



National Drought Management Authority WEST POKOT COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JANUARY 2016

JANUARY EW PHASE

EARLY WARNING FLAG



Drought Situation & EW Phase Classification

Biophysical Indicators

- Rainfall received was poorly distributed both spatially and temporally (only 3 wet days) across the Mixed and Agro pastoral livelihood zones. No rainfall was received in the Pastoral livelihood zone.
- Vegetation condition showed no significant change from December as evidenced by VCI-3month value of 78.41, the impact of the short rains still being evident.
- The surface water sources are recharged to 25-50% capacity in the Pastoral and Agro pastoral livelihood zones respectively. The water is projected to last for one month in the Pastoral livelihood zone.

Socio-Economic Indicators (Impact Indicators)

- No livestock deaths were reported but milk production and consumption continues to lie outside the normal range.
- Household and livestock distance to water sources were within the normal ranges.
- Terms of Trade were unfavourable in comparison to December due to a shift in maize price upwards.
- Coping strategy Index was within the normal range.
- Proportion of children 'at risk' of malnutrition increased when compared to the month of December.

Early Warning Phase Classification

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

Biophysical Indicators	Value	Normal ranges
% of average rainfall Aug-Jan (Nasukuta)	62	90-110
VCI-3month(county)	78.41	35-50
State of Water Sources	2-3	5

Production indicators	Value	Normal ranges
Livestock Migration Pattern	Normal	Normal
Livestock Body Condition	4-5	5
Milk Production	36.7	>45.8
Livestock deaths (for drought)	No deaths	No deaths

Access Indicators	Value	Normal ranges
Terms of Trade (ToT)	81	>94
Milk Consumption	28.2	>32.6
Water for Households	2-3	5

Utilization indicators	Value	Normal ranges
MUAC	7.89	0.0- 8.73
Coping Strategy Index	1.93	<2.08

Current Drought Risk	Low ▲	Medium	High
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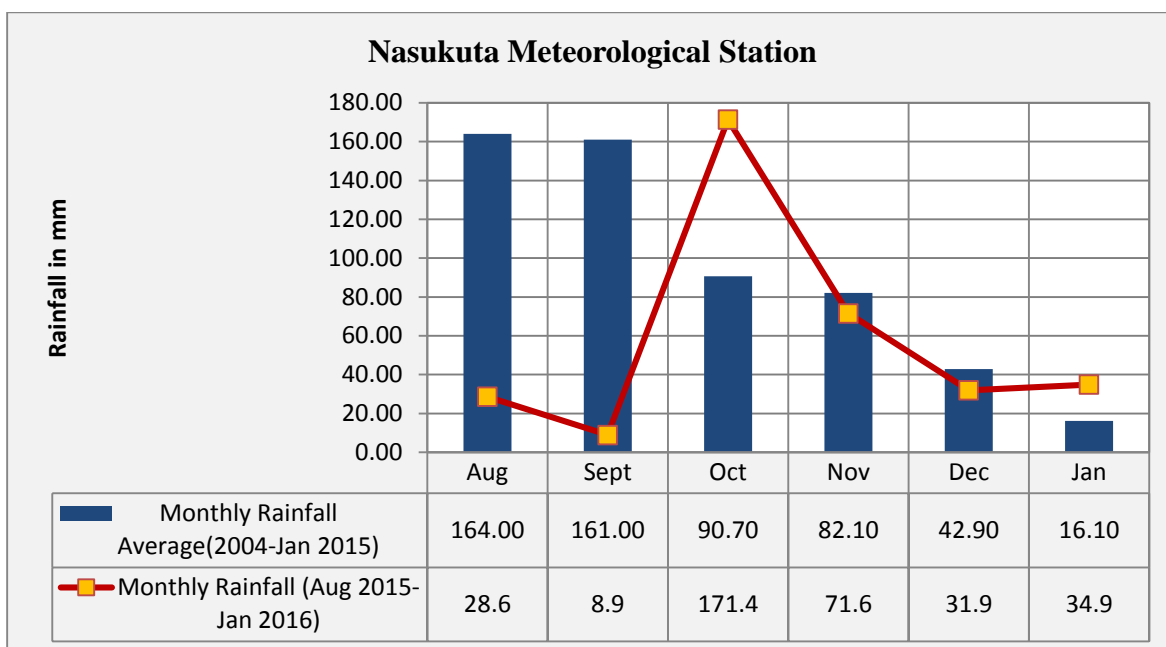
Most biophysical and impact indicators continue to lie within the normal range hence the current drought risk remains low.

1.0. ENVIRONMENTAL INDICATORS (STABILITY)

1.1 METEOROLOGICAL DROUGHT

1.1.1 Actual Rainfall

- The county received greatly depressed rains during the month under review with concentration skewed towards the highlands. The spatial and temporal distribution of the rain was generally poor with only 3 wet days being recorded for instance, at Nasukuta rainfall station.
- Dry and hot weather conditions persisted across most parts of the Agro-pastoral and Pastoral livelihood zones.



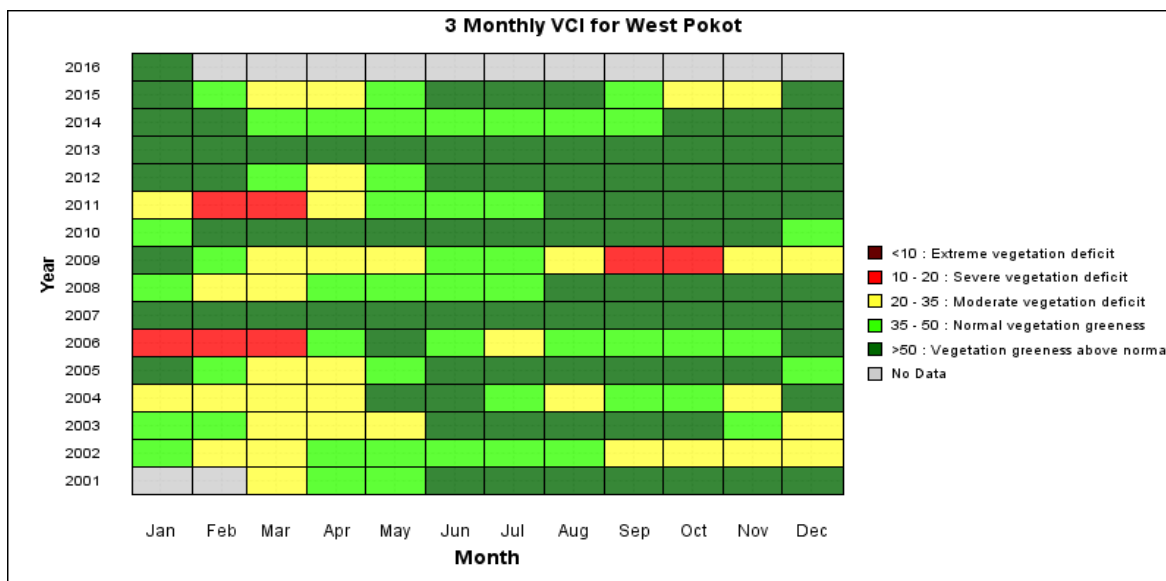
Source: Meteorological department-West Pokot

