



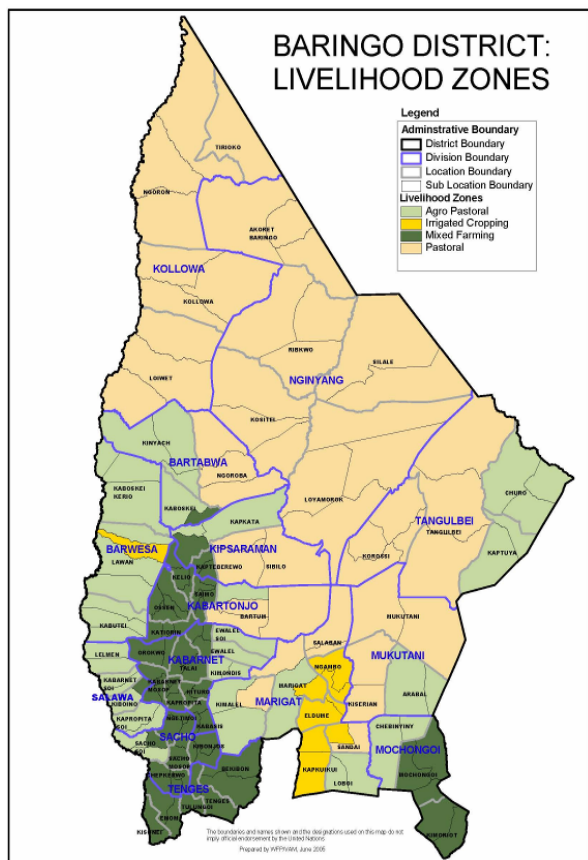
**OFFICE OF THE PRIME MINISTER**

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

**DROUGHT MONITORING BULLETIN, OCTOBER 2009**

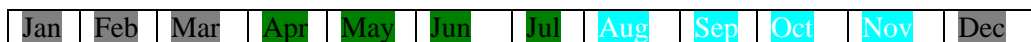
**Baringo Central/ North/ East Pokot/  
Marigat Districts**

**Warning Stages**



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

**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**

- The district received a total of 189 mm of rainfall from three recording stations for an average of 5 days. Temporal distribution was poor and the rainfall received had insignificant impact on the grazing and water resources.
- The quality and quantity of forage worsened in all the livelihood zones except in mixed farming.
- Water availability for both human and livestock was insufficient in pastoral, irrigated cropping and Agro-pastoral livelihood zones.
- Body condition of livestock was poor and deaths were reported due to the effects of drought stress in the pastoral, irrigated cropping and agro-pastoral livelihood zones.
- Milk production was low and only in camels and this was attributed to poor body condition of the animals due to insufficient pasture and browse.
- The average prices of livestock decreased in cattle and sheep while it insignificantly increased in goats. The increase in price of goats was attributed to availability of buyers and less number of animals in the markets during the month. Also prices in poultry increased than in last month due to high demand.
- The average prices of food crops and other commodities increased during the month owing to unavailability of supplies in the markets within the district and the neighboring districts coupled with high demand during the month as distribution of relief food delayed for nearly two months.
- Sale of fish, casual labour, petty trade (local beer brewing e.t.c.), sale of charcoal and sale of wood products were the other alternative sources of income for most sampled households during the month after the sale of livestock.
- The nutrition status of children declined during the month, with the percentage of those rated at risk of malnutrition increasing to 20.5 % from 18.4 % the previous month. This was attributed to delay in distribution of relief food and lack of supplementary food for children at the household level in the EMOP relief food distribution during the month and the previous one. This however is likely to worsen as milk production from the animals declined due to the drought effects.

### **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 Red water upsurge in goats; premature births in goats; goats & sheep pox outbreak; CCPP upsurge in goats and diarrhea upsurge in goats, leading to deaths in the affected areas.
- The GOK and other aid agencies to put more efforts 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 normalises as malnutrition cases are rising, prices of food commodities are rising, animals are dying due to drought effects hence people cannot cope with the stresses, also milk production from animals declined drastically due to the drought effects that has 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 to supply more anti-malarial drugs in all the rural health facilities that are far from the district hospitals to cope with Malaria upsurge at the moment and investigate cases of Enteric fever upsurge in Yatya, Kamrio and Kapunyany communities and Tangulbei and Churo divisions.
- The District Game Warden to ensure that Baboons, Hyenas and hunting dogs preying on the livestock are contained to save the pastoralists who are losing their animals daily. This has been an alarming scenario for several months now.

