

National Drought Management Authority

WEST POKOT COUNTY

DROUGHT EARLY WARNING BULLETIN FOR OCTOBER 2017



A Vision 2030 Flagship Project



OCTOBER EW PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- Enhanced rainfall with a temporal distribution of 17-19 days for highlands and 10-12 days for the lowlands was received over the month under analysis. Cumulative rainfall received during the 6-month period (May-Oct 2017) represents 108% of the total rainfall received normally for the period.
- Vegetation condition improved further as evidenced by the shift in VCI-3month for the county from 53 recorded previously to 65. Above normal vegetation greenness was observed in all sub counties. Equally, forage condition was very good across all livelihood zones.

Socio Economic Indicators (Impact Indicators)

- Body condition of all livestock species is good and improving. Distance to water sources reduced and is within the normal range for the month. Milk production and consumption remained stable and restricted to the normal range.
- Significant improvement was witnessed on terms of trade and no migration took place in October.
- Coping strategy index reduced slightly to 8.3 with a paltry 7.3% of households falling under the poor FCS category. Proportion of children 'at risk' of malnutrition remained stable at 4.0% and strongly within the normal range for the month under review.

Early Warning (EW) Phase Classification

LIVELIHOOD ZONE	EW PHASE	TREND
AGRO PASTORAL	NORMAL	IMPROVING
PASTORAL	NORMAL	IMPROVING
COUNTY	NORMAL	IMPROVING

Biophysical Indicators	Value	Normal range
Rainfall (% of normal for Nasukuta Station)	108	90-110
VCI-3month (County)	65	>35
VCI-3month (Pokot North)	63.8	>35
Forage Condition	Good	Good

Production Indicators	Value	Normal range
Livestock Body Condition	Normal	Normal
Milk Production	1.4 Litres	>1.1 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (attributed to drought)	No deaths	No deaths

Access Indicators	Value	Normal range
Terms of Trade (ToT)	90.8	>74
Milk Consumption	1.3Litres	>1.1Litres
Return distance to water sources (household)	2.3 km	0.0 -3.0km
Cost of water at source (Ksh /20 litres)	Kshs.5	<Kshs.5.0

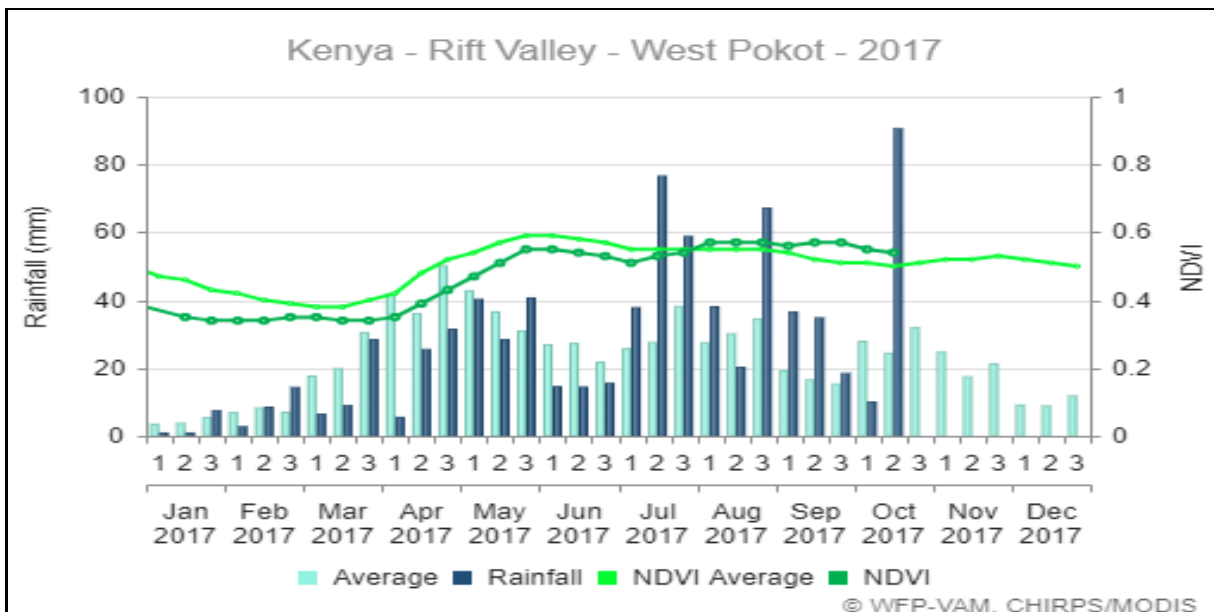
Utilization Indicators	Value	Normal range
Nutrition status, MUAC (% at risk of malnutrition)	4.0	0.0- 7.5
Coping Strategy Index (CSI)	8.3	<10.5
Food Consumption Score (FCS)	41.7	>35

<ul style="list-style-type: none"> Short rains harvests Short dry spell Increased HH Food Stock 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 Stock 	<ul style="list-style-type: none"> Short rains Planting/weeding (Irish potatoes, Cabbages and Onions) 								
Jan	Feb	Mar	Apr	July	Jun	Jul	Aug	Sept	Oct	Nov	Dec

1.0 CLIMATIC CONDITIONS

1.1 RAINFALL PERFORMANCE

- Rainfall onset in the county was witnessed during the second dekad of October. Rainfall received was enhanced and of high intensity during the second and third dekad of the month under review.
- Highland areas of the county recorded a temporal distribution of 17-19 days whereas the lowlands reported 10-12 wet days during the period under review.



