

# National Drought Management Authority

## WEST POKOT COUNTY

### DROUGHT EARLY WARNING BULLETIN FOR APRIL 2017



A Vision 2030 Flagship Project



#### APRIL EW PHASE

Drought Status: **ALARM**



Mipango ya kukabiliana na ukame

#### Drought Situation & EW Phase Classification

##### Biophysical Indicators

- Rainfall was received across most areas in the county mostly in the second and third dekad with a temporal distribution of 4-10 days. The cumulative rainfall for the 6-month period (November-April) for Nasukuta rainfall station amounts to only 64% of the normal for the same period.
- Vegetation condition improved slightly as evidenced by the shift in VCI-3month for the county to 18.95 in April from 15.57 in March. Pokot central and north remained most affected with a VCI-3month of 16.18 and 12.17 respectively.
- Forage condition is fair to poor across all the livelihood zones.

##### Socio Economic Indicators (Impact Indicators)

- Body condition of cattle and sheep is fair but improving and distance to water sources reduced but lies above the normal range. Milk production and consumption at household level is below the normal range. Terms of trade are low and lie outside the normal range by a significant margin.
- Part of the herd that had migrated outside the county has returned into the county in areas with pasture.
- Most households fell within the borderline food consumption band with 79% of them resorting to coping mechanisms. Proportion of children 'at risk' of malnutrition dropped to 8.8% but still remain outside the normal range.

#### Early Warning (EW) Phase Classification

LIVELIHOOD ZONE	EW PHASE	TREND
AGRO PASTORAL	<b>ALERT</b>	IMPROVING
PASTORAL	<b>ALARM</b>	IMPROVING
COUNTY	<b>ALARM</b>	IMPROVING

Biophysical Indicators	Value	Normal range
Rainfall (% of normal for Nasukuta Station)	64	90-110
VCI-3month (County)	18.95	>35
VCI-3month (Pokot Central)	16.18	>35
Forage Condition	Fair	Good

Production Indicators	Value	Normal range
Livestock Body Condition	Not Normal	Normal
Milk Production	0.6 Litres	>1.2 Litres
Livestock Migration Pattern	Normal	Normal
Livestock deaths (attributed to drought)	No deaths	No deaths

Access Indicators	Value	Normal range
Terms of Trade (ToT)	49.4	>70
Milk Consumption	0.6 Litres	>1.1 Litres
Return distance to water sources (household)	4.4km	0.0 -2.6km
Cost of water at source (Ksh /20 litres)	Kshs.10	<Kshs.5.0

Utilization Indicators	Value	Normal range
Nutrition status, MUAC (% at risk of malnutrition)	8.8	0.0- 7.5
Coping Strategy Index (CSI)	14.3	<14.5
Food Consumption Score	30.1	>35

- Short rains harvests
- Short dry spell
- Increased HH Food Stock
- Land preparation

- Planting/Weeding
- Long rains
- High Calving Rate
- Milk Yields Increase

- Long rains harvests
- A long dry spell
- Land preparation
- Increased HH Food Stock

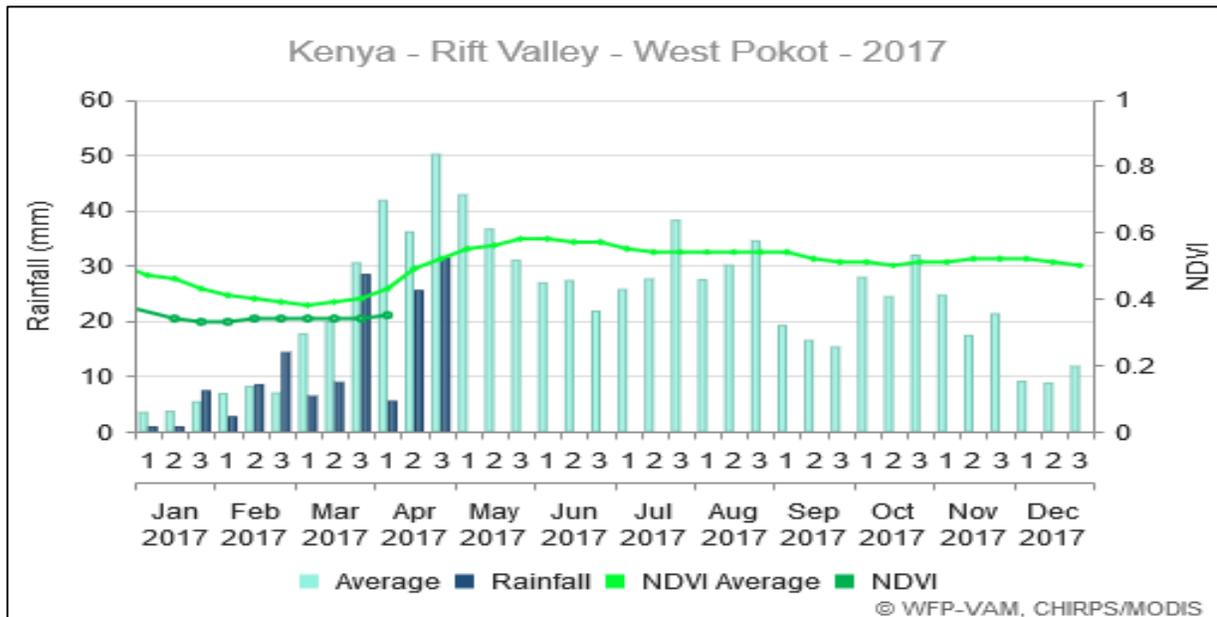
- Short rains
- Planting/weeding (Irish potatoes, Cabbages and Onions)

