



KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 19, 1ST – 10TH JULY 2016

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities drastically decreased in both intensity and spatial distribution compared to the previous dekad. The highest rainfall amount of 59.1mm was reported at Nyahururu station in Central region compared to 160.2mm reported at Eldoret Airport station in Rift valley region in the previous dekad. The second highest rainfall of 39.5mm was received at Nakuru station in Rift valley region. Moyale station in North Eastern region recorded the highest rainfall amount of 25.0mm. Coastal region reported the highest rainfall amount of 15.5mm at Msabaha station. Western region reported the highest rainfall amount of 4.8mm at Kakamega station. Embu station in Eastern region recorded the highest rainfall amount of 2.9mm. Nyanza region received the highest rainfall amount of 2.2mm at Kisii station, while stations in Nairobi region reported dry conditions.

Maximum temperatures were on an increasing trend, while Minimum temperatures decreased. The highest Maximum temperature of 33.9°C was recorded at Lodwar Station in North Eastern region compared to 32.9°C reported at Mandera station in the same region in the previous dekad. Nyahururu station continued to record the lowest Minimum temperature of 9.6°C.

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 19, 1ST – 10TH JULY 2016

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 4.8mm. Total pan evaporation was 33.0mm. There was no report on mean air temperature and sunshine hours.

Maize and beans were at maturity and harvest stages respectively. Both crops were in fair condition hence normal yield expected.

2.1.2 Kisii

The station reported total rainfall amount of 2.2mm. The mean air temperature and total Pan Evaporation recorded were 20.5°C and 35.0mm respectively. There was no report on Sunshine hours.

Maize and beans were at flowering and harvest stages respectively. Both crops were in fair state hence normal yield expected.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station recorded total rainfall amount of 18.5mm. Total Pan Evaporation reported was 30.4mm. 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 harvest stage and in fair state. Normal yield is expected for maize.

2.2.2 Eldoret - Kapsoya

The station received 25.9mm of rainfall. The mean air temperature and total Pan Evaporation reported were 17.2 °C and 85.5mm respectively. There was no report on sunshine hours.

Maize was at flowering in fair state and normal yield expected and beans were at harvest stage in poor state with below normal yield expected due to insufficient rain.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

Total amount of rainfall recorded was 0.3 mm. The average air temperature reported was 16.3 °C. There was no report on total Pan Evaporation and sunshine parameters.

Maize and beans were at flowering and harvesting respectively. Maize were in poor state because it had been affected by stalk borer hence below normal yield expected. Some farmers have started harvesting beans.

2.3.2 Kabete

The station reported dry conditions. There was no report on total evaporation, Mean air Temperature, and Sunshine parameters.

Both Maize and Beans were in flowering stage and in fair state, hence expected yield is normal.

2.3.3 Thika

The station reported dry conditions. The average air temperature and total Pan Evaporation recorded were 18.0°C and 45mm respectively. There was no report on Sunshine duration.

Maize was at flowering and in fair state. Beans and Potatoes were at harvesting and in poor state.

2.3.4 Nyahururu

The station recorded rainfall amount of 59.1mm, the mean air temperature and total Pan Evaporation reported were 15.2°C and 34.5mm respectively. There was no report on Sunshine hours.

Maize was at emergence while beans and potatoes were at flowering and maturity stages respectively and all in fair state. Normal yield is expected for potatoes but beans below normal yield is expected.

2.3.5 Dagoretti

The station reported dry conditions. Total Pan Evaporation recorded was 37.1mm. No report on Sunshine parameter and mean air temperature.

No Phenological report.

2.4 EASTERN KENYA REGION

2.4.1 Embu

The station reported 2.9mm rainfall amount. Total pan evaporation was 47.5mm. There was no report on the Mean air temperature and sunshine hours.

Maize and Beans were at flowering and maturity stages respectively and in fair state. Hence normal yield is expected.

2.4.2 Meru

The station recorded total rainfall amount of 06 mm. The Average air Temperature and total pan evaporation reported were 16.6°C and 71.5mm. There was no sunshine parameter.

Maize was at flowering stage and in poor state, while beans were in harvest stage and in fair state. Below normal yield is expected for both crops due to insufficient rain. Beans harvesting is almost over.

2.4.3 Katamani (Machakos)

The station reported dry conditions. The mean air temperature and total Pan Evaporation reported were 16.6 °C and 33.1mm respectively. No report on sunshine parameter.

Maize and beans were both at flowering stage but in poor and fair states respectively with below normal yields expected due to insufficient rain.

