

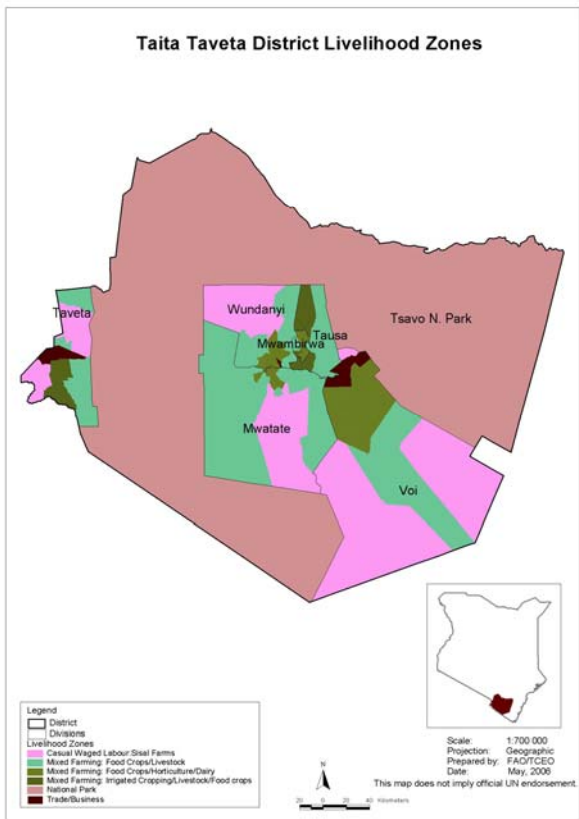


**OFFICE OF THE PRIME MINISTER
MINISTRY OF STATE FOR THE DEVELOPMENT OF NORTHERN KENYA AND OTHER ARID LANDS
ARID LANDS RESOURCE MANAGEMENT PROJECT II**

DROUGHT MONITORING BULLETIN, AUGUST 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 two districts in the month of August though low temperatures continued to prevail on the hill masses of Taita district. 44 mm of rainfall was recorded the previous month.
- Natural vegetation and pasture got depleted due to 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 to overgrazing. Overgrazing in the park led to destruction of wildlife habitats resulting to elephants moving to community land in search of pasture and water.
- Iyombonyi River, which supplies Iyombonyi /Sinai water project in Mwatate has dried up and Ngangu River also in Mwatate is drying up at very high rate. If it does not rain in one month's time Bura and Mwatate Rivers will have no water. In a week's time Mwatate dam will be completely dry if no rainfall is received. Drying up of rivers resulted in reduced irrigation activities in Taita Taveta.
- From sampled sentinel sites households' average distance to and from the water sources increased from 4.8 km to 5.6 km while time taken to fetch water increased from 2.5 hrs to 2.6 hrs due to overcrowding at water points. In Dighai, Kamtonga and Mkengerenyi in Mwachabo and Msorongu, Kwa-Mnengwa and Mwashuma in Mwakitau location household members trekked for more than 12 km to fetch water. Economic activities, especially for women, were significantly reduced due to long trekking distances to fetch water and also overcrowding at water points.
- Elephants and Buffalos were a major threat to household members. In Mwachabo, Mwatate district, a woman was killed by marauding elephants while working in the field.
- In both districts cattle body condition deteriorated further due to long trekking distances in search of pasture and water. Areas mostly affected are lower Sagalla, Kishushe, Mwakitau, Mwachabo, Ghazi, Paranga, Kidong'u, Salaita and Mahandakini. Although the number of livestock carcasses along Taveta road and inside the park increased tremendously, most of these livestock belong to herders from Kajiado and North Eastern on transit in search of pasture and water.
- Conflicts arose between Mwakitau community and herders from Kajiado district over pasture. However, the Provincial Administration contained the situation.
- Food for Assets programme immensely improved food security in the rain-fed lowlands in Taita Taveta.
- Government of Kenya through the Ministry of State for Special Programmes distributed relief food, targeting vulnerable people, especially the elderly, disabled persons and needy institutions.
- In the mixed farming: food crops/horticulture/dairy, milk was readily available and has impacted positively on nutrition status of the under fives. Although prices of food stuffs were still very high resulting to increased poverty, Food for Assets and Kazi Kwa Vijana programmes continued to impact positively on food security in Taita Taveta. Areas still facing acute food shortage and requiring 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.

