

National Drought Management Authority

WEST POKOT COUNTY

DROUGHT EARLY WARNING BULLETIN FOR SEPTEMBER 2017



A Vision 2030 Flagship Project



SEPTEMBER EW PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- The county experienced rainfall during the month under review with a distribution in time of 10-13 days. In reference to Nasukuta rainfall station, the cumulative rainfall for the 6-month period (April-September 2017) represents 90% of the total rainfall received normally for the period.
- Continued improvement in the condition of vegetation was witnessed as exemplified by the adjustment in VCI-3month for the county to 53 from 45 recorded in August. All sub counties manifested above normal vegetation greenness.
- Across all livelihood zones forage condition is very good.

Socio Economic Indicators (Impact Indicators)

- All livestock species exhibit a good body condition and on an improving trend. Household access distance to water sources remained stable and fell within the normal range for the month. Milk production and consumption was confined to the normal range and stable in relation to August.
- Terms of trade improved considerably surpassing the normal range with no migration taking place during the month.
- Coping strategy for the month stabilized at 11 with only seven percent of households being considered to be having a poor food consumption score. Proportion of children 'at risk' of malnutrition remained unchanged at 4.0% and fairly within the normal range for the month under review.

Early Warning (EW) Phase Classification

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

Biophysical Indicators	Value	Normal range
Rainfall (% of normal for Nasukuta Station)	90	90-110
VCI-3month (County)	53	>35
VCI-3month (Pokot Central)	51	>35
Forage Condition	Good	Good

Production Indicators	Value	Normal range
Livestock Body Condition	Normal	Normal
Milk Production	1.4 Litres	>1.3 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (attributed to drought)	No deaths	No deaths

Access Indicators	Value	Normal range
Terms of Trade (ToT)	77	>70
Milk Consumption	1.4Litres	>1.3Litres
Return distance to water sources (household)	2.6 km	0.0 -2.7km
Cost of water at source (Ksh /20 litres)	Kshs.5	<Kshs.5.0

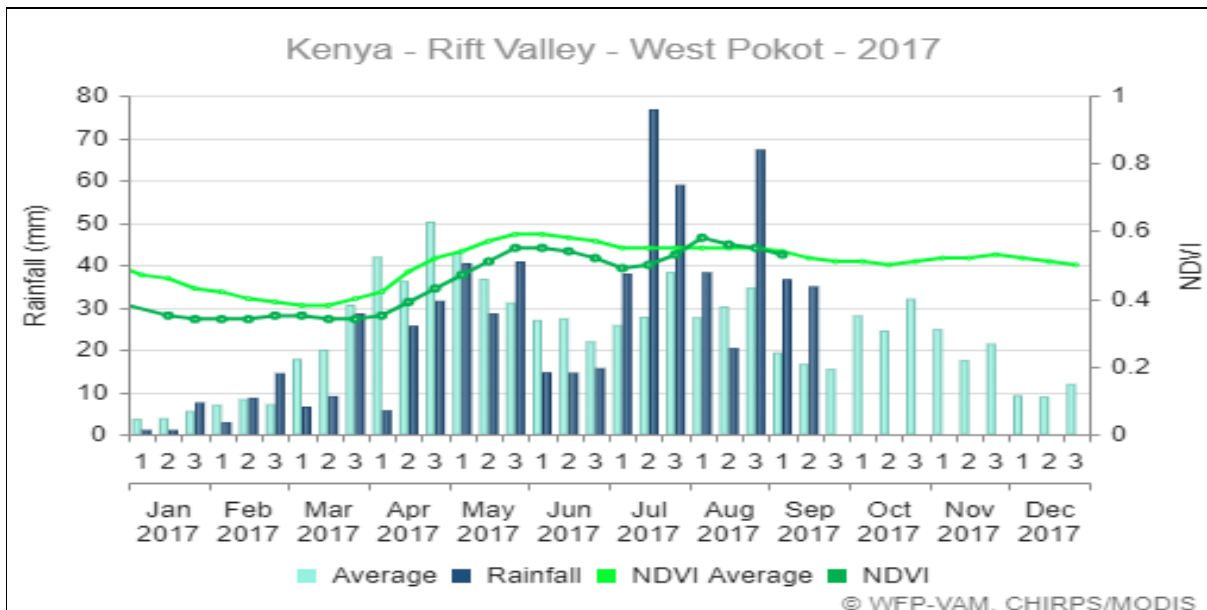
Utilization Indicators	Value	Normal range
Nutrition status, MUAC (% at risk of malnutrition)	4.0	0.0- 6.9
Coping Strategy Index (CSI)	11	<13.2
Food Consumption Score (FCS)	40	>35

<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 albeit of less intensity in comparison to the preceding two months was received across most parts of the county during the month under review.
- Rainfall distribution in time for most sites across all livelihood zones in the county ranged between 10 to 13 days during the month of September.



