**KENYA METEOROLOGICAL SERVICE**

**DEKADAL AGROMETEOROLOGICAL BULLETIN**

# WEATHER AND CROP REVIEW FOR DEKAD 31, 2013
# 01-10 NOVEMBER, 2013

## 1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country reduced drastically both in space and Intensity compared to the previous dekad. Eastern region received the highest amount of Rainfall countrywide with Meru, Embu Marsabit and Mwea stations receiving rainfall amount of 242.7mm, 159.3mm, 146.7mm and 145.1mm respectively. Moyale station in North Eastern region received the highest amount of rainfall of 135.7mm. In Central region, Nyahururu station recorded the highest amount of rainfall of 92.6mm. Kakamega station in Western region received received the highest amount of rainfall of 66.5mm. In Rift Valley region, Eldoret station received the highest amount of rainfall of 64.3mm. Coastal region had Mtwapa station reporting the highest amount of rainfall of 63.1mm. In Nairobi region, Dagoretti station received the highest amount of rainfall of 41.3mm. While Kisii station in Nyanza region reported the highest amount of rainfall of 40.8mm.

Generally, there was a great decrease in the maximum temperature over the whole country. The highest observed maximum temperature was 34.8$^0$C at Lodwar station compared to 36.6$^0$C reported in the same station during the previous dekad. The minimum temperature increased significantly in the whole country. Nyahururu station in Central region reported the lowest of 9.9$^0$C compared to the previous dekad where it recorded 7.6$^0$C.

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 31; 01-10 NOVEMBER 2013

### 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station received rainfall amount of 66.5mm. The mean air temperature and pan evaporation were 20.9$^0$C and 41.5mm respectively. There was no report on sunshine duration

*Beans were at maturity stage and in a good state with normal yield being expected.*

#### 2.1.2 Kisii

The station recorded rainfall of 40.8mm. The mean air temperature and sunshine duration were 20.2$^0$C and 4.6 hours respectively. Evaporation Pan report was 23.9mm.

*Maize is at emergence stage while beans were at maturity stage and in fair state*

## 2.2 RIFT VALLEY REGION

### 2.2.1 Kitale

The station received rainfall amount of 47.6mm. The average air temperature and Evaporation Pan were 18.7°C and 30.6mm respectively. There was no report on sunshine duration.

*Farmers have completed harvesting.*

### 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 64.3mm. The average air temperature and Evaporation pan reported were 17.3°C and 46.8mm respectively. There was no Sunshine.

*Farmers are harvesting their maize.*

## 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

### 2.3.1 Nyeri

The station received rainfall amount of 45.2mm. The average air temperature was 18.8$^0$C. There was no report on pan evaporation and sunshine parameters.

*Farmers have completed planting.*

### 2.3.2 Kabete

The station recorded 52.5mm of rainfall amount. The average air temperature and pan evaporation recorded were 19.1$^0$C and 38.2mm respectively. There was no report on sunshine duration.

*Farmers are busy planting.*

### 2.3.3 Thika

The station received rainfall of 49.5mm. The mean air temperature and pan evaporation recorded were 21.5$^0$C and 38.0mm respectively. No report on sunshine duration.

*Planting is underway.*

### 2.3.4. Nyahururu

The station received 92.6mm of rainfall. The mean air temperature and pan evaporation recorded were 15.0$^0$C and 39.1mm respectively. There was no report on sunshine.

*Maize was at maturity stage and in a good state while potatoes were at emergence stage and both crops are in good state.*

### 2.3.5. Dagoretti

The station received rainfall amount of 41.3mm and mean air temperature of 19.9$^0$C respectively. Evaporation pan and sunshine duration were 40.8mm and 5.9hours respectively.

*Both maize and beans are at emergence stage.*

## 2.4 EASTERN KENYA REGION

### 2.4.1 Meru

The station reported rainfall amount of 242.7mm. The average air temperature and Pan Evaporation were 19.1$^0$C and 47.7mm respectively. There was sunshine report of 5.0hrs.

