

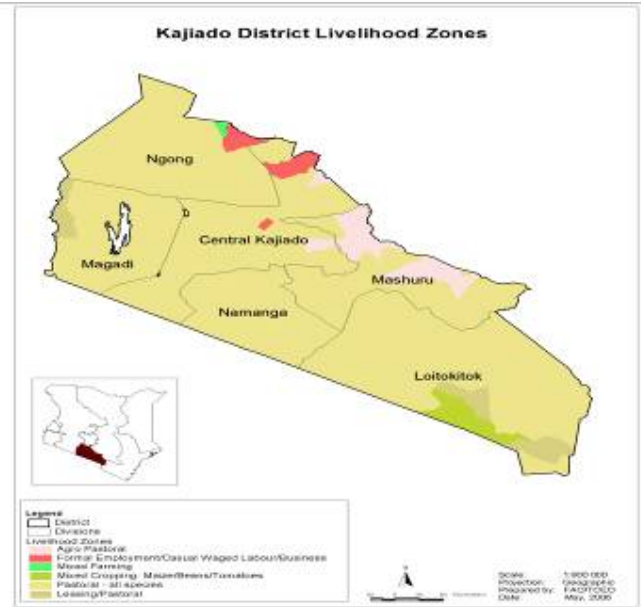


**OFFICE OF THE PRIME MINISTER  
MINISTRY OF STATE FOR THE DEVELOPMENT OF NORTHERN KENYA AND OTHER ARID LANDS  
ARID LANDS RESOURCE MANAGEMENT PROJECT II**

**DROUGHT MONITORING BULLETIN, DECEMBER 2009**

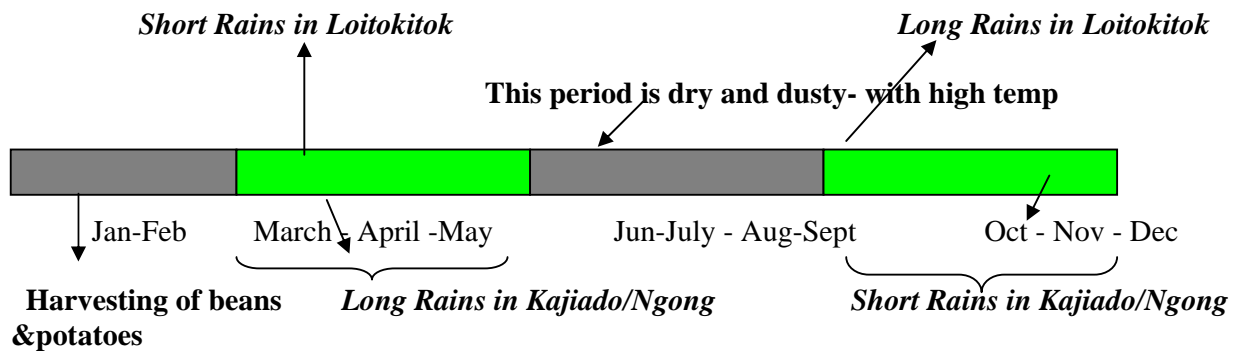
**Kajiado Central, North and Loitokitok districts**

**Warning stages**



Livelihood Zone	Warning Stage	Trend
Pastoral-All Species	Alarm	Improving
Agro Pastoral	Alarm	Improving
Mixed Farming	Alarm	Improving
District	Alarm	Improving

**Seasonal Calendar**



## **Situation overview**

- Moderate to intense rainfall was received in most parts of Loitokitok, Kajiado and Ngong districts during the last dekad of the month. An average of 129.1mm was recorded.
- Water availability for agriculture, livestock and domestic improved as result of the enhanced rains in the last two weeks of the month of December, recharging all temporary surface water points such as water ponds, dams and pans had water, reducing the dependence and reliance on boreholes.
- By the close of the month there was marked improvement in water availability with corresponding reduction in return distance (less than 10 Km in most areas to 3 Km) , improving livestock body condition, some migration of livestock into the district and average cattle prices increasing by 31.3 per cent from Ksh4,520 in November to Ksh6,584 in December 2009. However, the lack of sufficient regeneration of pastures has resulted in clustering of in areas that received rains in November negating the gains of pastures regeneration. The situation is expected to improve in the coming months
- Livestock mortalities were estimated at 50%, close to 60% Of some individivulas households have lost close to 90% of their herds.
- There was improvement in early planted crop in the high potential areas of Loitokitok and Ngong, with beans and potatoes maturing, while maize was at knee height to tussling/forming cobs to hard dough stage. However, in the marginal rain-fed crop growing the performance of crops was poor, as result of the extended dry spell. Kajiado is a net food importer, with close 90% of the household food needs being from purchases.
- Milk production remained low, maize and beans were available but at high price (maize and beans prices were at Ksh42 and Ksh80 per kg respectively). Continuing maize export ban from Tanzania and poor pastoralists' terms of trade exacerbated the deficits.
- EMOP relief food operation experienced severe food pipeline break as no food distribution was undertaken in November and December 2009 and the pipeline is expected to be restored by January 2010 with a reduced ration level (50%)
- Flooding was reported in Ngong (Magadi, Isinya and Ewuaso) and Loitokitok, causing infrasture damage by the close of the month ( bridges, roads, dams and dwellings ) and loss of lives ( 4 in Ewuaso Kedong and Magadi).
- Cholera outbreak was reported in Central and Ngong district particularly in Kware Slums in Ongata Rongai (Ngong), Bissell, Ilmarba, Lorngosua, Kumpa, Meto, Ngatatiek and Ipartimaro ( Central). 4 deaths and 202 suspected cases were reported while 6 cases were confirmed.
- Charcoal burning and sand harvesting declined owing to constant disruption by heavy rainfall. Demand for labor in crop growing areas improved; rates ranged between Ksh120 and 150.
- The nutrition status of children below 5 years remained high, with percentage of those rated at the risk of malnutrition (based on the Mid Upper Arm Circumference -MUAC < 135mm measurement) recorded at 14.98 from 14.97 in November.
- The drought warning stage was at alarm and improving in all livelihood zones. The food security status is rated as highly food insecure and recovery is pegged on the rains continuing through December and preferably into January 2010.

