

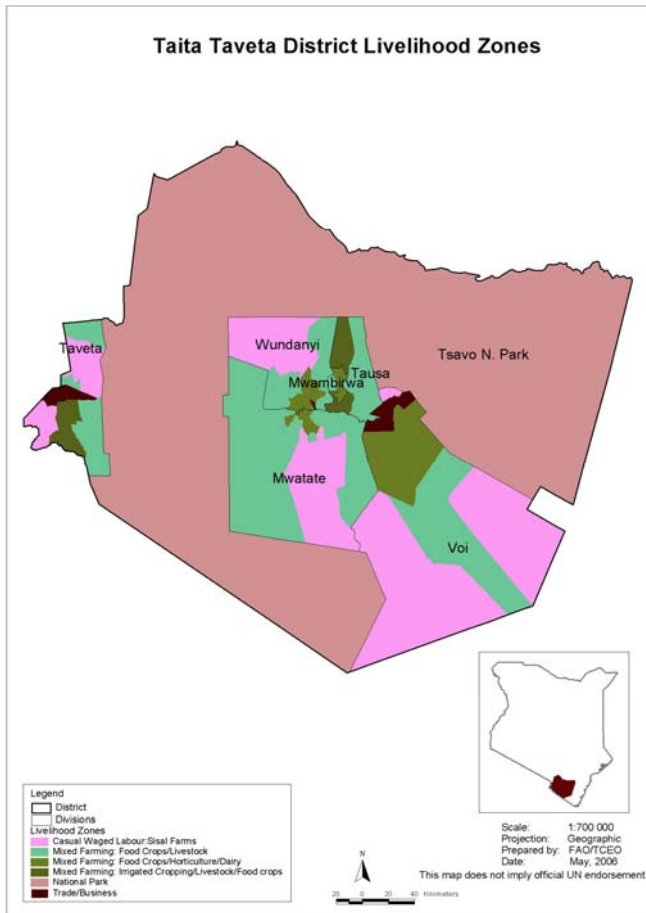


OFFICE OF THE PRIME MINISTER

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

DROUGHT MONITORING BULLETIN, SEPTEMBER 2009

Taita/Taveta Districts



Warning Stages

Livelihood zone	Warning Stage	Trend
Casual Waged Labour: Sisal Farms	Alert	Deteriorating
Mixed Farming: Food Crops/Livestock	Alert	Deteriorating
Mixed Farming: Food Crops/Horticulture/Dairy	Normal	Stable
Mixed Farming: Irrigated Cropping/Livestock/Food Crops	Alert	Deteriorating
National Park	Alert	Deteriorating
Trade/Business	Normal	Stable
District	Alert	Deteriorating

SEASONAL CALENDAR

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Maize	Harvesting	Planting	Weeding				Harvesting	Planting	Weeding			
Beans	Harvesting		Planting	Weeding		Harvesting				Planting	Weeding	
Vegetables						Sowing Transplanting	Top dressing		Harvesting			
Cattle	Milking											
Goats	Weaning		Mating/Kidding					Weaning		Mating/Kidding		
Rainfall			Long rains							Short rains		

Situation overview

- No rainfall was recorded in the four districts during the month under review. High temperatures and whirl winds were experienced, especially in the lowlands.
- In the larger Taita district, approximately 180,000 people were affected by water crisis. All rivers in the lowlands dried up and only base flows were available in the highlands and irrigation activities stalled, for instance Choke irrigation.
- Mwatate dam dried up and household members spent up to 5 hours to fetch water. From sampled sentinel sites average household distance to and from the water sources increased from 5.6 km to 5.8 km while time taken to fetch water increased from 2.6 hrs to 3.3 hrs due to overcrowding at water points.
- Rukanga, Mwakitau and Mwachabo sentinel sites recorded an average grazing distance of 20 km, 14 km and 14 km respectively. Increase in time to fetch water significantly affected economic activities, especially for women.
- Natural vegetation and pasture was depleted due to prolonged drought, coupled with overgrazing in both the ranches and Tsavo West National Park. Herders from Kajiado district and Somali community from North Eastern continued to dominate the ranches, resulting in overgrazing. Somali herders migrated to areas of Mwachumbinyi and Machombenyi in Modambogho, Mwatate district in search of pasture.
- There was an upsurge in human/wildlife conflict. In Wongonyi baboons and monkeys were uprooting cassava and sweet potatoes in the farms due to lack of fruits in the forest. Elephants and buffaloes moved to community land in search of pasture and water. In Challa, Taveta district a man was killed by marauding elephants while on his way to work. Wildlife destruction of drought-tolerant crops in the rain fed areas plus food crops in irrigation schemes will impact negatively on food security. In addition wildlife body condition deteriorated significantly and more than 100 elephants were reported to have succumbed to drought.
- There was an increase in cases of wild fires for instance Mwambirwa and Yale forest were almost consumed by these fires.
- In both districts cattle body condition deteriorated further due to long trekking distances in search of pasture and water. Areas mostly affected were Mwakitau, Mbulia, Kishushe, Marungu and Makamenyi in Taita district and Langata - Njukini and Salaita in Taveta district.
- Government of Kenya through the Ministry of State for Special Programmes continued to distribute relief foodstuff targeting vulnerable people, especially the elderly, disabled persons and needy institutions.
- Prices of food stuffs were still very high, resulting in increased poverty. However, Food for Assets and Kazi Kwa Vijana programme continued to impact positively on food security in Taita Taveta.
- Based on the Mid Upper Arm Circumference (MUAC) measurement, the nutrition status of children below five years continued to decline, with the percentage of those rated at risk of malnutrition increasing from 4.5 in August to 4.8 in September. This rise could be attributed to effects of prolonged drought and economic recession in the country.

