

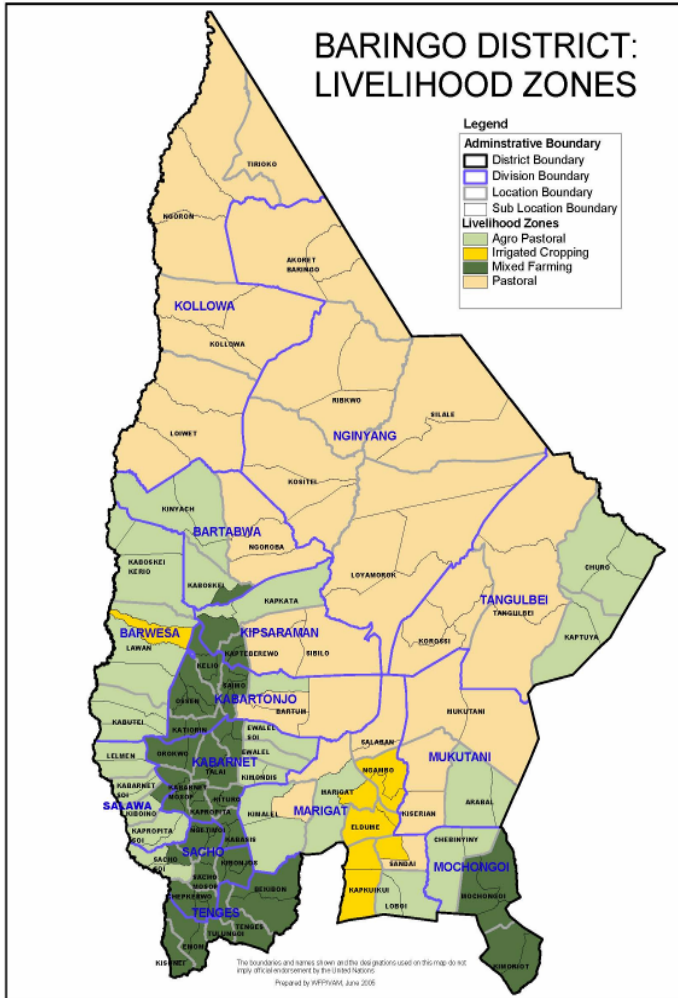


**OFFICE OF THE PRIME MINISTER  
MINISTRY FOR THE DEVELOPMENT OF NORTHERN KENYA  
AND OTHER ARID LANDS  
ARID LANDS RESOURCE MANAGEMENT PROJECT II**

**DROUGHT MONITORING BULLETIN, SEPTEMBER 2009**

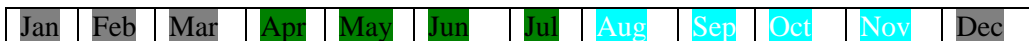
**Baringo Central/ North/ East Pokot/ Marigat Districts**

**Warning Stages**



Livelihood Zone	Warning stage	Trend
Pastoral	Alarm	Worsening
Agro pastoral	Alarm	Worsening
Irrigated Cropping	Alarm	Worsening
Mixed farming	Alarm	Worsening
District	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**

- Poor amount of rainfall was received in the month and temporal distribution was also poor. The rainfall received had insignificant impact on the grazing and water resources. A total of 40.3 mm average was received from 5 recording stations for an average of 2 days.
- The quality and quantity of forage worsened in all the livelihood zones and 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 this was attributed to poor body condition of the animals due to insufficient pasture and browse.
- The average prices of livestock decreased in goats and sheep while they slightly increased in cattle. The increase in price was attributed to availability of buyers and less number of animals in the markets during the month. Also poultry prices decreased compared to the previous month due to low demand.
- The average prices of food crops and other commodities slightly decreased during the month owing to availability of supplies in the markets within the district and the neighboring districts.
- Sale of fish, casual labour, petty trade (local beer brewing e.t.c.) and sale of charcoal and sale of wood products was the other alternative sources of income for most sampled households during the month after the sale of livestock.
- The general nutrition status of children below five years declined during the month, with the percentage of those rated at risk of malnutrition rising to 18.4 % from 14.0 % the previous month. This was attributed to delay in distribution of relief food and supplementary food for children at the household level and the EMOP relief food distribution during the month. The situation is likely to worsen as milk production declined due to the drought.

