



**KENYA METEOROLOGICAL SERVICE
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 35, 2013
11-20 DECEMBER, 2013**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country went down slightly both in space, intensity and amount compared to the previous dekad. Rift Valley region received the highest amount of rainfall countrywide with Kabarak recording 134.4mm. North Eastern region reported nothing over the entire dekad. In Central region, Nyeri station recorded the highest amount of rainfall of 96.3mm. Kakamega station in Western region received the highest amount of rainfall of 16.7mm which was a decrease according to the previous dekad. In Eastern region, Embu station received the highest amount of rainfall of 72.7mm which was a decrease compared to the previous dekad. Coastal region had Voi station reporting the highest amount of rainfall of 64.2mm. In Nairobi region, Wilson Airport received the highest amount of rainfall of 98.4mm; while Suba station in Nyanza region reported the highest amount of rainfall of 97.6mm which was an increase from the previous dekad.

Generally, there was a significant decrease in the maximum temperature over the whole country. The highest observed maximum temperature was 36.4°C at Wajir station. The minimum temperature increased slightly in the whole country with Nyahururu station in Central region reporting the lowest of 9.6°C compared to the previous dekad where it recorded 9.4°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 35; 11-20 DECEMBER 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 16.7mm. The mean air temperature and pan evaporation were 19.9°C and 28.7mm respectively. The sunshine duration was 2.4hrs

No phenological report

2.1.2 Kisii

The station recorded rainfall of 69.9mm. The mean air temperature and sunshine duration were 19.0°C and 2.3 hours respectively. Pan evaporation was 22.4mm.

Maize was at the flowering stage and in fair state

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 78.9mm. The average air temperature and pan Evaporation were 18.7°C and 29.1mm respectively. There was no report on sunshine duration.

No phenological report.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 52.1mm. The average air temperature and pan evaporation reported were 16.7°C and 41.4mm 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 96.3mm. The average air temperature was 17.9°C. There was no report on pan evaporation and sunshine parameters.

Maize crop is in the ninth leaf stage while beans were at flowering stage and both crops are in fair state.

2.3.2 Kabete

The station recorded 59.6mm of rainfall amount. The average air temperature recorded was 18.2°C. There was no report on pan evaporation and sunshine duration.

Maize and beans were both in emergence stage and in a fair state.

2.3.3 Thika

The station received rainfall of 30.2mm. The mean air temperature and pan evaporation recorded were 19.9°C and 26.7mm respectively. No report on sunshine duration.

Maize was at emergence stage and in fair state while beans and potatoes were both at flowering stage and in fair stat. Normal yield in all crops is expected.

2.3.4. Nyahururu

The station received 31.4mm of rainfall. The mean air temperature and pan evaporation recorded were 15.3°C and 34.4mm respectively. There was no report on sunshine duration.

Maize was at maturity stage and in a good state while potatoes were at emergence stage and both crops are in fair state. Normal yield in both crops is expected.

2.3.5. Dagoretti

The station received rainfall amount of 72.7mm and mean air temperature of 18.5°C respectively. Sunshine duration was 4.4hours.

Maize was at ninth leave stage while beans are at flowering stage. Both crops were at a fair state.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported rainfall amount of 49.5mm. The average air temperature and Pan Evaporation were 19.4°C and 30.5mm respectively. The sunshine duration was 3.3hrs.

Maize and beans are at emergence and flowering stage and both crops are doing fairly well.

2.4.2 Embu

The station recorded rainfall amounts of 72.4mm. There was no report on Temperature, Pan Evaporation Sunshine duration.

Maize was emergence stage while beans were at flowering stage and both in fair state. Normal yield is expected for beans.

2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 30.3mm. The average air temperature was 19.4°C. There was no report on sunshine duration and pan evaporation.

Maize and beans were at ninth leave and flowering stages respectively but both in good state. Above normal yield is expected for beans.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 13.9mm. The average air temperature and pan evaporation recorded was 27.9°C and 37.1mm respectively. There was no report on sunshine duration.