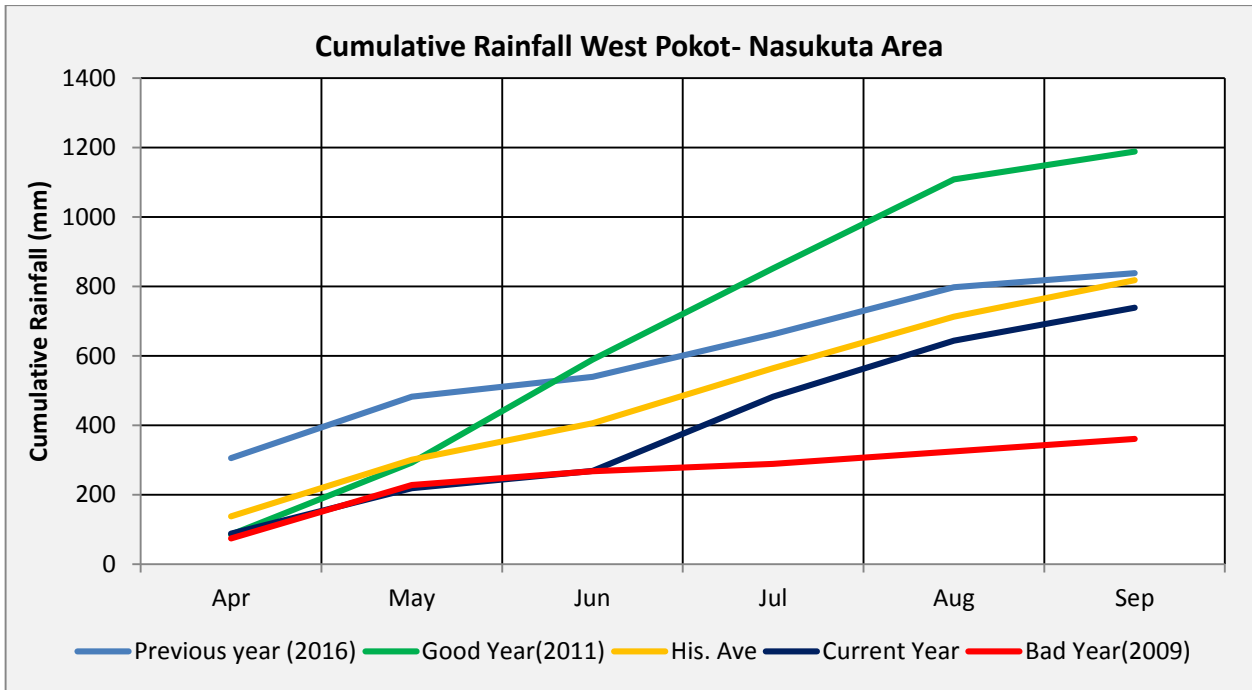
Source: VAM-World Food Programme

- Dekadal rainfall for September was slightly depressed in comparison to that of the previous two months but still remained superior in relation to the expected normally. Dekad one and two recorded an above average performance.
- The current normalized difference vegetation index (NDVI) values are at par with the historical NDVI values due to the above normal rainfall received over the July, August and September (JAS) period.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- An even distribution in space was witnessed across the Pastoral and Agro Pastoral livelihood zones with precipitation of fair to good amounts impounding most areas.
- For example, Nasukuta rainfall station recorded 95.5mm of rainfall in 13 days and this translated to 91 percent of the rainfall that is normally received during the month under review.

- Statistical analysis of data from the aforementioned rainfall station indicates that the cumulative rainfall for the six month period (April to September 2017) amounts to 738.9mm against the cumulative fourteen year rainfall average for the same period that amounts to 818mm.
- The rainfall amount above for the current year represents 90 percent of the average rainfall normally received for the period and thus falls within the desirable range for the season.
- In comparison to the cumulative rainfall recorded for the same period during the previous year (April to September 2016), the current cumulative rainfall falls short by twelve percent.
- Historically, the period April to September 2009 rates as the bad year as illustrated below.



1.3 OTHER EVENTS

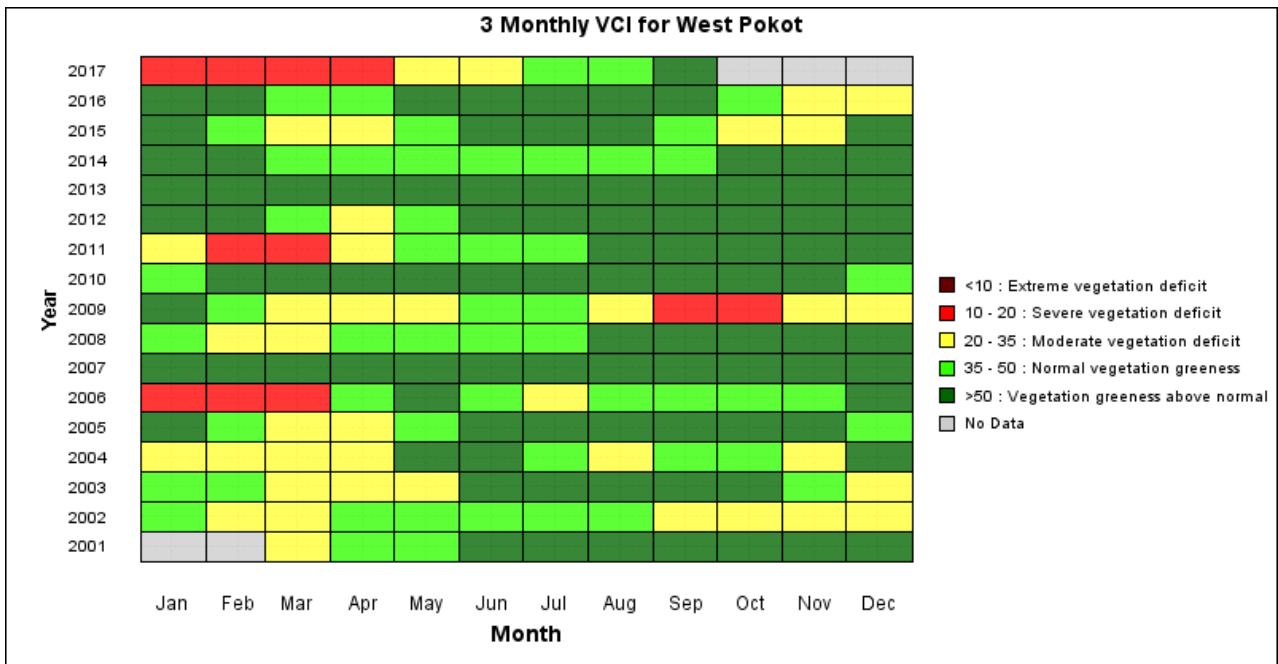
- There was no any other notable event such as floods, land/mud slides, lightning strikes nor hailstorms that occurred during the month under review.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- Below is a county matrix that depicts how months have been categorized in terms of agricultural drought on the basis of VCI thresholds. Each month has been placed under an appropriate vegetation deficit category upon conducting a retrospective analysis.
- Comparison of the relative NDVI change with respect to maximum and minimum historical NDVI value forms the basis for VCI.



Source: Boku University

- Vegetation Condition Index (VCI-3month) for the month under review is 53 for the entire county and this depicts above normal vegetation greenness.
- The vegetation condition has improved greatly to above normal level across all parts of the county as evidenced by the change in VCI-3month from 45 recorded in August to 53 during the current month. All sub counties are currently exhibiting above normal vegetation greenness.
- Continued receipt of good off season rains has contributed to the improvement due to significant regeneration having taken place countywide.

2.1.2 Pasture

- Pasture condition remains good across all livelihood zones and is above normal in comparison to the pasture situation during a normal year. In comparison to the previous month, an

improvement was noted in terms of regeneration and this could be attributed to the rainfall received over the JAS period.

