



## KENYA METEOROLOGICAL DEPARTMENT

### DEKADAL AGROMETEOROLOGICAL BULLETIN

#### WEATHER AND CROP REVIEW FOR DEKAD 07, 2012 01 – 10 MARCH 2012

##### 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Most stations continued to report active weather with increased rainfall intensities countrywide compared to the previous dekad. However, dry conditions continued to persist in the North-Eastern and Coastal regions. Kakamega station in Western province received the highest rainfall of 77.4 mm compared to 15.0 mm in the previous dekad. The second highest rainfall observed was 59.5 mm at Kisii in the Nyanza region. Narok station in the Rift Valley region reported 43.3 mm while in Eastern region of Kenya, Makindu recorded 24.4mm.

Maximum temperature decreased in most stations though most coastal stations reported an increase. The highest maximum temperature of 38.0°C was observed in Wajir and Mandera stations both in North Eastern, while the lowest maximum temperature of 23.7 °C was recorded at Nyahururu station in the Central region. Apart from the stations at the coast and Northeastern regions, which reported an increase in minimum temperature, most stations reported a decrease in the minimum temperature.

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 07; 01 – 10 MARCH 2012

###### 2.1 NYANZA AND WESTERN KENYA REGIONS

###### 2.1.1 Kakamega

This station received 77.4 mm of rainfall as compared to 15.0 mm of rainfall received in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.2°C and 45.6 mm respectively, and Sunshine hours recorded were 7.2 hours per day.

*Land preparation for the long rainfall season is still going on.*

###### 2.1.2 Kisii

The station recorded 59.5 mm of Rainfall as compared to 10.1 mm of Rainfall reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.5°C and 41.5mm respectively. There was no report on Sunshine hours. *Land preparation for next season is still going on.*

###### 2.2 RIFT VALLEY REGION

###### 2.2.1 Kitale

The station received 39.3 mm of rainfall as compared to 6.0 mm of Rainfall reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.9<sup>0</sup>C and 47.8 mm respectively. There was no report on sunshine hours. *Land preparation for the next long season is underway.*

### **2.2.2 Eldoret-Kapsoya**

The station received 20.2 mm of rainfall compared to 11.8 mm of Rainfall reported in the previous dekad. The average air temperature and total pan evaporation recorded were 17.0<sup>0</sup>c and 68.23mm respectively. The sunshine hours recorded were 8.6 hours per day. *Land preparation for the next long season is underway.*

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

### **2.3.1 Nyeri**

The station received 2.4 mm of rainfall compared to 9.2 mm of Rainfall reported in the previous dekad. The average air temperature and total pan evaporation recorded were 18.2<sup>0</sup>c and 45.9 mm respectively. There was no report on Sunshine hours. *Land Preparation is going on for the next season.*

### **2.3.2 Kabete**

The station received 5.0 mm of rainfall as compared to 9.0 mm of Rainfall reported in the previous dekad. The average air temperature and Evaporation pan recorded were 19.7<sup>0</sup>c and 61.0 mm respectively. There was no report on Sunshine hours. *Land preparation for the long rains season is going on.*

### **2.3.3 Thika**

The station reported dry conditions as compared to 15.2 mm of Rainfall reported in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 21.4<sup>0</sup>c and 57.5 mm respectively. There was no report on sunshine hours. *Land preparation is going on.*

### **2.3.4. Nyahururu**

The station received 35 mm of rainfall as compared to 8.7 mm of Rainfall reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 15.3<sup>0</sup>c and 71.5 mm respectively. Average Sunshine hours recorded were 9.3 hours per day. *Farmers are preparing the land for the next season.*

### **2.3.5. Dagoretti**

The station received 5.5 mm of rainfall as compared to 8.0 mm of Rainfall reported in the previous dekad. The average air temperature pan evaporation recorded were 24.4<sup>0</sup>c and 58.5 mm. There was no sunshine hours report. *Land preparation for the next season is going on.*