## **Recommendations 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 sudden deaths in sheep in Ngoron location (Kolloa division), cases of coughing and mucus upsurge in goats in Endao community (Marigat division) and Lice infestation out break in cattle in Kamrio (Nginyang division) for two months now.
- 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 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 should make efforts 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 Ngambo, Endao and Sirata communities in Marigat district.
- The district Game Warden to put more efforts to ensure that Baboons and Hyenas predating on goats in Mosuro (Mukutani division), Kositei location (Nginyang division), Barpello (Kolloa division), Barkipi (Marigat division), Rukus/ Komolion (Tangulbei division) and Kaptuya (Churo division) are contained to save the pastoralists who are losing their animals daily.

### **Current interventions**

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

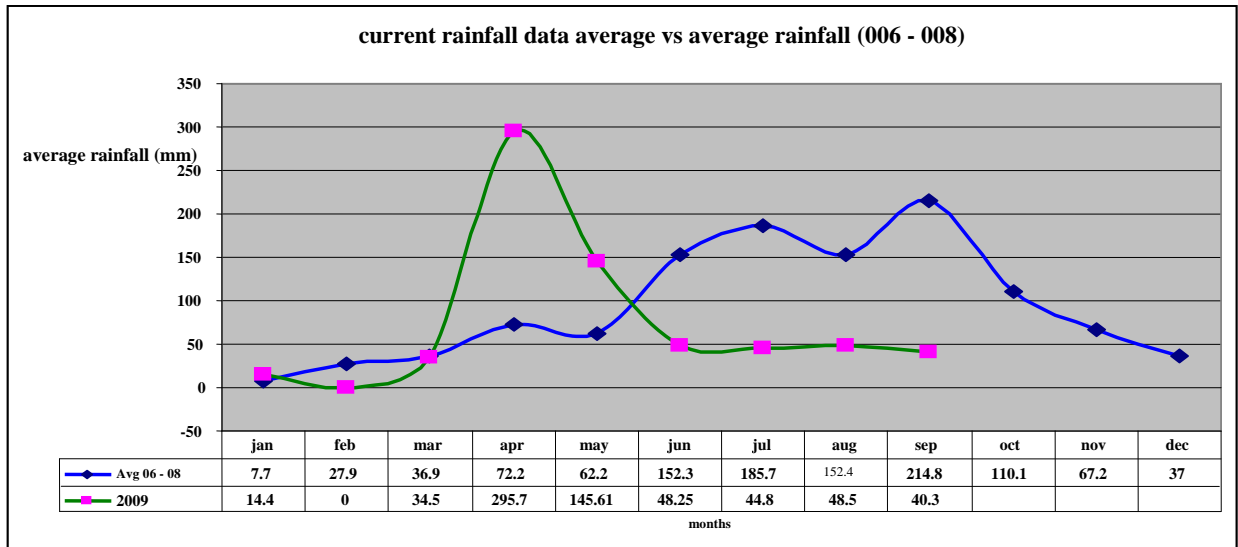
- Water trucking in East Pokot and Marigat districts – ALRMP.
- Peace building initiatives within the districts by various stakeholders i.e. the PSC, DPC, DSC, World vision, Community Elders, Youth groups, Political leaders, Pastors and ALRMP.

#### **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 so less as 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

- 40.3 mm average rainfall was received from 5- recording stations, 2 days average during the month in the project area compared to the previous month where there was 48.5 mm from 1- recording station. This was not normal at the time of the year as shown on the graph where the average was below the long term mean by 81.2 %.
- However, the drought period extended longer 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 was poor.
- The average distance to grazing areas increased from 9.7 km the previous month to 10.5 km during the 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 in use were pans and dams (10 % have water), natural rivers, traditional river wells, shallow wells, boreholes, springs and lakes.
- Distance to the nearest water source during the month increased to an average of 5.4 km from 4.4 km in 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 increased. 90 % of the

satellite herds were still held up at the dry season grazing points (Marakwet, Turkana central, Pokot central, Samburu and Laikipia west districts).

