

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 26, 11-20 SEPTEMBER, 2015

#### 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was a decrease in both spatial distribution and in the intensity of rainfall activities compared to the last dekad. The highest rainfall countrywide was received in Nyanza region, while the lowest was in Eastern and North-Eastern regions. Kisumu station in Nyanza region reported the highest rainfall amount of 120.1mm compared to 89.0mm recorded in Nakuru station in the Rift valley region in the previous dekad. In Western region, Kakamega station received the second highest rainfall amount of 34.5mm. In Rift Valley region, the highest rainfall amount of 26.5mm was received at Kericho station. Dagoretti station in Nairobi region reported the highest rainfall amount of 9.3mm. Mombasa station in the Coastal region, recorded the highest rainfall amount of 6.2mm. Nyahururu station in Central region, received the highest rainfall amount of 4.1mm. In Eastern region the highest rainfall amount of 0.02mm was received in Meru station, while North Eastern region reported the highest rainfall amount of 0.01mm in Wajir station.

Both Maximum and Minimum temperatures remained on an increasing trend. Mandera station in North-Eastern region reported the highest maximum temperature of  $37.0\,^{\circ}\text{C}$  compared to  $36.1\,^{\circ}\text{C}$  recorded in Lodwar station in the same region in the previous dekad. Nyahururu station in Central region continued to report the lowest minimum temperature of  $5.2\,^{\circ}\text{C}$ .

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 26: 11-20 SEPTEMBER, 2015

## 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station recorded rainfall amount of 26.5mm during the dekad. The mean air temperature and total Pan Evaporation reported were 21.9°C and 42.5 mm respectively. There was no report on sunshine parameter.

Planting of crops is underway.

#### **2.1.2** Kisii

The station received total rainfall amount of 21.7mm. The mean air temperature and total Pan Evaporation recorded were 21.8°C and 41.2mm respectively. There was no report on sunshine duration.

Most farmers have planted their crops and some are still preparing their farms.

#### 2.2 RIFT VALLEY REGION

## 2.2.1 Kitale.

The station reported total rainfall amount of 21.6mm. The mean air temperature and total Pan Evaporation recorded were 19.7°C and 38.1mm respectively. There was no report on sunshine parameter.

Maize was at harvest stage and in good state, hence normal yield is expected.

## 2.2.2 Eldoret-Kapsoya

The station reported rainfall amount of 48.8mm. The mean air temperature and total Pan Evaporation recorded were 17.4°C and 23.5mm respectively. There was no report on sunshine parameter.

Maize was at flowering stage and in fair state with normal yield expected.

## 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

## 2.3.1 **Nyeri**

The station received total rainfall amount of 0.2mm. The average air temperature was 19.0°C. There was no report on Pan Evaporation and sunshine parameters.

Harvesting of the crops is almost over and farmers continue with land preparations.

# 2.3.2 Kabete

The station received rainfall amount of 0.02mm. The total Pan Evaporation reported was 46.5mm. There was no report on Mean air Temperature and sunshine parameter

Farmers are preparing their farms for the next season.

## 2.3.3 Thika

The station reported dry conditions. The mean air temperature and total Pan Evaporation recorded was 20.3°C and 54.5mm respectively. There was no report on sunshine duration.

Farmers are still preparing their farms for the next season.

# 2.3.4 Nyahururu

The station reported rainfall amount of 4.1mm. The mean air temperature and total Pan Evaporation recorded were 14.6°C and 43.8mm respectively. There was no report on sunshine parameter.

Maize was at flowering stage and in fair state hence normal yield is expected.

# 2.3.5. <u>Dagoretti</u>

The station received total rainfall amount of 9.3mm. The Mean air Temperature and total Pan Evaporation reported were  $19.3^{\circ}$ C and 44.8mm respectively. There was no report on sunshine hours.

No Phenological report.

#### 2.4 EASTERN KENYA REGION

# 2.4.1 Embu

The station received total rainfall amount of 0.01mm. Total Pan Evaporation reported was 45.5. There was no report on Mean air Temperature and sunshine parameters.

Land preparation for the next season had started.

### 2.4.2 Meru

The station recorded rainfall amount of 0.02mm. The mean air temperature recorded was 19.3°C. There was no report on total Pan Evaporation and sunshine parameters.

Most farmers have finished Maize harvesting.

## 2.4.3 Katumani (Machakos)

The station recorded dry conditions. The Mean air Temperature and Pan Evaporation recorded was 20.1°C and 63.5mm respectively. Sunshine duration was 9.1hrs/day.

No Phenological report.

#### 2.5. COASTAL REGION

### 2.5.1 Msabaha

The station recorded rainfall amount of  $0.03\,\mathrm{mm}$ . The average air temperature and total Pan Evaporation recorded were  $27.1^{\circ}\mathrm{C}$  and  $65.5\,\mathrm{mm}$  respectively. There was no report on sunshine hours.

Maize has been harvested. Mangoes were at 50% flowering stage and in moderate state.

