

National Drought Management Authority
WEST POKOT COUNTY
DROUGHT EARLY WARNING BULLETIN FOR DECEMBER 2017



A Vision 2030 Flagship Project



DECEMBER EW PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- Poor to no rainfall was recorded across most areas in the county mostly in both first dekad and second with poor spatial and temporal distribution. The cumulative rainfall for the 6-month period (Jul-Dec) for Nasukuta rainfall station amounts to only 13% of the normal for the same period.
- The vegetation condition showed worsening trend across most parts as demonstrated by the shift in VCI-3month from the 72.8 in November to 71 recorded in December for the county. All Sub Counties recorded above normal vegetation greenness band. Forage condition is fair In December.

Socio Economic Indicators (Impact Indicators)

- Livestock body condition of cattle and sheep is notably fair with anticipated worsening trend. Distance to water sources increased slightly and still lies below the normal range. Milk production is below normal levels and consumption at household level is at par with the normal range. Terms of trade is favourable in December.
- Pastoralists are contemplating migrating outside the county, due to diminishing forage in their normal season grazing area.
- Most households fell within the acceptable food consumption band with 53%. Coping strategy index was at 8.6 in December. Proportion of children 'at risk' of malnutrition was at 4.1% but still remain within the normal

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) | 13 | 90-110 |
| VCI-3month (County) | 71 | >35 |
| VCI-3month (Pokot Central) | 76 | >35 |
| Forage Condition | Fair | Good |

| Production Indicators | Value | Normal range |
|--|-----------|--------------|
| Livestock Body Condition | Normal | Normal |
| Milk Production | 1.5Litres | >1.6 Litres |
| Livestock Migration Pattern | Usual | Normal |
| Livestock deaths (attributed to drought) | No deaths | No deaths |

| Access Indicators | Value | Normal range |
|--|------------|--------------|
| Terms of Trade (ToT) | 105 | >76 |
| Milk Consumption | 1.4 Litres | >1.2 Litres |
| Return distance to water sources (household) | 2.6 km | 0.0 -2.6km |
| Cost of water at source (Ksh /20 litres) | Kshs.5 | <Kshs.5.0 |

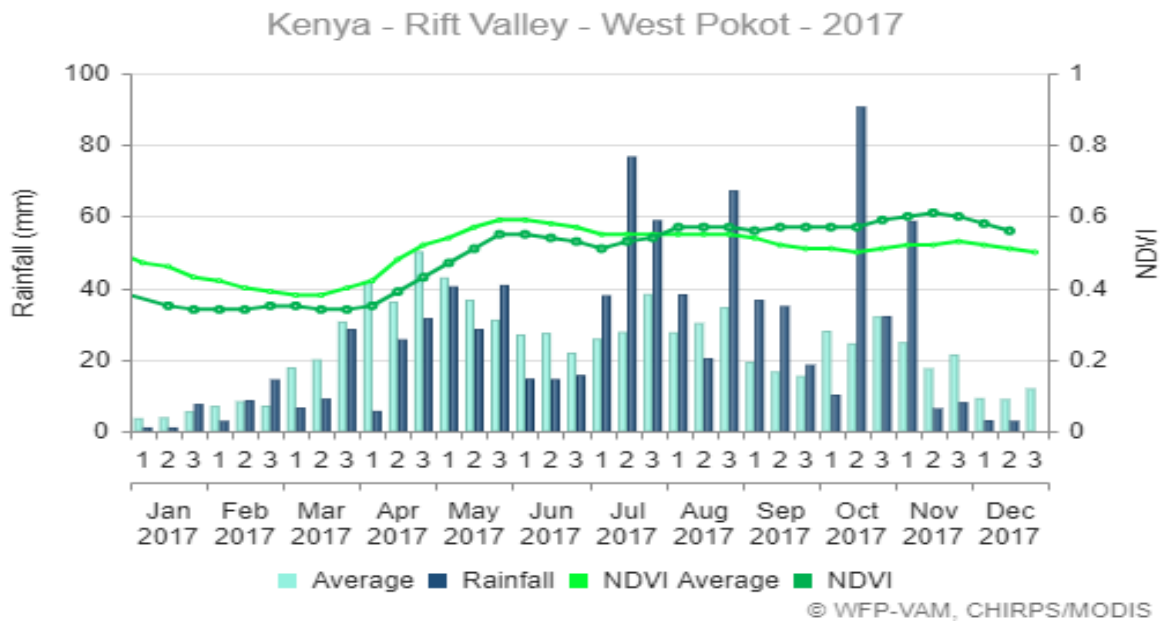
| Utilization Indicators | Value | Normal range |
|--|-------|--------------|
| Nutrition status, MUAC (% at risk of malnutrition) | 4.1 | 0.0- 7.5 |
| Coping Strategy Index (CSI) | 8.6 | <14.5 |
| Food Consumption Score | 40.6 | >35 |

| | | | | | | | | | | | |
|--|---|--|--|------|-----|-----|-----|------|-----|-----|-----|
| <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

- In December, which is the last month in the short season (OND) recorded less rainfall with reduced intensity compared to month of November. The cessation of short rains occurred early in the month.
- No rainfall was received in lowlands, only in highland areas where light showers were received during the month with a poor temporal and spatial distribution.



Source: VAM-World Food Programme

- The dekadal rainfall in December continued to reduce as compared to the previous month. The amounts were below normal in both the first dekad and the second dekad as illustrated above. Both dekads received similar amounts of precipitation
- The current NDVI values were above the historical NDVI values due to fairly good season. Notably, the trend is declining with the reducing intensity of rainfall.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- All rain-gauge stations located in both lowlands recorded no rainfall, apart from Koibos and Kabichbich which received traces of precipitation.
- Most parts of the county remained dry within the month.

