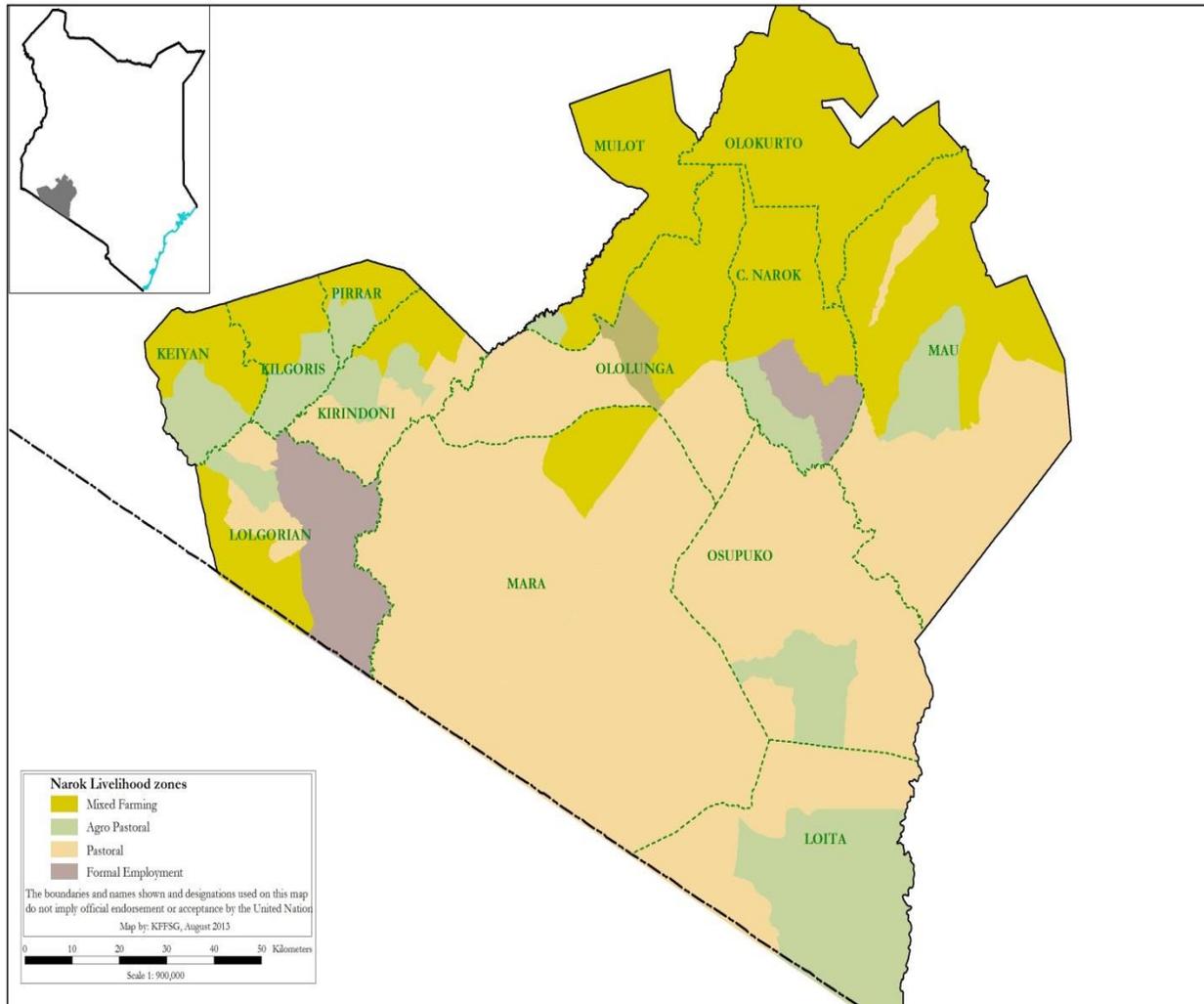


NAROK COUNTY

2018 LONG RAINS FOOD SECURITY ASSESSMENT REPORT



A Joint Report of Kenya Food Security Steering Group¹ and Narok County Steering Group

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Executive Summary

The county is classified as “Minimal” (IPC Phase 1) in the current assessment coming from “Crisis’ (IPC Phase 2) in pastoral and agro-pastoral livelihood zone and “Minimal” (IPC 1) in mixed farming livelihood zone during the short rains assessment of February 2018. The Long rains assessment was conducted between 6th and 10th August, 2018. A multi-sectoral and multi-agency approach was adopted during the assessment covering agriculture, livestock, health and nutrition, water and sanitation and education. Long rains assessment aimed at establishing an objective, evidence based and transparent food security situation.

Availability of food has improved; maize production is projected to increase by 18 percent when compared to the LTA, attributed to above normal long rains experienced in the county, though Maize lethal necrosis diseases and fall army worm infestation were estimated to have caused 10 percent maize crop losses. The livestock body condition for all livestock species in the three livelihood zone was good. However, tropical Livestock unit have declined, attributed to diminishing land sizes due to land demarcations and diversification from keeping large herds of indigenous cattle breeds to fewer improved breeds. Pasture and browse condition is also good and expected to last to the start of the short rains.

Access to food improved with the average price of maize in July 2018 declining to 39 Ksh/kg compared to 53 Ksh/kg in January in 2018 attributed to ongoing harvesting of maize. The terms of trade for July improved by 34 percent compared to January 2018 implying that households were able to purchase more quantity of maize with the proceeds from sale of a medium sized goat. The improvement has been occasioned by increase in goat prices which were 25 percent above long term averages. Water availability improved significantly as most surface sources in the county were recharged to 100 percent.

Morbidity patterns for the three top diseases has shown a mixed picture with upper respiratory tract infections (URTI) cases increasing by 51 percent compared to a similar period in 2017 in both under five and the general population and this was attributed to abnormal wet and cold weather experienced as result of the above average rains between March and May. There was 16 per cent increase in Malaria cases for both under 5 and general population compared to a similar period in 2017 attributed to low usage of mosquito nets in most households. Diarrhea cases, however, reduced by 25 percent which is attributed to availability of clean water for domestic use as result of above average long rains. The food security outcomes for the county have improved during the assessment period as result of above normal long rains experienced. For the nutrition indicators, the proportion of children under five years at risk of malnutrition, based on mid upper arm circumference (MUAC) of less than 135 mm, was at seven percent in June, 2018 which was 52 percent below compared to a similar period in 2017 while the GAM rates are at alert level of 6.8 percent. For the food consumption score, the proportion of households with acceptable food consumption score from January to April averaged over 65 percent in the three livelihood zones implying improved household dietary diversity and meal frequency. The coping strategy index for the three livelihood zones has remained relatively stable for the period under review with a mean index of 3.5 implying a stable food security situation in the county.

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1.0 INTRODUCTION

1.1 County Background

Narok County covers an approximate area of 17,933 square kilometers with a total population of 1,077,719 people (KNBS, Projected 2016). The county is divided into six sub-counties which include: Narok North, Narok South, Trans Mara West and Trans Mara East, Narok East and Narok West. There are four livelihood zones in the county namely: Pastoral, Agro pastoral, Mixed farming, and tourism/trade/business. Figure 1 shows the proportion of population in the four livelihood zones.

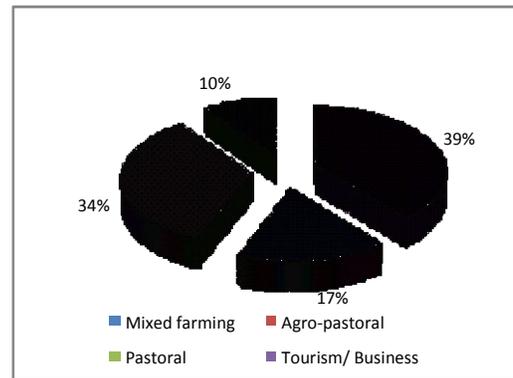


Figure 1: Proportion of population in livelihood zones

1.2 Methodology and Approach

Long rains assessment aimed at establishing an objective, evidence based and transparent food security situation. The methodology adopted included collection and analysis of primary data and secondary data. The primary data was collected using sectoral checklists while secondary data was gathered from NDMA price data, MUAC data, and nutritional smart survey and NDMA monthly bulletins. Initial County Steering Group meeting was conducted on 6th August 2018 where the preliminary sector reports were shared by the sector technical offices. Discussions were held and thereafter, the teams for field data gathering exercise were constituted with representation from the various sectors. Sample sites, transect drive routes and interview sites were agreed upon guided by various criteria such as the need to cover all the livelihood zones and sub-counties, hot-spot areas such as those that experienced flooding, areas affected by crop damage and outbreak of livestock diseases, markets, health facilities among others. During the transect drives interviews were conducted in Emarti, Enelenerai, Ololung'a, Kisiriri, Mosiro, Suswa, Nturumeti and Nairegi Enkagare. Discussion was held with community members, opinion leaders and key informants.

