

National Drought Management Authority

WEST POKOT COUNTY

DROUGHT EARLY WARNING BULLETIN FOR MAY 2017



A Vision 2030 Flagship Project



MAY EW PHASE



Drought Situation & EW Phase Classification

Biophysical Indicators

- During the month enhanced rainfall was received countywide with an average distribution in time of 12-15 days. The cumulative rainfall for the 6-month period (December-May) for Nasukuta rainfall station amounts to only 77% of the normal for the same period.
- The condition of vegetation improved further as evidenced by the shift in VCI-3month for the county from 18.95 in April to 25.02 in May. However, Pokot central remained most affected with a VCI-3month of 18.18.
- Forage condition is fair across all the livelihood zones.

Socio Economic Indicators (Impact Indicators)

- Body condition of cattle and sheep is fair but improving and distance to water source decreased further but remains outside the normal range. Milk production and consumption is low at household level and remains below the normal range. Terms of trade are currently unfavourable.
- There was no notable migration during the month. The overall FCS improved slightly but remained within the borderline band with 73% of households embracing coping mechanisms. Proportion of children 'at risk' of malnutrition dropped to 7.6% but still remains flagged outside the normal range.

Early Warning (EW) Phase Classification

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

Biophysical Indicators	Value	Normal range
Rainfall (% of normal for Nasukuta Station)	77	90-110
VCI-3month (County)	25.02	>35
VCI-3month (Pokot Central)	18.18	>35
Forage Condition	Fair	Good

Production Indicators	Value	Normal range
Livestock Body Condition	Not Normal	Normal
Milk Production	0.7 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)	50.6	>72
Milk Consumption	0.7Litres	>1.1 Litres
Return distance to water sources (household)	3.8 km	0.0 -2.5km
Cost of water at source (Ksh /20 litres)	Kshs.5	<Kshs.5.0

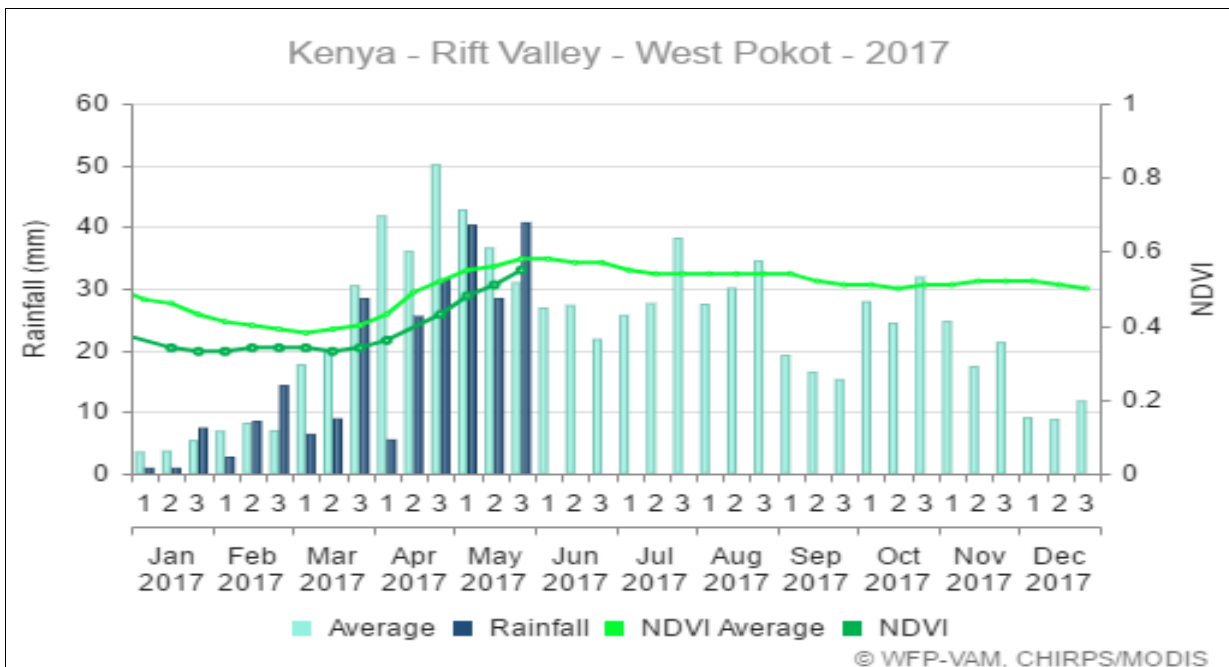
Utilization Indicators	Value	Normal range
Nutrition status, MUAC (% at risk of malnutrition)	7.6	0.0- 7.3
Coping Strategy Index (CSI)	14.1	<14.8
Food Consumption Score	33	>35

<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 received during the month under review was enhanced in comparison to the previous month with most areas across the entire county recording an average of 12-15 wet days.