### **Current interventions**

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

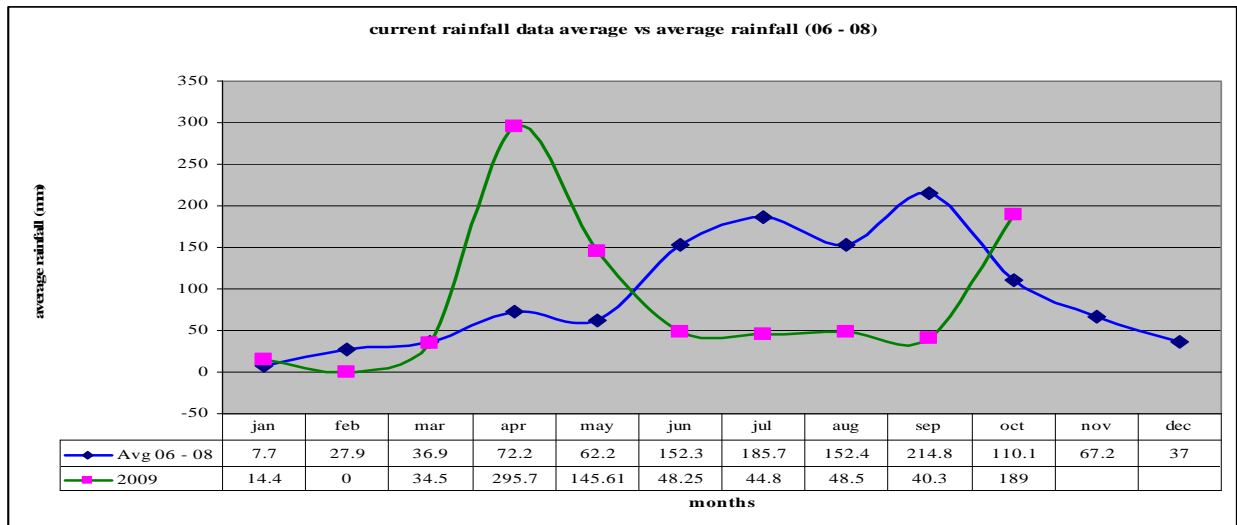
- Water trucking in East Pokot district – **ALRMP**.
- Peace building initiatives within the districts' of the project area by various stakeholders i.e. the **PSC, DPC, DSC, World vision, Community Elders, Youth groups, Political leaders, Pastors and ALRMP**.

#### **Food Aid**

- The **EMOP** relief food distribution phase 2 commenced in late May 2009 targeting the following number of population in the districts: - East Pokot – **47,423 (GFD)**, Baringo central – **3,476 (FFA)**, Marigat – **13,975 (FFA)** and Baringo North – **23,288 (FFA)** persons. However, the number that benefits from the relief food currently is lower compared to the number that is supposed to benefit according to the provisional district population census recently done.

## 1.0 Environmental indicators (Stability)

### 1.1 Rainfall



**Source: ALRMP rain gauge data stations**

- 189 mm average rainfall was received from 3- recording stations, for 5 days average during the month compared to 40.3 mm from 5- recording stations the previous month. This was not normal at the time of the year as shown on the graph where the current average is above the long term mean by 71.7 %. However, the drought period has extended more than expected.

### 1.2 Condition of natural vegetation and pasture

- The quantity of forage in all the livelihood zones worsened during the month due to lack of rain. The quality of the available pasture is poor.
- The average distance to grazing areas remained at 10.5 km as 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 showers.
- The water sources were pans & dams (10 % have water), natural rivers, traditional river wells, shallow wells, boreholes, springs and lakes.
- Distance to the nearest water source during the month remained at an average of 5.4 km same as the previous month for most of the households.

### 1.4 Emerging issues

- The little showers received during the month made no improvement on the browse and pasture condition. However, poor rejuvenation of pasture was noted owing to erratic rain experienced and the distances to water sources and pastures also remained far. 90 % of the Satellite herds are still held up at the dry season grazing points (Marakwet, Turkana central, Pokot central, Samburu and Laikipia west districts).
- Goats, cattle and sheep continue to die due to the effects of the extended drought period in pastoral, agro-pastoral and irrigated cropping livelihood zones.

- Baboons predating on goats due to lack of food in Mosuro community (Mukutani division), Kositei location (Nginyang division), Barpello community (Kolloa division), Komolion community (Tangulbei division), Barkipi community (Marigat division), Kamrio community (Nginyang division) and kaptuya community (Churo division).
- Hyena predating on goats in Kolloa location, Sirata/ Mosuro community (Mukutani division), Chemintany community (Bartabwa division) and Rukus community (Korossi location).
- Hunting dogs predating on goats in Loiwat location (Kolloa division).
- Scarcity of water in Orus location and Cherumbo community in Tangulbei and Churo divisions respectively owing to drying up of water pans and shallow wells in the areas.
- Abnormal out-migration of livestock in search of water and pasture in pastoral, Agro-pastoral and irrigated cropping livelihood zones.