- The condition of pasture is anticipated to improve further with the onset of the short rains.
- Currently there is no notable constraint to pasture access across all livelihood zones.
- Situational analysis of the two livelihood zones indicates that there is no significant variation in pasture quality and quantity.

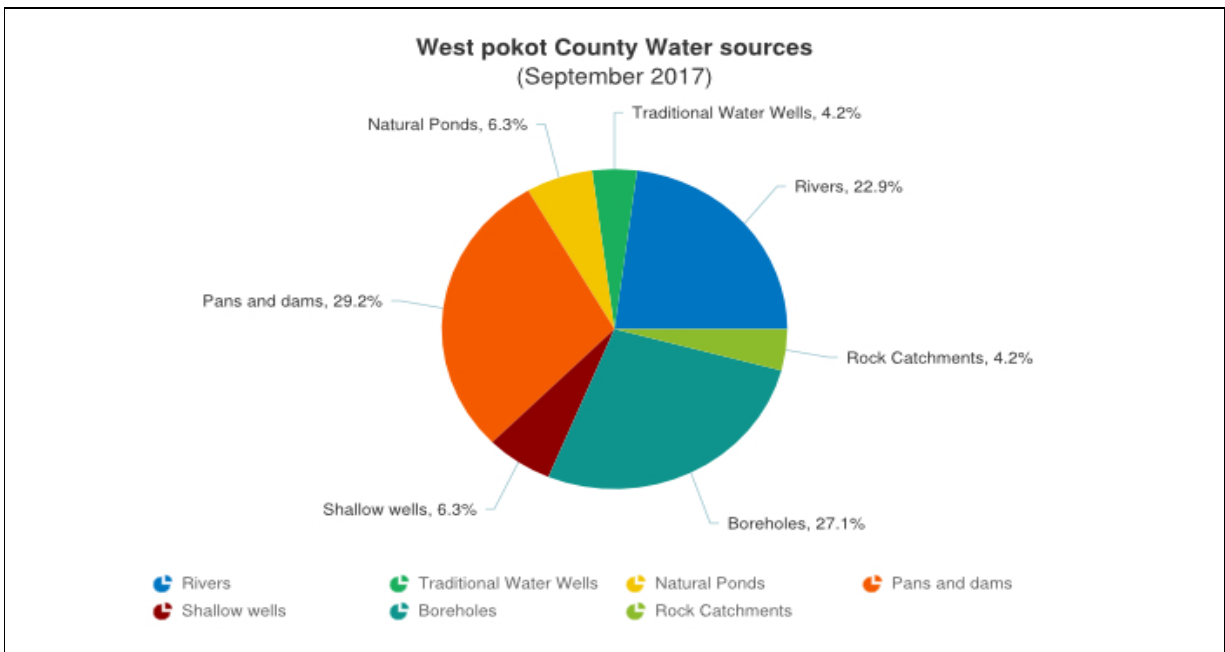
2.1.3 Browse

- Equally, the condition of browse is good across the two livelihood zones. When compared to the browse situation during a normal year, it ranks above normal. In relation to the previous month, a significant improvement was noted and that was due to receipt of good rains during the month under review.
- There is no significant restriction to browse access across the two livelihood zones.
- For the Pastoral and Agro Pastoral livelihood zones, browse quality and quantity remains invariable.

2.2 WATER RESOURCE

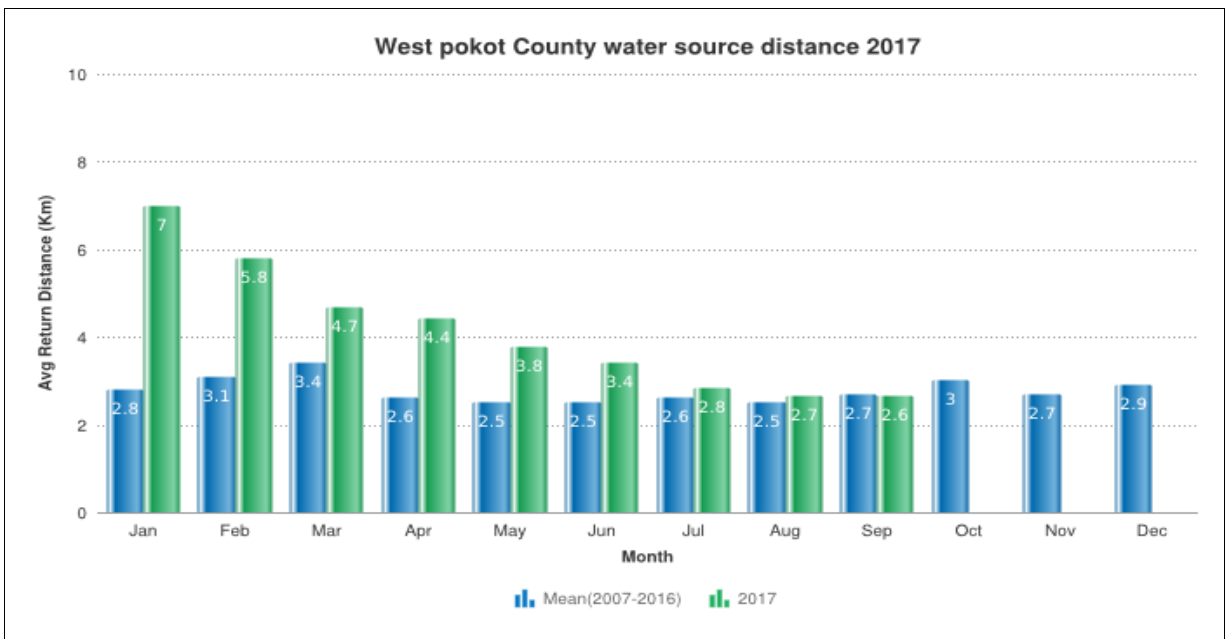
2.2.1 Sources

- The main sources of water currently in use for household and livestock needs include rivers, boreholes, pans and dams. Majority of households, approximately 29.2% reported to be using Pans while 27.1% and 22.9% households were drawing water from boreholes and rivers respectively.
- Due to receipt of rainfall during the month under review, the recharge level in open water sources rose remarkably and this is an improvement in comparison to the situation in August.
- Save for water pans that are normally dry during this time of the year, the current main sources in use are the normal sources where households obtain water from during this time of the year.
- In comparison to the previous month, the volume of water along permanent and seasonal rivers was notably high with normal flow being witnessed. Normally, the river volume is low during this period of the year and thus a significant dissimilarity currently.



