

KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 16, 1ST – 10TH JUNE 2016

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities continued to decrease drastically both in intensity and in spatial distribution. The highest rainfall amount of 29.1 mm was reported at Suba stations in Nyanza region compared to 103.4 mm reported at Kakamega station in Western region in the previous dekad. The second highest rainfall of 20.2 mm was received at Lamu station in Coast region. Embu station in Eastern region recorded the highest rainfall amount of 4.4 mm. North Eastern region reported the highest rainfall amount of 1.9 mm at Moyale station. Rift Valley region reported the highest rainfall of 0.3 mm at Kitale station. Nyeri station in Central region recorded 0.04 mm of rainfall. In Western region Kakamega station reported the highest rainfall amount of 0.01 mm while in Nairobi region; Dagoretti station reported the highest rainfall of 0.01 mm.

Maximum temperatures continued to increase as in the previous dekad while Minimum temperatures continue to reduce. The highest Maximum temperature of 35.6°C was recorded at Lodwar Station in North Eastern region compared to 35.6°C reported at Mandera station in the same region in the previous dekad. Nyahururu station continued to record the lowest Minimum temperature of 5.0°C compared to 7.6°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 16, 1ST – 10TH JUNE 2016

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 0.01 mm. The mean air temperature was 22.0°C and the total pans Evaporation were 38.5 mm. There was no report on and sunshine hours.

Maize and Beans were at flowering and maturity stages respectively and both in good state with normal yield expected.

2.1.2 <u>Kisii</u>

The station reported total rainfall amount of 6.1 mm. The mean air temperature and total Pan Evaporation recorded were 21.3°C and 34.1 mm respectively. There was no report on Sunshine hours.

Maize was at flowering stage and in good state, while beans were at maturity stage and in good state normal yield expected for both crops.

2.2 RIFT VALLEY REGION

2.2.1 <u>Kitale.</u>

The station recorded total rainfall amount of 0.3mm. Total Pan Evaporation reported 40.5 mm. 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, normal yield is expected for beans.

2.2.2 <u>Eldoret - Kapsoya</u>

The station received no rainfall. The mean air temperature and total Pan Evaporation reported were 16.3°C and 54.5mm respectively. There was no report on sunshine hours.

Maize was at emergence while beans were flowering stage. Both crops were in good state and normal yields are expected for beans.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

Total amount of rainfall recorded was 0.04mm. The average air temperature reported was 17.8°C. There was no report on Total Pan Evaporation and sunshine parameters.

Maize were at ninth leaf stage while beans were at flowering stage. Both crops are in poor state due to insufficient rain hence below normal yield is expected for beans.

2.3.2 Kabete

The station reported rainfall amount of 0.01mm while Total pan evaporation was 30.5mm. There was no report on Mean air Temperature, and Sunshine parameters.

Both Maize and Beans were at emergence stage and in fair state, though they have been affected by insufficient rain.

2.3.3 <u>Thika</u>

The station recorded dry conditions. The average air temperature and total Pan Evaporation recorded were 19°C and 32 mm respectively. There was no report on Sunshine duration.

Maize were at flowering stage and fair state while beans were at maturity and poor state due to excessive rainfall in the previous dekad. Potatoes also were at flowering stage and in fair state.

2.3.4 <u>Nyahururu</u>

The station recorded no rainfall, the mean air temperature and total Pan Evaporation reported were 14.0°C and 47.0mm respectively. There was no report on Sunshine hours.

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

2.3.5 <u>Dagoretti</u>

The station received 0.01mm of rainfall. Total Pan Evaporation recorded was 25.0mm. 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 4.4mm 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 0.1mm. The average air Temperature reported was 17.5° 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 and below normal yield is expected for beans due to insufficient rains.

2.4.3 Katumani (Machakos)

The station reported dry conditions. The mean air temperature and total Pan Evaporation reported were 18.4°C and 36.5mm respectively.

Maize were at emergence stage and fair state while Beans were at flowering stage and in fair state hence below normal yield is expected for beans due to poor rainfall distribution.

