



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, DECEMBER 2009

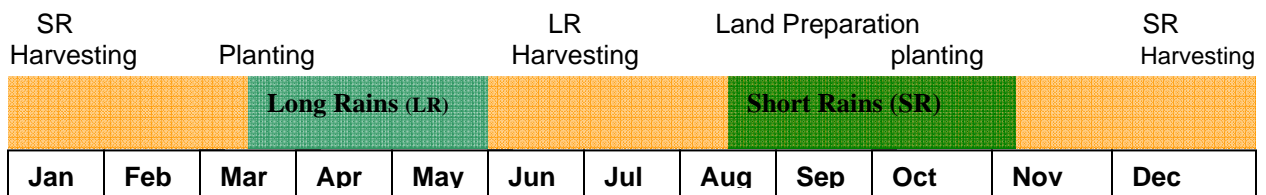
West, Central and North Pokot District

Warning Stages



Livelihood Zone	Warning stage	Trend
Agro pastoral	Alert	Improving
Mixed farming	Normal	No Change
Pastoralist	Alert	Improving
District	Alert	Improving

Seasonal Calendar



Situation overview

- The month of December started with a dry period but received above normal rainfall during the last week of the month. The entire district received rainfall that was above 300% of the normal. Mixed farming livelihood zones including Kapenguria, Tapach and Lelan received rainfall between 160mm – 200mm, with most of the other areas receiving between 120mm to 160mm. The normal long term rainfall average for December is between 20mm – 40mm.
- These rains were off season but improved pasture quality and quantity. Range conditions started to improve in the pastoral areas, but are yet to show significant changes in the agro pastoral livelihood areas. Average distance to grazing areas improved from 6.3km to 5.4 km as animals begun to move towards the households.
- There was no significant benefit to farmers since no major crops were in the farms. However, food security situation is expected to improve with availability of milk and green vegetables
- All the rivers were flowing and they were the major water sources compared to last where boreholes served as the major water sources. The distances traveled by households to access water improved from 3.2km to 2.8km.
- There was reduction in cattle price from Ksh8,568 to Ksh7,752 recorded last month. There was no significant change in price for goats with the average price recorded being Ksh1,104 compared to Ksh1,154 recorded last month.
- Price of maize remained high at Ksh34, the same average price recorded last month. Like maize, price of beans remained high at Ksh74, with no sales recorded in the households. Most households depended on the markets.
- Percentage of sampled children whose Mid Upper Arm Circumference (MUAC) was below 135 mm increased from 9.7% to 14.8%. The increase was notable in Konyao at 27.8%, Sasak 16.7% Nyangaita 14.6% and in Chepnyal 13.5%.
- In the month of November and December, livestock moved to the mixed farming areas in search of pasture and there was no milk available, especially for the children within the households.

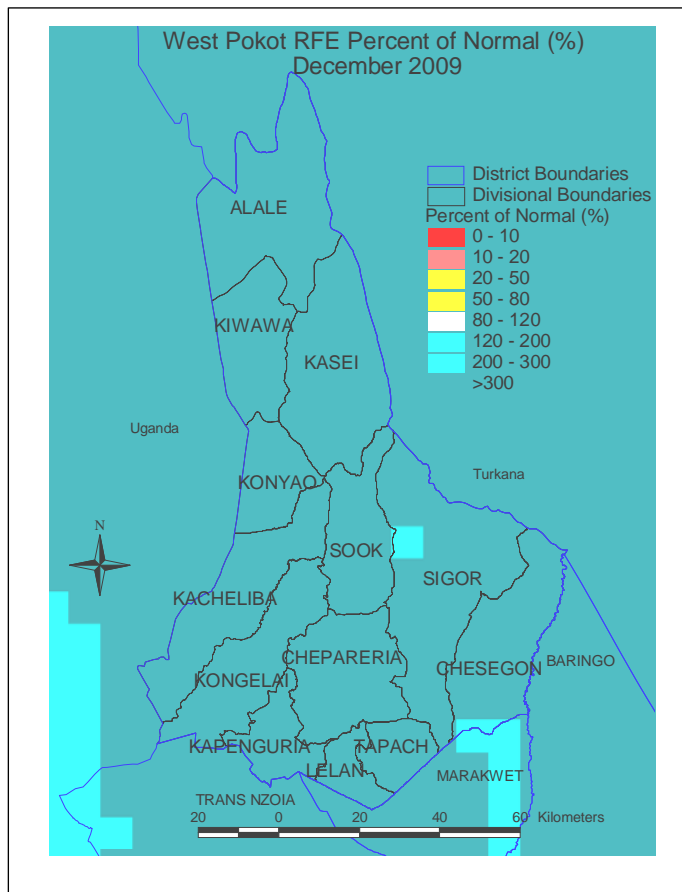
Recommendations to DSG and KFSM

- Supplementary feeding should be provided in areas with high malnutrition rates.
- Preparedness measures be put in place to address possible negative impact of off season rains, including Rift Valley Fever alert, human water-borne disease alert and mudslides alert.

