

# KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN WEATHER AND CROP REVIEW FOR DEKAD 10, 2013 01-10 APRIL 2013

#### 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

During the current dekad there was some reduction in rainfall activities in intensity in most stations countrywide, with highest rainfall of 221.2mm being received at Ngong station in Nairobi region compared to 265.6mm recorded at Marsabit station in Eastern region in the previous dekad. The second highest rainfall of 200.7mm was received at Marsabit station in Eastern region. Kisii station in Nyanza region reported highest rainfall of 150.3mm. In western region Kakamega station recorded the highest amount of rainfall of 145.5mm. Thika station in central region received the highest rainfall amount of 109.4mm. In rift valley region Eldoret Airport station recorded the highest rainfall amount of 108.9mm. Moyale station in North eastern region received the highest rainfall amount of 97.1mm. Voi station reported 91.1mm as the highest rainfall in the coastal region.

Maximum temperatures continued to decrease in most stations, while the minimum temperatures slightly increased in some stations. Mandera station in North Eastern region continued to report the highest maximum temperatures of 36.0°C compared to 35.2°C reported in the previous Dekad. The lowest maximum temperature of 22.2°C was recorded at Ngong station in Nairobi region compared to 22.7°C reported at the same station in the previous Dekad. The lowest minimum temperature of 10.4°C was reported in Nyahururu station in Central region compared to 9.1°C reported in the same station in the previous Dekad.

For a 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 10; 01-10 APRIL 2013

# 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

This station received rainfall amount of 145.5mm compared to 138.2mm reported in the previous dekad. The mean air temperature and pan evaporation reported were 21.3°C and 41.0mm respectively. There was no report on sunshine parameter.

Beans and maize in most farms were at emergence stage and in good state due to sufficient rainfall in this current dekad. Most farmers had finished planting.

### 2.1.2 Kisii

This station recorded rainfall amount of 150.3mm compared to 169.9mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.2°C and 36.3mm respectively. There was no report on sunshine duration.

Beans and maize were at emergence stage and in good state. Some farmers have started weeding.

#### 2.2 RIFT VALLEY REGION

### 2.2.1 Kitale

The station received rainfall amount of 81.5mm compared to 110.8mm reported in the previous dekad. The average air temperature was 20.2©C. There was no report on sunshine and evaporation parameters.

Maize and beans were at emergence stage and in good condition. Some farmers have started planting their crops.

# 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 112.1mm compared to 117.9mm reported in the previous dekad. The average air temperature reported was 18.4\(\mathbb{Z}\)C. There was no report on sunshine and evaporation parameters.

Maize and beans were emergence stage and in fair condition.

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

# 2.3.1 Nyeri

The station received rainfall amount of 54.8mm compared to 15.9mm received in the previous dekad. The average air temperature was 20.1°C. There was no report on pan evaporation and sunshine duration.

Maize and beans were at emergence stage and in fair state.

#### 2.3.2 Kabete

The station received rainfall amount of 205.2mm compared to 144.2mm reported in the previous dekad. The average air temperature reported was 19.8°C. There was no report on evaporation and sunshine duration.

Maize and beans were at emergence stage and in fair state, planting is still underway. Coffee was at 100% pin head. It has been attacked by leaf rust 25%, leaf minor less than 10%. Bananas were at 100% appearance of sucker. It has been damaged by thrips 25%, Ciggar and end rot at less than 10%.

### 2.3.3 **Thika**

The station received 109.4mm compared to 175.5mm received in the previous dekad. The mean air temperature recorded was 22.1°C. There was no report on sunshine and evaporation parameters.

Maize and beans were at emergence stage and in fair condition. Potatoes were also in emergence stage and in fair condition. Excessive rainfall during this dekad has started having a negative impact on the beans.

### 2.3.4. Nyahururu

The station received 103.1mm of rainfall compared to 72.8mm in the previous dekad. The mean air temperature and pan evaporation recorded were 16.5°C and 43.7mm respectively. The duration of sunshine was 6.31 hours.

Planting was in progress in most farms.