2.5 COASTAL REGION

2.5.1 Msabaha

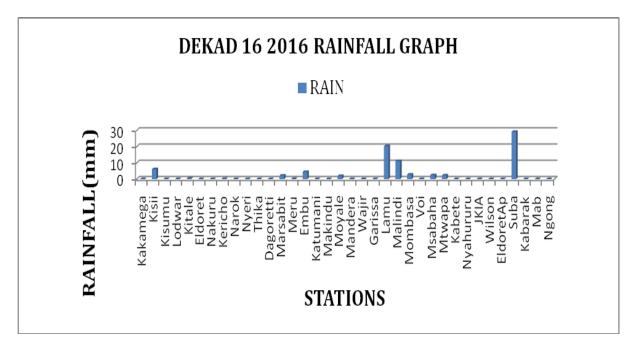
The station recorded 2.4mm of rainfall. The average air temperature recorded was 27.6°C. Total pan evaporation recorded was 55.2mm. There was no report sunshine duration.

Maize was at flowering stage and in fair state with normal yield expected. Mangoes were at 100% fruit setting stage in good state.

2.5.2 <u>Mtwapa</u>

The station received total rainfall amount of 2.2mm. The Mean ai temperature and total Pan Evaporation reported were 26.7°C and 50.2mm respectively. There was no report on sunshine parameter.

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



3. ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS

Figure 3.1: Dekadal rainfall totals for dekad 16, 2016

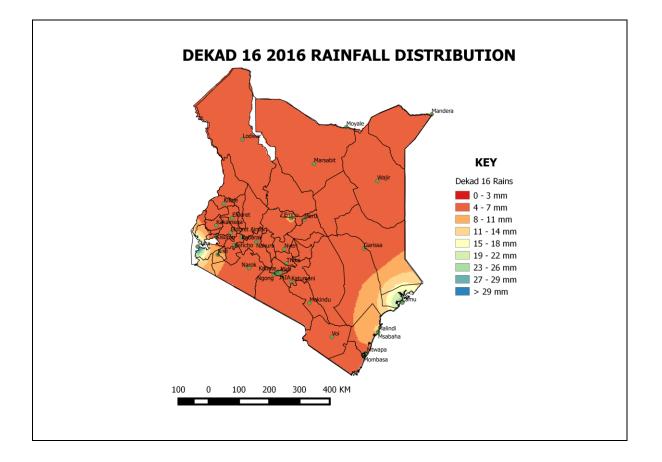


Figure 3.2: Dekadal rainfall distribution for dekad 16, 2016

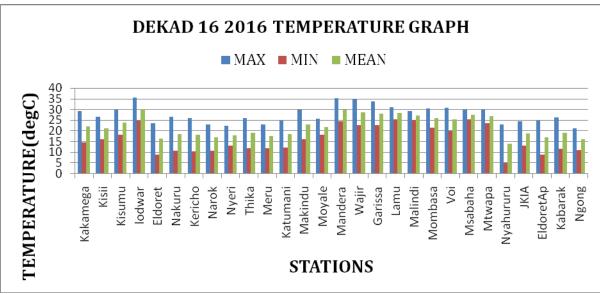


Figure 3.3: Maximum, Minimum and Average temperature for dekad 16, 2016

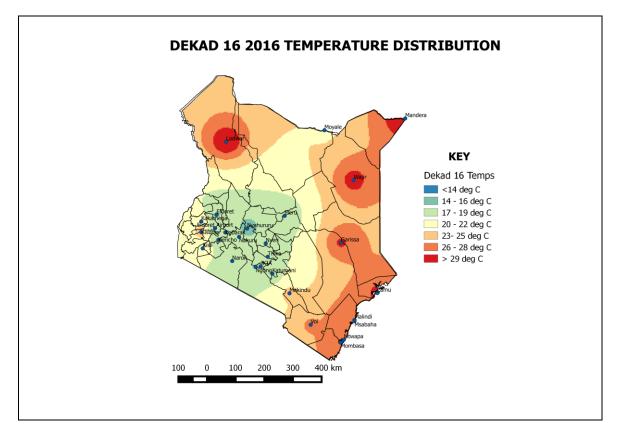


Figure 3.4: Mean temperature distribution for dekad 16, 2016

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11th – 20th 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 sunny intervals throughout the entire period. Afternoons are expected to experience mainly showers and thunderstorms over few places.

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

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

The sunny conditions continue to impact negatively 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 throughout the forecast period. Afternoons are expected to experience sunny intervals for the first three days of the forecast period followed by showers over few places thereafter.

The showers and sunny intervals 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 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 cool cloudy conditions giving way to sunny intervals throughout the forecast period.

The sunny intervals continue to have a negative 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 for the next four days then showers over few places thereafter.

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 Department, 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