### **1.5 Implications on food security**

- Worsening browse and pasture condition leading to livestock deaths and increasing distances to water accessibility had a negative impact to household food security for the pastoralists.

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

### **2.1 Livestock production**

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

- Livestock body condition was fair for both small stock and cattle respectively in mixed farming while are poor in pastoral, Agro-pastoral and irrigated cropping livelihood zones. Goats, cattle and sheep continue dying in the latter zones due to the effects of the extended drought period.
- This was not normal at the time of the year owing to extended period of the dry spell.

#### **2.1.2 Livestock diseases**

- Red water upsurge in goats in Rukus community (Tangulbei division).
- Premature births in goats in Endao community (Marigat division).
- Goats and sheep pox outbreak in Endao community (Marigat division).
- CCPP upsurge in Yatya community (Kipsaraman division).
- Diarrhea in goats leading to deaths in Kamrio and Kinyach communities (Nginyang & Bartabwa divisions respectively).

#### **2.1.3 Milk production**

- Milk production declined owing to extended effects of drought.
- This was not normal at the time of the year as the drought effects persisted.

## **2.2 Crop production**

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

- Agro-pastoralists reported crop failure due to lack of rain earlier in the year.
- This was not normal at the time of the year as this is supposed to be the short rains season.

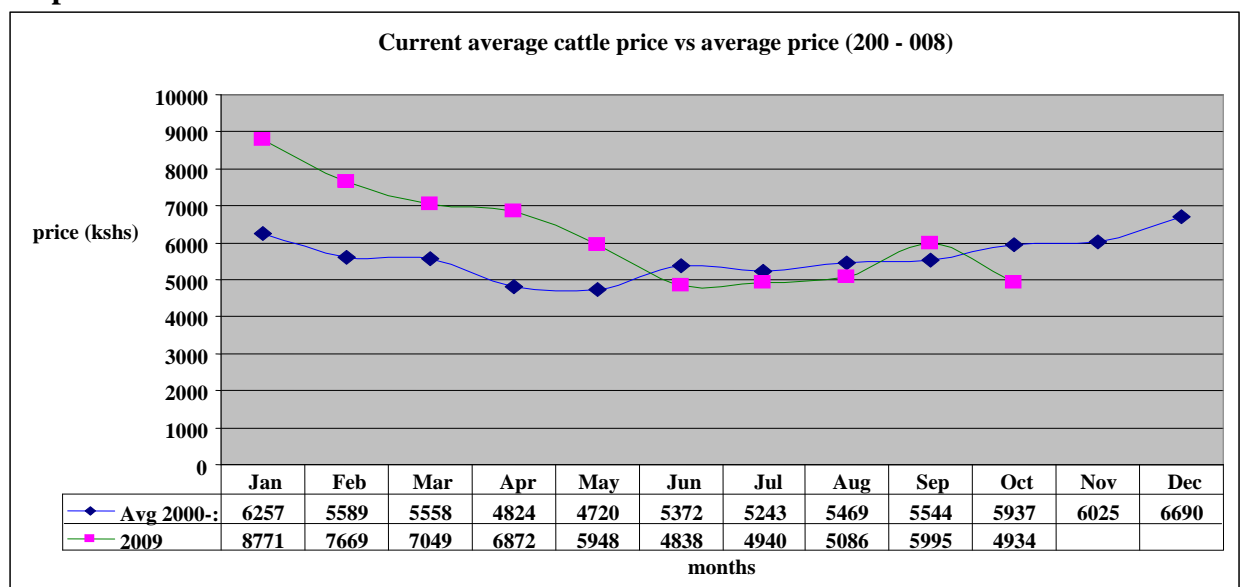
## 2.3 Implications on food security

- Milk production at household level declined yet this is the food depended upon by the pastoralists and children.
- Goats, cattle and sheep were dying due to drought stress. This was a major threat to food security at the household level. Relief food needs to be given to the population continuously until the situation normalizes.
- Market prices of cereals and legumes remain high in the project area and availability in the markets remains scarce.