#### 2.3.5. Dagoretti

The station received rainfall amount of 148.0mm compared to 115.6mm reported in the previous dekad. The mean air temperature and evaporation pan recorded were 20.2°C and 40.0mm respectively. The sunshine duration was 6.63hours.

#### 2.4 EASTERN KENYA REGION

### 2.4.1 Meru

The station reported 52.7mm compared to 107.5mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.8°C and 39.9mm respectively. There was no report on sunshine parameter.

Maize and beans were at emergence stage and in fair state. Most farmers have finished planting.

#### 2.4.2 Embu

The station received rainfall amount of 82.6mm compared to 103.9mm in the previous dekad. The average air temperature and pan evaporation were 15.4mm and 43.6mm respectively. There was no report on sunshine parameter.

Maize and beans were at emergence stage and in fair state. Most farmers have finished planting.

#### 2.4.3 Katumani (Machakos)

The station received rainfall amount of 45.7mm compared to 93.7mm in the previous dekad. The average air temperature was 21.4°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans were at emergence stage and in good condition.

#### 2.5 COASTAL REGION

#### 2.5.1. Msabaha

The station received rainfall amount of 80.1mm compared to 40.3mm received in the previous dekad. The average air temperature and pan evaporation recorded were 28.5°C and 38.1mm respectively. There was no report on sunshine hours.

Maize was at emergence stage and in fair condition.

#### 2.5.2 Mtwapa

The station received rainfall amount of 44.1mm compared to 70.6mm in the previous dekad. The average air temperature recorded and evaporation pan were 28.5°C and 46.1mm respectively. There was no report on sunshine parameter.

Maize was at emergence stage and in fair condition. Mangoes were at fruit setting stage and in good condition.

