



**KENYA METEOROLOGICAL SERVICE
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 2, 2014
11-20 JANUARY, 2014**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country increased slightly compared to the previous dekad. Nairobi region received the highest amount of rainfall countrywide with Wilson Airport station recording 59.4mm. North Eastern and Coastal regions were silent over the entire dekad. In Central region, Nyeri station recorded the highest amount of rainfall of 4.9mm. Narok station in Rift Valley region received the highest amount of rainfall of 32.1mm which was a significant increase according to the previous dekad. In Eastern region, Meru station received the highest amount of rainfall of 1.6mm which was a decrease compared to the previous dekad. Nyanza region had Kisii station reporting the highest amount of rainfall of 15.0mm. While Kakamega station in Western region reported the highest amount of rainfall of 22.1mm which was a slight decrease from the previous dekad.

Generally, there was a significant increase in the maximum temperature over the whole country. The highest observed maximum temperature was 37.6°C at Wajir station. The minimum temperature decreased slightly in the whole country with Nyahururu station in Central region reporting the lowest of 6.4°C compared to the previous dekad where it recorded 8.0°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 2; 11-20 JANUARY 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 22.1mm. The mean air temperature and pan evaporation were 21.2°C and 51.6mm respectively. The sunshine duration was 9.1hrs

No phenological report

2.1.2 Kisii

The station recorded rainfall of 15.0mm. The mean air temperature and sunshine duration were 22.9°C and 8.8 hours respectively. Pan evaporation was 41.3mm.

Maize was at the harvest stage and in fair state with normal yield being expected

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 7.3mm. The average air temperature and pan Evaporation were 19.4°C and 47.8mm respectively. There was no report on sunshine duration.

No phenological report.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 3.5mm. The average air temperature and pan evaporation reported were 16.9°C and 65.5mm 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 4.9mm. The average air temperature was 18.2°C. There was no report on pan evaporation and sunshine parameters.

Maize crop was in the tasseling stage while beans were at flowering stage and both crops were in poor state.

2.3.2 Kabete

The station recorded rainfall amount of 30.2mm. The average air temperature and Pan Evaporation recorded were 19.3°C and 62.7mm respectively. There was no report on sunshine duration.

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

2.3.3 Thika

The station did not record any rainfall in the dekad. The mean air temperature and pan evaporation recorded were 20.3°C. There was no report on sunshine duration and Pan Evaporation.

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

2.3.4. Nyahururu

The station only recorded a trace of rainfall in the dekad. The mean air temperature and pan evaporation recorded were 14.6°C and 50.6mm respectively. There was no report on sunshine duration.

Maize was at harvest stage and in a fair state while potatoes were at maturity stage and in failure state due to frost. Normal yield is expected for maize while potatoes below normal.

2.3.5. Dagoretti

The station reported rainfall amount of 36.8mm in the dekad. The average air temperature and Pan Evaporation were 19.7°C and 59.8mm respectively. The sunshine duration was 10.4hrs.

Maize was at tasseling stage while beans were at mature stage. Both crops were doing well and normal yield is being expected.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station recorded rainfall amounts of 1.6mm. The average air temperature and Pan Evaporation were 18.3°C and 44.1mm respectively. The sunshine duration was 9.0hrs.

Maize and beans were at flowering and maturity stage respectively. Both crops were in fair state.

2.4.2 Embu

The station did not report any rainfall in the dekad there was no report on Temperature, Pan Evaporation 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 no rainfall at all. The average air temperature and sunshine duration reported were 20.3°C and 9.1hrs. There was no report on and pan evaporation.

Maize and beans were at flowering and maturity stages respectively and in poor state due to too much sun. Below normal yield is expected for both crops.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 0.03mm which is only a trace of rainfall. The average air temperature and pan evaporation recorded was 27.7°C and 52.5mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in poor state due to insufficient rainfall with below normal yield being expected. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received no rainfall at all. The average air temperature and Pan Evaporation were 27.1°C and 64mm respectively. There was no report on sunshine duration.