Current interventions

Non-Food interventions

- Wundanyi, Mwatate, Voi and Taveta districts received 10,000 litres plastic water tanks from the Ministry of State for Special Programmes. Each district was allocated 10 tanks to be distributed to institutions facing acute water shortage.
- Taita Environment Management Alliance (TEMA) has established 45 fish ponds stocked with tilapia fish in Wongonyi, Mwatate district.
- Kenya Meat Commission bought a total of 549 cattle from local herders in the larger Taita Taveta district. Mwatate district 23, Wundanyi district 152, Voi district 234 and Taveta district 140.
- Water trucking to areas experiencing acute water shortage for instance Tausa, Kasigau and Mwatate is on going - Arid Lands Resource Management Project, Kenya Wildlife Service and Ministry of Water.

Food aid

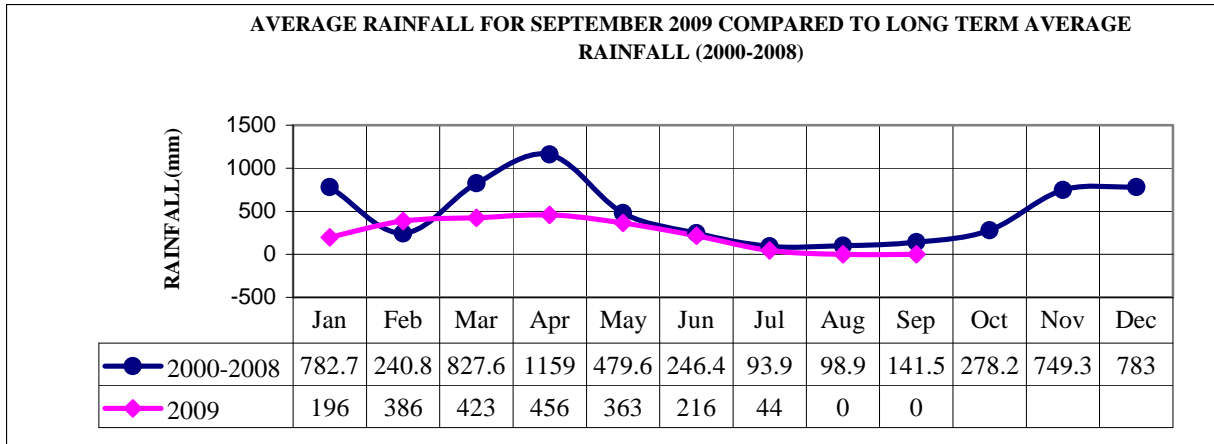
- Wundanyi, Mwatate, Voi and Taveta districts received relief foodstuffs from the Ministry of State for Special Programmes. Each district was allocated 1000 bags (maize) of 90 kg, 100 bags (beans) of 50 kg, 600 bags (Rice) of 50 kg and 100 cartons (cooking oil) of 6 x 3 litres.
- DSG approved 2% of the foodstuffs to be allocated to vulnerable groups in the two districts.

