



**KENYA METEOROLOGICAL SERVICE
DEKADAL AGROMETEOROLOGICAL
BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 13, 2014
01-10 MAY, 2014**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities increased tremendously countrywide with coastal region recording the highest rainfall as compared to the previous dekad where eastern region received the highest rainfall. Coastal region had Malindi, Mtwapa, Msabaha, Lamu and Mombasa stations recording the highest amount of rainfall of 274.5mm, 258.4mm, 195.6mm, 181.3mm and 161.1mm of rainfall respectively as compared to the highest rainfall of 35.8mm received at Embu station in Eastern region in the previous dekad. Western region received the second highest rainfall of 110.6mm at Kakamega station. Kericho station in Rift Valley region reported the highest amount of rainfall of 110.6mm. In Nairobi region, Jomo Kenyatta station received the highest amount of rainfall of 101.5mm. Nyeri station in Central region recorded the highest amount of rainfall of 83.0mm. In north eastern region, Moyale station received the highest amount of rainfall of 55.9mm. Suba station in Nyanza region received the highest rainfall amount of 53.3mm. Embu station in north eastern reported the highest rainfall amount of 32.1mm.

There was a drastic decrease in the maximum temperature country wide. Lodwar station still recorded the highest maximum temperature of 36.5°C compared to 37.6°C in the previous dekad. The minimum temperature continued to decrease in most stations countrywide with Nyahururu station in Central region recording the lowest temperature of 8.9°C compared to 8.1°C reported in the same station in the previous dekad.

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 13; 01-10May 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded rainfall amount of 110.6mm during the dekad. The mean air temperature and pan evaporation reported were 21.2°C and 37.6mm respectively. Sunshine duration was 4.4hrs.

Maize and beans were at emergence and flowering stages respectively and in good state. Normal yield is expected.

2.1.2 Kisii

The station recorded rainfall amount of 51.3mm. The mean air temperature and Pan Evaporation were 20.7°C and 41.8mm respectively. No records on Sunshine duration.

Maize and beans were at emergence and flowering stages respectively and in fair state. Beans have been affected by black Aphids.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station recorded rainfall amount of 67.8mm. Evaporation pan was 36.3mm. There was no report on average air temperature and sunshine duration.

Maize and beans were at emergence stage and in good state.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 95.9mm and the average air temperature reported was 19.2°C. There was no report on sunshine and Pan Evaporation parameters.

Maize and beans were at emergence stage and in good state.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 83.0mm. The average air temperature was 19.3°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans were at above 9th leaf and emergence stages respectively. Both crops were in fair state though beans have been affected by other insects.

2.3.2 Kabete

The station recorded rainfall amount of 67mm. Pan Evaporation recorded was 48.3mm. Sunshine duration was 4.8 hrs. There was no report on average air temperature.

Both maize and beans crops were at emergence stage and in good state.

2.3.3 Thika

The station recorded rainfall amount of 26.3mm. The mean air temperature and pan evaporation recorded were 21.3°C and 30.7mm respectively. There was no report on sunshine duration.

Maize and Beans were at emergency and flowering stages and potatoes too were in flowering stage. All crops are in good state.

2.3.4. Nyahururu

The station received rainfall amount of 9.4mm. The mean air temperature and pan evaporation recorded were 16.2°C and 41.1mm respectively. There was no report on sunshine duration.

Maize was at emergence stage and potatoes were at flowering state. Both crops were in poor state due to insufficient rain during the dekad.

2.3.5. Dagoretti

The station reported rainfall amount of 55.5mm. The average air temperature and Pan Evaporation were 19.5°C and 28.4mm respectively. Sunshine duration was 5.1hrs.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station recorded rainfall amount of 21.4mm. The average air temperature and Pan Evaporation recorded were 19.9°C and 40.4mm respectively while the sunshine record was 8.1hrs.

Maize and beans were at emergence and flowering stages respectively and in fair state. Both crops have been affected by insufficient rainfall during the dekad.

2.4.2 Embu

The station reported rainfall amount of 32.1mm. There was no report on the mean Air Temperature, Pan Evaporation and Sunshine duration.

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

2.4.3 Katumani (Machakos)

The station received rainfall amount of 12.1mm. The average air temperature reported was 19.8°C. There was no report on pan evaporation and Sunshine duration.

