



**KENYA METEOROLOGICAL DEPARTMENT**  
**DEKADAL AGROMETEOROLOGICAL BULLETIN**  
**WEATHER AND CROP REVIEW FOR DEKAD 13, 2012**  
**01 – 10 MAY 2012**

**1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

During the current dekad, there was a general decrease in rainfall intensity received in most stations countrywide. The highest rainfall received was in central region where all the stations received above 100mm with Nyeri station receiving the highest rainfall amount of 232.5 mm. Embu station in Eastern region recorded 123.8 mm compared to 249.2mm in the previous dekad. Kakamega station in Western region received the highest amount of rainfall of 103.4mm. The highest rainfall recorded at the Coastal region was 66.1 mm in Malindi station. In North Eastern region, all stations reported low rainfall except Moyale, which received 55.0 mm being the highest rainfall amount in this region. Eldoret Airport station in Rift Valley region reported 228.2mm being the highest rainfall in this region. Generally, the Eastern side of the country still received the lowest amount of the rainfall with Wajir and Garissa stations reporting dry conditions.

There was a general decrease in maximum temperatures in most stations countrywide. The highest maximum temperature recorded was 36.7<sup>0</sup>c at Garissa station, which was a decrease, compared to 37.1<sup>0</sup>c in the previous dekad at the same station. The lowest minimum temperature reported was 10.7 <sup>0</sup>c recorded at Nyahururu station compared to 11.0<sup>0</sup>c at the same station 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 13; 01 – 10 MAY 2012**

**2.1 NYANZA AND WESTERN REGIONS**

**2.1.1 Kakamega**

The station received 103.4 mm of rainfall compared to 132.4 mm in the previous dekad. The mean air temperature was 20.7<sup>0</sup>c. *There was no report on sunshine hours and pan evaporation.*

*Maize and beans were at emergence stage though beans are being destroyed by excessive rain.*

**2.1.2 Kisi**

The station received 106.3 mm compared to 152.7 mm in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.1<sup>0</sup>C and 35.1 mm respectively. The Sunshine hours reported were 3.8 hours per day.

*Maize and beans were at the emergence and flowering stages respectively. Black aphids damage beans, though both crops are in fair state.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received 72.5 mm of rainfall compared to 90.2 mm in the previous dekad. The average air temperature and total pan evaporation recorded were 19.6<sup>0</sup>C and 26.0 mm respectively. The sunshine hours reported were 5.4 hours per day.

*Both maize and beans were at emergence stage and in a fair state although the current excessive rains are affecting them adversely. Weeding has started in most farms.*

### **2.2.2 Eldoret-Kapsoya**

The station reported 108.8 mm of rainfall compared to 200.4 mm in the previous dekad. The average air temperature recorded was 17.70c.

*Maize and beans were at emergence stage but adversely affected by excessive rainfall.*

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

### **2.3.1 Nyeri**

The station reported 232.5 mm of rainfall compared to 127.9 mm in the previous dekad. The average air temperature recorded was 18.6<sup>0</sup>c. There was no report on sunshine hours and pan evaporation.

*Maize and beans were at emergence stage and in fair state although beans have been adversely affected by insects.*

### **2.3.2 Kabete**

The station reported 151.9 mm of rainfall compared to 208.5 mm in the previous dekad. The average air temperature and pan evaporation recorded were 18.8<sup>0</sup>c and 30.4 mm respectively. Sunshine hours recorded were 4.6 hours per day.

*Maize and beans were at emergence stage and in fair state. Weeding is in progress in most farms. Coffee was at 100% pinhead stage and in moderate state but damaged by leaf rust at less than 10%. Bananas were at 100% appearance of suckers 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 rainfall amount of 164.1 mm compared to 117.5 mm in the previous dekad. The mean air temperature and pan evaporation recorded were 20.9<sup>0</sup>c and 43.9 mm respectively. There was no report on sunshine hours.

*Maize, beans and potatoes were all at emergence stage and in fair state though excessive rainfall has adversely affected beans.*

#### **2.3.4. Nyahururu**

The station received rainfall amount of 108.5 mm compared to 134.9 mm in the previous dekad. The mean air temperature and total pan evaporation recorded were 15.9<sup>0</sup>c and 36.5 mm respectively. There was no report on sunshine hours.

*Maize, beans and potatoes were at emergence stage and in fair state though adversely affected by excess rainfall.*

#### **2.3.5. Dagoretti**

The station reported 153.2 mm of rainfall compared to 265.0 mm in the previous dekad. The average air temperature recorded was 19.10c. Sunshine hours recorded was 5.2 hours per day.

