



**KENYA METEOROLOGICAL SERVICE
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 3, 2014
21-31 JANUARY, 2014**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country decreased significantly compared to the previous dekad, an indication of a dry atmosphere. Lake Region received the highest amount of rainfall countrywide with Kisii station recording 31.5mm. Western, North Eastern, Eastern, Nairobi and Coastal regions were the worst over the whole dekad with less than 1.0mm. In Central region, Nyeri station recorded the highest amount of rainfall of 5.3mm. Kericho station in Rift Valley region received the highest amount of rainfall of 24.7mm which was a slight decrease from 32.1 recorded in Narok the previous dekad.

Generally, there was a considerable increase in the maximum temperature over the whole country. The highest observed maximum temperature was 37.0°C at Lodwar station. The minimum temperature increased slightly in the whole country with Nyahururu station in Central region recording the lowest of 6.7°C compared to the previous dekad where it recorded 6.4°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 2; 21-31 JANUARY 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 0.3mm. The mean air temperature and pan evaporation were 22.0°C and 57.3mm respectively. The sunshine duration was 9.6hrs

No phenological report

2.1.2 Kisii

The station recorded rainfall of 31.5mm. The mean air temperature and sunshine duration were 21.8°C and 8.6hours respectively. Pan evaporation was 43.5mm.

Farmers have harvested their maize crops.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 2.3mm. The average air temperature and pan Evaporation were 20.1°C and 53.3mm respectively. There was no report on sunshine duration.

No phenological report.

2.2.2 Eldoret-Kapsoya

The station received just a trace of rainfall over the dekad. The average air temperature and pan evaporation reported were 18.2°C and 85.5mm 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 5.3mm. The average air temperature was 18.4°C. There was no report on pan evaporation and sunshine parameters.

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

2.3.2 Kabete

The station recorded no rainfall. The average air temperature and Pan Evaporation recorded were 19.4°C and 63mm respectively. There was no report on sunshine duration.

Maize was at emergence stage and beans were at flowering stage and both crops were in a failure state. Both crops were being affected by insufficient rainfall.

2.3.3 Thika

The station did not record any rainfall in the dekad. The mean air temperature and pan evaporation recorded were 21.0°C and 63.0mm respectively. There was no report on sunshine duration.

Maize was at flowering 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 only recorded no rainfall during the dekad. The mean air temperature and pan evaporation recorded were 15.0°C and 59.5mm respectively. There was no report on sunshine duration.

Maize harvesting is over. 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 no rainfall over the dekad. The average air temperature and Pan Evaporation were 20.0°C and 65.5mm respectively. The sunshine duration was 10.3hrs.

Maize was at flowering stage while beans have been harvest. The report on bean yield was very low due to too much rain at the beginning and too much sun during the flowering stage.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station recorded no rainfall. The average air temperature and Pan Evaporation were 18.0°C and 88.5mm respectively. The sunshine duration was 88.5hrs.

Maize and beans were at flowering and maturity stage respectively. Both crops were in fair state. Normal yield in both crops were expected.

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 20.6°C and 8.7hrs. There was no report on and 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. Harvested of beans is complete.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 0.3mm. The average air temperature and pan evaporation recorded was 27.6°C and 59.3mm 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 27.4°C and 73mm 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.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

