



**KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 19, 2013
01-10 JULY 2013**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the Country have significantly decreased as compared to the previous dekad. Eldoret station in Rift Valley region recorded 227.2 mm of rainfall, which was the highest amount of rainfall recorded in the whole country. Mtwapa station in the Coastal region recorded the highest rainfall of 10.0mm, a significant decrease as compared to the previous Dekad highest record of 63.7mm. In Central region, the highest rainfall recorded was 28.3 mm at Nyahururu station while in North Eastern region the highest rainfall of 2.4mm reported at Moyale station. Embu station in Eastern region reported the highest rainfall of 1.2mm a decrease from 3.1mm recorded at the same station in the last dekad. In Nairobi region, Dagoretti station recorded the highest rainfall of 0.02mm, which is quite insignificant in agriculture.

The Maximum Temperatures increased significantly in most parts of the country compared with previous dekad while Minimum Temperatures decreased considerably. In the dekad, Lodwar station reported the highest maximum temperature of 34.1°C. Nyahururu station in Central region reported the lowest temperature of 5.7°C down from 6.7°C reported in the same station during 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 19; 01-10 JULY, 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received rainfall amount of 37mm. The mean air temperature and sunshine hours were 20.2°C and 7.8hrs respectively. The pan evaporation recorded was 265.1mm.

Maize crop is in wax ripeness stage and in good state with normal yields expected.

2.1.2 Kisii

This station recorded rainfall amount of 58.5mm. The mean air temperature and total pan evaporation recorded were 19.8°C and 36.4mm respectively. Sunshine duration recorded was 7.5hours.

Maize crop was approaching wax ripeness stage and in fair state as normal yields expected while beans harvesting is over.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 34.1mm. The average air temperature and pan evaporation were 18.5°C and 32.3mm respectively. There was no report on sunshine duration.

Maize is at flowering stage and in good state while beans are at maturity stage and in fair state. Normal yield expected for both crops.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 227.2mm. The average air temperature and pan evaporation reported were 16.5 °C and 46.8mm respectively. Sunshine duration recorded was 8.5hrs.

Maize was at flowering stage while beans at harvesting stages but both were in poor state. Insufficient rainfall adversely affected both crops. In addition, stalk borer has attacked maize hence below normal yields expected.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 9.2mm. The average air temperature was 16.4°C. There was no report on pan evaporation and sunshine parameters.

Maize crop was at wax ripening stage and in a poor state while beans were at harvesting stage and in fair state. The stalker borer has affected the maize crop, while insects have affected beans. Below normal yields expected for maize but beans normal.

2.3.2 Kabete

The station received no rainfall. The average air temperature and pan evaporation recorded were 16.4°C and 32.5mm respectively. Sunshine duration recorded was 6.2hrs.

Maize was at flowering stage and in a fair state. Beans were at maturity stage and in a fair state with normal yield expected. Coffee was at 100% berry soft stage and in a moderate state but damaged by leaf rust and leaf minor at less than 10% each. Bananas were at 100% appearance of sucker stage and in a moderate state but damaged by thrips, cigar end rot and cigar Toka at less than 10% each.

2.3.3 Thika

The station received no rainfall. The mean air temperature and pan evaporation recorded were 17.9°C and 32.0mm respectively. Sunshine duration recorded was 5.2hrs.

Maize crop is approaching maturity stage, and in poor state. Insufficient rainfall has adversely affected the crop with below normal yield is expected.

2.3.4. Nyahururu

The station received 28.3mm of rainfall. The mean air temperature and pan evaporation recorded were 13.6°C and 37.3mm respectively. There was no report on sunshine hours.

Maize was at flowering stage while beans were at maturity stage and in a fair state. Potatoes are at harvesting stage and in a good state. Normal yield expected for both beans and potatoes.

2.3.5. Dagoretti

The station received 0.2mm of rainfall. The mean air temperature and evaporation pan recorded were 17.0°C and 32mm respectively. Sunshine hours reported was 5 hours per day.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported no rainfall. The average air temperature and pan evaporation were 17.0°C and 35.5mm respectively. There was no report on sunshine parameter.

Maize was at flowering stage but in a poor state with below normal yield expected. This is due to adverse effects of insufficient rainfall.

2.4.2 Embu

The station recorded rainfall amounts of 1.2mm. The average air temperature was 12.5°C. There was no report on sunshine and pan evaporation parameters.

Maize was at mature stage and in poor state due to moisture stress. Below normal yields is expected

2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 0.3mm. The average air temperature and sunshine duration were 17.1°C and 5.7hrs respectively. There was no report on pan evaporation.

