



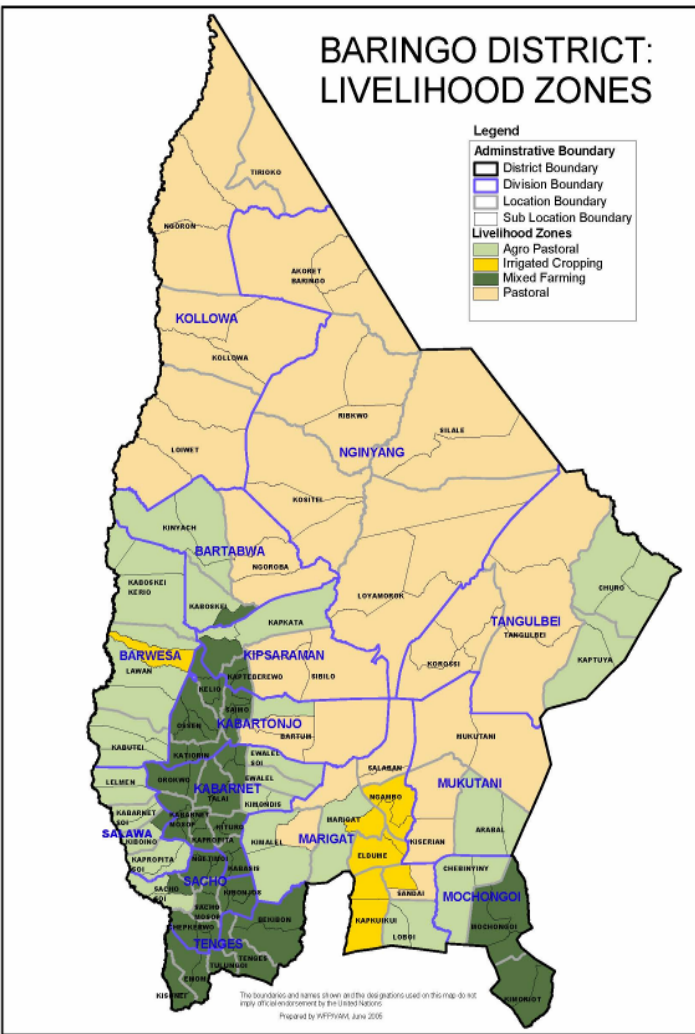
**OFFICE OF THE PRIME MINISTER  
MINISTRY OF STATE FOR THE DEVELOPMENT OF NORTHERN KENYA AND OTHER ARID LANDS  
ARID LANDS RESOURCE MANAGEMENT PROJECT II**

**DROUGHT MONITORING BULLETIN, JUNE 2010**

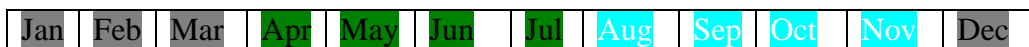
**Baringo Central/ North/  
East Pokot/ Marigat Districts**

**Warning Stages**

Livelihood Zone	Warning stage	Trend
Pastoral	Alert	Improving
Agro pastoral	Alert	Improving
Irrigated Cropping	Alert	Improving
Mixed farming	Alert	Improving
Project area	Alert	Improving



**Seasonal Calendar**



- Dry season :- (Land preparation, minimal calving, lambing & kidding)
- Long rains :- (Planting, most kidding & lambing and minimal calving & honey harvesting)
- Short rains :- (Most calving & honey harvesting and minimal kidding & lambing, pre-harvest & harvesting)

## **Situation overview**

- Little amount of rainfall was received in the month and temporal distribution was poor. The rainfall received had insignificant impact on the grazing and water resources in the areas that reported rainfall. A total of 79.2 mm average rainfall was received from 6 – stations for an average of 5 days.
- The quality and quantity of forage remained fair in all the livelihood zones.
- Water availability for both human and livestock was sufficient in all the livelihood zones.
- Body condition of livestock was good due to the favourable forage.
- Milk production was low and mainly obtained in camels. This was attributed to the animals being in gestation period.
- The average prices of livestock increased in cattle and sheep while it decreased in goats. The increase in price was attributed to availability of external buyers and better demand hence improving prices. Prices of poultry increased compared to the previous month due to improved demand.
- The average prices of food crops and other commodities decreased insignificantly during the month owing to stable availability of supplies in the markets within the district and the neighbouring districts.
- Sale of fish, honey, casual labour, petty trade (local beer brewing e.t.c.) and sale of charcoal & sale of wood products was the other alternative sources of income for most sampled households during the month after the sale of livestock.
- The nutrition status of children below five years based on MUAC<135mm measurement decreased to 13.4 % from 17.9 % the previous month. This was attributed to improvement of supplementary food at the household level in the month.