- The nutrition status of children below five years (based on the MUAC<135mm measurement) declined during the month under review, with the percentage of those rated at risk of malnutrition increasing from 3.7 in July to 4.5. Higher rates were recorded in Mwarungu, Wundanyi division at 11.6%.

Recommendations to DSG and KFSM

- Relevant stakeholders to collaborate and desilt dried up water dams and pans, for instance Mwatate dam, before the onset of short rains.
- 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.
- Ministry of Water to upgrade inefficient water projects and repair broken ones 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.
- Capacity building on modern farming technologies, promotion of drought tolerant crops and assurance of adequate certified seeds for planting in the next season.
- Kenya Wildlife Service to increase surveillance to address the problem of marauding elephants and address the problem of overgrazing in the National park.
- Ministry of Livestock development in collaboration with ranchers to stop overgrazing in the ranches.
- Expand school feeding programme in order to cater for secondary schools severely affected by effects of prolonged drought in Taita Taveta.

Current interventions

Non-food interventions

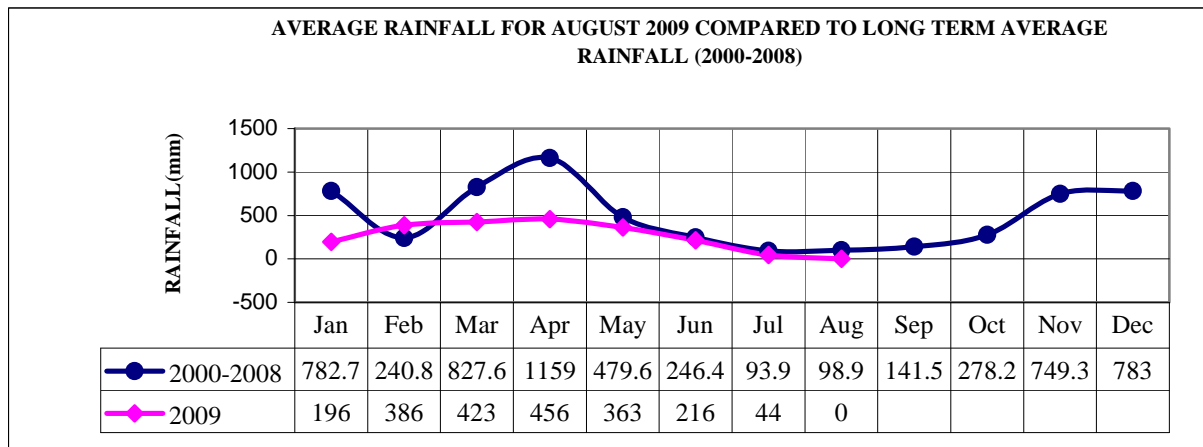
- Agriculture, Irrigation and Water Sector projects;
 - Equipping of Marapu borehole is complete - Arid Lands Resource Management Project/ Ministry of Water.
 - Water trucking to areas experiencing acute water shortage for instance Tausa, Kasigau and Mwatate is on going - Arid Lands Resource Management Project, Kenya Wildlife Service and Ministry of Water.

