KENYA METEOROLOGICAL SERVICE

DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 34, 2014
01- 10 DECEMBER, 2014

HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was a decrease in rainfall intensity and an increase in spatial distribution during the dekad. Coastal region realized the highest rainfall activities with Mombasa station recording 134.1mm compared to 140.7mm reported at Kakamega station in Western region in the previous Dekad. The second highest rainfall was reported in North Eastern region with Marsabit stations reporting 113.0mm. Suba station in Nyanza region received the highest rainfall of 103.8mm. In Eastern region, Meru station reported the highest amount of rainfall of 66.2mm. Narok station in Rift Valley region recorded the highest rainfall amount of 50.9mm. In Western region, the highest rainfall amount of 48.1mm was received at Kakamega station. Nyeri station in central region reported the highest rainfall amount of 38.9mm. In Nairobi region, the highest rainfall of 31.6mm was received at JKIA station.

Both Maximum and Minimum temperatures in most stations decreased unlike in the previous dekad where they were on an increasing trend. Wajir station in North-Eastern region reported the highest temperature of 35.3^{0}C compared to 34.7^{0}C at the same station in the same region in the previous dekad. The lowest Minimum temperature of 8.6^{0}C was recorded at Nyahururu station in central region compared 8.8^{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 34: 01 - 10 DECEMBER, 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded an increase in rainfall amount of 48.1mm compared to 140.7mm in the previous dekad. The mean air temperature and pan evaporation reported were 21.5^{0}C and 4.5mm respectively. There was no report on Sunshine duration.

No phenological report.

2.1.2 Kisii

The station reported rainfall amount of 54.6mm compared to 43.7mm recorded in the previous dekad. The mean air temperature and Pan Evaporation recorded were 20.1^{o}C and 3.0mm respectively. There was no record on Sunshine parameter.

Maize crop was at flowering stage and in fair state with normal yield expected.

2 .2 RIFT VALLEY REGION

2.2.1 Kitale

The station recorded rainfall amount of 13.5mm. The mean air temperature and Pan Evaporation were 18.9 ^{o}C and 3.7mm respectively. There was no report on sunshine duration.

No phenological report.

2.2.2 Eldoret-Kapsoya

The station recorded rainfall amount of 4.6mm. The mean air temperature and Pan Evaporation recorded were 16.9^{o}C and 4.8mm respectively. There was no record on sunshine duration.

No phenological report.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 38.9mm. The average air temperature was 17.4^{0}C. There was no report on pan evaporation and sunshine parameters

Maize and beans crops were at 9th leaf stage and flowering stage respectively. Both crops are in fair state though Maize has been affected by maize stalk borer and beans by some insects.

2.3.2 Kabete

The station recorded rainfall amount of 9.9mm. The sunshine duration reported was 6.9hrs/day. There was no average air temperature and report on Pan Evaporation.

No phenological report.

2.3.3 Thika

The station recorded rainfall amount of 12.4mm. The mean air temperature and Pan Evaporation recorded were 19.7□C and 3.6mm respectively. There was no report on sunshine duration.

Maize and beans were all at emergence stage and in fair state though they were adversely affected by insufficient rainfall. Potatoes also were at emergence and in fair state.

2.3.4. Nyahururu

The station reported rainfall amount of 24.6mm. The mean air temperature and Pan Evaporation recorded were 14.4^{0}C and 4.0mm respectively. There was no report sunshine duration.

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

2.3.5. Dagoretti

The station reported rainfall amount of 13.8mm. Sunshine recorded was 7.0hrs/day while Pan Evaporation was 4.0mm. There was no report on average air temperature.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station recorded rainfall amount of 66.2mm. The average air temperature and pan evaporation recorded were 17.8^{0}C and 3.4mm respectively. There was no report on Sunshine duration.

Maize and beans were both at emergence stage and in good and fair states respectively.

2.4.2 Embu

The station recorded rainfall amount of 21.1mm. The Pan Evaporation recorded was 3.8mm. There was no report on mean air temperature and sunshine parameters.

Both maize and beans were at emergence and flowering stages respectively and both in fair state. Normal yield is expected for beans.

2.4.3 Katumani (Machakos)

The station reported rainfall amount of 16.1mm. The average air temperature reported was 19.3^{0}C. There was no report on pan evaporation and Sunshine parameters.

