

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 15, 21ST - 31ST MAY 2016

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities continued to decrease both in intensity and in spatial distribution. The highest rainfall amount of 104.7 mm was reported at Kisii stations in Nyanza region compared to 166.2 mm reported at Kericho station in Rift valley region in the previous dekad. The second highest rainfall of 103.4 mm was received at Kakamega station in Western region. Kericho station in Rift valley region recorded the highest rainfall amount of 40.1 mm. Coastal region reported the highest rainfall amount of 9.9 mm at Mtwapa station. North Eastern region reported the highest rainfall of 4.4 mm at Moyale station. Kabete station in Nairobi region recorded 1.9 mm of rainfall. In Eastern region Embu station reported the highest rainfall amount of 0.8 mm while in Central region; Nyeri station reported the highest rainfall of 0.04 mm.

Maximum temperatures remained on increasing trend as in the previous dekad while Minimum temperatures continue to reduce drastically. The highest Maximum temperature of 35.6° C was recorded at Mandera Station in North Eastern region compared to 35.2° C reported at Lodwar station in the same region in the previous dekad. Nyahururu station continued to record the lowest Minimum temperature of 7.6° C compared to 10.9° 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 15, 21ST - 31ST MAY 2016

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 103.4 mm. The mean air temperature was 22.0° C. There was no report on and sunshine hours and total pan evaporation.

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

2.1.2 **Kisii**

The station reported total rainfall amount of 104.7 mm. The mean air temperature and total Pan Evaporation recorded were 20.9°C and 40.7 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.

2.2 RIFT VALLEY REGION

2.2.1 **Kitale**.

The station recorded total rainfall amount of 1.01mm. Total Pan Evaporation reported was 31.8 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 Eldoret - Kapsoya

The station received 2.2mm of rainfall. The mean air temperature and total Pan Evaporation reported were 17.6°C and 28.8mm respectively. There was no report on sunshine hours.

Maize and beans were at emergence and flowering stages respectively. Both crops are in good state and normal yields are expected for beans.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

Total rainfall amount recorded was 0.04 mm. 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 ninth leaf and flowering stages respectively. Both crops are in poor state due to insufficient rain hence below normal yield is expected.

2.3.2 **Kabete**

The station reported rainfall amount of 1.9mm. There was no report on Mean air Temperature, total pan evaporation and Sunshine parameters.

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

2.3.3 **Thika**

The station recorded dry conditions. The average air temperature and total Pan Evaporation recorded were 18.7°C and 30.5 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. Potatoes also were at flowering stage and in fair state.

2.3.4 Nyahururu

The station recorded total rainfall amount of 0.01 mm the mean air temperature and total Pan Evaporation reported were $15.1^{\circ}C$ and 36.0 mm 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 0.03mm of rainfall. Mean air temperature and total pan evaporation reported were 13.5°C and total Pan Evaporation recorded was 26.5mm. No report on Sunshine parameter.

No Phenological report.

2.4 EASTERN KENYA REGION

2.4.1 Embu

The station reported 0.8mm rainfall. Total pan evaporation reported was 22.3mm. There was no report on the Mean air temperature.

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

2.4.2 **Meru**

The station recorded total rainfall amount of $0.8\,\mathrm{mm}$. The Average air Temperature reported and total pan evaporation reported was $17.1^{\circ}\mathrm{C}$ and $28.8\,\mathrm{mm}$. There was no report on sunshine parameters.

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

2.4.3 Katumani (Machakos)

The station reported total rainfall amount of 0.8mm. The mean air temperature and total Pan Evaporation reported were 18.1°C and 31.8mm respectively.

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

2.5 COASTAL REGION

2.5.1 Msabaha

The station recorded 0.06mm of rainfall. The average air temperature recorded was 27.7°C. There was no report on total pan evaporation and sunshine duration.

Maize was at flowering stage and in fair state.

2.5.2 Mtwapa

The station received total rainfall amount of 9.9mm. The Mean air temperature and total Pan Evaporation reported were 26.2°C and 51.4mm respectively. There was no report on sunshine parameter.

