KENYA METEOROLOGICAL SERVICE

DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 34, 2013
1-10 DECMBER, 2013

1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country enhanced significantly both in space, intensity and amount compared to the previous dekad. Coastal region received the highest amount of Rainfall countrywide with Voi recording 155.4mm. Wajir station in North Eastern region received the highest amount of rainfall of 10mm. In Central region, Nyahururu station recorded the highest amount of rainfall of 38.9mm. Kakamega station in Western region received the highest amount of rainfall of 61mm which was an increase according to the previous dekad. In Rift Valley region, Kabarak station received the highest amount of rainfall of 45.4mm which was an increase compared to the previous dekad. Eastern region had Katumani station reporting the highest amount of rainfall of 125.6mm. In Nairobi region, Jomo Kenyatta International Airport station received the highest amount of rainfall of 111.2mm; while Kisumu station in Nyanza region reported the highest amount of rainfall of 52.0mm which was a decrease from the previous dekad.

Generally, there was a slight increase in the maximum temperature over the whole country. The highest observed maximum temperature was 36.1^{0}C at Lodwar station. The minimum temperature too decreased slightly in the whole country. Nyahururu station in Central region reported the lowest of 9.4^{0}C compared to the previous dekad where it recorded 9.5^{0}C.

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; 1-10 DECEMBER 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 61mm. The mean air temperature and pan evaporation were 21.1^{0}C and 39.3mm respectively. The sunshine duration was 7.1hrs

Beans harvesting is over in the region.

2.1.2 Kisii

The station recorded rainfall of 8.8mm. The mean air temperature and sunshine duration were 20.5^{0}C and 5.9 hours respectively. Pan evaporation was 31.8mm.

Maize was at the flowering stage while beans were at harvest stage and both crops are doing fairly well.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 2.9mm. The average air temperature and pan Evaporation were 19.1□C and 45.9mm respectively. There was no report on sunshine duration.

No phenological report.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 2.2mm. The average air temperature and pan evaporation reported were 16.6□C and 58.7mm respectively. There was no report on sunshine duration.

Maize harvesting is over in the region.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 17.9mm. The average air temperature was 18.6^{0}C. There was no report on pan evaporation and sunshine parameters.

Maize crop is in the ninth stage and beans in the budding stage.

2.3.2 Kabete

The station recorded 103.6mm of rainfall amount. The average air temperature recorded was 19.9^{0}C. There was no report on pan evaporation and sunshine duration.

Maize and beans were both emergence stage and in a fair state.

2.3.3 Thika

The station received rainfall of 80mm. The mean air temperature and pan evaporation recorded were 20.6^{0}C and 43.5mm respectively. No report on sunshine duration.

Maize, beans and potatoes were all at emergence stage and in fair state..

2.3.4. Nyahururu

The station received 38.9mm of rainfall. The mean air temperature and pan evaporation recorded were 16.9^{0}C and 34.4mm respectively. There was no report on sunshine duration.

Maize was at maturity stage and in a good state while potatoes were at emergence stage and both crops are in fair state. Normal yield in both crops is expected.

2.3.5. Dagoretti

The station received rainfall amount of 82.3mm and mean air temperature of 19.1^{0}C respectively. Pan evaporation and sunshine duration were 38.4mm and 5.3hours respectively.

Maize was at ninth leave stage while beans are at flowering stage. Both crops were at a good state.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported rainfall amount of 32.1mm. The average air temperature and Pan Evaporation were 19.5^{0}C and 34.6mm respectively. The sunshine duration was 6hrs.

Maize and beans are at emergence and flowering stage and both crops are doing fairly well.

2.4.2 Embu

The station recorded rainfall amounts of 12.2mm. The mean air temperature and pan evaporation was 23.3^{0}C and 34.8mm respectively. There was no report on Sunshine duration.

Maize and beans are at emergence and flowering stage and both crops are doing fairly well.

2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 125.6mm. The average air temperature was 23.4^{0}C. There was no report on sunshine duration and pan evaporation.

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

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 30.8mm. The average air temperature and pan evaporation recorded was 20.4^{0}C and 35.8mm respectively. There was no report on sunshine duration.