1.3 OTHER EVENTS

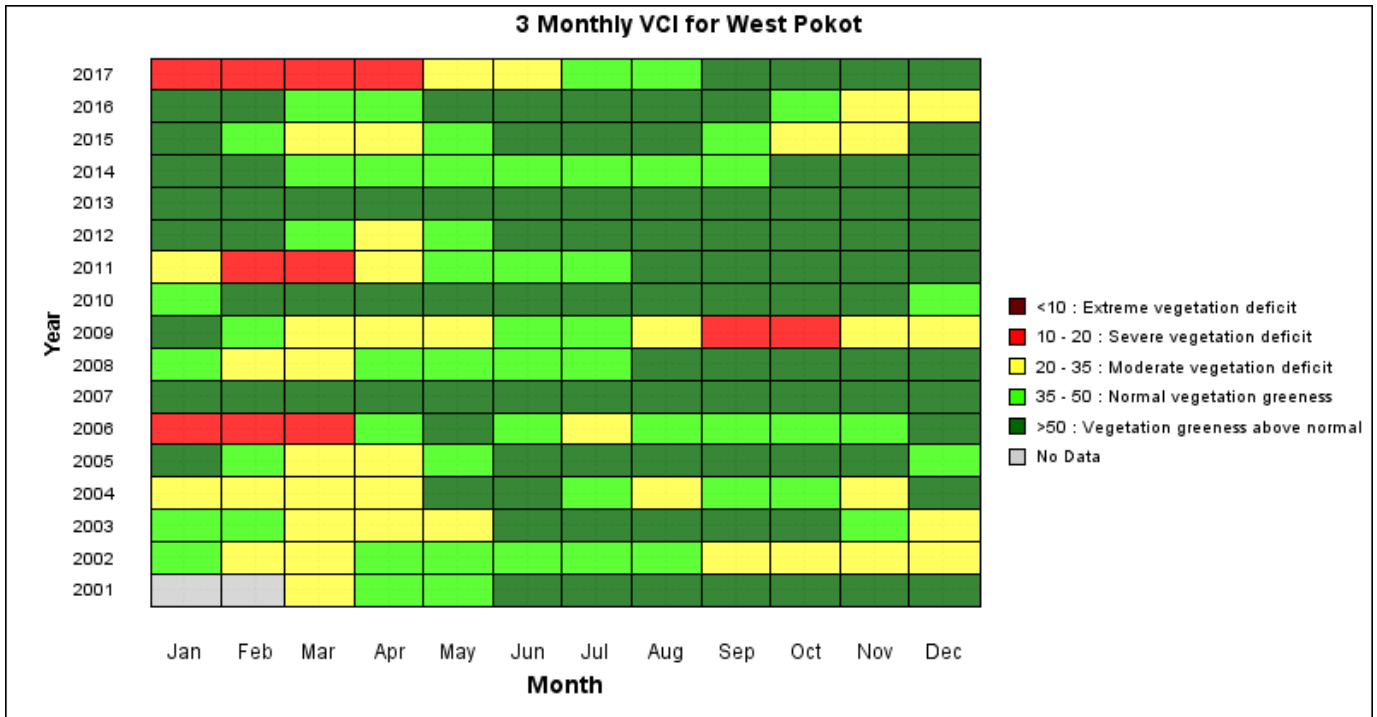
- There was no any other notable event such as floods, land/mud slides, lightning strikes nor hailstorms that occurred during the month under review.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- Below is a county VCI matrix, referring to agricultural drought analysis. It depicts how months have been categorized based on relevant VCI thresholds. The vegetation condition has been analysed retrospectively under an appropriate vegetation deficit band for the month under review.
- The basis for the vegetation condition index involves comparison of the relative NDVI (Normalised Difference Vegetation Index) change with respect to minimum and maximum historical NDVI value.



Source: Boku University

- Vegetation Condition Index (VCI-3month) for the month under review is 71 for the entire county and this depicts vegetation greenness above normal ranges.
- The vegetation condition showed deteriorating trend across most parts as demonstrated by the shift in VCI-3month from the 72.8 in November to 71 recorded in December for the county. All sub counties were under the above normal vegetation greenness band. Kacheliba, Kapenguria, Pokot South and Sigor dropped from 72.6 to 69, 68.6 to 65.6, 73 to 71 and 76.8 to 76. Generally, there was a decline in relation to condition of vegetation in all sub counties during the month. This is attributable to poor regeneration of vegetation due to cessation of OND season rains within the month under review.

2.1.2 Pasture

- The pasture condition is fair to poor across all livelihood zones. The condition however, is above normal in comparison to the pasture situation during a normal year. Notably, when compared to the previous month, pasture condition is deteriorating and this is attributed to poor short season rainfall received during the month under review.
- The anticipated normal dry spell in January is projected to worsen the pasture situation across all livelihoods.
- Pokot-Marakwet border conflict remain the major impediment to pasture access.
- There exists no significant variation in terms of quality and quantity of pasture in both zones.

2.1.3 Browse

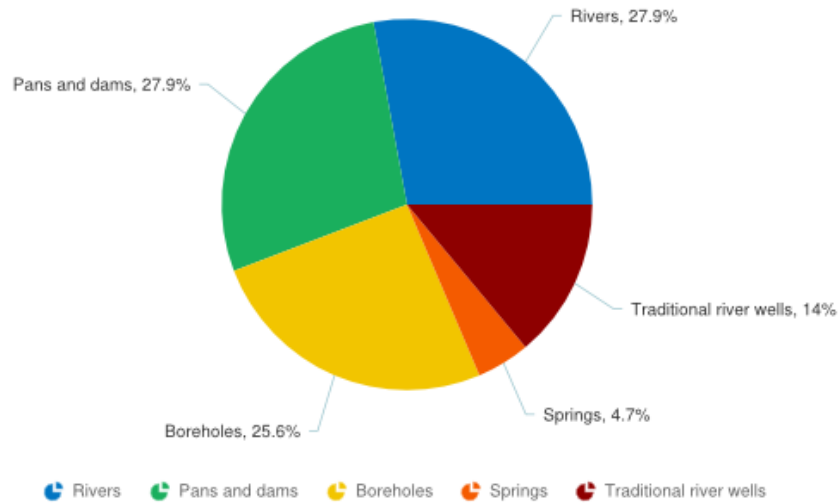
- The two livelihood zones experienced fair browse condition. In comparison to the browse situation during a normal year the situation is normal. There was a drop in quality of browse condition in relation to that of the previous month due to decreased rains received during the month under review.
- The browse access is still affected by the conflict along the Pokot-Marakwet/Turkana borders.
- Quality and quantity of browse is still good in both zones and there is no significant variation between the Pastoral and Agro Pastoral livelihood zones.