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

ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS

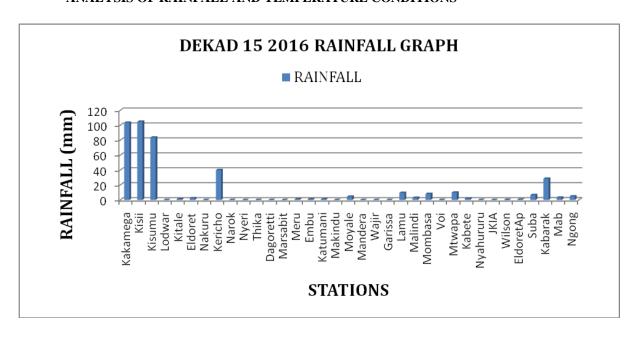


Figure 3.1: Dekadal rainfall totals for dekad 15, 2016

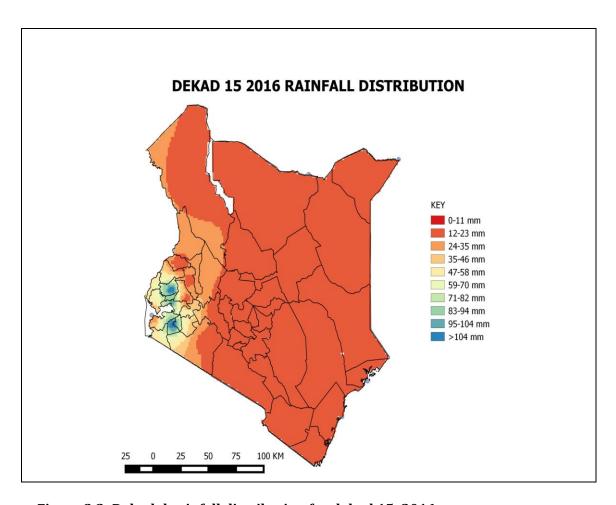


Figure 3.2: Dekadal rainfall distribution for dekad 15, 2016

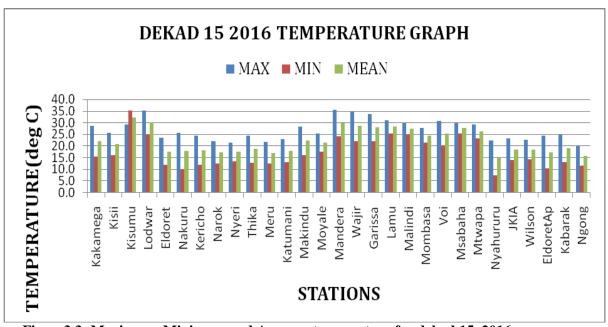


Figure 3.3: Maximum, Minimum and Average temperature for dekad 15, 2016

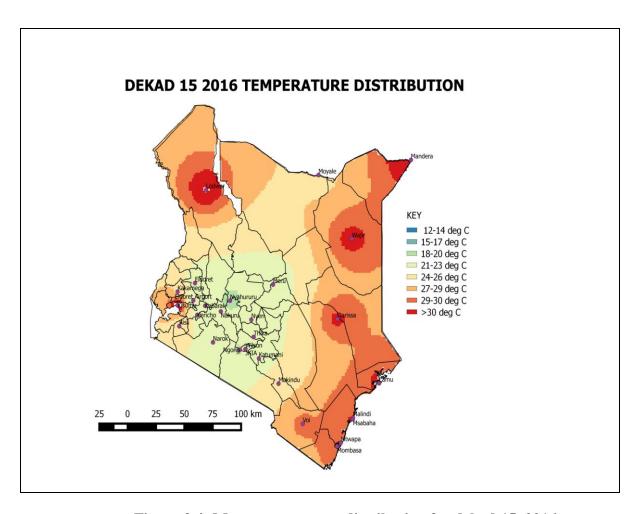


Figure 3.4: Mean temperature distribution for dekad 15, 2016

- 3. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; $1^{st} 30^{TH}$ 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 sunny intervals throughout the entire period. Afternoons are expected to experience showers and thunderstorms over few places.

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), are expected to experience sunny intervals throughout the entire forecast period.

The sunny conditions will 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 with occasional light rains. Afternoons are expected to experience sunny intervals.

The rains and sunny intervals are 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 cloudy conditions giving way to sunny intervals throughout the forecast period.

The sunny intervals will 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), are expected to experience sunny intervals the whole day throughout the forecast period.

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:

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