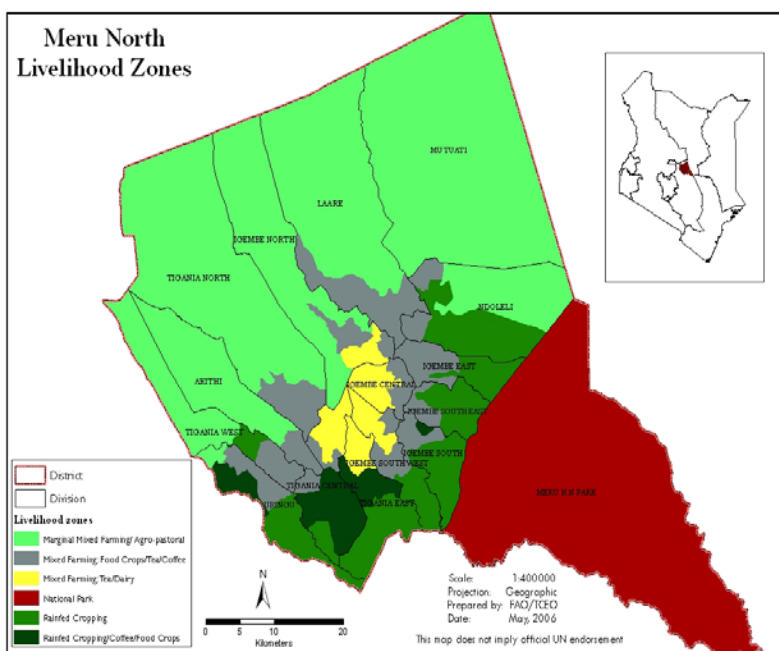




**OFFICE OF THE PRIME MINISTER
MINISTRY OF STATE FOR THE DEVELOPMENT OF NORTHERN KENYA AND OTHER ARID LANDS
ARID LANDS RESOURCE MANAGEMENT PROJECT II**

DROUGHT MONITORING BULLETIN, JUNE 2009

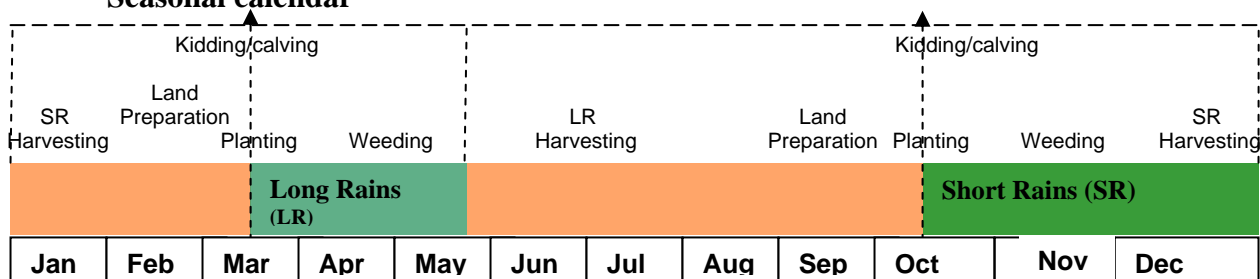
Meru North District



Warning Stages

Livelihood Zone	Stage	Trend
Mixed farming (FOOD)	Alert	Worsening
Livestock Farming	Alarm	Worsening
Agro Pastoral	Emergency	No Change
DISTRICT	Alarm	Worsening

Seasonal calendar



Situation overview

- The district received poor rainfall amount over the last four weeks. Spatial and temporal distribution was poor.
- Pasture quality and quantity declined during the month. Decline in the Agro-pastoral livelihood was more pronounced than other livelihood zones.
- Distances to grazing areas increased slightly to an average of 13.1 km compared to 10.4 km the previous month.
- Livestock body condition declined significantly in the Agro-pastoral livelihood zone. Only slight decline was noted in other livelihoods.
- Suspected cases of FMD and CCPP were reported at Kamweline, Mea, Kalimbene, and Maburwa sample sites
- Natural rivers were the main sources of water although volumes declined significantly compared to the previous month. Water vendors were important sources to a significant number of households in the Agro-pastoral livelihood.
- Average distances to watering points for households remained fairly the same at 6.4km similar to the previous month.
- Cattle prices declined to Ksh5,608 during the month compared to Ksh7,103 the previous month, while those of sheep appreciated to Ksh1,250 from Ksh920 last month. Goat prices also declined to Ksh1,521 from Ksh2,007 the previous month.
- Maize retailed at averages of Ksh40 per kilo while beans retailed at Ksh75.30. Prices of pigeon peas declined to Ksh80 per kilo.
- The nutrition status of children under five years slightly worsened during the month, with an average of 19.3 per cent being at risk of malnutrition compared to 17.1 per cent the previous month.

Previous DSG recommendations to KFSM

- The district requires support to conduct emergency livestock off-takes through KMC and other players to minimise extensive losses by herders due to drought.
- The district still requires relief assistance as the situation outlook still looks grim.