Maize is at emergence 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 1.7mm. The average air temperature and Pan Evaporation were 23.8^{0}C and 53.7mm respectively. There was no report on sunshine duration.

Maize was at ninth stage and in a poor state due to insufficient rainfall. Mangoes were at flowering stage and in fair state.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

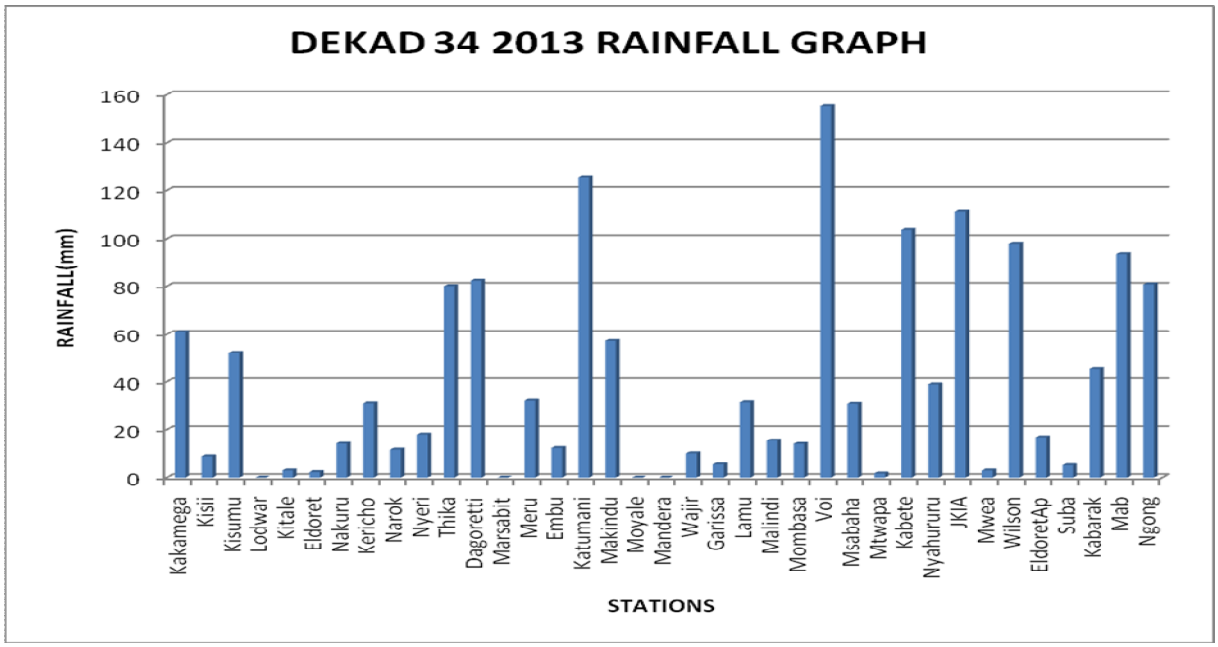

Figure 3.1: Dekadal rainfall totals for 1st to 10th DECEMBER 2013

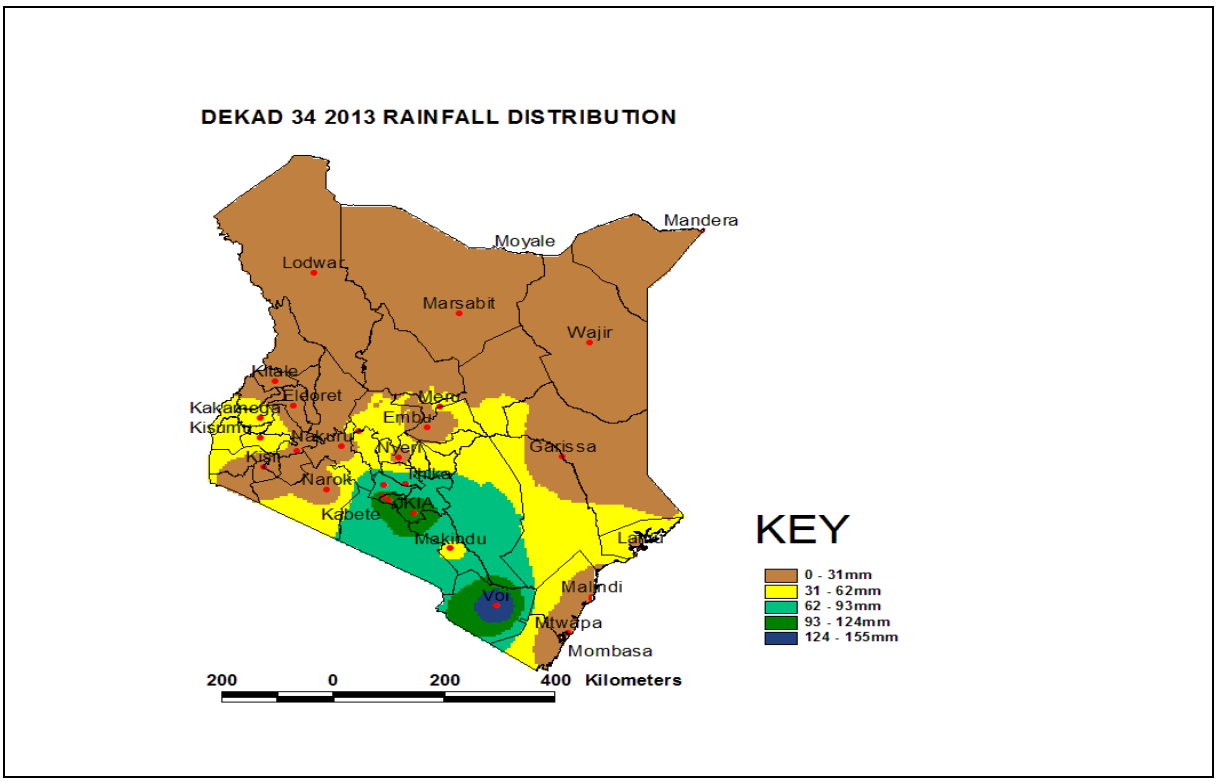

Figure 3.2: Dekadal rainfall distribution for dekad 34, 2013

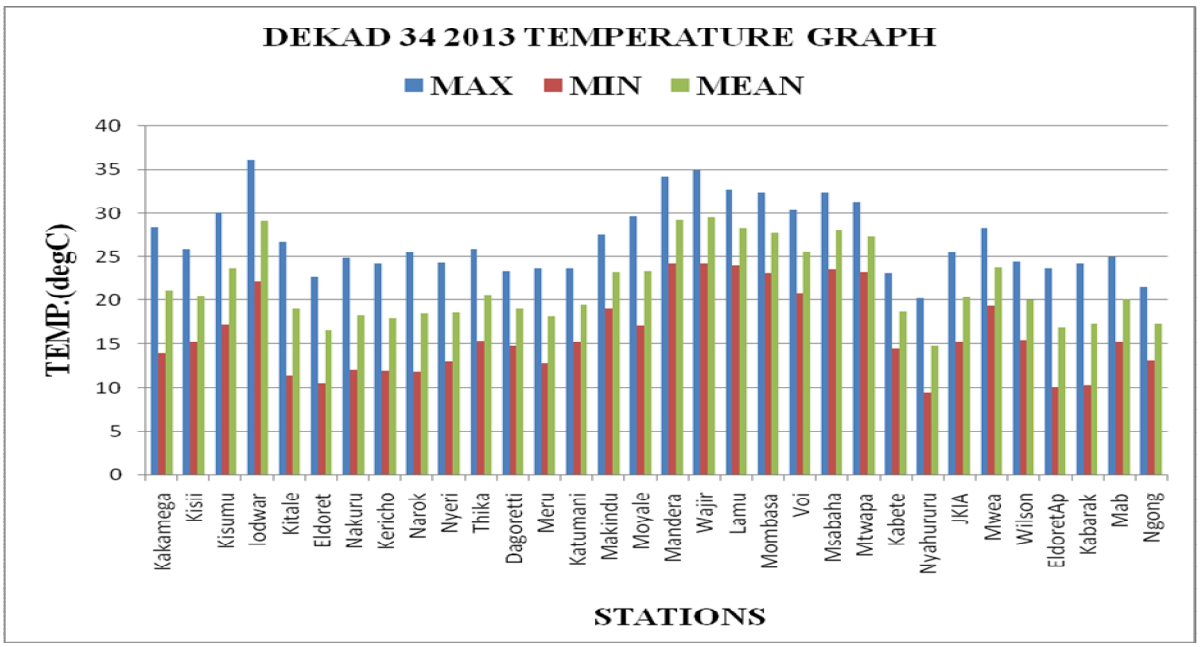

