

# KENYA METEOROLOGICAL SERVICES DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 24, 2013 21-31 AUGUST 2013

# 1. THE HIGHLIHTS ON RAINFALL AND TEMPERATURE

There had been slight reduction in rainfall activities in the country during the dekad compared to the previous dekad. Kitale station in North Rift region recorded the highest amount of rainfall of 110.4mm in the whole country while in the South Rift Valley region; Kericho recorded the highest with 67.9mm. The highest rainfall observed in the Western region, was 89.8mm at Kakamega station. In North Eastern region there was a reduction of rainfall with Moyale recording the highest of 8.0 mm. In Lake Region, Kisii station recorded the highest amount of rainfall of 76.5mm as compared to the previous dekad where it recorded the amount of 43.0mm. Embu station in Eastern region reported the highest amount of 14.9mm, which was a decrease from 19.3mm recorded at the same station in the previous dekad. In Nairobi region, Kabete station recorded the highest amount of rainfall of 22.2mm as compared to the previous dekad of 110.8mm at the same station. In Coast region there was a general increase of rainfall compared to the previous dekad where Mombasa station recorded the highest of 24.2mm.

There was a slight decrease in temperature both the Maximum and the Minimum. Lodwar station recorded the highest maximum temperature of 34.2°C. Nyahururu station in Central region reported the lowest minimum temperature of 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 24; 21-31 AUGUST 2013

#### 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station received rainfall amount of 89.8mm. The mean air temperature and sunshine hours were 19.9°C and 8.1hrs respectively. The pan evaporation recorded was 55.8mm.

Maize crop was in harvest stage and in good state with normal yields expected. Farmers have still harvesting their crops.

#### 2.1.2 <u>Kisii</u>

The station recorded rainfall amount of 76.5mm for the dekad. The mean air temperature and total pan evaporation recorded were 19.7°C and 50mm respectively. Sunshine duration recorded was 8.4hrs.

Farmers have harvested their crops.

# 2.2 RIFT VALLEY REGION

#### 2.2.1 Kitale

The station received rainfall amount of 110.4mm. The average air temperature and pan evaporation were 18.5<sup>o</sup>C and 45.9mm respectively. There was no report on sunshine duration.

Maize was at maturity stage and in good state. Normal yield expected for both crops.

#### 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 57.1mm. The average air temperature and pan evaporation reported were 16.2 <sup>[2]</sup>C and 44.2mm respectively. Sunshine duration recorded was 7.0hrs.

Maize was at maturity stage and in fair state. Normal yield expected.

#### 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

#### 2.3.1 <u>Nyeri</u>

The station received rainfall amount of 8.7mm. The average air temperature was 15.6°C. There was no report on pan evaporation and sunshine parameters.

Maize crop was at wax ripeness stage and in a poor state with below normal yield expected due to adverse effect by stalk borer.

#### 2.3.2 Kabete

The station recorded rainfall amount of 16.0mm. The average air temperature and pan evaporation recorded were 16.2°C and 29.7mm respectively. Sunshine duration recorded was 3.4hrs.

Maize was at wax ripeness stage and in a poor state. Beans were at maturity stage and in a poor state with below normal yield expected. Coffee was at 100% berry hard 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 <u>Thika</u>

The station received rainfall amount of 5.4mm. The mean air temperature and pan evaporation recorded were 18.1°C and 26.4mm respectively. Sunshine duration recorded was 3.2hrs.

Land preparation is going on for the next growing season.

## 2.3.4. Nyahururu

The station received 22.2mm of rainfall. The mean air temperature and pan evaporation recorded were 13.2°C and 32.4mm respectively. There was no report on sunshine.

Maize was at flowering stage while potatoes were at harvest stage and in a good state. Normal yield expected for both crops

# 2.3.5. <u>Dagoretti</u>

The station received rainfall amount of 1.1mm. The mean air temperature and sunshine duration recorded were 16.5°C and 3.6hours respectively. There was no report on evaporation

No phenological report

## 2.4 EASTERN KENYA REGION

#### 2.4.1 <u>Meru</u>

The station reported rainfall amount of 1.3mm. The average air temperature and pan evaporation were 17.1°C and 45.8mm respectively. The sunshine hours recorded was 8.0hrs.

No phenological report.

## 2.4.2 <u>Embu</u>

The station recorded rainfall amounts of 14.9mm. Pan evaporation and sunshine hour's parameters recorded were 20.4mm and 1.9hours respectively.

Farmers have already harvested their maize crop.

#### 2.4.3 Katumani (Machakos)

The station recorded no rainfall and average air temperature of 17.3°C. The sunshine duration recorded was and 5.5hrs. There was no report on pan evaporation.

No phenological report

#### 2.5. COASTAL REGION

#### 2.5.1 <u>Msabaha</u>

The station received rainfall amount of 2.9mm. The average air temperature and pan evaporation recorded was 26.4°C and 53.4mm respectively. The average sunshine duration was 8.9hours.

Mangoes were at 100% fruit setting stages and in good state.

#### 2.5.2 Mtwapa

The station received rainfall amount of 12.5mm. The average air temperature and average sunshine hours recorded were 25.1°C and 7.9hours respectively. The report on Pan Evaporation parameter was 53.5mm.

Harvesting of maize is still going on to the late harvesters. Mangoes have started flowering.