Recommendations to DSG and KFSM

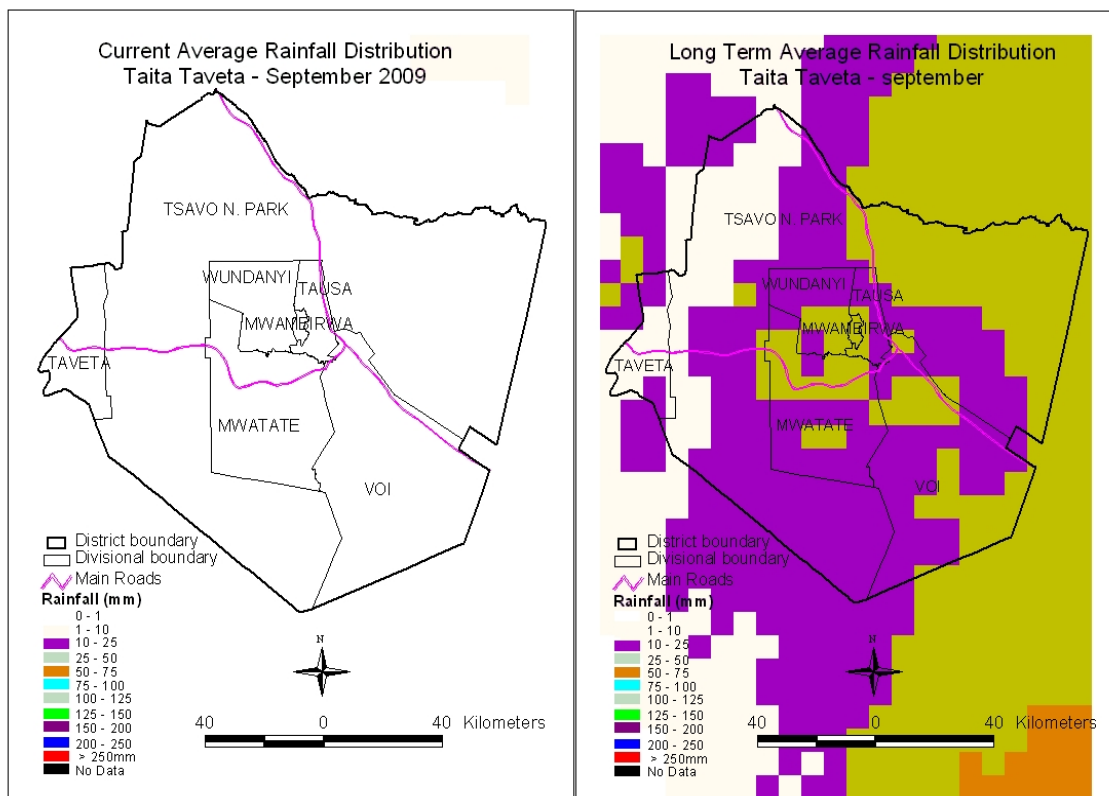
- Taita Taveta anticipates El Niño rains, therefore household members prone to disasters such as landslides and floods to be relocated to avoid fatal incidences.
- Communities neighbouring gazetted and non-gazetted forests to be encouraged to take precautions against fires, report any fire incidents and assist forest department officers to put off the fires.
- Capacity building on modern farming technologies, promotion of drought-tolerant crops and early issuance of certified seeds for planting in the next season.
- Farmers should be encouraged to engage in fish farming to improve food security.
- Relevant stakeholders to collaborate and desilt dried up water dams and pans, for instance Mwatate dam, before the onset of short rains.
- Protect existing springs either through fencing or planting trees given that springs are the only sources of water.
- Kenya Wildlife Service to excavate water pans inside the National Park in order to harvest run off water for use by wildlife during the dry spell.
- Kenya Wildlife Service to increase surveillance to address the problem of marauding elephants and address the problem of overgrazing in the National park.
- Expand school feeding programme in order to cater for secondary schools severely affected by effects of prolonged drought in Taita Taveta.

1.0 Environmental indicators (Stability)

1.1 Rainfall



- No rainfall was recorded in the four districts. High temperatures and whirl winds were experienced especially in the lowlands. Compared to the previous month the rainfall amount remained at zero.
- Compared to the long term average rainfall for 2000-2008 the trend is not normal and the amount of rainfall is zero.