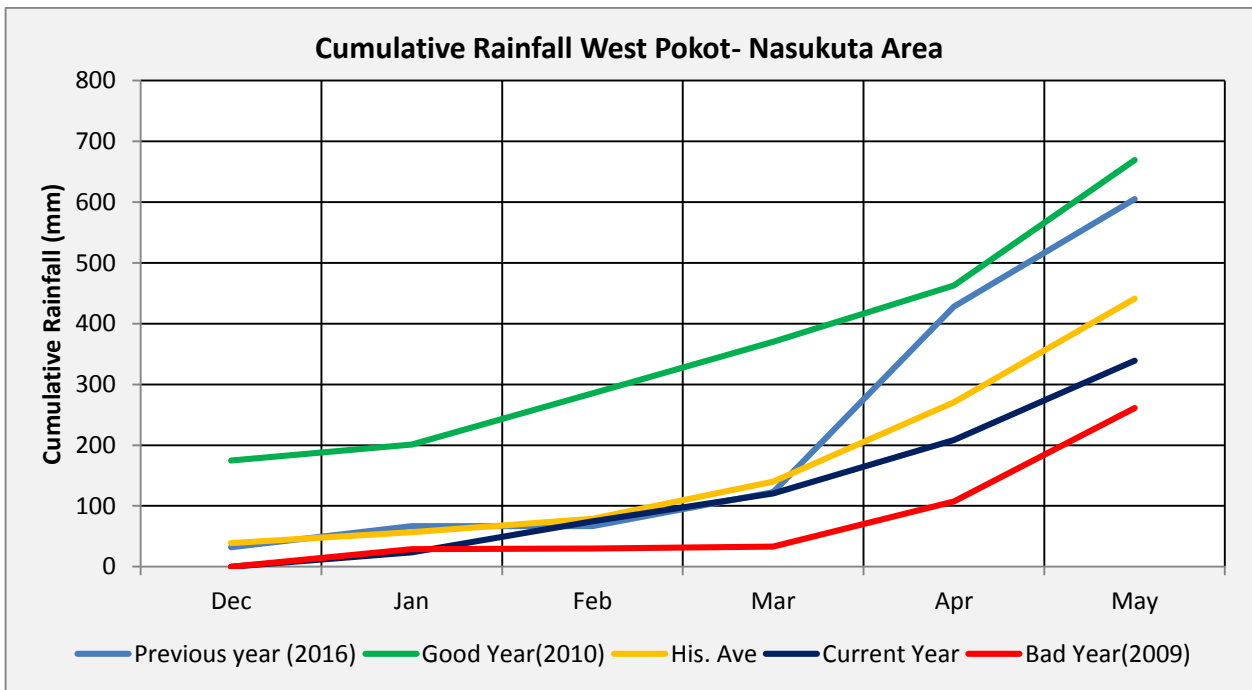
Source: VAM-World Food Programme

- There was a notable increase in dekadal rainfall amounts albeit the overall totals remaining below normal levels except for dekad three as depicted above. Highest rainfall amount was recorded during dekad one (40.2mm) and dekad three (40.6mm) with dekad two recording 28.3mm.
- The current NDVI values are still below the historical NDVI values due to below normal rainfall amounts.

1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The spatial distribution was even, most areas along the Pastoral and Agro Pastoral livelihood zones received rainfall during the month under review.
- Analysis of rainfall data as recorded at Nasukuta rainfall station located in the lowlands indicates that the cumulative rainfall for the six month period (December 2016 to May 2017) that amounts to 339.3mm is below the cumulative thirteen year rainfall average for the same period that amounts to 441.2mm.
- Thus the amount of rainfall received during the period above was only 77 percent of the average rainfall for the period and lies below the normal range for the season.

- In comparison to the cumulative rainfall for the same period during the previous year (December 2015 to May 2016), the current cumulative rainfall falls short by an absolute deficit of 265.8mm.
- The period December 2008 to May 2009 remains the bad year historically as illustrated below.



1.3 OTHER EVENTS

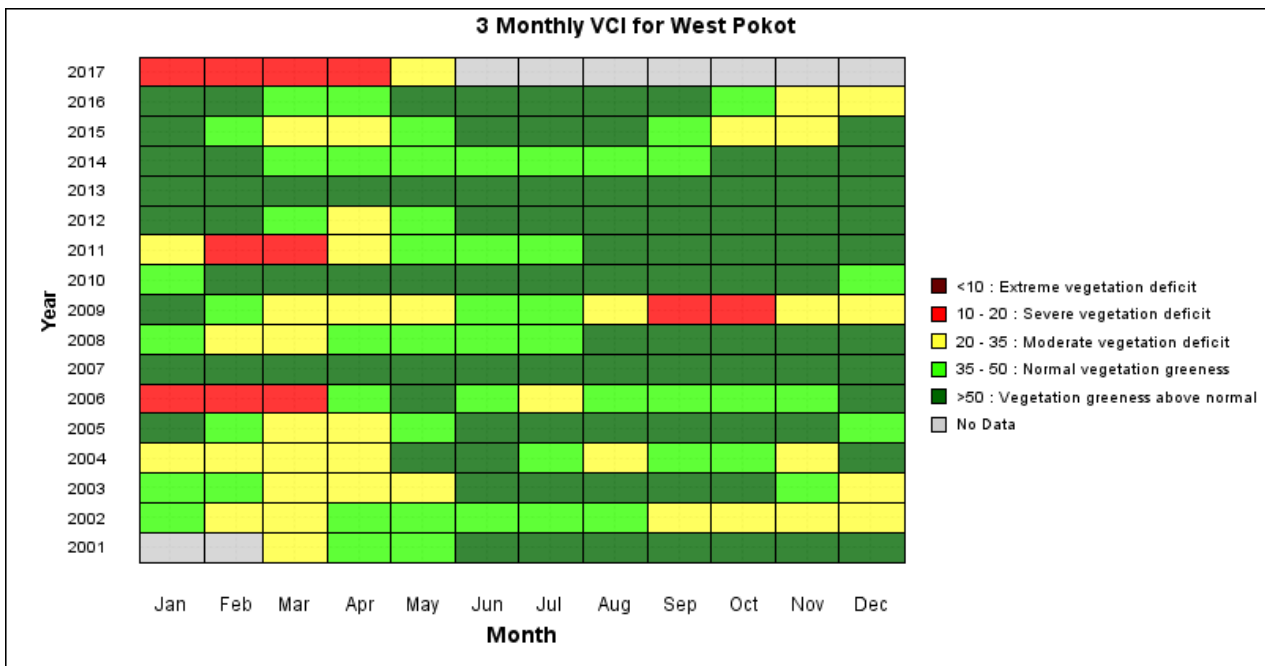
- There was no any other notable event such as floods, land/mud slides, lightning strikes nor hailstorms that occurred during the month under review.

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 each month from January to December has been classified in terms of agricultural drought based on VCI thresholds indicated. The vegetation condition has been analysed retrospectively and categorized 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 25.02 for the entire county and this depicts moderate vegetation deficit.
- A significant improvement in vegetation condition was witnessed across most parts evidenced by the shift in VCI-3month to 25.02 from the 18.18 recorded in April for the county. Pokot south, west and north sub counties fell within the moderate vegetation deficit band with only Pokot central still remaining in the severe vegetation deficit category.
- Generally, there was an improvement in the condition of vegetation across all the sub counties in relation to the preceding month. This could be attributed to the enhanced rainfall received during the month under review that led to accelerated vegetation regeneration.

2.1.2 Pasture

- Pasture condition is generally fair with an improving trend across all livelihood zones but still below normal in comparison to the pasture situation during a normal year. When compared to the previous month, pasture condition improved and this is due to the enhanced rainfall received during the month under review.
- Areas such as Masol, Kacheliba, Konyao and Kodich where pasture had depleted previous experienced a significant regeneration.
- Some areas along the Turkwel corridor such as Akulo and Amaler and those along the Pokot-Marakwet border including Chesegon remain inaccessible due to incidents of insecurity and thus pasture in these areas remains unutilized.
- There exists no significant variation in terms of quality and quantity of pasture in both zones.

