

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 12, 2014 21-30 APRIL, 2014

1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country were well distributed during the dekad as in the previous dekad though slightly less in amount but well in space. Eastern region received the highest amount of rainfall countrywide with Embu station recording 35.8mm as compared to 284.8mm recorded at Meru station in the previous dekad. In Western region, Kakamega received the highest amount of rainfall of 45.5mm which was a decrease as compared to the previous dekad. In North Eastern region, Mandera recorded the highest amount of rainfall of 74.9mm. In the Coastal region, Mtwapa station received the highest amount of rainfall of 18.5mm. In Nairobi region, Wilson station received the highest amount of rainfall of 25.9mm which was a decrease as compared to the previous dekad. In Nyanza Suba station recorded 26.1mm of rainfall which was the highest rainfall in the area. In Central region, Nyeri station recorded the highest amount of rainfall of 5.6mm as compared to 154.2mm in the previous dekad.

There was an increase in the maximum temperature country wide. Lodwar station recorded the highest maximum temperature of 37.6°C compared to 36.2°C recorded in the previous dekad. The minimum temperature decreased significantly in most stations countrywide with Nyahururu station in Central region recording the lowest temperature of 7.1°C compared to 8.3°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 12; 21-30APRIL 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded rainfall amount of 17.0mm during the dekad. The mean air temperature is 21.9°C. There was no record on sunshine duration. Pan Evaporation was 45.5mm.

Maize and beans were at emergence stage and in fair state. Weeding is underway.

2.1.2 <u>Kisii</u>

The station recorded rainfall amount of 63.1mm. The mean air temperature and Pan Evaporation were 20.2°C and 32.6mm respectively. No records on Sunshine duration.

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

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station recorded rainfall amount of 13.6mm and the average air temperature was 13.2^{III}C. The Pan Evaporation recorded was 45.1mm. No record on sun shine.

Maize and beans were at emergence stage and in fair state due to insufficient rain.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 0.01mm and the average air temperature reported was 18.7^{III}C. Pan Evaporation was 67.5mm. No record on sun shine.

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

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

The station received rainfall amount of 5.6mm over the dekad. The average air temperature was 18.5°C. There was no report on pan evaporation and sunshine parameters.

Maize was above 9th leaf while beans were at emergence stage and both crops were in fair state though beans have been affected by other insects.

2.3.2 Kabete

The station recorded rainfall amount of 5.3mm over the dekad. The average air temperature and the Pan Evaporation recorded were 18.6°C and 48.3mm respectively. There was no report on sunshine duration.

Both maize and beans crops were at emergence stage and in good condition.

2.3.3 <u>Thika</u>

The station recorded rainfall amount of 0.8mm. The mean air temperature and pan evaporation recorded were 21.3°C and 37.3mm respectively. There was no report on sunshine duration.

Maize is at emergency stage while Potatoes and beans were all at flowering stage. All crops are in excellent state.

2.3.4. <u>Nyahururu</u>

The station received no rainfall during the dekad. The mean air temperature and pan evaporation recorded were 15.4°C and 56.5mm respectively. There was no report on sunshine duration.

Both Maize and potatoes were at emergence stage and in fair state. Lack of rainfall has affected the growth of the crops.

2.3.5. Dagoretti

The station reported rainfall amount of 10.3mm during the dekad. The average air temperature and Pan Evaporation were 19.5°C and 49.3mm respectively. Sunshine duration was 9.4hrs/day.

No phenological report.

2.4 EASTERN KENYA REGION

2.4.1 <u>Meru</u>

The station recorded rainfall amount of 27.3mm. The average air temperature and Pan Evaporation recorded were 18.6°C and 46.3mm respectively while the sunshine record was 10.0hrs/day.

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

2.4.2 <u>Embu</u>

The station reported rainfall amount of 35.8mm. Pan Evaporation was 46.8mm while the mean Air Temperature was14.8°C. No report on the Sunshine duration.

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

2.4.3 Katumani (Machakos)

The station received no rainfall during the dekad. The average air temperature reported was 19.8°C. There was no report on pan evaporation and Sunshine duration.

Both maize and beans were at flowering stage and in poor state due to insufficient rainfall. Below normal yield is expected.

2.5. COASTAL REGION

2.5.1 Msabaha

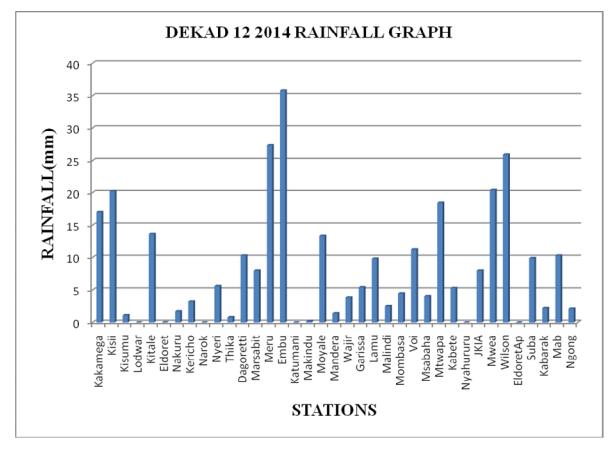
The station received rainfall amount of 4.0mm. The average air temperature and Pan Evaporation recorded was 29.6°C and 57mm respectively. There was no report on sunshine duration.

Most farmers have completed planting but there is insufficient rainfall.

