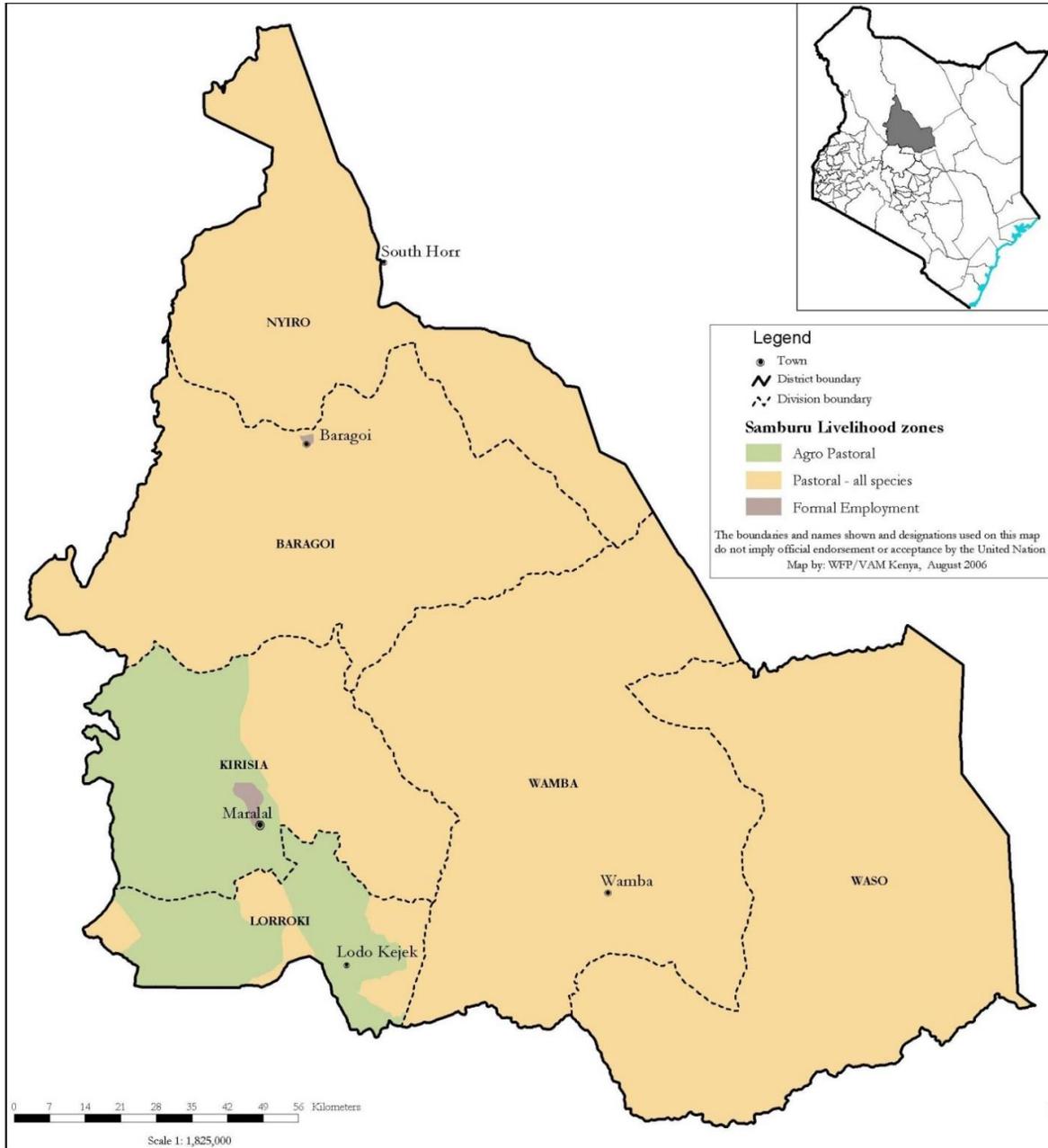


SAMBURU COUNTY
2016 SHORT RAINS FOOD SECURITY ASSESSMENT REPORT



A

**Joint Report by the Kenya Food Security Steering Group (KFSSG) and Samburu County
 Technical Steering Group (CSG)**

February, 2017

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Executive Summary

Samburu County is classified in the Stressed food insecurity phase (IPC Phase 2) in both pastoral and agro-pastoral livelihood zones with localized pockets in Nachola, Nyiro and Ndoto wards classified in Crisis (IPC Phase 3). The proportion of households with poor and borderline food consumption score was 53 percent meaning that a majority of the households had lower than normal meals per day and less diverse foods in their diet. The Global Acute Malnutrition (GAM) for Samburu was at 14.5 percent which is classified in a serious phase according to WHO standards. The mean Coping Strategy Index (CSI) was 18 implying that households are relying on less severe coping strategies to bridge their food gap.

Mass out-migration of livestock was observed to Laikipia and Isiolo Counties and abnormal migratory routes towards Mt. Kenya and Nyandarua. Forage has deteriorated in both pastoral and agro pastoral livelihood zones. Unusual livestock mortalities attributed to the prevailing dry spell have been witnessed in pockets of Samburu north particularly in Kawop where mortality was three percent compared with a normal of two percent. Trekking distances to water points increased for both domestic and livestock use as a result of drying up of surface water sources and low yielding volumes of underground sources due to ongoing dry spell. Cost of water in some areas was high particularly in Baragoi at Ksh 30 per 20 litre jerrican. Water consumption per person per day declined across the livelihood zones. Main markets are operational with food commodities; however, the livestock volumes traded are low in the markets since the livestock traders were not willing to buy weak and emaciated animals that cannot trek long distances to terminal markets.

The main drivers of food insecurity within the county include poor performance of the 2016 short rains which impacted negatively on crops, forage regeneration and low recharge level of water sources. Insecurity in some pockets has been a key constrain in accessing some available pastures and even led to resource based conflicts that resulted to loss of livelihood assets by some households in Nachola, Marti and Archers Post.