- Goats, cattle and sheep continued to die due to the effects of the extended drought period in pastoral, Agro-pastoral and irrigated cropping livelihood zones.
- Baboons predated 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) and Kaptuya community (Churo division).
- Hyenas predated on goats in Kolloa location and Rukus community (Korossi location).
- Scarcity of water in Ngambo and Sirata/ Logumgum communities owing to drying up of Molo River and insufficient water in Perkeria river.
- 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 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 body condition was fair for both small stock and cattle respectively in mixed farming and poor in pastoral, agro-pastoral and irrigated cropping livelihood zones. Goats, cattle and sheep continued 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**

- Coughing and mucus upsurge in goats and sheep in Endao community (Marigat division).
- Sudden deaths in sheep from unknown disease in Ngoron location, Kolloa division.
- Lice infestation outbreak in cattle in Kamrio community for two months now (Nginyang division).

#### **2.1.3 Milk production**

- Milk production declined in the district 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.
- This was not normal at the time of the year as this is supposed to be the short rains season.

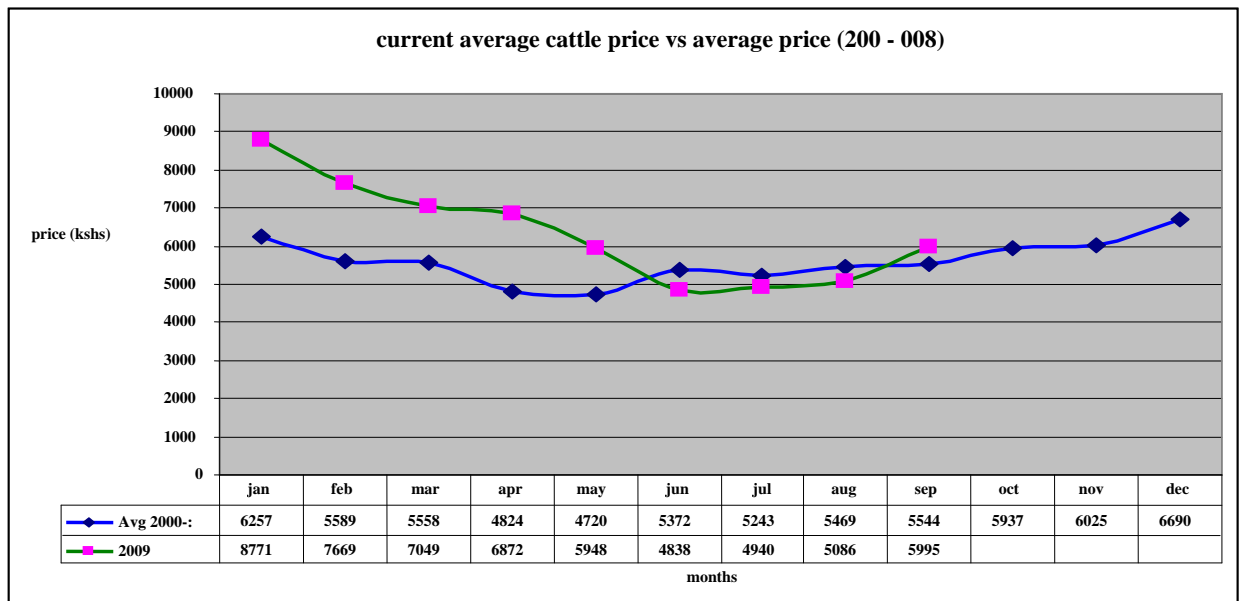
### **2.3 Implications on food security**

- 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 normalises.
- Market prices of cereals and legumes remained high in the district and availability in the markets remained scarce.