2.5 COASTAL REGION

2.5.1 Msabaha

The station recorded 15.5mm of rainfall. The average air temperature was 25.5°C. Total evaporation was 47.5mm. There was no report on 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 Mtwapa

The station received total rainfall amount of 2.1mm. The Mean air temperature reported was 25.1°C. Total pan evaporation was 38mm. There was no report on sunshine parameter.

Maize was at flowering stage while mangoes were at harvest stage but both in fair state. Maize had been adversely affected by insufficient rain, insects and stalk borer while mangoes were affected by insects.

3. ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS

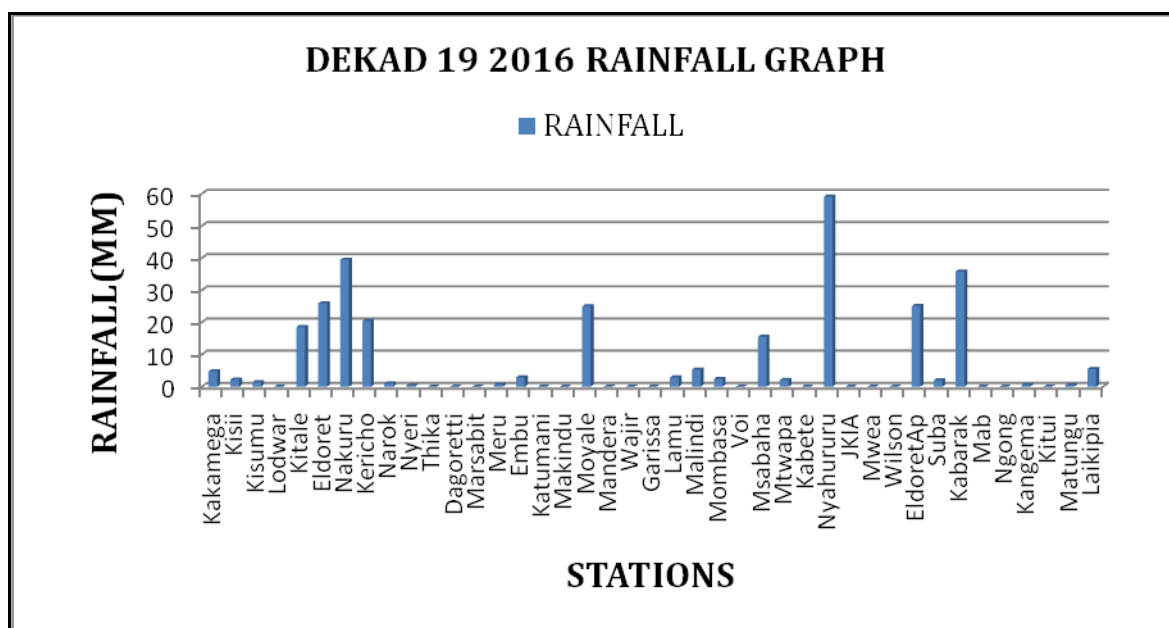


Figure 3.1: Dekadal rainfall totals for dekad 19, 2016

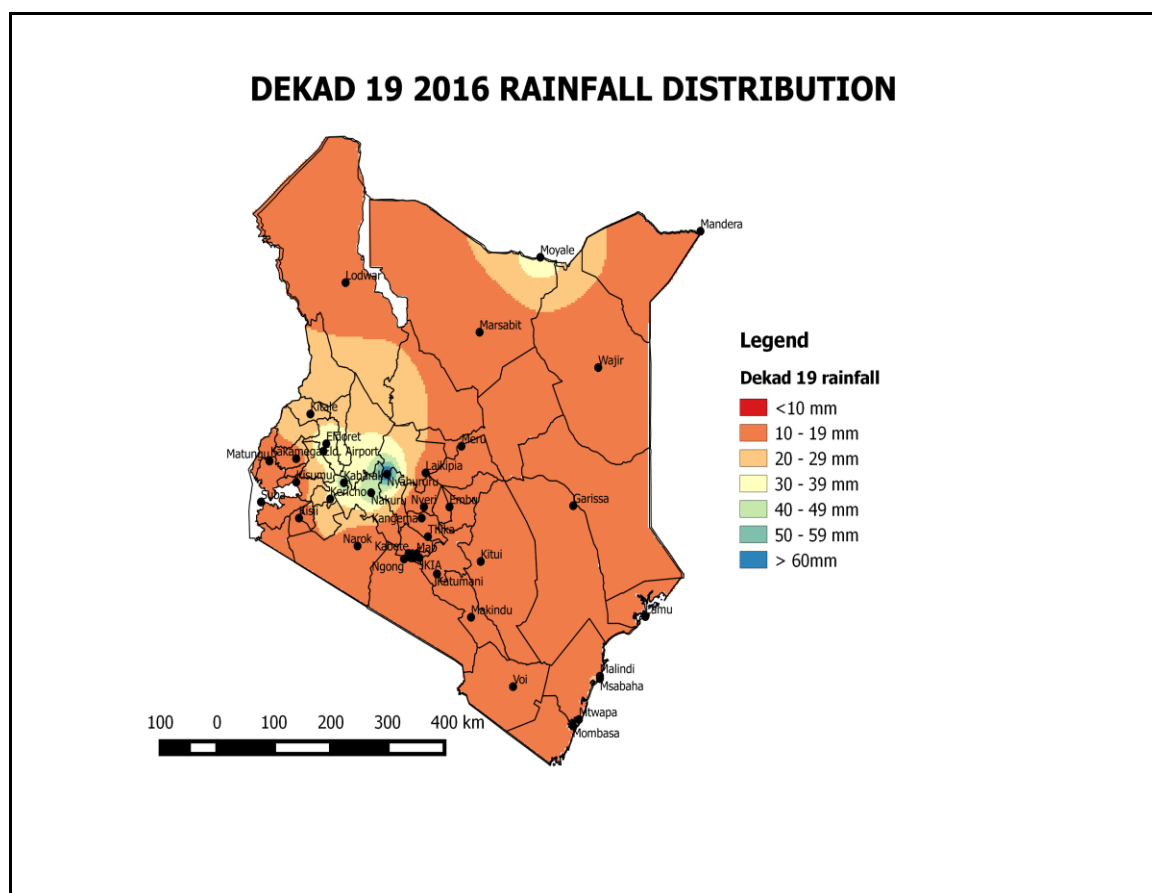


Figure 3.2: Dekadal rainfall distribution for dekad 19, 2016