Recommendations to DSG and KFSM

- School feeding program to be initiated in schools in the Northern Grazing Area.
- Increase relief supplies which should also include human and livestock drugs, and seeds for the next planting season.
- Bring in KMC to off take livestock in the northern grazing area.

1.0 Environmental indicators (stability)
1.1 Rainfall

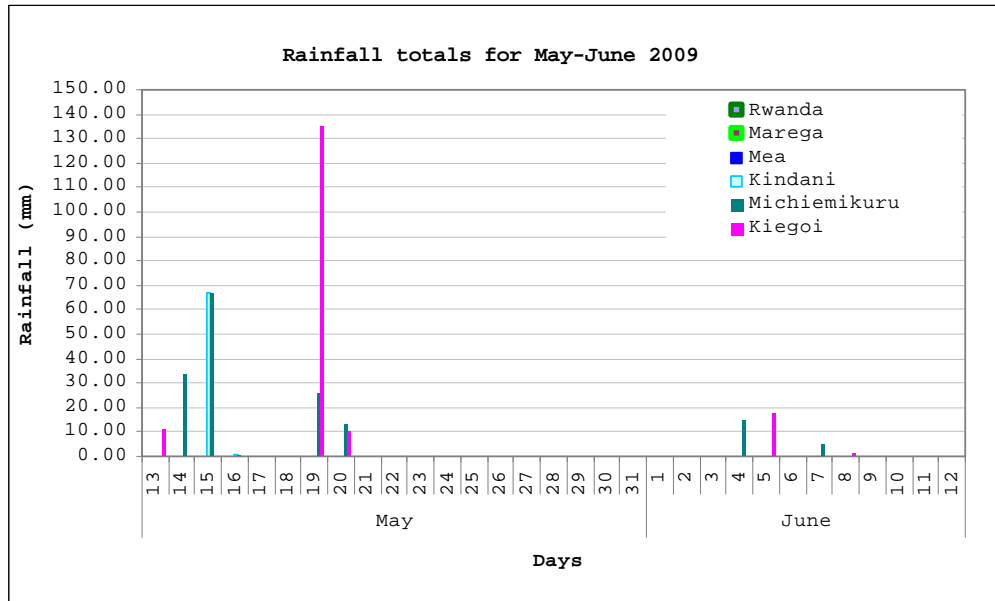


Fig: Daily rainfall totals during the month of May and June

**Michimikuru and Kiegoi tea factories are outside the sentinel sites but are on the high elevation areas of the district. Rains in localities where these two are located contribute significantly to river discharge in the dry lower parts of the district.*

- Rainfall performance over the month was poor and abnormal in all parts of the district.
- Temporal distribution was poor as showers were only reported during the second week of May and first week of June in a few areas.
- Spatial distribution was also poor as no rains were reported in the Northern Grazing Area (Agro-pastoral livelihood) and surrounding areas.