Food aid

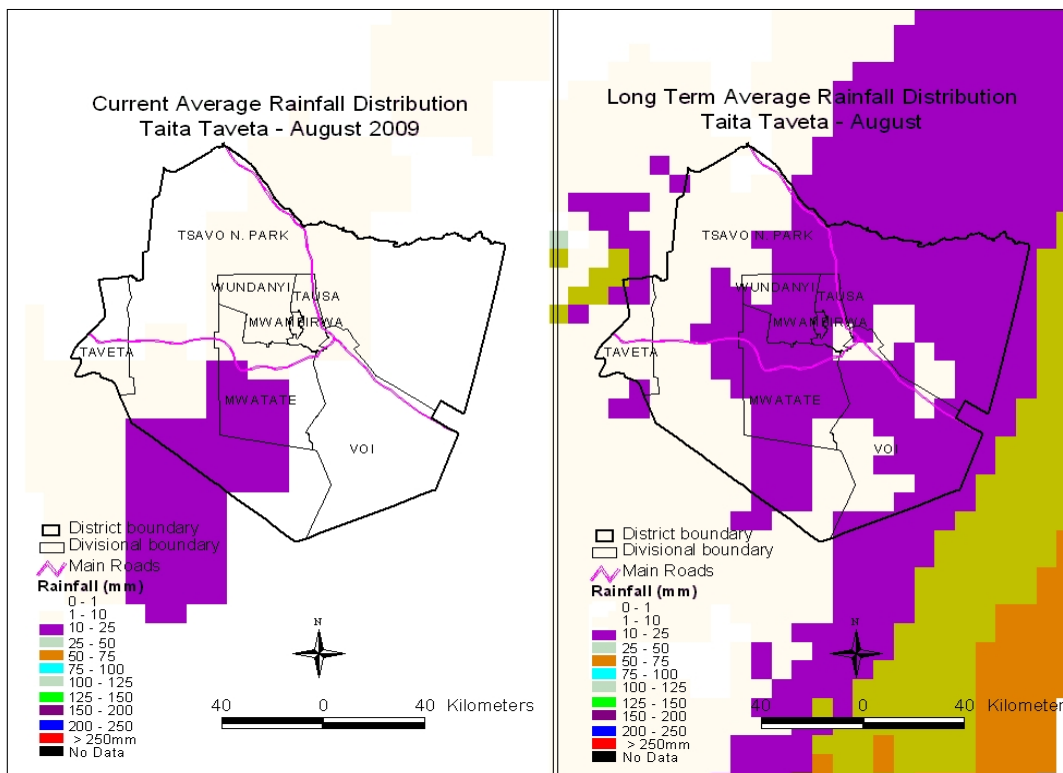
- Wundanyi, Mwatate, Voi and Taveta districts received relief foodstuffs from the Ministry of State for Special Programmes. Each district was allocated 1000 bags (maize) of 90 kg, 200 bags (beans) of 90 kg, 600 bags (Rice) of 50 kg and 200 cartons (cooking oil) of 6 x 3 litres.
- DSG approved 2% of the foodstuffs to be allocated to vulnerable groups in the two districts.

1.0 Environmental indicators (Stability)

1.1 Rainfall



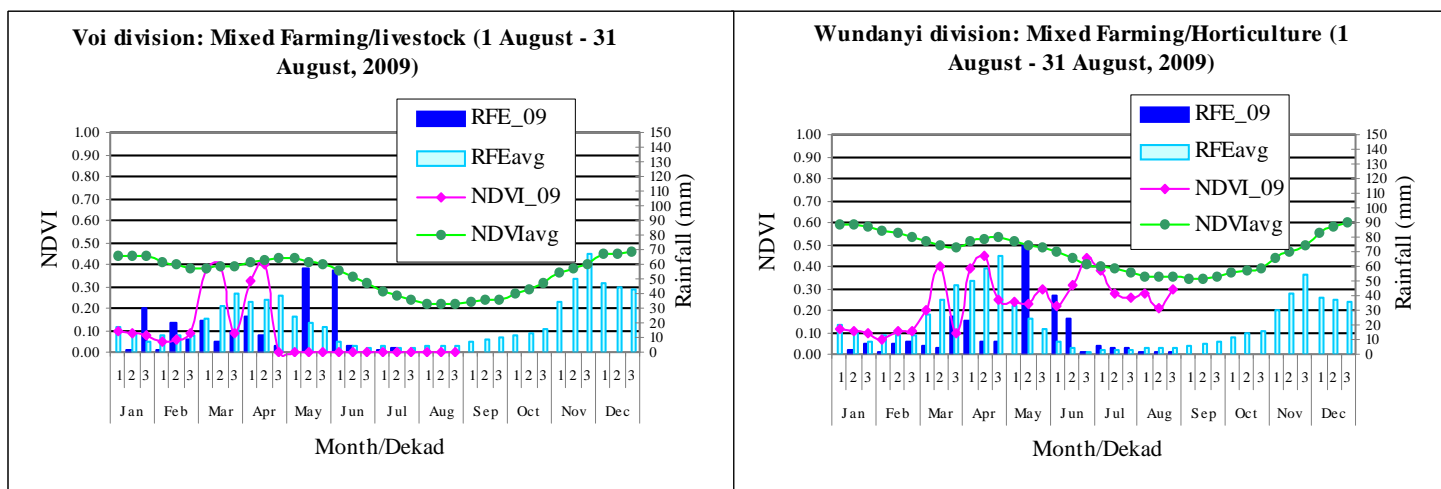
- No rainfall was recorded in the four districts during the month, though low temperatures prevailed on the hill masses of Taita district. The previous month recorded 44 mm.
- Compared to the long term average rainfall for 2000-2008 the trend is not normal and the amount of rainfall is zero.