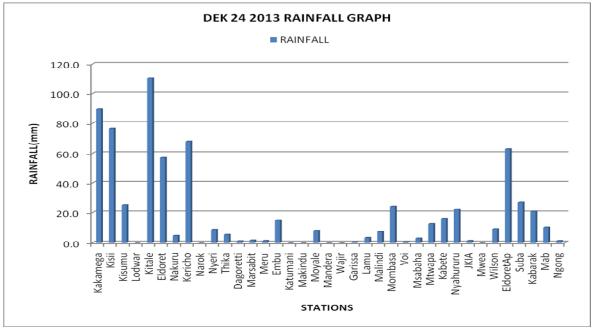


Figure 3.1: Dekadal rainfall totals for 21<sup>st to</sup> 31<sup>st</sup> August 2013

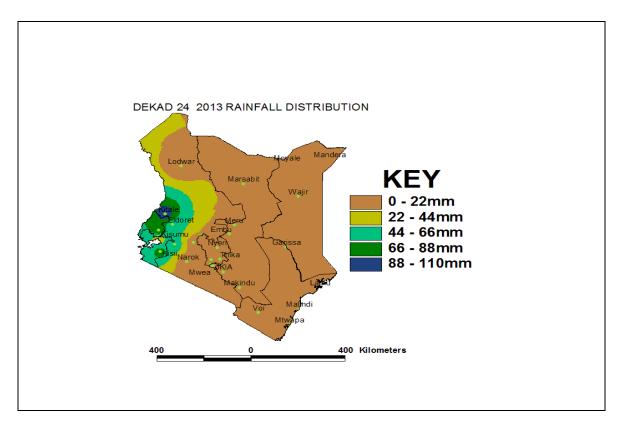


Figure 3.2: Dekadal rainfall distribution for dekad 24, 2013

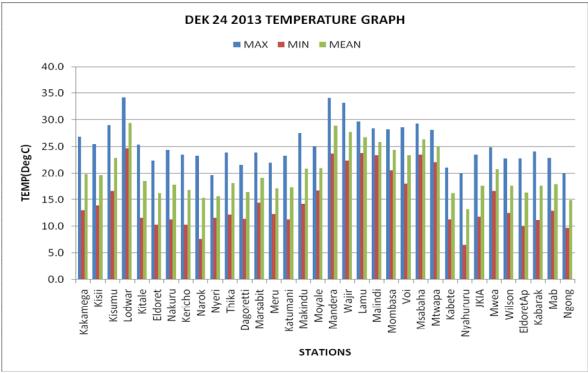


Figure 3.3: Maximum, Minimum and Average temperature in <sup>o</sup>C for dekad 24, 2013

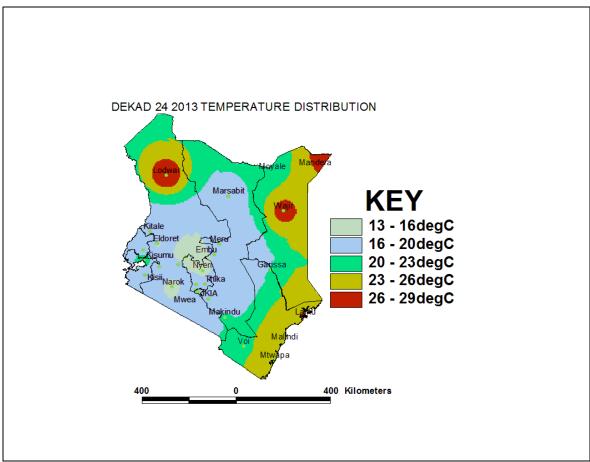


Figure 3.4: Mean temperature distribution for dekad 24, 2013

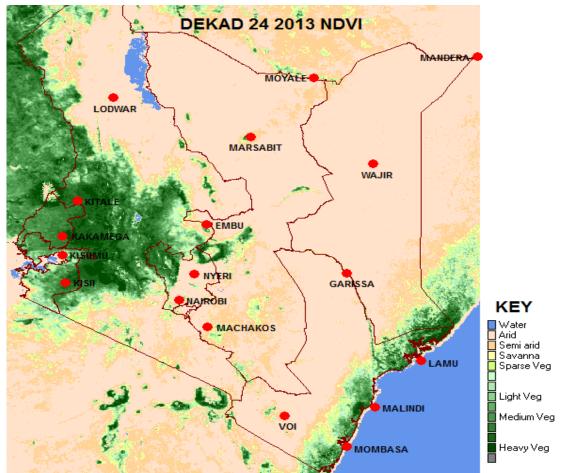


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS 1-10 September 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 throughout the forecast period. Showers and thunderstorms are likely over several places in the afternoon for the entire forecast period.

The showers may cause a negative effect to the crops, which are at the harvest stage thus interfering with the work of harvest.

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

The dry conditions might degenerate the state of pastures and vegetation cover in these regions thus causing animal- human conflict.

The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience cloudy mornings breaking into sunny intervals and sunny intervals in the afternoon with showers over few places.

The wet conditions will benefit the crops, which are still in the flowering stages.

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

Dry conditions might worsen the state of pasture and vegetation in these counties, which most likely may cause conflict to the hostile tribes, living there due to water and pasture competition.

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 are expected to worsen the situations of crops and pastures in these regions.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience sunny intervals with showers over few places in the morning giving way to sunny intervals for the rest of the forecast period.

The morning showers continue to benefit crops and vegetation in these regions.

For feedback or further guidance, Contact:

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