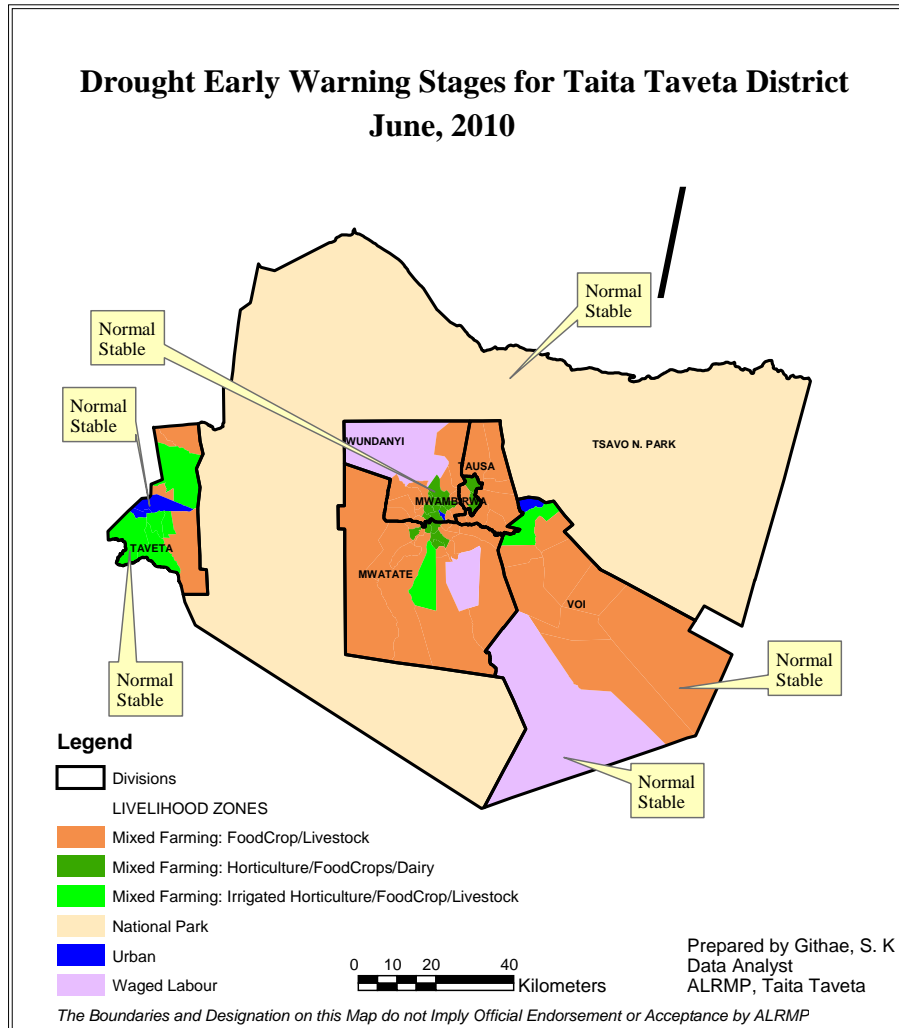




**OFFICE OF THE PRIME MINISTER  
MINISTRY OF STATE FOR THE DEVELOPMENT OF NORTHERN KENYA AND OTHER ARID LANDS  
ARID LANDS RESOURCE MANAGEMENT PROJECT II**

**DROUGHT MONTHLY BULLETIN FOR JUNE, 2010**



**Seasonal Calendar**

<ul style="list-style-type: none"> <li>• Short rains harvests</li> <li>• Short dry spell</li> </ul>			<ul style="list-style-type: none"> <li>• Planting/Weeding</li> <li>• Long rains</li> </ul>			<ul style="list-style-type: none"> <li>• Long rains harvests</li> <li>• A long dry spell</li> </ul>			<ul style="list-style-type: none"> <li>• Short rains</li> <li>• Planting/weeding</li> </ul>		
<b>Jan</b>	<b>Feb</b>	<b>Mar</b>	<b>Apr</b>	<b>May</b>	<b>Jun</b>	<b>Jul</b>	<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>

## **Situation overview**

- Taita Taveta received very low amounts of rainfall. An average rainfall amount of 106 mm was recorded compared to 299 mm recorded in the previous month.
- Light showers coupled with very low temperatures were realized in the hill masses of Taita while the lowlands recorded high temperatures. Taveta district reported high temperatures in the month under review.
- These rains continue to recharge major rivers that flow to the lowlands. However, inadequate rainfall has resulted to significant food crop failure in the lowlands especially in areas of Kishushe and Mwatate in Taita and Mahandakini, Uthiani, Kijijini and Langata in Taveta district.
- Food crop failure will impact negatively on food security due to food shortage in the affected areas.
- Most successful farmers in the lowlands are harvesting maize. Availability of cereals will reduce livelihood vulnerability in all livelihood zones.
- Also this will improve living standards of household members due to decreased foodstuff prices.
- Quality and quantity of natural vegetation and pasture is good in all livelihood zones. However if high temperatures coupled with overgrazing continue, pasture quality and quantity will deteriorate at a high rate. Also pasture will not last as anticipated.
- The distance to grazing areas remained at 2.4 km due to availability of pasture and water. This has enhanced livestock body condition.
- Availability of milk at household level resulting to good nutrition status of the under fives.
- High prices of livestock have enhanced purchasing power of household members.
- Food crop destruction by Monkeys and baboons pose a major threat to food security.
- Based on the Mid Upper Arm Circumference (MUAC) measurement, the nutrition status of children below five years was stable, with the percentage of those rated at risk of malnutrition slightly increasing to 3.1 from 3.0 the previous month.

