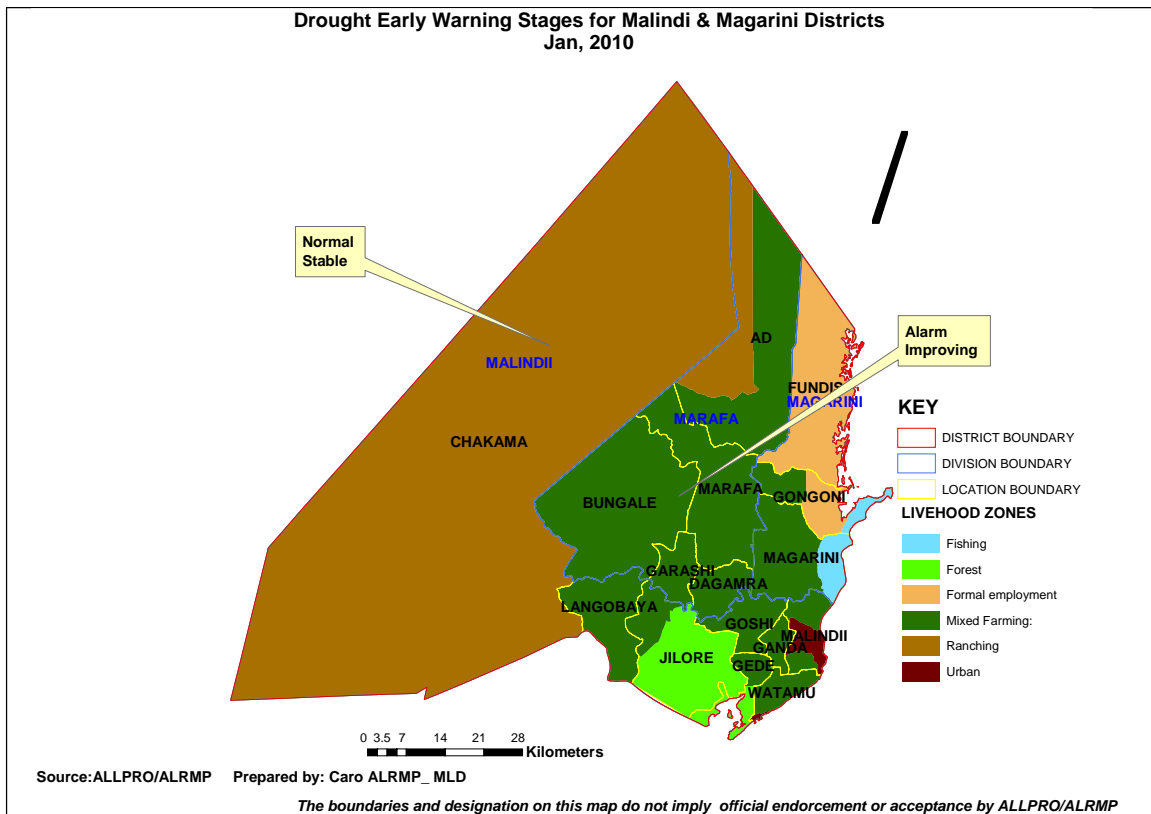




OFFICE OF THE PRIME MINISTER
MINISTRY OF STATE FOR THE DEVELOPMENT OF NORTHERN KENYA AND OTHER ARID LANDS
ARID LANDS RESOURCE MANAGEMENT PROJECT II

DROUGHT MONITORING BULLETIN, JANUARY 2010

Malindi & Magarini Districts



Seasonal calendar

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

NB.

- Malindi district has a bimodal rainfall pattern.
- Long rains fall between April and June while short rains fall between October and December

