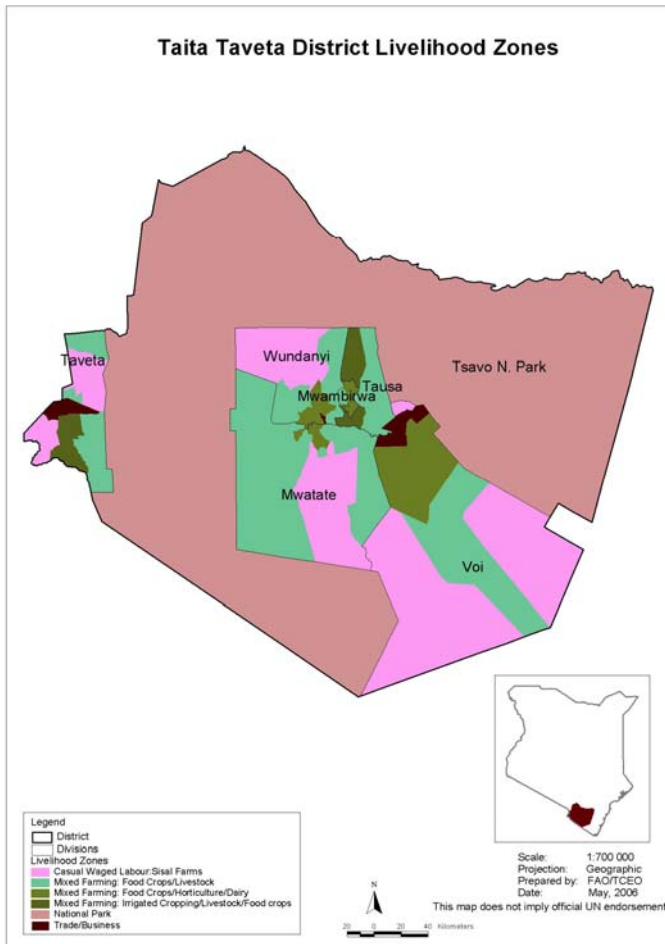




**OFFICE OF THE PRIME MINISTER
MINISTRY OF STATE FOR THE DEVELOPMENT OF NORTHERN KENYA AND OTHER ARID LANDS
ARID LANDS RESOURCE MANAGEMENT PROJECT II**

DROUGHT MONTHLY BULLETIN, JUNE 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	Normal	Stable
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

- Light showers were experienced mostly in the hill masses of Taita district. These areas also recorded very low temperatures, marking the beginning of the cold season. Both Taita and Taveta districts recorded very low amount of rainfall at an average of 216 mm compared to 316 mm recorded in May. Mwambirwa and Tausa stations recorded the highest rainfall amounts at 76.00 mm and 90.25mm respectively.
- The poor mode of rainfall worsened the food situation in the two districts, especially the rain-fed areas of Taita and Taveta district which were already facing acute food shortage due to crop failure in the past seasons.
- Condition of natural vegetation and pasture deteriorated at a high rate due to overgrazing in both the ranches and Tsavo West National Park.
- Low water levels resulted in drying up of shallow wells, seasonal and major rivers for instance lower Voi River and Mzazala River in Mashangi sub-location. Also irrigation schemes in the two districts were not fully operational.
- Manoa, Kamtonga and Mwatate dams were drying up at a high rate given that large herds of elephants were using the same water sources with livestock.
- From sampled sentinel sites, average distance to and from the water sources increased from 4.5 km to 4.8 km and time taken to fetch water increased from 2.0 hrs to 2.1 hrs. Time taken to fetch water increased due to overcrowding at water points.
- Long trekking distances to fetch water and overcrowding at water points deprived household members of time to engage in other economic activities.
- An unusual event occurred when marauding elephants were observed at Msisinenyi and Gandia in Modambogho, Mwatate division.
- Elephants damaged water pipes and tanks for Mgangu water project and Alia borehole in Mwachabo location, Mwatate division.
- In both districts livestock body condition deteriorated, especially for cattle due to lack of pasture and water. Areas mostly affected are Kishushe, Mwakitau, Ghazi, Paranga, Kidong, Salaita and Mahandakini.
- Cases of drought-related livestock deaths were reported in Mbulia, Makamenyi and Marungu sub locations, Taita district.
- Herders from the Maasai community and Gicheha's farm security officers in Taveta were engaged in a fierce fight after Maasai herders grazed over 3,000 cattle illegally. However, no serious injuries were reported and Provincial Administration contained the situation.
- Herders from Tanzania and Loitokitok district plus Taveta herders from Salaita and Mahandakini took advantage of the dwindling pasture in the park, while others migrated to Msambweni, Kwale district.
- Large herds of cattle continued to graze in the Tsavo West National Park. Overgrazing in the park will increase cases of human/wildlife conflict as elephants move into farms in search of pasture.
- Maize crop in the rain-fed lowlands dried up, worsening food situation in both districts.
- Households in the rain-fed lowlands in both districts should be targeted through Food for Assets. while Government of Kenya general food distribution targeted vulnerable groups.
- Prices of cereals and legumes were still very high at both household and market level. In the two districts, the price of maize and beans per kilogram was Ksh35 per kilo and Ksh 90 respectively.