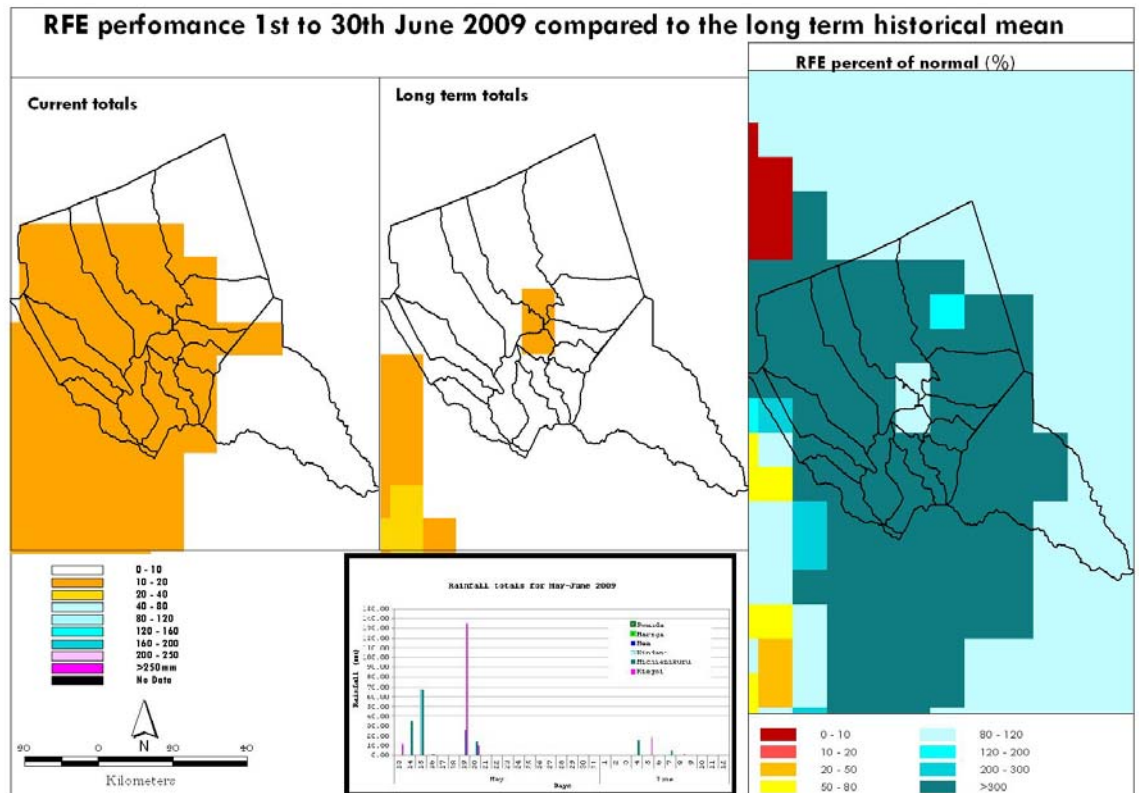


Fig: Rainfall performance during the month compared with the long term average

1.2 Condition of natural vegetation and pasture

- General quality and quantity of pasture declined significantly compared to the previous month.
- The decline was more pronounced in the Agro-pastoral livelihood zone, with most grazing areas in the NGA bare.
- The decline was also noted in other livelihood zones though not as serious as the Agro-pastoral livelihood.
- This decline resulted from poor rainfall performance witnessed during the month.

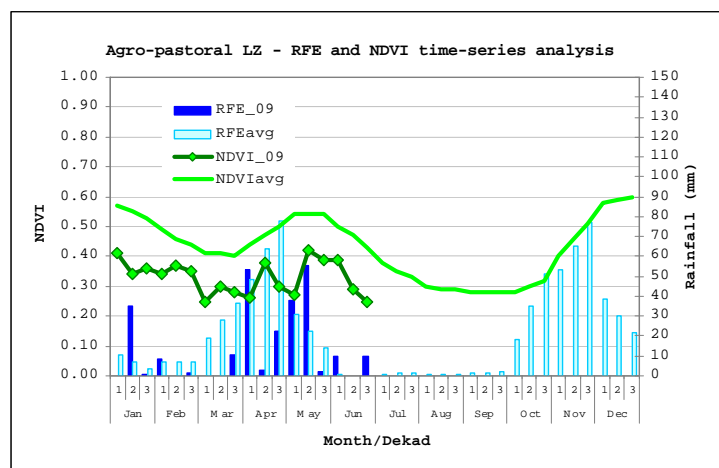


Fig: NDVI analysis of the Agro-pastoral (marginal mixed farming) livelihood zone

1.3 Distances to grazing areas

- Average distances to grazing areas increased from 10.4 km the previous month to 13.1 km.
- Longest distances were witnessed in the Agro-pastoral zone with Kibiru, Kamweline, and Mea areas recording 23 km, 20.8 km, and 25 km respectively.
- Although distances recorded in this zone were still too high, they declined slightly compared to the previous month. This was because herders opted to camp near areas that have pastures other than the long journeys.
- Livestock from as far as Kalimbene, Mea, and Mutuati are grazing around Kinaduba springs while those from Maburwa, Rwanda, and Rei have moved to farmlands in Kimirii, Marega, katithine, and areas bordering the Meru National Park.
- Distances were expected to increase further as the next rain season will not be until November.

1.4 Water sources and availability

1.4.1 Water sources

- Similar to the previous month, natural rivers were the main sources of water.
- However, river volumes significantly declined during the month due to lack of precipitation.
- River flows could not reach the Agro-pastoral zone due to abstraction upstream and low volumes.
- Water stress further worsened in this zone with the breaking down of Ndumuru borehole, forcing livestock to water at Ngare naite springs, Kinaduba springs, Kandebene and Inono boreholes, and Igombe salt lick.
- Livestock numbers have also increased at watering points compared to the previous month. These points are now being used by livestock from neighbouring Isiolo district.

1.4.2 Household access to water

- Average distances to watering points remained the same as the previous month, albeit still high.
- Distances during the month averaged at 6.4 km compared to 6.9 km the previous month.
- Similar to the previous month longest distances were recorded in the Agro-pastoral livelihood zone indicating pronounced water stress for domestic use.
- Water quality has also declined significantly in this zone as livestock share watering points with households.
- Water vendors remained important sources in this zone.
- With rains expected in November, the shortages are expected to worsen.

1.5 Emerging issues

- Abstraction of rivers Likiundu and Liliaba worsened, especially with the low volumes.
- As a result, flows were not reaching the grazing areas and this will fuel conflicts as the dry spell continues.

- Livestock from Turkana are currently grazing at Elat, while those from Isiolo district have moved up to Kinaduba areas thereby increasing competition for the little pastures available
- Massive movements of livestock from the Northern Grazing Area towards farming areas within the district have been witnessed throughout the month. In addition, conflicts have been reported in Kalimbene (Kangeta division) between herders and farmers.

1.6 Implications on food security

- Pasture declined significantly, initiating massive livestock movements and conflicts.
- Water stress worsened for both livestock and households.
- Consequently, food situation in the district worsened further than the previous month.

2.0 Rural economy indicators (Food availability)

2.1 Livestock production

2.1.1 Livestock body condition

- Body conditions of livestock in the Agro-pastoral livelihood zone deteriorated compared to the previous month.
- Deaths were also reported in this zone due to poor health resulting from lack of pastures and long distances to watering points.
- Milk production declined significantly in this zone.
- Conditions of livestock in other livelihood zones remained fair as farmers fed them with bean stalks from the ongoing harvests and maize stalks that will not bear anything.

