



**KENYA METEOROLOGICAL SERVICES  
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 23, 2013  
11-20 AUGUST 2013**

**1. THE HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

Rainfall activities in the country have decreased in both space and time compared to the previous dekad. Eldoret Kapsoya station in North Rift region recorded the highest amount of rainfall of 168.2mm in the whole country. The highest rainfall observed in the Western region, was 97.9mm at Kakamega station. This was an increase, compared to the previous dekad. In North Eastern region there was a significant reduction of rainfall with Marsabit recording the highest of 5.2 mm. Embu station in Eastern region reported the highest amount of 19.3mm, which was a slight decrease from 20.3mm recorded at the same station in the previous dekad. In Nairobi region, Moi Airbase station recorded the highest amount of rainfall of 69.9mm. In Central region, Nyahururu station recorded the highest amount of rainfall of 110.8mm as compared to the previous dekad of 73.5mm at the same station. In Coast region there was a general reduction of rainfall compared to the previous Dekad where Malindi station recorded the highest of 6.0mm.

There was a general increase in temperature both the Maximum and the Minimum. Mandera station recorded the highest maximum temperature of 34.8°C. Nyahururu station in Central region reported the lowest minimum temperature of 8.1°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 23; 11-20 AUGUST 2013**

**2.1 NYANZA AND WESTERN REGIONS**

**2.1.1 Kakamega**

The station received rainfall amount of 97.9mm. The mean air temperature and sunshine hours were 20.7°C and 7.2hrs respectively. The pan evaporation recorded was 40.4mm.

*Maize crop was in harvest stage and in good state with normal yields expected. Farmers have started harvesting their crops.*

**2.1.2 Kisii**

The station recorded rainfall amount of 43.0mm for the dekad. The mean air temperature and total pan evaporation recorded were 20.2°C and 33.0mm respectively. Sunshine duration recorded was 7.1hrs.

*Maize crop was at harvest stage and in fair state as normal yields expected.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received rainfall amount of 45.5mm. The average air temperature and pan evaporation were 18.3°C and 28.5mm respectively. There was no report on sunshine duration.

*Maize is at flowering stage and in good state while beans are at harvest stage and in good state. Normal yield expected for both crops.*

### **2.2.2 Eldoret-Kapsoya**

The station received rainfall amount of 59.5mm. The average air temperature and pan evaporation reported were 15.5 °C and 33.0mm respectively. Sunshine duration recorded was 5.1hrs.

*Maize was at maturity stage and in fair state. Normal yield expected.*

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

### **2.3.1 Nyeri**

The station received rainfall amount of 14.8mm. The average air temperature was 17.0°C. There was no report on pan evaporation and sunshine parameters.

*Maize crop was at wax ripeness stage and in a poor state with below normal yield expected due to adverse effect by stalk borer.*

### **2.3.2 Kabete**

The station recorded rainfall amount of 28.2mm. The average air temperature and pan evaporation recorded were 17.7°C and 27.7mm respectively. Sunshine duration recorded was 4.2hrs.

*Maize was at wax ripeness stage and in a fair state. Beans were at maturity stage and in a fair state with normal yield expected. Coffee was at 100% berry hard stage and in a moderate state but damaged by leaf rust and leaf minor at less than 10% each. Bananas were at 100% appearance of sucker stage and in a moderate state but damaged by thrips, cigar end rot and cigar Toka at less than 10% each.*

### **2.3.3 Thika**

The station received rainfall amount of 0.03mm, which is only a trace. The mean air temperature and pan evaporation recorded were 19.4°C and 29.5mm respectively. Sunshine duration recorded was 3.2hrs.

*Land preparation is going on for the next growing season.*

### **2.3.4. Nyahururu**

The station received 110.8mm of rainfall. The mean air temperature recorded was 14.6°C. There was no report on sunshine and Pan Evaporation.

*Maize was at flowering stage while potatoes were at harvest stage and in a good state. Normal yield expected for both crops*

### **2.3.5. Dagoretti**

The station received rainfall amount of 13.9mm. The mean air temperature and evaporation pan recorded were 18.3°C and 28.4mm respectively. Sunshine hours reported was 4.7hours per day.

*No phenological report*

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Meru**

The station reported rainfall amount of 0.03mm. The average air temperature and pan evaporation were 17.8°C and 34.5mm respectively. The sunshine hours recorded was 5.3hrs.

*Maize crop has been harvested.*

### **2.4.2 Embu**

The station recorded rainfall amounts of 19.3mm. Pan evaporation and sunshine hour's parameters recorded were 25.3mm and 2.5hours respectively.