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

- The United States Geological Survey satellite images above indicate that little showers of about 20 mm were received in the month of August.
- The rains, ranging between 1 – 25 mm, were recorded in the third dekad realized on the hill masses of Wundanyi and lowland areas of Kamtonga in Mwatate district.
- 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 50 – 75 mm while the current map show very low amount ranging between 1 – 25 mm.

1.2 Condition of natural vegetation and pasture



NDVI – Normalized Difference Vegetation Index

RFE – Rainfall Estimates

- Natural vegetation and pasture got depleted due to overgrazing in both the ranches and Tsavo West National Park.
- Voi division continued to record null vegetation index while Wundanyi recorded 0.28, 0.21 and 0.3 in dekad 1, 2 and 3 respectively compared to 0.38, 0.27 and 0.26 in July. 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 on the rain fed lowlands with increased cases of overgrazing, drying of vegetation 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 7.0 km to 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 tap water, springs, natural rivers, dams and boreholes. Iyombonyi River which supplies Iyombonyi /Sinai water project in Mwatate dried up and Ngangu River also in Mwatate is drying up at very high rate. In one month's time if it does not rain Bura and Mwatate Rivers will have no water.
- Mwatate dam will be completely dry in one week's time if no rainfall is received. Drying up of rivers has resulted to reduced irrigation activities in Taita Taveta.

- From sampled sentinel sites households' average distance to and from the water sources increased from 4.8 km to 5.6 km while time taken to fetch water increased from 2.5 hrs to 2.6 hrs due to overcrowding at water points. In Dighai, Kamtonga and Mkengerenyi in Mwachabo and Msorongu, Kwa-Mnengwa and Mwashuma in Mwakitau location household members are now trekking for more than 12 km to fetch water.

1.4 Emerging issues

1.4.1 Insecurity/conflict/human displacement

- Conflict arose between Mwakitau community and herders from Kajiado district over pasture. However the Provincial Administration contained the situation.
- Overgrazing in the park led to destruction of wildlife habitats resulting to elephants moving to community land in search of pasture and water. Elephants and Buffalos were a major threat to household members. In Mwachabo, Mwatate district a woman was killed by marauding elephants while working in the field.
- Although the number of livestock carcasses along Taveta road and inside the park has increased tremendously, most of these livestock belong to herders from Kajiado and North Eastern on transit in search of pasture and water. Areas where cattle deaths were reported are Mbulia, Kishushe, Marungu and Makamenyi in Taita district and Langata and Salaita in Taveta district.

1.4.2 Migration

- Herders from Kajiado district and Somali community from North Eastern continue to dominate the ranches resulting to overgrazing.

