

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 28, 2014 01-10 OCTOBER, 2014

# 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was a decrease in rainfall intensity while the spatial distribution increased during the dekad. Msabaha station in coastal region recorded the highest rainfall amount of 107.3mm countrywide compared to 120.2mm reported in Nyanza region at Kisii station during the previous dekad. The second highest rainfall amount of 75.8mm was recorded in Western region at Kakamega station. Kitale station in Rift valley region recorded the highest rainfall amount of 68.4mm. In Nyanza region, Kisumu station reported the highest rainfall amount of 60.6mm. Dagoretti station in Nairobi region received the highest rainfall amount of 38.9mm. In Central region, Nyeri station reported the highest rainfall amount of 32.4mm. Mandera station in North-eastern region recorded the highest rainfall amount of 29.3mm while in Eastern region; Embu station received the highest rainfall amount of 22.5mm.

Both maximum and minimum temperatures continued on an increasing trend. North Eastern region still recorded the highest maximum temperature of 36.0°C at Lodwar station. Nyahururu station in Central region continued to record the lowest minimum temperature of 6.9°C compared to 5.7°C 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 28; 01-10 OCTOBER 2014

#### 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station recorded a decrease in rainfall amount of 75.8mm compared to 105.4mm in the previous dekad. The mean air temperature and Pan Evaporation were 21.0°C and 4.1mm respectively. There was no report on Sunshine duration.

Beans were at flowering stage and in good state with normal yield expected.

# 2.1.2 <u>Kisii</u>

The station reported a drastic decrease in rainfall amount of 53.7mm compared to 120.2mm recorded in the previous dekad. The mean air temperature and Pan Evaporation were 20.3°C and 3.3mm respectively. There was no record on Sunshine parameter.

Maize and beans crops were still at emergence and flowering stages respectively and in fair state. Most farmers are weeding their farms.

## 2.2 **RIFT VALLEY REGION**

## 2.2.1 Kitale

The station recorded rainfall amount of 68.4mm. Pan Evaporation recorded was 4.0mm. There was no report on mean air temperature and sunshine duration.

Maize harvesting is still in progress.

#### 2.2.2 Eldoret - Kapsoya

The station recorded rainfall amount of 32.4mm. The mean air temperature and Pan Evaporation recorded were 17.9°C and 5.1mm respectively. There was no record on sunshine duration.

Maize was at maturity stage and in poor state. Below normal yield is expected.

## 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

#### 2.3.1 Nyeri

The station received rainfall amount of 32.4mm. The average air temperature was 19.4°C. There was no report on pan evaporation and sunshine parameters

Planting for the short rains is in progress.

## 2.3.2 Kabete

The station recorded rainfall amount of 29.5mm. There was no mean air temperature, Pan Evaporation and sunshine parameter.

Farmers have prepared their farms and are waiting for the short rains.

#### 2.3.3 Thika

The station recorded rainfall amount of 5.6mm. The mean air temperature and Pan Evaporation recorded were 22.0°C and 4.2mm respectively. There was no report on sunshine duration.

Farmers are awaiting onset of the short rains.

#### 2.3.4. Nyahururu

The station reported rainfall amount of 15.3mm. The mean air temperature and Pan Evaporation recorded were 14.8°C and 4.7mm respectively. There was no report sunshine duration.

Maize was still at flowering stage and in fair state. Potatoes were also at flowering stage and in fair state hence normal yield for both crops is expected.

#### 2.3.5. Dagoretti

The station reported rainfall amount of 38.9mm. The average air temperature and pan evaporation recorded were 20.1°C and 4.3mm respectively. There was no Sunshine report.

No report on phenological observations.

# 2.4 EASTERN KENYA REGION

## 2.4.1 <u>Meru</u>

The station recorded rainfall amount of 5.0mm. The average air temperature and Pan Evaporation recorded were 20.2°C and 5.6mm respectively. There was no Sunshine duration reported.

Some farmers have started planting while others are still preparing their land.

## 2.4.2 <u>Embu</u>

The station recorded rainfall amount of 22.5mm. Pan Evaporation recorded was 4.0mm. There was no mean air temperature and sunshine report.

Land preparation is still underway for the OND season.

# 2.4.3 Katumani (Machakos)

The station reported rainfall amount of 2.4mm. The average air temperature reported was 20.8°C. There was no report on pan evaporation and Sunshine duration.

No phenological report.

# 2.5. COASTAL REGION

## 2.5.1 <u>Msabaha</u>

The station received rainfall amount of 107.3mm. The average air temperature recorded was 26.6°C. There was no report on Pan Evaporation and sunshine duration.

Maize was 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 66.6mm. The average air temperature and Pan evaporation reported were 25.8°C and 4.2mm respectively. There was no report on Sunshine duration.

Mangoes were still at flowering stage and in good state. Land preparation is still is underway.