1.0 Environmental indicators (Stability)

1.1 Rainfall

- Low rainfall was recorded at the beginning of the month. However, this situation changed towards end of December when all the livelihoods received rainfall above normal.
- The temporal distribution was for about six days which was above 300% of the normal in all the parts of the district. The off-season rains caused damage to major infrastructure, especially roads within the district and connecting to the neighbouring Turkana district.
- However, due to the drought at the beginning of the month and low rainfall in the last two seasons, so far there was no negative impact on the major livelihoods in the district.
- Regeneration of pasture, especially in the pastoral livelihoods started and it's expected to improve the quality and quantity of fodder available within the district.
- The rainfall received was of less significant to the farmers, since it's off season and there are no crops in the farm.
- However, the food security situation is expected to improve due to availability of green vegetables which act as food supplements.
- Milk production is expected to improve as pasture condition improves, and



availability of milk is also expected to improve as animals move back to their normal grazing period.

- As a caveat, there is also likelihood of significant negative impacts in the event that the current rainfall continues to be excessive.
- There is likelihood of further infrastructural destruction.
- People vulnerable to Mudslides and floods should also be alerted.
- In the extreme event livestock diseases like Rift Valley Fever and Water

borne human disease may arise.

Fig 1. A representation of percentage of the normal Rainfall Estimate (RFE) computed from cumulative Satellite Imagery for December 2009 compared to the month's long term average (Image source NOAA/USGS/FEWS/USAID)

Current season performance

- Rainfall received in the month, especially during the last week of December was above normal.
- The pastoral, especially the low lying areas, received rainfall between 80mm-160mm compared to the expected 10mm-40mm at this time of the year.
- Rainfall received along the Pokot – Turkana Boarder was above 160mm compare to the normal 10mm-20mm.
- In the mixed farming livelihood zone including Kapenguria, Tapach and Lelan, rainfall received was between 160mm- 200mm. (Fig.2 Below)

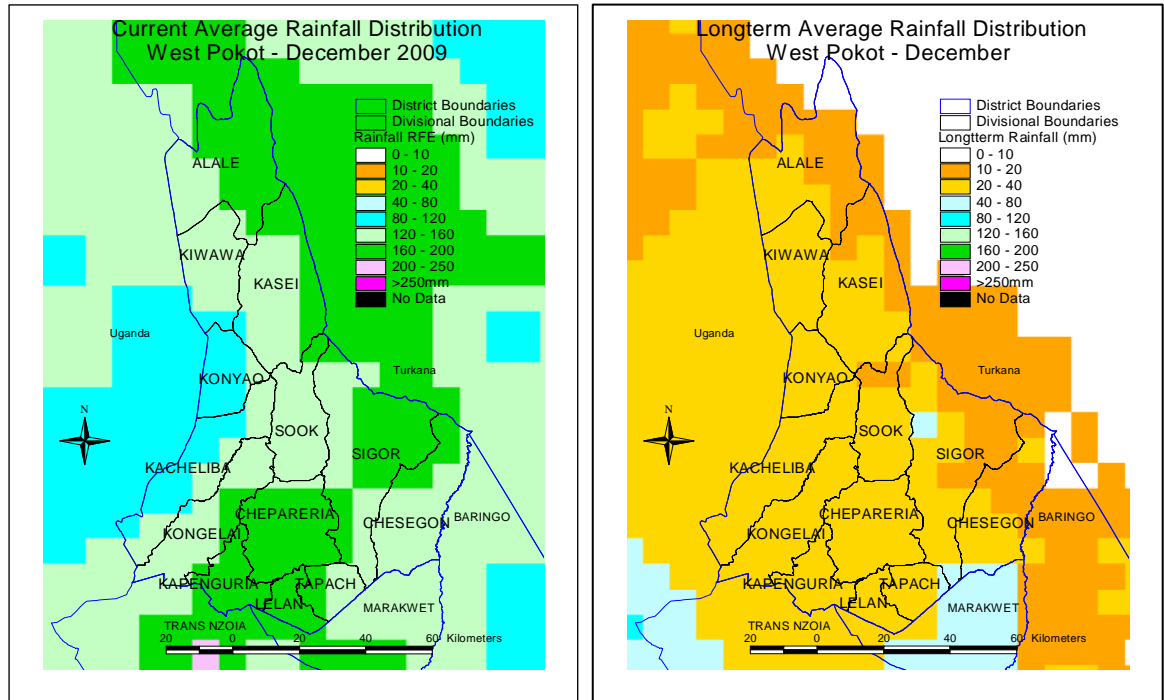


Fig 2. Comparison of the current rainfall distribution against long term estimates for November (Image Source: NOAA/USGS/FEWS/USAID)

