



**KENYA METEOROLOGICAL DEPARTMENT**  
**DEKADAL AGROMETEOROLOGICAL BULLETIN**  
**WEATHER AND CROP REVIEW FOR DEKAD 16, 2012**  
**01– 10 JUNE 2012**

**1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

During the current dekad, most stations countrywide continued to report a decrease in the amount of rainfall both in intensity and spatial distribution compared to the previous dekad. The highest rainfall received countrywide was 73.4 mm at Kisii station in Nyanza region compared to 140.9 mm reported as the highest rainfall at Kericho station in Rift Valley region in the previous dekad. Kakamega station in Western region still reported the second highest rainfall of 63.2 mm compared to 127.3 mm in the previous dekad. Eldoret Airport station recorded the highest rainfall of 62.2mm in Rift Valley region. In Nairobi region, Moi Air Base station recorded the highest rainfall of 58.4 mm, while Nyahururu station in Central region received the highest rainfall of 24.3 mm. Embu station in Eastern region reported the highest rainfall of 9.1 mm, while in Coast region the highest amount of rainfall of 6.3 mm was received at Msabaha station. Most stations in North Eastern region reported dry conditions.

The decreasing trend in both maximum and minimum temperatures continued in most stations. The highest maximum temperature recorded countrywide, was 35.2<sup>0</sup>c at Lodwar station in Rift Valley compared to 35.7 <sup>0</sup>C recorded at Mandera station in the previous dekad. Nyahururu station in Central Kenya reported the lowest maximum temperature of 21.4 <sup>0</sup>C which was an increase from 21.0<sup>0</sup>C recorded in the previous dekad at the same station.

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

**2.0 CROP AND WEATHER REVIEW FOR DEKAD 16; 01 – 10 JUNE 2012**

**2.1 NYANZA AND WESTERN REGIONS**

**2.1.1 Kakamega**

This station received 76.9 mm of rainfall which was an increase from 63.2 mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.5<sup>0</sup>c and 38.4 mm respectively. There was no report on sunshine hours.

*Maize and beans were at emergence and flowering stages respectively. Beans have been adversely affected by excessive rainfall though normal yield is still expected.*

**2.1.2 Kisii**

This station recorded 93.6 mm of rainfall compared to 73.4 mm in the previous dekad. The mean air temperature and total pan evaporation recorded were 19.8<sup>0</sup>C and 42.1 mm respectively. There was no report on sunshine.

*Maize and beans were at emergence and flowering stages respectively. Both crops were in fair state with normal yield expected.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received rainfall of 29.0 mm compared to 14.4 mm reported in the previous dekad. The average air temperature and pan evaporation recorded were 19.2<sup>0</sup>C and 30.0mm respectively. There was 7.8 hours of sunshine recorded.

*Maize and beans were at emergence and flowering stages respectively. Both crops are in fair state and weeding is still going on.*

### **2.2.2 Eldoret-Kapsoya**

The station recorded rainfall of 52.0 mm compared to 34.6 mm in the previous dekad. The average air temperature and total pan evaporation recorded were 16.9<sup>0</sup>C and 42.5mm respectively. There was no sunshine report.

*Maize and beans were at emergence and flowering stages respectively, and in good condition. Weeding is still in progress in most farms.*

## **2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION**

### **2.3.1 Nyeri**

The station reported 1.7 mm of rainfall compared to 14.6 mm in the previous dekad. The average air temperature and total pan evaporation recorded were 17.0<sup>0</sup>c and 27.2mm respectively. There was no report on sunshine hours.

*Maize and beans were at ninth leaf and flowering stages respectively. Maize has been adversely affected by stalk borer though still in fair state, while beans were adversely affected by excessive rainfall and leaf hoppers and in poor state.*

### **2.3.2 Kabete**

The station recorded rainfall of 0.02 mm compared to 19.8 mm in the previous dekad. The average air temperature and pan evaporation recorded were 16.7<sup>0</sup>c and 19.0 mm respectively. There was 2.3 hours of sunshine reported per day.

