

**National Drought Management Authority  
West Pokot County  
Drought Early Warning Bulletin for July 2017**



A Vision 2030 Flagship Project



**JULY EW PHASE**



**Drought Situation & EW Phase Classification**

**Biophysical Indicators**

- Generally, sufficient rainfall was received across most areas in the county mostly in the second and first dekad with a temporal distribution of 2-6 days. The cumulative rainfall for the 6-month period (October-March) for Nasukuta rainfall station amounts to only 73% of the normal for the same period.
- Vegetation condition improved significantly as evidenced by the shift in VCI-3month for the county to 37 from 32.2 in June. 3 Sub Counties were in normal vegetation greenness band only Sigor had moderate vegetation deficit. Forage condition is fair In July

**Socio Economic Indicators (Impact Indicators)**

- Body condition of cattle and sheep is fair with an improving trend. Distance to water sources reduced significantly but lies above the normal range. Milk production is below normal levels and consumption at household level is at above normal range. Terms of trade remained unfavourable in July.
- Most livestock (35%) that had migrated back to their normal grazing area, have moved back outside the county.
- Most households fell within the borderline food consumption band with 73% of them resorting to coping mechanisms. Proportion of children 'at risk' of malnutrition dropped to 5.1% but still remain outside the normal range.

**1Early Warning (EW) Phase Classification**

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

Biophysical Indicators	Value	Normal range
Rainfall (% of normal for Nasukuta Station)	73	90-110
VCI-3month (County)	37	>35
VCI-3month (Pokot Central)	34	>35
Forage Condition	Fair	Good

Production Indicators	Value	Normal range
Livestock Body Condition	Not Normal	Normal
Milk Production	1.4 Litres	>1.6 Litres
Livestock Migration Pattern	Unusual	Normal
Livestock deaths (attributed to drought)	No deaths	No deaths

Access Indicators	Value	Normal range
Terms of Trade (ToT)	57	>76
Milk Consumption	1.3 Litres	>1.2 Litres
Return distance to water sources (household)	2.8 km	0.0 -2.6km
Cost of water at source (Ksh /20 litres)	Kshs.5	<Kshs.5.0

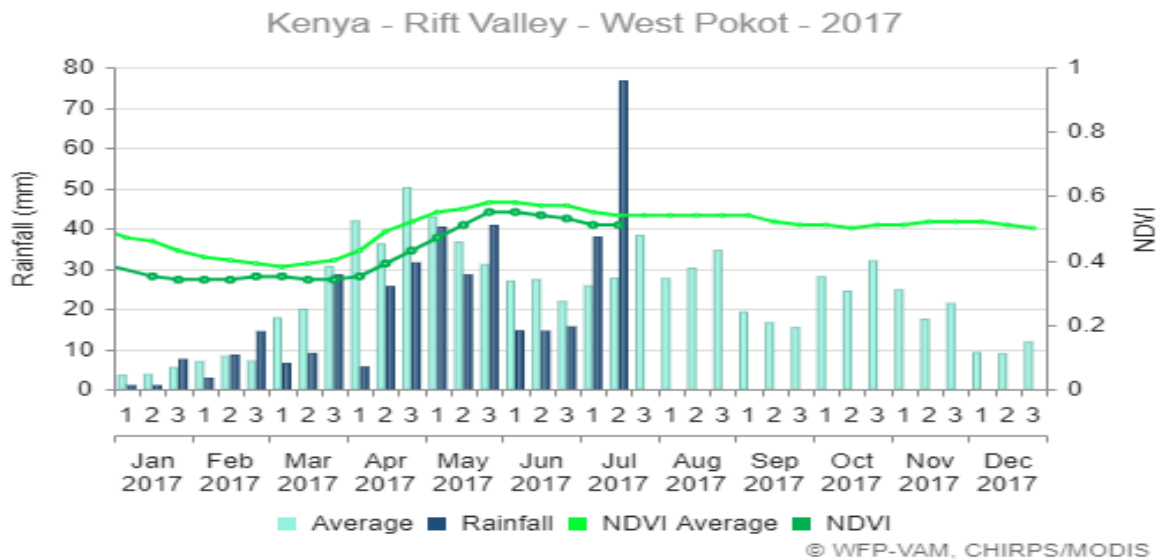
Utilization Indicators	Value	Normal range
Nutrition status, MUAC (% at risk of malnutrition)	5.1	0.0- 7.5
Coping Strategy Index (CSI)	10.7	<14.5
Food Consumption Score	25	>35

<ul style="list-style-type: none"> <li>▪ Short rains harvests</li> <li>▪ Short dry spell</li> <li>▪ Increased HH Food Stock</li> <li>▪ Land preparation</li> </ul>	<ul style="list-style-type: none"> <li>▪ Planting/Weeding</li> <li>▪ Long rains</li> <li>▪ High Calving Rate</li> <li>▪ Milk Yields Increase</li> </ul>	<ul style="list-style-type: none"> <li>▪ Long rains harvests</li> <li>▪ A long dry spell</li> <li>▪ Land preparation</li> <li>▪ Increased HH Food Stock</li> </ul>	<ul style="list-style-type: none"> <li>▪ Short rains</li> <li>▪ Planting/weeding</li> <li>▪ (Irish potatoes, Cabbages and Onions)</li> </ul>								
Jan	Feb	Mar	Apr	July	Jun	Jul	Aug	Sept	Oct	Nov	Dec

## 1.0 CLIMATIC CONDITIONS

### 1.1 RAINFALL PERFORMANCE

- The county received off season rains with more intensity compared to month of June.
- Most areas in the lowlands and highlands received high rainfall during the month of July with a temporal distribution of 2-6 days.



