

National Drought Management Authority

WEST POKOT COUNTY

DROUGHT EARLY WARNING BULLETIN FOR JUNE 2017



A Vision 2030 Flagship Project



JUNE EW PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- Rainfall received during the month was depressed with a temporal distribution of 2-4 days. Compared to the normal for the same period, the cumulative rainfall for the 6-month period (January-June) for Nasukuta rainfall station amounts to only 81%.
- Slight improvement in the condition of vegetation was noted as evidenced by the shift in VCI-3month for the county to 32.2 from 25.02 in May. Pokot central&north remained most affected with a VCI-3month of 27.06&29.91 respectively.
- The condition of forage is fair across all the livelihood zones.

Socio Economic Indicators (Impact Indicators)

- Cattle body condition is fair but that of goat is good and distance to water source decreased slightly but remains outside the normal range. The level of milk production and consumption is low at household level and remains below the normal range. Terms of trade remain unfavourable.
- Migration was reported across the county (from Pokot north and west towards Uganda) during the month under review. Food consumption score remained unchanged and fell within the borderline band with 68% of households practising coping in June. Proportion of children 'at risk' of malnutrition dropped from 7.0% in May to 5.6% in June thereby remaining within the normal range.

Early Warning (EW) Phase Classification

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

Biophysical Indicators	Value	Normal range
Rainfall (% of normal for Nasukuta Station)	81	90-110
VCI-3month (County)	32.2	>35
VCI-3month (Pokot Central)	27.06	>35
Forage Condition	Fair	Good

Production Indicators	Value	Normal range
Livestock Body Condition	Not Normal	Normal
Milk Production	1.2 Litres	>1.5 Litres
Livestock Migration Pattern	Not Normal	Normal
Livestock deaths (attributed to drought)	No deaths	No deaths

Access Indicators	Value	Normal range
Terms of Trade (ToT)	51.0	>75
Milk Consumption	1.2Litres	>1.3Litres
Return distance to water sources (household)	3.4 km	0.0 -2.5km
Cost of water at source (Ksh /20 litres)	Kshs.5	<Kshs.5.0

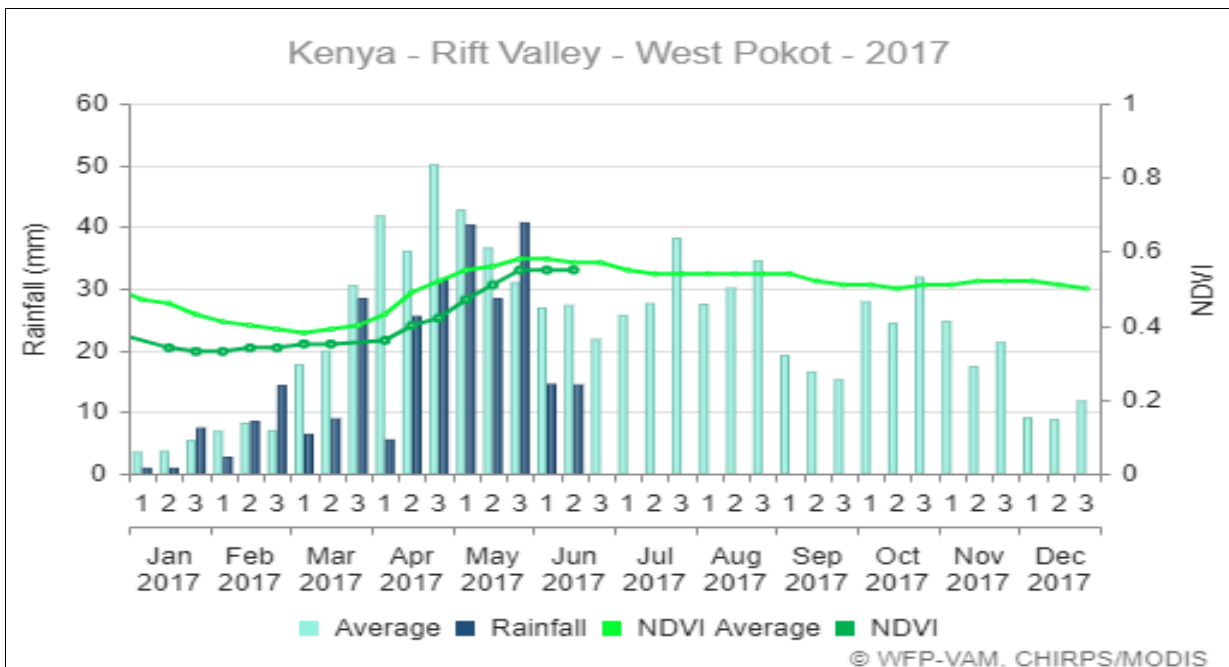
Utilization Indicators	Value	Normal range
Nutrition status, MUAC (% at risk of malnutrition)	5.6	0.0- 7.0
Coping Strategy Index (CSI)	13.6	<14.2
Food Consumption Score (FCS)	34.3	>35

<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

- The county experienced rainfall of low intensity in comparison to the previous month. Most areas along the lowland belt had a temporal distribution of 2-4 days.