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

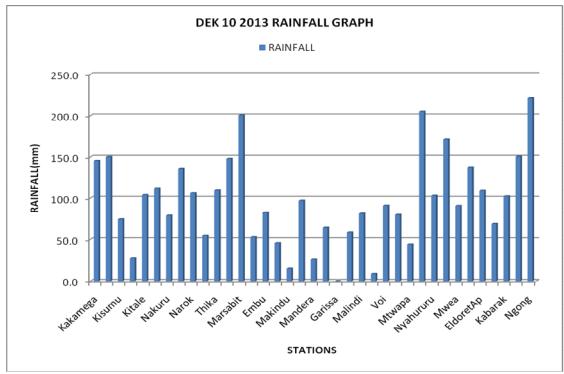


Figure 3.1: Dekadal Rainfall totals for the period 01-10 April 2013

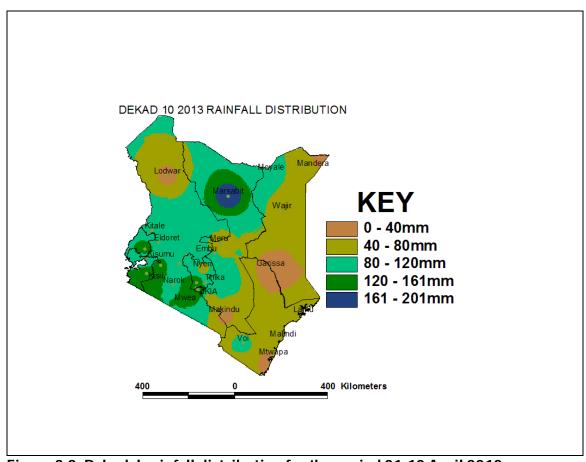


Figure 3.2: Dekadal rainfall distribution for the period 01-10 April 2013

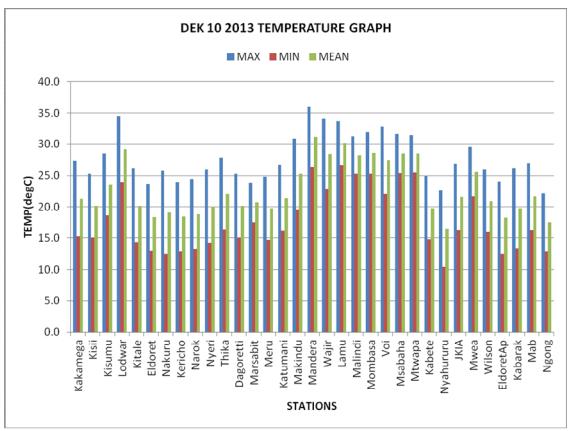


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 10, 2013

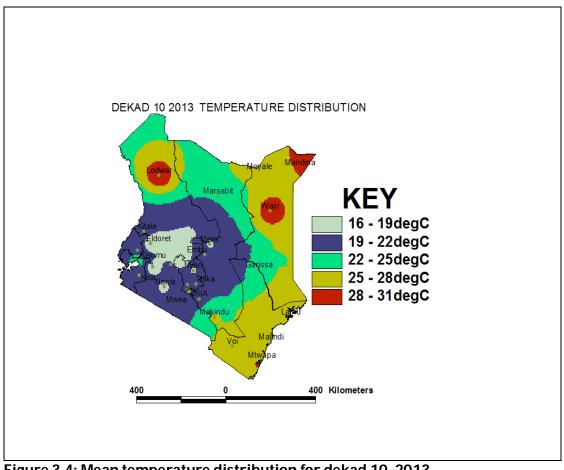


Figure 3.4: Mean temperature distribution for dekad 10, 2013

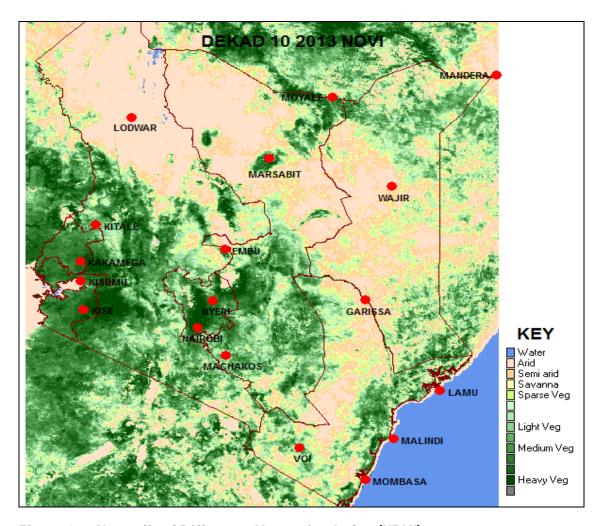


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

# 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 APRIL 2013

♣ Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Nyamira, Kericho, Bomet, Uasin-Gishu, Nakuru, Narok, Trans Nzoia, Elgeyo Marakwet, Nandi, Laikipia, Kajiado, Vihiga and Busia), are expected to experience in the mornings rains over a few places followed by sunny intervals for the rest of the entire forecast period. Afternoons are expected to experience showers and thunderstorms over several places for the first six days, followed by showers and thunderstorms over few places over the last four days of the forecast period.

The showers are of great benefit to the crops which are mainly in their emergence stage in these regions.

Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience showers over few places for the first three days, followed by sunny intervals for the rest of the entire period. Afternoons will have showers and thunderstorms over few places for the first six days, followed by sunny intervals for the rest of the forecast period.

The showers will continue to benefit the pasture and vegetation cover in these regions.

The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience in the morning rains over several places for the first half of the forecast, followed by cloudy conditions with rains over few places for the rest of the forecast period. The afternoons will experience mainly showers over a few places for the entire forecast period.

The expected showers will continue to benefit the germinating crops in these regions.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience in the mornings mainly rains over few places for the entire forecast period. Afternoons are expected to have showers over a few places for the first six days of the forecast followed by, sunny intervals for the rest of the forecast period.

The expected showers will continue to replenish the pasture for the animals and vegetation in these regions.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to have mornings with mainly sunny intervals throughout the entire forecast period. Mainly showers over a few places will be expected for the entire forecast period in the afternoon.

The showers are of great benefit to the crops which are still mainly in their emergence stage in these regions.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), Expected showers over several places for the first three days, decreasing to showers over few places for next five days followed by sunny intervals on the last two days of the forecast period.

The showers are of great benefit for the crops which are in their emergence stage in these regions.

# For feedback or further guidance, Contact:

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