## **Recommendations to DSG and KFSM**

- Provision of relief food: Restoration of EMOP relief food operation and expansion of school feeding program in the next term to cover more schools in the pastoral areas (Action: WFP).
- Livestock Production and Veterinary Services: Restocking of livestock, especially the breeding herds, to enable pastoralist restore the losses estimated at 50% and livestock disease surveillance/ disease control : vaccination and provision of FMD, CBPP, LSD, trpanocidal drugs and CCPP, sheep and goat pox vaccines, and adequate and contingency and preparedness for RVF, in the event of the Elnino (action: DVS/DVO).

- Agriculture: Avail ling the relief seeds stock for the districts (MoA)
- Health and Nutrition : Mitigation high malnutrition and cholera and diarrheal disease surveillance (MoH).

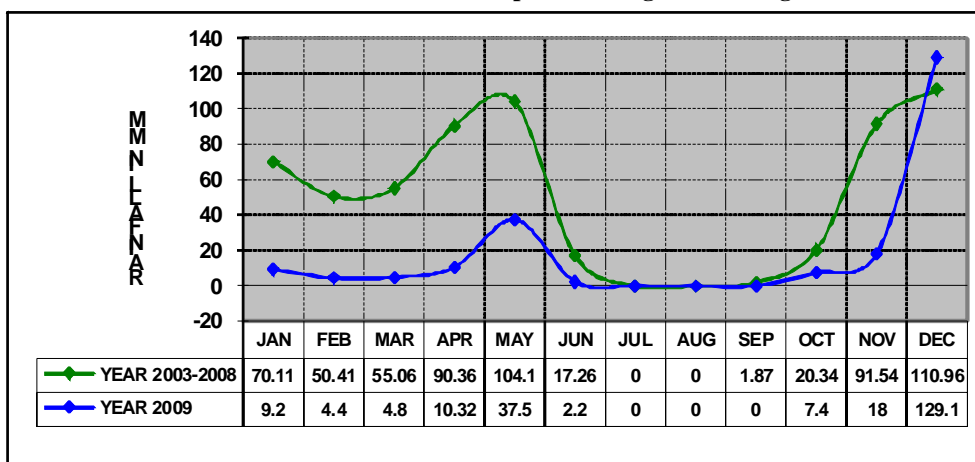
### Current interventions

<b>Institution</b>	<b>Intervention (on going)</b>
<b>Livestock and Agriculture</b>	<ul style="list-style-type: none"> <li>• RVF vaccination : 15,000 small stock vaccinated in the hot spots areas of Mashuru, Kajiado Central (DVO – Kajiado Central) and CCPP vaccination</li> <li>• Relief seeds provisions</li> </ul>
<b>Water development</b>	<ul style="list-style-type: none"> <li>• 100 plastic tanks of 10,000-16,000 liters for schools and community , distributed to institution – on going</li> <li>• Drilling and rehabilitation of boreholes and shallow wells</li> <li>• Diesel subsidy to community boreholes</li> </ul>
<b>Relief Food EMOP</b>	<ul style="list-style-type: none"> <li>• Up scaling of population from 15% to 35% of the larger Kajiado population with effect from October 2009</li> </ul>
<b>Nutrition and Health</b>	<ul style="list-style-type: none"> <li>• Implementing an Integrated Management of Acute Malnutrition (IMAM) Programme (Mercy – USA and Concern Worldwide)</li> <li>• Cholera surveillance and community awareness campaign (ALRMP/Mom)</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>• Construction of PCEA Upper Matasia science lab (Ksh.2,500,000) in Kajiado North, Pilewa Primary dormitory ( Ksh.3,000,000) in Kajiado Central and a classroom at Inkoi Suk Primary School, Loitokitok (Ministry for Development Of Northern Kenya and other Arid Lands)- ongoing</li> </ul>

