

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 15, 2015 21-31 MAY, 2015

# 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities increased both in intensity and spatial distribution during the dekad in the country. The highest rainfall amount of 235.3mm, 125.3mm and122.3mm were recorded at Mombasa, Msabaha and Lamu stations in Coastal region compared to 175.7mm and 156.2mm received at Kabete and Wilson station respectively in Nairobi region in the previous dekad. Western region reported the highest rainfall amount of 116.7mm at Kakamega station. Kisii station in Nyanza region recorded the highest rainfall amount of 111.3mm. Rift Valley region recorded the highest rainfall amount of 80.6mm at Kitale station. In Nairobi region, Kabete station recorded the highest rainfall amount of 78.8mm. Mwea station in Eastern region received the highest rainfall amount of 35.8mm. Central region reported the highest rainfall amount Nyahururu station. Moyale station in North Eastern region recorded the highest rainfall amount of 11.0mm.

Maximum and minimum temperatures were on a decreasing trend during the dekad. North-eastern region continued to record the highest maximum temperature of 36.3°C at Mandera station compared to 37.1°C reported at the same station in the previous dekad. The lowest Minimum temperature of 8.5°C was recorded at Nyahururu station in central region compared to 9.0°C reported at 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 15:21-31 MAY, 2015

# 2.1 NYANZA AND WESTERN REGIONS

## 2.1.1 Kakamega

The station received rainfall amount of 116.7mm during the dekad. The mean air temperature and Pan Evaporation recorded were 21.6°C and 4.6mm respectively. The sunshine reported was 7.0hrs/day.

Maize and beans were at emergence and flowering stages respectively. Normal yield is expected for beans though adversely affected by excessive rainfall.

## 2.1.2 Kisii

The station reported rainfall amount of 111.3mm. The mean air temperature and Pan Evaporation recorded were 20.1°C and 3.4mm respectively. There was no report on sunshine parameter.

Maize was at emergence stage and in good state while beans were at flowering stage and in fair state. Normal yield is expected for beans.

# 2.2 RIFT VALLEY REGION

## 2.2.1 Kitale

The station reported rainfall amount of 80.6mm. The mean air temperature recorded was 20.0°C. There was no report on Pan Evaporation and sunshine duration.

Maize and beans were at emergence and flowering stages respectively and both are in good state. Normal yield is expected for beans.

## 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 10.4mm. The mean air temperature and Pan Evaporation recorded were 18.1°C and 4.8mm respectively. There was no record on sunshine duration.

Both 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 24.1mm. The average air temperature was 18.9°C. There was no report on Pan Evaporation and sunshine parameters.

Maize and beans were at ninth leaf and flowering stages respectively and both are in fair state. Beans had been adversely affected by insects though normal yield is expected.

## 2.3.2 Kabete

The station received rainfall amount of 78.8mm. The Pan Evaporation recorded was 3.3mm. There was no report on Mean air temperature and sunshine duration.

Both maize and beans were at emergence stage and in fair state.

## 2.3.3 <u>Thika</u>

The station recorded rainfall amount of 14.2mm. The mean air temperature and Pan Evaporation recorded were 20.9<sup>ID</sup>C and 3.2mm respectively. There was no report on sunshine duration.

Maize was at emergence stage while Beans and Potatoes were at flowering stages and all are in fair state. Normal yield is expected for both beans and potatoes.

## 2.3.4 <u>Nyahururu</u>

The station reported rainfall amount of 24.9mm. The mean air temperature and Pan Evaporation recorded were  $15.3^{\circ}$ C and 3.9mm respectively. There was no report on sunshine hours.

Both maize and Potatoes were at emergence stage and in fair state.

## 2.3.5. Dagoretti

The station reported rainfall amount of 46.8mm. There was no report on mean air temperature, Pan Evaporation and sunshine hours.

Maize was at 100% ninth leave stage and in good state.

#### 2.4 EASTERN KENYA REGION

#### 2.4.1 <u>Embu</u>

The station received rainfall amount of 32.5mm. The Pan Evaporation recorded was 2.9mm. There was no report on mean air temperature and sunshine parameters.

Maize and Beans were both at flowering stage and in fair state. Normal yield is expected for both crops.

#### 2.4.2 Meru

The station received rainfall amount of 4.7mm. The mean air temperature recorded was 19.2°C. There was no report on Pan Evaporation and sunshine duration.

Maize and Beans were at flowering and maturity stages respectively and both are in fair state. Normal yield is expected for both crops.

#### 2.4.3 Katumani (Machakos)

The station reported rainfall amount of 6.4mm. The average air temperature and Pan Evaporation recorded were 19.8°C and 3.1mm respectively. There was no report on Sunshine duration.

Maize and Beans were both at flowering stage and in fair and good state respectively. Normal yield is expected for both crops.

## 2.5. COASTAL REGION

#### 2.5.1 Msabaha

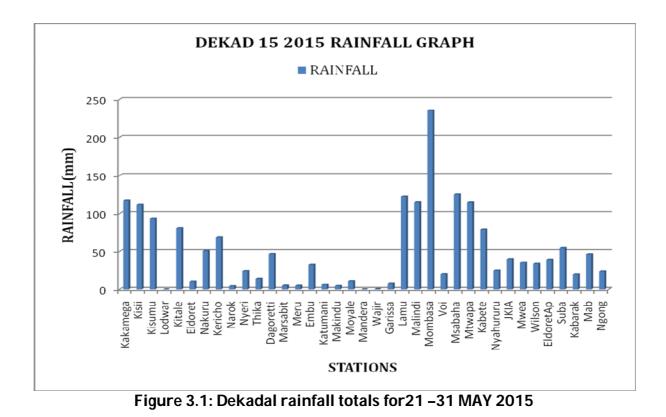
The station received rainfall amount of 125.3mm. The average air temperature recorded was 27.0°C. There was no report on Pan Evaporation and sunshine duration.