- The cumulative rainfall for the six month period (August 2016 to January 2016) amounts to a paltry 347.3mm against the long term rainfall average for the period amounting to 556.8mm and this translates to 62% of the average rainfall for the period (or an **absolute deficit** of 209.5mm).
- Therefore, the current cumulative rainfall for the **six month** period compares relatively poorer to the long term average for the same period as opposed to the amount for the **one month** (January 2016) period that is superior to the respective long term average (lies above normal ranges).

1.2 AGRICULTURAL DROUGHT

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

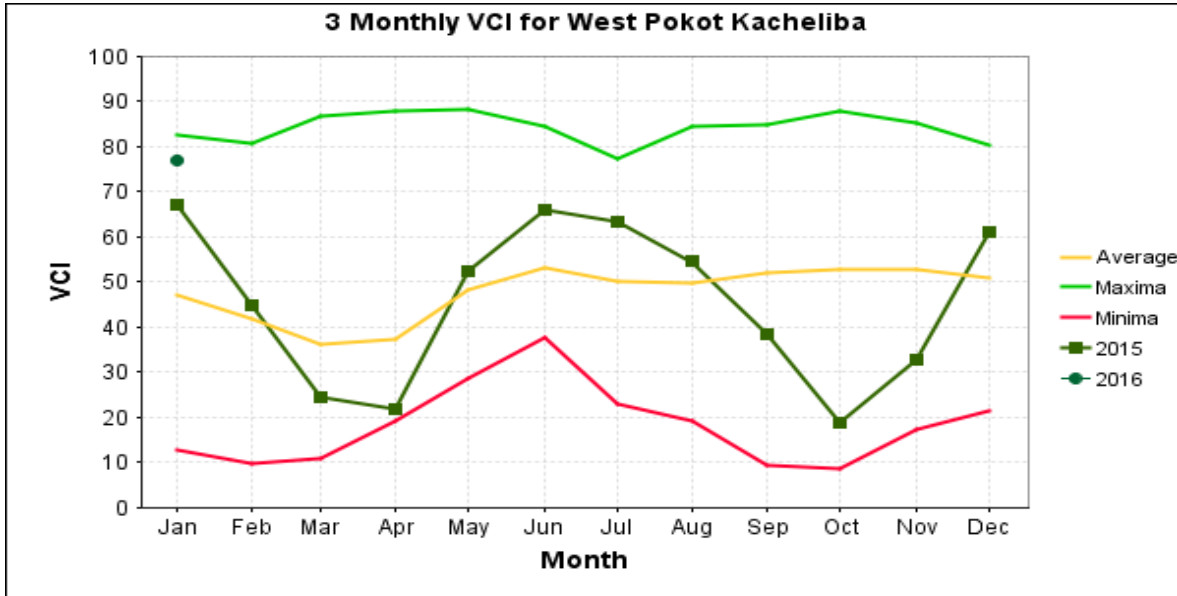
- Pasture condition was fair to good across the livelihood zones as a result of regeneration that was witnessed during the short rains period.
- In the Mixed farming zone, pasture condition was good especially in Kapsait and Kaibos. In the Pastoral and parts of the Agro pastoral livelihood zone, pasture condition was fair albeit with the quantities dwindling. However, in localised areas of Pokot central (Nyangaita, Tikit, Orwa), Pokot north (Kodich, Konyao, Kiwawa, Kopulio, Kases) and Pokot west (Riwo, Sook, Endugh) pasture condition was poor.
- The available pasture is expected to last for the next 2 and 1 month(s) in the Mixed farming and Agro-pastoral/Pastoral livelihood zones respectively. Pasture condition is above normal at this particular time of the year.
- The browse condition was generally fair to good across the livelihood zones. Browse is expected to last for the next 3 and 2 months in the Mixed farming and Agro-pastoral/Pastoral livelihood zones respectively. Browse condition is above normal at this particular time of the year.



- The matrix above depicts agricultural drought based on VCI thresholds. The matrix shows a retrospective analysis of the drought vegetation condition and related drought category for the month of January 2016.
- It can be deduced that vegetation condition remained relatively stable in comparison to

December as evidenced by the VCI-3month of 78.41 for the county mainly attributed to the thick canopy species that remained green.

- All the sub-counties in West Pokot county exhibited relatively good vegetation condition as reflected in their respective vegetation condition indices.



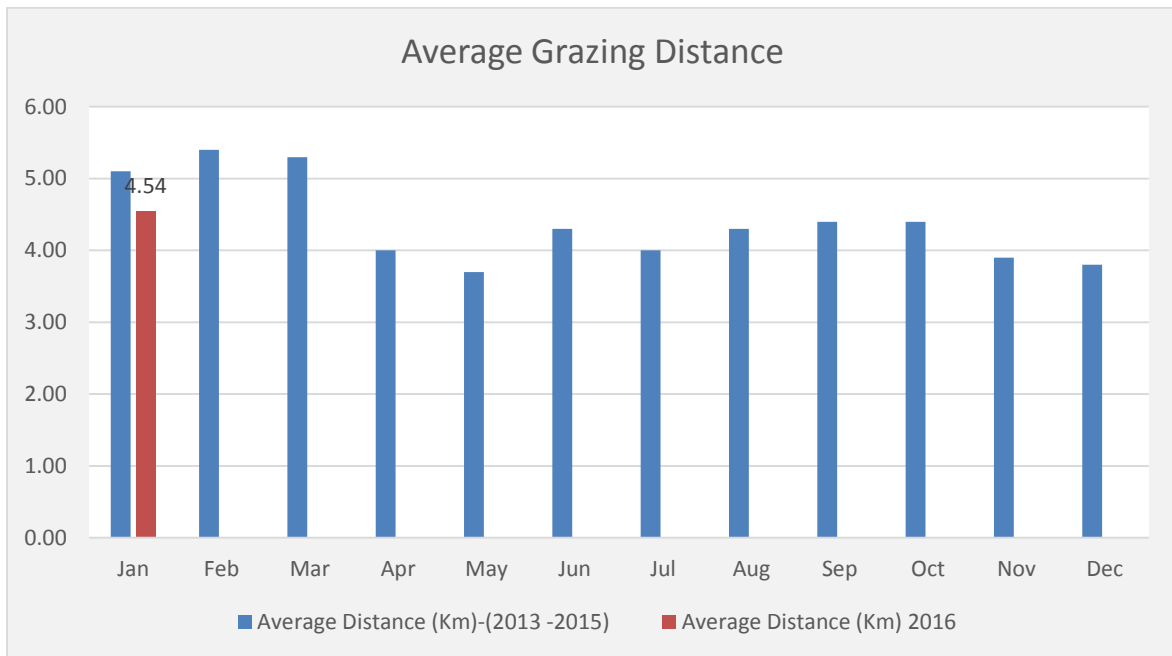
- The chart above shows the vegetation condition expressed as VCI and comparing the period January 2016 with the long-term maximum, minimum and average recorded in the same period for Pokot north sub-county.
- It can be deduced that vegetation condition index for the month of January 2016 is within the normal range and exhibit above average vegetation condition.
- Actually, the effect of the short rains is still evident in the vegetation condition despite the dry weather conditions that prevailed during the month under review.

