Nanyuki and Ethiopia. Traded volumes varied according to the distance and the level of supply to the market. Low livestock volumes traded in the market were recorded in the months of November and December due to improving body conditions of livestock as the pasture had regenerated with the onset of the short rains and as such, famers were not willing to dispose of their livestock. Furthermore, the brokers intercepted the livestock for sale on the way before reaching the markets further influencing the volumes traded in the terminal markets. However, in the month of January, there were high volumes traded in the markets primarily occasioned by the need to raise school fees. Traded volumes for food commodity remained stable compared to the normal periods. *Posho* and fortified maize were the most food commodities' in high demand across all livelihood zones.

3.2.2. Market Prices

Maize Price

The average price of maize for the month of January was Ksh.52 per kg which compares more

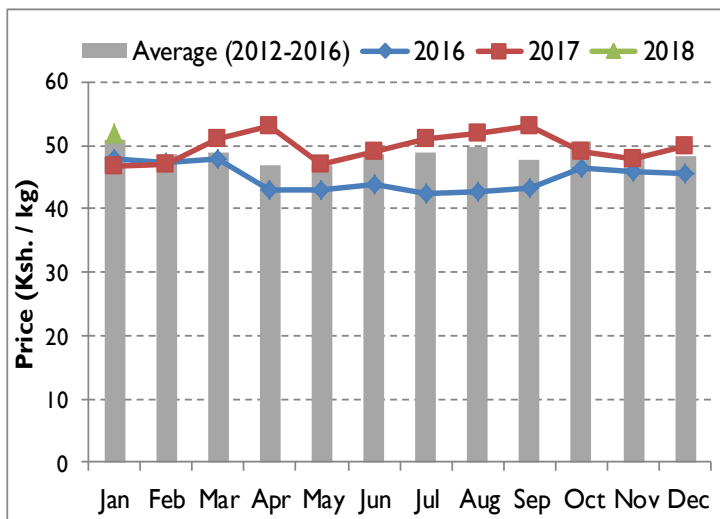


Figure 3: Average Maize Price per kilo in the County

or less with the LTA of Ksh.51 per kg. However, the current price was 11 percent higher compared with the same period last year as shown in figure 3 below. The lowest maize prices were recorded in Saku and border points of Moyale, Elhadi and Dukana at Ksh.40-50 per kg. Even though Moyale recorded lowest prices, it was still above the long term average of Ksh. 30-35 per kilogram. The highest prices were reported in the southern parts of Laisamis, including Logologo, Ndikir, Lependera, Kargi-Rengumo, Mt.Kulala Gatab, Loiyangalani,

Olturot, El Molo, and Barambate where the price ranged between Ksh.70 to 90 per kg. High maize prices were attributed to long distances from the source markets, total crop failure, rough terrain and poor infrastructure increasing the cost of food items. The price of maize is likely to increase due to total crop failure experienced in the county during the short rain season.

Goat Prices

The current average goat price was Ksh. 3,421 which was 11 percent above the LTA of Ksh.

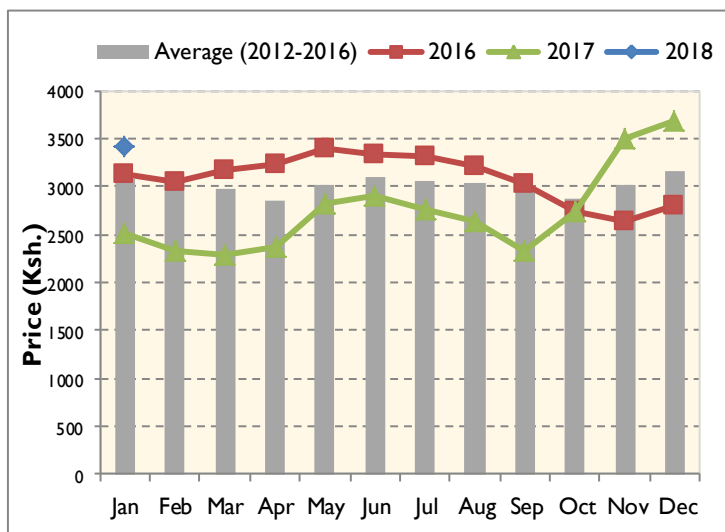


Figure 4: Average Goat Prices in the County

3,086 and 36 percent above the price recorded same period last year at Ksh. 2,515. The prices of goat recorded an upward trend from the month of October as shown in figure 4 below. The upward trend was mainly due to the improved body condition following forage rejuvenation with the onset on of the short rains coupled with high demands in the month of December for festivities. However, goat prices marginally declined in the month of January 2018 due to the short dry spell which led to gradual deterioration of the body condition; high volume

of goats at terminal market in need to raise school fees; as wells as resurgence of brokers who exploit sellers by roadside on their way to market where they dictate the price as vulnerable pastoralist sell to save transportation cost.