*Maize and Beans were at emergence and flowering stages respectively. Maize is in fair state while beans in poor state due to excessive rainfall.*

### **2.3.3 Thika**

The station reported dry conditions compared to 2.4 mm in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 18.8<sup>0</sup>c and 23.0mm respectively. There was no report on sunshine hours.

*Maize and beans were at emergence stage. Maize was in fair state while beans were in poor state due to excessive rainfall.*

### **2.3.4. Nyahururu**

The station received rainfall of 17.4 mm compared to 24.3mm reported in the previous dekad. The mean air temperature and pan evaporation recorded were 13.9<sup>0</sup>C and 39.2mm respectively. There was 7.1 hours of sunshine recorded.

*Maize and Beans were at emergence and flowering stages respectively. Potatoes were at flowering stage. All crops are in fair state.*

#### **2.3.5. Dagoretti**

The station recorded 0.02 mm of rainfall compared to 9.6 mm recorded in the previous dekad. The average air temperature and pan evaporation recorded were 16.9<sup>0</sup>c and 20.5mm respectively. There was no sunshine report.

### **2.4 EASTERN KENYA REGION**

#### **2.4.1 Meru**

The station still reported dry conditions. The average air temperature and pan evaporation recorded were 17.6<sup>0</sup>c and 35.5 mm respectively. There was 6.6 hours per day of sunshine.

*Maize and beans were at emergence and flowering stages respectively. Both crops are in fair state.*

#### **2.4.2 Embu**

The station reported rainfall of 1.9 mm compared to 9.1 mm in the previous dekad. The average air temperature and pan evaporation were 17.9<sup>0</sup>c and 20.6 mm respectively. Sunshine hours reported were 2.9 hrs per day.

*Maize and beans were at flowering stages and in good condition. Normal yield is expected.*

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

The station recorded dry conditions compared to 23.5 mm in the previous dekad. The average air temperature recorded was 17.9<sup>0</sup>c. There was no report on pan evaporation and sunshine parameters.

*Maize and beans were at emergence and flowering stages respectively. Both crops are in fair state though the two crops have been adversely affected by insufficient rain.*

### **2.5.0 COASTAL REGION**

#### **2.5.1. Msabaha**

The station received a decrease of rainfall of 3.0 mm compared to 6.3 mm in the previous dekad. The average air temperature and pan evaporation recorded were 26.9<sup>0</sup> c and 43.0mm respectively. There was no sunshine report.

*Maize was at flowering stage and in fair state. Mangoes were at 80% fruit setting and both ripeness and flowering stages at 10% each and in good state.*

#### **2.5.2 Mtwapa**

This station recorded decreased rainfall of 4.6 mm compared to 5.5 mm in the previous dekad. The average air temperature and pan evaporation were 26.4<sup>0</sup>C and 47.6 mm respectively. There was no sunshine report.

Maize was at flowering stage and in fair state though adversely affected by stalk borers. Farmers are still weeding in most farms. Water melon was at 100% flowering stage and in unsatisfactory state due to damage by aphids, leaf miners and leaf rust. Mangoes were at 100% fruit setting stage and in moderate state.