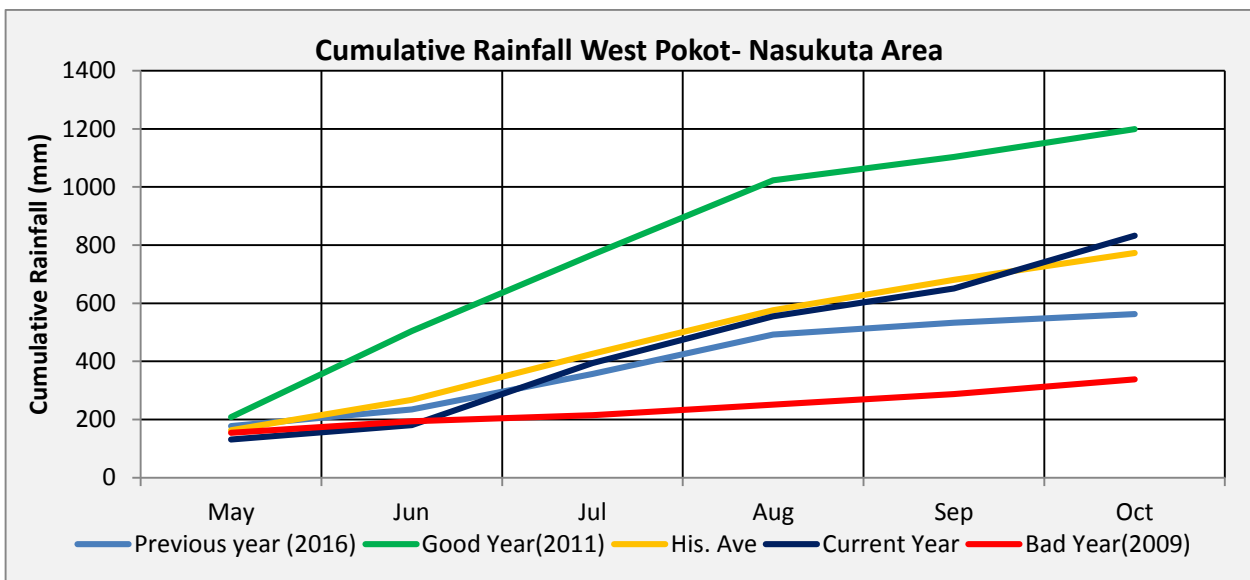
Source: VAM-World Food Programme

- As depicted above, second dekad rainfall for October was superior in comparison to the expected rainfall normally. Generally, the performance was above normal with for instance 90.4mm of rainfall being recorded against the expected 24.3mm for dekad two of the month.
- Consequently, as a result of the timely onset coupled with receipt of enhanced rainfall, the current normalized difference vegetation index (NDVI) values are higher than the historical NDVI values for the month signifying an improved situation.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- Rainfall received was of good amount and evenly distributed in space across all livelihood zones.
- During the month, Nasukuta rainfall station located in the lowlands recorded 181.3mm of rainfall in 12 days against the expected 92.3mm normally for the month under review.

- In reference to the above rainfall station, the cumulative rainfall for the six month period (May to October 2017) amounts to 832.2mm against the cumulative fourteen year rainfall average for the same period that amounts to 772.9mm.
- Therefore, the amount of rainfall recorded above for the six month period within the current year represents 108 percent of the average rainfall normally received for the period and thus falls above the seasonal range by a significant margin.
- When compared to the cumulative rainfall recorded for the same six month period during the previous year (May to October 2016), the current cumulative rainfall is higher by forty eight percent.
- The period May to October 2009 is considered to be the bad year historically as depicted below.



- Rainfall stations in the highlands including Tapach, Kaibichbich, Kaibos and Kishaunet recorded 361.9mm, 318.1mm, 256mm and 206.8mm respectively. On the other hand, those in the lowlands such as Sigor, Sebit, Alale, Mtembur and Kongelai reported 255.5mm, 229.6mm, 202.1mm, 129.9mm and 125.7mm in that order.

(Source: Meteorological Department-West Pokot County)

1.3 OTHER EVENTS

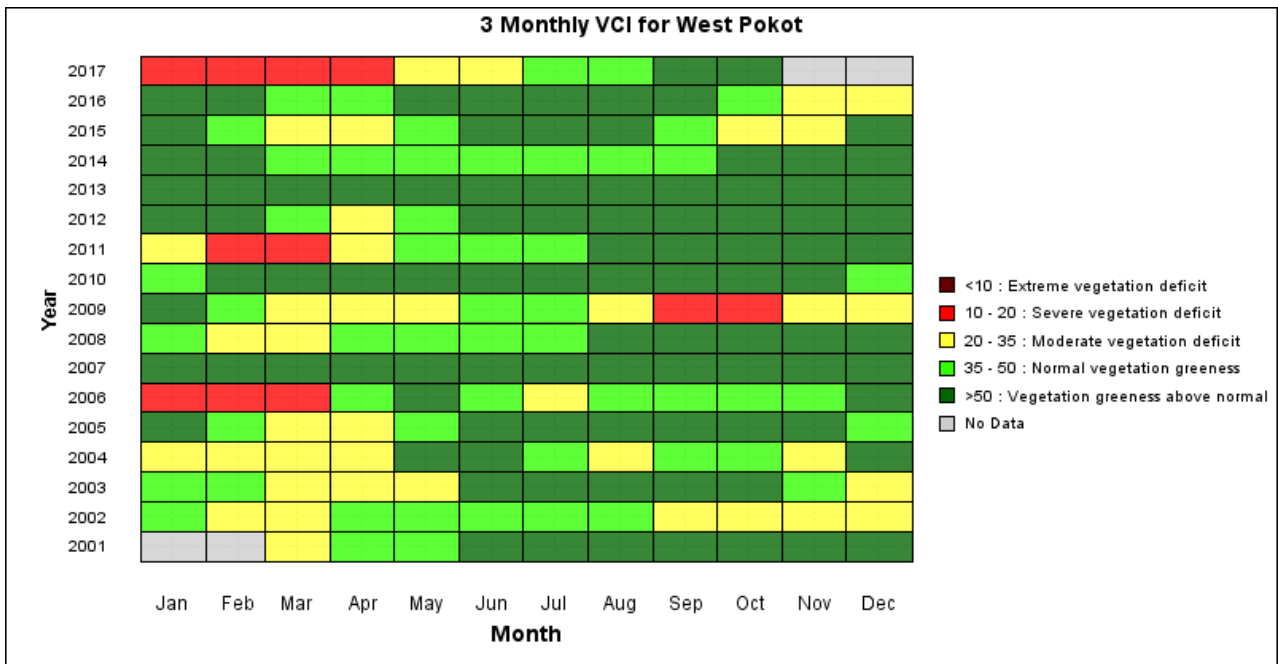
- **Floods:** two lives were lost as a result of river swelling reported in Lomut, Marich and Chepareria.
- No other notable event such as land/mud slides, lightning strikes or hailstorms was witnessed during the month under review.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The county VCI matrix below illustrates how months have been classified in terms of agricultural drought based on applicable VCI thresholds. Retrogressive analysis of the vegetation condition has placed each month under the relevant vegetation deficit class.
- Relative NDVI change with respect to maximum and minimum historical NDVI value forms the basis for VCI.



Source: Boku University

- The county exhibited above normal vegetation greenness as supported by the Vegetation Condition Index (VCI-3month) for the month that was 65.
- Sustained improvement in vegetation condition was witnessed across the county as advanced by adjustment in VCI-3month to 65 from the 53 documented previously. Currently, vegetation across all sub counties display above normal attributes with the VCI-3month exceeding 60.
- The improvement could be attributed to the timely onset of the short rains coupled with the above normal performance of the off season rains that resulted in sustained regeneration.

