

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

## WEATHER AND CROP REVIEW FOR DEKAD 17, 11<sup>TH</sup> – 20TH JUNE 2016

## 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities have increased both in spatial distribution and intensity compared to the previous dekad. The highest rainfall amount of 88.5 mm was reported at Kisii station in Nyanza region compared to 29.1mm reported at Suba station in the same region in the previous dekad. The second highest rainfall of 88.1 mm was received at Kericho station in Rift Valley region. Mtwapa station in Coast region recorded the highest rainfall amount of 62.8mm. Eastern region reported the highest rainfall amount of 56.4 mm at Mwea station. Western region reported the highest rainfall of 34.4 mm at Kakamega station. Nyeri station in Central region recorded 32.3mm of rainfall. In Nairobi region received 23.7mm at Dagoretti station; while Lodwar station in North Eastern region received rainfall amount of 8.6mm.

Maximum temperatures have decreased drastically compared to the previous dekad while Minimum temperatures were still on a decreasing trend. The highest Maximum temperature of 34.4°C was recorded at Mandera Station in North Eastern region compared to 35.6°C reported at Lodwar station in the same region in the previous dekad. Nyahururu station continued to record the lowest Minimum temperature of 7.3°C compared to 5.0°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 17, $11^{TH} - 20^{TH}$ JUNE 2016

## 2.1 NYANZA AND WESTERN REGIONS

## 2.1.1 Kakamega

The station received rainfall amount of 34.4 mm. The mean air temperature was 22.2°C. There was no report on total pan evaporation and sunshine hours.

Maize is still in flowering state and in fair conditions while Beans have been harvested.

## 2.1.2 <u>Kisii</u>

The station reported total rainfall amount of 88.5 mm. The mean air temperature and total Pan Evaporation recorded were 20.6°C and 36.5 mm respectively. There was no report on Sunshine hours.

Maize was in flowering stage and in poor condition because it has been affected by maize lethal necrosis diseases. Beans were in maturity stage and in fair condition.

## 2.2 RIFT VALLEY REGION

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

The station recorded total rainfall amount of 60.8mm. Total Pan Evaporation reported was 35.8 mm. There was no report on the mean air temperature, and Sunshine duration.

Maize was at flowering stage and in good condition, while Beans were at maturity and in fair state. Hence normal yield is expected.

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

The station received 42.1mm of rainfall. The mean air temperature and total Pan Evaporation reported were 16.6°C and 35.8mm respectively. There was no report on sunshine hours.

Maize and Beans were at emergence and flowering stages respectively. Both crops were in poor state due to insufficient rain in the previous dekad hence below normal yield is expected for beans.

## 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

## 2.3.1 <u>Nyeri</u>

Total amount of rainfall recorded was 32.3mm. The average air temperature reported was 17.1°C. There was no report on total Pan Evaporation and sunshine parameters.

Maize is in the flowering stage and in fair condition; though it has been affected by stalk borer. Beans are at maturity stage and in poor state because it has been affected by some insects. Expected yield for Beans is below normal.

## 2.3.2 Kabete

The station reported rainfall amount of 19.4mm while total pan evaporation was 27.4mm. There was no report on Mean air Temperature, and Sunshine parameters.

Both Maize and Beans were in flowering stage and in fair state.

#### 2.3.3 Thika

The station recorded rainfall of 23.3mm. The average air temperature and total Pan Evaporation recorded were 18.4°C and 27.3 mm respectively. There was no report on Sunshine duration.

Maize and Beans were at flowering and maturity stages respectively. Both crops are affected by excessive rainfall during the dekad; hence below normal yield is expected. Potatoes are in maturity stage and in poor condition.

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

The station recorded rainfall amount of 29.7mm, the mean air temperature and total Pan Evaporation reported were  $14.5^{\circ}$ C and 33.7mm respectively. There was no report on Sunshine hours.

Maize and Beans were at emergence and flowering stages respectively. Both crops are in fair state, though beans have been affected by excessive rainfall. Potatoes were in flowering stage and in fair state hence normal yield is expected.

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

The station received 23.7mm of rainfall. Total Pan Evaporation recorded was 23.7mm. No report on Sunshine parameter and mean air temperature.

No Phenological report.

## 2.4 EASTERN KENYA REGION

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

The station reported 41mm rainfall. There was no report on the Mean air temperature and total pan evaporation.

Maize and Beans were at emergence and flowering stages respectively and in fair state. Normal yield is expected for beans.

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

The station recorded total rainfall amount of 6.2mm. The Average air Temperature reported was 17.6°C. There was no report on total pan evaporation and sunshine para*meters.* 

Maize was at emergence and in fair state while beans were in flowering state and in poor condition due to insufficient rainfall during the dekad.

#### 2.4.3 Katumani (Machakos)

The station reported rainfall of 4.1mm. The mean air temperature and total Pan Evaporation reported were 17.9<sup>o</sup>C and 27.1mm respectively.

Both maize and beans were in flowering and in poor state due to too much sunshine. Below normal yield is expected for both crops.

## 2.5 COASTAL REGION

#### 2.5.1 Msabaha

The station recorded 27.4mm of rainfall. The average air temperature and total pan evaporation recorded were 26.6°C and 46.4mm respectively. There was no report sunshine duration.

Maize was at flowering stage and in poor state due to some unidentified diseases; hence below normal yield is expected. Mangoes were at 100% fruit setting stage and in good state.