3.2.3. Terms of Trade

The current average terms of trade for the county were favourable especially for the pastoralists where households were able to purchase 66 kilograms of maize from the sale of an average

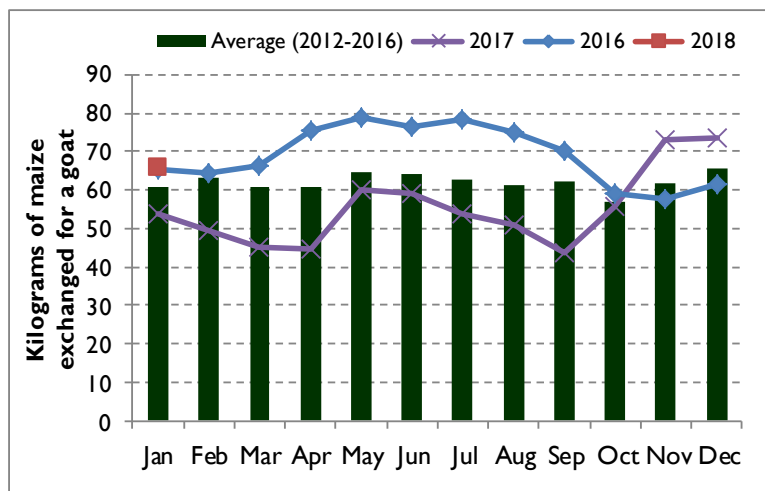


Figure 5: Comparative Terms of Trade in the County

size goat as shown in figure 5. The increase represented eight percent above the long term average of 61 kilograms and 22 percent higher than same period last year when households could only buy 54 kilograms of maize from the sale of a goat. There was a sharp increase in the terms of trade between September and December from 44 kilograms to 74 kilograms. The increase is mainly attributed to the increase in the goat prices and relatively stable maize prices

over the same period.

3.2.4. Income Sources

Livestock production is the main source of cash income across all livelihood zones contributing 82 and 60 percent of cash income in the pastoral and agro-pastoral livelihood zones respectively as shown in Table 9 below. Other sources of income include: Food and cash crop production, petty trade, casual and formal waged labour. In North Horr, it was reported that 2.5 percent of the household heads did not have any source of income while in Laisamis 2.1 percent did not have any source of income (SMART Survey, 2018).

Table 9: 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)

Major Water Sources

The major water sources are boreholes, dams, pans, shallow wells and rock catchments. Boreholes and springs are most common and viable in pastoral livelihood zones of Laisamis and North Horr. Roof catchments, earth pans and shallow wells formed the main water sources in the agro-pastoral livelihood zones of Saku and Moyale. The high intensity of rainfall received during the period October to December 2017 albeit with poor temporal distribution, generated massive surface run off, soil erosion, destruction of dams and pans as well as flooding in the urban areas. Significant flooding was experienced in Marsabit Town, Olom-Kalacha, Bori and Dambala-Fachana in Moyale. Most strategic water pans in the pastoral and agro-pastoral livelihood zones have some water which can last at least a week, while small pans have already dried up. Shallow wells have little water due to poor recharge. In the pastoral areas of Mudhe, the main water source is ground catchment tanks which have already been exhausted.

Distance to Water Sources

The current return trekking distances to domestic water sources ranged from 2-5 km in agro-pastoral areas with exception of Qachacha (10km), Hurri Hills (50 km covered by water boozers) and Mt.Kulal/Gatab 6km compared to 2-4 km normally (Table 13). In the pastoral areas, the current distance ranges 3-6 km except Manyatta Rengumo (10km) in Kargi, Lependera (1km), Qate (10km) in Bori and Watiti (6km) of Moyale Sub County. In Forolle pastoral area, low purchasing power has led women to walk 6km to access pan water while other households access water at 2 km by buying. There was high concentration of both human and livestock around boreholes and a few water pans such as in the pastoral areas of Badenrero in Moyale with livestock from Wajir and Mandera counties.

Waiting Time at the Source

In pastoral and agro-pastoral areas the normal waiting time is 10-30 minutes. The current waiting times in both pastoral and agro-pastoral zones ranges 30 to 40 minutes. Exceptions are Qachacha (1hour) and Waye Godha (1 hour for women to access water to pans) in the agro-pastoral zones and Lependera (2-5 minutes due to presence of rock catchment water), Mudhe (2 hours) in the pastoral livelihood zones due to dwindling water levels in underground tanks

and Forole (1 hour) for households accessing water from pan competing with livestock. In the fisher folk areas of Loyiangelani the waiting time is 10 minutes due to plenty of piped water and proximity to Maji *Moto* springs.

Cost of Water

Currently, in Agro-pastoral areas a 20 litre jerrican of water was sold at Ksh.5 save for Qashasha, Hurri Hills and Moyale Township where vendors sold water at Kshs.40-50 per 20 litre jerrican. In pastoral areas, water was sold between Kshs. 2-5 per 20 litres jerrican except in Belesa at Ksh.1 per 20 litre Jerrican and in Forolle Kshs. 5 for both underground tanks (owned by women) as well as borehole water. Borehole water was sold between Kshs. 2-5 per 20 litre jerrican across the livelihood zones. Generally, water from pans, underground tanks and shallow wells was free of charge. However, in some areas, a monthly service charge of Ksh.100-200 was levied on households, further exacerbating the overall cost of water. This includes the agro-pastoral areas of Songa and Mt.Kulal/Gatab and pastoral areas of Mudhe, Ndikirr, Lependera, Kargi (Manyatta Lengima), Barambate and the fisher folk areas of Loiyangelani.