# 1.0 Environmental indicators (Stability)

## 1.1 Rainfall

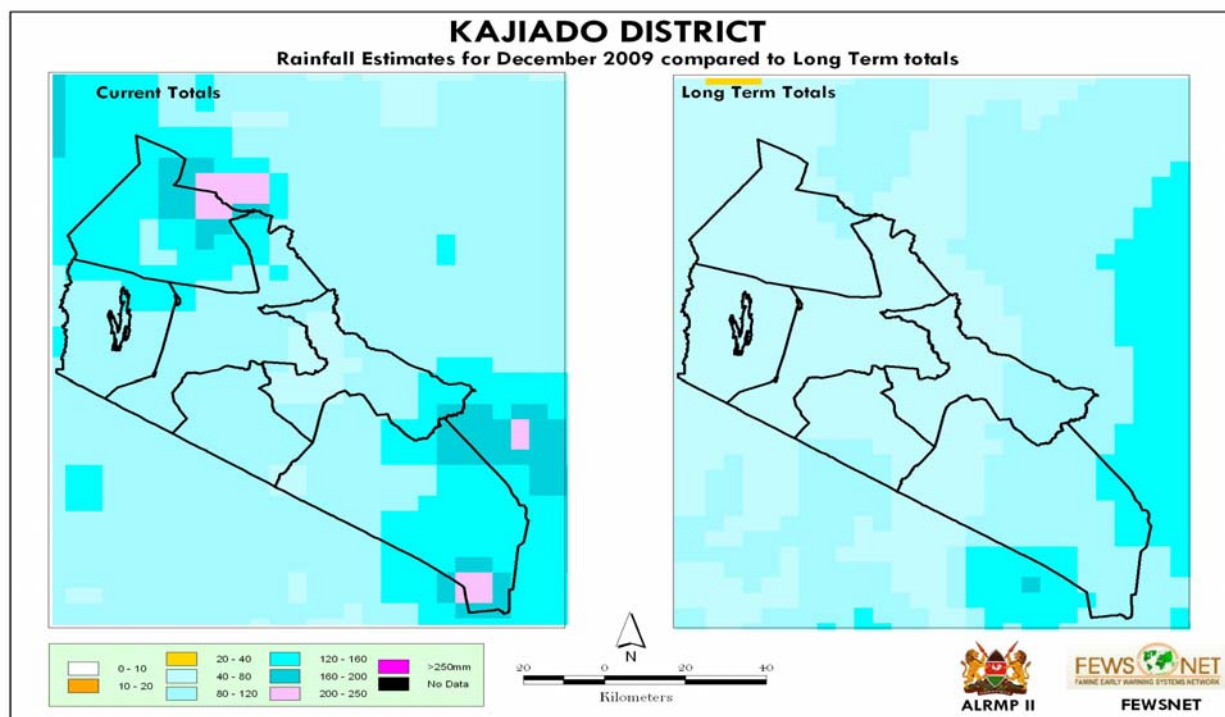
Rainfall data as at December 2009 compared to long term average 2003-08



Source: ALRMP sample sites. Total sample size (n)-11 sites

- Moderate to heavy and well distributed rainfall was recorded in all the livelihoods/districts, with incidences of torrential rains, resulting into floods with corresponding damage and menace in Ngong, Isinya, Loitokitok, Mashuru and Magadi.
- Availability of good rainfall across all livelihood zones is expected to trigger improvement in food security in the districts.

Division	Central Loitokitok	Kajiado central	Magadi	Namanga	Ngong	Mashuru	Isinya
Amount (mm)	211	68	72	115	122.4	75.4	241
No. Of Rainfall Days	15	8	7	11	11	4	10

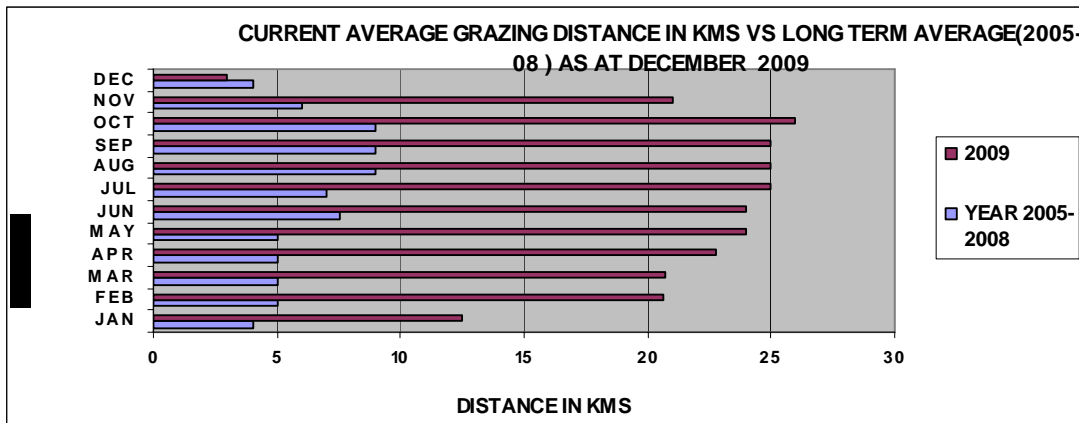


## 1.2 Condition of natural vegetation and pasture

There was improvement in pasture and browse availability and accessibility as result of regeneration to all livestock types. The observed range condition had corresponding positive impact on livestock productivity and subsequently desirable impact on food security status.

### 1.2.1 Distance to grazing areas

Distance to grazing areas was within the normal radii of less than 10 Kms in most areas.

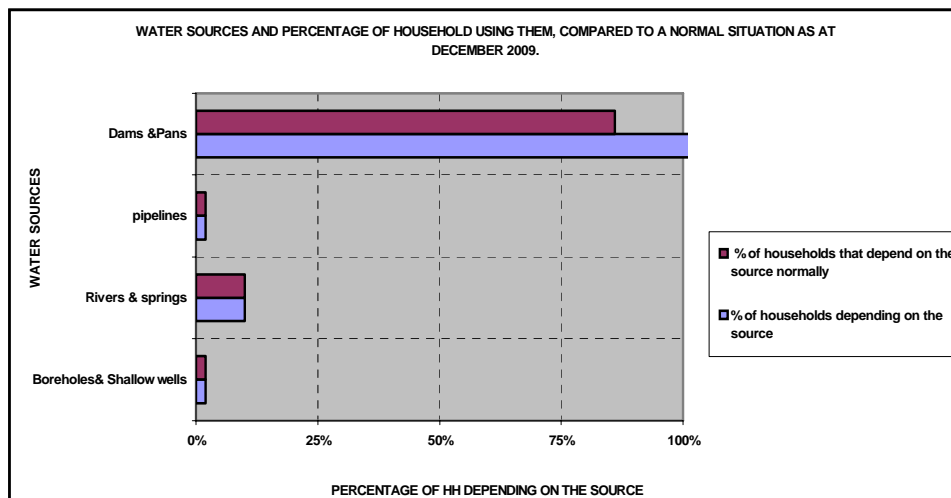


Source: ALRMP sample sites, Total Sample size (n) 270 households

The observed situation was normal.

