



## **Situation overview**

- The Kenya Wildlife Service station at Mweiga recorded 30 mm of rain for five days, up from 11 mm for three rainy days registered last month. Heavy rains were recorded for a maximum of 3 days and below in various parts of the district as the month came to an end.
- Though the rains assisted in regeneration of pasture in most grazing fields, the month was mainly dry and windy during the day and cold and chilly at night, leading to increased frost attacks on natural pasture.
- Most areas recorded erratic rainfall for two days, especially in the high altitude areas. However the rain recorded in the lower zones was inadequate for crop production, pasture regeneration or water harvesting.
- Major rivers recharged following the rainfall in the catchment areas, though Lachuta and Karemno rivers remained dry downstream due to heavy abstraction upstream.
- Water levels in most water conservation structures such as water pans, ponds and shallow wells improved with the showers and could sustain households for at least a fortnight.
- Livestock remained at high altitude areas of Mt Kenya and Aberdare Forest in search of water and pasture. Increased cases of livestock deaths in this region were reported as most animals were unable to withstand the change in weather.
- Livestock body condition for all species was poor and worsening, with livestock showing signs of general body weakness.
- Milk prices increased due to scarcity in markets. Average price was Ksh 23 per bottle (750 ml), up from Ksh 14 per bottle during normal periods.
- There were increased cases of human/wildlife conflicts as livestock moved deeper into the forest reserves in search of pasture and water. Incidences of wildlife from Solio Ranch invading farms in Naromoru area increased.
- Prolonged dry conditions forced most households to feed on their seed stock, hence majority of the farmers do not have seeds for the short rains planting season.
- Rise in food prices continued, while livestock prices were on a downward trend. Households continued relying on food purchases for their daily food requirements.
- Withdrawal of pupils from public primary schools not covered by the school-feeding programme increased, especially during the afternoon sessions as they took time off to go and look for food.
- Petty crime was on the increase, a sign of food stress in the region.
- Most farms remained unattended, which was an indication of inadequate planting seeds at household level. Hence, land under crop production during the upcoming October - December short rains season is expected to drop as a result of high farm input prices.
- In the few farms with food crops, cases of pest infestations remained high, with the most common pest being aphids, bean fly, red spider mites and Irish potato tuber moths rampant in Gakawa Location.
- Conflicts over irrigation water between upstream and downstream water users rose as water flow in rivers continued to dwindle.

- Cases of Type O Foot and Mouth Disease were reported in Guara area of Gakawa location, which is a major entry point to Mt Kenya Forest. The situation was, however, controlled as no new cases have been reported.
- Households dug water conservation structures such as hand-made water pans and ponds in anticipation of the short rains.
- The nutritional status of children below five years declined slightly, with those rated as being at risk of malnutrition recorded at 4.6 percent from 4 in August. However, there were signs of deterioration as food stress continued being felt at household level and heightened by the high food prices. The nutrition status was within normal range compared to the long term averages.

### **Recommendations to DSG and KFSSG**

- De-worming of vulnerable groups of livestock i.e. 22,800 calves, 28,000 goats and 51,000 sheep for better utilisation of scarce feed resources.
- Construction of large dams upstream to check flooding and store the same for irrigation use.
- Increase provision of water for domestic and livestock use in areas hard hit by drought i.e. Burguret, Mugunda and Kinyaiti area.
- Water harvesting techniques at household level should be encouraged.
- Due to increased livestock movement in search of pasture, at least 50,000 animals should be vaccinated against Foot and Mouth Disease (FMD) and Lumpy Skin Disease (LSD).
- Expansion of school-feeding programme to cover an additional 29 schools with a total enrolment 8,350 pupils affected by drought.
- Provision of drought recovery farm inputs such as certified seeds and fertilizers to assist farmers recover from the previous two consecutive poor seasons.
- Provision of relief food should be considered as a short term measure to cater for 74,250 people affected by drought.
- Introduction and promotion of drought-tolerant crops in drought-prone areas.