*Maize and beans are at emergence stage and both are in fair state.*

### 2.4.2 Embu

The station recorded rainfall amounts of 159.3mm. The mean air temperature was 16.0$^0$C. There was no report on Sunshine and Pan Evaporation.

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

### 2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 41.7mm. The average air temperature was 20.8$^0$C. There was no report on sunshine duration and pan evaporation.

*No phenological report*

## 2.5. COASTAL REGION

### 2.5.1 Msabaha

The station received rainfall amount of 46.9mm. The average air temperature and pan evaporation recorded was 27.1$^0$C and 32.9mm respectively. There was no report on sunshine duration.

*Maize is at emergence stage and in fair state.*

### *2.5.*2 Mtwapa

The station received rainfall amount of 63.1mm. The average air temperature and Pan Evaporation were 26.4$^0$C and 47.7mm respectively. There was no report on sunshine duration.

*Planting of maize crop is continuing around Mtwapa area in Kilifi County. Mangoes were at flowering stage and in fair state.*

## 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

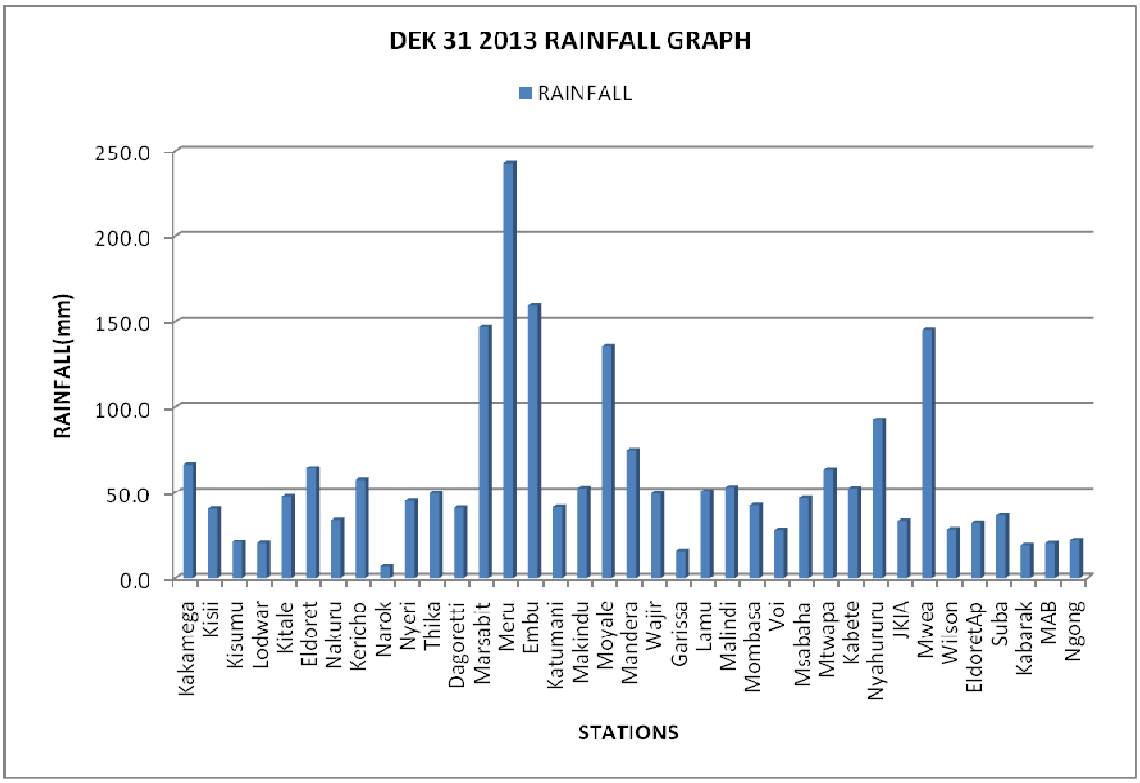


**Figure 3.1: Dekadal rainfall totals for 01st to 10th November 2013**

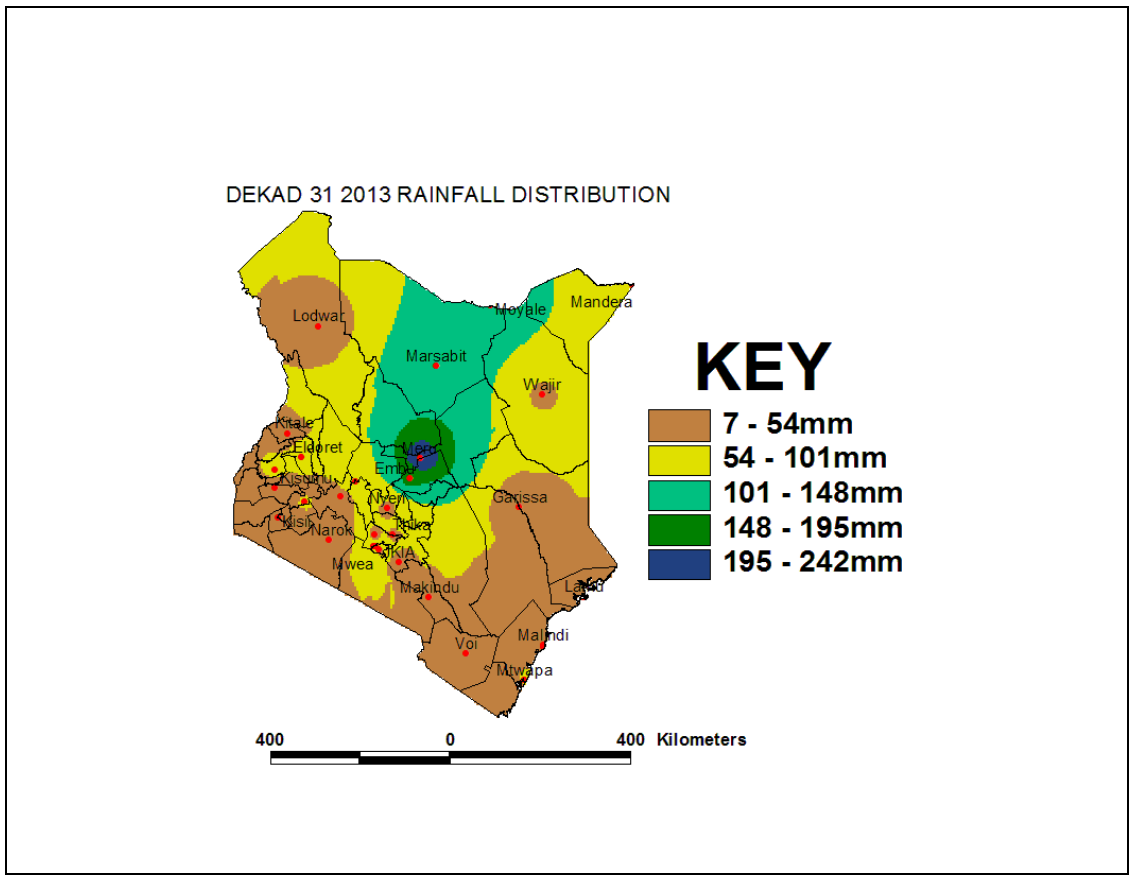


**Figure 3.2: Dekadal rainfall distribution for dekad 31, 2013**

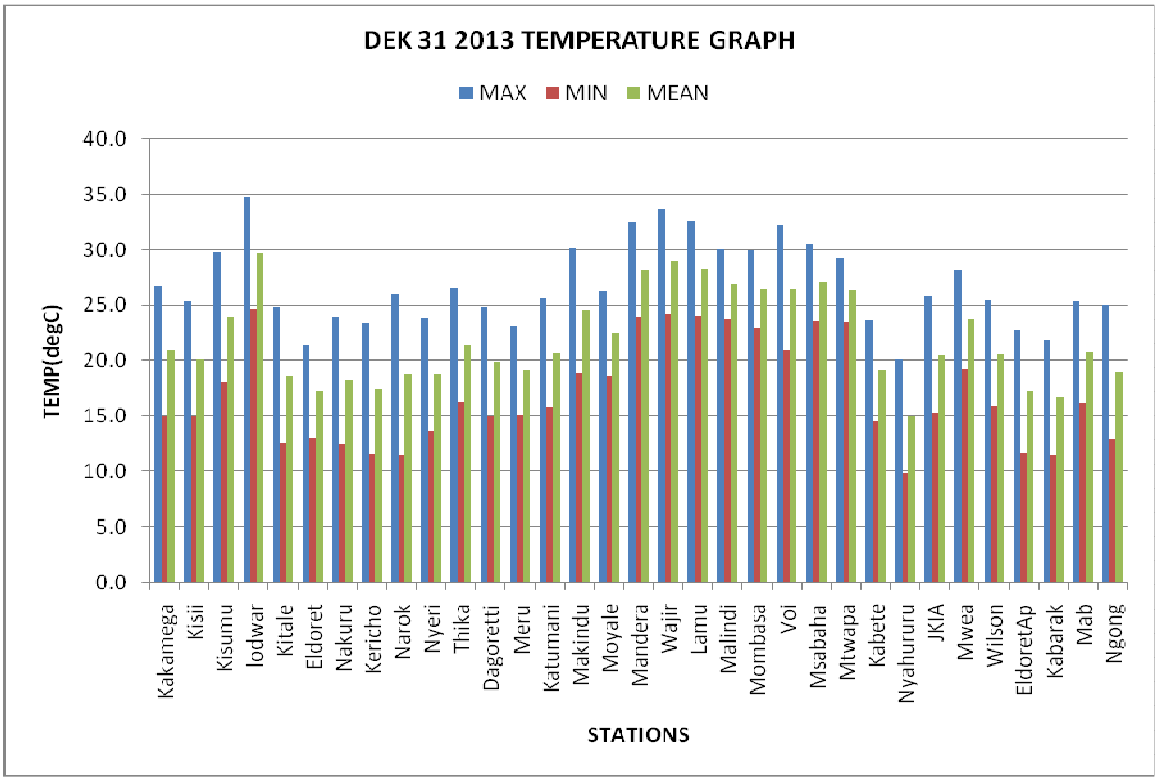