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

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

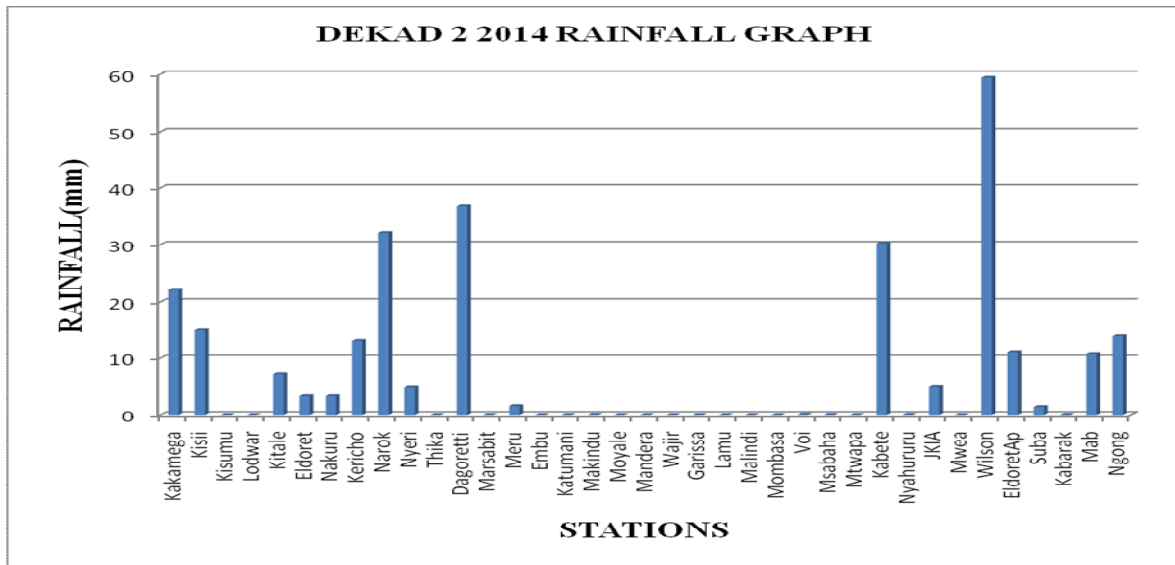


Figure 3.1: Dekadal rainfall totals for 11th to 20th January 2014

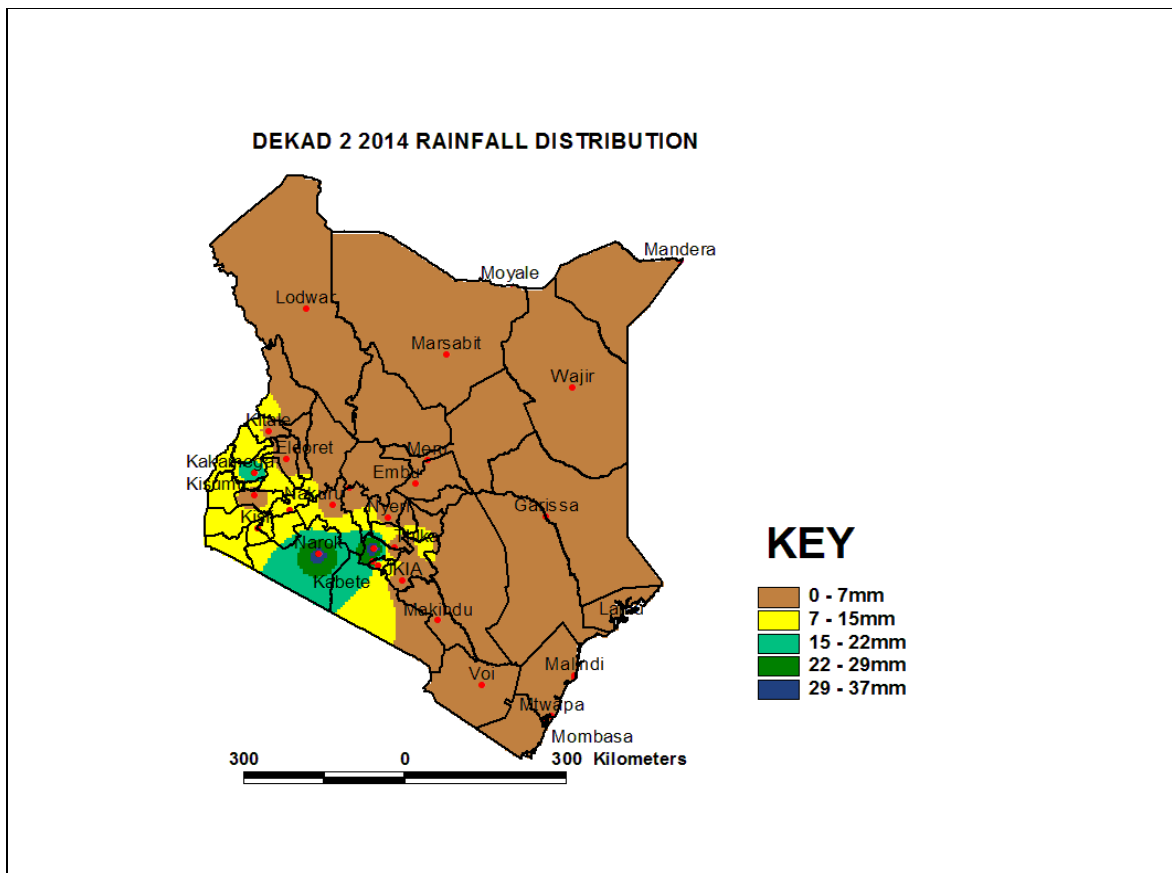


Figure 3.2: Dekadal rainfall distribution for dekad 2, 2014

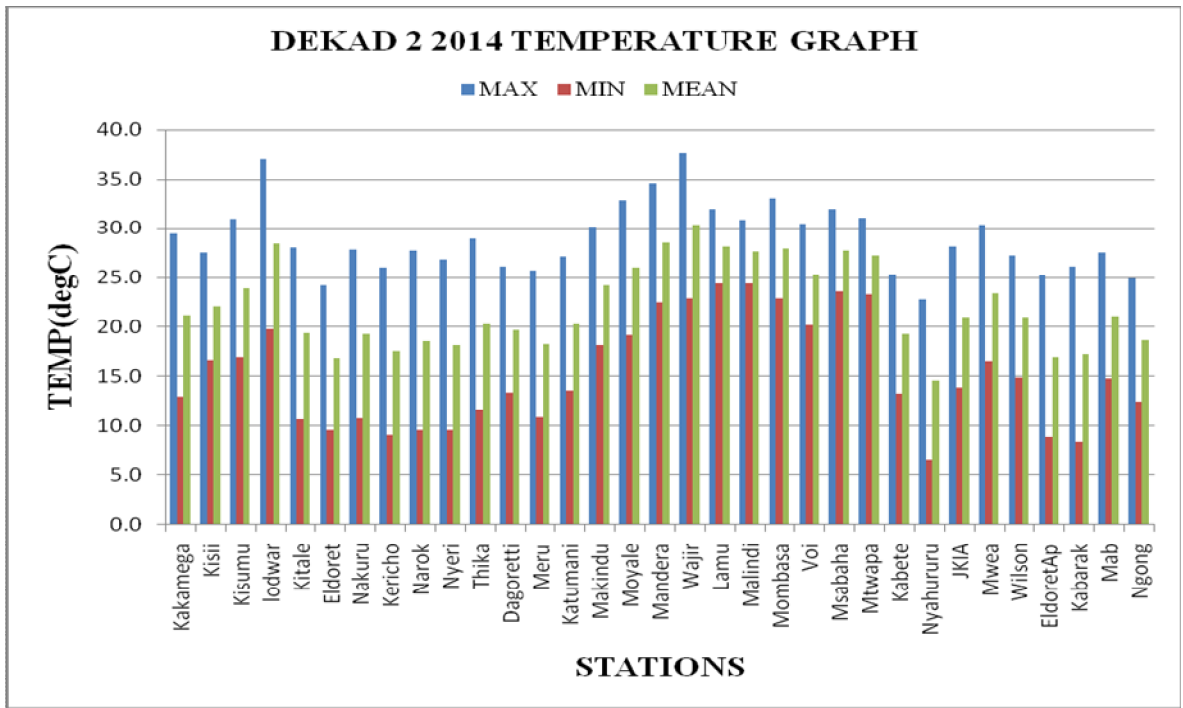


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 2, 2014

