

# BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 21, 2014 21-31 JULY, 2014

#### 1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

There was an increase both in intensity and in the spatial distribution of rainfall during the previous dekad. Rift Valley region received the highest amount of rainfall countrywide with Eldoret Airport station recording 118.9mm, compared to the previous dekad where Kitale station received the highest rainfall of 50.7mm. Kisii station in Nyanza region received the second highest rainfall of 83.6mm. In Western region, Kakamega station recorded the highest rainfall of 73.8mm. Nyahururu station received the highest amount of rainfall of 58.1mm in Central region. Mtwapa station received the highest rainfall amount of 55.4mm in the Coastal region. In Eastern region the highest rainfall of 4.7mm was recorded at Embu Mwea station. In North Eastern region the highest rainfall amount of 1.4mm was recorded at Wajir station while Kabete station in Nairobi region reported the highest amount of rainfall of 0.5mm.

Maximum temperatures in most stations continued with a decreasing trend though Lodwar station in North Eastern region recorded the highest maximum temperature of 34.5°C compared to 33.9°C recorded at the same station in the previous dekad. The minimum temperatures increased in most stations with Nyahururu station in Central region recording the lowest temperature of 8.8°C compared to 8.1°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 21; 21-31 JULY 2014

#### 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station recorded rainfall amount of 73.8mm during the dekad. The mean air temperature and evaporation reported were 20.8°C and 3.7mm respectively. Sunshine duration reported was 5.4 hours.

Maize was at maturity stage and in a good state. Normal yield is expected.

#### 2.1.2 Kisii

The station recorded rainfall amount of 83.6mm. The mean air temperature and Pan Evaporation were 19.8°C and 3.8mm respectively. There was no record on Sunshine parameter.

Maize was at flowering stage and in a fair state hence normal yield is expected.

#### 2.2 RIFT VALLEY REGION

#### **2.2.1 Kitale**

The station recorded rainfall amount of 46.9mm. Mean air temperature and Pan Evaporation recorded were 18.8°C and 3.3mm respectively. There was no report on sunshine duration.

Maize was at flowering stage while beans were at harvesting stage and both are in good state hence normal yield is expected for both crops.

# 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 89.0mm. The average air temperature reported was 16.7°C. There was no report on pan evaporation and sunshine Parameter.

Maize and beans were at flowering and harvesting stages respectively and are in poor and failure states respectively due to insufficient rain, hence below normal yield is expected for both crops.

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

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

The station received rainfall amount of 19.6mm. The average air temperature was 16.8°C. There was no report on pan evaporation and sunshine parameters.

Maize was at wax ripeness and in a fair state though adversely affected by stalk borer. Normal yield is expected.

#### **2.3.2** Kabete

The station recorded rainfall amount of 0.5mm. Evaporation was 2.5mm. No report on Mean air temperature and sunshine parameter.

Both Maize and beans were at maturity stages and in fair states with normal yield being expected.

#### 2.3.3 Thika

The station received no rainfall. The mean air temperature was 19.2°C while evaporation was 2.8mm. There was no report on sunshine duration.

Harvesting of maize is going on as land preparation is under way.

# 2.3.4. Nyahururu

The station received rainfall amount of 58.1mm. The mean air temperature and pan evaporation recorded were  $14.5^{\circ}$ C and 3.3mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in fair state while potatoes were at harvesting stage and also in fair state though below normal yield is expected for both crops.

# 2.3.5. Dagoretti

The station reported rainfall amount of 0.4mm. The average air temperature and pan evaporation recorded were 17.5°C and 2.8mm respectively. No Sunshine duration reported.

No report on phenological observations.

#### 2.4 EASTERN KENYA REGION

# 2.4.1 Meru

The station recorded rainfall amount of 0.1mm. The average air temperature and Pan Evaporation recorded were 18.0°C and 4.4mm respectively. Sunshine record was 5.5hrs.

Maize was at harvesting stage and in poor state having been affected by insufficient rainfall during the dekad, therefore below normal yield is expected.

#### 2.4.2 Embu

The station recorded rainfall amount of 4.6mm. There was no record on the average air temperature and sunshine duration. Pan Evaporation was 2.2mm.

Maize was at maturity stage and in a fair state hence normal yield is expected.

#### 2.4.3 Katumani (Machakos)

The station reported rainfall amount of 1.1mm. The average air temperature reported was  $18.0^{\circ}$ C. There was no report on pan evaporation and Sunshine duration.

Maize harvesting is complete.

#### 2.5. COASTAL REGION

#### 2.5.1 Msabaha

The station received rainfall amount of 13.6 mm. The average air temperature and Pan Evaporation recorded were  $25.8^{\circ}\text{C}$  and 3.9 mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in fair state therefore normal yield is expected. Mangoes are at 100% fruit setting stage and in good state.

# 2.5.2 Mtwapa

The station received rainfall amount of 55.4mm. The average air temperature and pan evaporation recorded were 25.4°C and 3.6mm respectively. There was no report on Sunshine duration.

Maize was at maturity stage and in a fair state though adversely affected by insects, birds, animals, diseases mainly maize stalk borer and excessive weed growth. Mangoes were at harvesting stage and in a fair state hence normal yield is expected for both crops.