2.1.3 Browse

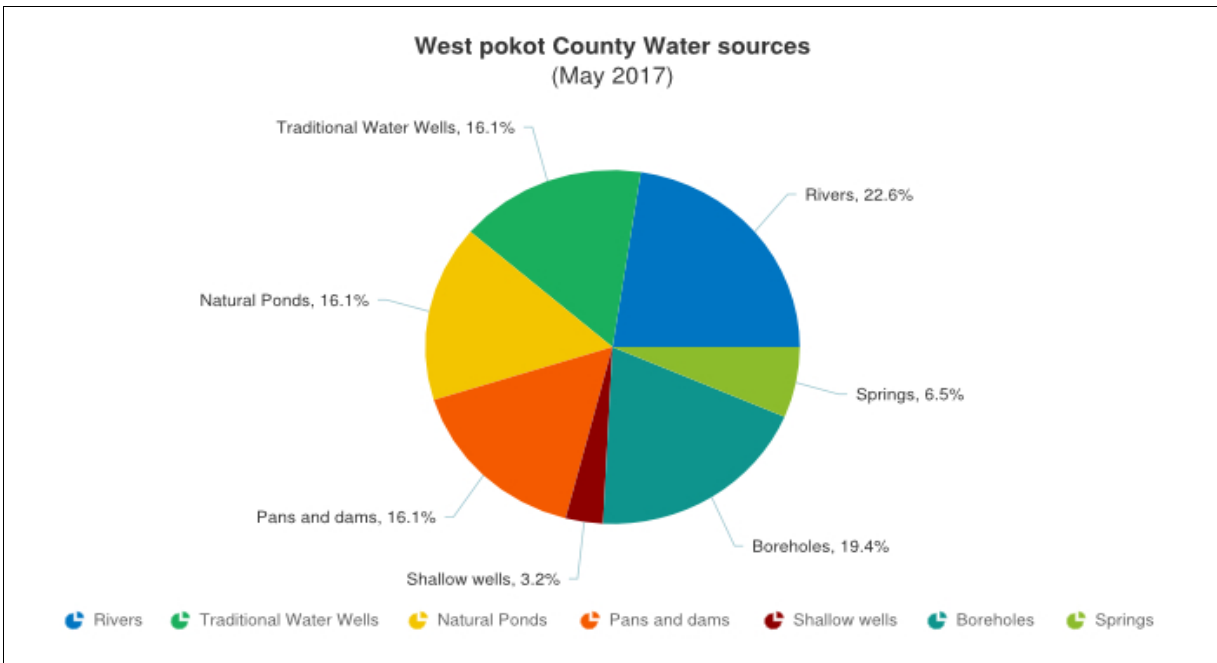
- Browse condition is fair to good across the two livelihood zones but still below normal in comparison to the browse situation during a normal year. There was a notable improvement in browse condition in relation to the previous month due to the enhanced rainfall received during the month under review.
- Access to browse for majority of pastoralists in Pokot central is constrained by the sporadic insecurity incidents along the Pokot-Marakwet/Turkana borders.
- Quality and quantity of browse remains uniform across the Pastoral and Agro Pastoral livelihood zones.

2.2 WATER RESOURCE

2.2.1 Sources

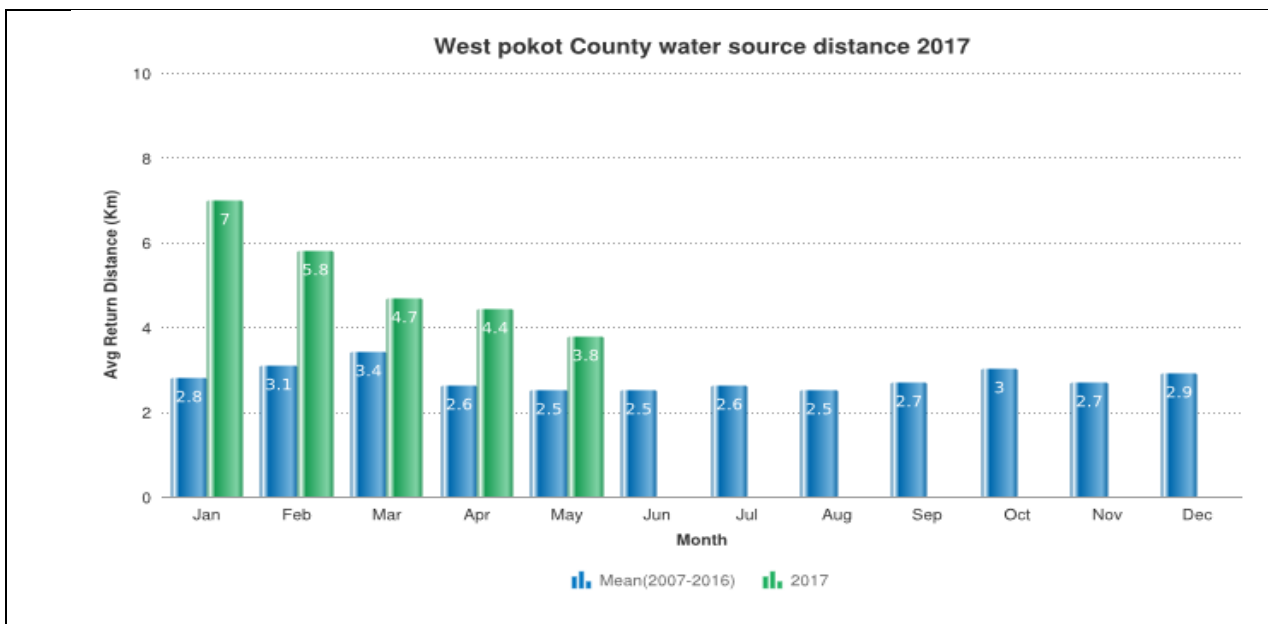
- Majority of households (22.6 percent) relied on rivers as the major source of water for household and livestock use during the month under review. This being a deviation from the previous month during which borehole was the main source. Other water sources in use included traditional water wells and water pans.
- Water recharge level in open water sources improved significantly during the month as a result of the good rains with most water pans being at 50-75 percent capacity.
- The current main sources in use are the normal sources where households draw water from during this time of the year.

