



National Drought Management Authority
WEST POKOT COUNTY
DROUGHT EARLY WARNING BULLETIN FOR FEBRUARY 2016

February 2016 EW Phase

Drought Status: ALERT



Maandalizi ya mapema

Drought Situation & EW Phase Classification

Biophysical Indicators

- No rainfall was received across all livelihood zones during the month under review.
- Vegetation deteriorated significantly as evidenced by the shift in Vegetation condition index (VCI-3month) from 78.41 in January to 65.05 in February
- Most of the surface water sources in the Pastoral/Agro Pastoral zone dried up with very few slightly less than 25 percent capacity. The water is projected to last for less than a month in these zones.

Socio-Economic Indicators (Impact Indicators)

- No livestock deaths attributed to drought were reported but milk production level continues to be low with consumption highly affected negatively.
- Household and livestock distance to water sources increased further but remained within the normal range. Over 50% of herd moved outside the county.
- Terms of trade dipped further with livestock (cattle) exhibiting a fair to poor body condition.
- Proportion of children 'at risk' of malnutrition was on the rise and fell outside the normal range for February with the CSI going up too.

Early Warning Phase Classification

Livelihood Zone	EW Phase	Trend
Agro Pastoral	Alert	Worsening
Pastoral all Species	Alarm	Worsening
Mixed Farming	Normal	Worsening
County	Alert	Worsening

Biophysical Indicators	Value	Normal ranges
% of average rainfall Sep-Feb (Nasukuta)	76	90-110
VCI-3month(county)	65.05	35-50
State of Water Sources	1-2	5
Production indicators	Value	Normal ranges
Livestock Migration Pattern	Normal	Normal
Livestock Body Condition	2-3	5
Milk Production	29.4	>41.6
Livestock deaths (for drought)	No deaths	No deaths
Access Indicators	Value	Normal ranges
Terms of Trade (ToT)	68	>82
Milk Consumption	22.7	>30.3
Water for Households	1-2	5
Utilization indicators	Value	Normal ranges
MUAC	9.77	0.0- 9.45
Coping Strategy Index-CSI	2.10	<2.18

Seasonal Calendar

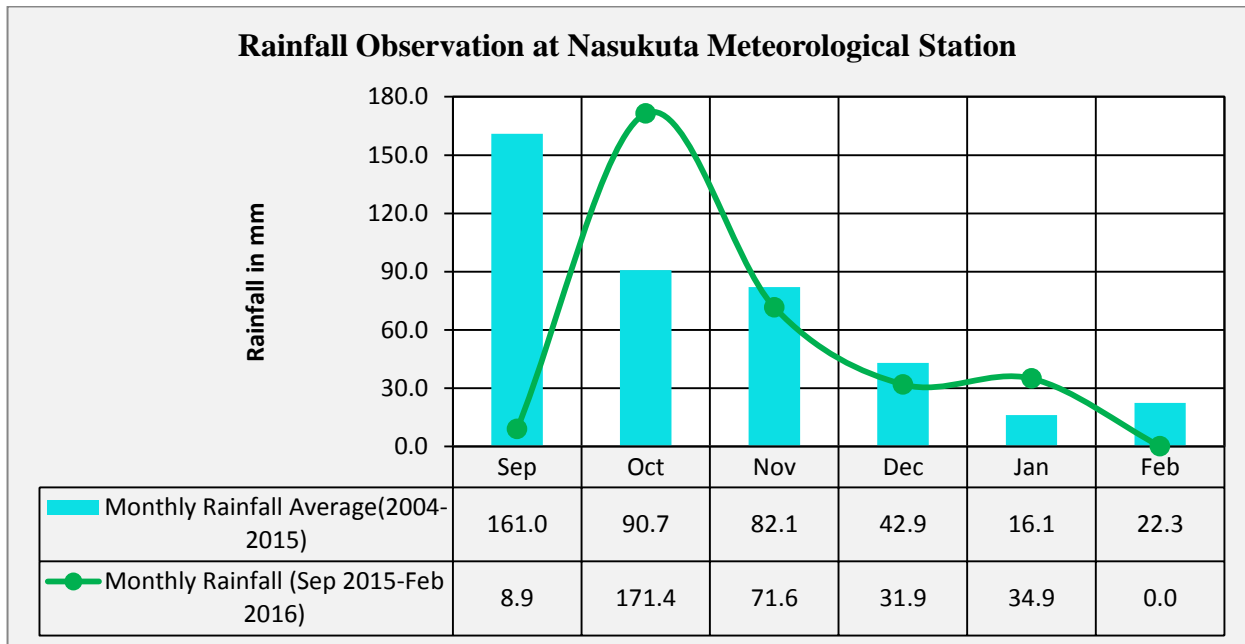
<ul style="list-style-type: none"> ▪ Short rains harvests (fast maturing crops) ▪ Short dry spell ▪ Reduced milk yields ▪ Increased HH Food Stocks ▪ Land preparation 	<ul style="list-style-type: none"> ▪ Planting/Weeding ▪ Long rains ▪ High Calving Rate ▪ Milk Yields Increase 	<ul style="list-style-type: none"> ▪ Long rains harvests ▪ A long dry spell ▪ Land preparation ▪ Increased HH Food Stocks 	<ul style="list-style-type: none"> ▪ Short rains ▪ Planting/weeding (Irish potatoes, Cabbages and Onions) 								
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1.0 ENVIRONMENTAL INDICATORS (STABILITY)

1.1 METEOROLOGICAL DROUGHT

1.1.1 Actual Rainfall

- No rainfall was received in the county during the month under review. Dry and hot weather conditions persisted across the entire county with the Agro Pastoral and Pastoral livelihood zones recording relatively high temperatures (30⁰ Celsius).



Source: meteorological department-West Pokot County

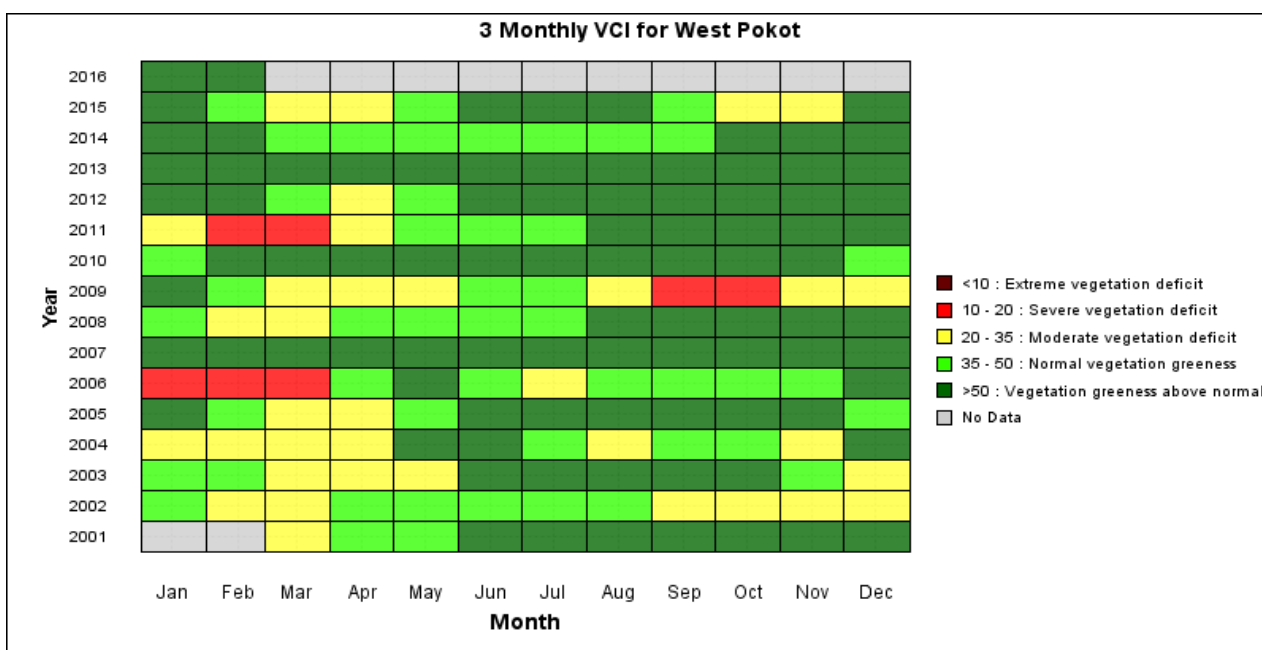
- The cumulative rainfall for the six month period (September 2015 to February 2016) amounts to only 318.7mm against the long term rainfall average for the period amounting to 415.1mm and this translates to 76% of the average rainfall for the period (or an absolute deficit of 96.4mm), hence lies outside the normal range.
- The current cumulative rainfall for the six month period and that of one month period (February 2016) thus compares substantially poorer to their respective long term average for the same period.