- Most households were languishing in poverty because of high prices of food stuffs.
- Areas that were adversely affected by effects of prices and need particular attention in regard to food security were Mwakine and Riata in Kimorigho division, Jipe division, Challa division and parts of Njukini location in Taveta district.
- Others were Kajire, Marapu, Rahasi, Ndara, Bungule, Bachuma, Marungu, and parts of Rukanga in Voi division, Mwakitau, Kamtonga, Chunga Unga and Mukuki in Mwatate division.
- In addition Mbulia, Ndome and parts of Mbololo in Tausa division and Wongonyi in Mwambirwa division, Paranga, Sangenyi, Nyache, Kishamba, Njawuli, Mwaroko, Mbale and Kishushe in Wundanyi division of Taita district.
- The nutrition status of children below five years (based on the Mid Upper Arm Circumference MUAC<135mm measurement,) improved slightly during the month under review, with the percentage of those rated at risk of malnutrition dropping from 4.7 in May to 4.5.

Recommendations to DSG and KFSM

- Provide food supplementation in most affected locations.
- Ministry of Water to move fast and upgrade inefficient water projects to curb water shortage, especially in Mwakitau and Mwachabo location.
- Protect existing springs either through fencing or planting trees given that springs are the only source of water in the two districts.
- Kenya Wildlife Services to increase surveillance to address the problem of marauding elephants and address the problem of overgrazing in the National park.
- Expanded school-feeding programme to cover Mwaroko, Nyache, Sangenyi, Chome, Sungululu and Kishushe areas.
- Ministry of Livestock Development in collaboration with ranchers to stop overgrazing in the ranches.

