

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 16, 2014 01-10 JUNE, 2014

# 1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

There was an increase in intensity in rainfall though spatial distribution was the same as the previous dekad, with dry conditions being reported in Eastern and North-eastern regions. Rift Valley region received the highest amount of rainfall countrywide with Kericho recording 149.4mm. Kakamega station in Western region received the second highest rainfall of 107.4mm. In Eastern region, Embu station recorded 81.9mm. Kisii station recorded the highest amount of rainfall of 76.3mm in Nyanza region. Lamu station received the highest rainfall amount of 63.0mm in Coastal region. In Nairobi region the highest rainfall of 56.3mm was recorded at Kabete station. In Central region the highest rainfall amount of 51.1mm was recorded at Nyahururu station, while Moyale station in North Eastern region reported the highest amount of rainfall of 2.1mm.

Maximum temperatures were on a decreasing trend while the minimum temperatures were on the increasing compared to the previous dekad. Lodwar station in North Eastern region recorded the highest maximum temperature of 36.0°C compared to 36.4°C recorded at Mandera station in the same region in the previous dekad. The minimum temperatures increased in most stations with Nyahururu station in Central region recording the lowest temperature of 10.0°C compared to 7.9°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 16; 01-10 JUNE 2014

# 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station recorded rainfall amount of 107.4mm during the dekad. The mean air temperature and pan evaporation reported were 21.8°C and 4.3mm respectively. Sunshine duration reported was 5.2 hours.

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

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

The station recorded rainfall amount of 76.3mm. The mean air temperature and Pan Evaporation were 20.3°C and 2.9mm respectively. There was no record on Sunshine parameter.

Maize were at flowering stage and in good state while beans were at maturity stage and in a fair state, hence normal yield is expected

#### 2.2 **RIFT VALLEY REGION**

#### 2.2.1 <u>Kitale</u>

The station recorded rainfall amount of 71.9mm. Mean air temperature and Pan Evaporation recorded were  $19.9^{\circ}$ C and 2.8mm respectively. There was no report on sunshine duration.

Both maize and beans were in emergency stages and in a poor state due to insufficient rain.

#### 2.2.2 <u>Eldoret-Kapsoya</u>

The station received rainfall amount of 22.8mm. The average air temperature was 18.5°C. Sunshine duration was 7.0 hours. There was no report on evaporation Parameter.

Maize and beans were at emergence stage and in poor state due to insufficient rain, hence below normal yield expected.

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

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

The station received rainfall amount of 10.3 mm. The average air temperature was 18.4°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans were in flowering stage and in a fair state though adversely affected by diseases and other insects respectively. Expected yield is normal.

#### 2.3.2 Kabete

The station recorded rainfall amount of 56.3mm. Mean air temperature was 18.3°C. No report on evaporation and sunshine.

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

#### 2.3.3 <u>Thika</u>

The station recorded rainfall amount of 35.9mm. The mean air temperature was 21.0°C. There was no report on sunshine duration and evaporation.

Maize was at flowering stage while beans and potatoes were at maturity stage. All crops were in fair state. Normal yield is expected.

#### 2.3.4. <u>Nyahururu</u>

The station received rainfall amount of 51.1mm. The mean air temperature and pan evaporation recorded were  $16.5^{\circ}$ C and 3.8mm respectively. There was no report on sunshine duration.

Maize was at emergence stage and in fair state while potatoes were at flowering stage also in fair state though the expected yield is below normal

# 2.3.5. <u>Dagoretti</u>

The station reported rainfall amount of 28.0mm. The average air temperature and pan evaporation were 19.3°C and 3.0mm respectively. Sunshine duration was 3.3hrs.

# 2.4 EASTERN KENYA REGION

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

The station recorded rainfall amount of 5.9mm. The average air temperature and Pan Evaporation recorded were 18.9°C and 3.9mm respectively. Sunshine record was 8.3hrs.

Maize was in maturity stage and poor state while beans were at harvest stage. Both crops were affected by insufficient rainfall during the dekad, therefore below normal yield is expected.

#### 2.4.2 <u>Embu</u>

The station reported rainfall amount of 81.9mm. There was no average air temperature, Pan evaporation and report on Sunshine duration.

Maize and beans were at flowering and maturity stages respectively. Both crops are in fair state hence normal yield is expected.

#### 2.4.3 Katumani (Machakos)

The station reported rainfall amount of 4.5mm. The average air temperature reported was 19.9°C. There was no report on pan evaporation and Sunshine duration.

Maize and beans were at flowering and harvesting stages respectively. Both crops are in poor state due to insufficient rainfall. Expected yield for both crops is below normal.

#### 2.5. COASTAL REGION

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

The station received rainfall amount of 53.2mm. The average air temperature and Pan Evaporation recorded were 26.8°C and 3.2mm respectively. There was no report on sunshine duration.

Maize was in emergence stage and in fair state during the dekad. Mangoes were in 100% fruit setting stage and in good state.

#### 2.5.2 <u>Mtwapa</u>

The station received rainfall amount of 46.5mm. The average air temperature recorded was 26.6°C. Sunshine duration reported was 3.7 hours while there was no report on Pan Evaporation

Maize was at flowering stage and in a fair state though adversely affected by excessive rainfall, birds and diseases mainly maize stalk borer. Mangoes were in maturity stage and in a good state hence expected yield is normal.