Maize is at emergence stage and in fair state. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received rainfall amount of 51mm. The average air temperature and Pan Evaporation were 27.7°C and 52.8mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in a poor state due to insufficient rainfall.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

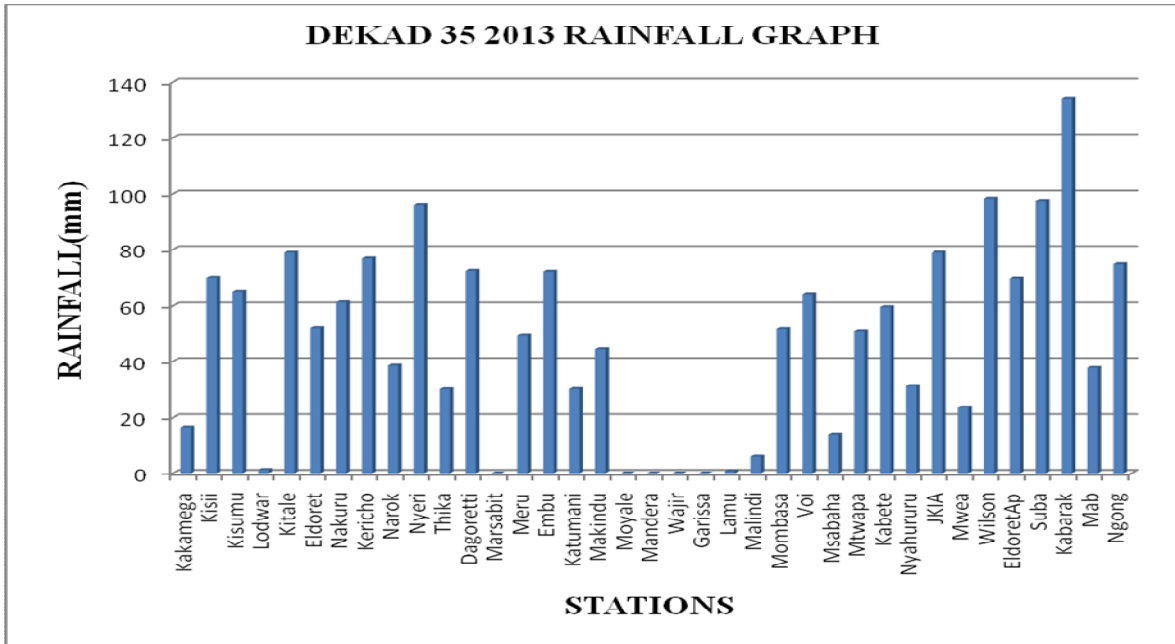


Figure 3.1: Dekadal rainfall totals for 11th to 20th DECEMBER 2013