2.2 WATER RESOURCE

2.2.1 Sources

- Households and livestock are currently relying on pans and dams, rivers, traditional river wells, boreholes and springs as their main sources of water during the month of December. Pans and dams and rivers both recorded 27.9 percent, boreholes recorded 25.6 percent and traditional river wells 14 percent of households using them, the change of water sources is attributed to decreased rainfall. Other water sources in use included springs at 4.7 percent.
- In comparison to month of November, the water recharge levels decreased due to poor rains.
- The current main sources in use are the normal sources where households draw water from during this time of the year.
- The rivers and boreholes water levels have dropped due to decreased rains. This is normal compared to this period of the year.

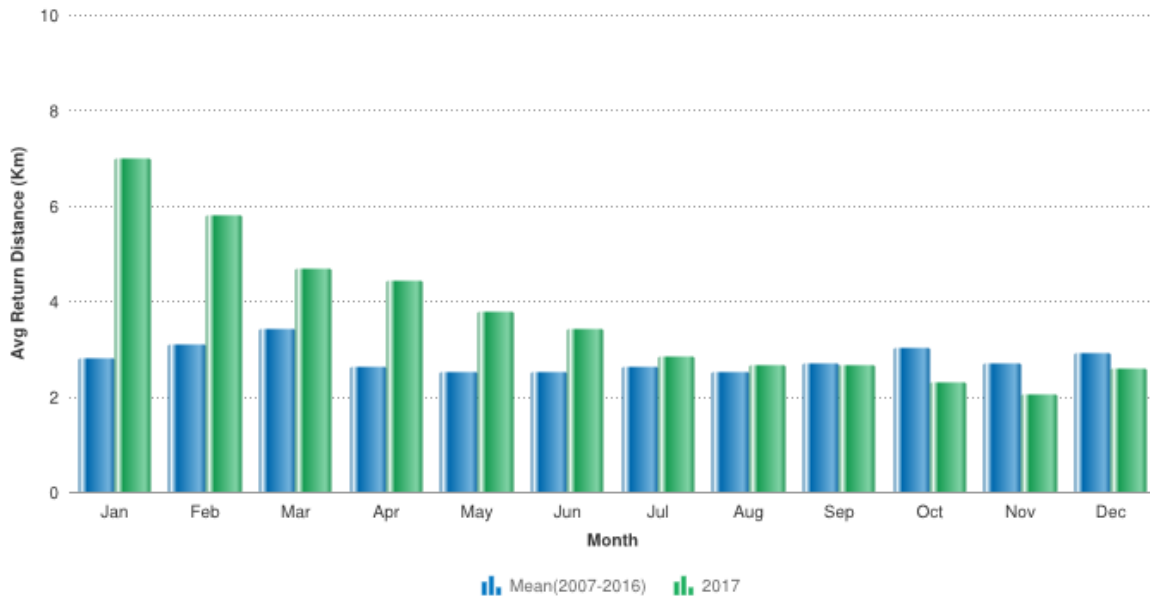
West pokot County Water sources
(December 2017)



2.2.2 Household Access and Utilization

- The household return distance to water source is 2.6 Km, a slight increase from the 2.1 Km recorded in November but remains 17 percent below its long term average distance.
- Longer trekking distances water source were recorded in the pastoral livelihood zone in comparison to the Agro Pastoral livelihood zone. Water distances notably increased due to the inadequate water point recharge within the month.

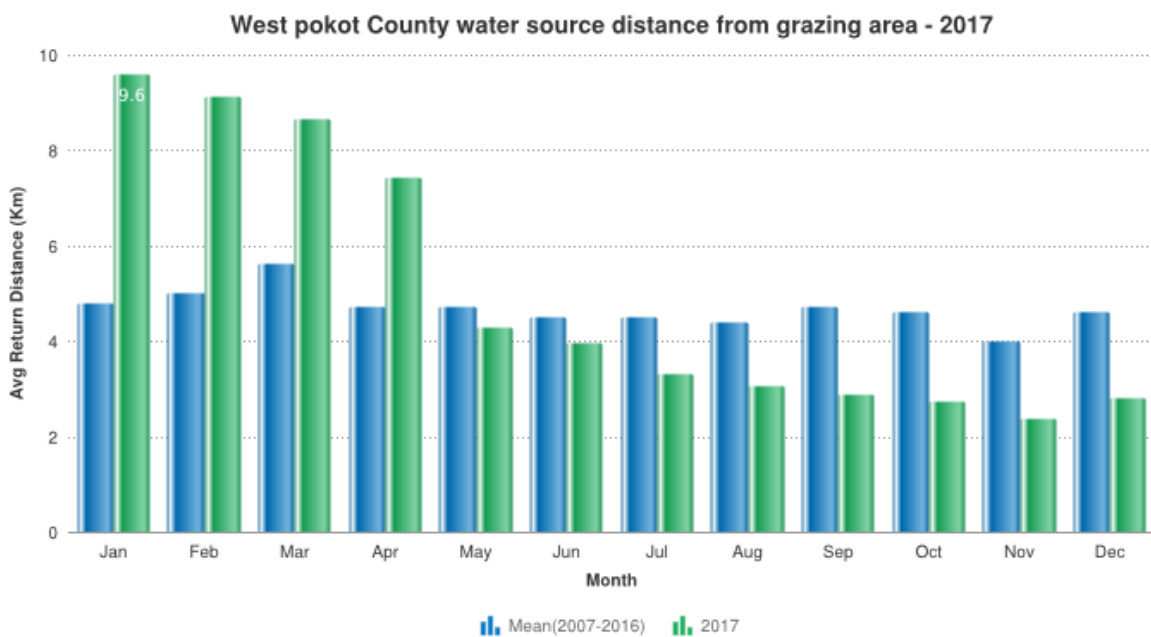
West pokot County water source distance 2017



- The waiting time at water source slightly increased in both the Agro Pastoral zone and Pastoral zones.
- The average household water consumption per person per day is at 7-12 litres in the Pastoral zone whereas in the Agro pastoral zone remained 9-14 litres per person per day.
- Water costs at source is still free in the rural areas unlike in urban centres where a 20 litre jerrican costs remained within normal ranges for the period.