### 3.0 Access to food

#### 3.1 Livestock marketing

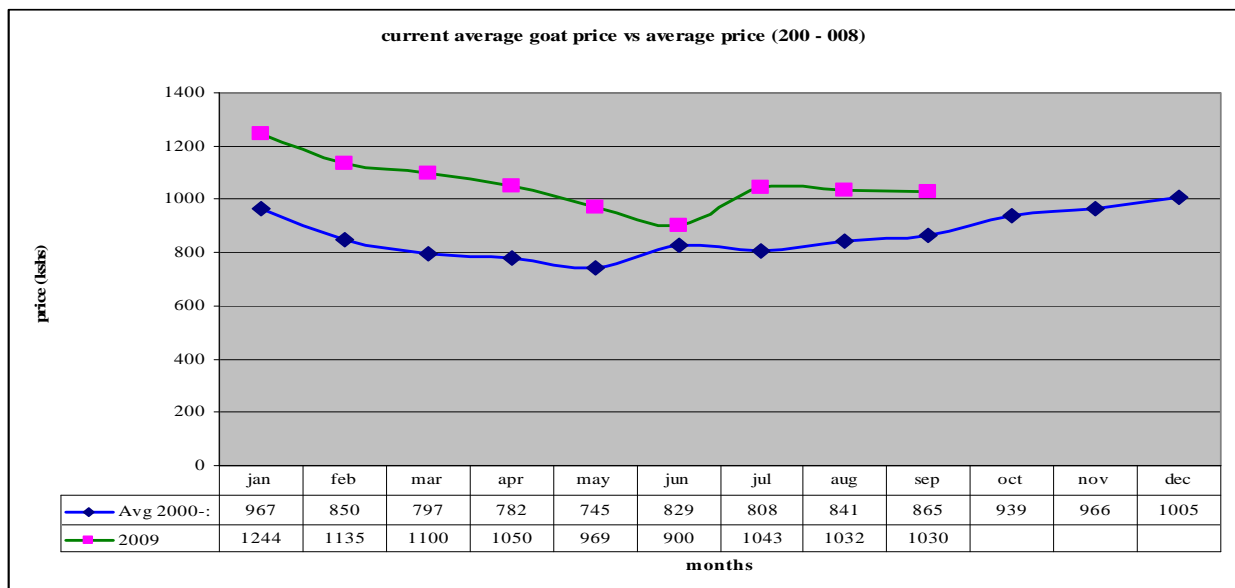
##### 3.1.1 Cattle prices



**N = 480 HH**

- The average price showed a slight increase in the price of cattle from Ksh5,086 in the previous month to Ksh5,995 in September.
- The increase was 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, higher than the long term mean by 8.1 % as shown on the graph.
- The slight price increase was attributed to availability of external buyers during the month. However, the poor body condition of the livestock owing to insufficient pasture during this period contributed to low prices. This was not good for household food security.
- Bartabwa division had the highest average cattle price of Ksh8,000. This was attributed to fair body condition due to accessing favorable pasture along the Kerio river basin. Ngingyang division had the lowest average price of Ksh4,200 due to poor body condition.

