

KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 1, 1ST – 10TH JANUARY, 2019.

HIGHLIGHTS ON RAINFALL AND TEMPERATURE.

Dry weather conditions were generally experienced over several parts of the Country during the current dekad (1st - 10th /2019). Increased day-time (maximum) and Night-time (minimum) temperatures were experienced in almost all stations. Eastern Counties received increased amounts of rainfall compared to the last Dekad with Meru station leading with 65.8 mm of rainfall. Counties along the coastal region continued to register low amounts of rainfall except Mtwapa station which received some rain compared to the previous dekad.

Maximum and Minimum temperatures increased in most stations during the dekad. The highest Maximum temperature of 37.0 °C was recorded at Wajir station in North Eastern region compared to 36.5 °C reported in the same station in the previous dekad.

Nyahururu station in Central region recorded the lowest Minimum temperature of 8.0 °C compared to 7.3 °C recorded in 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.

CROP AND WEATHER REVIEW FOR DEKAD 36, 21ST – 31ST DECEMBER, 2018.

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded Total rainfall amount of 0.52 mm. The Mean air Temperature was 22.4 mm.

2.1.2 Kisii

The station reported Total rainfall amount of 4.82 mm. The Mean air temperature and the Total Pan Evaporation recorded were 21.3°C and 32.8 mm respectively.

Maize was at flowering stage and in poor state as it has been affected by Fall Army Worms; hence below normal yield is expected.

2.2 RIFT VALLEY REGION.

2.2.1 <u>Kit</u>ale.

The station recorded 1.0 mm of rainfall. The Mean air temperature was 20.2 °C

2.2.2 Eldoret - Kapsoya.

The station recorded 11.9 mm of rainfall. The Mean air temperature was 18.2 °C

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION.

2.3.1 Nveri

The station recorded 27.6 mm of rainfall.

Maize and beans were in emergence and flowering stages respectively; both crops were in fair state.

2.3.2 <u>Kabete</u>

The station received 7.9mm of rainfall.

Maize and Beans were still in emergence and flowering stages respectively; both crops were in fair state.

2.3.3 Nyahururu

The station received 6.3 mm of rainfall. The mean air temperature recorded was 14.9°C.

2.3.4 <u>Dagoretti</u>

The station recorded 10.9.0 mm of rainfall. The Mean air temperature was 19.0°C

2.3.5 Thika

The station reported 6.1 mm of rainfall. Total Pan Evaporation was 44.3 mm.

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

2.4 EASTERN REGION.

2.4.1 Embu

The station recorded 46.5 mm of rainfall.

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

2.4.2 Meru

The station recorded 65.8 mm of rainfall, The Mean air temperature was $19.2 \, ^{0}\mathrm{C}$.

There was no phenological report.

2.4.3 Katumani (Machakos)

The station reported 14.7 mm of rainfall. Mean air temperature was 19.4 °C Maize and Bean crops were at emergence and flowering stages respectively; both were in good state.

2.5 COASTAL REGION.

2.5.1 Msabaha

The station recorded 0.2 mm of rainfall. There was no report on Mean Air Temperature, Pan Evaporation and sunshine parameters.

Maize and Beans crops were still at emergence stage and in fair state.

2.5.2 Mtwapa

The station recorded 10.5 mm of rainfall. The Mean Air temperature recorded was 28.5°C There was no report on Pan Evaporation and sunshine parameters.

Maize and Beans were still at emergence stage and in fair state. Mangoes are in dormant stage.

2.5.3 Lamu

The station recorded 0.02 mm of rainfall. The Mean air temperature recorded was 29.1 $^{\circ}$ C.

ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS.

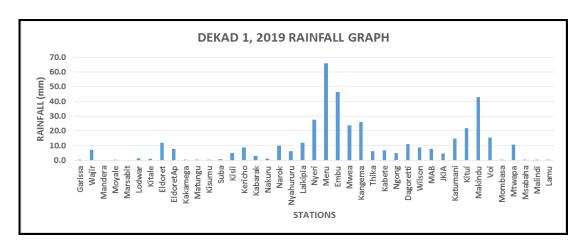


Figure 3.1: Dekadal rainfall totals for dekad 1, 2019.