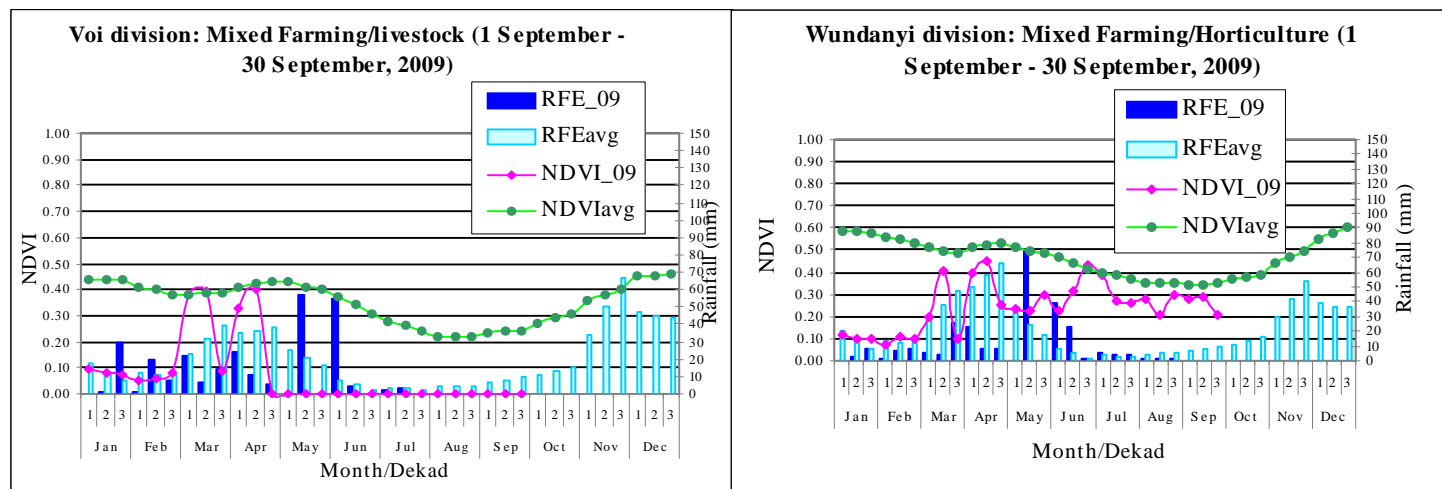
USGS

Satellite images – Figure illustrate Comparison of Current September 2009 Rainfall Distribution with the Long Term Averages for Taita Taveta.

- The United States Geological Survey satellite images above indicate that no rainfall was received in the district during the month of September.

- Compared to Long Term rainfall map it is clear that rainfall patterns have really changed. Eastwards of Taita Taveta high amount rainfall was recorded ranging between 25 – 50 mm, the hill masses of Wundanyi and Mwambirwa recorded 10 – 25 mm while the current map indicate no rainfall.

1.2 Condition of natural vegetation and pasture



NDVI – Normalized Difference Vegetation Index

RFE – Rainfall Estimates

- Natural vegetation and pasture was depleted due to prolonged drought coupled with overgrazing in both the ranches and Tsavo West National Park.
- Voi division continued to record null vegetation index while Wundanyi recorded 0.27, 0.29 and 0.31 in dekad 1, 2 and 3 respectively compared to 0.28, 0.21 and 0.3 in August.
- This could be attributed to thick forest cover coupled with low temperatures in Wundanyi and also its location on the hill masses compared to Voi located on the rain fed lowlands with increased cases of overgrazing, depleted pasture and charcoal burning.
- Compared to the long term vegetation index averages, both districts exhibited an abnormal trend.
- Average grazing distance analyzed from sampled sentinel sites remained at 8.2 km due to depleted pasture and drying up of water sources.

1.3 Water sources and availability

- In the month under review water sources for both human and livestock use were piped water, springs, natural rivers and boreholes.
- In the larger Taita district, approximately 180,000 people were affected by water crisis. All rivers in the lowlands dried up and only base flows were available in the highlands. Irrigation activities stalled, for instance Choke irrigation.
- Mwatate dam dried up and household members spent up to 5 hours to fetch water.
- From sampled sentinel sites households' average distance to and from the water sources increased from 5.6 km to 5.8 km while time taken to fetch water increased from 2.6 hrs to 3.3 hrs due to overcrowding at water points.
- Rukanga, Mwakitau and Mwachabo sentinel sites recorded an average grazing distance of 20 km, 14 km and 14 km respectively.