- Most seasonal rivers including Kanyang'areng resumed flow with the permanent rivers recording improved volumes. This is normal during this period of the year.



2.2.2 Household Access and Utilization

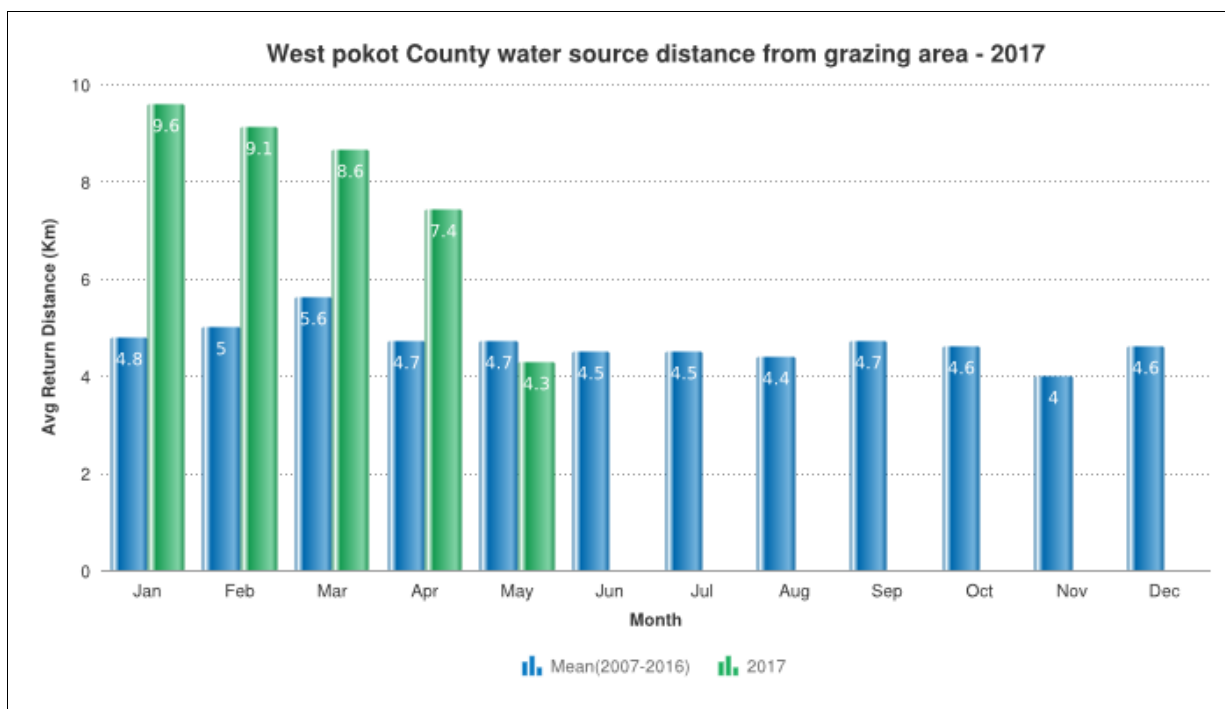
- The current household return distance to water source is 3.8Km and this is a decrease from the 4.4Km recorded in April but remains 52 percent above its long term average distance.
- The pastoral livelihood zone recorded a longer trekking distance to water source in comparison to the Agro Pastoral livelihood zone. Distance to water source reduced significantly as a result of the rainfall received during the month under review.



- The waiting time at water source generally reduced in both the Agro Pastoral and Pastoral livelihood zones to an average of 15-30 minutes.
- The average household water consumption per person per day improved to 10-15 litres in the Pastoral zone and 20-25 litres in the Agro pastoral zone.
- The cost of water at source is free in the rural areas unlike in urban centres where a 20 litre jerrican costs Kshs. 5 at water kiosks with the exception of water vendors who are selling a 20 litre jerrican at Kshs.10. 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 4.3 Km. This being a significant decrease from the 7.4Km recorded in April. In comparison to the normal trekking distance of 4.7 Km, current trekking distance lies below the normal range by nine percent.
- The Agro Pastoral livelihood zone recorded a shorter trekking distance from grazing areas to water sources in comparison to the Pastoral livelihood zone.



- Reduced livestock trekking distance was mainly attributed to availability of pasture in areas in close proximity to water sources such as water pans that had recharged.
- Watering frequency for all livestock species is 6-7 times in a week across the Pastoral and Agro Pastoral livelihood zones.

3.0 PRODUCTION INDICATORS

3.1 LIVESTOCK PRODUCTION

3.1.1 Livestock Body Condition

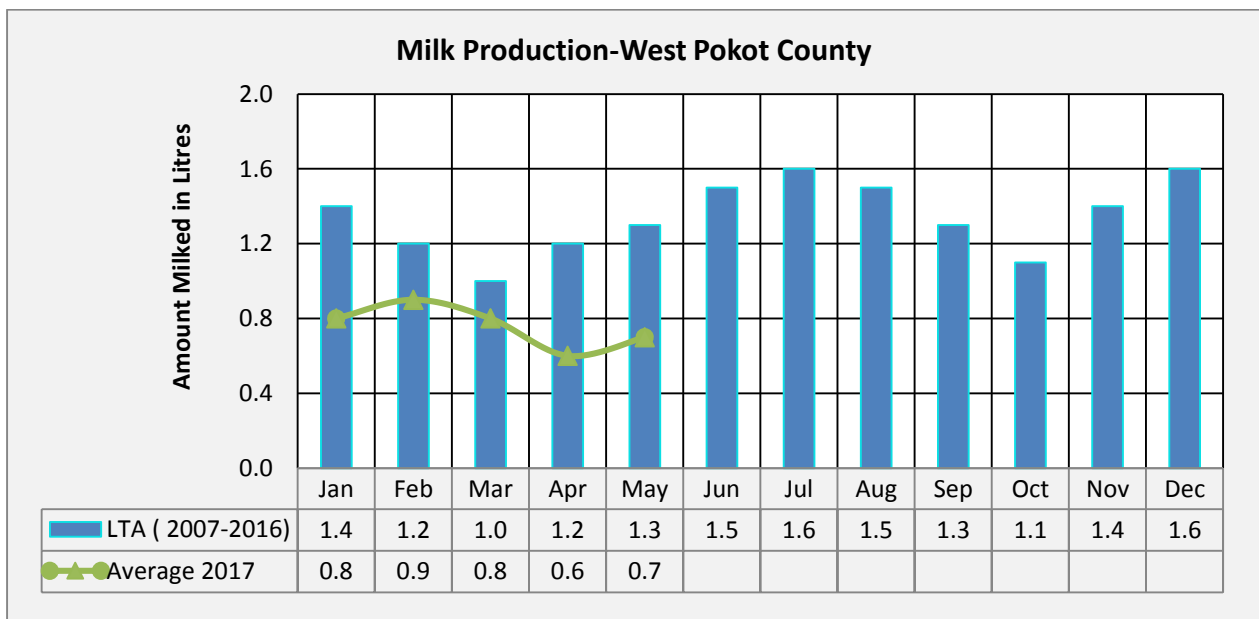
- The body condition of cattle and sheep is fair and continues to improve while that of camels and goats is fair-good in the Pastoral and Agro Pastoral livelihood zones.
- Livestock body condition is expected to improve further over successive months across all the livelihood zones as pasture availability is promoted by the ongoing long rains.
- However, in comparison to similar periods during previous years, the body condition of cattle and sheep is below normal and this is due 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