## **Recommendations to District Steering Group and Kenya Food Security Meeting**

- Agriculture officers to sensitize farmers on proper conservation of maize to address the issue of aflatoxin.
- Livestock department to sensitize herders on pasture storage and use of hay bailer machine.
- Protect and conserve existing springs given that springs are the only source of water during the dry season.
- Kenya Wildlife Service to increase surveillance to address the problem of wildlife menace.

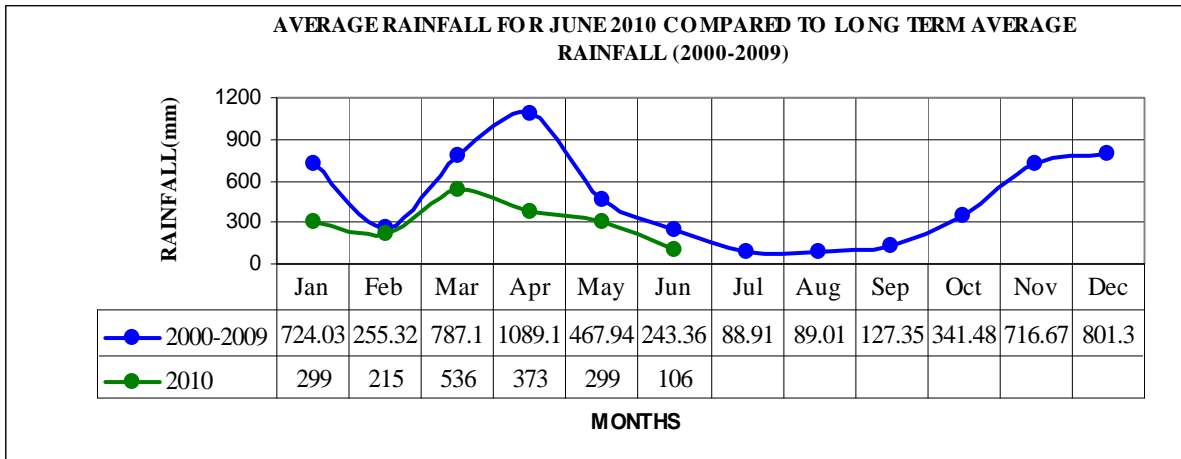
## **Current interventions**

### **Non-food interventions**

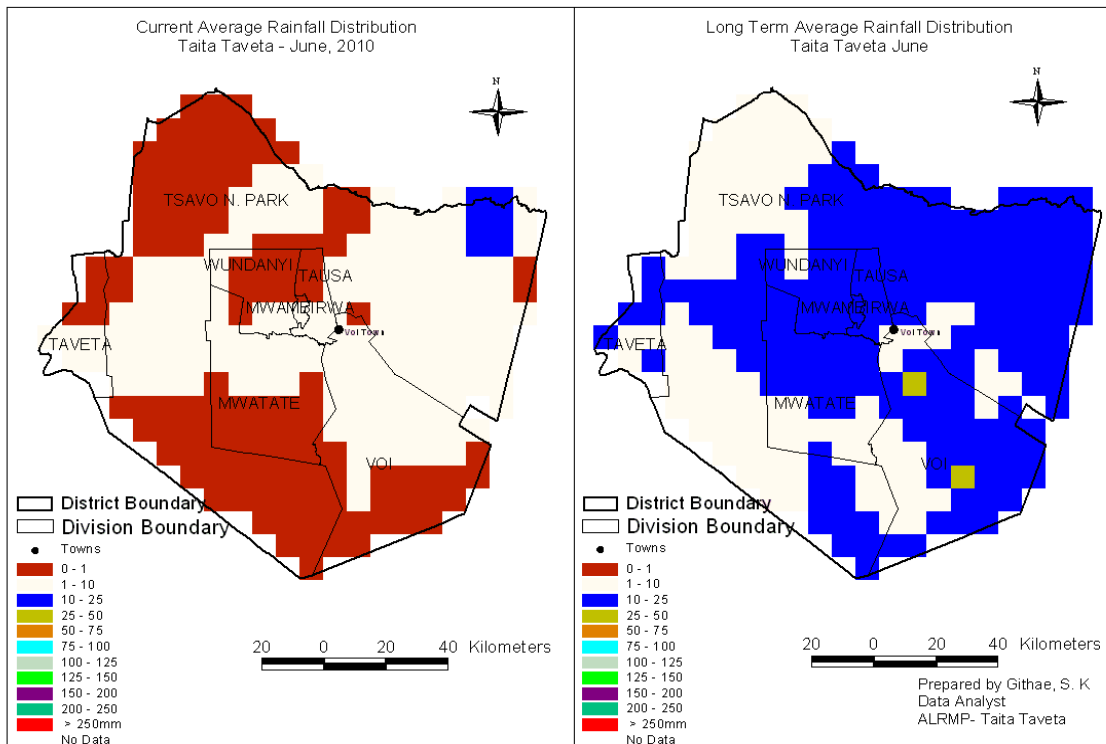
- Agriculture, Irrigation and Water Sector projects
  - Excavation of Mgeno water pan is on going - Arid Lands Resource Management Project.
  - Fencing of Challa irrigation scheme water intake is on going- Arid Lands Resource Management Project.
  - Drilling and equipping of Jipe borehole in Taveta is on going - Arid Lands Resource Management Project.
  - Laying and installation of Marapu extension pipes is on going - Arid Lands Resource Management Project.

## 1.0 Environmental indicators (Stability)

### 1.1 Rainfall



- Taita Taveta received very low amounts of rainfall. An average rainfall amount of 106 mm was recorded compared to 299 mm recorded in the previous month.
- Light showers coupled with very low temperatures were realized in the hill masses of Taita while the lowlands recorded high temperatures. Taveta district reported high temperatures in the month under review.
- These rains continue to recharge major rivers that flow to the lowlands. Compared to the long term average rainfall for 2000-2009 the trend is normal.