2.1.2 Pasture

- The condition of pasture in all livelihood zones is good and above the normal quantity when compared to the pasture level during a normal year. There was a notable improvement in

comparison to September and that was attributed to the opportunely short rains that precipitated further regeneration.

- Over the short rains period, pasture condition is expected to improve further.
- Across all livelihood zones, no major deterrent to pasture access currently exists.
- Based on situation analysis of pasture quantity and quality in the two livelihood zones, no variation currently exists.

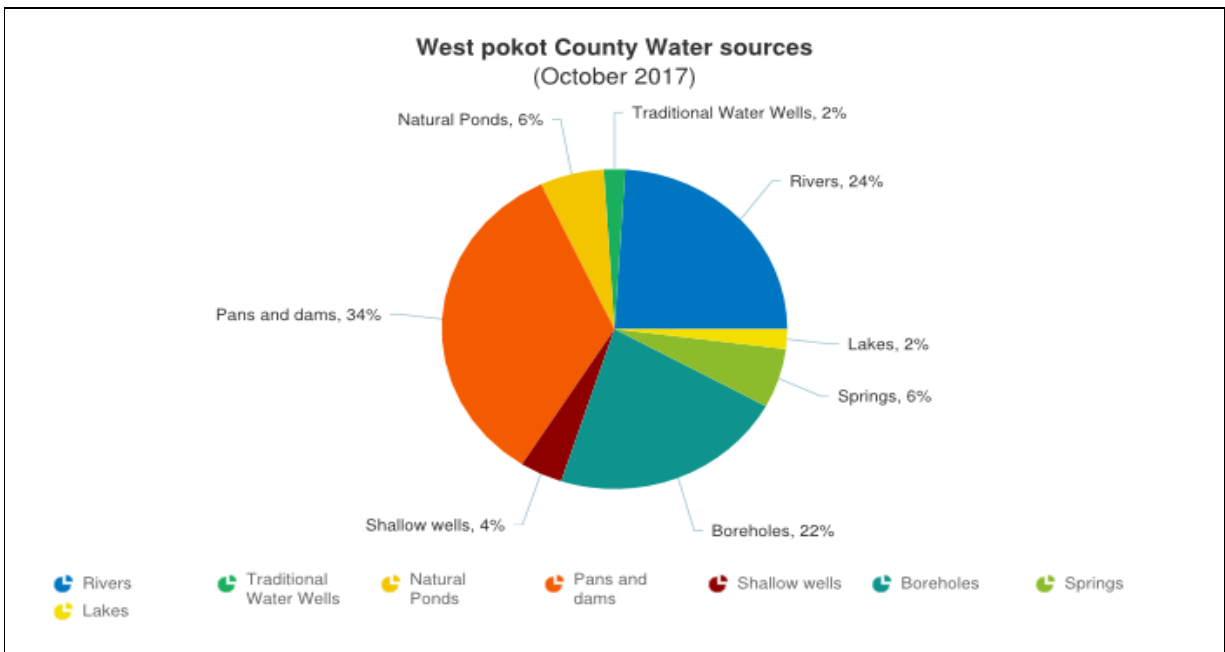
2.1.3 Browse

- Browse condition is good in the Pastoral and Agro Pastoral livelihood zones. Current browse level is superior to the browse quantity for the period during a normal year. When compared to the foregoing month, notable improvement attributed to the onset of the short rains was witnessed.
- No major impediment to browse access currently exists across the two livelihood zones.
- Uniformity in browse quantity and quality is evident across the Pastoral and Agro Pastoral livelihood zones.

2.2 WATER RESOURCE

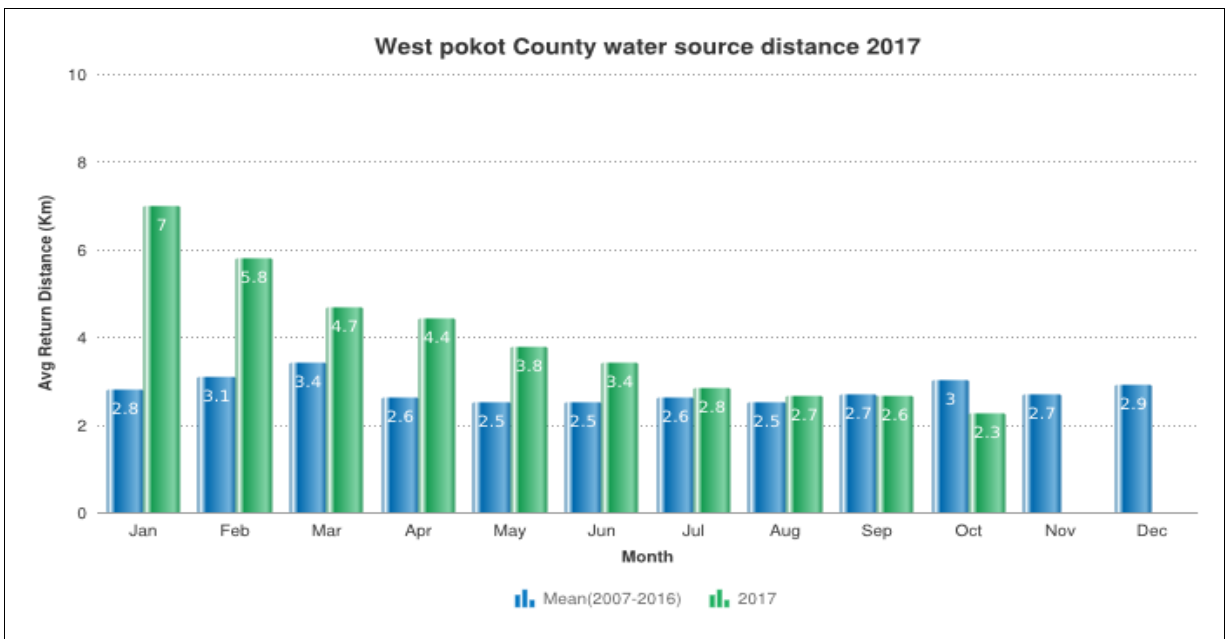
2.2.1 Sources

- Households are currently utilizing Pans and dams, rivers and boreholes in meeting household and livestock water needs. Thirty four percent of households sampled reported to be using Pans; twenty four percent drew from rivers and twenty two percent fetched from boreholes.
- Recharge level in open water sources rose significantly due to receipt of enhanced rainfall during the month under review thus an improved situation in relation to September.
- Normally, the aforementioned sources suffice household water needs during this time of the year.
- Over flow was witnessed in some seasonal rivers such as Lomut with most permanent rivers including Suam, Muruny and Wei Wei generally full to capacity. Ordinarily, river volume is less during this period of the year and thus a slight variation being observed at the moment.