## 1.3 Water sources and availability

Table 2: Water sources and percentage of household using them, compared to a normal situation.

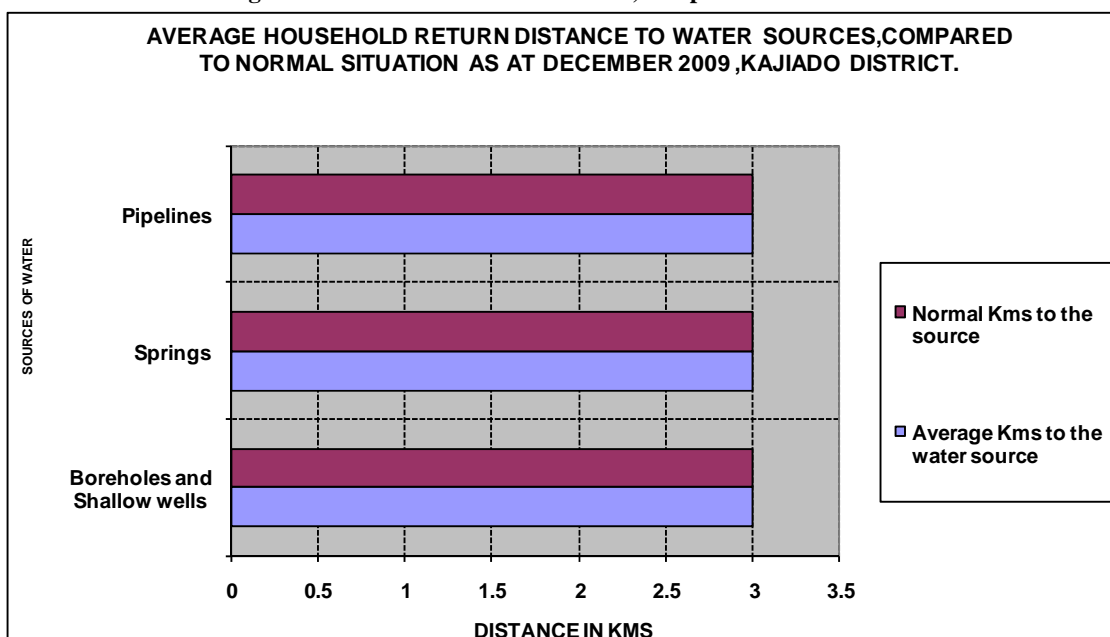


Source: ALRMP sample sites, Total Sample size (n) 270 households

Most temporary water sources (dams and pans) were recharged. Natural springs and seasonal rivers had adequate water. Generally, water availability and accessibility was good across all the three districts. The observed situation was normal.

### 1.3.1 Household access to water

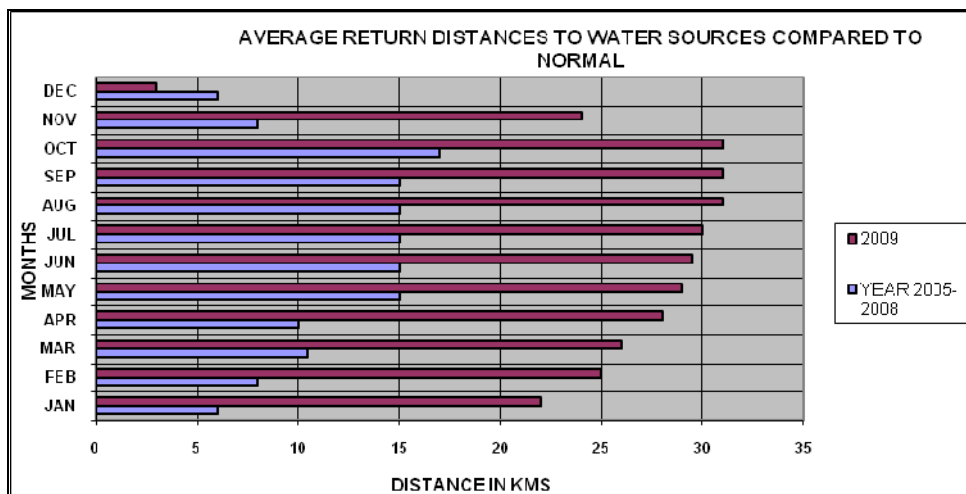
Table 3: Average return distances to water sources, compared to a normal situation



Source: ALRMP sample sites, Total Sample size (n) 270 households

The average distance to water sources was 3kms. Return time for fetching water for domestic use reduced to less than 1hour in most areas.

### 1.3.2 Livestock access to water



Source: ALRMP sample sites, Total Sample size (n) 270 households

Distance from grazing points to water points was 3kms (one way) and the observed situation was normal at this time of the year.

### 1.4 Emerging issues

- Increasing cases of floods on the low land, with most feeder roads being rendered impassable as a result of heavy floods, bridges and Irrigation canals were swept away by floods and

livestock and human deaths (Ewuaso Kedong and Magadi). Crop damage in the low lands and in the irrigation farms.

- Foot and Mouth Disease (FMD), contagious caprine pleuropneumonia (CCPP) were reported by most household's members. Cholera outbreak in Ngong and Central districts. Lack of sufficient regeneration of pastures and clustering of livestock in areas that received earlier and have good pastures

## 2.0 Rural economy indicators (Food availability)

### 2.1 Livestock production

#### 2.1.1 Livestock body condition

All livestock kinds maintained good body condition district wide. This is mainly attributed to pasture and water availability in most parts of the district. The observed trend had positive implications on food security as livestock in good body condition fetched good prices.