2.1.2 Livestock diseases

- Cases of FMD and CCPP were reported at Kamweline, Mea, Kalimbene, and Maburwa sample sites.
- No other major livestock diseases were reported during the month.

2.2 Crop production

2.2.1 Timeliness and condition of various crop production activities

- Conditions of major crops deteriorated significantly during the month.
- Bean harvests were only reported in the central parts of the district, although harvests were slightly below normal. In the rest of the district insignificant harvests were reported.
- Insignificant maize harvests were expected this season mainly due to poor rainfall performance during tussling and filling stages.
- Pigeon peas and dolicos lablab also performed poorly, with very little harvests expected.
- Most areas of Tigania West division, lower parts of Akithi, Igembe North, Tigania North, Laare, Mutuati, Ndoleli, and Igembe Southwest reported insignificant bean harvests and expect no maize harvests at all.

2.2.2 Pests and diseases

- There were no cases of crop pests and diseases reported.

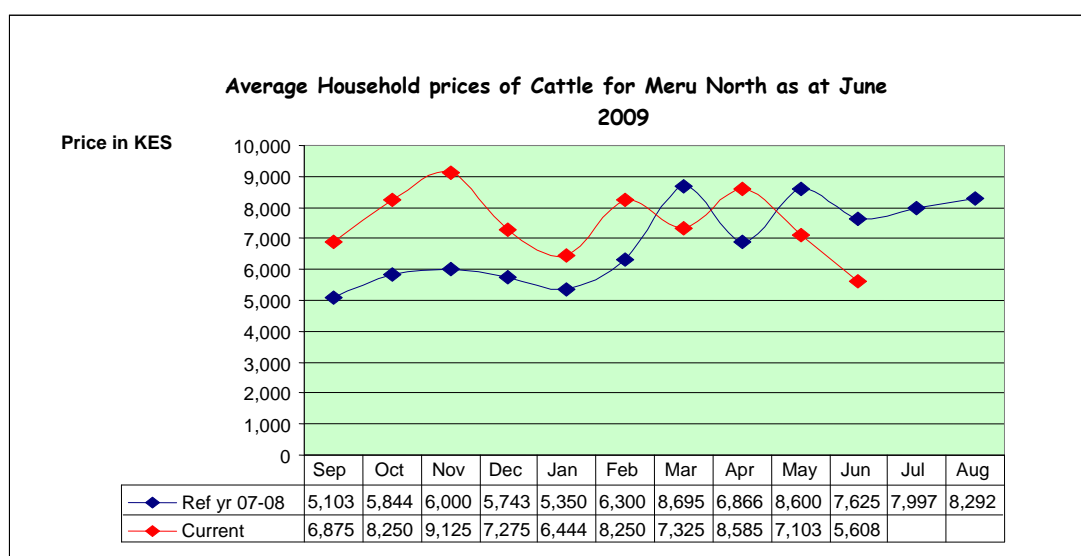
2.3 Implications on food security

- Food security declined further compared to the previous month.
- Bean harvests were below normal, while insignificant maize harvests were expected.
- Livestock body conditions declined further in the Agro-pastoral livelihood.
- The situation was not normal for the district at the time of the year.