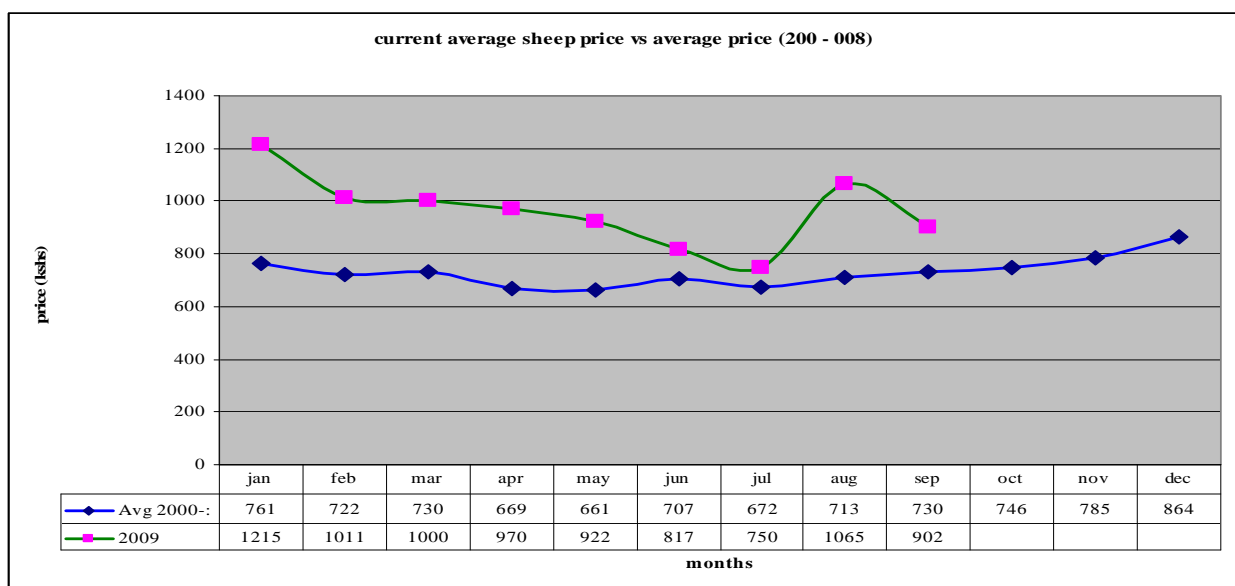
### 3.1.2 Goats prices



**N = 480 HH**

- The average goat price decreased from Ksh1,032 in August to Ksh1,030 in September, showing price depreciation. The price was however slightly above the long term mean by 19.1 %. The decrease was attributed to flooding of goats in the markets, causing sales at throw away price. This had a negative impact on household food security.
- Bartabwa division had the highest goat price average of Ksh1,427 due to accessing external buyers while Kipsaraman division had the lowest price average of Ksh659 owing to poor body condition.

### 3.1.3 Sheep prices



N = 480 HH

- The average sheep price decreased from Ksh1065 in August to Ksh902 in September, showing a depreciation. The price decrease was attributed to poor body condition and low demand. The price was, however, higher than the long term mean by 23.6 %. This had a negative impact on household food security.
- Mukutani division had the highest sheep price at Ksh1,200 owing to accessing peri-urban prices while Kipsaraman division had the lowest price at Ksh475 as a result of poor body condition of the animals coupled with low demand.

### 3.2 Livestock sales

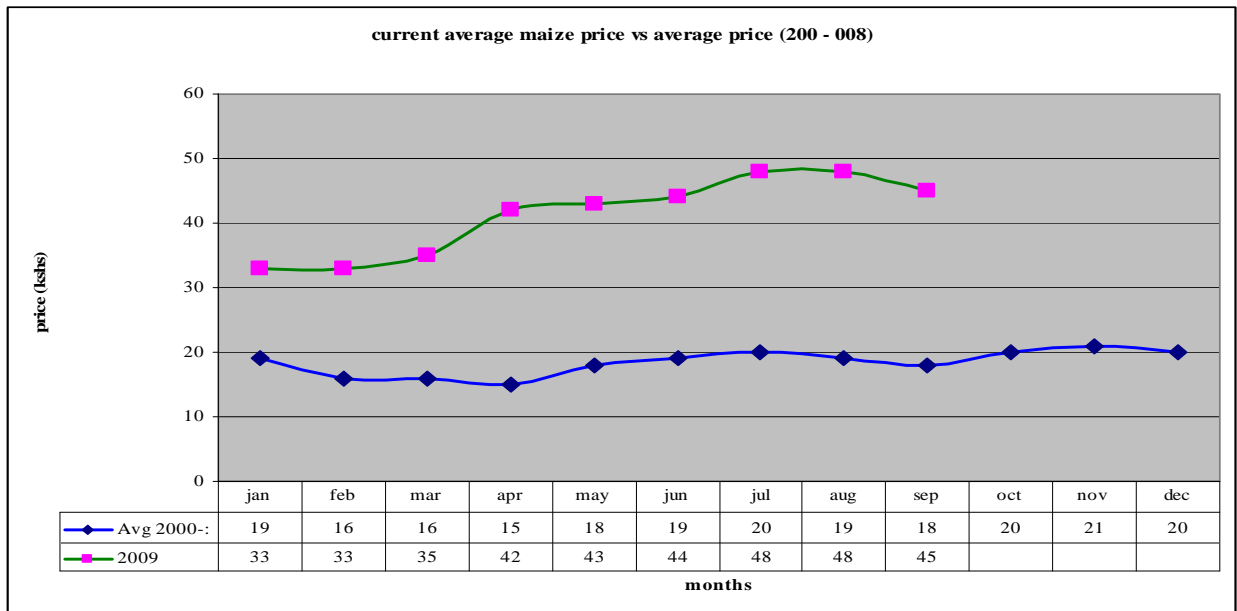
- The volume of livestock sales increased in the month compared to the previous months as a result of demand for food in the markets during the month.
- Goats, sheep, poultry and cattle were the main livestock offered for sale at the markets.
- Pastoral, agro-pastoral and irrigated cropping livelihood 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 prevailing 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 children under five years.