Both maize and beans were at emergence and flowering stages respectively and in poor state due to insufficient rainfall. Below normal yield is expected.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 195.6mm. The average air temperature and Pan Evaporation recorded were 27.1°C and 26.3mm respectively. There was no report on sunshine parameter.

Maize crop was in emergence stage and in fair state. There was sufficient rain during the dekad.

2.5.2 Mtwapa

The station received rainfall amount of 258.4mm. The average air temperature and pan evaporation recorded were 26.3°C while Pan Evaporation was 29.9mm. There was no report on sunshine duration.

Maize was at emergence stage while Mangoes were at flowering stage. Both crops were in good state. Maize has been affected by excessive rainfall. Normal yield for mangoes is expected.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

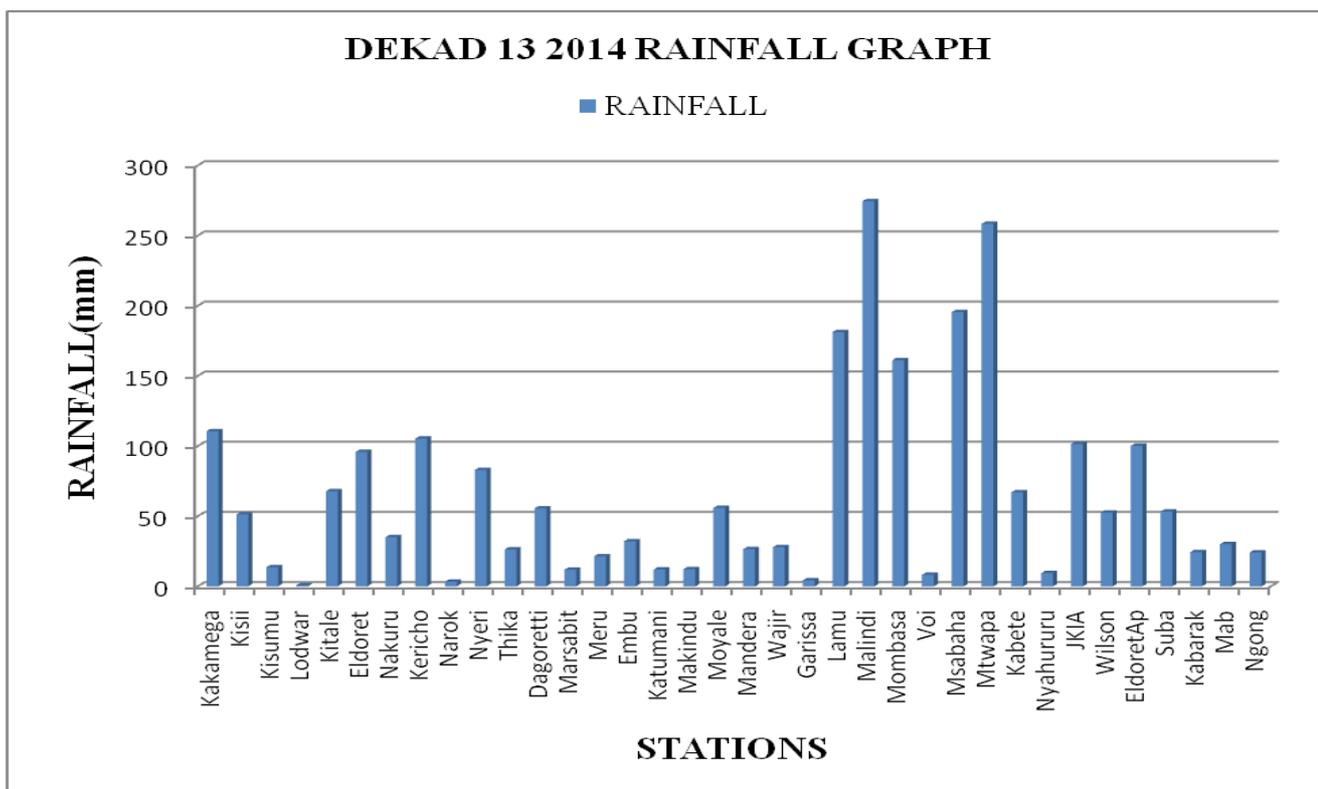