- Pastoralists continued reporting incidents of contagious bovine pleuropneumonia (CBPP) in cattle along the Pokot-Uganda border at Kapchok area with some parts of Chepareria also reporting a number of goats as having been affected by contagious caprine pleuropneumonia (CCPP).

3.1.3 Milk Production

- The two livelihood zones reported an average of 0.7 litres milk produced during the month under review and hence no significant variation from the 0.6 litres recorded in April. Most of the milk produced in the county came from cattle.



- In comparison to a normal season, the current household milk production of 0.7 litres is below the normal household milk production for the month by 46 percent.
- The low production levels could be attributed to the fact that majority of the milking herd that had migrated earlier outside the county in search of pasture is yet to return to their normal grazing areas within the county. In addition, most animals recovering from the effects of the recent drought are yet to attain their maximum productivity.

3.2 RAIN-FED CROP PRODUCTION

3.2.1 Stage and Condition of food Crops

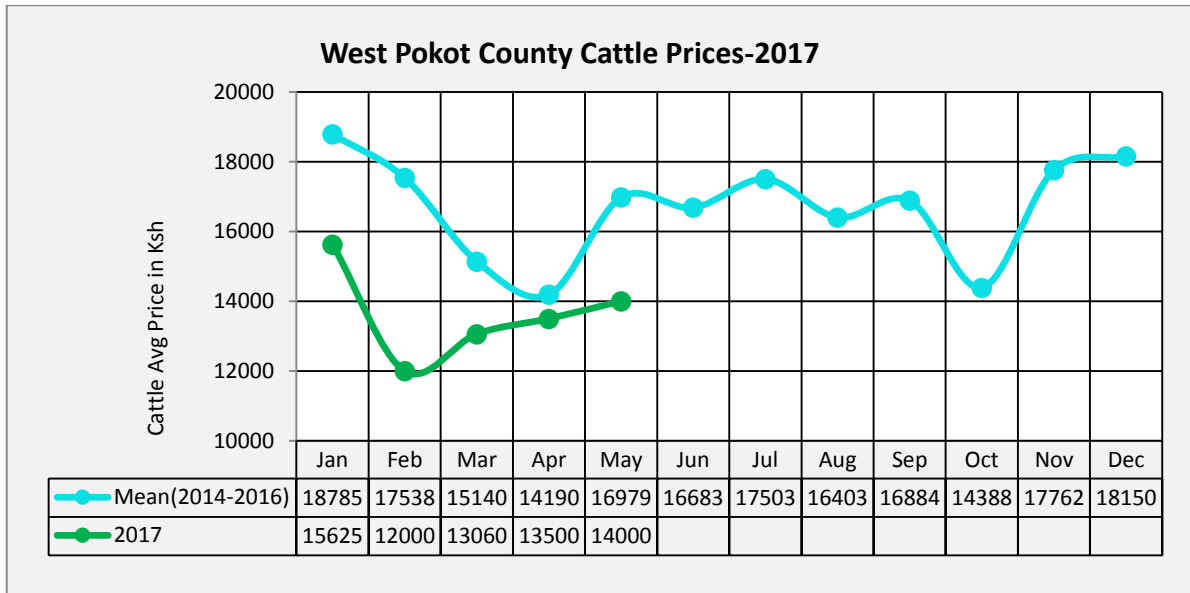
- Maize, Beans and Irish Potatoes are the main crops grown by farmers (approximately 50 percent of the population) during the long rains season. The development of crops planted during the previous month is on course with maize across most areas having gone past knee height.
- Horticultural production involving mainly onions in areas such as Ortum is ongoing with markets well positioned with adequate supplies of this food commodity.
- Over 3000 acres under maize production has been affected by the Faw/Fall Army worm with the irrigation farms in Pokot central being worst affected.

4.0 MARKET PERFORMANCE

4.1 LIVESTOCK MARKETING

4.1.1 Cattle prices

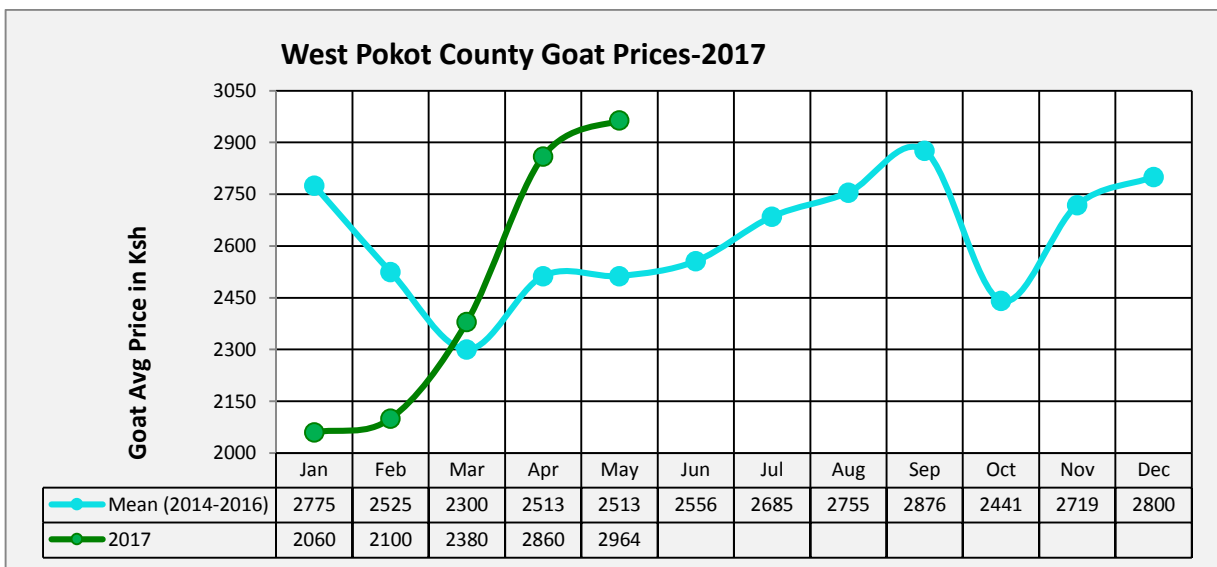
- The trading price of cattle during the month under review was Ksh.14,000. This being an increase in comparison to the previous month when it traded at Ksh. 13,500.
- The increase in price was due to an improvement in the cattle body condition attributed to pasture availability coupled with reduced trekking distance to water source.