1.2 Condition of natural vegetation and pasture

- Pasture conditions, which were previously declining in the pastoral livelihoods, started improving. This follows the rainfall received towards the end of December. Like the rest of the district, the pastoral livelihoods received rainfall in the third dekad of December (*fig. 3 Below.*)
- Most animals that had migrated started moving back to the normal grazing areas.

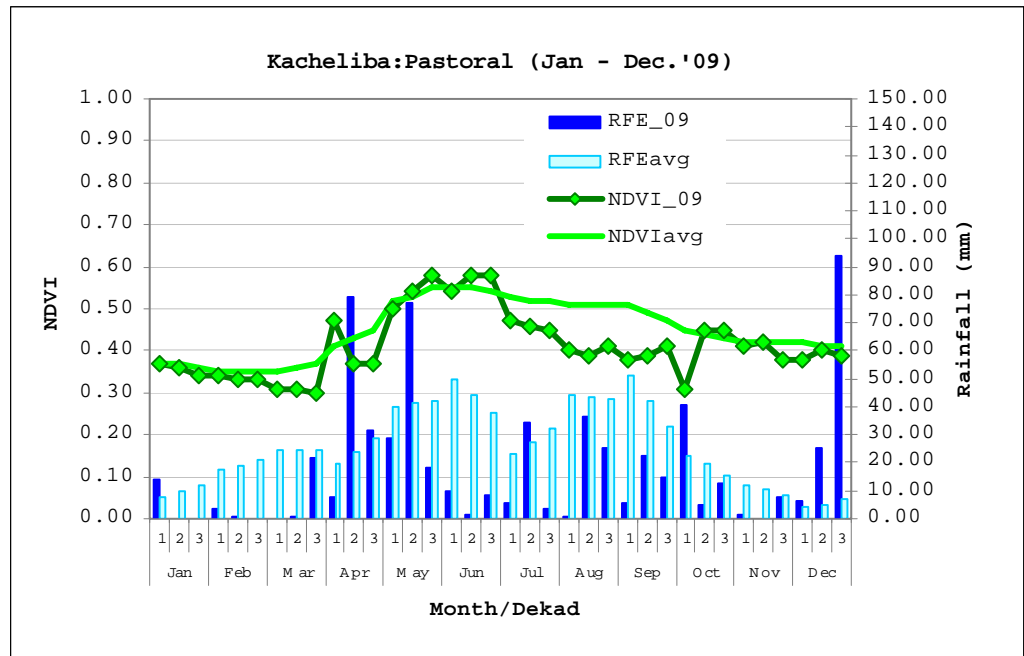


Fig 3. Graph Showing RFE and NDVI time series analysis for the Pastoral Livelihood (Kacheliba)

- Like the pastoral livelihood, above normal rainfall was received during the last dekad of December. The pasture conditions here were however very poor and they have not yet fully regenerated. This situation is, however, expected to improve in January once more rainfall is received.