1.0 Introduction

1.1 County Background

Samburu County borders Turkana County to the Northwest, Baringo County to the Southwest, Marsabit County to the Northeast, Isiolo County to the East and Laikipia County to the South. It covers an area of approximately 21,022.2 square kilometres with an estimated projected population of 283,780 (KNBS, 2016). The county has three sub-counties: Samburu North, Samburu East and Samburu Central and three main livelihood zones: pastoral all species, agro-pastoral and formal employment/casual waged labour (Figure 1). The assessment did not take into consideration analysis based on the formal employment/casual waged labour due to its insignificant proportion in the county.

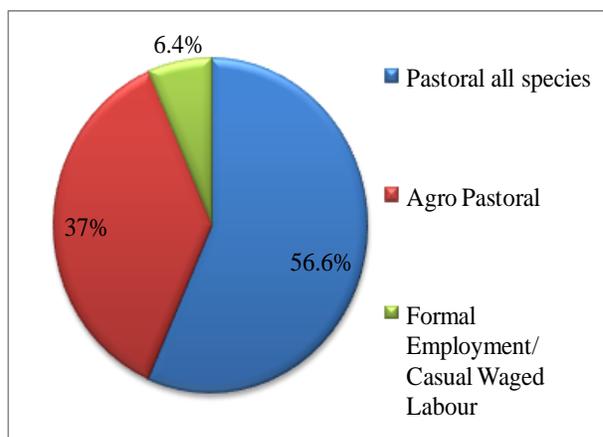


Figure 1: Proportion of population by livelihood

1.2 Objectives and Approach

The overall objective of Samburu county short rains 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 previous seasons, and to provide recommendations for possible response options based on the situation analysis.

The food security assessment for the County was conducted from 16th to 27th January, 2017 using multi-sectoral approach; the team used all available and relevant data in food insecurity based on the integrated food security phase classification (IPC) methodology. The process started by gathering data using sectoral checklists coupled with conducting a minimum of two market interviews, two focused group community interviews and two key informant interviews in each livelihood zone. Triangulation of data was enhanced by visiting health and education institutions to gather applicable data. Observation technique were also used during transects drives to obtain qualitative data. The field data was collated, reviewed, analyzed and triangulated which resulted to the county food security assessment report whose preliminary findings were disseminated to CSG during debriefing meeting.

2.0 Drivers of Food and Nutrition Security in the County

2.1 Rainfall Performance

The county experiences bimodal rainfall seasonality. The short rains are most reliable in the pastoral livelihood zone while long rains season is more reliable in agro pastoral livelihood. The short rains onset was realized in the third dekad (10 days period) of November 2016 which was late compared to normal third dekad of October. Generally, most parts of the county received intermittent and depressed rainfall of about 50 – 75 percent of the normal while parts of Samburu West and East sub counties recorded near normal amounts of between 75 – 90 percent of the normal. Temporal distribution was poor and uneven although spatial distribution was fair across the livelihood zones with cessation occurring in the third dekad of November as opposed to normally third dekad of January.

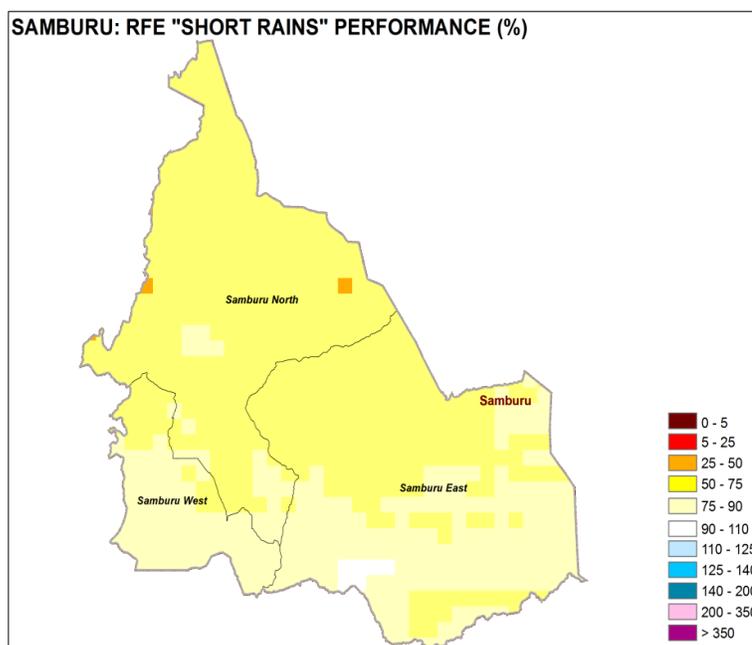


Figure 2: Rainfall Estimate as Percentage of Normal

2.2 Insecurity/Conflict

Cases of cattle rustling were reported in Samburu North particularly in Marti, Nachola and Ngorishe with reported deaths of two people leading to migration and human displacement. Based on community interview, there is likelihood of eruption of resource based conflicts along the Samburu and Isiolo border as herders converge in areas of Koom and Kawop areas in Samburu North.

2.3 Other Shocks and Hazards

Foot and mouth disease (FMD) was confirmed by county department of veterinary services in Logorate. According to community focus group discussions, clinical signs of contagious caprine pleuropneumonia (CCPP), Peste des petits ruminants (PPR) and sheep and goat pox were reported affecting small stocks in both pastoral and agro pastoral areas. In addition, human wildlife conflicts were also encountered in some areas like Kirimom whereby an elephant killed a man and destroying water points in pastoral areas of Loijuk and Ngurunit. The human wildlife conflicts is attributed to invasion of Mugie ranch in Laikipia bordering Samburu by pastoralists hence overlapping established wildlife territory and ecosystem.