### 2.5.2 Mtwapa.

The station recorded rainfall amount of 1.0mm. The average air temperature and total Pan Evaporation reported were  $26.0^{\circ}$ C and 54.0mm respectively. There was no report on Sunshine parameter.

Harvesting of maize crop is still ongoing.

# 3.0 ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS.

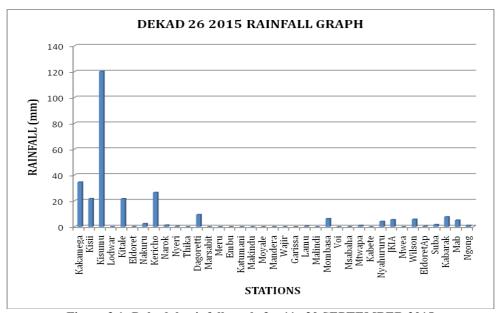


Figure 3.1: Dekadal rainfall totals for 11 –20 SEPTEMBER 2015

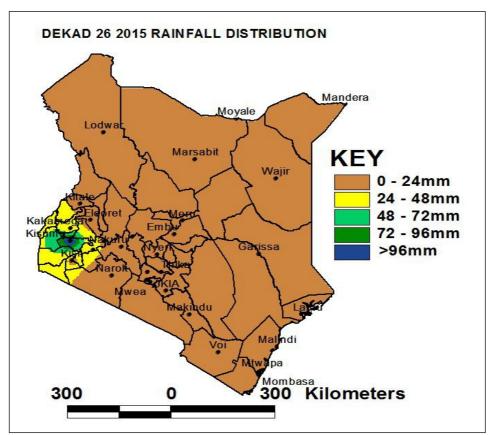


Figure 3.2: Dekadal rainfall distribution for dekad 26, 2015

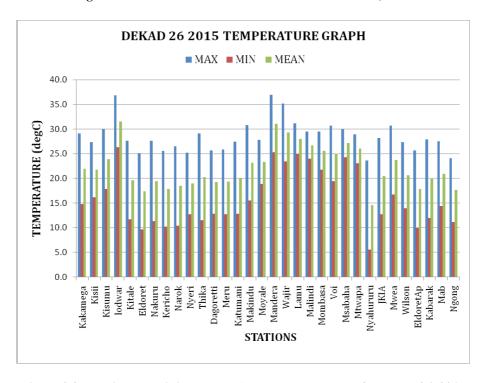


Figure 3.3: Maximum, Minimum and Average temperature for dekad 26, 2015

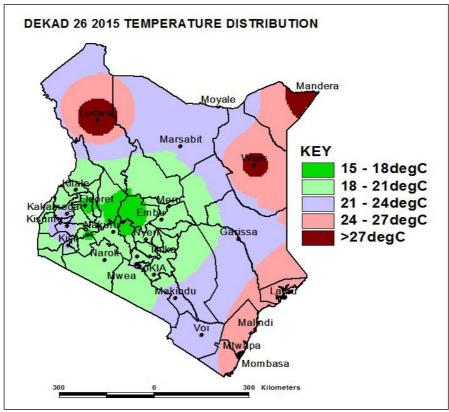


Figure 3.4: Mean temperature distribution for dekad 26, 2015

# 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-30 SEPTEMBER, 2015.

❖ 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), morning are expected to experience mainly sunny intervals throughout the forecast period. Afternoons are expected to experience showers and thunderstorms over few places throughout the forecast period.

The afternoon showers will be of great benefit to the crops being planted and flowering stage in places like Kakamega and Eldoret respectively. The showers will also replenish the soil with moisture for the growth of pasture and vegetation that supports livestock keeping in this region. The sunny intervals will be of advantage to drying of maize that is at harvesting stage in places like Kitale.

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

The continued sunny intervals will be of disadvantage to the growth of pasture and vegetation for livestock kept in these regions.

❖ The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), Mornings are expected to experience mainly sunny intervals for the entire forecast period. Afternoons are expected to experience sunny intervals for the first four days, followed by occasional showers over few places from the fifth day onwards.

The afternoon showers will be beneficial to the development of maize crops that are in the flowering stage in Nyahururu. The sunny conditions are of great benefit to drying of maize that is at harvest stage in places like Meru.

❖ Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience mainly sunny intervals for the entire day throughout the forecast period.

The sunny intervals will have a negative effect on the growth of pasture and vegetation for the animals kept in these places.

❖ Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience mainly sunny intervals the whole day for the entire forecast period.

The continued sunny intervals will be of disadvantage to the growth and development of pasture and vegetations for the animals kept in these places.

❖ In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), Mornings are expected to receive sunny intervals for the first four days, followed by occasional showers over few places from the fifth day up to the end of the forecast period. Afternoons are expected to experience mainly sunny intervals throughout the forecast period.

The morning showers will be of great benefit to the growth of mangoes, which are at flowering stage in Msabaha, while the afternoon sun will be of advantage to the drying of maize, which is at harvesting stage in places like Lamu and Mtwapa.

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