

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 17, 2014 11-20 JUNE, 2014

1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

There was a decrease both in intensity and spatial distribution of rainfall during the dekad, with dry conditions still prevailing in Eastern and North-eastern regions. Western region received the highest amount of rainfall countrywide with Kakamega station recording 141.6mm, compared to the previous dekad where Kericho station in Rift Valley region received the highest rainfall of 149.4mm. Kisii station in Nyanza region received the second highest rainfall of 68.1mm. In Central region, Nyahururu station recorded the highest rainfall of 54.6mm. Eldoret Airport station recorded the highest rainfall amount of 41.2mm in Nairobi region. In Coastal region the highest rainfall of 31.0mm was recorded at Mtwapa station. In Eastern region the highest rainfall amount of 4.2mm was recorded at Embu Mwea station, while Moyale station in North Eastern region reported the highest amount of rainfall of 0.1mm.

Both Maximum and minimum temperatures were on a decreasing trend during the dekad. Lodwar station in North Eastern region recorded the highest maximum temperature of 35.6°C compared to 36.0°C recorded at same station in the previous dekad. The minimum temperatures decreased in most stations with Nyahururu station in Central region recording the lowest temperature of 9.1°C compared to 10.0°C reported 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.

2. CROP AND WEATHER REVIEW FOR DEKAD 17; 11-20 JUNE 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded rainfall amount of 141.6mm during the dekad. The mean air temperature reported was 21.6^oC. Sunshine duration reported was 6.6 hours. There was no report on evaporation.

Maize and beans were at flowering and harvest stages respectively and in good state. Normal yield is expected.

2.1.2 <u>Kisii</u>

The station recorded rainfall amount of 68.1mm. The mean air temperature and Pan Evaporation were 25.3°C and 3.2mm respectively. There was no record on Sunshine parameter.

Maize were at flowering stage and in good state while beans were at harvesting stage and in a good state, hence normal yield is expected

2.2 **RIFT VALLEY REGION**

2.2.1 Kitale

The station recorded rainfall amount of 43.1mm. Mean air temperature and Pan Evaporation recorded were 19.6° C and 3.0mm respectively. There was no report on sunshine duration.

Maize was at emergency stage while beans were at flowering stage and both are in good stat hence normal yield is expected for beans.

2.2.2 <u>Eldoret-Kapsoya</u>

The station received rainfall amount of 41mm. The average air temperature was 17.8°C. There was no report on evaporation and sunshine Parameters.

Maize and beans were at emergence and flowering stages respectively and both are in poor state due to insufficient rain, hence below normal yield of beans is expected.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

The station received rainfall amount of 3.6mm. The average air temperature was 17.1°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans were in flowering stage and in a fair state though maize is adversely affected by stalk borer while beans are affected by other insects. Normal yield is expected for both crops.

2.3.2 Kabete

The station recorded rainfall amount of 41.2mm. Mean air temperature was 19.5°C. No report on evaporation and sunshine.

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

2.3.3 <u>Thika</u>

The station recorded rainfall amount of 0.01mm. The mean air temperature was 19.0°C while evaporation was 2.0mm. There was no report on sunshine duration.

Maize was at flowering while beans were at harvesting stages respectively. Potatoes were at maturity stage. All crops were in fair state. Normal yield is expected.

2.3.4. <u>Nyahururu</u>

The station received rainfall amount of 54.6mm. The mean air temperature and pan evaporation recorded were 15.7° C and 4.0mm respectively. There was no report on sunshine duration.

Maize was at emergence stage and in fair state while potatoes were at flowering stage also in fair state though below normal yield is expected.

2.3.5. <u>Dagoretti</u>

The station reported rainfall amount of 16.4mm. The average air temperature and pan evaporation were 18.0°C and 2.8mm respectively. No Sunshine duration reported.

No report on phenological observations.

2.4 EASTERN KENYA REGION

2.4.1 <u>Meru</u>

The station recorded rainfall amount of 0.2mm. The average air temperature and Pan Evaporation recorded were 18.1° C and 3.1mm respectively. Sunshine record was 5.7hrs.

Maize was in maturity stage and poor state while beans were at harvest stage and in a fair state. Both crops were affected by insufficient rainfall during the dekad, therefore below normal yield is expected.

2.4.2 <u>Embu</u>

The station reported rainfall amount of 3.9mm. The average air temperature and Pan Evaporation were 16.5^oC and 3.0mm respectively. No report on Sunshine duration.

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

2.4.3 Katumani (Machakos)

The station reported rainfall amount of 1.8mm. The average air temperature reported was 18.4^oC. There was no report on pan evaporation and Sunshine duration.

Maize is at maturity stage and in poor state due to insufficient rain hence below normal yield expected. Harvesting of beans is over in most farms.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 7.5mm. The average air temperature and Pan Evaporation recorded were 26.7°C and 3.7mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in fair state therefore normal yield is expected. Mangoes are at 100% fruit setting stage and in good state.

2.5.2 <u>Mtwapa</u>

The station received rainfall amount of 31.0mm. The average air temperature and pan evaporation recorded were 28.9°C and 4.5mm respectively. Sunshine duration reported was 7.7 hours.

Maize was at flowering stage and in a fair state though adversely affected by excessive rainfall, birds and diseases mainly maize stalk borer. Mangoes were in harvesting stage and in a good state hence normal yield is expected.