3.0 Impacts of Drivers on Food and Nutrition Security

3.1 Availability

The maize stocks held by households in agro pastoral livelihood, harvested from the long rains season are 500 percent of LTA which will likely last for the next two months. However,

households in pastoral are entirely depending on markets for food commodities. Milk availability at the household level was below normal as a result migration of livestock in search of forage and water.

3.1.1 Crops Production

Maize and beans are the main staple food crops grown in the agro pastoral livelihood with maize contributing 80 percent to food and 40 percent to income while beans contribute 10 and 5 percent to food and income respectively.

The area planted for rain fed maize production increased by 7 percent while the area under beans and cow peas decreased by 22 and 30 percent respectively compared to LTA. The increase in area under maize production can be attributed to provision of certified seeds and subsidized ploughing rates by county government. The projected production in the lowland of agro pastoral is zero due to poor rainfall that led to wilting of crops before knee height and flowering for maize and beans respectively.

Table 1: Rain Fed Crop Production

Crop	Area planted during 2016 Short rains season (Ha)	Long Term Average area planted during the Short rains season (Ha)	2016 Short rains season production (90 kg bags) Projected	Long Term Average production during the Short rains season (90 kg bags)
MAIZE	396	370	0	2,400
BEANS	250	320	0	3,000
COW PEAS	35	50	0	300

The area under irrigated crops decreased by 73 and 50 percent compared to LTA for maize and assorted vegetables respectively. The reduction in acreage was attributed to abandonment of part of the irrigation land at Kurungu in South Horr by farmers due to conflict brought about by livestock invading the farms for pastures.

Table 2: Irrigated Crop Production

Crop	Area planted during the 2016 Short rains season (ha)	Long Term Average (3 years) area planted during Short rains season (ha)	2016 Short rains season production (90 kg bags) Actual	Long Term Average (3 years) production during 2015 Short rains season (90 kg bags)
Maize	4	15	Nil	600
Assorted vegetables (tomatoes, kales, spinach)	10	20	10 tonnes	50 tonnes

Maize Stocks

The maize stocks held at household level is 500 percent of the LTA. Most of the stocks are held within the agro pastoral livelihood zone and expected to last for the next two months as opposed to one month normally. The stocks in the households are attributed to increased land under crop

production and high yields from the long rains harvest. The households in pastoral livelihood are currently depending on markets for food commodities supplied by traders mostly from Meru, Isiolo and Laikipia. The stocks held at NCPB increased by 25 percent of the LTA whereas stocks held by traders and millers decreased by 20 and 60 percent comparable to LTA respectively. The NCPB was offering fair prices compared to traders and millers and therefore farmers preferred selling their produce to meet their domestic needs.

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
Households	60,530	10, 100
Traders	1, 600	2,000
Millers	1,000	2,500
NCPB	5, 229	4, 200
Total	68,359	18,800

3.1.2 Livestock Production

The livestock production contributes to 85 percent of cash income in pastoral livelihood and 60 percent in agro pastoral livelihood (Table 4).

Table 4: Livestock Average Percentage Contribution of Cash Income

Livelihood zone	Livestock average % of cash income contribution
Pastoral	85
Agro pastoral	60

Forage condition

In the pastoral livelihood zone, pasture condition is poor and compared with fair normally at this time of the year. The pasture is projected to last up to mid February 2017. In the agro-pastoral zone, the forage is fair to poor due to controlled grazing practiced by individual farmers in the Lorroki plateau. The situation is normal and is projected to last for the next one month.

Browse situation in pastoral livelihood zone is fair to poor and is projected to last for next 1-2 months, whereas it normally last up to three months. In the agro-pastoral livelihood zone, browse condition is good to fair in the Kirisia hills and may last for the next three months which is normal at this time of the year (Table 5).

Table 5: Forage condition

Livelihood Zone	Pasture Condition			Browse Condition		
	Current	Normal	Projected duration to last	Current	Normal	Projected duration to last
Pastoral	Poor	Fair	3 weeks	Fair to poor	Good	1 – 2 months
Agro pastoral	Fair to poor	Fair	1 month	Good to fair	Good	3 months

Livestock body condition

Livestock body conditions for grazers in pastoral zone are fair to poor, which is not normal whereas the browsers (goats and camels) are good - fair and the trend is projected to be fair to poor in the coming months. In the agro-pastoral zone, the livestock body conditions for cattle is fair while small stock is good to fair attributed to availability of some hay harvested from enclosures and crops by-products and good browse in the high lands.

Milk availability and consumption

Average milk consumption at household level ranges from 0-1 litres in pastoral livelihood zone compared with a normal of 1-1.5 litres while in the agro-pastoral zone, the consumption was 0.5-1.5 litres compared with a normal of 1-2 litres. Some parts of the agro pastoral zone that keep dairy cattle and dairy Goats e.g. Loosuk and Baawa are producing milk for the market. A few farmers with dairy cattle and camels are selling milk at Ksh 60-80 per litre across the livelihood zones comparable to normal price of Ksh 45-50. The high prices are attributed to low milk production at household level due to mass migration of livestock. The milk availability is expected to decrease due to drought being experienced in the county.

Table 6: Milk production, Consumption and retail price

Livelihood zone	Milk production (litres/HH/day)		Milk Consumption (litres/HH/day)		Price per litre (Ksh)	
	Current	Normal	Current	Normal	Current	Normal
Pastoral	0 – 1	1 - 2	0 - 1	1 –1.5	60 - 80	45 - 50
Agro pastoral	0.5 – 1.5	2 - 3	0.5 – 1.5	1 - 2	60 - 80	45 - 50

Livestock Diseases and Mortalities

Isolated cases of foot and mouth disease (FMD) at Logorate, sheep & goat pox in Samburu East and in Nachola were reported by the veterinary service department. Livestock mortalities were noticed in Kawop accounting to three percent above the threshold of two percent attributed to the prevailing dry spell. The nearest watering point for livestock in Kawop was 15–20 km coupled with watering of livestock after two days compounded the high livestock mortality rate.