2.2.2 Household Access and Utilization

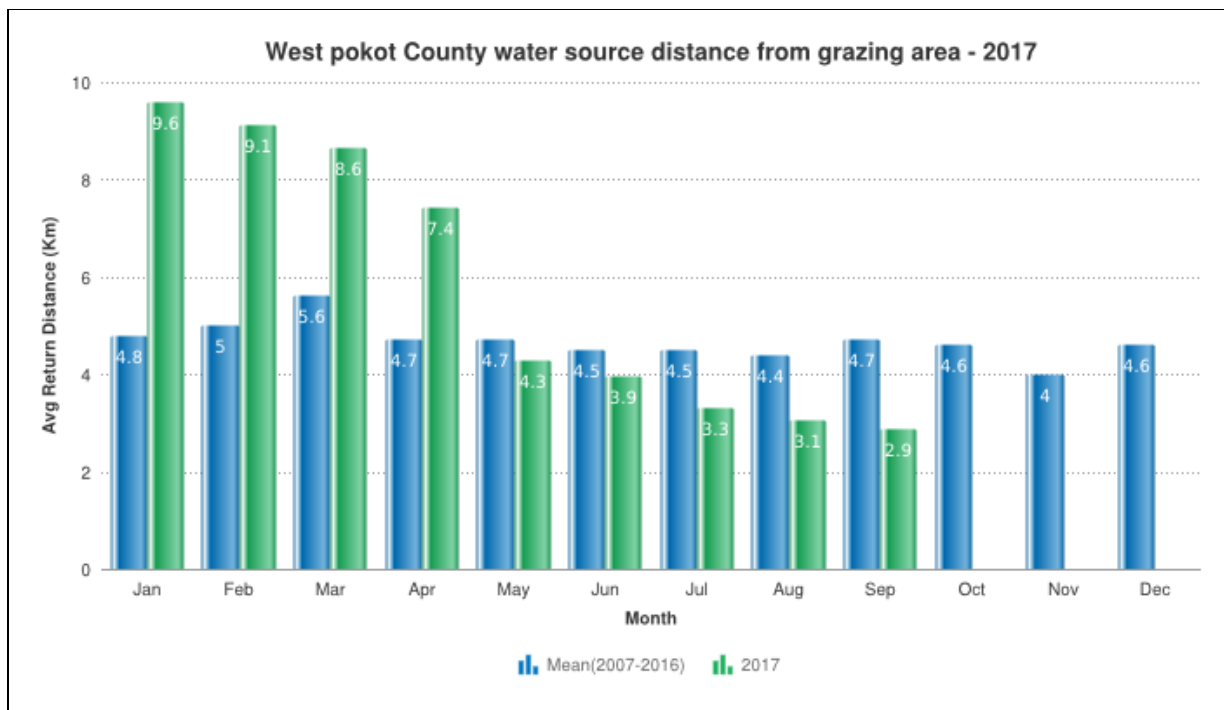
- Household return distance to water source remained stable in relation to the previous month at 2.6 Km. This distance is lower than the long term average distance for the month by four percent.
- The trekking distance to water source was shorter in the Agro Pastoral zone compared to that of the Pastoral zone. The stability above in terms of distance to water source could be attributed to improved water availability across all areas in the county resulting from receipt of adequate rainfall and thus recharge of water sources in close proximity to households..



- For both livelihood zones, the waiting time at water source is generally minimal.
- Average household water consumption per person per day for the Agro Pastoral and Pastoral livelihood zones is 30-35 litres and 25-30 litres respectively.
- Water at source is free of any charges but in urban centres a 20 litre jerrican costs KShs.5 across most water kiosks. These charges are below the normal range for the period.

2.2.3 Livestock Access

- Livestock return distance from grazing areas to water source during the month under review was 2.9 Km, that being a slight decrease from the 3.1 Km recorded in August. When compared to the 4.7 Km trekking distance normally, current distance lies below the normal range by 38 percent.
- The trekking distance from grazing areas to water sources was shorter in the Agro Pastoral livelihood zone in comparison to the Pastoral livelihood zone.



- Continued receipt of rainfall and pasture regeneration within the vicinity of water sources were the constituent elements influencing the reducing livestock trekking distance during the month under appraisal.
- Watering frequency for all livestock species across the Pastoral and Agro Pastoral livelihood zones is currently seven times in a week.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

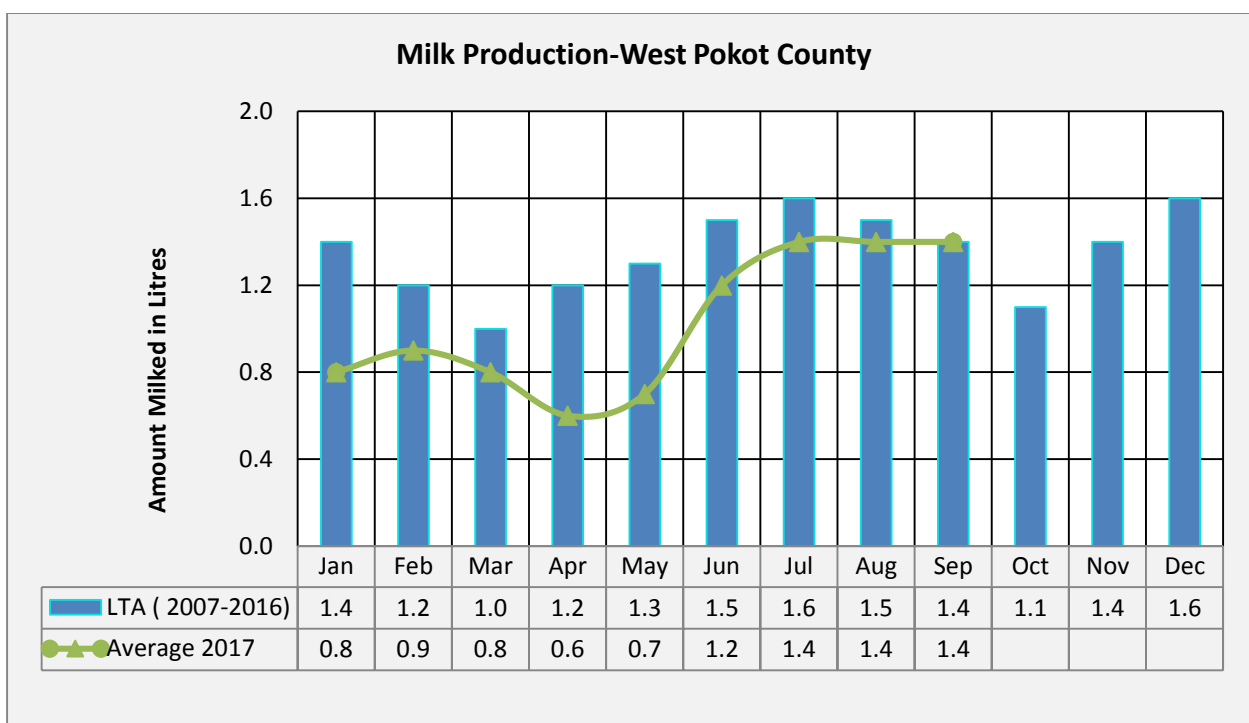
- The body condition for all livestock species across the Pastoral and Agro Pastoral livelihood zones is good.
- Sustenance of pasture within adequate levels over the short rains period is contemplated to be a key driver that will stabilize the livestock body condition and even occasion improvement in some areas for the next four months.
- When compared to alike periods during previous years, the body condition of all species is above normal and this is accredited to availability of sufficient forage and water within the county constraining animals to feed within a considerably shorter distance from households.