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 January was 4.54km.
- Trekking distance increased from 3.47km in the month of December 2015 to 4.54km in the month under review across the livelihood zones. Nyangaita, Ptokou and Konyao sentinel sites recorded the highest trekking distance from grazing areas to water sources at 11 km, 10 km and 7.3 km respectively.
- Increased trekking distance from the water points to the grazing areas was attributed to drying

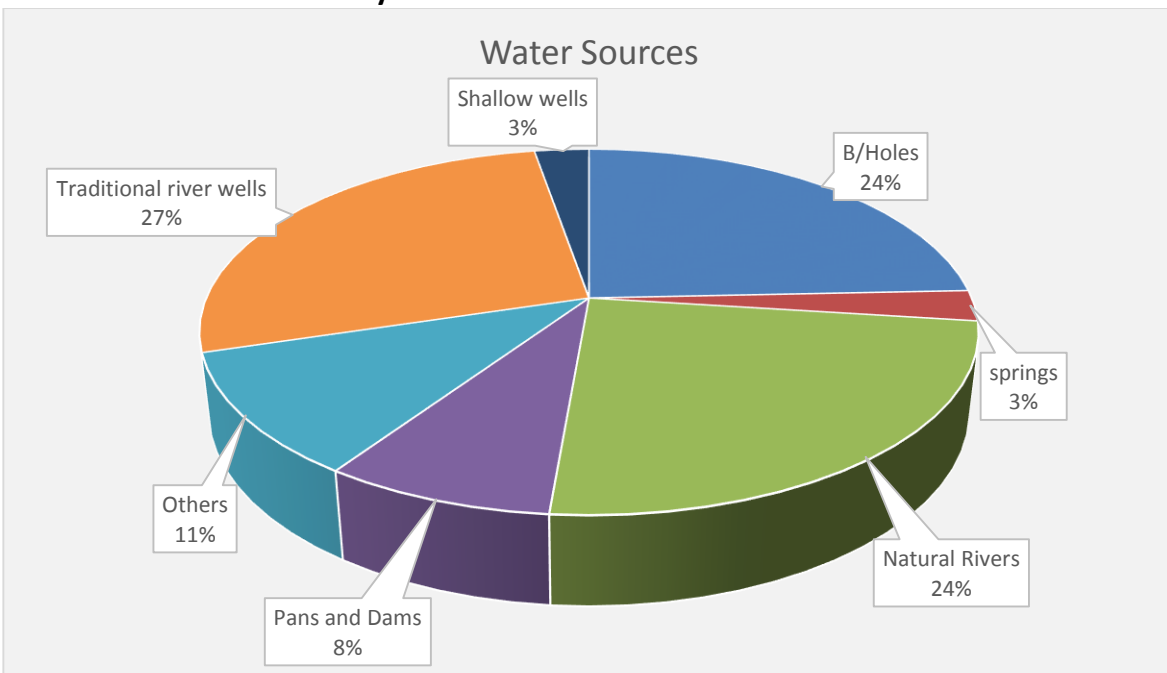
of some water reservoirs near grazing areas and poor forage condition in selected pocket zones in close proximity to water sources.

- The watering frequency for all livestock species range between 1-4 days across the livelihood zones which is normal at this time of the year. The trekking distance of 4.54km is within the normal range when compared to the long-term trekking distance of 5.10km.



1.3 HYDROLOGICAL DROUGHT

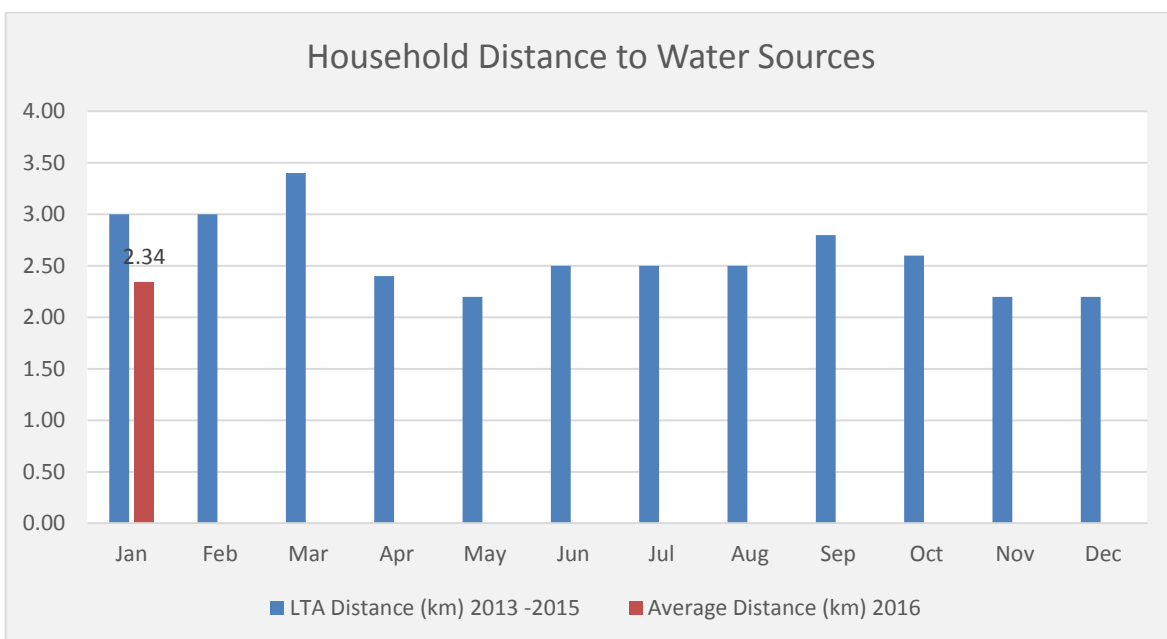
1.3.1 Water Sources and Availability



- From the figure shown above 24%, 27% and 24% of the communities interviewed stated that their main sources of water were natural rivers, traditional river wells and boreholes respectively for the month of January. When compared to the preceding month, the main water sources were relatively the same but with reduced river use from 32% basically attributed to drying up of seasonal rivers. Other water sources included pans and springs. These are the normal water sources at this time of the year.

