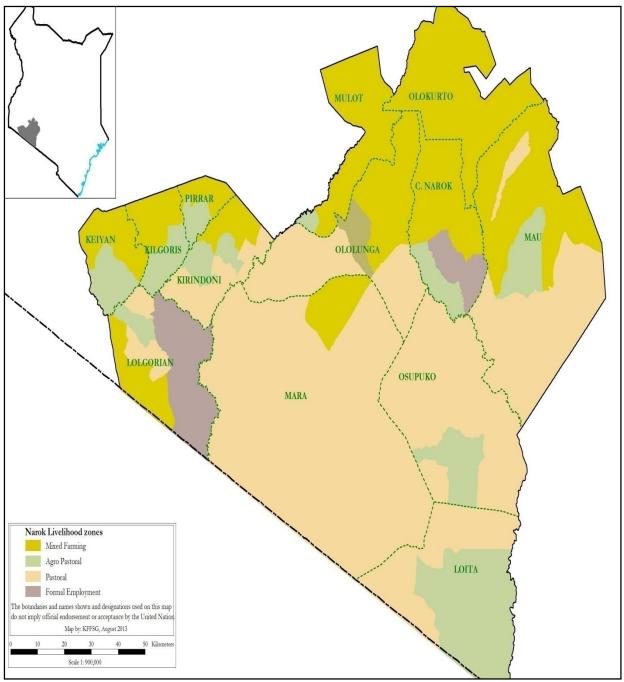
NAROK COUNTY 2016 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



A Joint Report by the Kenya Food Security Steering Group¹ and the Narok County Steering Group,

February, 2017

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Executive Summary

Narok county is in "None or Minimal" food security phase classification (IPC Phase 1) but stressed in parts of the pastoral and agro-pastoral livelihood zones where 20 percent of the population is facing food insecurity due to forage and water scarcity as well as in and out-migration. The proportion of households with acceptable food consumption score was 73 percent indicating improved household dietary diversity and food frequency. The mean coping strategy score increased slightly in the current season, implying that households are engaging in consumption-related coping strategies frequently and employing less severe coping strategies.

The nutritional status was stable and the proportion of households at risk of malnutrition was 7.57 percent which was below the five-year mean of 8.9 percent. Morbidity prevalence for under-fives declined by 4.6 percent in December 2016 compared with same time 2015; indicating improved nutrition status as attributed to access to food and health care. Water consumption per person per day is within the sphere standards (above 15litres/person/day) except in the pastoral livelihood zone which recorded 10 litres/ person/day hence low utilization of food commodities.

Crop production in the mixed farming and agro-pastoral areas decreased by 50 percent, although the reduction did not limit household food since they were relying on own stocks which were estimated to last for three months. However, milk production declined by 50 to 100 percent due early migration thus affecting household milk production and consumption in the pastoral and agro-pastoral zones. Households were holding 119 percent of maize stocks compared with normal.

The terms of trade are unfavourable where the sale of one goat is exchanging for 62kg of maize thus limiting household food access in the pastoral areas. Maize prices are stable following 60 percent of own production and previous seasons stocks while livestock body condition which was good fetched fair market prices, despite the January over supply of livestock in the markets. The current factors affecting food security include: late onset and low amounts of rainfall which negatively affected water and forage situation thus triggering early livestock migration that constrained household milk production consumption.

1. Introduction

1.1County Background

Narok County covers an approximate area of 17,933 square kilometres with a total population of 1,077,719 people (KNBS, Projected 2016). The county is divided into four sub-counties namely; Narok North, Narok South, Trans Mara West and Trans Mara East. The three main livelihood zones include: mixed farming, pastoral, and agro-pastoral, with tourism, trade, business constituting the balance (Figure 1).

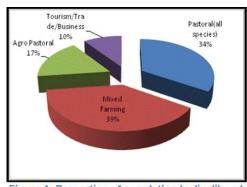


Figure 1: Proportion of population by livelihoods

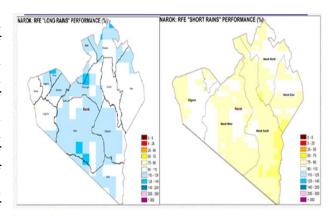
1.2 Objectives and approach

The overall objective of the assessment was to develop an objective, evidence-based and transparent food security situation analysis following the short rains season of 2016 taking into account the cumulative effect of the previous seasons; as well as provide recommendations for possible response options based on the situation analysis building up consensus. The specific objective was to review of existing data on the current situation analysis as provided by the sectors and determine the food security trends for previous seasons. The assessment methodology employed included an initial county status briefings which was conducted on Monday the 16th of January 2017, presentation of sectoral checklists from agriculture, livestock, and water, health and nutrition and education sectors. In an attempt to have a quick assessment of filed situation as well as ground truth the performance of the season, transect drives were organized and conducted for two days. On day one the team visited the Mixed, pastoral and agro-pastoral areas of (Ntulele, Mosiro, Ambru, Mara, Dikir, Kilgoris, Ololulunga and Lemek). The visit coincided with market days at Ntulele, Dikir and Ololulunga. During the transect drives, the teams collected sector-wide food security data using community and household interviews, focus group discussions and key informant interviews. The review and analysis of primary and secondary data and the county food security draft report compiled on day four in readiness for sharing during the de-briefing in the County steering group meeting on day five.