3.1.2 Livestock Diseases

- Contagious bovine pleuropneumonia (CBPP) in cattle was reported by most households in Chepareria and Riwo wards.
- Incidents of contagious caprine pleuropneumonia (CCPP) in goats were reported mainly in Wei Wei ward.

3.1.3 Milk Production

- Similar to the previous month, the two livelihood zones reported an average of 1.4 litres milk produced. Cattle is the main producer of milk in the county.
- Current household milk production is at par with the normal household milk production for the month under assessment.
- Factors influencing production remained relatively the same for the past three months hence the stability in the observed trend.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

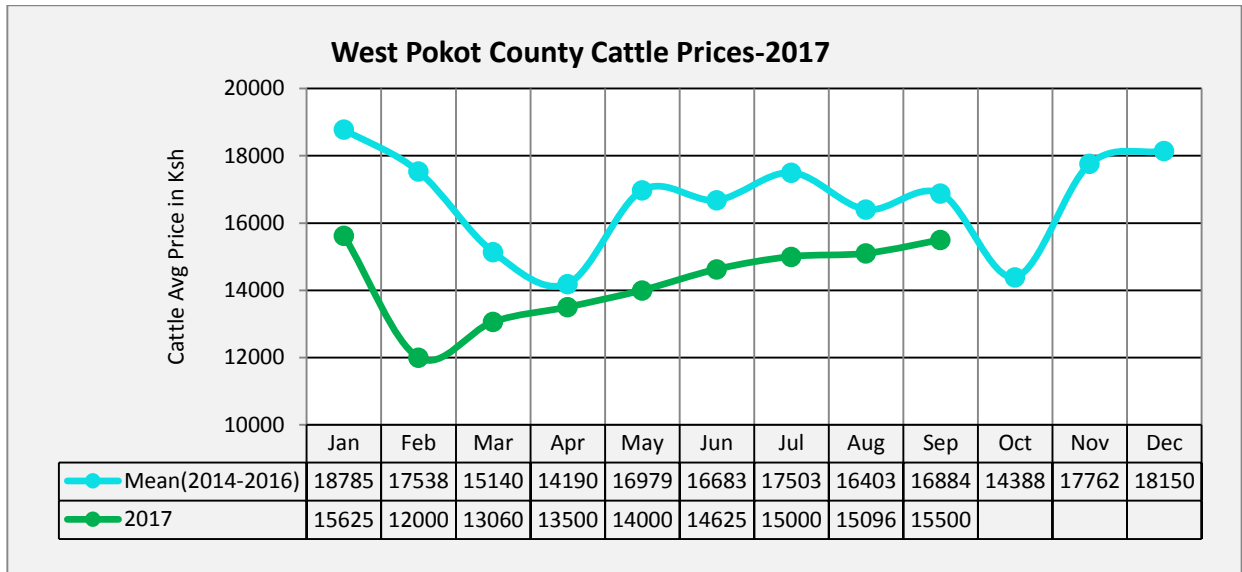
- Maize, Beans and Irish Potatoes are the main crops planted by majority of the farmers (approximately 50 percent) during the long rains season.
- Maize harvesting mainly in the Mixed Farming zone has been derailed by the rainfall that has persisted thus interfering with the drying period.
- Most markets along the Agro Pastoral livelihood zone such as Sigor and Ortum are well positioned with horticultural produce ranging from bulb Onions, Water melon to Pawpaw fruits supplied from Batei, Kokwotendwo, Wakorr and along Wei Wei River.
- A drop in maize yield is highly anticipated across the county owing to the mature maize rotting that has been witnessed as a result of the excessive rains coupled with the earlier losses attributed to FAW/Fall Army worm infestation.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle prices

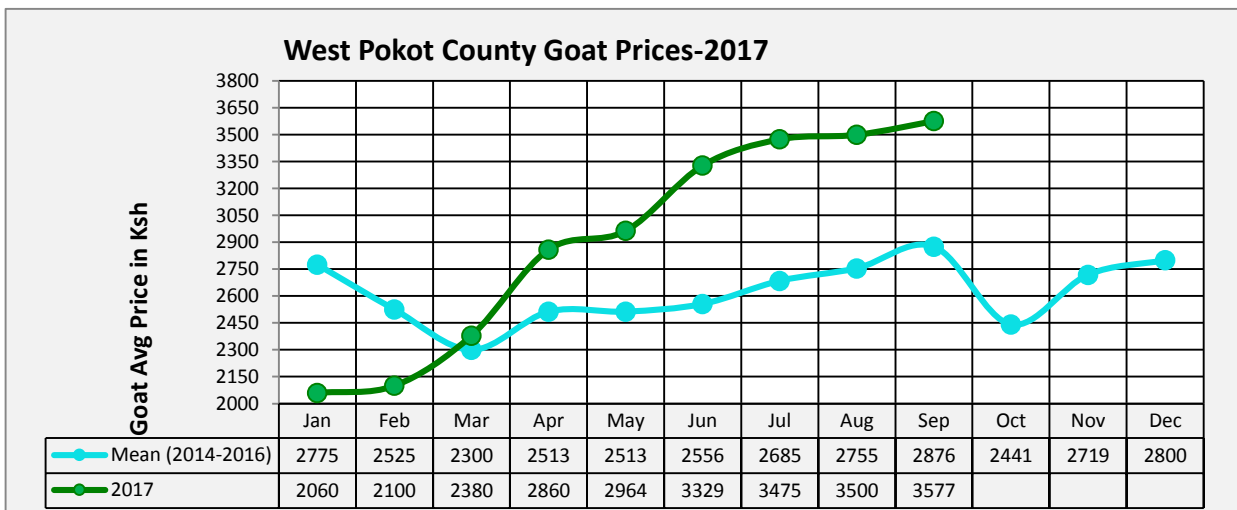
- During the month under review, cattle traded at Ksh. 15,500 at the market. This being a significant increase from the Ksh. 15,096 recorded during the previous month.
- Good body condition as a result of pasture and water availability in sufficient quantities within the county is the major factor contributing to the increase in price.