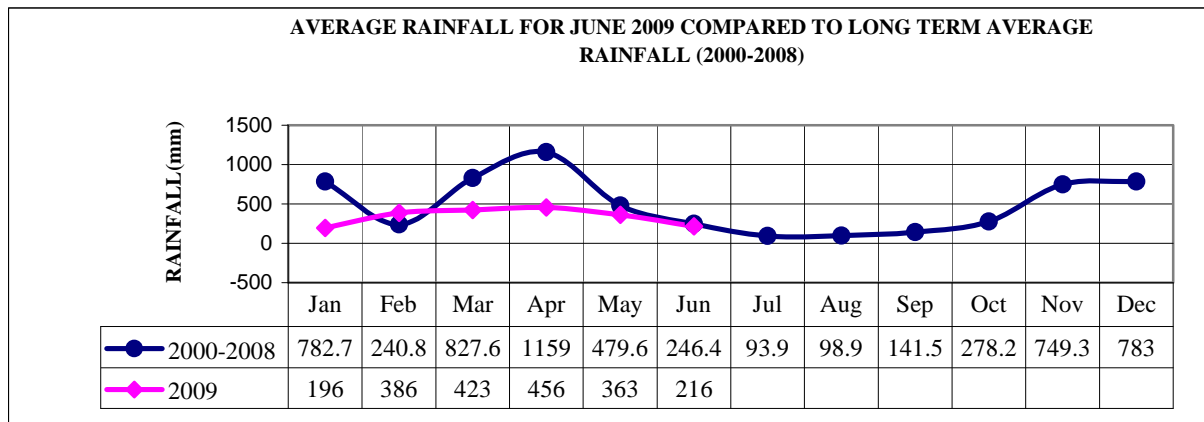
Current Interventions

Non-food Interventions

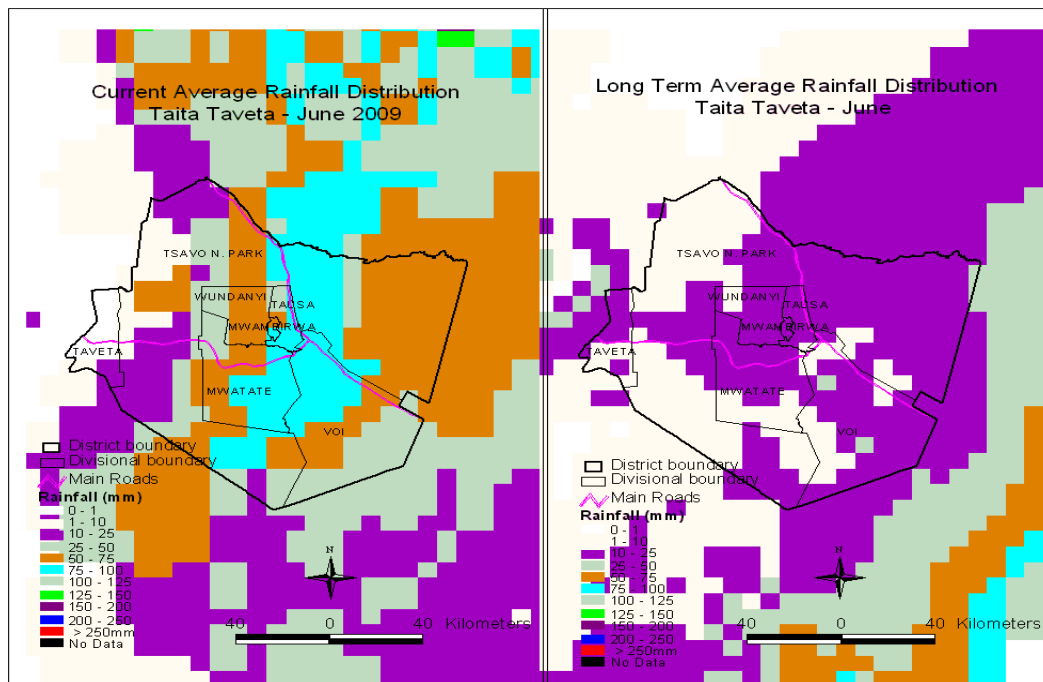
- Agriculture, Irrigation and Water Sector projects
 - World Vision through Protracted Relief and Rehabilitation Operations (PRRO)/EMOP are undertaking projects such as construction of Njukini, Chumvini, Challa, Nakruto, Mahoo, Kitobo, Mtakuja and Kazamoyo soil conservation structures.
 - Others are desilting of Kamlenza and Sembeka irrigation canals and construction of Rubu/Mata drainage canal all in Taveta district.
 - Constructions of Mwamsai and Kwa Ziro water pans in Taita district are complete – Arid Lands Resource Management Project.
 - Construction of Ore irrigation in-take in Taita district is on going – Arid Lands Resource Management Project.
 - Water trucking to areas experiencing acute water shortage for instance Tausa, Kasigau and Mwatate is on going - Arid Lands Resource Management Project/ Ministry of Water.
- Health Sector Projects
 - Procurement of 4 digital bathroom scale, 6 height scale- infants and 4 digital paediatric scales to be distributed to health centres - Arid Lands Resource Management Project.

