

# KENYA METEOROLOGICAL SERVICES DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 22, 2013 1-10 AUGUST 2013

#### 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the Country have decreased considerably as compared to the previous dekad. Eldoret station in North Rift region recorded the highest amount of rainfall of 85.9mm in the country. Kakamega station in the Western region recorded the highest rainfall of 75.2mm, a slight increase as compared to the previous Dekad. In North Eastern region there was a significant decline of rainfall with Moyale recording the highest of 4.8 mm, which is far down from the previous dekad of 92.0mm. In the Lake region, Kisumu station reported the highest amount of rainfall of 40.9mm as compared with 46.5 recorded in Kisii station the previous dekad. Embu station in Eastern region reported the highest amount of rainfall of 20.3mm, which was a slight decrease from 23.8mm recorded at the same station in the previous dekad. In Nairobi region, Kabete station recorded the highest amount of rainfall of 6.8mm. In Central region, Nyahururu station recorded the highest amount of rainfall of 73.5mm as compared to the previous dekad of 109. In Coast region there was a good distribution of rainfall almost in all stations with Msabaha recording the highest amount of rainfall of 37.6mm

There was slight decrease in Maximum and Minimum Temperatures as compared to the previous dekad. During the dekad, Mandera station reported the highest maximum temperature of 33.6°C. Nyahururu station in Central region reported the lowest minimum temperature of 7.3°C.

For a more comprehensive summary of rainfall and other meteorological parameters, see Figures 3.1 to 3.4 as shown below.

#### 2.0 CROP AND WEATHER REVIEW FOR DEKAD 22; 1-10 AUGUST 2013

#### 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station received rainfall amount of 75.2mm. The mean air temperature and sunshine hours were 20.0°C and 5.2hrs respectively. The pan evaporation recorded was 30.5mm.

Maize crop was in harvest stage and in good state with normal yields expected.

#### 2.1.2 Kisii

The station recorded rainfall amount of 9.7mm for the dekad. The mean air temperature and total pan evaporation recorded were 19.0°C and 28.1mm respectively. Sunshine duration recorded was 4.8hrs.

Maize crop was at harvest stage and in fair state as normal yields expected.

#### 2.2 RIFT VALLEY REGION

#### 2.2.1 **Kitale**

The station received rainfall amount of 45.5mm. The average air temperature and pan evaporation were 18.3©C and 28.5mm respectively. There was no report on sunshine duration.

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

# 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 59.5mm. The average air temperature and pan evaporation reported were 15.5  $\ \square$ C and 33.0mm respectively. Sunshine duration recorded was 5.1hrs.

Maize was at flowering 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 16.2mm. The average air temperature was 15.3°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 6.8mm. The average air temperature and pan evaporation recorded were 15.2°C and 17.8mm respectively. Sunshine duration recorded was 1.7hrs.

Maize was at wax ripeness 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 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 **Thika**

The station received rainfall amount of 1.5mm. The mean air temperature and pan evaporation recorded were 17.9°C and 19.0mm respectively. Sunshine duration recorded was 1.2hrs.

Maize crop had been harvested.

#### 2.3.4 Nyahururu

The station received 73.5mm of rainfall. The mean air temperature and pan evaporation recorded were 12.8°C and 26.5mm respectively. There was no report on sunshine.

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

#### 2.3.5. Dagoretti

The station received rainfall amount of 3.8mm. The mean air temperature and evaporation pan recorded were 15.8°C and 18.6mm respectively. Sunshine hours reported was 1.9hours per day.

#### 2.4 EASTERN KENYA REGION

# 2.4.1 Meru

The station reported rainfall amount of 7.6mm. The average air temperature and pan evaporation were 16.4°C and 27.6mm respectively. The sunshine hours recorded was 3.6hrs.

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

# 2.4.2 Embu

The station recorded rainfall amounts of 20.3mm. Pan evaporation and sunshine hours parameters records were 16.8mm and 1.1hours respectively.

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

# 2.4.3 Katumani (Machakos)

The station recorded minimal rainfall amount of only trace, which is insignificant to the crops. The average air temperature and sunshine duration were 16.6°C and 2.5hrs respectively. There was no report on pan evaporation.

Harvesting is complete

#### 2.5 COASTAL REGION

#### 2.5.1 **Msabaha**

The station received rainfall amount of 37.6mm. The average air temperature and pan evaporation recorded was 24.9°C and 37.1mm respectively. The sunshine duration was 6.6hours.

Maize was at harvest stage and in fair state while normal yield is expected. Mangoes were at 100% fruit setting stages and in good state

# 2.5.2 Mtwapa

The station received rainfall amount of 42.3mm. The average air temperature and pan evaporation recorded were 24.3°C and 27.5mm respectively. Sunshine hours recorded was 3.9hrs.

Maize was at harvest stage and in a good state. Harvesting of early maize is going on all over the region. Normal yield for maize is expected. Mangoes were at harvesting stage and in fair state.