## **1.0 Environmental indicators (Stability)**

### **1.1 Rainfall**

- Heavy rains were recorded for a maximum of 3 days and below in various parts of the district as the month came to an end. The rains assisted in regeneration of pasture in most grazing fields.
- The month was mainly dry and windy during the day, with cold and chilly nights, which resulted in increased frost attacks on natural pasture.
- Most areas recorded erratic rainfall for two days, especially in the high altitude areas. However the rain recorded in the lower zones was inadequate for crop production, pasture regeneration or water harvesting.
- The Kenya Wildlife Service station at Mweiga recorded 30 mm of rain for five days, up from 11 mm for three rainy days registered last month.
- The situation was outside normal seasonal range and requires close monitoring.

### **1.2 Condition of natural vegetation and pasture**

- Scarcity of pasture continued being experienced in all parts of the district, with the lower areas suffering more from poor availability and quality of both pasture and browse.
- The little rainfall realized during the month under review assisted in sprouting of natural vegetation, whose growth and development is threatened by the ongoing dry spell and continued frost attacks.
- Sheep were the major beneficiaries of the ongoing weather conditions but the rest of the herds remained threatened as they were unable to feed on the sprouting natural grass.
- Having exhausted all other sources of livestock feeds, households turned to mugumo tree branches as an alternative source, forcing most households especially from lower zones to walk for an average of 10 km daily in search of the trees along the forest area.
- The situation was outside the usual seasonal range.

### **1.3 Water sources and availability**

- Rivers remained the major water sources of water throughout the district.
- Water levels in major water conservation structures in the region improved as a result of the downpour experienced towards the end of the month.
- As a result, household access to water was expected to stabilize in the short run.
- Recharge in major rivers emanating from the mountains was observed following the rains, though Lachuta and Karemno rivers remained dry downstream due to heavy abstraction upstream.
- Water rationing for domestic use was still ongoing and restriction on abstraction of river water for irrigation purposes still on throughout the district.
- Average return distance to water sources remained at 2.2 km from homesteads and 2.5 km to grazing areas with an average return time of 1.4 hours.
- Mugunda location recorded the highest distances of 3.5 km and 4.5 km to homesteads and grazing fields respectively with an average return time of 2 hours.

### **1.4 Emerging issues**

- Restriction on abstraction of water for irrigation activities in major rivers led to reduction in food production in the district, which worsened the food stress in the district.
- Increased livestock deaths were reported in high altitude areas due to effects of weather change, mostly affecting livestock from the lower zones which moved to the region in search of water and pasture.

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

- Food security at household level was threatened as food reserves got exhausted, thus households relied on food purchases.
- Additional expenses were also being incurred for purchase of fodder for livestock left behind at household level.
- Continued retention of livestock at high altitude areas, poor availability of pasture leading to poor body conditions were some of the factors that led to reduced milk availability both for domestic consumption and for local market. As a result, milk

prices continued to rise with the highest price of Ksh 30 per bottle (750ml) recorded in Mugunda Location.

- Restriction on irrigation activities impacted negatively on both food production for household consumption and commercial agriculture.
- The situation was outside seasonal range as food prices at market level were too high and most households did not have reliable daily source of income.

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

### **2.1 Livestock production**

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

- Livestock body conditions were poor for all species, with over 80 per cent of cattle and goats showing signs of general body weakness due to malnutrition.
- Drought-related livestock deaths were on the increase compared to last month.
- An average of 47 and 169 deaths were reported for cattle and sheep, up from 15 and 69 deaths in August, of which 45 and 143 of the deaths respectively were drought related.
- The body conditions cannot withstand even common ailments, a situation that requires close monitoring.
- The situation led to more livestock being offered for sale, though there were no ready buyers as the livestock was not fit for meat production.
- The situation was outside normal seasonal range and on a worsening trend.