1.0 Environmental indicators (Stability)

1.1 Rainfall



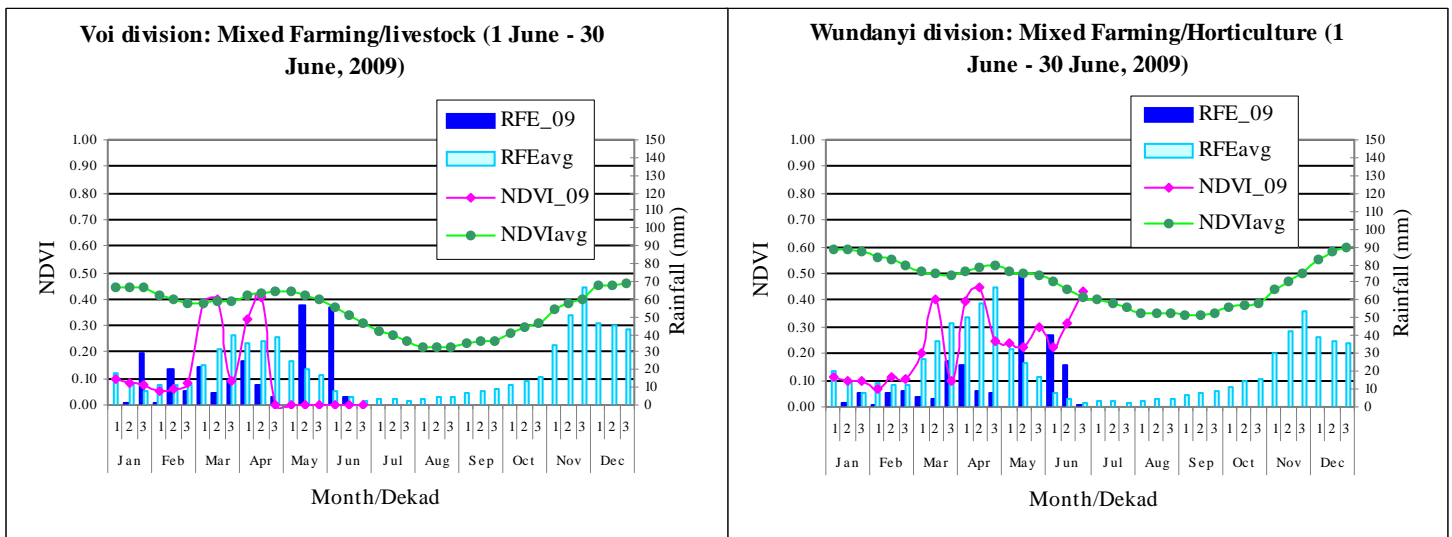
- Light showers were experienced mostly in the hill masses of Taita district. These areas also recorded very low temperatures marking the beginning of the cold season.
- Generally in the month under review both Taita and Taveta districts recorded very low amount of rainfall at an average of 216 mm compared to 316 mm recorded in the month of May.
- This poor mode of rainfall has worsened the food situation in the two districts especially the rain fed areas of Taita and Taveta districts already facing acute food shortage due to crop failure in the past seasons.
- Compared to the long term average rainfall for 2000-2008 the trend is normal though at low levels.



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

- The United States Geological Survey satellite images above indicate that rains were received only in the first and second dekad.
- Moreover the amount of rainfall recorded was as follows Mwambirwa 76.00 mm, Tausa 90.25 mm, Wundanyi 64.40 mm, Mwatate 72.00 mm, National Park 49.80 mm, Voi 56.59 mm and Taveta 2.56 mm.
- Wongonyi, Tausa, Bura, Wumari/Sechu, Chawia and parts of Voi recorded rainfall amount ranging between 75 – 100 mm areas of Wundanyi recorded 50 – 75 mm.
- Long Term Rainfall map show an even distribution of rainfall pattern ranging between 1 – 25 mm while the current month indicates uneven distribution of rainfall.

1.2 Condition of natural vegetation and pasture



NDVI – Normalized Difference Vegetation Index

RFE – Rainfall Estimates

- Condition of natural vegetation and pasture deteriorated at a high rate due to overgrazing in both the ranches and Tsavo West National Park.
- In June, Voi division continued to record null vegetation index while Wundanyi recorded 0.22, 0.31 and 0.44 in dekad 1, 2 and 3 respectively compared to 0.24, 0.23 and 0.30 in May.
- This could be attributed to thick forest cover, light showers received and cool temperatures in Wundanyi and also its location on the hill masses compared to Voi located in the lowlands with increased cases of overgrazing and charcoal burning.
- Compared to the long term vegetation index averages, Voi division exhibits an abnormal trend.
- Average grazing distance analyzed from sampled sentinel sites increased from 6.0 km to 6.1 km.

1.3 Water sources and availability

- In the month under review water sources for both human and livestock use were tap water, springs, natural rivers, water pans, dams and boreholes.

- Low amounts of rainfall experienced in the past three months would have improved water situation in Taita district but unfortunately most of the water projects have broken down and others stalled due to poor management.
- Manoa, Kamtonga and Mwatate dams are drying up at a high rate given that large herds of elephants are using the same water sources with livestock.
- Low water levels have resulted to drying up of shallow wells, seasonal and major rivers for instance lower Voi river and Mzazala river in Mashangi sub location. Also irrigation schemes in the two districts are not fully operational.
- From sampled sentinel sites average distance to and from the water sources increased from 4.5 km to 4.8 km and time taken to fetch water increased from 2.0 hrs to 2.1 hrs.
- However in some areas like Dighai, Kamtonga and Mkengerenyi in Mwachabo and Msorongo, Kwa-Mnengwa and Mwashuma in Mwakitau location household members are trekking for about 12 km to fetch water.
- Time taken to fetch water has increased due to overcrowding at water points.