*United States Geological Survey Satellite images – Figure illustrate Comparison of Current June 2010 Rainfall Distribution with the Long Term Averages for Taita Taveta.*

- The images above indicate that Taita Taveta recorded a total rainfall amount of 88.43 mm compared to 371.16 mm in the previous month.

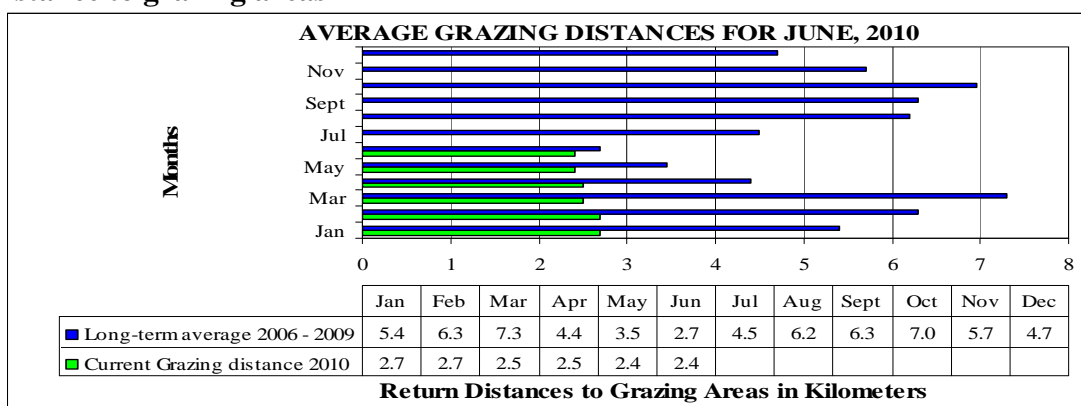
- Dekad 1, 2 and 3 recorded 42.02 mm, 10.85 mm and 35.56 mm respectively compared to 299.80 mm, 5.98 mm and 65.39 mm recorded in the previous month.
- Generally Taita Taveta district recorded low rainfall amount ranging between 0 – 10 mm.
- The long term average rainfall images indicate a total rainfall amount of 90.17 mm.

## 1.2 Condition of natural vegetation and pasture

### 1.2.1. Quality and Quantity

- Africa Data Dissemination System has suspended processing of Normalized Difference Vegetation Index (NDVI) data.
- Quality and quantity of natural vegetation and pasture is good in all livelihood zones. However if high temperatures coupled with overgrazing continue, pasture quality and quantity will deteriorate at a high rate.
- Compared with the same month in a normal year condition of natural vegetation and pasture is good.

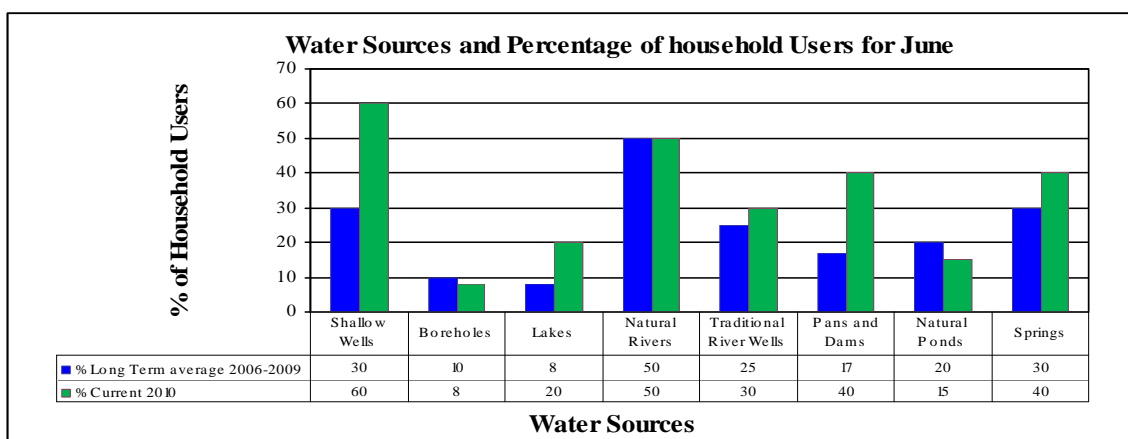
### 1.2.2. Distance to grazing areas



The distance to grazing areas remained at 2.4 km due to availability of pasture and water. Compared to the long term average the distance is significantly shorter.

## 1.3 Water sources and availability

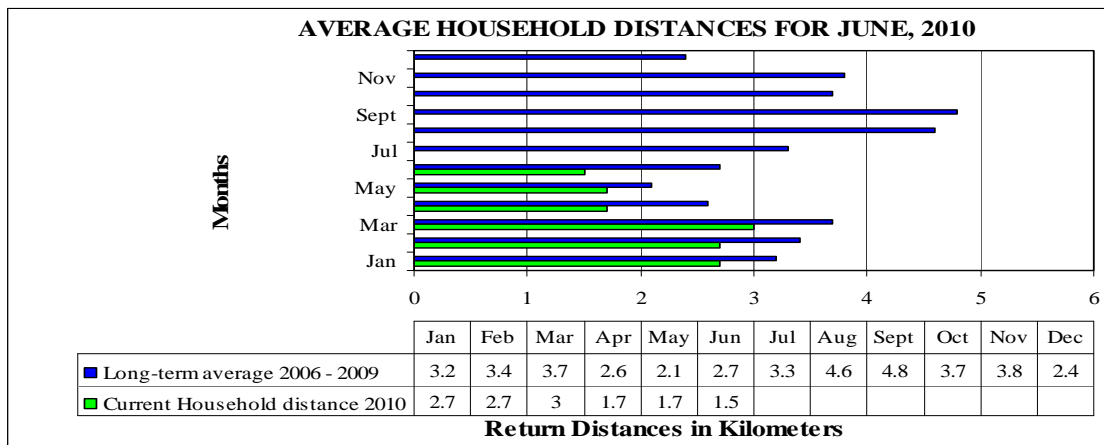
### 1.3.1. Main water sources



The rains resulted in an increase in water table resulting to increased use of shallow wells. Compared to the previous month percentage use of shallow wells, pans and dams remained the

same. Other water sources for both human and livestock use included tap water, springs, boreholes, water pans and harvested roof water.