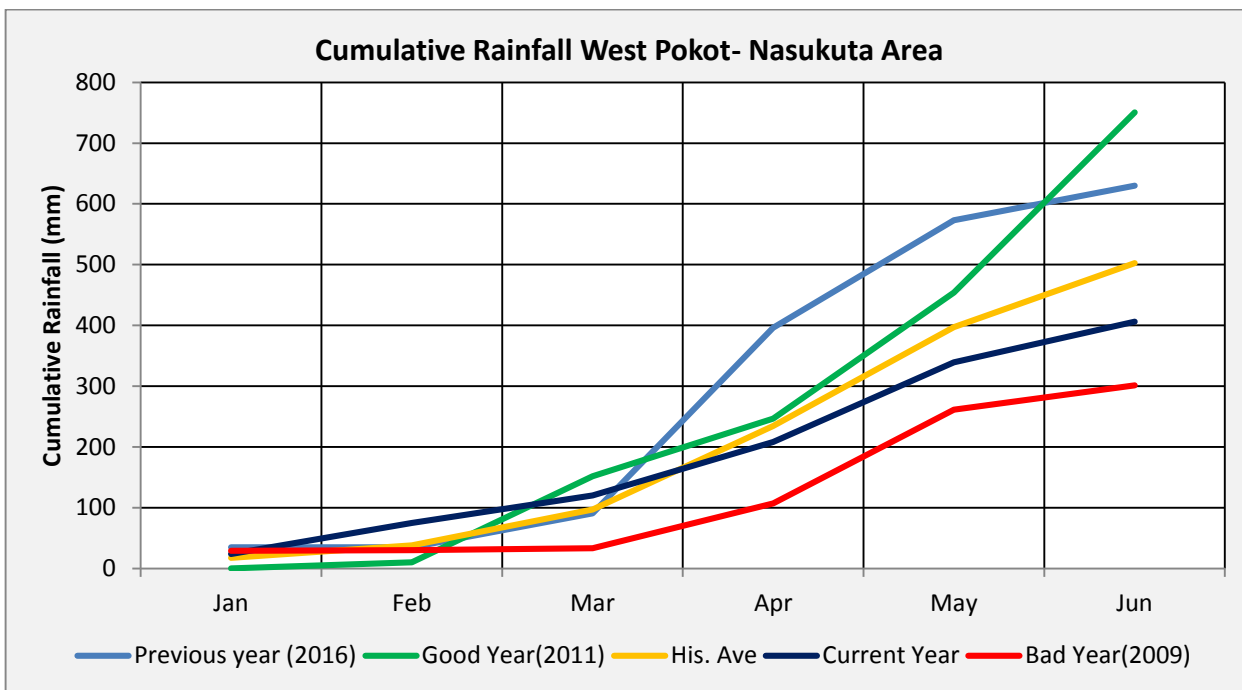
Source: VAM-World Food Programme

- Dekadal rainfall amounts dropped significantly and fell outside the normal range for the month as illustrated above. Both dekad one and two recorded 14.4mm against the expected 26.8mm and 27.2mm respectively.
- As a result of the below normal rainfall received over the long rains period, the current NDVI values remain inferior to the historical NDVI values.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The distribution in space was uneven with only select few sites along the Agro Pastoral livelihood zone receiving rainfall during the month under review.
- The cumulative rainfall for the six month period (January to June 2017) amounts to 406.3mm against the cumulative thirteen year rainfall average for the same period that amounts to 502.5mm.
- Therefore, rainfall amount recorded during the period above was only 81 percent of the average rainfall for the period and lies below the normal range for the season.
- Compared to the cumulative rainfall recorded for the same period during the previous year (January to June 2016), the current cumulative rainfall is less by thirty six percent.

- The period January to June 2009 remains the bad year historically as illustrated below.



- Rainfall stations in the highlands including Kaibichbich, Tapach, Kapenguria forest headquarters, Kaibos and Sinna recorded 101.6mm,95.4mm,41.4mm,115.9mm and 36.1mm of rainfall respectively.
- For the other rainfall stations located in the lowlands including Alale, Sigor, Mtembur and Mariny recorded 15.9mm, 4.3mm, 27.1mm and 8.6mm of rainfall respectively.

(Source: Meteorological Department-West Pokot County)

1.3 OTHER EVENTS

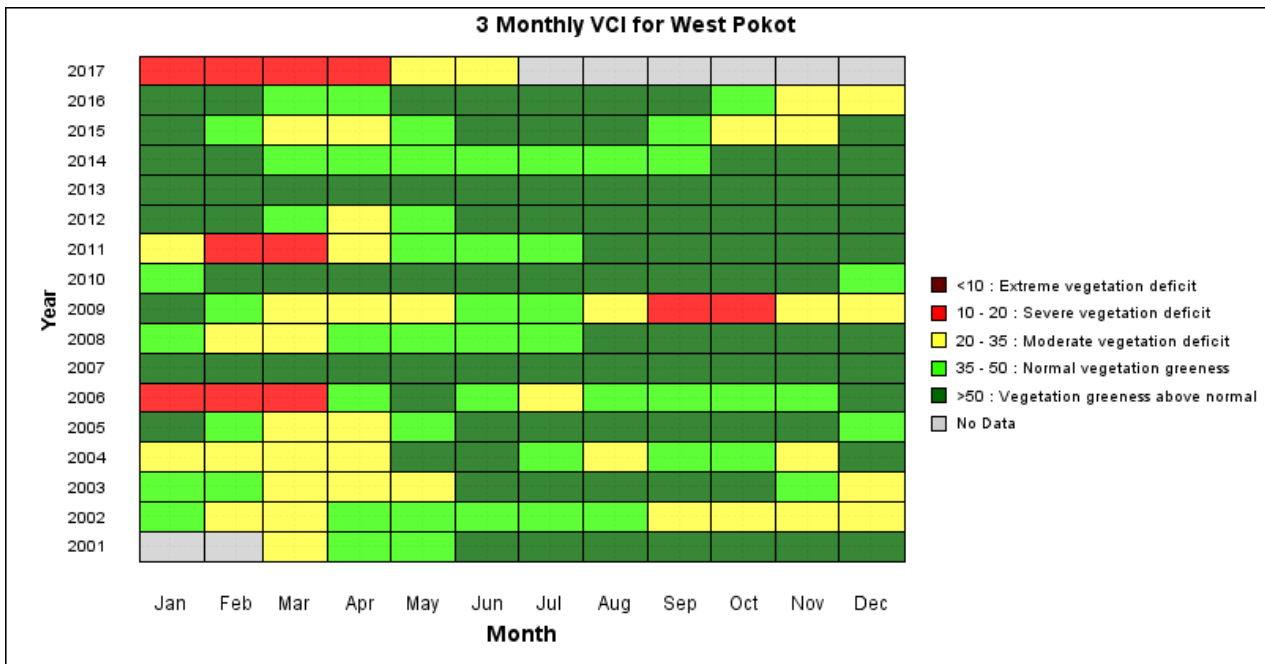
- During the month under review, no notable event such as floods, land/mud slides, lightning strikes nor hailstorms occurred.

2.0 IMPACTS ON VEGETATION AND WATER

2.1 VEGETATION CONDITION

2.1.1 Vegetation Condition Index (VCI)

- The county matrix below illustrates how months have been categorized in terms of agricultural drought based on the respective VCI thresholds indicated. A retrospective analysis has been done and the month under review placed in an appropriate vegetation deficit band.
- Comparison of the relative NDVI (Normalised Difference Vegetation Index) change with respect to minimum and maximum historical NDVI value forms the basis for VCI.