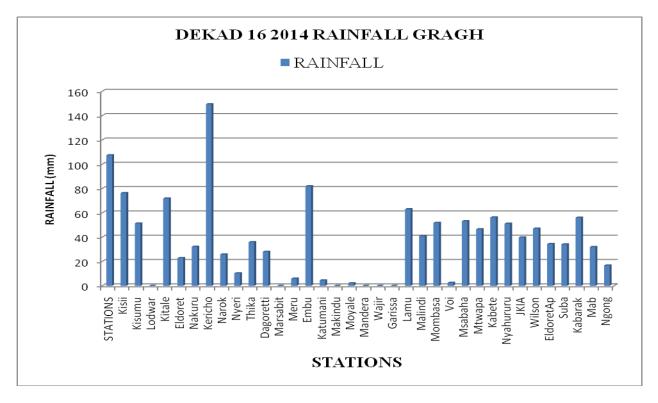


Figure 3.1: Dekadal rainfall totals for 01-10 JUNE 2014

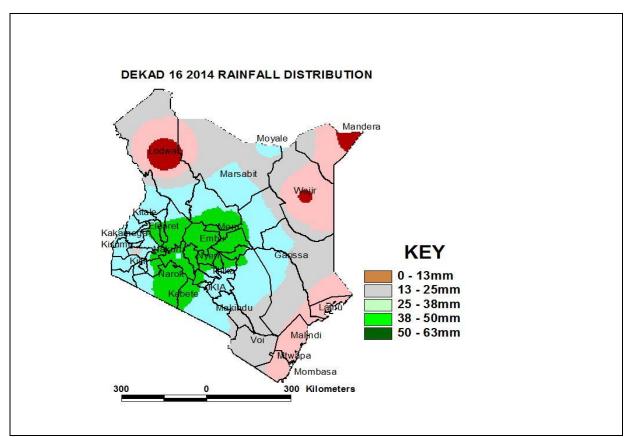


Figure 3.2: Dekadal rainfall distribution for dekad 16, 2014

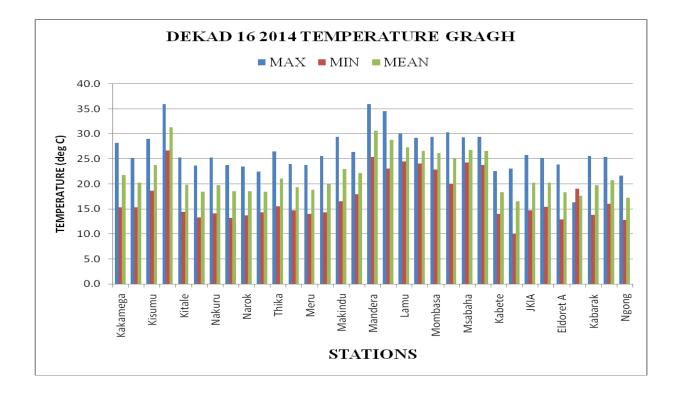


Figure 3.3: Maximum, Minimum and Average temperature in <sup>o</sup>C for dekad 16, 2014

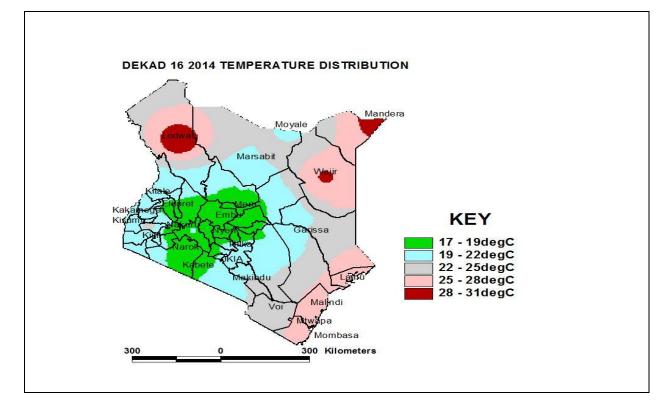


Figure 3.4: Mean temperature distribution for dekad 16, 2014

# 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 June 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), mornings are expected to experience mainly rains over few places. Afternoon showers and thunderstorms are expected over several places reducing to few places towards the end of the forecast period.

The morning rains and Afternoon showers are of great importance for the growth of the maize and Beans crops in the regions.

The Northwestern counties (Turkana, West Pokot and Samburu), Are expected to have Afternoon showers and thunderstorm on 12<sup>th</sup>, breaking into sunny intervals throughout the forecast period.

The sunny conditions will have a negative impact on 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 mainly cool cloudy early morning breaking to sunny intervals with a chance of rains over few places in the morning while in the Afternoons are expected to experience showers over few places reducing to sunny intervals for three days and then showers over few places for the remaining forecast period.

The expected showers will continue to benefit the crops and vegetation in this region.

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

The expected sunny conditions will influence the state of pasture and vegetation negatively in this region.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), mornings are expected to experience mainly sunny intervals throughout the forecast period, with afternoon showers over few places towards the end of the forecast period.

The showers are expected to continue replenishing the crops, pasture and vegetation in the region.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience morning showers over few places for the first six days breaking into sunny intervals for the rest of the forecast period.

The showers will continue to benefit the development of the crops in this region.

For feedback or further guidance, Contact: Director, Kenya Meteorological Services, 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

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