1.3.2 Household Access to Water

- From the figure shown below, household water distance in the month of January was 2.34km across the livelihood zones. In comparison to the month of December where household water distance was 1.9km, household distance to water source slightly increased.
- Increased household water distance was attributed to drying up of seasonal rivers and pans that were in close proximity leading to reduced water availability and access.
- However, the household water distance of 2.34km during the month under review is within the normal range when compared to the long term average of 3km at this time of the year.
- Household water distance was highest in Agro-pastoral and Pastoral livelihood zones at 2.5km and 2.4km 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 jerry can 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 90-120 minutes in the Agro pastoral and Pastoral zones respectively.

- Average household water consumption per person per day is lowest in the Pastoral zone at 5litres and highest in the Mixed farming zone at 15litres with the usage in the Agro pastoral zone being 8litres which is above 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 mainly reared in Pokot north in areas such as Kasei, Kodich, Kases, 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 in parts of Agro pastoral and Pastoral livelihood zones. In the Mixed farming zone, cattle body condition showed good smooth appearance due to availability of abundant pasture. Body condition of goats in all livelihood zones and camels in Pastoral zone is good.
- The good body condition especially for browsers could be attributed to availability of sufficient browse of good quality across all the livelihood zones.
- However, the body condition is expected to deteriorate mainly for cattle owing to diminishing forage condition and increased trekking distances especially in the Pastoral livelihood zone

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. Pest petis ruminants (PPR) outbreak was reported in Kaipakwen and Chepkuin under Ptokou sentinel site and across a number of sites in the Pastoral zone.

- 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 was ongoing during the month under review.

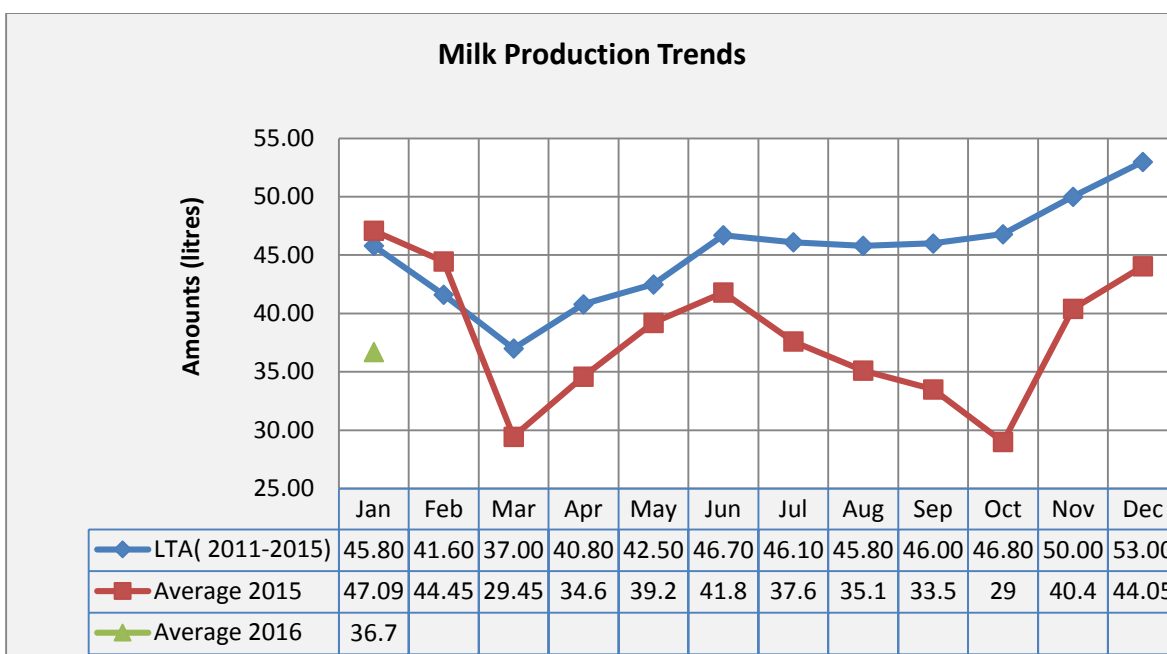
Participatory Epidemiology Report:

- A participatory disease search (PDS) conducted by the veterinary department in pokot north(Lokitonyola location of Alale ward) during the month under review, identified through pairwise ranking contagious bovine pleuropneumonia (CBPP),east coast fever (ECF) and trypanosomiasis with a matrix score of 4 as the most prevalent disease in cattle.
- Contagious caprine pleuropneumonia (CCPP), PPR and Mange were also identified as the most common in goats with the sheep being affected by PPR and enterotoxaemia.
- Animal feeds, floods, animal movement and management were singled out as the greatest predisposing risk factors that sped up infections and disease thereby making them fatal.

(Source: Veterinary department in conjunction with ACTED-LANINA phase v)

2.1.3 Milk Production

- From the figure shown below, average milk production decreased to 36.7 litres in comparison to the 44.1 litres recorded during the month of December across the livelihood zones.
- The decrease in milk production was attributed to poor pasture condition in selected sites especially in the Agro pastoral and Pastoral zones with the increased livestock trekking distance in search of pasture also having a negative effect on livestock productivity.
- When compared to the long term average of 45.8litres, milk production was significantly lower by a margin of 9.1litres during the period under review.



2.2 CROP PRODUCTION

2.2.1 Timeliness and status of crop production

- 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. Maize production under irrigation at Wei Wei irrigation scheme was at grain filling stage during the month under review.