### 3.4 Crop prices (Market prices)

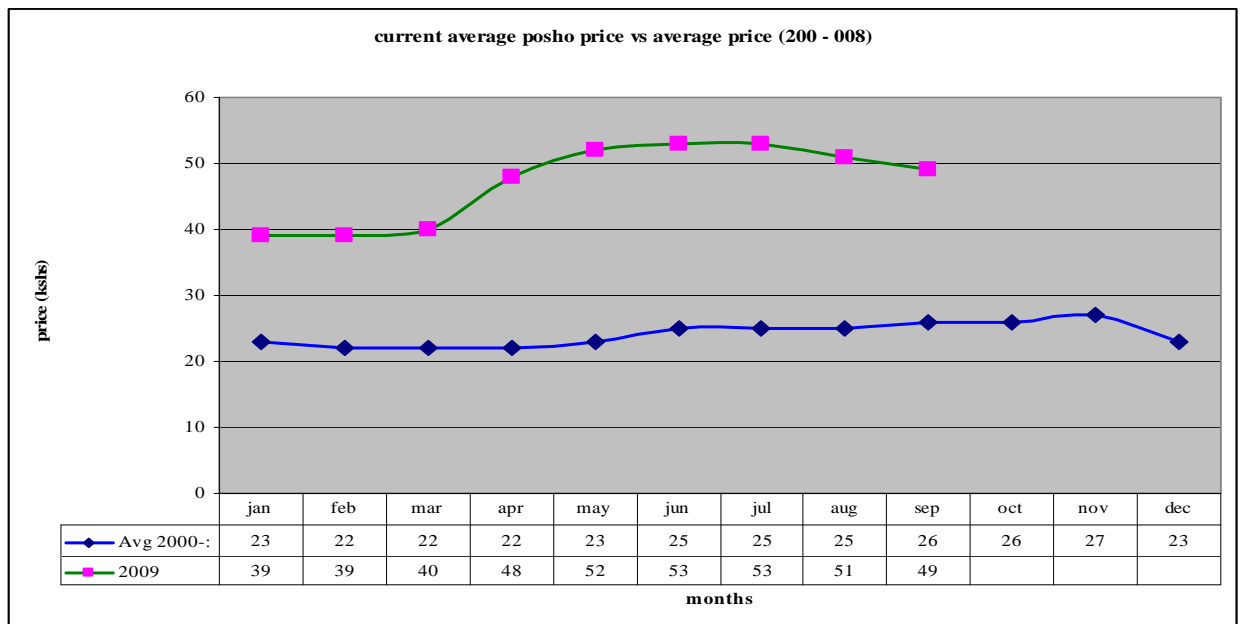
#### 3.4.1 Maize prices



N = 480 HH

- The average maize price during the month was Ksh45, Ksh3 less than that of the previous month (highest price in the market was Ksh70 per kilo).
- The average price was higher than the long term mean by 150 % owing to scarcity of the food at the markets. However, the demand picked up in the markets because of famine stress that affected more of the population.
- The high prices were attributed to inadequate supply of maize to the local markets from Agro- pastoralists within the districts and also neighboring districts.
- 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 districts.