Jan	Feb	Mar	Apr	July	Jun	Jul	Aug	Sept	Oct	Nov	Dec
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## 1.0 CLIMATIC CONDITIONS

### 1.1 RAINFALL PERFORMANCE

- The county continued receiving rainfall of higher intensity during the month under review in comparison to the preceding month.
- Most areas in the lowlands and highlands received rainfall during the month of April with a temporal distribution of 4-10 days.



Source: VAM-World Food Programme

- However, dekadal rainfall amounts were depressed and below normal as illustrated above. Dekadal rainfall amounts increased rapidly from dekad one to dekad two and steadily to dekad three.
- Similarly, current NDVI values were below the historical NDVI values due to below normal rainfall amounts.

### 1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The distribution of rainfall in space was uneven with varying rainfall amounts. Kaibos received 90.7mm in 10 rainy days, Tapach received 191.5mm in 15 rainy days, Kaibichbich received 83.3mm in 7 rainy days, Sebit received 103.7 in 9 rainy days, Alale received 104.8 in 6 rainy days and Sigor received 78mm in 5 rainy days.

### 1.3 OTHER EVENTS

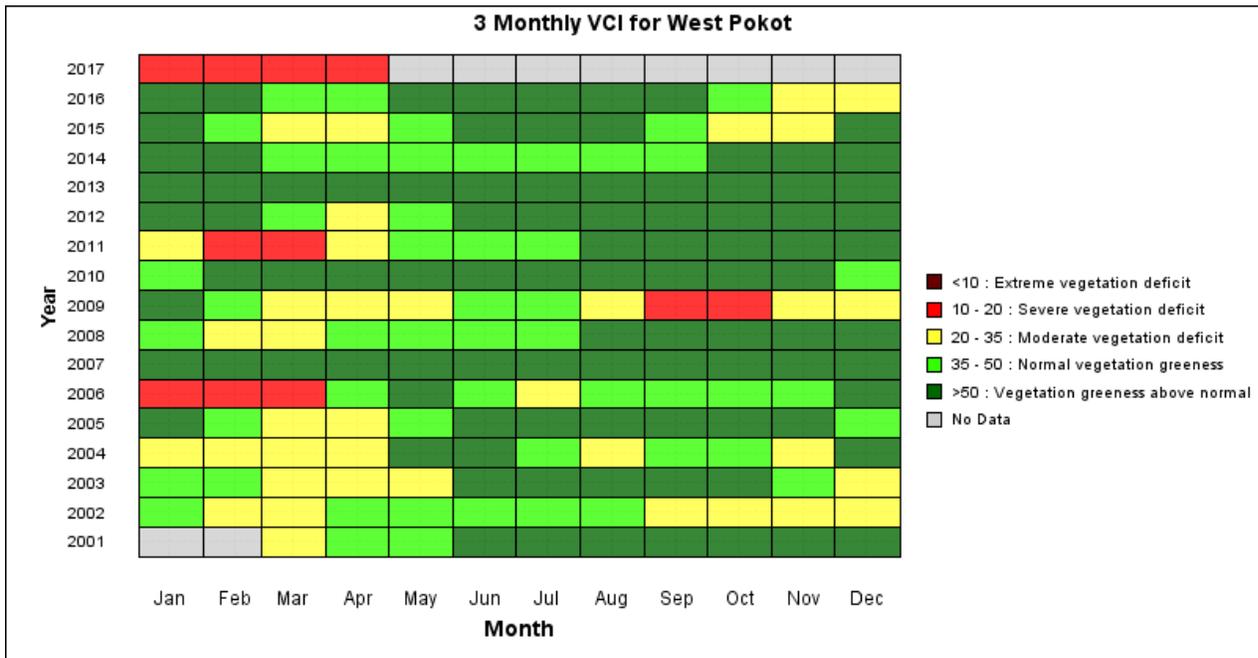
- There was no any other notable event such as floods, land/mud slides, lightning strikes nor hailstorms that occurred during the month under review.

## 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 18.95 for the entire county and this depicts severe vegetation deficit.
- A slight improvement in vegetation condition was witnessed across most parts as exemplified by the shift in VCI-3month to 18.95 in April from the 15.57 recorded in March for the county. Pokot North and Pokot Central Sub-counties fell in the severe vegetation deficit band whereas Pokot West and Pokot South sub-counties were under the moderate vegetation deficit. However, this was an improvement in relation to condition of vegetation in those sub counties during the preceding month.
- This improvement is attributed by the regeneration of vegetation due to the ongoing long rains.