*Maize was at harvest stage and in poor state due to insufficient rainfall. Below normal yields is expected*

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

The station recorded minimal rainfall amount of 0.6mm. The average air temperature and sunshine duration were 21.9°C and 5.5hrs respectively. There was no report on pan evaporation.

*No phenological report*

## **2.5. COASTAL REGION**

### **2.5.1 Msabaha**

The station received rainfall amount of 2.5mm. The average air temperature and pan evaporation recorded was 25.2°C and 39.5mm respectively. The average sunshine duration was 8.8hours.

*Farmers have harvested their maize crop. Mangoes were at 100% fruit setting stages and in good state*

### **2.5.2 Mtwapa**

The station received rainfall amount of 5.1mm. The average air temperature and average sunshine hours recorded were 24.5°C and 8.7hours respectively. There was no report on Pan Evaporation parameter.

*Harvesting of maize is almost complete in the region Normal yield for maize is expected. Mangoes have started flowering.*

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

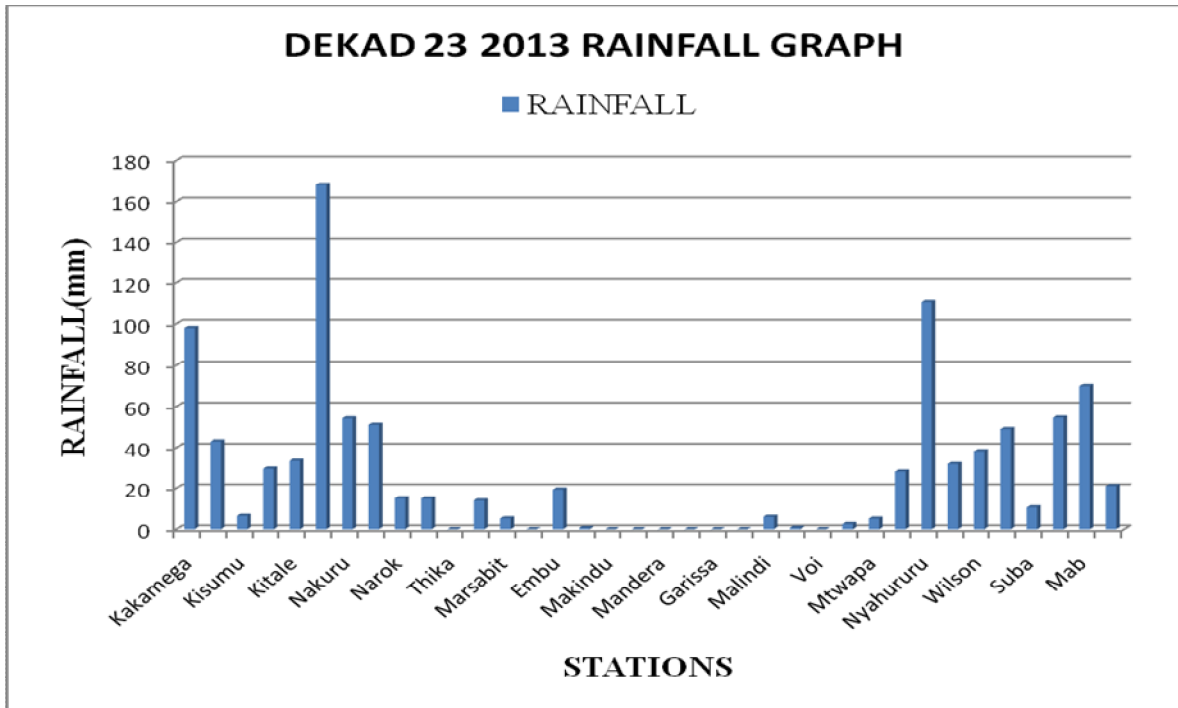


Figure 3.1: Dekadal rainfall totals for 11<sup>th</sup> to 20<sup>th</sup> August 2013