## 3.0 Access to food

### 3.1 Livestock marketing

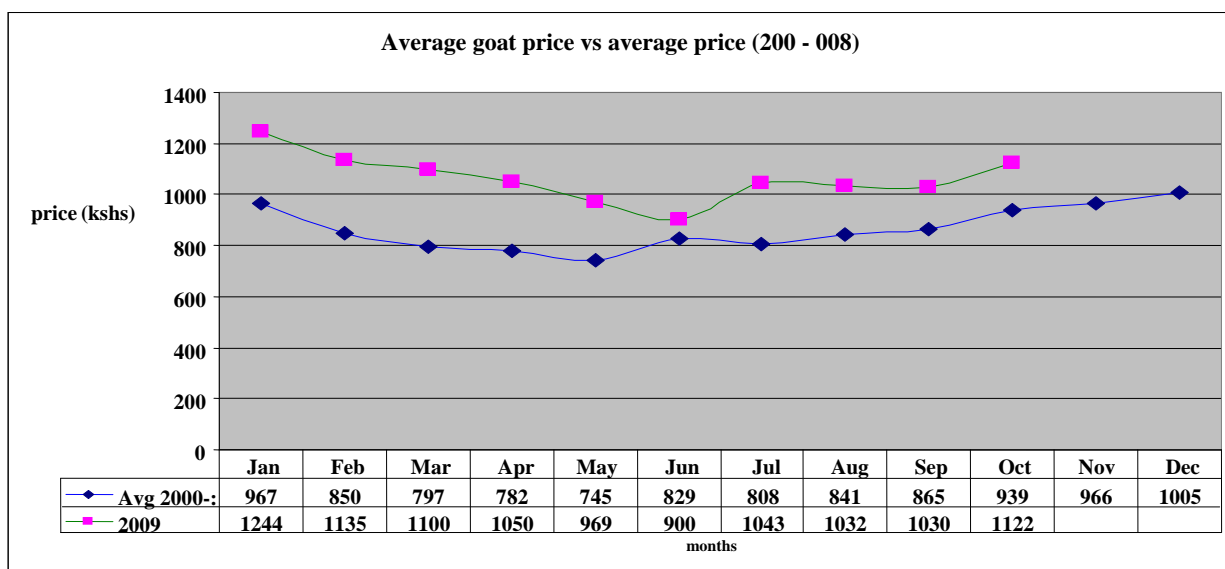
#### 3.1.1 Cattle prices



N = 480 HH

- The average price showed a decrease in the price of cattle from Ksh 5,995 in the previous month to Ksh 4,934 in October.
- The decrease was not normal at the time of the year when the price of cattle is expected to go up at this time of the assumed rainy season. The price was, however, lower than the long term mean by 16.9 % as shown on the graph.
- The price decrease was attributed to the poor body condition of the livestock owing to insufficient pasture during this period. This was not good for household food security.
- Bartabwa division had the highest average cattle price of Ksh 7,000. This was attributed to fair body condition due to accessing favorable pasture along the Kerio river basin. Kipsaraman division had the lowest average price of Ksh3,200 due to poor body condition.

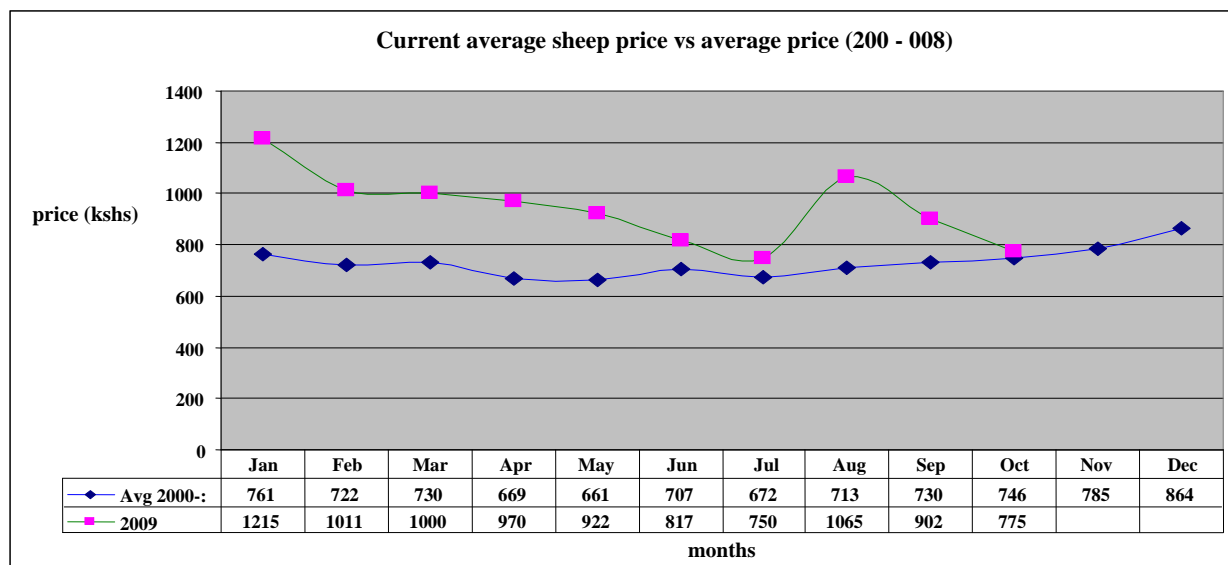
#### 3.1.2 Goats prices



N = 480 HH

- The average goat price increased from Ksh1,030 in September to Ksh1,122 in October showing some appreciation. The price was, however, slightly above the long term mean by 19.5 %. The increase was attributed to high demand of goats in the markets causing sales to go up. This was a positive impact to household food security.
- Bartabwa division had the highest goat price average of Ksh2,135 due to accessing external buyers while Kipsaraman division had the lowest price average of Ksh653 owing to poor body condition.