Situation overview

- Most parts of the district (Malindi/Magarini) remained generally dry during the month under review. The livestock livelihood zone, however, experienced significant rainfall amounts and occasional cool and cloudy conditions were recorded along the coastal belt. The district received an average of 53.1mm of rainfall, which was a drop from 69.5mm the previous month. These uncharacteristic spill-over showers were mostly received in the livestock farming zone.
- Availability of pasture and natural vegetation for livestock deteriorated during the month across all livelihood zones. The average distance to the nearest grazing fields increased by 6.25% during the month i.e. from 2.9km in December to 3.2km.
- There was no change in availability of water for domestic and livestock use during the month under review compared to the previous month. The average return distance to the nearest community water sources stood at 2.5km same as the previous month.
- The tourism livelihood zone continued to register a remarkable improvement owing to increased tourist numbers. Hot and dry conditions during the month were ideal for salt processing in the casual waged labour livelihood zone.
- Heavy rains experienced in upcountry areas caused flooding of River Sabaki in Dagamra location, Marafa division, Magarini district. Approximately 53 households were displaced by the floods .
- Livestock body condition continued to improve during the month under review owing to stable distances to grazing and water sources across all livelihood zones.
- There was a significant reduction in milk production by sampled households across all livelihood zones and it was attributed to migration of pastoralists from the livestock farming zone to Tana delta.
- Harvesting of pineapples, mangoes, cassava, coconut, watermelons, green maize, green leafy vegetables and bananas grown along the riverine areas in the mixed and livestock farming zones was recorded during the month
- There was a 9.3% reduction in the district monthly average cattle price during the month across all livelihood zones, from Ksh9142 in December to Ksh8291.
- Despite the drop in production, daily household milk consumption increased by 135% i.e. from 69.5 bottles (750ml) in December to 164 bottles of the same capacity in January owing to low sales volumes during the month under review
- The average district maize price rose marginally during the month from Ksh24 in December to Ksh 25 in January, representing a 4.2% increase. This was attributed to dwindling maize stocks at household level across all livelihood zones.
- Casual labour was the major source of income for many households across all livelihood zones, followed by sale of charcoal and livestock. Approximately 55% of sampled households gained income from casual labour in January, up from 31% in December.
- There was a further reduction in the number of children who were at risk of malnutrition during the month, from 11.2% in December to 8.9% in January. This was attributed to the on-going school feeding programme after schools reopened and supplementary feeding through 11 health centres.

Recommendations to DSG and KFSM

- Short and medium term sectoral interventions to support livelihoods (food & non-food interventions).
- Food aid: Continued EMOP GOK/WFP relief food operations on food-for-asset (FFA) basis.

Food interventions

- Distribution of 190,800 kg of maize, 6400 kg of corn meal, 34950 kg of pulses and 10405 litres

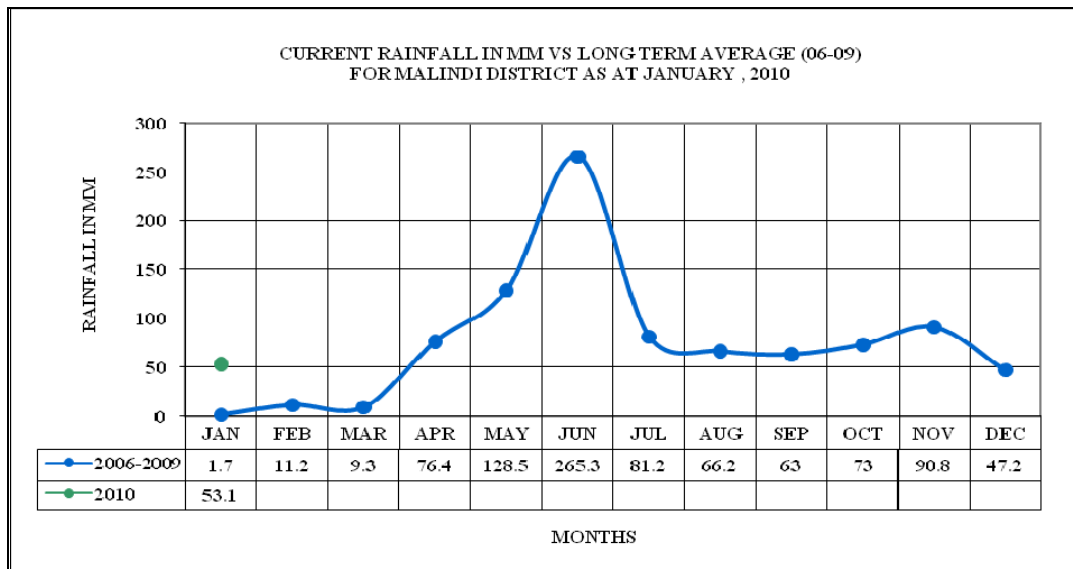
- of cooking oil to 29,000 people in Adu, Langobaya, Chakama and Bungale locations
- Supplementary feeding of children (under 5 years) through 11 health centres
- School feeding programme.