Source: Boku University

- The Vegetation Condition Index (VCI-3month) for the month under review is 32.2 and this illustrates a moderate vegetation deficit.
- Improvement in vegetation condition was witnessed across the entire county as supported by the rise in VCI-3month from 25.02 recorded in May to 32.2 in June. Only Pokot north and central remained within the moderate vegetation deficit band with Pokot south and west sub counties experiencing normal vegetation greenness.
- This improvement in relation to the previous month could be attributed to the cumulative effect of rainfall received in April, May and part of June that promoted active vegetation regeneration.

2.1.2 Pasture

- Pasture condition is generally fair however, on a worsening trend across the Pastoral and Agro Pastoral livelihood zones. It is below normal in comparison to the pasture situation during a normal year. When compared to the previous month, pasture condition remained unchanged and this is due to the highly depressed rainfall received during the month under review.
- Select areas including Nyangaita, Marich, Wakorr and Sarmach have pasture of poor quality.
- Incidents of insecurity in some sites within the county such as Chesegeon remain the major constraint to pasture access.
- There exists no significant variation in terms of quality and quantity of pasture in both zones.

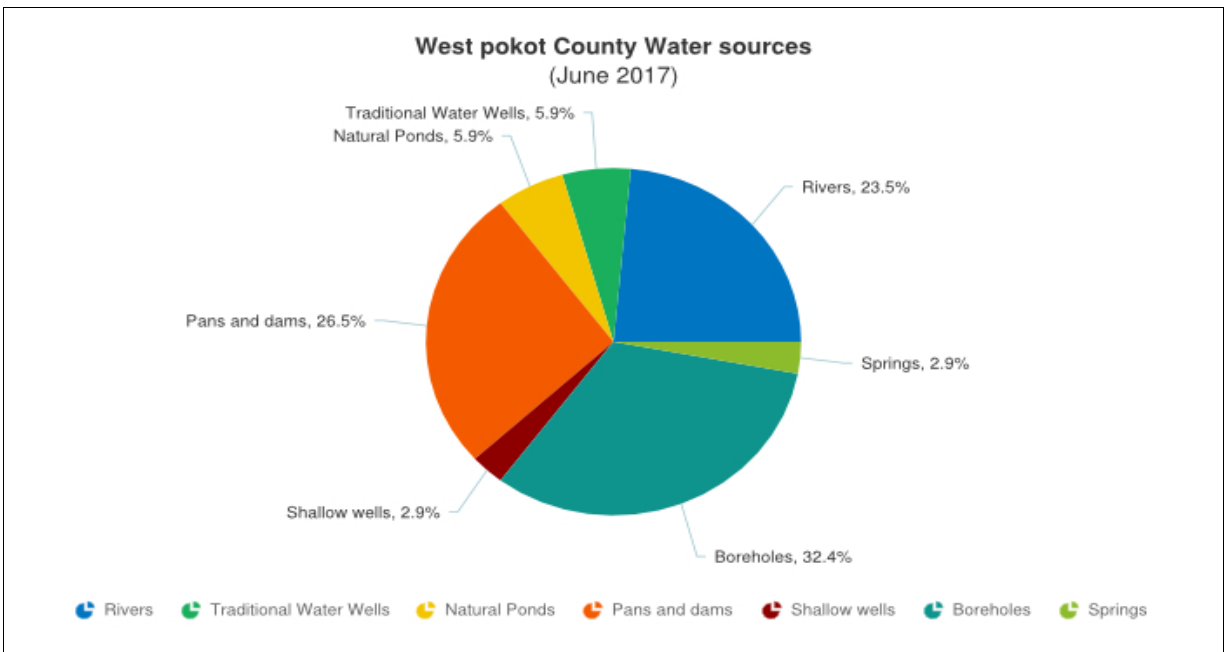
2.1.3 Browse

- Browse condition is fair to good across the two livelihood zones but remains below normal in comparison to the browse situation during a normal year. In relation to the previous month, browse condition improved slightly as a consequence of the cumulative effect of rainfall received over the long rains period.
- Sporadic incidents of insecurity along the Pokot-Marakwet/Turkana border have continued limiting Pastoralists mainly in Pokot central sub county from accessing browse.
- There exists no significant variation both in quality and quantity of browse across the Pastoral and Agro Pastoral livelihood zones.

2.2 WATER RESOURCE

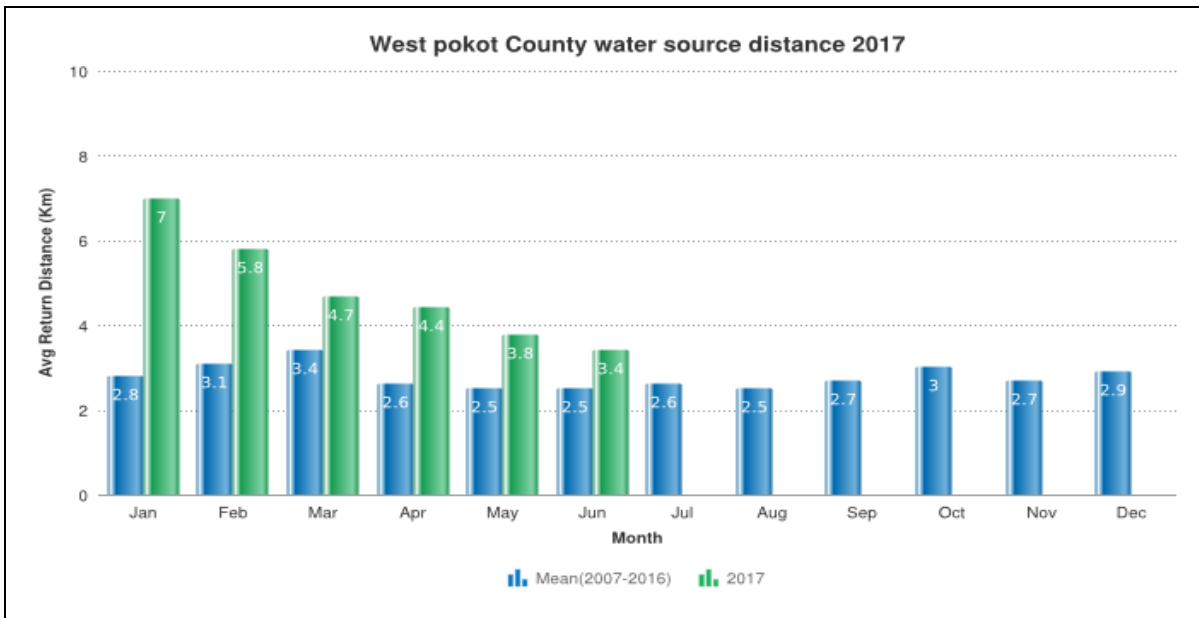
2.2.1 Sources

- A total of 32.4 percent of households relied on boreholes as the main source of water for household and livestock use during the month under review. This was a shift from the previous month where rivers were the main source of water.
- Most of the open water sources such as pans and dams were recharged up to fifty percent capacity and formed another major source of water for livestock consumption. However, some select pans in Konyao and Pserum remained dry.
- The current main sources of water in use are the normal sources where households draw water from during this time of the year.
- River volume was low in comparison to the previous month with no flow being witnessed along seasonal rivers. This is normal during this period of the year.