## **Recommendations to DSG and KFSM**

- The veterinary department / agencies should step up support to the livestock health sub sector through vaccinations and treatment of clinical cases. In particular, more efforts should be directed to investigate cases of premature births in goats as CCPP upsurge is suspected to be the cause; heart water upsurge; foot rot upsurge in cattle; fatal diarrhea in goats & swelling of the head in sheep; camel orf upsurge; goats & sheep pox outbreak; chicken flu outbreak and the poisonous weed killing cattle in the areas mentioned of the project area.
- The GOK and other aid agencies to put more effort to ensure that communities in East Pokot, North Baringo, Marigat and Baringo central districts are given continuous relief food supplies (GFD) and supplementary food for children and the elderly until the stress situation normalizes as prices of food commodities are above the long term mean by over 100 %, a significant number of animals were lost during the recent drought hence people cannot cope with the stresses, also milk production from animals is low due to the drought effects that persisted for a long period.
- There is need to strengthen conflict prevention and peace building initiatives to maintain the already achieved level of peace and further reduce it to the lowest level along the borders of East Pokot, Baringo, Marakwet, Turkana, Laikipia west and Samburu districts to enhance peaceful co-existence.
- The Moh/ Mphs/ stakeholders should put more efforts to supply anti-malarial drugs in all the rural health facilities, in the project area to cope with the current Malaria outbreak also to spray houses & thickets with anti-mosquito chemicals and investigate cases of diarrhea & vomiting outbreak, suspected to be cholera and mumps outbreak in the areas mentioned of the project area.

- The District Public Works Engineer should put more efforts to ensure that the roads washed away in the areas mentioned by the recent torrential rains are rehabilitated to permit food and other logistics reach communities.
- The GOK and other Aid agencies to make efforts to assist communities displaced by floods and farms & animals swept in the areas mentioned of the project area.
- The District game warden should put more efforts to ensure that the Crocodiles, Lynxes and Hyenas predating on livestock in the areas mentioned of the project area are contained to save pastoralists who lose their livelihood daily.

### **Current interventions**

#### **Non-food interventions**

- Laying of water pipes for Chesirimion, Tangelbei & Karimodow (East Pokot district) and Kimalel & Endao/ Loberer (Marigat district) boreholes – MONKOAL.
- Peace building initiatives within the districts' of the project area by various stakeholders i.e. the PSC, DPC, DSC, World vision, Community Elders, Youth groups, Political leaders, Pastors, Peace caravan and ALRMP.

#### **Food aid**

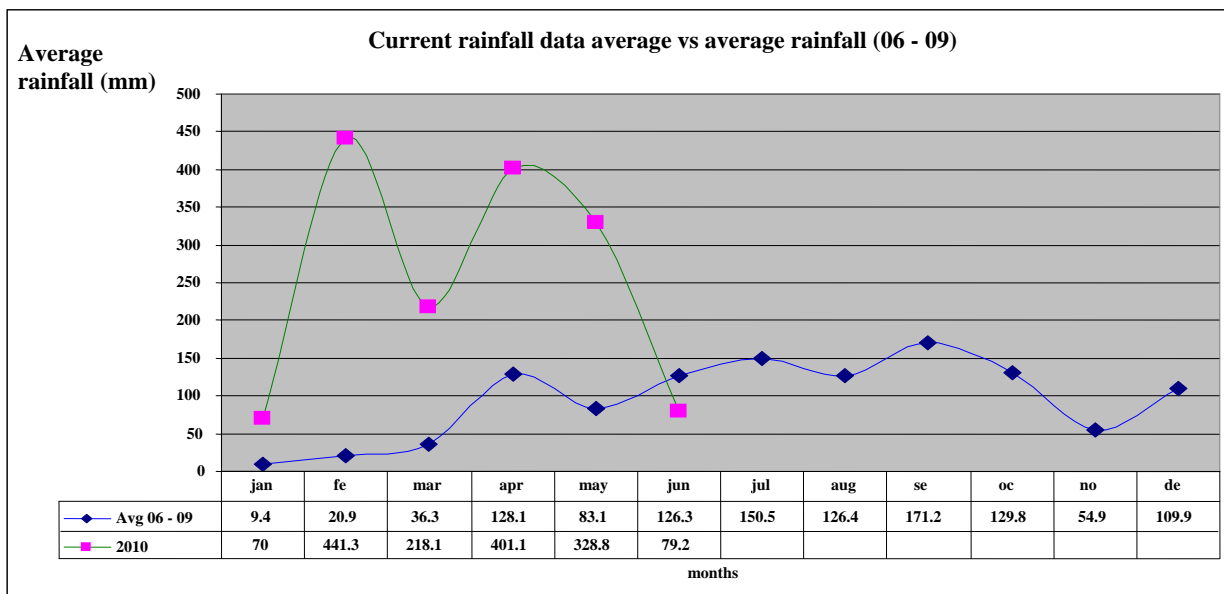
None

#### **DSG meeting and recommendations**

The DSG held meetings on 15<sup>th</sup>, 22<sup>nd</sup> and 24<sup>th</sup> June 2010 to endorse distribution of pasture seeds and to conduct a screening of co-operating partner for Food for Assets & for General Food Distribution respectively for the larger Baringo.

## 1.0 Environmental indicators (Stability)

### 1.1 Rainfall



**Source: ALRMP rain gauge data stations**

79.2 mm average rainfall was received from 6- stations, 5 days average during the month in the project area compared to the previous month where there was 328.8 mm from 7- stations, average 12 days. This was not normal at this time of the year as shown on the graph where the current average is below the long term mean by 37.3 %.