1.2 AGRICULTURAL DROUGHT

1.2.1 Condition of Natural Vegetation and Pasture(Quantity/Quality)

- Pasture condition was fair to poor across the livelihood zones this being a consequent result of the dry weather conditions prevailing during the month under review.
- In the Mixed Farming zone, pasture condition was fair albeit with dwindling quantities. Most parts of the Pastoral and Agro Pastoral livelihood zones exhibited pasture of poor condition.

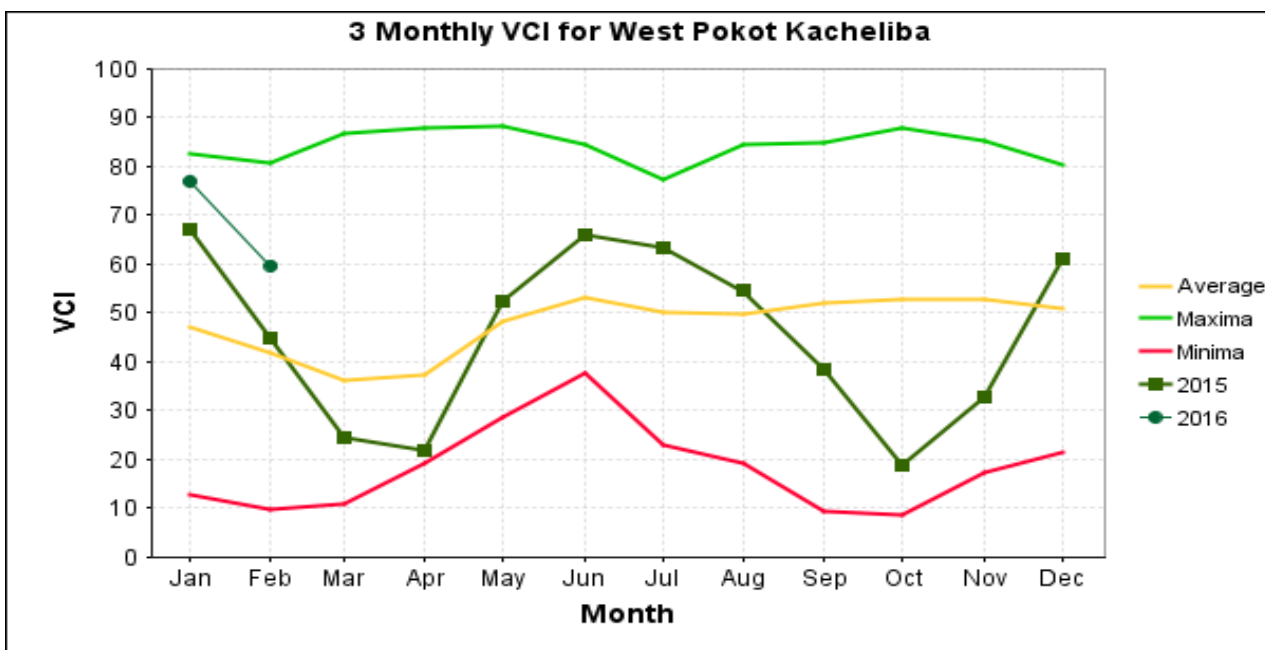
- Pasture depletion was noted in areas of Kases, Nyangaita, Runo, Orwa, Kodich, Kiwawa, Mtembur, Kacheliba, Konyao, Chepkopegh, Kasei, Masoland Kopulio.
- The available pasture is expected to last for the next one and less than one month in the Mixed Farming and Agro Pastoral/Pastoral livelihood zones respectively except in areas where it is depleted and animals have already moved out.
- Pasture quantity is below the normal levels at this particular time of the year.
- The browse condition was generally fair across the livelihood zones. Browse is expected to last for the next two and one month(s) in the Mixed Farming and Agro Pastoral/Pastoral livelihood zones respectively.
- Some parts of the Pastoral and Agro Pastoral livelihood zones such as Marich, Sekerr, Losam and Kangoletiang had browse of poor quality (dry).
- Browse condition is below normal at this particular time of the year.



Source: Boku university

- The matrix above depicts vegetation condition based on VCI thresholds. The matrix shows a retrospective analysis of the vegetation condition and related deficit category for the month of February 2016.
- It can be deduced that vegetation condition deteriorated as evidenced by the vegetation condition index (VCI-3month) drop from 78.41 recorded in January to 65.05 in February for the entire county.
- The rate of deterioration was high across February as further supported by the VCI-1month value recorded to be 51.73 from the 84 recorded in January.

- The greenness in the county was mainly that of the evergreen thick non edible canopy species.
- The vegetation condition deteriorated across all the sub-counties with those in the Pastoral zone such as Pokot north and central greatly affected as reflected in the drop in their respective VCI-3month.
- The chart below shows the vegetation condition expressed as VCI and comparing the period February 2016 with the long-term maximum, minimum and average recorded in the same period for Pokot north sub-county. It clearly shows how the vegetation condition deteriorated sharply during the month under review.