Maize and beans were at emergence and flowering stages respectively and in good state as normal yield is expected for beans.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 34.6mm. The average air temperature recorded was 27.5^{0}C. There was no report on sunshine duration and Pan Evaporation.

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

2.5.2 Mtwapa

The station received rainfall amount of 90.4mm. The average air temperature recorded was 27.5^{0}C. There was no report on Sunshine duration and Pan Evaporation.

Maize was still 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

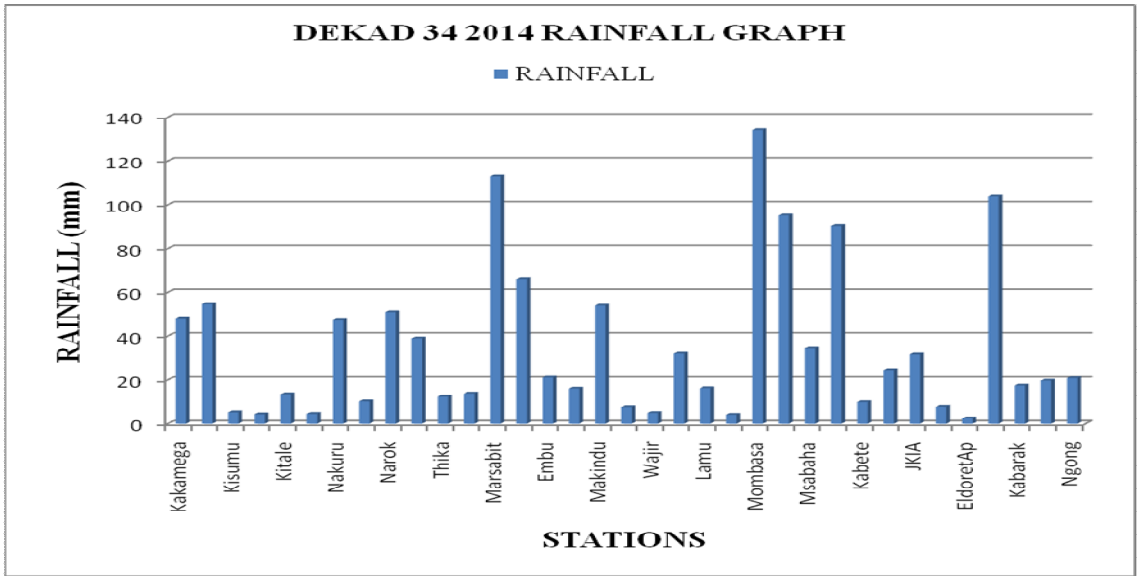

Figure 3.1: Dekadal rainfall totals for 01 - 10 DECEMBER 2014

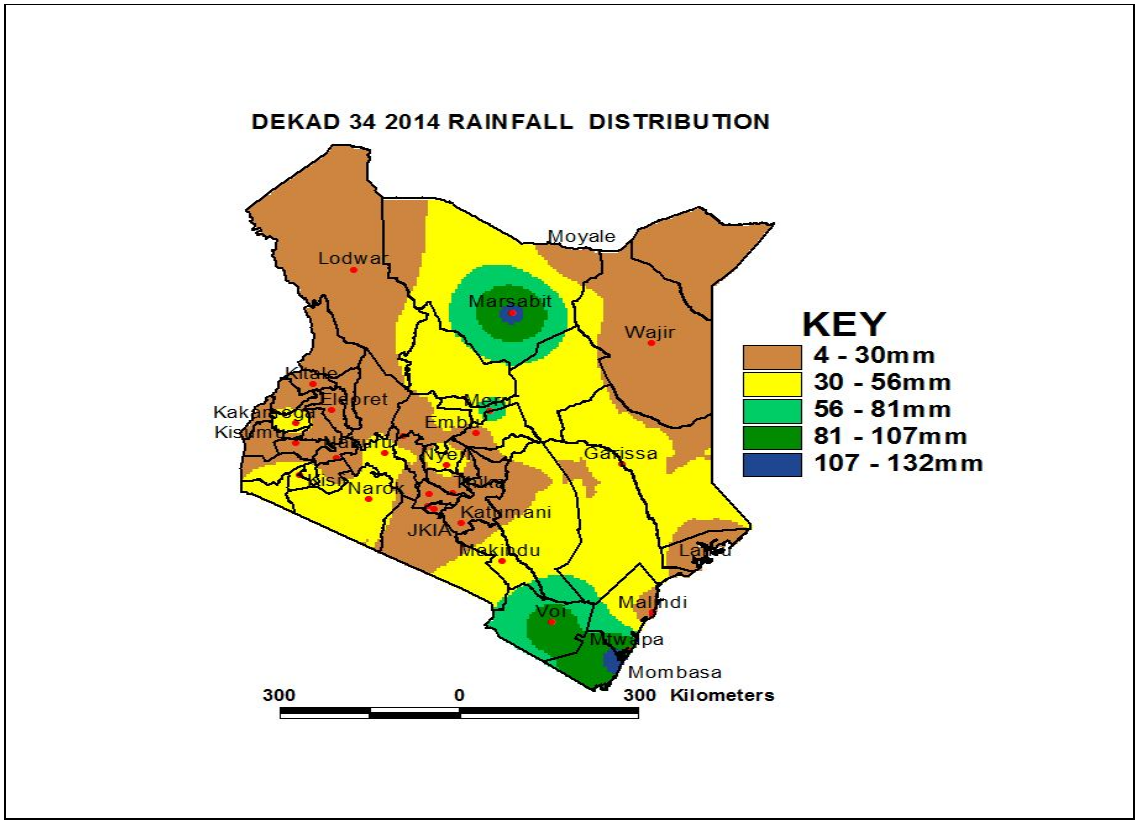

Figure 3.2: Dekadal rainfall distribution for dekad 34, 2014

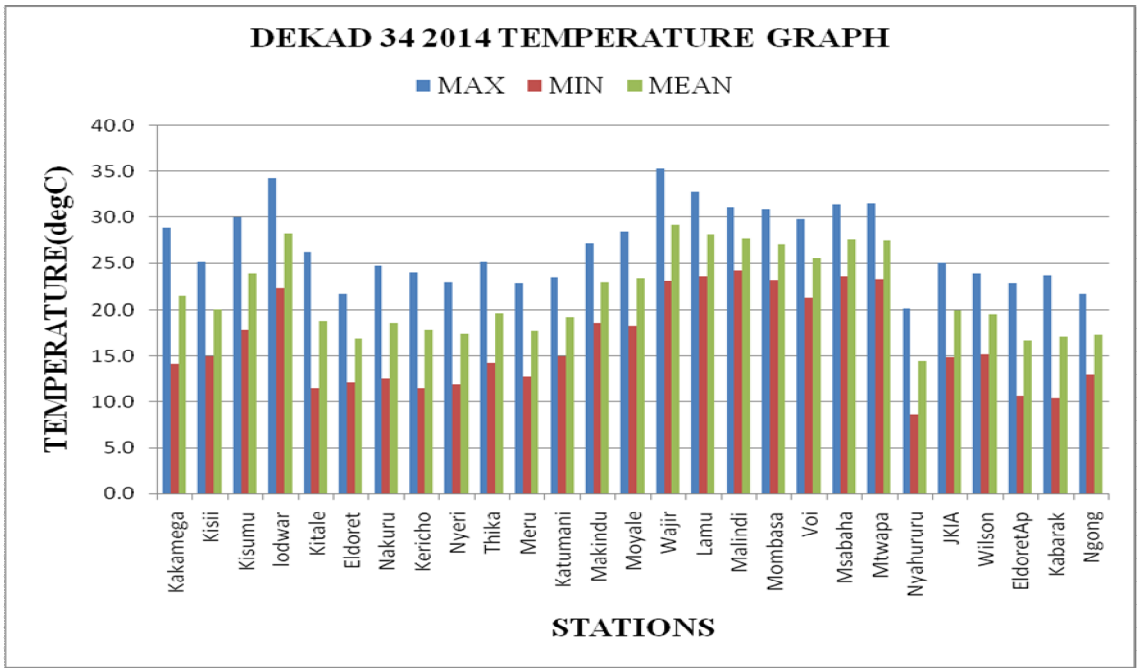

Figure 3.3: Maximum, Minimum and Average temperature for dekad 34, 2014.