### 1.2 Condition of natural vegetation and pasture

The quantity of forage in all the livelihood zones remained fair during the month. Quality of the available pasture was good. The average distance to grazing areas increased to 5.4 km. from 4.4 km in the previous month.

### 1.3 Water sources and availability

- During the last four weeks there was a decrease in water availability following poor temporal distribution of rains in the project area. The water sources in use were pans and dams, natural rivers, traditional river wells, boreholes, springs and lakes.
- Distance to the nearest water source during the month increased to an average of 2.6 km from 2.3 km the previous month for most of the households.

### 1.4 Emerging issues

- The little showers received during the month made insignificant impact on the browse and pasture resources in the areas that reported rainfall and the distances to water sources and pastures also increased. 30 % of the satellite herds were still held up at the dry season grazing points (Marakwet, Turkana East, Pokot central, Samburu and Laikipia west districts).
- Road network linking Marigat – Mukutani, Marigat – Chemolingot – Kolloa and the Kerio valley roads were destroyed by the current rains making it difficult for transportation of food and other supplies.
- Hyena & lynx predating on goats in Barpello sub-location (Kolowa division) while crocodiles predated on goats in Komolion community (Tangulbei division).

## **1.5 Implications on food security**

Destroyed road network by rains made it difficult for communities to access food from the markets, thereby raising prices by high percentage. This had a negative impact on household food security for the pastoralists.

## **2.0 Rural economy indicators (Food availability)**

### **2.1 Livestock production**

#### **2.1.1 Livestock body condition**

Livestock health was good for all the species in all the livelihood zones due to fair browse and pasture. This was normal at this time of the year owing to the recently received rains in the project area.

#### **2.1.2 Livestock diseases**

- Premature births in goats in Barpello sub-location (Kolowa division).
- Heart water disease upsurge in Loiwat location (Kolowa division).
- Foot rot in cattle upsurge in Ngambo location (Marigat division).
- Poisonous weed killing cattle in Ngambo location (Marigat division).
- Fatal diarrhea in goats and swelling of the head in sheep in Kamrio community (Nginyang division) and Ngambo location (Marigat division).
- Camel orf upsurge in Maron sub-location (Nginyang division).
- Cough upsurge in goats in Kaisakat sub-location (Kolowa division).
- Goats & sheep pox outbreak in Kiserian location (Mukutani division).
- Chicken flu outbreak in Endao sub-location (Marigat division).

#### **2.1.3 Milk production**

Milk production slightly improved in the project area following the recent rains that made forage improve. However, majority of the animals were in gestation period. This was normal at this time of the year according to the seasonal calendar.

## **2.2 Crop production**

### **2.2.1 Timeliness and status of various crop production activities**

Crops planted by Agro-pastoralists in the project area showed signs of drying at the flowering stage due to lack of rain during the month also crops are destroyed by wild animals i.e. wild pigs, lynx, birds and rodents. This was normal at this time of the year when crops are nearing maturity stage.

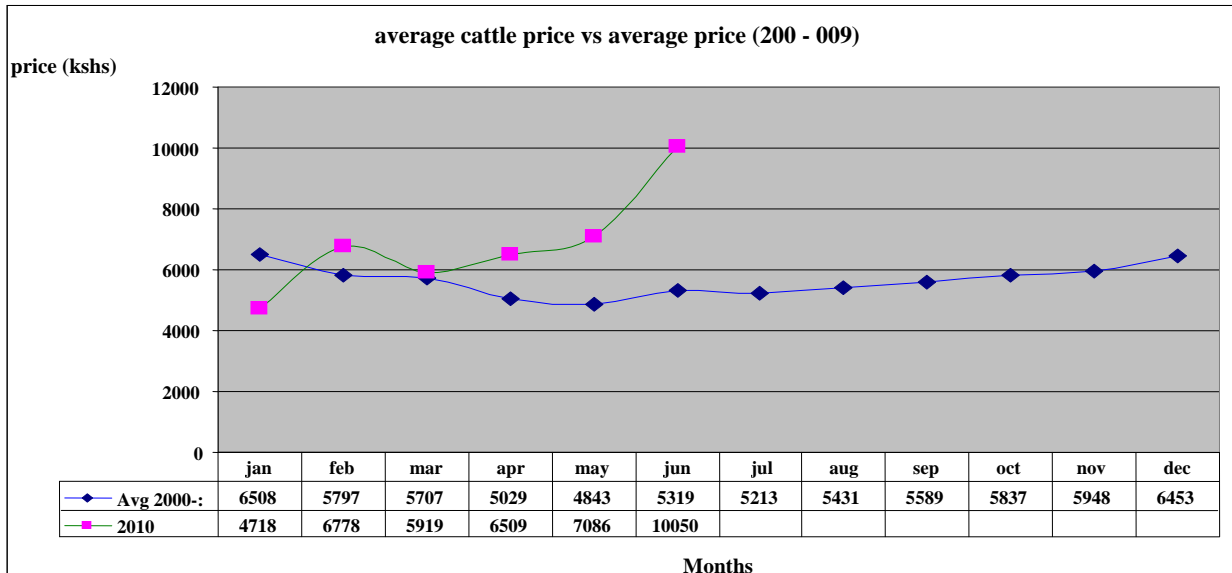
## **2.3 Implications on food security**

- Milk production at household level was still low yet this is the food depended upon by the pastoralists and children. Relief and supplementary foods need to be given to the population continuously until the situation normalizes.
- Market prices of cereals and legumes remained high in the project area and availability in the markets erratic.