2.2.2 Household Access and Utilization

- The current household return distance to water source is 3.4Km and this is a decrease from the 3.8Km recorded in May but remains 36 percent above its long term average distance.
- The trekking distance to water source is long in the Pastoral livelihood zone in comparison to the Agro Pastoral livelihood zone. The slight decrease in distance to water source could be attributed to availability of water in open sources due to recharge over the preceding months.

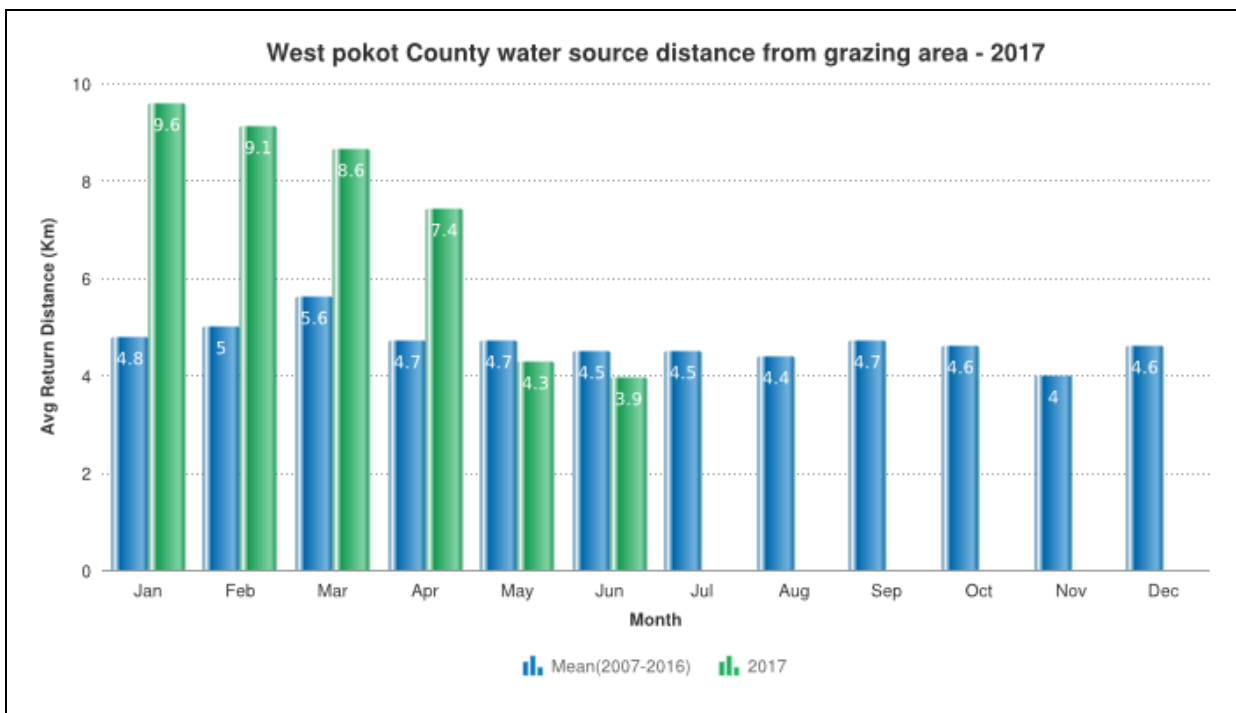


- The waiting time at water source generally remains unchanged from that of the previous month in both the Agro Pastoral and Pastoral livelihood zones at an average of 15-30 minutes.

- The average household water consumption per person per day is 15-20 litres in the Pastoral zone and 20-25 litres in the Agro pastoral zone.
- Unlike in the urban centres where a 20 litre jerrican costs Kshs.5, the cost of water at source is free in the rural areas. These charges lie within the normal range for the period.

2.2.3 Livestock Access

- The current livestock return trekking distance from grazing areas to water sources is 3.9 Km. This being a slight decrease from the 4.3Km recorded in May. Compared to the normal trekking distance of 4.5Km, current trekking distance lies below the normal range by thirteen percent.
- The Pastoral livelihood zone recorded a longer trekking distance from grazing areas to water sources in comparison to the Agro Pastoral livelihood zone.



- Availability of pasture in pocket zones in close proximity to open water sources such as rivers and pans was the major contributor towards the reduced livestock trekking distance.
- Watering frequency for all livestock species is 5-6 times in a week across the Pastoral and Agro Pastoral livelihood zones save for select areas such as Konyao and Kangoletiang where it averages 3-4 times.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