Non-food interventions

- Rapid short rains food security assessment to establish district food security status.
- Rehabilitation of Kadzandani borehole to avail water within shorter distances in Kadzandani and Adu.
- Training of disaster risk reduction committee on project proposal writing and resource mobilisation.
- Provision of ox-ploughs to farmer groups to increase land prepared for food crops.
- Food for assets (FFA) activities in Langobaya, Marafa and Magarini divisions.

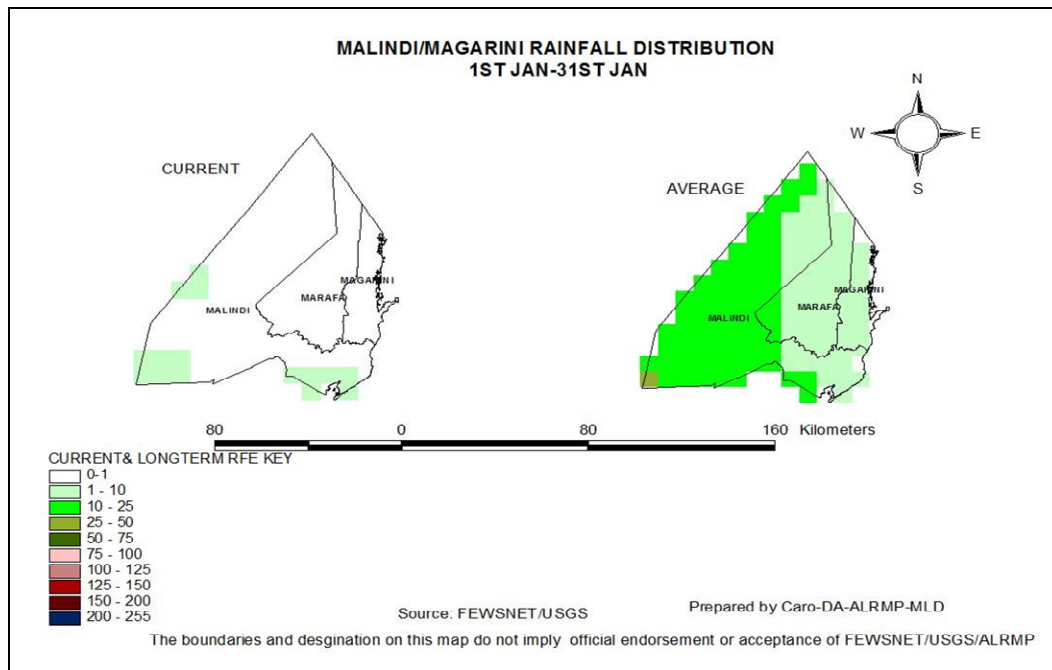
1.0 Environmental indicators (Stability)

