



**KENYA METEOROLOGICAL SERVICE  
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 4, 2014  
1-10 FEBRUARY, 2014**

**1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

Rainfall activities in the country increased significantly space as compared to the previous dekad. Rift Valley region received the highest amount of rainfall countrywide with Narok station recording 77.9mm. In Nairobi region there was substantial distribution with Kabete recording the highest amount of rainfall of 76.0mm. In North Eastern, Moyale recorded 5.5mm which was the highest in the region as the other stations remained silent. Eastern region saw Katumani station in Machakos County recording the highest with 61.0mm. In Coastal region, Voi station recorded the highest with 61.3mm. In Western region Kakamega station was the highest with 30.1mm. In Central region, Thika station recorded the highest amount of rainfall of 23.3mm. In Nyanza region, Kisumu station recorded the highest amount of rainfall of 27.3mm.

Generally, there was a slight increase in the maximum temperature over the whole country though in the western side of Rift valley was slightly lower than the previous dekad. The highest observed maximum temperature was 37.8°C at Lodwar station. The minimum temperature increased significantly in the whole country with Nyahururu station in Central region recording the lowest of 8.0°C compared to the previous dekad where it recorded 6.7°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 4; 1-10 FEBRUARY 2014**

**2.1 NYANZA AND WESTERN REGIONS**

**2.1.1 Kakamega**

The station received rainfall amount of 30.1mm. The mean air temperature and pan evaporation were 21.2°C and 48.6mm respectively. The sunshine duration was 7.3hrs

*No phenological report*

**2.1.2 Kisii**

The station recorded rainfall of 1.1mm. The mean air temperature and sunshine duration were 21.2°C and 6.6hours respectively. Pan evaporation was 33.6mm.

*Farmers have harvested their maize crops.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received rainfall amount of 4.6mm. The average air temperature and pan Evaporation were 19.8°C and 42.1mm respectively. There was no report on sunshine duration.

*No phenological report.*

### **2.2.2 Eldoret-Kapsoya**

The station received rainfall amount of 8.8mm. The average air temperature and pan evaporation reported were 17.7°C and 56.8mm respectively. There was no report on sunshine duration.

*No phenological report.*

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

### **2.3.1 Nyeri**

The station received rainfall amount of 3.2mm. The average air temperature was 19.8°C. There was no report on pan evaporation and sunshine parameters.

*Maize crop was at the flowering stage while beans were at harvest stage and both crops were in failure state due to insufficient rainfall.*

### **2.3.2 Kabete**

The station recorded rainfall amount of 76mm. The average air temperature and Pan Evaporation recorded were 20.3°C and 57.5mm respectively. There was no report on sunshine duration.

*Maize was at flowering stage and beans were at maturity stage and both crops were in a failure state due to too much heat. Below normal harvest is being expected.*

### **2.3.3 Thika**

The station recorded rainfall amount of 23.3mm. The mean air temperature and pan evaporation recorded were 22.2°C and 53.3mm respectively. There was no report on sunshine duration.

*Maize was at mature stage and in poor state while beans and potatoes were both at harvest stage and in poor state due to insufficient rain. Below normal yield in all crops is expected.*

### **2.3.4. Nyahururu**

The station recorded rainfall amount of 1.9mm during the dekad. The mean air temperature and pan evaporation recorded were 15.9°C and 51.9mm respectively. There was no report on sunshine duration.

*No phenological report.*

### **2.3.5. Dagoretti**

The station reported rainfall amount of 56.1mm over the dekad. The average air temperature and Pan Evaporation were 20.3°C and 45.1mm respectively. The sunshine duration was 7.8hrs.

*Maize was at flowering stage and in good state.*

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Meru**

The station recorded rainfall of 28.0mm. The average air temperature and Pan Evaporation were 19.7°C and 46mm respectively. The sunshine duration was 7.8hrs.

*Maize and beans were at maturity and harvest stages respectively. Both crops were in fair state. Normal yield in both crops were expected.*

### **2.4.2 Embu**

The station reported rainfall amount of 9.3mm during the dekad. There was no report on Temperature, Pan Evaporation and Sunshine duration.

*Both maize and beans were at flowering and maturity stage respectively and in poor state as they had been adversely affected by insufficient rain. Below normal yield is expected for both crops.*

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

The station recorded rainfall amount of 61mm. The average air temperature and sunshine duration reported were 21.6°C and 7.6hrs. There was no report on pan evaporation.