The assessment was conducted between 6th and 10th August, 2018. While in the field, the team conducted a minimum of two community, two key informant and two market interviews in each of the sampled sites. The assessment teams also visited markets and health facilities to triangulate information in the checklists. Visual inspection techniques were also used during the transect drives to obtain qualitative data. The field data was collected, reviewed, analyzed and triangulated to verify its validity. A multi-sectoral and multi-agency approach was adopted during the assessment covering agriculture, livestock, health and nutrition, water and sanitation and education. Livelihood zone was used as the unit of analysis for the food security indicators collected. The consolidated county report was presented to and adopted by the County Steering Group on 10th August 2018.

2.0 DRIVERS OF FOOD AND NUTRITION SECURITY IN THE COUNTY

2.1 Rainfall Performance

The onset of the long rains season was early in the third dekad of February compared to the normal onset which is second dekad of March. Heavy rain downpour was experienced in the second dekad of March and the second and third dekads of April.

The rains continued throughout the months of March, April and mid-May and declined towards the end of May. A total of 439 mm of rainfall was experienced between March and May, 2018 compared the long term average of 246.81 mm. Temporal and spatial distribution of the rain was good across all the livelihood zones. The county received over 350 percent of the long term average (Figure 2). The County experienced off season rains in the months of June and July 2018.

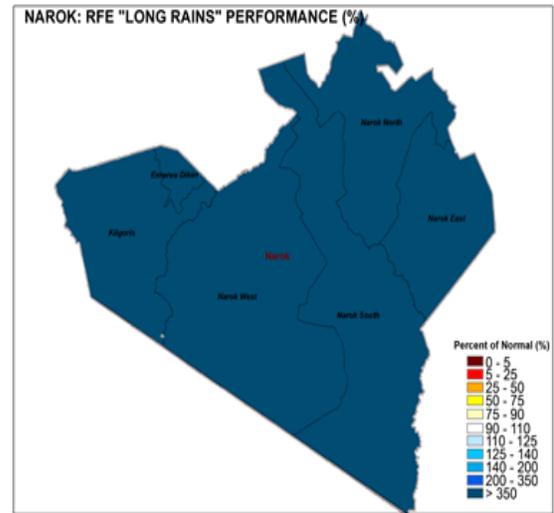


Figure 2: Long Rains Performance

2.2 Insecurity/Conflict

There are no major cases of conflicts or insecurity within the county during the assessment period. However, some few isolated cases of human – livestock – wildlife conflict were reported in some areas in the Pastoral and Agro pastoral especially the sections bordering the Masai Mara game reserve in Trans Mara West, Narok East and Narok West sub counties. Wildlife invaded some of the farms destroying crops hence reducing crop yields. This is usually resolved through constant consultation with Kenya Wildlife Services, the county government, national government and the affected farmers. There have been reported cases of inter-ethnic clashes in parts of Transmara East and Transmara West subcounties and therefore the government is carrying out disarmament exercise.

2.3 Flooding

The heavy rainfall experienced in various agricultural areas caused flooding that affected crop performance. The floods submerged crop plantations in areas like Ntulele, Mosiro, Nairegi Engare and many others within the county. Over 200 acres under different crops were destroyed with 153 acres being extremely affected. Floods that occurred in various parts of the county also led to transport disruptions after major roads became impassable. There was also destruction of property and infrastructure such school facilities and roads particularly Narok Mai Mahiu section. According to Kenya Red Cross flooding in Mosiro Ward displaced 607 households caused 6 human deaths, led to deaths of 6 sheep, 60 goats and over 400 chickens. Several areas suffered environmental degradation that was caused by soil erosion following the heavy rainfall. Several rivers such as Siyaipei and Narok rivers burst their banks due to heavy rains in the catchment areas.

2.4 Diseases and Pest

Maize production was affected by infestation of the Fall Armyworm (FAW) (in Lolgorian, Mulot and Naroosura wards) and Maize Lethal Necrosis Disease (MLND) in Trans Mara East Sub county and other parts of the county. FAW is estimated to have caused a reduction of 10% in

maize production in the affected areas. There was also an upsurge of livestock diseases across the county which mostly affected small stock and in total the county lost 33,980 livestock due to diseases during the long rains. The most common diseases reported were, Blue tongue, Foot and Mouth Disease (FMD), Sheep and Goat Pox, Contagious bovine pleura pneumonia (CCBP), PPR and Contagious Caprine Pleuro Pneumonia (CCPP), Rabies and Trypanosomiasis

3.0 IMPACTS OF DRIVERS ON FOOD AND NUTRITION SECURITY

3.1 Availability

3.1.1 Crop Production

Long rains season is the main season for crop production in the county with the major crops grown being maize, beans and Irish potatoes. Maize production contributes 20 and 15 percent cash income for agro pastoral and mixed farming livelihood zones respectively.

Rain fed crop production

Maize hectareage in the mixed livelihood zone is approximately 54 percent of the total maize grown in the county (Table 1). Agro pastoral livelihood zones account for about 37 percent while the pastoral livelihood zone accounts for nine percent. In the pastoral livelihood zone about 98 percent of the maize consumed comes from the mixed farming and agro pastoral livelihood zones. The enhanced rains that were experienced caused a reduction of seven percent in the overall maize hectareage when compared to LTA. This is attributed to early onset of the rains which started in the third dekad of February across the county making land preparation difficult. In agro pastoral livelihood zones like Mulot in Narok West, which had planted earlier, there was a positive impact as farmers are experiencing high yields; between 12 to 17 bags/acre compared to a normal of 5-10 bags/acre. Mixed farming livelihood zones in Trans Mara West Sub County; Lolgorian and Angata Barikoi were affected negatively as the maize farms were waterlogged leading to leaching of soil nutrients. Fall Armyworm (FAW) invasion attacked 20 percent of the 2018 maize crop early in the season but later the impact was reduced by the heavy rains. Maize Lethal Necrosis Disease (MLND) also affected about five to 10 percent of the planted maize crop across the county especially in Agro pastoral livelihood zone e.g. Kimintet ward (Trans West), Mulot ward (Narok west) and in the pastoral areas such as Mosiro and Suswa (Narok East), and Mixed farming livelihood zone of Katakala and Kisiriri (Narok North). Despite all these factors, maize production is projected to increase by 18 percent compared to the LTA attributed to higher productivity per hectare due to enhanced rains. The area under beans increased by 27.5 percent. However, the heavy and enhanced rainfall experienced in most of the mixed farming and agro pastoral livelihood zones led to waterlogging and leaching of soil nutrients resulting to a 27.4 percent decrease in bean production. Production of Irish potatoes in the county declined by 44.2 percent due to the excessive wet conditions, diseases and rotting of the crop despite increase of the acreage under production by 14.6 percent. This caused a drop in yields; in the mixed farming area of Oloropil Ward (Narok North) production of less than 3 bags per acre was experienced compared to 20-30 bags per acre normally.