Migration

Mass out-migration of livestock observed from Samburu Central and some from Wamba west to Mugie ranch in Laikipia County and others from Samburu east crossing to Isiolo County with abnormal migratory routes noticed towards Mt. Kenya and Nyandarua. There was also internal migration of livestock within Samburu west to Mathew ranges, Kiltamany and Ndikir eldama lemelepo hills and others have moved to Koom. Livestock in Samburu north, where pasture has been exhausted, are migrating to Samburu east through Ndonyo Wasin which has caused insecurity. The remaining cattle in Samburu north are concentrated in insecurity prone zones of Marti and Kawop.

3.2 Access

Main markets are operational with food commodities prices increasing. The TOT in January 2017 was 48 kilograms of maize from income of sale one goat. It is expected that TOT might fall further as the livestock body condition deteriorates while on the other hand the maize prices continue to rise.

3.2.1 Markets' Operations

Major markets across the livelihood zones are operational although some markets have low livestock volumes due to migration of livestock to dry season grazing areas. This was particularly for markets in Samburu north which experienced low volumes of livestock traded leading to suppressed household purchasing power. According to community interviews, traders particularly in Baragoi are not willing to buy weak animals that will not be able to trek long distances to terminal markets. The main markets include Lolkunian, Archers Post, Ngilai and Lpus centres in Samburu East, Tangar, Latakweny and Ngurunit in Samburu north whereas Suguta Marmar, Porro, Kisima, Maralal and Lekuru are in Samburu central.

Maize Flour (Posho) Prices

The current maize market prices in both pastoral and agro pastoral livelihoods stabilized between Ksh 45–60 per kilogram. Maize flour prices have been stable for the last three months attributed to the 2016 long rains season good crop harvests realized in the months of October and November in agro pastoral livelihood and supplies from Laikipia, Nyandarua and Meru counties. The current maize flour price is 6

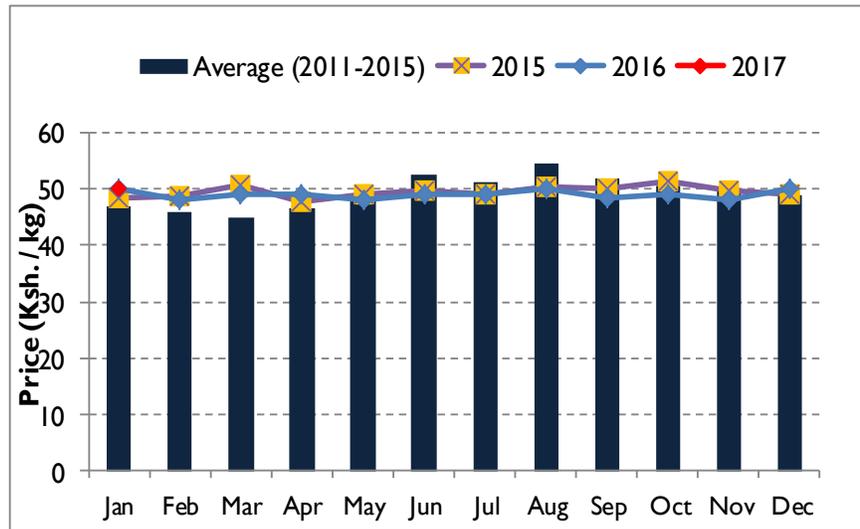


Figure 3: Maize Flour Prices

percent above the long term and 4 percent above the same season in 2015 (Fig. 3). According to NDMA bulletin, high Maize flour (posho) selling price were noticed in pastoral areas of Arsim in Samburu North, Swaari and Westgate in Samburu East at Ksh 60 per kilo attributed to transport charges owing to poor condition of access roads.

Goat prices

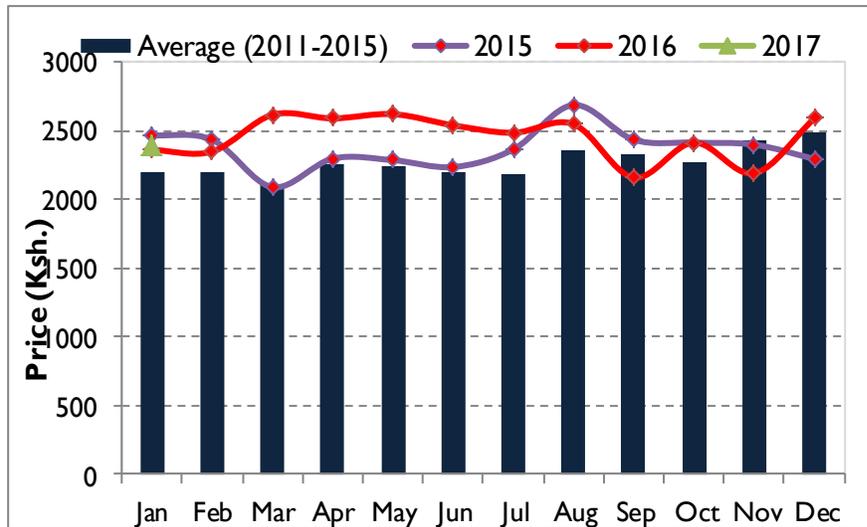


Figure 4: Goat Prices Trend

price is seven percent above the previous month (NDMA). The prices are projected to decrease attributed to high supply in the markets as parents sell to get first term fees as well as deteriorating body conditions. The current market price was ranging between Ksh 2000 – 4000 across the livelihood zones.