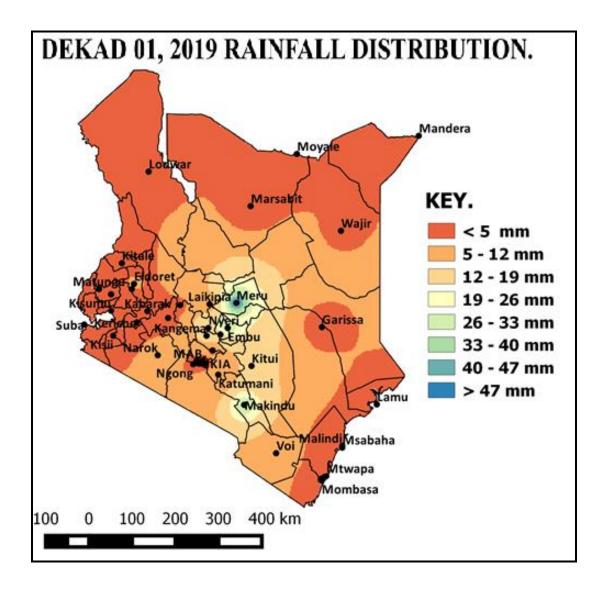


Figure 3.2: Dekadal rainfall distribution for dekad 1, 2019.

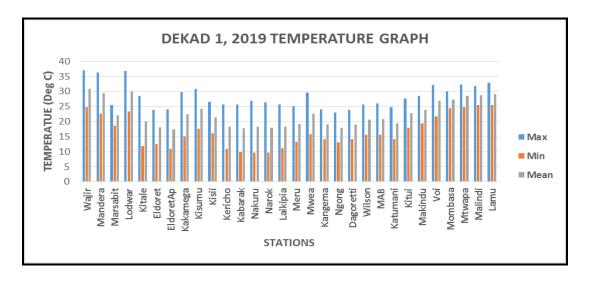


Figure 3.3: Maximum, Minimum and Average temperature for dekad 1, 2019.

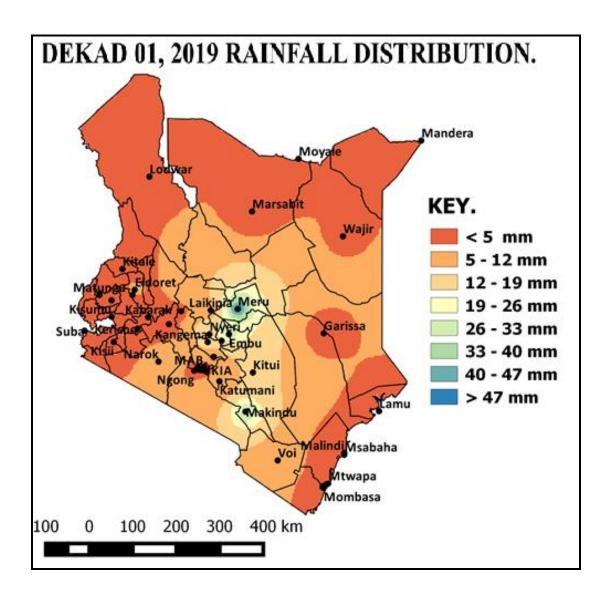


Figure 3.4: Mean temperature distribution for dekad 1, 2019.

EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11^{TH} – 20^{TH} , JANUARY 2019

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 forecast period. Afternoons/Evenings are expected to experience mainly showers and thunderstorms over few places for the first five days of the forecast period followed by sunny intervals thereafter.

The showers will benefit the crops that are at flowering stage in places like Kisii and Kakamega.

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

The sunny intervals will have a negative effect on the pasture and vegetation for the animals 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 experience cloudiness breaking into sunny intervals for the first three days of the forecast period, followed by rains over few places for the next two days and sunny intervals thereafter. Afternoons/evening are expected to experience showers over few places for the first five days of the forecast period followed by sunny intervals thereafter.

The Showers will continue to benefit maize and Beans crops that are in emergence and flowering stages in places like Kabete, Thika and Embu .

North-Eastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), Sunny intervals the whole day are expected during the forecast period. Poor pasture regeneration expected due to the dry conditions in the region.

South-Eastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui, Sunny intervals the whole day are expected during the forecast period.

The dry conditions likely to affect crops that are at emergence stage. Poor pasture regeneration is expected in this region.

Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc.)

Mornings are expected to experience showers over few places followed by sunny intervals thereafter in the afternoons for the entire forecast period.

The showers will benefit the crops that are in emergence stage in this region.

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

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