Table 1: Comparison of the current area planted and current production with LTA

Crop	Area planted during 2018 Short rains season (Ha)	Long Term Average (5 year) area planted during the Short rains season (Ha)	2018 Short rains season production (90 kg bags) Projected/Actual	Long Term Average (5 year) production during the Short rains season (90 kg bags)
Maize	83,178	88,988	2,079,450	1,762,534
Beans	28,515	22,367	142,575	196,601
Irish potatoes	9,591	8,368	191,820 (110 kg bags)	343,909

Irrigated crop production

The main crops produced through irrigation are maize, beans, tomatoes and kales as illustrated in Table 2. Irrigation activities are mainly undertaken in Naroosura (Narok West), Mosiro (Narok East), Pulunga (Narok North) irrigation schemes and also along the banks of major rivers in the county. Area planted under maize and tomatoes and kales increased by 41.8 percent and 3.9 percent respectively against their LTA. However, there was a drop of 26.7 percent of the area planted under Kales attributed to the farmers having other alternative vegetables i.e. black night shade available in the farms due to the enhanced rainfall. This resulted to a reduction of 24 percent in kales production. The heavy rains experienced in the county in the month of April and May led to washing away of irrigation pipes and blocking of the water intake in Mosiro irrigation scheme thus paralyzing irrigation activities. Out of the 205 acres planted under maize in the scheme, 92 acres were destroyed by the floods. Currently only a few farmers are irrigating their land by using fuel run generators making irrigation cost ineffective. The irrigation in Mosiro will remain halted until the pipes are repaired posing a threat to food and nutritional security in the area for the 520 households with an estimated population of 4,000 who directly or indirectly depend on it. Although area planted under maize increased by 41 percent, production decreased by four percent compared to LTA due to the excess water which caused water logging and leaching of nutrients. Tomato crop production was reduced by 36 percent of LTA due to the heavy rains which caused flooding of farms; high incidences of diseases due the wet conditions and farmers faced challenges of controlling them with chemicals are costly.

Table 2. Irrigated Crop

Crop	Area planted during the 2018 Long rains season (ha)	Long Term Average (3 years) area planted during Long rains season (ha)	2018 Long rains season production (90 kg bags/MT) Projected/actual	Long Term Average (3 years) production during 2018 Long rains season (90 kg bags/MT)
Maize	105	74	2,500 bgs	2,612
Tomatoes	503	484	3,012	4,762
Kales	205	280	1,230	1,546

3.1.2 Cereals stock

The main staple foods consumed in the different livelihoods of the county are maize, beans, millet, sorghum, sweet potatoes, Irish potatoes, and rice. The quantities of maize held by different actors have increased by 162 percent when compared to the LTA (Table 3), attributed to the ongoing harvesting of maize in some parts of the county for example Mulot (Narok West), Trans Mara West sub-county, Suswa (Narok East Sub county) and Narok South. Households are holding 178 percent of the LTA occasioned by increased production of maize due to enhanced rains. Maize stocks held by the households in Agropastoral and mixed farming livelihood zones is expected to 3 months while in pastoral livelihood zone could last one month. However, harvesting is going which expected to increase stocks held.

Table 3: Quantities held currently (90Kg Bags)

Commodity	Maize		Sorghum		Millet	
	Current	LTA	Current	LTA	Current	LTA
Farmers	151,585	85,147	3000	3,550	950	1,340
Traders	96,400	30550	220	800	2870	2,735
Millers	1990	6362	0	0	0	0
Food Assistance/ NCPB	70,000	296	0	0	0	0
Total	319,985	122,355	3,220	4,350	3,820	4,075

3.1.3 Livestock Production

The main livestock species kept are cattle, sheep and goats where the dominant breeds are the Zebu, indigenous sheep and goats. Other livestock species are donkeys, poultry, rabbits, pigs, bee keeping and fish farming. Livestock contributes significantly to households' incomes whereby in pastoral livelihood zones, they contribute about 85 percent, in agro pastoral zones they contribute about 66 percent and in mixed farming they contribute about 40 percent. The above average rainfall received in the county led to improvement in forage and water availability thus resulting to positive impact on livestock body condition, improved milk and meat production which improved household income and food consumption.

Pasture and browse situation

The pasture quantity and quality in mixed farming livelihood zone remained good. In the agro-pastoral and pastoral livelihood zones, pasture condition ranged from fair to good. The pasture conditions in pastoral livelihood zones of Mosiro, Ntuka, Mara, Emarti, Elangata Enterit and Mararianda are fair and on declining trend owing to rains cessation in the third dekad of May and overgrazing. In the mixed farming and agro pastoral zones (e.g. most parts of Narok South, Narok West, Narok North and Transmara East and West) farmers have improved pastures such as napier grass, Rhodes grasses which supplement the natural grasses. Some parts of mixed farming and agro pastoral zones like Ololulunga, Nkareta, Nturumeti have wheat, barley and maize straws and have embraced conservation initiatives (baling and storage) which supplement livestock feeding. Pastoral zones depend majorly on natural pastures and experience high competition with wildlife e.g. Mosiro and Mara wards. The pastoral livelihood zone also

experienced invasion by *olarrashi* (inedible herbage) which has increased due to the heavy rains experienced in the County thus hindering accessibility to pastures. Pasture is projected to last for at most 3-4 months in agro pastoral and mixed farming zone while in pastoral zone it is projected to last for 1 – 2 months (Table 4). The quality and quantity of browse in all the livelihood zones remained good. Browse is projected to last for 4-5 months in agro pastoral and mixed farming zones while in pastoral zones it is projected to last for 3-4 months which is above normal and expected to last up to the short rain season. The main limiting factors in access of pastures and browse in the county are competition from wildlife, tsetse fly infestation in pasture land, invasion by inedible herbage (*Olarrashi*) and increased crop production encroachment to pasture and browse growing areas in the livelihood zones.

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	
Agro pastoral	good	Good	3-4	3-4	Crops encroachment	good	Good	4-5	4	Competition with life
Mixed farming	good	Good	3-4	3-4	Crops encroachment	good	Good	4-5	4	Crops encroachment, steep slopes
Pastoral	Fair - good	Good	1-2	2-3	Competition with wild animals, tsetse fly infestation, Invasion by inedible herbage	good	Good	2-3	4	Competition with wild animals, tsetse fly infestation

Livestock Productivity

Livestock body condition

Livestock body condition for cattle is good in the Mixed farming and agro pastoral livelihood zone and ranged from fair to good in the pastoral livelihood zone (Table 5). The body condition for sheep and goats remained good across all livelihood zones. The stability in livestock body condition is attributed to good forage condition, minimal livestock migrations and water availability. The current livestock body condition is normal at this time of the year (Trend in the next 3 - 6 months).

Table 5: Livestock body condition

Livelihood zone	Cattle		Sheep		Goat	
	Current	Normal	Current	Normal	Current	Normal
Agro pastoral	Good	Good	Good	Good	Good	Good
Mixed farming	Good	Good	Good	Good	Good	Good
Pastoral	Fair - Good	Good	Good	Good	Good	Good

Tropical livestock units (TLUs)

The declining TLUs is attributed to diminishing land sizes due to land demarcations and diversification from keeping large herds of indigenous cattle breeds to fewer improved breeds. There is also a tendency in pastoral and agro pastoral livelihood zones by the farmers/pastoralists to divert from keeping large herds of cattle to small stock (sheep and goats) probably because of their tolerance to dry spells after having previous experiences of cattle losses during droughts therefore contributing to the reduction. The current TLUs are lower in the range of xyz percentage compared with normal for all the livelihood zones (Table 6).

Table 6: Tropical livestock units

Livelihood zone	Poor income households		Medium income households	
	Current	Normal	Current	Normal
Agro pastoral	6	7	20	21
Mixed farming	4	5	6	7
Pastoral	7	7	20	21

Birth rate

The birth rates for all livestock species across all the livelihood zones were within normal ranges. This is because livestock did not experience any weather related stresses or other conditions which would have affected their birth rates.

Milk production increased from 66 percent and from 60 percent in Agro pastoral and mixed livelihood zones respectively while it remained stable in Pastoral livelihood zones compared to LTA. However, milk consumption at household level reduced from three to two litres in Agropastoral and five to three in mixed farming livelihood zones and two to one litres in pastoral livelihood zones. The reduction in consumption is attributed to sales by households in order to purchase of other household commodities. Milk prices in Mixed farming zones ranges from Ksh 25- 30 Kshs, 30-40 Ksh in the agro pastoral and Ksh 30 -50 in the pastoral livelihood zone compared to long term average of Kshs. 40 (Table 7). This is due to decreasing supply and high demand in trading centers.

