



**KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 14, 2013
11-20 MAY 2013**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

During the dekad, rainfall activities decreased significantly in the whole country compared to the previous dekad. The highest rainfall received countrywide was 83.9mm, 56.5mm, 38.4mm and 31.0mm at Mtwapa, Kericho, Mombasa and Lamu stations respectively. In Western region Kakamega station recorded 4.6mm down from 156.0mm received the previous dekad. Kisii station in Nyanza region recorded the highest rainfall of 16mm down from 149.2mm. In the Rift-valley region the highest rainfall of 56.5mm was received at Kericho meteorological station down from 132.9mm received in Eldoret Airport previously. Nyahururu station in Central region reported the highest rainfall of 29.1mm down from 109.4mm received previously in the region at Thika. In North Eastern region the highest rainfall of 1.9mm was reported at Moyale station down from 81.1mm the same station. Embu station in Eastern region reported the highest rainfall of 6.0mm down from 47.5mm received in Mwea station. Kabete station reported 31.0mm as the highest rainfall in Nairobi region. In the Coastal region, Mtwapa recorded the highest rainfall of 83.9mm as compared to 344.6mm received in Lamu in the previous dekad.

Maximum Temperature increased slightly as compared to the previous dekad while the Minimum Temperature decreased in most stations. Mandera station in North Eastern region continued to report the highest maximum temperature of 35.3°C compared to 35.2°C reported in the previous dekad. The lowest maximum temperature of 20.7°C was recorded at Ngong in Nairobi region compared to 21.0°C reported at Nyahururu station in Central region in the previous Dekad. Nyahururu station in Central region still reported the lowest minimum temperature of 5.8°C compared to 9.4°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; 01-10 MAY 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received rainfall amount of 4.6mm. The mean air temperature and pan evaporation reported were 20.8°C and 39.1 mm respectively. There was no report on sunshine hours.

Maize crop has past 9th leaf though affected by a virus disease which is damaging the leaves. Beans are in the flowering stage.

2.1.2 Kisii

This station recorded rainfall amount of 16.0mm. The mean air temperature and total pan evaporation recorded were 20.0°C and 39mm respectively. There was no report on sunshine duration.

Maize is in the 9th leaf stage and in fair state as beans crop is flowering stage and in a fair state.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 4.6mm. The average air temperature and pan evaporation were 20.0°C and 40.1mm respectively. There was no report on sunshine parameter.

Maize crop is in the emergence stage and in a good state while the beans are at 25% flowering stage and in a good state.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 5.8mm. The average air temperature and pan evaporation reported were 16.8 °C and 58.3mm respectively. There was no report on sunshine parameter.

Maize and beans were at emergence stage and in fair condition. Weeding is in progress.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 8.1mm. The average air temperature was 18.2°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans were at emergence and flowering stages and in fair state. The maize crop is being affected by the maize stalker borer and beans by some other insects.

2.3.2 Kabete

The station received rainfall amount of 31mm. The average air temperature recorded was 18.1°C. There was no report on sunshine hours and pan evaporation.

Maize and beans were at emergence stage and in fair state. Few farmers have started weeding their crops. Coffee was at 100% pin head. It has been attacked by leaf rust 25%, leaf minor less than 10%. Bananas were at 100% appearance of sucker. It has been damaged by thrips 25%, cigar and end rot at less than 10%.

2.3.3 Thika

The station received 7.7mm. The mean air temperature and pan evaporation recorded were 20.4°C and 33.7mm respectively. There was no report on sunshine hours.

Maize and beans were at flowering stages respectively and in poor condition due to excessive rainfall during previous dekad. Potatoes were also at flowering stage and in poor condition.

2.3.4. Nyahururu

The station received 29.1mm of rainfall. The mean air temperature and pan evaporation recorded were 13.7°C and 48.1mm respectively. There was no report on sunshine hours.

Maize and potatoes were at emergence stage and in fair condition respectively.

2.3.5. Dagoretti

The station received rainfall amount of 29.2mm. The mean air temperature and evaporation pan recorded were 18.6°C. There were no sunshine and evaporation parameters recorded.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported traces of rainfall. The average air temperature and pan evaporation were 18.6°C and 42mm respectively. There was no report on sunshine parameter.

Maize and beans were at emergence and flowering stages respectively and in fair state. Some farmers have started weeding.

2.4.2 Embu

The station recorded rainfall and pan evaporation amounts of 6.0mm and 35.5mm respectively. There was no report on sunshine and Temperature parameters.