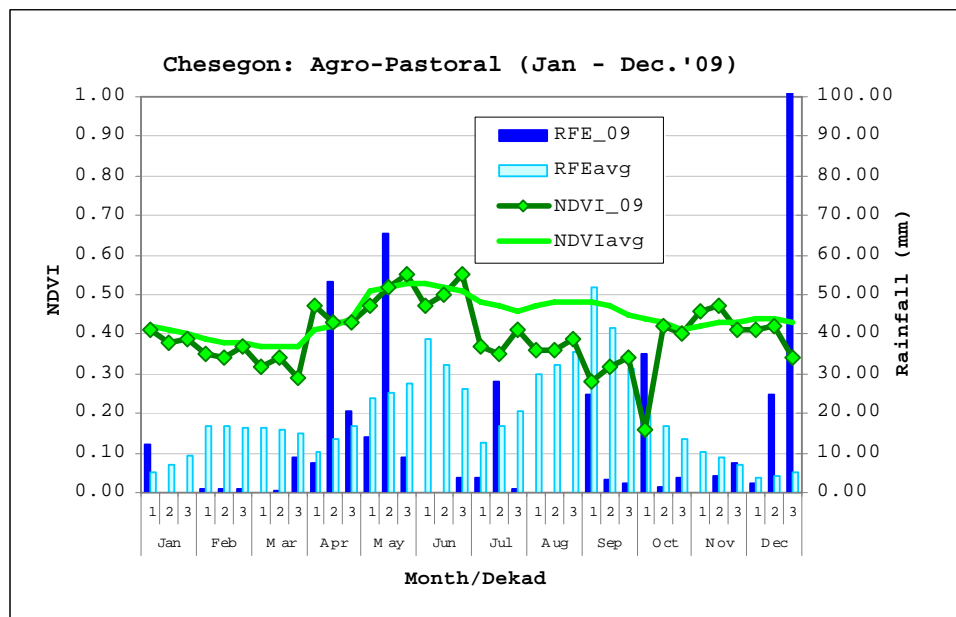


Fig 4. Graph Showing RFE and NDVI time series analysis for the Agro-Pastoral Livelihood (Chesegon)

- In the mixed farming areas, high rainfall was received in the second and third dekads of December. This was, however, off season rainfall and is insignificant to the farmers in these areas since it's not yet planting time

- There are, however, some crops like potatoes which are in season in the upper areas and are likely to be affected if the current rainfall proceeds abnormally

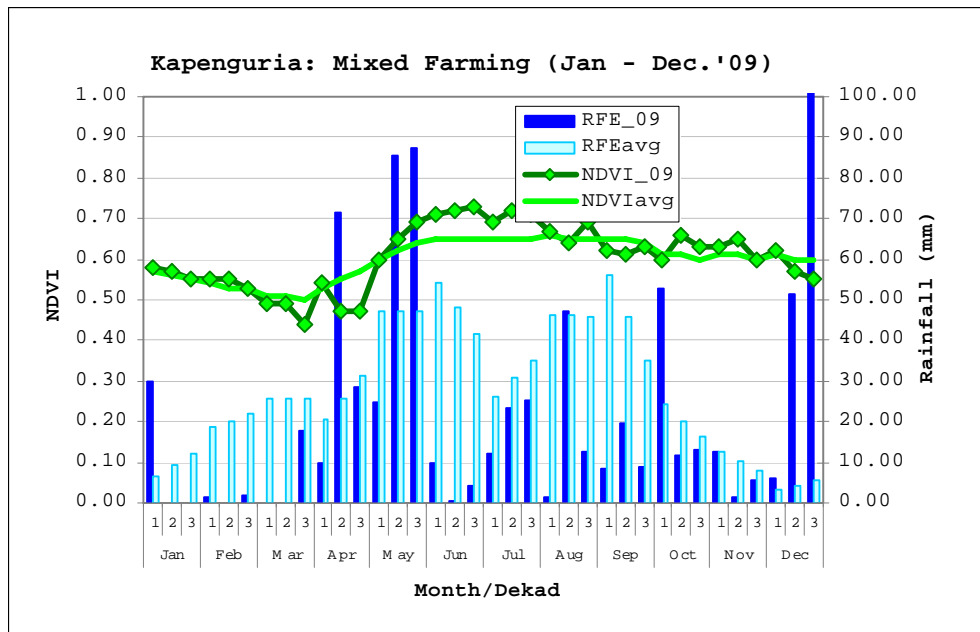


Fig 5. Graph Showing RFE and NDVI time series analysis for the Mixed Farming Livelihood (Kapenguria)

1.2.1 Distances to grazing areas

- The average distance to grazing areas improved from 6.3km to 5.4 km in the month. This improvement was as a result of the rainfall that was received towards the end of the month, hence improving availability of pasture close to the households. Most of the animals which were in the dry season grazing areas for more than one season moved out of these areas. This situation is normal and is expected to improve if the current rains continue

1.3 Water sources and availability

1.3.1 Water sources

- Traditional river wells were the major water sources compared to last month where boreholes were the major water sources. This is an indication that most of the rivers have started flowing following the rains that were received in watershed areas.
- This situation is now normal after a lengthy period where boreholes and traditional river wells had been the major water sources. The situation is expected to continue improving if the rains continue as expected.

1.3.2 Household access to water

- Average distances traveled by households in search of water improved from 3.2 km to 2.8km in the month. This improvement was as a result of the rainfall received and subsequent change in the sources of water.
- The longest distance recorded was 7.6km in Nyangaita compared to 8km recorded last month. This situation is normal and expected to improve.

1.4 Emerging issues

1.4.1 Migration

- Most livestock have started moving back to the normal grazing areas. Good rainfall was also received along the Pokot-Turkana border.
- These are the areas which mainly serve as the dry season grazing areas, hence if there is more rainfall there as animals move out, then pastures will have a chance to generate. This is important considering that these areas had been over grazed due to rainfall shortage in the last two seasons.