3.0 Access to food

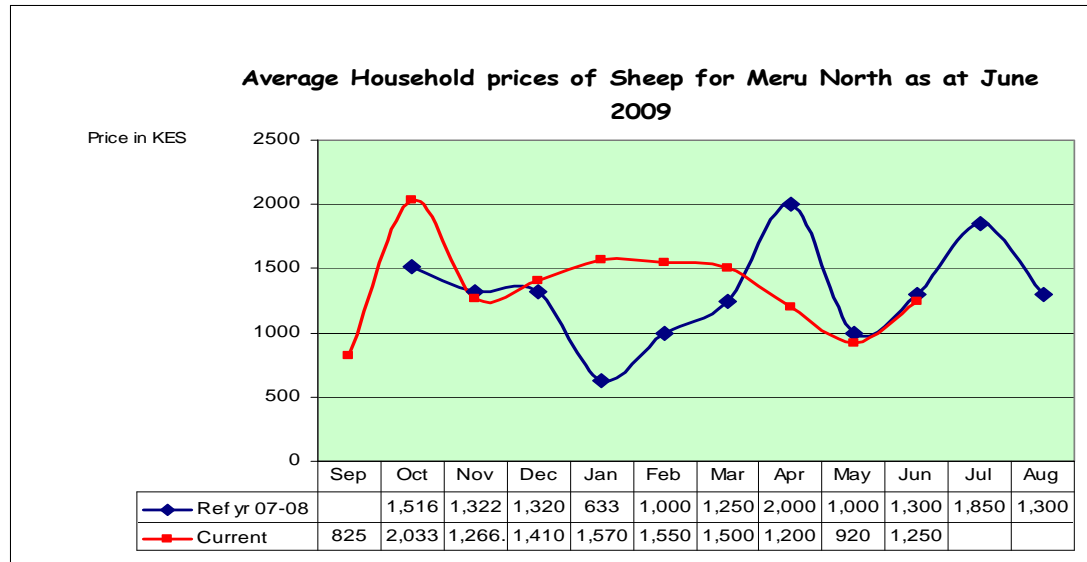
3.1 Livestock marketing

3.1.1 Cattle prices



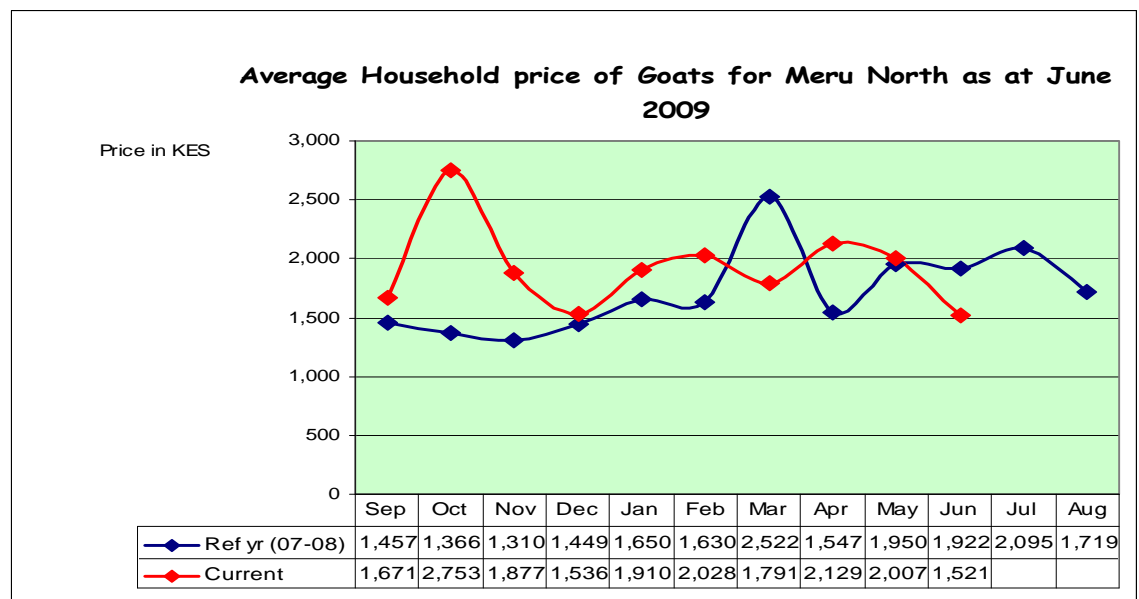
- Cattle prices declined considerably to Ksh5,608 from Ksh7,103 the previous month.
- The prices were much lower than those in the corresponding month of the reference year reflecting an abnormal situation.
- This decline resulted from poor body conditions of cattle and oversupply in the markets.
- Further, quarantine imposed in Igembe North district due an outbreak of FMD and CCPP has also had a negative effect on prices.
- Average prices in the Agro-pastoral livelihood zone stood at Ksh5,880.
- Livestock in this zone have also been affected by FMD and CCPP.

3.1.2 Sheep prices



- A marginal increase in average prices of sheep was noted during the month with current prices settling at Ksh 1,250 compared to Ksh 920 the previous month.
- Sheep prices are expected to increase further as their body conditions do not deteriorate as fast as other livestock due to poor pastures. They are likely to silently substitute goats and cattle.
- There were no inter-livelihood zones differences noted during the month.

3.1.3 Goat prices



- Average goat prices declined, albeit marginally to settle at Ksh1,521 compared to Ksh2,007 the previous month.

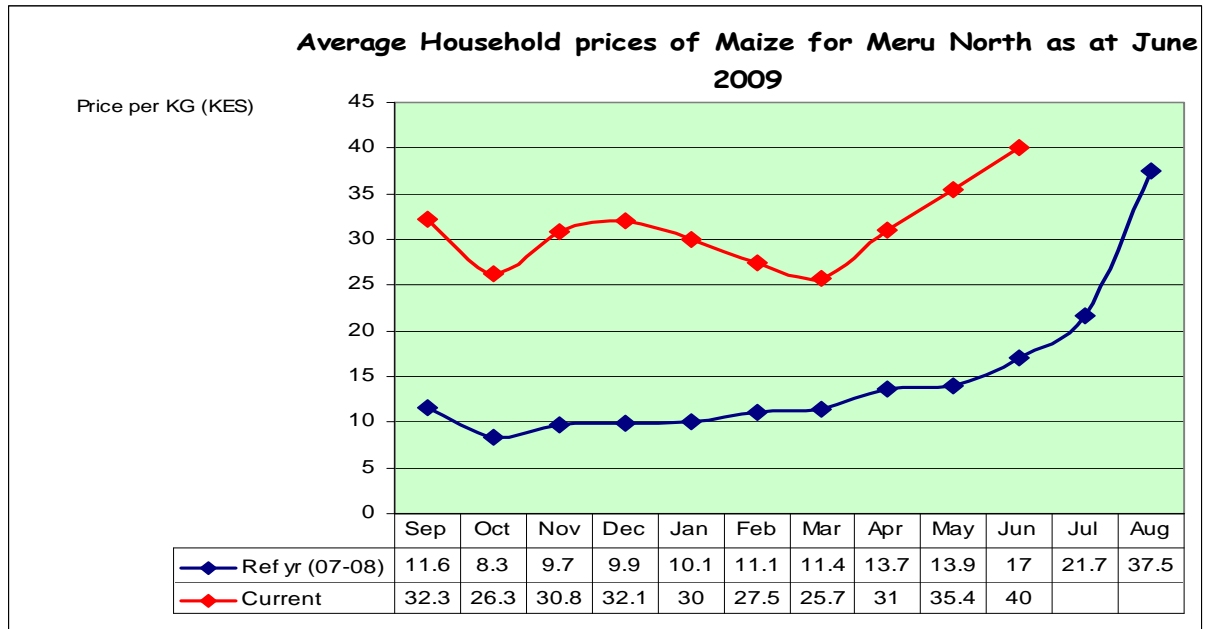
- This decline was as a result of the poor body conditions of the animals.
- Further, the market was flooded as herders tried to reduce stocks to manageable levels.
- There were no significant inter-livelihood zones differences noted during the month as sales were only realised in the Agro-pastoral livelihood.