2.2.3 Livestock Access

- The current livestock return trekking distance from grazing areas to water sources is 2.8 Km, this is a slight increase from the 2.4 Km recorded in November. In comparison to the normal trekking distance of 4.6 Km, current trekking distance lies below the normal range by 39 percent.
- In Pastoral livelihood zone, the trekking distance from grazing areas to water sources was longer in comparison to the Agro Pastoral livelihood zone.



- Increased livestock trekking distance was mainly attributed to the insufficient rains received within the month of December.
- Frequency for watering cattle and shoats reduced to 4-6 times in a week while for camel is 3-5 times in a week.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

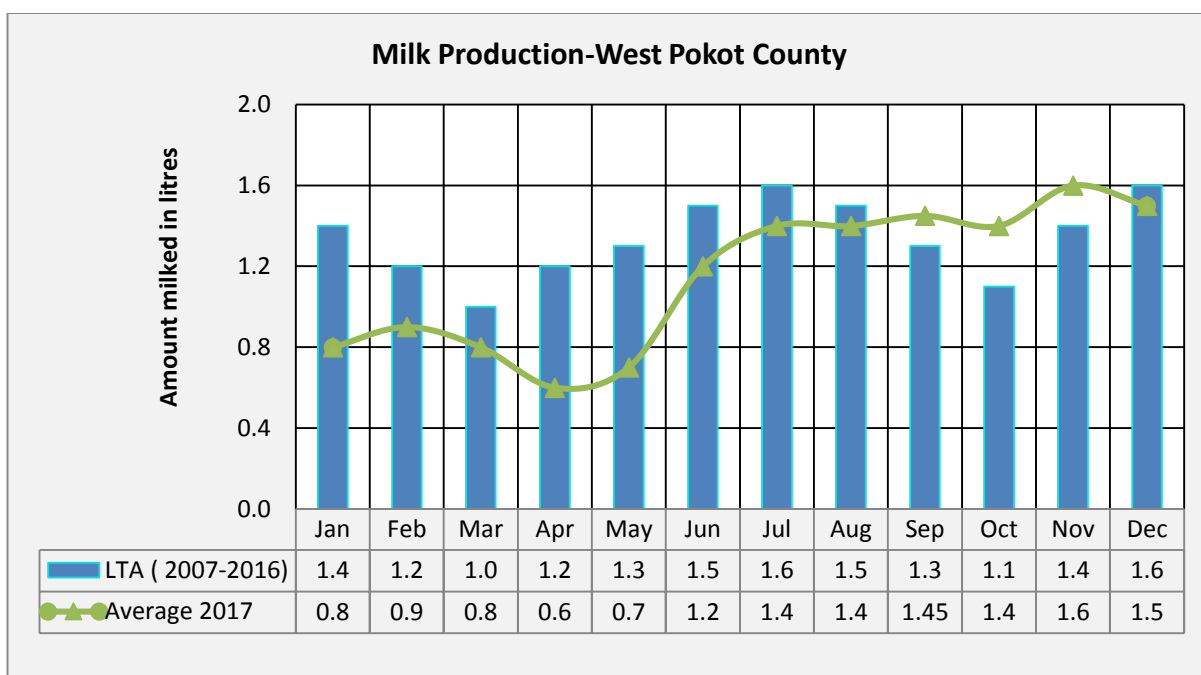
- The livestock body condition of livestock species including cattle, goats, camels and sheep is fair to good in both the Pastoral and Agro Pastoral livelihood zones.
- Notably, livestock body condition is expected to worsen over successive months across all the livelihood zones due to cessation of OND rains.
- In comparison to similar periods during previous years, the body condition of all species is normal and this is attributed to adequate cumulative forage condition generated during the OND season.
- There exists no significant variation in livestock body condition across the two livelihood zones.

3.1.2 Livestock Diseases

- Cases of abortion in goats were reported in Kaipakwen in Sigor. Incidences of Foot Mouth Disease and Lumpy Skin Disease were reported in Pokot North, Chepareria, Riwo, Sigor and Masol wards. CCPP cases goats was reported in Kapchok ward.

3.1.3 Milk Production

- In December, the two livelihood zones reported an average of 1.5 litres milk produced during the month slightly dropped from that recorded in the month of November. Cattle produced most milk within the county.
- In comparison to a normal season, the current household milk production is below the normal household milk production for the month by 6 percent.
- There significant change from the household milk production recorded during the previous month due to the dwindling forage condition in their normal grazing areas.