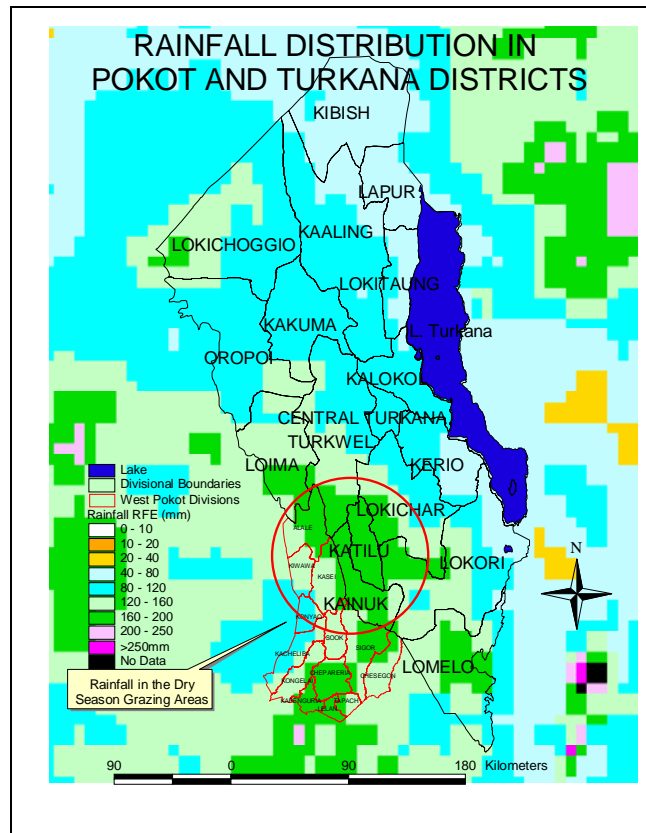


Fig 6. Map showing Livestock Concentrations and Movements as well as well as Rainfall Distribution

2.0 Rural economy indicators (Food availability)

2.1 Livestock production

2.1.1 Livestock body condition

- Livestock body condition was good as animals continued to access good pasture. In the previous month, most of the animals had moved away to areas where harvesting was done, hence there were accessing good fodder. The difference currently is that some animals started moving to the normal grazing areas. This started to improve the availability of milk to the households hence improving the food security status.
- The livestock situation is expected to revert to the normal fully once the current rains that are being experienced progress on as expected.

2.1.2 Livestock diseases

- There were no major new cases of livestock disease outbreak in the district.

- It is, however, necessary to monitor animals which returning from neighbouring Uganda as well as the neighbouring districts for any serious disease incidents.

2.2 Crop production

2.2.1 Timeliness and condition of various crop production activities

- There were no crops, especially cereals and legumes in season since the harvesting season was concluded. However, there were vegetables in the farm in the upper zones of the mixed farming livelihood, which include cabbages and potatoes.
- Most of these are rain-fed, hence a good harvest is expected if current rainfall proceeds normally.
- However, if the rainfall is above normal, as the trend showed towards the end of the month, there is likelihood of crop failures for the commodities due to excessive rainfall.