2.2.2 Household Access and Utilization

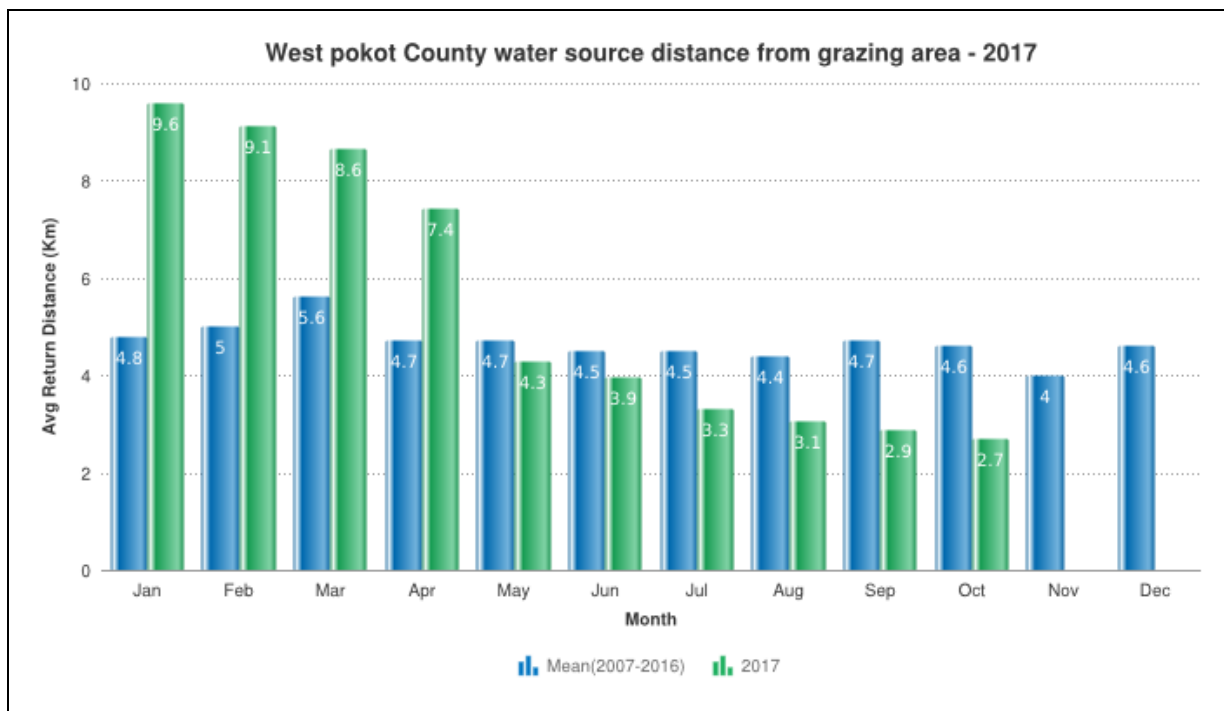
- Return distance to water source for households dropped slightly to 2.3 Km from the 2.6 Km recorded during the previous month. Compared to long term average distance for the month, the current distance is considerably lower by twenty three percent.
- The Pastoral zone reported a longer trekking distance to water source than the Agro Pastoral zone. The decrease could be attributed to adequate recharge of open water sources in close proximity to households during the month under review.



- Waiting time at water source for the two livelihood zones is nil to five minutes.
- Water utilization has improved drastically with the Pastoral and Agro Pastoral livelihood zones recording an average household water consumption per person per day of 30-35 litres and 40-45 litres in that order.
- Water at source is not charged save for water kiosks in urban centres that are currently dispensing a 20 litre jerrican at five shillings. These are the normal charges for the period.

2.2.3 Livestock Access

- Return distance from grazing areas to water source for livestock reduced from the 2.9 Km reported previously to 2.7 Km during the month under review. Current distance is lower by forty one percent in comparison to the trekking distance normally.
- Animals traversed a longer distance to access water in the Pastoral livelihood zone unlike in the Agro Pastoral livelihood zone during the month under analysis.



- Reduced livestock trekking distance during the month under review could be attributed to pasture availability in areas near open water sources.
- Currently all livestock species in the two livelihood zones are drinking water on a daily basis.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

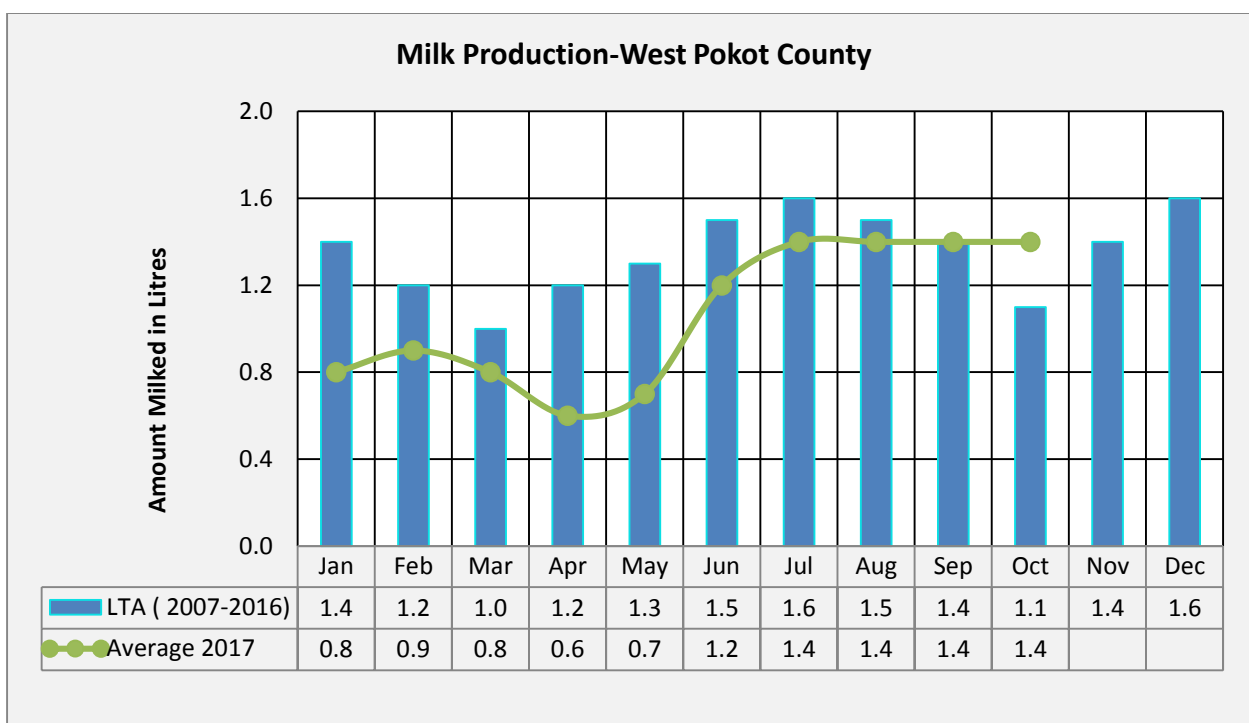
- Livestock body condition is good in both the Agro Pastoral and Pastoral livelihood zones. Sheep exhibit a fat tail with camels having a thick fat hump in both zones.
- Body condition for all species is expected to improve further with availability of quality pasture in adequate quantities sustained by the ongoing short rains over the next 3-4 months.
- When compared to similar periods during previous years, the body condition of all species is above normal and this is greatly credited to the limited trekking influenced by forage and water availability within the reach of households.