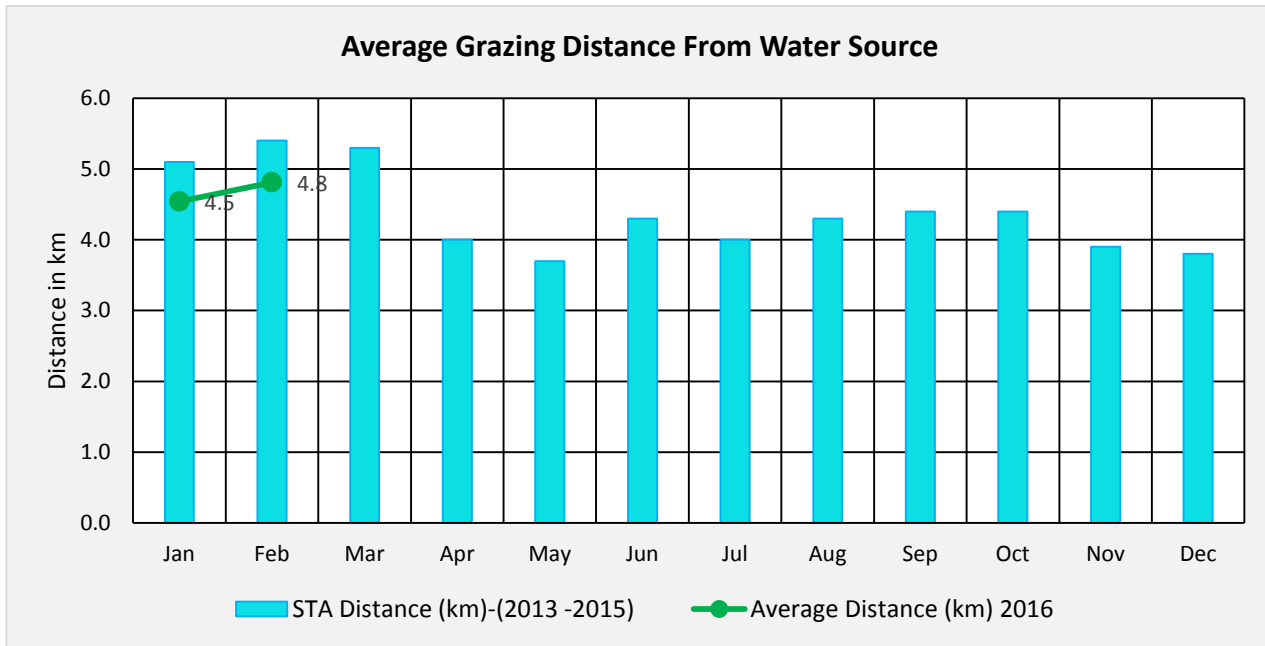


Source: Boku university

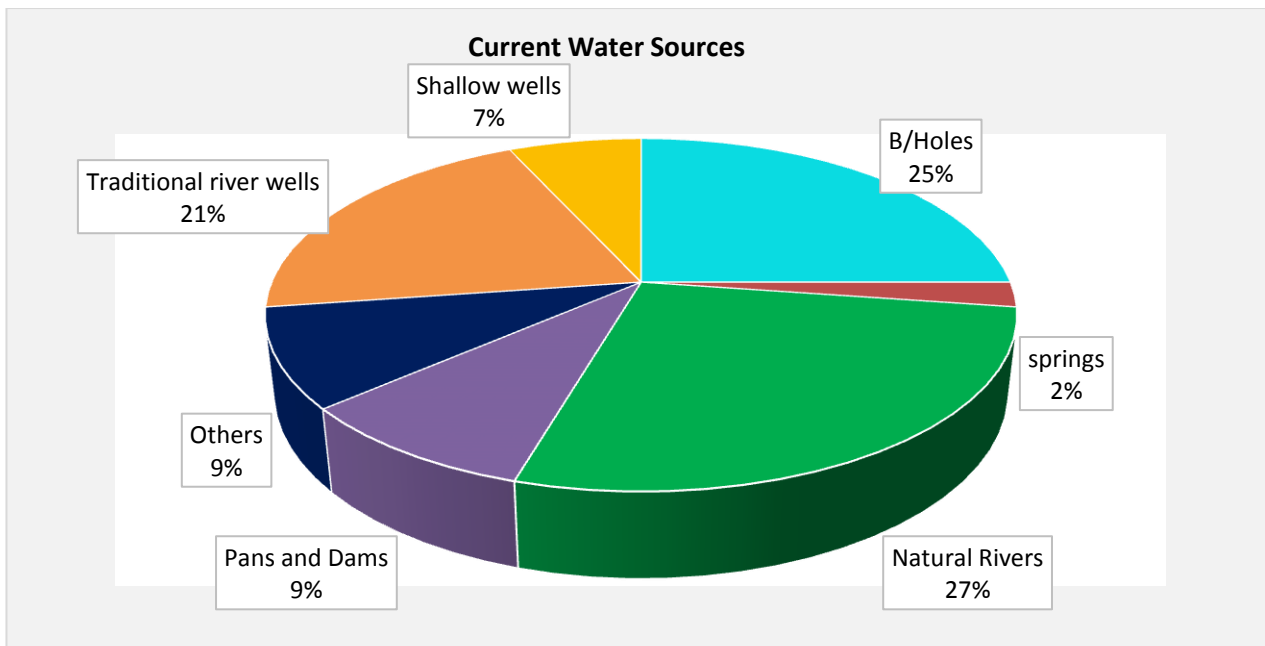
1.2.2 Distance to Grazing Areas

- From the figure shown below, livestock trekking distance from the grazing areas to water points in the month of February was 4.8km.
- This was an increase from the 4.5km recorded in January. Nyangaita, Ptokou, Konyao, Poole sentinel sites recorded the highest trekking distance from grazing areas to water sources at 11.5km, 10km, 9km and 6.8km respectively.
- Increased trekking distance from the grazing areas to water points was attributed to drying up of some water reservoirs and forage degeneration. The watering frequency for all livestock species range between 2-4 days across the livelihood zones which is normal at this time of the year. The

trekking distance of 4.8km is within the normal range when compared to the short term trekking distance of 5.4km.



1.3 HYDROLOGICAL DROUGHT
1.3.1 Water Sources and Availability

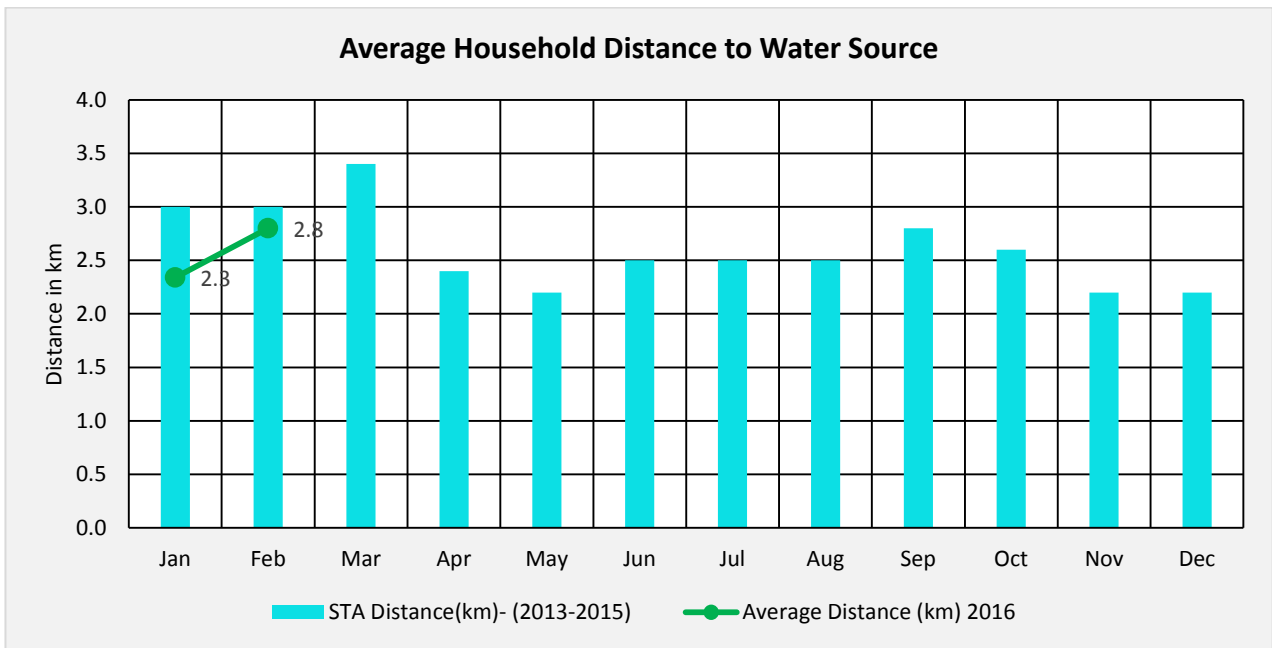


- From the figure shown above 27%, 25% and 21% of the communities interviewed stated that their main sources of water were natural rivers, boreholes and traditional river wells respectively for the month of February. When compared to the preceding month, the main water sources

were relatively the same but with reduced recharge levels attributed to the short dry spell. Other water sources included pans, shallow wells and springs. These are the normal water sources during this particular time of the year.