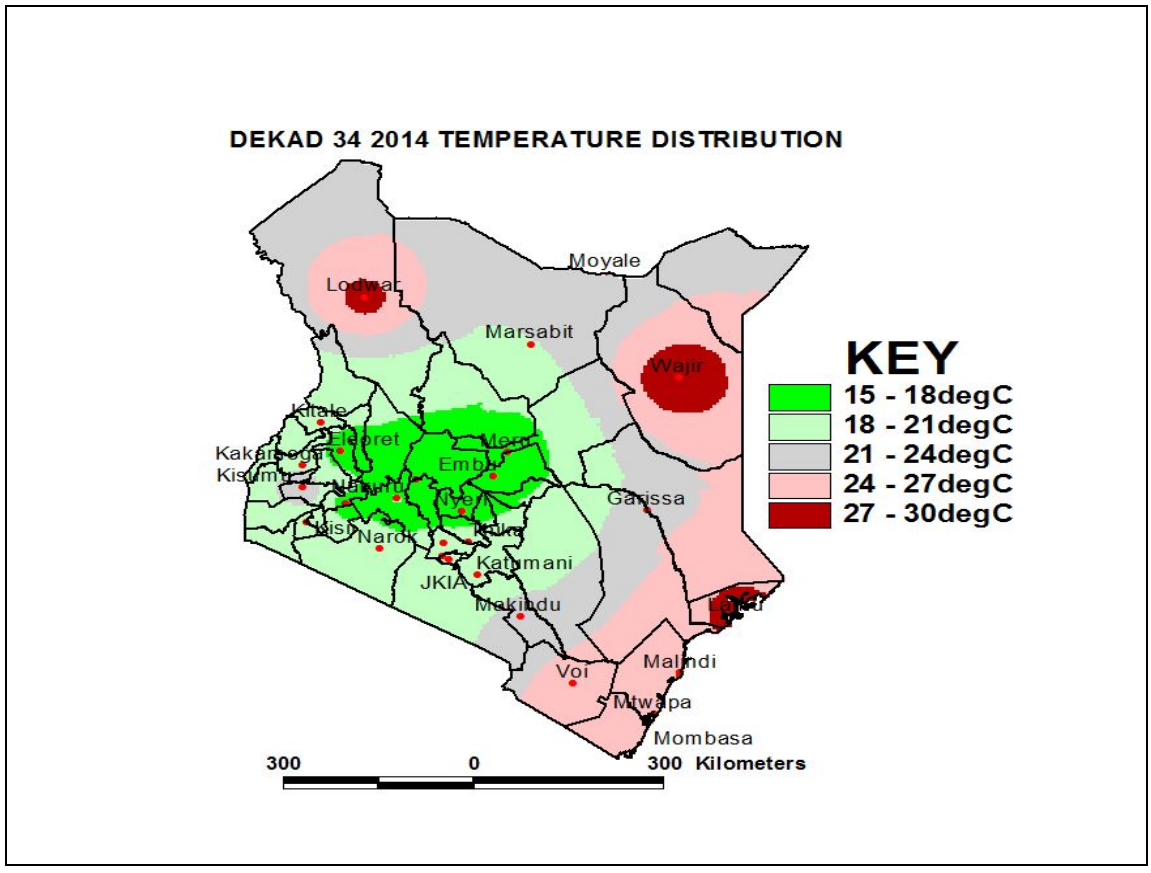

Figure 3.4: Mean temperature distribution for dekad 34, 2014

EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 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 sunny intervals in the morning throughout the forecast period. Showers and thunderstorms are expected in the afternoon/evening over few places throughout the forecast period.

  The afternoon/evening 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 the entire day throughout the forecast period.

  The sunny condition will deprive the soil with moisture thereby reducing the growth of pasture and vegetation hence affecting 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 giving way to sunny intervals throughout the forecast period. Afternoon/evening showers over few places are expected throughout the forecast period.

  The afternoon/evening showers will replenish soil moisture that will benefit the crops like maize that is in emergence stage in places like Nyeri, Embu etc.

- ***N*ortheastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to experience sunny intervals the entire day throughout the forecast period.

  The sunny condition will affect 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 sunny intervals the entire day throughout the forecast period. There is a likelihood of occasional showers in the afternoons.

  The occasional afternoon showers are of great benefit to maize and beans crops that are in the emergence and flowering stages respectively 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 morning showers over few places throughout the forecast period. Afternoons are expected to experience sunny intervals for the entire period.

  The morning 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 and

to the development of mangoes that are in flowering and fruit setting stages in the region

.

For feedback or further guidance, Contact:
Director,
Kenya Meteorological Services,
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