3.1.2 Livestock Diseases

- Most households in Kapchok and Riwo wards reported incidents of contagious caprine pleuropneumonia (CCPP) and pest petis ruminantes (PPR) in goats during the month under review.
- Cases of contagious bovine pleuropneumonia (CBPP) in cattle were reported by some households in Masol ward and some parts of Chepareria such as Pserum.

3.1.3 Milk Production

- The Pastoral and Agro Pastoral livelihood zones reported an average of 1.4 litres milk produced, a scenario replicated over the last four months. Cattle are the main milk producer in the county.
- Noteworthy is the fact that the current household milk production falls above the normal range of household milk produced for the month under examination by twenty seven percent.
- The observed stability in trend is basically down to causal factors influencing production such as size of milking herd and calving rate remaining comparatively the same over the aforementioned range of months above.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

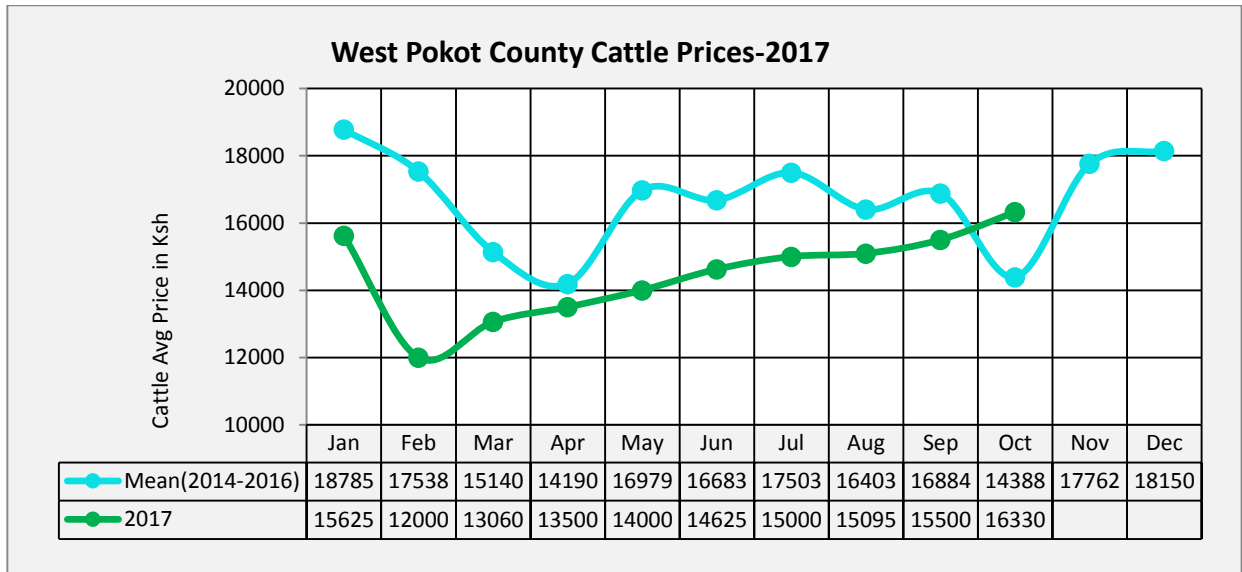
- Beans, Maize and Irish Potatoes are the dominant crop species cultivated by most farmers (approximately 50 percent) over the long rains season. A section of farmers mainly along the lowland areas of the county do cultivate Sorghum and Green grams albeit on a small scale.
- Harvesting of Maize planted during the long rains season was the major activity taking during the month under review. However, a small portion of farmers in the lowlands were planting beans with some in the highlands planting Irish Potatoes.
- Intensified activity was witnessed among farmers practising horticulture in the Agro Pastoral livelihood zone with most major markets along this zone including Sigor, Lomut, Chepareria and Ortum well positioned with adequate stocks of bulb Onions, Water melon, banana and Pawpaw from source areas of Kokwotendwo, Wakorr, Lomut, Sebit and along river Wei Wei.
- Maize production is projected to be lower than normal due to crop losses resulting from derailed harvesting owing to continued receipt of rains leading to rotting taking place in maize stalked on farms coupled with losses attributed to FAW/Fall Army worm that destroyed maize planted in over 10,000 acres earlier in the season.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle prices

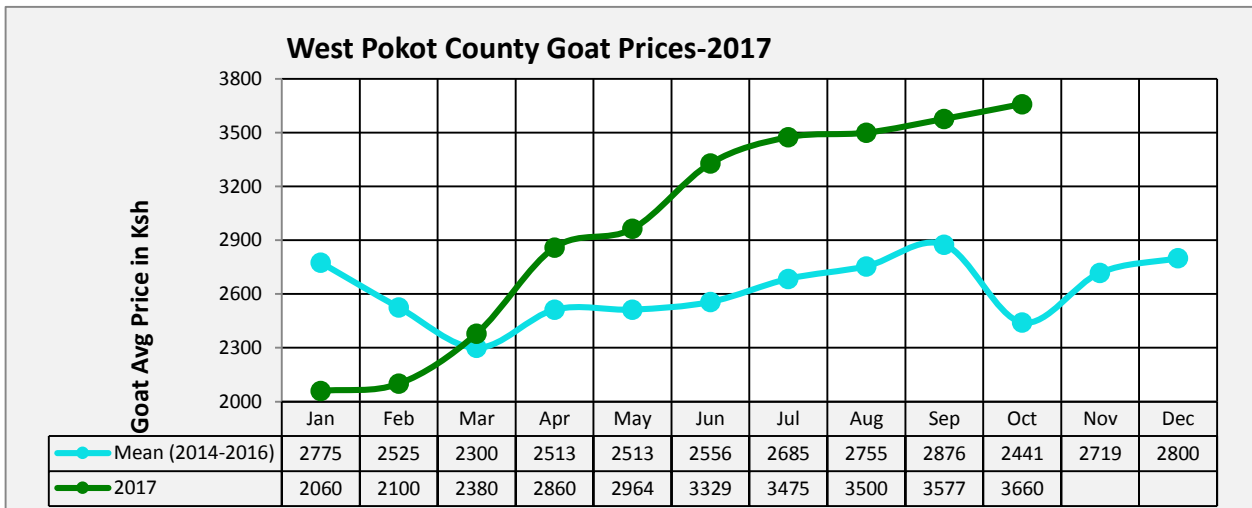
- Cattle traded at Ksh. 16, 330 during the month under review hence a significant rise from the Ksh. 15,500 recorded in September.
- Improved body condition due to availability of quality pasture and water within the county was the major driver for the increase in price.