1.0 Rainfall

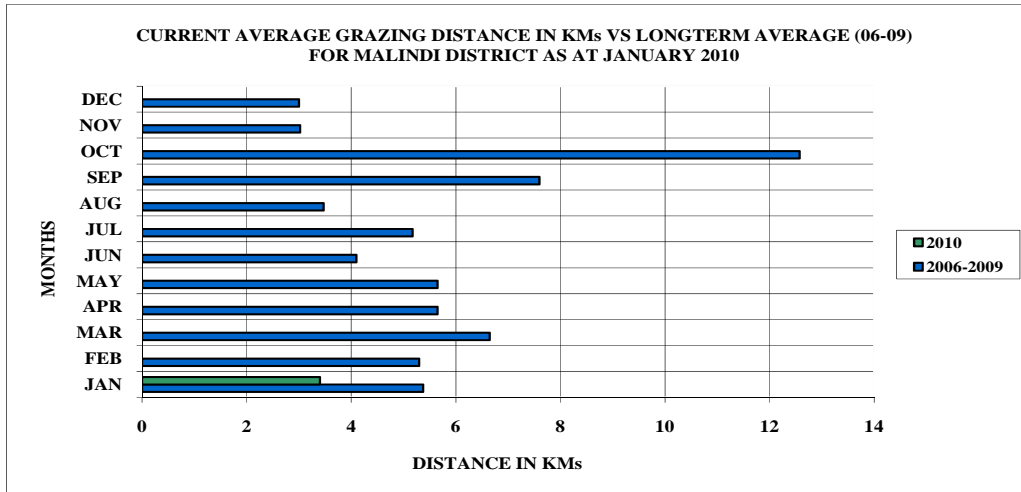


Source: ALRMP sample sites. Total sample size (n) – 12 sites

- Most parts of the district (Malindi/Magarini) remained generally dry in January. The livestock livelihood zone, however, experienced significant rainfall amounts during the month under review. Occasional cool and cloudy conditions were recorded along the coastal belt.
- The district received an average of 53.1mm of rainfall during the month which was a drop from 69.5mm in the previous month. This represents a 23.6% decrease. These uncharacteristic spill-over showers were mostly received in the livestock farming zone i.e. Makongeni and Matolani. No rains were received in the mixed farming zone.
- As indicated above, the rains in that particular zone are not normal during this time of the year.



1.2 Condition of natural vegetation and pasture



Source: ALRMP sample sites. Total sample size (n) 240 households

- The availability of pasture and natural vegetation for livestock deteriorated during the month across all livelihood zones. As a result, the average distance to the nearest grazing fields increased by 6.25% during the month under review i.e. from 2.9km in December to 3.2km in January. However, the distance was shorter than the long term mean as indicated in the above graph
- Pasture and natural vegetation was within shorter distances in the livestock farming zone than in the mixed farming zone. Although the condition deteriorated, the distances were within the normal seasonal ranges.

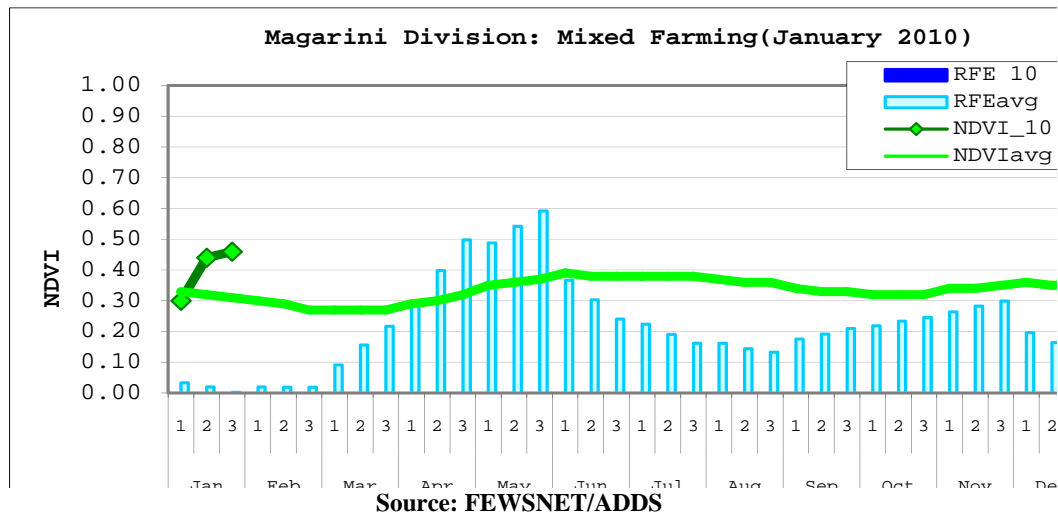
Normalized Difference Vegetation Index (NDVI) & Rainfall Estimate (RFE)
Marafa Division - Comparatively Worst Case Scenario



Source: FEWSNET/ADDS

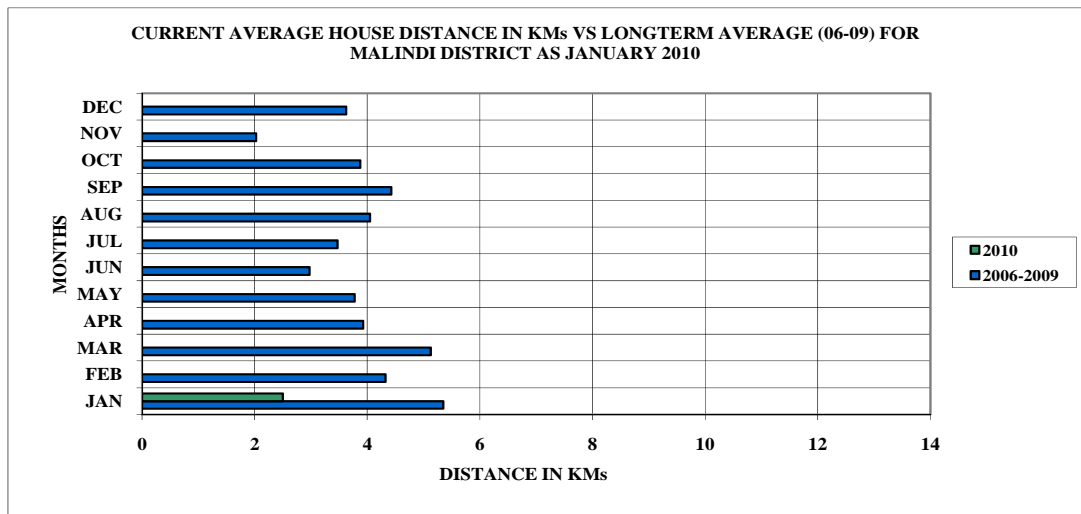
- The graph above shows that the pasture and natural vegetation condition in Marafa division (mixed farming zone) was poor in the first and second decades of the month but slightly improved to above average in the third decade of the month.