2. Drivers of Food and Nutrition Security in the County

2.1 Rainfall performance

Onset of the short rains was late in the 1st dekad of November compared to normal 3rd dekad of October. Temporal distribution was good in most parts, where most of the rains were received in the month of November and the first dekad of December. Spatial distribution was even with pastoral areas of Suswa, Oloikarere, Mosiro, and Enkutoto recording between 50 - 75 percent of the normal, while the agro-pastoral zones of Oropuko, Mara, Kirindoni, Ololunga and Ntulele, received between 75-90 percent of normal. A section of the Mixed farming areas of Figure 2 Rainfall performance



Mau, Kilgoris, Mulot, Olokurto, Pirrar and parts of Kiyan received 90-110 percent of normal. Cessation was in 2nd dekad of December compared to the normal 3rd dekad of December (Figure 2).

2.2 County peace building initiatives

Inter-community conflicts between Kipsigis and Maasai in Kirindoni (Narok West) have constrained food production (crops-farm attendance and livestock-access to forage in forests), food commodity supplies as markets are closed, household incomes due to limited labour movement, access to open water sources and health facilities.

3. Impacts of drivers on Food and Nutrition Security

3.1 Availability

Food availability is one of pillars of food security. The performance of the availability pillar was influenced by livestock and crop production indicators as well as food stocks at household level and also market supplies. Market infrastructure facilitated steady supplies of necessary food commodities in the markets.

3.1.1 Crop Production

Rain-fed crop production

Crop production is significant in the mixed farming and agro-pastoral areas. Maize and Beans contribute 60 and 20 percent to food and 70 and five percent to income respectively in both mixed farming and agro-pastoral livelihood zones. Area under maize and beans increased by 4 and 13 percent of Long Term Average (LTA) since some farmers had shifted to alternative crops due to Maize Lethal Necrosis Disease (MLND) in previous short rains seasons. However, following impressive maize performance during the long rain season they have reverted to growing maize. Area under potato remained stable compared to LTA attributed to availability of seed farmers saved from the long rains season. However, yields declined by five percent due to poor performance of the rains. Potatoes and maize production declined by five and ten percent respectively while beans yields increased by 13 percent. (Table 1).

Table 1: Rain-fed crop production

Стор	Area planted during 2016 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2016 Short rains season production (90 kg bags) Projected/Actual	Long Term Average production during the Short rains season (90 kg bags)
1. Maize	33,850	32,540	846,250	936,400
2. Beans	15,780	13,980	157,750	139,750
3. Potatoes	8,400	8,370	75,500 Tons	79,800 Tons

Irrigated crop production

Area under irrigation decreased by 11 and 33 percent for maize and beans respectively while it increased by 7 percent for tomatoes compared with the LTA. The area under irrigation increased due to expansion of Mosiro, Shulakino and Olopito schemes. Secondly, Micro irrigation along the major rivers (Ewaso Nyiro and Engare Narok) also contributed to increased acreage. Farmers moved from irrigated maize production to the high value crops such as tomato that registered an increased area under crop and production resulting to 11 percent reduction of irrigated area under maize. The increase led to depressed prices of tomato towards the end of the period under review. The production decreased by 8 and 19 percent for maize and beans but increased by 19 percent for tomatoes compared with the LTA (Table 2).

Table 2: Irrigated crop production

Crop	Area planted during the 2016 Short rains season (ha)	Short Term Average (3 years) area planted during Short rains season (ha)	2016 Short rains season production (90 kg bags) Projected/actu al	Short Term Average (3 years) production during 2015 Short rains season (90 kg bags)
Maize	80	90	4420	4810
Beans	20	30	300	370
Tomatoes	940	880	14,150 Tons	11, 870 Tons
Total	1040	1001		

The current total stocks held by households, Traders, Millers and the NCPB were 36 percent higher than the LTA (Table 3); and are expected to last for about three months, which is normal. Households stocks are 19 percent higher than LTA since some farmers in the mixed farming and agro-pastoral areas have harvested and are also holding stocks from the previous long rains season.

Table 3: Maize stocks

Maize stocks held by	Quantities held currently (90-kg bags)	Long Term Average quantities held (90-kg bags)
		at similar time of the year.
House Holds	70,510	59,500
Traders	117,730	56,530
Millers	15,765	5,153
NCPB	40,300	57,876
Total	244,301	179,052

3.1.2 Livestock Production

The major livestock in the county are cattle, goats, and sheep. The contribution of livestock production to cash income in the mixed farming, pastoral and agro-pastoral livelihood zones is 40, 85 and 66 percent respectively. Pasture and browse are fair in the mixed farming and agro-pastoral zones but poor in the pastoral livelihood zone, the available pasture are expected to last for 1-2 months (Table 4), which is not normal. Access to pasture and browse was limited by in-migration, inter-community conflicts in the mixed farming areas and by water scarcity in the pastoral and agro-pastoral areas.

Table 4: Pasture and browse situation

Livelihood	Current	Normal	Duration	Factors affecting accessibility
Mixed farming	Fair	Fair	1 -2 months	In-migrations, conflicts,
Pastoral	Poor	Fair	1 month	Water scarcity
Agro-pastoral	Fair	Fair	1-2 months	None

Livestock Productivity

Livestock body condition was fair across all the livelihood zones compared to good under normal seasons. Forage and water situation is expected to deteriorate with progressing dry spell resulting in decreased livestock prices for the pastoralists households who rely on markets for food commodities (Table 5). The short rains season is usually the lean season for minimal lambing, kidding and calving across all the livelihood zones. Birth rates during the season under review were within range.