3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

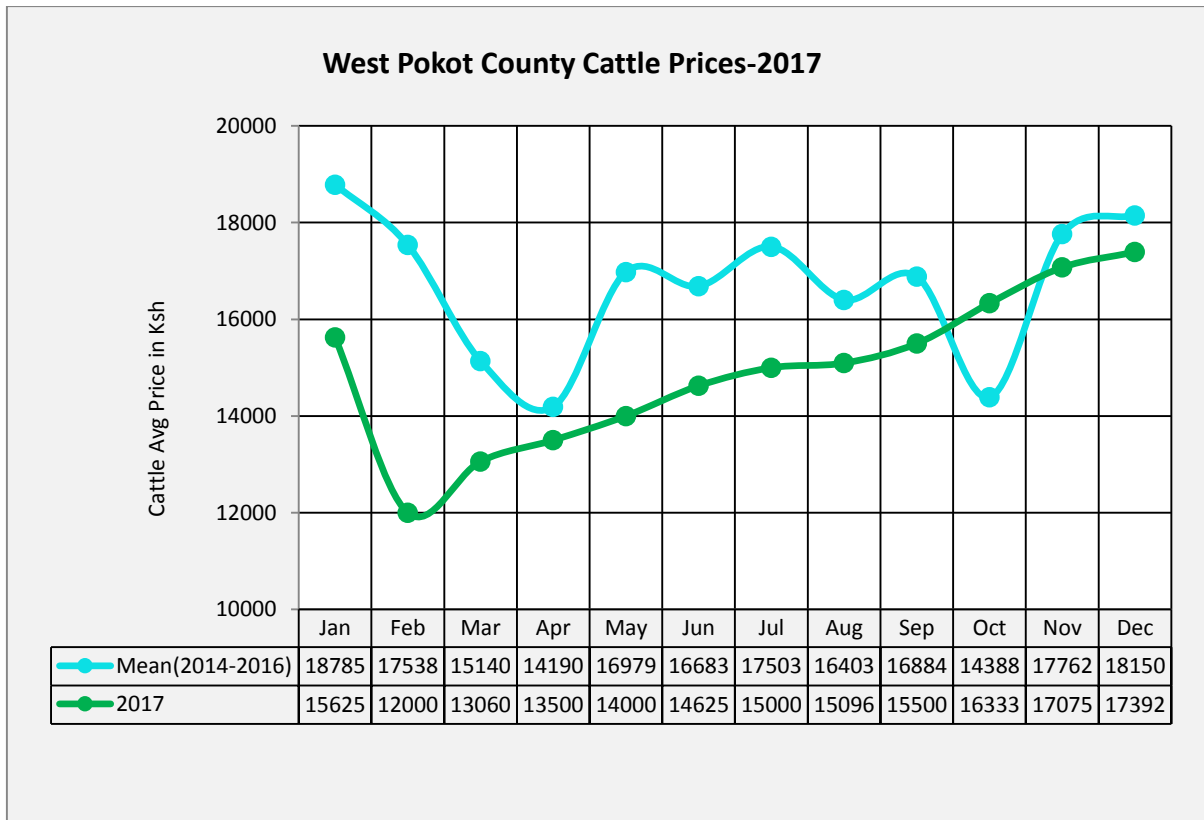
- Horticultural production was booming with intensive market activity being witnessed more so along the production zones of Sebit, Wakorr, Wei Wei, and Lomut.
- Other agricultural production activities going on during the month under review included bulb onion harvesting (in areas such as Kokwotendwo and Kerelwa) and supply to Ortum market for distribution to other centres within and outside the county.
- Maize, Beans and Irish Potatoes are the main crops grown by farmers (approximately 50 percent of the population) during the long rains season. Most of the crops have been harvested and stored.
- The level of horticultural supplies such as mangoes, pawpaw and onions to major markets including Sigor, Ortum and Lomut have improved due to fair OND season performance.
- Farmers in the lowland areas under Irrigation such as Ortum and Wei Wei that had planted beans at the onset of the short rains were engaged in weeding.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle prices

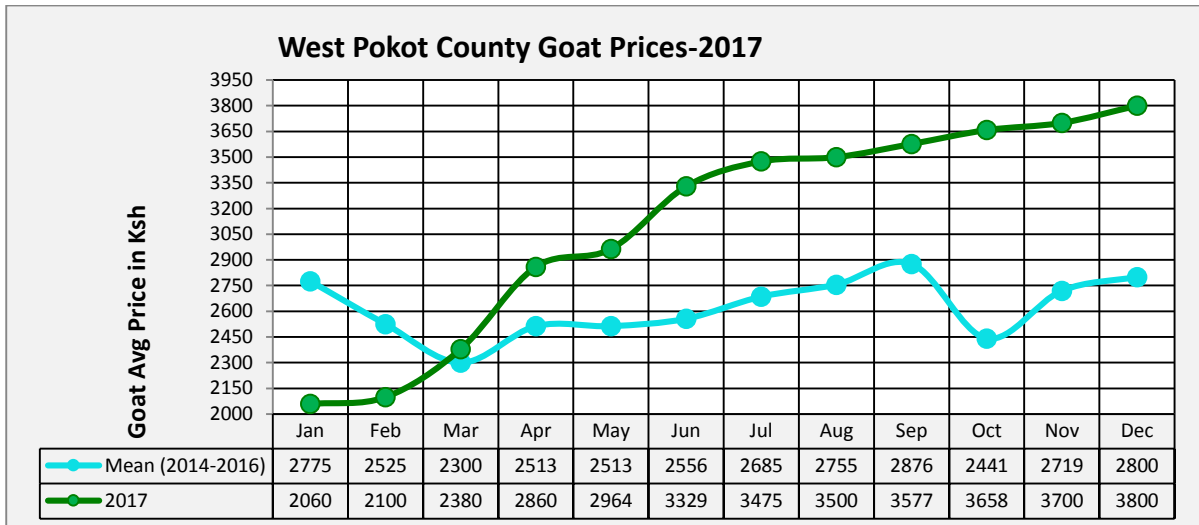
- In December, cattle traded at Ksh 17,392. The prices recorded remained stable compared to that of the previous month.
- The price increase was mainly due to December festivities within and outside the county, this necessitated massive demand of beef and also continuous improvement in the cattle body condition attributed to stability of pasture condition and water source levels during the month.



- The current cattle price is below the short term average price for the month by 4.2 percent.

4.1.2 Goat Prices

- During the month under review, the price of goat was at Ksh.3, 800 across all livelihood zones. This indicates continued price stability in comparison to that of the previous month.