Water Consumption

The average water consumption across the livelihood zones was 5-10 litres per person per day compared to 20 litres normally as shown in Table 10. In agro-pastoral livelihood zones, water consumption was 6-8 litres per person per day except the areas of Waye Godha in Moyale sub-county at 20 litres per person per day, Hurri Hills at 3.3 litres per person per day. For the pastoral livelihood zones, the average water consumption was between 10-12 litres per day. Save for the areas of Watiti at two litres per person per day, Forolle at 3.3 litres per person per day for underground tank users.

Table 10: 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	2-5	2-4	5	2-5	30-40	10-30	6-8	10-20	1 month
Pastoral	3-6	2-4	2-5	2-5	30-40	10-30	10-12	10-20	1 month

3.2.6. Food Consumption

According to the NDMA bulletin of January, 2018, 67.9 percent of the households in the agro-pastoral livelihood zone had acceptable food consumption score while 18.5 percent had borderline food consumption score implying that the households consumed staple and vegetables complemented by a frequent four days per week consumption of oil and pulses. 13.6 percent of the household had poor consumption score meaning they were not able to consume at least staple and vegetables on a daily basis. In the pastoral livelihood zone, 55.2 percent of the households had acceptable food consumption score, 41.3 percent had borderline consumption score while 3.5 percent of the households had poor food consumption score. There was drop in the mean food consumption from December at 39.5 to 37.6 across the livelihood zones which was mainly attributed to reduced amounts of food consumed, poor dietary diversity and reduced frequency of meals. A SMART survey conducted in month of February for North Horr and Laisamis showed 47.9 percent of the households in North Horr had acceptable food consumption score while 35.8 and 16.3 percent had borderline and poor consumption scores respectively. On the other hand, in Laisamis, only 32.7 percent of the

households had acceptable consumption score while 46.4 and 20.9 percent had borderline and poor consumption scores respectively.

3.2.7. Coping Strategy

The mean reduced coping strategy index (rCSI) for the county was 18.5 up from 17 recorded the previous month. There were variations across the livelihood zones with pastoral livelihood zones recording a mean coping strategy index of 19.1 while for the agro-pastoral livelihood zone, the mean coping strategy index was 17.3 indicating an increased adoption of consumption based coping strategies in the pastoral zones compared to the agro-pastoral livelihood zones. Some of the notable consumption based coping strategies employed included: Skipping of meals, reliance on less preferred and less expensive foods, reduction in meal portions and sharing of meals. According to the SMART survey, North Horr had a mean coping strategy index of 16.21 down from 18.48 recorded in July last year while Laisamis had a mean coping strategy index of 14.64 down from 17.7 recorded last year.

3.3 Utilization

3.3.1. Morbidity and Mortality Patterns

Upper Respiratory Tract Infections (URTI), Malaria and Diarrhoea were reported to be the most common ailments in the county during the period under review. The trend shows that URTI across the County has been persistently high especially for the months of November to December compared to the same period last year given the cold effect of short rains.. The high prevalence of diarrhoea was attributed to the flooding that occurred during the October-November rain and poor WASH practices reported across the county. There was unusually high prevalence of malaria in the month of November especially in North Horr Sub County due to the high intensity of rains and subsequent flooding resulting to an outbreak of malaria.

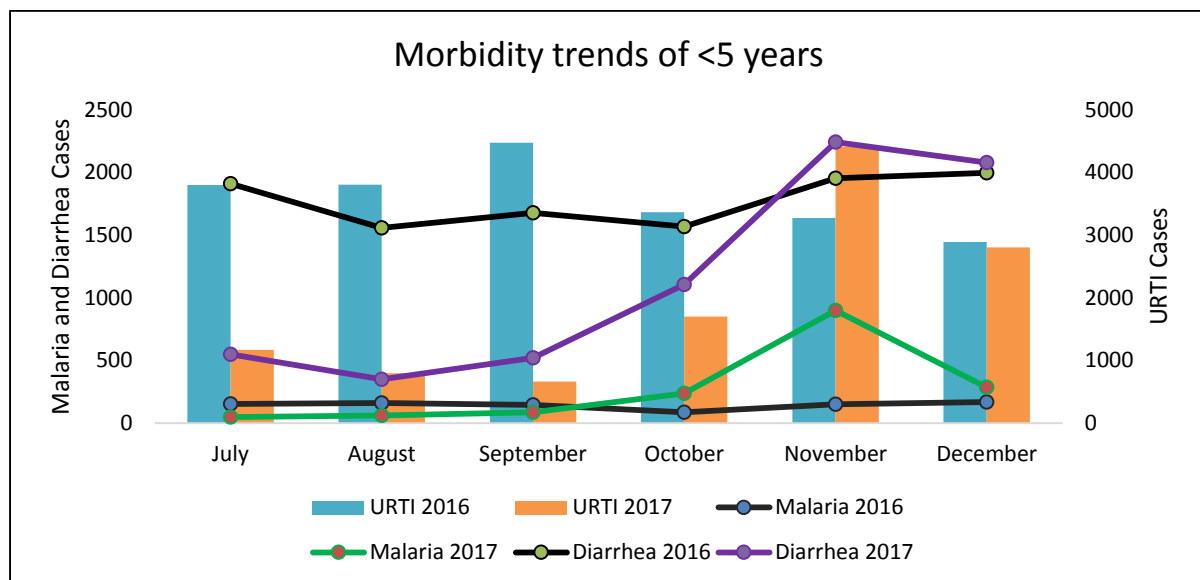


Figure 6. Morbidity trends of children under five years

Epidemic Prone Diseases

There were lower incidences of epidemic prone diseases reported in 2017 compared to 2016 within the specified period attributed to low reporting rate due to the health workers strike that affected service delivery. Disease outbreaks reported by the community members included Kalazar in Moyale specifically in Mudhe village, and Malaria in parts of North Horr and Loiyangalani.