### **2.1.2 Pasture**

- The condition of pasture is generally fair to poor but improving across the two livelihood zones and this is not normal in comparison to the pasture situation during a normal year. When compared to the previous month, pasture condition improved slightly and this could be mainly attributed to the rainfall received during the month under review.
- There is improved pasture regeneration in areas where pasture was depleted.
- The ongoing conflict along the Pokot-Turkana/Marakwet borders remain the major impediment to pasture access.
- There exists no significant variation in terms of quality and quantity of pasture in both zones.

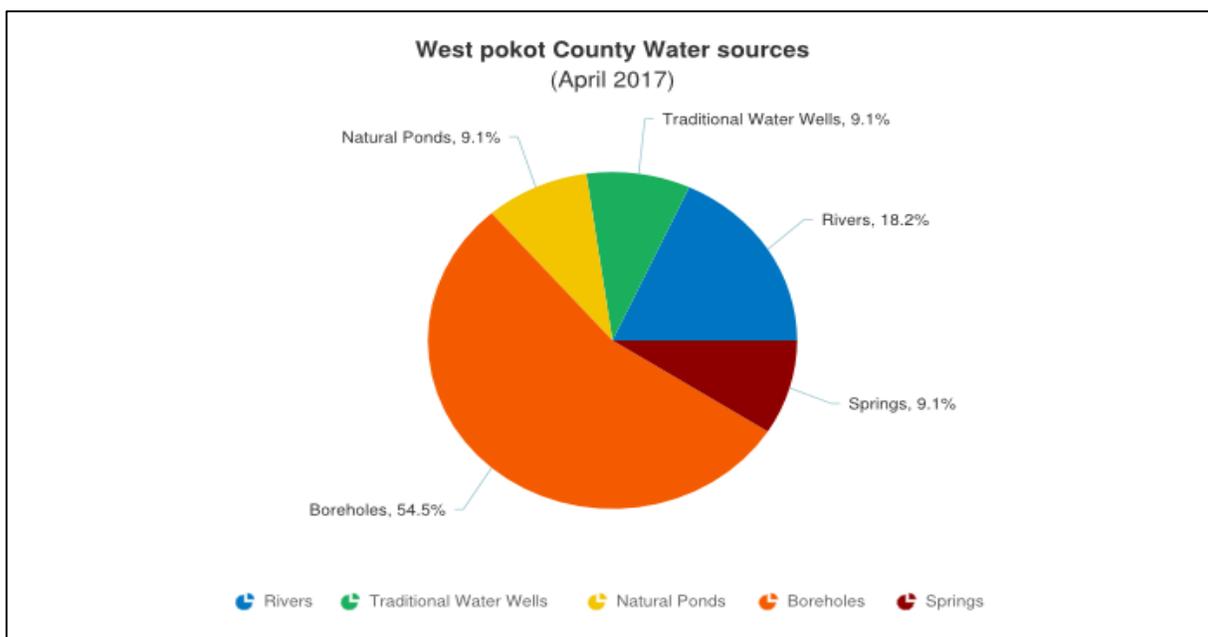
### **2.1.3 Browse**

- Browse condition is fair across the two livelihood zones and this is not normal in comparison to the browse situation during a normal year. A slight improvement in browse condition was noted in relation to that of the previous month due to improved rainfall received during the month under review.
- Access to browse has been constrained by the conflict along the Pokot-Marakwet/Turkana borders.
- Quality and quantity of browse is fair in both zones and there is no significant variation between the Pastoral and Agro Pastoral livelihood zones.