Source: VAM-World Food Programme

- The dekadal rainfall amounts in July increased as compared to previous month. The amounts were above normal as illustrated above. The second dekad notably received highest amounts of rainfall compared to all dekads of the year so far. Both dekads received above normal rainfall
- The current NDVI values remained below the historical NDVI values due to underperformed long rains season.

### 1.2 AMOUNT OF RAINFALL AND SPATIAL DISTRIBUTION

- The distribution of rainfall in space and time was uneven with varying rainfall amounts. Nasukuta rainfall station received 213.6mm in 18 rainy days within the month.

### 1.3 OTHER EVENTS

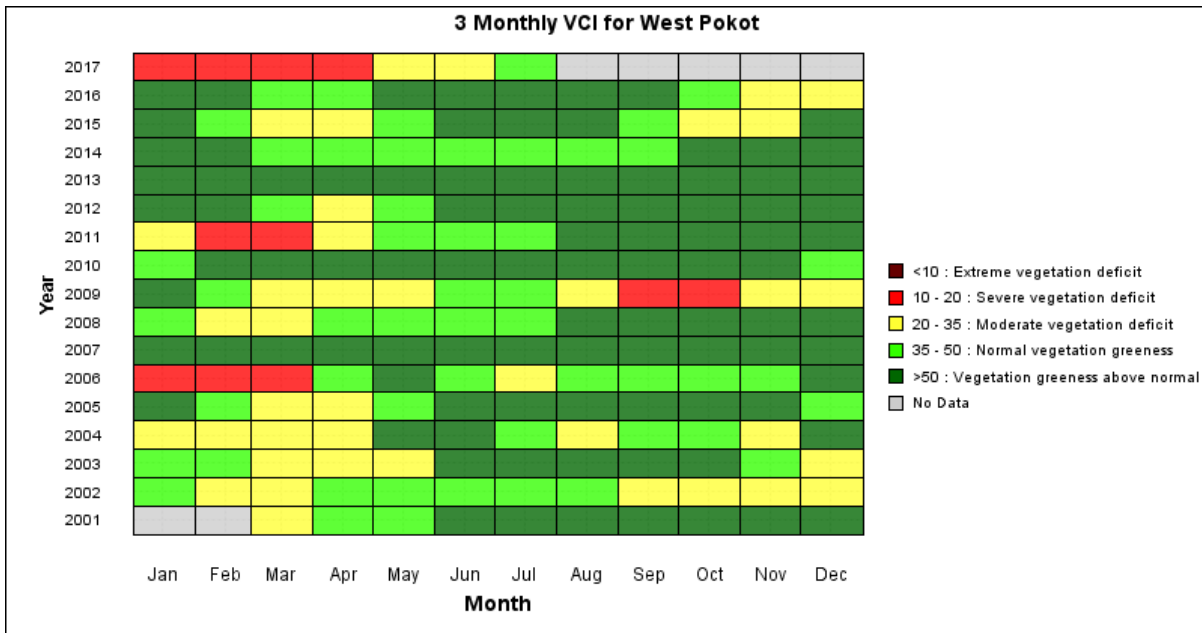
- There was no any other notable event such as floods, land/mud slides, lightning strikes nor hailstorms that occurred during the month under review.

## 2.0 IMPACTS ON VEGETATION AND WATER

### 2.1 VEGETATION CONDITION

#### 2.1.1 Vegetation Condition Index (VCI)

- Below is a county 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 37 for the entire county and this depicts normal vegetation greenness.
- A significant improvement in vegetation condition was recorded across most parts as demonstrated by the shift in VCI-3month from the 32.2 in June to 37 recorded in July for the county. Only Sigor Sub-county remained in the moderate vegetation deficit band whereas Kacheliba, Pokot South and Kapenguria were under the normal vegetation greenness. Generally, there was an improvement in relation to condition of vegetation in all sub counties during the month. This is attributable to sufficient regeneration of vegetation due to good off season within the month under review.

### **2.1.2 Pasture**

- The pasture condition is fair with an improving trend across all livelihood zones. The condition is below normal in comparison to the pasture situation during a normal year. When compared to the previous month, pasture condition notably regenerated and this is due to adequate off season rainfall received during the month under review.
- The pasture condition is expected to improve further due to ongoing rains.
- The perennial conflict along the Pokot-Marakwet border remain the major impediment to pasture access.
- There exists no significant variation in terms of quality and quantity of pasture in both zones.

