WEATHER AND CROP REVIEW FOR DEKAD 35, 2014
11-20 DECEMBER, 2014

HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was a decrease in both rainfall intensity and spatial distribution over the country during the dekad. The highest rainfall was experienced over Nyanza region with Kisumu station recording 71.9mm compared to 134.1mm reported at Mombasa station in coastal region in the previous Dekad. The second highest rainfall was received in Rift Valley region with Kericho station recoding 25.4mm. In Eastern region Makindu station received the highest rainfall of 24.2mm. In central region, Nyahururu station reported the highest amount of rainfall of 18.4mm. Mombasa station in Coastal region received the highest rainfall amount of 12.0mm. In Nairobi region, JKIA recorded the highest rainfall amount of 7.6mm.Kakamega station reported the highest rainfall of 3.9mm in Western Region. Garissa station in North Eastern region reported the highest rainfall amount of 1.6mm.

During the review period, both Maximum and Minimum temperatures in most stations increased like in the previous dekad where they were on an increasing trend. Lodwar station in North-Eastern region reported the highest temperature of 36.3^{0}C compared to 35.9^{0}C at the Wajir station in the same region in the previous dekad. The lowest Minimum temperature of 8.7^{0}C was recorded at Nyahururu station in central region compared to 8.6^{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 35:11 -20 DECEMBER, 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded a decrease in rainfall amount of 3.9mm compared to 48.1mm in the previous dekad. The mean air temperature and pan evaporation reported were 22.1^{0}C and 4.6mm respectively. There was no report on Sunshine duration.

No phenological report.

2.1.2 Kisii

The station reported rainfall amount of 16.7mm compared to 54.6mm recorded in the previous dekad. The mean air temperature and Pan Evaporation recorded were 21.2^{o}C and 2.9mm 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 a decrease in rainfall amount of 0.01mm as compared to 13.5mm recorded in previous dekad. The mean air temperature and Pan Evaporation were 19.2 ^{o}C and 3.7mm respectively. There was no report on sunshine duration.

2.2.2 Eldoret-Kapsoya

The station received no rainfall. The mean air temperature and PanEvaporation recorded were 17.1^{o}C and 5.7mm respectively. There was no record on sunshine duration.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 0.6mm. The average air temperature was 18.2^{0}C. There was no report on pan evaporation and sunshine parameters

Maize was at 9th leaf stage and in fair state though having been affected by maize stalk borer. Beans were at flowering stage and in poor state due to insufficient rainfall. Below normal yield is expected for Beans crops.

2.3.2 Kabete

The station recorded rainfall amount of 4.4mm. The sunshine duration reported was 9.2hrs/day. There was no record on average air temperature and report on Pan Evaporation.

Maize and Beans were both at emergence stage and in fair state though having been adversely affected by insufficient rainfall.

2.3.3 Thika

The station recorded rainfall amount of 4.7mm. The mean air temperature and Pan Evaporation recorded were 20.5□C and 4.7mm respectively. There was no report on sunshine duration.

Maize, beans and Potatoes were at emergence, flowering and maturity stages respectively and all in poor state due to insufficient rain. Below normal yield is expected for Beans and Potatoes.

2.3.4 Nyahururu

The station reported rainfall amount of 18.4mm. The mean air temperature and Pan Evaporation recorded were 15.4^{0}C and 5.1mm respectively. There was no report on sunshine duration.

Maize and Potatoes were both at harvest stage and in fair state. Normal yield for both crops is expected.

2.3.5. Dagoretti

The station reported rainfall amount of 6.6mm. Sunshine recorded was 8.9hrs/day while Pan Evaporation was 5.0mm. There was no report on average air temperature.

2.4 EASTERN KENYA REGION

2.4.1 Embu

The station recorded no rainfall. The Pan Evaporation recorded was 4.3mm. There was no report on mean air temperature and sunshine parameters.

M*aize was at emergence stage and in fair state while Beans were at flowering stage and in poor state. Both crops had been adversely affected by insufficient rainfall. Below normal yield is expected for Beans.*

2.4.2 Katumani (Machakos)

The station reported rainfall amount of 16.8mm. The average air temperature reported was 20.0^{0}C. There was no report on pan evaporation and Sunshine parameters.

Maize and beans were at emergence and flowering stages respectively and both in poor state due to insufficient rainfall. Below normal yield is expected for beans.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 0.85mm. The average air temperature and pan Evaporation recorded were 28.1^{0}C and 4.6mm respectively. There was no report on sunshine duration.