1.4 Emerging issues

1.4.1. Insecurity/conflict/human displacement

- There was an increase in cases of wild fires; for instance Mwambirwa and Yale forest were almost consumed by these fires.
- There was an upsurge in human/wildlife conflict. In Wongonyi baboons and monkeys were uprooting cassava and sweet potatoes in the farms due to lack of fruits in the forest.
- Elephants and buffaloes moved to community land in search of pasture and water. In Challa, Taveta district a man was killed by marauding elephants while on his way to work.
- Cases of wildlife deaths were reported and more than 100 elephants were reported to have succumbed to drought.
- Areas where cattle deaths were reported include Mwakitau, Mbulia, Kishushe, Marungu and Makamenyi in Taita district and Langata - Njukini and Salaita in Taveta district.

1.4.2. Migration

- Herders from Kajiado district and Somali community from North Eastern continued to dominate the ranches, resulting to overgrazing. Somali herders in search of pasture were reported in Mwachumbinyi and Machombenyi in Modambogho, Mwatate district.

1.4.3 Implications on food security

- Food for Assets programme improved food security in the rain fed lowlands in Taita Taveta immensely.
- Government of Kenya through the Ministry of State for Special Programmes continued to distribute relief foodstuff targeting vulnerable people especially the elderly, disabled persons and needy institutions.
- Increase in time to fetch water significantly affected economic activities, especially for women.
- Wildlife destruction of drought-tolerant crops in the rain fed areas plus food crops in irrigation schemes will impact negatively on food security.
- Areas still facing acute food shortage and require immediate attention are Wongonyi, Msau, Mwachabo and Mwakitau in Mwatate district, Kasigau, Tausa and lower Sagalla in Voi district, Paranga, Sangenyi, Nyache, Kishushe, Kishamba, Njawuli, Mwaroko, Mlechi, Choke, Wanganga, Irido and Saghasa in Wundanyi district.
- Others were Nakruto, Kasokoni, Chokaa, Kidong'u, Challa kati, Uthiani, Kijijini, Vikwatani, Chumvini A & B, Langata, Kitondooni, Mahandakini, Machungwani and Ulawani in Challa division, Njoro, Mtakuja, Kazamoyo, Kachero, Mata village, Masaaini, Mkwajuni, Luduwani, Kimala and Rekeke in Jipe division and Lessessia, Kasarani, parts of Mjini, Langata, Chewa, Mahoo, Salaita, parts of Vikwatani, Mwakine, Riata, Madarasani, Lotima A & B, Riata Ndogo/Kubwa, Timbooni, Rassia, Malikiloriti, Ndilidau and Timbila in Bomeni division of Taveta district.

2.0 Rural economy indicators (Food availability)

2.1 Livestock production

2.1.1 Livestock body condition

- In both districts cattle body condition has further deteriorated due to long trekking distances in search of pasture and water.
- Areas mostly affected are lower Sagalla, Kishushe, Mbulia, Mwakitau, Mwachabo, Ghazi, Paranga, Kidong'u, Salaita and Mahandakini.
- Compared with a normal year livestock body condition especially for cattle is not good.

2.1.2 Milk production

- Milk production from 12 sampled sentinel sites increased from 5,250 litres in August to 5,480 litres in September. Out of these 3,150 litres were obtained from Mwarungu and Mashangi given that it's the weaning season.
- Mixed farming: food crops/horticulture/dairy livelihood zone continued to dominate the dairy sector recording 74% situated in the wetlands, mixed farming: food crops/livestock livelihood zone 23% and casual waged labour: sisal farms 3% found in the rain fed lowlands.
- Casual waged labour: sisal farms and mixed farming: food crops/livestock livelihood zones low milk production could be attributed to deteriorating body condition of cattle due to long trekking distances in search of pasture and water in these livelihood zones.

2.2 Crop production

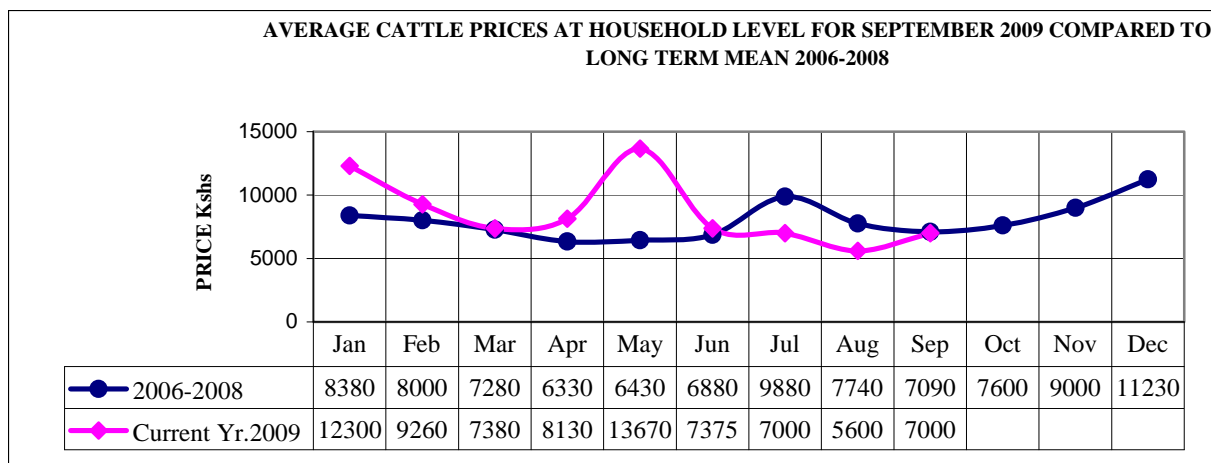
2.2.1 Timeliness and condition of various crop production activities