*No phenological observations.*

### **2.4 EASTERN KENYA REGION**

#### **2.4.1 Meru**

The station reported 111.9 mm of rainfall compared to 52.9 mm in the previous dekad. The average air temperature recorded was 18.8<sup>0</sup>c. There was no report on pan evaporation and sunshine hours parameters.

*No phenological observations.*

#### **2.4.2 Embu**

The station reported 123.8 mm of rainfall compared to 249.2 mm in the previous dekad. The average air temperature was 19.7<sup>0</sup>c. Sunshine hours recorded was 6.4 hours.

*Both maize and beans were at emergence stage and in fair state.*

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

The station reported 104.5 mm of rainfall compared to 183.4 mm in the previous dekad. The average air temperature recorded was 19.8<sup>0</sup>c. There was no report on evaporation pan and sunshine parameters.

*Maize and beans were at emergence and flowering stages respectively. Both crops are in good state and normal yield is expected.*

### **2.5 COASTAL REGION**

#### **2.5.1. Msabaha**

The station reported 3.8 mm of rainfall compared to 11.5 mm in the previous dekad. The average air temperature and pan evaporation recorded were 27.6<sup>0</sup>c and 49.9 mm respectively. There was no sunshine report.

*Maize was at emergence stage and in fair state. Weeding is in progress in most farms. Mangoes were at 100% fruit setting stage and in good state.*

### 2.5.2 Mtwapa

This station reported 15.3 mm of rainfall compared to 29.5 mm in the previous dekad. The average air temperature and pan evaporation recorded were 27.4<sup>0</sup>c and 48.7 mm respectively. There was no report on sunshine hours.

*Maize is at 70% ninth leaf stage and in unsatisfactory state due to damage by stalk borers. Watermelon was at the 100% fifth leaf stage and in unsatisfactory state due damage by aphids and leaf miners. Mangoes were at 100% fruit setting stage and in moderate state though fruits are falling due to strong low winds.*