3.2 Milk consumption

- Milk consumption increased further during the month, while sales continued to decrease.
- An average of 14.4 bottles (750ml) was consumed in an average sample of 30 households compared to 13.4 bottles the previous month.
- Unlike the previous month, the bulk of the milk was consumed in the Agro-pastoral livelihood.

3.3 Crop prices

3.3.1 Maize prices

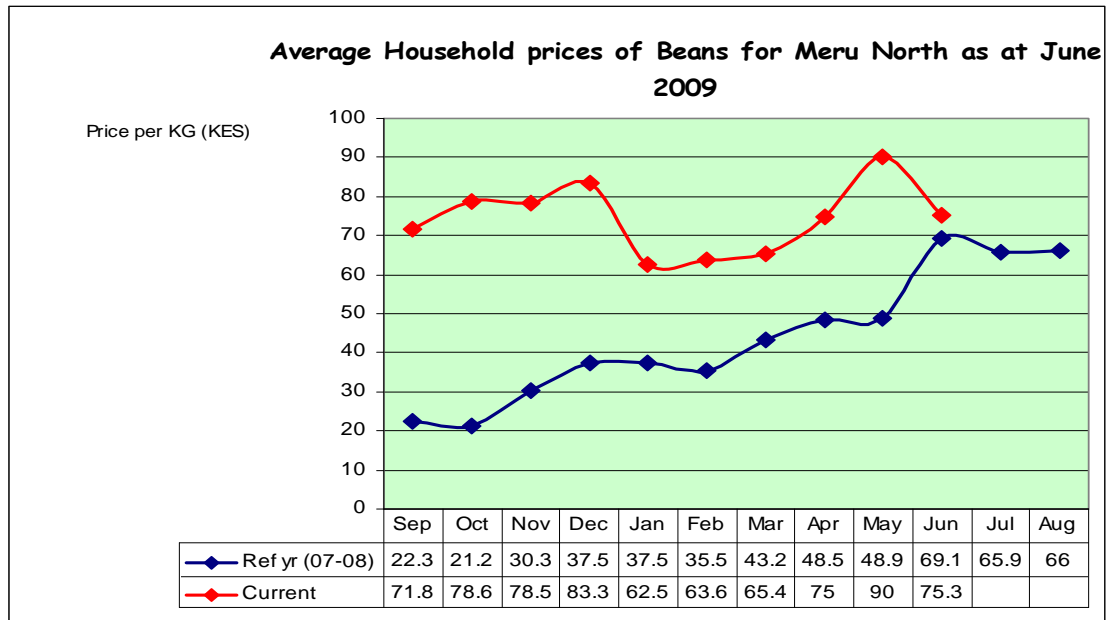


- Maize prices increased further to Ksh40 per kilo during the month compared to Ksh35.40 the previous month.
- A shortage of maize prevailed in the district and below normal harvests were expected this harvest.
- Prices were also expected to maintain the upward trend till the next harvest next year.