Table 5: Livestock body condition

Livelihood	Species	Condition	Normal	Remarks
Mixed farming	Cattle	Fair	Good	Forage availability
	Goats	Fair	Good	low hence the
	Sheep	Fair	Good	deteriorating trend
Pastoral	Cattle	Fair	Fair	
	Goats	Fair	Good	
	Sheep	Fair	Good	
Agro-pastoral	Cattle	Fair	Good	
	Goats	Fair	Good	
	Sheep	Fair	Good	

Milk production, consumption and prices

Households in the pastoral and agro-pastoral areas are relying on milk from goats and sheep since cattle have migrated. In the mixed farming zone livestock are currently grazing within the proximity of homesteads since pasture, browse and water are available and accessible. The average milk production per household per day declined by 50-100 percent of normal across all livelihood zones (Table 6).

Table 6: Household milk production

	Current milk production (Litres)/per household/ day	Normal	Remark
Mixed farming	2-5	4-8	Declining forage
Pastoral	0-2	1-3	Below normal
Agro-pastoral	0-2	2-4	

Household milk consumption reduced by 50-100 percent of normal across all livelihood zones; while milk prices increased by 40 percent compared with normal ranges during the season (Table 7).

Table 7: Household milk consumption and prices

	Current HH per day (lts)	Normal (lts)	Price peritre	Normal price
Mixed farming	0.5-2	1-3	Kshs 30-40	Kshs25-35
Pastoral	0-2	1-3	Kshs 40-60	Kshs30-40
Agro-pastoral	0-2	1-3	Kshs 40-60	Kshs 30-40

The average TLUs declined by 53 and 16 percent for poor and medium household groups respectively across all the livelihood zones (Table 8); and are projected to decline with current progressing dry spell.

Table 8: Average Tropical Livestock Units per household

Livelihood Zone	Poor HH group		Medium HH group)
	Current	Normal	Poor Income	Medium Income
Pastoral	5	7	21	21
Agro pastoral	3	7	15	21

Mixed farming	1	5	5	7

Livestock Migration

Livestock migration was recorded in all the livelihood zones. In the mixed farming livelihood zone, Livestock were migrating towards the upper parts of Mau; neighboring counties of Nakuru, Kajiado, Bomet and Nairobi where pasture and water are still available. Out-migration was recorded towards Tanzania. The migrations were normal in pattern and routes but started earlier (October-November) than normal (January-February).

Livestock Diseases and Mortalities

The main livestock diseases reported were, Foot and Mouth Disease (FMD), Lumpy Skin Disease (LSD), Sheep and Goat Pox and Contagious Caprine Pleuro-Pneumonia (CCPP), Contagious Bovine Pleuro-Pneumonia (CBPP), Rabies, Enterotoxaemia, Helminthiasis and Trypanosomiasis. An advance county-wide livestock vaccination against notifiable diseases was conducted before the onset of the migrations. The reported mortality rates for the season are within the normal ranges.

Water for Livestock

The main water sources for domestic and livestock are rivers, springs, pans, dams and boreholes. The quantity and quality of water has declined in all the livelihood zones as a result of decreasing water levels. Average return trekking distance in worst affected areas such as Mosiro and Kelongisa was 15 kilometers while watering intervals were was once per day. . Water availability is projected to last for one to one and half months in pastoral and agro pastoral livelihood zones while it can last for one and half month to two months in mixed farming zones (Table 9).

Table 9: Water for livestock

Livelihood zone	Return trekking distances (Kms)		Expected duration to last (Months)		Watering frequency per day	
	Current	Normal	Current	Normal	Current	Normal
Mixed farming	2-6	0.5-3	2	3-4	Once	Twice
Pastoral	4-15	3-8	05-1	1-2	Once	Once
Agro- pastoral	4-15	3-8	2	3-4	Once	Once

3.2 Access

Access to food is dependent on household purchasing power. The access pillar is built around household income sources from productive assets, fluctuation of market prices of livestock and food commodities, domestic water supply and food security outcomes namely food consumption score and coping strategy index-consumption related.

3.2.1 Markets

Most trading activities are concentrated in the main livestock and foodstuff markets in the county which include; Suswa and Ntulele (Narok East), Ewasongiro and Tipis (Narok North), Olulunga and Naroosura (Narok South); Mulot and Aitong (Narok); Olmelili and Dikir (West Trans-Mara East) and Kilgoris and Ogwedi (Transmara West). All markets were operational with free access and flow of commodities into and out of the county except Kilgoris following the imposition of quarantine due to FMD outbreak and Esoit due inter-community conflicts. The main products traded in the markets were livestock and livestock products, crop produce and other household items sourced locally and from the neighbouring Bomet, Nakuru, Kajiado and Nairobi counties. Traded volumes were normal for the season. Market purchases are an important source of food, and the fairly stable food prices have contributed to access to adequate food.

Maize prices

The pastoral zone recorded the highest maize price of Kshs. 60 while the lowest price of Ksh. 35 was reported in the agro-pastoral and mixed farming areas. The average price of maize has remained stable over the last six months and is currently 20 percent below the LTA (Figure 3). Prices are projected to remain stable until the next season following own farm production in the mixed farming and agro-pastoral zones as well as carryover stocks from the previous season held at household level.



Figure 3: Average maize prices

Goat prices



Figure 4: Average goat prices

The goat price in January 2017 was 36 and 30 percent below the LTA and same time 2016 respectively (Figure 4). The low price is attributed to the current deteriorating body condition of goats in the pastoral and agro-pastoral areas as well as the gradual high supply to the markets as the current dry spell progresses and the early preparations for school fees. The price is expected to further decrease as the current dry spell continues in the next 2-3 months before the onset of the long rains season.