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

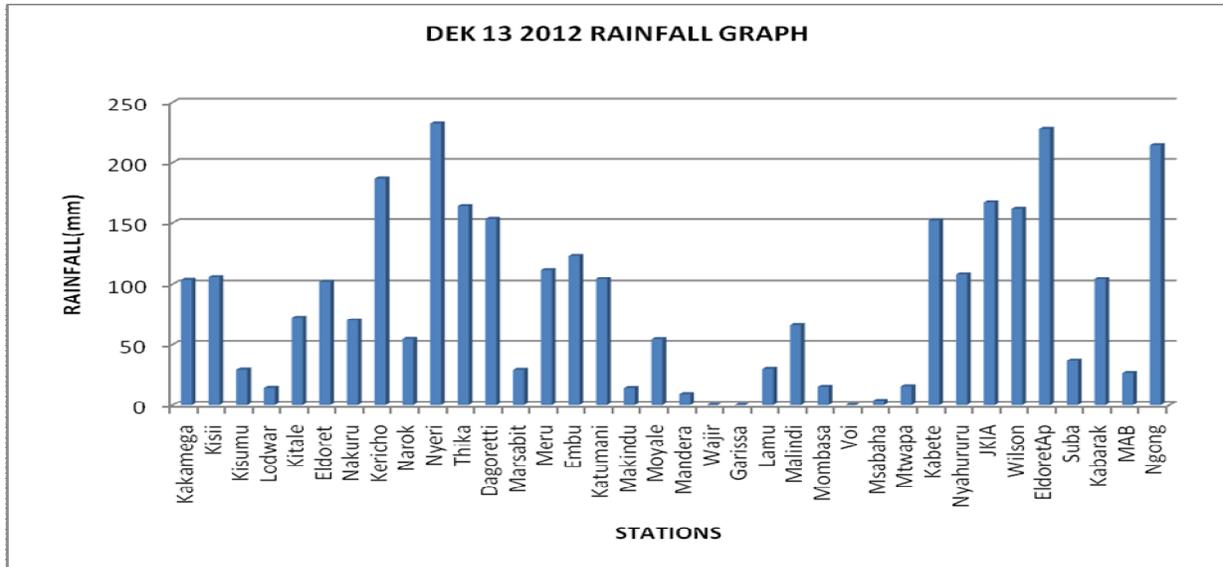


Figure 3.1: Dekadal rainfall totals for 1-10 May 2012

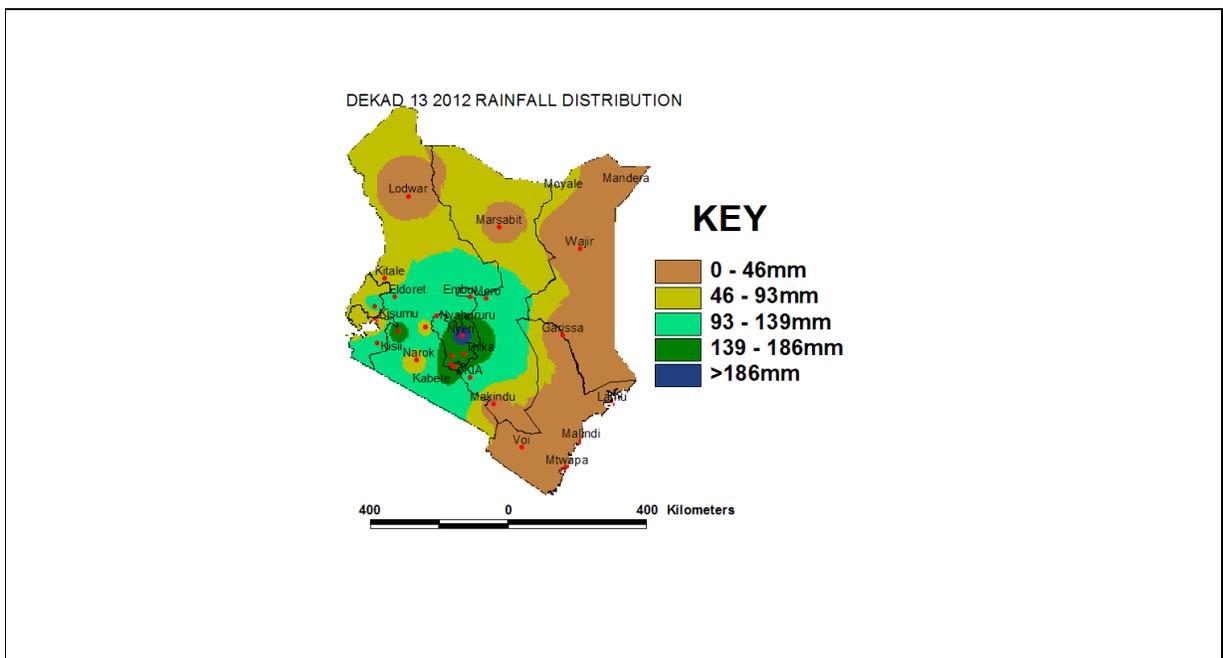


Figure 3.2: Dekadal rainfall distribution

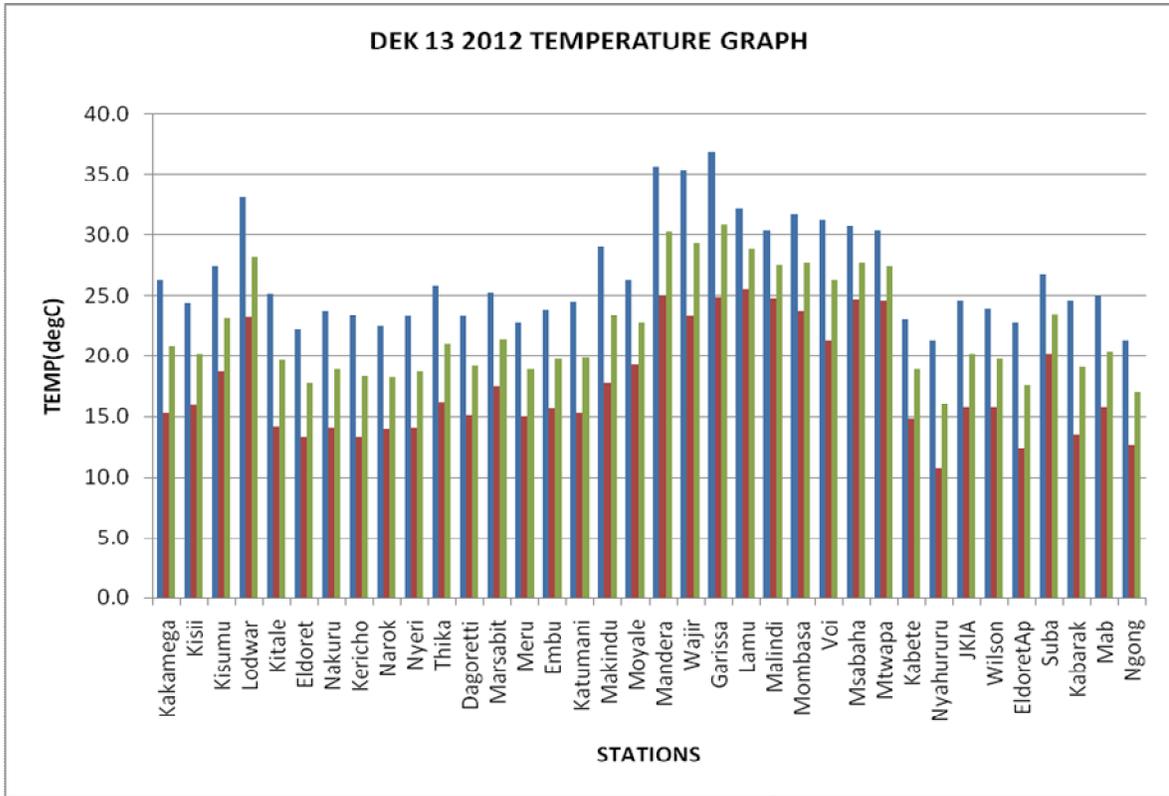


Figure 3.3: Maximum, Minimum and Average temperature in °C

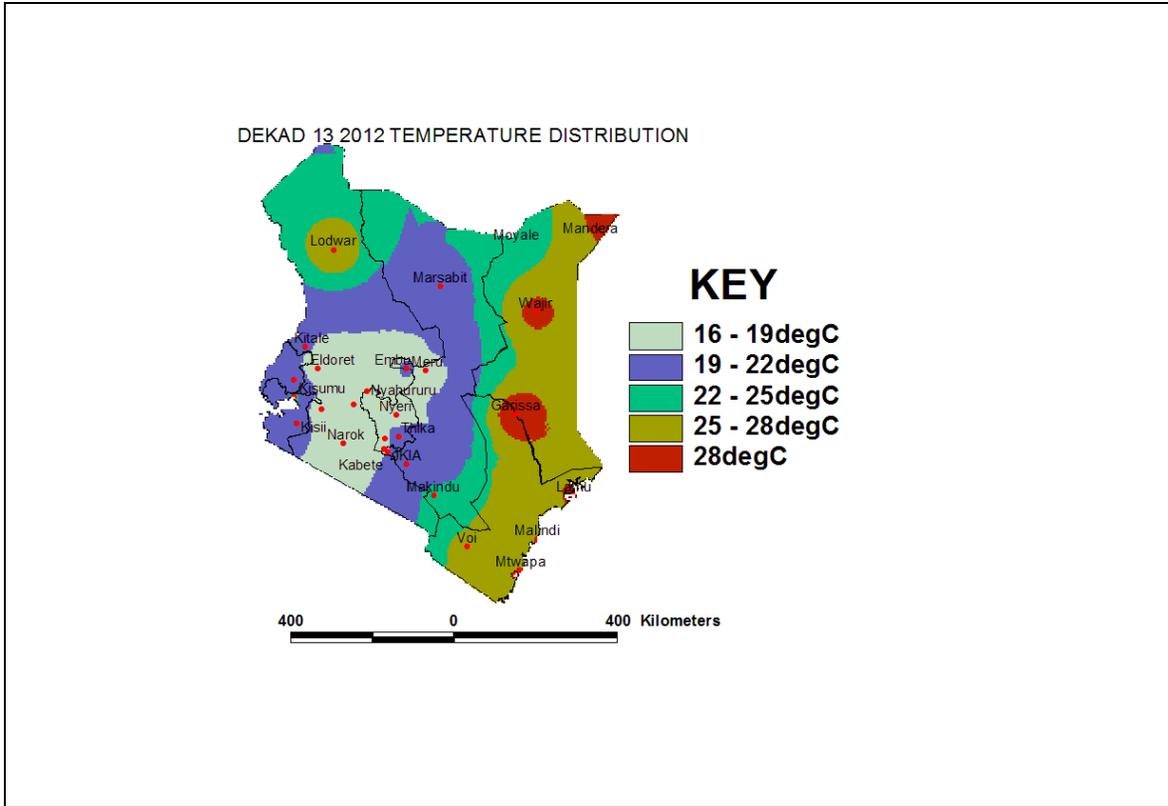


Figure 3.4: Mean temperature distribution

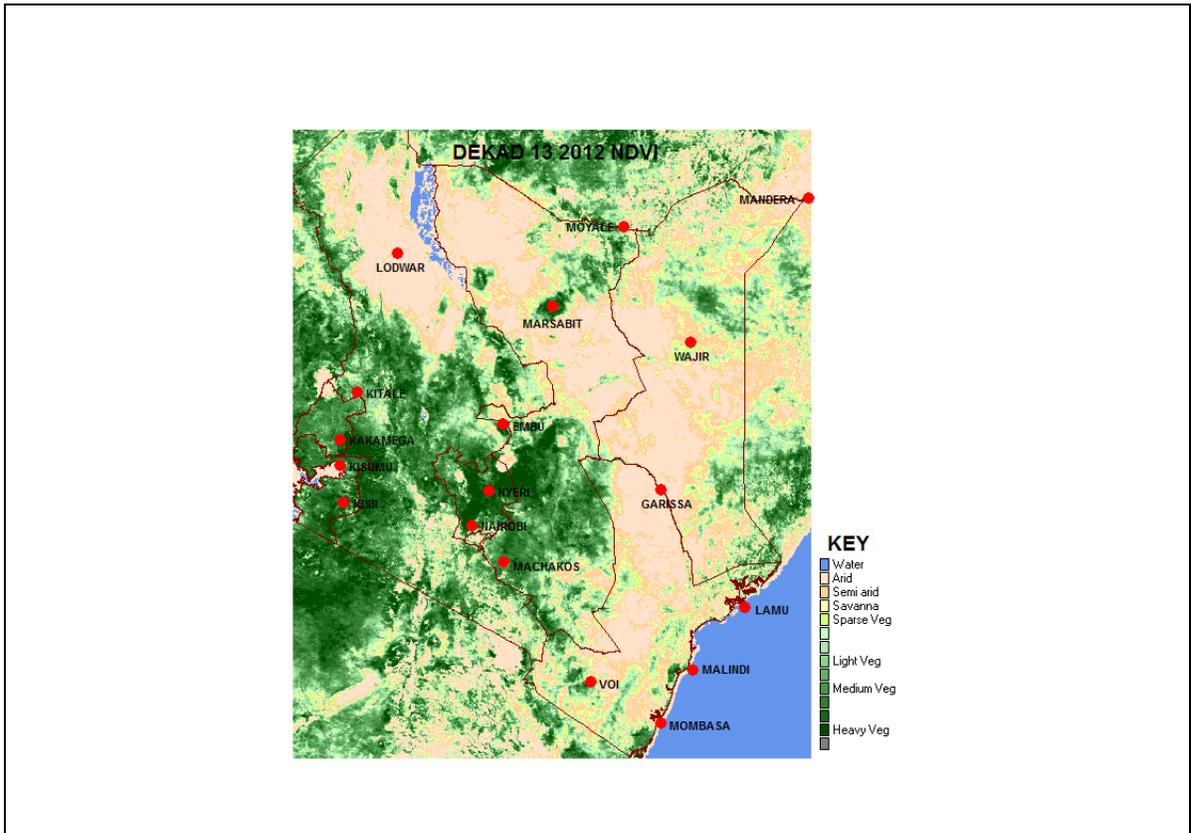


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 MAY 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 morning rains over few places breaking to sunny intervals and afternoon/night showers accompanied thunderstorms over several places. However the intensity is expected to be low.

*This is expected to continue improving the vegetative growth of maize and bean in the above-mentioned counties.*