Table 7: Milk Production and consumption

Livelihood zone	Milk Production (Litres)/Household		Milk consumption (Litres) per Household		Prices (Ksh)/Litre	
	Current	LTA	Current	LTA	Current	LTA
Agro pastoral	3-5	3	2	3	30-40	40
Mixed farming	5-8	5	3	5	25-30	30
Pastoral	1-2	2	1	2	30-50	40

Migration

There were minimal livestock migrations, except internal movements to cereal farms (wheat, barley and maize) after harvest to feed on straws from lowlands area like Mosiro to Ololulunga, Nkareta, Keekonyokie wards and upper parts of Narok North and East.

Livestock Diseases and Mortalities

The heavy rains led to an upsurge of diseases namely; Blue tongue, Heart water, Foot and Mouth Disease(FMD), Contagious bovine pleura pneumonia (CCBP), PPR and Contagious Caprine Pleuro-Pneumonia (CCPP), Trypanosomiasis and Helminthiasis. Other livestock diseases reported were Sheep and Goat Pox, Lumpy skin disease, anthrax, enterotoxaemia, and vector borne diseases and Rabies. However, mortality rates for the season are within the normal ranges but slightly above normal for sheep. In total the county lost a total of 33,980 livestock during the long rains due to diseases.

Water for Livestock

The main sources of water for livestock in the county are streams, wells, rivers, springs, pans, dams, shallow wells.

Table 8: Water Sources and Availability

Livelihood zone	Sources		Return average distances (km)		Expected duration to last (months)		Watering frequency
	Current	Normal	Current	Normal	Current	Normal	
Agro pastoral	Boreholes, wells, rivers, springs, pans, dams	Boreholes, wells, rivers, springs, pans, dams	5	5	3-4	3-4	once
Mixed farming	Streams, wells, rivers, springs, pans, dams, shallow wells	Streams, wells, rivers, springs, pans, dams, shallow wells	0.2 -2	2	3-4	3-4	twice
Pastoral	Boreholes, wells, rivers, springs, pans, dams	Boreholes, wells, rivers, springs, pans, dams	6	6	2-3	3-4	once

Due to good recharge of water sources, the current average return distance of 3-Kms, were within the LTA, in all the livelihood zones, lowest in the Mixed Farming, and high in the pastoral zone. However, in some of the agro pastoral zones (Mosiro) the return trekking was higher which ranged 6-10 kilometers. Water availability is expected to last 3-4 months in the Agro pastoral and Mixed Farming Zones, 2-3 months in the Pastoral Zones, compared to LTA of 3-4 months (Table 8). Watering frequency is once to twice for cattle, sheep and goats across all the livelihood zones which normal at this time of the year.

3.2 ACCESS

3.2.1 Market operations

The major markets for livestock and food stuff in the county are Suswa and Ntulele (Narok East), Narok, Ewaso Ngiro and Tipis (Narok North), Ololunga and Naroosura (Narok South); Mulot and Aitong (Narok West); Olmelili and Dikir (Trans-Mara East) and Kilgoris and Ogwedhi (Transmara West). Market operations remained normal in all the livelihood zones. The main livestock sold in the markets included cattle, goats and sheep while food commodities included maize, posho, rice, beans, kales, cabbages and potatoes. The main livestock supplies to the market were from, Kilgoris, Suswa, Aitong, Ololunga, Ewaso Nyiro to terminal markets in Nairobi, Kiambu, Nakuru, Nyandarua and south Nyanza counties. Supplies of food stuffs come from within the county and other surrounding counties of Nakuru, Nairobi, Kisii, Bomet and other surrounding counties. Traded volumes varied according to the distance and the level of supply to the market. Low livestock volumes traded in the market continued to be recorded, as farmers were not willing to sell, attributed to improved body conditions of livestock and availability of water and pastures. There was high demand for young stock in the markets as farmers purchase them for restocking. Traded volumes for food commodity remained stable compared to the normal periods. Maize and beans were the food commodities' in high demand across all livelihood zones.

Maize prices

The average price of maize per kilogram reduced by 15 percent compared to the month of June. The highest prices were recorded in pastoral livelihood zone at Kshs 46 per kg while the lowest was recorded in the agro-pastoral livelihood zone at an average price of Kshs 25 per kg. In the pastoral livelihood zone around 10 to 20 percent of the maize available for sale is being supplied from agro pastoral and mixed farming livelihood zones. The July maize price is 34 percent below the LTA as shown in Figure 3.

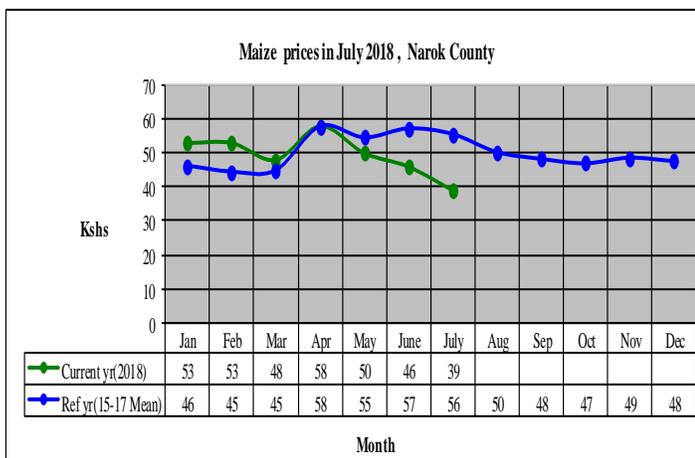


Figure 3: Current maize prices compared to LTA

Goat Prices

The price of medium sized goat in July increased by 25 percent above LTA as shown in Figure 4. The increase of goat prices is attributed to availability of browse and water, resulting in good

body conditions, and availability of other food stuffs in the households reducing the number of goats supplied to markets. The highest prices were recorded in the mixed farming livelihood zone was at Kshs 4,200 per head while the lowest price was recorded in the agro-pastoral livelihood zone at Kshs 3,500 per head. There was also an increased demand for young

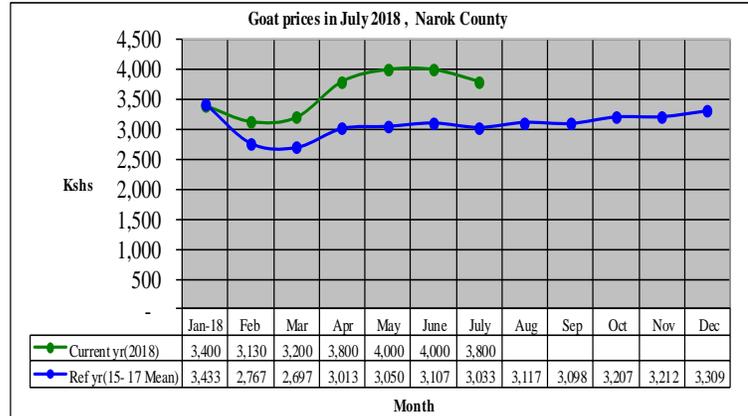


Figure 4: Goat prices

stock for restocking as opposed to adult stock destined for slaughter.

3.2.2 Terms of trade

The Terms of Trade (ToT) based on the maize/goat price ratio increased by sixteen percent in July when compared to the month of June which is 49 percent of the LTA. The increase was attributed to significant decrease in maize prices relative to those of goat prices. This implies that sale of one medium sized goat could purchase 98.4kg of maize which were favorable for pastoral communities. The current TOT is above the normal range at this time of the year as shown in Figure 5.

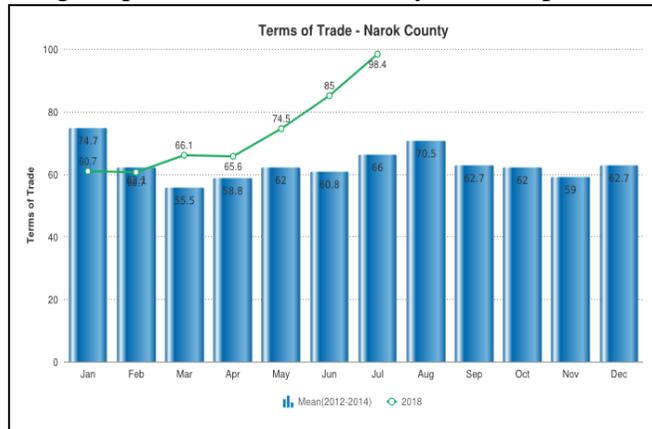


Figure 5: Terms of trade

3.2.3 Income sources

In the pastoral livelihood zone the main income source of income is sale of livestock and milk while in the Mixed farming and Agro-pastoral zones have an advantage of selling both livestock, milk and other farm products. Small scale farmers in the irrigated irrigation areas usually depend on sale of horticulture produce as the main source of income especially in the irrigation schemes along the rivers. The income sources are normal at this time, and are expected to increase in the agro pastoral and mixed livelihood zones as harvesting and sale of maize increases in the months of August and September. This will have a positive impact on food and nutrition security in these areas.