### 3.4.2 Posho (maize meal) prices

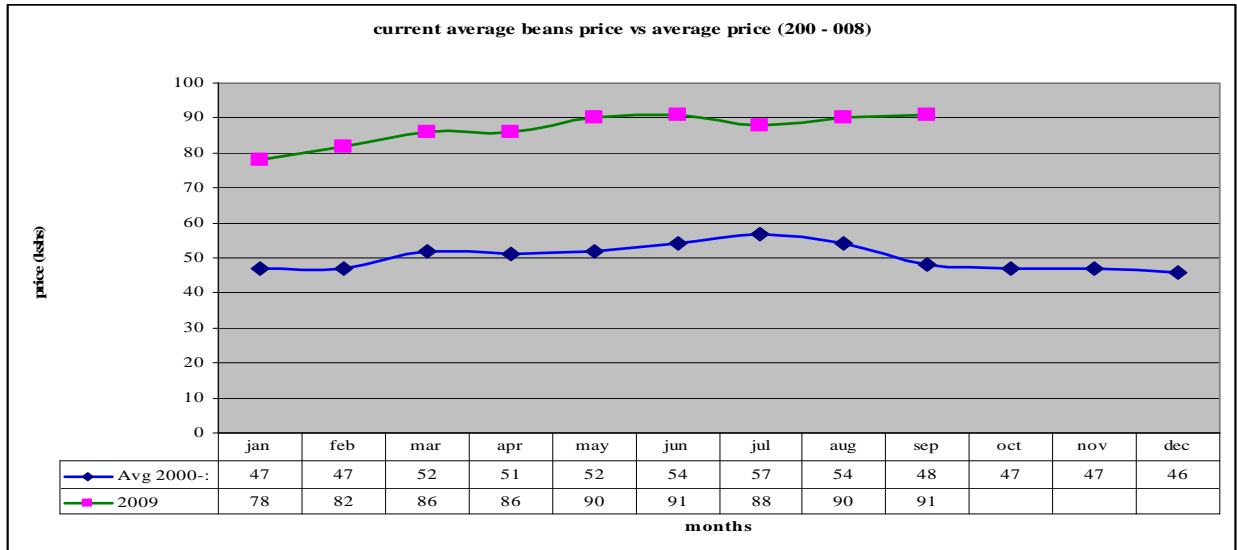


N = 480 HH

- The average price of posho during the month was Ksh49, Ksh2 less than that of the previous month (highest price in the market is Ksh80 per kg).
- The average price decreased due to availability of maize in the local markets.
- The price was more than the long term mean by 88.5 %, which eroded 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 on purchase of the commodity from their local markets, which normally is dictated by 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 Ksh91, Ksh1 more than the previous month. The highest price in the market was Ksh120 per kg.
- The price was more than the long term mean by 89.6 %. The price increase was due to unavailability of the food commodity in the markets within the districts and also from the neighboring districts. However, the prices were too high, eroding the purchasing power of the pastoralists. This posed 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 due to lack of rainfall.

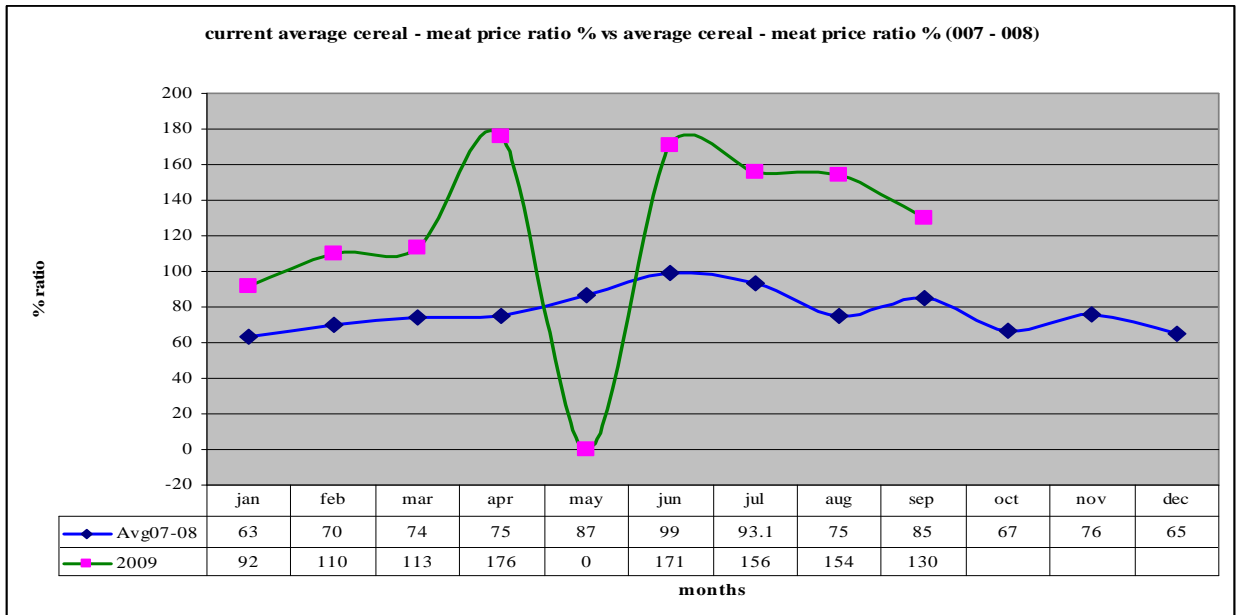
#### 3.5.2 Livestock income

- Livestock income improved compared to 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 is 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 labor was another major source of income during the month, with approximately 1/3 of the household 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 Ksh 86, below 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