- The current cattle price is below the short term average price for the month by 17.5 percent.

4.1.2 Goat Prices

- The price of goat increased to Ksh.2,964 during the month of May from the Ksh.2,860 recorded in April across all livelihood zones.

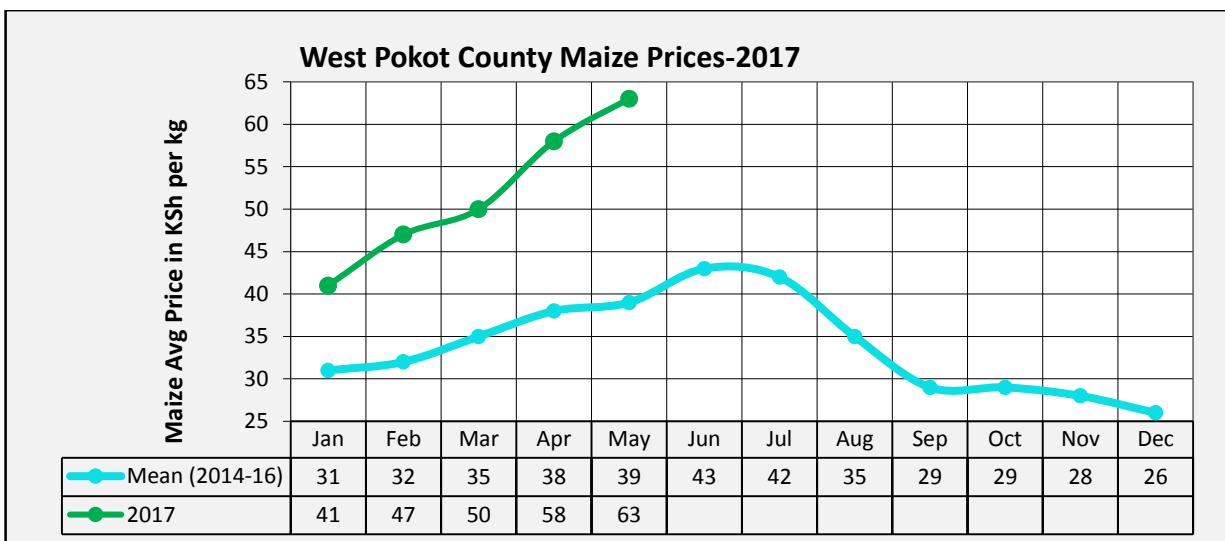


- Improved goat body condition resulting from browse availability countywide was the main reason that led to the increase.
- The current retailing price of goat is 17.9 percent above the short term average price for the month.

4.2 CROP PRICES

4.2.1 Maize

- A kilogram of maize currently costs Ksh.63; this is an increase from the Kshs.58 recorded in April.
- This market price is 61.5 percent above the three year short term average price for the month under review.

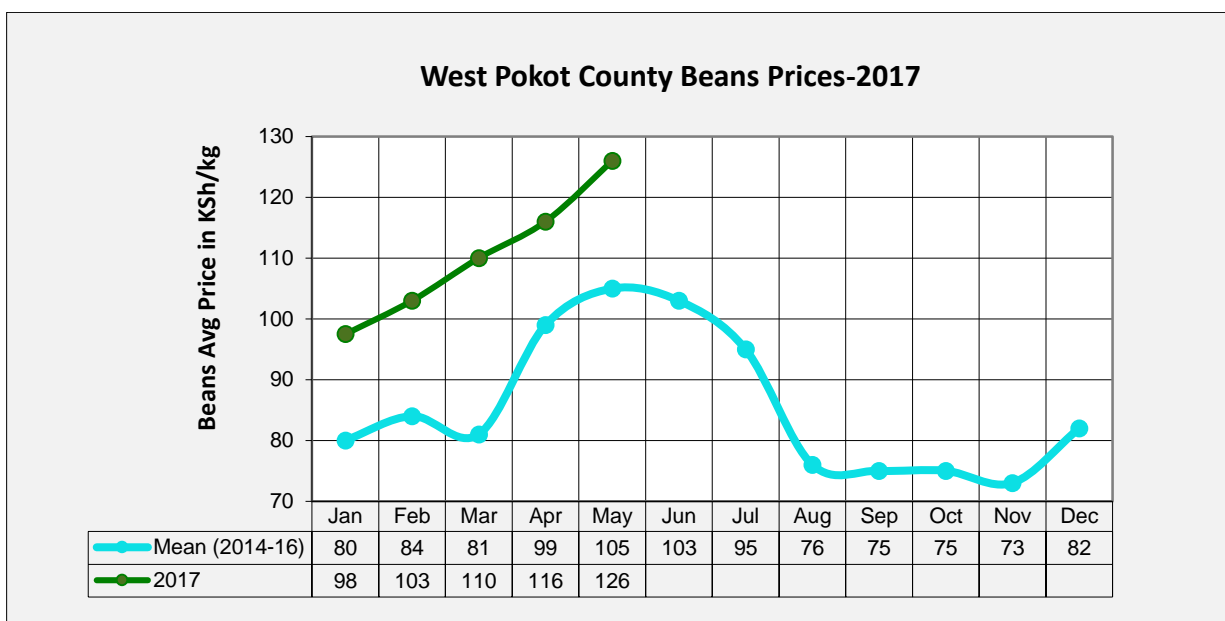


- Supplies from external sources in Marakwet that normally stabilize prices have been limited as a result of the ongoing conflict and thus Pastoral areas especially in Pokot central recorded a higher price in comparison to other areas.
- Most households are anticipated to rely more on markets to replenish their stocks in anticipation of the August harvest. Maize price is expected to rise further with this increase in demand more so within the external sources.