## **2.2 WATER RESOURCE**

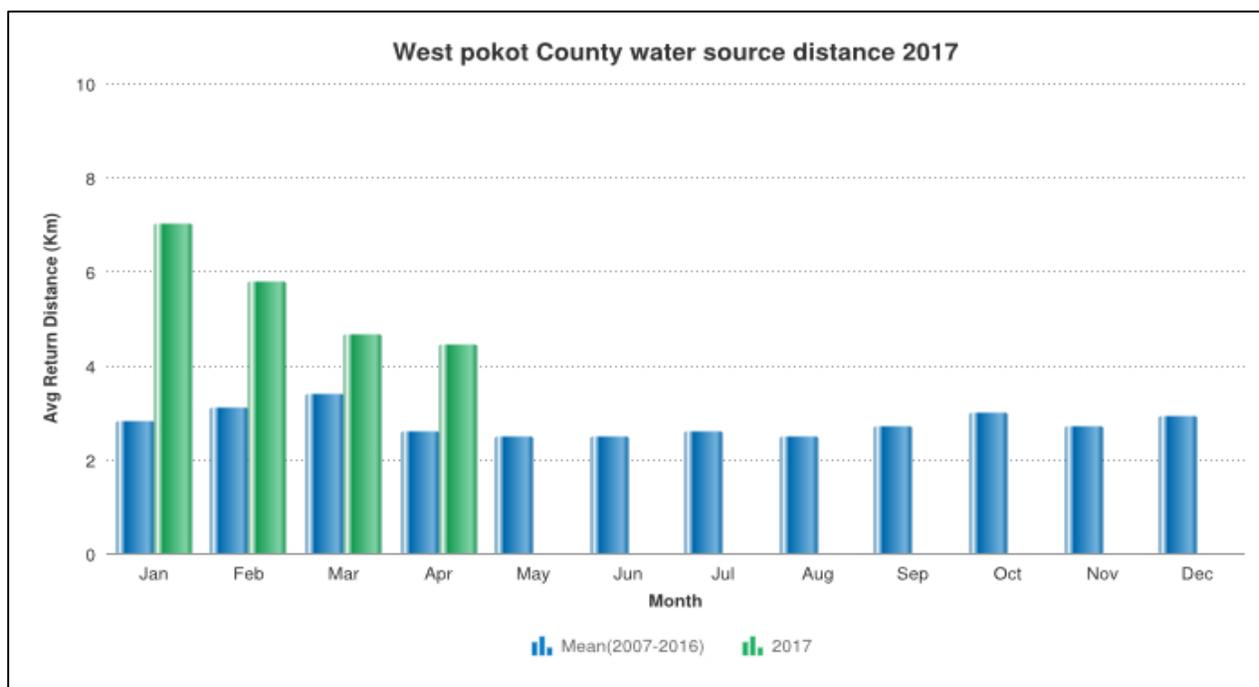
### **2.2.1 Sources**

- Borehole remained the main source of water during the month used by households and livestock with 55 percent of households relying on them. Other water sources in use included natural rivers, traditional water wells and water pans.
- In comparison to the preceding month, the water recharge levels improved due to the rains experienced.
- The current main sources in use are the normal sources where households draw water from during this time of the year albeit with a slight variation in the percentage of households relying on them.
- The water level in most boreholes rose slightly but still remains below the normal level for this time of the year.



### 2.2.2 Household Access and Utilization

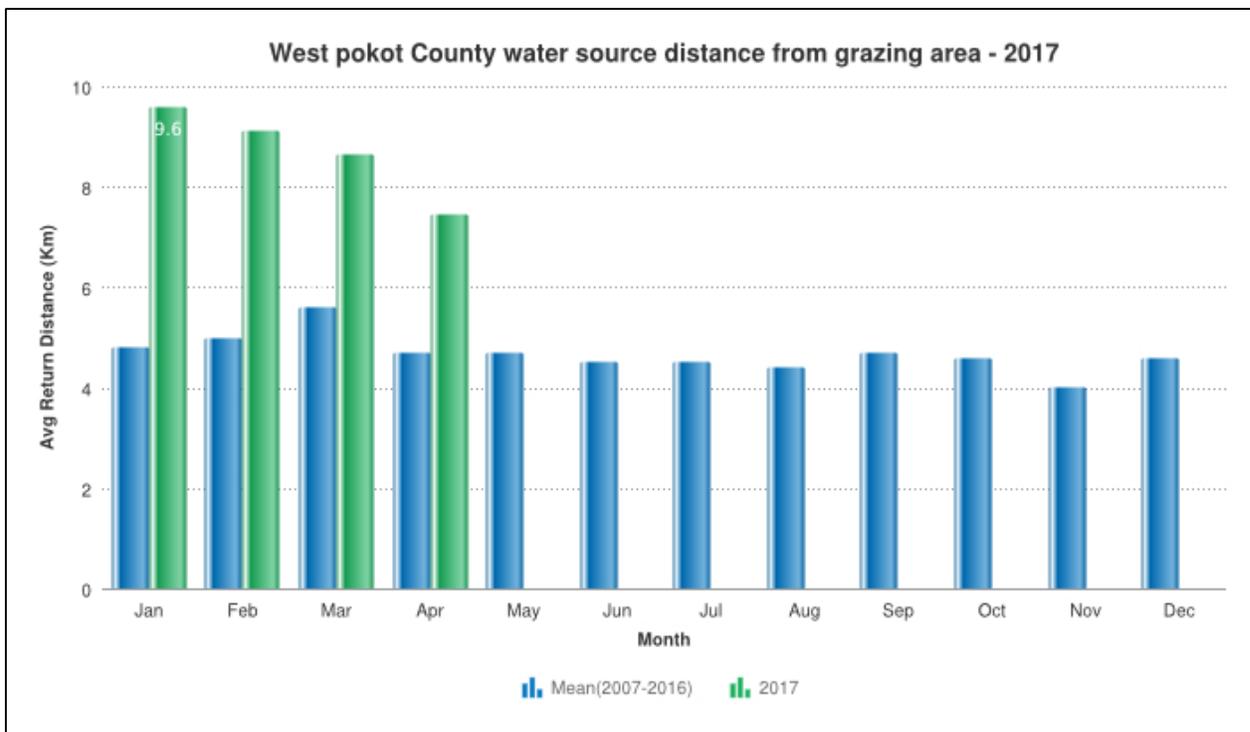
- The current household return distance to water source is 4.4Km and this is a decrease from the 4.7Km recorded in March but remains 41 percent above its long term average distance.
- The pastoral livelihood zone recorded a longer trekking distance to water source in comparison to the Agro Pastoral livelihood zone. Water distances reduced due to the ongoing long rains.