3.2.4 Water access and availability

Major water sources

The major sources of water in the county are rivers, dams, pans, boreholes, shallow wells, ponds and springs. During the season, pans and dams recharged up to 100 percent due to above normal rains experienced in all the livelihood zones (Table 9). However, the current water levels have decreased to approximately 80 percent since the cessation of the rain in the first dekad of June.

Compared to a similar period in 2017, water levels available is more than 80 percent above normal and is predicted to last up to a period of six months.

Table 9: Water availability

Ward/ Livelihood zone	Water Source	No. of Normal Operational	No. of Current Operational Sources	Projected Duration	Normal Duration of water	% Recharged by the Rains	Locality of Non- operational Water Sources
Pastoral	Rivers	3	3	Permanent	All year	100%	None
	Water Pans	47	35	6 Months	3 months	90%	Spread across LH zone
	Boreholes	5	5	12 Months	12 Months	100%	None
Agro-pastoral	Rivers	3	3	permanent	All year	100%	
	Water Pans	65	58	6 Months	4 months	80%	Nkoban and katakala
	Boreholes	23	13	12 Months	12 Months	100%	Narok hospital, Naisoya, sheep and goat and mwamba
Mixed Farming	Rivers	2	2	Permanent	All year	100%	None
	Water Pans	253	186	6 Months	4 months	90%	Spread across LH zone
	Boreholes	5	3	12 Months	12 Months	100%	Kikuyani and Nairegie Enkare

Distance to water sources and waiting time

Accessibility to water points has improved to slightly above normal and thus people do not have to trek long distances in search of water. There are 4 newly constructed water pans in pastoral and agro pastoral areas hence bringing more water sources close to households. Distance to water sources has reduced from a maximum of 15 km to 5 km in the pastoral livelihoods while remaining stable in the agro pastoral and mixed farming livelihood zones (Table 9). There was no concentration at water sources due to availability of water sources across all livelihood zones, consequently, the waiting time in pastoral livelihood zone, reduced from normal maximum of 40 minutes to a maximum of 30 minutes.

Water consumption and cost

Water consumption rates have also improved across all livelihood zones to compare to normal. Improved availability of water has led to reduced dependency on vendors, stabilizing the costs at between three shillings to five shillings in the pastoral and agro pastoral zones respectively (Table 10). This is due to increased recharge to open water sources. However, the quality has deteriorated as most of open water sources receive water from runoff. The run-off drains through farms which are already contaminated with agricultural chemicals.

Table 10: Water access

Livelihood zone	Return Distance to Water for Domestic Use (Km)		Cost of Water at Source (Ksh. Per 20litres)		Waiting Time at Water Source (Minutes)		Average Water Consumption (Litres/person/day)	
	Normal	Current	Normal	Current	Normal	Current	Normal	Current
Pastoral	3 to 15	3 to 5	3 to 5	3 to 5	30 to 40	30	20 to 30	20 to 30
Agro pastoral	0.5 to 5	0.5 to 5	3 to 5	3 to 5	10 to 15	10	20 to 30	20 to 30
Mixed farming	0.2 to 5	0.2 to 4	3 to 5	2 to 3	20	10	30	30 to 40

3.2.5 Food Consumption

The proportion of households with acceptable food consumption score from January to April was over 65 percent in the three livelihood zone implying that majority of the households were not engaging in consumption based coping strategies (Figure 6). Most households were consuming an average of 3 meals per day across all the livelihood zones. Common foods groups consumed mainly are cereals, seasonal vegetables and some animal proteins. Compared to a similar period in 2017, the proportion of households with acceptable food consumption score improved significantly from an average of 40 percent to the current 65 percent implying improved household dietary diversity and meal frequency. (NDMA January-July Bulletin 2018).

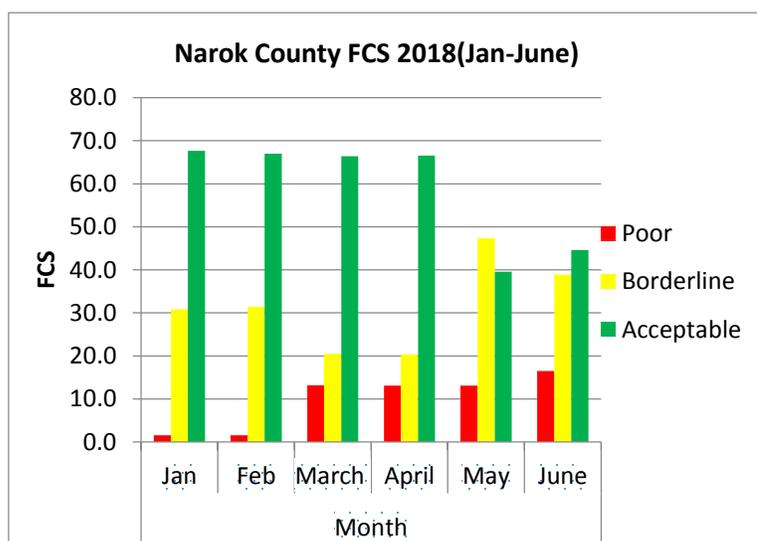


Figure 6: Narok Food Consumption Score Jan-June

3.2.6 Coping strategy

The coping strategy index for the three livelihood zones has remained relatively stable with a mean index of 3.5 implying a stable food security situation in the county (figure 7). Compared to a similar period in 2017, the mean coping strategy index for the county has improved from 6 in 2017 to 3.6 in 2018 implying that most households are gradually reducing

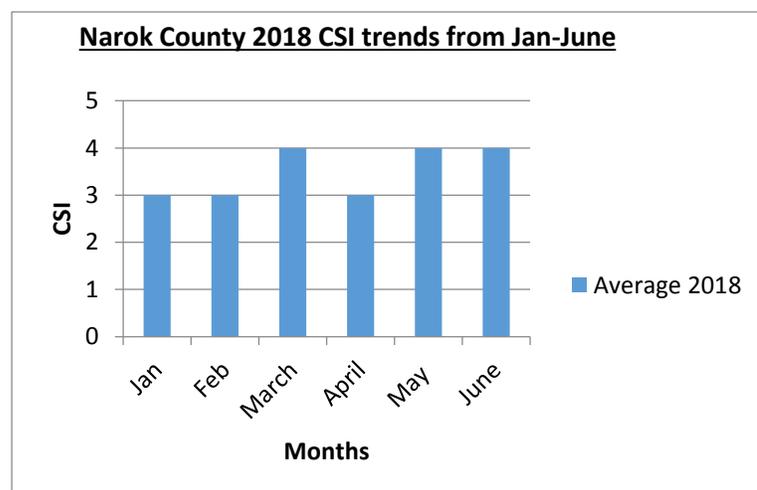


Figure 7: Average CSI Jan-June

employing consumption based coping strategies. Highest CSI was recorded in pastoral livelihood zones with the lowest being in the Mixed farming livelihood zone which is attributed to availability of food due to good harvest at this time of the year. (NDMA January-July Bulletin 2018).