- The current cattle price lies above the short term average price for the month by 13 percent.

4.1.2 Goat Prices

- The price of goat adjusted upwards to Ksh. 3,660 during the month under analysis from the Ksh. 3,577 recorded previously across the Pastoral and Agro Pastoral livelihood zones.

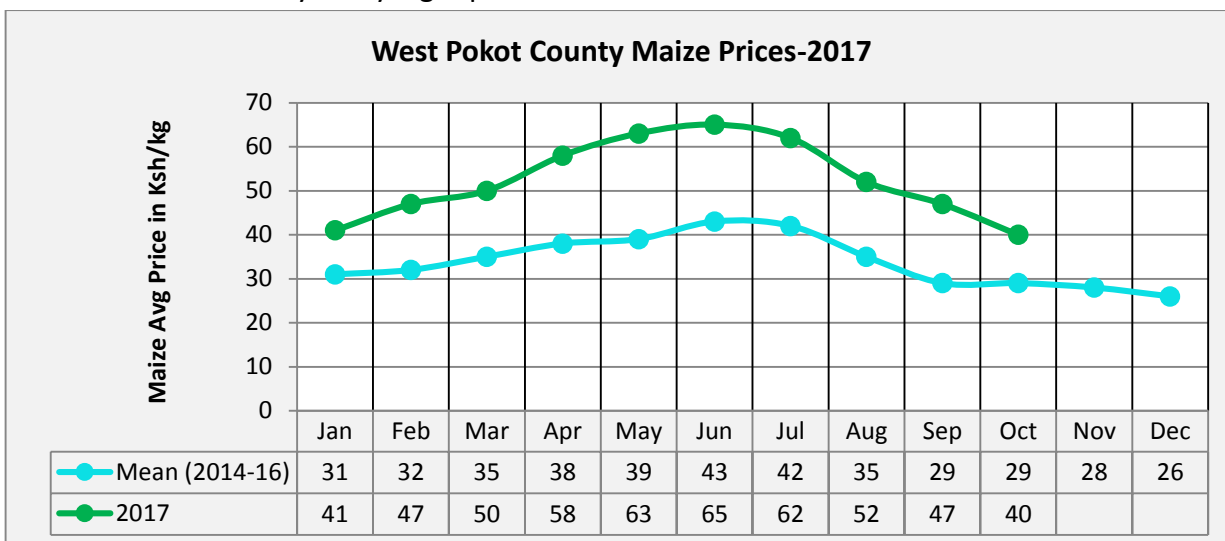


- This shift in price could be attributed to improved goat body condition arising from browse availability in sufficient quantities within the county.
- When compared to the short term average price for the month, the current market value of goat lies above by fifty percent.

4.2 CROP PRICES

4.2.1 Maize

- Maize price fell drastically to Ksh.40 per kg from the Ksh.47 per kg recorded in September.
- However, the current market price still lies above the three year short term average price for the month under review by thirty eight percent.

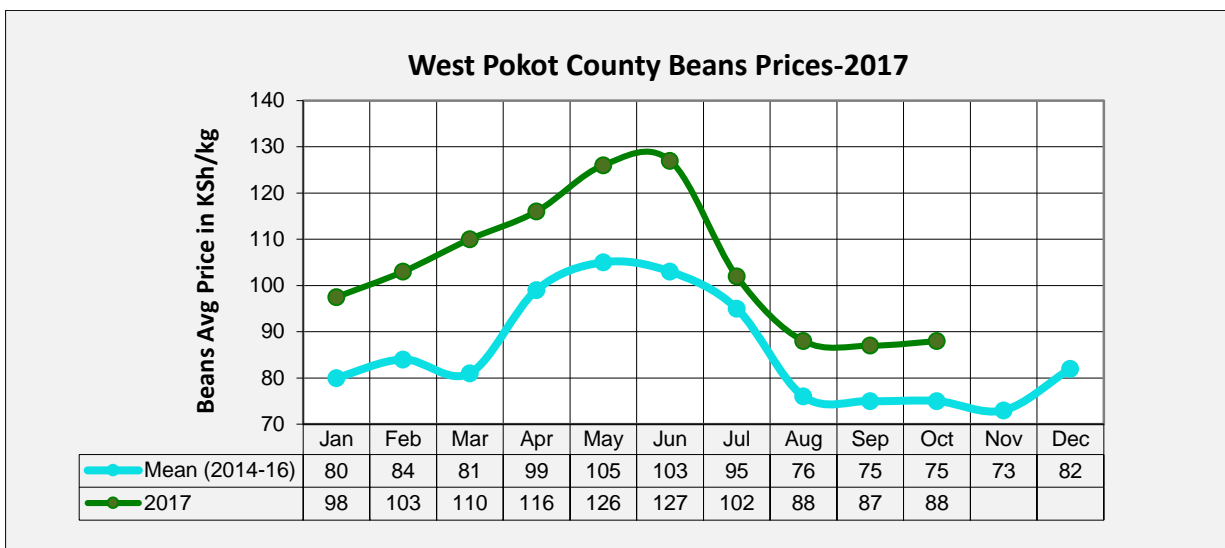


- A slight variation in price exists between the two livelihood zones and this is due to the Pastoral zone being dependent on the Agro Pastoral livelihood zone for its supplies. Improved availability across all sites has led to a significant drop in price being witnessed generally.
- As more stocks from the Mixed Farming zone where harvesting is currently taking place hit the market, the price is expected to drop further.