3.2.2 Terms of trade

The terms of trade (ToT) in December 2016 improved by 37 percent compared with LTA but declined by 21 percent in January 2017 (Figure 5). The observed improvement was due to the relatively stable maize and goat prices that remained fair and stable between June and December 2016. The Terms of Trade (ToT) were unfavorable to livestock producer in January 2017 since the sale of a goat could purchase 62 kg of maize compared with LTA of 78 kg hence limiting access to food. The decline in ToT was attributed by reduced goat prices and relatively stable maize prices. Following the on-going dry spell, the ToT are expected to decrease due

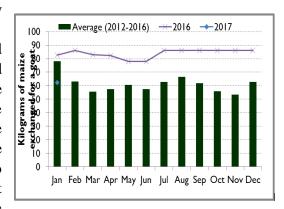


Figure 5: Trends of Terms of Trade

to deteriorating livestock body condition as occasioned by forage and water scarcity. However, the on-going migrations may stabilize the situation since few animals will be supplied to the markets.

3.2.3 Income sources

The main sources of income are crop production, livestock production and others including fishing, casual labour and charcoal burning. The county is mostly dependent on the long rains for crop production in the mixed farming and agro-pastoral areas. The main crops grown for food and income include maize, beans and potatoes. Maize and Beans contribute (60:20) and (70:5) percent to food income in the mixed farming and agro-pastoral livelihood zones respectively. The major livestock in the county are cattle, goats, and sheep. The contribution of livestock production to cash income in the mixed, pastoral and agro-pastoral livelihood zones is 40, 85 and 66 percent respectively.

3.2.4 Domestic water supply

Major water sources

The main sources of water for domestic use are dams, pans, ponds, boreholes, shallow wells and rivers (Figure 6). Recharge rates for open water sources was about 40 percent of their capacities. Distance to water sources for domestic use was above normal range by 50 percent across all livelihood zones following the early drying of open water sources due to due to poor rainfall performance, seepage and competition between humans, livestock and wildlife. The cost of water has remained stable at Ksh 3 for a 20 litre jerican in all livelihood zones. Some households rely on free water from earth pans, shallow wells and roof

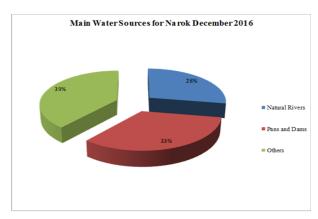


Figure 6: Common water sources

catchments. Current waiting time at water source has increased by 20-50 percent for all livelihood zones and is expected to increase in the next 2-3 months. Water consumption per person per day

declined by 50 percent across all the livelihood zones compared with the normal for the season. Consumption in the pastoral areas was below the sphere standards, which is below normal at this time of the year. On-going water trucking intervention by the county government is expected to stabilize the situation (Table 10).

Table 10: Water for domestic use

Sub county / livelihood zone			Cost of Water (Kshs./20litres)		Wate	ng Time at er Source inutes)	Average HH consumption (Litres/person/day)	
	Curre nt	Norm al	Curre nt	Norm al	Curre nt	Normal	Curre nt	Normal
Mixed farming	1-2	<1	3	2-5	5-20	10	20-40	40
Pastoral	10-15	5-10	3	2-5	30-60	30	10	20
Agro- pastoral	5-10	2-5	3	2-5	2-20	10	15-20	30

Food Consumption

The proportion of households (HH) with acceptable food consumption score remained stable at 71 percent during the short rains season. Between November and December 2016, the proportion of HH in borderline declined by 26 percent, while the poor HH increased by 60 percent (Figure 7). The significant shift of households from poor and borderline to acceptable FCS is indicative of improved household dietary diversity and food frequency which has resulted from increased food production and favourable market prices of food commodities over the last three months. Many households across all livelihood zones continued to rely on porridge, ugali, potatoes and tomatoes as the main foods. In addition, vegetables are regularly consumed in the mixed faming zone.

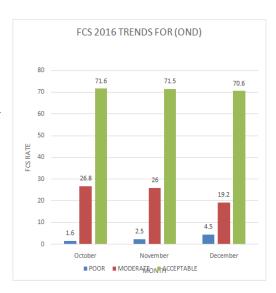


Figure 7: Food Consumption Score

Currently households are consuming two to three meals per day which is normal for this time of the year.

Coping strategy

The mean coping strategy index increased from 15 to 28 between August and December 2016 (Figure 8), implying that households were more frequently engaging in consumption-based coping strategies and the coping strategies were more severe for the last four seasons. Most common consumption related coping strategies employed by households were; rely on less preferred and less expensive food and skip meals.



Figure 8: Coping Strategy Index

3.3 Utilization

Household food utilization is a function of morbidity

prevalence of under-fives and general population, levels of completion of immunization and vitamin A coverage, nutritional status among households and level of sanitation and hygiene

practices among households.

3.3.1 Morbidity patterns

The morbidity prevalence among children under five years of age includes; upper respiratory tract infections (URTIs), diarrhea, malaria, pneumonia and skin diseases (Figure 9). Reported cases declined by 4.6 percent from 2015 to 2016 although there was a 2.8 percent increase in pneumonia cases. The URTI which is aggravated by climatic change is the leading cause of morbidity for both children under five years and the general population during the period under review. Diarrhoea and skin diseases also remain high due to poor sanitation and hygiene conditions respectively. No human disease outbreak was reported during the reporting season. Crude mortality rate (CDR) was 0.36/10,000/day and under-fives mortality

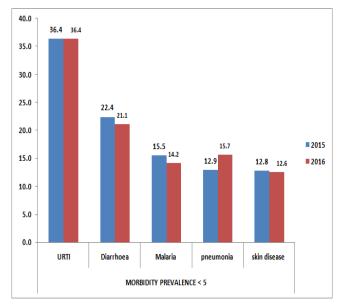


Figure 9: Morbidity prevalence for under 5s

rate (U5DR) was 0.48/10,000/daywhich is below the alert cut offs.