3.2.2 Terms of Trade

Term of trade (TOT) in January 2017 was two percent above the LTA and six percent below the 2015 season at the same time of the year (Fig. 5). The current TOT is favourable implying that income from sale of a goat can fetch 48 kilograms of maize comparable to LTA of 47 kilograms.

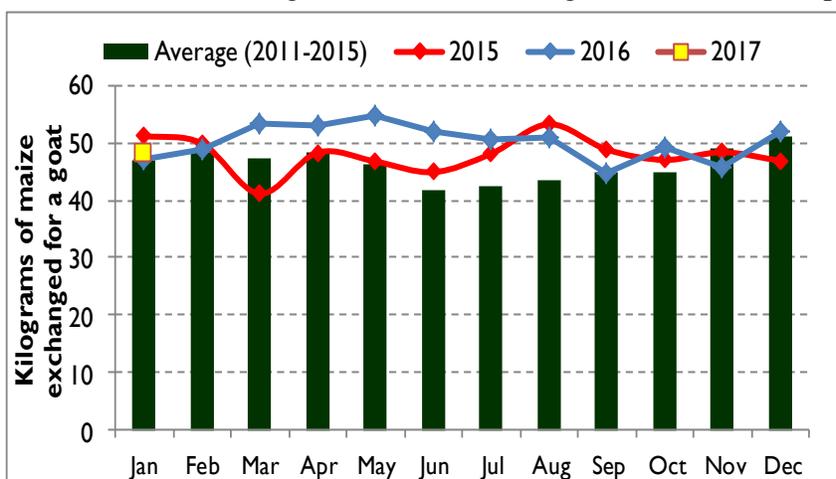


Figure 5: Terms of Trade Trend

Goats selling price in January 2017 was nine percent above the long term average and two percent below the same season in January 2015 (Fig. 4). The increase can be linked to better marketing awareness, and information by government and partners through livestock market associations (LMAs); better body condition for the small stocks and improved livestock market structures (sale yards). The average

The increase can be attributed to better market awareness and information and high demand during Christmas festive season. The TOT in January 2017 slightly declined compared to December 2016 attributed to decreasing livestock prices owing to oversupply as parents sell to get fees for term one and deteriorating body conditions.

3.2.3 Income Sources

The main source of income across the livelihoods is sale of livestock and livestock products (Fig. 6). Livestock production in pastoral zone constitutes 85 percent of household income while in agro pastoral contributes 60 percent to income. The county also benefits on social safety nets through cash transfers by national government under social services department supporting 13,232 vulnerable elderly, people with disabilities and orphan children. The monthly average expenditure of sampled vulnerable households taking into account food items, non-food items and other recurrent costs on average amounts to Ksh 31,745.70 per household per month (KRC).

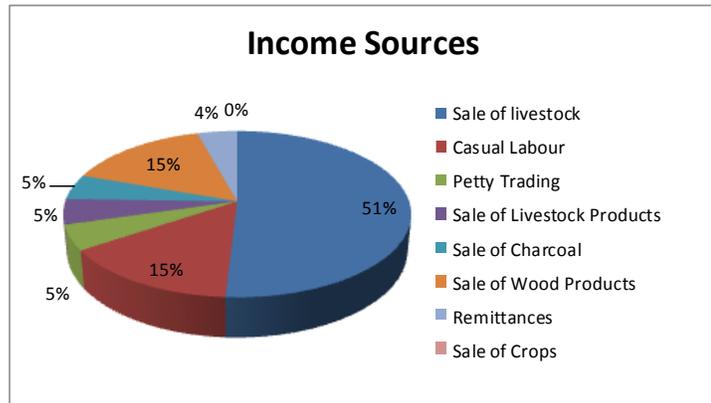


Figure 6: Income Sources

3.2.4 Water Access and Availability Water Sources

The current water sources for domestic and livestock use include boreholes, shallow wells, springs, pans and dams (Fig. 7). The short rains recharge for surface water sources was about 10 percent. Most open surface water sources in pastoral livelihood have dried up and underground sources strained resulting to pump breakdowns. The drying up is attributed to low recharge levels due to poor performance of short rains and high ambient temperatures as a result of prolonged dry spell. The water pans in agro pastoral are holding almost 30 percent of the water and are declining faster.

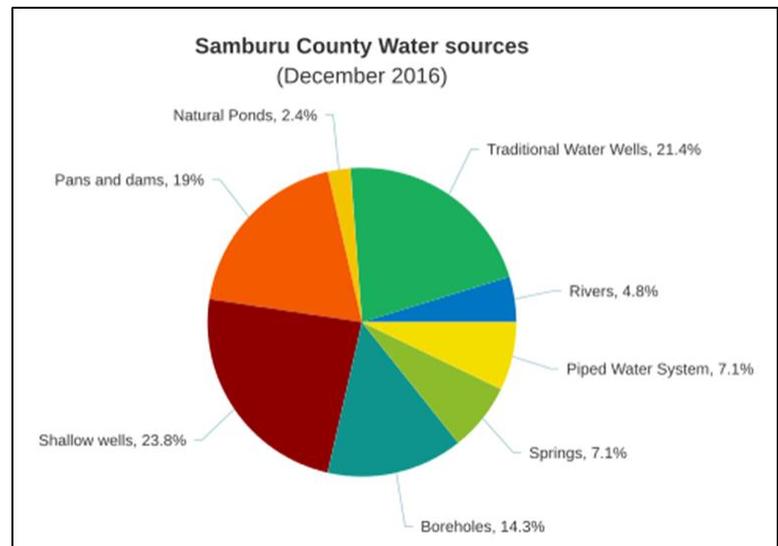


Figure 7: Water Sources

Distance to water sources and waiting time at the source

The current return trekking distance to water sources doubled compared with normal in the pastoral and was near normal in the agro pastoral livelihood zone (Table 4). The doubling of distances in pastoral livelihood zone is attributed to drying up of surface water sources and low yielding volumes of underground sources due to ongoing dry spell, thus leading to longer waiting time at water points. The increased return trekking distances indicates inadequate water availability that has led to watering of cattle in the pastoral livelihood after every two days instead of daily.