3.3 Utilization

3.3.1 Morbidity and mortality patterns

The three most prevalent diseases between January and June 2018 among under-fives and the general population were upper respiratory tract infections (URTI), diarrhea and Malaria respectively. A significant increase of 51 percent was noted in URTI cases compared to a similar

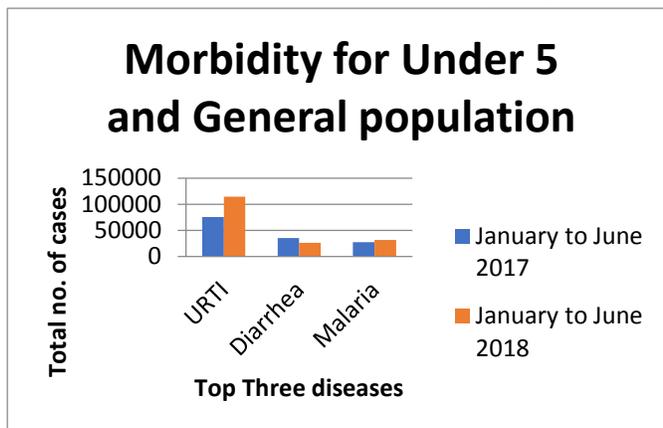


Figure 8: Morbidity patterns

period in 2017 in both under five and the general population and this was attributed to abnormal wet and cold weather experienced as result of the above average rains between March and May (Figure 8). There was 16 per cent increase in Malaria cases for both under 5 and general population compared to a similar period in 2017. The increase is attributed to above average long rains and poor environmental sanitation such as overgrown bushes near households and accumulation of stagnant water that led to breeding of mosquitos coupled with low usage of mosquito nets in most households. However, Diarrhea cases reduced by 25 percent which is attributed to availability of clean water for domestic use as result of above average long rains. There was no notifiable outbreak of epidemic and water borne diseases during the reporting period. Under five mortality rates and crude mortality rate (CMR) was stable and below the emergency threshold.

Table 11: Cases of top three diseases for both under 5 and general population

Top 3 Disease in both under 5 and general population	January to June 2017 Total cases	January to June 2018 Total cases	Percentage change
URTI	75656	114223	Increase 51 percent
Diarrhea	35299	26158	Decrease 25 percent
Malaria	27221	31688	Increase 16 percent

3.3.2 Immunization and Vitamin A supplementation

The proportion of fully immunized children in the county between January and June 2018 increased marginally to 62.3 from 54.9 percent in the same period of 2017; with the coverage remaining well below the national target of 80 percent (Figure 9). Vitamin A coverage for children between 12-59 months for January to July 2018 was 52.1 percent which is 20 percent increase compared to a

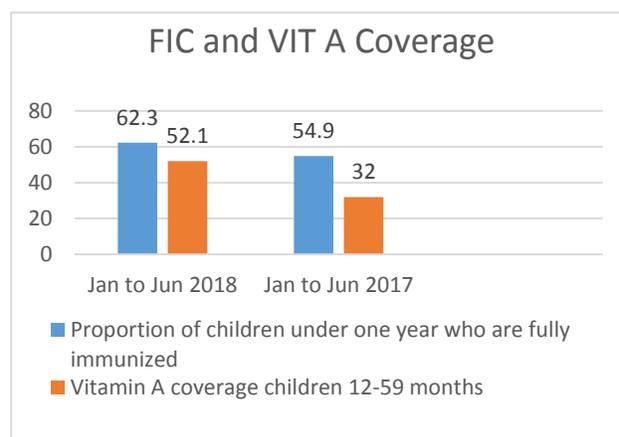


Figure 9: FIC and VIT A coverage

similar period in 2017 with the coverage far below the national target of 80 percent. The increase in coverage for fully immunized children and Vitamin A supplementation coverage is attributed to the integrated outreaches carried out in first quarter of 2018 which reached more children.

3.3.3 Nutritional status and dietary diversity

The proportion of children under five years at risk of malnutrition, based on mid upper arm circumference (MUAC) of < 135 mm, was at seven percent in June, 2018 which was 52 percent less compared a similar period in 2017 (figure 10). The decrease was attributed to the better performance of the long rains resulting to availability of food at household level. Improved milk availability at the household level and consumption helped in improvement of nutritional status of children under five. However, according to DHIS data, there was an increase in admissions for both severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) children into outpatient therapeutic program (OTP) and supplementary feeding program (SFP) respectively compared with similar period in the last two years (Figure 11). The increase in the number of admissions was attributed to the scaling up of nutrition response activities such as mass screening and increasing the coverage of outreach sites during the period under review which resulted to new cases being discovered in previously hard to reach areas.

According to the most recent SMART survey done in January 2018, the GAM rates are at alert level of 6.8 percent which remains well below the WHO emergency threshold of 15 percent.

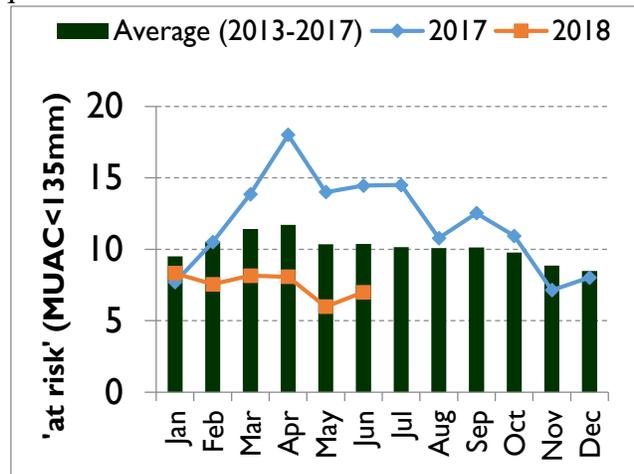


Figure 10: Proportion of children at risk of malnutrition

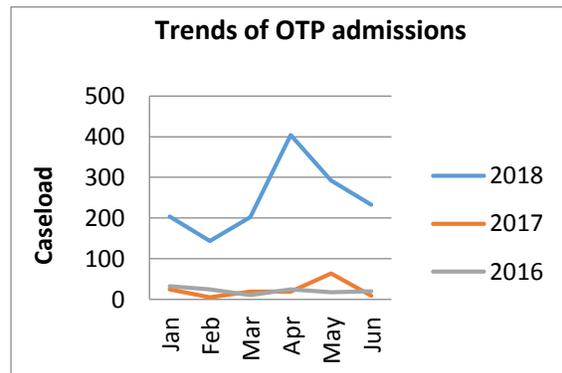


Figure 10: Trend of OTP admission Jan-Jun

3.3.4 Sanitation and Hygiene

According to SMART survey done in January 2018, the average latrine coverage in the county marginally increased to 52.4 percent for the period of January to June 2018 compared to 47 percent in a similar period in 2017. The increase was attributed to health promotion through community units. Coverage and utilization is low in the pastoral areas due to low sensitization, nomadic lifestyle and cultural beliefs. Most households practice open defecation especially in the pastoral livelihood zone, posing a health risk during rainy season. Contamination of open water sources was prevalent as livestock shared open water sources with humans. Open water sources were contaminated through surface run-off washing into them agro-chemicals, human waste and refuse.

3.4 Trends of key food security indicators

Table 12: Food security trends in Narok County

Indicator	Short rains assessment, Feb 2017	Long rains assessment, Aug 2018
% of maize stocks held by households	No stocks for pastoralists, relying on market purchases	29 percent of LTA
Livestock body condition	MF & Agro-p: All species in good body condition, Cattle in Pastoral zone is fair	Good in all livelihood zones
Water consumption (litres per person per day)	MF: 30-40Lppd, Agro-pastoral: 20-30LPPD, Pastoralists: 15-20	MF-30-40L, Agro-pastoral-20-30L, Pastoral 20-30L
Price of maize (per kg)	53/Kg	39/Kg
Distance to water sources	MF 1-2Km while in the Agro-pastoral zone, return distance average 3-5Km. Return distances in the Pastoral zone range from 3-10Km.	MF-0.2-2KM, Agro-pastoral 5km, Pastoral- 6km
Terms of trade (pastoral zone)	64 kgs	98.4kg
Coping strategy index	Pastoral, Agro-pastoral and Mixed farming recording 3.4, 2.9 and 3.6 percent respectively	Mean for the county 3.5
Food consumption score	40 percent of households have acceptable food consumption score (FCS) while 31 percent falls at borderline	65 percent of household across all the livelihood zones had acceptable food consumption score

Cross – Cutting Issues

3.5 Education

3.5.1 Enrolment

There are 750 ECDE centers, 708 Primary and 155 Secondary public schools in the County with a respective enrollment of 59741, 213373 and 28206 learners (Table 13). Compared to term I, 2018 this is a net increase of one percent, for ECDE and three percent for both primary and secondary. This is attributed to employment of ECDE teachers by county government and improved learning infrastructure through 100 percent transition infrastructure grants provided by Ministry of Education to secondary schools. Lack of day school and inadequate teachers in pastoral areas of Emarti and Mosiro hampered access to education. In the Pastoral and Agro pastoral livelihood zones, there cases of children who have attained school age but are yet to be enrolled which is attributed to weak enforcement of law and negative attitude towards education.