1.3.2 Household Access to Water

- From the figure shown below, household water distance in the month of February was 2.8km across the livelihood zones. In comparison to the month of January where household water distance was 2.3km, household water distance gradually increased.
- Increased household water distance was attributed to drying up of seasonal rivers and pans hence reduced water availability and access.
- However, the household water distance of 2.8 during the month under review is within the normal range when compared to the short term average of 3km at this time of the year.
- Household water distance was highest in Pastoral and Agro Pastoral livelihood zones at 3.6km and 2.3km respectively and lowest in Mixed Farming livelihood zone at 1.0km.



- Cost of water is within the normal range of Kshs.2-4 per 20 litre jerrycan at the water source with an exception of water vendors who are selling a 20litre jerry can at Kshs.30. The waiting time at water source is in the range of 1.5-2hrs in the Agro Pastoral and Pastoral zones respectively.
- Average household water consumption per person per day is lowest in the Pastoral zone at 4litres and highest in the Mixed Farming zone at 12litres with the usage in the Agro Pastoral zone being 6litres which is normal at this particular time of the year.

2.0 PRODUCTION INDICATORS (FOOD AVAILABILITY)

2.1 LIVESTOCK PRODUCTION

2.1.1 Livestock Body Condition

- The main livestock species reared by the pastoralists are camels, shoats and cattle. Camels are mostly reared in Pokot north in areas such as Kasei, Kangoletiang, Kiwawa and Konyao and some parts of the Agro Pastoral zone such as Sigor and Nyangaita in Pokot central sub county.
- The body condition of cattle is fair to poor in the Agro Pastoral and Pastoral livelihood zones. In the Mixed Farming zone, cattle body condition remained relatively good with a smooth appearance due to availability of pasture. Body condition of goats is fair in all livelihood zones and that of camels in Pastoral zone is good to fair.
- The deteriorating body condition for both cattle and goats is attributed to forage degeneration especially in the Agro Pastoral and Pastoral livelihood zones.
- Livestock body condition is expected to deteriorate further mainly for cattle as the short dry spell continues.

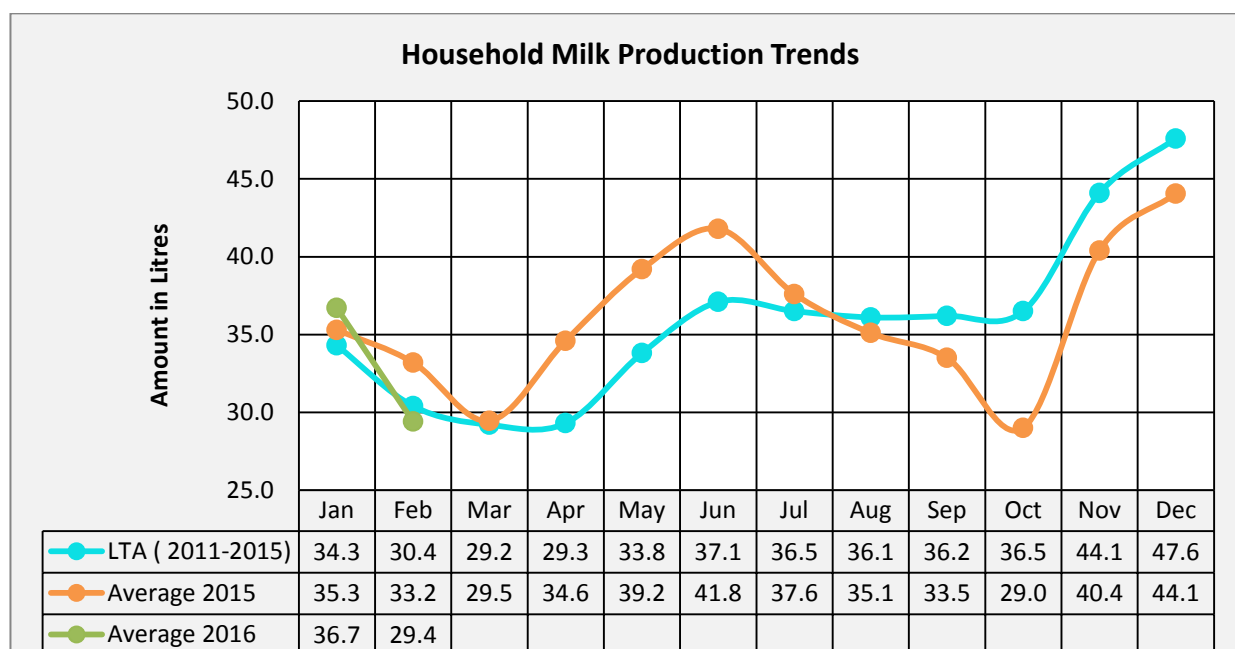
BODY CONDITION	SCORE	WARNING STAGE
Emaciated, little muscle left	1	Emergency
Very thin no fat, bones visible	2	
Thin fore ribs visible	3	Alert Worsening/Alarm
Borderline fore-ribs not visible. 12th & 13th ribs visible	4	Alert
Moderate. neither fat nor thin	5	Normal/Alert
Good smooth appearance	6	
Very Good Smooth with fat over back and tail head	7	Normal
Fat, Blocky. Bone over back not visible	8	

2.1.2 Livestock Diseases

- Notifiable cases of contagious caprine pleuropneumonia (CCPP) were reported in the Pastoral livelihood zone. Pastoralists in Kamila area of Kiwawa ward reported Pest Petis Ruminants (PPR) in goats and a mysterious disease affecting camels with lumps over the body.
- Newcastle disease was reported across all livelihood zones. Increase in tick borne disease (anaplasmosis and heart water disease) across all livelihood zones was also reported. Preventive measures of livestock vaccination and disease surveillance were ongoing during the month under review.

2.1.3 Milk Production

- From the figure shown below, average milk production per sentinel site per day decreased from 36.7 litres in the preceding month to 29.4 litres during the month under review across the livelihood zones.
- The decrease in milk production was attributed to pasture depletion in a number of areas in the Agro Pastoral and Pastoral zones coupled with outmigration/increased livestock trekking distance to dry season grazing areas.
- When compared to the long term average of 30.4litres, milk production was near normal at this particular period of the year.



Sample size, n=30 households per sentinel site

2.2 CROP PRODUCTION

2.2.1 Timeliness and status of crop production

- There has been enhanced cultivation of land in anticipation of the long rains.
- No major crop production activities were taking place during the month under review apart from horticultural production in the highlands and the lowlands of Sigor under irrigation along Muruny river.

2.2.2 Pests and diseases

- Farmers continued reporting cases of potato plight mainly in Pokot south (highlands) in February.