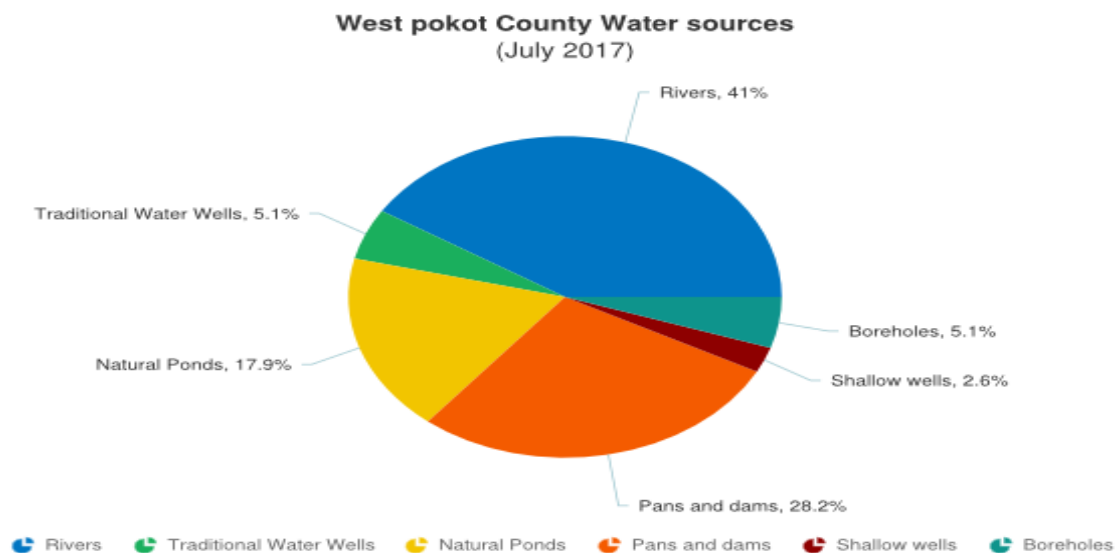
### **2.1.3 Browse**

- Browse condition is good across the two livelihood zones but still below normal in comparison to the browse situation during a normal year. There was a significant improvement in browse condition in relation to that of the previous month due to sufficient rainfall received during the month under review.
- Access to browse is still constrained by the conflict along the Pokot-Marakwet/Turkana borders.
- Quality and quantity of browse is good to good in both zones and there is no significant variation between the Pastoral and Agro Pastoral livelihood zones.

## **2.2 WATER RESOURCE**

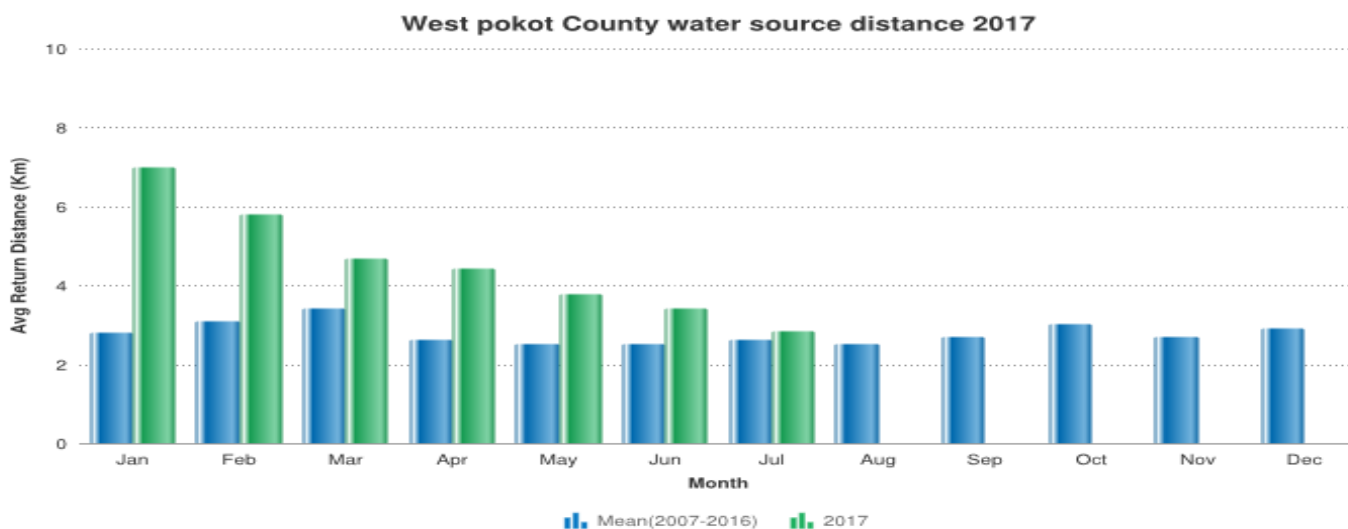
### **2.2.1 Sources**

- Rivers took over from boreholes as the main source of water during the month of July used by households and livestock with 41 percent of households relying on them, this attributed to increased rainfall. Other water sources in use included pans, dams, boreholes and traditional water wells.
- In comparison to month of June, the water recharge levels increased due to adequate rains.
- 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 rivers and boreholes went up due to ongoing rains. 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 2.8 Km and this is a decrease from the 3.4 Km recorded in June but remains 8 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 significantly reduced due to the sufficient recharge within the month.

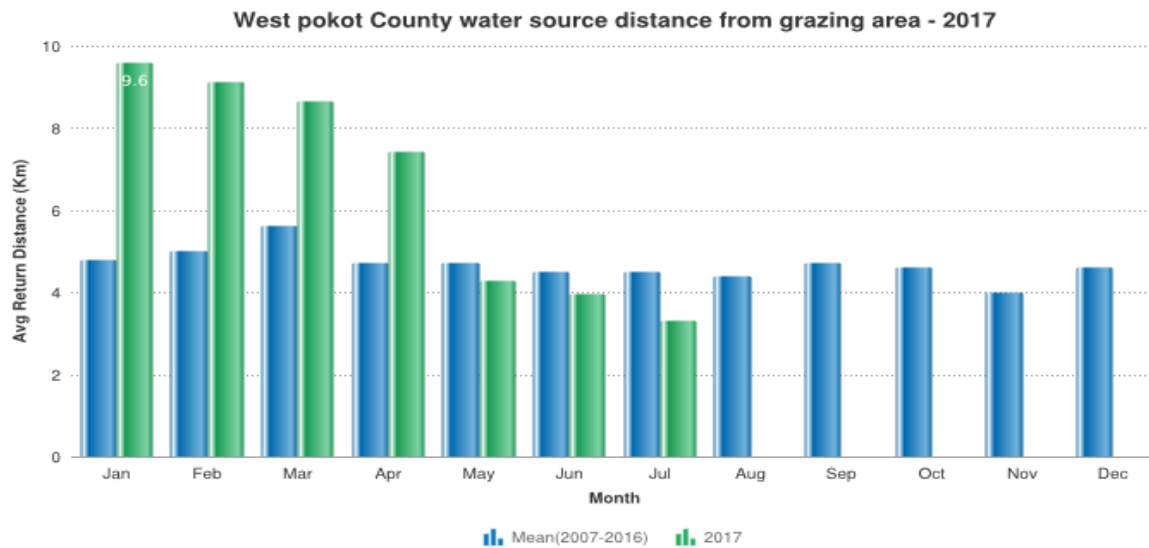


- The waiting time at water source generally reduced in both the Agro Pastoral zone and Pastoral zones.