3.3.2. Immunization and Vitamin A supplementation

There was no significant variations in the fully immunized child coverage for the county remained for the period July to December 2017 which stood 72.9 percent and same period in 2016 at 72.8 percent as shown in Table 11 below. However, the coverage still remained below the national targets of 80 percent. The low coverage was attributed to both low documentation as well as nurses' strike which lasted for four months. From the findings of the focused group discussions conducted for four days across the county with the community members, caregivers reported that majority of their children had received recommended vaccine antigens which were not documented.

Table 11: Immunization Coverage

Year	Percentage of fully immunized children in the county Source DHIS MOH 710.	Percentage of children immunized against the mentioned diseases in the county Source:(DHIS) (Nutrition survey if available)
July to December 2017	72.9%	1. OPV 1 ____93.9%
		2. OPV 3 ____78.2%
		3. Measles ____81.8%
July to December 2016	72.8%	1. OPV 1 ____43.4%
		2. OPV 3 ____36.1%
		3. Measles ____36.5%

Vitamin A coverage for children aged 12-59 months for the county was generally low for the period July to December 2017 at 41.5 percent compared to 47.6 percent recorded same period last year. For the children for 6-11 months the coverage was 69.5 percent compared to 84.8 percent for 2016. This was also clearly seen in the latest survey that was conducted in January 2018 in Laisamis and North Horr which clearly revealed that Vitamin A coverage for 12-59 was 48.0 and 43.5 percent. This is attributed to low documentation in maternal child booklets, facility registers and low end month reporting and subsequent low numbers being captured in the DHIs across the sub-counties and health workers strike that halted critical health care services namely vaccination and micronutrient supplementation programs that closed for six months.. In the focused group discussion caregivers, reported that they usually receive Vitamin A during two *malezi bora* months in a year and during integrated outreaches.

3.3.3. Nutrition Status and Dietary Diversity

Proportion of children 'at risk' of malnutrition was 20.8 percent compared to the long term average of 22 percent and 21.7 percent same period last year as shown in figure 6 below. Some of the underlying causes to malnutrition in the county are increased incidences of diseases amongst under-fives and poor infant feeding practices

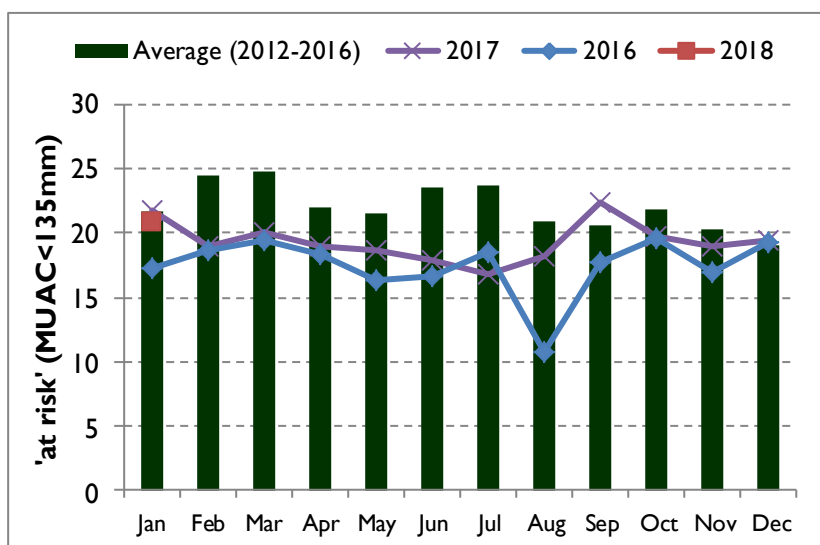


Figure 7: Proportion of children with MUAC less than 135mm

average of 22 percent and 21.7 percent same period last year as shown in figure 6 below. Some of the underlying causes to malnutrition in the county are increased incidences of diseases amongst under-fives and poor infant feeding practices Pastoral zones of Golbo (Moyale), Illeret, Korr and Loiyangalani (Laisamis) reported emergency levels which

had surpassed the normal thresholds. A recent survey conducted in January 2018 in Laisamis and North Horr shows that the GAM rates are 21.2 percent and 21.8 percent respectively. There was a drop in GAM rates for North Horr and Laisamis sub counties from 2017 levels to January 2018 attributed robust emergency response strategy mounted by partners led by Ministry of Health through Blanket Supplementary Feeding Programme (BSFP) and integrated health and nutrition outreaches.