### 3.0 Access to food

#### 3.1 Livestock marketing

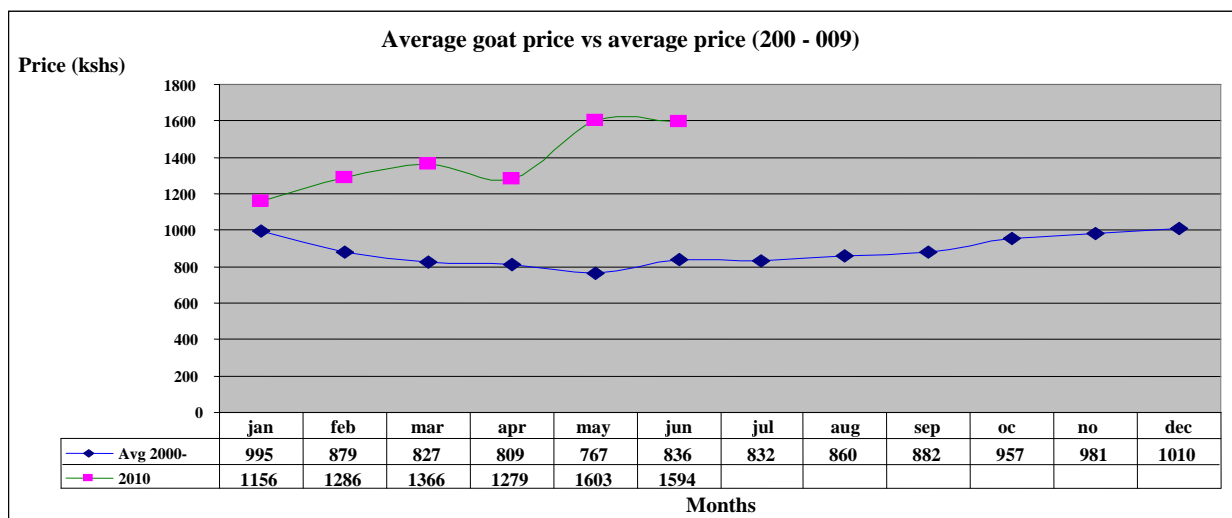
##### 3.1.1 Cattle prices (From household level)



N = 480 HH

- The average price showed an increase in the price of cattle from Ksh 7,086 in the previous month to Ksh 10,050 in June. The increase was normal at this time of the year when the price of cattle is expected to go up at this time of the season. The price was, however, higher than the long term mean by 88.9 % as shown on the graph.
- The price increase was attributed to less number of animals in the markets, prompting hike in prices and demand. This was a positive impact for the household food security.
- Bartabwa division had the highest average cattle price at Ksh17,500. This was attributed to good health of the animals and accessing external buyers. Nginyang division had the lowest average price of Ksh7,300 due to low demand as a result of influx of the animals in the markets.