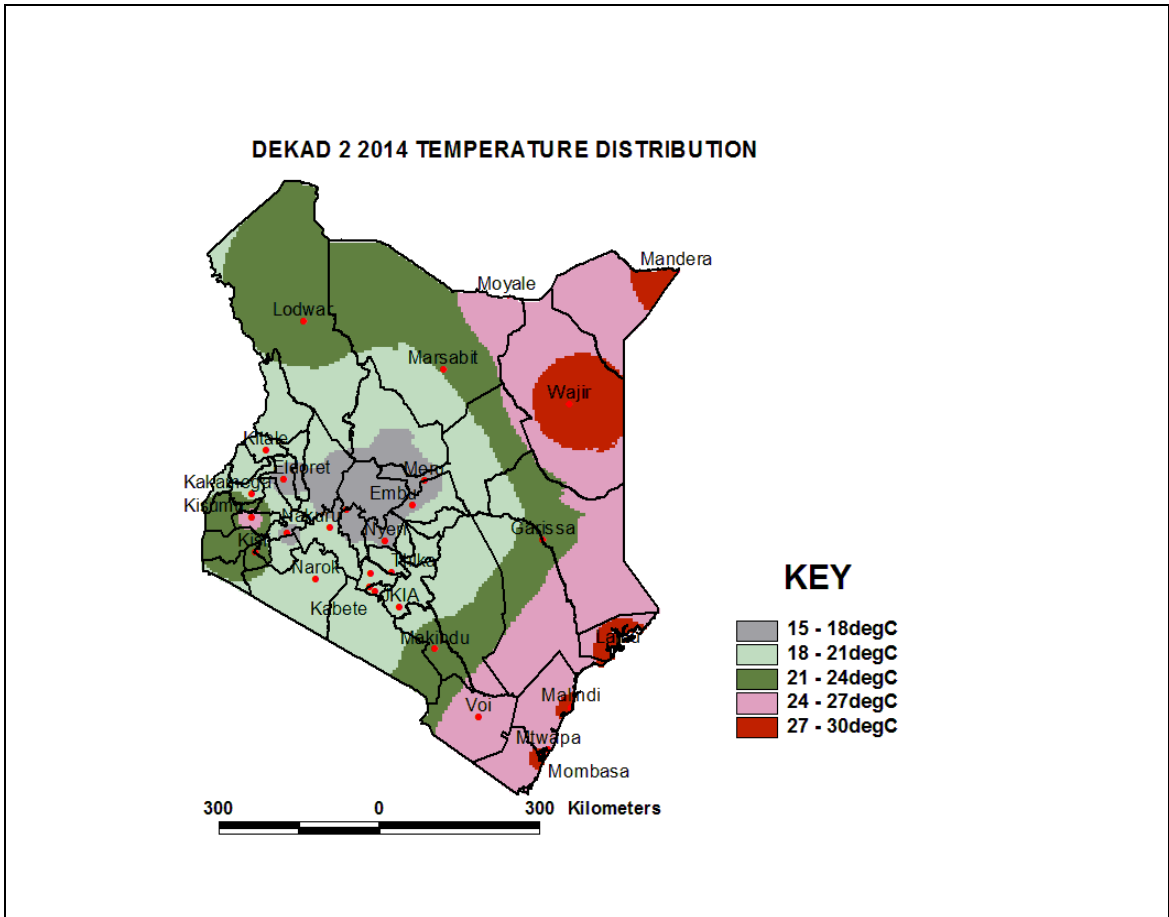


Figure 3.4: Mean temperature distribution for dekad 2, 2014

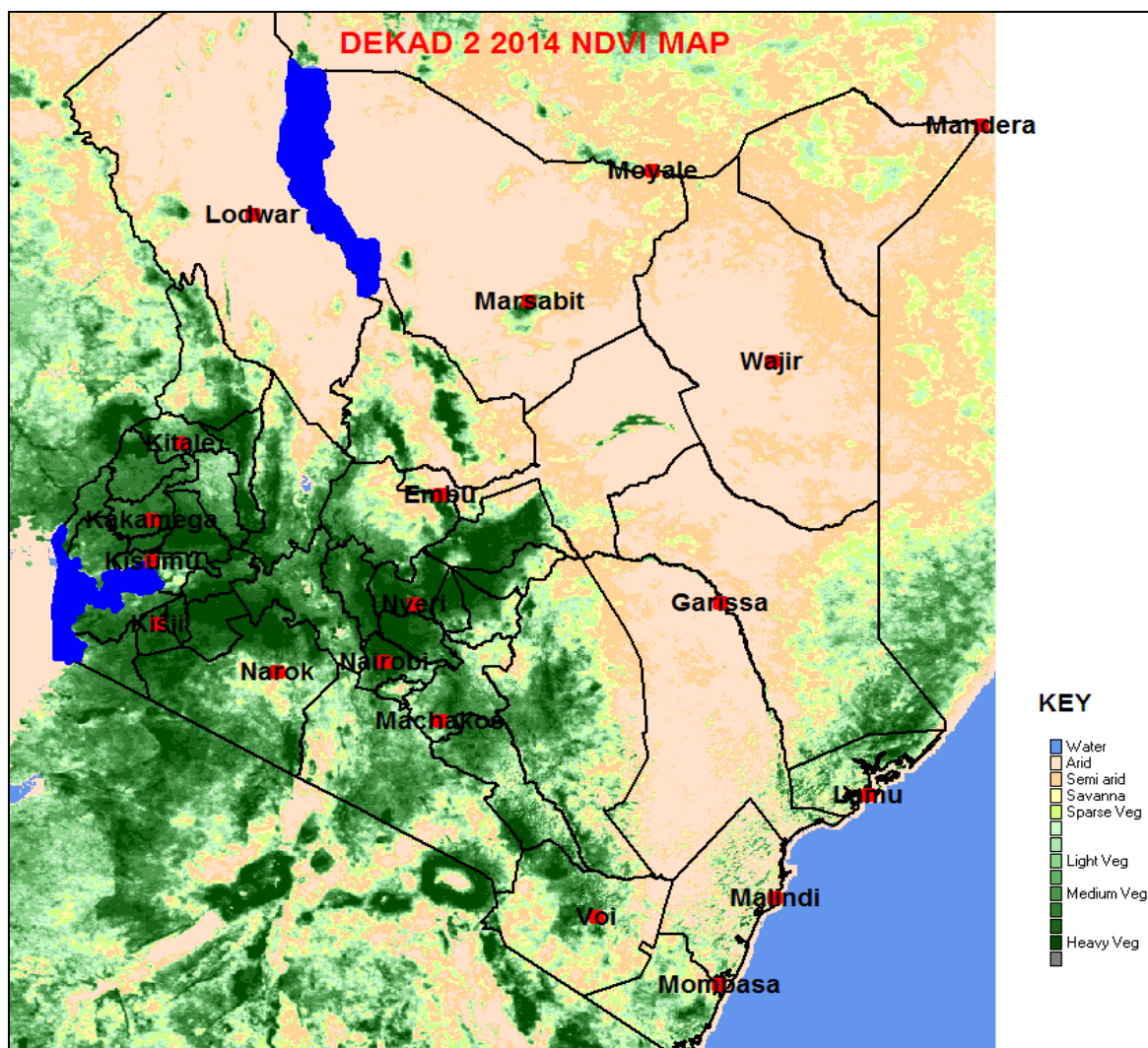


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS;
21-31 JANUARY 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 through the forecast period. Showers and thunderstorms are likely in afternoons over few places in the entire forecast period.

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

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

The dry condition is expected to worsen 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 sunny intervals throughout the forecast period.

Showers and thunderstorms are likely in afternoons over few places in the entire forecast period

The expected showers will advance 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 extensive over dekads 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 during the morning section of the forecast period, the last days are expected to experience afternoon/evening showers.

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 throughout the forecast period.

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

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