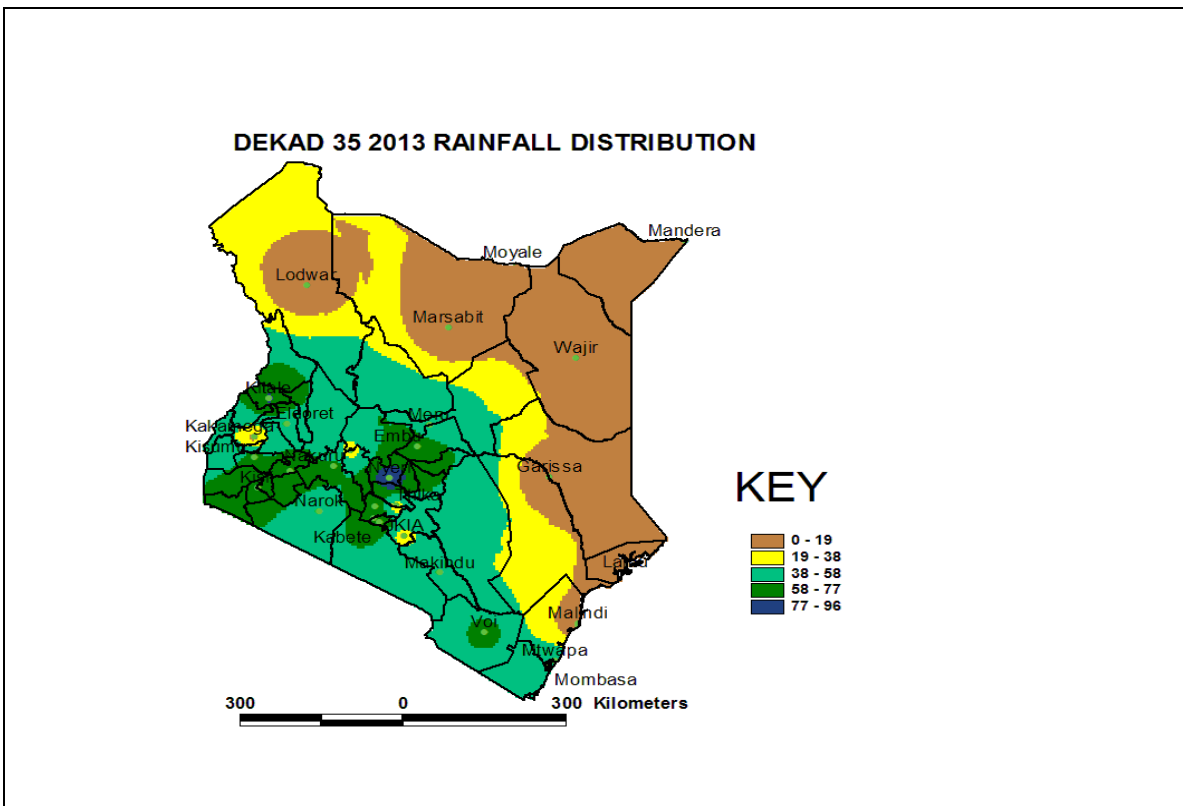


Figure 3.2: Dekadal rainfall distribution for dekad 35, 2013

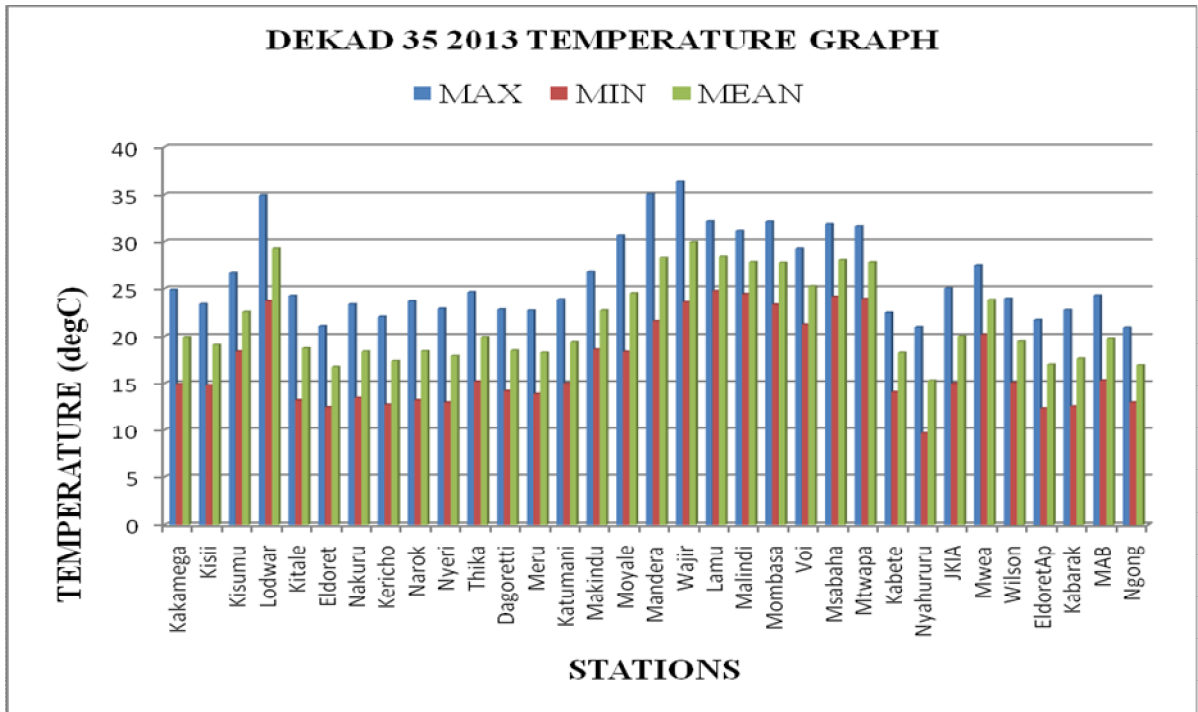


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 35, 2013

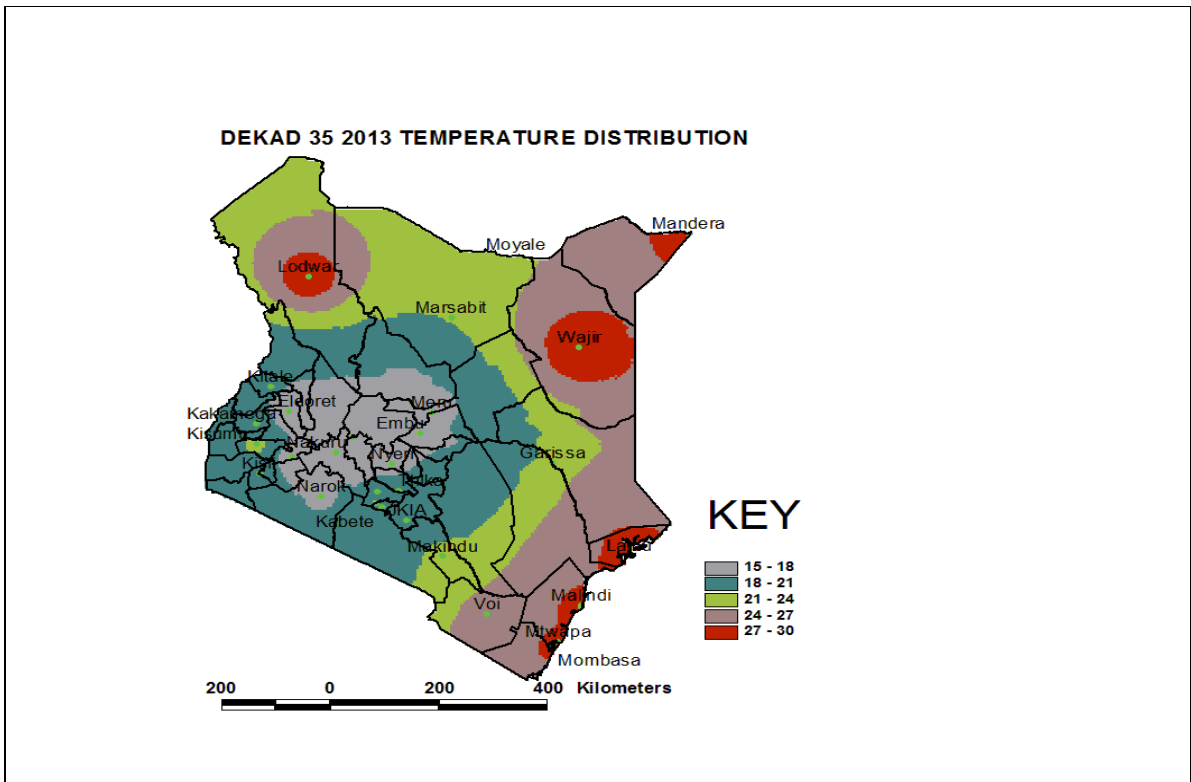


Figure 3.4: Mean temperature distribution for dekad 35, 2013

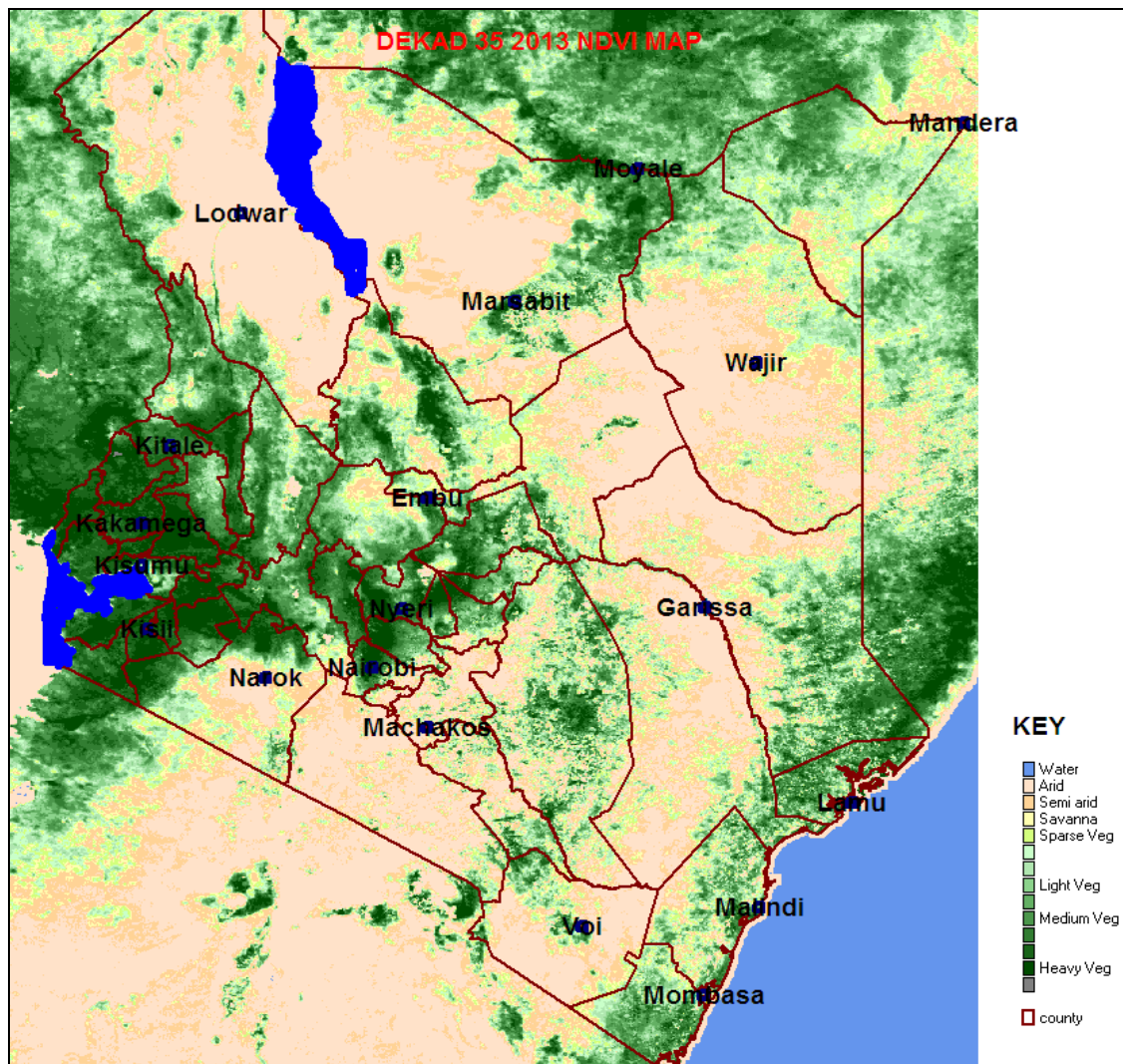


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-31 DECEMBER 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 afternoons over few places in the entire forecast period except on the last afternoon, which is expected to have sunny intervals.

The sunny weather may not affect the state of crops due to enough moisture from the previous dekad.

Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals throughout the forecast period.

The dry period is expected to over stress 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 rains over few places in the afternoon throughout the forecast period.

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.

The dry condition extended over period is expected to worsen 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 throughout the forecast period.

The dry condition forecasted will deteriorate 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 sunny intervals in the entire forecast period.

The dry condition will slow the growth of crops in the region.

For feedback or further guidance, Contact:

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