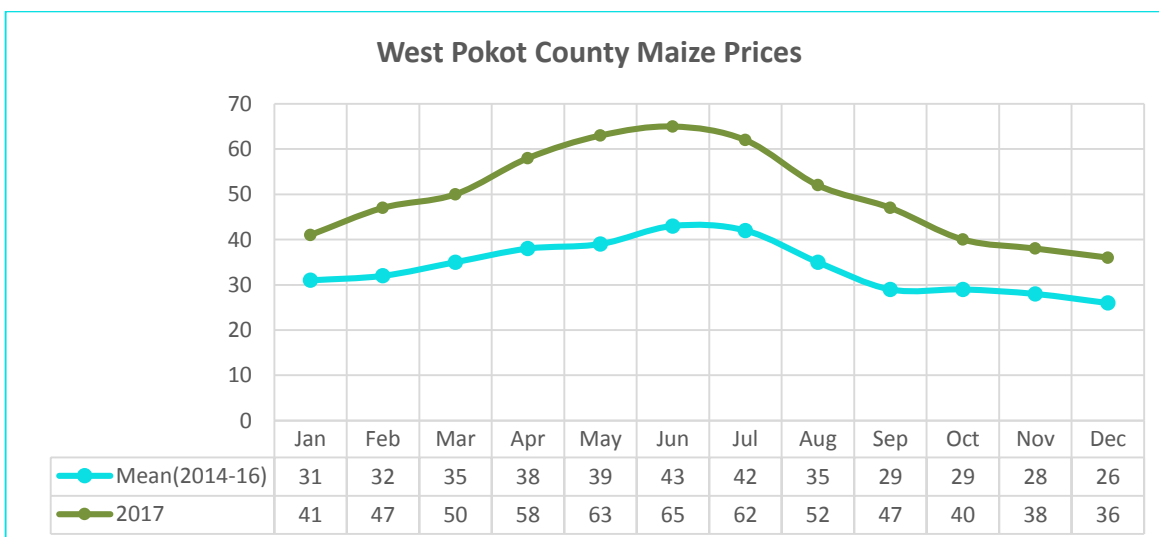


- The price stability is attributed mainly to a influx in meat demand during end year festivities and steady in the body condition of goat as a result of fair forage condition.
- The current retailing price of goat is 35.7 percent above the short term average price for the month.

4.2 CROP PRICES

4.2.1 Maize

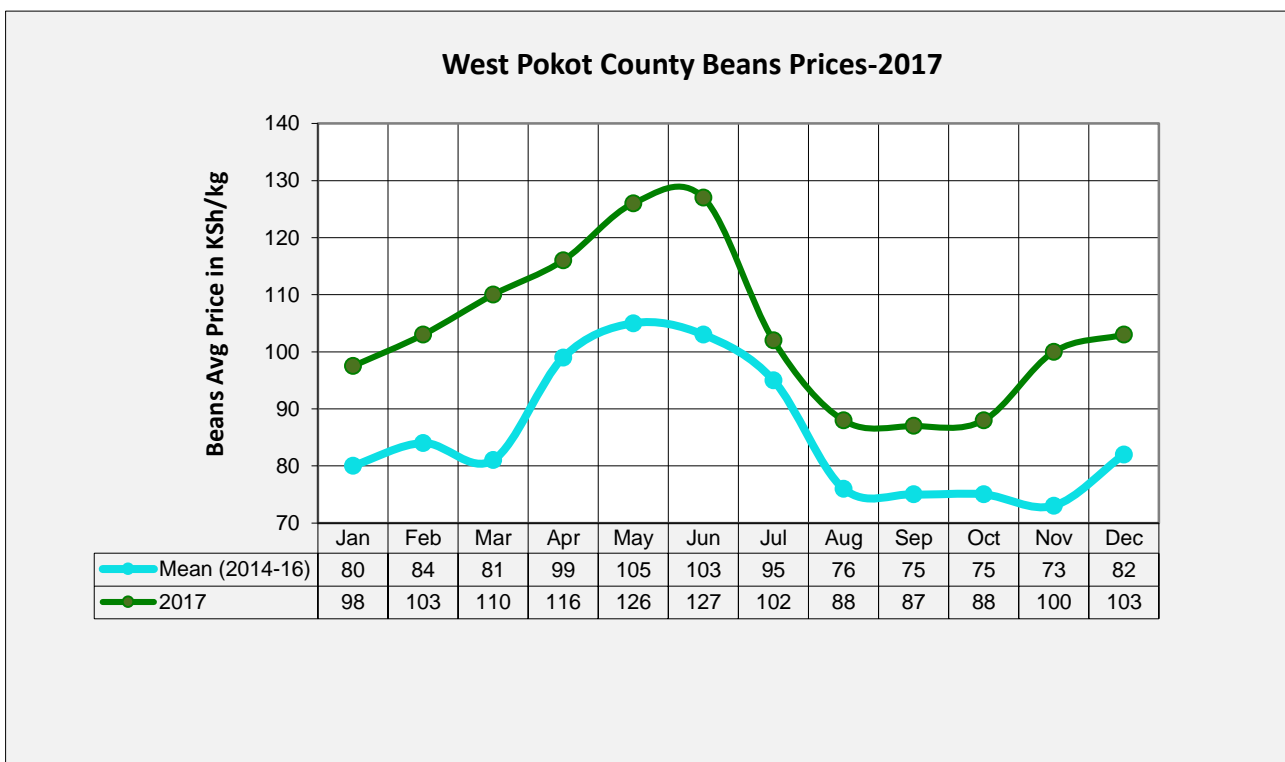
- Maize traded at Ksh.36 per Kg, this is a decrease from the Kshs.38 recorded in November.
- This market price is 38 percent above the three year short term average price for the month under review.



- The Pokot-Marakwet border conflict and Pastoral zones in Pokot central resulted to a higher price in comparison to other areas as a result of the normal external supply sources (mainly Marakwet) being affected. Generally, the decrease is as a result of local harvesting and steady external supply of maize.
- Households rely more on local markets to replenish their stocks, maize price is likely to remain stable as the supply of maize increases from local and external sources (Uganda and Trans Nzoia) which are normal suppliers to the county.

