

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 7, 2014 1-10 MARCH, 2014

# 1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country tended for increment as compared to the previous dekad. Eastern Region received the highest amount of rainfall countrywide with Mwea station recording 47.7mm as compared to 53.7mm recorded in Kisii station in Lake region in the previous dekad. In Western and North Eastern regions, there was no rainfall within the dekad. In Rift Valley region, Narok station recorded the highest amount of rainfall of 12.4mm. In the Coastal region, Mtwapa station received the highest amount of rainfall with 37.1mm. In Nairobi Dagoretti received the highest amount of rainfall of 6.6mm and in Lake region, Suba station recorded 23.1mm. In Central region, Thika station recorded the highest amount of rainfall of 5.2mm

There was a general increase in the maximum temperature country wide. Lodwar station recorded the highest maximum temperature of 38.4°C compared to 37.7°C recorded in the Wajir station in the previous dekad. The minimum temperature increased significantly in most stations in the country with Nyahururu station in Central region recording the lowest temperature of 6.9°C compared to 7.5°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 7; 1-10 MARCH 2014

# 2.1 NYANZA AND WESTERN REGIONS

### 2.1.1 Kakamega

The station did not record any rainfall. The mean air temperature was 23.4°C. There were no records on sunshine duration and Evaporation Pan.

### No phenological report

# 2.1.2 <u>Kisii</u>

The station recorded rainfall amount of 8.1mm. The mean air temperature and Pan Evaporation were23.0C and 57.6mm respectively. No records on Sunshine duration.

### No phenological report

## 2.2 RIFT VALLEY REGION

## 2.2.1 Kitale

The station did not record any rainfall. There were no records of average air temperature and sunshine duration. The Van Evaporation record was 61.5mm.

No phenological report.

# 2.2.2 Eldoret-Kapsoya

The station received no rainfall during the dekad. The average air temperature and pan evaporation reported were 18.9<sup>°</sup>C and 82mm respectively. There was no report on sunshine duration.

No phenological report.

# 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

# 2.3.1 <u>Nyeri</u>

The station received rainfall amount of 1.8mm over the dekad. The average air temperature was 19.4°C. There was no report on pan evaporation and sunshine parameters.

Maize crop was at the wax ripeness stage and in failure state due to insufficient rainfall with below normal yield being expected.

# 2.3.2 Kabete

The station recorded rainfall amount of 4.2mm over the dekad. The average air temperature recorded was 19.6°C. There was no report on sunshine duration and the Pan Evaporation was 61mm.

Maize was at flowering stage and in poor state due to insufficient rainfall. Below normal yield is expected.

# 2.3.3 Thika

The station recorded rainfall amount of 5.2mm. The mean air temperature and pan evaporation recorded were 22.3°C and 57.8mm respectively. There was no report on sunshine duration.

Maize was at harvest stage and in poor state as it had been adversely affected by insufficient rainfall. Below normal yield is expected for the crop.

### 2.3.4. <u>Nyahururu</u>

The station recorded rainfall amount of 0.2mm. The mean air temperature and pan evaporation recorded were 15.6°C and 71.7mm respectively. There was no report on sunshine duration.

No phenological report.

### 2.3.5. Dagoretti

The station reported rainfall amount of 6.6mm during the dekad. The average air temperature and Pan Evaporation were 20.6°C and 62.6mm respectively. No report on sunshine duration.

Maize had been disposed at their wax ripeness stage.

# 2.4 EASTERN KENYA REGION

### 2.4.1 <u>Meru</u>

The station recorded no rainfall. The average air temperature and Pan Evaporation recorded were 18.9°C and 57.5mm respectively. No report on Sunshine duration.

Maize and was at maturity stage and in fair state with below normal yield being expected.

#### 2.4.2 <u>Embu</u>

The station reported rainfall amount of 24.9mm. There was no report on Temperature, Van Evaporation and Sunshine duration respectively.

Maize was at maturity stage and in fair state with below normal yield being expected.

#### 2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 16.4mm. The average air temperature reported was 22.1°C. There was no report on pan evaporation and Sunshine duration.

Maize was at harvesting stage and in poor state due to adverse effect by too much sun. Below normal yield is expected for the crop.

#### 2.5. COASTAL REGION

#### 2.5.1 Msabaha

The station received rainfall amount of 1.3mm. The average air temperature and Pan Evaporation recorded was 28.8°C and 55.3mm respectively. There was no report on sunshine duration.

Mangoes were at 100% fruit setting stage and in good state.

#### 2.5.2 <u>Mtwapa</u>

The station received rainfall amount of 37.1mm. The average air temperature recorded was 28.1°C. There was no report on sunshine duration and Pan Evaporation.

Mangoes were at flowering stage and in good state.

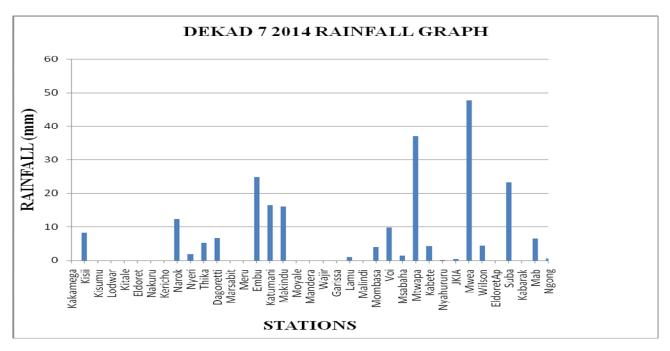


Figure 3.1: Dekadal rainfall totals for 1<sup>st</sup> to 10<sup>th</sup> March 2014