### 3.1.3 Sheep prices



N = 480 HH

- The average sheep price decreased from Ksh902 in September to Ksh775 in October showing depreciation. The price decrease was attributed to poor body condition and low demand. The price was, however, higher than the long term mean by 3.9 %. This had a negative impact on household food security.
- Nginyang division had the highest sheep price at Ksh 875 owing to high demand while Tangulbei division had the lowest price at Ksh650 as a result of poor body condition of the animals coupled with low demand.

### 3.2 Livestock sales

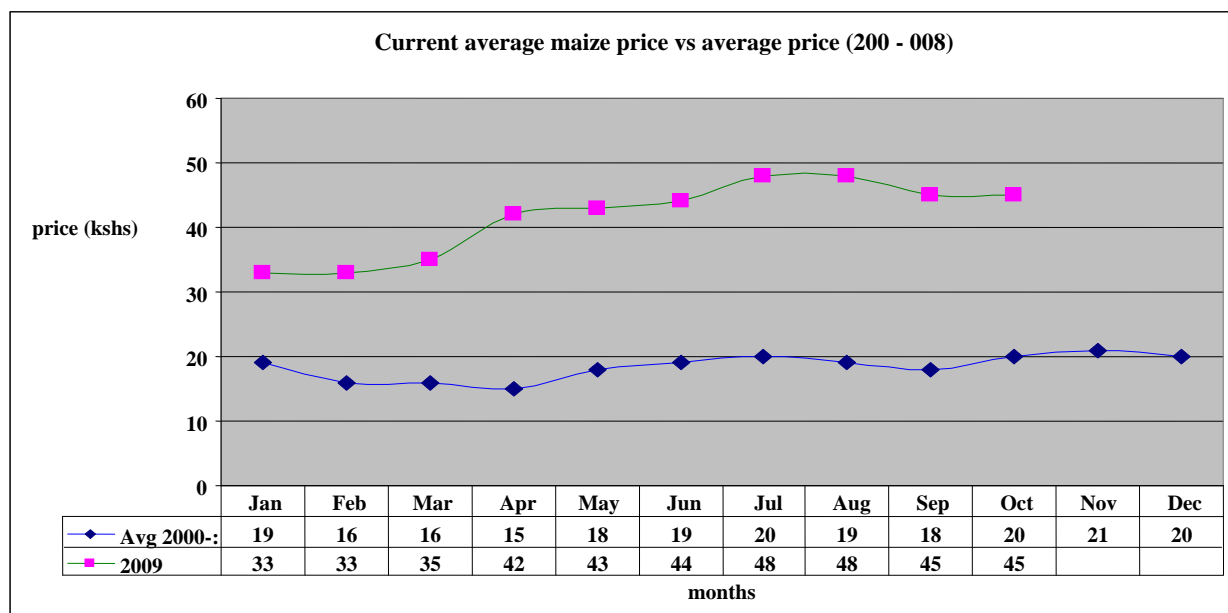
- The volume of livestock sales increased in the month compared to the previous months as a result of demand for food in the markets during the month.
- Goats, sheep, poultry and cattle were the main livestock offered for sale at the markets.
- Pastoral, Agro-pastoral and Irrigated cropping livelihood 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 not normal at the time of the year owing to high demand for food during the current drought period.

### 3.3 Milk consumption

- Milk consumption by household members declined drastically in all the livelihood zones.
- Compared with the previous month the milk consumption at household level decreased owing to the effects of the extended drought period. This had a negative impact on food security at household level especially for the under five year's children.