1.4.3 Implications on food security

- Food for Assets programme immensely improved food security in the rain fed lowlands in Taita Taveta. Government of Kenya through the Ministry of State for Special Programmes has been distributing relief foodstuff targeting vulnerable people especially the elderly, disabled persons and needy institutions. Economic activities, especially for women, were significantly reduced due long trekking distances to fetch water and also overcrowding at water points.
- Overgrazing in the Park will increase cases of human wildlife conflict. Elephants will move to irrigated farms in search of pasture and water resulting to crop destruction. 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 Saghassa 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

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

2.1.2 Milk production

- Milk yields from 360 sampled households in both districts decreased from 7,748 litres in July to 5,250 litres in August. Out of these 2,565 litres were obtained from Mwarungu and Mwakitau.
- Mixed farming: food crops/horticulture/dairy livelihood zone continued to dominate the dairy sector recording 64% situated in the wetlands, mixed farming: food crops/livestock livelihood zone 31% and casual waged labour: sisal farms 5% 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

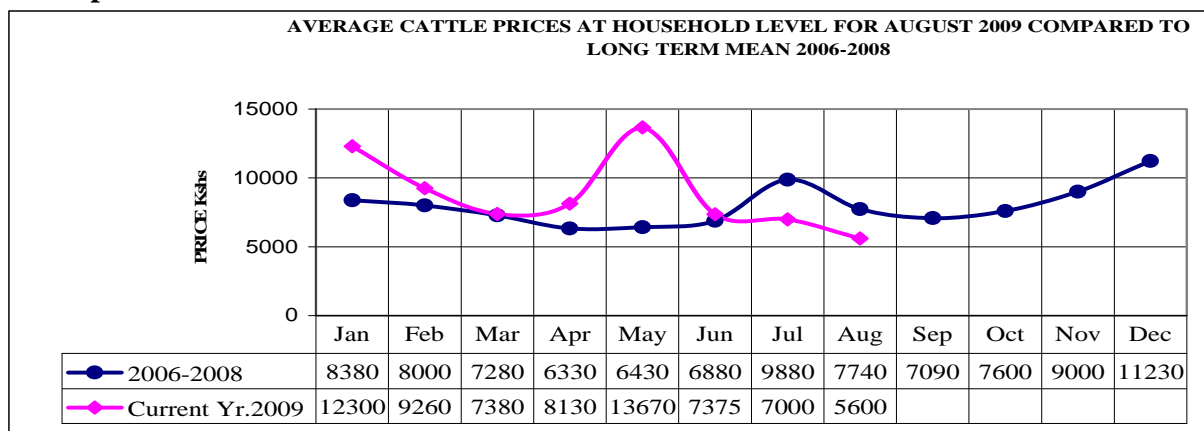
2.2.1. Timeliness and condition of various crop production activities

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

3.0 Access to food

3.1 Livestock marketing

3.1.1 Cattle prices

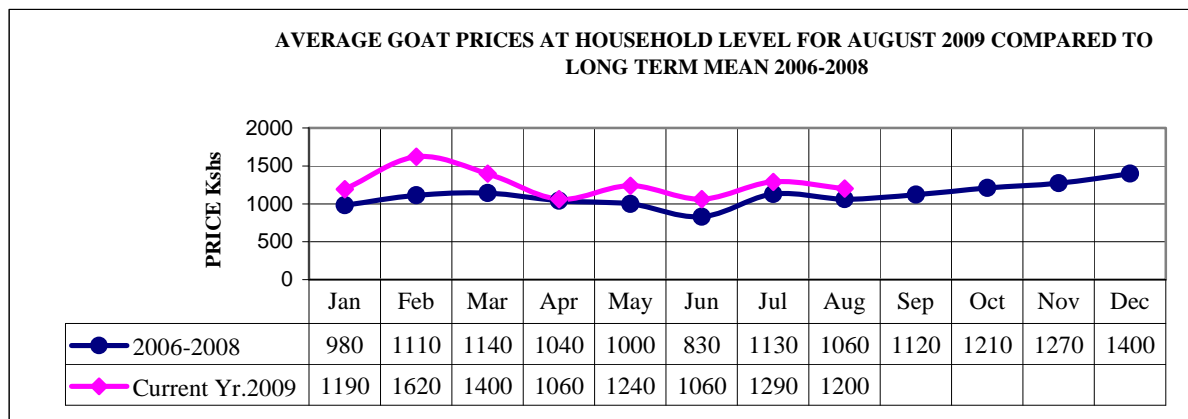


N = 360 households

- The average cattle price at household level decreased from Ksh7,000 in July to Ksh5,600.
- High prices were reported in the mixed farming: food crops/horticulture/dairy livelihood zone at Ksh12,000 while low prices prevailed in the casual waged labour: sisal farms at Ksh5,000 and

Ksh4,500 in the mixed farming: food crops/livestock livelihood zones. Compared to the long term mean the trend was abnormal and the price is low.