#### 2.1.2 Livestock health

Foot and Mouth Disease (FMD) and contagious caprine pleuropneumonia (CCPP) were reported by most household's members.

#### 2.1.3 Milk production

- Most households interviewed during the month indicated availability of milk though the quantity was small. An average of 1.5 liters was recorded. Milk was mostly from shoats as most lactating cows and calves died as a result of drought. The milk consumption trend had positive food security implications at household level.

#### 2.1.4 Livestock migration

Most livestock were in their wet season grazing areas.

## 2.2 Crop production

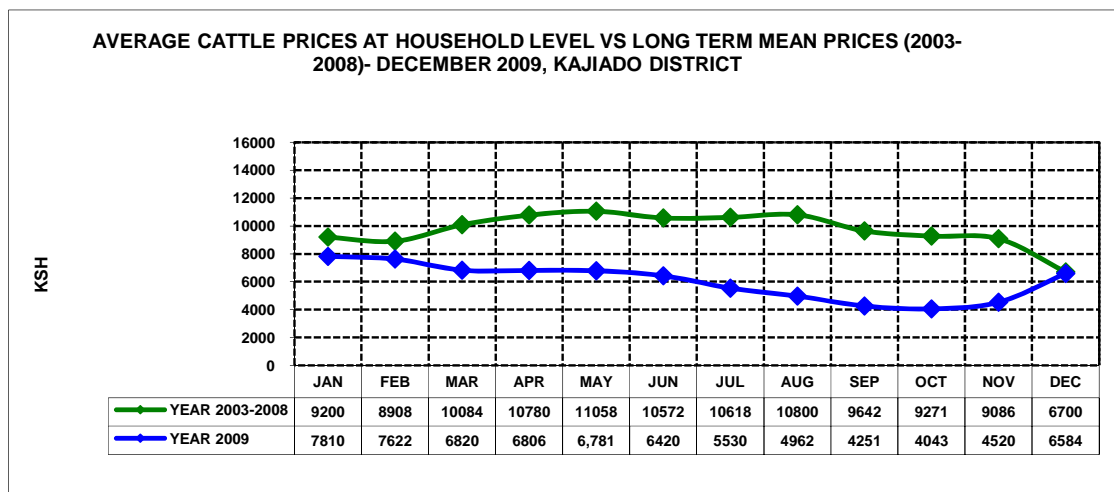
### 2.2.1 Timeliness and status of crop production activities

- Crop performance in high potential crop growing areas improved. maize was at knee high to tussling/forming cobs to hard dough stage. Beans and potatoes were maturing. However, in the marginal rain fed crop growing the performance of crops was poor, as result of the extended dry spell. Cases of rotting of mature beans as a result of disproportionate rainfall were reported in Rombo, Entarara and Ilasit in Loitokitok district.

## 3.0 Access to food

### 3.1 Livestock marketing

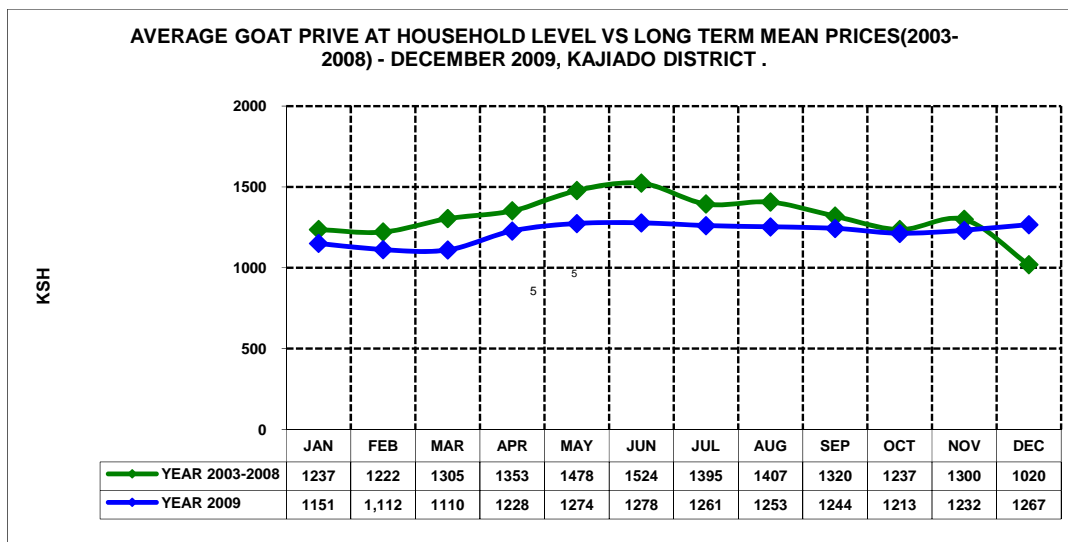
#### 3.1.1 Cattle prices



Source: ALRMP sample sites, Total Sample size (n) 270 households

Average cattle prices increased by 31.3 per cent from Ksh4,520 in November to Ksh 6,584 in December. The price was below long term average by 1.73 per cent. The observed trend was attributed to improved body condition and decline in supply to the markets as farmers were holding back their livestock anticipating livestock improvement.