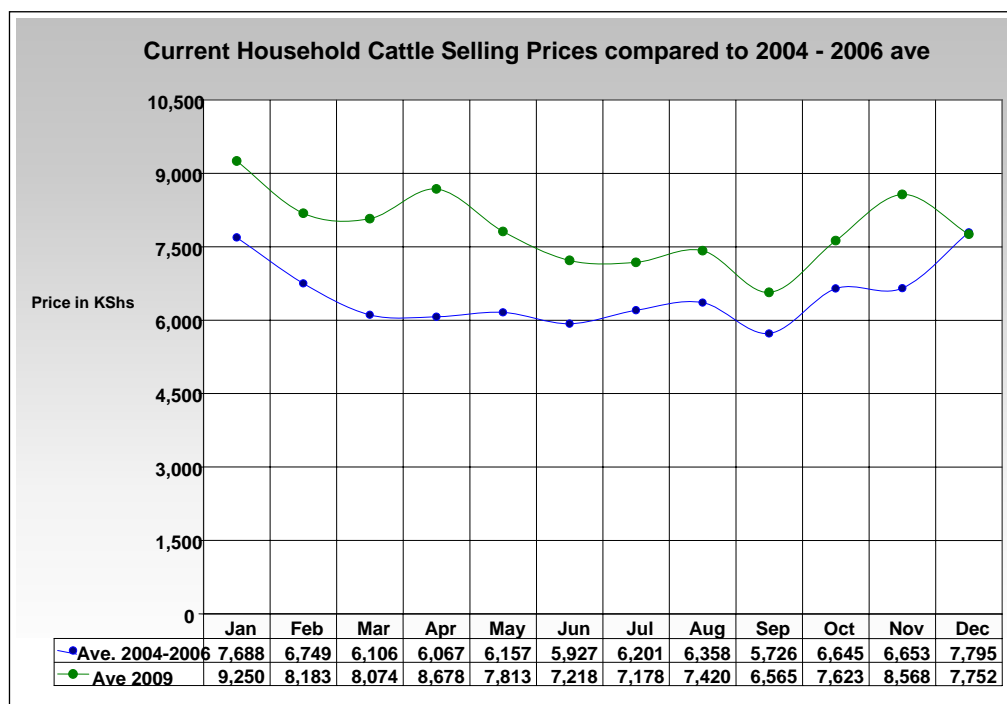
2.2.2 Pest and diseases

There were no cases of crop pests and diseases reported out of the normal since there were no crops in the field. The previous harvest was poor, leaving very few people with food stocks in their homes, hence cases of post harvest pest are not common as well.

3.0 Access to food

3.1 Livestock marketing

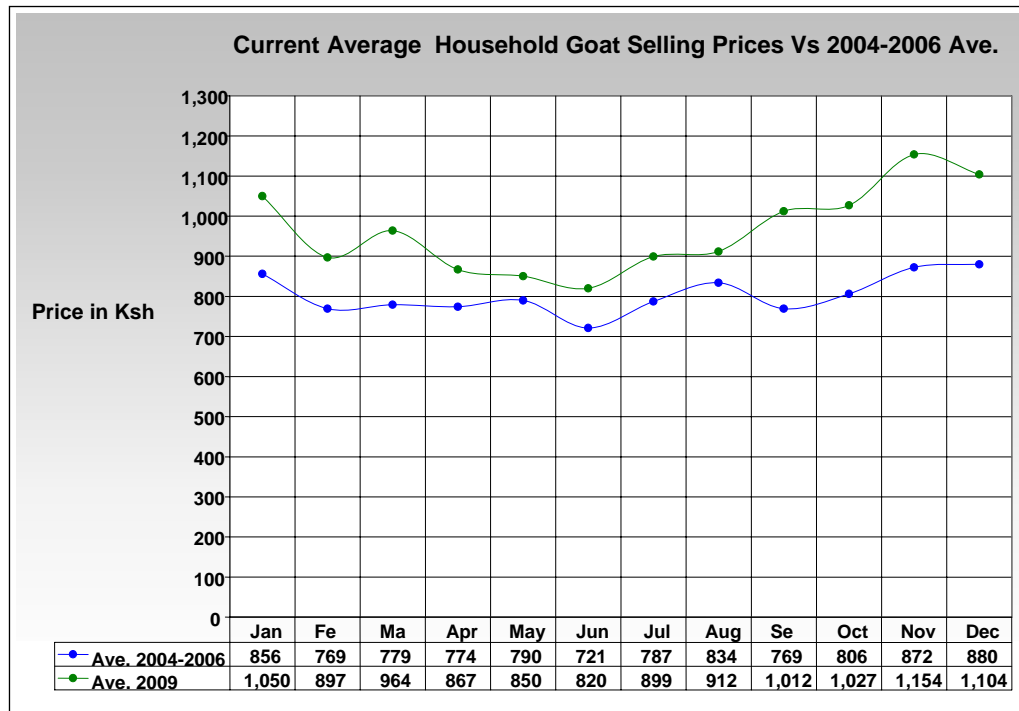
3.1.1 Cattle prices



- The average price of cattle was Ksh7,752 compared to Ksh8,568 recorded last month. The decline was attributed to the dry spell that was there at the beginning of the month before the end of December rains were received.

- The highest price of Ksh7,225 was recorded in Pserum while the lowest price of KSh 6,000 was recorded in Nyangaita. The lowest price was, however, higher than the Ksh5,100 recorded in Konyao last month.
- The current situation in terms of livestock prices was normal at this time of the year.