3.1.2. Goats prices

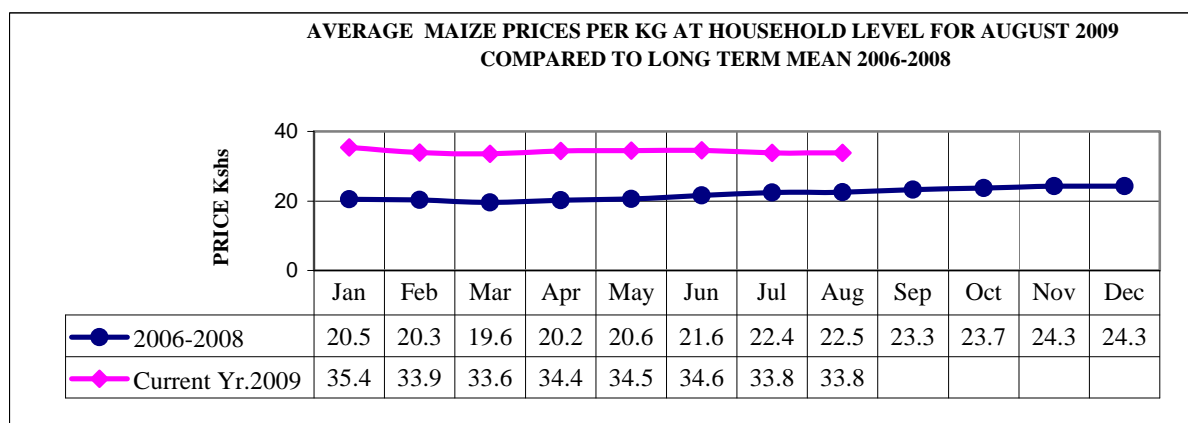


N = 360 households

- The average goat price at household level decreased from Ksh1,290 in July to Ksh1,200.
- High prices were recorded in Njukini at Ksh1,400. 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 Ksh1,400 than in both the casual waged labour: sisal farms livelihood zone at Ksh1,000 and Ksh750 in the mixed farming: food crops/livestock livelihood zone.
- Compared to the long term mean trend is normal but the price is high.

3.2 Crop prices

3.2.1. Maize prices

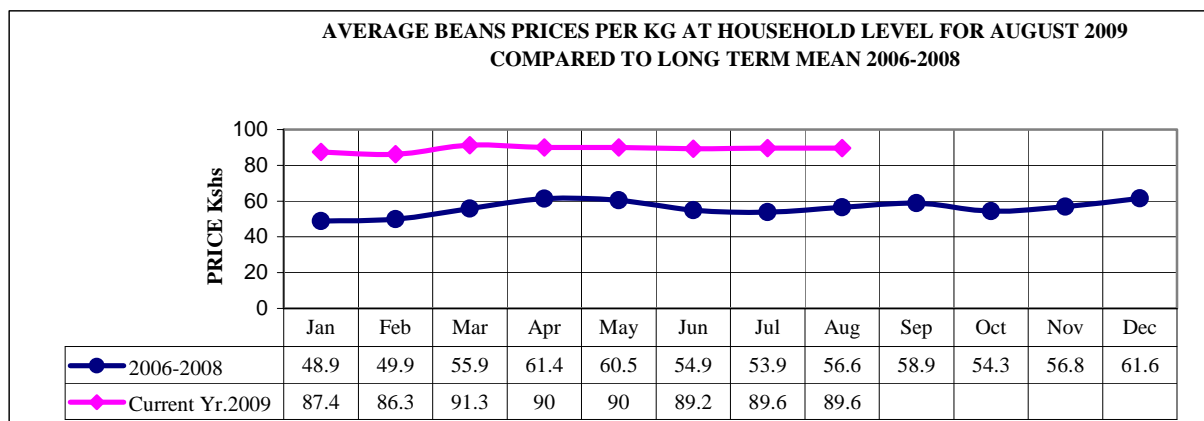


N = 360 households

- The average maize price at household level remained at Ksh33.8 per kilo.
- The prevailing high prices were due to depleted maize stock 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 Ksh35 - 50.
- 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

- The average beans price at household level remained at Ksh89.6.
- The high price in the four 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 Ksh80 - 100.
- Compared to the long term mean the trend was normal but the price was extremely high.