**Normalized Difference Vegetation Index (NDVI) & Rainfall Estimates
Magarini Division - Comparatively Best Case Scenario**



The quality and quantity of pasture and natural vegetation in Magarini division was good during the month as indicated in the graph. Livestock in the division accessed grazing fields within acceptable distances.

1.3 Water sources and availability



Source: ALRMP sample sites. Total sample size (n) 240 households

- There was no change in availability of water for domestic and livestock use during the month under review compared to the previous month. The average return distance to the nearest community water sources stood at 2.5km in January same as in December.
- There were no inter-livelihood differences in the distances to the nearest water sources. The district average distance was also within the acceptable seasonal range for the period of the year.
- In the livestock farming zone the main water sources were River Sabaki, dams and pans while in the mixed farming zone the sources were shallow wells, Baricho pipeline, River Sabaki, boreholes, dams and pans were the main sources of water in the last four weeks.

1.4 Emerging issues

1.4.1 Insecurity/Conflict/Human displacement

- Sporadic security issues among pastoralists and crop farmers were reported in Chakama location during the month. These were however addressed by the provincial administration and Arid Lands Resource Management Project.
- Heavy rains experienced in upcountry areas caused flooding of river Sabaki in Dagamra location, Marafa division, Magarini district. Approximately 53 households residing close to the river banks were displaced by the floods

1.4.2 Migration

Some pastoralists who migrated to the district from Tana Delta district started moving back to the district owing to improved pastures there.

1.4.3 Other factors affecting livelihoods

- The tourism livelihood zone continued to register a remarkable improvement owing to increased tourist numbers.
- Hot and dry conditions during the month were ideal for salt processing in the casual waged labour livelihood zone.

1.5 Implications on food security

- The poor performance of the 2009 short rains will impacted negatively on food security particularly in the mixed farming zone. Improvement in household food security in this zone was hinged on the performance of these rains. Short rains were poor across the two districts except Dagamra and Garashi locations in Marafa division, Magarini district.
- The quality and quantity of pasture and natural vegetation is likely to register further deterioration in the coming months due to the poor performance of the short rains.
- The situation is however normal in the livestock farming zone.

2.0 Rural economy indicators (Food availability)

2.1 Livestock production

2.1.1 Livestock body condition

Livestock body condition continued to improve during the month under review owing to stable distances to grazing and water sources across all livelihood zones. Improved livestock body condition was more evident in small stock than in large stock. The observed livestock condition was normal during this time of the year.

2.1.2 Milk production

- There was a significant reduction in milk production by sampled households across all livelihood zones during the month under review. The reduction was attributed to migration of pastoralists from the livestock farming zone to Tana delta as indicated above
- Average milk production decreased by 35.7% from 83.3 bottles (750ml) in December to 53.5 bottles of the same capacity in January.
- More milk was produced in the mixed farming zone (average of 59 bottles) compared to the livestock farming zone (average of 48 bottles).

2.2 Crop production

2.2.1 Timeliness and status of various crop production activities

- Maize crop in some parts of the mixed farming zone i.e. Dagamra and Garashi locations was at maturity stage during the month, harvesting is yet to commence.
- The costal belt did not receive adequate rains and as a result most farmers have abandoned their maize fields. The crops have completely wilted. The following were the main field activities in the mixed farming zone during the month;

- Minimal land preparation.
- Pest and disease control in cereals and vegetables.
- Weeding in food crops in the mixed farming zone.
- Transplanting of vegetables in irrigated farms along the riverine areas.
- Harvesting and marketing of green maize, mangoes and watermelons along the coastal belt.