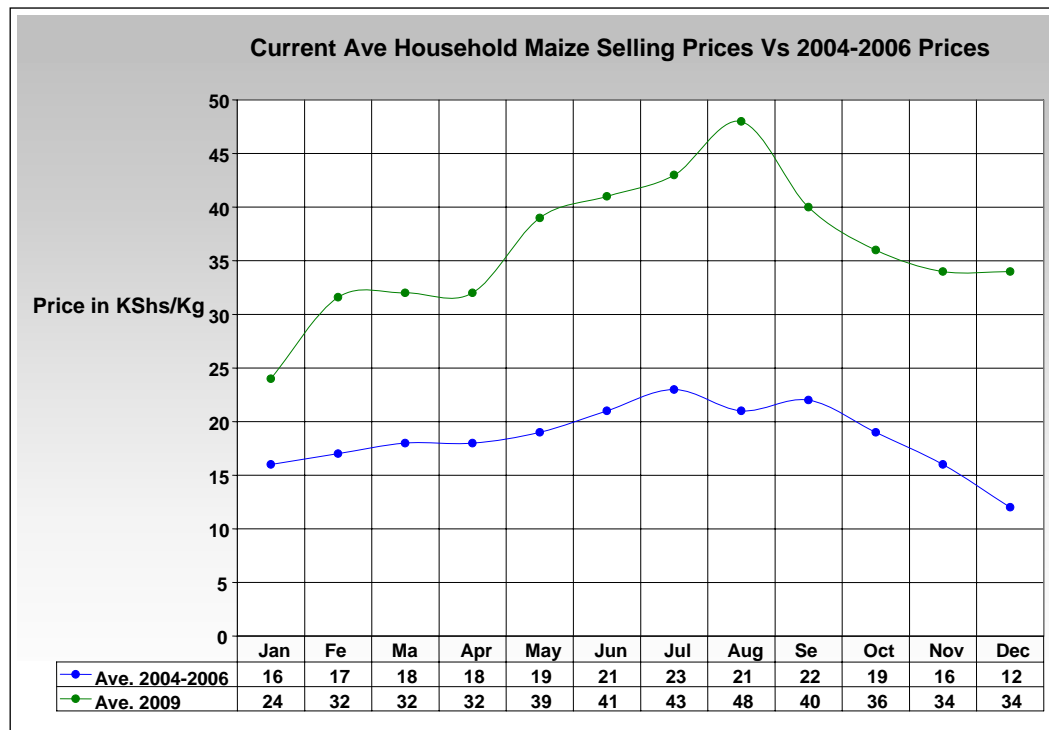
3.1.2 Goat prices



- There was no significant increase in the price for goats in the month compared to the month of November.
- The average price was Ksh1,104 compared to Ksh1,154 recorded last month. The lowest price of Ksh747 was recorded in Kangoletiang compared to the lowest price of Ksh780 recorded in Orwa last month. This low price was as a result of the reduced rains at the beginning of the month hence poor browse for the goats.
- It is, however, expected that the rainfall received toward the end of the month will improve this situation.