Table 13- Enrollment

Indicator	Term I 2018			Term II 2018 (includes new students registered and drop-outs since Term I 2018)		
	№ Boys	№ Girls	Total	№ Boys	№ Girls	Total
Enrolment						
ECD	29,694	28,608	58,232	31,217	28,524	59,741
Primary	110,920	101,867	212,787	108,968	104,405	213,373
Secondary	14,905	12,208	27,113	15001	13,205	28,206

3.5.2 Participation

ECDE and Primary levels had higher average attendance rates (83 percent and 73 percent respectively) with no significant difference in terms of gender while at secondary level there is a marked lower boys’ attendance compared to girls’ (73 percent and 80 percent respectively) even though boys have slightly higher enrollment. Generally, low attendance rates are attributed to lack of school fees in cases where secondary schools boards have had to employ teachers as a result of increased enrollment a cost that is transferred to parents. Child labour especially during planting seasons and market days is affecting school attendance.

Table 14: School attendance Jan-Jul 2018

Indicator	Term I 2018						Term II 2018					
	Jan-18		Feb-18		Mar-18		May-18		Jun-18		Jul-18	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
School Attendance												
ECD	24322	23698	24255	22801	26348	23806	26224	24100	25386	24392	25827	24728
Primary	78936	71088	80143	72755	81162	72802	82108	76319	82505	75506	82913	74691
Secondary	10421	9557	10475	9603	10662	9837	11013	10734	11093	10492	11168	10634

3.5.3 Retention

Across the levels girls are more likely to drop out of school than boys (figure 12) with highest number of drop outs recorded among primary and secondary school girls in term 1 and 2 which has been on the rise across the period. Early marriages and teenage pregnancies among girls were cited as the main cause while boy dropout is attributed to child labor.

3.5.4 School meals programme

Apart from Homegrown Schools Meals Programme (HGSMP), there are other informal school feeding arrangements initiated by parents; in Mosiro (Pastoral livelihood zone) where school feeding program is supported by Mosiro Irrigation scheme. Low cost primary boarding schools also depend on intermittent feeding programs supported by well-wishers and parents. A total of 124 primary schools in the county, with an enrolment of 31,396 (16,971 boys and 14,425 girls) are benefiting from HGSMP which is only 17 percent of the schools in the county.

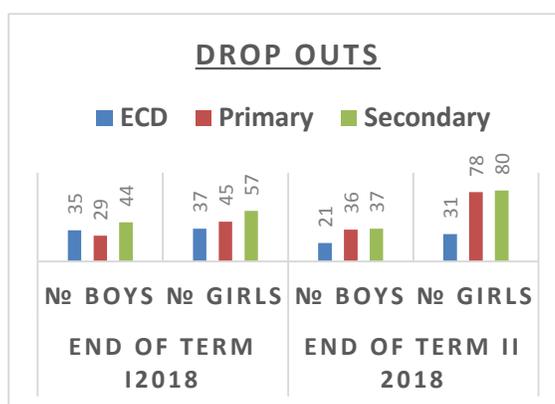


Figure 11: No of drop outs

4.0 FOOD SECURITY PROGNOSIS

4.1 Prognosis Assumptions

Food security prognosis in Narok County for the next six months is based on the following assumptions:

- Ongoing off season rains will continue in mixed farming and agro pastoral zone.
- Normal onset of the short rains will be the first dekad of October
- Normal to above normal short rains in most parts of the county will be experienced
- Normal market operations with stable commodity food prices to prevail
- Current good body condition of goat and sheep is likely to be sustained until the start of short rains.
- High goat prices to continue.
- Minimal out migration of livestock from pastoral livelihood zones expected
- Forage and water availability expected to be stable

4.2 Food security outlook

August-October 2018

The ongoing off reason rainfall in some parts of the county will lead to improvement in crop performance and subsequent improvement of agricultural production in areas where maize is still green. The cloudy and drizzly conditions in Mixed farming livelihood zones and some areas of agro pastoral livelihood zone are favorable for maturing of the crop planted during the LRA season. The levels of water sources and good forage condition will be maintained due to the cool/cold and cloudy conditions in these livelihood zones.

However, in the pastoral livelihood zones forage conditions are expected to decline from the current good condition to fair in the next three months (up to October) when the short rains are expected. The dry conditions and silting of open water sources during the long rains, however, may lead to water scarcity and reduced pasture for livestock towards the end of August and in September 2018. Water availability will decline increasing distances to watering sources. Maize harvesting and selling is expected to continue in the mixed farming and agro pastoral areas. Since the county had improved production of maize, supply across the county will stabilize maize prices. The ongoing harvesting of maize will improve the level of food security at household level, stabilize maize prices and increase incomes of farmers in the county. The ongoing off season rains are also expected to improve water availability, pasture and browse conditions thus stabilizing milk production and consumption in mixed farming and some parts of agro pastoral up to next season. The availability of wheat, barley straws and maize stovers will also supplement livestock feeds in these zones.

The current favorable Terms of Trade which are expected to be sustained for the next 3 months. Livestock body condition will continue to be good in the Mixed farming and Agro pastoral live hood zones while in the pastoral livelihood it is expected to range from between fair to good thus making the livestock prices to remain stable. The above-average performance of the 2018 long rains experienced in the county will continue to have widespread positive impacts increasing access and consumption of food, including cereals, tubers, and vegetables, which will improve general levels of acute malnutrition across the county during this period. There will be minimal livelihood change coping strategies and mortality rate is expected to remain normal.

November to January 2019

With the forecasted long rains expected to be normal to above normal in most part of the county, the key food indicators predicted for October to December 2018, are expected to improve during this period in all livelihood zones. Water availability, pasture and browse condition and milk availability especially in the Agro Pastoral livelihood zone are expected to improve tremendously.

5.0 CONCLUSION AND INTERVENTIONS

5.1 Conclusion

5.1.1 Phase classification

The three livelihood zones in the county are classified in the Minimal Phase (Phase 1) of the Integrated Food Security Phase (IPC). As a result of above normal long rains, all the food security indicators have significantly improved compared to previously where mixed farming was classified in Phase 1 while agro pastoral and pastoral livelihood zone were classified in Phase 2. Though there are few pockets that were affected by the floods e.g. Mosiro, the County food security situation is expected to remain stable. A number of factors that need to be monitored include crop and livestock pest and diseases which have caused substantial crop losses and reduced livestock productivity. The short rains will also influence the outcome of food security in the remaining part of the year and will be determined if the county eventually recovers from cumulative effect of previous droughts in the county.

5.1.2 Summary of Findings

The main drivers to food insecurity in Narok County in this season include, flooding, human wildlife conflicts, plant and livestock diseases. The food security outcomes for the county have improved during the assessment period as result of above normal long rains experienced. For the nutrition indicators, the proportion of children under five years at risk of malnutrition, based on mid upper arm circumference (MUAC) of < 135 mm, was at seven percent in June 2018 which was 52 percent below to a similar period in 2017 while the GAM rates are at alert level of 6.8 percent which remains well below the WHO emergency threshold of 15 percent. For the food consumption score, the proportion of households with acceptable food consumption score from January to April averaged over 65 percent in the three livelihood zones implying improved household dietary diversity and meal frequency. The coping strategy index for the three livelihood zones has remained relatively stable for the period under review with a mean index of 3.5 implying a stable food security situation in the county which also shows that most households are not or minimally employing consumption based coping strategies.