- The average household water consumption per person per day is at 8-11 litres in the Pastoral zone whereas in the Agro pastoral zone is 12-15 litres per person per day.
- 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 normal range for the period.

### 2.2.3 Livestock Access

- The current livestock return trekking distance from grazing areas to water sources is 3.3 Km, this is a decrease from the 3.9 Km recorded in June. In comparison to the normal trekking distance of 4.5 Km, current trekking distance lies below the normal range by 27 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 mainly attributed to the good long rains received within the month of July.
- Watering frequency for cattle and shoats is at 5-7 times in a week while for camel is 4-5 times in a week.

### 3.0 PRODUCTION INDICATORS

#### 3.1 LIVESTOCK PRODUCTION

##### 3.1.1 Livestock Body Condition

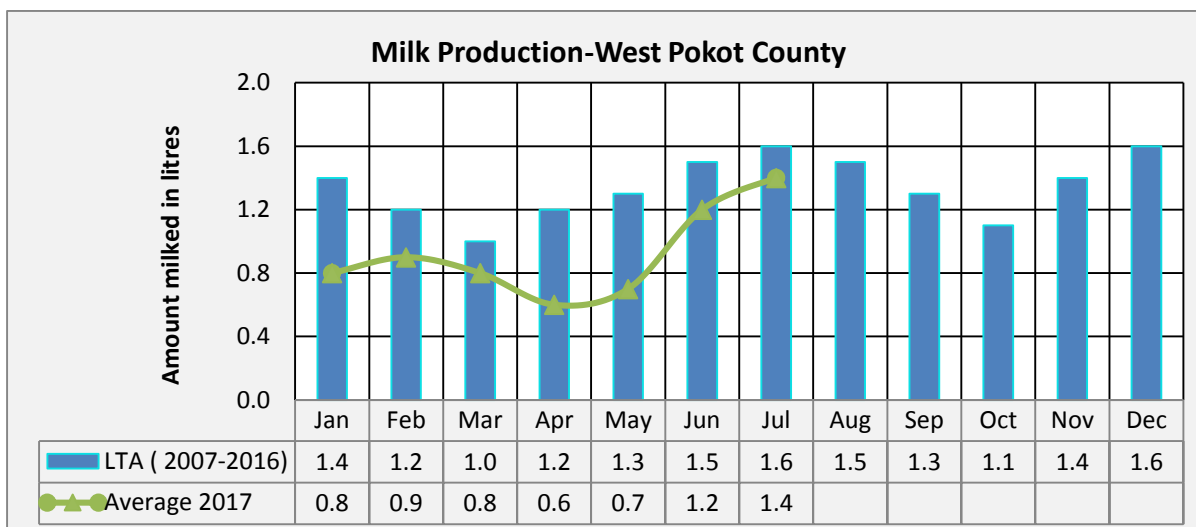
- The body condition of cattle and sheep is still fair while that of camels and goats is fair-good in the Pastoral and Agro Pastoral livelihood zones.
- Livestock body condition is expected to improve over successive months across all the livelihood zones due to ongoing good off season rains.
- In comparison to similar periods during previous years, the body condition of all species is below normal and this is due to fair pasture condition within the county.
- Across the two livelihood zones, there exists no significant variation in livestock body condition.

##### 3.1.2 Livestock Diseases

- Incidents Lumpy skin disease (LSD) and contagious caprine pleuropneumonia (CCPP) in goats were reported in Pokot South and North. PPR and Contagious bovine pleuropneumonia (CBPP) in cattle were reported in Masol ward.

##### 3.1.3 Milk Production

- The two livelihood zones reported an average of 1.4 litres milk produced during the month this was an increase from 1.2 litres of the previous month of June. Most of the milk produced in the county comes from cattle.
- In comparison to a normal season, the current household milk production is below the normal household milk production for the month by 13 percent.
- There was a significant change from the household milk production recorded during the previous month due to the improving forage condition in their normal grazing areas.