2.2.3 Harvest

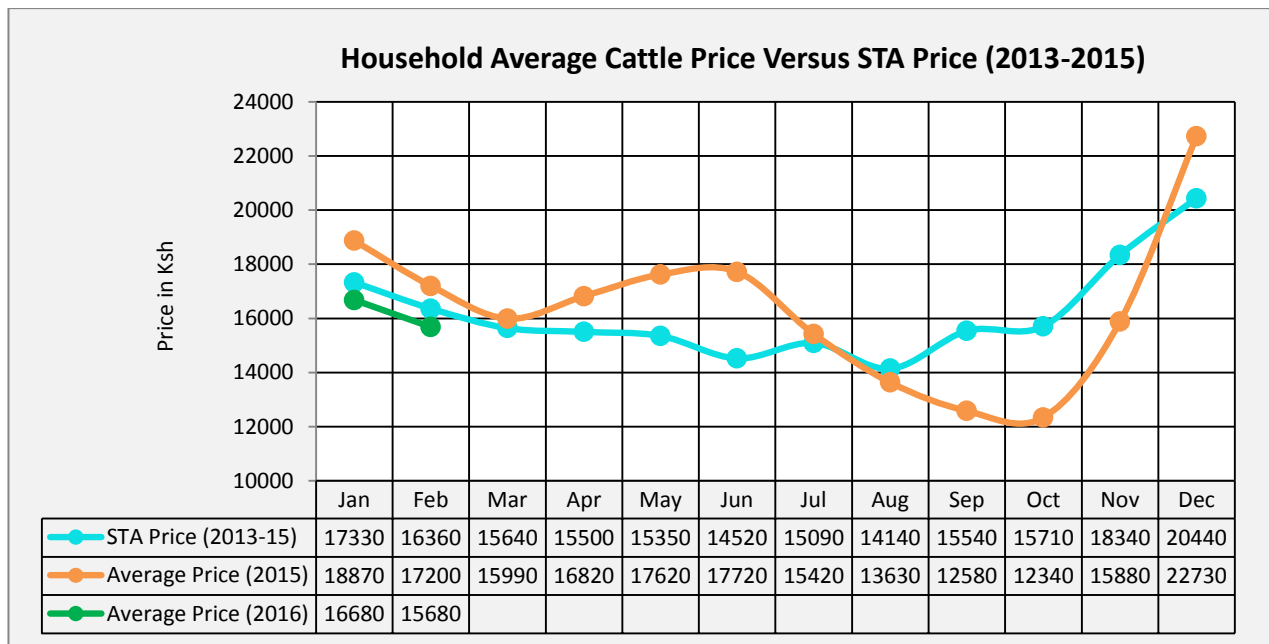
- Harvesting of Irish potatoes was ongoing in the highlands and onions in the lowlands of Ortum.

3.0 ACCESS TO FOOD

3.1 LIVESTOCK MARKETING

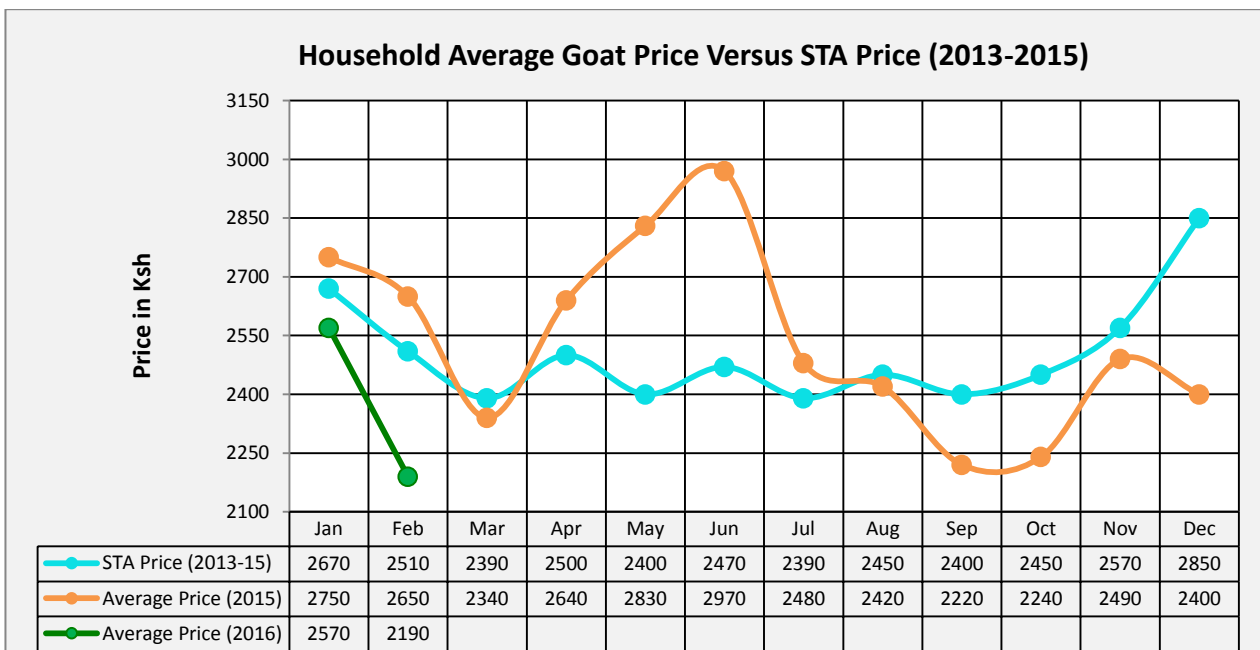
3.1.1 Cattle prices

- Cattle prices decreased from Ksh.16,680 in the preceding month to Ksh.15,680 in the month of February. The figure below clearly shows that cattle price is below the short term mean on a decreasing trend.
- Cattle price is 4% below the short term average. Decreased cattle price across the livelihood zones was attributed to the deteriorating body condition of cattle and increased supply to markets for majority of households raising school fees.
- Mixed Farming livelihood zone recorded the highest average cattle price at Ksh.20,250 followed by Agro Pastoral livelihood zone at Ksh.18,000.



3.1.2 Goat Prices

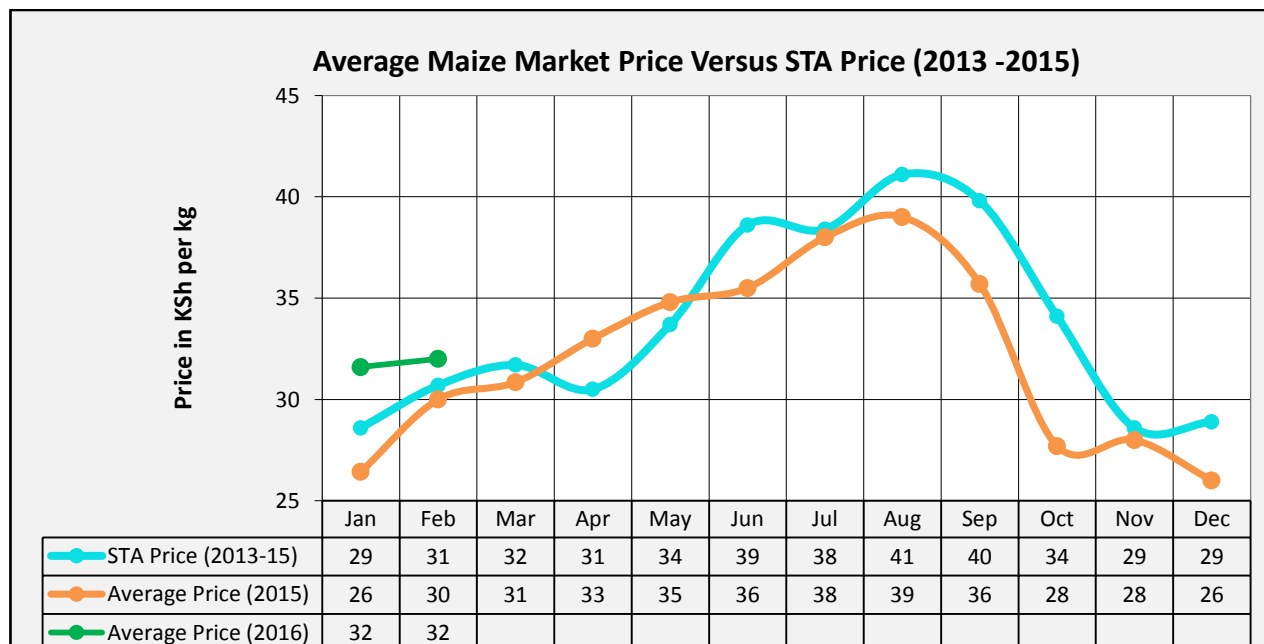
- From the figure illustrated below, the price of goat dropped to Ksh.2,190 from Ksh.2,570 recorded in January. The current goat price is 13% below the short term average price.
- The Agro Pastoral livelihood zone traded a goat at Ksh.2,670 while in the Pastoral all species livelihood zone a goat sold at Ksh.1,990.



