



**KENYA METEOROLOGICAL DEPARTMENT  
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 04, 2012;  
1<sup>ST</sup> TO 10<sup>TH</sup> FEBRUARY 2012**

**1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

Most stations continued to report dry conditions countrywide. For example, Voi and Msabaha Meteorological stations in the coastal strip recorded only 0.53 mm and 0.04 mm of rainfall respectively compared to 1.11mm and 0.05mm reported by the same stations during the previous dekad. Kisii station in Nyanza Province recorded only 0.01 mm of rainfall. All the stations in the remaining Provinces namely; Western, Central, Nairobi and Eastern reported dry conditions.

For daytime (maximum) temperature, half of all the meteorological stations reported a decrease while the other half reported an increase. The highest daytime temperature during the dekad was 37.3<sup>0</sup>C. This was observed at Wajir and Garissa stations in North-Eastern Province. The lowest was 22.9<sup>0</sup>C observed at Nyahururu in Central province. Most stations countrywide, recorded a slight increase in nighttime (minimum) temperature compared to the previous dekad. Approximately half of the stations continued to manifest a decrease in the minimum temperature just as in the previous dekad.

For more comprehensive summary of rainfall and other meteorological parameters, see Figures 3.1 to 3.4 as shown below.

**2. CROP AND WEATHER REVIEW FOR DEKAD 04; 1<sup>ST</sup> TO 10<sup>TH</sup> FEBRUARY 2012**

**2.1 NYANZA AND WESTERN PROVINCES**

**2.1.1 Kakamega**

The station continued to report dry conditions as in the previous dekad. The mean air temperature and total pan evaporation recorded were 22.1<sup>0</sup>c and 75.5 mm respectively. The average sunshine hours were 11.0 hours per day.

*Land preparation for the next long rains season is ongoing.*

**2.1.2 Kisii**

The station continued to report dry conditions as in the previous dekad. The mean air temperature and total pan evaporation recorded were 23.1<sup>0</sup>C and 61.5mm respectively while the average sunshine hours were 10.4 hours per day.

*Land preparation is underway.*

## **2.2 RIFT VALLEY PROVINCE**

### **2.2.1 Kitale**

Like in the previous dekad, the station reported nil rainfall. The average air temperature and total pan evaporation observed at the station were 19.8<sup>0</sup>C and 63.0 mm respectively while the average sunshine hours were 10.8 hours per day.

*Land preparation for the next long season is underway.*

### **2.2.2 Eldoret-Kapsoya**

The station continued to report dry conditions as in the previous dekad. The average air temperature and total pan evaporation recorded were 17.2<sup>0</sup>c and 88.5mm respectively while the average sunshine hours were 11.1 hours per day.

*Land preparation for the next long season is underway.*

## **2.3 CENTRAL AND NAIROBI PROVINCES**

### **2.3.1 Nyeri**

The station remained dry during the dekad. The average air temperature and total pan evaporation were 17.1<sup>0</sup>c and 58.0 mm respectively. There was no report on sunshine hours.

*Maize was at flowering stage but in poor state due to insufficient rain. Below normal yield is expected.*

### **2.3.2 Kabete**

The station reported nil rainfall. The average air temperature was 12.2<sup>0</sup>C while sunshine hours were 11.2 hours. There was no report on evaporation pan.

*Maize, which was in maturity stage, was also in poor state due to insufficient rainfall. Below normal yield is expected from the crop. Coffee was at 100% ripeness stage and in moderate state but damaged by leaf rust and leaf minor diseases. Bananas were at 100% appearance of sucker's stage and in moderate state though damaged by thrips and cigar end rot at 25% and less than 10% respectively.*

### **2.3.3 Thika**

The station reported dry conditions just as in previous dekad. The mean air temperature and total pan evaporation recorded at the station were 19.2<sup>0</sup>c and 59.0 mm respectively. The sunshine hours were 10.3 hours per day

*Farmers are busy preparation their land for the long rains season.*

### **2.3.4. Nyahururu**

The station continued to report dry conditions. The mean air temperature and sunshine hours observed were 13.5<sup>0</sup>c and 10.9 hours respectively, while the dekadal total pan evaporation was 75.0 mm.