5.1.3 Sub-county ranking

Sub County	Food Security Rank (1-10 from worst to best)	Main Food Security Threat (if any)
Transamara East	1	High poverty level, high drop-out rates in school, early marriages, high malnutrition, low acreage of maize, crop diseases, ethnic conflict, low acreage, consumption of illicit brew, human wildlife conflict
Narok South	2	Low enrollment in schools, human wildlife conflict, high poverty level, high malnutrition rates, evictions
Narok East	3	Mosiro-affected by the floods, 200 acres destroyed, livestock deaths, presence of invasive species, few sources of water-no ground potential of boreholes, porous soils that cannot hold water,
Narok West	4	Human wildlife conflict, zoonotic diseases-wildlife to domestic animals, low enrollment in schools. Income from tourism
Narok North	5	Low crop production e.g. irish potatoes, Diversification of livelihood, better infrastructure.
Transamara West	6	Better Infrastructure, more productive land, improved livestock breeds, human wildlife conflict

5.2 Ongoing Interventions

5.2.1 Food interventions

No on-going food interventions were recorded during the period under review.

5.2.2 Non-food on-going interventions

Health and Nutrition

Sub county	Intervention	Location	No. of beneficiaries		Implementers	Estimated Cost (Ksh)	Time Frame
			Male	Female			
All	Management of Acute Malnutrition (IMAM)	Countywide	8,000	7,000	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	5m	Continuous
All	Vitamin A Supplementation	Countywide	115,000	120,000	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	-	Continuous
All	Integrated outreaches	Narok East, Narok South & Transmara Eas	20,000	25,000	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	2M	Continuous
All	Zinc Supplementation	Countywide		90,000	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	1M	
All	Iron Folate Supplementation among Pregnant Women	Countywide		90,000	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	1M	Continuous
All	IYCN Interventions (EBF and Timely Intro of complementary Foods)	Countywide		130,000	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	-	Continuous
All	Deworming	Countywide	80,000	110,000	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	-	Continuous

Livestock Sector

Intervention	Objective	Specific Location	Activity target	Cost	No. of beneficiaries	Implementation Time Frame	Implementation stakeholders
Control and control livestock pests and diseases	Livestock pest and disease control	Countywide	60% of population	10 Million	All affected households	1 year	County government, National government
Provision of extension messages	Capacity building of farmers	County wide	40% of population	5 million	Selected farmers groups	Continuous	County government, National government, development partners, ASDSP, NAGRIP
RPLRP (Regional pastoral livelihood resilience project)	Development of water structures, capacity building, livestock marketing infrastructures and disease control	Mulot, Nkareta, Ewasongiro Suswa and Low land areas of the County	45% of population	50 M	Communities surrounding the facilities	2017-2022	MOALF and Relevant line ministries
ASDSP Project and Action Africa Help International	Support Capacity Building beef and dairy Value Chains	County wide and Mara, Siana and Naikarra	60% of population	20 M	Selected Groups involved in the Value chains	2013-2022	MOALF and partners staff
NARIGP (National agricultural rural inclusive growth project)	Improvement of agricultural productivity and profitability	20 Wards of the County	75% of population			2018-2022	MOALF
KENTTEC	Tsetse and Trypanosomiasis control and eradication	Low land areas of the County e.g Naikara, Siana and Mara wards	40% of population	5 M	Communities living in the affected areas	continuous	MOALF and their staff

Agriculture Sector

County	Sub county	Intervention	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost (Kshs)	Time Frame
Narok	All	Fertilizer Subsidy	15,000	Agriculture	Improved crop production	60M	continuous
	Transmara west Transmara east	Piloting of crop insurance	All farmers targeted, 59 farmers registered	MOAI, Insurance companies	Farmers ready to risk as they are cushioned against hazards affecting crop farming	20 M	Started in the long rains season
Narok	All	Capacity Building/support for fall armyworm management training	Farmer groups where maize is grown	Agriculture	Improved crop production	5 Million	continuous
Narok	All	Quelea quelea bird control 6 million birds	Wheat, sorghum farmers	MOAI, National and County	Prevention of grain losses	20 Millions	now
Narok		Capacity building	farmers	NARIGP, ASDSP	Just started		happening
Narok	Narok Noth, Narok South, Narok east	Plant clinic	farmers	Agriculture	Plant health	500,000	Continuous
Narok	All	Up scaling of crop insurance	All willing maize farmers	MOAI, Insurance Companies	To mitigate against crop production losses brought about by hazards	20 M	continuous

Water Sector

Immediate On-going Interventions							
Sub County/ Ward	Intervention	Location	No. of beneficiaries	Implementers	Cost	Time Frame	Implementation Status (% of completion)
Medium and Long Term On-going Interventions							
Narok East	Rehabilitation of Pinyinyi	Ntulele	3000	CG/Water sector trust	49M	2 Years	

Keekonyokie ward	water project			fund			
Narok East/Suswa ward	Rehabilitation of Suswa pipeline	Suswa	5000	World bank through Rift valley water services board /Equalization fund		1 year	70%
Narok East /Keekonyokie ward	Rehabilitation of Nairegie Enkare (Lelongo) Dam	Nairegie Enkare	15000	Equalization fund through Rift valley water services board	70M	1 year	20%
	Rehabilitation/Extension of Olpunyua water project	Ntulele	5000	Equalization fund through Rift valley water services board	20M	1 year	20%

5.3 Recommended Interventions

5.3.1 Food interventions

No non food recommendations were made.

5.3.2 Non-food interventions

Livestock Recommended Interventions

Immediate

Coverage	Intervention	Specific locations	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Countywide	Pasture improvement, establishment, conservation and construction of strategic feed reserves	All wards	5,000 households	MOAL&F Community, relevant stakeholders, Development partners	10 M	5 m (1 Tractor And Baler For Pasture Harvesting, Human Resources)	2018-2019

Countywide	Enhanced Vaccination of notifiable diseases and vector control, treatments	countywide	10,000 households	MOALF and partners	8M	0	2018-2019
Countywide	Breed improvement	County wide	3,500 households	MOAL&F and partners	3 M	None	July 2018-June 2019

Long term recommended interventions

Division	Intervention	Locations	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Countywide	Reseeding denuded areas	Eleng'ata enterit, Ntuka, Mosiro, Koyaki, Ongata Naado, Ewaso ng'iro	5,000 households	MOAL&F and partners	50m	None	July 2018-June 2019
Countywide	Breed improvement	County wide	3,500 households	MOAL&F and partners	30 M	None	July 2018-June 2019
Countywide	Development of market infrastructure- sale yards, holding grounds, market information and linkage to markets	County wide	50,000 people	MOAL&F, livestock marketing councils and the community	20 M	None	July 2018-June 2019

Agriculture Sector Immediate interventions

County	Sub county	Intervention	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Narok	All	Capacity building	5000 HH	Agric Stakeholders Department,	5 M		Continuous

Narok		Provision of drought recovery seed	1000	Agriculture	5 M		
Narok		Soil and Water Conservation	1000 Farms	Agriculture	500,000	personnel	continuous

Medium term/Long Term interventions

County	Sub county	Intervention	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
Narok	All	Fertilizer Subsidy	20,0000	National Government, County Government	60 M		Continuous
Narok		Crop Insurance Subsidy	1000 HH	National Government, Insurance Companies	20M		Continuous

Health and Nutrition Sector

Immediate Recommended Interventions							
Sub County /Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
All	Scale of High Impact Nutrition (HINI)	All wards	120,000	MOH	5 M	-	6 months
Narok East	Integrated outreaches	Mosiro Ward	10,000	MOH/UNICEF/RED CROSS/NDMA	3 M	-	6 months
Narok South	Integrated outreaches	Naroosura Maji Motho wardWard	12,000	MOH/UNICEF/RED CROSS/NDMA	3 M	-	6 months
Transmara East	Integrated outreaches	Ikerin Ward	8,000	MOH/UNICEF/RED CROSS/NDMA	2 M	-	6 months

Medium and Long term Recommended Interventions

Sub County /Ward	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources	Available Resources	Time Frame
All 6 sub counties	CHVs training on nutrition	All 6 sub counties	30 CUs	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	25 M	0	3 years starting Oct 2018
All 6 sub counties	All HCW training on IMAM	All 6 sub counties	200 HCW	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	30 M	0	3 years starting OCT 2018
All 6 sub counties	School Nutrition Program	All 6 sub counties	250 schools	MOH/UNICEF/RED CROSS/CAID/NDMA/NI	40 M	0	3 years starting OCT 2018