3.2 CROP PRICES

3.2.1 Maize (Markets)

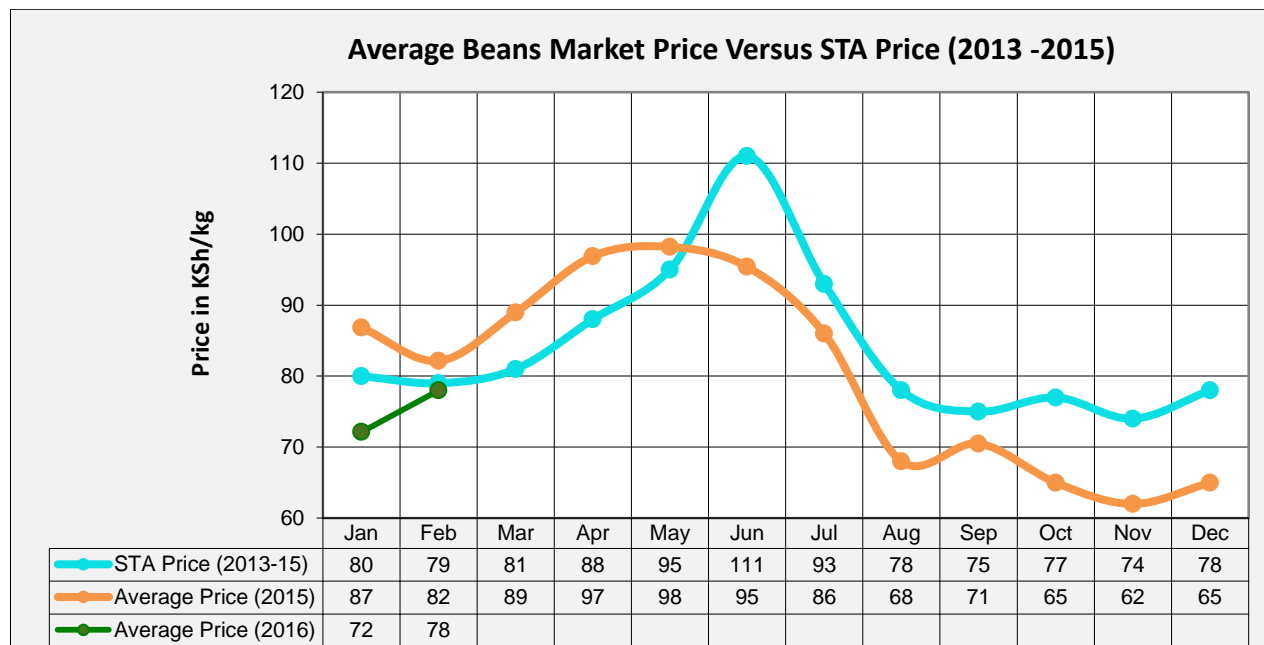
- Maize price remained stable at Ksh.32 per kilogram in February with no change from January. There was no significant difference between this price and the short term average price.



- The stability could be attributed to availability of maize in the markets mainly from the external supply sources.

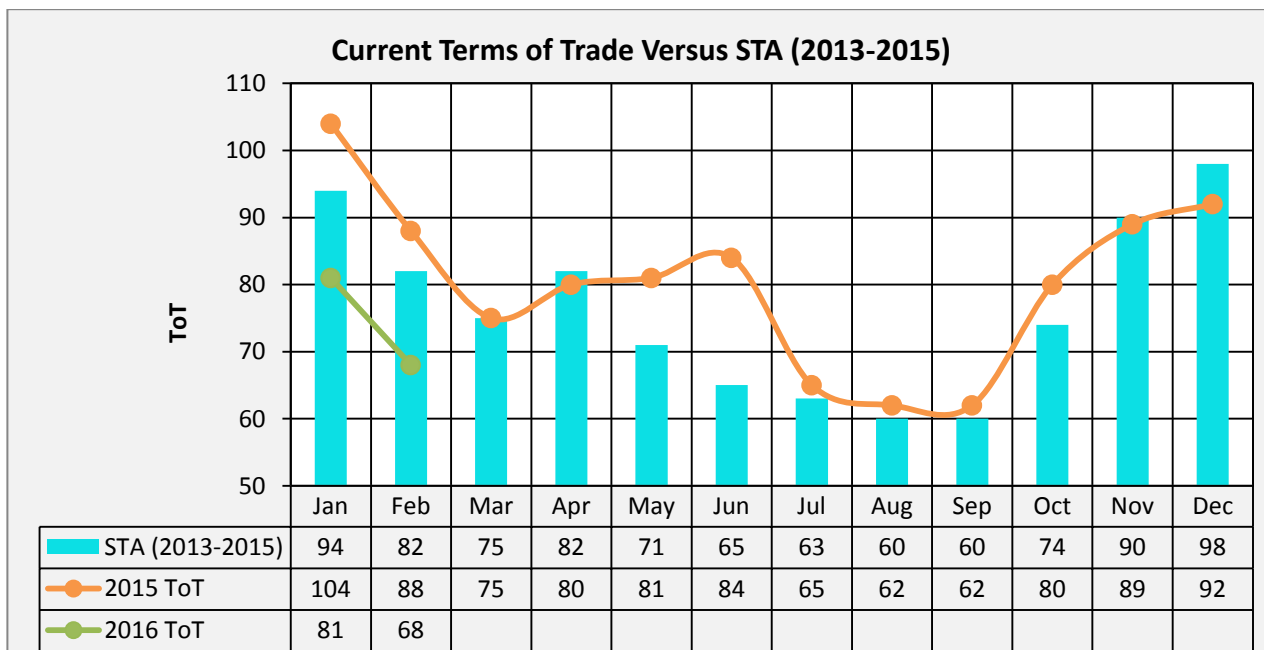
3.2.2 Beans

- Average price of beans during the month of February was Ksh.78 across the livelihood zones. This was an increase from Ksh.72 recorded in the preceding month.
- The current beans price is at par with the short term average price.
- Pastoral all species zone recorded the highest average price at Ksh.87 per kilogram followed by Mixed Farming zone at Ksh.78 per kilogram and Agro Pastoral zone at Ksh. 65.



