

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 14, 11th - 20th MAY 2016

# 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities decreased both in intensity and in spatial distribution. The highest rainfall amount of 166.2 mm was reported at Kericho station in Rift valley region compared to 190.4mm recorded in Lamu station at the Coastal region during the previous dekad. The second highest rainfall of 148.6 mm was received at Kakamega station in Western region. Kabete station in Nairobi region recorded the highest rainfall amount of 114.4 mm. In central region Nyahururu station reported the highest rainfall of 102.3 mm. Kisii station in Nyanza region received highest rainfall amount of 97.0 mm. In Eastern region Embu station reported the highest rainfall amount of 55.6 mm at Msabaha station, while North Eastern region reported the highest rainfall of 0.6 mm at Moyale station.

Maximum temperatures were on increasing trend while Minimum temperatures continue to decrease. The highest Maximum temperature of 35.2°C was recorded at Lodwar Station in North Eastern region compared to 34.8°C reported at Garissa station in the same region in the previous dekad. Nyahururu station continued to record the lowest Minimum temperature of 10.9°C compared to 9.5°C reported at 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 14, 11<sup>th</sup> – 20<sup>th</sup> MAY 2016

# 2.1 NYANZA AND WESTERN REGIONS

# 2.1.1 Kakamega

The station received rainfall amount of 148.6 mm. The mean air temperature and total pan Evaporation were 21.9°C and 40.4 mm respectively. There was no report on and sunshine hours.

Beans are in flowering stage and in fair state, while maize were in emergency stage and in good state.

# 2.1.2 <u>Kisii</u>

The station reported total rainfall amount of 97.0 mm. The mean air temperature and total Pan Evaporation recorded were 20.9°C and 31.0 mm respectively. There was no report on Sunshine hours.

Beans were in flowering stage and in fair state, while maize were at emergence stage and in good state.

# 2.2 RIFT VALLEY REGION

# 2.2.1 <u>Kitale.</u>

The station recorded total rainfall amount of 80.9mm. Total Pan Evaporation reported was 35.4mm. There was no report on the mean air temperature, and Sunshine duration.

Maize and Beans were at emergence and flowering stages respectively and in good state.

#### 2.2.2 Eldoret - Kapsoya

The station received 39.7mm of rainfall. The mean air temperature and total Pan Evaporation reported were 18.2°C and 39.7mm respectively. There was no report on sunshine hours.

Maize were at emergence stage and in good state, while beans were at flowering stage and in fair state.

# 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

# 2.3.1 <u>Nyeri</u>

Total rainfall amount recorded was 86.8mm. The average air temperature reported was 18.6°C. There was no report on Total Pan Evaporation and sunshine parameters.

Maize and Beans were at emergence and flowering stages respectively and in fair state

# 2.3.2 <u>Kabete</u>

The station reported rainfall amount of 114.4mm. The total Pan Evaporation recorded was 29.6mm. There was no report on Mean air Temperature and Sunshine parameters.

Both Maize and Beans are at emergence stage and in fair state, though the beans have been affected by excessive rain in this dekad.

# 2.3.3 <u>Thika</u>

The station recorded 61.6mm of rainfall. The average air temperature and total Pan Evaporation recorded were 19.7°C and 26.1mm respectively. There was no report on Sunshine duration.

Maize were at emergence and fair state while beans were at flowering and poor state due to excessive rainfall. Potatoes also were at flowering stage and in poor state.

#### 2.3.4 Nyahururu

The station recorded total rainfall amount of 102.3mm the mean air temperature and total Pan Evaporation reported were 16.3°C and 38.8mm respectively. There was no report on Sunshine hours.

Maize and beans were at emergence stage and in fair state. Potatoes too were at emergence stage and in fair state.

#### 2.3.5 <u>Dagoretti</u>

The station received 85.5mm of rainfall. Total Pan Evaporation recorded was 31.6mm. No report on mean air temperature and Sunshine parameters.

No Phenological report.

# 2.4 EASTERN KENYA REGION

#### 2.4.1 <u>Embu</u>

The station reported 93.3mm rainfall. Total pan evaporation reported was 20.7mm. There was no report on the Mean air temperature.

Maize and Beans were at emergence and flowering stages respectively and in fair state.

#### 2.4.2 <u>Meru</u>

The station recorded total rainfall amount of 4.1mm. The Average air Temperature reported and total pan evaporation reported were 18.5°C and 29.6mm. There was no report on sunshine parameters.

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

#### 2.4.3 Katumani (Machakos)

The station reported total rainfall amount of 36.5mm. The mean air temperature and total Pan Evaporation reported were 19.6<sup>o</sup>C and 31.3mm respectively.

Maize and Beans were at emergence and flowering stages respectively and in fair state.

# 2.5 COASTAL REGION

#### 2.5.1 Msabaha

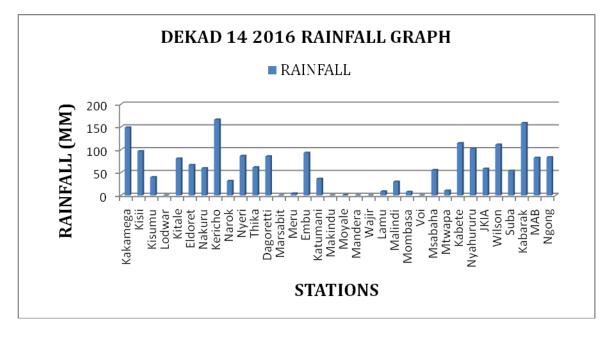
The station recorded 55.6mm of rainfall. The average air temperature and total Pan Evaporation recorded were 27.4°C and 62.6mm respectively. There was no report on sunshine duration.