Figure 3.1: Dekadal rainfall totals for 01- 10 May 2014

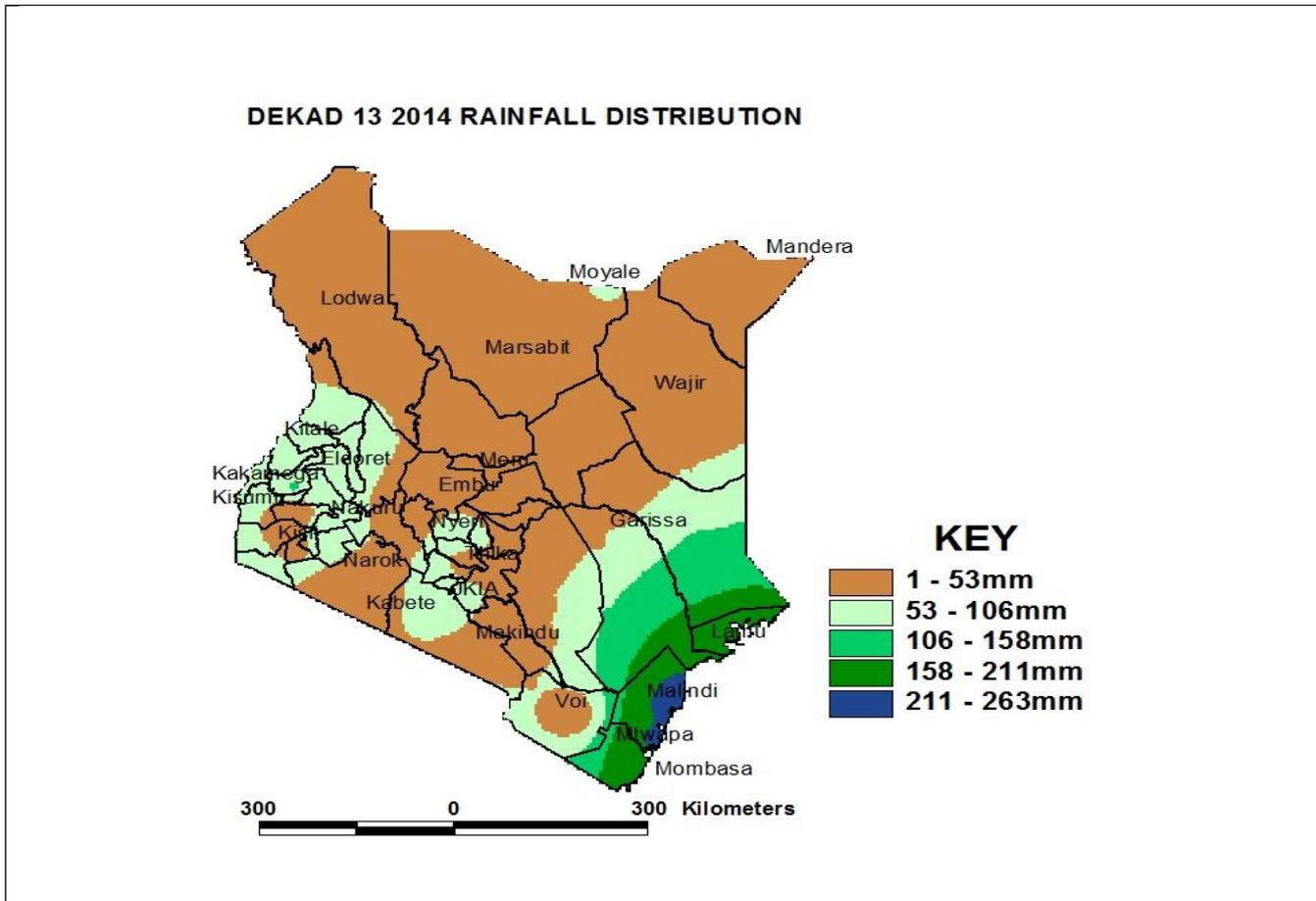


Figure 3.2: Dekadal rainfall distribution for dekad 13, 2014

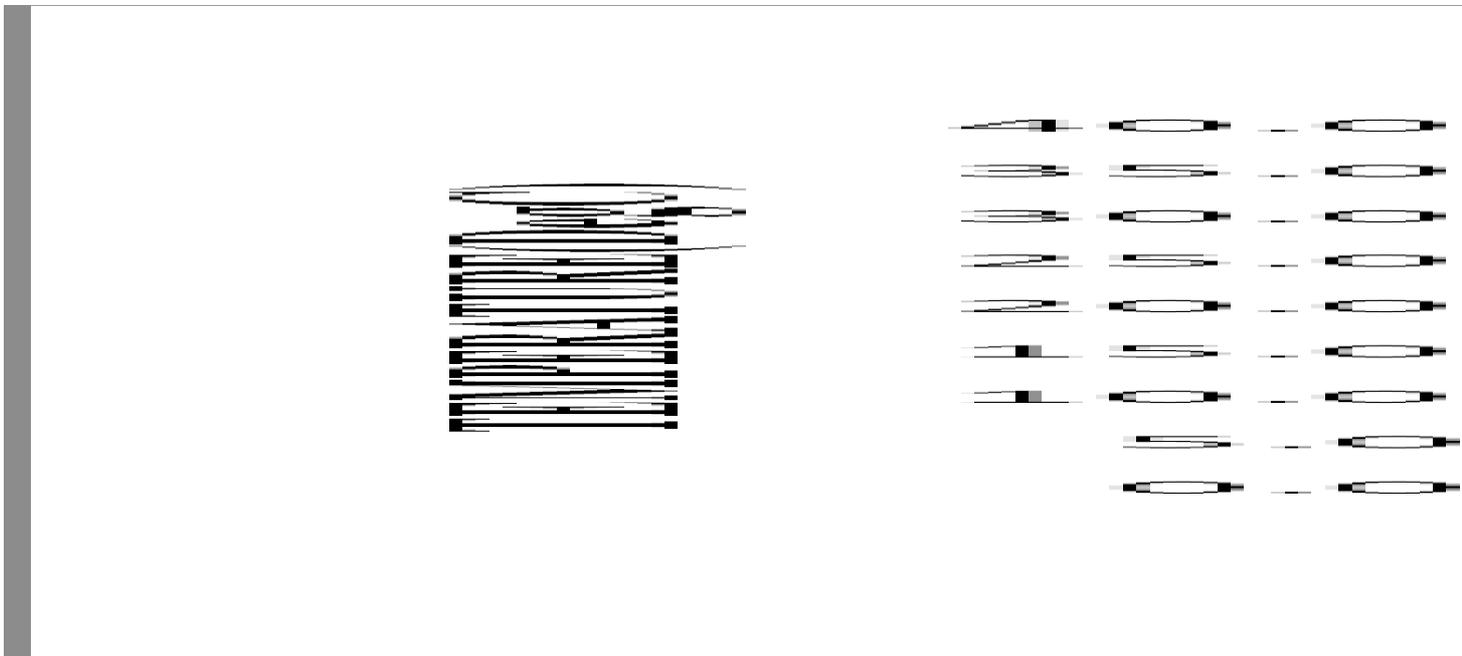


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 13, 2014

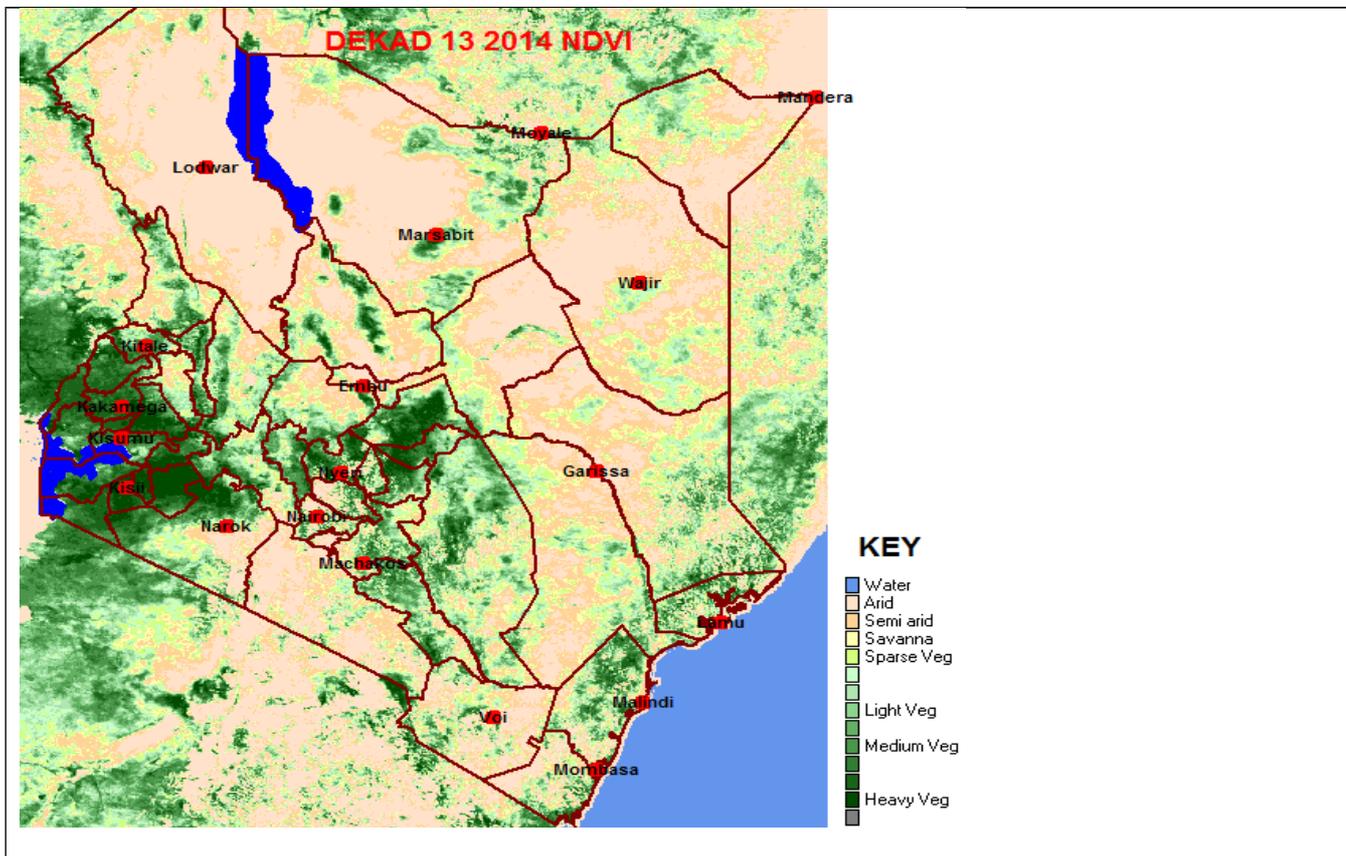


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 May 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 rains in the morning over several places for the first two days, reducing to few places on the third day thereafter giving way to sunny intervals for the remaining days of the forecast period. In the afternoon will expect showers and thunderstorms over several places on the first three days, reducing to few places for the rest of the forecast period.

The rains and showers will benefit the growth and the development of the maize and Beans crops, which are mostly in emergency and flowering stages.

