KENYA METEOROLOGICAL SERVICE

DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 33, 2014
21- 30 NOVEMBER, 2014

HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was an increase in rainfall intensity and a decrease in spatial distribution during the dekad. Western region realized the highest rainfall activities with Kakamega station recording 140.7mm compared to 122.2mm reported at Thika station in Central region in the previous Dekad. The second highest rainfall was reported in Rift Valley region with Kericho and Eldoret airport stations reporting 124.6mm and 67.9mm respectively. Kisumu station in Nyanza region received the highest rainfall of 59.2mm. In Nairobi region, Dagoretti station reported the highest amount of rainfall of 41.0mm. Embu station in Eastern region recorded the highest rainfall amount of 39.9mm. In coastal region, the highest rainfall amount of 34.9mm was received at Lamu station. Nyahururu station in central region reported the highest rainfall amount of 20.7mm. In north eastern region, the highest rainfall of 20.3mm was received at Lodwar.

Both Maximum and Minimum temperatures in most stations increased unlike in the previous dekad where they were on a decreasing trend. Wajir station in North-Eastern region reported the highest temperature of 34.7^{0}C compared to 35.9^{0}C at Lodwar station in the same region in the previous dekad. The lowest Minimum temperature of 8.8^{0}C was recorded at Nyahururu station in central region compared 10.4^{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 33: 21 - 30 NOVEMBER, 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded an increase in rainfall amount of 140.7mm compared to 45.3mm in the previous dekad. The mean air temperature and pan evaporation reported were 20.5^{0}C and 4.4mm respectively. There was no report on Sunshine duration.

Beans have been harvested.

2.1.2 Kisii

The station reported rainfall amount of 43.7mm compared to 42.7mm recorded in the previous dekad. The mean air temperature and Pan Evaporation recorded were 19.6^{o}C and 2.4mm respectively. There was no record on Sunshine parameter.

Maize crop was at flowering stage and in fair state with normal yield expected, although excessive rainfall this dekad may affect it.

2 .2 RIFT VALLEY REGION

2.2.1 Kitale

The station recorded rainfall amount of 41.2mm. There was no report on mean air temperature, Pan Evaporation and sunshine duration.

No phenological report.

2.2.2 Eldoret-Kapsoya

The station recorded rainfall amount of 44.5mm. The mean air temperature and Pan Evaporation recorded were 17.5^{o}C and 3.7mm respectively. There was no record on sunshine duration.

Maize harvest is over in most farms.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 7.6mm. The average air temperature was 18.7^{0}C. There was no report on pan evaporation and sunshine parameters

Maize and beans crops were at9th leaf stage and budding stage respectively. Maize has been affected by maize stalk borer and beans by some insects.

2.3.2 Kabete

The station recorded rainfall amount of 6.4mm. The average air temperature was 19.2^{0}C while the sunshine was 5.5hrs/day. There was no report on Pan Evaporation.

Most crops are in germination stage.

2.3.3 Thika

The station recorded rainfall amount of 3.4mm. The mean air temperature and Pan Evaporation recorded were 21.4C and 3.9mm respectively. There was no report on sunshine duration.

Maize and beans were all at emergence stage and in fair state though it has been affected by insufficient rainfall in this dekad. Potatoes also were at emergence and in fair state.

2.3.4. Nyahururu

The station reported rainfall amount of 20.7mm. The mean air temperature and Pan Evaporation recorded were 15.0^{0}C and 3.4mm respectively. There was no report sunshine duration.

Maize was still at maturity stage and in fair state, while Potatoes were at flowering stage and in fair state. Normal yield for both crops is expected.

2.3.5. Dagoretti

The station reported rainfall amount of 41.0mm. Sunshine recorded was 7.9hrs/day while Pan Evaporation was 4.5mm. There was no report on average air temperature.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station recorded rainfall amount of 15.8mm. The average air temperature and pan evaporation recorded were 18.9^{0}C and 3.3mm respectively. There was no report on Sunshine duration.

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

2.4.2 Embu

The station recorded rainfall amount of 39.9mm. There was no report on mean air temperature, Pan Evaporation and sunshine parameters.

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

2.4.3 Katumani (Machakos)

The station reported rainfall amount of 23.6mm. The average air temperature reported was 21.2^{0}C. There was no report on pan evaporation and Sunshine parameters.

Maize and beans were at emergence stage and in good state.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 8.4mm. The average air temperature and pan Evaporation recorded were 28.4^{0}C and 4.9mm respectively. There was no report on sunshine duration.