3.3 LIVESTOCK TERMS OF TRADE (TOT)

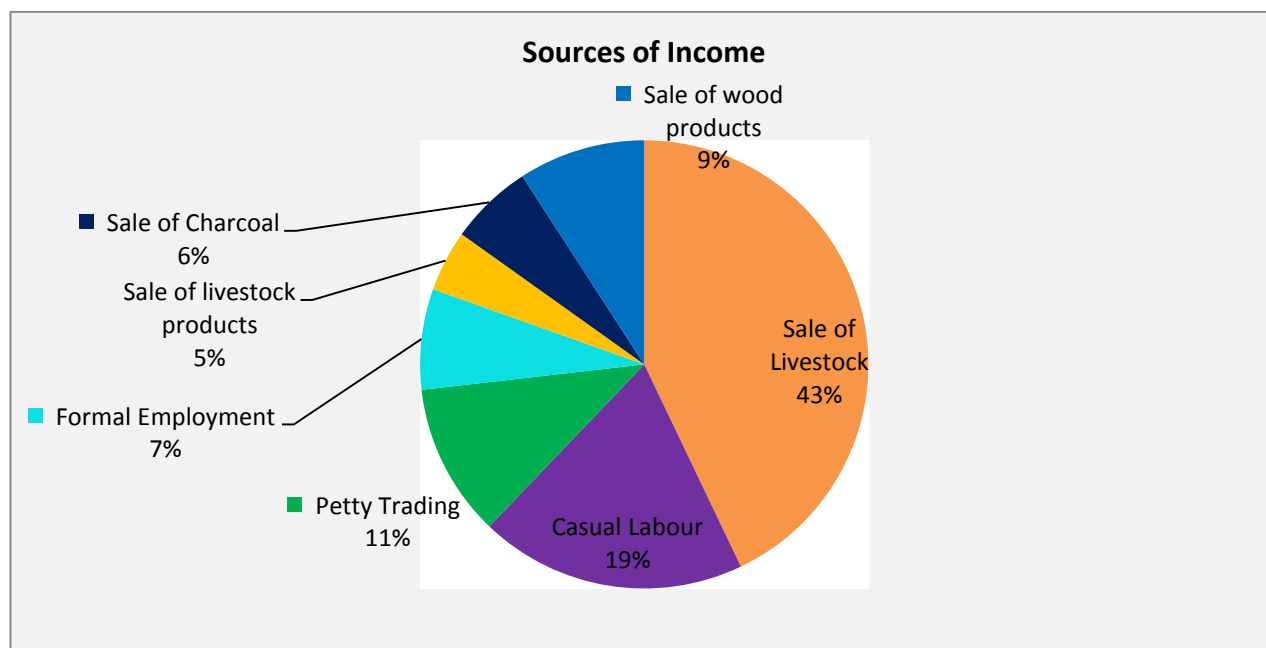
- The terms of trade during the month adjusted downwards to 68 from 81 recorded in January. This adjustment was majorly attributed to the fall in the selling price of goat with the maize price remaining stable.
- Thus the terms of trade were unfavourable to the pastoralists since the number of kilograms of maize they could buy was thirteen less from those they could acquire from the sale of the same goat in January.
- The terms of trade will continue being influenced by the selling price of goat as the dry spell persists.
- The terms of trade for the month under review are 17% below the short term average indicative of a deteriorating food security situation among the pastoralists.



3.4 INCOME

3.4.1 Sources of Income

- Sale of livestock formed the major income earner during the month under review. The increase by 9 percent from January being mainly attributed to households selling more to raise school fees. More households also resorted to sale of wood products.
- During the month, the percentage of households deriving their livelihood through casual labour and petty trade stood at 19 percent and 11 percent respectively.