3.3.2 Immunization and vitamin A coverage

Fully immunized child (FIC) coverage for the county for 2016 was 31 and 55 percent in 2015 and 2016 respectively, recording some 24 percent improvement due to enhanced reporting from health facilities. Vitamin A supplementation for children aged 6-59 months, from the period of July to December 2016 was 16 percent compared with 7 percent for same period in 2015but below the national target of 80 percent. There was an increase of 8% which can be attributed to strengthened reporting at the health facility and also intensified Malezi Bora activities. Vitamin A coverage in

the county is very low due to poor reporting and since completely immunization children are not presented for growth monitoring hence not supplemented with vitamin A.

3.3.3 Nutritional status

The proportion of children under five years at risk of malnutrition, based on mid upper arm circumference (MUAC) of <135 mm, has reduced slightly by 15 percent compared with the LTA of 8.9 (Figure 10). The improvement in nutritional status may be attributed to increased household access to food and health care. The trend is likely to deteriorate especially in the pastoral and agropastoral areas due to out-migrations of livestock hence decreased household milk consumption among children.

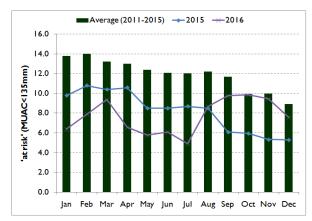


Figure 10: Proportion of under 5s at risk of malnutrition

3.3.4 Sanitation and Hygiene

The average latrine coverage in the county was 47 percent as a result of increased health promotion through community units. Coverage utilization is low in the pastoral areas (Figure 11) due to low sensitization, nomadic lifestyle and cultural beliefs. Water sources contaminated through surface run-off washing away agro-chemicals, human waste and refuse, polluting water sources. Most rural households are not treating water, according to information from the community interviews.

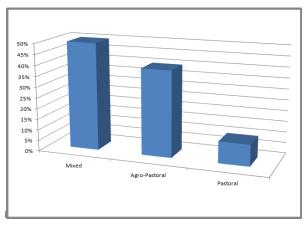


Figure 11: Latrine coverage by livelihoods

3.4 Trends of key food security indicators

The county was classified as 'None or Minimal' (Phase I) during the long rains assessment of August 2016 and has remained the same in the current assessment. The performance of food security indicators comparing the long rains and short rains seasons are shown in Table 11.

Table 11: Food security trends in Narok County

Indicator	Long rains assessment, August 2016	Short rains assessment, Feb 2017
Maize stocks held by households % LTA	59	119

Indicator	Long rains assessment, August 2016	Short rains assessment, Feb 2017
(mixed and agro- pastoral)		
Livestock body condition	Good	Fair
Water consumption (litres per person per day) Mixed farming: Pastoral: Agro-pastoral:	15-20	10-30
Price of maize (per kg)	35-40	35-60
Distance to grazing (km)	3	6km
Terms of trade (pastoral zone)	86	62
Coping strategy index	15	28
Food consumption		
score	14	3
Poor:	34	24
Borderline: Acceptable:	53	71

3.5 Education

School attendance and retention were within normal range (Table 12). No schools were closed down due to water or food shortage. Key on-going interventions include water trucking and school meals programme.

Table 12: Performance of schools

TERM III 2016											
T . 11	EC	D	Prima	ary	Secondary						
Indicators	Boys	Girls	Boys Girls		Boys	Girls					
Total enrollment	27,633	25,735	120,667	111,925	14,475	11,238					
School dropout (%)	0	0	-	1	0.69	0.95					
Transition rate (%)	91.11	89.67	62.87	58.37	-	-					

Growth rate (%)	3.06	2.71	0.72	3.0	-	-
School Meals Programme (SMP)	Targ scho	get=109 ools	1	50 boys 00 girls		

4. Food Security Prognosis

4.1 Assumptions

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

- Long rains of 2017 are likely to be below average.
- Resource-based conflicts are likely to arise
- Market prices are likely to increase
- Agricultural farm inputs are likely to be unavailable.

4.2 Outlook for next 3 months (February, March, April)

The overall food security situation across the county is expected to remain stable over the next three months. The next maize harvest is in May-June but available maize stocks at HH level are expected to stabilize maize price in the market. Forage is expected to deteriorate due to high land surface temperature and pressure from grazing by livestock from other parts of the county. Thereafter, forage regeneration is expected following the start of the long rains season in March. The livestock body condition is expected to remain stable in the mixed farming livelihood zone but deteriorate in the pastoral and agro-pastoral livelihood zone. Terms of trade are expected to remain stable and in favor of livestock keepers. The nutrition status of children under five is expected to decline due to lack of milk following out-migration especially in the pastoral and agro-pastoral livelihood zones. Food consumption patterns are expected to decline in the pastoral areas where milk availability is expected to decline and hence decreased household consumption. Frequency of meal consumption is expected to remain the same in all livelihood zones. Mortality rates for both children under five and the general population are expected to remain below the alert cut off points.