4.2.2 Beans

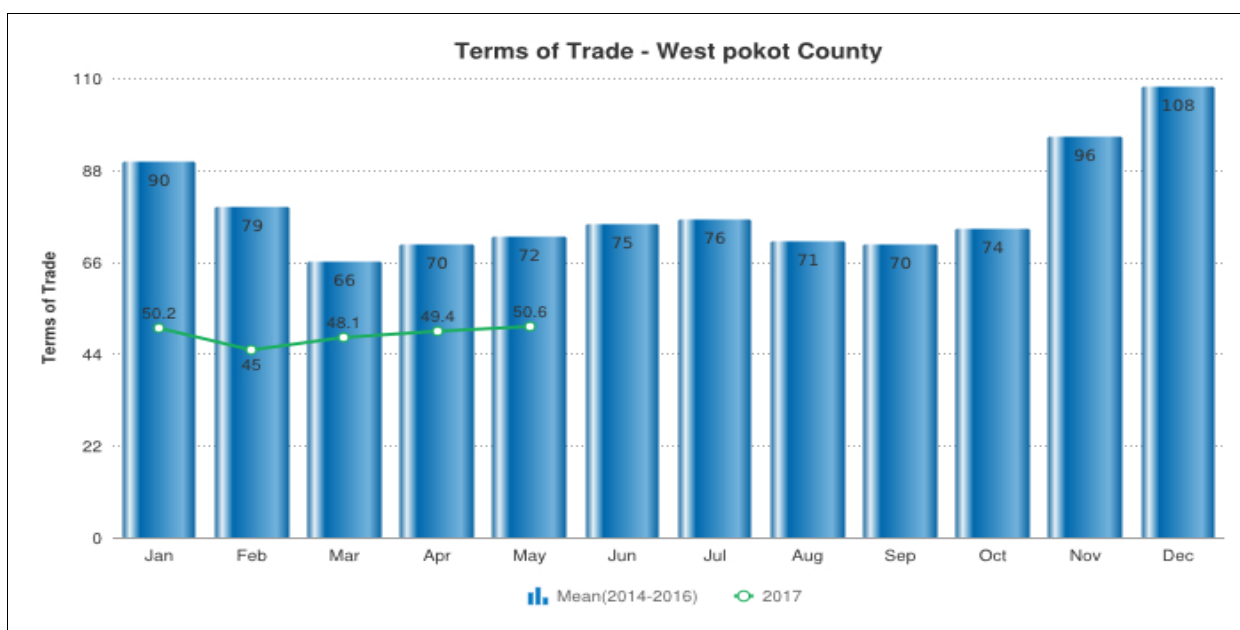
- The price of beans per kilogram increased from the Ksh. 116 reported in April to Ksh. 126 during the month under review.
- This increase in price could be attributed to scarcity of beans at the major external supply sources with the stocks from internal sources already depleted.
- Due to the two livelihood zones relying on the same external sources for supplies, there was no significant variation in price across the Pastoral and Agro Pastoral zones.

- The current market price of beans lies above the three year short term average price for a normal season during this time of the year by 20 percent.



4.3 LIVESTOCK PRICE RATIO/ TERMS OF TRADE (TOT)

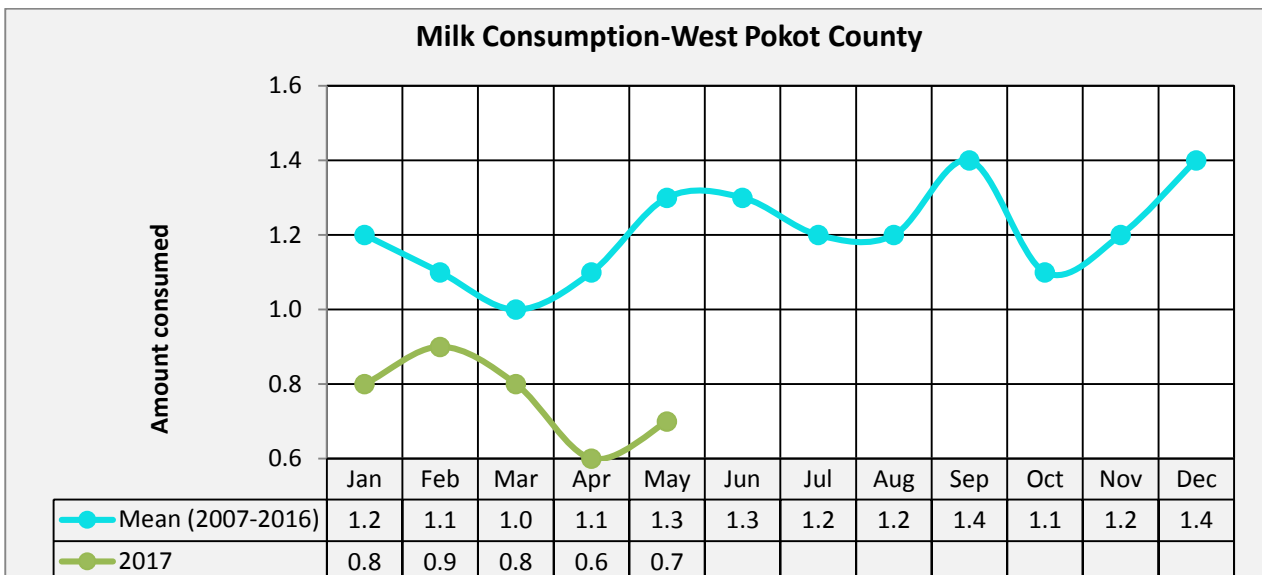
- The ToT is still unfavourable at 50.6 implying that pastoralists are getting almost a similar amount of maize as that they could obtain in April from sale of the same goat. The current ToT is 29.7 percent lower than the short term average ToT for the month. The stability in ToT was as a result of the concurrent increase in both goat and maize price.
- Stability in ToT is anticipated over the next two months as the overall effect of the increasing goat price is likely to be neutralized by the increase in maize price over that period.