Maize was at maturity stage and in a poor state due to moisture stress. Below normal yield is expected.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received rainfall amount of 0.2mm. The average air temperature and pan evaporation recorded was 25.9°C and 40mm respectively. The sunshine duration was 8.3 hours.

Maize was at approaching wax ripeness stage and in fair condition while Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received rainfall amount of 10.0mm. The average air temperature and pan evaporation recorded were 25.4°C and 44.5mm respectively. There was no report on sunshine hours.

Maize was at maturity stage and in fair state but adversely affected by birds, animals and stalk borer though normal yield is expected. Mangoes were at harvesting stage and in fair state.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITION

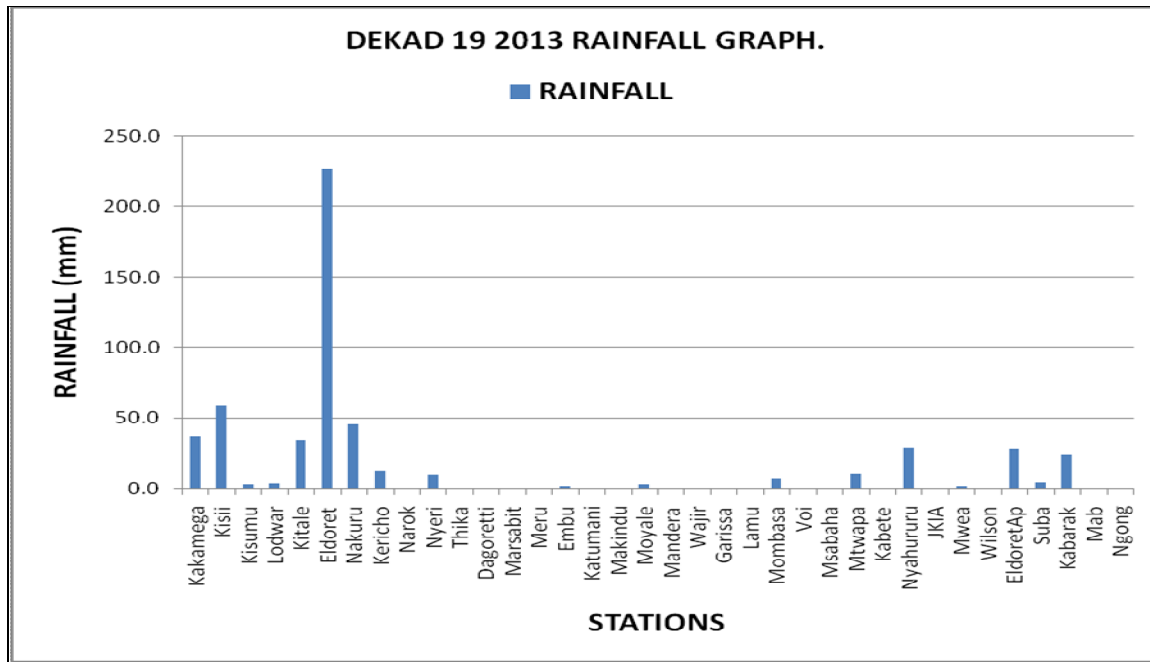


Figure 3.1: Dekadal Rainfall totals for 1st to 10th July 2013

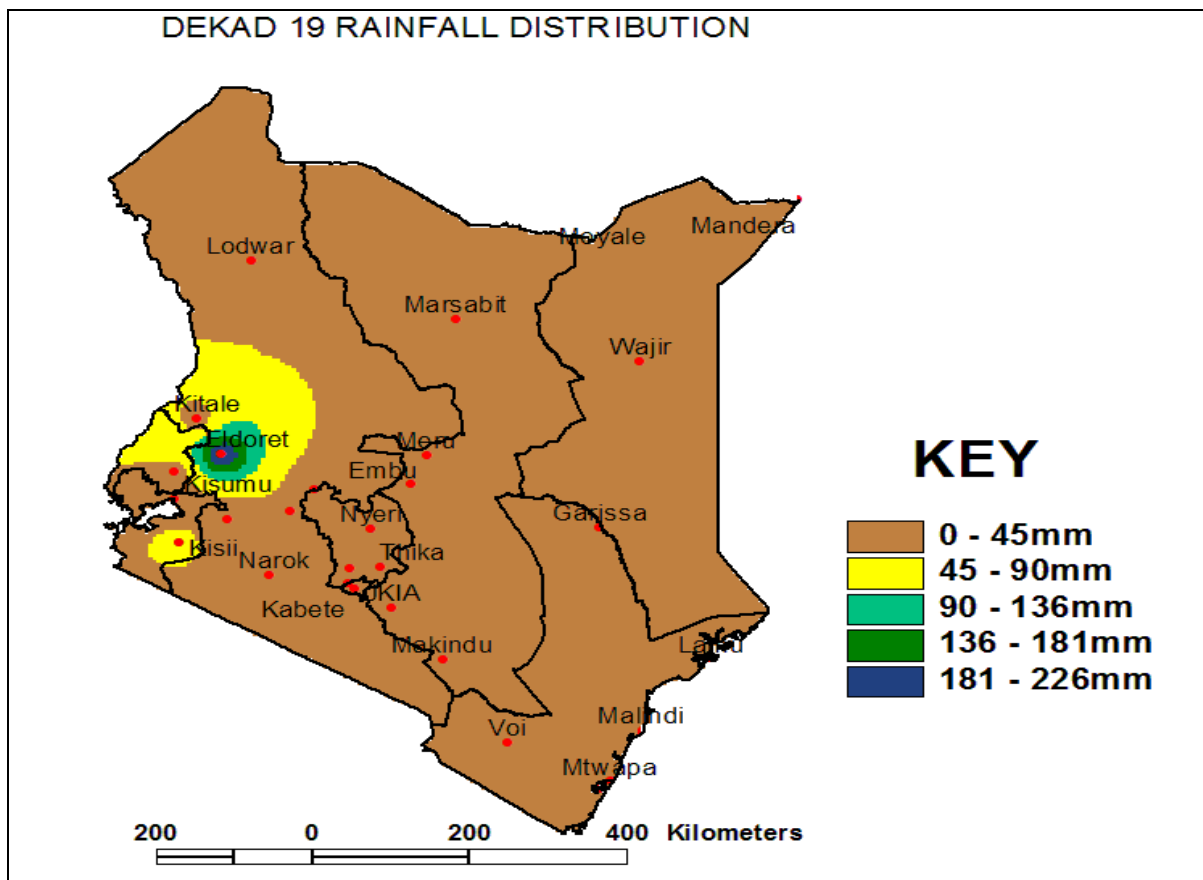


Figure 3.2: Dekadal Rainfall distribution for Dekad 19, 2013

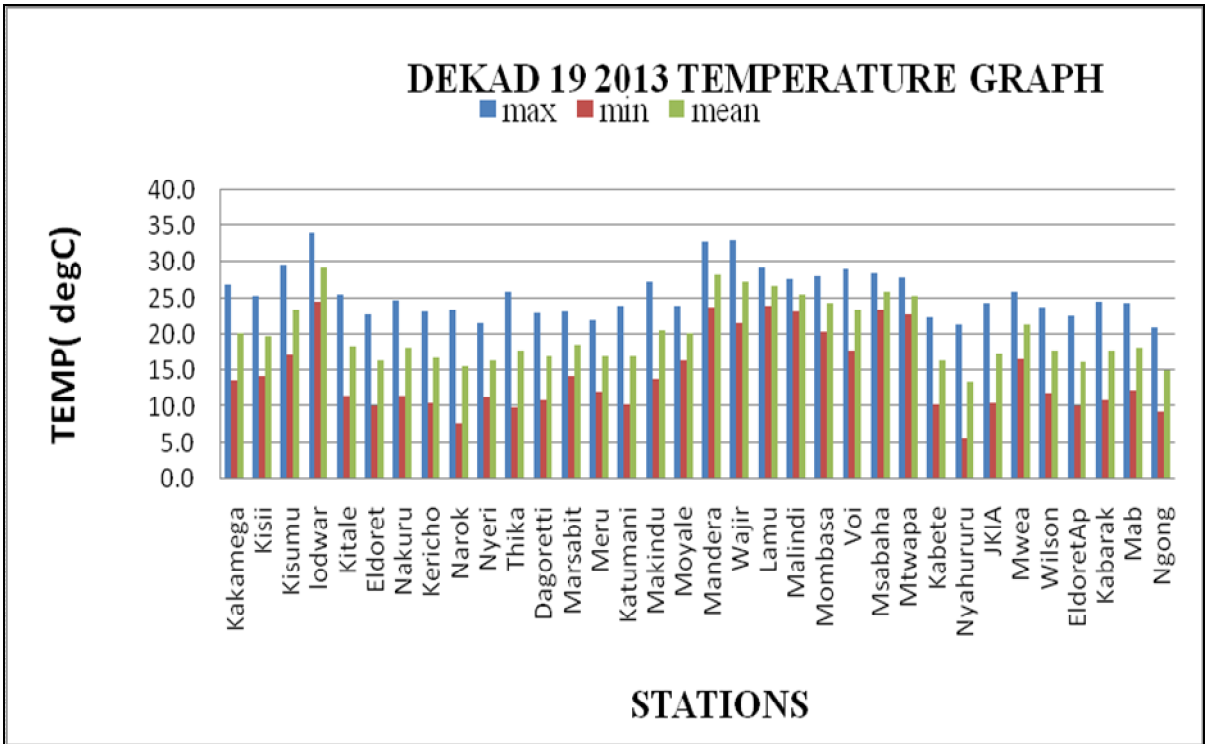


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 19, 2013

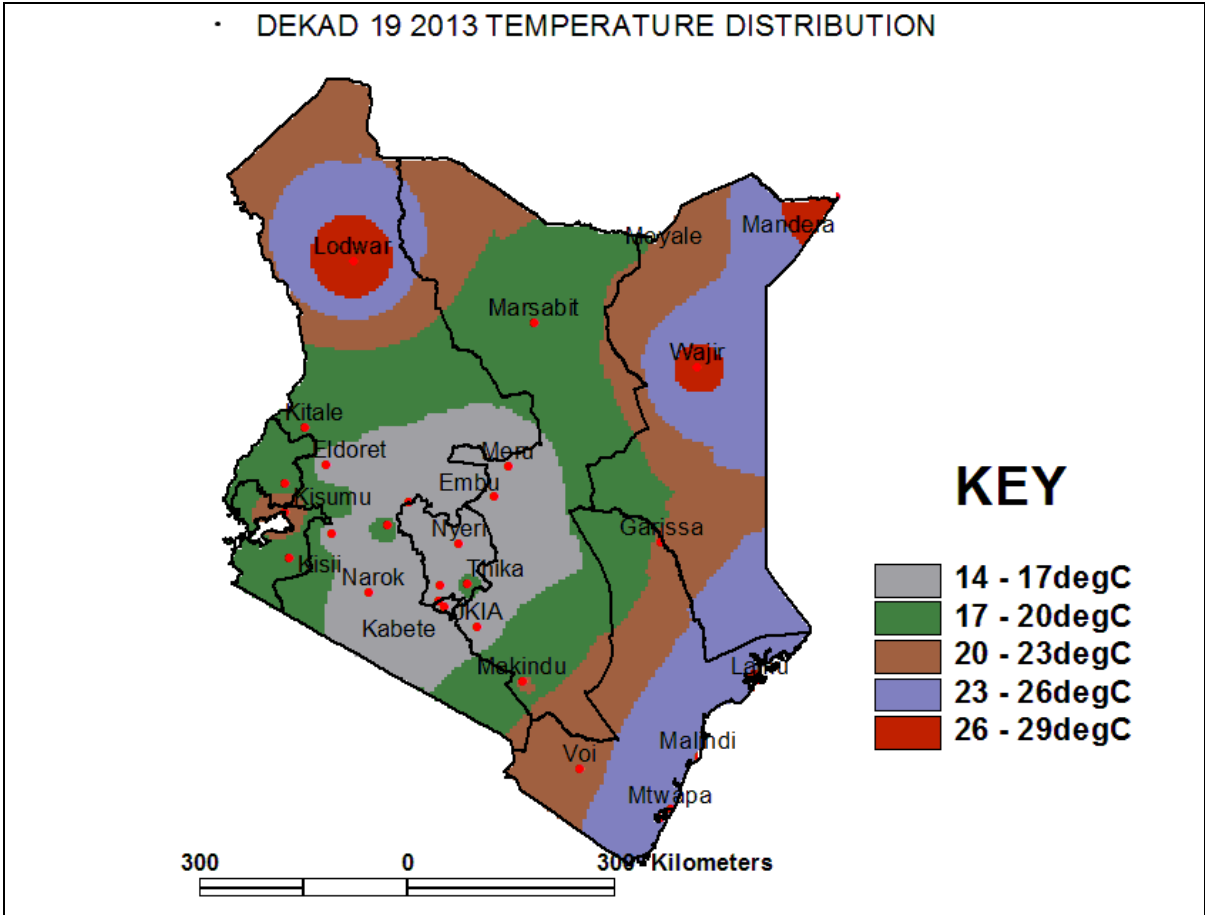


Figure 3.4: Mean temperature distribution for dekad 19, 2013

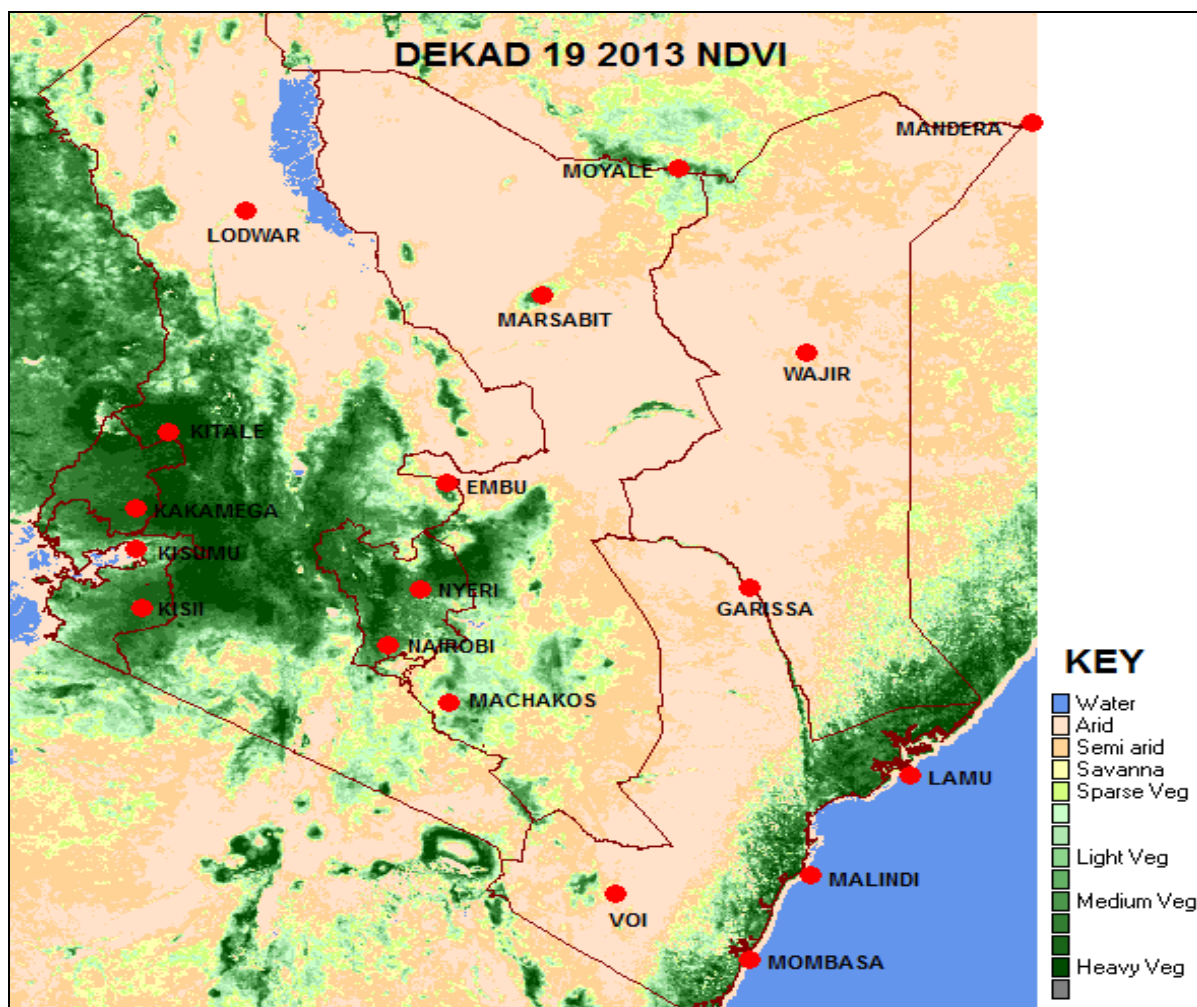


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 JULY 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 while afternoons are expected to experience showers and thunderstorms over few places for the entire forecast period.

The showers continue to be of great benefit to the some crops, which are now in their flowering stage.

- ✚ Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning and afternoon for the entire forecast period.

The dry conditions will influence negatively on the pastures and vegetation cover in these regions.

- ✚ **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 mornings breaking into sunny intervals, sunny intervals for the rest of the day throughout the entire forecast period.

The dry conditions will influence the crops growing in the region and vegetation negatively.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to continue experiencing sunny intervals in the morning and afternoon over the entire forecast period.

Dry conditions expected to be unfavorable to the pastures and vegetation in these regions.

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals in the morning and the afternoon for the entire forecast period.

Dry conditions expected to impact negatively on the growing crops and pastures in these regions.

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** are expected to experience showers over few places in the mornings and sunny intervals in the afternoons for the entire forecast period.

The morning showers continue to benefit the growing crops in these regions.

For feedback or further guidance, Contact:

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