- ✚ **Over the Northwestern counties (Turkana, West Pokot etc),** is expected to experience sunny interval during the first two days of the forecast period and afternoon showers over several places reducing to few places for rest of the dekad.

*The expected rains will help maintain the pasture and general vegetation of the region.*

- ✚ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc)** Cloudy morning with rains especially in high ground areas and afternoon/ night showers over several places will be experienced for much of the forecast period. Localized heavy rainfall events are likely to occur occasionally but with less frequency than the previous dekad.

*The expected continuation in rainfall activities will spur the growth of maize and beans planted in the region.*

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc)**, The first two days is expected cloud conditions with rain and afternoon/night showers. During the other remaining days will be characterized by afternoon/night showers.

*The showers will be expected to keep improving the crops domestic crops and pasture in these regions.*

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** Sunny intervals are expected during the first half of the forecast period the morning rain and afternoon showers over few places during the last half of the forecast period.

*The expected rain will improve the pasture for livestock and wildlife in the region and also spur the growth of maize and beans which are in their vegetative growth.*

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** showers are expected over several places and are expected to be heavy on the first two days especially on the south Coast. The rainfall intensities are expected to increase in the second half of the forecast period.

*The expected showers and heavy rains will continue spurring the growth of plants and crops being planted for the long rains season.*

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

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