Maize were at emergence state and in fair state.

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

The station received total rainfall amount of 10.4mm. The Mean air temperature and total Pan Evaporation reported were 26.9°C and 54.9mm respectively. There was no report on sunshine parameter.

Maize were at emergence stage and in good state. Mangoes were at flowering stage and in fair state.



#### ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS

Figure 3.1: Dekadal rainfall totals for dekad 14, 2016

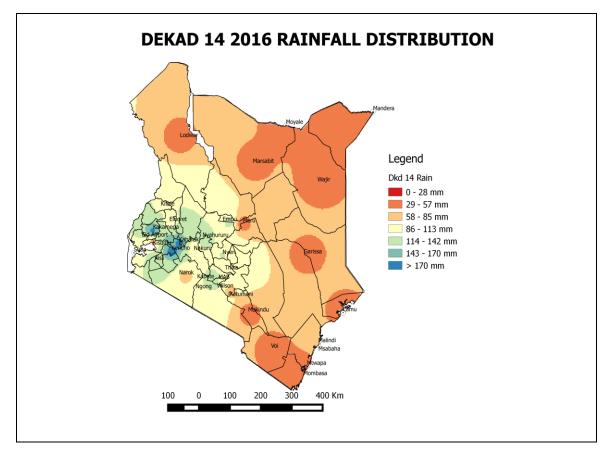
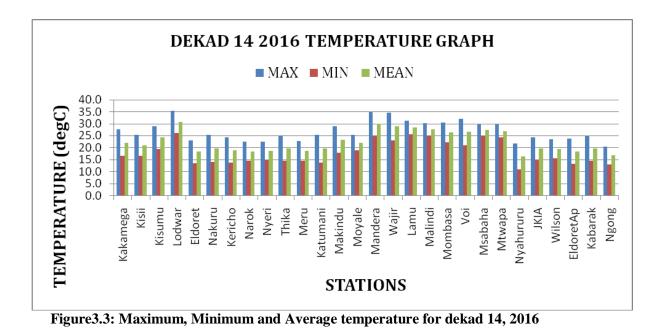


Figure 3.2: Dekadal rainfall distribution for dekad 14, 2016



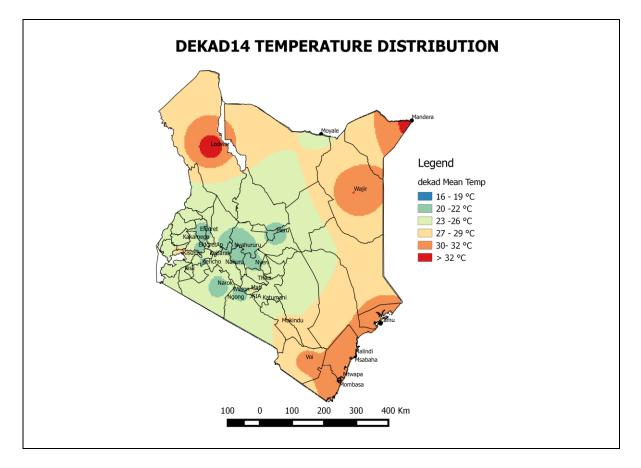


Figure 3.4: Mean temperature distribution for dekad 14, 2016

- 3. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21<sup>st</sup> 31<sup>st</sup> MAY, 2016.
- 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 occasional rains over few places, for the first two days of the forecast period followed by sunny intervals thereafter. Afternoons are expected to experience showers and thunderstorms over several places on the first day of the forecast period, reducing to few places thereafter.

The Showers will be beneficial to the growth of the crops that are at emergence and flowering stages in places like Kisii, Kakamega and Kitale.

The Northwestern counties (Turkana, West Pokot and Samburu), Mornings are expected to experience rains over few places on the first day of the forecast period, followed by sunny intervals thereafter. Afternoons/Evenings are expected to experience mainly sunny intervals throughout the forecast period, except on the first day where showers over few places may be realized.

The showers will continue to replenish the pasture and vegetation for livestock kept in this region.

The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), Mornings are expected to be cloudy with rains over few places breaking into sunny intervals for the first two days, followed by sunny intervals thereafter. Afternoons/Night are expected to experience showers over few places for the first three days, followed by sunny intervals there after throughout the forecast period.

The rains/showers and sunny intervals will be of great benefit to the crops, which are in their emergence and flowering stages in places like Thika, Meru, Embu and Nyahururu.

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

The sunny intervals continue to have a negative impact to the pasture and vegetation for the animals kept in these areas.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), Mornings are expected to experience sunny intervals throughout the forecast period. Afternoons are expected to experience sunny intervals with showers over few places on the first day of the forecast period, followed by sunny intervals thereafter.

The Showers will continue to replenish the vegetation and pasture for the animals kept in these areas.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), Mornings are expected to experience mainly showers over few places. Afternoons are expected to experience sunny intervals throughout the forecast period.

The showers will benefit the maize crop, which is in emergence stage in places like Msabaha and Mtwapa. They will also benefit mangoes, which are at 100% fruit setting and flowering stages in Msabaha and Mtwapa respectively.

#### For feedback or further guidance, Contact:

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