- ❖ **Over the Northwestern counties (Turkana, West Pokot and Samburu),** Sunny intervals are expected in the morning throughout the forecast period. In the afternoon, showers and thunderstorms are expected in the first four days, giving way to sunny intervals for the remaining forecast period.

The afternoon showers will be of beneficial on the state of pasture and vegetation in this region.

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 morning with rains over

few places for the first three days, giving way to sunny intervals for the remaining days of the forecast period. While in the afternoon, showers over several places for the first two days, reducing to few places for the remaining forecast period are expected.

The expected showers will continue to enhance the state of the crops and vegetation in the region.

- ❖ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo)**, are expected to experience morning rains over few places and sunny intervals in the afternoon throughout the forecast period.

The expected morning rains during the dekad will enhance the state of pasture and vegetation, which are mostly in emergence state in this region.

- ❖ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui)**, are expected to experience early morning cloudiness giving way to sunny intervals. Afternoons are expected to have showers over few places for the first four days, giving way to sunny intervals thereafter.

The wet conditions expected will be of great benefit to the crops, pasture and vegetation in the region.

- ❖ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)**, is expected to experience showers in the morning over several places. Afternoons are expected to experience mainly sunny intervals giving way to showers over few places throughout the forecast period.

The showers will benefit the crops which are still in the emergence state in this region.

For feedback or further guidance, Contact:

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