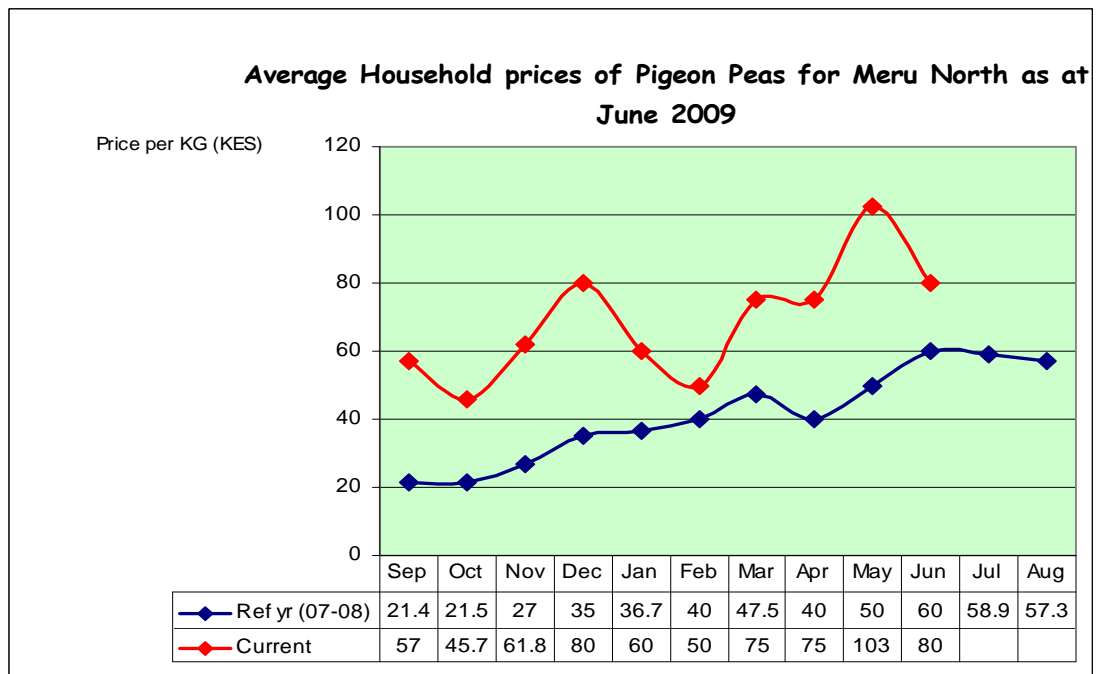
3.3.2 Beans prices

- Bean prices declined during the month to Ksh75.30 from Ksh90 the previous month.

- The decline was as a result of the ongoing harvest in the central parts of the district.
- However, this decline was not expected to last long as harvests realised were below normal.

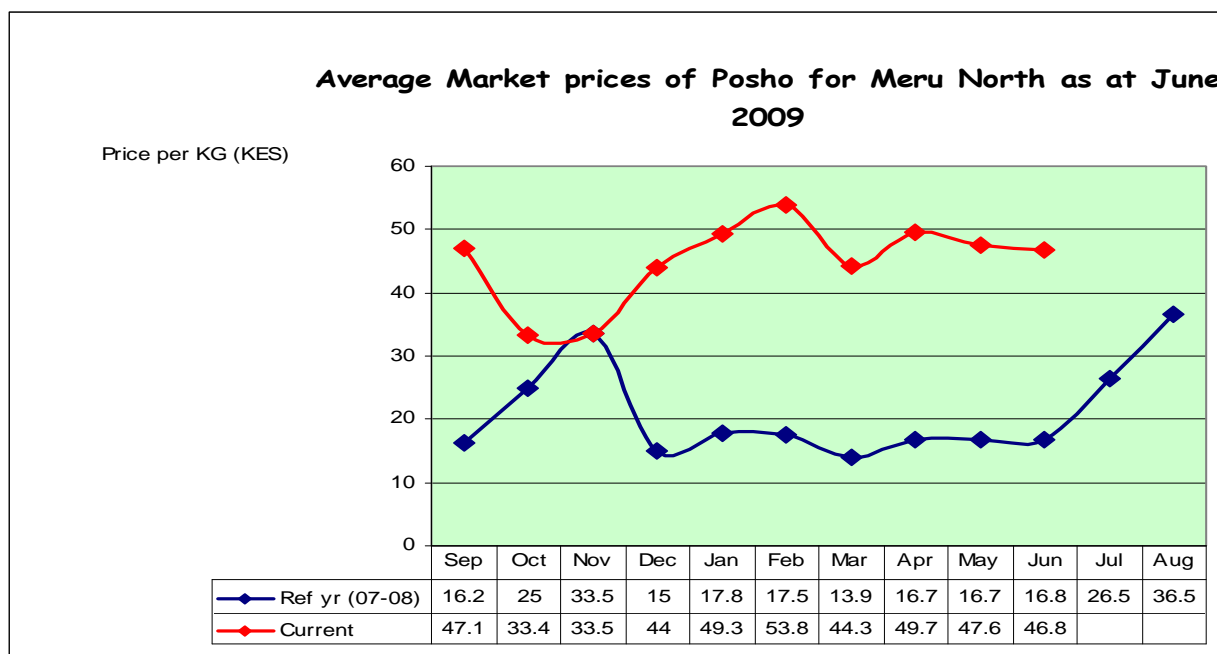


3.3.3 Pigeon peas



- Pigeon prices declined significantly to Ksh80 per kilo compared to Ksh103 recorded the previous month.
- This was due to harvests ongoing in the central parts of the district.
- However, crop performance was poor and as such these prices were expected to increase again.

3.3.4 Posho prices



- Posho prices remained the same as the previous month although prices were still high.
- These high prices could be as a result of the high maize prices coupled with the prevailing shortage of the same.