Cost of water and consumption

The cost of a 20 litre jerrican ranged between Ksh 5-10 in pastoral areas. In some pockets of Baragoi and Nyiro, the cost of water was Ksh 30 which is inclusive of transportation cost. The high cost in the two places is attributed to breakdown of strategic boreholes therefore; households have no options rather than depend on wells being owned by individuals. In agro pastoral the cost of water remained stable at Ksh 2 – 5 attributed to close proximity of water points (Table 4).

Table 7: Water for domestic and livestock use

Livelihood Zone	Trekking Distance to Water Sources for Domestic Use (Km)		Cost of Water (Ksh per 20litres Jerican)		Waiting Time at Source (Minutes)		Average HH Use (Liters/person/day)	
	Current	Normal	Current	Normal	Current	Normal	Current	Normal
Pastoral	7 - 10	2.5 - 5	10 - 15	5 - 10	20 – 25	10 - 15	5	15
Agro pastoral	2 - 3	1.5 - 2	2 - 5	2 - 5	10	10	10	20

3.2.5 Food Consumption

In December 2016, the proportion of households with poor and borderline food consumption score was 53 percent compared to 29 percent in December 2015. Household in acceptable food consumption score has decreased by 25 percent compared to December 2015. The decrease can be attributed to mass out migration of livestock leading to households having limited access to milk and meat. Households in pastoral livelihood are currently consuming 1 – 2 meals in a day as compared to 2 – 3 normally while in agro pastoral livelihood zone, they are taking 2 – 3 meals per day, which is normal at this time of the year.

3.2.6 Coping Strategy

In December 2016, the mean coping strategy index was 18 compared with 19 in December 2015 (FSOM). The marginal decrease can be attributed to distribution of relief food by national government, county government, WFP and Kenya Red Cross that slightly contributed to food availability during the period under review. The common consumption related coping strategies employed by households include relying on less expensive foods and borrowing food or relying on relatives or friends.

3.3 Utilization

Majory of the households had poor sanitation and hygiene practices which are result of low latrine coverage, poor handwashing practices and open defecation. Crude mortality rate and under five years mortality rates are below alert threshold. Malnutrition rates are high than WHO thresholds.

3.3.1 Morbidity and Mortality Patterns

Common diseases for under-five years include upper respiratory tract infections (URTI), diarrhea, pneumonia, skin disease and eye infection. There was a significant reduction of the number of cases captured in district health information system (DHIS) for URTIs in the period under review which could be attributed to the health workers strike that was experienced in December 2016. For the general population the, main morbidity cases include Upper respiratory

tract infections, diarrhea, pneumonia, disease of skin and confirmed malaria. The trends show a slight increase of diarrhea, pneumonia and disease of the skin, attributed to water shortages in the county during the period under review. Crude mortality rate and under five years mortality rates are at 0.035/10,000/day and 0.015/10,000/day respectively and are below alert threshold of 0.5/10,000/day and 1/10,000/day respectively (Births and death Office).

3.3.2 Nutritional Status

The proportion of children at risk of malnutrition by MUAC according to National Drought Management Authority (NDMA) December bulletin is high at 20.78 percent which is 12.3 percent above the long term average and 30 percent above the 2015 MUAC value at the same time of the year as shown in Figure 8. The Global Acute Malnutrition (GAM) for Samburu was at 14.5 percent which is classified in a serious phase (SMART survey 2016). This is attributed to low milk consumption at household level and poor maternal, infant and young child nutrition practices, coupled with diseases such as diarrhea.

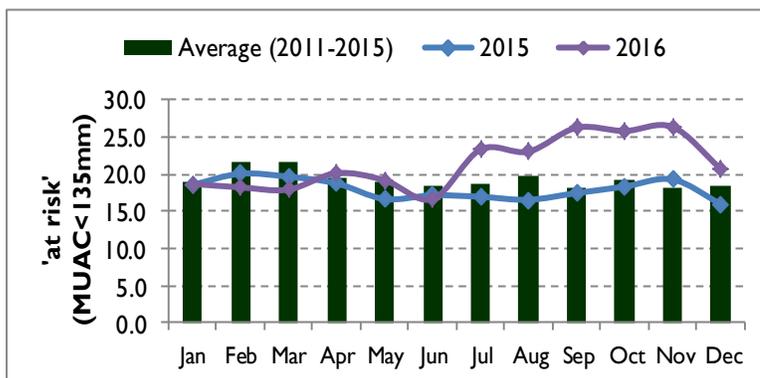


Figure 8: Proportion of Children at Risk of Malnutrition

3.3.3 Sanitation and Hygiene

According to DHIS, the latrine coverage was at 28 percent which is a slight increase compared to previous season which was 25 percent. However, 75.3 percent of the population is reported to practice open defecation. There was no water borne disease outbreak reported; however there was increase of typhoid fever by 28 percent compared last season attributed to poor sanitation practices including low proportion of households practicing hand washing at critical times and poor food handling and storage (SMART Survey 2016).