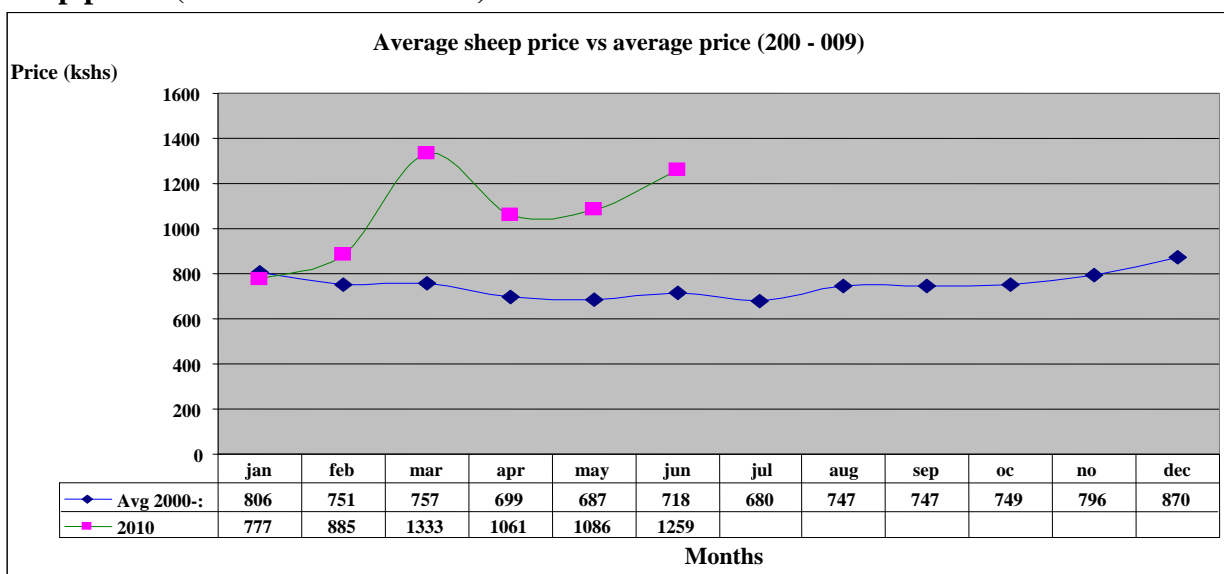
##### 3.1.2 Goats prices



N = 480 HH

- The average price of goats decreased from Ksh1,603 in May to Ksh1,594 in June, showing depreciation. The price was, however, above the long term mean by 90.7 %. The decrease was attributed to influx of animals in the markets, prompting low prices due to low demand. This had a negative impact on household food security.
- Bartabwa division had the highest goat price average of Ksh2,360 due to accessing adequate external buyers who compete for purchase of the animals while Nginyang division had the lowest price average of Ksh1,323 owing to influx of animals in the market.

### 3.1.3 Sheep prices (From household level)



N = 480 HH

- The average sheep price increased from Ksh1,086 in May to Ksh1,259 in June showing appreciation. The price increase was attributed to high demand of the animals coupled with less number in the markets. The price was, however, higher than the long term mean by 75.3 %. This was a positive impact to household food security.
- Bartabwa division had the highest average sheep price of Ksh1,600 owing to accessing external buyers while Nginyang division had the lowest price of Ksh1,000 due to influx of the animals in the market.

### 3.2 Livestock sales

- The volume of livestock sales decreased in the month compared to the previous month as a result of other sources of food alternatives at the household level.
- Goats, sheep, poultry and cattle were the main livestock offered for sale at the markets.
- Pastoral, Agro-pastoral and Irrigated cropping livelihood zones had the highest sales as they depend on their livestock sales as the sole means of getting household needs while mixed farming livelihood zone had the lowest sales owing to having other sources of income e.g. business, food stock, employment and casual labor e.t.c. to depend on.
- The level of sales was normal at this time of the year owing to other sources of food alternatives during the month.

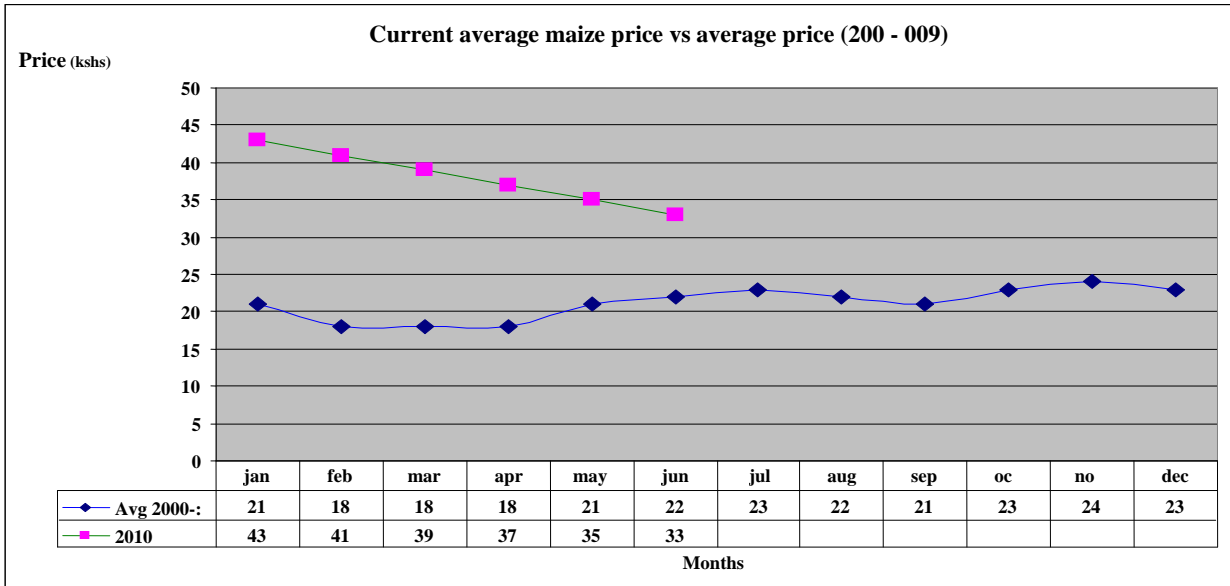
### 3.3 Milk consumption

- Milk consumption by household members improved for those who own animals in all the livelihood zones after the recent rains that made forage improve. However, 70 % of the households do not access milk as they lost nearly all the livestock in the just ended drought.

- Compared with the previous month the milk consumption at household level picked up after the recent rains made the forage better. This had a positive impact on food security at household level, especially for children under five years for the households that had animals.