- In the mixed farming: food crops/livestock livelihood zone farmers were preparing land in readiness for the planting season.
- However, in the casual waged labour: sisal farms livelihood zone some casual waged labourers are busy planting sisal crop.
- In the mixed farming: food crops/horticulture/dairy livelihood zone farmers are harvesting vegetables and others are preparing land.
- In the mixed farming: irrigated cropping/livestock/food crops livelihood zone most farmers are harvesting tomatoes, onions, bananas, beans and maize.

3.0 Access to food

3.1 Livestock marketing

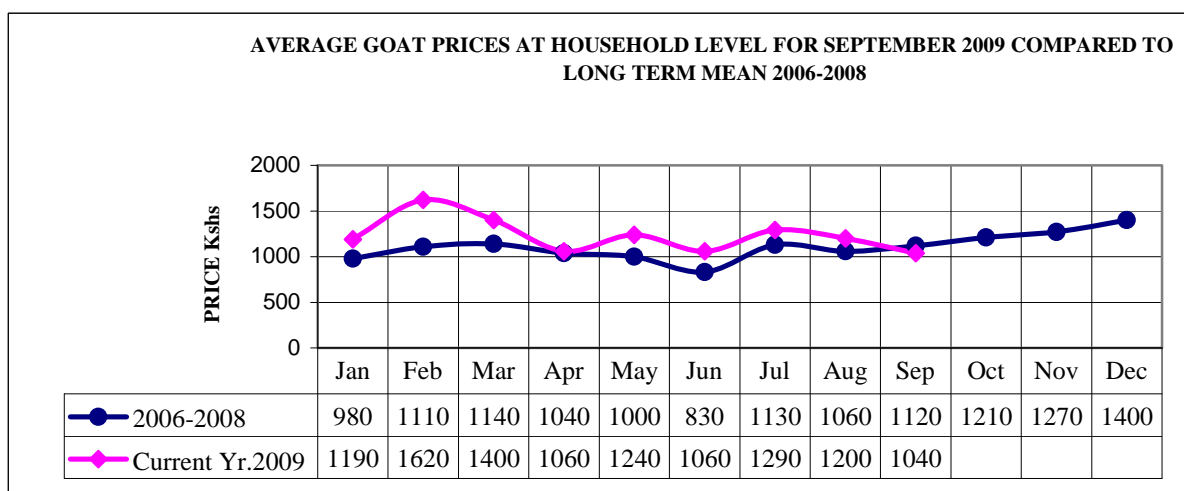
3.1.1. Cattle prices



N = 360 households

- The average cattle price at household level increased from Ksh5,600 in August to Ksh7,000.
- The highest prices were reported in the mixed farming: food crops/horticulture/dairy livelihood zone at Ksh9,000 while low prices prevailed in the casual waged labour: sisal farms at Ksh5,000 and Ksh4,000 in the mixed farming: food crops/livestock livelihood zones.
- Compared to the long term mean the trend was abnormal and the price low.