### 3.4 Crop prices

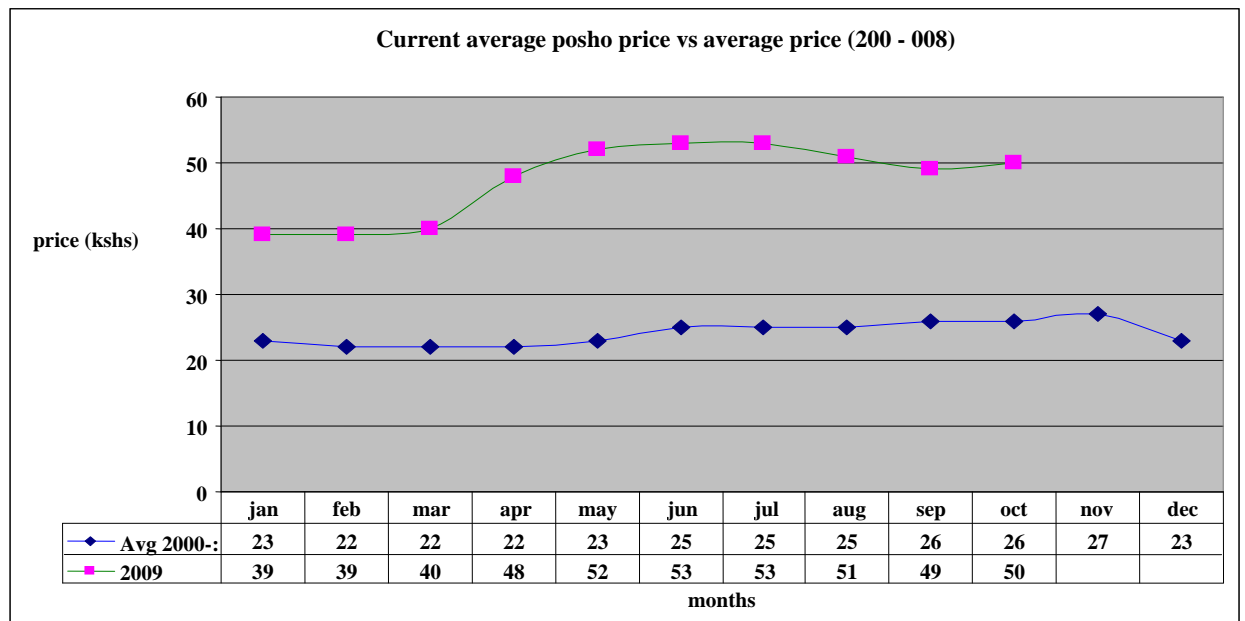
#### 3.4.1 Maize prices



N = 480 HH

- The average maize price during the month was Ksh45, same as that of the previous month (highest price in the market is Ksh70 per kg).
- The average price was more than the long term mean by 125 % owing to scarcity of the food at the markets however the demand has picked up in the markets because of famine stress that has affected more of the population in the project area.
- Inadequate 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 the time of the year owing to the scarcity of the food in the project area.

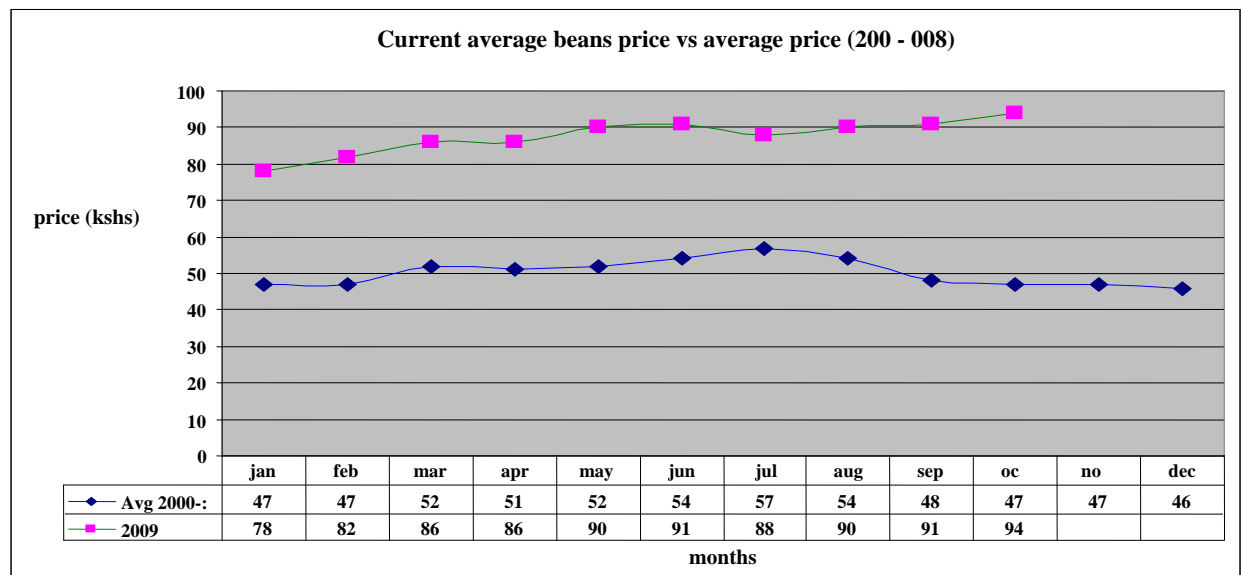
### 3.4.2 Posho (maize meal) prices



N = 480 HH

- The average price of posho per during the month was Ksh50 per kilo, Ksh1.00 more than that of the previous month (highest price in the market is Ksh80 per kg).
- The average price increased due to high demand of maize in the local markets.
- The price was more than the long term mean by 92.3 %, eroding the purchasing power of the pastoralists as they had 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 currently on purchasing the commodity from their local markets which normally is dictated by it's availability unlike the mixed farming who are producers and access it easily.
- The price of posho was not normal at the time of the year owing to erratic availability of maize in the markets.