- The waiting time at water source in the Agro Pastoral zone averages 15 minutes whereas in the Pastoral zone is half an hour.
- The average household water consumption per person per day is 5-10 litres in the Pastoral zone whereas in the Agro pastoral zone is 10-15 litres per person per day.
- The cost of water at source is free in the rural areas unlike in urban centres where a 20litre jerrican costs Kshs. 10 at water kiosks with the exception of water vendors who are selling a 20 litre jerrican at Kshs.20. These charges lie outside the normal range for the period.

### 2.2.3 Livestock Access

- The current livestock return trekking distance from grazing areas to water sources is 7.4 Km. This being a slight decrease from the 8.6 Km recorded in March. In comparison to the normal trekking distance of 4.7 Km, current trekking distance lies above the normal range by fifty seven percent.
- The trekking distance from grazing areas to water sources was longer in the Pastoral livelihood zone in comparison to the Agro Pastoral livelihood zone.



- Reduced livestock trekking distance was majorly attributed to the ongoing long rains that has precipitated regeneration of pasture in spot areas within the county.
- Watering frequency for cattle and shoats is 5-6 times in a week while for camel is 4-5 times in a week.



- In comparison to a normal season, the current household milk production of 0.6litres is below the normal household milk production for the month by 50 percent.
- There was no significant change from the household milk production level of 0.8litres recorded during the previous month due to the already fair pasture condition and part of the livestock herd still remain in the migration zones.

## **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. Most farmers in the lowland areas are still engaged in land preparation and planting at the same time.
- The level of horticultural supplies such as mangoes, pawpaw and onions to major markets including Sigor, Ortum and Lomut remains low due to productivity being affected by the previous rainfall situation.
- Maize crop mainly under irrigation has been affected by the Faw/Fall Army worm that has resulted in loss of the crop in a number of farms especially in Pokot central.

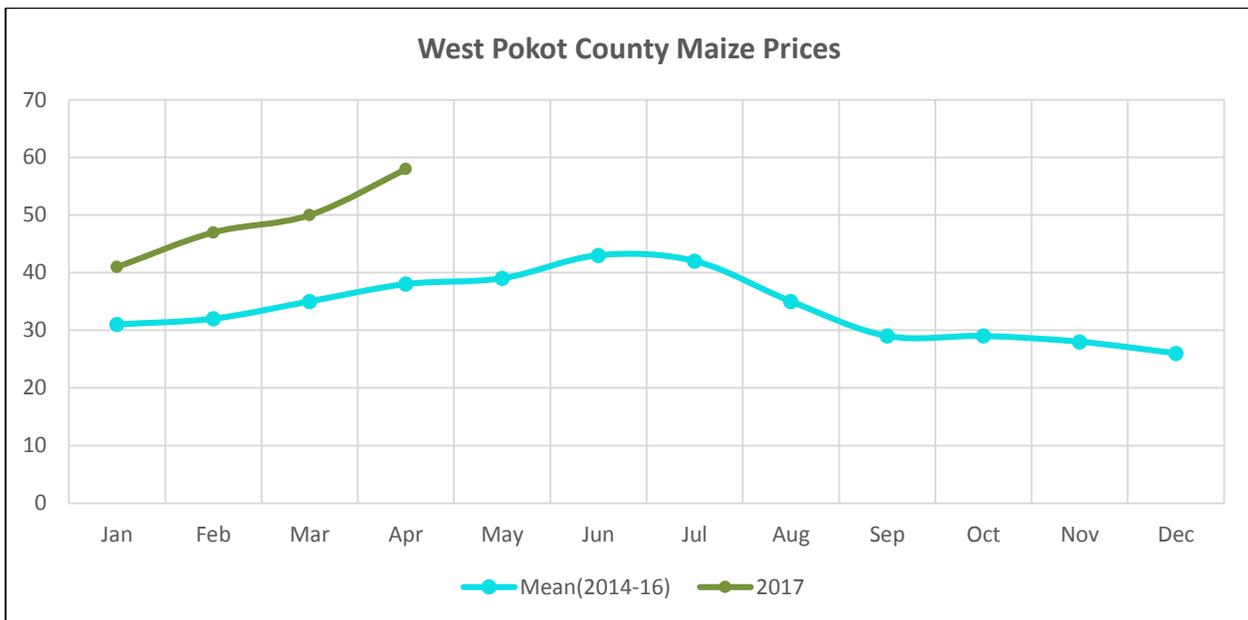


- The increase in price was due to a slight improvement in the body condition of goat attributed to improved forage regeneration.
- The current retailing price of goat is 14 percent above the short term average price for the month.