### 3.2 RAIN-FED CROP PRODUCTION

#### 3.2.1 Stage and Condition of food Crops

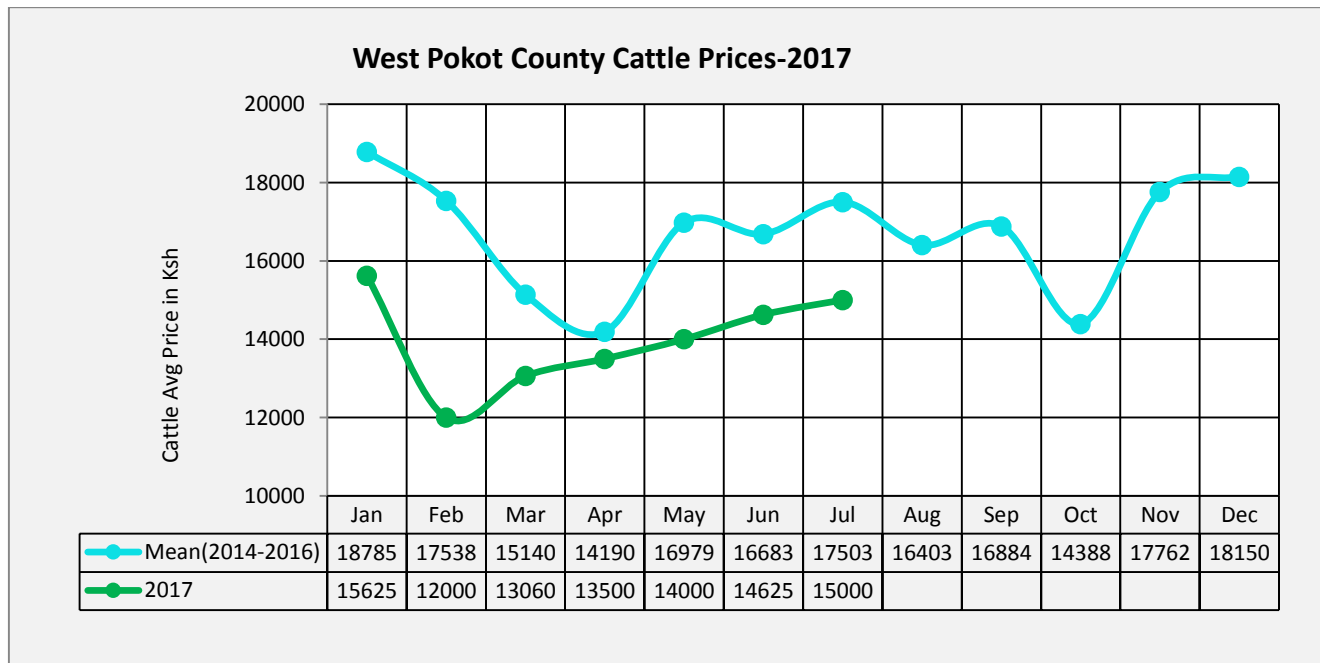
- Maize, Beans and Irish Potatoes are the main crops grown by farmers (approximately 50 percent of the population) during the long rains season. The crops that had wilted in June have recovered, thanks to off season. Maize crop currently at tussling stage.
- The level of horticultural supplies such as mangoes, pawpaw and onions to major markets including Sigor, Ortum and Lomut that had improved significantly is expected to improve due to ongoing rains.
- Maize crop across the county has been affected by the FAW/Fall Army worm that has resulted in loss of the crop in the farms.

### 4.0 MARKET PERFORMANCE

#### 4.1 LIVESTOCK MARKETING

##### 4.1.1 Cattle prices

- Cattle traded at Ksh. 15,000 during the month under review. This being an increase from the Ksh. 14,625 recorded during the previous month.
- The increase in price was due to an improvement in the cattle body condition attributed to improved pasture condition and improved water recharge levels during the month.

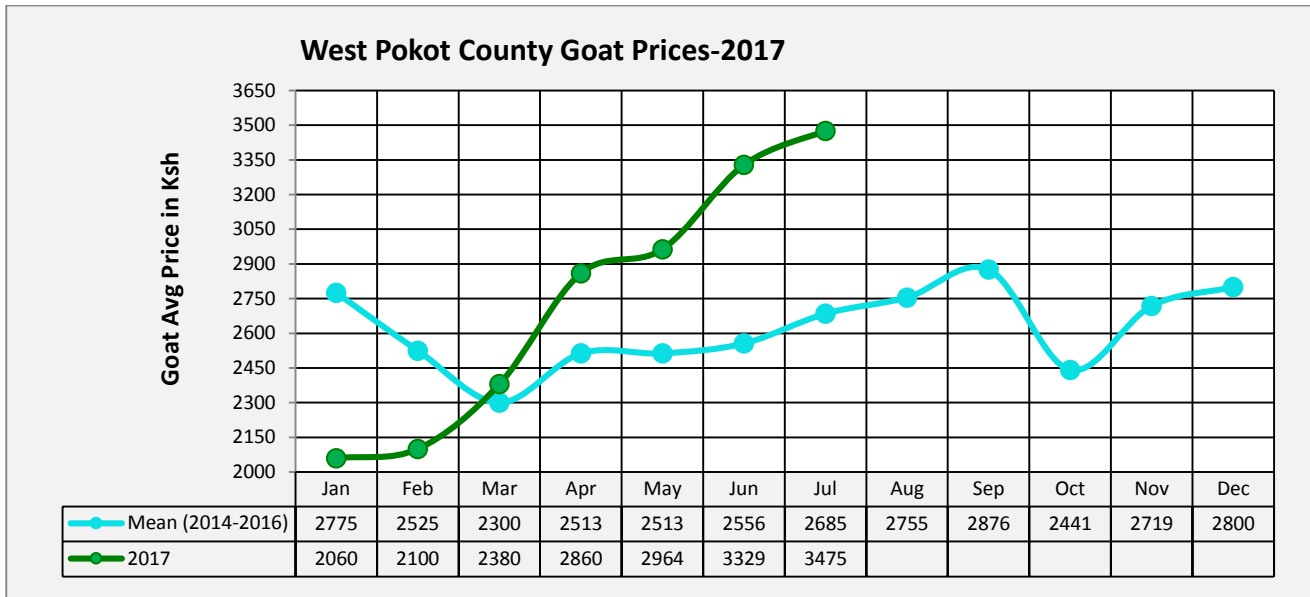


- The current cattle price is below the short term average price for the month by 14 percent.



#### 4.1.2 Goat Prices

- The price of goat increased to Ksh.3, 475 across all livelihood zones during the month under review from the Ksh.3, 329 recorded during the previous month.