### 1.3.2. Household access to water



Average household distance decreased to 1.5 from 1.7 km. Compared to the long term average the distance is shorter. Time taken to fetch water remained at 0.8 hrs compared to the previous month.

## 1.4 Emerging issues

### 1.4.1. Insecurity/conflict/human displacement

- Inadequate rainfall has resulted to significant food crop failure in the lowlands especially in areas of Kishushe and Mwatate in Taita and Mahandakini, Uthiani, Kijijini and Langata in Taveta district.
- Increased cases of elephants roaming near settlements and cultivated land are being reported. Food crop destruction by Monkeys and baboons pose a major threat to food security.

### 1.4.2. Migration

No major in or out migration was reported.

### 1.4.3. Implications on food security

- Food crop failure will impact negatively on food security due to food shortage. Food for Assets programme is progressing on well in the rain fed lowlands of Taita Taveta.
- Wildlife destruction of food crops in all livelihood zones will impact negatively on food security.

## 2.0 Rural economy indicators (Food availability)

### 2.1 Livestock production

#### 2.1.1. Livestock body condition

Livestock body condition is good due to availability of pasture and water. Compared with the same month in a normal year livestock body condition was good.

#### 2.1.2. Milk production

Milk production from 12 sampled sentinel sites decreased to 8,180 litres from 8,808 litres in the previous month.

- Mwarungu, Lushangonyi and Mashangi sample sites in the mixed farming: horticulture/food crops/dairy livelihood zone recorded the highest amount of milk production at 2,460 litres, 1,440 litres and 1,200 litres respectively.
- Mixed farming: horticulture/food crops/dairy livelihood zone continued to dominate the dairy sector recording 78% situated in the wetlands, mixed farming: food crops/livestock livelihood zone 19% and casual waged labour: sisal farms 3% found in the rain fed lowlands.

## 2.2 Crop production

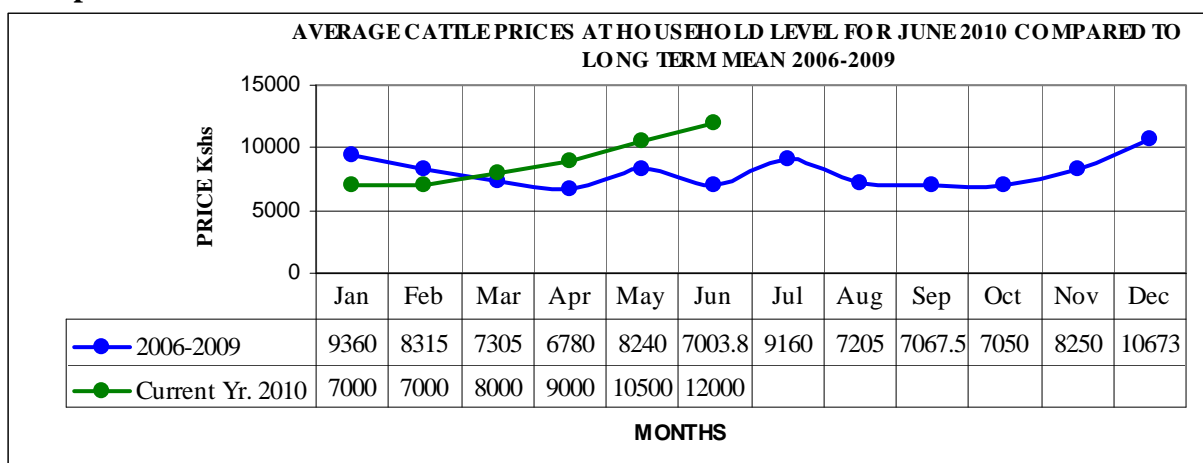
### 2.2.1. Timeliness and condition of various crop production activities

- In the mixed farming: food crops/livestock livelihood zone farmers are harvesting maize. In the mixed farming: horticulture/food crops/dairy livelihood zone farmers are harvesting maize and beans.
- In the mixed farming: irrigated cropping/livestock/food crops livelihood zone most farmers are harvesting onions, tomatoes and kales. However in the casual waged labour: sisal farms livelihood zone casual labourers are weeding.