### 3.4.3 Beans prices



N = 480 HH

- The average price of beans during the month was Ksh 94, Ksh3 more than the previous month, highest price in the market was Ksh120 per kg.
- The price was more than the long term mean by 100 %.
- The average price increased due to unavailability of the food commodity in the markets within the district and also from the neighboring districts. However, the prices were too high at the moment to cope with the purchasing power of the pastoralists. This is really a threat to 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 the time of the year owing to its erratic availability in the markets.

### 3.5 Income

#### 3.5.1 Crop income

- Agro-pastoralists reported crop failure in the district due to lack of rainfall earlier in the year.

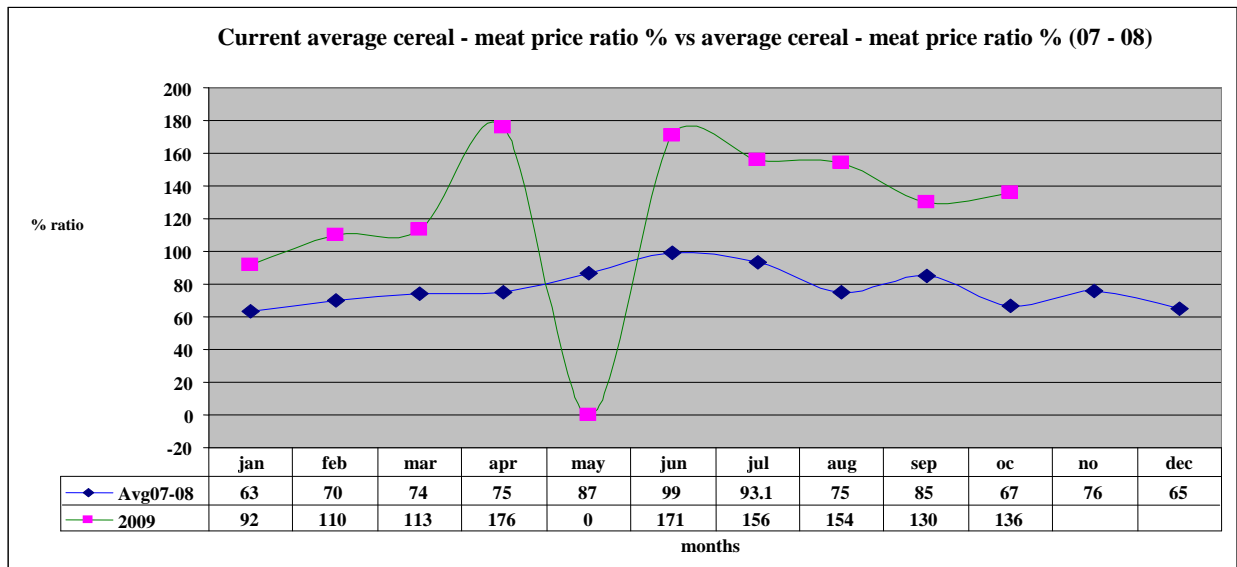
#### 3.5.2 Livestock income

- Livestock sales income improved than that of the previous month due to fair availability of external buyers during the month who normally purchase large number of animals and offer better prices.
- The income obtained from the livestock was not normal at this time of the year because of the less number of animals sold at the markets owing to the drought stress.

#### 3.5.3 Other income

- Casual labour was another major source of income during the month, with approximately 1/3 of the household's members engaged as casual laborers, followed by sale of fish, sale of charcoal, sale of wood products and petty trade (local beer brewing).
- The average daily wage rate per casual for the month was Ksh90, above that of 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.