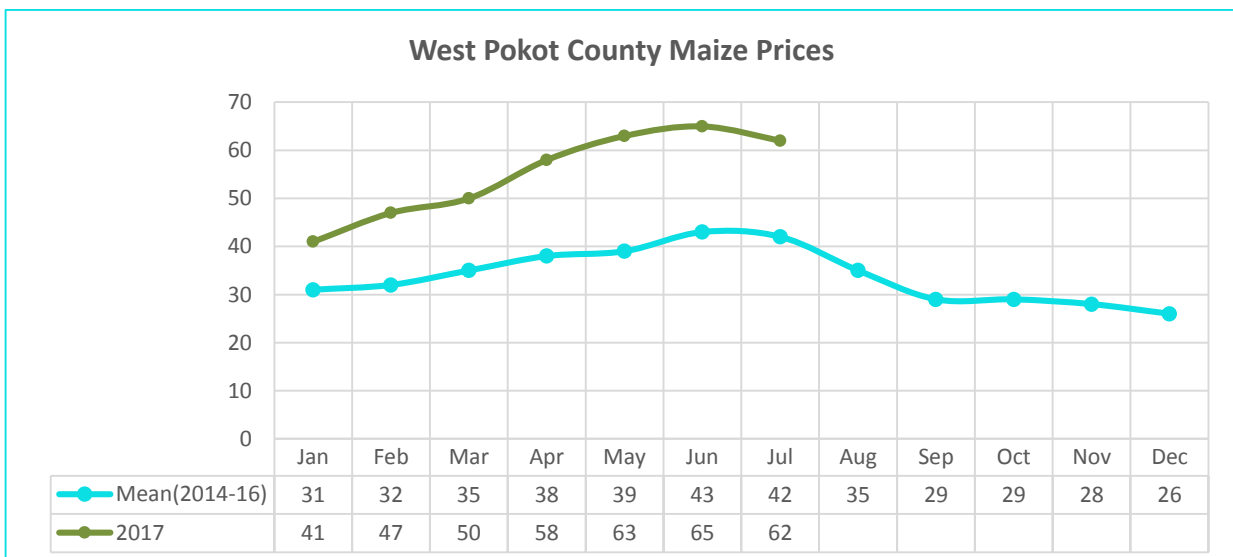


- The increase in price is attributed to an improvement in the body condition of goat as a result of improved forage regeneration.
- The current retailing price of goat is 29 percent above the short term average price for the month.

#### 4.2 CROP PRICES

##### 4.2.1 Maize

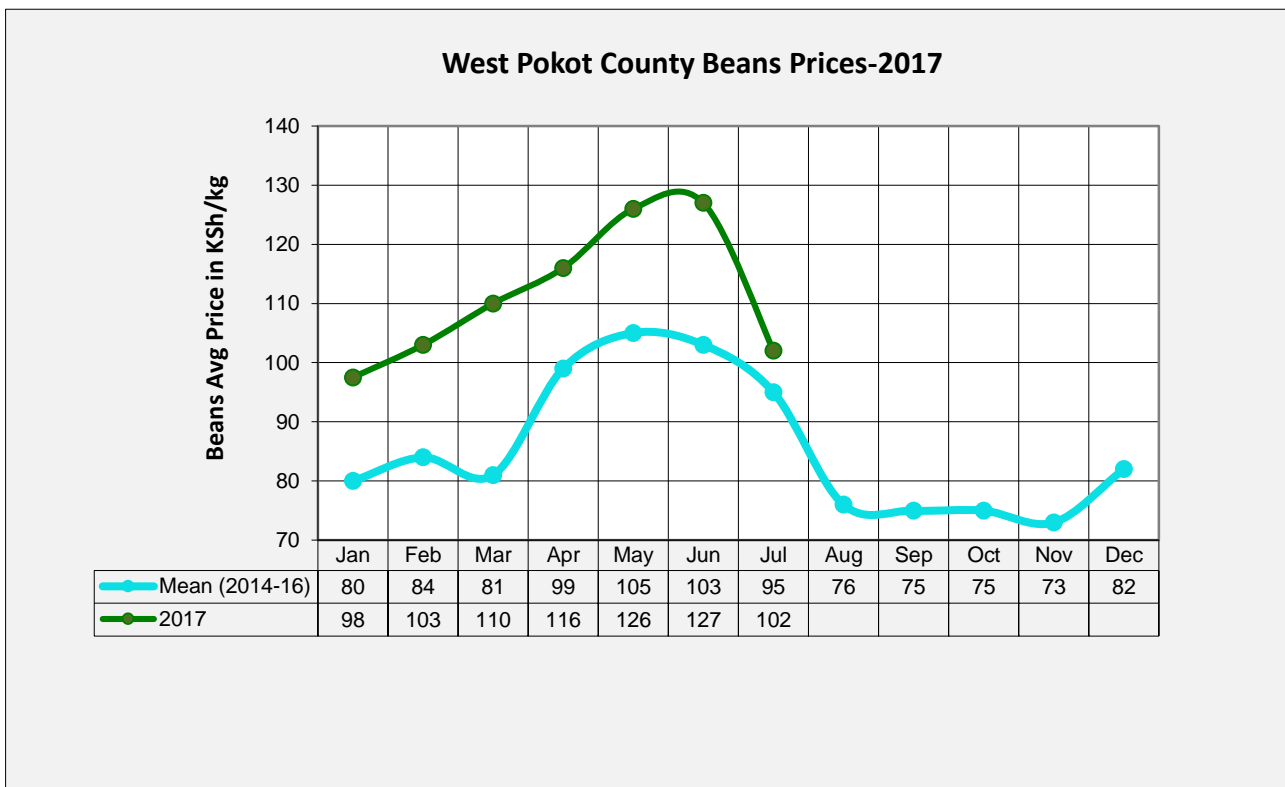
- Maize currently costs Ksh.62 per Kg, this is a decrease from the Kshs.65 recorded in June.
- This market price is 48 percent above the three year short term average price for the month under review.