4.2.2 Beans

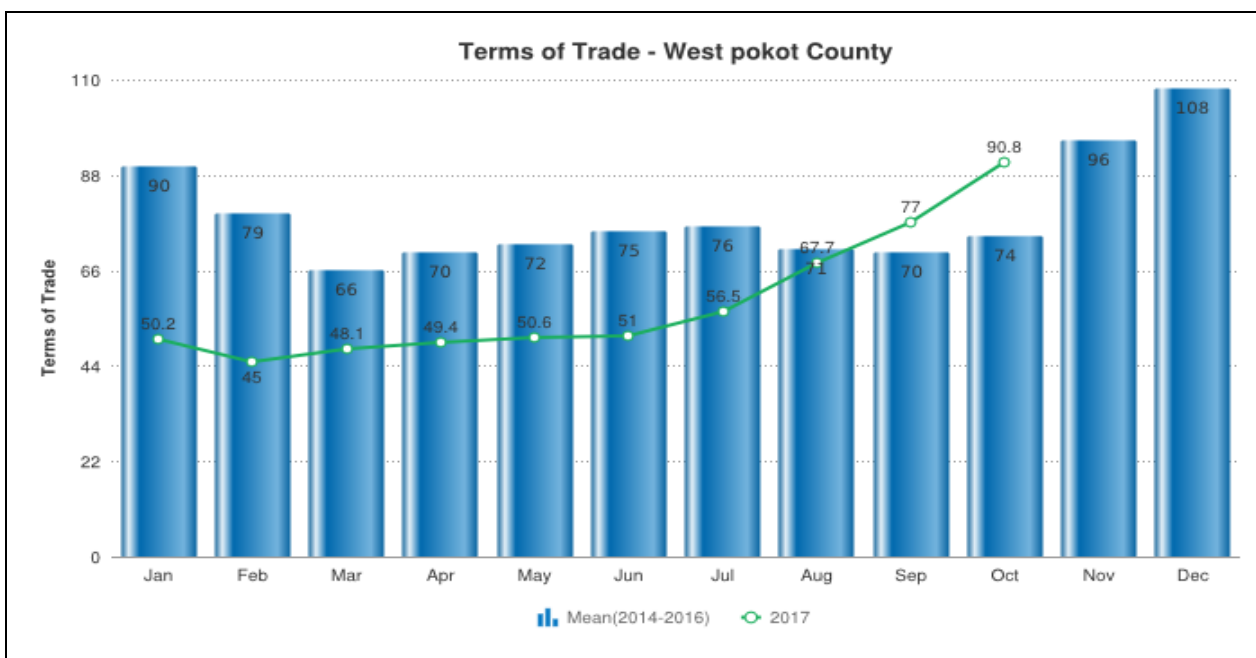
- The price of beans remained stable at Ksh. 88 per kilogram during the month under review.
- The stability has been influenced by the external supply sources owing to the fact that most internal sources are experiencing stock outs hence unable to influence the price at the market.
- Pastoral markets reported a higher price than the Agro Pastoral ones and that could be attributed to scarcity occasioned by limited stocks hitting those markets from the normal internal sources where stocks had generally dwindled.

- In comparison to the three year short term average price for a normal season during this time of the year, the current market price of beans lies above by seventeen percent.



4.3 LIVESTOCK PRICE RATIO/ TERMS OF TRADE (TOT)

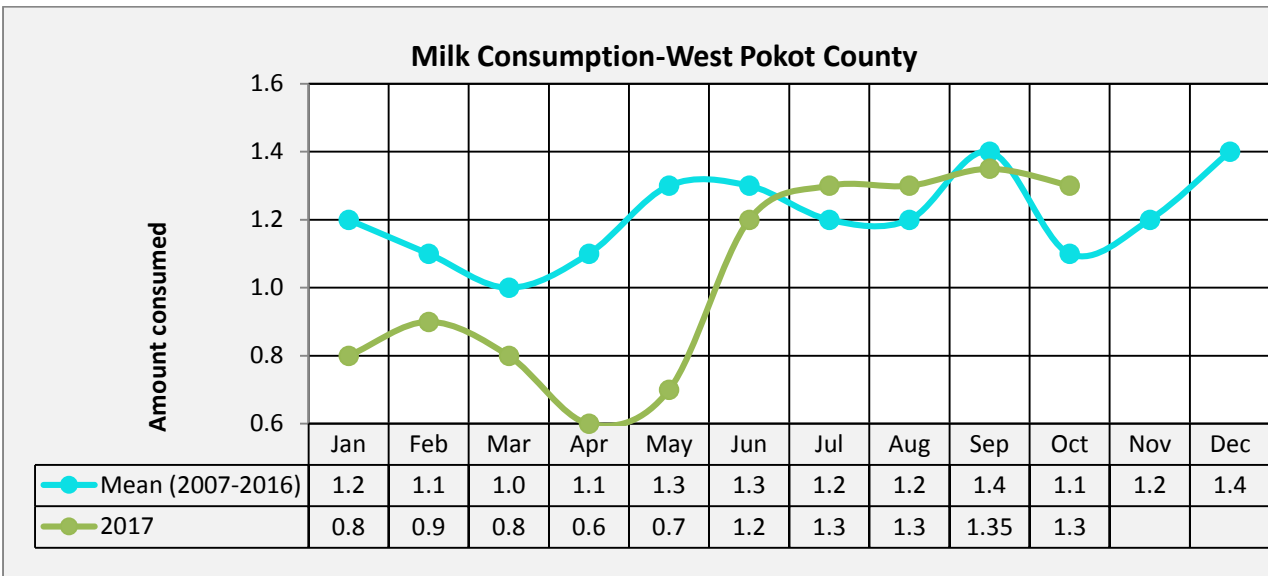
- The current ToT is favourable, pastoralists are obtaining thirteen more kilograms of maize on top of the 67Kg they could obtain previously from sale of a similar goat. Current ToT lies above the short term average for the month by 23 percent. The improved ToT is mainly ascribed to the further drop in maize price coinciding with the rise in goat price.
- Further improvement is anticipated over the next 3-4 months as the price of maize drops with that of goat rising due to availability of enough browse translating to improved body condition.



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Across the Pastoral and Agro Pastoral livelihood zones, the level of milk consumed remained unchanged from the previous month and thus stabilized at 1.3 litres.



- The stability above has mainly been dictated by the quantity of milk produced at household level that has equally remained stable over the past four months.
- However, in relation to milk consumed normally over the same period, current consumption falls above that threshold by eighteen percent.