2.2.2 Pests and diseases

- Cases of potato plight were reported mainly in Pokot south (highlands) during the month under review

2.2.3 Harvest

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

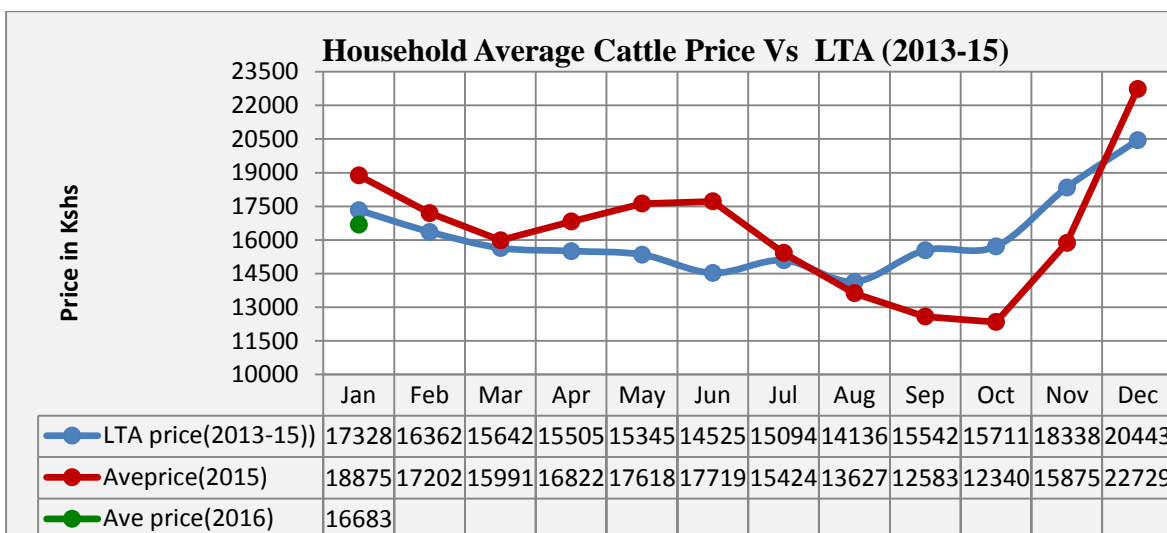
3.0 ACCESS TO FOOD

3.1 LIVESTOCK MARKETING

3.1.1 Cattle prices

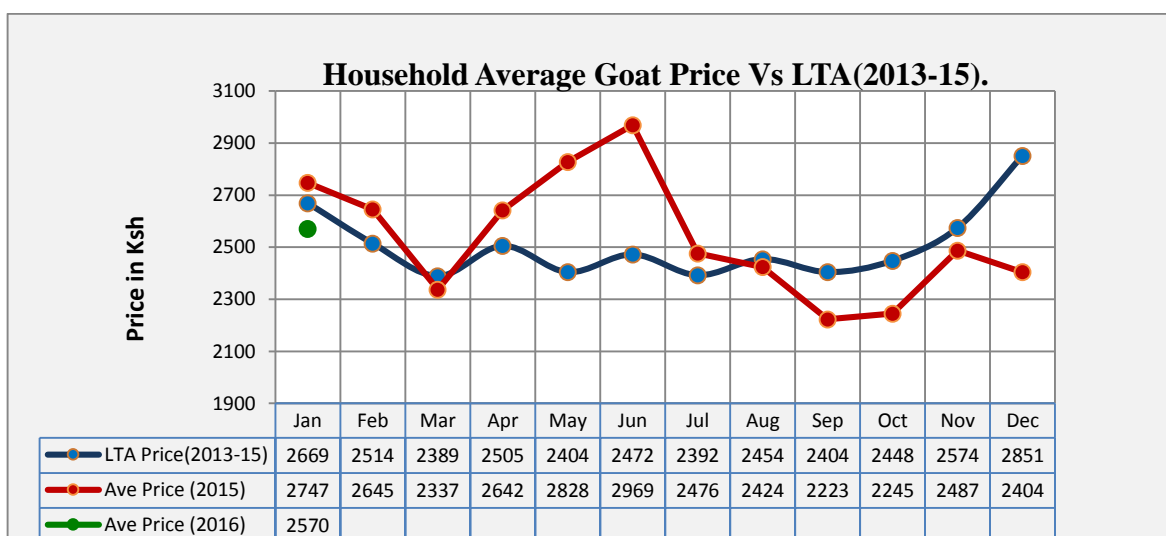
- The figure below exhibits that cattle prices are below the long term mean on a decreasing trend. Cattle prices decreased from Kshs.22, 729 in the preceding month to Kshs. 16,683 in the month of January.

- Cattle prices are 4% below the long term average. Decreased cattle prices across the livelihood zones could be attributed to a deteriorating body condition of cattle as pasture condition remains poor in selected sites across all livelihood zones and increased trekking distance coupled with reduced market vibrancy during the month under review.
- The Agro-Pastoral zone recorded the highest average cattle price at Kshs.20, 000 followed by Pastoral all species zone at Kshs.14, 850.



3.1.2 Goat Prices

- From the figure illustrated below, the price of goat was Kshs.2570 in the month of January. In comparison to the month of December where on average the price of goats was Kshs.2404, goat prices were stable. The current goat price is 4% below the long term average.



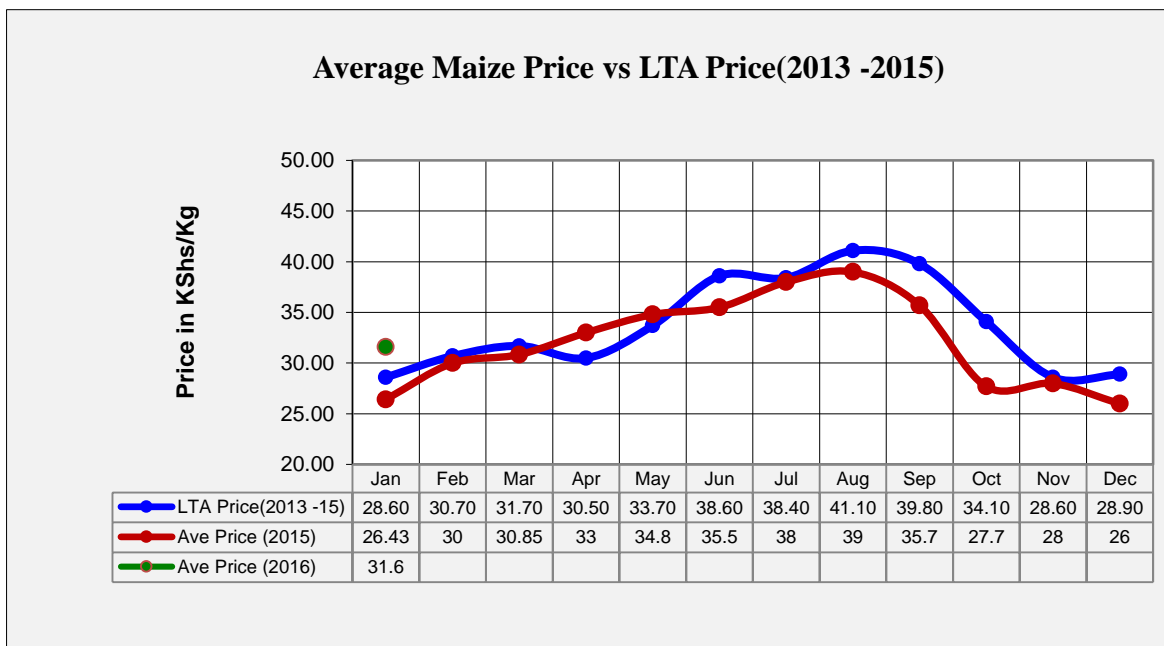
- The pastoral all species livelihood zone had an average selling price of Kshs.2,304 while the Agro-

pastoral livelihood zone was retailing goats at an average price of Kshs.2,836.