4.3 Outlook for the subsequent 3 months (May, June, July)

With the projected below normal to normal performance of the long rains, modest rejuvenation of pasture and browse is expected across all livelihood zones and thus the body condition of livestock is expected to improve. Maize stock supply in the markets will increase leading to reduced market price. At the same time, goat prices will increase steadily until end of July as farmers hold their stocks following the good body conditions and own farm food production. Therefore the terms of trade are likely to remain favorable to the livestock keepers. Water sources are expected to recharge by over 50 percent leading to improved water availability and accessibility. Increased milk production is expected to improve the nutrition status of the children under-five years.

5. Conclusion and Interventions

5.1 Conclusion

The county is in "None or Minimal" food security phase classification (IPC Phase 1) except pastoral and agro-pastoral livelihood zones which are stressed mainly due to current forage ,water scarcity and out-migration. The situation is expected to continue deteriorating up to the next season. However, key factors that need close monitoring in the next six months; especially in the pastoral and agro-pastoral areas, include stocks of staples, pasture and browse situation, livestock body condition, human and livestock diseases, livestock and food prices, under-five nutritional status, distances to water sources, availability and access to forage and water, resource-based conflicts, inter-community conflicts and insecurity.

5.1.1 Phase classification

The county is in "None or Minimal" food security phase classification (IPC Phase 1) except some parts of the pastoral and agro-pastoral livelihood zones which are in the stressed food security phase classification (IPC Phase 2) attributed to fair to poor forage conditions, water scarcity and out-migration.

5.2 Ongoing Interventions

5.2.1 Food interventions

None

5.2.2 Non-food interventions

County	Interventio	Location	No. of		Implemente	Impacts in terms	Cost	Time
	n		beneficia	rie	rs	of food security		Frame
			S					
Agricult	ure							
	Provision of	County	15,000	Mo	OA/	Increased crop	2.1Bil	Continu
	Subsidized	wide		NO	CPB/NCG	productivity	lion	ous
	Fertilizer							
	Plant clinic	Narok	100	Mo	OA/ CABI	Improved plant	18Mil	Ongoin
		East,				health	lion	g
		North						
		and						
		South						
	Traditional	Narok	1800	Mo	OA	Seed production	o.5M	On
	high value	South						going
	crops	and West						
		Sub						
		Counties						
Livestocl	k							
All sub-	Extension	Countywi	60% of	Mo	OALF	+VE		continu
countie	Messages	de	populati					ous
S			on					

All sub-	Livestock		All	Vet. Staff	+VE		
countie			affected	vei. Staff	+VE		
	diseases						
S	prevention		househo				
	and control		ld				
Narok	Establishme	All	40% of	ENSDA- Ewaso-	<u>+</u>		Continu
South	nt of	county	the	Nyiro South	livestock		ous
/North/	livestock	especiall	househo	Development	production		
East	feeds	y pastoral	lds	Authority			
	reserve,	and agro-					
	Capacity	pastoral					
	building and	livelihoo					
	provision of	d zone					
	breeding						
	stock						
	(Sahiwal						
	and Galla						
	goats)						
Water	godds)						
Central	Water	Olototoo	3000	Rift valley water	Water availability	1.8m	Continu
Mulot	trucking and	Nkareta		service board	, , and a , and and	110111	ous
Olulung	provision of	Mulot		NDMA			045
a	oil subsidy	Lemek					
Mara	to some	Maji					
Ospuko	operational	moto					
Mau	boreholes	Suswa					
East	borchoics	Suswa					
Mulot	Construct of	Mulot	5000	County	Water availability	10m	6
14101	treatment	Williot	3000	government,	vv ater a variability	10111	months
	plant Mulot			Water services			Inontins
	1 .			trust fund			
	water			trust runa			
TT 141	supply						
COUN	nd Nutrition vitamin A	county	183,284	MOH/UNICE	boost	300.0	
		county	103,204			300,0	
TY	supplementa	wide		F	immunity/unicef	00/-	
	tion	2011-4-	102 204	MOHANICE	moducos immost -f	D	
	zinc	county	183,284	MOH/UNICE	reduces impact of	Done	
	supplementa	wide		F	diarrhea and boost	vitam	
	tion		11	-	recovery	in A	
	Managemen		all	MOHADHOE	acute malnutrition	390,0	
	t of acute		acutely	MOH/UNICE	treated/unicef	00/-	
	malnutrition		malnouri	F			
	(imam)		shed				
			children				

	IYCN	county	all under	MOH/UNICE	improved health	130,0	
	intervention	wide	fives/pre	F	status for infants	00/-	
	s		gnant and		and young children		
			lactating				
			mothers				
	iron folate	county	all	MOH/UNICE	treatment of	300,0	
	supplementa	wide	pregnant	F	anaemia/ reduction	00/-	
	tion among		mothers		of iron deficiency		
	pregnant				and congenital		
	women				abnormalities		
	food	county	all under	МОН	reduction in	170,0	
	fortification	wide	fives		micronutrient	00/-	
					deficiency		
Education	n						
	Deworming		311,673				

5.3 Recommended Interventions

5.3.1 Food interventions

Division	Interv	ention	Locat	tion	No. of		Propose	d	Requi	red	Ava	ilable	Time
					beneficia	ries	Impleme	enters	Resou	rces	Rese	ources	Frame
									in KE	S			
Education													
Countywid	e	Feedin	g	Cou	ntywide	200	,000,	GoK		55.81	M	Firewood	1 years
		Progra	mme					Count	y	221.3	34M	cooks	
								gover	nment				
								Dono	rs				