*Maize was at flowering stage and in poor state due to adverse effect by too much sun. Below normal yield is expected for the crop.*

## **2.5. COASTAL REGION**

### **2.5.1 Msabaha**

The station received no rainfall during the dekad. The average air temperature and pan evaporation recorded was 28.0°C and 53.5mm respectively. There was no report on sunshine duration.

*Due to severe weather maize crop dried prematurely. Mangoes were at 100% fruit setting stage and in good state.*

### **2.5.2 Mtwapa**

The station received rainfall of 0.4mm The average air temperature and Pan Evaporation were 27.6°C and 66mm respectively. There was no report on sunshine duration.

*Maize was at wax maturity stage and in a failure state as it had been adversely affected by insufficient rainfall and below normal yield is expected. Mangoes were at flowering stage and in moderate state.*

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

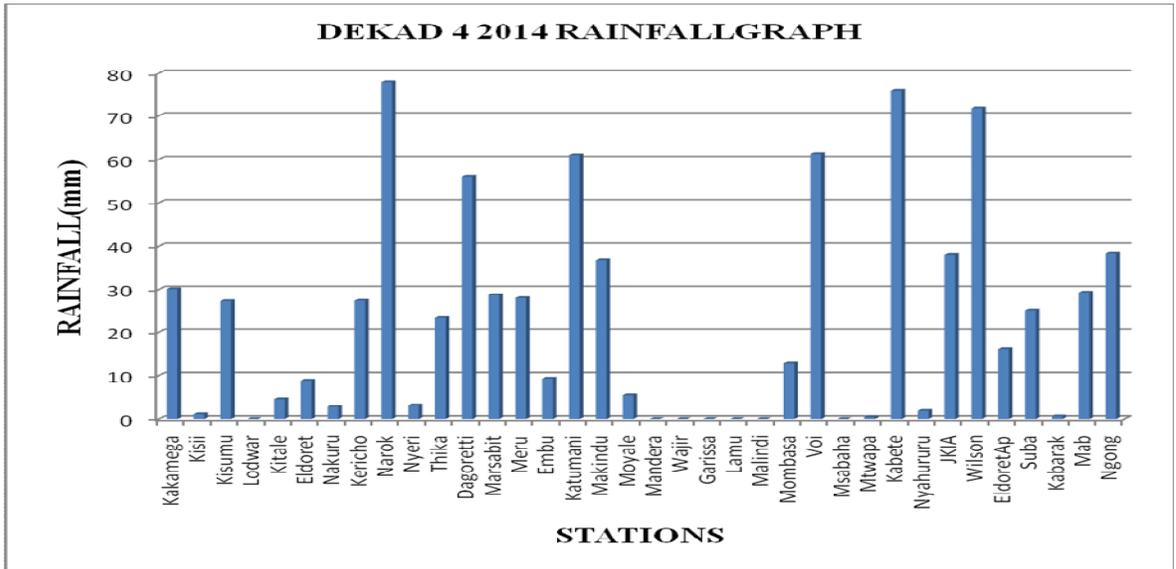


Figure 3.1: Dekadal rainfall totals for 1<sup>st</sup> to 10<sup>th</sup> February 2014