5.0 FOOD CONSUMPTION AND NUTRITION STATUS

5.1 MILK CONSUMPTION

- All the 0.7 litres of milk produced currently is being consumed at household level across all livelihood zones.



- The low consumption level is as a result of low production level attributed to the fact that a good portion of the milking herd that migrated outside the county in search of pasture still remains in those grazing zones.
- In comparison to the same period over time, the quantity of milk consumed is 46 percent below the normal consumption level for the month.

5.2 FOOD CONSUMPTION SCORE

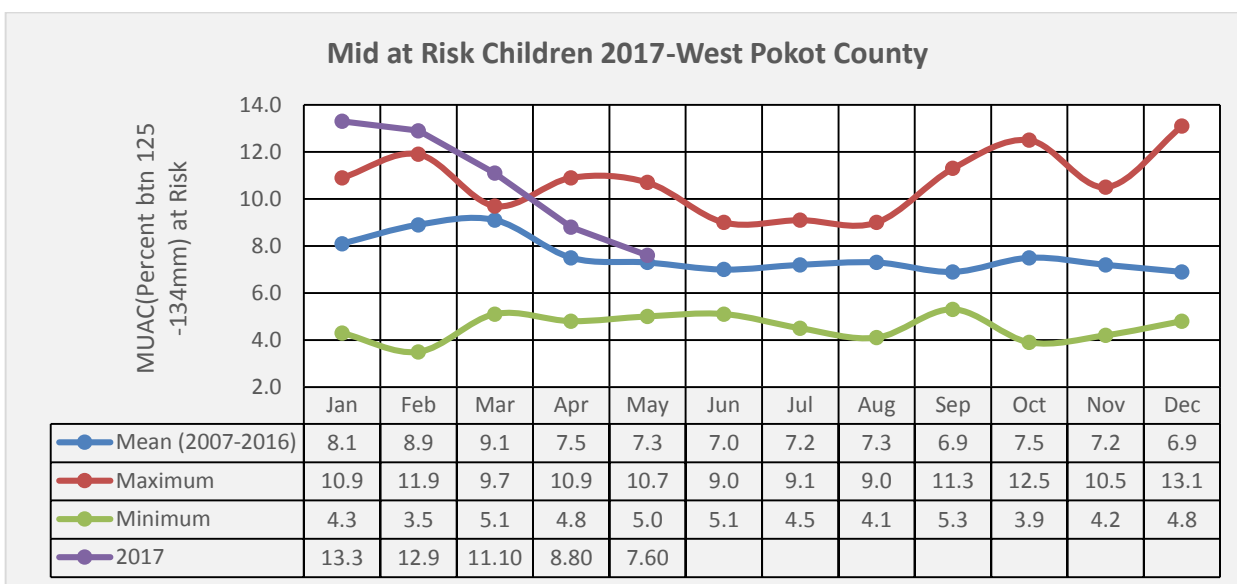
- A total of 61%, 22% and 17% of households fell within the poor, borderline and acceptable food consumption score categories respectively during the month under review.
- The mean food consumption score for the two livelihood zones during the month under review was 33 and thus an improvement in comparison to the 30.1 recorded during the previous month.
- However, there was a significant variation across the two livelihood zones with for instance 79% of households in the Pastoral zone being categorized as having a poor FCS in comparison to 33% of households under the same category in the Agro Pastoral zone.

5.3 HEALTH AND NUTRITION STATUS

5.3.1 Nutrition Status

- Proportion of children rated being 'at risk' of malnutrition dropped to 7.6 percent from the 8.8 percent recorded in April.

- The current proportion of children rated being 'at risk' of malnutrition is 4 percent above the long term average for the period in a normal year.



- Improved accessibility to essential health and nutrition commodities through initiation of mass screening and integrated health outreach services in a number of sites in the county was the major driver that contributed to the reducing number of under-fives falling outside the normal range of children 'at risk' of malnutrition.

5.3.2 Health

- Malaria and Diarrhea 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 May was 14.1 and thus remains unchanged from the 14.3 recorded during the previous month. Thus households employed relatively the same coping mechanisms in May as those employed in April.
- Agro Pastoral livelihood zone recorded a coping strategy index of 13.4 in comparison to the 14.6 in Pastoral livelihood zone and this is mainly due to the slow but steady improvement in livestock productivity and availability of diverse coping mechanisms within the Agro 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.
- The proportion of households resorting to coping in May was 73% and this was a slight drop from the 78% that were practising coping in April.

6.0 CURRENT INTERVENTION MEASURES (ACTION)

6.1 NON-FOOD

- NDMA with support from European Union (EU) under the drought contingency fund (DCF), continued supporting mass screening and health outreaches targeting mainly Pokot central and north and provided fuel subsidy to gen set driven boreholes mainly in Pokot north. Peace meetings targeting conflict prone areas in Pokot south and central were also conducted during the month under review.

7.0 EMERGING ISSUES

7.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT

- There were no major insecurity incidents during the month save for cattle theft in Akulo and Cheseгон that resulted in loss of fifty animals.

7.2 MIGRATION

- Majority of the herd still remain in the dry season grazing areas mainly in Uganda where they had migrated to earlier in the year and thus there was no notable migration that took place during the month under review.

7.3 FOOD SECURITY PROGNOSIS

- Livestock productivity is anticipated to improve further with pasture availability translating to improved body condition. Terms of trade are expected to be stable or improve steadily depending on the market adjustment of maize price and thus households stand a high probability of accessing nutritious foods leading to improved nutrition situation. However, incidents of insecurity in Pokot central remain a major constraint to household food access from markets.

8.0 RECOMMENDATIONS

- Intensify disease surveillance efforts while monitoring and vaccinating animals that will be migrating back into the county against pest petis ruminantes (PPR), CBPP and CCPP.
- Minimize the risk of water borne disease outbreak through provision of health education services on sanitation while providing essential water treatment chemicals.
- Optimize agricultural production by controlling the spread of the faw/fall army worm through provision of relevant pesticides while providing education on management of the worm.
- Enhance peace building efforts along the Turkana and Marakwet borders so as to facilitate smooth market accessibility for majority of household's resident in those conflict prone zones.