- The ongoing conflict along the Pokot-Marakwet border, Pastoral sites 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 cut off. Generally, the slight decrease is as a result of steady external supply of maize.
- Most households are relying on markets to replenish their stocks, maize price is likely to drop further as the supply of maize increases from the external sources (Uganda and Trans Nzoia) which are normal suppliers to the county.

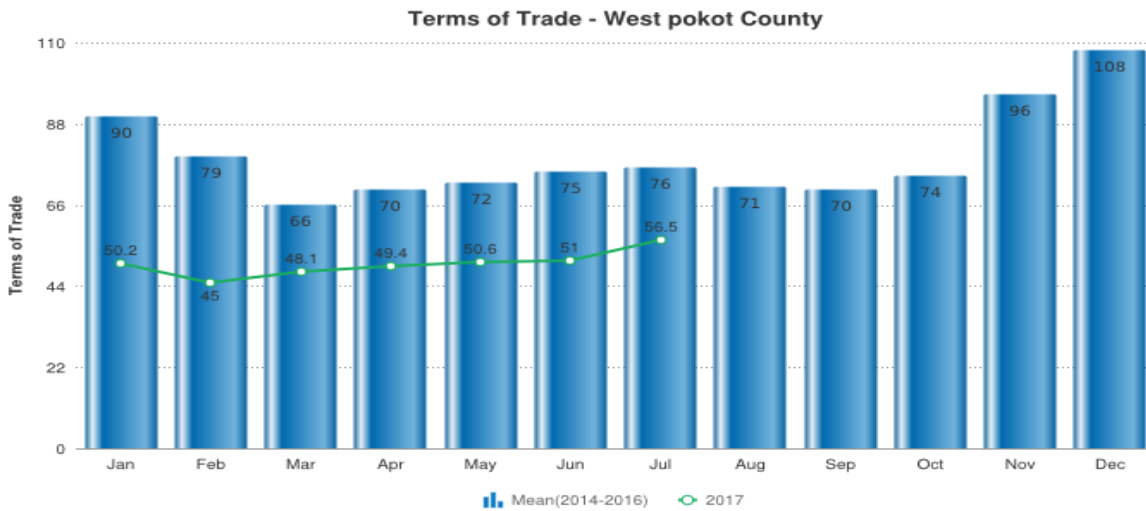
#### 4.2.2 Beans

- The price of beans per kilogram dropped to Ksh. 102 during the month under review.
- This is attributed to significant harvests of beans around the county and steady 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 7 percent.



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

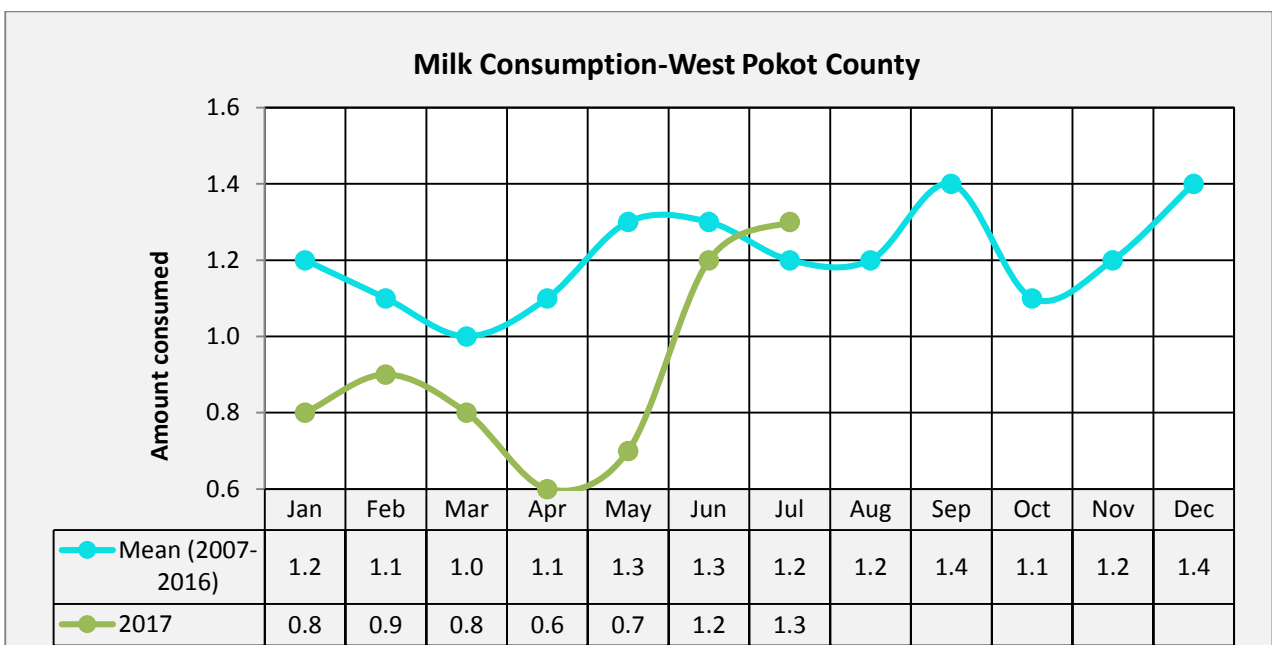
- The ToT is still unfavourable at 56.5 implying that pastoralists are getting almost a similar amount of maize as that they could obtain in May from sale of the same goat. The current ToT is 26 percent lower than the short term average ToT for the month. A slight increase in ToT was driven majorly by a rise in goat price and the dropping maize prices.
- Stability is anticipated over the next three months as the price of goat is projected to go up with the good off season rains to match the expected drop in price of maize during that period.