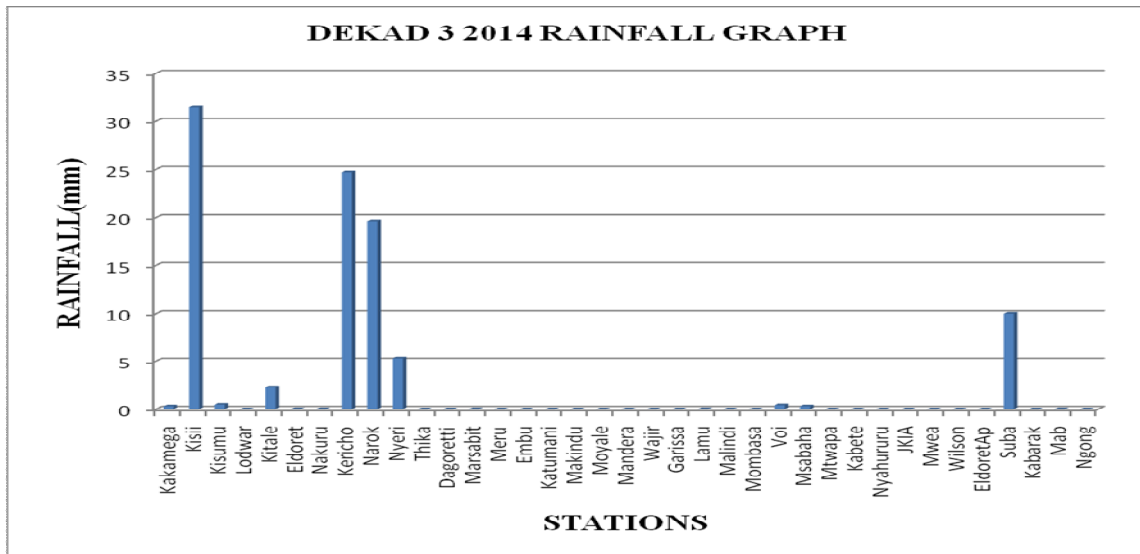


Figure 3.1: Dekadal rainfall totals for 21st to 31st January 2014

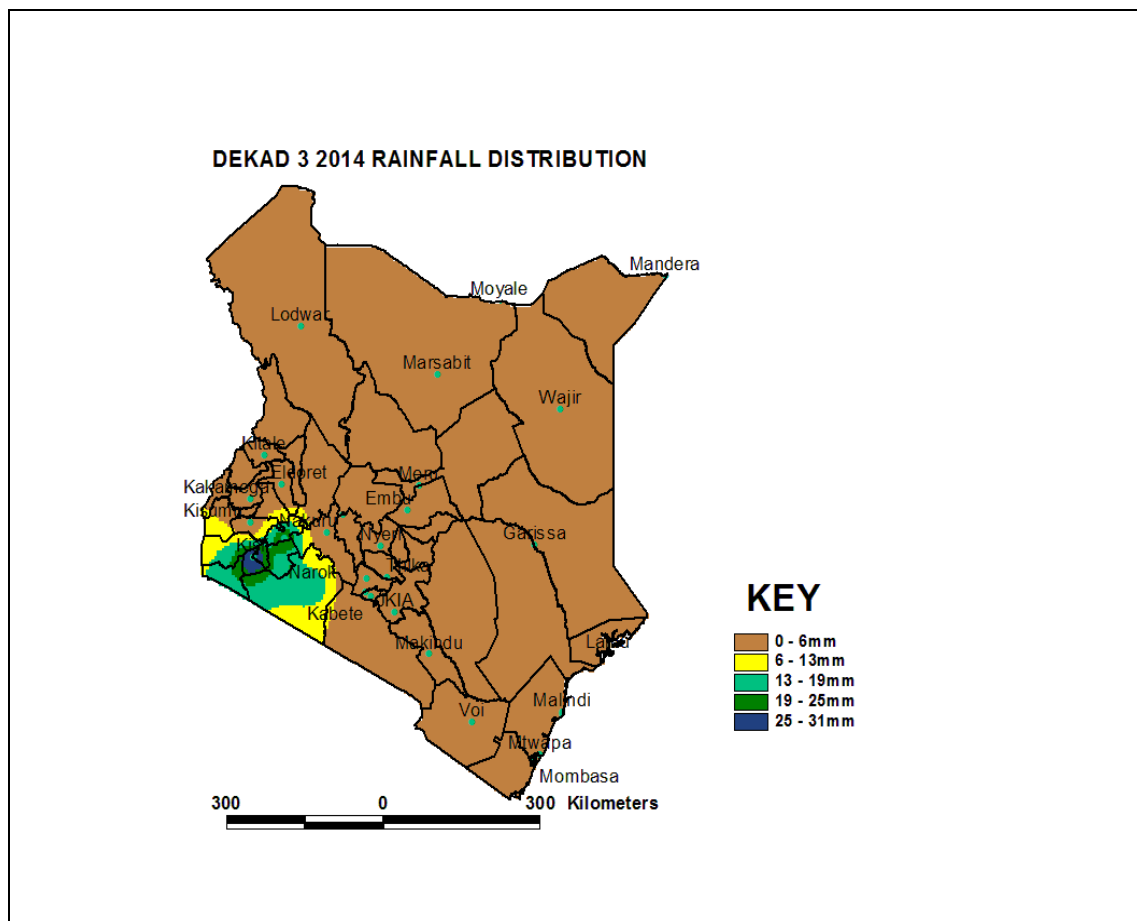


Figure 3.2: Dekadal rainfall distribution for dekad 3, 2014

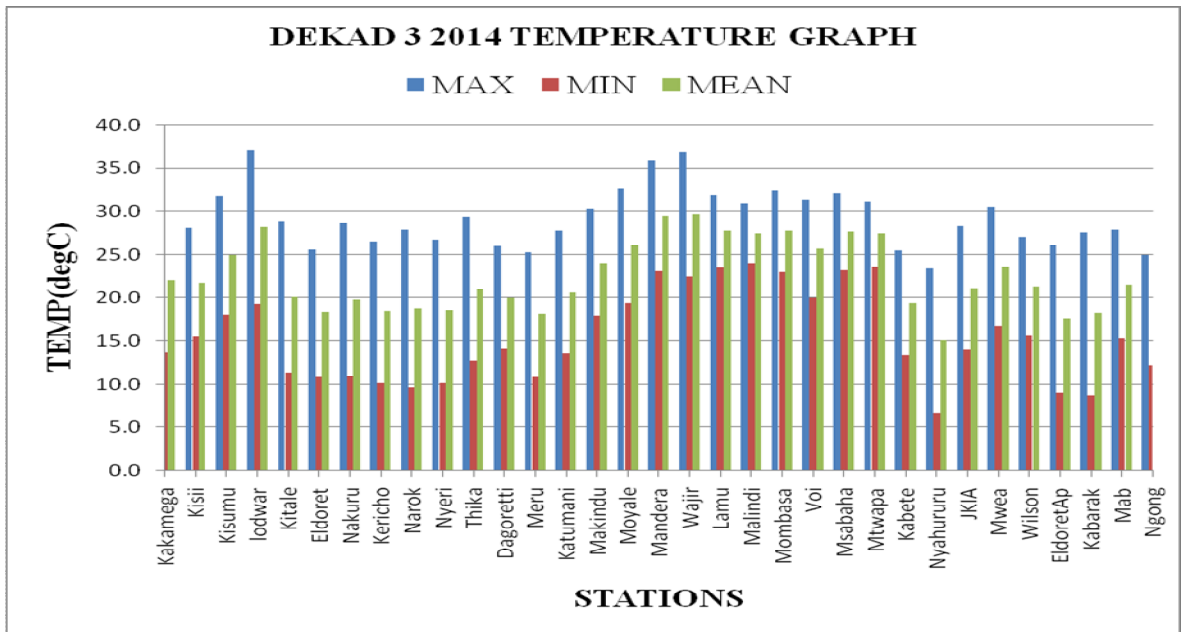


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 3, 2014

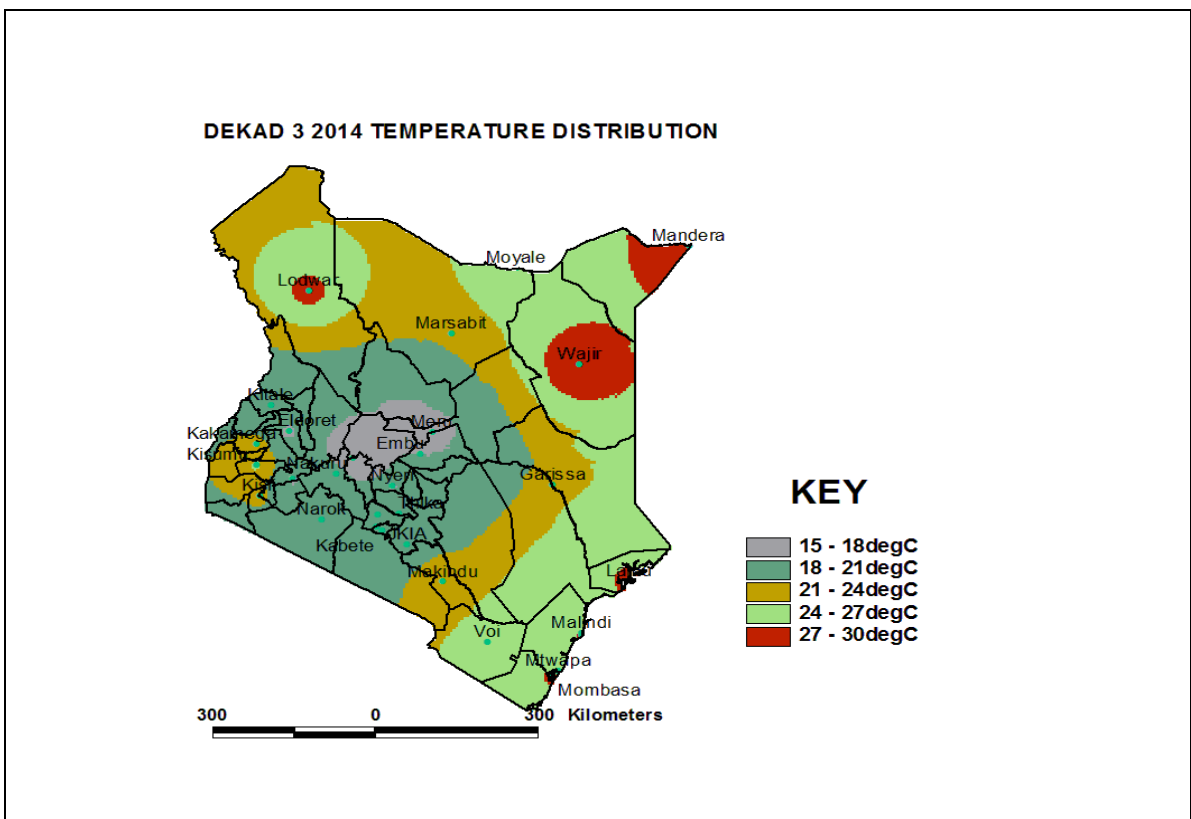


Figure 3.4: Mean temperature distribution for dekad 3, 2014

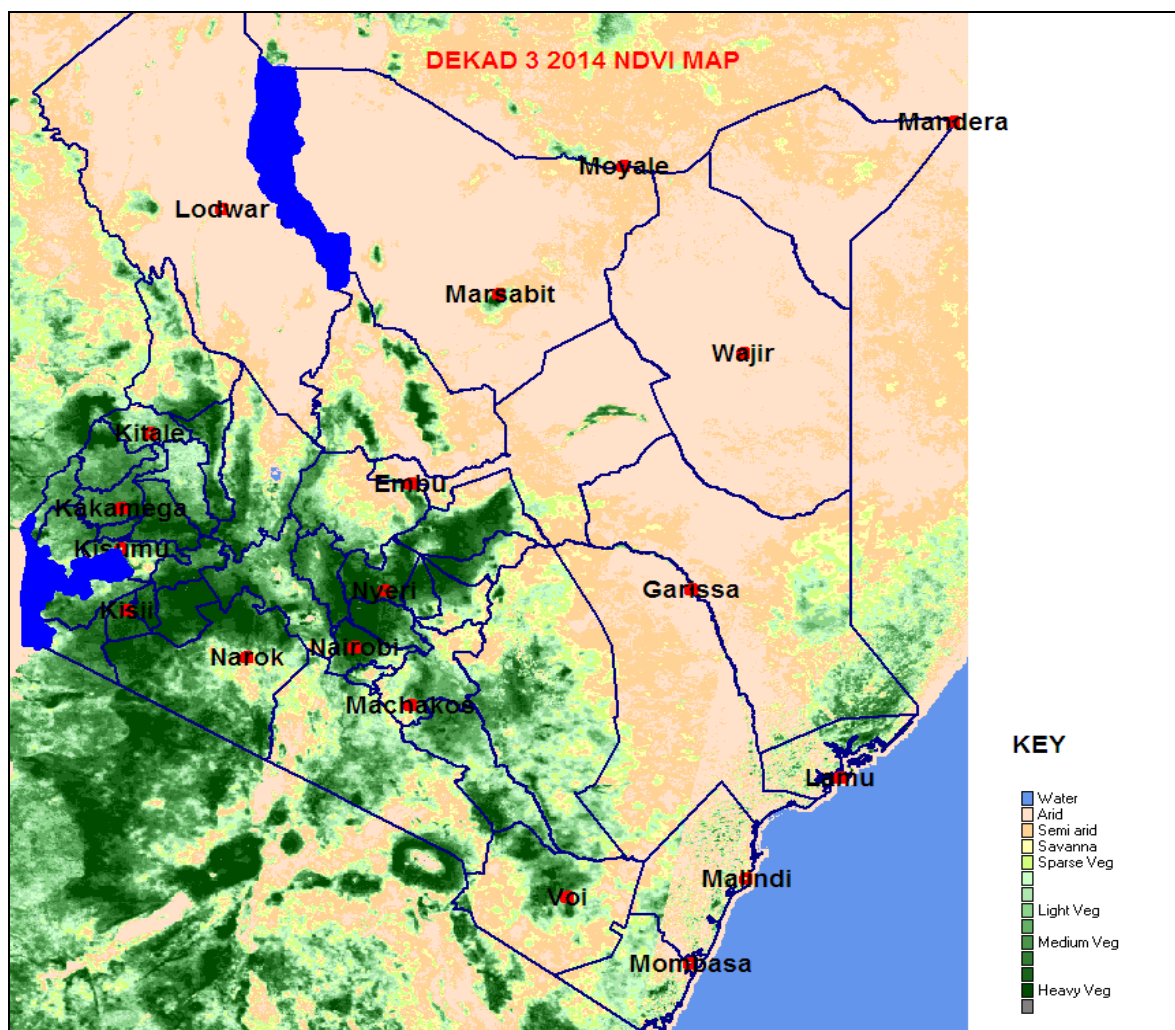


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 1-10 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 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 boom 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 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 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 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 with rains over few places in the last two days.

This dry condition spread over dekads is expected to deteriorate 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 few days are expected to experience afternoon showers over few places.

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 early morning showers over few places and sunny intervals in the afternoon throughout the forecast period.

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

For feedback or further guidance, Contact:

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