- The current cattle price is below the short term average price for the month by 9 percent.

4.1.2 Goat Prices

- A slight increase in price was recorded with a goat retailing at Ksh.3,577 across all livelihood zones during the month under review.

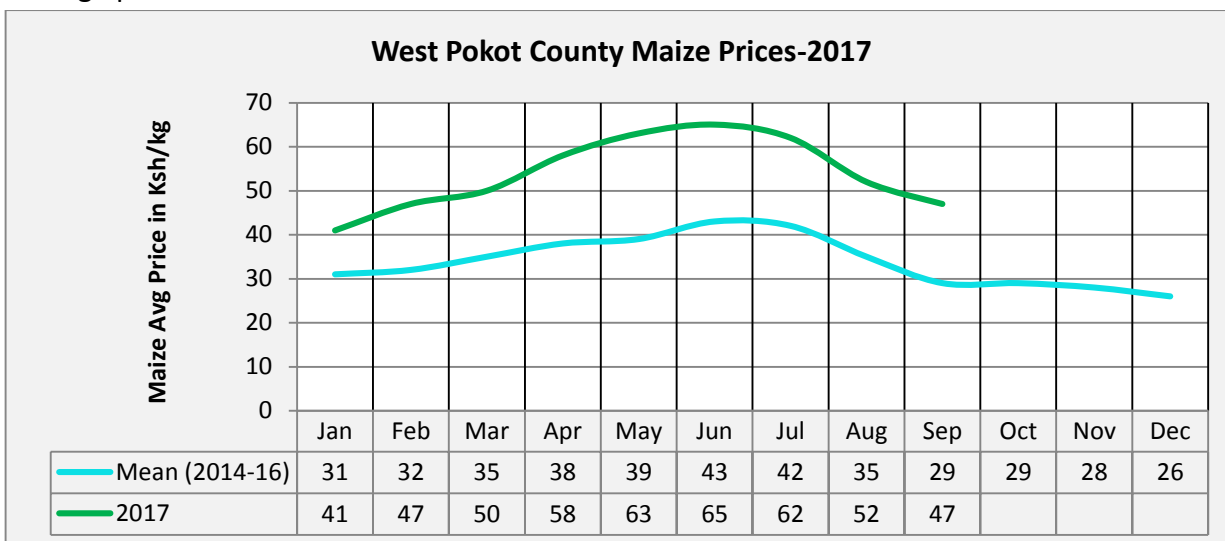


- Improved goat body condition as a result of browse availability in adequate quantities within the county was the major causal factor behind the shift in price upwards.
- In comparison to the short term average price for the month, the current market value of a goat is twenty four percent above.

4.2 CROP PRICES

4.2.1 Maize

- Maize recorded a drop in price per kilogram from Ksh.52 in August to Ksh.47 in September.
- However, the current market price still remains 62 percent above the three year short term average price for the month under review.

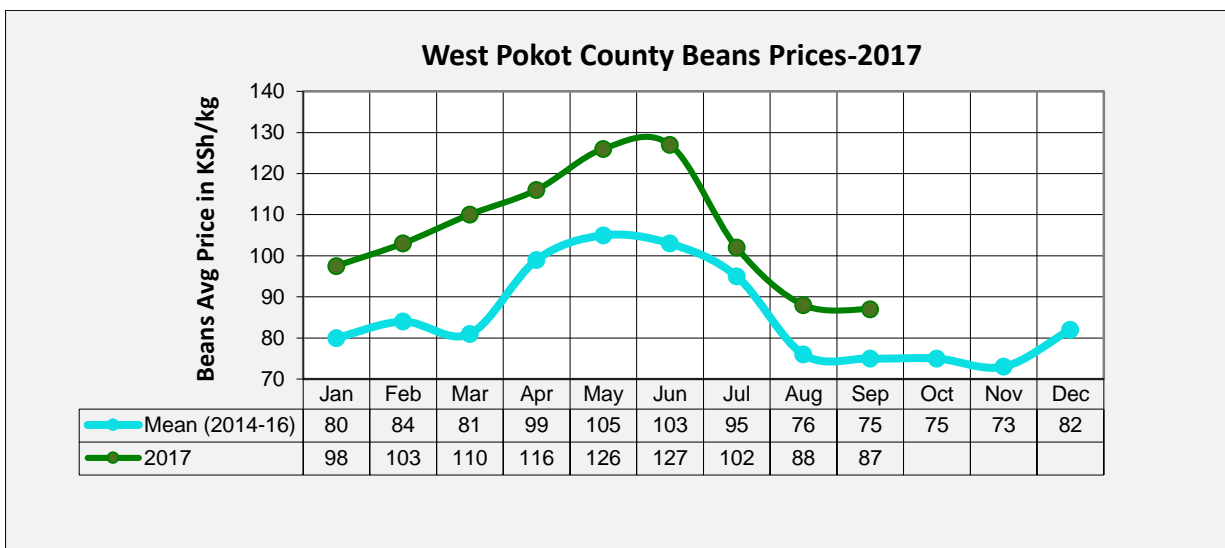


- There is a slight difference in price across the two livelihood zones and this is attributable to the fact that the Pastoral zone is dependent on the Agro Pastoral zone. Generally, a significant decrease in price has been witnessed and it's mainly due to improved availability across all sites.
- A further drop is anticipated as market reliance subsides with more stocks from the Mixed Farming zone likely to hit the markets over the next two months.