2.2.2 Pests and diseases

Maize was affected by maize stalk borer and beetles. Local varieties of cassava were adversely affected by mosaic disease and mealy-bugs. Farmers were advised accordingly by the Agriculture department.

2.2.3 Crop harvests

Harvesting of pineapples, mangoes, cassava, coconut, watermelons, green maize, green leafy vegetables and bananas grown along the riverine areas in the mixed and livestock farming zones was recorded during the month. These were sold in local markets.

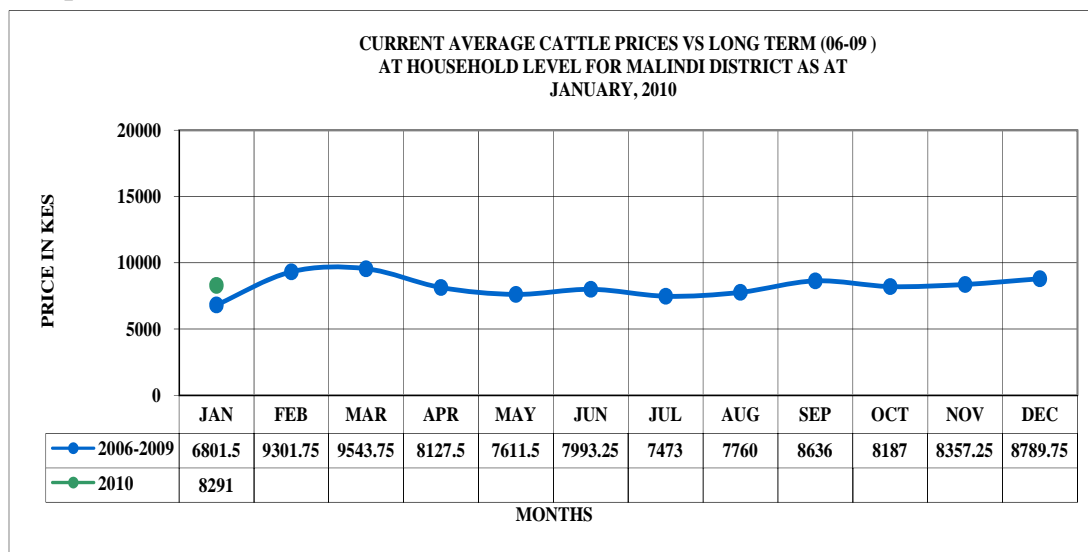
2.2.4 Implications on food security

- Poor short rains crop performance in many parts of the mixed farming zone impacted negatively on household food security. Divisions that need particular attention in this respect include Langobaya and Marafa.
- Low milk production in the livestock farming zone despite improved pasture and natural vegetation and livestock body condition adversely affected food security.
- However, household food security in the lower parts of the mixed farming zone improved further with the harvesting of various cash and food crops i.e. cassava, coconut, watermelons, green maize, green vegetables and bananas as indicated above.