*Farmers are preparing the land for the next season.*

### **2.3.5. Dagoretti**

The station reported dry conditions just as in the previous dekad. The average air temperature and total pan evaporation recorded were 19.4<sup>0</sup>c and 67.0 mm while sunshine was 11.1 hours per day.

*Land preparation for the next season is in progress.*

## **2.4 EASTERN PROVINCE**

### **2.4.1 Meru**

The station reported dry conditions just like in the previous dekad. The average air temperature and total pan evaporation recorded were 18.4<sup>0</sup>c and 51.5 mm. Sunshine hours reported were 9.9 hours per day.

*Maize was at flowering stage and in poor condition due to insufficient rainfall. Expected yield is below normal.*

### **2.4.2 Embu**

The station reported dry conditions just as in the previous dekad. The average air temperature recorded was 20.2<sup>0</sup>c. There was no report on Sunshine hours and evaporation pan.

*Maize was at flowering stage and in poor state due to current drought. Expected yield is below normal.*

### **2.4.3 Katumani (Machakos)**

The station reported dry conditions just as in the previous dekad. The average air temperature recorded was 21.0<sup>0</sup>c. There was no report on evaporation and sunshine parameters.

*Maize, which was at harvesting stage, was also in fair state. The crop is expected to give normal yield despite being adversely affected by poor rainfall*

## **2.4 COAST PROVINCE**

### **2.5.1. Msabaha**

The station remained dry reporting only 0.04 mm of rainfall. This was the second highest rainfall recorded in the whole country. *The average air temperature and pan evaporation recorded were 27.5<sup>0</sup>c and 55.0mm respectively. There was no sunshine report.*

*Harvesting of maize is complete and land preparation started in readiness for the long rains season. Mangoes were at 100% fruit setting stage and in good state.*

### **2.5.2 Mtwapa**

This station reported nil rainfall just as in the previous dekad while the average air temperature was 27.6<sup>0</sup>c. There was no report on both evaporation and sunshine.

*Below normal yield is expected for maize, which was at flowering stage and in fair state. The crop has suffered damage by stalk borer and it's growth hampered by excessive*

weeds and insufficient rain. Watermelon was at 100% consumer's ripeness stage and in bad state due to insufficient rainfall.