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 receive rainfall amount of 3.5mm. The average air temperature and pan Evaporation recorded were 27.4^{0}C and 5.3mm respectively. 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 in fair state.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

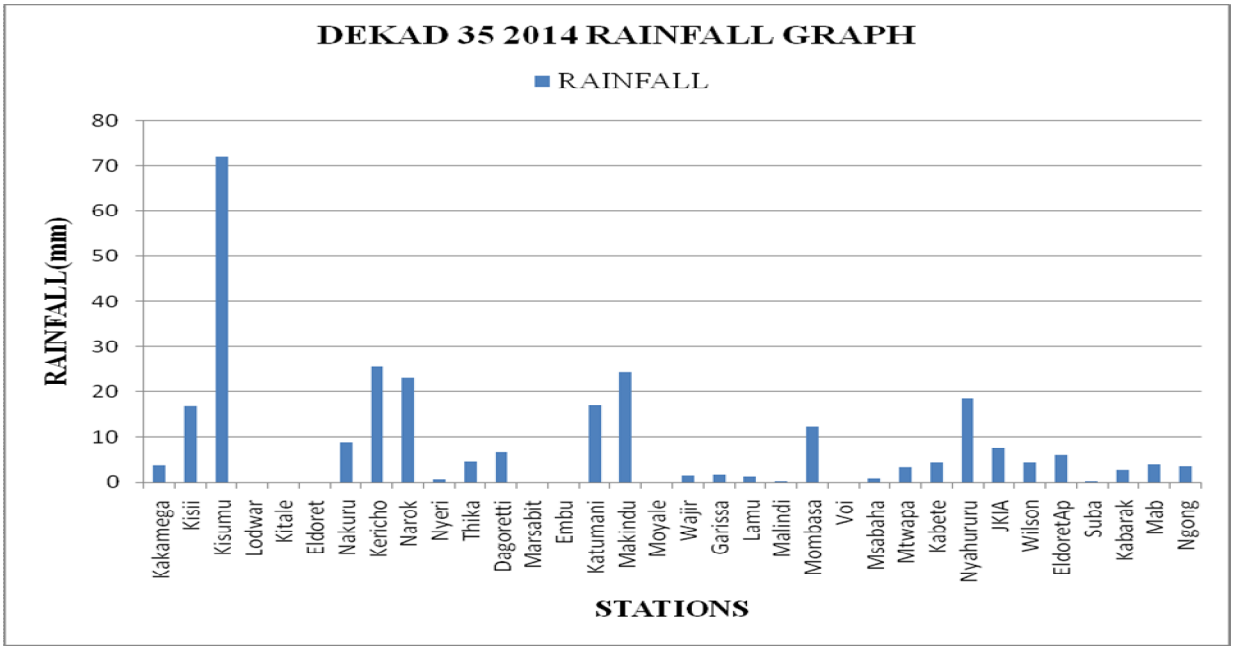

Figure 3.1: Dekadal rainfall totals for 11 - 20 DECEMBER 2014

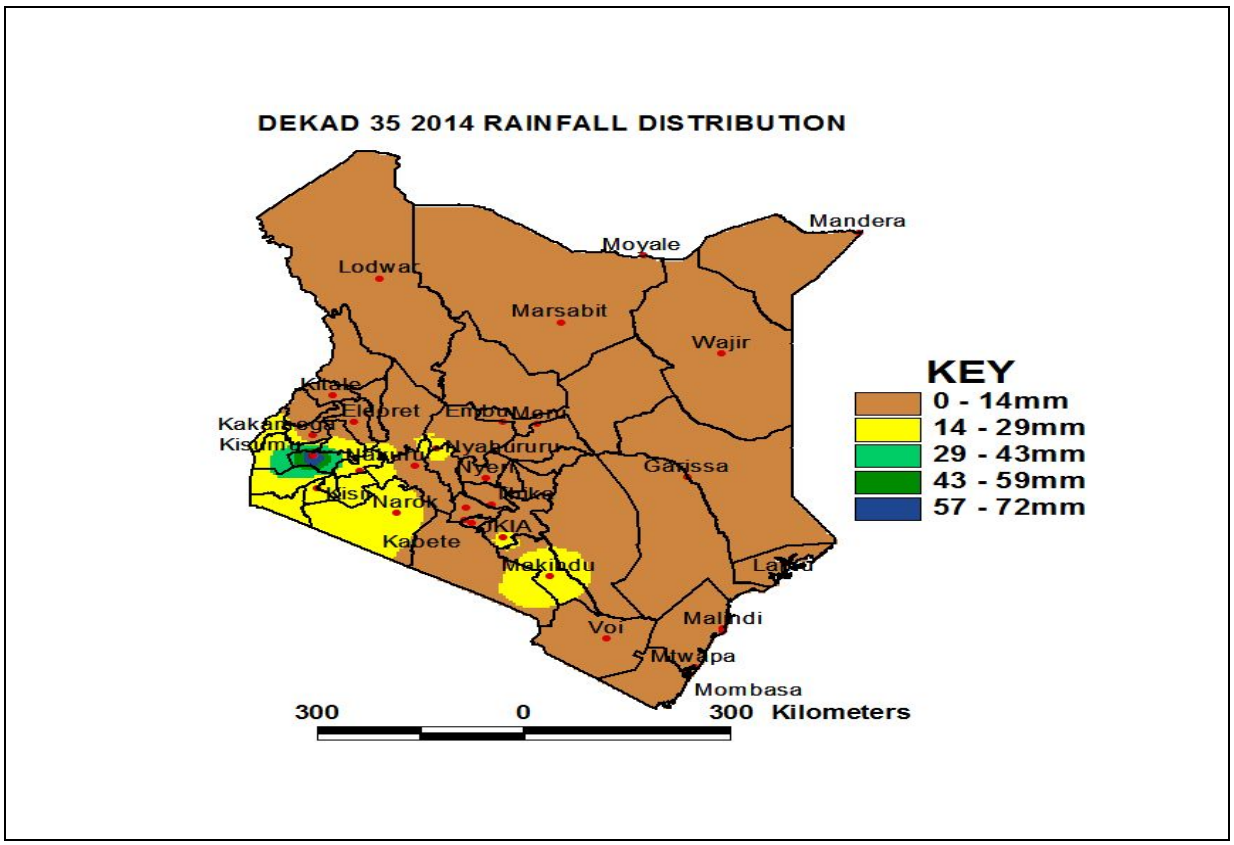

Figure 3.2: Dekadal rainfall distribution for dekad 35, 2014

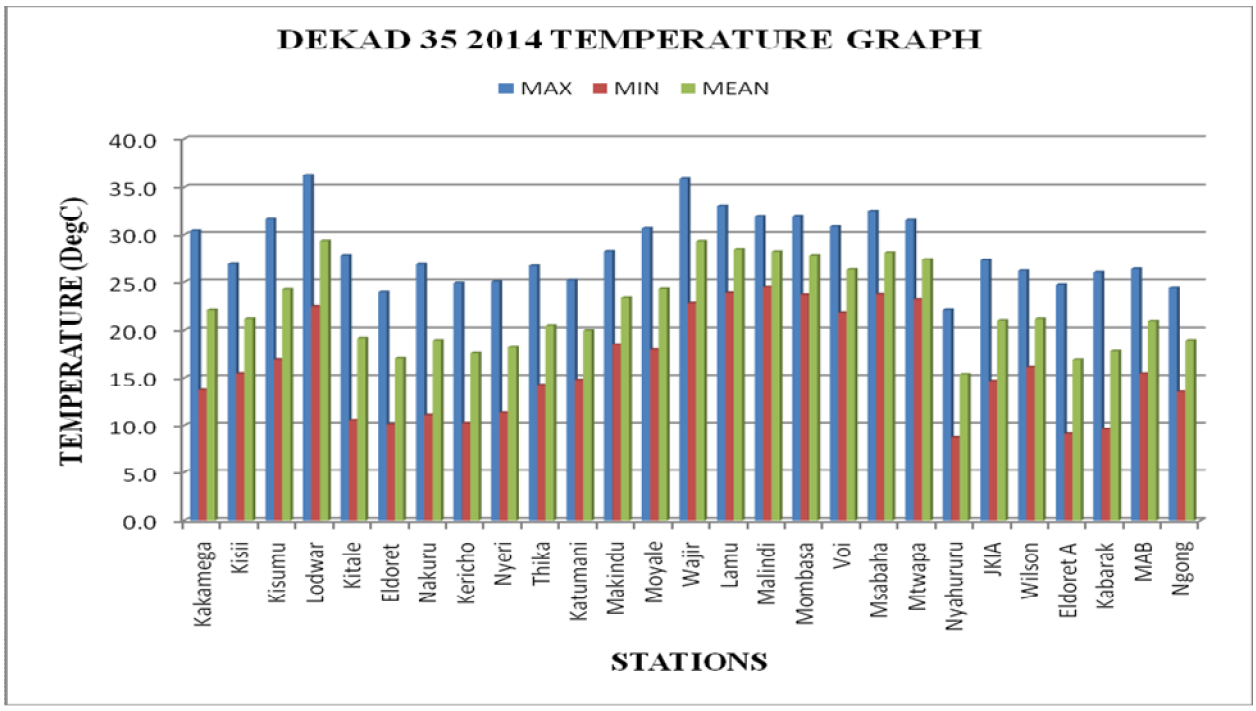

Figure 3.3: Maximum, Minimum and Average temperature for dekad 35, 2014.