## 4.2 CROP PRICES

### 4.2.1 Maize

- Maize currently costs Kshs.58 per Kg, this is an increase from the Kshs.50 recorded in March.
- This market price is fifty three percent above the three year short term average price for the month under review.

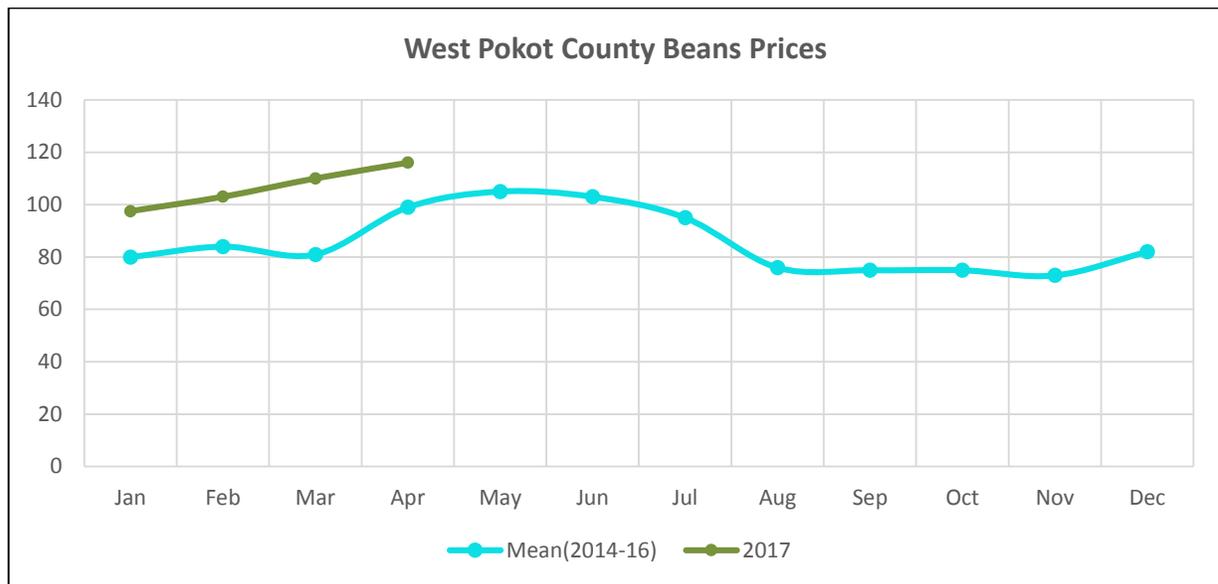


- Due to the ongoing conflict along the Pokot-Marakwet border, Pastoral sites in Pokot central recorded a higher price in comparison to other areas as a result of the normal external supply sources (mainly Marakwet) being cut off.
- Most households are going to rely on markets to replenish their stocks over the long rains season, maize price is thus likely to increase further as the demand for maize increases within the external sources (Uganda and Trans Nzoia) that usually supply the county.

### 4.2.2 Beans

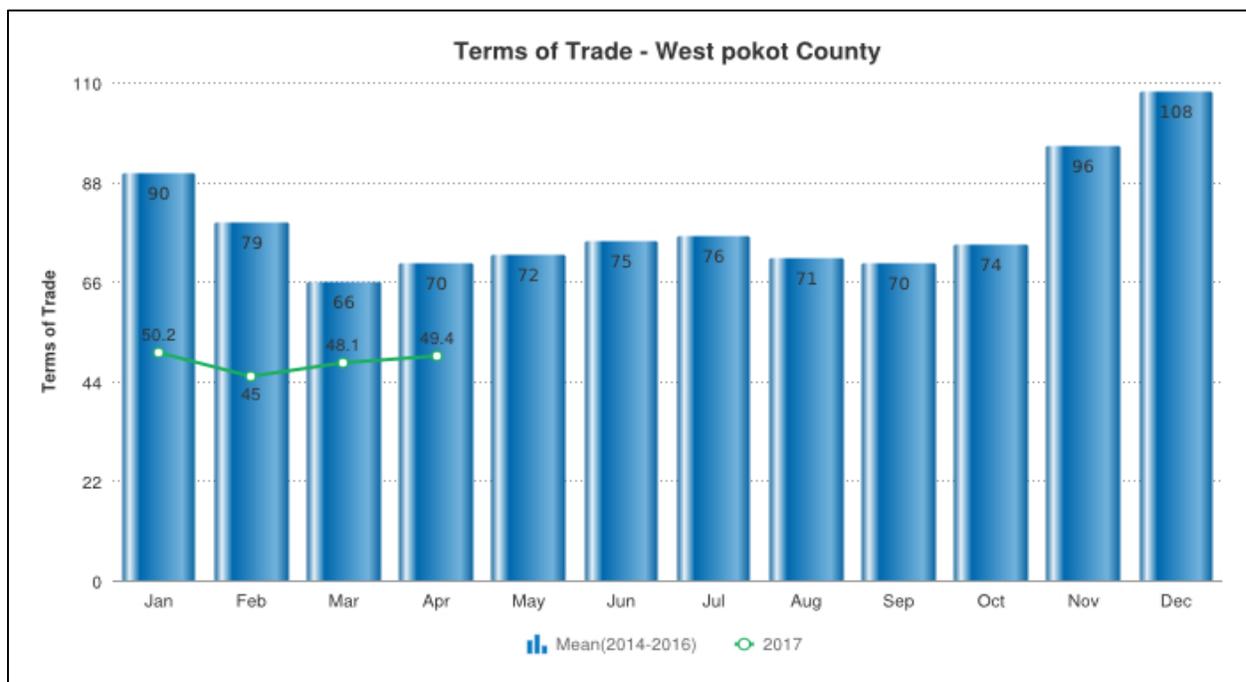
- The price of beans per kilogram increased from the Kshs. 110 reported in March to Kshs. 116 during the month under review.
- This increase in price could be attributed to scarcity of beans at the major external supply sources.
- There was no significant variation in price across the two livelihood 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 17 percent.