5.3.2 Non-food interventions

Division	Interventio n	Location	No. of beneficia ries	Proposed Impleme nters	Require d Resourc es in KES	Availabl e Resourc es	Time Frame
Agricultu	ire						
	Proper management of on-farm storage and value	County wide	14,100	MOALFD	6.23M	Extensio n staff 2 m/cycles	1 year

	addition of food						
	Provision of Subsidized Fertilizer and Seed/ Seedlings	County wide	25,000	MOA/ NCPB/NC G	Increased crop productiv ity	2.1Billio n	Continuous
	Promotion of drought tolerant crops as alternatives	County wide	30,000	County Agricultur e dept and stakeholde rs	5Million	Vehicle and personnel	2016
	Soil and water conservation promotion	County wide	8,100	County Departme nt of Agricultur e	15 Million	Staff	2016 & -17 yrs
	County cereal strategic reserves	Sub-county wide	25000 vulnerabl e househol ds	Narok County Governme nt	200Milli on	Public land, unused NCPB silo at Enengetia	
Livestock							
All subcount ies	Pasture improvemen t	All wards	5,000 househol ds	MOAL&F Communit y,stakehol ders, Developm ent partners	10 Million)	5 m (1 Tractor And Baler	2016-2017
All sub counties	Reseeding denuded areas	Elangata Enterit, Ntuka, Mosiro, Naado, Koyaki, Ongata Ewaso Ng'iro	5,000 househol ds	MOAL&F and partners	50m	None	July 2016-June 2017
All sub counties	Enhanced Vaccination of notifiable diseases and vector control	countywide	10,000 househol ds	Vet dept and private service providers	100m	1m	August 2016- March 2017