Maize and beans were at flowering stages and in fair state.

2.4.3 Katumani (Machakos)

The station recorded no rainfall. The average air temperature was 19.4°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans are in the flowering stages and in poor condition due to excessive rains in the previous dekads.

2.5 COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 26.6mm. The average air temperature and pan evaporation recorded was 26.9°C and 37.1mm respectively. There was no report on sunshine hours.

Maize was at emergence stage and in fair condition but affected by insufficient rainfall in the previous dekad.

2.5.2 Mtwapa

The station received rainfall amount of 83.9mm. The average air temperature and pan evaporation recorded were 26.8°C and 33.8mm respectively. There was no report on sunshine hours.

Maize was at flowering stage and in good condition. Mangoes were at fruit setting stage and in good condition.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

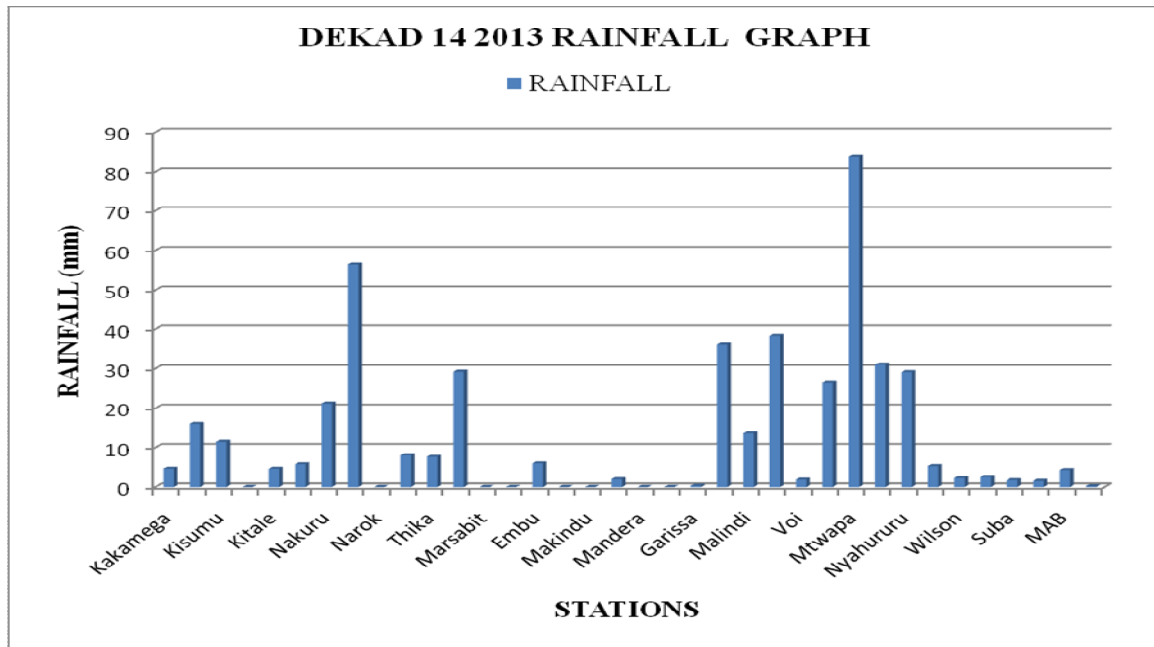


Figure 3.1: Dekadal rainfall totals for 11-20 May 2013

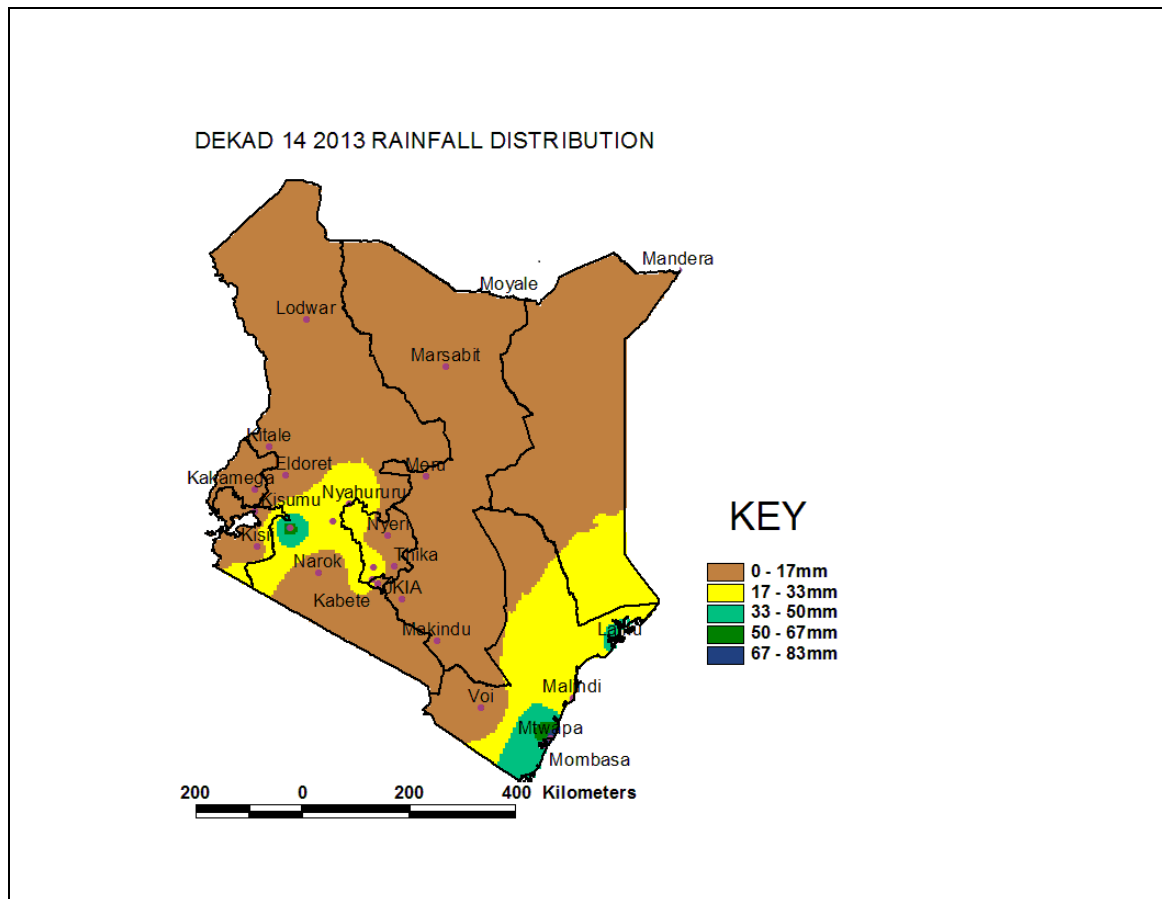


Figure 3.2: Dekadal rainfall distribution for 11-20 May 2013

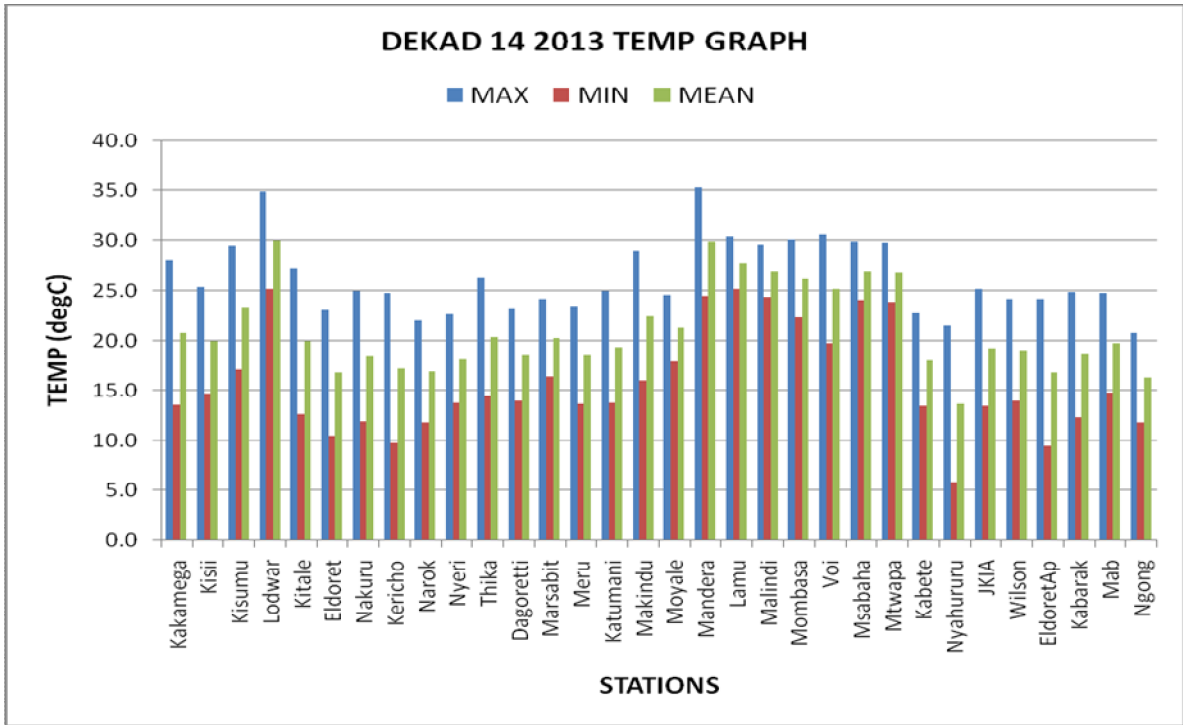


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 14, 2013

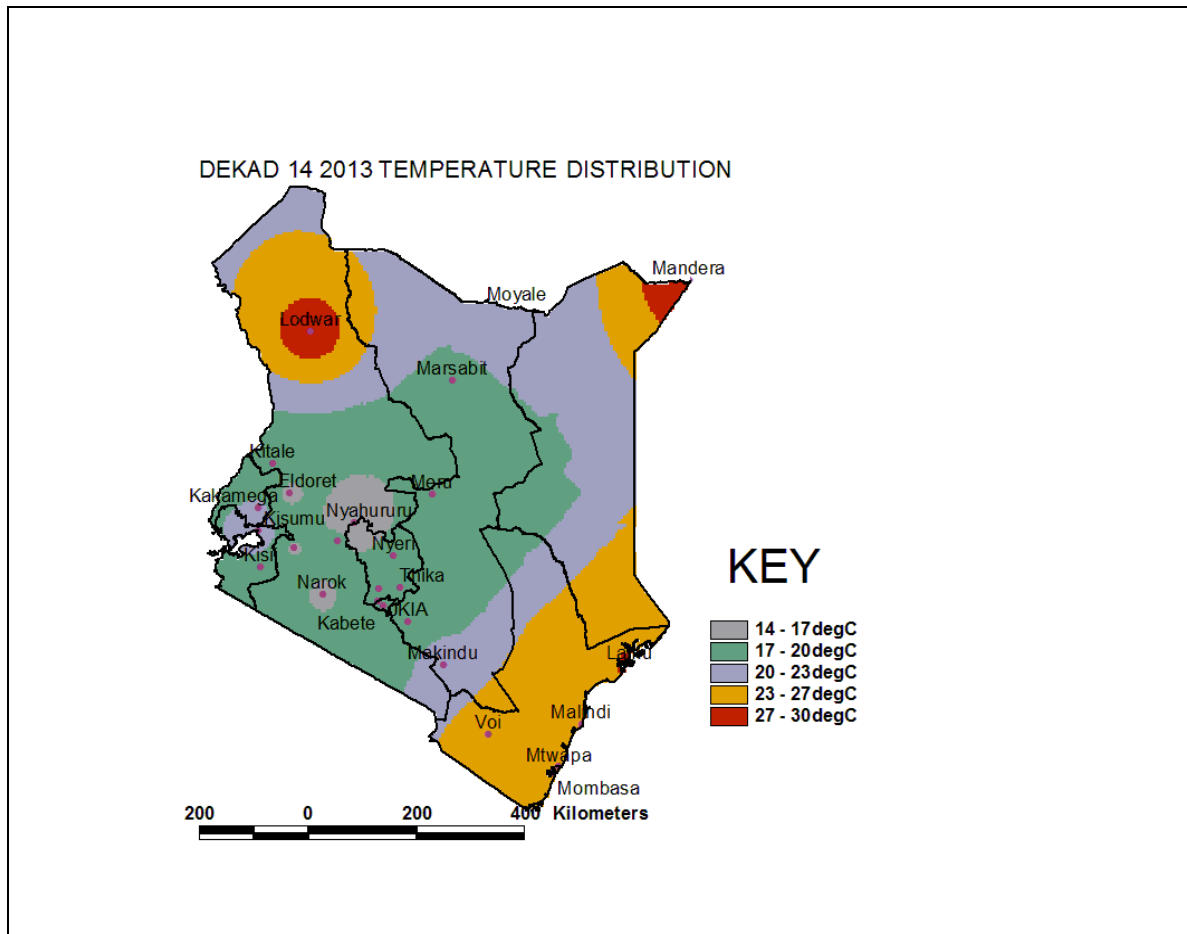


Figure 3.4: Mean temperature distribution for dekad 14, 2013