#### 4.3 LIVESTOCK PRICE RATIO/ TERMS OF TRADE (TOT)

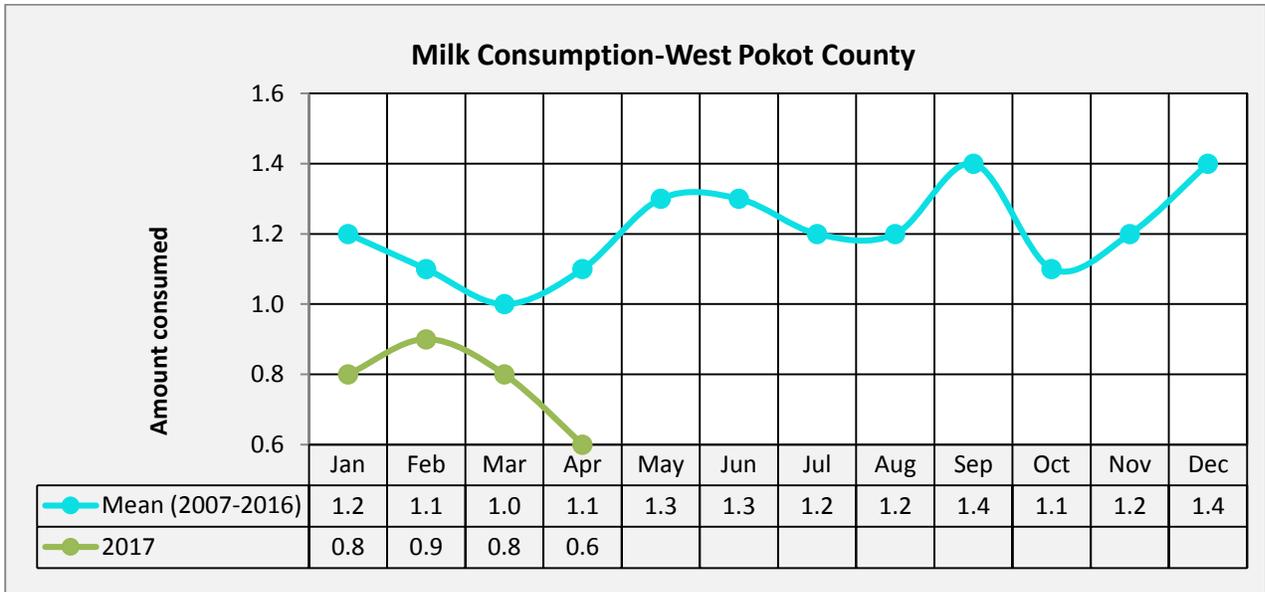
- The ToT remains unfavourable at 49 implying that pastoralists are getting almost a similar amount of maize as that they could obtain in March from sale of the same goat. The current ToT is 30 percent lower than the short term average ToT for the month. ToT thus remained stable as a result of the rise in maize price being matched by an almost equivalent rise in goat price.
- Stability is anticipated over the next three months as the price of goat is projected to increase further with continued receipt of rainfall to match the rising price of maize during that period.



## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 MILK CONSUMPTION

- All the 0.6 litres of milk produced currently is being consumed by households across all livelihood zones.



- The low consumption level is as a result of low production level attributed to the fact that part 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 45 percent below the normal consumption level for the month.