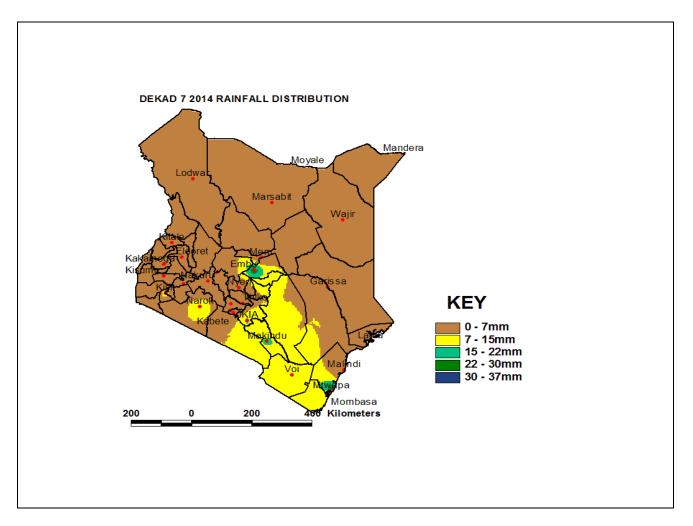


Figure 3.2: Dekadal rainfall distribution for dekad 7, 2014

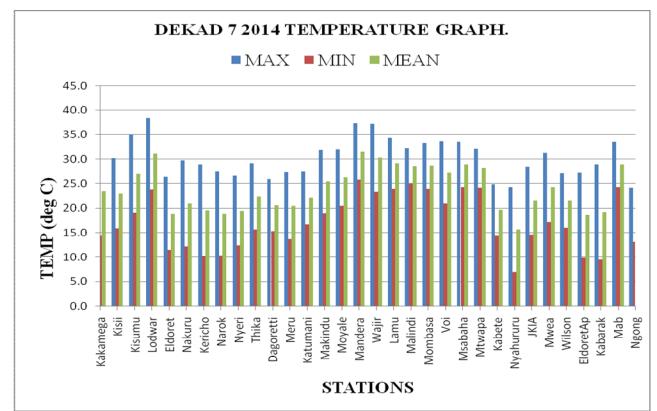


Figure 3.3: Maximum, Minimum and Average temperature in <sup>o</sup>C for dekad 7, 2014

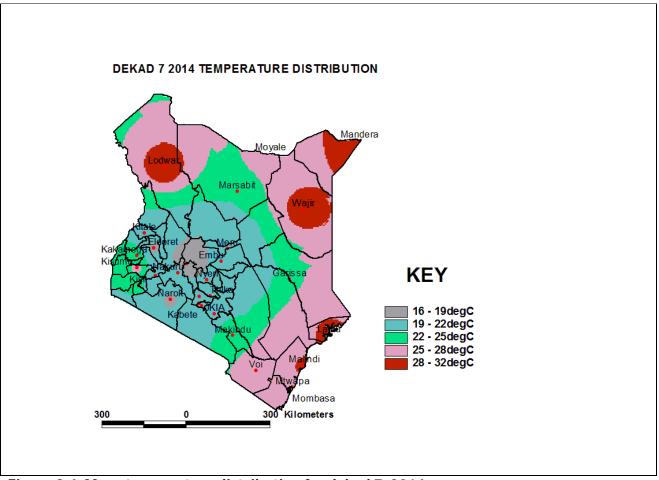


Figure 3.4: Mean temperature distribution for dekad 7, 2014

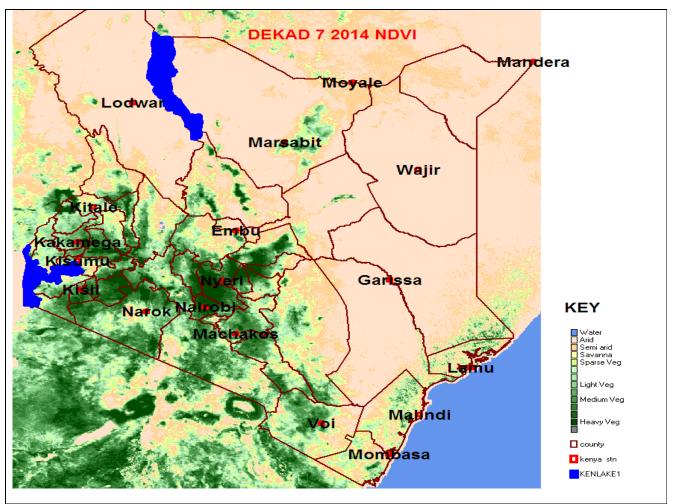


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

# 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 MARCH 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 rains in few places in the morning during the first few days and the rest other days would be sunny interval. In the afternoons, there would be showers and thunderstorms interchanging with sunny intervals throughout the forecast period.

The afternoon showers will continue to improve the state of the crops and the vegetation, which are still in farms in the region.

Over the Northwestern counties (Turkana, West Pokot and Samburu), Rains over few places in the morning in the first few days and sunny intervals for the rest of forecast period. In the afternoons, expect mainly sunny intervals with showers and thunderstorms over few places throughout the forecast period. The wet condition is expected to resurrect then 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 mainly cloudy early morning with rains over few places giving way to sunny intervals throughout the forecast period. In the afternoons, sunny intervals, showers and thunderstorms are expected over several places throughout the forecast period.

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 rains over few places coupled with sunny intervals throughout the day during the forecast period.

This dry condition will continue to worsen 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 breaking into sunny intervals in the morning session over the forecast period and during the afternoon session showers over few places giving way to sunny intervals throughout the forecast period.
- The wet conditions forecasted 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 mainly showers over few places, giving way to sunny intervals during the morning session and sunny intervals in the afternoon throughout the forecast period.
- The showers expected will have a refreshing impact on the crops 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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