### 3.4 Crop prices (Market prices)

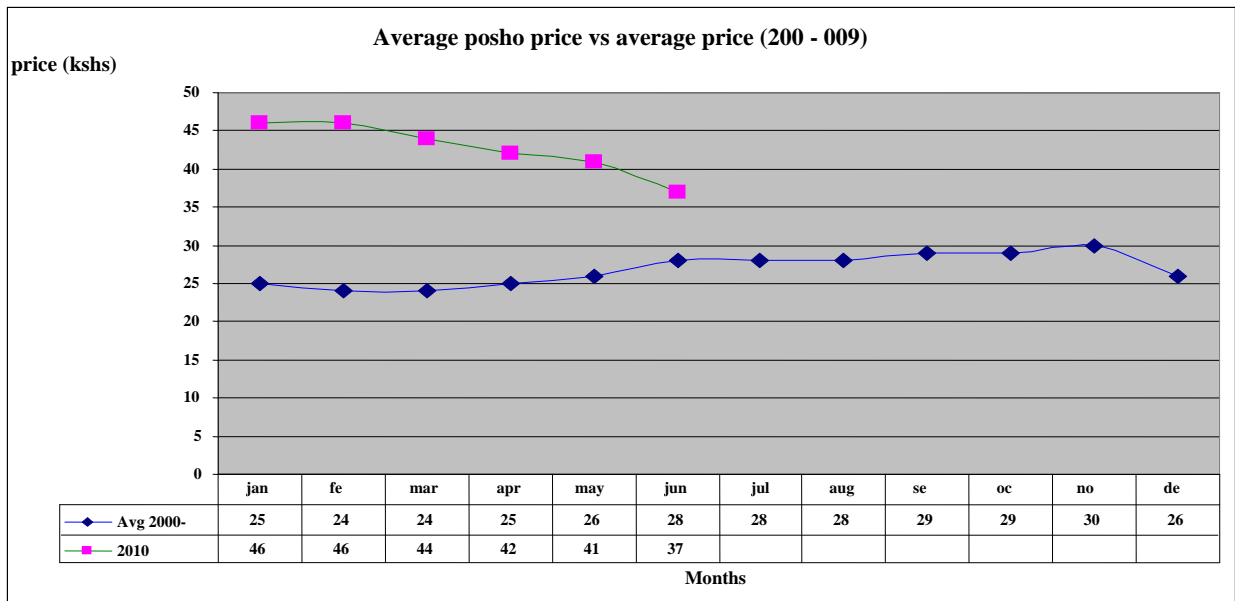
#### 3.4.1 Maize prices



**N = 480 HH**

- The average maize price during the month was Ksh33 per kilo, Ksh2 less than the previous month (highest price in the market was Ksh 50 per kg).
- The average price was more than the long term mean by 50 % owing to erratic availability of the food at the markets. However, the demand stabilized in the markets owing to other food alternatives available for the communities during this rainy season.
- Erratic supply of maize to the local markets from Agro- pastoralists within the project area and also neighboring districts is the cause of high prices.
- As in the previous month, maize prices were much higher in the pastoral, Agro-pastoral and irrigated cropping livelihood zones than in the mixed farming livelihood zone.
- The average maize price was not normal at this time of the year owing to erratic availability of the food in the project area.

#### 3.4.2 Posho (maize meal) prices



N = 480 HH

- The average price of Posho during the month was Ksh37, Ksh4 less than the previous month (highest price in the market was Ksh60 per kg).
- The average price decreased due to stable supply of maize in the local markets. The price was more than the long term mean by 32.1 %, eroding the purchasing power of the pastoralists as they have to sell a lot of animals to meet the food demand.
- Posho prices were much higher in the pastoral, Agro-pastoral and Irrigated cropping livelihood zones than in the mixed farming zone because the three zones depend on purchasing the commodity from their local markets which normally is dictated by its availability unlike the mixed farming who are producers and access it easily.
- The price of Posho was not normal at this time of the year owing to erratic availability of maize in the markets.