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Meru**

The station received 7.4 mm of rainfall as compared to 5.6 mm of Rainfall reported in the previous dekad. The average air temperature and Evaporation pan recorded were 19.6<sup>0</sup>c and 46.4 mm respectively. There was no report on Sunshine hours. *Land preparation for next season is going on.*

#### 2.4.2 **Embu**

The station received 5.4 mm of rainfall as compared to 5.6 mm of Rainfall reported in the previous dekad. The average air temperature and Evaporation pan recorded were 21.0<sup>o</sup>c and 56.9 mm respectively. There was no report on Sunshine hours. *Maize harvesting is still going on, with below normal yield expected.*

#### 2.4.3 **Katamani (Machakos)**

The station received 1.6 mm of rainfall as compared to 0.01 mm of Rainfall reported in the previous dekad. The average air temperature recorded was 22.1<sup>o</sup>c. There was no report on evaporation and sunshine parameters. *Land preparation for the next season has started.*

### 2.5.0 **COAST PROVINCE**

#### 2.5.1. **Msabaha**

The station received 0.01 mm of rainfall as compared to 0.6mm of rainfall received in the previous dekad. *The* average air temperature and pan evaporation recorded were 28.2<sup>o</sup>c and 60.5 mm of Rain respectively. There was no sunshine report. *Land preparation for the next season is going on.*

#### 2.5.2 **Mtwapa**

This station reported dry conditions as compared to 0.4 mm of Rainfall reported in the previous dekad. The average air temperature recorded was 28.1<sup>o</sup>c. There was no sunshine and Pan evaporation report. *Land preparation for the next season has started. Watermelon was at 100% consumer's ripeness stage and in bad state due to prolonged dry spell.*