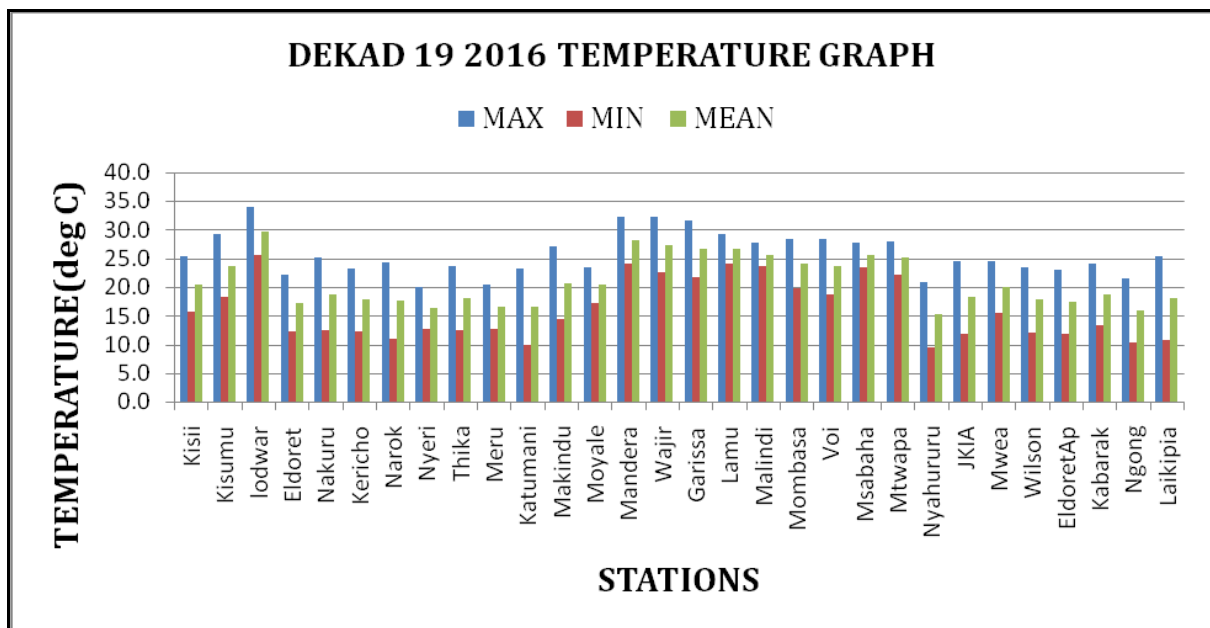


Figure3.3: Maximum, Minimum and Average temperature for dekad 19, 2016

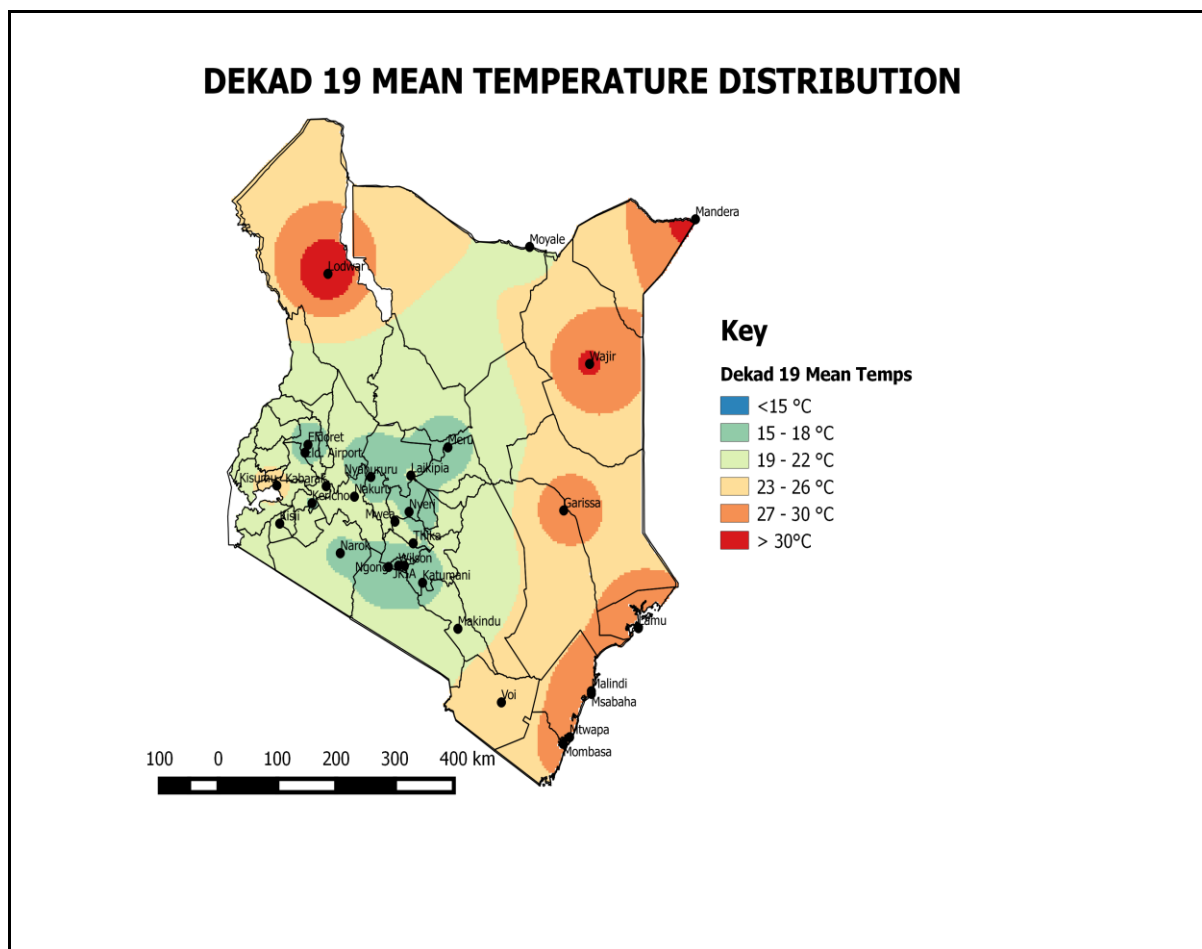


Figure 3.4: Mean temperature distribution for dekad 19, 2016

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11TH – 20TH JULY, 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, while Afternoons are expected to experience showers and thunderstorms over several places throughout the forecast period.

The Showers and sunny intervals will be of great benefit to the maize that is at flowering stage in Kisii, Eldoret and Kitale.

- ❖ **The Northwestern counties (Turkana, West Pokot and Samburu),** are expected to experience sunny intervals the whole day throughout the forecast period
The sunny intervals will have a negative 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 and cloudy breaking into sunny intervals, while Afternoons are expected to experience rains over few places throughout the forecast period.
The rains are of great advantage to the crops, which are in their emergence and flowering stages in places like Kabete, Thika, Nyeri, 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.

Sunny intervals continue to be of disadvantage to the pasture and vegetation for the animals kept in these areas.

- ❖ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals the whole day 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),** Mornings are expected to experience occasional showers over few places breaking into sunny intervals in the afternoons throughout the forecast period.

The showers will be of advantage to the maize crop and mangoes, which are at flowering and 100% fruit setting stages in Msabaha and Mtwapa respectively.

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