### 3.4.3 Beans prices (market price)

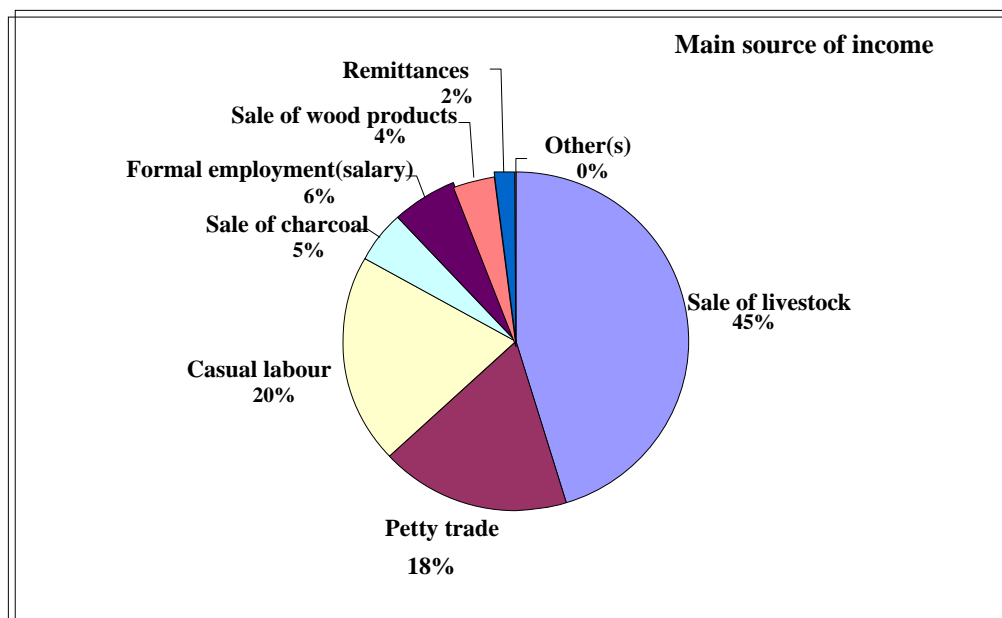


N = 480 HH

- The average price of beans during the month was Ksh85, Ksh2 less than the previous month, highest price in the market was Ksh20 per kg. The price was higher than the long term mean by 46.6 %.
- The average price reduced due to stable availability of the food commodity in the markets within the project area and also from the neighboring districts. However , the prices were too high at the moment to cope with the purchasing power of the pastoralists, threatening household food security.
- Beans prices were higher in the Pastoral livelihood zone than in the irrigated cropping and Agro- pastoral zones. Beans prices were not normal at this time of the year owing to its erratic availability in the markets.

### 3.5 Income

#### 3.5.1 Main sources of income



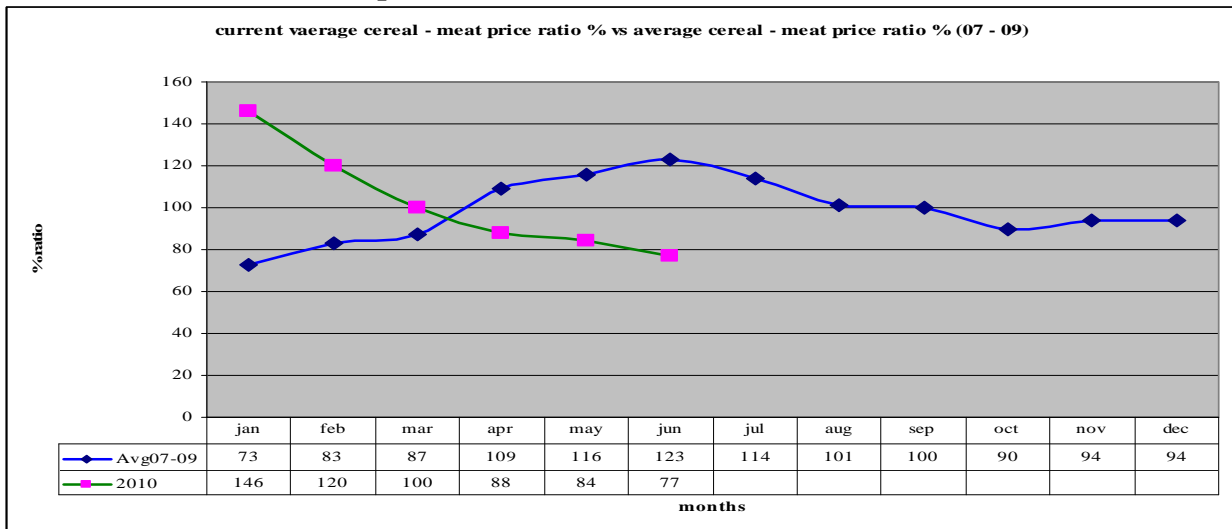
N = 480 HH

- Livestock sales income decreased compared to the previous months due to reduced number of animals sold in the markets owing to less demand for food in the markets during the month.
- The income obtained from the livestock was normal at this time of the year. The average daily wage rate per casual for the month was Ksh117, Ksh2.00 less than the previous month, something so meager to meet the daily household's needs.
- Most of the trade in charcoal, wood products and petty trading was recorded in Pastoral, irrigated cropping and Agro-pastoral livelihood zones. This reflects unavailability of livestock and farm incomes for the households in these zones.

#### 3.5.2 Other income

- Sale of fish and honey was the other sources of income during the month with approximately a fraction of the household's members sampled engaged as fish traders' & honey sellers around Lake Baringo (Komolion community) and Nginyang & Kolloa divisions respectively.