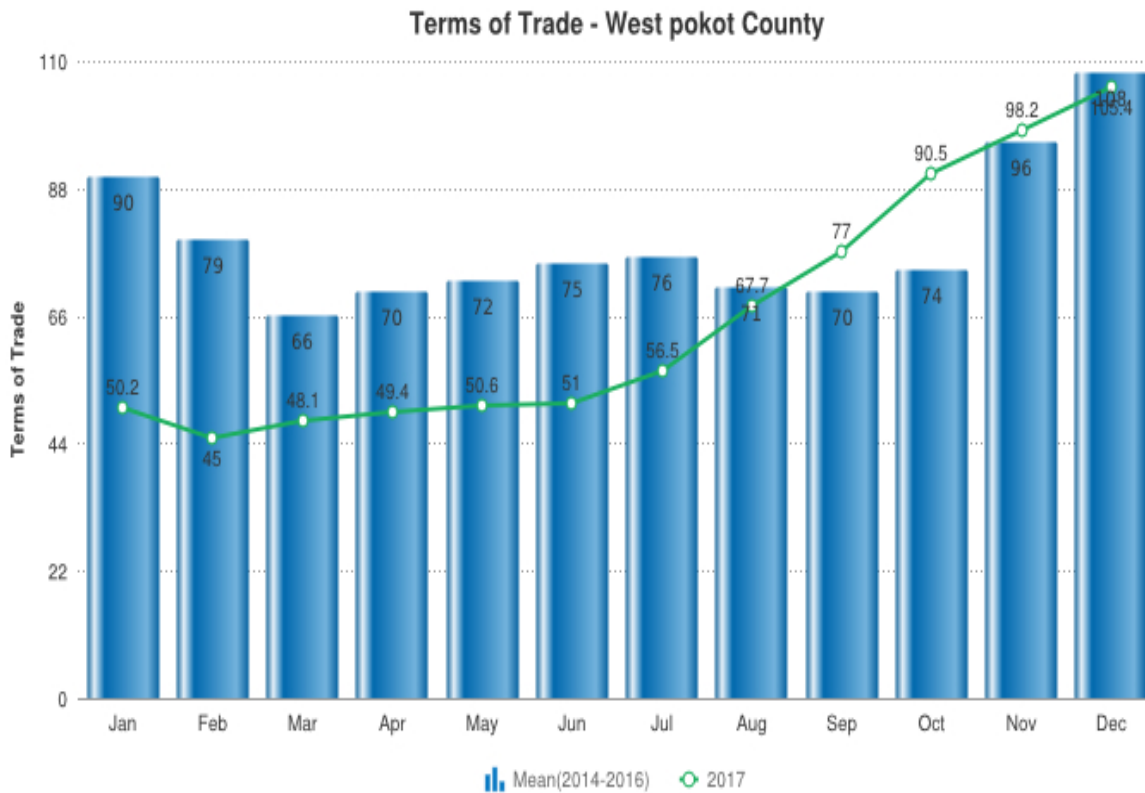
4.2.2 Beans

- Beans traded at 102 per Kg during the month under review. The prices increased slightly in comparison to that of November.
- This is attributed to low local bean produce around the county and increasing prices at external supply sources.
- There was no significant variation in price across the two livelihood zones since they both relied on the same external sources for supplies.
- The current market price of beans is significantly above the three year short term average price for a normal season during this time of the year by 26 percent.



4.3 LIVESTOCK PRICE RATIO/ TERMS OF TRADE (TOT)

- The Terms of Trade is still favourable at 105 implying that pastoralists are getting more amount of maize as that they could obtain in December from sale of the same goat. The current ToT is 3 percent below the short term average ToT for the month. An increase in ToT was driven mainly by an stability in goat price and the falling maize prices.

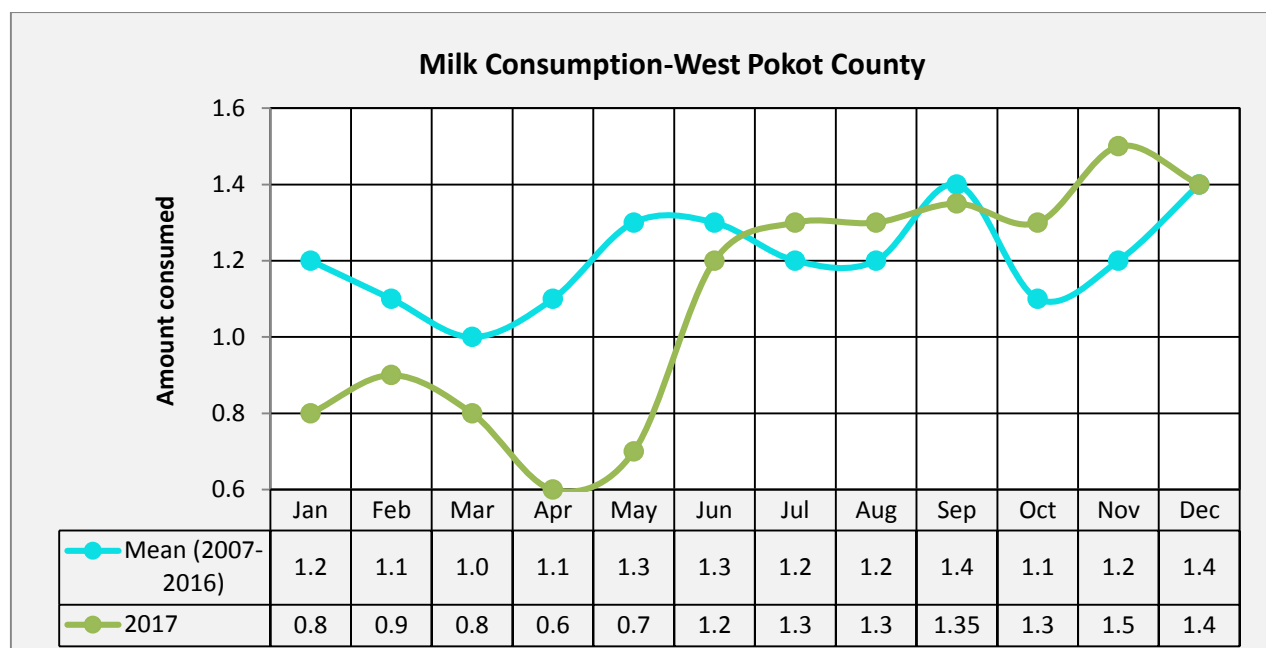


- Variation stability expected over the next three months as the price of goat is projected to fall with the dry spell season anticipated in January coupled with soaring maize price during that period.

5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- In December, households across all livelihood zones consumed 1.4 litres of milk on average.



- The slight decrease in milk consumption level is as a result of fluctuating production attributed to the dwindling pastoral resources especially forage and increasing livestock trekking distances to water points.
- In comparison to the same period over time, the quantity of milk consumed is at par.