3.4 Trends of Key Food Security Indicators

Table 8: Food Security Trends in Samburu County

Indicator	Long Rains Assessment, July 2016		Short Rains Assessment, Feb 2017	
% of maize stocks held by households (agro-pastoral)	62 percent of long term average (LTA)		500 percent of long term average (LTA)	
Livestock body condition	Grazers	Fair	Grazers	Fair to poor
	Browsers	Good	Browsers	Good to fair
Livestock Mortality (drought related)	No deaths		3% deaths	
Water consumption (litres per person per day)	Pastoral Livelihood	20	5	
	Agro pastoral	30	10	

Indicator	Long Rains Assessment, July 2016	Short Rains Assessment, Feb 2017
	Livelihood	
Price of maize (per kg)	Ksh 49	Ksh 50
Distance to grazing	2 – 8 km	7 – 10 km
Terms of trade (pastoral zone)	51	52
Coping strategy index	19 (December 2015, FSOM)	18 (December 2016, FSOM)
Food consumption score	Poor - 6% Borderline – 23% Acceptable – 71% (FSOM December 2015)	Poor - 1% Borderline – 52% Acceptable – 46% (FSOM December 2016)
Latrine Coverage	25%	28%
Children at risk of malnutrition	17.36%	20.78%

3.5 Education

Introduction

There are a total of 161 primary schools spread across the county, with a population of 47,868 pupils in primary section comprising of 25,732 boys and 22,136 girls. Early childhood centers attached to the primary schools are 161 with a population of 12,550 pupils (boys- 6,024 and girls- 6,526). Delay of funds is the main challenge affecting education in the county especially in pastoral livelihood zone.

Enrolment, Attendance and Drop-out Rates

All public primary schools in the county are under home grown school meals programme where national government sends cash to school accounts and in-turn, food is sourced locally by the school meals committee. Findings in sampled schools during the transect drive established that school meals programme funds for first term 2017 has been disbursed to school accounts and procurement process on-going. Feeding in most schools was not going on except in schools that had food balances from third term 2016. Delays in cash disbursement coupled with the on-going drought, greatly affected enrolment and attendance rate in schools.

Drop-out cases associated with the current drought situation are at 18 percent with boys being the most affected at 20.5 percent and girls at 16 percent. Boys have moved with livestock in search for pasture and water which is a normal trend at this time of the year. No school has been closed due to the current drought situation. Secondary schools are facing acute food shortage due to low fee payment, a situation associated with poor livestock prices.

In both livelihood zones, most schools receive water from boreholes and roof catchment systems. This water is shared with other community members. No treatment reported despite high possibility of contamination. High competition between schools and herdsman for water in Marti and Lesirikan was reported. However in most cases, pupils are forced to collect water from shallow wells to schools when boreholes and other options are not available.

4.0 Food Security Prognosis

4.1 Prognosis Assumptions

The food security outcomes in the next six months are influenced by the following assumptions:

- Preliminary forecasts points that March to May 2017 long rains are likely to be below normal to near-normal.
- Following the below average performance of October, November and December 2016 short rains, forage and water conditions are most likely to be depleted faster than normal between February and April.
- Livestock prices are likely to decrease until April as rangeland conditions deteriorate resulting to poor livestock body conditions.
- Food commodity prices are likely to increase in the next three months as food stocks deplete at household level.
- Resource based conflicts and human wildlife conflicts are likely to arise as livestock compete for forage and water.
- Farm inputs will likely be distributed to farmers in agro pastoral in time in preparation for the 2017 March–May long rains.

4.2 Food Security Outlook

Outlook for 3 months (Feb – April 2017)

Food security is expected to decline through April 2017 across the livelihood zones. Further depletion of forage is expected to continue impacting negatively on livestock body conditions, abnormal migratory routes and low milk availability and consumption. The yields at watering points are expected to reduce and trekking distance will increase further. As livestock body conditions deteriorate, livestock markets price will decrease and probably crop food commodity prices will increase thus term of trades is expected to be unfavorable to pastoralists.

Outlook for 6 months (May – July 2017)

The expected onset of the long rains in March is expected to improve the forage conditions by April, which in turn is anticipated to improve livestock body condition. Livestock production is likely to improve leading to an increase in milk production. There is likelihood of harvest of pulses in July 2017.

5.0 Conclusion and Interventions

5.1 Conclusion

5.1.1 Phase Classification

The current food security situation in the county is classified as Stressed (IPC 2) in both pastoral and agro-pastoral livelihood zones except some pockets in Nachola, Nyiro and Ndoto wards are in Crisis (IPC Phase 3). Livestock deaths have increased in comparison to the last two seasons. Livestock mass out-migration has been reported with abnormal migratory routes to Mt. Kenya and Nyandarua County which is not normal at this time of the year. As the dry spell continues, the following factors need to be closely monitored: livestock mortality rates, livestock migration trends, water borne diseases, sanitation and hygiene at household level, malnutrition rates, market price for food commodities and livestock.

5.1.2 Summary of the Findings

Samburu County food security situation is classified as Stressed (IPC Phase 2) except pockets in Nachola, Nyiro and Ndoto wards that are classified as Crisis (IPC Phase 3) following the below

normal short rains that contributed to crop failure, early forage depletion resulting to mass migrations, increased distances to water points, deterioration in livestock body conditions and even livestock mortalities in areas like Kawop. Milk availability and consumption is low across the livelihoods probably leading to high malnutrition rates of children under five years. Households in agro pastoral zone are holding stocks that can last up to two months while households in pastoral zone are entire depending on markets for food commodities. Coping strategy index is stable at 18 in December 2015 compared with 19 in December 2016 (FSOM).

5.1.3 Sub County Ranking

Sub Counties	Ranking (Worse to best)	Reasons
North	1	Poor livestock body conditions Livestock mortality rates High water prices and trekking distances Depleted forage Insecurity Poor markets Out migrations Samburu East Poor quality of water Poor rainfall
East	2	High trekking distances Poor forage Insecurity Fair markets operations Out and in-migrations Poor quality of water Depressed rainfall
Central	3	Food stock available Water availability Fair forage conditions Vibrant markets Out migrations to Mugie Available livestock feeds in the markets Conserve individual pastures

5.2 Ongoing Interventions

5.2.1 Food Interventions

The national government distributed relief food through the office of County Commissioner (10,300 bags of 90kg of maize, 3,468 bags of 50 kg beans, 700 cartons of oil and 1,525bags of 25 kg fortified health food) for the September, October, November, December 2016 and January 2017.