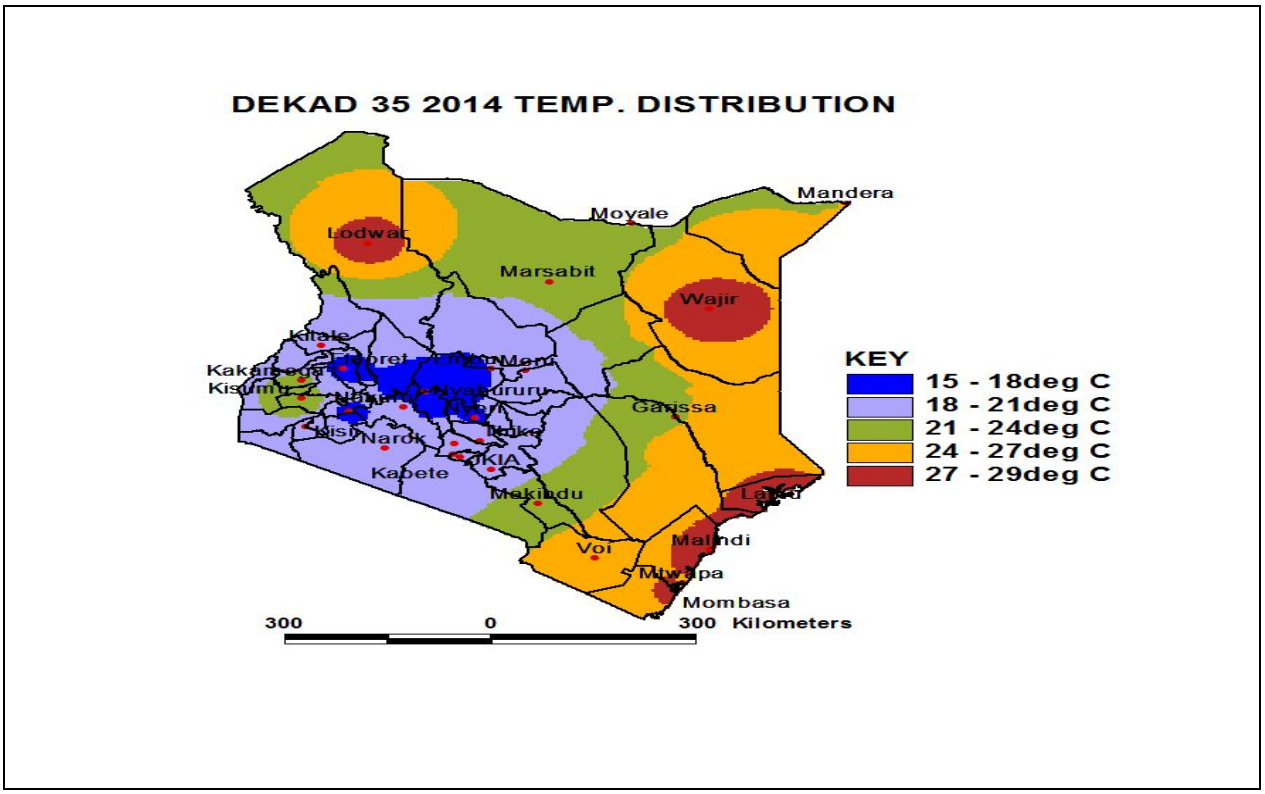

Figure 3.4: Mean temperature distribution for dekad 35, 2014

EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-31 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 mornings , showers and thunderstorms over few places in the afternoon for the first two days of the dekad. Showers and thunderstorms are expected in the afternoon over several places reducing to few places for the remainder of the forecast period.

  The afternoon 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 favor 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 conditions will deprive the soil of 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 sunny intervals in the morning/Afternoon for the first two days and for the next four days will experience rains over few places. Showers are expected over several places in the afternoon/evening reducing to few places and sunny intervals for the remainder of 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 throughout the day for the first two days of the forecast period, rains over few places in the morning to the extreme south and sunny intervals the entire day for the remainder of the forecast period.

  The rainy condition will benefit 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 throughout the day for the first two days and rains over few places in the morning on the following four days with sunny intervals in the afternoon. Showers are expected in the afternoon/evening over several places reducing to few places on seventh day and sunny intervals for the remainder of the forecast period.

  The occasional afternoon showers are of great benefit to maize and bean crops that are in emergence and in 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

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For feedback or further guidance, Contact:
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