2.5.2 Mtwapa

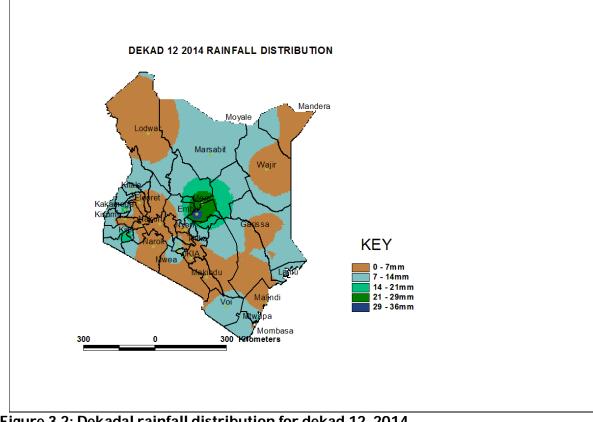
The station received rainfall amount of 18.5mm. The average air temperature recorded was 28.0°C while Pan Evaporation was 58.5mm. There was no report on sunshine duration.

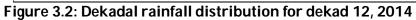
Maize was at emergence stage while Mangoes were at flowering stage. Both crops were in good state. Normal yield for mangoes is expected.



3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

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





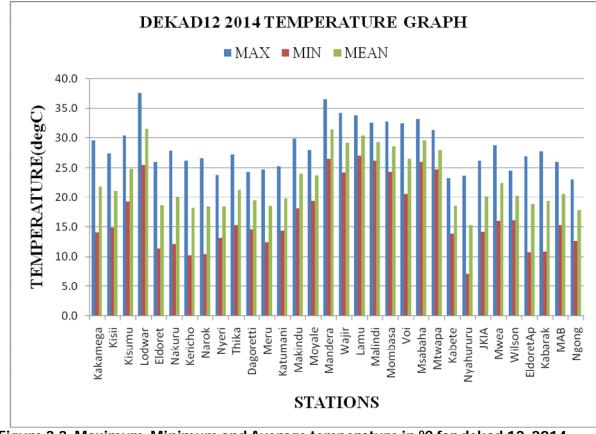


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 12, 2014

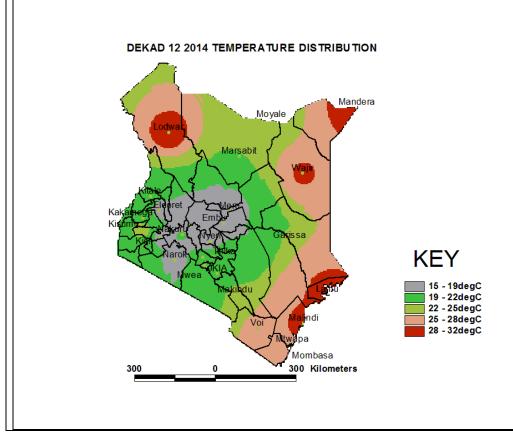


Figure 3.4: Mean temperature distribution for dekad 12, 2014

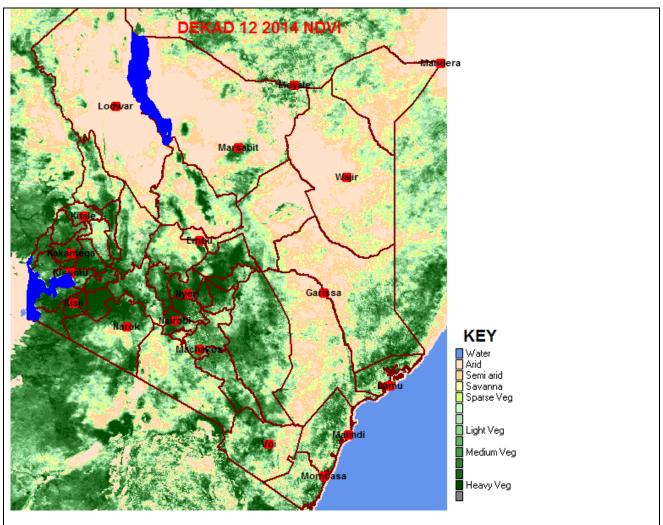


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-30 APRIL 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 mainly sunny intervals in the morning with rains over few places while from 9th rains over several places giving way to sunny intervals is expected during morning. In the afternoon will expect showers and thunderstorms over several places throughout the dekad.

The rains and showers will be expected to benefit the growth and the development of the crops, which are still mainly in emergence stage.

Over the Northwestern counties (Turkana, West Pokot and Samburu), Sunny conditions are expected in the morning throughout the forecast period. In the afternoon, sunny intervals are expected up to 9th while on 10th showers and thunderstorms over few places will be expected.

The afternoon showers are expected to improve the state of 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 giving way to sunny intervals at the beginning of the forecast while in the afternoon, showers over several places towards the end of the forecast period are expected.

The expected showers will continue to enhance the state of the crops and vegetation in the region.

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

The expected morning rains during the dekad will enhance the state of pasture and vegetation in this region.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience cloudy mornings with rains over few places giving way to sunny intervals to the 7th day thereafter will experience cloudy early mornings giving way to sunny intervals. We expect to have afternoon showers over few places from the 8th day towards the end of the forecast period.

The wet conditions expected will regenerate the crops, pasture and vegetation in the region.

- In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), is expected to experience showers over several places in the morning while in the afternoon we expect mainly sunny intervals giving way to showers over few places throughout the forecast period.
- The showers may have a positive impact on the crops which are still in the emergence state in this 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

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