#### **2.1.2 Livestock diseases**

- Livestock deaths during calving were on the increase, accelerated by the livestock general body weakness due to the effects of the ongoing drought.
- Cases of Type O Foot and Mouth Disease were reported in Guara region of Gakawa location. Though no new cases were reported during the monitoring period, close monitoring and vaccination is required.
- Sheep were adversely affected by respiratory ailments due to their continued exposure to dust in grazing fields. The condition contributed to an average of 22 related deaths.
- Cases of tick-borne diseases such as ECF were also common in areas where livestock shared grazing fields with wildlife, especially along the forest.

## **2.2 Crop production**

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

- Farmers were preparing land in anticipation of October-December short rains. The acreage cultivated decreased as most farmers remained undecided on food production following massive crop failure experienced last season.
- Crop production was, therefore, expected to decline following unavailability of certified seeds for planting as most household consumed the little seed they had as the effect of drought worsened.
- The situation was outside seasonal norm and close monitoring required.

### **2.2.2 Pest and diseases**

- Infestation of Irish potatoes tuber moths remained a thorny issue in Gakawa location.

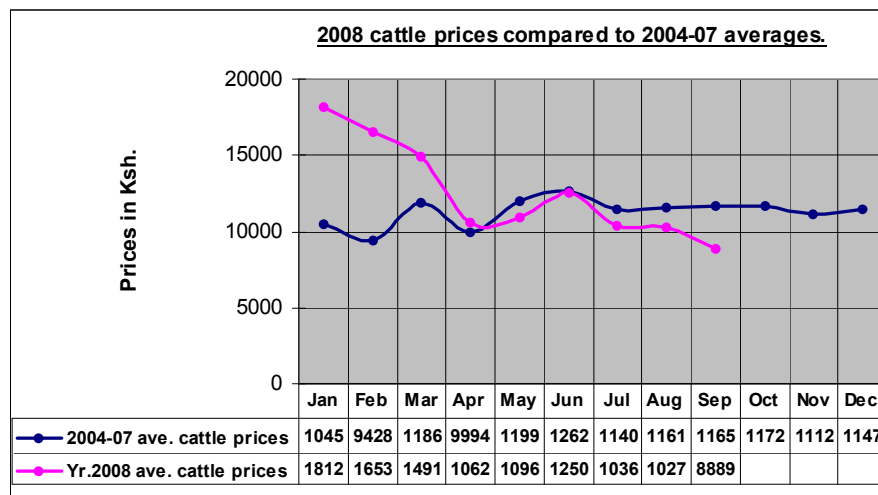
### 2.2.3 Implications on food security

- Though there was an improvement in livestock birth rate, a general reduction in livestock products was recorded within the district as livestock succumbed to the effects of the ongoing drought.
- Livestock sales and prices dropped for all the species compared to the long term averages.
- Consequently, terms of trade for households were unfavorable as livestock sales were their main source of income. This was further compounded by high prices of food commodities.
- Most households' food reserves got exhausted, leading to continued employment of various coping strategies by those adversely affected.
- This situation was outside seasonal norm and was expected to worsen if the drought persists.
- Human wildlife conflicts are on the increase as livestock move deep into the forest reserves in search of pasture and water. In Naromoru, wildlife has moved out of Solio Ranch a condition which has put the locals and the KWS at loggerheads.