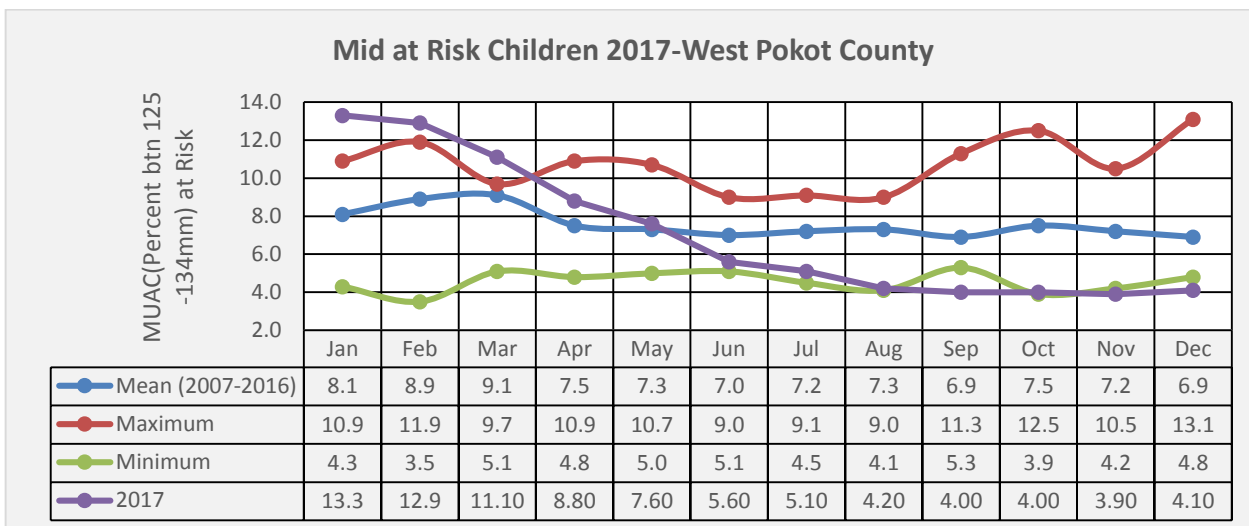
5.2 FOOD CONSUMPTION SCORE

- In reference to food consumption proportions, a total of 53%, 44% and 3% of households fell within the acceptable, borderline and poor food consumption score categories respectively during the month under review.
- The mean food consumption score for the two livelihood zones during the month under review remained stable at 40.6 same as that recorded during the previous month.
- However, there was a significant variation across the two livelihood zones with for instance 44.4% of households in the Pastoral zone being categorized as having acceptable FCS in comparison to 66.7% households under the same category in the Agro Pastoral zone.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- The proportion of children rated being 'at risk' of malnutrition remained at 4.1 percent slightly higher than that recorded in November.
- The current proportion of children rated being 'at risk' of malnutrition is 40.5 percent below the long term average for the period in a normal year.



- The slight increase in malnutrition among under-fives is attributed to dwindling and consumption accessibility of milk and other essential health and nutrition commodities in the county was the major driver that contributed to the reduced number of children falling outside the normal range of children 'at risk' of malnutrition.

5.3.2 Health

- Cases of Malaria, Coughing and Typhoid was the most commonly reported ailment during the month among the sampled children.

5.4 COPING STRATEGY

5.4.1 Coping Strategy Index (CSI)

- Coping strategy index for the month of December was at 8.6, which represents an increase in comparison to the coping strategy index of 7.5 during the previous month. The households employed increased level of coping mechanisms in December compared to the previous month, this can be attributed to dynamic food commodity prices in the markets e. g beans.
- Agro Pastoral livelihood zone recorded a coping strategy index of 8.3 in comparison to the 8.9 in Pastoral livelihood zone and this is mainly due to stability in livestock productivity along the Pastoral zone.
- The notable consumption based coping strategies employed by majority of the households during the month included reliance on less preferred/less expensive food.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD

- Ministry of health distributed mosquito nets within the county.
- Lumpy Skin Disease vaccination was undertaken by county government in Pokot North.
- ACF together with ministry of health and nutrition supported a series of mass screening and health outreaches targeting mainly Pokot central and north during the month under review.
- World vision/WFP and Red Cross are conducting cash transfers to vulnerable households in Turkwel belt and Pokot North areas
- Peace meetings were conducted by SIKOM and county government along county borders.

7.0 EMERGING ISSUES

7.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT

- Banditry attack was reported early in the month mainly in Pokot central along Pokot-Marakwet border at Chesegeon where 48 cattle were stolen.

7.2 MIGRATION

- Farmers are contemplating moving back to the dry season grazing zones mainly outside the county (Uganda) from next month due to the fast diminishing pasture and browse conditions at traditional zones.

7.3 FOOD SECURITY PROGNOSIS

- Deterioration in livestock productivity is anticipated due to the cessation short rains and onset of dry spells from next month. The body condition is projected to worsen with the unavailability of good forage during this period.
- Access to nutritious foods such as milk is expected to dwindle with the diminishing pastoral resources necessitating livestock milk production.
- Maize prices are expected to soar with that of goat projected to fall as a consequence the terms of trade shall remain unfavourable over this period.
- Constant conflicts along county borders shall remain the greatest constraint to food security due to limited market accessibility and dwindling stocks in the market.

8.0 RECOMMENDATIONS

1. LIVESTOCK SECTOR

- Support timely stock piling of livestock feeds in anticipation of prolonged dry spells in the county.
- Support ring vaccination of FMD disease across the county and enhance surveillance while monitoring and vaccinating animals that will be migrating back into the county against PPR, CBPP and CCPP.
- Support awareness on community driven strategic livestock destocking to avert losses in event of delayed rains.

2. PEACE AND SECURITY SECTOR

- Upscale peace building efforts along the Turkana and Marakwet borders so as to facilitate smooth market accessibility for majority of pastoral communities in conflict prone zones.

3. WATER SECTOR

- Capacity build and support farmers with modern smart water use technologies to enable maximum utilization of stored water.

4. HEALTH AND NUTRITION SECTOR

- Upscale mass screening and integrated medical outreaches to all hotspots countywide while providing health education on sanitation and proper utilization of water treatment chemicals so as to minimize the risk of water borne disease outbreak.