3.0 Access to food

3.1 Livestock marketing

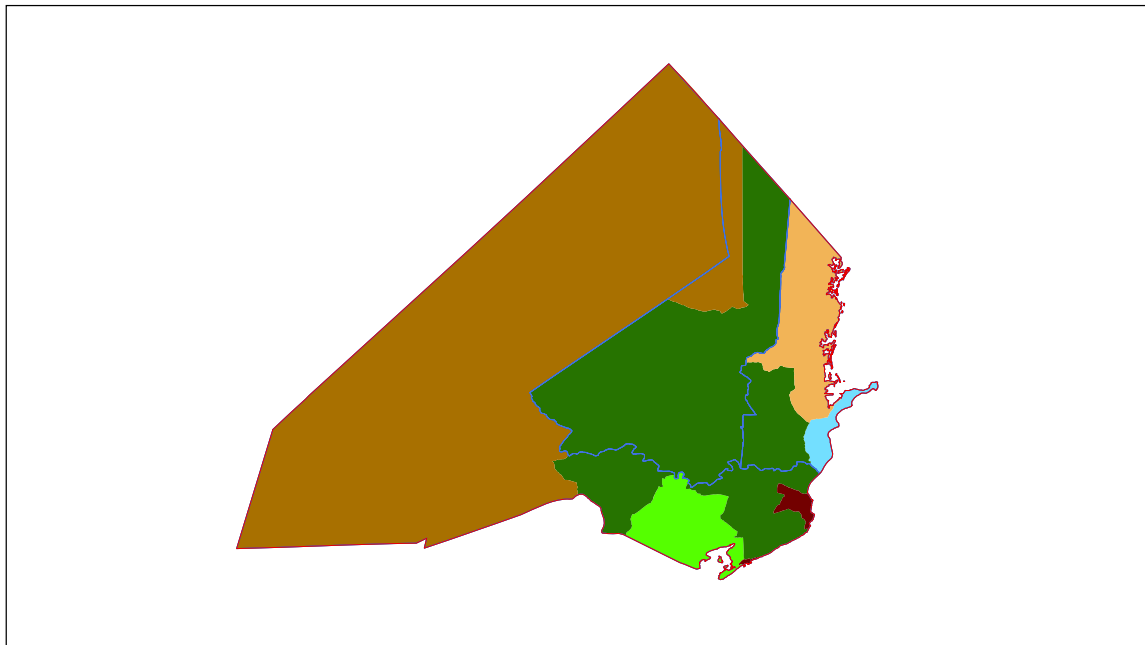
3.1.1 Cattle prices



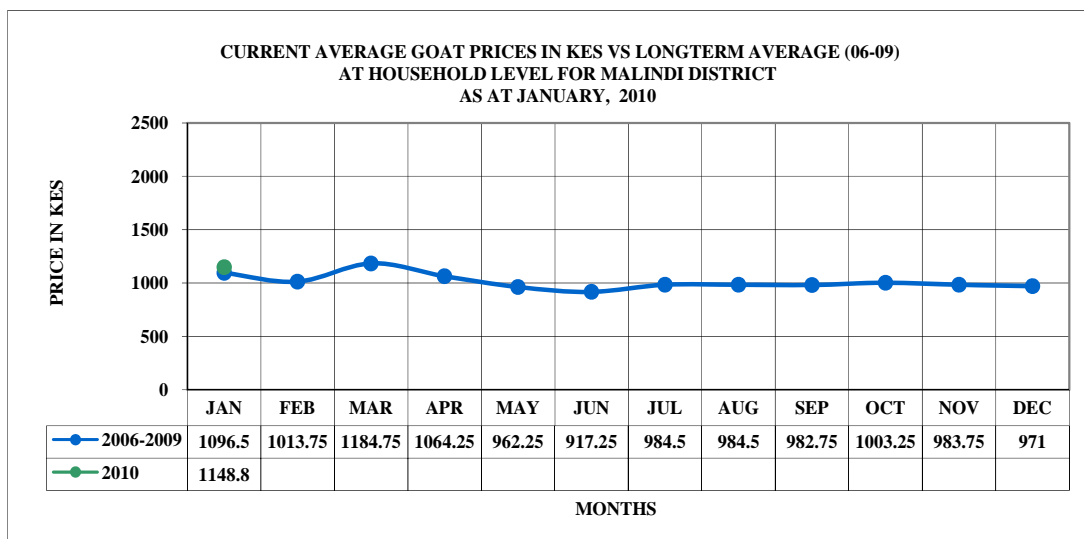
Source: ALRMP sample sites. Total sample size (n) 240 households

- There was a reduction in the district monthly average cattle price during the month under review across all livelihood zones, from Ksh 9142 in December to Ksh8291 in January, representing a 9.3% decline (LTM). The average price was 21.9% higher than the long term mean.

- There were outstanding inter-livelihood zone differences where average prices were higher in the livestock farming zone at Ksh10,357 compared to the mixed farming zone at Ksh 6,225. The decrease in the monthly district average price could be attributed to a general decline in demand for animals immediately after the festive season.



3.1.2 Goat prices



Source: ALRMP sample sites. Total sample size (n) 240 households

- There was a 13.1% increase in the district average goat price during the month, from Ksh 1015 in December 2009 to Ksh1148 in January 2010. The increase was reflected across all livelihood zones. The prices, which were above the long term mean, were higher in the livestock farming zone at Ksh1314 and lower in the mixed farming zone at Ksh 983.
- The increase could be attributed to a high demand for goats in hotels as the main tourism season reaches its peak in the district.