1.4 Emerging issues

1.4.1. Insecurity/conflict/human displacement

- Maize crop in the rain-fed lowlands dried up, worsening food situation in both districts.
- Cases of drought-related livestock deaths were reported in Mbulia, Makamenyi and Marungu sub locations, Taita district.
- An unusual event occurred when marauding elephants were observed at Msisinenyi and Gandia in Modambogho, Mwatate division.
- Elephants damaged water pipes and tanks for Mgangu water project and Alia borehole in Mwachabo location, Mwatate division.
- Herders from the Maasai community and Gicheha's farm security officers in Taveta were engaged in a fierce fight after Maasai herders took over 3,000 cattle to graze illegally.
- However, no serious injuries were reported and Provincial Administration contained the situation.

1.4.2 Migration

- The Somali community continued to dominate the ranches, resulting in overgrazing.
- Large herd sizes of cattle continued to graze in the Tsavo West National Park.
- Herders from Tanzania and Loitokitok district plus Taveta herders from Salaita and Mahandakini took advantage of the dwindling pasture in the park while others have migrated to Msambweni, Kwale district.

1.4.3 Implication on food security

- Households in the rain-fed lowlands in both districts should be targeted through Food for Assets. However, Government of Kenya pipeline uses General food distribution to target vulnerable groups.
- Long trekking distances to fetch water and overcrowding at water points deprives household members' of time to engage in other economic activities.
- Overgrazing in the park will increase cases of human/wildlife conflict as elephants are expected to move into farms in search of pasture, which might lead to fatal attacks.
- Areas still facing acute food shortage and require immediate attention are Mwakitau in Mwatate division, Kasigau and lower Sagalla in Voi division, Tausa division, Wongonyi in Mwambirwa,

Paranga, Sangenyi, Nyache, Kishamba, Njawuli, Mwaroko, Mlechi, Choke, Wanganga, Irido and Saghasa in Wundanyi division, Taita district.

- Others were Nakruto, Kasokoni, Chokaa, Kidong'u, Challa kati, Uthiani, Kijijini, Vikwatani, Chumvini A & B, Langata, and Ulawani in Challa division, Njoro, Mtakuja, Kazamoyo, Kachero, Mata village, Nasaini 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 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 livestock body condition is deteriorating especially for cattle due to lack of pasture and water.
- Areas mostly affected are Kishushe, Mwakitau, Ghazi, Paranga, Kidong, Salaita and Mahandakini.
- Compared with a normal year livestock body condition especially for cattle is not good.

2.1.2 Milk production

- Milk yield from 360 sampled households in both districts decreased from 8,155 litres in May to 6,349 litres in June.
- Compared to the previous month casual waged labour: sisal farms and mixed farming: food crops/livestock livelihood zones indicate a significant drop in milk production.
- This could be attributed to deteriorating body condition of cattle due to depleted pasture and dwindling water sources in these livelihood zones.
- Mixed farming: food crops/horticulture/dairy livelihood zone continued to dominate the dairy sector recording 72% situated in the wetlands, mixed farming: food crops/livestock livelihood zone 25% and casual waged labour: sisal farms 3% found in the rain fed lowlands.

2.2 Crop production

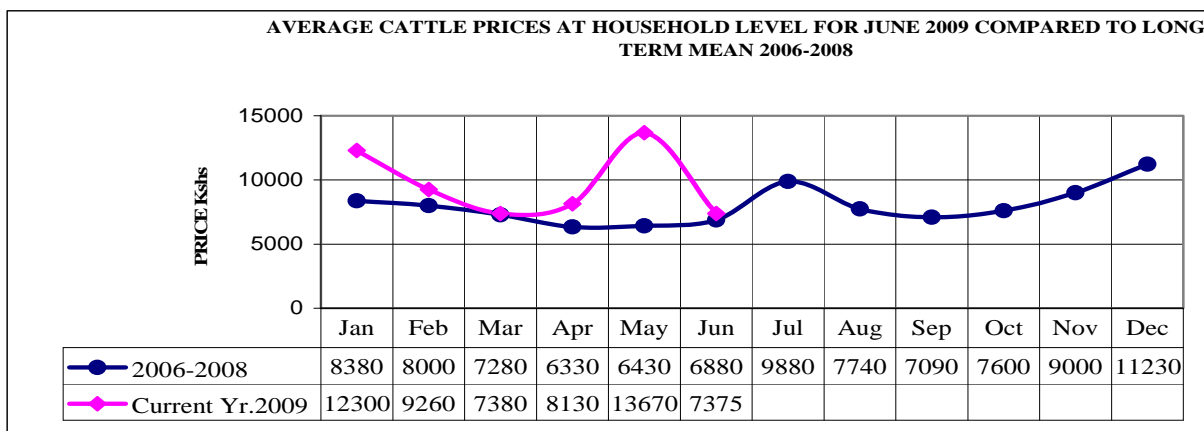
2.2.1 Timeliness and condition of various crop production activities

- In the mixed farming: food crops/livestock livelihood zone no crop production activity was ongoing.
- However, in the casual waged labour: sisal farms livelihood zone some casual waged labourers are busy harvesting while others are preparing land for planting sisal crop.
- In the mixed farming: food crops/horticulture/dairy livelihood zone farmers harvested vegetables and maize crop was flowering.
- In the mixed farming: irrigated cropping/livestock/food crops livelihood zone most farmers were harvesting bananas and sugarcane and a few were harvesting green maize.