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



N = 480 HH

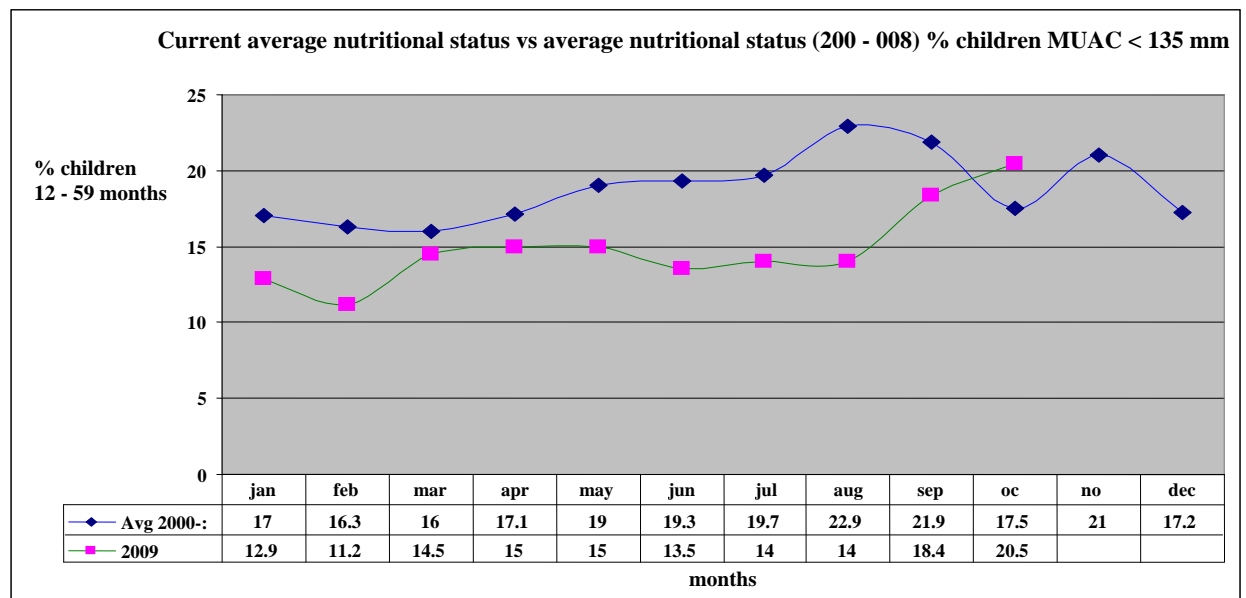
- Terms of trade worsened by 5 % during the month from that of the previous month.
- The price ratio remained worse in pastoral, Agro-pastoral and irrigated cropping livelihood zones because of low prices offered for the livestock sales by the traders as compared to high prices to purchase cereals while it was lower in mixed farming livelihood zone owing to fair accessibility of cereals and better livestock prices in this area.
- The current 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 4,800 market price, he/ she has to sell 5 (five) goats, that goes for an average of Ksh 1000 at the moment to meet the price and the sack cannot last for even a month. This 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 coupled with the erosion of the peoples' purchasing power depleted the asset level of the pastoralists through high number of animals sold to purchase foods hence a threat to the household food security.

## 4.0 Human welfare indicators (Utilisation of food)

### 4.1 Nutrition status



N = 2,083 children

- The nutrition status of children declined during the month, with the percentage of those rated at risk of malnutrition increasing to 20.5 % from 18.4 % the previous month.
- This was attributed to delay in distribution of relief food and lack of supplementary food for children at the household level in the EMOP relief food distribution during the month and the previous one.
- This however is likely to worsen as milk production from the animals declined due to the drought effects.
- Higher rates were noted in pastoral, irrigated cropping and agro-pastoral livelihood zones and lowest in mixed farming livelihood zone.
- The rates were worse compared to the long term mean.

### 4.2 Human health

- High incidences of malaria were reported, which were severe during the month in Nginyang division and Kinyach community (Bartabwa division).
- Enteric fever upsurge was reported in Yatya, Kamrio and Kapunyany communities (Kipsaraman, Nginyang and Kolloa divisions respectively) and Tangelbei and Churo divisions as a result of consuming dirty pools of water.
- Worsening nutritional status of the elderly was noted and they are at risk due to lack of supplementary food at the household level.

### 4.3 Flagged areas

- Pastoral, Agro-pastoral and irrigated cropping livelihood zones reported the highest malnutrition rates. These areas require particular attention.

## 5.0 Current interventions

### 5.1 Non-food interventions

- Water trucking in East Pokot district – ALRMP.
- 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 and ALRMP.

## **5.2 Food Aid**

- The EMOP relief food distribution phase 2 commenced in late May 2009 targeting the following number of population in the districts: - East Pokot – 47,423 (GFD), Baringo central – 3,476 (FFA), Marigat – 13,975 (FFA) and Baringo North – 23,288 (FFA) persons. However, the number that benefits from the relief food currently is lower compared to the number that is supposed to benefit according to the provisional district population census recently done.

## **5.3 Other coping strategies**

The coping mechanisms employed by the vulnerable population in all the livelihood zones during the month were; migration of livestock in search of pasture and water, borrowing food from relatives, reduction in size of meals and skipping some, eating wild foods and performing casual labour and petty trade. This was employed by majority of the sampled households while a few of the households sold their livestock.

- Compared to previous months, the situation requires more percentage population coverage of Emergency Operation relief food distribution.

## **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 Red water upsurge in goats; premature births in goats; goats & sheep pox outbreak; CCPP upsurge in goats and diarrhea upsurge in goats, leading to deaths in the affected areas.
- The GOK and other aid agencies to put more efforts 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 normalises as malnutrition cases are rising, prices of food commodities are rising, animals are dying due to drought effects hence people cannot cope with the stresses, also milk production from animals declined drastically due to the drought effects that has persisted for a long period.
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