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

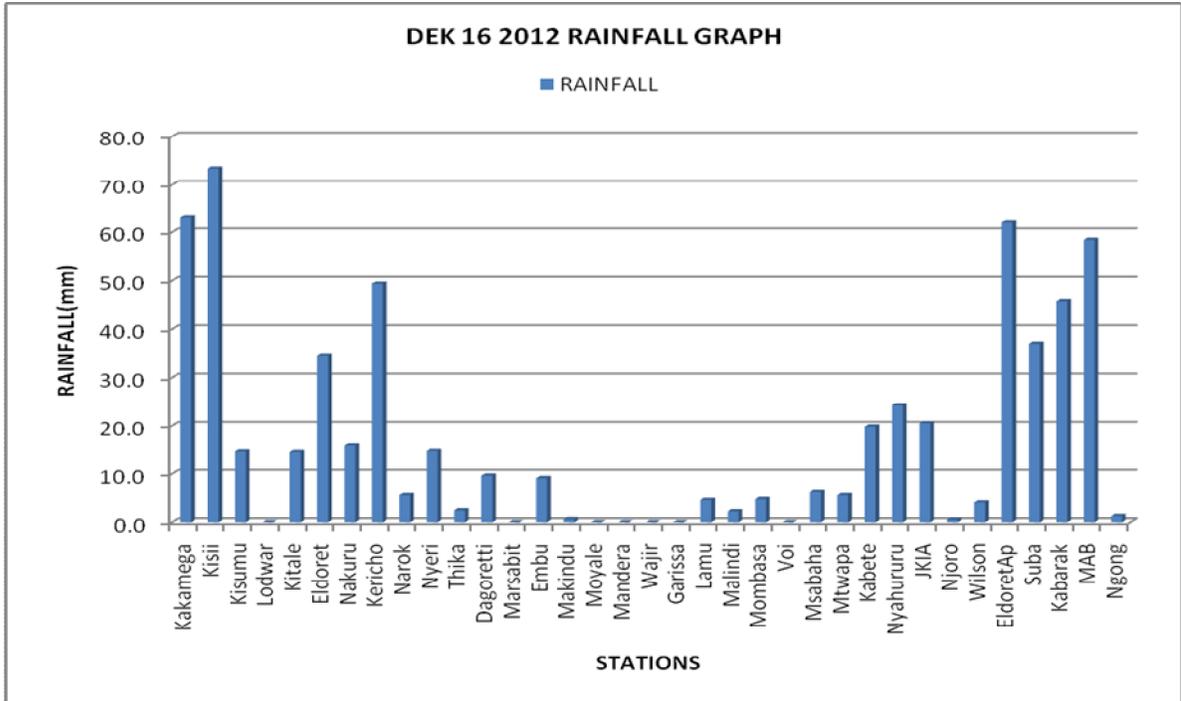


Figure 3.1: Dekadal rainfall totals for 1-10 JUNE 2012

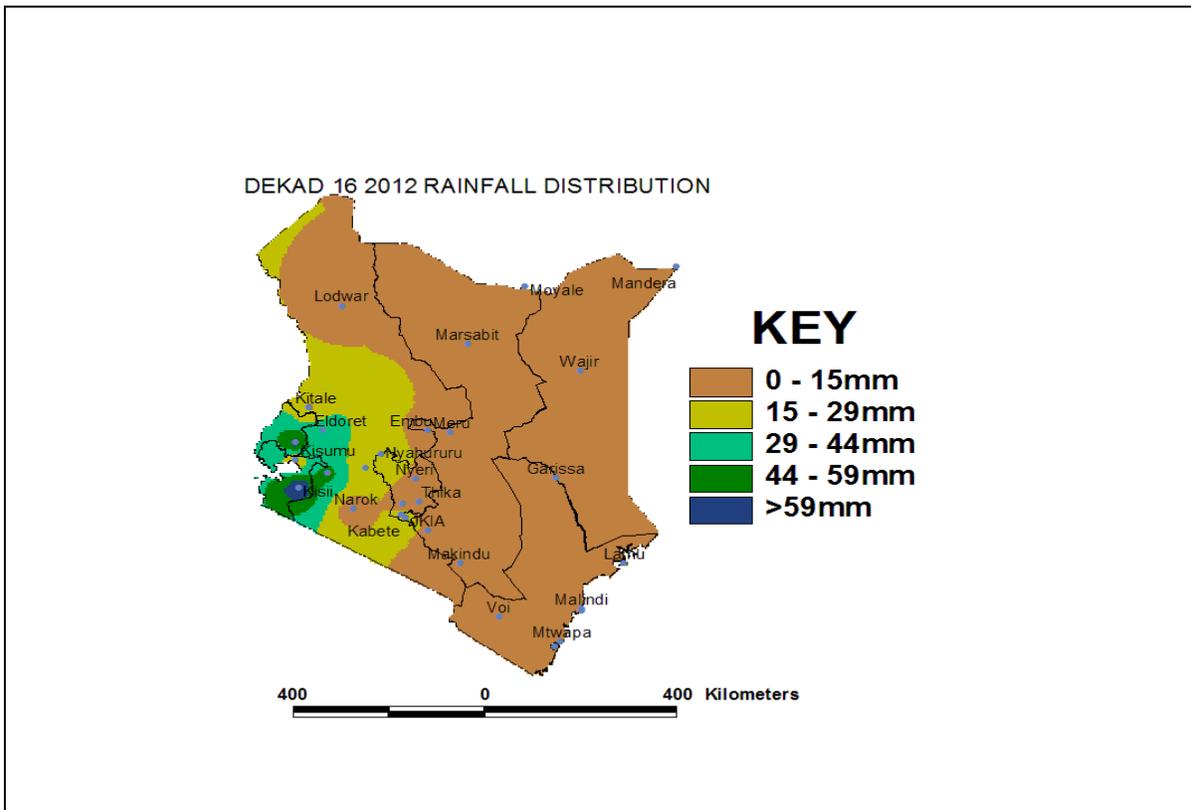


Figure 3.2: Dekadal rainfall distribution

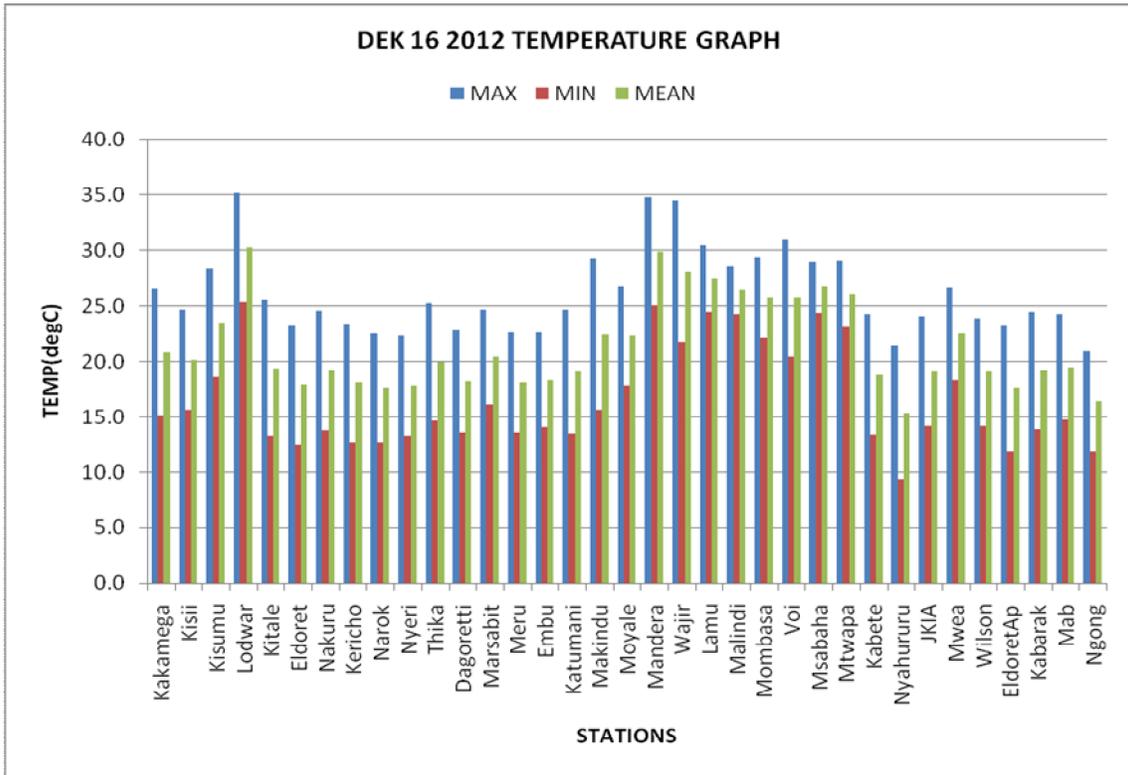


Figure 3.3: Maximum, Minimum and Average temperature in <sup>0</sup>c

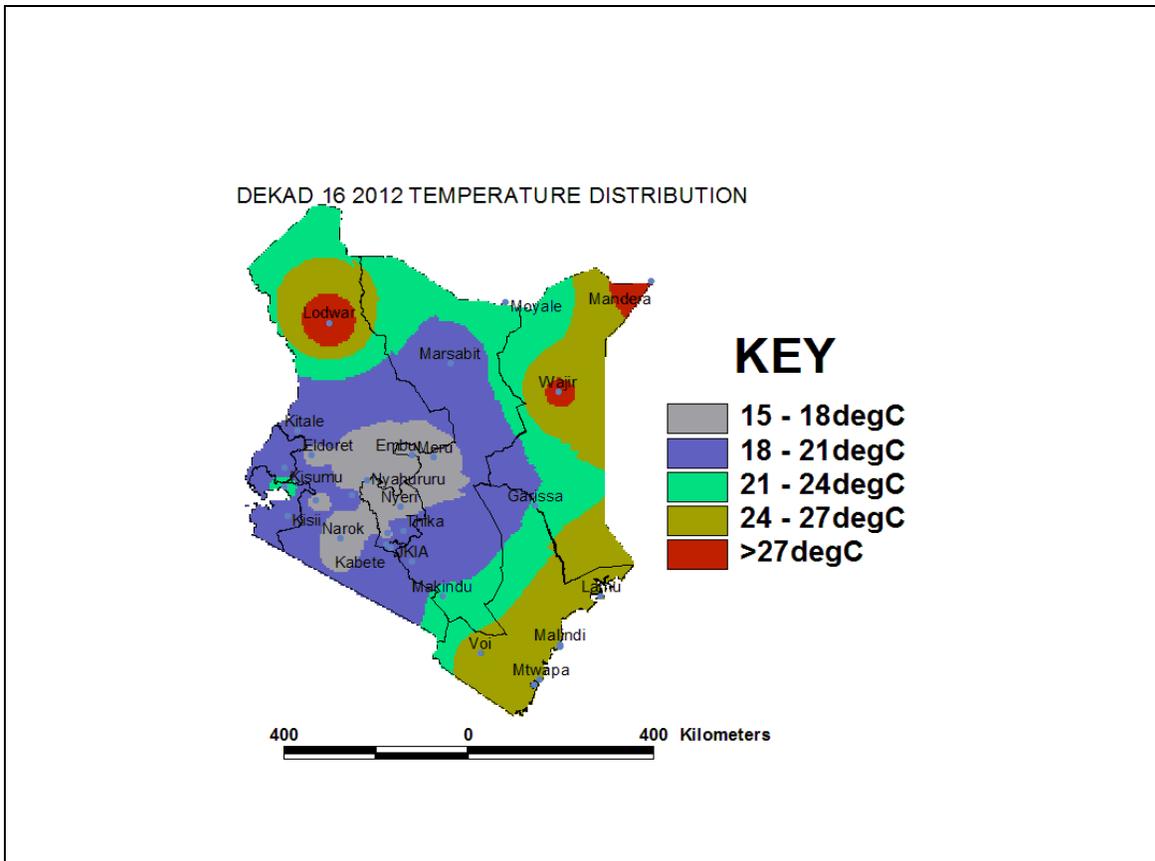


Figure 3.4: Mean temperature distribution

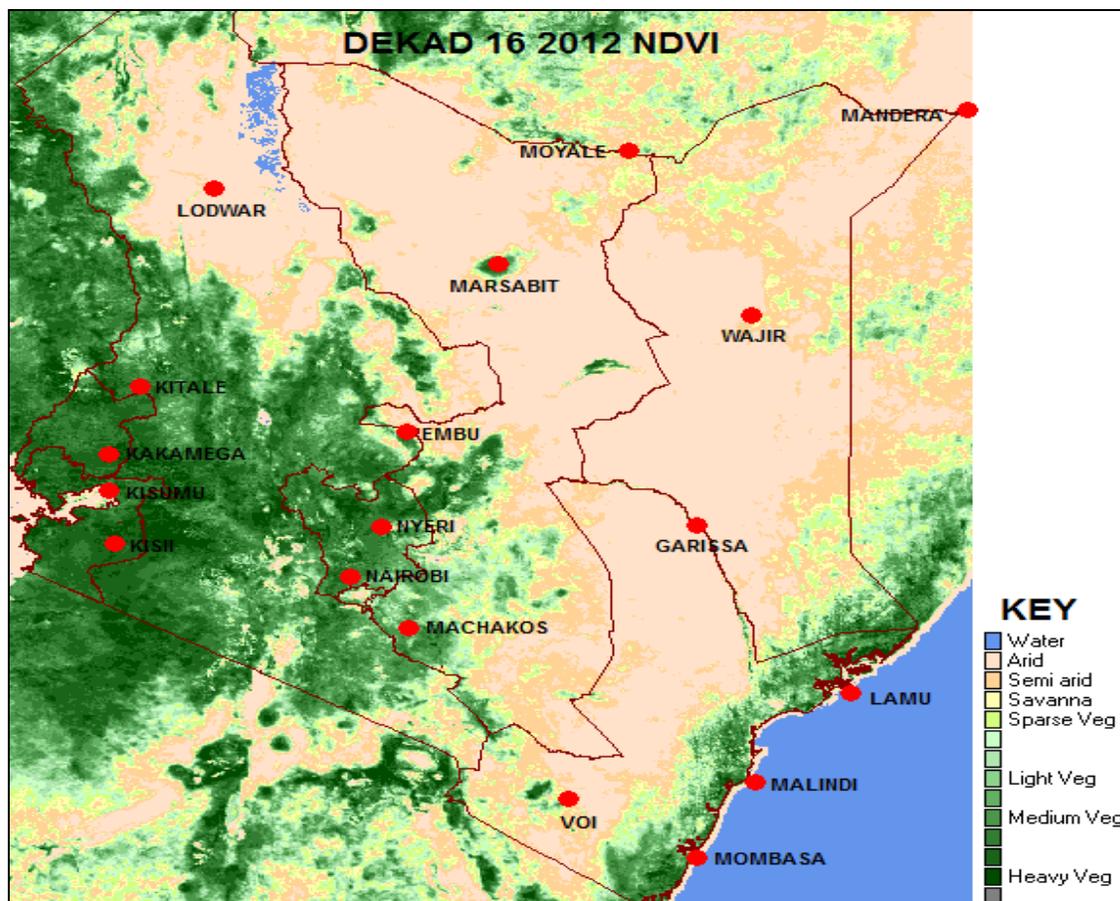


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 JUNE 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)** , are likely to experience sunny intervals in the morning then afternoon/night showers accompanied by thunderstorms over several places occasionally reducing to few places.

*The showers will continue flourishing the crops which are in vegetative and flowering stages.*

- **Over the Northwestern counties (Turkana, West Pokot etc)** , will experience mainly sunny intervals over most places for much of the forecast period. Afternoon showers are likely to occur over a few places bordering Uganda in the last two days of the forecast period.

*The expected showers will continue to replenish the pasture and general vegetation of the region.*

- ✚ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc) will** experience cool cloudy morning with light rains/drizzle over few places and mainly sunny intervals in the afternoon. Occasional light afternoon showers are however likely over a few places.

*The light rains will continue benefiting the growing crops in the region especially maize and beans.*

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** Sunny intervals are expected throughout the forecast period.

*The continued sunny conditions will start having a negative impact on the pasture and crops grown in this region.*

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** will experience sunny intervals throughout the forecast period.

*The current sunny intervals will start having a negative impact on the pasture for livestock kept in this region.*

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** Light to moderate morning showers are expected over several places especially during the first day of the forecast period.

*The continued showers in this region will sustain mangoes and watermelons which are in their fruit setting stage.*

***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