3.0 Access to food

3.1 Livestock marketing

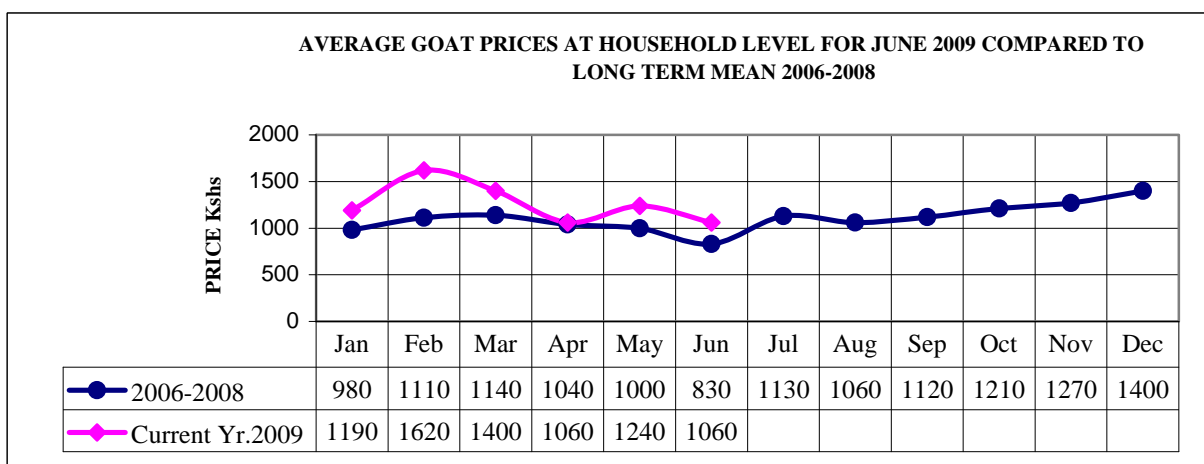
3.1.1. Cattle prices



N = 360 households

- The average cattle price at household level decreased from Ksh 13,670 in May to Ksh 7,375.
- High prices were recorded in Mata and Njukini at Ksh 12,000 and Ksh 10,000 respectively.
- Otherwise most cattle prices at market level were ranging between Ksh 4,000 – 12,000.
- High prices were reported in the mixed farming: food crops/horticulture/dairy livelihood zone at Ksh 12,000 while low prices prevailed in the casual waged labour: sisal farms at Ksh 6,000 and Ksh 6,500 in the mixed farming: food crops/livestock livelihood zones.
- Compared to the long term mean the trend was abnormal and the price was slightly higher.