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

The station received total rainfall amount of 62.8mm. The Mean air temperature reported was 26.1°C. There was no report on total pan evaporation and sunshine parameter.

Maize was at flowering stage and in fair state, hence normal yield is expected. Mangoes were at flowering stage and in fair state.

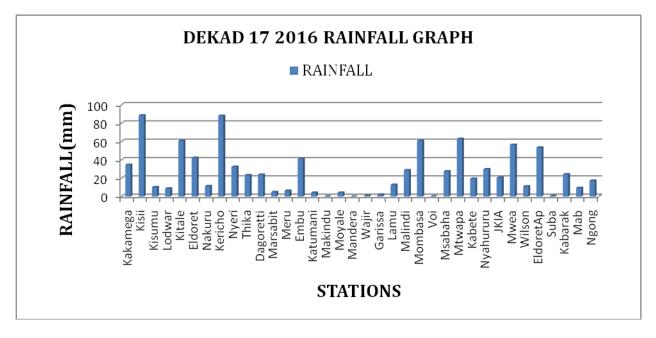


Figure 3.1: Dekadal rainfall totals for dekad 17, 2016

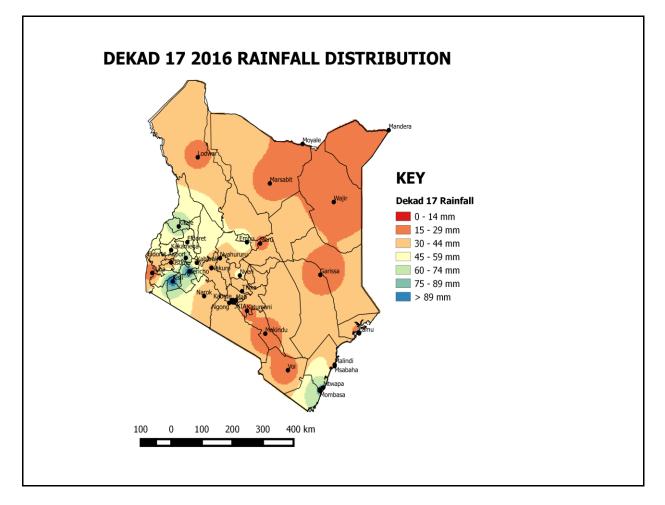


Figure 3.2: Dekadal rainfall distribution for dekad 17, 2016

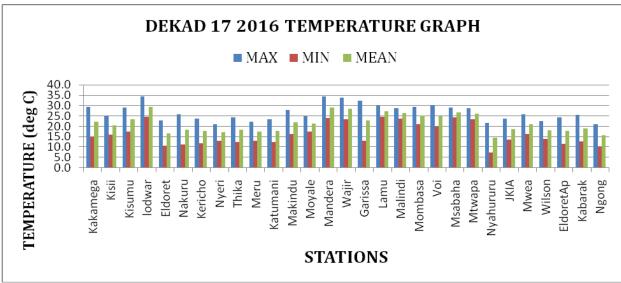


Figure 3.3: Maximum, Minimum and Average temperature for dekad 17, 2016

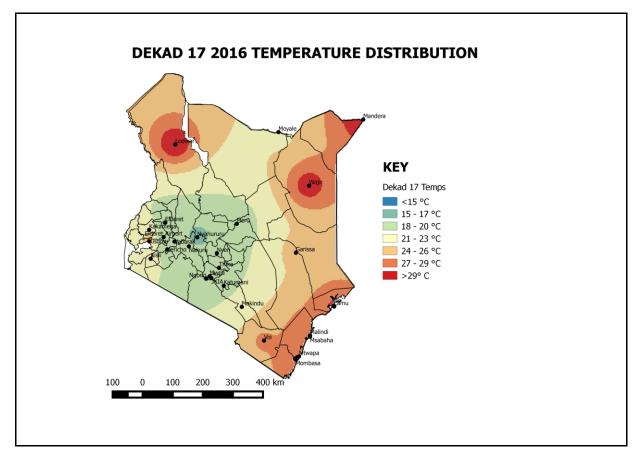


Figure 3.4: Mean temperature distribution for dekad 17, 2016

# 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; $11^{\rm th}$ – $20^{\rm th}$ JUNE, 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 morning rains giving way to sunny intervals during the first three days of the forecast period. Afternoons are expected to experience mainly showers and thunderstorms over several places at the beginning of the forecast period reducing to few places thereafter.

The Showers and sunny intervals will be of advantage to the growth of the crops that are at flowering and maturity stages in places like Kisii, Kakamega and Kitale.

The Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience morning rains over few places for the first three days of forecast period. The afternoons are expected to experience showers and thunderstorms over few places for the first three days of the forecast period giving way to sunny intervals thereafter.

The rains and showers will have a positive impact on 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 cool cloudy with rains over few places throughout the forecast period and afternoon showers are expected over few places through the entire forecast period.

The rains and showers are of great benefit to the crops, which are in their emergence and flowering stages in places like Kabete, Meru, Embu and Nyahururu.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience rains over few places in the morning on the third day of the forecast period giving way to sunny intervals the whole day for the rest of the forecast period.

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 cool cloudy with rains over few places on the third day giving way to sunny intervals for the rest of the forecast period.

The morning rains will have a positive impact on 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 showers over few places followed by sunny intervals in the afternoons at the beginning of the forecast period. Towards the end of the forecast period, the rainfall coverage is likely to improve to several places. The showers will benefit the maize crop, which is in flowering 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:

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

©2016 Kenya Meteorological Services