Maize was still at flowering stage and in fair state. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received rainfall amount of 4.0mm. The average air temperature and pan evaporation recorded were 27.5^{0}C and 5.7mm respectively. There was no report on Sunshine duration.

Maize was at emergence stage and in good state while mangoes were still at flowering stage and also in fair state.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

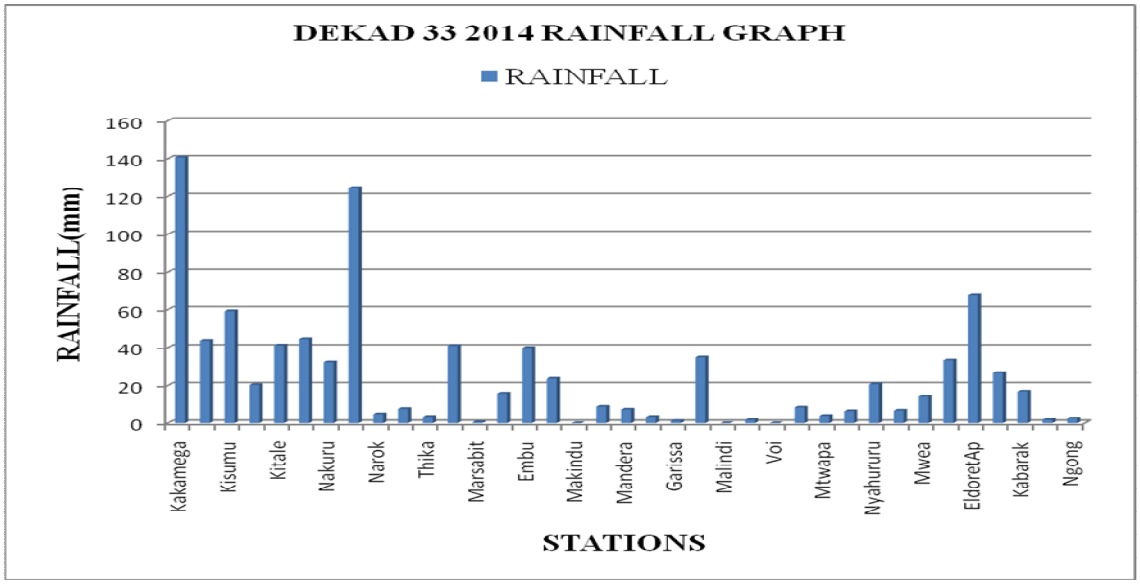

Figure 3.1: Dekadal rainfall totals for 21 - 30 NOVEMBER 2014

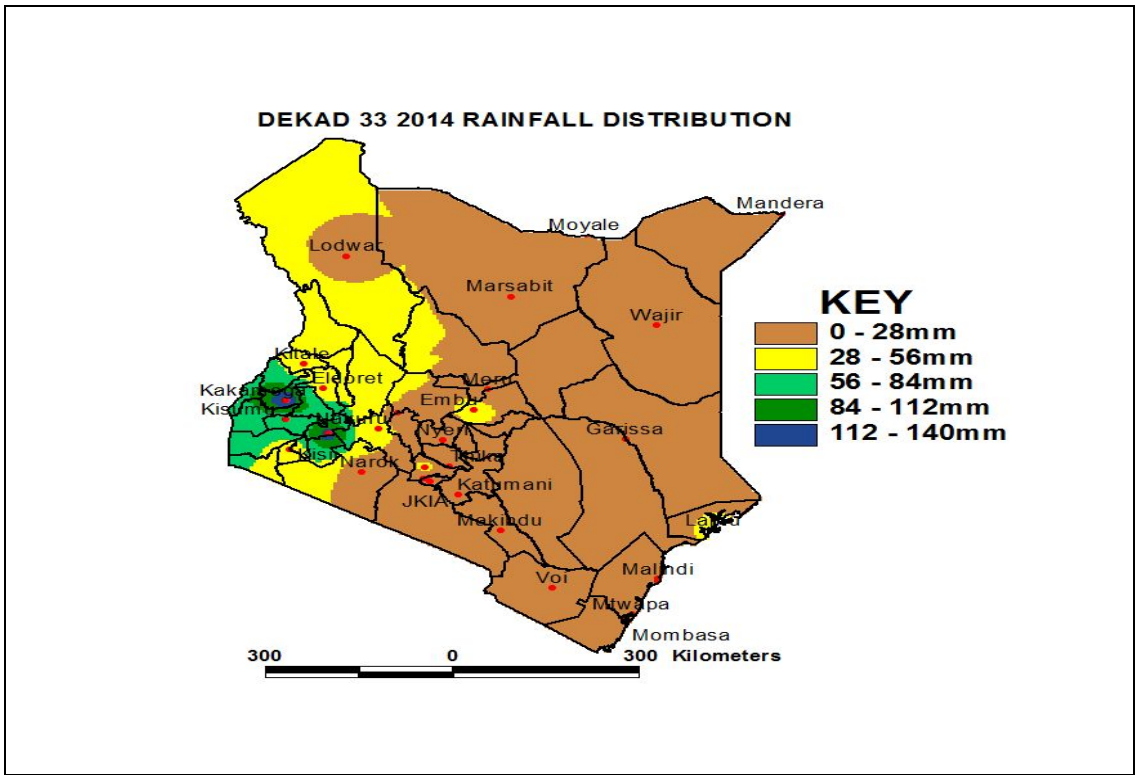

Figure 3.2: Dekadal rainfall distribution for dekad 33, 2014

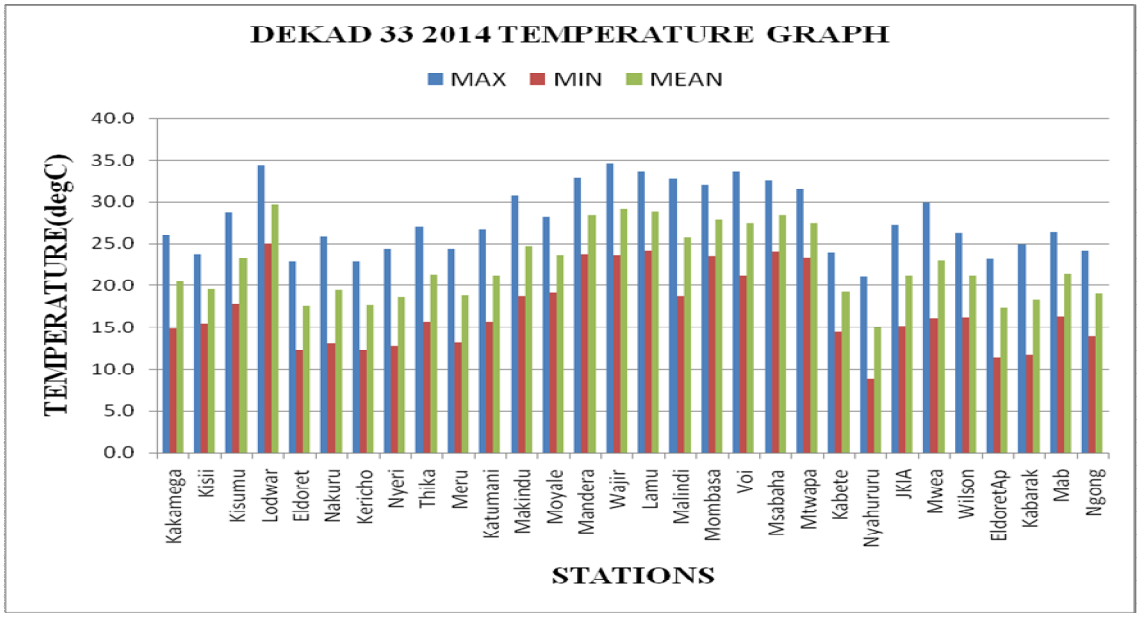

Figure 3.3: Maximum, Minimum and Average temperature for dekad 33, 2014.