3.2 CROP PRICES

3.2.1 Maize (Markets)

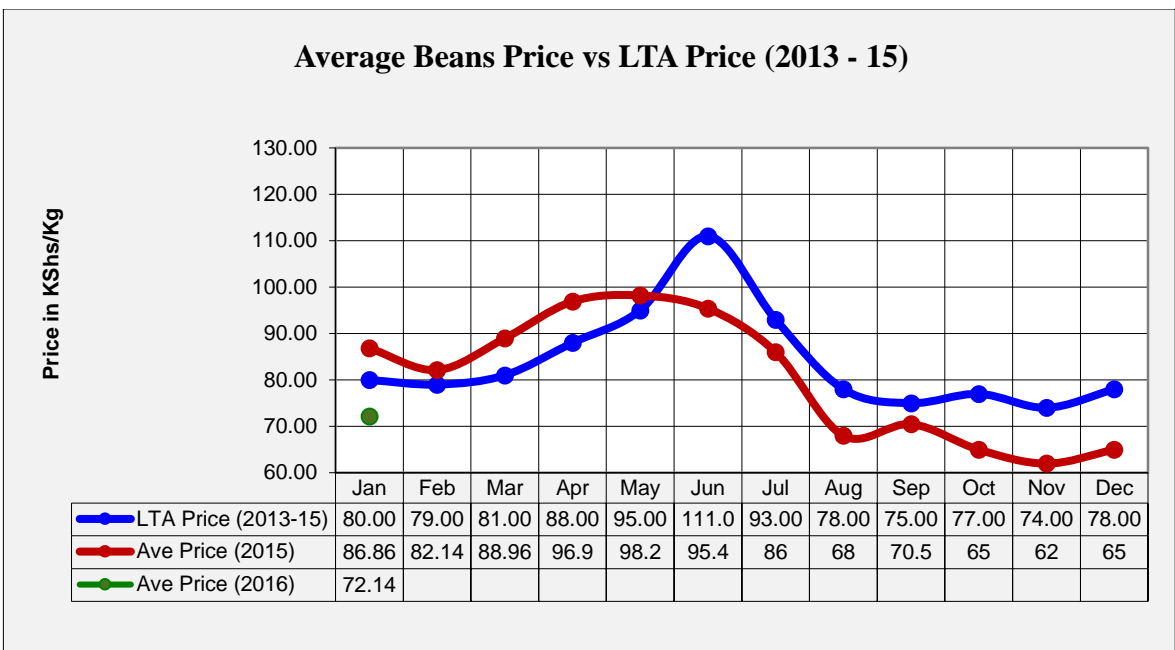
- Maize price increased from Kshs.26 in December to Kshs.32 in the month under review. The current maize price is outside the normal range of Kshs. <28. The current maize price is 10% above the long term average.



- The increase in maize price was attributed to a decrease in maize supply internally mainly from the mixed farming zone as a consequent effect of reduced acreage under maize production during the short rains period.

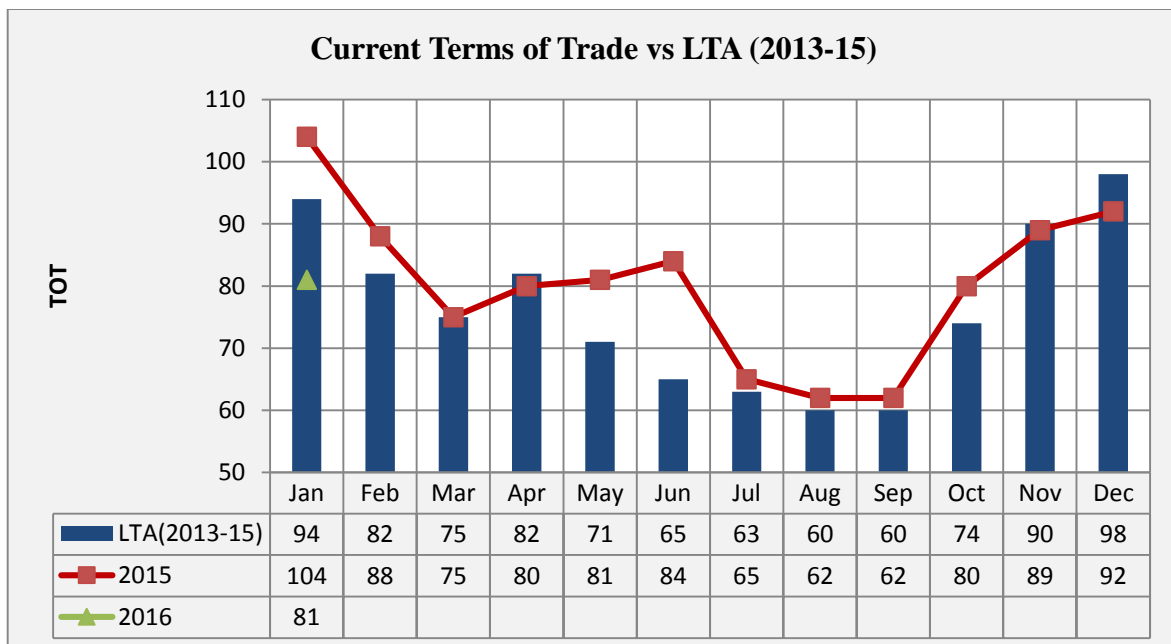
3.2.2 Beans

- Average price of beans during the month of January was Kshs.72 across the livelihood zones. This was an increase from Kshs.65 recorded in the preceding month.
- The current beans price is within the normal range of Kshs. <80 and 5% below the long term average.
- Pastoral all species zone recorded the highest average price at Kshs.77 per kilogram followed by Agro pastoral zone at Kshs.68 per kilogram and Mixed farming zone at Kshs. 63.