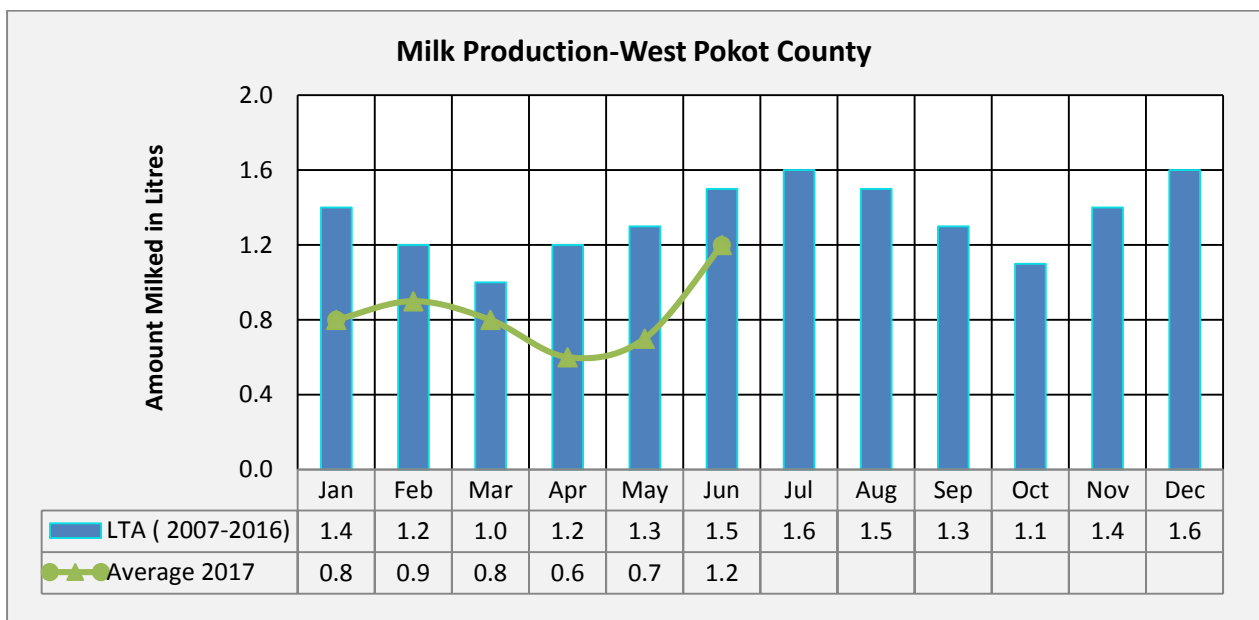
- Cattle and sheep body condition is fair while that of camel and goat is good in the Pastoral and Agro Pastoral livelihood zones.
- Livestock body condition is anticipated to remain relatively stable over the next one month across all the livelihood zones and thereafter start deteriorating as pasture depletes with the dry spell of July, August, September (JAS) season.
- The body condition of cattle and sheep is below normal in comparison to similar periods during previous years and this is attributed to the recent drought that led to pasture depletion within the county necessitating animals to trek for long distances in search of pasture and water.
- Across the two livelihood zones, there exists no significant variation in livestock body condition.

3.1.2 Livestock Diseases

- Incidents of contagious bovine pleuropneumonia (CBPP) in cattle were reported in Kodich, Masol and Konyao with Wei Wei ward reporting contagious caprine pleuropneumonia (CCPP) in goats.

3.1.3 Milk Production

- The Pastoral and Agro Pastoral livelihood zones recorded an average of 1.2 litres milk produced in June and that represented a slight increase from the 0.7 litres recorded in May. Most of the milk produced in the county came from cattle.



- The current household milk production is below the normal household milk production for the month by 20 percent.
- Reduced number of milking herd within the county and slow progress to attainment of optimum productivity from the effects of the recent drought were the major factors behind the low production levels.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

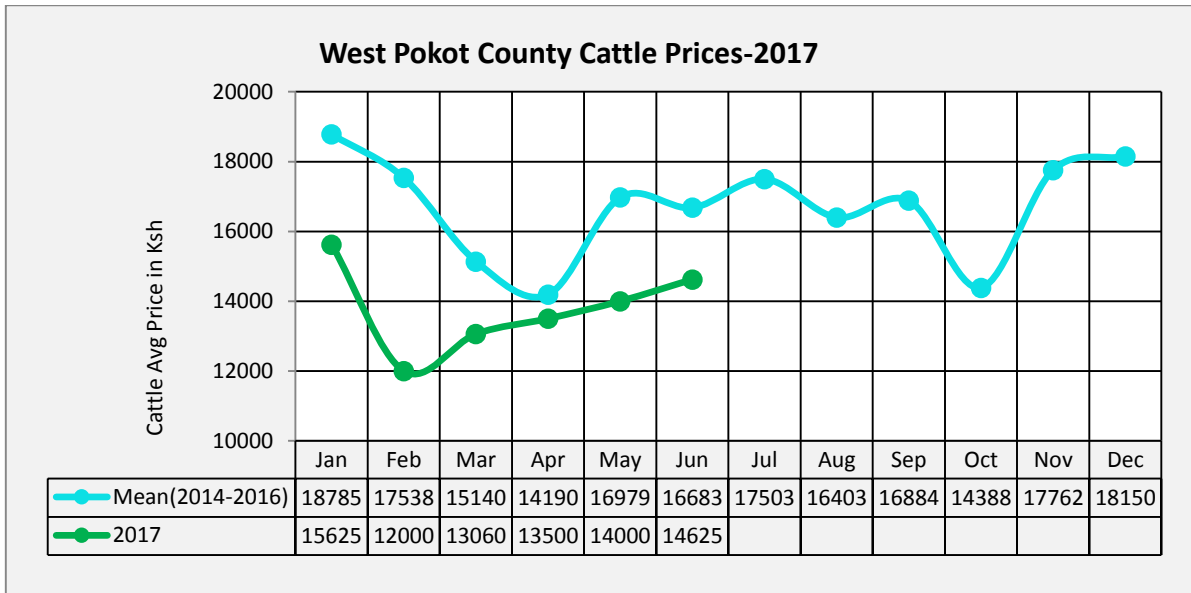
- Majority of the farmers grow Maize, Beans and Irish Potatoes during the long rains season. Maize in the Mixed Farming zone is at tussling stage and farmers who had planted beans earlier in the season have already started harvesting.
- Notably, Maize crop across most farms in the lowland areas had already started withering away as a result of the dry spell experienced during the month of June in those zones. In addition, over 65,000ha of land under Maize cultivation had been destroyed by the fall army worm.
- Harvesting of Irish Potatoes in the Mixed Farming zone was on going during the month under review.
- Horticultural production involving mainly onions in areas such as Ortum, Batei, Kokwotendwo and Tapach is ongoing with markets well positioned with adequate supplies of this food commodity.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle prices