**Figure 3.3: Maximum, Minimum and Average temperature in $^0$C for dekad 31, 2013**

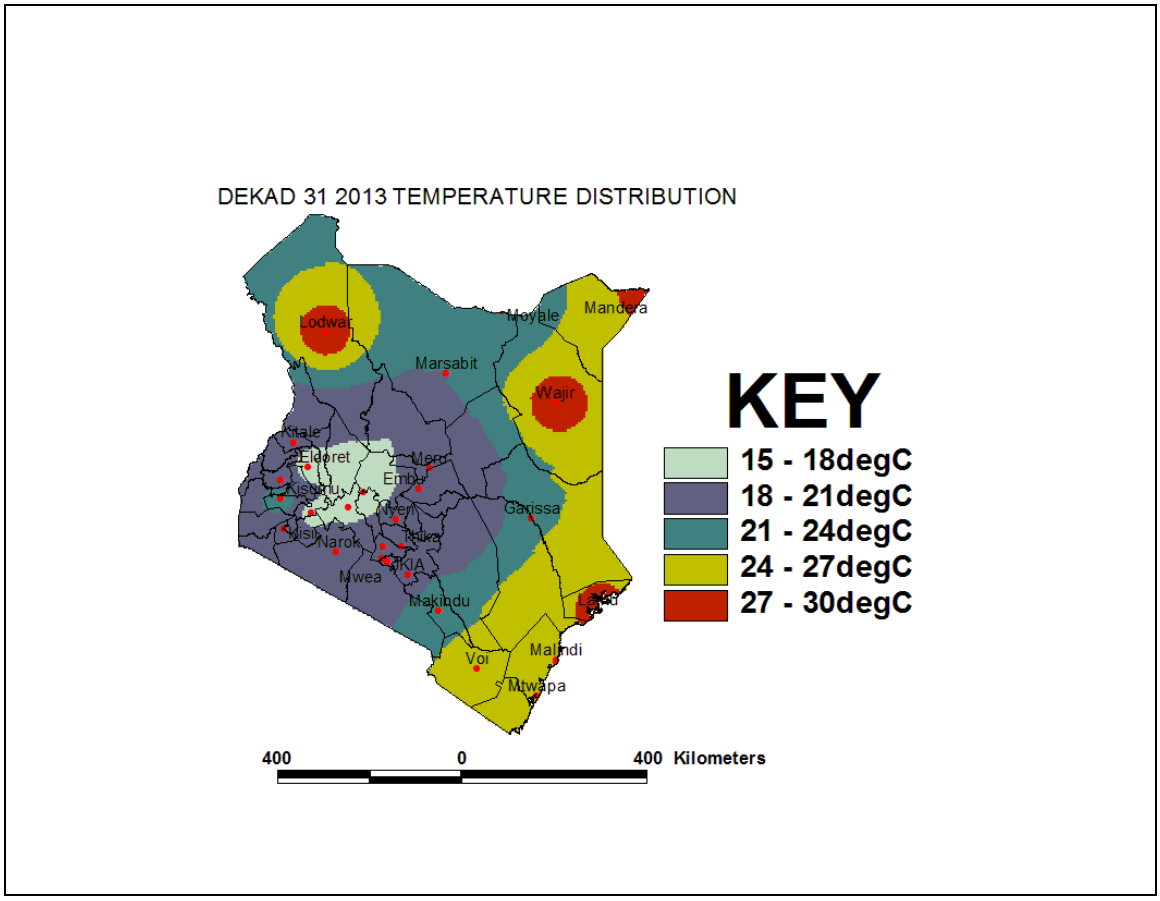


**Figure 3.4: Mean temperature distribution for dekad 31, 2013**

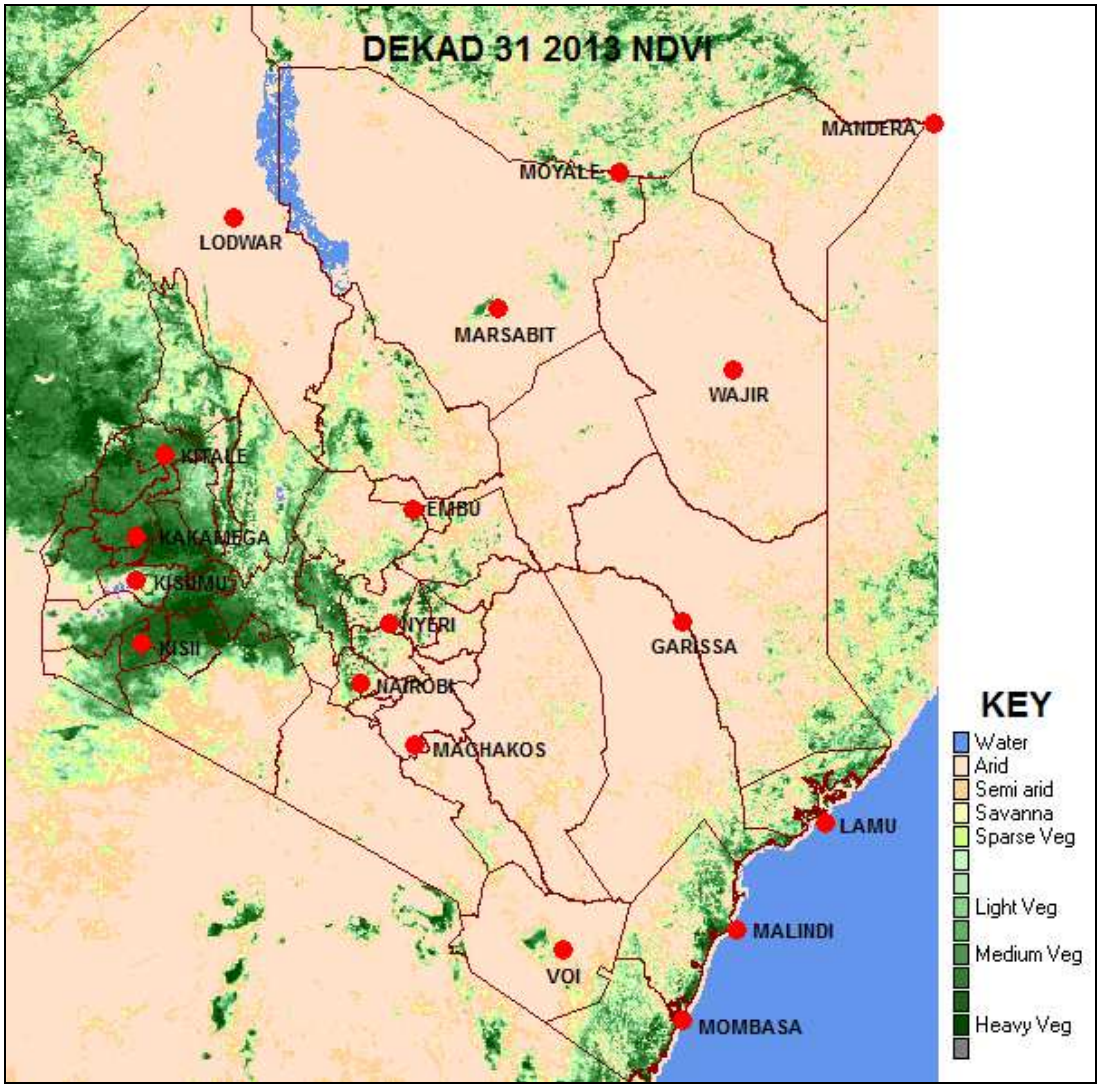


**Figure 3.5: Normalized Difference Vegetation Index (NDVI)**

## 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 NOVEMBER 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 sunny intervals in the morning during the forecast period. Showers and thunderstorms are likely in afternoon over several places in the forecast period.

  *The showers are expected to improve the state of the already emerged crops but have a negative impact in the mature crops in the region.*

- ***O*ver the Northwestern counties (Turkana, West Pokot and Samburu),** are expected to experience sunny intervals in the morning and showers over few places throughout the forecast period.

  *The afternoon showers will enhance the state of pasture and vegetation conditions in these counties.*

- **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu**, **Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga),** are

expected to experience early cloudy mornings, breaking into sunny intervals and showers over few places in the afternoon throughout the forecast period.

*The expected showers will enhance the growth of the already emerged crops in the region.*

***N*ortheastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to experience sunny intervals and rains over few places throughout the forecast period.

*The wet weather being expected will enhance resurgence of pasture and vegetation in these counties, and may solve multiple of problems facing people in these counties.*

- **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals in morning and afternoon showers over few places throughout the forecast period.

*The dry weather forecasted will worsen the state of pasture and vegetation in the region.*

**In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)**, are expected to experience sunny intervals throughout the forecast period.

*The dry condition will have a negative impact on crops in the region.*

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