## 3.0 Access to food

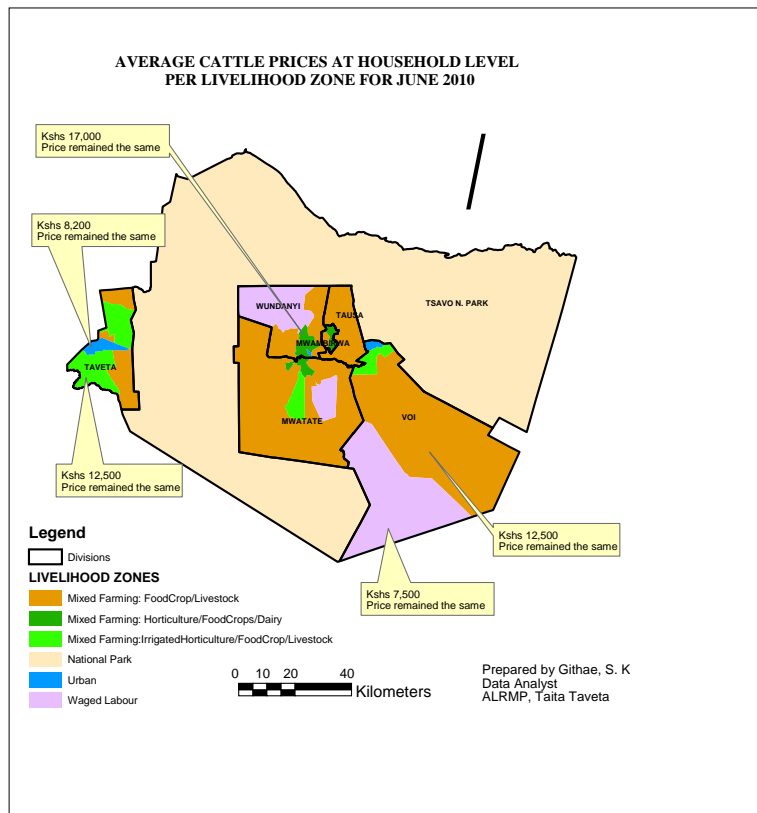
### 3.1 Livestock marketing

#### 3.1.1. Cattle prices



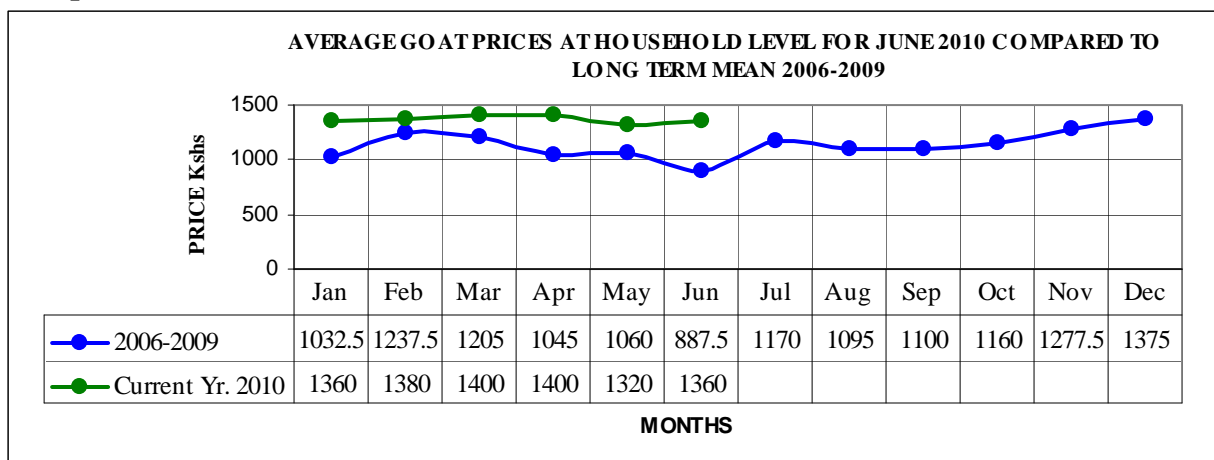
N = 360 households

The average cattle price at household level increased to Ksh12,000 from Ksh10,500. The rise in price could be attributed to improved cattle body condition. Compared to the long term mean the trend is normal and the price is higher.



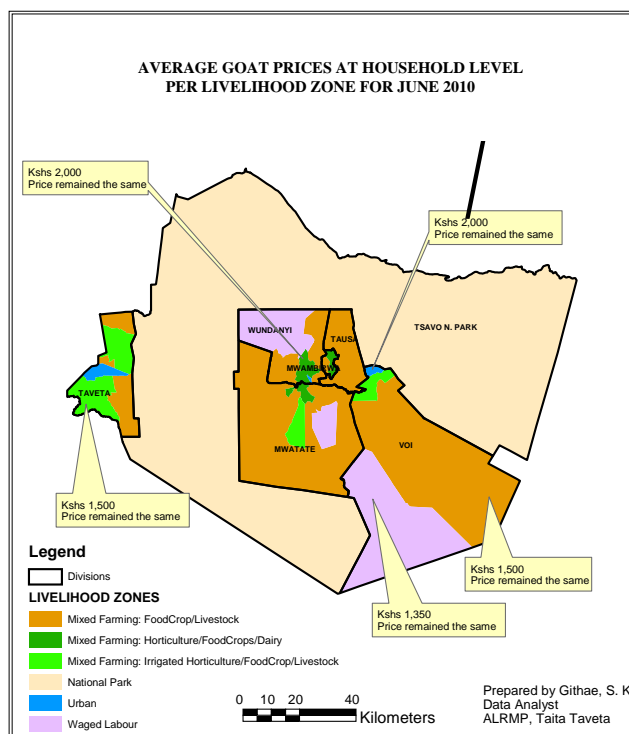
High prices were reported in the mixed farming: horticulture/food crops/dairy livelihood zone at Ksh17,000 while low prices prevailed in the mixed farming: food crops/livestock and casual waged labour: sisal farms livelihood zones at Ksh12,500 and Ksh7,500 respectively.