3.1.2 Goats prices

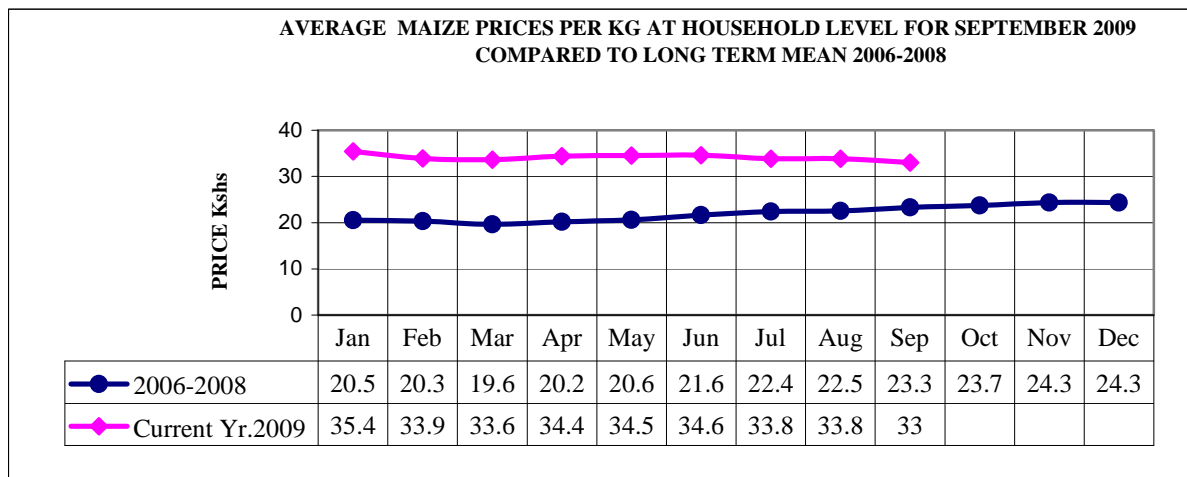


N = 360 households

- The average goat price at household level decreased from Ksh1,200 in August to Ksh1,040.
- The high prices were recorded in Challa at Ksh1,350. The fluctuating price could be attributed to effects of prolonged drought and changes in body condition.
- Prices remained higher in the mixed farming: food crops/horticulture/dairy livelihood zone at Ksh 1,400 than in both the casual waged labour: sisal farms livelihood zone at Ksh900 and Ksh700 in the mixed farming: food crops/livestock livelihood zone.
- Compared to the long term mean trend was not normal and the price was low.

3.2 Crop prices

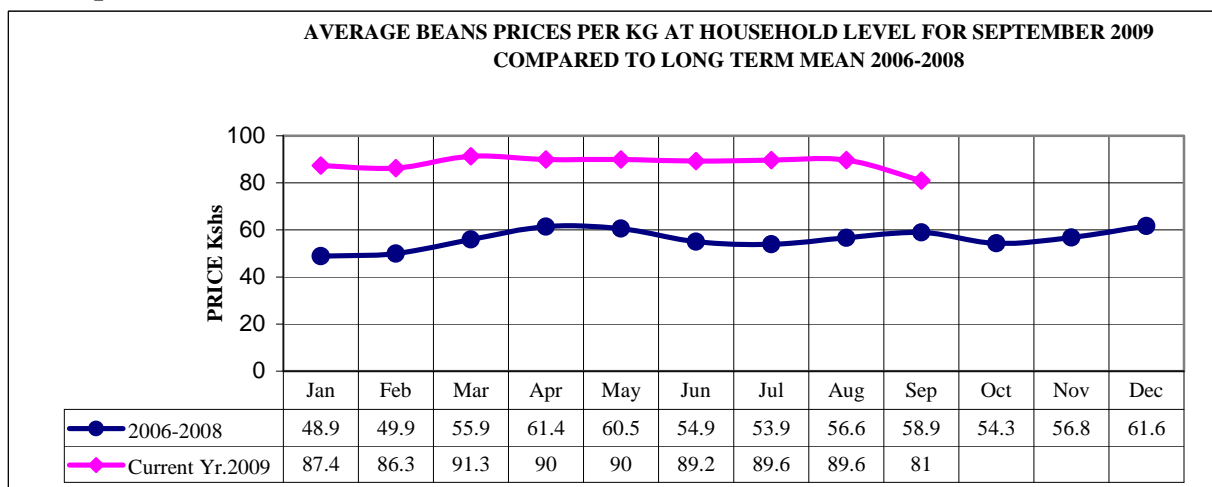
3.2.1 Maize prices



N = 360 households

- The average maize price at household level decreased from Ksh33.8 to Ksh33.
- The prevailing high prices were due to depleted maize stocks at household level and lack of sufficient stocks at national level.
- In the mixed farming: food crops/horticulture/dairy, mixed farming: food crops/livestock and mixed farming: irrigated cropping/livestock/food crops livelihood zones average maize prices at market level are still ranging from Ksh30 - 40.
- Compared to the long term mean the trend is normal but the price is still very high.