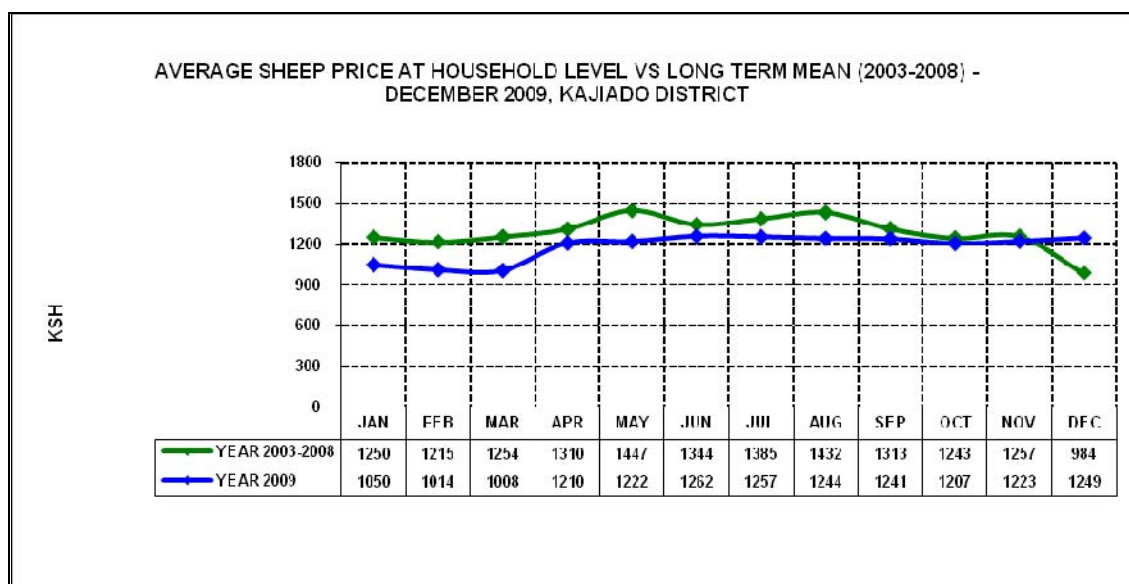
### 3.1.2 Goats prices



Source: ALRMP sample sites, Total Sample size (n) 270 households

Average goat prices increased slightly by 2.76 percent from Ksh1,232 in November to Ksh1,267 in December. The observed trend was attributed to improved body condition and decline in supply to the markets as farmers were holding back their livestock anticipating livestock improvement.

### 3.1.3 Sheep prices



Source: ALRMP sample sites, Total Sample size(n) 270 households

Sheep prices increased by 2.0 percent during the month from Ksh1223 in November to Ksh1249. The increase was attributed to decline in supply to markets. Browse condition improved in most areas improving condition of shoats.

### 3.1.4 Milk consumption

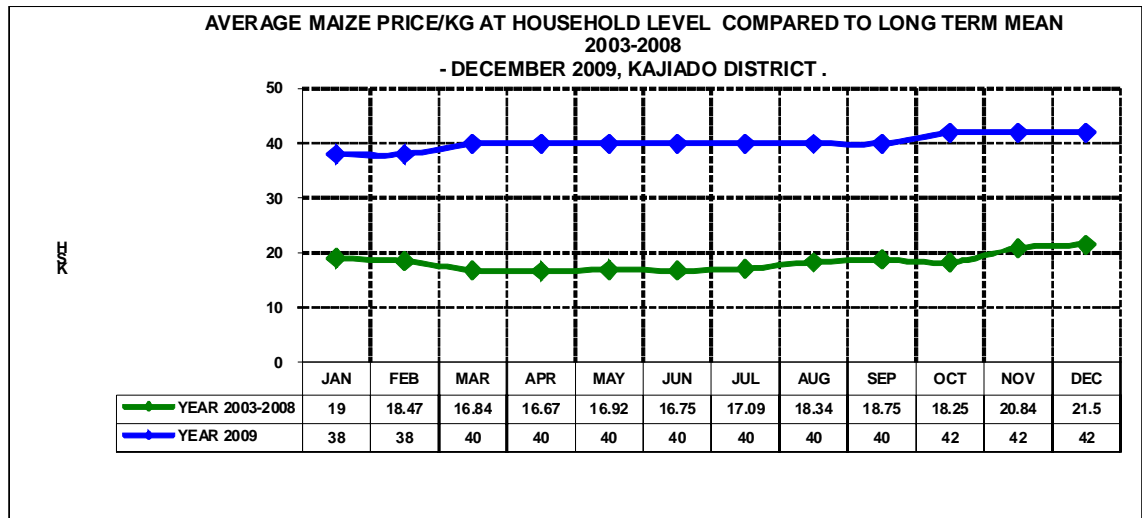
Availability and accessibility of milk in the rural pastoral household was on upward trend. However, the observed situation was below normal compared to normal year. The effects of the recent drought are obvious as most farmers lost close to 50% of their herd. Improved access to milk had positive implications on food security, especially for children under five years.

### 3.2 Implications on food security

Improved livestock prices had positive implications on food security at household level. Availability of vegetables at affordable prices reduced the burden of purchasing highly priced cereals.