Mulot Mau trucking	Water							
East Mara Mau, Provisions of water Central tanks Naado, Nkareta, Onginye a Olokinyei, Ntuka, Maji Moto, Mausa Mau Construction of pans and ga development Central of springs Health and Nutrition (IMAM) Intervention Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming Vitamin A ORS and Zinc Deworming Mau, Provisions Suswa, Musiro, Lemek, Ongata Naado, Nkareta, Onginye and Ongata Naado, Nkareta Donors, GoK County Donors, GoK County GoK County governme nt, GOK, Donors County governme nt, GOK, Donors MOH and -funds for Partners distributi on of the UNICEF and FII nutrition suppleme nts suppleme resource Nado, Nkareta, Ongata Naado, Nkareta on the partners of distributi on of the UNICEF and FII nutrition suppleme nts and Partners support to resource on the partners of the partners o	Mulot	Water	Suswa, Musiro,	5000	Rift valley	1m	Machin	3 months
Mara Provisions Clemek, Ongata County	Mau	trucking	Lemek, Ongata		water		eries	
Mau, Loita Central Mara Olulung a Osupko	East		Naado, Nkareta		service			
Loita Central Central Mara Olulung a Onginye a Olokinyei, Ntuka, Maji Moto, Mausa Suswa, Musiro, Ololulun ga development of springs Construction of springs County and development to facture of springs County and intervention (IMAM) County and intervention (IMAM) County and intervention IYCN and intervention Iron Folate Supplement ation among Pregnant women Vitamin A ORS and Zinc Deworming County ation and partners County and partners	Mara				Board			
Central Mara Construction Ololulung a Osupko County Osupko Osupko County Osupko County Osupko County Osupko Osupko County Osupko County Osupko County Osupko Osupko County Osupko Os	Mau,	Provisions	Suswa, Musiro,	10,000	County	1m		
Mara Olulung a Osupko Nkareta, Onginye , Olokinyei, Ntuka, Maji Moto, Mausa Mau Gentruction of pans and development of springs Health and Nutrition Managemen t of Acute Malnutrition (IMAM) Managemen (Imam)	Loita	of water	Lemek, Ongata		governme			
Olulung a Onginye Olokinyei, Ntuka, Maji Moto, Mausa Musiro, Ololulun of pans and development Central of springs Managemen t of Acute Malnutrition (IMAM)	Central	tanks	Naado,		nt,			
a Osupko Nuka, Maji Moto, Mausa Mau Construction of pans and development of springs Health and Nutrition Managemen t of Acute Malnutrition (IMAM) Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Osupty Nuka, Maji Moto, Mausa Suswa, Musiro, Lemek, Ongata Naado, Nkareta About 20,000 County Int, GOK, Donors MOH and Partners of distributi on of the UNICEF and Financial Partners suppleme nts supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming Mau Construction Nuka, Maji Moto, Mausa Suswa, Musiro, Lemek, Ongata Naado, Nkareta About 20,000 Partners of distributi on of the UNICEF and FHI nutrition suppleme nts Human resource Iron Folate County 70,000 MOH and Partners suppleme nts and Funds Partners Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming	Mara		Nkareta,		Donors,			
Osupko Ntuka, Maji Moto, Mausa Mau Oto, Mausa Mausiro, Lemek, Ongata development of springs Manado, Nkareta Maado, Nkareta Maudo, Nkareta Maado, Nkareta Madou	Olulung		Onginye		GoK			
Mau Construction Ololulun of pans and development of Springs Health and Nutrition Managemen (IMAM) Financial Supplement ation among Pregnant Women Financial Supplement ation and Cainc Deworming Financial Supplement ation among Pregnant Women Financial Financial Supplement ation among Pregnant Women Financial Fi			_					
Mau Ololulun of pans and development Central of springs About County I Om Gistributi on of the Acute Malnutrition (IMAM)	Osupko		, ,					
Ololulun of pans and development of springs Health and Nutrition Managemen t of Acute Malnutrition (IMAM)			,					
ga development of springs Health and Nutrition Managemen t of Acute Malnutrition (IMAM) ITYCN Intervention Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming Vitamin A ORS and Zinc Deworming Naado, Nkareta of nt, GOK, Donors Naado, Nkareta on th, GOK, Donors Int, GOK, Donors Naado, Nkareta on th, GOK, Donors Int, GOK, Donors Naado, Nkareta on th, GOK, Donors NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts Naado, Nkareta on th, GOK, Donors NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and Partners on the UNICEF and FHI nutrition suppleme nts NAADON MOH and NAADO				6,000	1	10m		3-6months
Central of springs					_		labour	
Managemen t of Acute Malnutrition (IMAM)	_	-	Naado, Nkareta					
Managemen t of Acute Malnutrition (IMAM)					Donors			
t of Acute Malnutrition (IMAM) Malnutrition (IMAM)	Health an	T	Γ~				~	T
Malnutrition (IMAM) Children and 5,000 pregnant and FHI nutrition suppleme mothers IYCN County I44,300 MOH and Partners support t resource Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming Malnutrition (IMAM) children and 5,000 UNICEF and FHI nutrition suppleme nts and Partners suppleme nts and Financial support t resource nts and Funds MOH and Adequate Human resource 1-5 months 1-5 months 1-5 months 1-5 months 1-5 months 1-5 months		_	County					1-5 months
(IMAM) and 5,000 pregnant and lactation mothers IYCN Intervention Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming And 5,000 pregnant and 1-5 months and Partners Wonzen And FHI nutrition suppleme nts MOH and Partners Support t Partners Suppleme nts and Funds UNICEF and FHI nutrition suppleme nts Adequate Partners Suppleme nts and Funds Human resource 1-5 months 1-5 months 1-5 months 1-5 months 1-5 months 1-5 months					Partners			
pregnant and FHI nutrition suppleme nts IYCN County 144,300 MOH and Financial support t resource Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming pregnant and FHI nutrition suppleme nts and Financial support t resource MOH and Adequate Partners suppleme nts and Funds MOH and O.6M Human resource And FHI nutrition suppleme nts aund Financial Human resource MOH and Adequate Partners suppleme nts and Funds MOH and O.6M Human resource Partners resource							nts	
IYCN County 144,300 MOH and Partners suppleme nts and Pregnant Women Total Woman Total Accounty Total Total Total Accounty Total		(IMAM)						
lactation mothers IYCN County 144,300 MOH and Partners support t resource Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming IYCN County 144,300 MOH and Partners support t resource suppleme nts and Funds MOH and Partners suppleme nts and Funds NOH and Partners suppleme nts and Funds NOH and O.6M Human resource suppleme nts and Funds Partners resource suppleme nts and Funds NOH and O.6M Human resource suppleme nts and Funds Partners resource suppleme nts and Funds NOH and O.6M Human resource								
IYCN County 144,300 MOH and Financial Human 1-5 months Intervention 70,000 MOH and Partners support t resource Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming 144,300 MOH and Partners nts and Partners NOH and Partners NOH and Partners nts and Partners nts nts NOH and NOH and Partners nesource NOH and NOH and NOH and Partners nesource NOH and NOH								
IYCN County 144,300 MOH and Partners support t resource Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming IYCN County 144,300 MOH and Partners support t resource MOH and Partners support t resource MOH and Partners suppleme resource MOH and Partners suppleme nts and Funds MOH and O.6M Human resource 1-5 months 1-5 months 1-5 months								
Intervention Partners support t resource Iron Folate Supplement ation among Pregnant Women Vitamin A ORS and Zinc Deworming Iron Folate County 70,000 MOH and Partners suppleme nts and Funds Partners suppleme nts and Funds MOH and O.6M Human resource resource Partners suppleme nts and Funds Partners resource 120,000 MOH and Partners resource		IVCN	County		MOH and		Нитоп	1.5 months
Iron Folate Supplement ation among Pregnant Women Vitamin A County ORS and Zinc Deworming Iron Folate County 70,000 MOH and Partners Suppleme nts and Funds MOH and Adequate suppleme nts and Funds NOH and ORS and Partners Partners Partners resource MOH and ORS and Partners resource Partners resource			County	144,300				1-3 monus
Supplement ation among Pregnant Women Vitamin A County ORS and Zinc Deworming Partners suppleme nts and Funds NOH and O.6M Human resource Partners suppleme nts and Funds NOH and O.6M Human resource Partners resource			County	70.000				1-5 months
ation among Pregnant Women Vitamin A County ORS and Zinc Deworming ation among Pregnant Funds Note and Pregnant Funds Note and Partners Note			County	70,000				1-3 months
Pregnant Women Vitamin A ORS and Zinc Deworming Prunds Funds					1 artifers		Tosource	
Women Vitamin A County ORS and Zinc Deworming Vitamin A County 120,000 Partners MOH and 0.6M Partners resource 1-5 months								
Vitamin A County 120,000 MOH and 0.6M Human resource Deworming 120,000 Partners 120,000 County Partner		_						
ORS and Zinc Partners resource Deworming			County	120,000	MOH and	0.6M	Human	1-5 months
Zinc Deworming			J	,		, , , ,		
Deworming								
FOOU ZU4,UUU IVIOH and I.OIVI Human I-3 months		Food		204,000	MOH and	1.6M	Human	1-5 months
Fortification Partners resource				,				
Education	Education	n						
Feeding 200,000 GoK 55.8M Firewood 1 years		Feeding		200,000	GoK	55.8M	Firewood	1 years
Programme 221.34M cooks		_		,				

		County		
		governmen		
		t, Donors		