### 3.1.2. Goats prices



**N = 360 households**

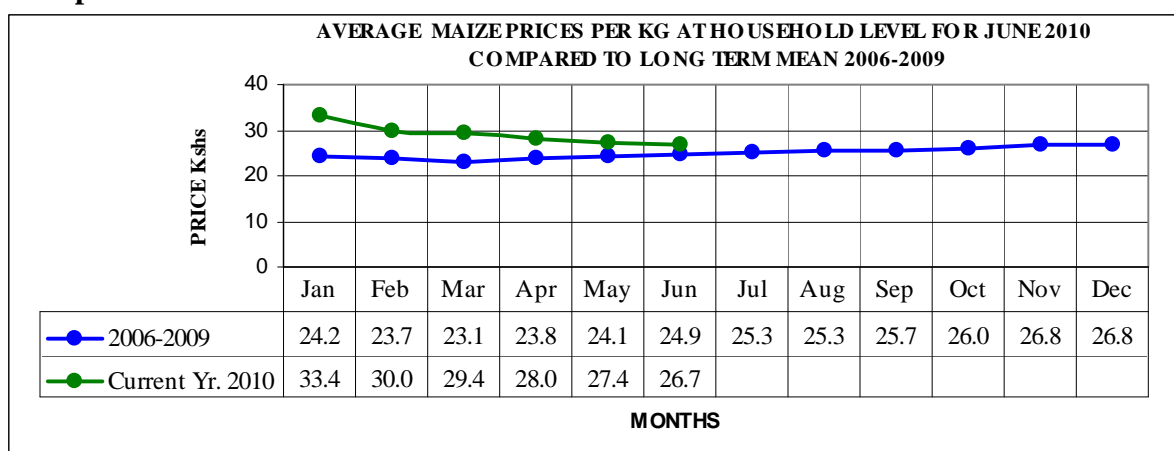
The average goat price at household level increased to Kshs 1,360 from Kshs 1,320 in the previous month. High prices were recorded in Njukini and Challa at Kshs 1,800 and Kshs 1,500 respectively. Compared to the long term mean trend is not normal and the price is higher.



Prices remained higher in the mixed farming: horticulture/food crops/dairy livelihood zone at Ksh2,000 than in both the casual waged labour: sisal farms livelihood zone at Ksh1,350 and Ksh1,500 in the mixed farming: food crops/livestock livelihood zone.

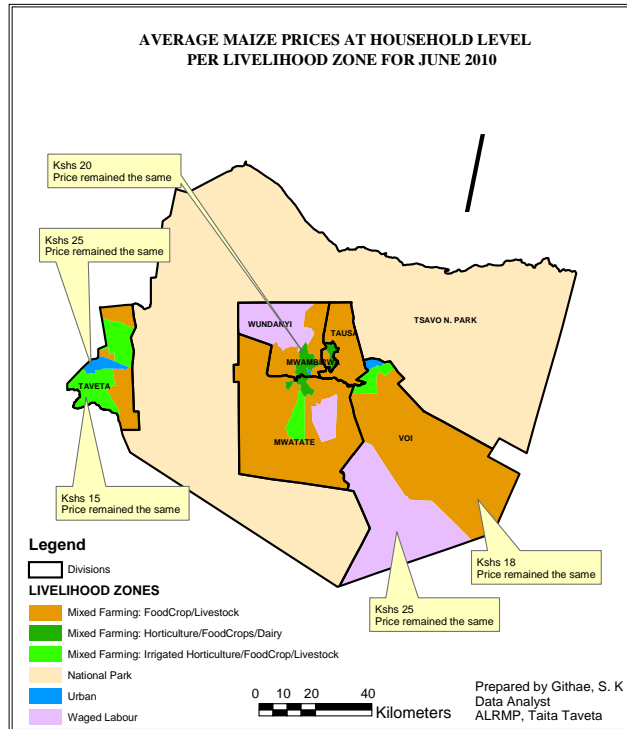
### 3.2 Crop prices

#### 3.2.1. Maize prices



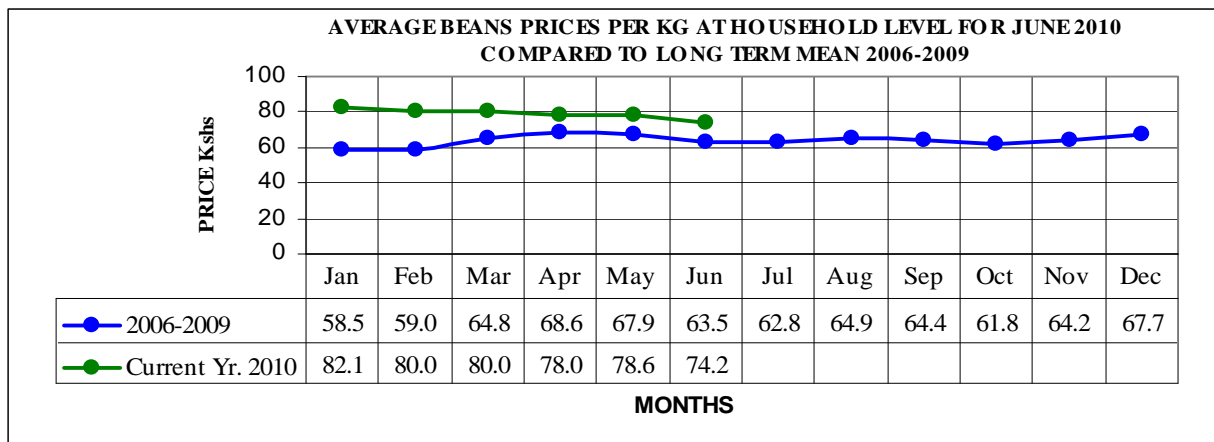
**N = 360 households**

Average maize price per kg at household level decreased to Ksh26.7 from Ksh27.4. Low prices were recorded in Challa location at Ksh15 and high prices in Wongonyi and Mata at Ksh35. The gradual price fall could be attributed to stocks at household level especially in the rain fed areas. Compared to the long term mean the trend is not normal and the price is higher.