### 3.6 Terms of trade (cereal - meat price ratio)



N = 480 HH

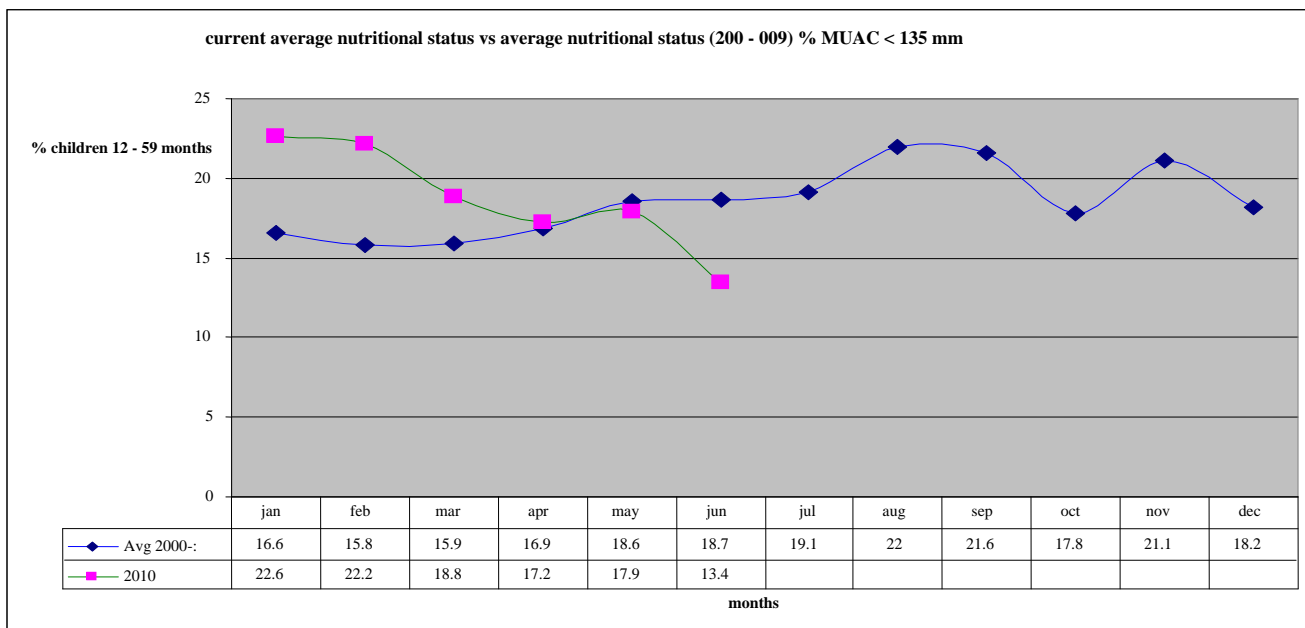
- Terms of trade improved by 7 % during the month from that of the previous month, however it was below the long term mean by 37.4 %. However, the price ratio remained worse in pastoral, Agro-pastoral and irrigated cropping livelihood zones because of relatively low prices offered for the livestock sales by the traders as compared to high prices to purchase cereals while it was lower in mixed farming livelihood zone owing to better accessibility of cereals and better livestock prices in this area.
- The cereal: meat price ratio is not normal at this time of the year. For a pastoralist to purchase 90 kg sack of Posho which goes at an average price of ksh. 3,600.00 market price, he/ she has to sell 3 (three) goats, that goes for an average of ksh. 1,500.00 at the moment to meet the price and the sack cannot last for even a month. This has completely eroded the purchasing power of the people hence depleting the asset level of the pastoralists each time animals are sold.

### 3.7 Implications on food security

- The low prices of livestock offered coupled with the erosion of the peoples' purchasing power in the project area depleted the asset level of the pastoralists through high number of animals sold to purchase food, hence a threat to the household food security.

## 4.0 Human welfare indicators (Utilization of Food)

### 4.1 Nutrition status



**N = 2,051 children**

- The nutrition status of children below five years improved, with 13.4 % of children rated at risk of malnutrition, 4.5 % less that of May. This was attributed to improvement in availability of supplementary food at the household level during the month.
- The rates of those at risk of malnutrition was highest in pastoral, irrigated cropping & Agro-pastoral livelihood zones and was lower in mixed farming livelihood zone.
- The nutrition status was better than the long term mean.

#### 4.2 Human health

- Fatal diarrhea and vomiting outbreak suspected to be cholera in Amaya community (Churo division).
- Malaria outbreak reported in the project area.
- Mumps outbreak in Kapunyany sub-location (Kolowa division) and Kamrio community (Nginyang division).

#### 4.3 Flagged areas

Diarrhea and vomiting outbreak suspected to be cholera in Amaya community and malaria outbreak in the project area. These areas require particular attention.

#### 5.0 Current intervention measures

##### 5.1 Non-food interventions

The following programmes are currently ongoing in the project area and are meant to mitigate the disease, drought and famine stress in the project area.

- Laying of water pipes for Chesirimion, Tangelbei & Karimodow (East Pokot district) and Kimalel & Endao/ Loberer (Marigat district) boreholes – MONKOAL.
- Peace building initiatives within the districts' of the project area by various stakeholders i.e. the PSC, DPC, DSC, World Vision, Community Elders, Youth groups, Political leaders, Pastors, Peace caravan and ALRMP.

##### 5.2 Food aid

- None

### 5.3 Coping strategies

The coping mechanisms employed by the vulnerable population in all the livelihood zones during the month were;

- Borrowing food from relatives
- Reduction in size of meals & skipping some
- Eating wild foods
- Performing casual labour & petty trade.

This was employed by majority of the sampled households while less than half of the households sold their livestock. Compared to previous months, the situation is improving.

### 6.0 Recommendations to DSG and KFSM

- The veterinary department / agencies should step up support to the livestock health sub sector through vaccinations and treatment of clinical cases. In particular, more efforts should be directed to investigate cases of premature births in goats as CCPP upsurge is suspected to be the cause; heart water upsurge; foot rot upsurge in cattle; fatal diarrhea in goats & swelling of the head in sheep; camel orf upsurge; goats & sheep pox outbreak; chicken flu outbreak and the poisonous weed killing cattle in the areas mentioned of the project area.
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