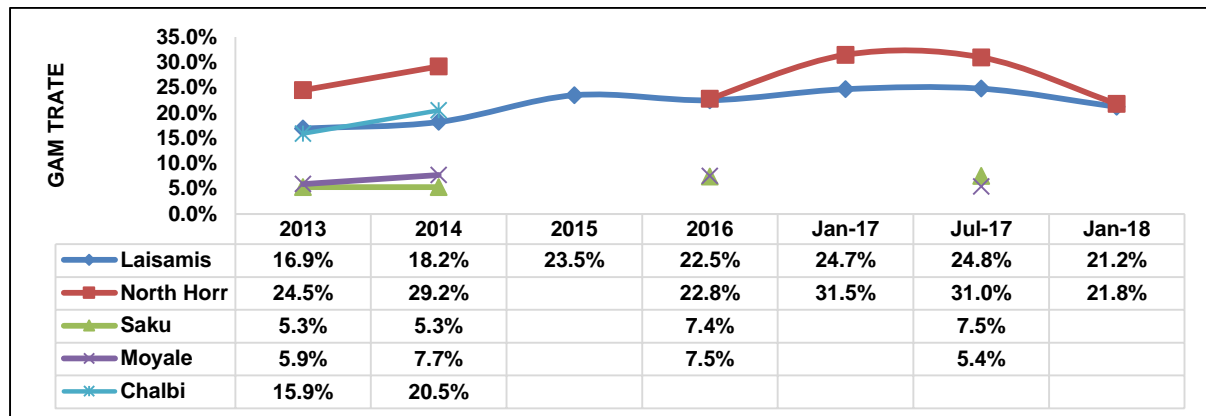


Figure 8. GAM rates trends in Marsabit County

Poor dietary diversity was noted across all livelihood zones at three to five food groups with a minimum meal frequency of one to two meals per day mostly beans and maize. The SMART survey done in January 2018 indicated that 59.2 percent 49.8 percent of households in North Horr and Laisamis were consuming less than five food groups per day. According to MIYCN KABP conducted in October 2017, minimum dietary diversity for children 6-23 months was 15.5%, minimum Acceptable diet was 15.6% and Minimum meal frequency was 41.2% which were very low. This was attributed to complementary foods not being adequate due to prolonged drought that had killed livestock leading to lack of food and also reduces purchasing power of a household.

3.3.4. Sanitation and Hygiene

In pastoral livelihood areas, there were reported cases of diarrhoea owing to usage of open water sources where to the water is contaminated by animal carcasses washed by floods and sharing of water between livestock and humans such as in Badanrero and Wayie Godha. In El-Barouk, Lependera, Manyatta Rengumo (Kargi) diarrhoeal cases were also reported which was attributed to poor water handling practices where the households neither boil nor treat water. In Agro –pastoral areas in Mt. Kulal/Gatab, diarrhoea cases were also reported. Some knowledge on water treatment at household level was noted across the livelihood zones by use of aqua tabs, P&G tabs, purr and in one case aluminium sulphate.. However, availability of water treatment chemicals was found to be minimal at 10 percent. In the pastoral livelihood zones, households reported treating water using water treatment chemicals hence no reported cases of waterborne diseases.

Latrine coverage remains low at about 10 percent across all livelihood zones which is associated with negative cultural practices and movement of pastoral communities.. The areas with poor latrine coverage and use are Qachacha, Mudhe, Wayie Godha, Bori, Watiti, Badanrero, Forolle and Hurri Hills. Hand washing at the four critical times was very low across all the livelihood zones at 16.9%.

3.4 Trends of Key Food Security Indicators

Table 12: Food Security Trends in Marsabit County

Indicator	Long rains assessment, July 2017	Short rains assessment, February 2018
% of maize stocks held by households (agro-pastoral)	19.2%	3.9%
Livestock body condition	Camel/Sheep/Goat: Fair Cattle: Poor	Camel/Sheep/Goat: Good to Fair Cattle: Fair
Water consumption (litres per person per day)	15-20 litres/person/day	Agro-pastoral: 6-8l/p/d Pastoral: 10-12l/p/d
Price of maize (per kg)	49	52
Distance to grazing (km)	Agro-pastoral 15-25 Pastoral 15-25	Agro-pastoral 5-15 Pastoral 15-25
Terms of trade (pastoral zone)	59 kg	66kg
Coping strategy index	Agro-pastoral 15.8 Pastoral 26.2	Mean: 22.3 Agro-pastoral 17.3 Pastoral 19.1
Food consumption score	Poor: 40.7 % Borderline: 35.7 % Acceptable: 23.6 %	Poor: 18.5 % Borderline: 22.8% Acceptable: 58.6%

4.0 CROSS CUTTING ISSUES

4.1. Education

Access (Enrolment)

Overall Enrolment in schools in the county increased from 63,865 pupils in Term III 2017 to 65,536 in January 2018 which reflected a 2.3 percent increase. The total number of children enrolled in ECD centres in Term III 2017 was 12,011 compared to 13,558 in January 2018 an increase of 12.9 percent. The number of boys increased by 13.8 percent (845 boys) while that of girls increased by 11.8 percent in ECD centres as indicated in Table 13 below. The increase in enrolment in ECD centres was attributed to the construction of more ECD centres and hiring of more ECD teachers. The county also realized an increase of 12 percent in secondary enrolment (an increase of 18 percent for boys and 6.4 percent for girls) attributed to the government policy of 100 percent transition and Free Day Secondary School Education which came into effect in January 2018. Further, provision of grants by the national government to some schools in the county to construct additional infrastructural facilities contributed to the increase in enrolment. However there was decrease of 1.8 percent for the number of pupils enrolled in primary schools (from 44,912 in January 2018 compared to 45,752 in Term III 2017). Enrolment of boys decreased by 2.2 percent while that of girls dropped by 1.4 percent.