Maize and beans were both at flowering stage and in fair and good state respectively. Normal yield is expected for beans.

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

The station received rainfall amount of 114.4mm. 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 harvest stage and in fair state with normal yield expected.



# 3.0 ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS.

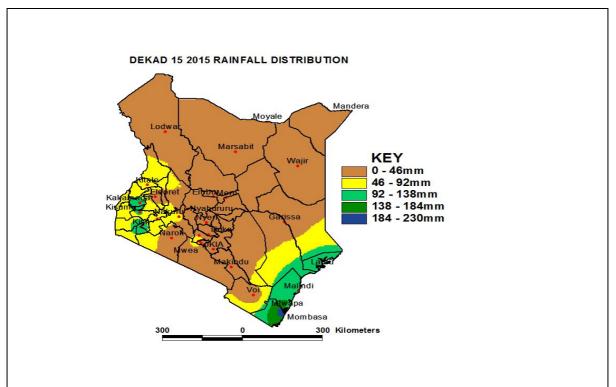


Figure 3.2: Dekadal rainfall distribution for dekad 15, 2015

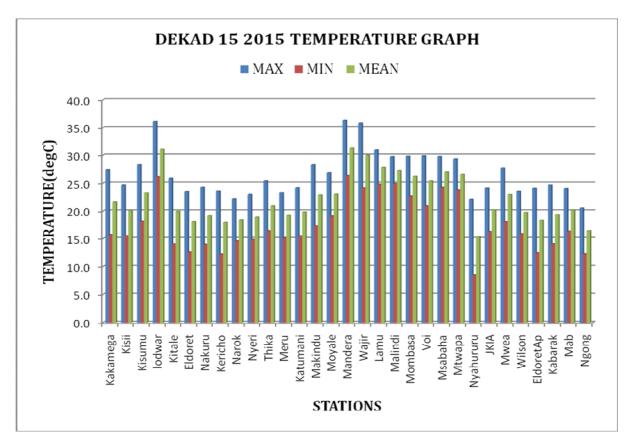


Figure 3.3: Maximum, Minimum and Average temperature for dekad 15, 2015

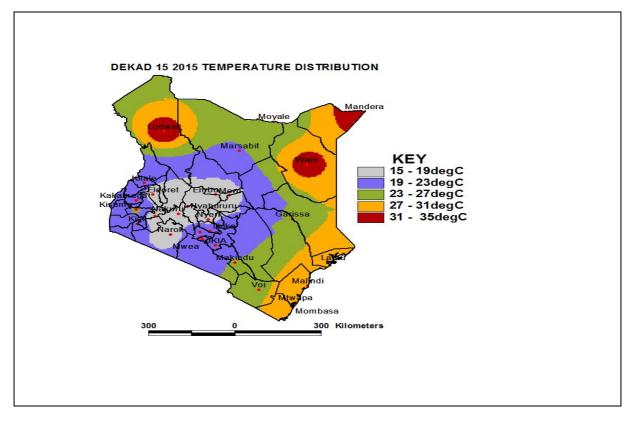


Figure 3.4: Mean temperature distribution for dekad 15, 2015

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 JUNE, 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), are expected to experience rains over few places breaking to sunny intervals from the seventh day. Afternoons are expected to experience showers and thunderstorms over several places reducing into few places from the seventh day of the forecast period.

The rains and showers will be of great benefit to the crops, which are mostly in emergence and flowering stages in places like Kisii, Kitale etc. They will also replenish the soil with moisture that will affect positively on the growth of pasture and vegetation that supports livestock keeping in this region.

The Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning throughout the entire forecast period. Afternoons are expected to experience showers and thunderstorms over few places breaking to sunny intervals from the fifth day of the forecast period.

The afternoon showers will be of advantage to the growth of pasture and vegetation that supports the livestock kept 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 rains over few places breaking to sunny interval from the ninth day of the forecast period. Afternoon showers are expected over several places breaking to few places from the sixth day of the forecast period.

Morning rains and afternoon/evening showers will be of great benefit to the development of crops that are in the emergence, ninth leaf and flowering stages in places like Nyahururu, Nyeri, Meru, etc.

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

The sunny conditions will be of disadvantage to the growth of pasture and vegetation that supports the livestock kept in these regions.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience rains over few places breaking to sunny intervals from seventh day of the forecast period. Afternoons are expected to experience showers over few places breaking to sunny interval from the seventh day of the forecast period.

The rains and showers will be of advantage to the pasture and vegetation growth for livestock rearing in this region and also the maize and Beans that are at flowering stage in places like Katumani.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience morning showers over few places breaking into sunny intervals from fifth day of the forecast period. Afternoons are expected to experience sunny intervals throughout the forecast period.

The showers will continue benefiting the growth and development of Maize that is at emergence stage in places like Msabaha and Mtwapa. In addition, it will benefit the growth of mangoes that is in the fruit setting stage in places like Msabaha.

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