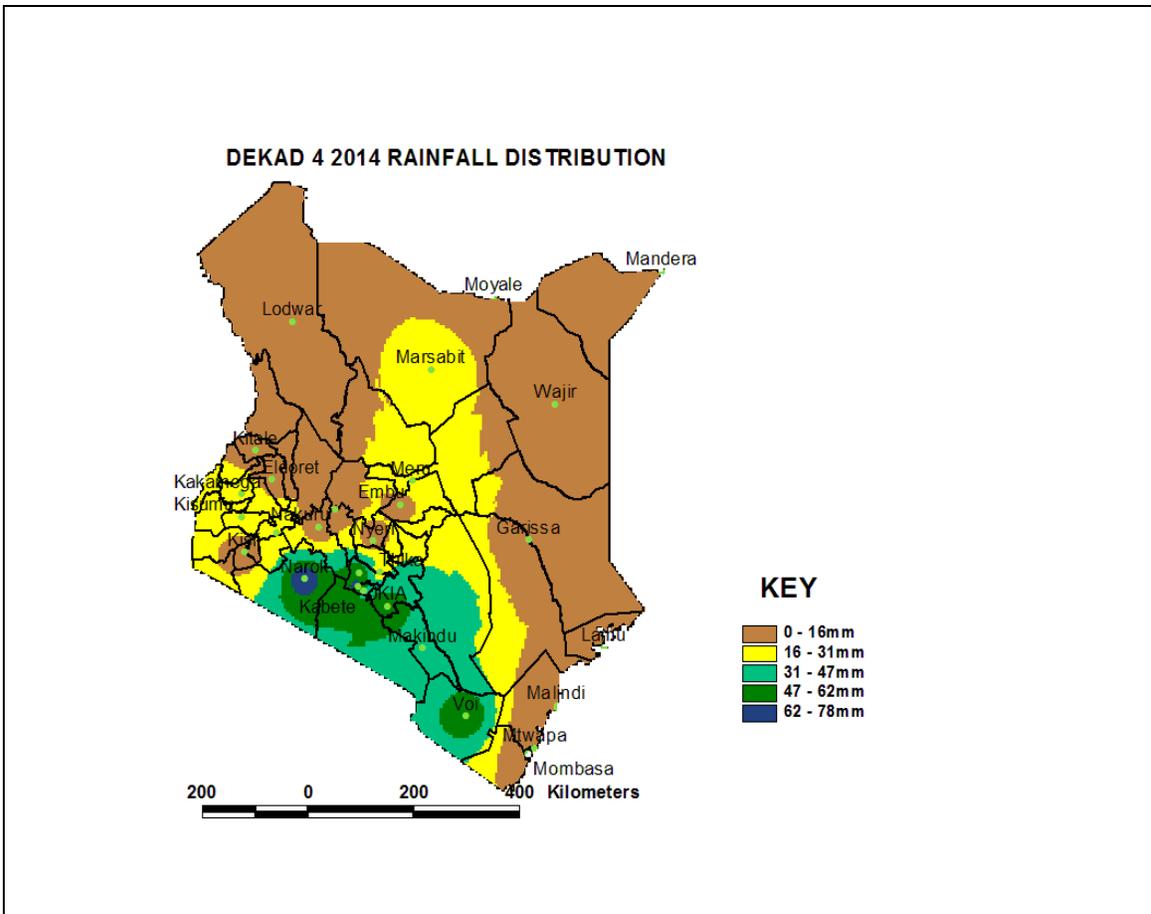


Figure 3.2: Dekadal rainfall distribution for dekad 4, 2014

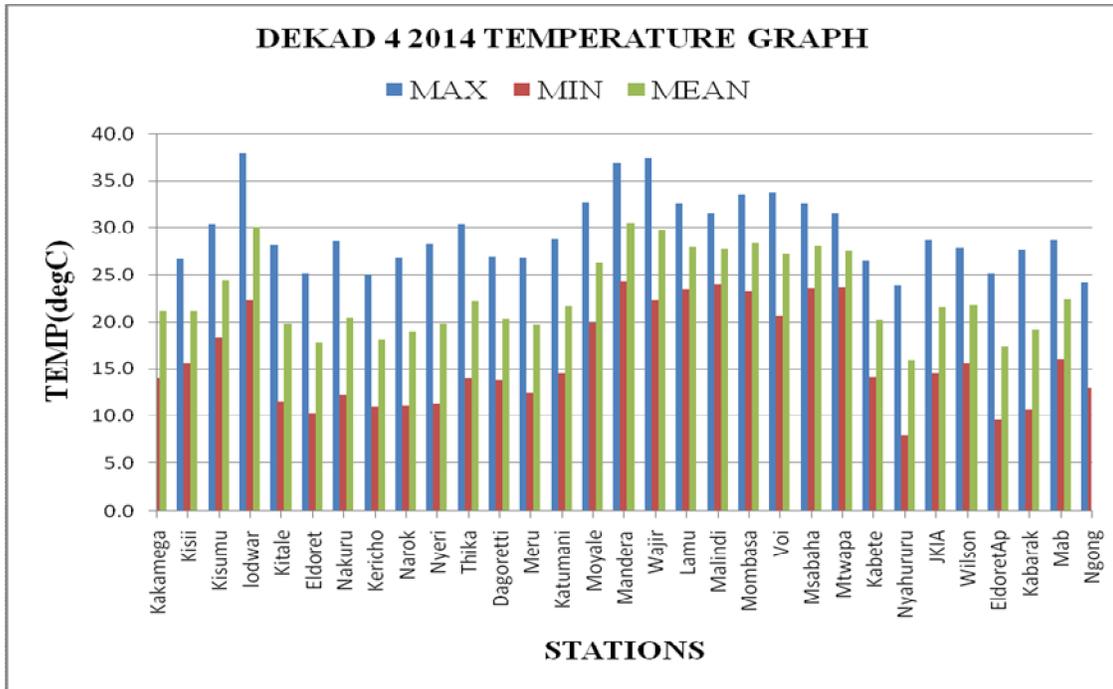


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 4, 2014

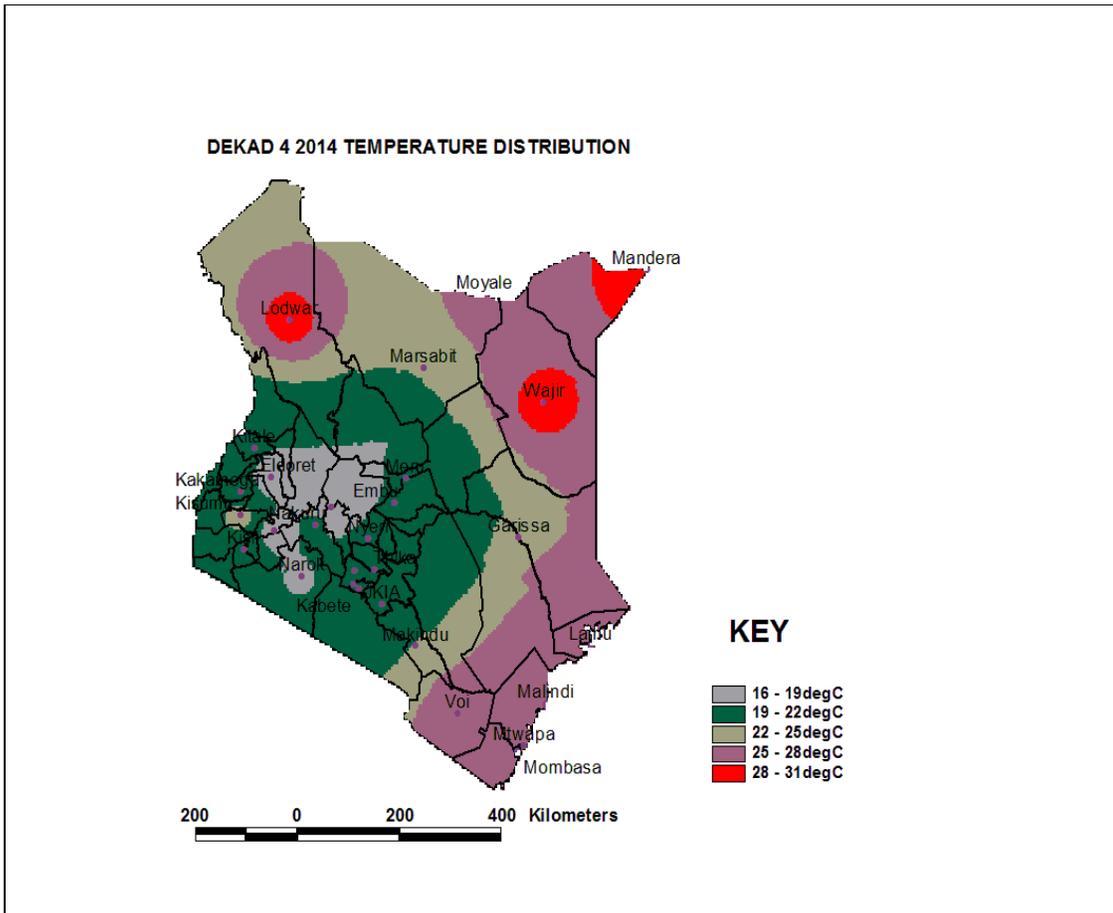


Figure 3.4: Mean temperature distribution for dekad 4, 2014

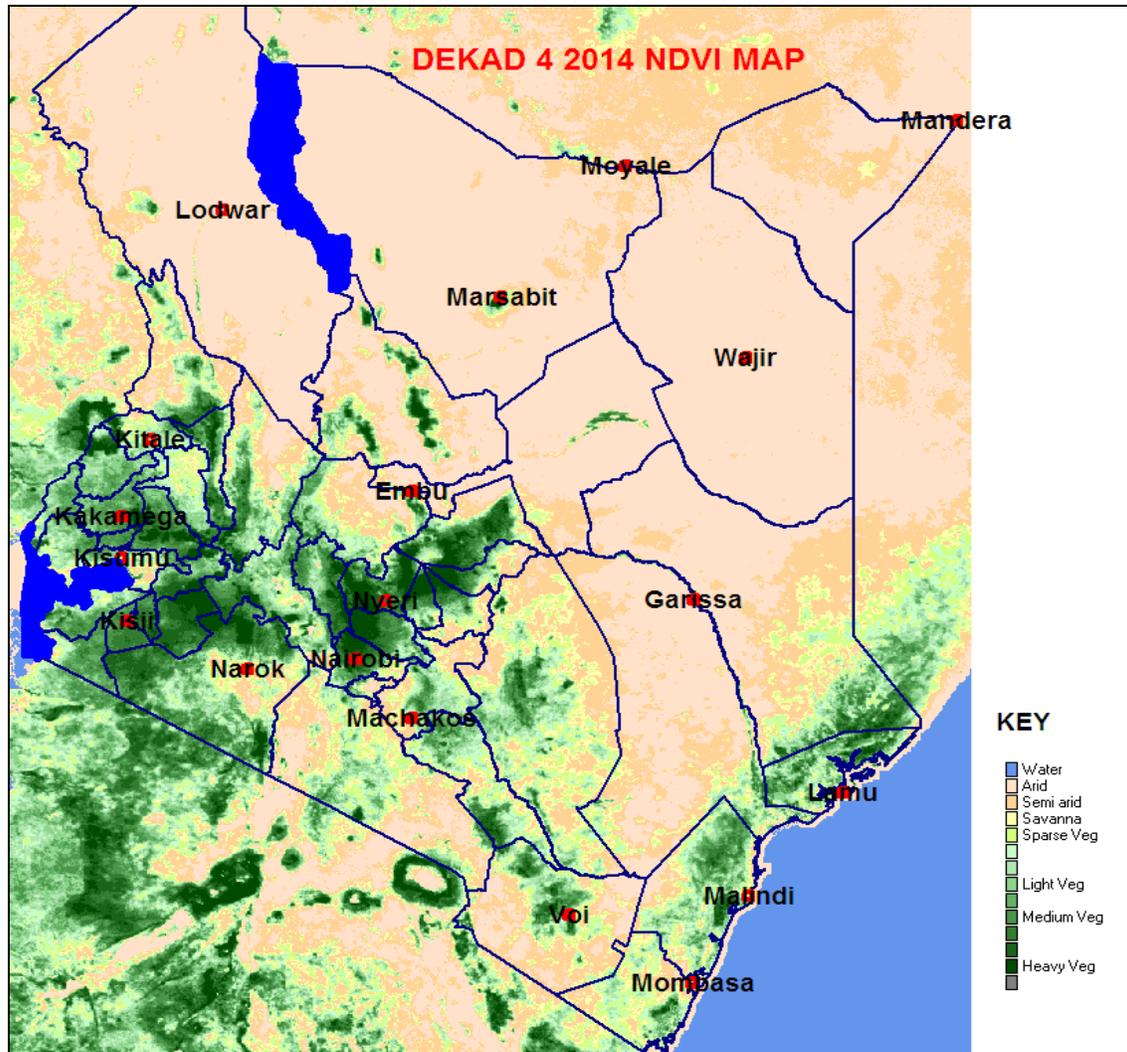


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS;  
11-20 FEBRUARY 2014

- ❖ 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. Afternoon Showers and thunderstorms over several places reducing to few places, towards the end of the forecast period. Relatively heavy showers may be realized on the last three days over the South rift.

*The afternoon showers are expected to improve the state of crops in the region*

- ❖ Over the Northwestern counties (Turkana, West Pokot and Samburu), Sun intervals are expected the whole day in most parts throughout the forecast period.

Afternoon showers and thunderstorm are expected on the last two day of the dekad over areas along the Kenya-Uganda and Sudan border.

*The dry condition is expected to degenerate 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 mainly cloudiness breaking into sunny intervals, light rains over few places is expected on the last two days. Showers and thunderstorms are likely in afternoons over few places in the last three days.

*The expected showers will enhance the state of the crops in the region.*

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

*This dry condition spread over dekads is expected to weaken 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 during the morning section of the forecast period. The last three days are expected to experience afternoon showers over few places, and then thereafter it will clear.

*The wet condition forecasted will develop the state of crops, pasture and vegetation in the region.*

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

*The sunny interval is expected to degenerate the state of the crops in the region.*

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

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