### 3.3 Food prices

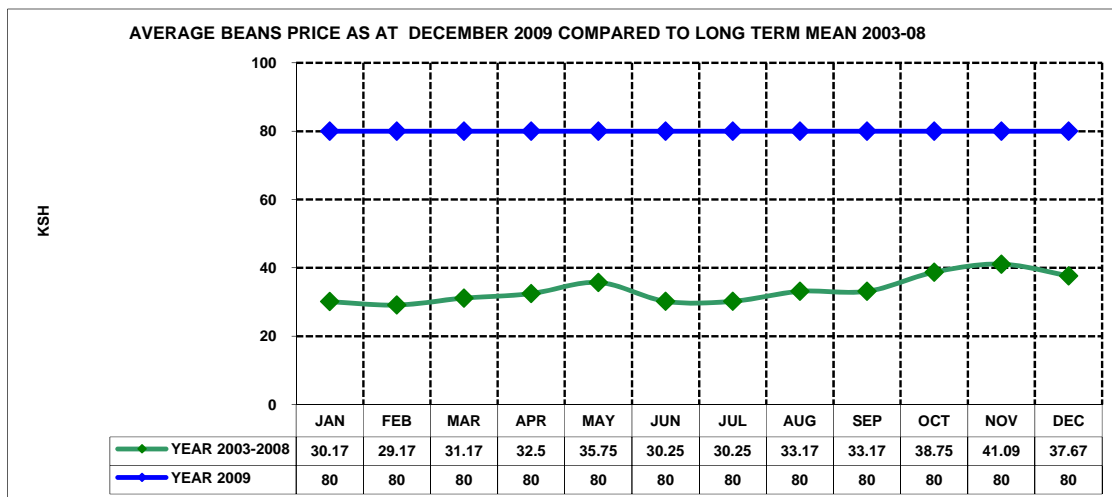
#### 3.3.1 Maize prices



Source: ALRMP sample sites, Total Sample size (n) 270 households

The average maize price stabilised at Ksh 42 per kilo. The district depends on external supplies from neighbouring districts and Tanzania. The scarcity is mainly attributed to poor performance of crops as a result of recent drought.

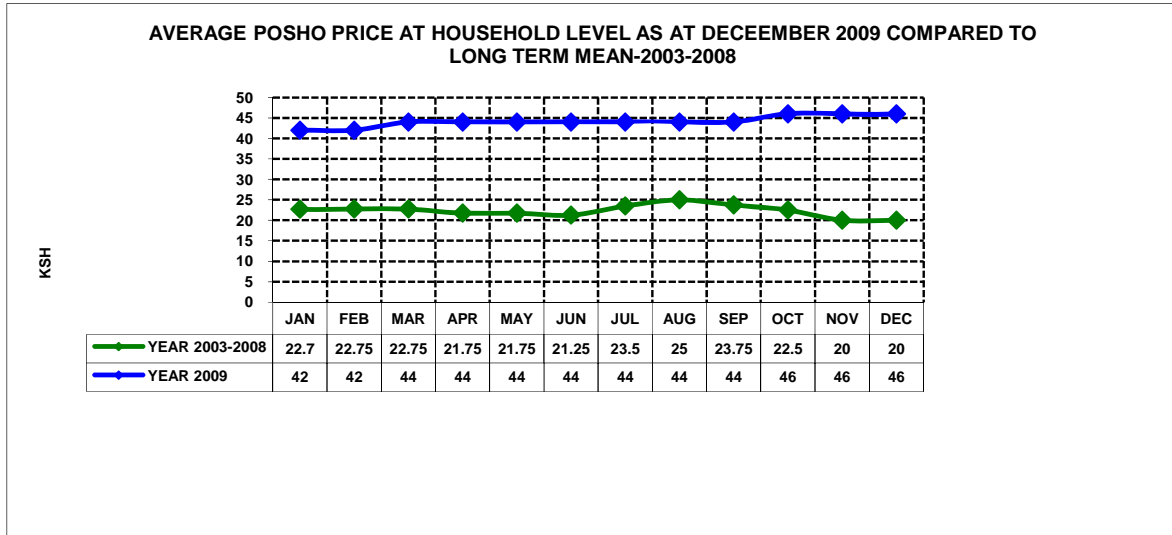
#### 3.3.2 Beans prices



Source: ALRMP sample sites, Total Sample size (n) 270 households

The district depends on external supplies from neighbouring districts and Tanzania. The scarcity was mainly attributed to poor performance of crops as a result of recent drought.

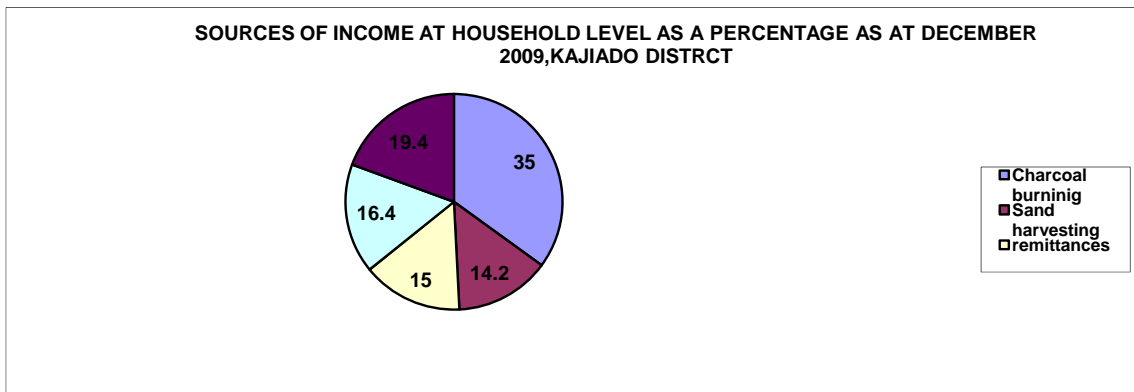
### 3.3.3 Posho (locally milled maize meal) prices



Source: ALRMP sample sites, Total Sample size (n) 270 households

The average price of Posho stabilised at Ksh46 per kilo. The price was above normal compared to the long term mean of Ksh20 per kilo.

### 3.4 Income



Source: ALRMP sample sites, Total Sample size (n) 270 households

#### 3.4.1 Crop income

Generally there was no crop income in rain-fed crop growing areas owing to the recent drought in the three districts. Crop income is expected in February to April 2010.