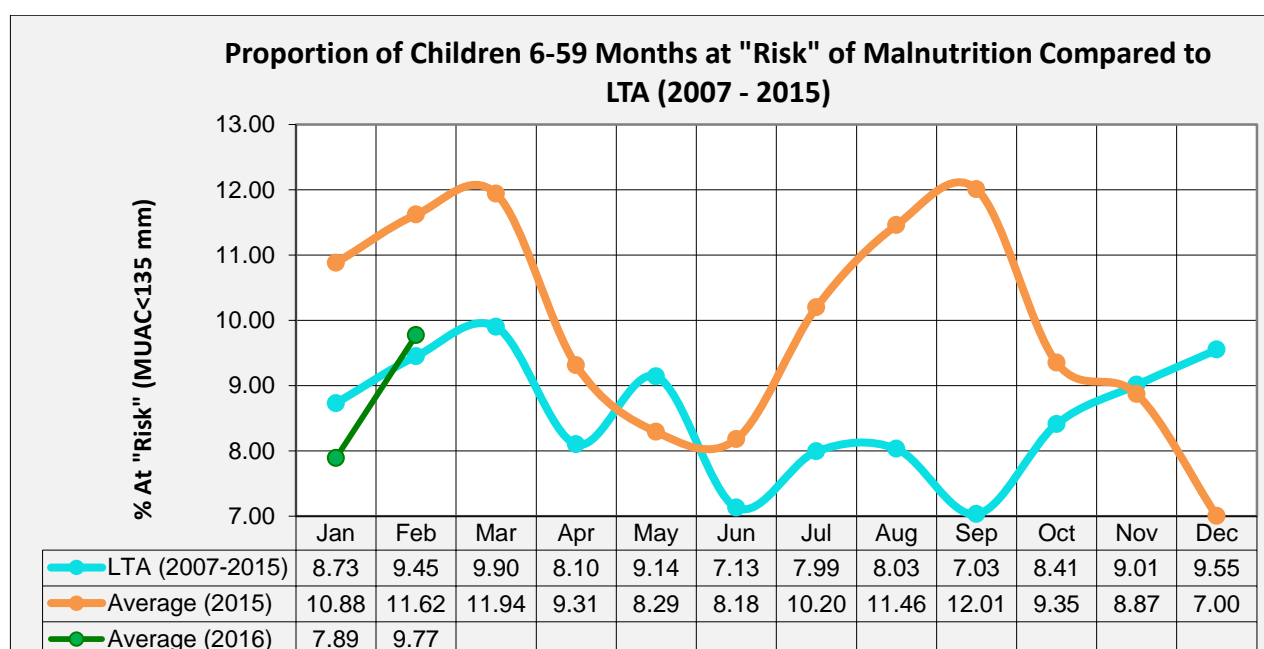


4.0 UTILIZATION OF FOOD

4.1 HEALTH AND NUTRITION STATUS

4.1.1 Mid Upper Arm Circumference (MUAC)

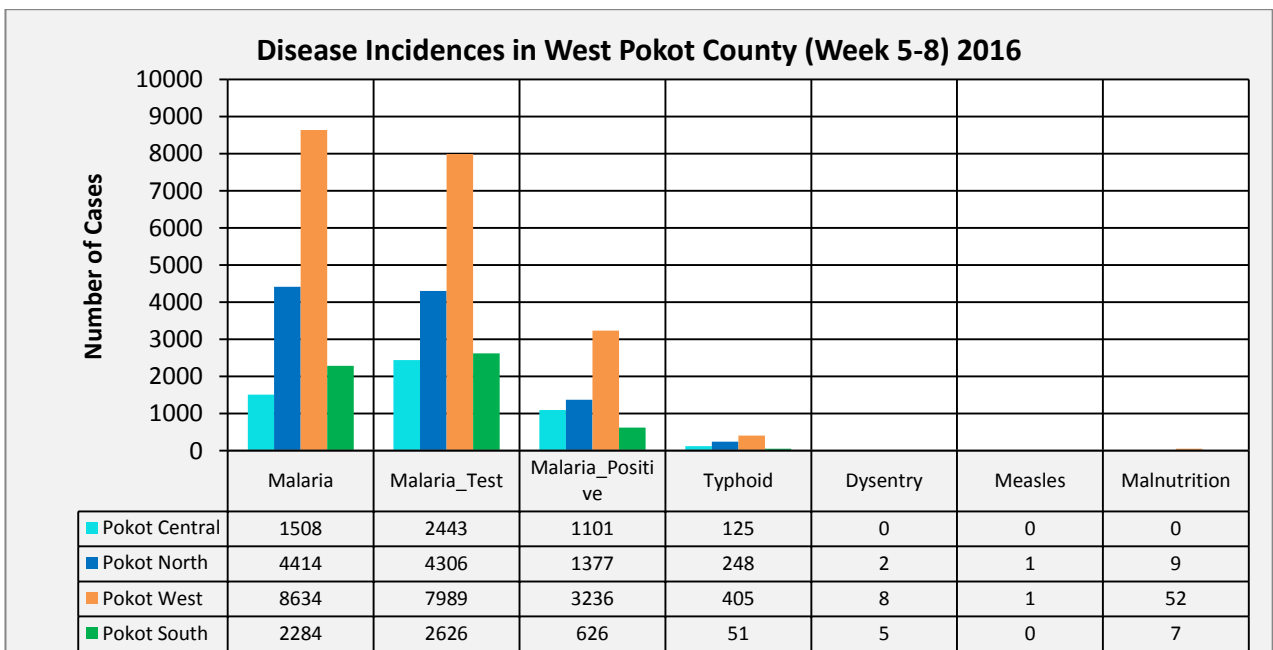
- During the month under review, proportion of children rated being 'at risk' of malnutrition increased to 9.77 percent from the 7.89 percent recorded in January.
- This being almost at par with the long term average. The increase in levels of malnutrition could be attributed to a further decrease in milk consumption and poor utilization of health services such as supplementary feeding programme (SFP).
- Cases of high malnutrition were witnessed in Ptokou, Nyangaita, Sasak and Konyao with these sites recording 15.5 percent, 14.3 percent, 12.3 percent and 11.8 percent respectively of the sampled children as being at risk of malnutrition.



Sample size, n=837 children between 6-59 months from 11 sentinel sites

4.1.2 Human Diseases

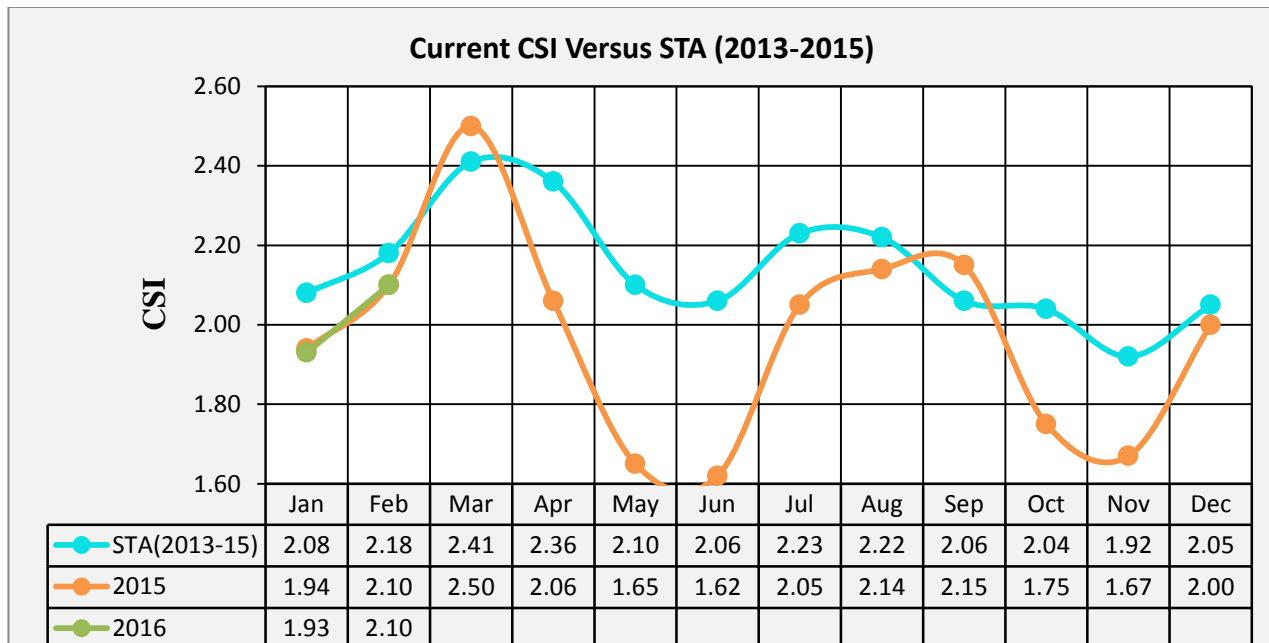
- No major disease outbreak was reported during the month under review except cases of malaria and typhoid across the county.
- Fewer cases of typhoid were reported during the month under review in comparison to those reported in January across the sub counties except in Pokot west Sub County where 405 cases were recorded in comparison to the 192 reported in January.
- The figure below gives a summary of the cases reported across the health facilities in February.



4.2 COPING STRATEGY

4.2.1 Coping Strategy Index (CSI)

- From the figure shown below, CSI increased from 1.93 recorded in January to 2.10 in February, this being indicative of a deteriorating food security situation.
- However, this coping strategy index remained within the normal range for the period.
- Notable coping strategies employed included reduced portion size, acquisition through credit and reduced meal frequency to an average of once per day in the Pastoral zone.



5.0 CURRENT INTERVENTION MEASURES

5.1 NON-FOOD

- Routine high impact nutrition interventions (HINI) implementation done in 67 health facilities and scaling up the facilities implementing full package of HINI ongoing.

5.2 FOOD AID

- No food distribution was conducted during the month under review.

6.0 EMERGING ISSUES

6.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT

- No major insecurity incidences were reported during the month under review.

6.2 MIGRATION

- Over 50 percent of the herd moved towards Uganda and Turkana border with some crossing into Uganda especially from Pokot north that was worst affected in terms of pasture depletion during the month under review.

6.3 FOOD SECURITY PROGNOSIS

- The livestock body condition continues deteriorating as the dry spell further exerts pressure on the available dry pasture and this is likely to further impact negatively the already stressed livestock sector.
- The cost of food is likely to skyrocket as the available food stocks continue dwindling at household level as the dry spell prevails leading to increased demand at market level.
- Consequently, levels of malnutrition are projected to shoot up further especially with a constraint in accessing sufficient milk for the under-fives being evident.
- The eroding terms of trade are likely to have a significant impact on the food security situation as the purchasing power of households especially in the Pastoral zone reduces.
- Enhanced market activity is thus likely to be witnessed as households seek to replenish their food stocks through the dry spell.
- Market access through proper road network will thus be a key factor in mitigating any shortfall that may occur during this period as majority of households are expected to fall into the stressed food insecurity phase during this period.

7.0 RECOMMENDATIONS

7.1 RECOMMENDATIONS TO CSG/KFSSG

- Provision of certified/drought tolerant seeds to farmers in the rain fed zone during the long rains season to boost crop production -action: ministry of agriculture.
- Enhance mobile health service and nutritional surveillance in the rural areas with aggressive advocacy on access and utilization of health and nutrition services.-action, MoH and other nutrition actors.
- Provision of pasture seeds to boost livestock feeds production during the long rains with intensified education to promote adoption of best practices that improve livestock production.-action; ministry of livestock.