3.3 Income

3.3.1 Livestock income

- Livestock income obtained from 360 sampled households has decreased. Sale of 5 cattle @ Ksh 5,600; 43 goats @ Ksh1,200 and 66 chickens @ Ksh190 realised Ksh92,140 compared to Ksh11,450 in July. 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

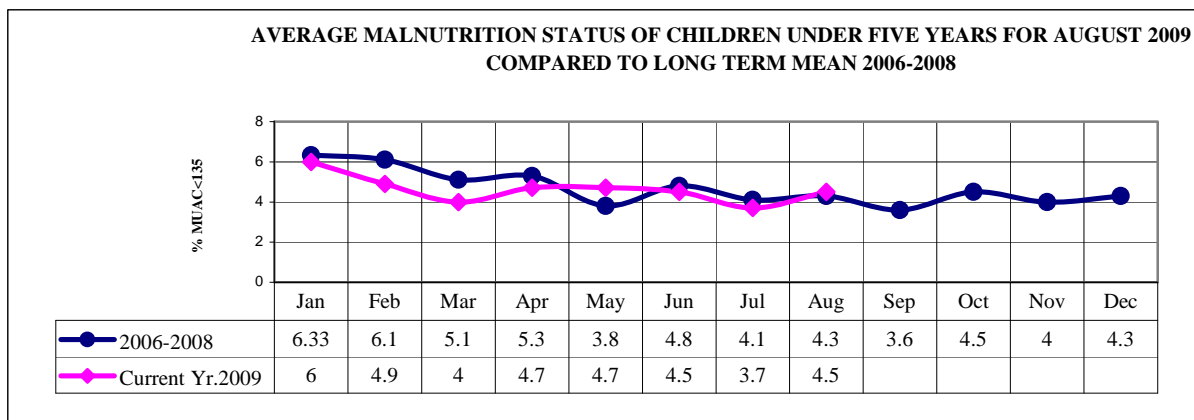
- In Taveta district, Bomeni division, most household members are still depending on sales of ballast which they break manually. Others were casual labour, petty trade, formal employment, remittances, sand and brick selling, charcoal selling, miraa selling, fishing and small scale mining.

3.4 Implications on food security

- Although prices of food stuffs were still very high resulting to 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 is readily available and has impacted positively on nutrition status of the under fives.

4.0 Human welfare indicators (Utilisation of food)

4.1 Nutrition status



N = 360 households

- The nutrition status of children below five years (based on the MUAC<135mm measurement), declined slightly during the month under review, with the percentage of those rated as being at risk of malnutrition increased from 3.7 in July to 4.5 in August. This rise could be attributed to effects of prolonged drought and economic recession in the country.
- Out of 1,372 children under-five sampled in 12 sample sites areas, 73 were found with MUAC< 135mm. High levels of MUAC measurement were reported in Mwarungu, Wundanyi district at 11.6%. Compared to long term mean the trend is normal but the level is slightly higher.

5.0 Current interventions

5.1 Non-food interventions

- Agriculture, Irrigation and Water Sector projects;
 - Equipping of Marapu borehole is complete - Arid Lands Resource Management Project/ Ministry of Water.
 - 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.

5.2 Food Interventions

- 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, 200 bags (beans) of 90 kg, 600 bags (Rice) of 50 kg and 200 cartons (cooking oil) of 6 x 3 litres.
- DSG approved 2% of the foodstuffs to be allocated to vulnerable groups in the two districts.

6.0 Recommendations to DSG and KFSM

- Relevant stakeholders to collaborate and desilt dried up water dams and pans, for instance Mwatate dam, before the onset of short rains.
- 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.

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- Protect existing springs either through fencing or planting trees given that springs are the only source of water in the two districts.
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