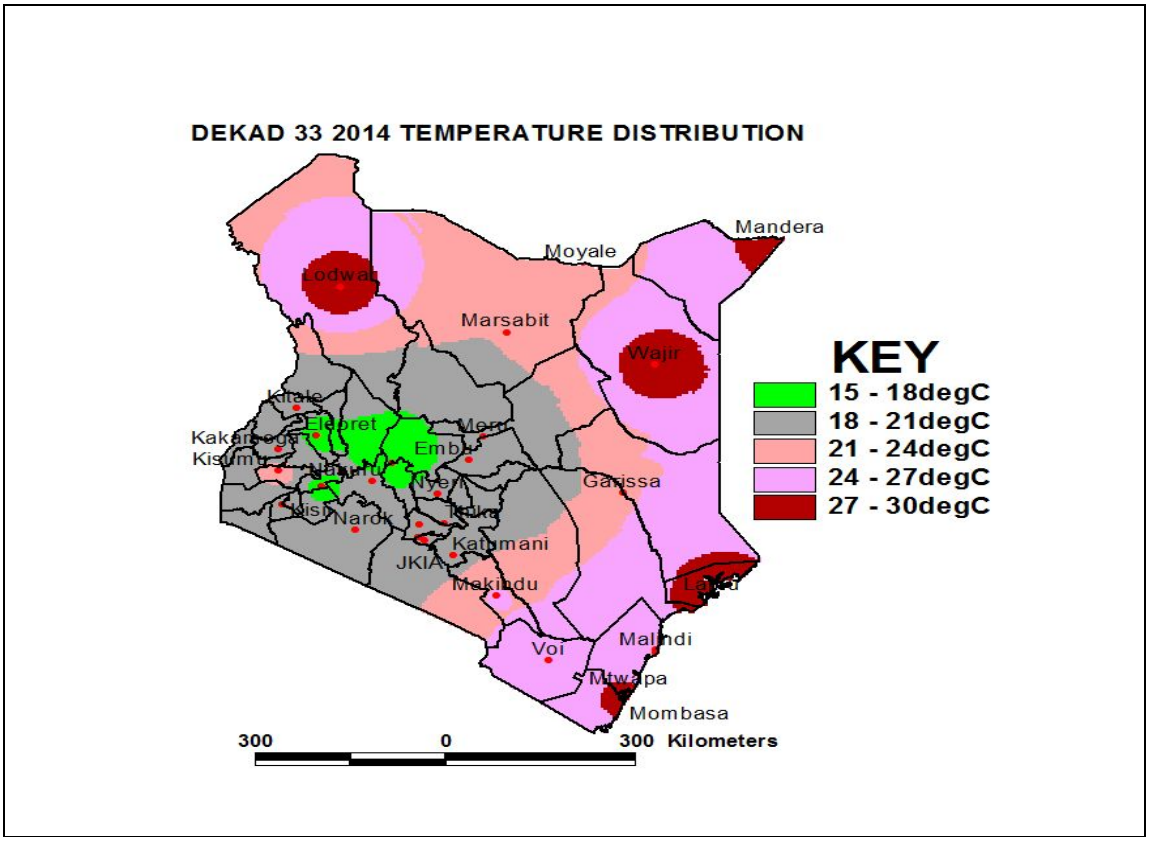

Figure 3.4: Mean temperature distribution for dekad 33, 2014

EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 DECEMBER 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)**, are expected to experience morning rains over few places on the first two days and sunny intervals on the remaining mornings. Showers and thunderstorms are expected in the afternoon/evening over several places on the first two days reducing to few places for the rest of the forecast period.

  The rains and showers will boost soil moisture that will be beneficial to the growth and development of Maize crop that are still in flowering stage in places like Kisii, it will also favour the growth of pasture and vegetation that will support livestock keeping.

- **The Northwestern counties (Turkana, West Pokot and Samburu),** are expected to experience sunny intervals in the morning throughout the forecast period. Afternoon/evening showers and thunderstorms are expected over few places on the first day and sunny intervals thereafter.

  The showers will continue to replenish the growth of pasture and vegetation to benefit the livestock kept in these regions.

- ***T*he Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu**, **Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga),** are expected to experience cloudy early mornings with rains over few places on the first two days and the last two days and sunny intervals on the other days. Afternoon/evening showers over few places are expected throughout the forecast period.

  The rains and showers will replenish soil moisture that will benefit the crops like maize that is in emergence stage in places like Nyeri, Embu etc. For the maize that is at the maturity stage like in Nyahururu, there is likelihood of being affected by aflotoxin.

- ***N*ortheastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to experience morning rains over few places on the first and last two days and sunny intervals on the remaining days. Afternoon/evening showers over few places are expected on the same days.

  The rains and showers are of great importance to the pasture and vegetation growth that mainly sustain livestock keeping in this region.

- **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience rains over few places in the mornings on the first two and last three days of the forecast period. Afternoon/evening showers over few places are expected on the same days.

  The rains and showers are of great benefit to maize crop that is in the emergence stage and to the pasture and vegetation growth for livestock rearing in this region.

- **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)**, are expected to experience showers over few places in the morning throughout the forecast period. Afternoon showers over few places are expected on the first three days of the forecast period and sunny intervals thereafter.

  The sunny conditions will be beneficial to the development of mangoes that are in flowering and fruit setting stages in the north coast, while the showers will be beneficial to the growth and development of maize crop that is in the emergence and flowering stages in places like Msabaha and Mtwapa.

For feedback or further guidance, Contact:
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