# 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

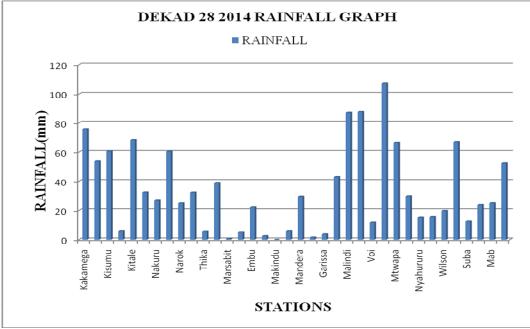


Figure 3.1: Dekadal rainfall totals for 01-10 OCTOBER 2014

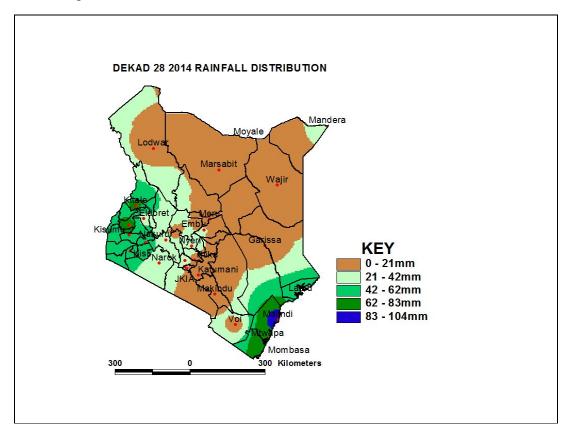


Figure 3.2: Dekadal rainfall distribution for dekad 28, 2014

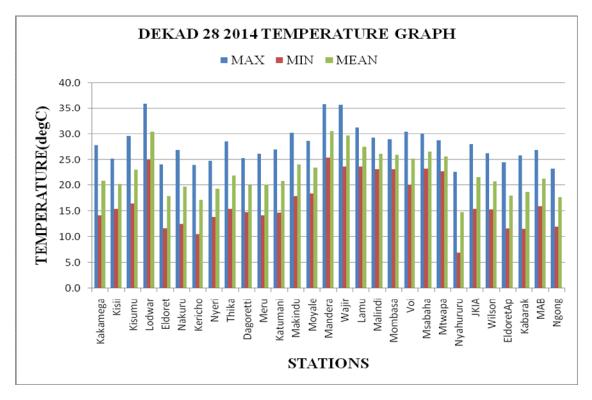


Figure 3.3: Maximum, Minimum and Average temperature for dekad 28, 2014.

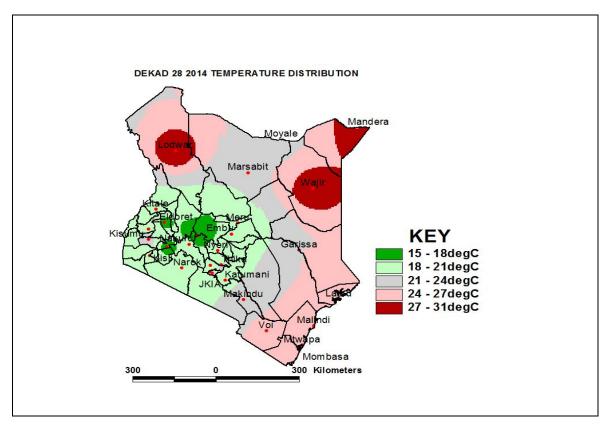


Figure 3.4: Mean temperature distribution for dekad 28, 2014

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 OCTOBER 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 for the entire forecast period with occasional rains over few places while the afternoon/evenings are expected to have showers and thunderstorms over several places throughout the forecast period.

The forecast weather conditions will continue to improve the growth and development of maize and beans currently in their emergence and flowering phenological stages in Kisii and Kakamega and the surrounding areas.

The Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience mainly sunny intervals in the morning and showers over few places in the afternoon throughout the forecast period.

The showers will impact positively on the growth of pasture and vegetation in these regions.

The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience mainly sunny intervals in the morning with occasional morning rains over few places. Afternoon/evening showers are expected over several places for the entire forecast period.

The rains and showers are beneficial to the maize crop in germination stage and potatoes in flowering stages in places like Nyeri and Nyahururu respectively.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience rains over few places in the morning and sunny intervals in the afternoons on the third and fourth days. The last three days are expected to experience morning rains over several places and afternoon showers over few places. The first and second days are expected to experience sunny interval the entire day.

The rains and showers are of great importance to the pasture and vegetation growth in the region.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience sunny intervals in the morning throughout the forecast period and afternoon/evening showers on the last three days.

The showers are of benefit to the pasture and vegetation growth in the region.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience showers in the morning on the last two days of the forecast period, the other days are expected to experience sunny intervals the entire day.

The morning showers are of great importance for the development of mangoes that are in fruit setting and maize in emergence stage in Msabaha.

For feedback or further guidance, Contact: Director, Kenya Meteorological Service, Agrometeorological 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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