### 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

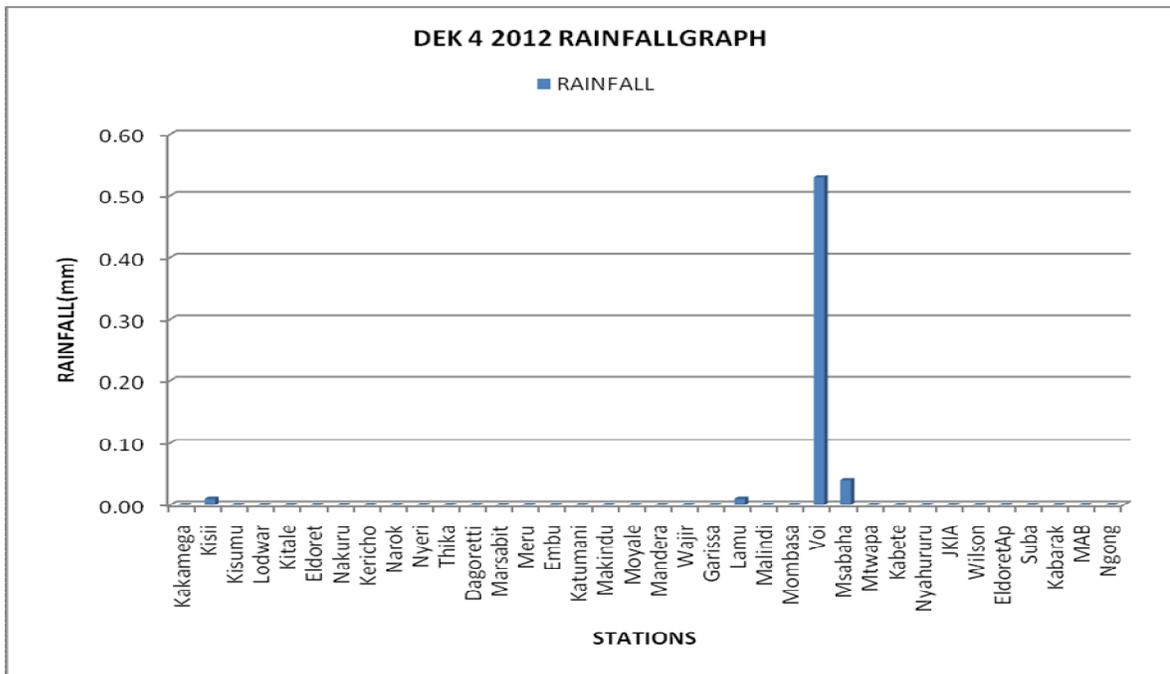


Figure 3.1: Actual dekadal Rainfall amounts for 01 – 10 February 2012

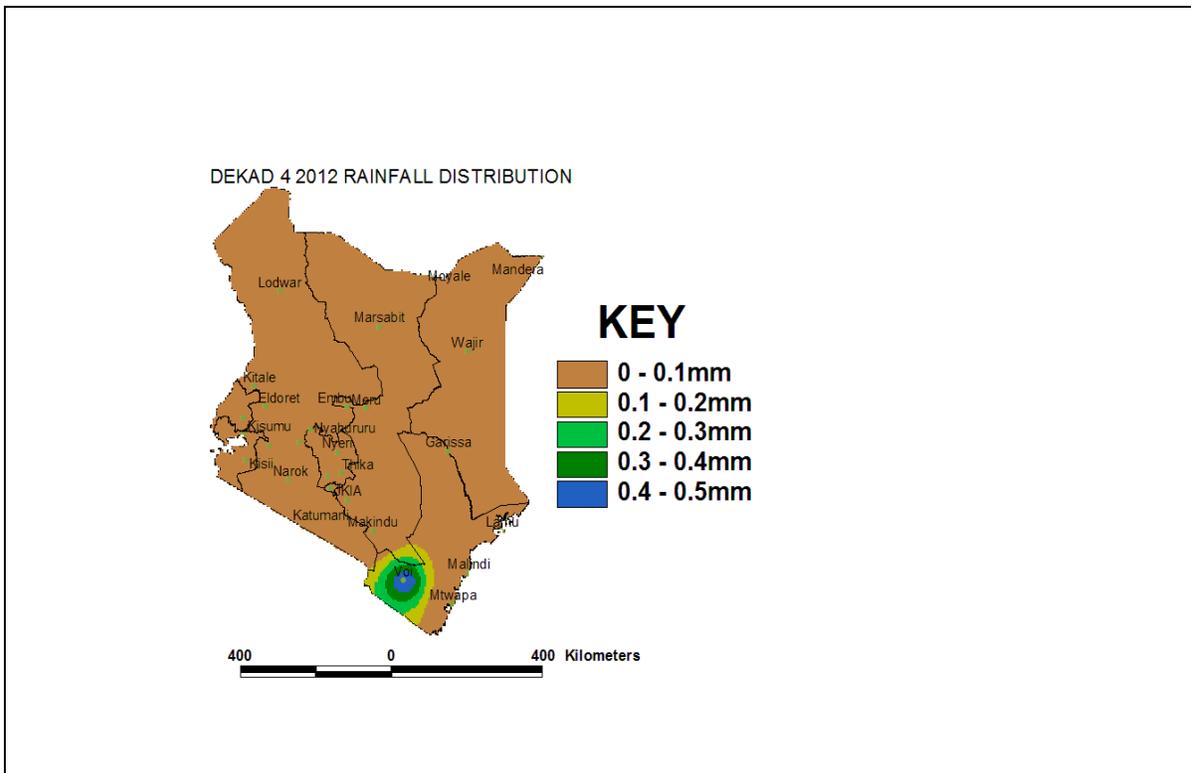


Figure 3.2: Dekadal Rainfall distribution

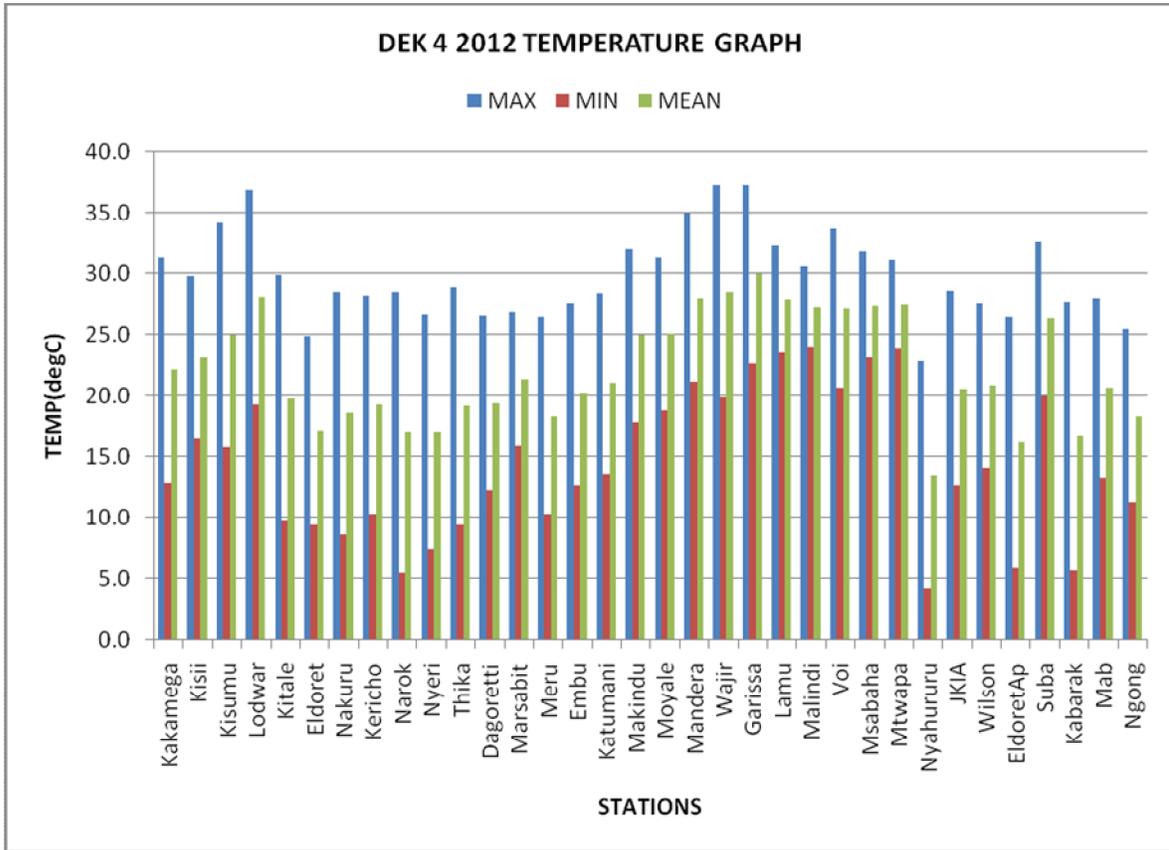


Figure 3.3: Maximum, Minimum and Average Temperature distribution

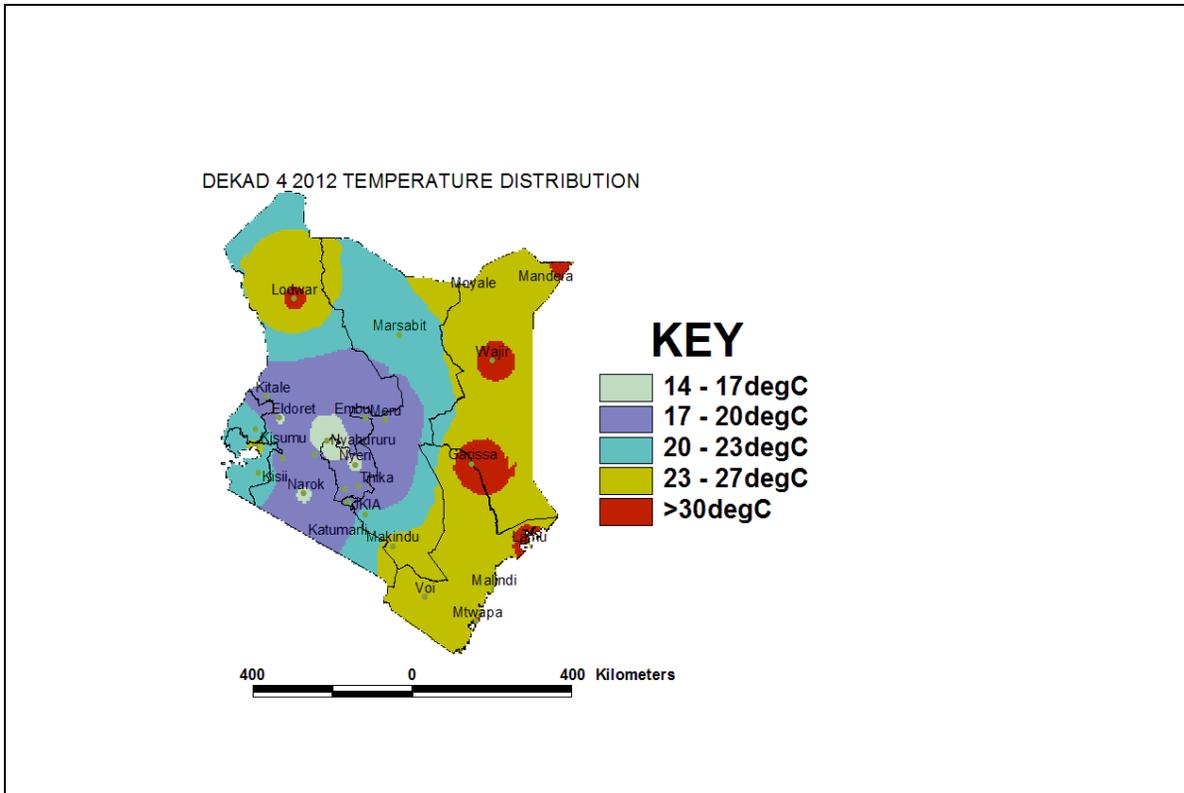


Figure 3.4: Mean Temperature distribution

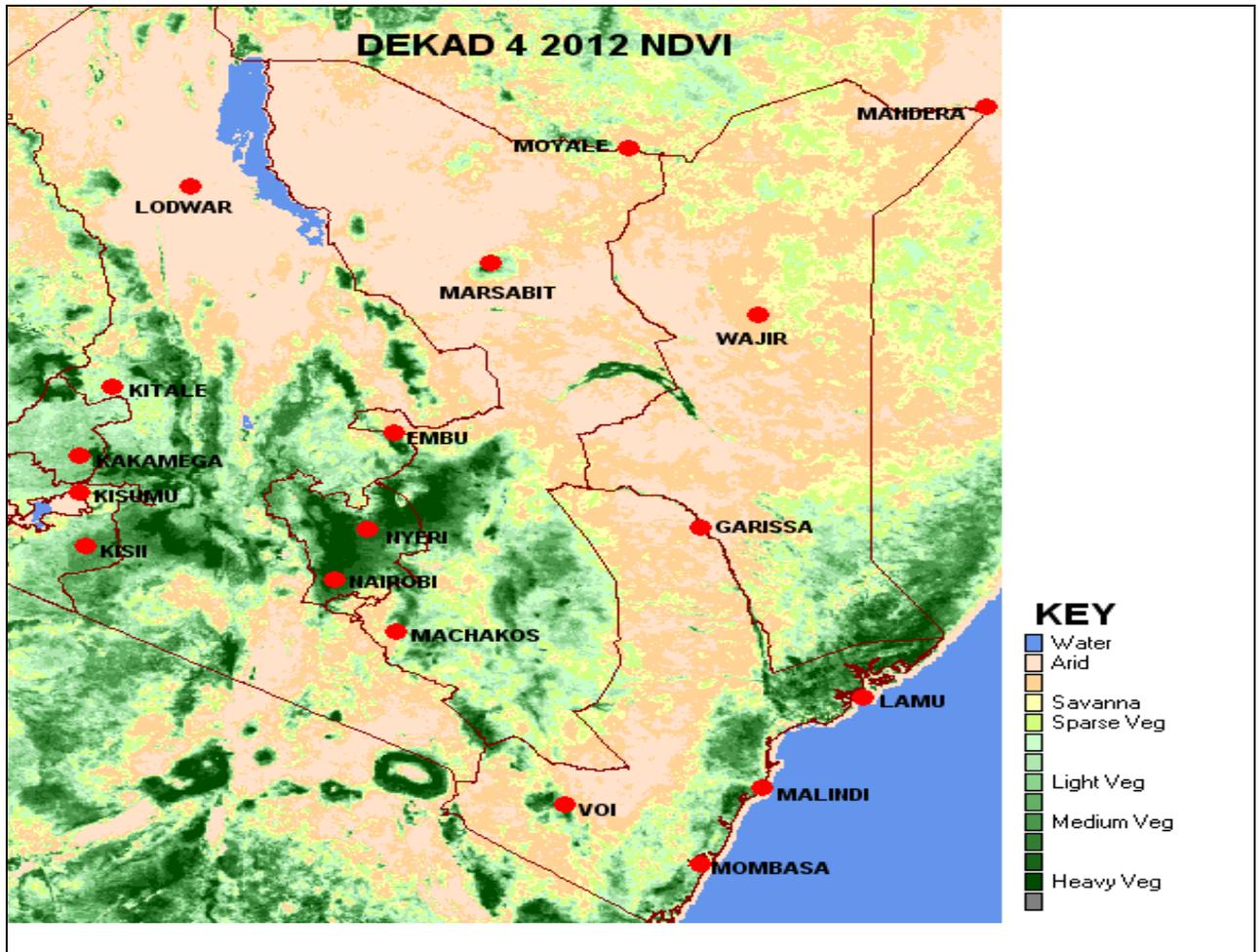


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 10<sup>TH</sup> TO 20<sup>TH</sup> FEBRUARY, 2012

- + **Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Central and south Rift Valley (Kitale, Kakamega, Kisumu, Kisii, Migori, Nyamira, Kericho, Bomet, Uasin-Gishu, Nakuru, Narok, Nyandarua, etc)** will experience mainly sunny intervals over most