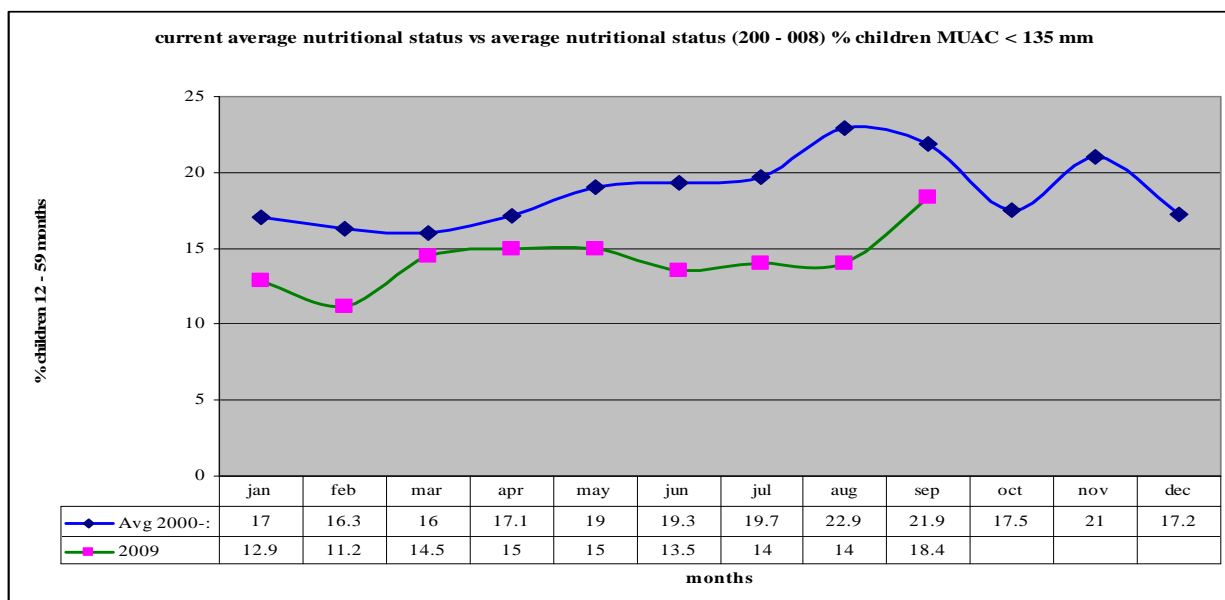
- Terms of trade improved by 15.6 % during the month from that of the previous month.
- The price ratio remained worse in pastoral, agro-pastoral and irrigated cropping livelihood zones because of low prices offered for the livestock sales by the traders as compared to high prices to purchase cereals while it was lower in mixed farming livelihood zone owing to fair accessibility of cereals and better livestock prices in this area.
- The cereal: meat price ratio was not normal at the time of the year. For a pastoralist to purchase 90 kg sack of Posho at an average price of Ksh4,800 market price, he/ she had to sell 5 (five) goats at an average of Ksh1000 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 offered 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 = 2,079 children

- The general nutrition status of children below five years declined during the month, with the percentage of those rated at risk of malnutrition rising to 18.4 % from 14.0 % the previous month.
- This was attributed to delay in distribution of relief food and supplementary food for children at the household level and the EMOP relief food distribution during the month. The situation is likely to worsen as milk production declined due to the drought.
- The highest rates were recorded in pastoral, irrigated cropping and Agro-pastoral livelihood zones and lower in mixed farming livelihood zone.

### 4.2 Health

- High incidences of malaria, which were severe, were reported in the district.
- Enteric fever upsurge was reported in Ngambo, Endao and Sirata communities (Marigat district) for three months now as a result of consuming dirty river water. Molo and Perkeria rivers were dry in Ngambo and Sirata/ Logumgum areas.
- Chicken pox outbreak was reported in Kapunyany (Kolloa division).
- Poor nutrition status of pregnant women caused miscarriages in Kapunyany (Kolloa division).

### **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**

The following programmes were on-going in the district and are meant to mitigate the drought and famine stress.

- Water trucking in East Pokot and Marigat districts – 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 benefited from the relief food was less compared than 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 populations 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 sudden deaths in sheep in Ngoron location (Kolloa division), cases of coughing and mucus upsurge in goats in Endao community (Marigat division) and Lice infestation out break in cattle in Kamrio (Nginyang division) for two months now.
- 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 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 should make efforts 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 Ngambo, Endao and Sirata communities in Marigat district.
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