Figure 3.3: Maximum, Minimum and Average temperature in ^{0}C for dekad 34, 2013

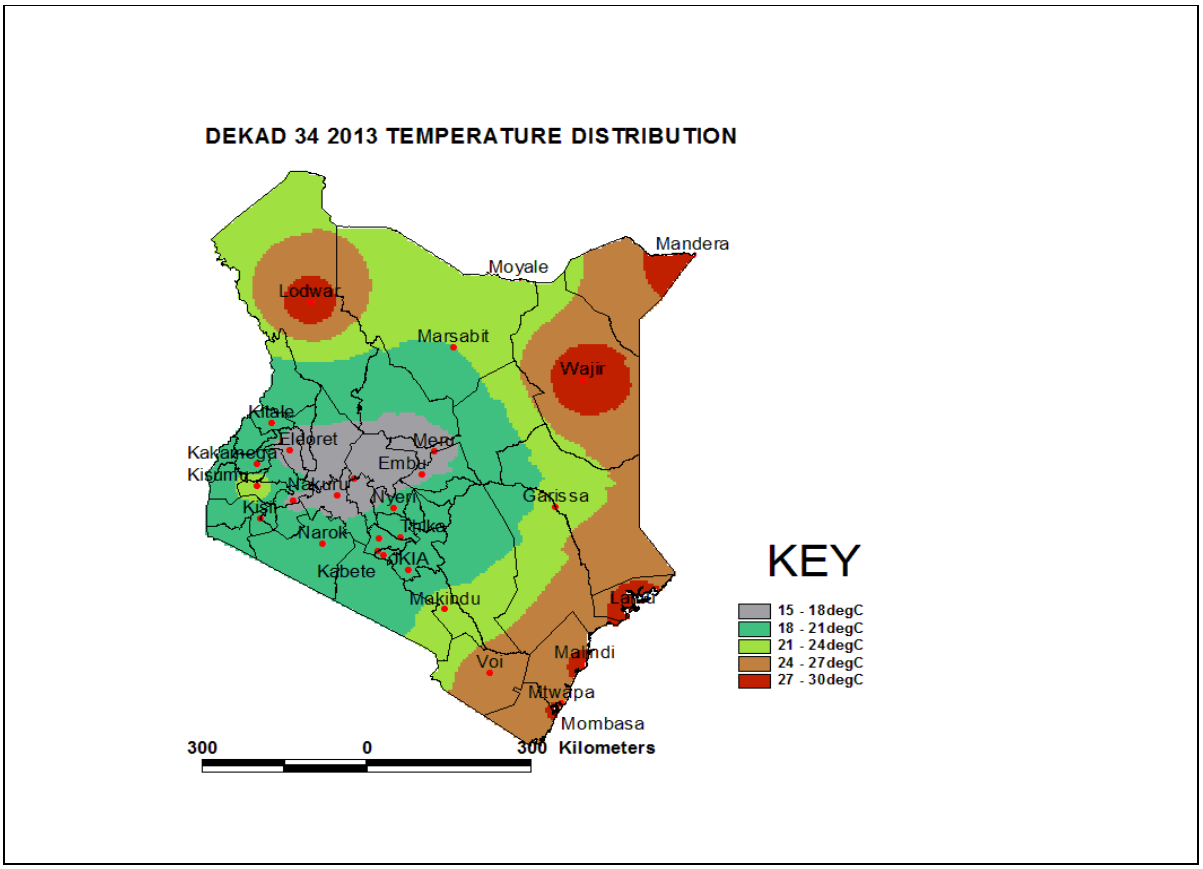

Figure 3.4: Mean temperature distribution for dekad 34, 2013

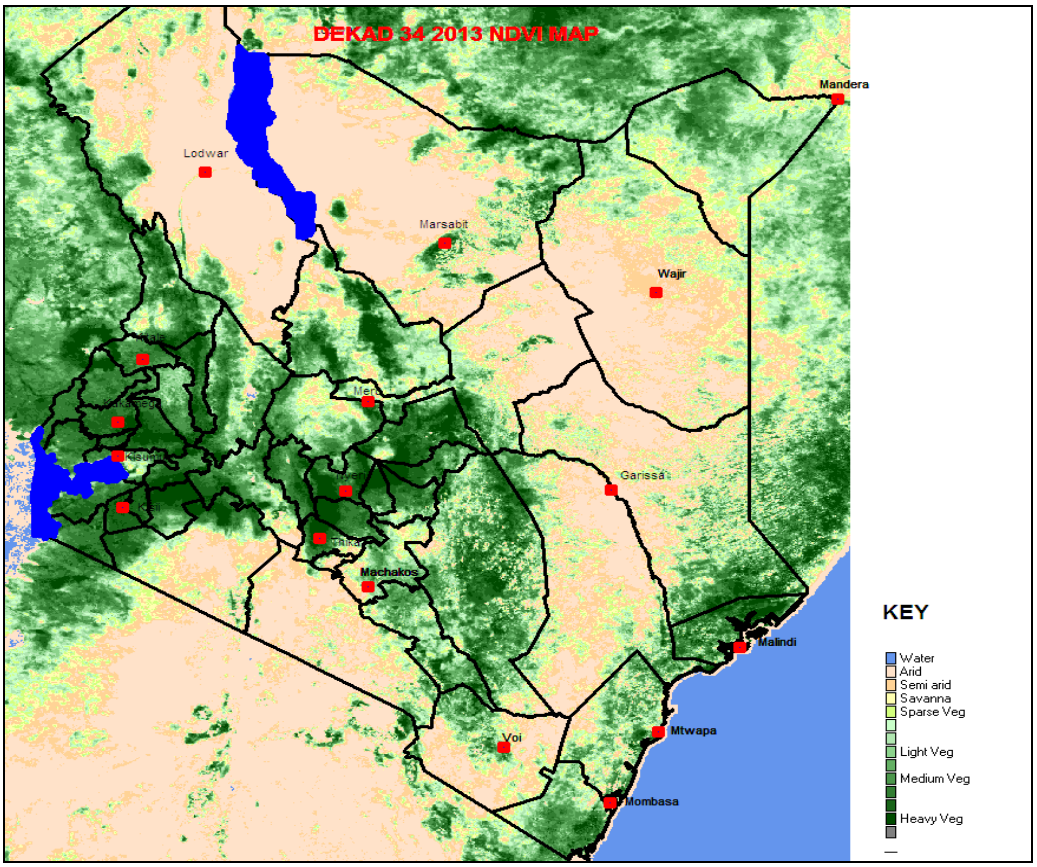

Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 DECEMBER 2013

- **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 during the forecast period. Showers and thunderstorms are likely in afternoons over few places in the entire forecast period.

  The showers are expected to continue improving the state of the crops but have a negative impact in the mature crops in the region.

- ***Over* the Northwestern counties (Turkana, West Pokot and Samburu),** are expected to experience sunny intervals throughout the forecast period.

  The dry period is expected to stress the state of pasture and vegetation conditions in these counties.

- **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu**, **Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga),** are expected to experience early cloudy mornings, breaking into sunny intervals and rains over few places in the afternoon throughout the forecast period.

  The expected showers will enhance the well being of growth of the crops in the region.

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

  The dry condition extended over period is expected to deteriorate the state of pasture and vegetation in these counties.

- **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals in morning and afternoon showers over few places throughout the forecast period.

  The wet weather forecasted will enhance the state of crops, pasture and vegetation in the region.

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

  The wet condition will improve the already emerged crops in the region.

For feedback or further guidance, Contact:
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