3.1.2. Goats prices

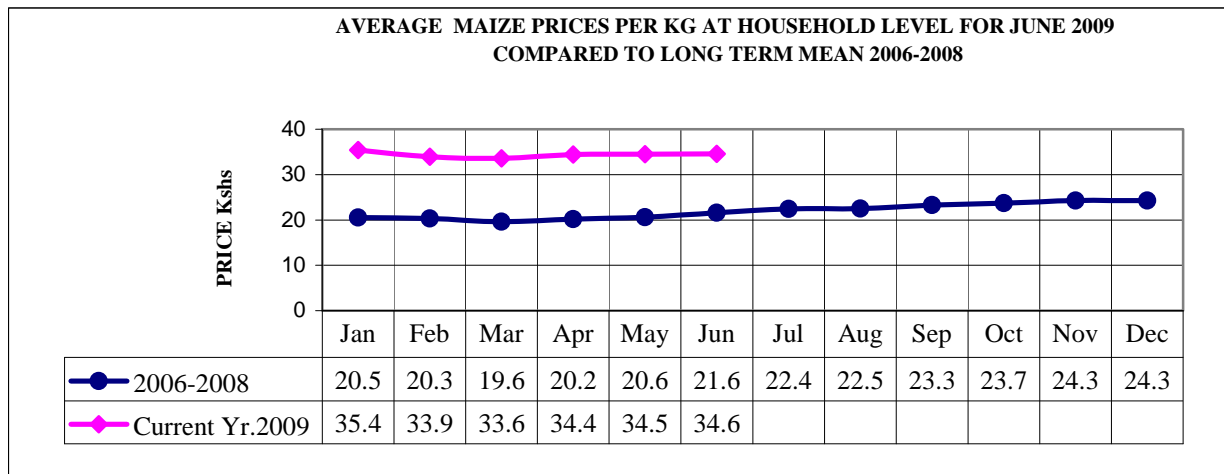


N = 360 households

- The average goat price at household level decreased from Ksh1,240 in May to Ksh 1,060.
- Low prices were recorded in challa and Njukini at Ksh 700.
- The drop in price could be attributed to an increase in supply of goats in the market and the prevailing drought.
- Prices remained higher in the mixed farming: food crops/horticulture/dairy livelihood zone at Ksh 1,500 than in both the casual waged labour: sisal farms livelihood zone at Ksh 1,000 and Ksh 750 in the mixed farming: food crops/livestock livelihood zone.
- Compared to the long term mean trend was normal but the price high.

3.2 Crop prices

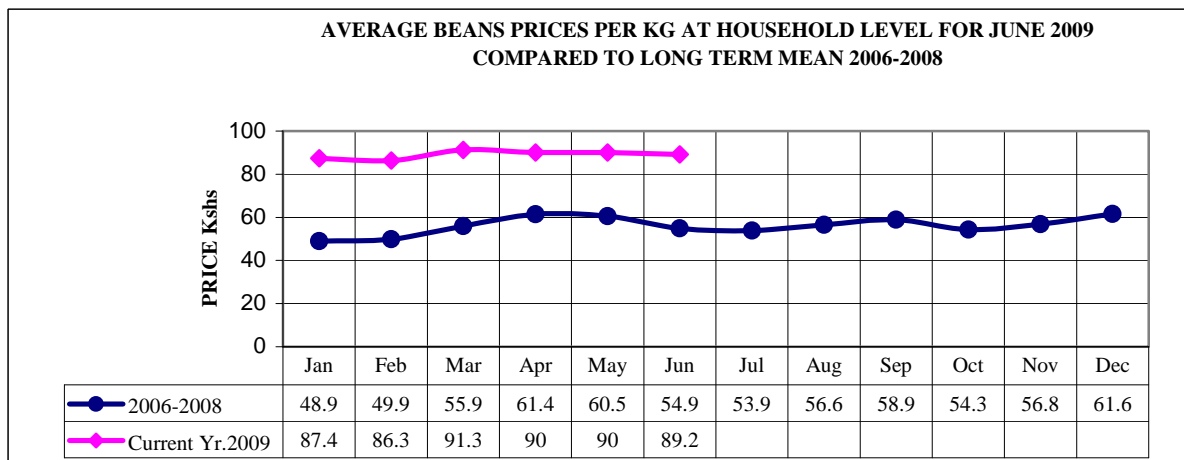
3.2.1 Maize prices



N = 360 households

- The average maize price at household level increased from Ksh34.5 per kilo in May to Ksh34.6.
- The prevailing high prices were due to depleted maize stocks at household and national levels.
- 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 still ranged from Ksh 35 - 50.
- Compared to the long term mean, the trend was normal but the price still very high.

3.2.2 Beans prices



N = 360 households

- The average beans price at household level decreased from Ksh90 per kilo in May to Ksh 89.2.
- The high price in both districts was due to shortage of beans both at market and household levels.
- 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 Ksh 80 - 90.

- Compared to the long term mean the trend was normal but the price extremely high.

3.3 Income

3.3.1. Livestock income

- Livestock income obtained from 360 sampled households has decreased. Sale of 6 cattle @ Ksh 7,375; 14 goats @ Ksh 1,060 and 46 chickens @ Ksh 220 realized Ksh 69,210 compared to Ksh 136,290 in May.
- This decrease in livestock income could be attributed to fall in prices of livestock due to deteriorating body condition of cattle.