## 3.0 Access to food

### 3.1 Livestock marketing

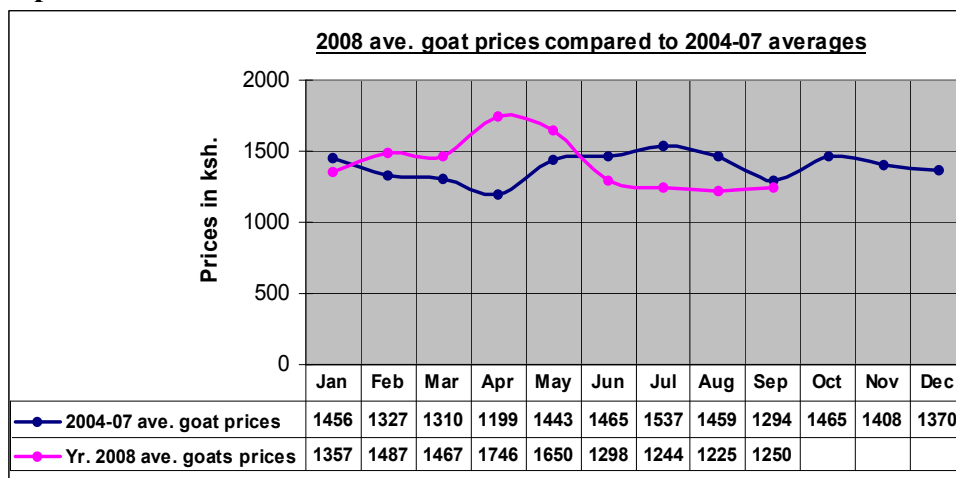
#### 3.1.1 Cattle prices



- The average price of cattle was Ksh 8,888.90, down from Ksh 10,276 recorded last month.
- Compared to the long term averages of 2004-07, the prices were slightly below normal seasonal range.
- The price drop was attributed to unfavourable weather conditions, leading to poor livestock body conditions.
- The prices are expected to continue dropping if the current weather conditions persist.

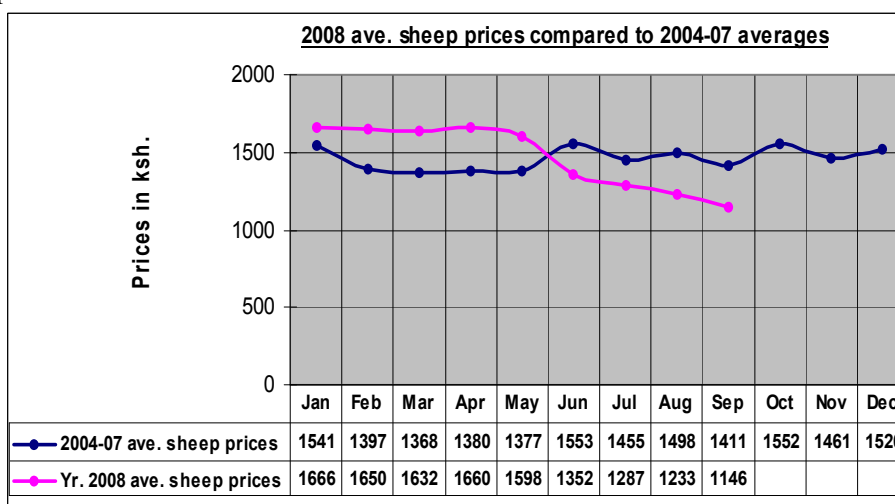
- With livestock showing extreme signs of general body weakness, marketing was threatened as majority was not fit for rearing or meat production.
- Highest cattle prices were recorded in Lower Mugunda location at Ksh 13,333.30 and the lowest in Kiamathaga at Ksh 6,000.

### 3.1.2 Goat prices



- Goat prices were within normal range but below the long term average.
- The average price was Ksh 1,250, up from Ksh 1,225 in August. The highest price was Ksh 1,500 recorded in Gakawa and the lowest Ksh 1,050 in Mwiyo.
- Goats were not adversely affected compared to the other species, thus boosting demand at market level against low supply.