The county government supplemented in the month of November 2016 with 400 metric tonnes of maize in partnership with WFP and RAMATI D.I targeting 60,460 beneficiaries. Red Cross also purchased and distributed relief food targeting 918 households within the county with each

household receiving 41.4 Kgs of rice, 7.2 Kgs of legumes, 1.2 Kgs of salt and 2.4 litres of vegetable oil. All the 161 public primary schools in the county are under home grown schools meal programme (HGSMP).

5.2.2 Non-Food Interventions

Intervention	Ward	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost in Million (KSH)	Time Frame	STATUS
LIVESTOCK							
Provision of 6000 hay bales and 5000 UMMN Blocks	All wards	1150 Persons	National Government and Department of Livestock Production	Improve milk production and wealth		December 2016 January 2017	Ongoing
Livestock off take	All wards	2200	KMC	Improve livelihoods		January February 2017	Ongoing
WATER							
Water trucking to vulnerable population and Institutions	Vulnerable Institutions, schools and strategic water trucking sites in water scarce areas.	100,000 persons	County Government	Reduced water stress for domestic and livestock use	6 M	3 months	Ongoing
Attending to breakdown borehole by Drought Response Team	Strategic boreholes in the County.	150,000 persons	County Government, NDMA	Reduced water stress for domestic and livestock use	2 M	Continuous	ongoing
AGRICULTURE							
Irrigation projects (Arsim and Kurungu)	Arsim – Ndoto Ward	1155 HH	County Government of Samburu	improve on food availability and accessibility as well as improved nutrition and income when complete		2017 -2018	Ongoing
Post -harvest	Suguta mar mar, Poro,	2,350	County	Safe and	0.6 M	December	

Intervention	Ward	No. of beneficiaries	Implementers	Impacts in terms of food security	Cost in Million (KSH)	Time Frame	STATUS
management trainings	Maralal		Government	healthy food products		2016 January to 2017	
Irrigation projects (Seiya)	Lodokejek	855 HH	National government of Kenya (DRSLP)	Will improve on food availability accessibility and income when complete		2017 -18	Ongoing (30 %)
Extension services for small scale farmers	Wamba	100	Dept of agriculture	Improved households food production		Continuous	ongoing
HEALTH AND NUTRITION							
Provision and distribution of 102,780 Aqua tabs	19 hotspots in Samburu East and North	3426 Households	NDMA, MOH	Prevent waterborne related diseases	0.308 M	Nov – Dec 2016	Completed
Integrated medical outreaches	3 sub-counties	1500 households	MOH	Reduced morbidities in the county	1.5 M	OCT-DEC 2016	Completed

5.3 Recommended Interventions

5.3.1 Food Interventions

Sub County	Population in need (% range min – max)	Proposed mode of intervention
Samburu North	60 - 65%	GFD
Samburu East	50 - 55%	GFD
Samburu Central	20-25%	FFA

5.3.2 Non-Food Interventions

Ward Name	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources in million (Ksh)	Available Resources in million (Ksh)	Time-Frame
AGRICULTURE							
County wide	Provision of drought tolerant seeds	Marti, Wamba, Lodung'okwe, Maralal, Nachola, Ngilai	2400	County Dept. of Agriculture, NGOs, FBOs, Farmers	9 M		Feb – March 2017
LIVESTOCK							
County Wide	Accelerated off-take and destocking by slaughter	All wards	20,000	KMC, Dept of Livestock, NDMA	51 M		Feb – April 2017
County Wide	Provision of livestock concentrates	All wards	12,000	Dept of Livestock, NDMA, RPLRP	48 M		Feb – April 2017
Samburu central	Ring vaccination against FMD	Suguta, Loosuk, Poro	3000	Dept of Livestock, NDMA, RPLRP	4.4 M		Feb – March 2017
WATER SECTOR							
Samburu North and East	Up-scaling Water trucking to vulnerable communities and institutions	Nachola, Seren, Swaari, Lekiji, Ngutuk Engiron, Silango Nanyokie	3500	Dept. of water, NDMA	5.7 M		Feb – April 2017
County wide	Enhance repair of non-functional boreholes	County wide		Dept. of water, NDMA	1 M		Feb – April 2017
Samburu North and East	Fuel subsidy to strategic boreholes	Baawa, Lchoro Lerai, Lederero, Barsaloi, Ljingei, Natiti, Sharda, Suiyan, LdupaiLolkuniani, Ngutuk elmuget	6000 HHs	Dept. of water, NDMA	14.8 M	5 M	Feb – April 2017
HEALTH & NUTRITION							
County wide	Intensified MASS SCREENING	30 hotspots	30,000	MOH, IMC, NHPplus	2.18 M	NIL	3 months

Ward Name	Intervention	Location	No. of beneficiaries	Proposed Implementers	Required Resources in million (Ksh)	Available Resources in million (Ksh)	Time-Frame
County wide	WASH interventions	Lesepe, Marti Kawop Baragoi Koom Matthew ranges Wamba Lodungokwe Loikas Amaiya Maralal Lodokejek Suguta	9,100	MOH IMC AMREF	3.44 M	NIL	3 months
County wide	Integrated medical outreaches	County wide	60,000	MOH	2 M	NIL	3 months
County wide	Health and Nutrition education at Community level	Lesepe, Marti Kawop Koom Matthew ranges Loikas Amaiya Lodokejek Suguta	10,000	MOH AMREF NHPplus IMC WVK	2.1 M	NIL	3 months
Waso, Nyiro, Nachola	Provision of mobilets	Lesepe Koom Kawop	5,000	MOH	2 M	NIL	3 months
Waso, Nyiro, Nachola	Collection and burning of carcasses	Lesepe Koom Kawop	2,000	MOH	0.5 M	NIL	3 months