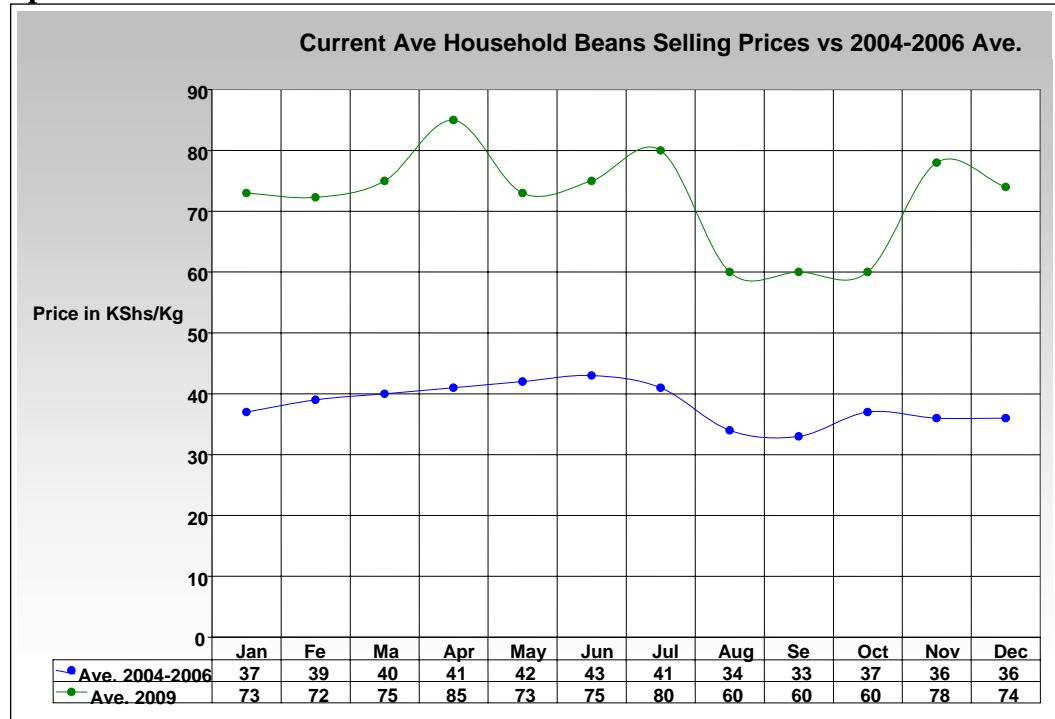
3.2 Crop prices

3.2.1 Maize prices



- Maize prices remained high and there was no change in price compared to November. The average price was Ksh34, the same price that was recorded last month. This is a shift from the previous trend where price of maize had started to reduce, especially after harvests in the neighbouring districts.
- The price was above the normal average and very few households were reported to have sold maize and most of it was from outside the district.
- The situation was not normal and is not expected to improve soon, since harvesting has been concluded.

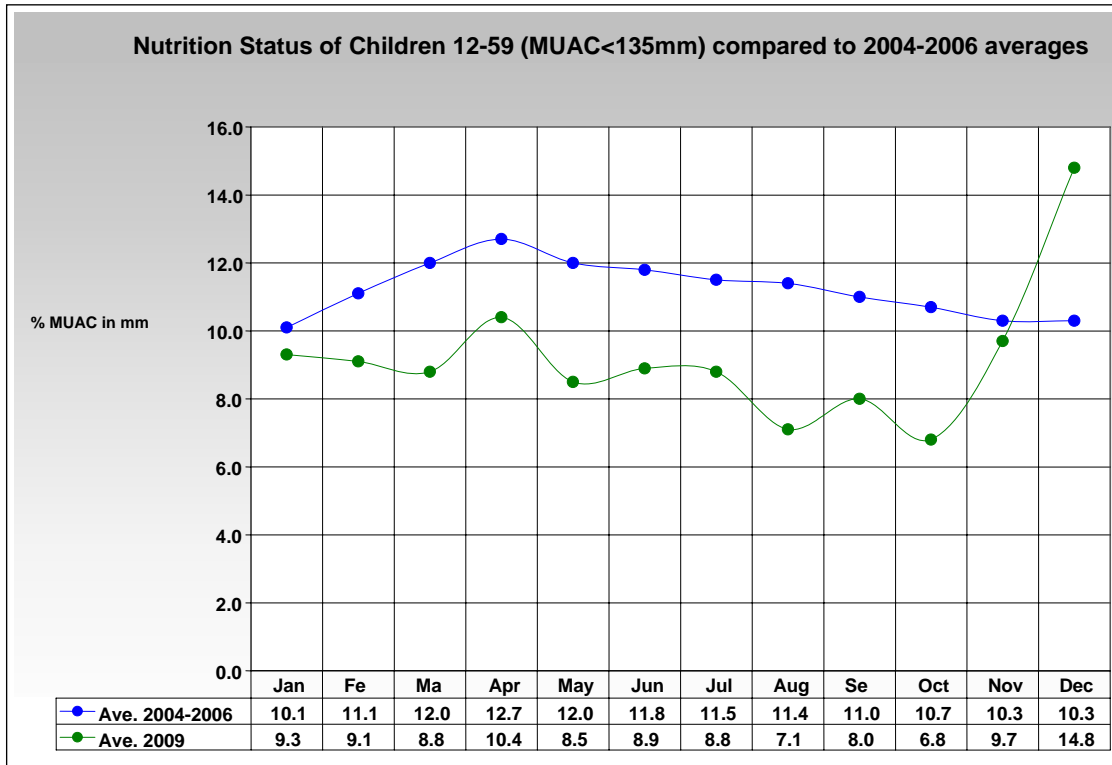
3.2.2 Beans prices



- The price of beans remained high at Ksh74 per kilo. There were no sales recorded at the household and currently the commodity is available in the market only. The price was still above normal average and this was not a normal situation at the time of the year.
- The highest price of Ksh80 was recorded in Kapsait and Pserum, while the lowest of Ksh50 was recorded in Kaibos. Scarcity of beans in the markets was still very high, with no stocks of the commodity within the households. These prices were not normal at the time of the year.

4.0 Human welfare indicators (Utilisation of food)

4.1 Nutrition status



- Percentage of sampled children whose Mid Upper Arm Circumference (MUAC) was below 135 mm increased from 9.7% to 14.8% during the month.
- The increase was notable in Konyao at 27.8%, Sasak 16.7% Nyangaita 14.6% and in Chepnyal 13.5%. Livestock had moved to the mixed farming areas in search for pasture during the month and there was no milk available especially for the children within the households
- This situation is likely to improve as the animals have started moving back after the rains. However, an intervention is required in these areas, especially by providing supplementary food to children before the conditions get back to normal.