places. Occasional showers and thunderstorms will be experienced over several places in the first half of the forecast period.

*These rainy conditions will have a positive impact on the pasture which had been greatly stressed due to the ongoing dry spell in these regions.*

- + **The Northwestern counties (Turkana, West Pokot etc),** will experience mainly sunny periods throughout the forecast period.

*These dry conditions will continue to affect livestock kept in these areas negatively due to water and pasture scarcity caused by drought.*

- ✚ **In the Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu etc),** sunny intervals will prevail during the first two days of the forecast period. Some cloud developments that may result in light Rains/Showers are expected on Saturday, 11<sup>th</sup> to Monday, 13<sup>th</sup> February 2012.

*The forecast slight increase in cloudiness and light rains will be beneficial to the maize crop which has been adversely affected due to lack of sufficient soil moisture.*

- ✚ **In Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** mainly dry conditions will prevail with chances of some increase in cloud cover and showers over few places in areas around Garissa on Saturday/Sunday (11<sup>th</sup>/12<sup>th</sup> February 2012).

*The showers will replenish the pasture which has been adversely affected by lack of sufficient water in turn impacting negatively the livestock in these regions.*

- ✚ **In Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi etc),** Sunny intervals are expected for much of the forecast period. Morning rains are likely to be experienced on Saturday, 11<sup>th</sup> to Monday, 13<sup>th</sup> February 2012.

*The rain conditions will boost the crops which were in otherwise poor state due to the dry spell being experienced countrywide.*

- ✚ **Over the Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale etc),** hot and dry conditions will prevail for much of the forecast period especially in north coast.

*The sunny periods will continue to have negative effect on the mango and other fruit trees in these areas.*

***For feedback or further guidance, Contact:***

Director,  
Kenya Meteorological Department,  
Agro meteorological Advisory Services Division,  
Dagoretti Corner, Ngong Road, P.O. Box 30259, 00100 GPO, Nairobi  
Tel: +254 (0)20 3867880-7/3876957/3873682 ; Fax: +254 (0)20 3876955  
E-mail: [agromet@meteo.go.ke](mailto:agromet@meteo.go.ke);  
Website: [www.meteo.go.ke](http://www.meteo.go.ke)

©2012 The Kenya Meteorological Department