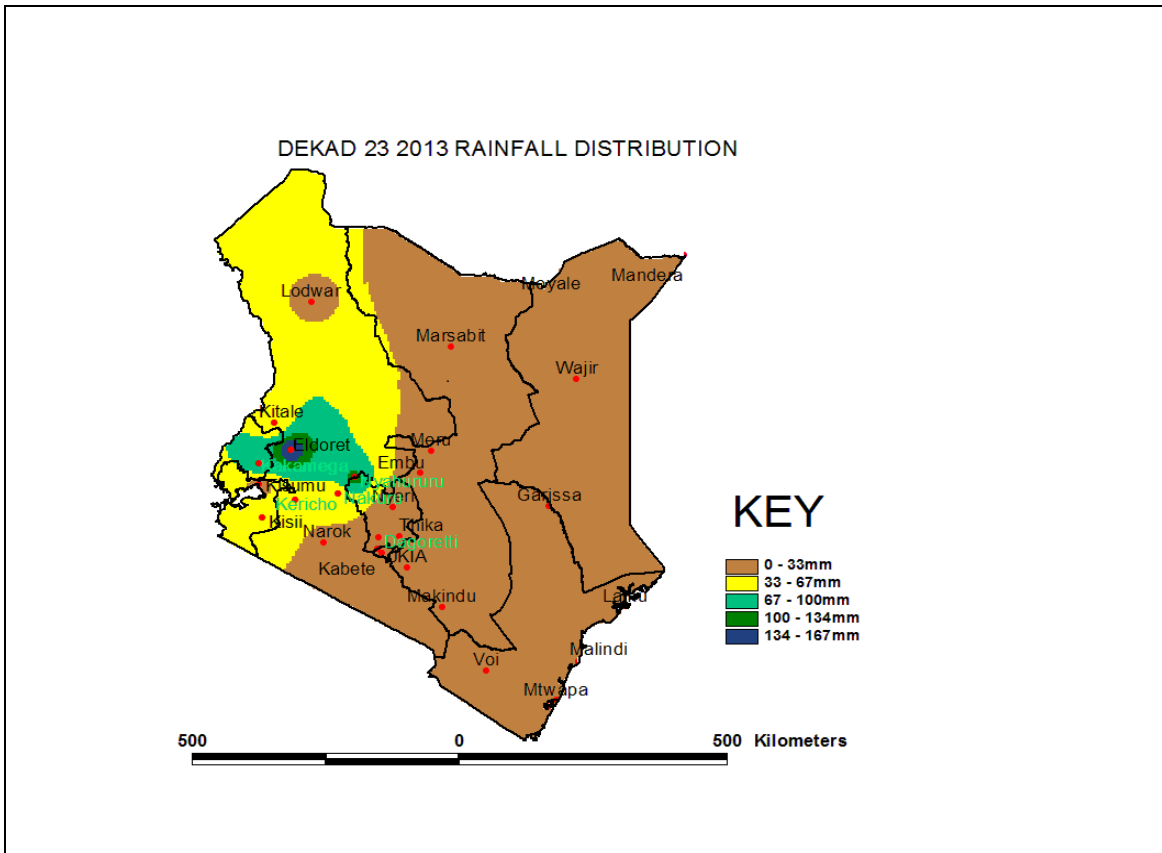


Figure 3.2: Dekadal rainfall distribution for dekad 23, 2013

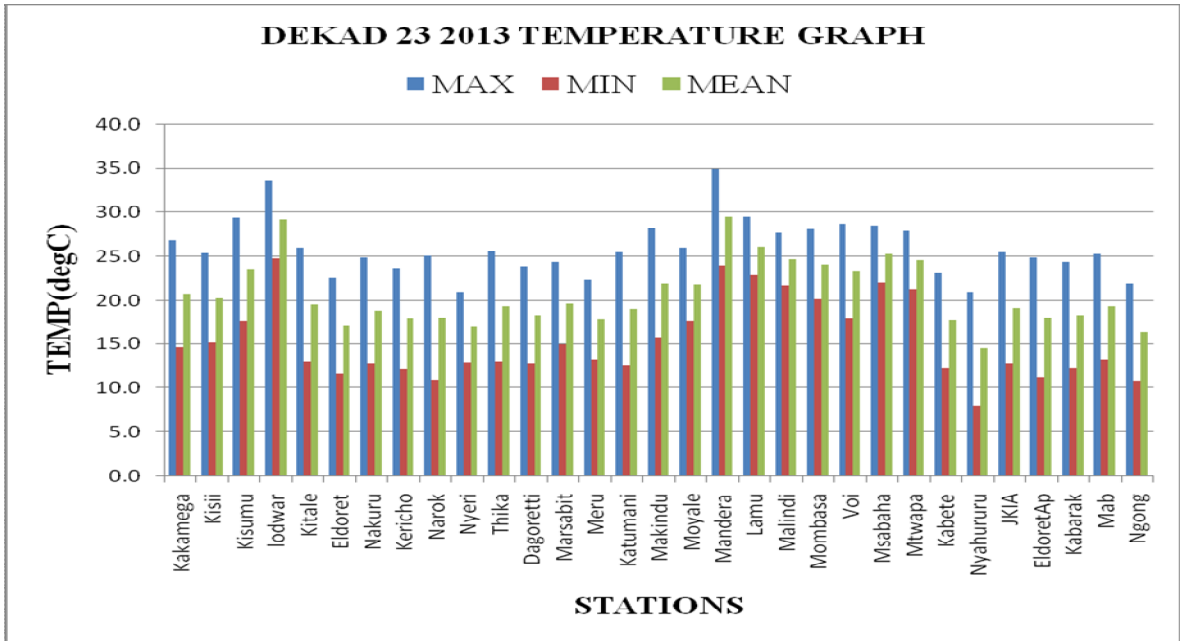


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 23, 2013

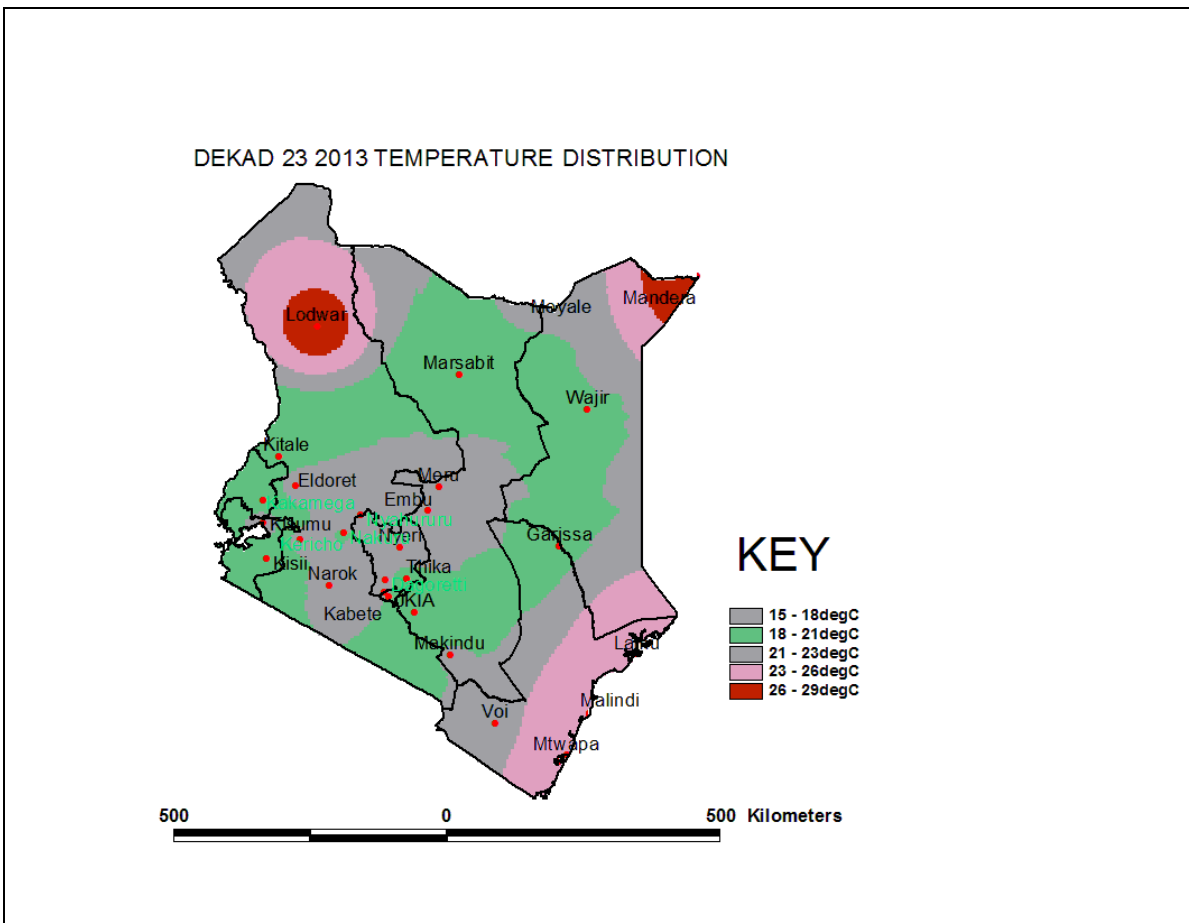


Figure 3.4: Mean temperature distribution for dekad 23, 2013

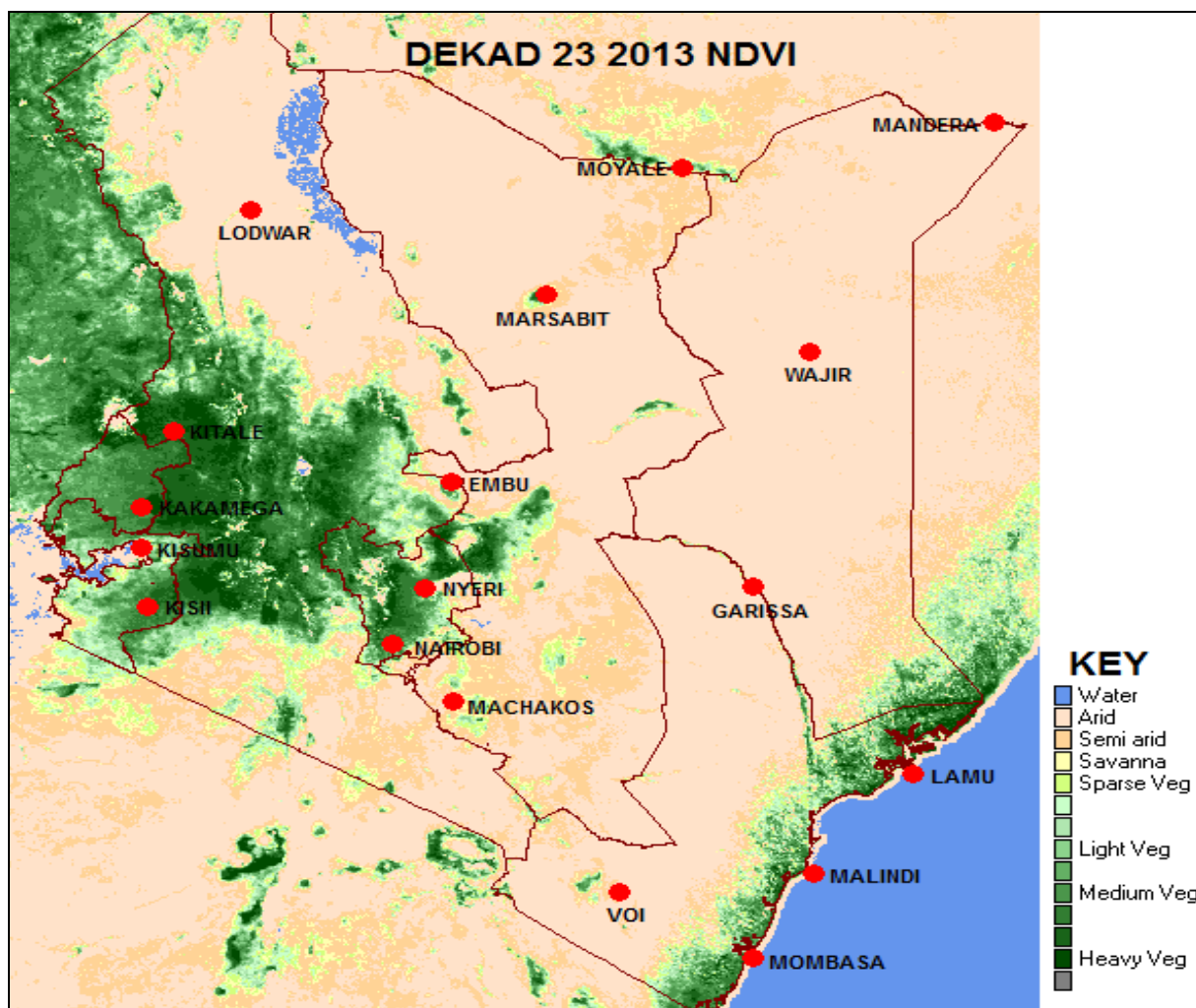


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS 21-31 August 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 throughout the forecast period. Showers and thunderstorms are expected over few places in the afternoon for the entire forecast period.

*The showers may pose a negative effect to the crops, which are at the harvest stage thus interfering with the work of harvest.*

- ✚ Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning and showers in the afternoon during the first half for the forecast period.

*The dry conditions will worsen the state of pastures and vegetation cover in these regions thus causing animal- human conflict.*

- ✚ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga),** are expected to experience cloudy early mornings accompanied by light rains over few places and sunny intervals in the afternoon.

*The wet conditions will benefit the crops remaining in the farms and vegetation in the region*

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to experience sunny intervals over the entire forecast period.

*Dry conditions are expected to be exacerbate the state of pasture and vegetation in these counties.*

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals in the morning and the afternoon for the entire forecast period.

*Dry conditions are expected to overstress growth of crops and pastures in these regions.*

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** are expected to experience light morning showers over few places giving way to sunny intervals for the rest of the forecast period.

*The morning showers continue to benefit crops and vegetation in these regions.*

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

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