#### 3.4.2 Livestock income

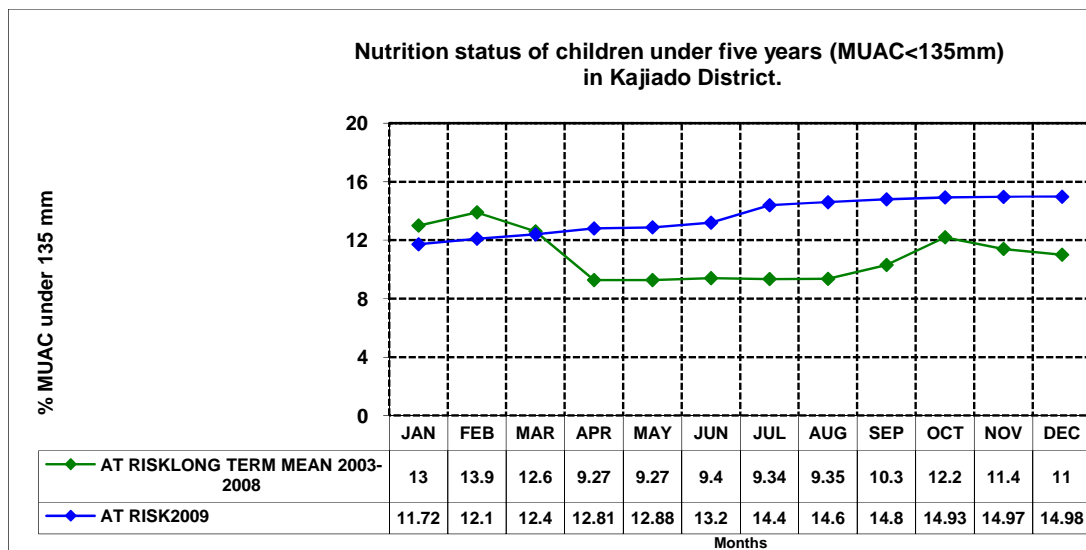
- The month was characterised by low supply of livestock to the market hence low income. Livestock prices increased owing to pastoralists holding back their stock. Other sources of income were sale of charcoal, sand harvesting, petty trade and remittances.
- Charcoal burning remained the main source of income for many households across all livelihood zones followed by sale of livestock. The observed trend can largely be attributed to the recent homes. One bag of charcoal sold between Ksh400-600.

### 3.5 Terms of trade for pastoralists

Pastoralists' terms of trade improved as livestock prices appreciated compared to the previous month. However, the gains were eroded by high cereal prices and high livestock mortalities rates.

## 4.0 Human welfare indicators (Utilization of food)

### 4.1 Nutrition status



Source: ALRMP sample sites, Total Sample size (n) 270 households-1,343 children were examined.

- The nutrition status of children 12-59 months remained high, with the percentage of those rated at risk of malnutrition recorded at 14.98 from 14.97 in November 2009. This can largely be attributed to the adverse effects of the just ended drought. The status is expected to improve in the next few months if the rains are sustained.
- Children continued to feed more on cereals (maize and maize flour) than on their traditional diet of milk. However, most households reported milk and vegetables availability but these are yet to have meaningful impact on the general nutrition status.

### 4.2 Human health

- Cholera outbreak was reported in Central and Ngong district particularly in Kware Slums in Ongata Rongai (Ngong), Bissell, Ilmarba, Lorngosua, Kumpa, Meto, Ngatatiek and Ipartimaro (Central). 4 deaths and 202 suspected cases were reported while 6 cases were confirmed.

## 5.0 Current interventions

Institution	Intervention (ongoing)
<b>Livestock and Agriculture</b>	<ul style="list-style-type: none"> <li>RVF vaccination : 15,000 small stock vaccinated in the hot spots areas of Mashuru, Kajiado Central (DVO – Kajiado Central) and CCPP vaccination</li> <li>Relief seeds provisions</li> </ul>
<b>Water development</b>	<ul style="list-style-type: none"> <li>100 plastic tanks of 10,000-16,000 liters for schools and community , distributed to institution – on going</li> <li>Drilling and rehabilitation of boreholes and shallow wells</li> <li>Diesel subsidy to community boreholes</li> </ul>
<b>Relief Food EMOP</b>	<ul style="list-style-type: none"> <li>Up scaling of population from 15% to 35% of the larger Kajiado population with effect from October 2009</li> </ul>

<b>Nutrition and Health</b>	<ul style="list-style-type: none"> <li>• Implementing an Integrated Management of Acute Malnutrition (IMAM) Programme (Mercy – USA and Concern Worldwide)</li> <li>• Cholera surveillance and community awareness campaign (ALRMP/Mom)</li> </ul>
<b>Education</b>	<ul style="list-style-type: none"> <li>• Construction of PCEA Upper Matasia science lab (Ksh.2,500,000) in Kajiado North, Pilewa Primary dormitory ( Ksh.3,000,000) in Kajiado Central and a classroom at Inkoisuk Primary School, Loitokitok (Ministry for Development Of Northern Kenya and other Arid Lands)- ongoing</li> </ul>

### 5.1 Coping strategies

- Search for employment and casual labour.
- Dependence and/or receiving remittances.
- Reduced ration and number of meals per day.
- Increased charcoal burning and sand harvesting.

### 6.0 Recommendations to DSG and KFSM

- Provision of relief food: Restoration of EMOP relief food operation and expansion of school feeding program in the next term to cover more schools in the pastoral areas (Action: WFP).
- Livestock Production and Veterinary Services: Restocking of livestock, especially the breeding herds, to enable pastoralist restore the losses estimated at 50% and livestock disease surveillance/ disease control : vaccination and provision of FMD, CBPP, LSD, trpanocidal drugs and CCPP, sheep and goat pox vaccines, and adequate and contingency and preparedness for RVF, in the event of the Elnino (action: DVS/DVO).
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