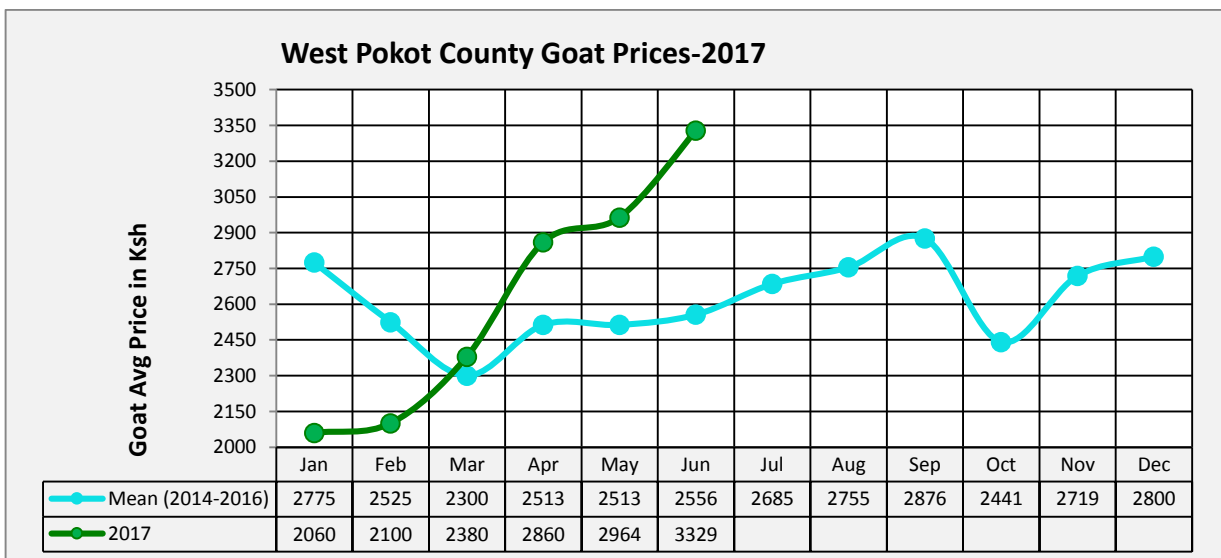
- The price of cattle across major markets in the Pastoral and Agro Pastoral livelihood zones adjusted upwards during the month under review to Ksh.14, 625 from the Ksh.14, 000 in May.
- Improved body condition in comparison to the previous month attributed to reduced trekking distance to water source and pasture availability was the major driver behind the price increase.



- The current cattle price is below the short term average price for the month by 12 percent.

4.1.2 Goat Prices

- Equally goat price experienced an upward shift, a goat traded at Ksh.3, 329 during the month under review in comparison to Ksh.2, 964 during the month of May across all livelihood zones.

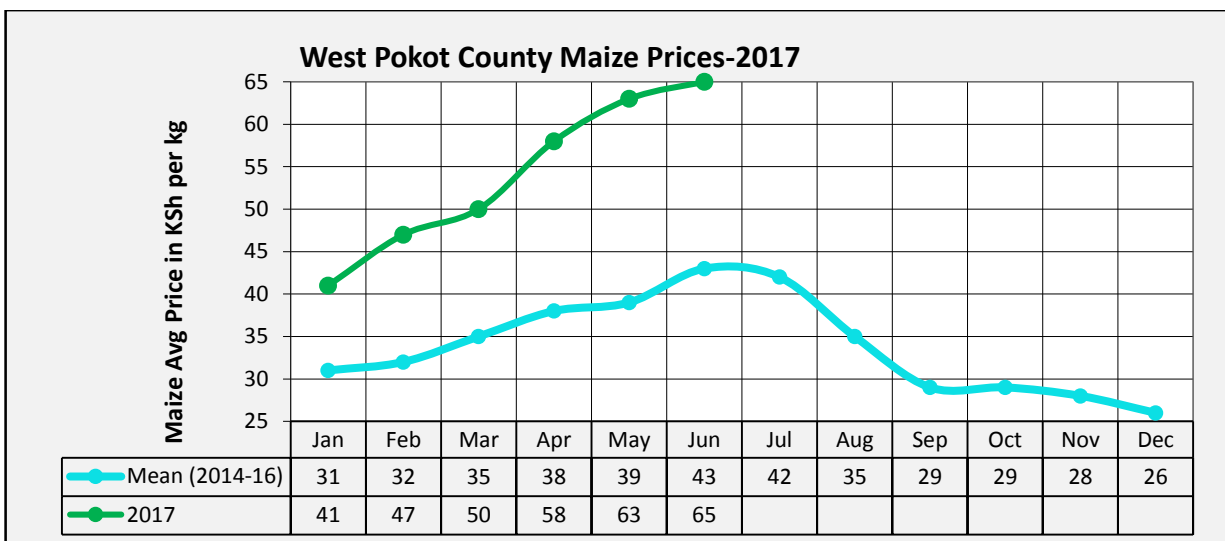


- The increase in price was as a result of improved body condition in comparison to the previous month attributed to browse availability and quicker recovery from the drought effects.
- The current retailing price of goat is 30 percent above the short term average price for the month.

4.2 CROP PRICES

4.2.1 Maize

- Maize currently retails at Kshs.65 per kg and this is an increase from the Kshs.63 recorded in May.
- This market price is 51 percent above the three year short term average price for the month under review.

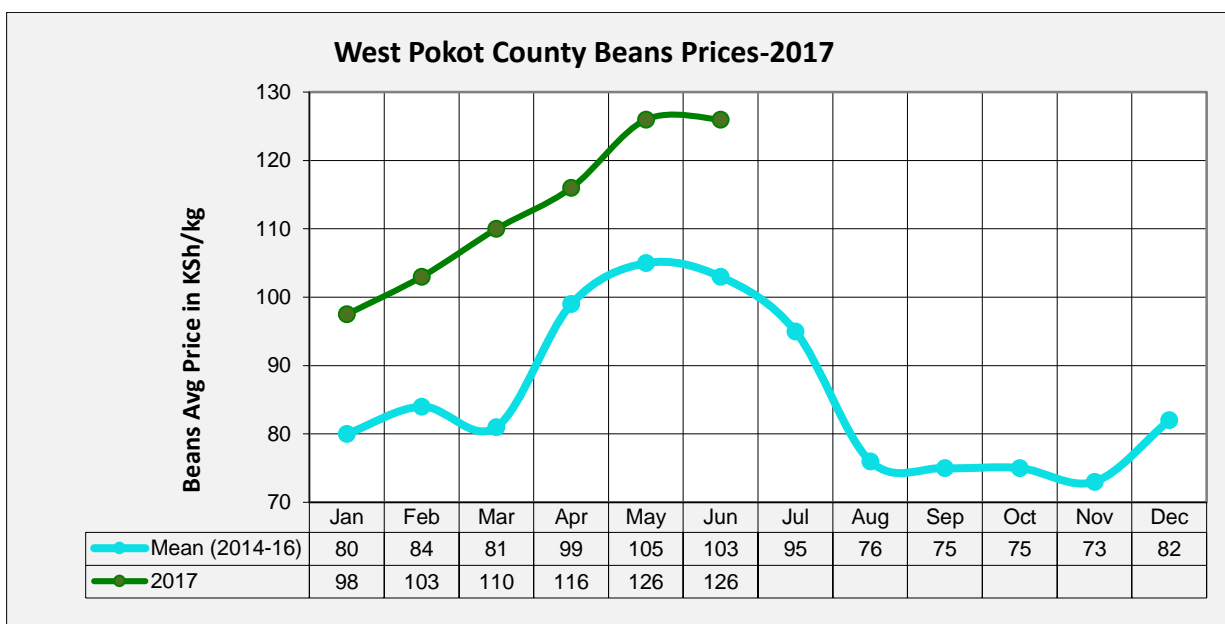


- Limited supply of cereals from external sources bordering the county coupled with stock outs are the main factors that resulted in the Pastoral areas recording a higher price in comparison to other areas.
- Markets will be key for most households in meeting their daily food needs. The price of Maize is projected to rise further as scarcity hits the Mixed Farming zone resulting in an increase in demand.