The decrease was occasioned by migration of households especially in the pastoral zones due to the current drought.

Table 13: Enrolment

Enrollment	Term III 2017			Term I 2018		
	Boys	Girls	Total	Boys	Girls	Total
ECD	6108	5903	12011	6953	6605	13558
Primary	23249	22503	45752	22736	22176	44912
Secondary	3310	2792	6102	3916	2970	6886

Participation (Attendance)

The monthly attendance in ECD, Primary and Secondary fluctuated from month to month in the months of September 2017 to February 2018. However the attendance remained normal across the period due to availability of SMP in primary schools provided by both national and county government. Other issues affecting participation across all levels were shortage of teachers and inadequate learning facilities.

Retention (Drop out)

There was no significant drop out reported although daily absenteeism and normal attendance was experienced from time to time across all levels. The main reasons for absenteeism in school for ECD centres, primary and secondary schools were lack of food in school (delay in delivery of food), migration by parents during drought, households not valuing schooling (preference of parents for children to herd compared to education and fees or costs (especially for secondary schools).

School Meals Programme (SMP)

All public primary schools in the county are covered by Regular School Meals Programme (RSMP) covering 181 public primary schools with total beneficiaries of 44,248 (22,241 boys and 22,007 girls) as shown in table 14 below. A mid-day meal comprising of maize, rice, beans and oils was provided. An estimated 54 primary schools (30 percent) with a total of 13,271 pupils (6,669 boys and 6,602) occasionally missed meals due to delays in delivery of food, water shortage and lack of firewood in the schools. Poor quality of food especially beans was observed in some of the schools under the RSMP across the county.

Table 14: School Meals Programme

No. of Schools With School Feeding	RSMP		
	Boys	Girls	Total
181	22,241	22,007	44,248

There were no instances where students were switching schools due to food insecurity or instances where one gender was more affected than the other. Student transfers that occurred in and out of the county were normal. Moreover, no school closed for more than one term or was sheltering IDPS. All schools (ECD, Primary and Secondary) have latrines and WASH facilities which were provided by various partners. However no school had a functional water source within 100 metres or offered health and nutrition services in the county.

5.0 FOOD SECURITY PROGNOSIS

5.1. Assumptions

- Late onset of the long rains in the first to second week of April
- Normal to above normal rainfall in most parts of the county
- Normal market operations but high basic commodity food prices
- Deteriorating body condition of livestock
- Lower goat prices
- In-migration of livestock in fall back areas of Buluk, Huri Hills and Sibiloi
- Depletion of open water resources and forage

5.2. Food Security Outlook for February to April, 2018

The food security situation in the county is expected to worsen across all the livelihood zones until the onset of the long rains. Open water sources such as water pans which have water are expected to dry up in the next one month. Available forage in the fall back grazing areas is expected to last for the next one month across the livelihood zones as in-migration of livestock into the county is anticipated to persist. Livestock body condition is likely to deteriorate further mostly for cattle and sheep across the livelihood zones due to pasture depletion. Livestock disease outbreak is expected in the dry season convergence grazing areas. Household food consumption score is expected to deteriorate while dietary diversity is projected to remain within 3-5 food groups but with significant reduction in meal size. Traded volumes in the main livestock terminal markets will likely increase as the livestock body condition worsen further deepening the livestock prices. Terms of trade is anticipated to worsen with expected dip in goat prices and an upsurge in the maize prices resulting from total crop failure. Nutritional status of children is expected to be within the normal ranges prompted by ongoing blanket supplementary feeding, infant feeding practices, disease prevention measures, HSNP and other programmes being undertaken across the county by various actors.

However, food security situation for is likely to improve from the month of April following normal to above normal forecasted long rains across the county. The above normal rainfall forecast might influence early preparation of and planting by farmers. Pasture and browse is expected to regenerate thus improving the livestock body condition, birth rates and milk availability at household level. Livestock migration is expected to be towards wet grazing areas. Open water sources are expected to recharge reducing distances to watering points, the waiting time and increasing water consumption levels at the household. Livestock prices are likely to increase due to improved body condition and reduced trade volumes in the market. Households are expected to employ less severe coping strategies. Similarly, food consumption is expected to improve as households consume more food groups frequently. Nutritional status for children under five years is anticipated to improve due to availability of milk.

5.3. Food Security Outlook for May to July, 2018

With the forecasted long rains expected to be normal to above normal in most part of the county, the key food indicators predicted for March to May are expected to remain the same for the period June to August, 2018. However, from the month of August, some food security indicators may start to slide such as open water sources, pasture and browse and milk availability.

6.0 CONCLUSIONS AND INTERVENTIONS

6.1. Conclusion

6.1.1. Phase Classification

The food security phase classification for the county is Stressed (IPC Phase 2) except Laisamis sub-county which is classified as Crisis (IPC Phase 3).