### 5.2 FOOD CONSUMPTION SCORE

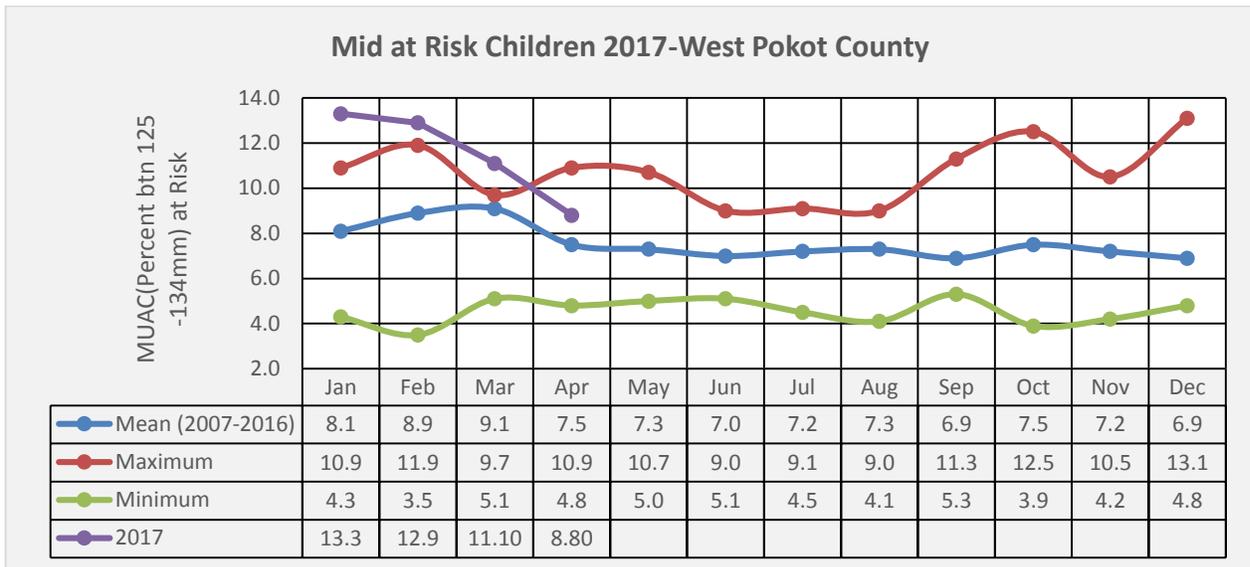
- A total of 30%, 60% and 10% of households fell within the poor, borderline and acceptable food consumption score categories during the month under review.
- The mean food consumption score for the two livelihood zones during the month under review was 30.1, and thus an improvement in comparison to the 26.4 recorded during the previous month.
- However, there was a significant variation across the two livelihood zones with for instance 40.4% of households in the Pastoral zone being categorized as having a poor FCS in comparison to 8.5% 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 8.8 percent from the 11.1 percent recorded in March.

- The current proportion of children rated being 'at risk' of malnutrition is 17 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

- 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 April was 14.3, which represents a decrease in comparison to the coping strategy index of the previous month that was 21.6. Thus households employed fewer and less severe coping mechanisms in April compared to the previous month.
- Agro Pastoral livelihood zone recorded a coping strategy index of 17.6 in comparison to the 12.5 in Pastoral livelihood zone and this is mainly due to the slow but steady improvement in livestock productivity along the Pastoral zone.
- The notable consumption based coping strategies employed by majority of the households during the month included reduced portion size of meals and reliance on less preferred/less expensive food.
- The proportion of households resorting to coping in April was 79% and this was a drop from the 85% that were practising coping in March.

## **6.0 CURRENT INTERVENTION MEASURES (ACTION)**

### **6.1 NON-FOOD**

- With support from European Union (EU) under the drought contingency fund (DCF), NDMA continued facilitating the ministry of health to conduct mass screening and integrated health outreaches targeting mainly Pokot central and north during the month under review.

## **7.0 EMERGING ISSUES**

### **7.1 INSECURITY/CONFLICT/HUMAN DISPLACEMENT**

- Insecurity incidents were reported in Annet sub location along the Pokot-Marakwet border where one life was lost as a result of a banditry attack and cattle stolen.

### **7.2 MIGRATION**

- Few animals have started migrating back into the county from the dry season grazing zones mainly outside the county (Uganda) and this is due to availability of pasture in spot areas within the county.

### **7.3 FOOD SECURITY PROGNOSIS**

- A marginal improvement is anticipated in livestock productivity with continued receipt of rainfall. The body condition is expected to improve with availability of pasture during the long rains period.
- The price of maize is projected to increase further with that of goat remaining stable or adjusting upwards, as a consequence the terms of trade shall remain stable over this period.
- However, access to nutritious foods to supplement household daily needs will be highly constrained by the non-increasing purchasing power and thus no significant gains are likely to be made in curbing the high rates of malnutrition. Most households are thus going to employ a variety of coping strategies to bridge any food gaps.
- The ongoing conflict especially in Pokot central shall remain the greatest impediment to food security due to limited market accessibility and dwindling stocks in the market.

## **8.0 RECOMMENDATIONS**

- Strengthen disease surveillance while monitoring and vaccinating animals that will be migrating back into the county against PPR, CBPP and CCPP.
- Provision of supplementary feeds to the milking herd that did not migrate targeting areas where pasture has not regenerated.

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