4.2.2 Beans

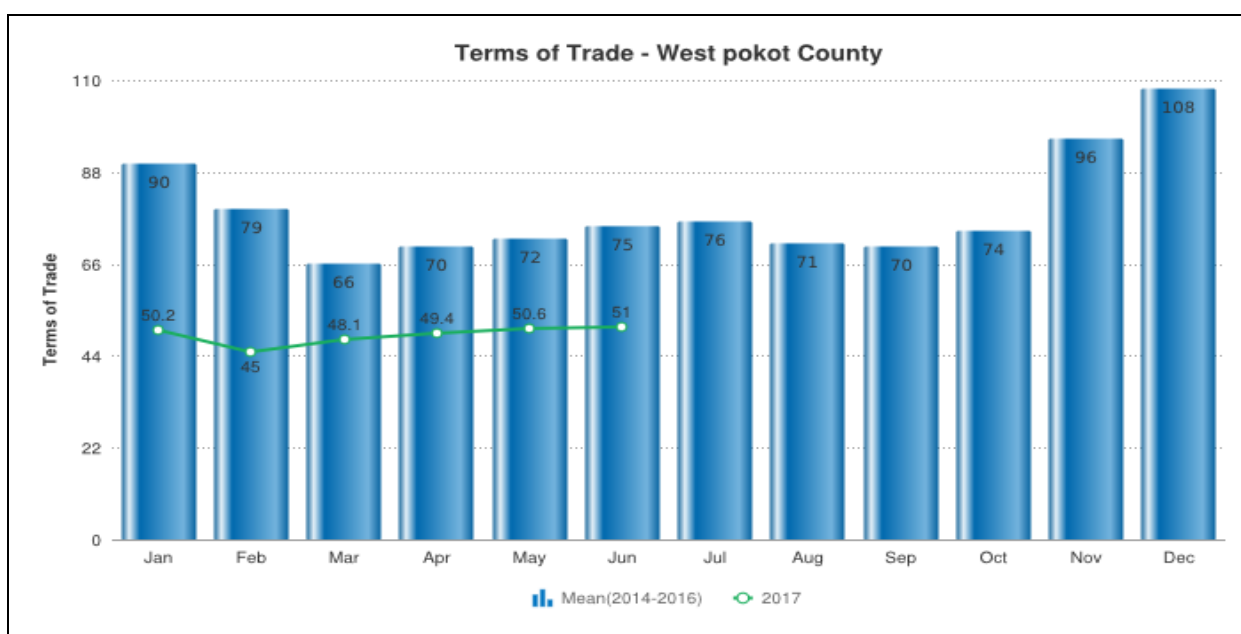
- The price of beans per kilogram remained stable at Kshs. 126 during the month under review.
- The stability could be attributed to availability of beans at household level albeit in small quantities from the on-going harvesting and that has eased demand for it at market level.
- There was no significant variation in price of beans across the Pastoral and Agro Pastoral zone due to availability in both zones.

- 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 lies above by 23 percent.



4.3 LIVESTOCK PRICE RATIO/ TERMS OF TRADE (TOT)

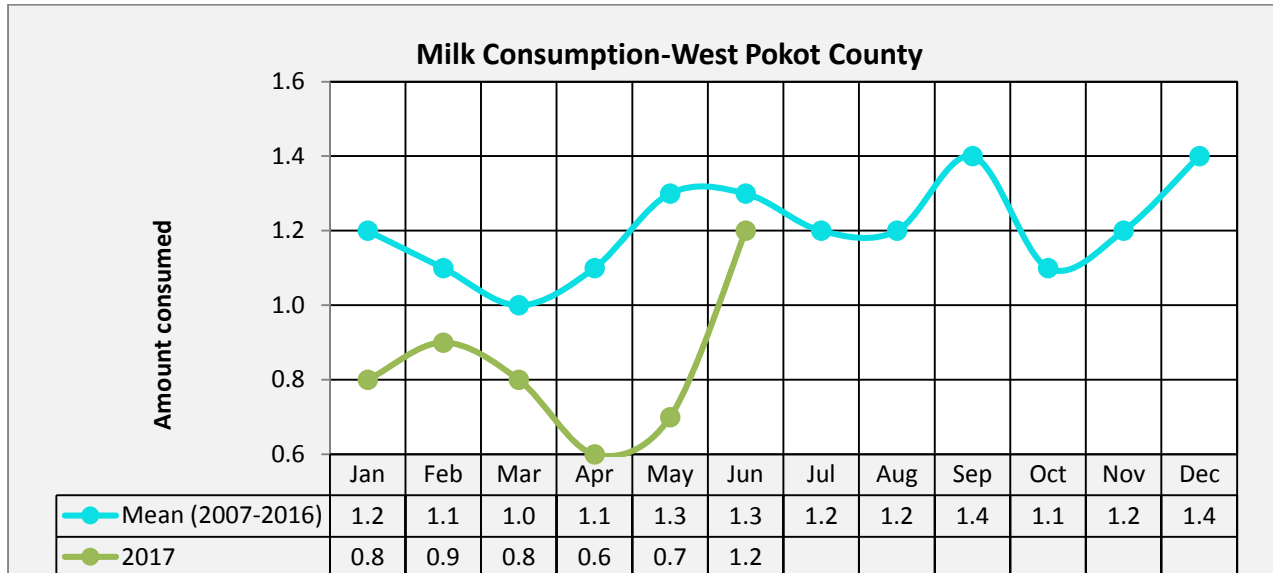
- The ToT remained unchanged and unfavourable to pastoralists at 51 percent implying that they could only obtain the same number of kilograms of maize as those in May from the sale of a goat. This ToT is 32 percent lower than the short term average ToT for the month. The stability is attributed to the concurrent increase in both goat and maize price.
- The overall effect of the increasing goat price is likely to be neutralized by the skyrocketing price of maize resulting in a stable ToT over the next one month.