4.2.2 Beans

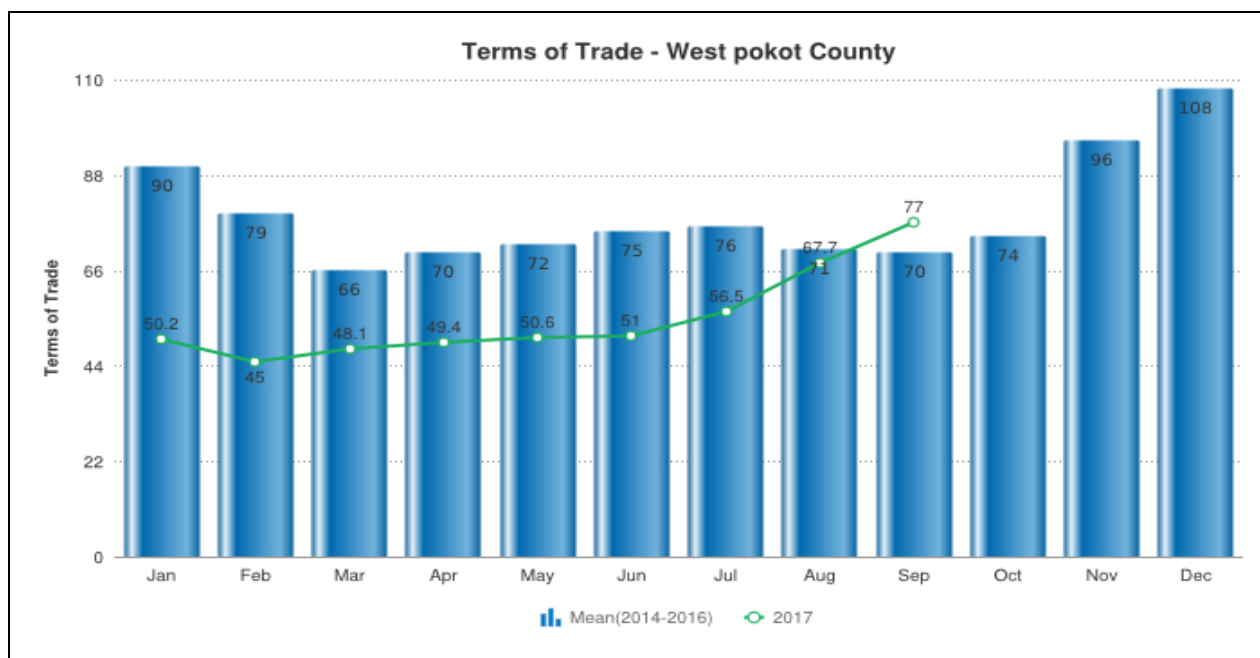
- Beans price remained stable at Ksh. 87 per kilogram during the month under review.
- The continuous flow of beans to markets witnessed over the last two months following the harvest in the Mixed Farming and Agro Pastoral zones has since slumped due to dwindling stocks within the internal sources hence the stability.
- During the month under review, a significant variation in price was noted across the two livelihood zones and that is down to limited stocks reaching some markets in the pastoral zone.

- When compared to the three year short term average price for a normal season during this time of the year, the current market price of beans ranks above by sixteen percent.



4.3 LIVESTOCK PRICE RATIO/ TERMS OF TRADE (TOT)

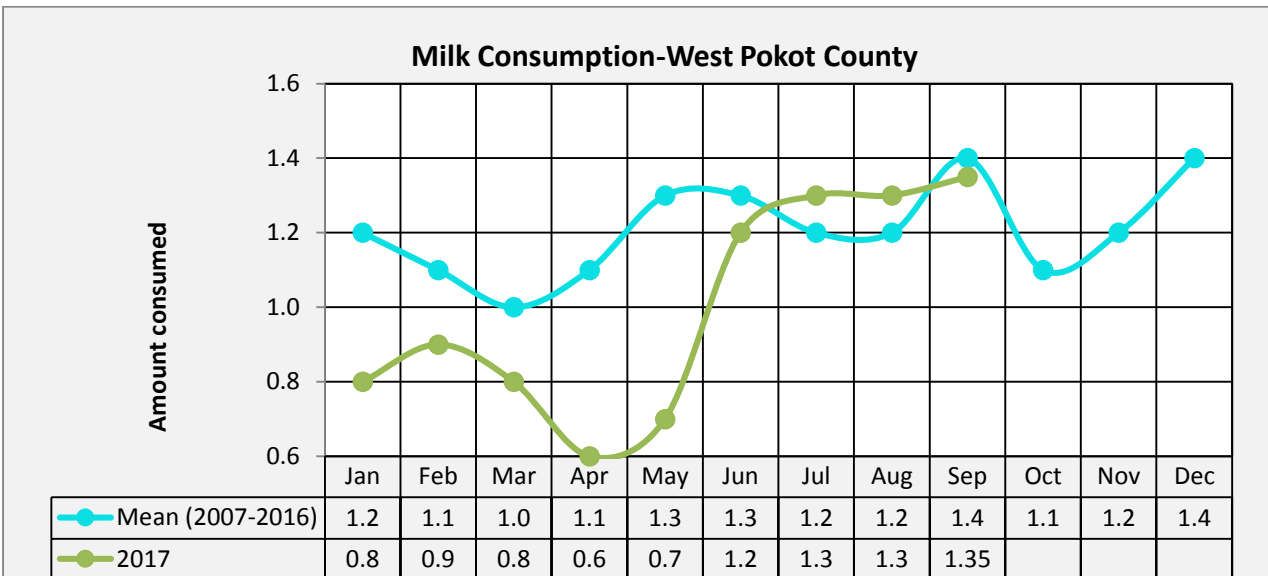
- The current ToT is favourable, pastoralists are obtaining nine more kilograms of maize on top of the 67Kg they could obtain previously from sale of a similar goat. The current ToT is 10 percent above the short term average ToT for the month. The improved ToT is mainly ascribed to the significant drop in maize price coinciding with the rise in goat price.
- A further improvement is forecasted over the next three months with the onset of the short rains as the price of goat is anticipated to rise further with that of maize falling considerably.



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- Milk consumption level remained stable at 1.3 litres across the Pastoral and Agro Pastoral livelihood zones.



- Milk production has remained relatively stable over the last three months thus impacting consumption to assume the same stability.
- Current consumption is at par with what has normally been consumed over time for the same period.