### 3.1.3 Sheep prices

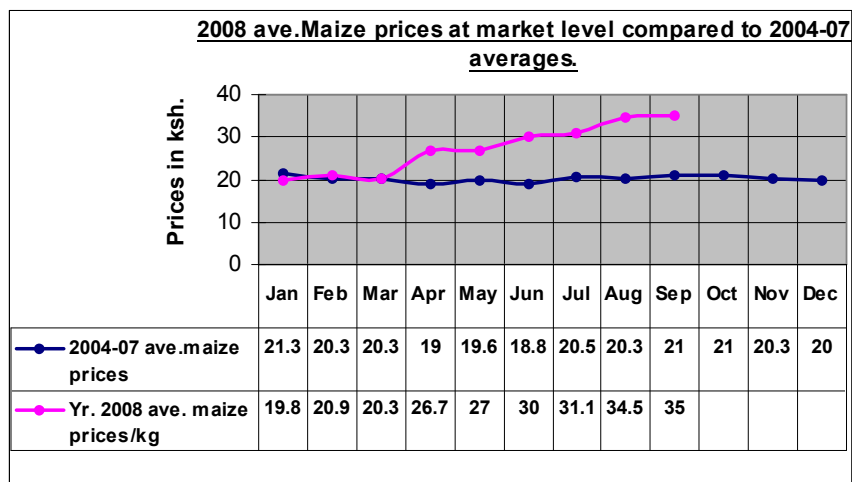


- Sheep prices dropped but were within the normal range.
- The average price was Ksh 1,146.20, down from Ksh 1,233 recorded last month.
- Highest sheep prices of Ksh 1,607.10 were recorded in Gakawa and lowest of Ksh 835.70 in Upper Mugunda location.

- The price drop was due to deteriorating body conditions due to the impact of the dry spell.

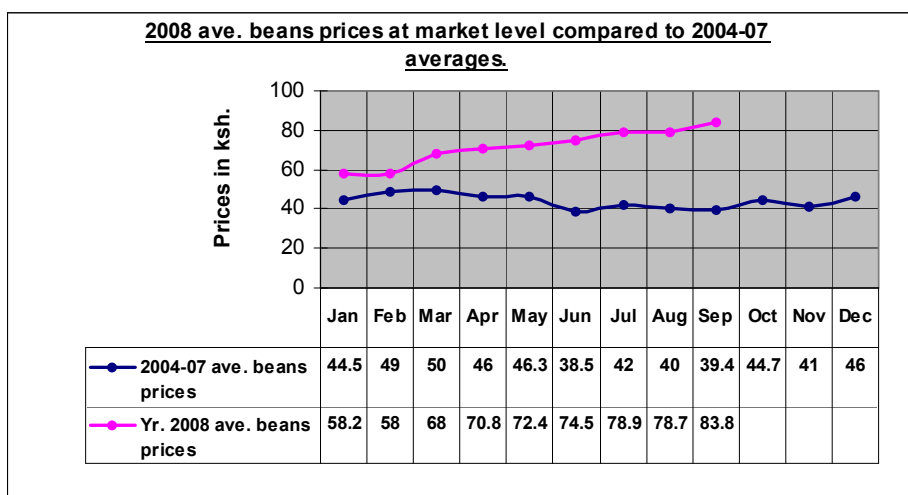
### 3.2 Crop prices

#### 3.2.1 Maize prices



- No maize sales were reported at household level as cereal reserves were exhausted in all livelihood zones.
- At market level, a kilo of maize fetched Ksh 35 per kilo, up from Ksh 34.50 in August. Highest price of Ksh 40 was recorded in Upper Mugunda and lowest in Naromoru at Ksh 30.70/.
- High transport costs contributed to the price rise and remain a major challenge as food crops are sourced from outside the district. The prices are expected to drop only after the onset of the short rains.
- Compared to the 2004/07 long term averages, the prices were outside the seasonal norm, a condition that requires close monitoring.

#### 3.2.2 Beans prices



- Beans prices remained higher than normal at Ksh 83.80 per kilo, up from Ksh 78.7 recorded last month.
- Highest price of Ksh 100 per kilo and lowest of Ksh75 were recorded in Upper and Lower Mugunda respectively.
- Household stocks started getting exhausted because of the combined effect of the previous two consecutive poor rainy seasons.
- Continued low supply of beans in major markets within the district led to high prices, which were beyond normal seasonal averages.