3.3.2 Other income sources

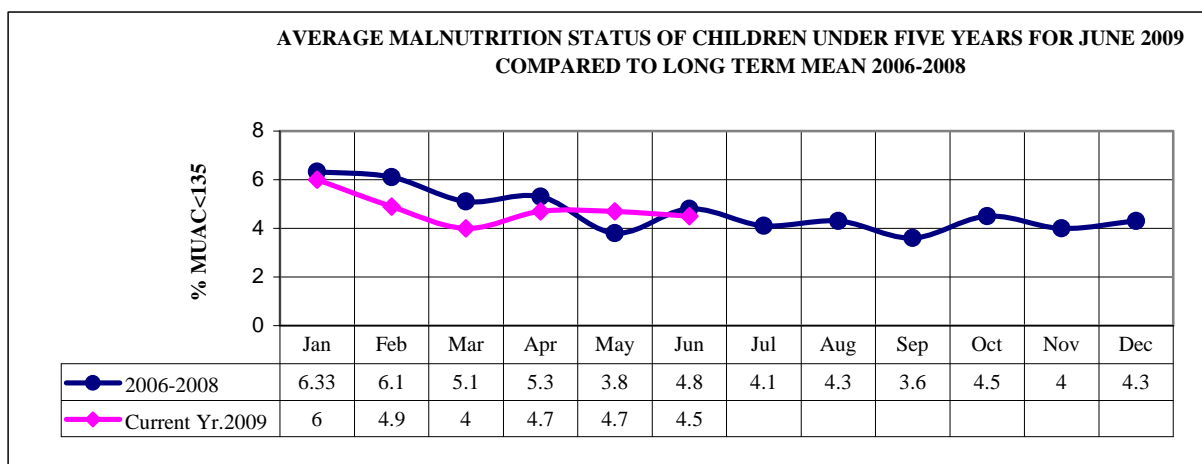
- In Taveta district, Bomeni division, most household members depended on sales of ballast, which they broke manually.
- Others were casual labour, petty trade, formal employment, remittances, sand and brick selling, charcoal selling, miraa selling, fishing and small scale mining. However, remittances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

3.4 Implications on food security

- Prices of cereals and legumes are still very high at both household and market level. The price of maize and beans per kilogram is Ksh 35 and Ksh 90 respectively in the two districts.
- Following the failure of the long rains the situation is expected to worsen given that most farmers will not harvest.
- Most households are languishing in poverty because of high prices of food stuff.
- Availability of milk has impacted positively on food security especially on the hill masses given that it's of great essence to growth of the under fives.

4.0 Welfare indicators (Utilization of food)

4.1 Nutrition status



N = 360 households

- The nutrition status of children below five years (based on the Mid Upper Arm Circumference MUAC<135mm measurement,) improved slightly during the month under review.
- The percentage of those rated at risk of malnutrition dropped from 4.7 in May to 4.5.
- Out of 1,395 children under-five sampled in 12 sample sites areas, 58 were found with MUAC< 135mm.
- High rates were reported in Mwakitau/Mwashuma location, Taita district at 14.7%.
- Compared to long term mean the trend was normal and at a low level.

5.0 Current interventions

5.1 Non-food interventions

- Agriculture, Irrigation and Water Sector projects.
 - World Vision through Protracted Relief and Rehabilitation Operations (PRRO)/EMOP was undertaking projects such as construction of Njukini, Chumvini, Challa, Nakruto, Mahoo, Kitobo, Mtakuja and Kazamoyo soil conservation structures.
 - Others included desilting of Kamlenza and Sembeka irrigation canals and construction of Rubu drainage canal all in Taveta district.
 - Constructions of Mwamsai and Kwa Ziro water pans in Taita district are complete – Arid Lands Resource Management Project.
 - Construction of Ore irrigation in-take in Taita district is on going – Arid Lands Resource Management Project.
 - Water trucking to areas experiencing acute water shortage for instance Tausa, Kasigau and Mwatate is on going - Arid Lands Resource Management Project/ Ministry of Water.
- Health Sector Projects
 - Procurement of four digital bathroom scales, 6 height scale- infants and 4 digital paediatric scales to be distributed to health centres - Arid Lands Resource Management Project.
 - Distribution of Unimix to address the problem of malnutrition is on going - Arid Lands Resource Management Project/ Ministry of Public Health and Sanitation.

6.0 Recommendations to DSG and KFSM

- Provide food supplementation in most affected locations.
- Ministry of Water to move fast and upgrade inefficient water projects to curb water shortage, especially in Mwakitau and Mwachabo location.
- Protect existing springs either through fencing or planting trees given that springs are the only source of water in the two districts.
- Kenya Wildlife Services to increase surveillance to address the problem of marauding elephants and address the problem of overgrazing in the National park.
- Expanded school-feeding programme to cover Mwaroko, Nyache, Sangenyi, Chome, Sungululu and Kishushe areas.
- Ministry of Livestock Development in collaboration with ranchers to stop overgrazing in the ranches.
-