3.3 LIVESTOCK TERMS OF TRADE (TOT)

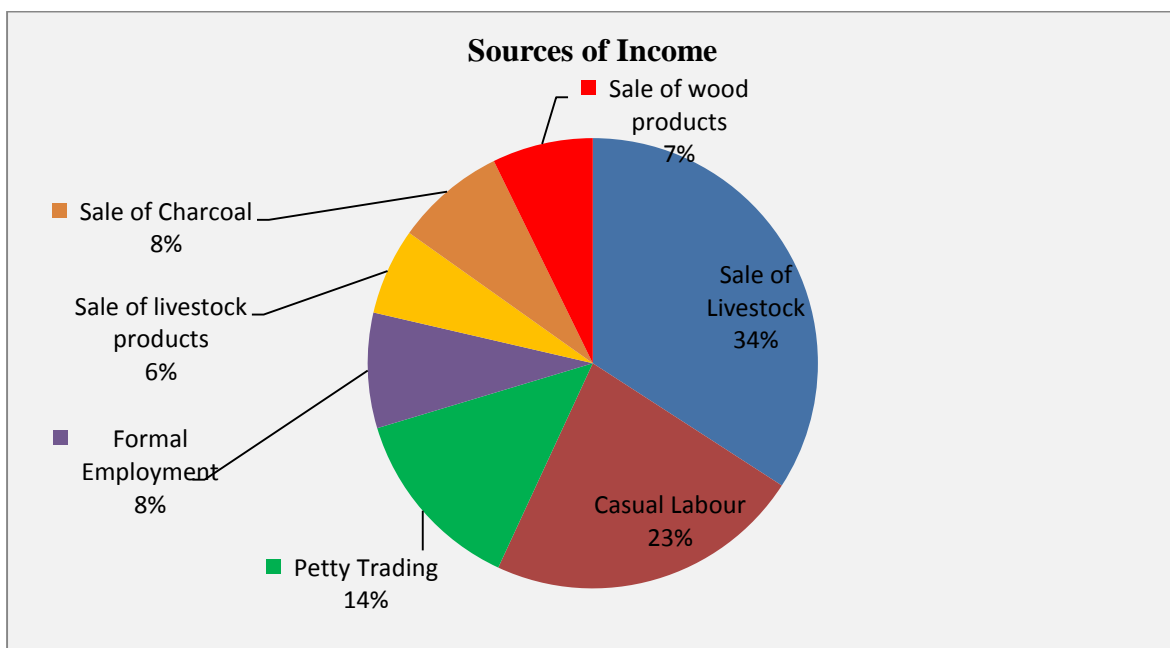
- A goat was exchanging for 81kg of maize in the month of January compared to 92kg in month of December.
- As the price of goat remains stable, terms of trade are being influenced by maize price. The terms of trade for the month under review are 14% below the long term average.
- Terms of trade are favourable to the farmers as opposed to the pastoralists. This is indicative of a deteriorating food security situation among the pastoralists.



3.4 INCOME

3.4.1 Sources of Income

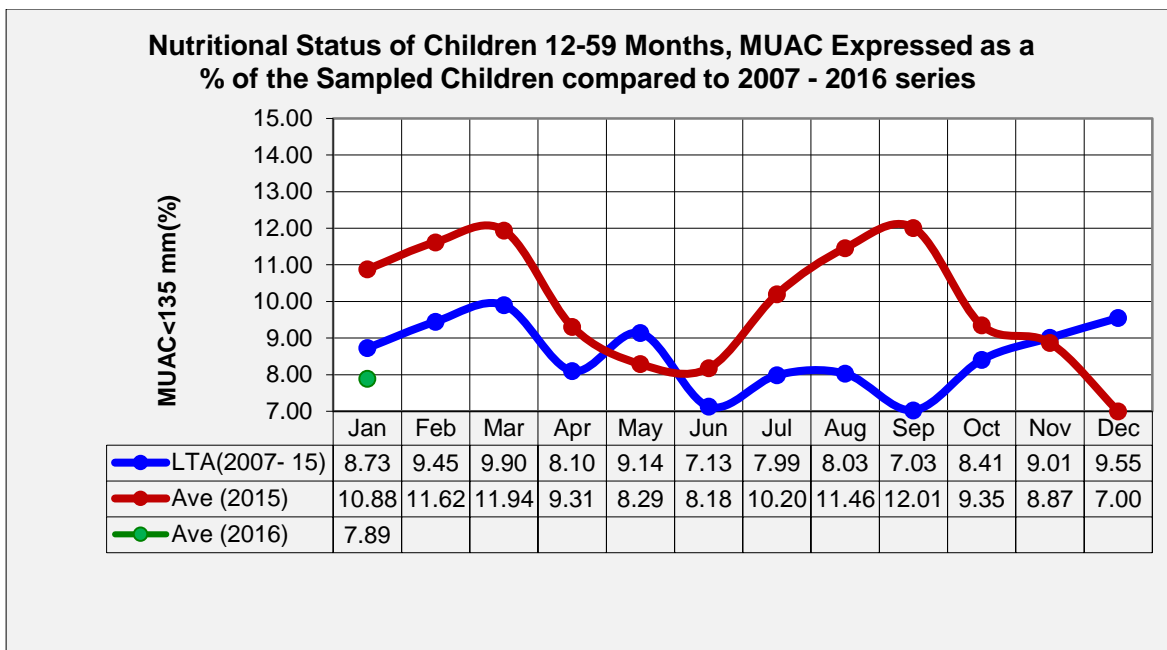
- Majority of the households continue relying on sale of livestock and casual labour as their main source of income .However, percentage of households selling livestock reduced from 37% recorded in December to 34% during the month under review.
- During the month, the number of households deriving their livelihood through casual labour and petty trade stood at 23% and 14% respectively
- Other sources of income were formal employment, sale of charcoal and sale of livestock products at 8%, 8% and 6% respectively across the livelihood zones.