# 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

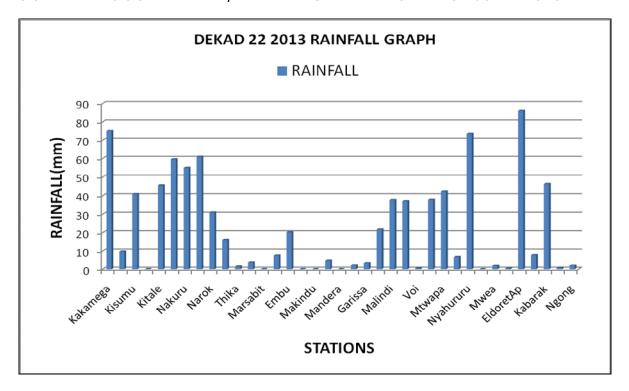


Figure 3.1: Dekadal Rainfall totals for 1st to 10<sup>TH</sup> August 2013

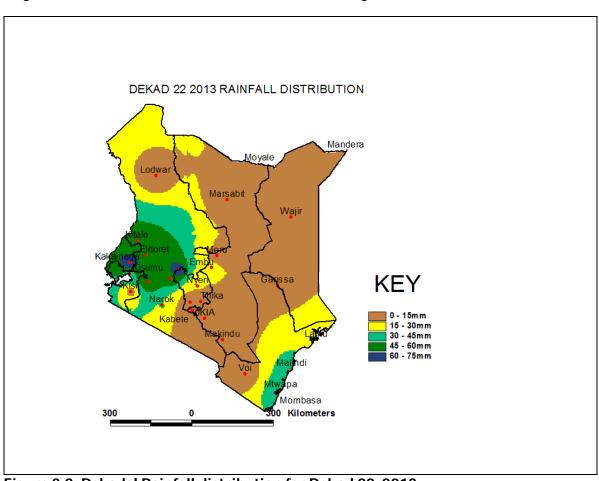


Figure 3.2: Dekadal Rainfall distribution for Dekad 22, 2013

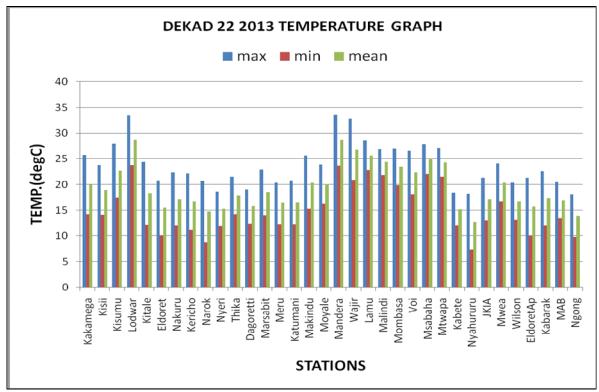


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 22, 2013

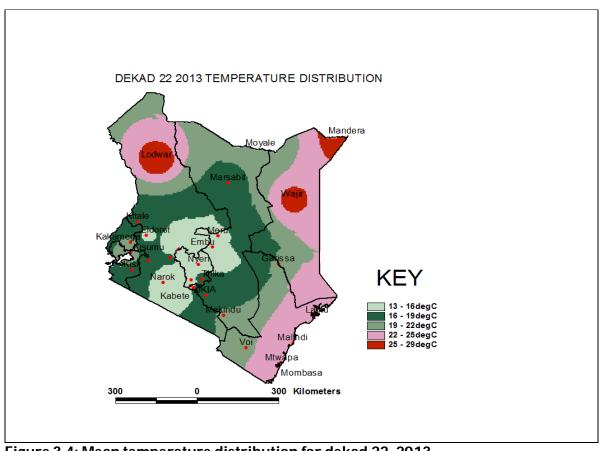


Figure 3.4: Mean temperature distribution for dekad 22, 2013

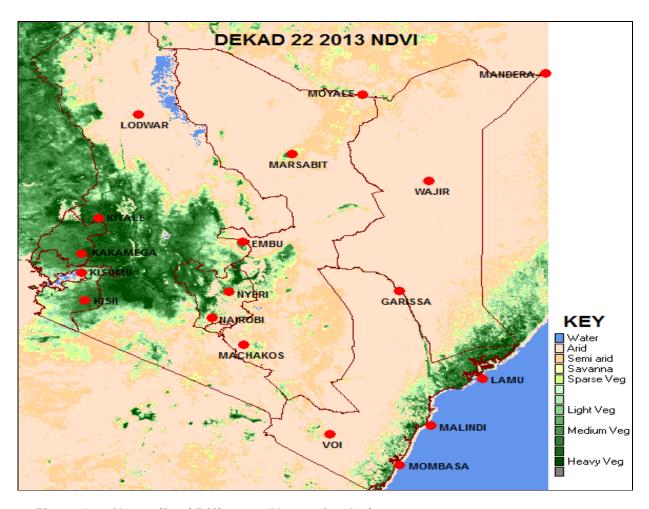


Figure 3.5: Normalised Difference Vegetation Index

# 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS 11-20 AUGUST 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 expected over few places in the afternoon/evening in first five days increasing to several places on the last half of the forecast period.

The enhanced showers may pose 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 showers in the afternoon during the first half for the forecast period.

The dry conditions will aggravate the state of 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 accompanied by light rains over few places and sunny intervals in the afternoon with showers over few places.

The wet conditions will benefit the crops remaining in the farms and vegetation in the region

♣ Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience sunny intervals and rain over few places in the morning and sunny interval in the 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 might heighten the negative growth of crops and pastures in these regions.

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

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

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# For feedback or further guidance, Contact:

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