# 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

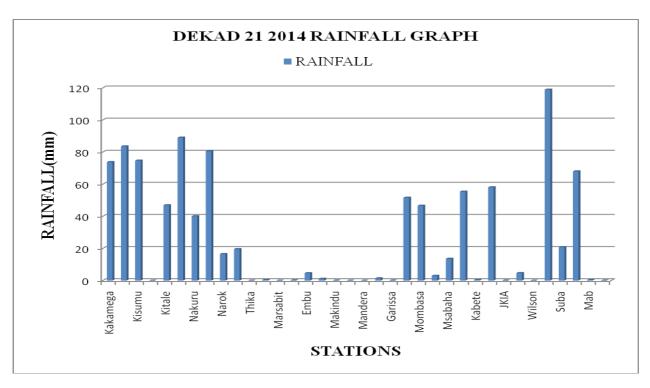


Figure 3.1: Dekadal rainfall totals for 21- 31 JULY 2014

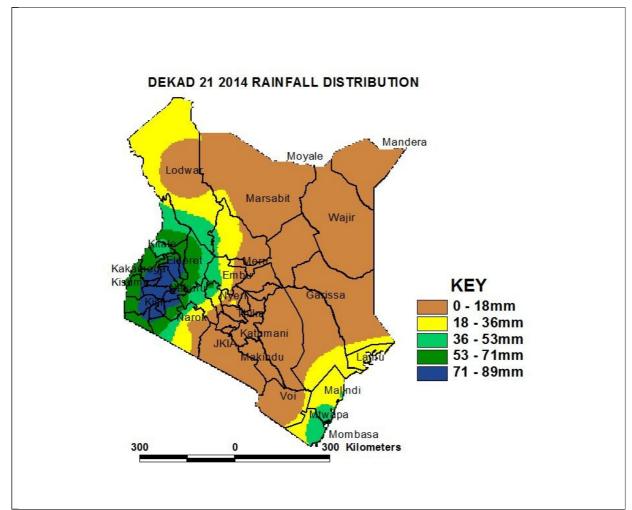


Figure 3.2: Dekadal rainfall distribution for dekad 21, 2014

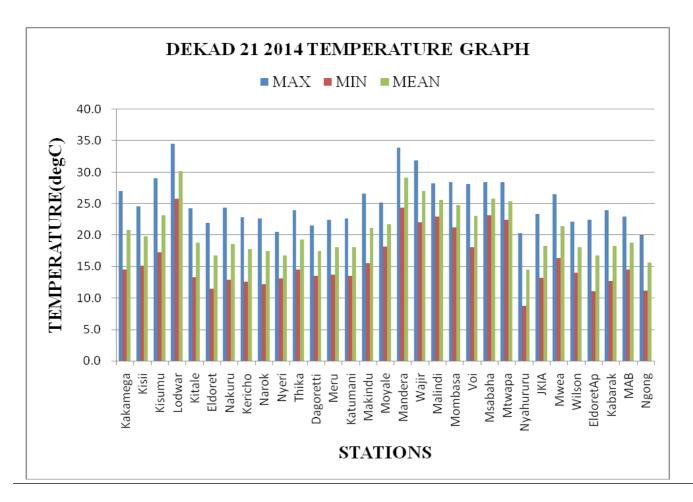


Figure 3.3: Maximum, Minimum and Average temperature for dekad 21, 2014.

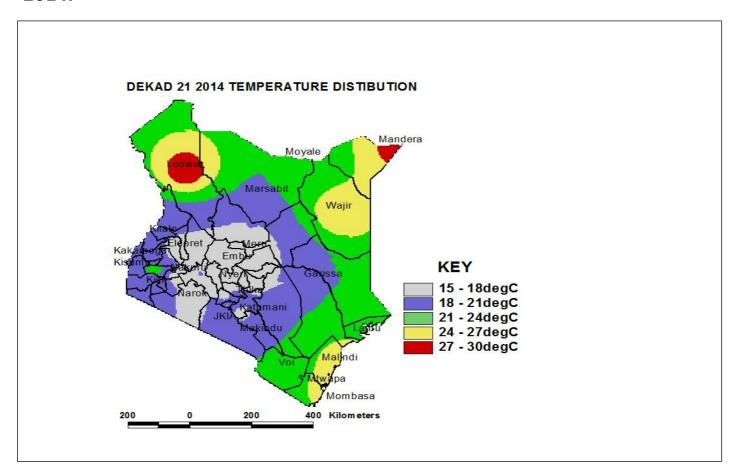


Figure 3.4: Mean temperature distribution for dekad 21, 2014

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS;01-10 AUGUST 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 rains over few places giving way to sunny intervals for the entire forecast period. Afternoon/evening showers and thunderstorms are expected over several places at the beginning of the forecast period, reducing to few places towards the end of the forecast period.

The rains and showers will enhance the growth of the maize crop which is in its flowering stage in the regions.

❖ The Northwestern counties (Turkana, West Pokot and Samburu), Are expected to experience sunny intervals throughout the forecast period.

The sunny condition will impact negatively 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 early morning cloudiness giving way to sunny intervals with the exception of the first six days which are expected to receive rains over few places. Showers are expected in the afternoon over few places throughout the forecast period.

The rains and showers will benefit the Maize crop which is in the flowering stage.

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

The expected sunny condition will impact negatively on pasture and vegetation in the region.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience sunny intervals throughout the forecast period.

The sunny conditions will impact negatively on pasture and vegetation in the region.

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

The showers will benefit the development of the Maize crop, which is in the flowering stage.

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