## 5.0 FOOD CONSUMPTION AND NUTRITION STATUS

### 5.1 MILK CONSUMPTION

- In July, 1.3 litres of milk is being consumed by households across all livelihood zones.



- The high consumption level is as a result of high production level attributed to the fact that a good portion of the milking herd that migrated outside the county in search of pasture are at traditional grazing zones.
- In comparison to the same period over time, the quantity of milk consumed is 8 percent above normal consumption level for the month.

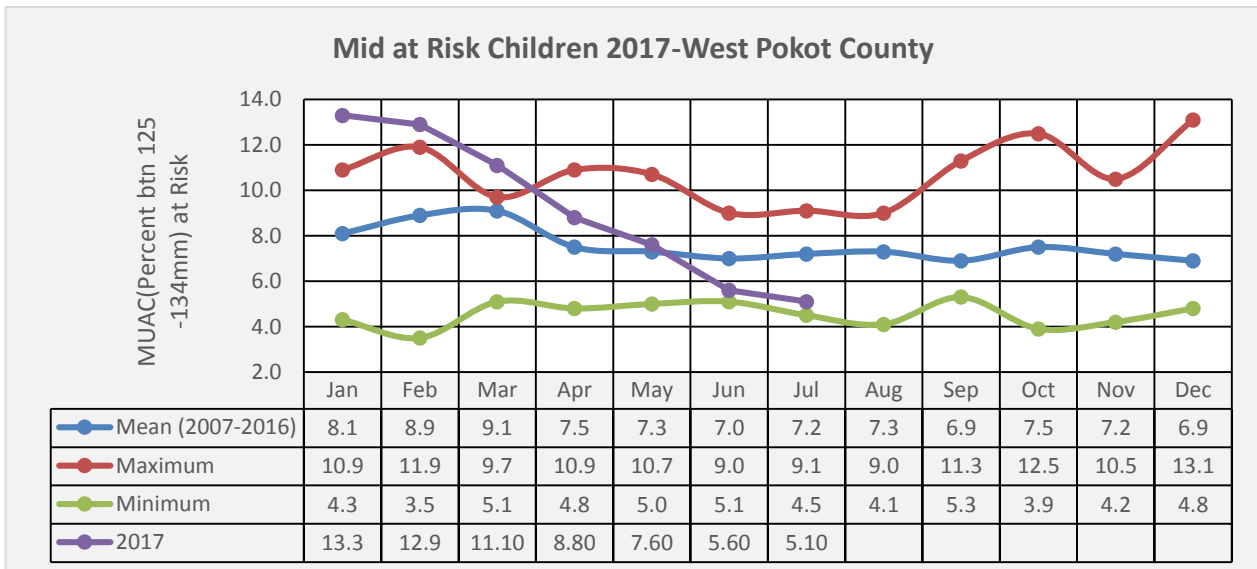
### 5.2 FOOD CONSUMPTION SCORE

- A total of 73%, 65% and 12% of households fell within the borderline, poor 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 25 and thus a decrease in comparison to the 34 recorded during the previous month.
- However, there was a significant variation across the two livelihood zones with for instance 51% of households in the Pastoral zone being categorized as having a poor FCS in comparison to 32% 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 5.1 percent from the 5.6 percent recorded in June.
- The current proportion of children rated being ‘at risk’ of malnutrition is 29 percent below the long term average for the period in a normal year.



- Improved accessibility to milk and other essential health and nutrition commodities through initiation of mass screening and integrated health outreach services in a number of sites in the Drought Bulletin \_ July 2017\_ West Pokot County

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 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 July was 10.7, which represents a decrease in comparison to the coping strategy index of the previous month that was 13.6. Thus households employed less coping mechanisms in July compared to the previous month, this can be attributed to a drop of food commodity prices in the markets e. g maize and beans.
- Agro Pastoral livelihood zone recorded a coping strategy index of 11.9 in comparison to the 9.8 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 reliance on less preferred/less expensive food.

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

### **6.1 NON-FOOD**

- NDMA with support from European Union (EU) under the drought contingency fund (DCF), supported a series of water trucking, mass screening and health outreaches targeting mainly Pokot central and north during the month under review.

## **7.0 EMERGING ISSUES**

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

- Decreased banditry attacks were reported mainly in Pokot central in areas such as Cheptulel, Amolem, Akulo, Amaler, Akiriamet and Chesezon with incidents of insecurity also decreased along the Kapenguria- Lodwar highway at Lami Nyeusi area near Kainuk along the Pokot-Turkana border.

### **7.2 MIGRATION**

- Some animals have migrated back to the dry season grazing zones mainly outside the county (Uganda) and this is due to the poor performance of the long rains that has been witnessed leading to no significant regeneration of pasture taking place, but they are expected to migrate back due to improving forage at traditional zones,

### **7.3 FOOD SECURITY PROGNOSIS**

- More improvement is expected in livestock productivity with the ongoing off season rains. The body condition is projected to improve with availability of pasture during this period.
- Maize prices is anticipated to decrease further with that of goat remaining stable or adjusting upwards, as a consequence the terms of trade shall remain favourable over this period.
- Access to nutritious foods such as milk is expected to improve with the ongoing rains necessitating regeneration of adequate pasture for livestock production.
- The conflict especially in Pokot central 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 disease surveillance while monitoring and vaccinating animals that will be migrating back into the county against PPR, CBPP and Support pasture development with the anticipated off season rains

#### **2. HEALTH AND NUTRITION SECTOR**

- Promote 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.
- Support and 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.

#### **3. AGRICULTURE SECTOR**

- Capacity build farmers to plant drought escaping food crops.
- Support control of Fall Army Worm (FAW) maize infestation in the county.