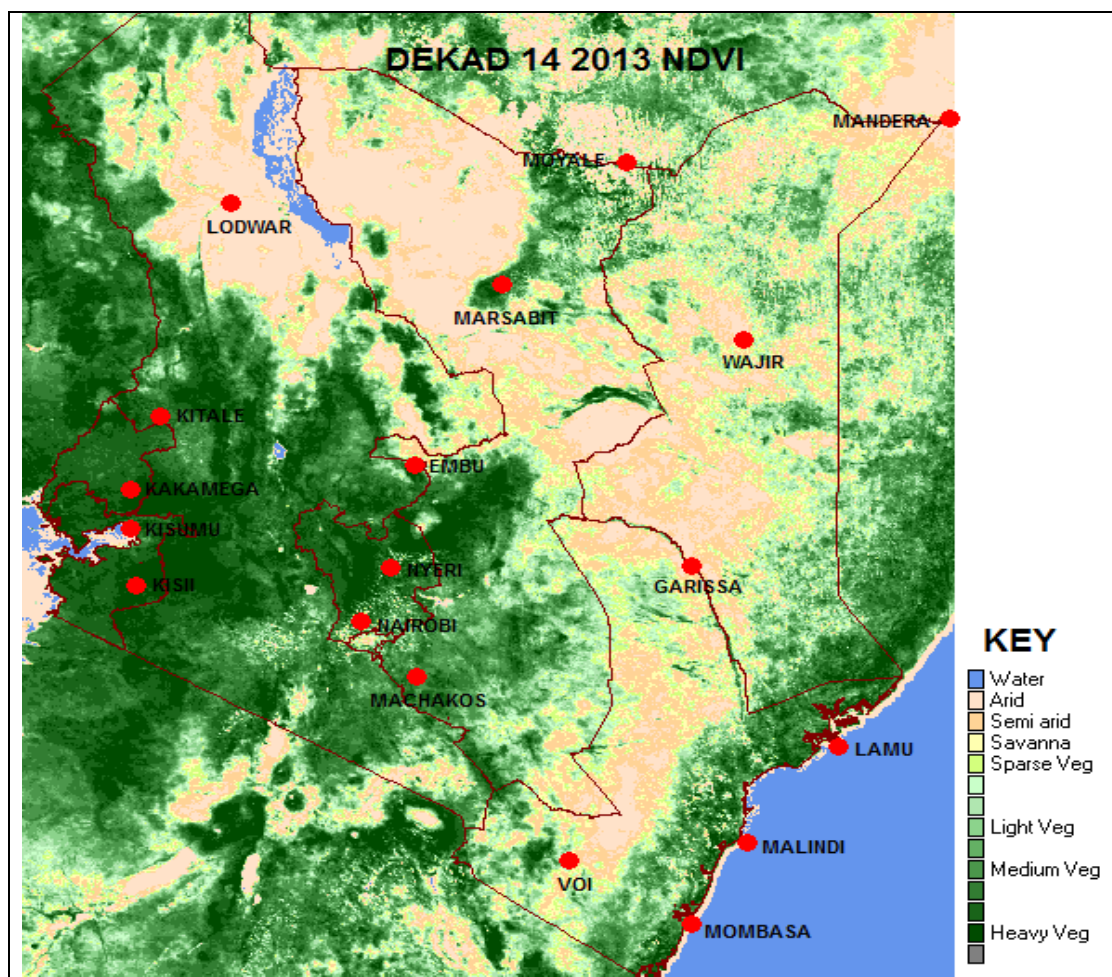


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS 21-30 MAY 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 for the entire forecast period. 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 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 impact 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 which will break into sunny intervals over the entire forecast period. Showers over a few places are to be experienced in the afternoon for the entire forecast period too.

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

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

The dry conditions are likely to be detrimental 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.

The dry conditions are 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 morning showers over few places for the entire forecast period. In the afternoon, showers over few places are expected for the entire forecast period.

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

For feedback or further guidance, Contact:

Director,

Kenya Meteorological Department,

Agro meteorological Advisory Services Division,

Dagoretti Corner, Ngong Road, P.O. Box 30259, 00100 GPO, Nairobi

Tel: +254 (0)20 3867880-7/3876957/3873682; Fax: +254 (0)20 3876955

E-mail: agromet@meteo.go.ke;

Website: www.meteo.go.ke

©2013 The Kenya Meteorological Department