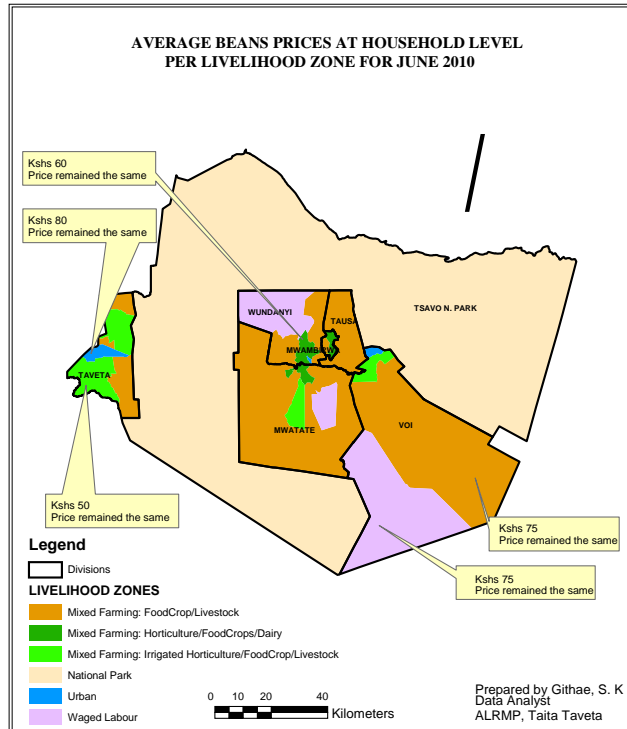
In the mixed farming: horticulture/food crops/dairy, mixed farming: food crops/livestock and mixed farming: irrigated cropping/livestock/food crops livelihood zones average maize prices at market level were Ksh20, Ksh18 and Ksh15 respectively.

### 3.2.2. Beans prices



**N = 360 households**

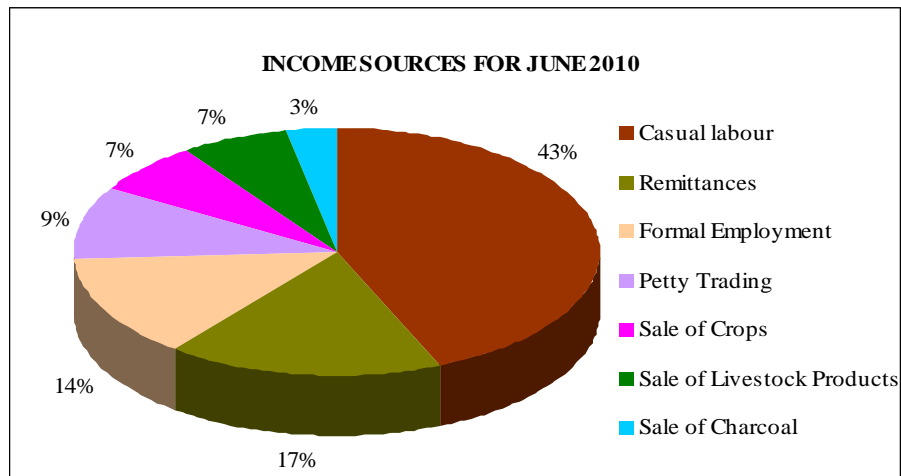
- Average beans price per kg at household level decreased to Ksh74.2 from Kshs 78.6 the previous month. The high price could be attributed to low level of stocks aggravated by crops destroyed by torrential rains in the long rain season.
- Low prices were recorded in Njukini locations at Kshs 60. Compared to the long term mean the trend is normal but the price is higher.



In the mixed farming: horticulture/food crops/dairy, mixed farming: food crops/livestock and mixed farming: irrigated cropping/livestock/food crops livelihood zones average beans prices at market level were Ksh60, Ksh75 and Ksh50 respectively.

### 3.3 Income

#### 3.3.1. Income sources



Compared to the previous month percentage sale of charcoal, remittances and petty trading remained the same. Both sale of livestock products and formal employment rose by 1%. However casual labour and sale of crops dropped by 1%.

### 3.3.2. Livestock income

Out of 360 sampled households sale of 5 cattle @ Ksh 12,000; 15 goats @ Kshs 1,360 and 34 chickens @ Kshs 240 realized a total livestock income of Kshs 88,560 compared to Kshs 126,180 in the previous month.

### 3.3.2. Other income sources

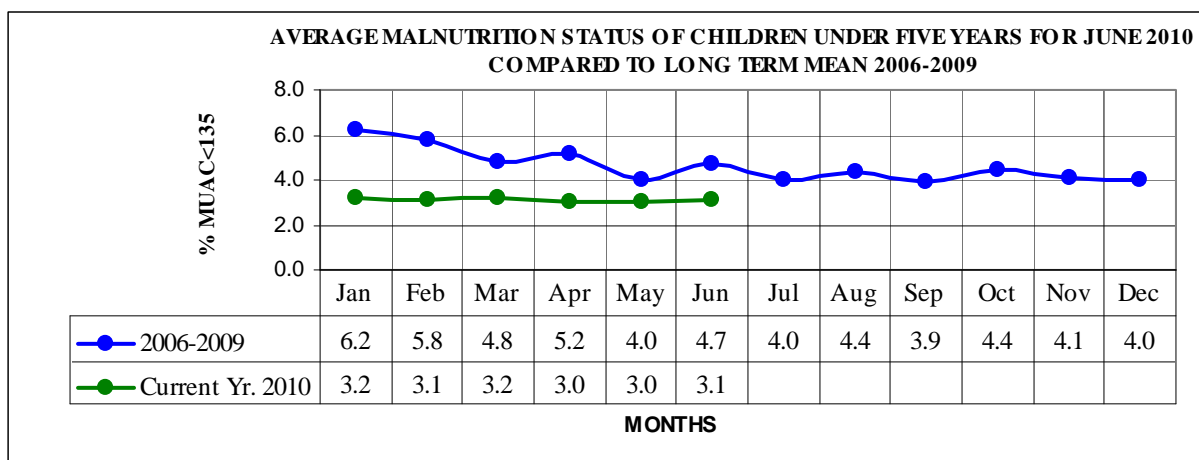
Others income sources were fishing, small scale mining, sell of sand, brick, charcoal, firewood, ballast and miraa.