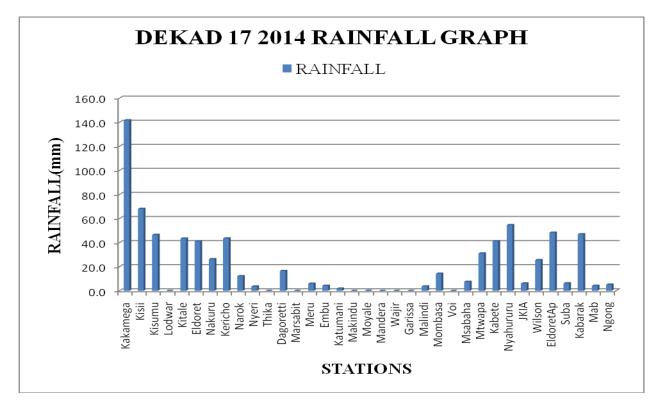


Figure 3.1: Dekadal rainfall totals for 11-20 JUNE 2014

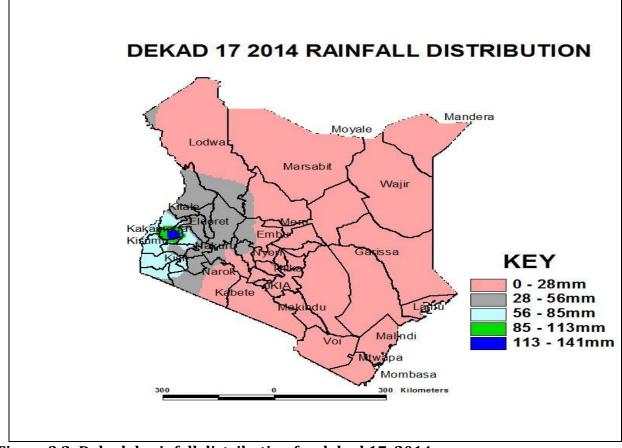


Figure 3.2: Dekadal rainfall distribution for dekad 17, 2014

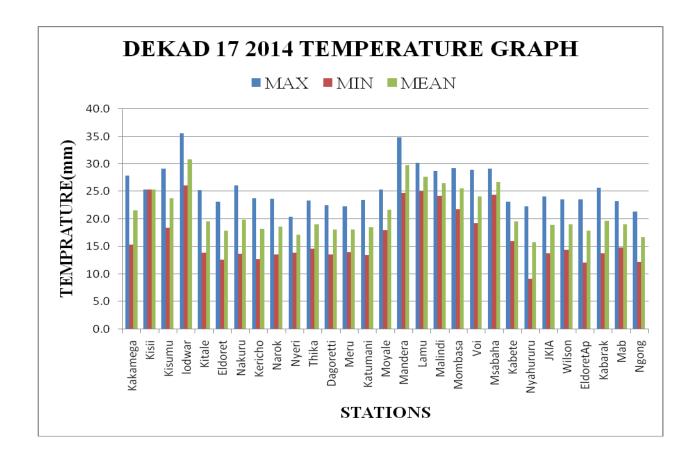


Figure 3.3: Maximum, Minimum and Average temperature in ^oC for dekad 17, 2014

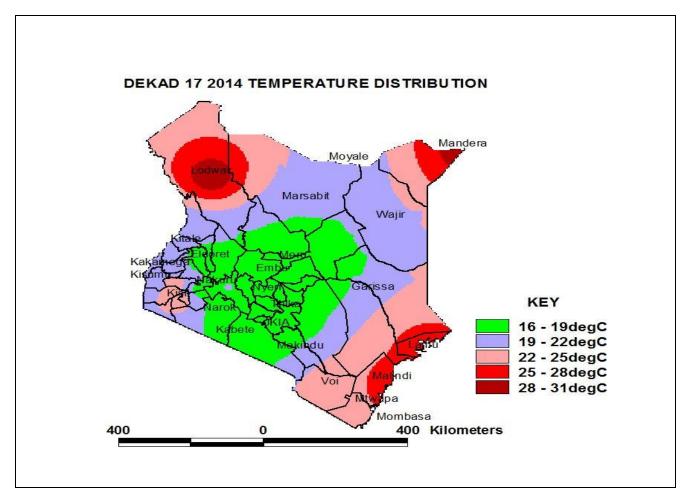


Figure 3.4: Mean temperature distribution for dekad 17, 2014

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-30 June 2014

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 predominantly sunny intervals with rains over few places. Afternoon showers and thunderstorms are expected over several places throughout the forecast period with the exception of the fourth day on which only a few places will receive rainfall.

The morning rains and Afternoon showers are of great importance for the growth of the maize crop which is in its flowering stage in the regions.

The Northwestern counties (Turkana, West Pokot and Samburu), Are expected to have mainly sunny intervals throughout the day for the entire forecast period.

The sunny conditions will have a negative impact on pasture and vegetation in this region.

The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience early morning cloudiness with rains over few places. Afternoon showers over few places are expected throughout the forecast period except on the fourth day on which sunny intervals will prevail.

The expected showers will continue to benefit the Maize and Beans crops, which are in emergence and flowering stage in this region.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience sunny intervals in the morning and afternoon throughout the forecast period.

The expected sunny conditions will have a negative impact on the state of pasture and vegetation in this region.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience mainly sunny intervals throughout the forecast period.

The sunny conditions will have a negative impact on the crops, pasture and vegetation

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience morning showers over few places giving way to sunny intervals throughout the forecast period.

The showers will continue to benefit the development of the Maize crop, which is in the flowering stage in this region.

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