4.0 UTILIZATION OF FOOD

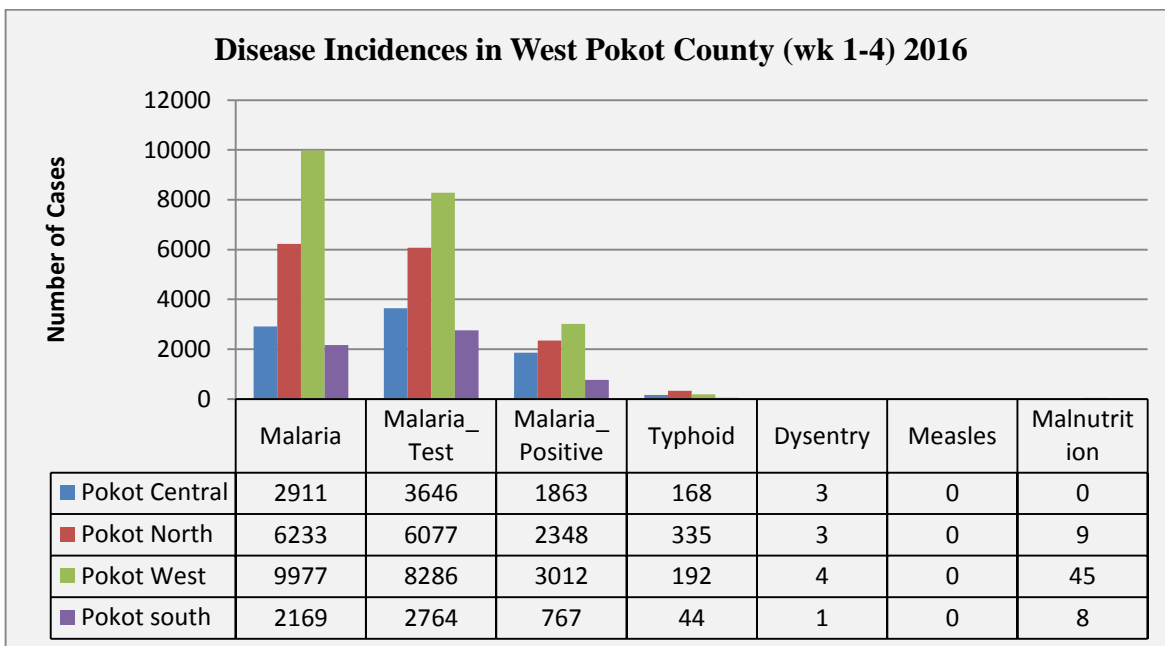
4.1 NUTRITION STATUS

- During the month under review, proportion of children rated being 'at risk' of malnutrition increased from 7% in the preceding month to 7.89% in the month under review.
- However, this proportion of children rated being 'at risk' of malnutrition is 10% below the long term average. The increase in levels of malnutrition could be attributed to a decrease in milk consumption and poor utilization of health services such as SFP and OTP. Cases of high malnutrition were witnessed in Ptokou, Sasak and Poole.



4.2 HUMAN DISEASES

- No major disease outbreak was reported during the month under review except cases of Malaria and Diarrhoea.

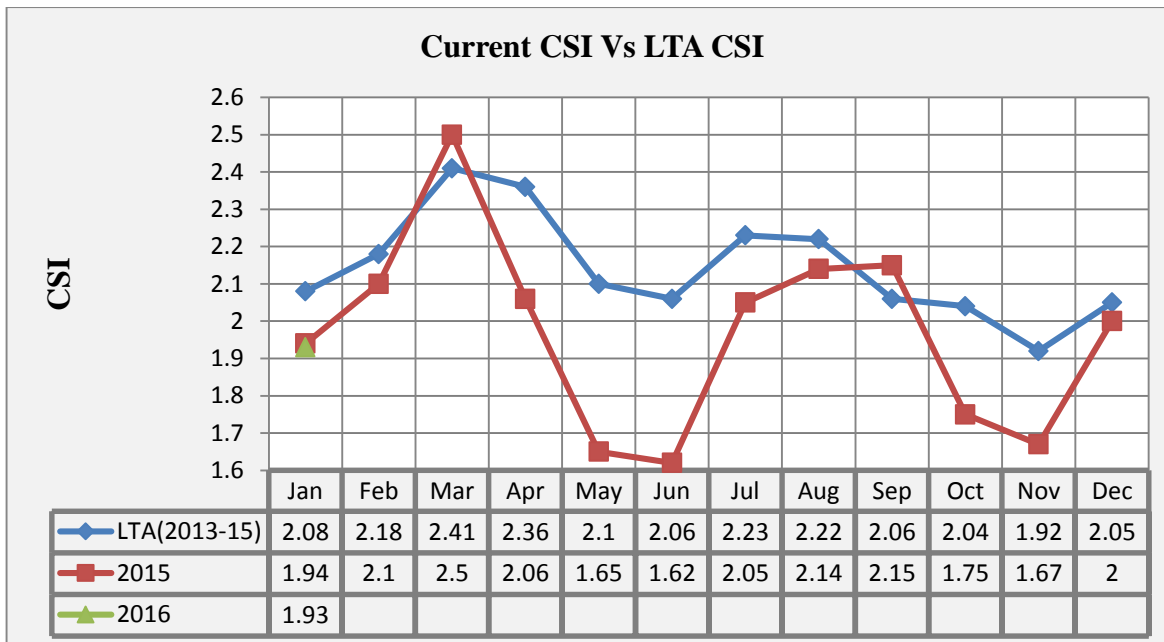


4.3 COPING STRATEGY

4.3.1 Coping Strategy Index (CSI)

- From the figure shown below, CSI remained relatively stable at 1.93 during the month under review as households employed the same strategies in bridging the food gap.

- Coping strategy index for the month of January was within the normal range.
- Notable coping strategies were reduction in number of meals, reduction in the size of meals and purchase of food on credit.



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.
- Provision of subsidized fruit tree seedlings countywide targeting 5000 beneficiaries and supply of water pumps for irrigation mainly in Pokot north and central.
- Supply of 68 camels as an alternative source of livelihood to four pastoralist groups in the county.

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

- No major livestock migration was witnessed during the month under review. However, few

animals especially in the pastoral zone started moving towards the border of Turkana and Uganda. The situation is normal.

6.3 FOOD SECURITY PROGNOSIS

- Livestock productivity is projected to go down as rangeland conditions continue depleting across the livelihood zones resulting in poor animal body condition.
- Levels of malnutrition are expected to be on the rise as the levels of milk consumption go down due to constraints in availability and access.
- However, food security will marginally remain the same as December due to availability of stocks within households but the purchasing power will reduce as the ToT continue to worsen.
- Majority of the households will thus rely on the markets to supplement their dietary needs and this is likely to witness the commodity prices sky rocket.
- Proper infrastructure (access roads) will thus be a key factor in mitigating any shortfall that may occur during this period as most households are expected to remain in the minimal food security band.

7.0 RECOMMENDATIONS

7.1 RECOMMENDATIONS TO CSG/KFSSG

- Increase advocacy on access and utilization of health and nutrition services with concurrent strengthening of community health and nutrition surveillance.-action, MoH and other nutrition actors.
- Early provision of seeds and subsidized fertilizers across all livelihood zones and increase the irrigation infrastructure -action: ministry of agriculture.
- Public education to promote adoption of best practices that improve livestock production with immediate institution of necessary measures to control the spread of diseases.-action; ministry of livestock.