### 3.4 Implications on food security

- Food for Asset and Kazi Kwa Vijana programme are on going and have impacted positively on food security. Improved living standards due to decreased foodstuff prices and availability of cereals and pulses.
- Increased purchasing power of household members due to high prices of livestock. Availability of milk at household level resulting to good nutrition status of the under fives.

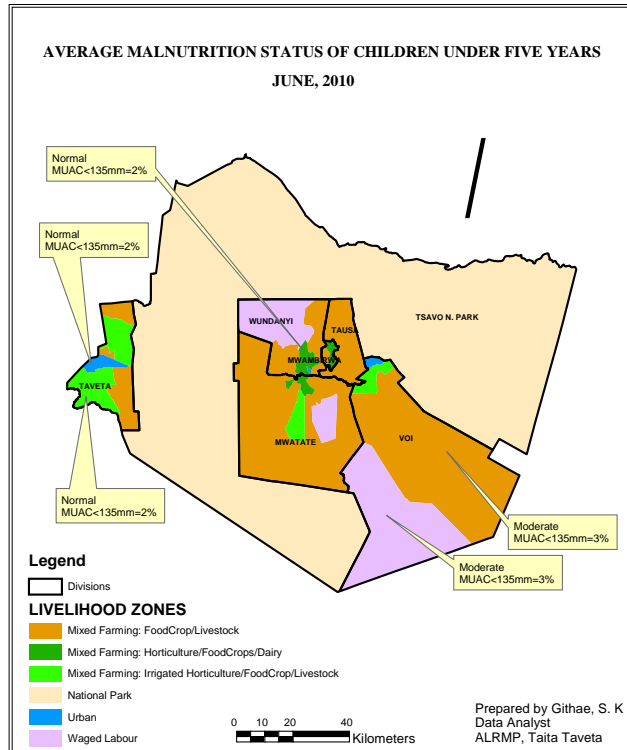
## 4.0 Human welfare indicators (Utilization of food)

### 4.1 Nutrition status



N = 360 households

- Based on the Mid Upper Arm Circumference (MUAC) measurement, the nutrition status of children below five years was stable, with the percentage of those rated at risk of malnutrition slightly increasing to 3.1 from 3.0 in the previous month.
- Out of 1,467 children under-five sampled in 12 sample sites areas, 45 were found with MUAC < 135mm. High levels of MUAC measurement were reported in Mwarungu at 5.8%.
- Compared to long term mean the trend is normal and MUAC level was lower.



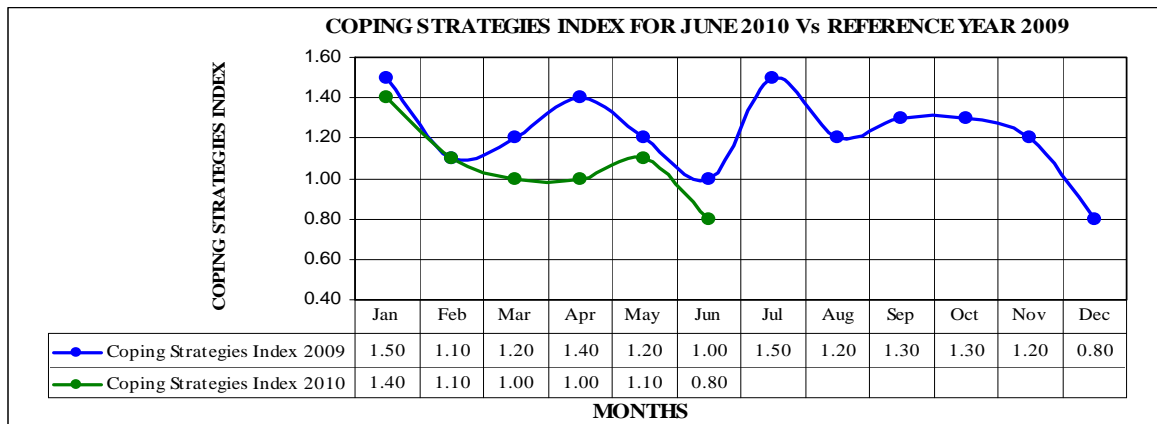
## 5.0 Current interventions

### 5.1 Non-food interventions

Agriculture, Irrigation and Water Sector projects

- Excavation of Mgeno water pan is on going - Arid Lands Resource Management Project.
- Fencing of Challa irrigation scheme water intake is on going- Arid Lands Resource Management Project.
- Drilling and equipping of Jipe borehole in Taveta is on going - Arid Lands Resource Management Project.
- Laying and installation of Marapu extension pipes is on going - Arid Lands Resource Management Project.

### 5.2 Coping Strategies



- The coping strategy index decreased to 0.80 from 1.10 in the previous month. The decrease could be attributed to increased stocks of maize at household level resulting to reduced coping strategy.
- Casual waged labour, mixed farming: horticulture/food crops/dairy and mixed farming: food crops/livestock indicated a coping strategy index of 1.1, 0.7 and 0.7 respectively.

## **6.0 Recommendations**

- Agriculture officers to sensitize farmers on proper storage of maize to address the issue of aflatoxin.
- Livestock department to sensitize herders on pasture conservation and use of hay bailer machine.
- Protect and conserve existing springs given that springs are the only source of water during the dry season.
- Kenya Wildlife Service to increase surveillance to address the problem of wildlife menace.