6.1.2. Summary of Findings

Food consumption score in the agro- pastoral livelihood zone indicated 67.9 percent of the household had acceptable consumption while 18.5 percent had borderline and 13.6 percent had poor consumption score. In the pastoral livelihood zone, 55.2 percent had acceptable consumption score, 22.8 percent had borderline while only 3.5 percent had poor consumption score. The mean coping strategy index was 22.3 with only three percent of the households not adopting any coping strategies. Nine percent of the households employed emergency coping strategies, 54 percent adopted crisis coping strategies while 32 percent of the households adopted stress coping strategies. Pastoral livelihood zones of North Horr and Laisamis had GAM rates of 21.8 percent and 21.2 percent respectively. Children at risk of malnutrition in the North Horr and Laisamis were 3.4 and 6.8 percents respectively.

6.1.3. Sub-County Ranking

Table 15: 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
Laisamis	1	Livestock death due to cold weather Low immunization coverage High malnutrition rates (GAM rates 21.2%) Out-migration of livestock
Moyale	2	Cross border conflict Influx of IDPs Near total crop failure Poor temporal distribution of rainfall Limited water access and poor quality Poor pasture condition
North Horr	3	Livestock death due to cold weather High malnutrition rates (GAM rates 21.8%) In-migration of livestock Low immunization coverage Outbreak of Malaria
Saku	4	Near total crop failure Limited water access and poor quality Limited water access

6.2. Ongoing Interventions

6.2.1. Food Interventions

- Blanket Supplementary Feeding Programme intervention continued in North Horr and Laisamis sub-counties and implemented by WFP, UNICEF, Concern WW, FH Kenya, World Vision and Sub Counties health management teams.

- Therapeutic Integrated Management of Acute Malnutrition for the Under-fives, Pregnant and Lactating Mothers (Supplementary Feeding Program (SFP), Out Patient Therapeutic Program (OTP) by MOH supported by UNICEF, WFP, World Vision, CONCERN WW and FHK.

6.2.2. Non-Food Interventions

Interventions	Objectives	Specific Location	Activity Target	Cost	No. of Beneficiaries	Implementation Time Frame	Implementation Stakeholders
Agriculture							
Subsidized tractor ploughing services	To increase the area under cultivation	All wards		4.5M	300 vulnerable HH	Continuous	County Government
Continued provision of agriculture extension services	Continued adoption of agriculture as an alternative livelihood.	All agro-pastoral zones of Saku, Moyale, Laisamis, North Horr			3500 farming household reached	Continuous	County Government & other stakeholders
Provision of assorted farm inputs, pumps, agro chemicals, herbicides	To reduce the burden of farm labour	Saku Moyale Laisamis North Horr		6.7M	400 HH	3 months	County Government
Promotion of producer and marketing groups for green grams	To link the farmers to the markets	Saku-central & Sagante wards		===	100 HH	6 months	Farm concern & agriculture Department
Kales value chain up scaling	Adoption of most suitable varieties	All wards		1.2M	62 farmer groups	Continuous	ASDSP DoAL&F
Feasibility studies and development of designs for establishment of spate irrigation	Flood water harvesting for crop production	Laisamis & North Horr		21M	1200 HH	2 Months	County Government
Livestock							
Sensitization and stimulation of dormant markets	To boost household income and small trades during market days	Obbu, Loiyangalani, Karare, Turbi		1.5 M	300 HH	1 Month	County Govt, NDMA, FHK
Construction of Dabel Market, Dukana	To increase livestock sales, Petty trades will develop at market places	Golbo, Dukana		5M	1000HH	6 months	REGAL AG, RPLRP, County Government
Rehabilitation and expansion of	To provide fodder for	Maikona		4 M	1,500 HH	6months	DRSLP

Interventions	Objectives	Specific Location	Activity Target	Cost	No. of Beneficiaries	Implementation Time Frame	Implementation Stakeholders
Kalacha Pasture irrigation Scheme	livestock during drought and empower pastoralists through sales of hay						
Construction of livestock quarantine station at Shegel	To provide direct market for livestock meant for abattoir slaughtering	Maikona		75 M	5000 HH	1 year	DRSLP
Water and Sanitation							
Water trucking	To Improve clean water availability,	Karare,SakuTownship, Kambinye .		30 Million	600HH	Jan-Feb 2018.	County Government.
Water Borehole repairs	For Continuous clean water availability,	All sub-county.		2 Million	2000HH	Jan-Feb 2018.	County Government(Water Department)
Expansion of Bakuli 3 dam and sewerage project in Marsabit urban water supply.	To increase access to clean water	Saku ward.		2billion	6000HH	Jan 2018 – Dec 2020	National Government Flagship project.
Completion of Badassa dam water supply project.	To increase access to clean water	Saku ward		1 billion	6000HH	Jan 2018 – Dec 2020	National Government Flagship project.
Health and Nutrition							
Vitamin A Supplementation	To improve the Micronutrient status of the community-hence food security.	All sub counties		3,989,747	51,236 children between 6 to 59 months	continuous	MoH,UNICEF,WFP Concern WW, WVK, FHK, GIZ, NHP plus
Zinc Supplementation	To improve the Micronutrient status of the community-hence food security	All sub counties		2,753,758	All children with diarrhea	continuous	MoH,UNICEF,WFP Concern WW, WVK, FHK, GIZ, NHP plus
Management of Acute Malnutrition (IMAM)	To improve/adjust the Nutrient status of the	All sub counties		72,473,896	2,488 SAM & 7,963 MAM	continuous	MoH,UNICEF,WFP Concern WW, WVK, FHK,GAIN,