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- All the 1.2 litres of milk produced currently is being consumed at household level across all livelihood zones.



- Reduced milk production level at household level attributed to a small milking herd within the county is the major contributor towards the low consumption level.
- The quantity of milk consumed is 7.7 percent below the normal consumption level for the month.

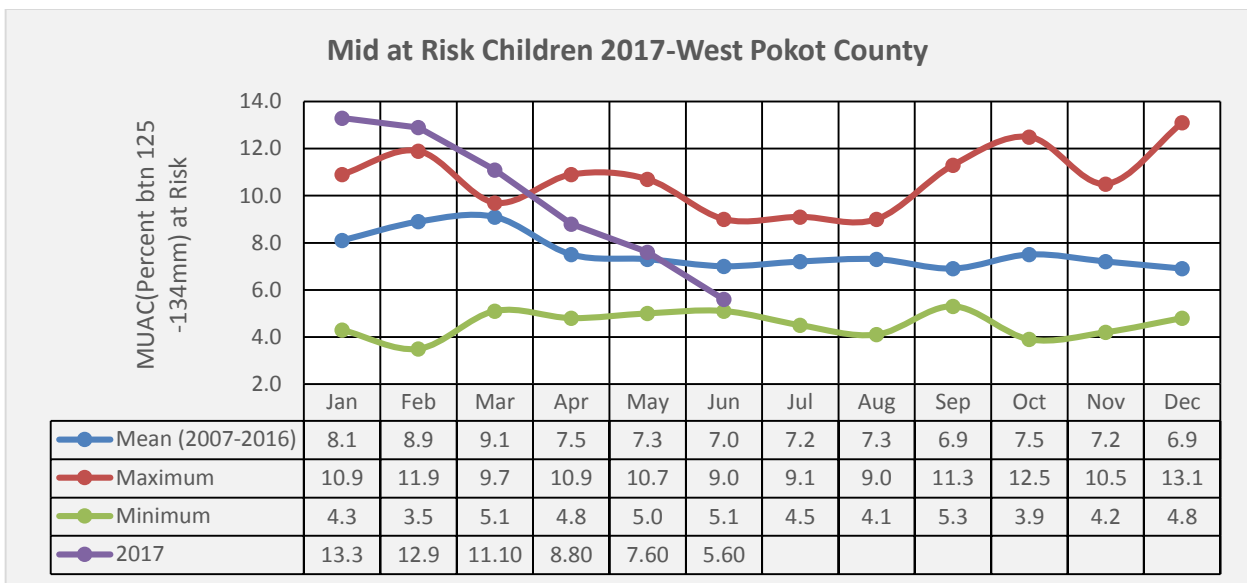
5.2 FOOD CONSUMPTION SCORE

- A total of 29%, 39% and 80% 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 was 34.3 and thus remained unchanged from that of the previous month.
- However, there was a significant variation across the two livelihood zones with for instance 47.5% of households in the Agro Pastoral zone being categorized as having a poor FCS in comparison to 58.4% of households under the same category in the Pastoral zone.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- Proportion of children rated being 'at risk' of malnutrition was 5.6 percent, a decrease from the 7.6 percent during the previous month.
- This proportion 'at risk' of malnutrition is 28.6 percent below the long term average for the period in a normal year.



- The reducing number of under-fives falling outside the normal range of children at 'risk' of malnutrition is as a result of the active case finding and continued provision of essential health and nutrition services through integrated health outreaches especially in hotspots.

5.3.2 Health

- Among the sampled children during the month under review, Diarrhea was the most commonly reported ailment.

5.4 COPING STRATEGY

5.4.1 Coping Strategy Index (CSI)

- Coping strategy index for the month of June was 13.6 and thus remained relatively unchanged from the 14.1 recorded during the previous month. Therefore, coping strategies employed by households were similar for June and May.
- Pastoral livelihood zone recorded a coping strategy index of 12.3 in comparison to the 15.3 in Agro Pastoral livelihood zone and this is mainly due to the continued slow but steady improvement in livestock productivity along the Pastoral zone.
- Most households relied on less preferred/less expensive food such as sorghum during the month under review.
- Sixty eight percent of households sampled practiced coping in June, a slight decrease from the seventy three percent that were practising coping in May.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 FOOD

- Kengen Company donated 90 bags of maize and 60 bags of beans benefitting 2,500 learners targeting schools along the Pokot-Turkana border including Riting, Lorogon, Sarmach, Lonyangalem, Turkwel and George primary at a cost of 1.5 million.

6.2 NON-FOOD

Livestock

- The ministry of livestock with support from national government distributed 4000 (2kg) blocks of UMMB to Lelan and Tapach wards at a cost of Kshs 3 million.

Health

- Action against Hunger (ACF) was supporting 18 health outreaches targeting sites such as Shalpough, Kerelwa, Toomoi, Katuda, Nasal, Kasitot, Kaporo among others at a cost of Kshs 406,800 during the month under review.

7.0 EMERGING ISSUES

7.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT

- A banditry attack was reported in Ombolion area where over 500 cattle were stolen with one life being lost during the month under review.

7.2 MIGRATION

- Livestock migration was witnessed in Riwo, Suam, Kodich, Kapchok, Kiwawa, Batei and Masol wards involving the herd that had not migrated earlier.

7.3 FOOD SECURITY PROGNOSIS

- Livestock productivity is anticipated to experience a dip over the next two months as the available pasture levels dwindle mainly along the Pastoral livelihood zone.
- Livestock body condition is expected to deteriorate with the terms of trade projected to remain stable or start deteriorating if no off season rainfall is received coupled with the harvest anticipated to be low.
- Proper market functionality will be key in bridging food gaps that may arise over the next two months especially in the Pastoral zone.

8.0 RECOMMENDATIONS

- Control the spread of faw/fall army worm through provision of effective and relevant pesticides while sensitizing farmers so as to optimize agricultural production.
- Vaccinate animals against Pest Petis Ruminantes (PPR), CBPP and CCPP targeting Batei, Chepareria, Kapchok and Wei Wei wards while intensifying disease surveillance efforts along the county borders.
- Provide essential water treatment chemicals targeting all hotspots so as to minimize the risk of water borne disease outbreak while providing nutrition and health services through integrated outreaches to sites that have reported high malnutrition rates.
- Facilitate smooth market accessibility for majority of households resident in the conflict prone Turkwel belt through enhanced peace building along the Turkana and Marakwet borders.