### 3.3 Emerging issues

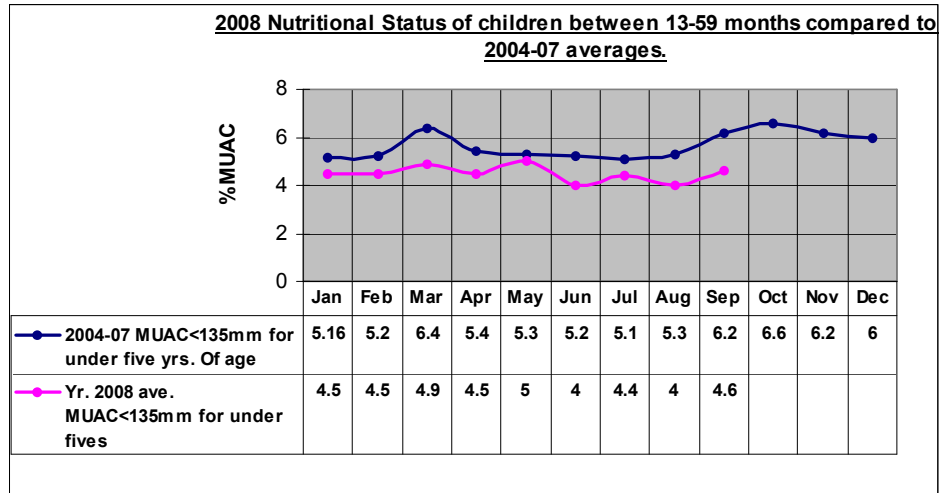
- Continued restriction on irrigation activities contributed to high food prices in major markets as food scarcity started being felt throughout the district.
- Household food preferences changed, with most households consuming only those food items within their means.
- People continued moving from the lower regions to high potential area of Endarasha and Kabaru in exchange of labour for food.
- Food composition at household level was poor and inadequate and most households could not afford three meals daily. Most households relied on porridge as their main source of food.
- Schools mobilised parents to contribute towards provision of porridge to all pupils during lunch time.

### 3.4 Implication on food security

- Ongoing poor livestock prices and high food prices resulted in unfavourable terms of trade for the locals.
- Signs of food stress continued to be felt at household level as most households rely on crop production, which was poor during the previous two seasons.
- Casual labour was hard to come by and average daily wage rates lower at Ksh123.5, leaving residents with limited means of meeting daily food needs.

## 4.0 Welfare indicators (Utilisation of food)

## 4.1 Nutrition status



- The nutritional status of children below five years declined slightly, with those rated as being at risk of malnutrition recorded at 4.6 percent from 4 in August. However, there were signs of deterioration as food stress continued being felt at household level and heightened by the high food prices.
- Reduced milk production throughout the district had a direct impact on the nutrition status of children.
- At least 1,328 children were monitored during the month under review and the nutrition status was expected to deteriorate if the dry spell persists.

## 4.2 Migration

- Movement of people from the lower regions to the high potential areas along the mountains in search of food was on the increase.
- In most cases, labourers exchanged a day's wage for a bucket of potatoes.

## 5.0 Coping strategies

- Petty trade, charcoal burning, ballast making along roadsides and sale of scrap metal.
- Use of cactus, mugumo tree branches and banana fibre stalks as an alternative source of feed for livestock.
- Borrowing from friends and relatives and preference of payment in kind e.g. a bucket of potatoes in exchange for farm labour.
- Hunting wildlife for food and sleeping during the day to save energy.
- Taking porridge as their main meal.
- Household heads arriving home late in the night and moving out early to avoid domestic conflicts.
- Youths harvesting grass/forage along road reserves, forests and public institution grounds for sale at Ksh 150 to 200 per sack.
- Pupils skipping the afternoon sessions to look for food, especially in Mwiyo and Mugunda.
- Expulsion of internally displaced people who had been living with host families.

## **6.0 Recommendations**

- De-worming of vulnerable groups of livestock i.e. 22,800 calves, 28,000 goats and 51,000 sheep for better utilisation of scarce feed resources.
- Construction of large dams upstream to check flooding and store the same for irrigation use.
- Increase provision of water for domestic and livestock use in areas hard hit by drought i.e. Burguret, Mugunda and Kinyaiti area.
- Water harvesting techniques at household level should be encouraged.
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