Interventions	Objectives	Specific Location	Activity Target	Cost	No. of Beneficiaries	Implementation Time Frame	Implementation Stakeholders
	affected community.						GIZ, NHP plus
IYCN Interventions (EBF and Timely Intro of complementary Foods)	To lower morbidity and mortalities hence improving food security.	All sub counties		5,741,889	11,992 children < the age of 1 yr	continuous	MoH, UNICEF, WFP Concern WW, WVK, FHK, GIZ, NHP plus
Iron Folate Supplementation among Pregnant Women	To improve the Micronutrient status of the community- hence food security	All sub counties		6,059,792	14,784 Pregnant women	continuous	MoH, UNICEF, WFP Concern WW, WVK, FHK, GIZ, NHP plus
Deworming	To enhance children participation and growth	All sub counties		2,753,758	45,240 children between 1 & 5 yrs	continuous	MoH, UNICEF, WFP Concern WW, WVK, FHK, GAIN, GIZ, NHP plus
Food Fortification (MNPS- micronutrient powder supplementation.	To improve the Micronutrient status of the community- hence food security	All sub counties		8,945,805	51,236 children between 6 to 59 months		MoH, UNICEF, WFP Concern WW, WVK, FHK, GAIN, GIZ, NHP plus
Education							
SMP	To increase access and retention of learners	All sub counties			178 schools 44,348 pupils	Long term	M.O.E
Free primary and subsidized Secondary Education Programme	To increase access and retention of learners, and reduced school fees/cost burden to parents	All sub counties			213 schools 51,789 learners	Long term	M.O.E

6.3. Recommended Interventions

6.3.1. Food Interventions

Following the assessment of the short rains on the impact on various sectors, the team recommended reduction in the population in need of immediate food aid for North Horr sub-county and an increase for Laisamis and Moyale as shown in Table 16 below.

Table 16: Population in need of Food Assistance

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

6.3.2. Non-Food Interventions

Sub-County	Intervention	Wards	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Agriculture							
All	Early mobilization of farmers for land preparation	All	2000 HHs	DoALF	0.75M	-	
All	Early distribution of certified seeds	Agro-pastoral zones					
All	Continued support to water harvesting for crop production	All	20 community groups	DoALF	21M	-	
Livestock							
Moyale, Laisamis, North Horr and Saku	Livestock feed supplements /provision of hay	15 most affected wards	8000HH-15000HH	GoK, County government and partners	80.4M	Staff	One months
Moyale, Laisamis, North Horr and Saku	Activation, enhancement and sensitization on livestock off-take, then commercial offtake	all the 20 wards in the County	8000HH-10000HH	GoK, County government and partners	305.7 M	Staff	two months
Laisamis, North Horr, Saku and Moyale	Livestock treatment, multi vitamin and mineral supplementation	Across the County as need arises	4,000 HH	GOK, National Government and partners	50 M	Staff	3 months
Water and Sanitation							
Laisamis, North Horr, Saku, Moyale	Water trucking to community.	All,	8400 persons (1400 HH).	County Government, World Vision, Red	15 million	Nil in Cash but assets water boozers.	3months

Sub-County	Intervention	Wards	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
				Cross, Pacida			
Laisamis, North Horr, Saku, Moyale,	Provision of small scale water treatment chemicals	All.	2200 HH,	County Government, World Vision, Red Cross, Pacida	2.5 million .	Nil.	3months(<u>Feb-April 2018</u>)
Laisamis, North Horr, Saku, Moyale,	Solar installation and rehabilitation of borehole/water pans.	Bori, El barouk Badanrero, Barambate	400HH	County Government.	19 million .	Nil	February to March 2018.
Laisamis, North Horr, Saku, Moyale,	Provisions of Hand pump installation to underground tanks and shallow wells.	Munde, Forolle and Hurri Hills Kargi	1000HH	County Government.	1.5 Million	Nil	3 months (Feb-April 2018).
Laisamis, North Horr, Saku, Moyale,	Provision of 1200 plastic tanks @ 5000 litres for roof catchment	Marsabit Central, Mt. Kulal(Gatab), Hurri Hills, Kambinye, Qachacha, Karare, Songa, Watiti, Forolle.	2600HH	County Government.	72 million	Nil	6months (Feb-July 2018).

Health and Nutrition

Laisamis and North Horr	Promotion of consumption of the least consumed food groups such as eggs and fish.	All sub counties	8092	County department of health and IPS	Human resource, anthropometric equipment, Funds	Human resource,	Continuous
High County wide	Promotion of WASH practices	All wards	319, 234	County Government	Human resource Equipment	Few HR	End of 2019

Sub-County	Intervention	Wards	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Education							
All sub counties	Water trucking to schools	146 schools across the county	33161	Partners/ county Government/ND MA	Kshs. 10 M		FEB - APRIL
All sub counties	School bursaries	35 secondary schools	5,000	Partners, county government, National government, CDF	Kshs. 50 M		Feb – June
All sub counties	Conduct Enrolment drives/ campaigns on Sensitization on importance of education	All sub counties	50,000 household s/individuals	Partners, county government, National government,	Kshs. 10 M		Feb to June