3.5 Income

3.5.1 Crop income

- The numbers of households relying on incomes from the sale of crops declined further this month compared to the previous month.
- Only 4 per cent of 330 households sampled relied on the sale of crops compared to 6 per cent the previous month.
- This reflects declined food stocks at households.
- Sales made were from crops currently being harvested.
- Food levels at households are significantly low in the Agro-pastoral livelihood to warrant any sales.

3.5.2 Livestock income

- Households relying on incomes from livestock remained the same like the previous month.

- 22 households out of 330 households sampled relied on sale of livestock.
- However, incomes received were low as livestock prices registered declines during the month.

3.5.2 Other income

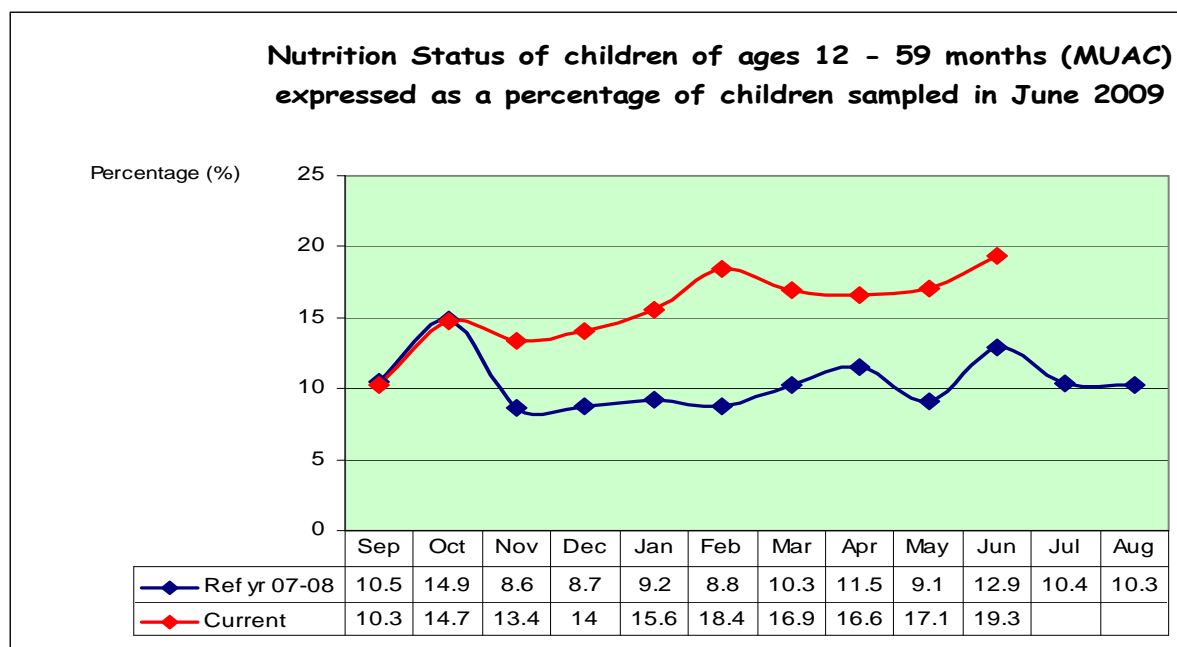
- 42 per cent of 330 sampled households relied on casual labour during the month compared to 39 per cent the previous month.
- Most were employed to harvest beans.
- Petty trading also registered substantial figures particularly the sale of khat
- Sale of charcoal also brought significant incomes.

3.6 Implications on food security

- Food security in the district deteriorated compared to the previous month.
- Livestock prices declined during the month, while those of legumes and cereals increased.
- Incomes also declined, eroding the ability of households to access food in the markets.
- Further, vegetables and pulses are not readily available in the markets and their prices have increased further than the previous month.

4.0 Welfare indicators (Utilisation of food)

4.1 Nutrition status



- 19.3 per cent of sampled children under five years were at risk of malnutrition compared to 17.1 per cent the previous month.

- The decline in the nutrition status was due to prevailing food shortages in households and high prices of the same in the markets. Further, there was a shortage of green vegetables and legumes in the district.
- Igembe North recorded 44.6 per cent from 36.2 per cent the previous month. Mutuati and Tigania North recorded 29.6 per cent and 19.9 per cent respectively compared to 30.5 per cent and 21.9 per cent respectively.

4.2 Human health

- No major human disease outbreak was reported during the month under review.

4.3 Flagged areas

- Igembe North, Mutuati, Igembe Southeast, Tigania North, and Laare divisions require close monitoring due to the possible high levels of malnutrition reported.
- In addition, the same divisions need monitoring due to the noted poor crop conditions in the fields.

5.0 Current interventions

5.1 Non-food interventions

- Livestock vaccination against FMD in the Northern Grazing Area carried out by Veterinary department.

5.2 Food aid interventions

- Food supplementation of malnourished children under the age of five years has been extended to all divisions.

6.0 Recommendations to DSG and KFSM

- There is need to conduct a rapid food security assessment to determine the number of people affected by the prevailing drought.
- Request KMC to buy livestock from the herders since a ring vaccination has already been carried out within the NGA.
- Implore KFSSG to consider enrolling schools in the NGA into SFP through WFP.
- Continued supply of relief food to the affected persons.