5.2 FOOD CONSUMPTION SCORE

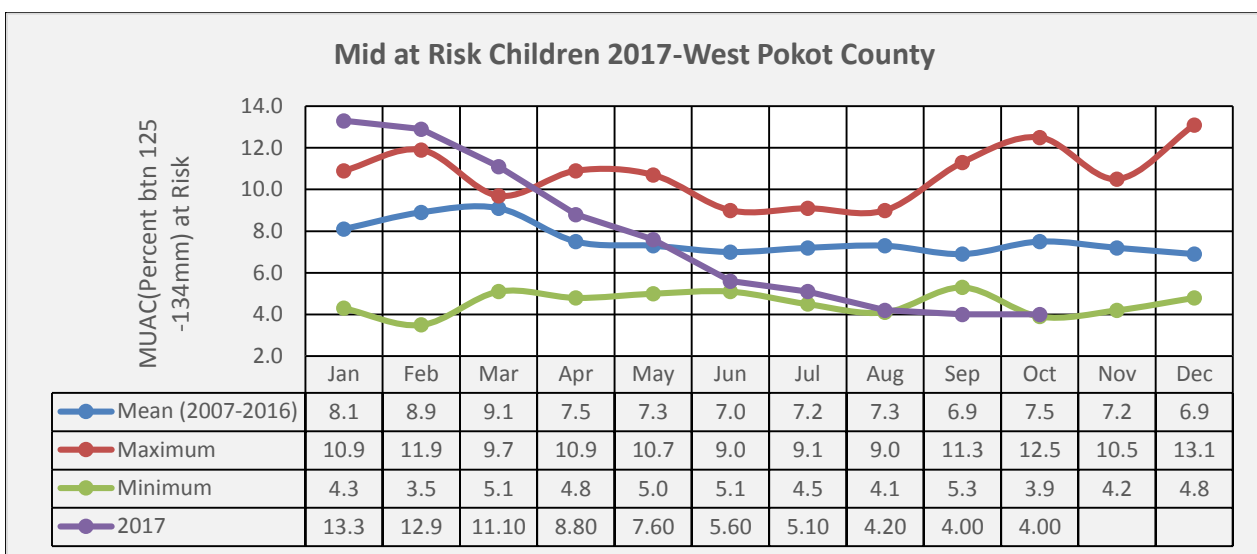
- A total of 54%, 38.7% and 7.3% of households fell within the acceptable, borderline and poor food consumption score categories respectively during the month under review.
- For the two livelihood zones the FCS adjusted slightly to 41.7 from the 40 recorded during the previous month.
- Notable variations between the two livelihood zones included the percentage of households falling under each category with for instance 41.1% of households in the Pastoral zone being classified as having acceptable FCS as opposed to 73.3% of households under the same class in the Agro Pastoral zone. Additionally, the former zone has some households under the poor band.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- Stability in proportion of children rated being 'at risk' of malnutrition was observed and thus stood at four percent during the period under assessment.

- The proportion above falls below the long term average of children rated being ‘at risk’ of malnutrition for the month by 47 percent.



- The notable stability in number of under-fives falling outside the normal range of children at ‘risk’ of malnutrition could be attributed to ease of access to essential nutrition supplements even in hotspots within hard to reach sites through intensive integrated health outreach missions by various agencies.

5.3.2 Health

- For the sampled children during the month of October, the most commonly reported ailments included diarrhea and malaria with fever with few cases of Pneumonia being reported too.

5.4 COPING STRATEGY

5.4.1 Coping Strategy Index (CSI)

- The coping strategy index for the month adjusted downwards slightly to 8.3 from the 11 recorded during the previous month. Therefore, households employed lesser coping strategies in bridging the food gap due to improved food availability during the month under review in comparison to the previous one.
- Continued improvement in livestock productivity more so in the Pastoral zone contributed considerably towards the shift in CSI downwards to 7.6 with that of the Agro Pastoral zone adjusting too slightly downwards to 9.4.
- During the month under analysis most households resorted to relying on less preferred/less expensive food and borrowing as a means of meeting their food needs.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 FOOD

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

6.2 NON-FOOD

Health

- Over 30 integrated health outreaches (with a nutrition bias) supported by Action against Hunger (ACF) and Kenya Redcross targeting sites such as Lokii, Nakwapuo, Asilong, Kamokong'wo, Ngotut, Leng'orok, Churum, Katulpogh, Chepnyal, Tipet, Amoler, Kaloyatum among others were on going during the month under review.

Cash Transfer

- Chakula Kwa Jamii cash transfer programme implemented by world vision with support from world food programme (WFP) and the government of Kenya (GoK) targeting over 15,000 households countywide was on going during the period under review.
- In addition, over 2,000 households mainly along the Turkwel corridor were also being covered under a similar programme implemented by Kenya Redcross during that period.

7.0 EMERGING ISSUES

7.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT

- No significant incidents of insecurity were reported countywide during the month of October.

7.2 MIGRATION

- Neither in migration nor out migration of animals is currently taking place.

7.3 FOOD SECURITY PROGNOSIS

- Livestock body condition is expected to improve further with availability of sufficient forage for utilization being enhanced by the impounding short rains. Consequently, the quantity of milk produced shall increase with market price also anticipated to rise steadily over the next 3-4 months.
- Agricultural productivity is set to experience a significant boost especially for farmers in the Agro Pastoral and Mixed Farming zones cultivating fast maturing crops like beans, bulb onions and Irish potatoes over the short rains season.

- The fall in price of maize per kilogram influenced by availability of adequate maize in markets from the Mixed Farming zone where harvesting is taking place shall coincide with the increasing market value of goat leading to improved terms of trade and consequently translating to a higher purchasing power more so for pastoral households for the next 3-4 months.
- Intensive market activity is likely to be witnessed with most households seeking alternative nutritious foods to supplement their dietary needs and this is likely to have a significant impact in terms of maintaining malnutrition levels to the optimal minimum.
- Food security situation in the county is generally expected to oscillate within the minimal phase with pockets of households experiencing stress being well positioned to bridge their food gaps via markets countywide due to the prevailing calm environment.

8.0 RECOMMENDATIONS

- **Health and Nutrition:** Strengthen the on-going integrated health outreaches through provision of all essential nutrition and medical care services, stock pile drugs in all health facilities and avail adequate number of health personnel to support outreaches in all hotspots within the county.
- **Veterinary:** Intensify disease surveillance efforts in areas prone to CBPP, PPR and CCPP while focussing on animal health by providing essential veterinary services through mass vaccination drives and treatment where applicable.
- **Agriculture:** Minimize losses associated with poor storage by acquainting farmers in the Mixed Farming zone with elementary post-harvest handling techniques such as use of hermetic storage bags while advocating for cultivation of fast maturing drought resistant crops especially in the Agro Pastoral zone over the short rains season.
- **Livestock:** Upscale efforts aimed at stock piling livestock feeds in strategic hay reserves for use during the dry season by providing farmer groups with pasture seeds so as to maximize production over the short rains season.