3.2.2 Beans prices



N = 360 households

- In the month of September the average beans price at household level decreased from Ksh89.6 to Ksh81.
- The fall in price could be attributed to an increase in supply of beans due to harvests in irrigation schemes and imports from Tanzania.

- In the mixed farming: food crops/horticulture/dairy, mixed farming: food crops/livestock and mixed farming: irrigated cropping/livestock/food crops livelihood zones average beans prices at market level are still ranging from Ksh80 - 100.
- Compared to the long term mean the trend was not normal and the price is extremely high.

3.3 Income

3.3.1. Livestock income

- Livestock income obtained from 360 sampled households has decreased. Sale of 4 cattle @ Ksh 7,000, 33 goats @ Ksh1,040 and 64 chickens @ Ksh200 realized Ksh75,120 compared to Ksh 92,140 in August.
- The fall in livestock income could be attributed to decrease in prices of livestock emanating from poor body condition of cattle.

3.3.2 Other income sources

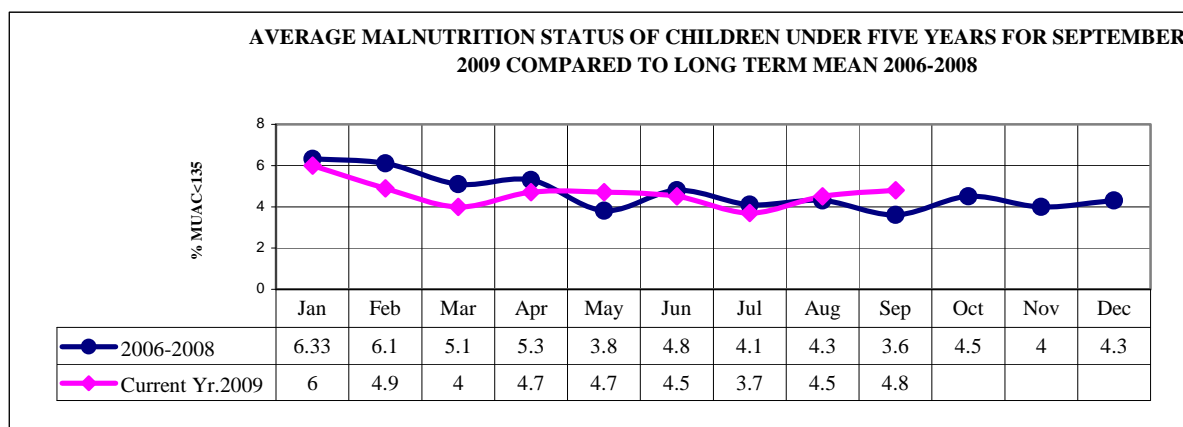
- In Taveta district, Bomeni division, most household members still depended on sales of ballast, which they broke manually.
- Others sources were casual labour, petty trade, formal employment, remittances, sand and brick selling, charcoal selling, miraa selling, fishing and small-scale mining.

3.4 Implications on food security

- Although prices of food stuffs were still very high resulting in increased poverty, Food for Assets and Kazi Kwa Vijana programme continued to impact positively on food security in Taita Taveta.
- In the mixed farming: food crops/horticulture/dairy, milk was readily available and impacted positively on nutrition status of children under five.

4.0 Human welfare indicators (Utilisation 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 continued to decline, with the percentage of those rated at risk of malnutrition increasing from 4.5 in August to 4.8 in September. This rise could be attributed to effects of prolonged drought and economic recession in the country.

- Out of 1,350 children under-five sampled in 12 sample sites areas, 66 were found with MUAC < 135mm. Highest rates were recorded in Mwakitau and Mwarungu at 11.6% and 11.5% respectively.
- Compared to long term mean the trend was not normal.

5.0 Current interventions

5.1 Non-Food interventions

- Wundanyi, Mwatate, Voi and Taveta districts received 10,000 litres plastic water tanks from the Ministry of State for Special Programmes. Each district was allocated 10 tanks to be distributed to institutions facing acute water shortage.
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5.2 Food aid

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- DSG approved 2% of the foodstuffs to be allocated to vulnerable groups in the two districts.

6.0 Recommendations to DSG and KFSM

- Taita Taveta anticipates El Niño rains, therefore household members prone to disasters such as landslides and floods to be relocated to avoid fatal incidences.
- Communities neighbouring gazetted and non-gazetted forests to be encouraged to take precautions against fires, report any fire incidents and assist forest department officers to put off the fires.
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