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

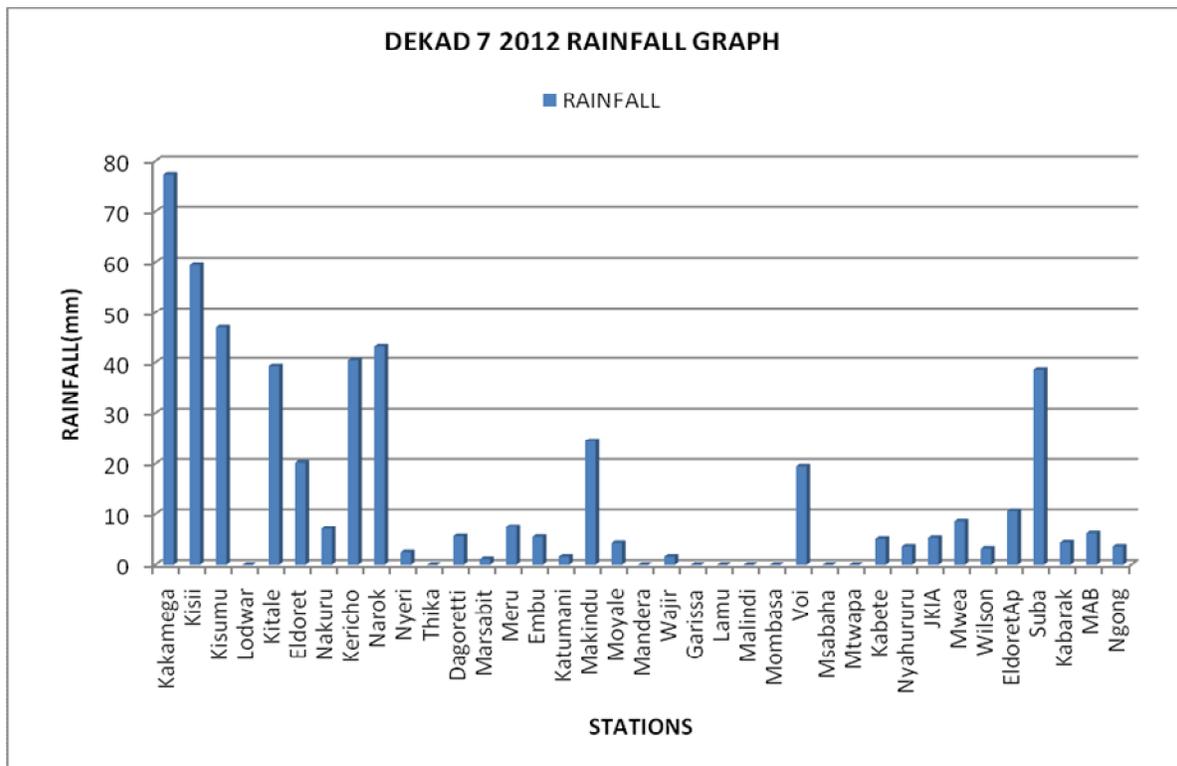


Figure 3.1: Dekadal Rainfall totals for 01 - 10 March 2012

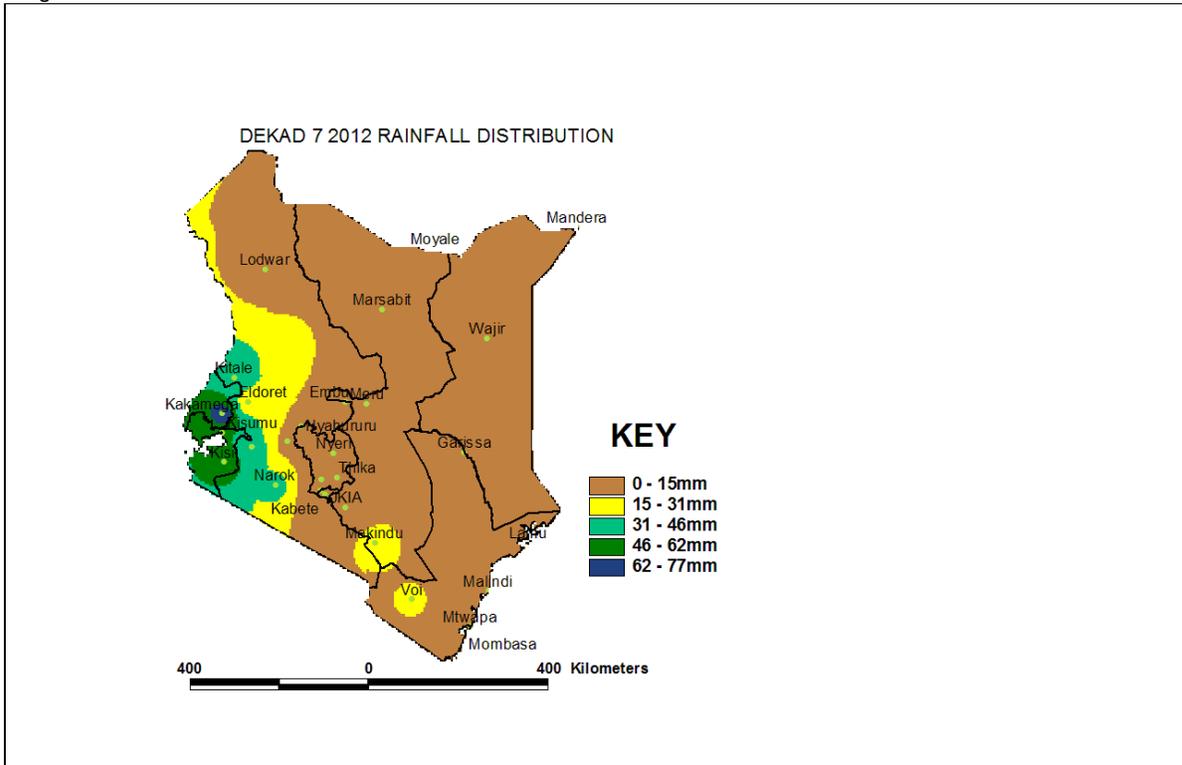


Figure 3.2: Dekadal Rainfall distribution

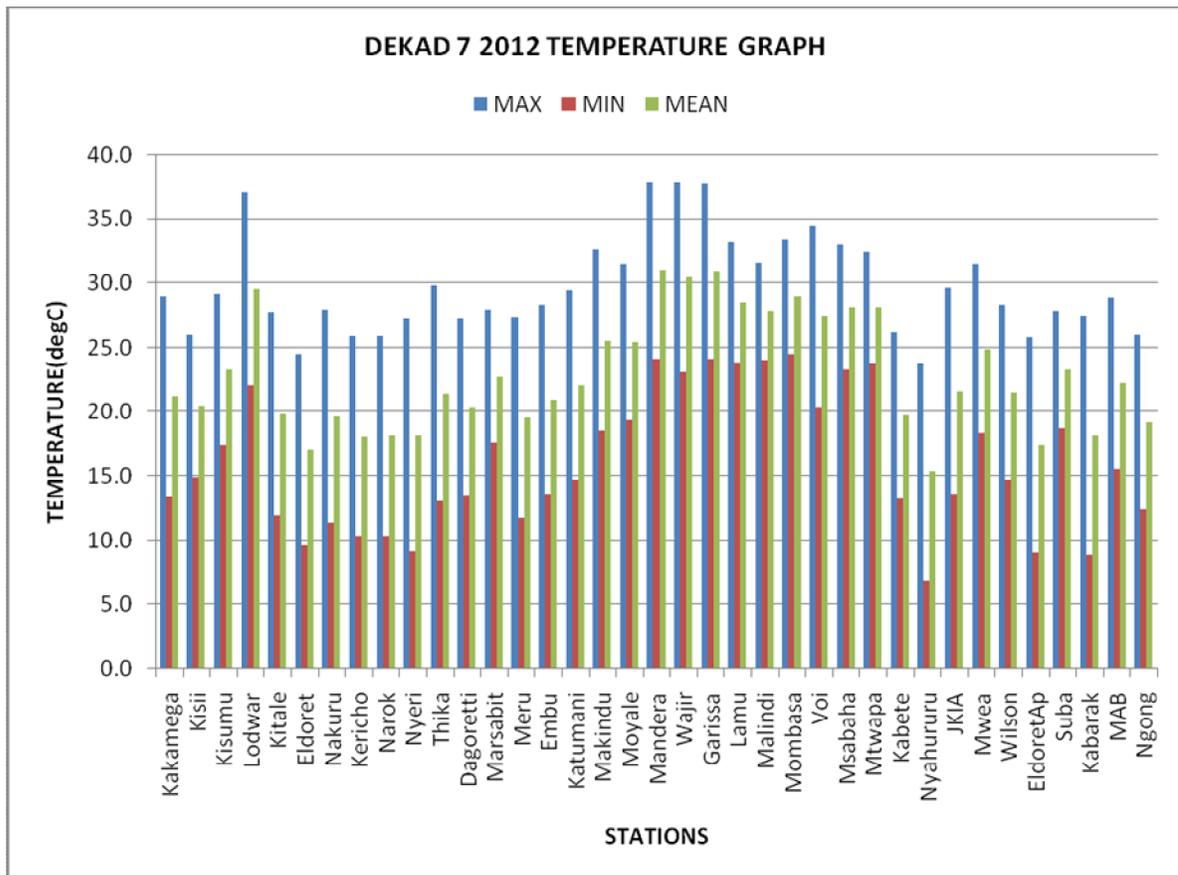


Figure 3.3: Maximum, Minimum and Average temperature in °C

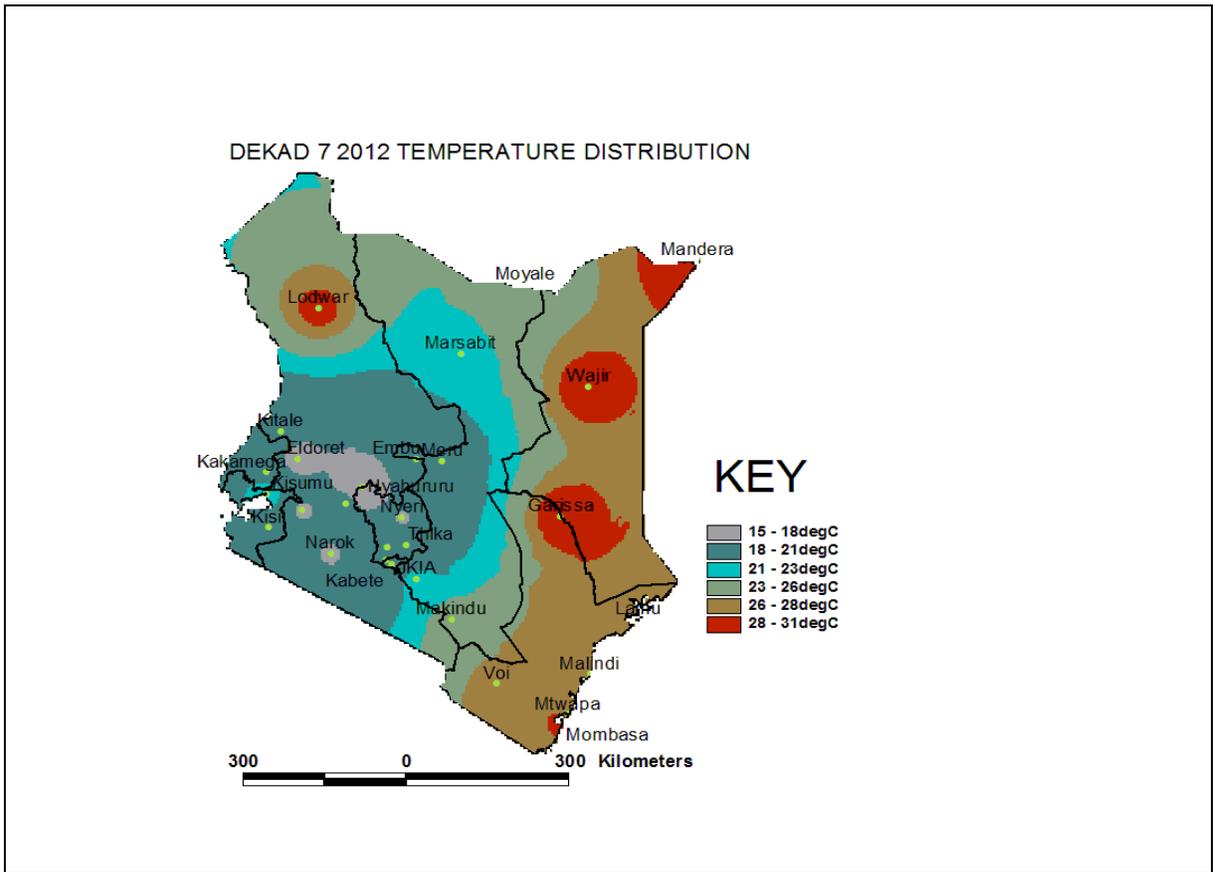


Figure 3.4: Mean Temperature distribution

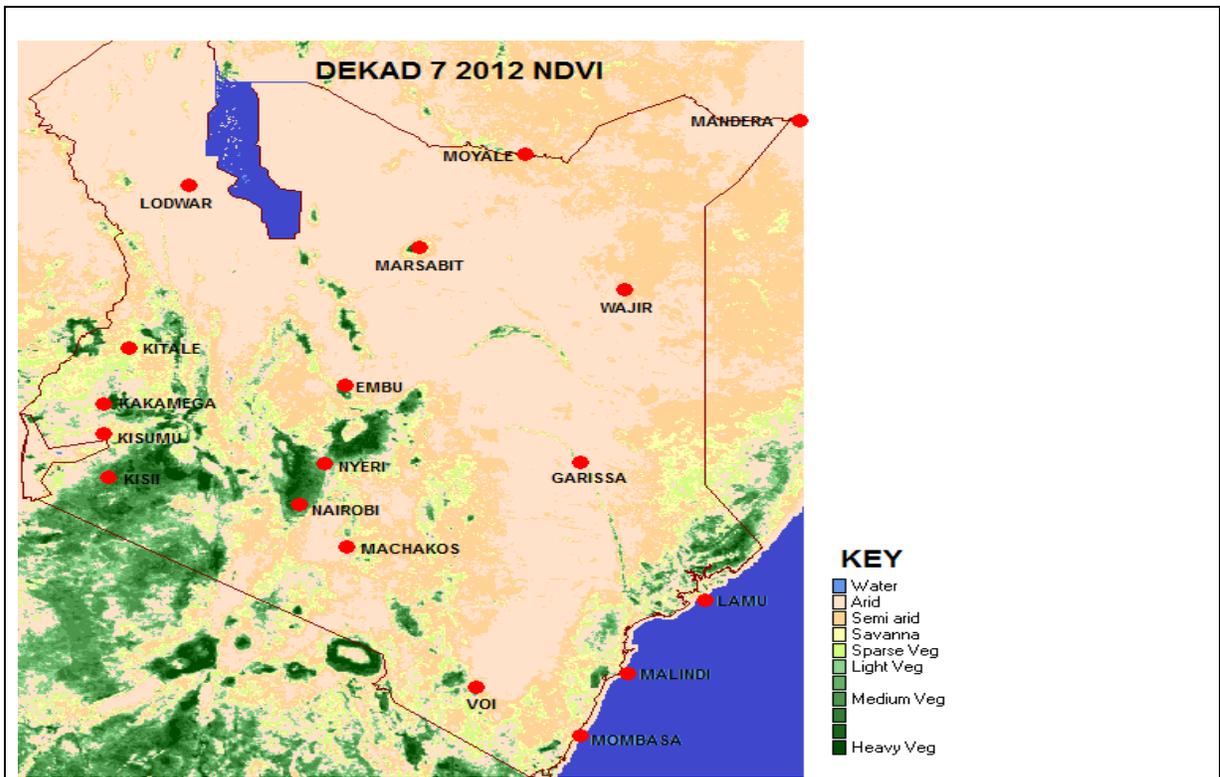


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 MARCH, 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 sunny intervals, occasional afternoon showers over few places confined to the Southern areas near the lake and south Nyanza during the second half of the forecast period. *These weather conditions are beneficial to the crops some farmers have started planting in these regions.*
- ✚ **The Northwestern counties (Turkana, West Pokot etc),** will experience sunny conditions throughout the forecast period. *These dry conditions are not are not beneficial to the pasture for animals kept in these regions.*
- ✚ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc)** Will experience sunny intervals for much of the forecast period. *The sunny periods are useful in land preparation which is going on in most farms.*
- ✚ **In the Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** sunny intervals will be experienced throughout the forecast period. Localized light showers will be experienced around Moyale in the second half of the forecast period. *The showers will replenish the pasture in these regions hence benefit the animals kept in these regions.*
- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** will experience sunny periods for much of the forecast period. *These conditions are favorable for the land preparation going on in these regions.*
- ✚ **The Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale, etc):** Sunny intervals will be experienced in most parts of the region with occasional rains over the extreme southern tip of Kenya and Tanzania during the second half of the forecast period. *The rainy conditions are favorable to the mango 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)

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