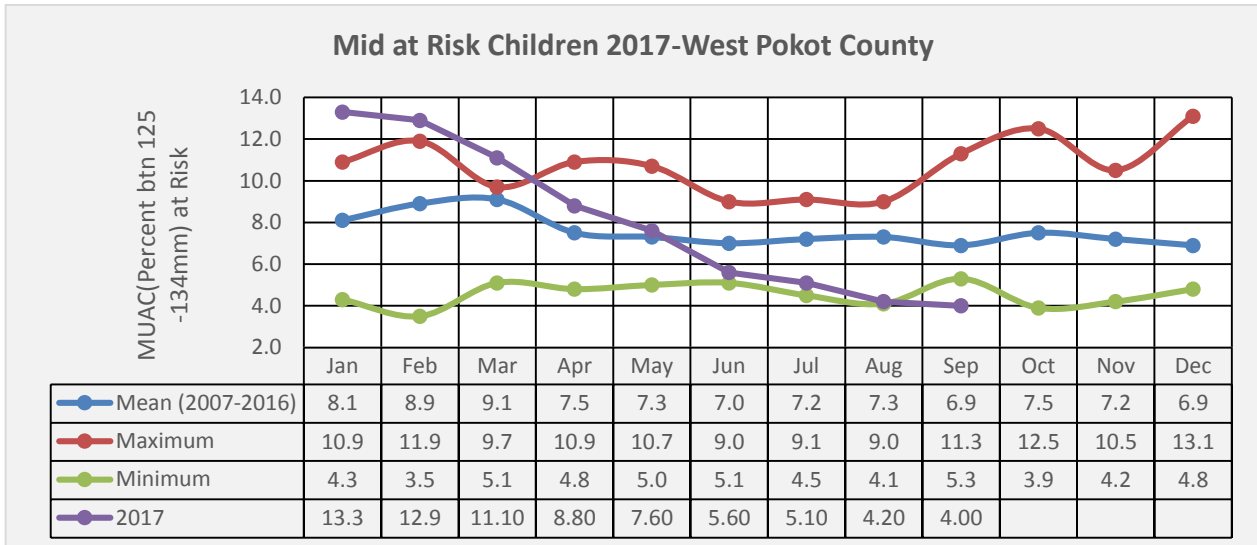
5.2 FOOD CONSUMPTION SCORE

- A total of 54%, 39% and 7% of households fell within the acceptable, borderline and poor food consumption score categories respectively during the month under review.
- An improvement in FCS was noted with the two livelihood zones having a mean score of 40 as opposed to the 38 during the previous month.
- Comparison of the two livelihood zones reveals glaring disparities with an illustration of 97% of households in the Agro Pastoral zone being classified as having acceptable FCS in comparison to 48.9% of households under the same class in the Pastoral zone.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- Proportion of children rated being 'at risk' of malnutrition remained stable at four percent.
- Compared to the long term average for the period in a normal year, the current proportion of children rated being 'at risk' of malnutrition is lower by 43 percent.



- Availability of essential nutrition services, enhanced health education through integrated health outreaches and improved access to food especially in hard to reach areas are the major determinants behind the observed stability in the number of under-fives falling outside the normal range of children at 'risk' of malnutrition.

5.3.2 Health

- The most prevalent ailments reported during the month under review among the sampled children included Malaria with fever and diarrhea.

5.4 COPING STRATEGY

5.4.1 Coping Strategy Index (CSI)

- Households employed the same level of coping as that of the previous month as exemplified by the CSI for the month that remained stable at 11.
- Improved livestock productivity along the Pastoral zone had a positive impact in terms of stabilizing the CSI at 10 with that of the Agro Pastoral zone being 12.8.
- Reliance on less preferred/less expensive food was the outstanding coping strategy employed by majority of the households during the month under analysis.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 FOOD

- During the month of September, no relief food distribution was conducted.

6.2 NON-FOOD

Peace and Security

- SIKOM peace network conducted peace meetings during the month under review targeting conflict hotspots along the boundary of West Pokot and that of Turkana and Elgeyo Marakwet.

Health

- The 10 integrated health outreaches supported by Kenya Red Cross (KRCS) and the 19 facilitated by Action against Hunger (ACF) both offering high impact nutrition interventions (HINI) for mother, infant and young child nutrition targeting areas such as Chesta, Sekerr, Tamkal, Kaptabuk, Cheptya, Parua among others were on going during the month under review.

7.0 EMERGING ISSUES

7.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT

- Banditry attacks that resulted in loss of four lives and estimated sixty cattle stolen were reported in Lokori and Chesegon along the Turkana-Pokot-Marakwet border during the month under assessment.

7.2 MIGRATION

- No major livestock migration is currently taking place save for few animals that are still trooping back from Uganda into the county.

7.3 FOOD SECURITY PROGNOSIS

- The body condition of livestock is projected to improve further with the short rains promoting and maintaining pasture availability within desirable levels for livestock utilization. Consequently, livestock productivity shall experience a boom with milk production level and market price likely to shift upwards significantly over the next three months.
- The purchasing power is expected to increase as the terms of trade improve due to the rising price of goat likely to coincide with the falling price of maize as more stocks hit the market from the Mixed farming zone where harvesting is set to take place over the next two months.

- Malnutrition levels are anticipated to drop further due to improved access to nutritious foods by majority of households especially along the pastoral zone whose purchasing power shall be stronger.
- Normal market functionality coupled with a peaceful environment more so along major access roads to markets shall suffice in terms of bridging food gaps for pockets of households that may be stressed during this period.

8.0 RECOMMENDATIONS

- **Livestock:** Enhance pasture conservation through rehabilitation of strategic grazing zones, rangeland reseeding and advocating for a grazing management regime in addition to stockpiling crop residuals and hay in strategic reserves for utilization during the dry season.
- **Agriculture:** Upscale sensitization efforts focussing on farmers in the Mixed Farming zone by providing basic education on post-harvest handling through demonstrations to minimize losses associated with poor crop storage.
- **Health and Nutrition:** Upscale nutritional screening and supplement distribution for the underweight in areas such as Serewo, Kacheliba, Konyao and Kauriong that exhibit high rates of malnutrition and support active case finding while providing health education on water treatment techniques countywide.
- **Veterinary:** Improve animal health hence productivity through mass treatment and vaccination campaigns targeting sites along the county borders where incidents of CBPP and CCPP have been reported.
- **Peace and Security:** Intensify peace building efforts amongst communities residing along the county borders such as Turkwel and Cheseгон while conducting police patrols along the Kapenguria-Lodwar highway.