

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 16, 2015

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities decreased both in intensity and spatial distribution during the dekad in the country. The highest rainfall amount of 116.4mm was recorded at JKIA station in Nairobi region compared to 235.3mm received at Mombasa station in Coastal region in the previous dekad. Nyanza region reported the second highest rainfall amount of 107.4mm at Kisii station. Kakamega station in Western region recorded the highest rainfall amount of 86.0mm. Rift Valley region recorded the highest rainfall amount of 76.8mm at Kericho station. In Central region, Thika station recorded the highest rainfall amount of 61.8mm. Katumani station in Eastern region received the highest rainfall amount of 42.9mm. Coastal region reported the highest rainfall amount of 28.5mm at Lamu station. Moyale station in North Eastern region recorded the highest rainfall amount of 1.4mm.

Maximum and minimum temperatures were generally on a decreasing trend during the dekad though in North-eastern region, temperatures continued to increase with Mandera station still reporting the highest maximum temperature of 36.8°C compared to 36.3°C reported at the same station in the previous dekad. Nyahururu station in Central region continued to report the lowest Minimum temperature of 9.1°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 16: 01- 10 JUNE, 2015

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 86.0mm during the dekad. The mean air temperature and Pan Evaporation recorded were 21.2°C and 4.5mm respectively. The sunshine hrs reported was 5.8hrs/day.

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

2.1.2 **Kisii**

The station reported rainfall amount of 107.4mm. The mean air temperature and Pan Evaporation recorded were 20.0°C and 2.9mm respectively. There was no report on sunshine parameter.

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

2.2 RIFT VALLEY REGION

2.2.1 **Kitale**

The station reported rainfall amount of 38.9mm. The mean air temperature and Pan Evaporation recorded were 19.5°C and 2.8mm respectively. There was no report on 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 34.4mm. The mean air temperature and Pan Evaporation recorded were 17.3°C and 3.1mm respectively. There was no record on sunshine duration.

No phenological report.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 8.7mm. The average air temperature was 18.1°C. There was no report on Pan Evaporation and sunshine parameters.

Maize and beans were at tasseling 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 82.2mm. The Pan Evaporation recorded was 3.6mm. 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 **Thika**

The station recorded rainfall amount of 61.8mm. The mean air temperature recorded was 19.40°C. There was no report on Pan Evaporation and sunshine duration.

Maize and beans were both at flowering stage and in excellent and fair state respectively. Potatoes were at maturity stage in fair state. Above normal yield is expected for maize but for beans and potatoes normal yield.

2.3.4 Nyahururu

The station reported rainfall amount of 49.7mm. The mean air temperature and Pan Evaporation recorded were 15.5^oC and 3.8mm respectively. There was no report on sunshine hours.

Both maize and Potatoes were at emergence and flowering stages respectively and both are in fair state. Normal yield is expected for potatoes.

2.3.5. <u>Dagoretti</u>

The station reported rainfall amount of 60.5mm. The Pan Evaporation recorded was 2.9mm. There was no report on mean air temperature and sunshine hours.

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

2.4 EASTERN KENYA REGION

2.4.1 Embu

The station received rainfall amount of 8.1mm. The Pan Evaporation recorded was 1.9mm. There was no report on mean air temperature and sunshine parameters.

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

2.4.2 Meru

The station received rainfall amount of 0.2mm. The mean air temperature and Pan Evaporation recorded were 18.3°C and 3.1mm respectively. There was no report on 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 42.9mm. The Pan Evaporation recorded was 2.7mm. There was no report on average air temperature and 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 5.8mm. The average air temperature and Pan Evaporation recorded were 27.0°C and 4.4mm respectively. There was no report on sunshine duration.

Maize was at emergence stage and in fair state while mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa.

The station received rainfall amount of 17.7mm. The average air temperature recorded and Pan Evaporation were 26.2°C and 4.1mm respectively. There was no report on Sunshine duration.

Maize was at flowering stage and in fair state. Mangoes were at harvest stage and in good state.

3.0 ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS.

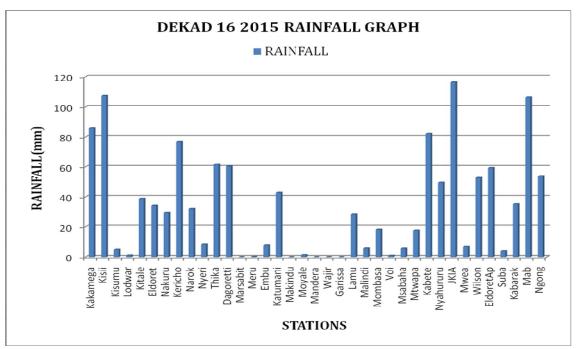


Figure 3.1: Dekadal rainfall totals for 01 -10 JUNE 2015

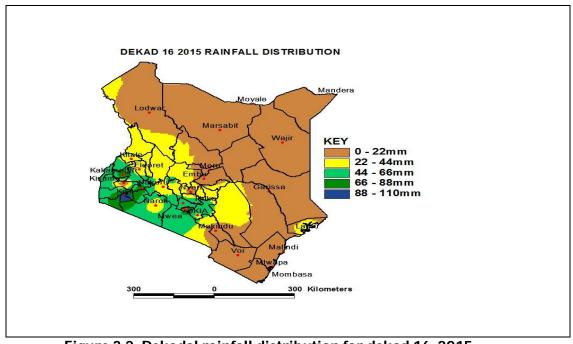


Figure 3.2: Dekadal rainfall distribution for dekad 16, 2015

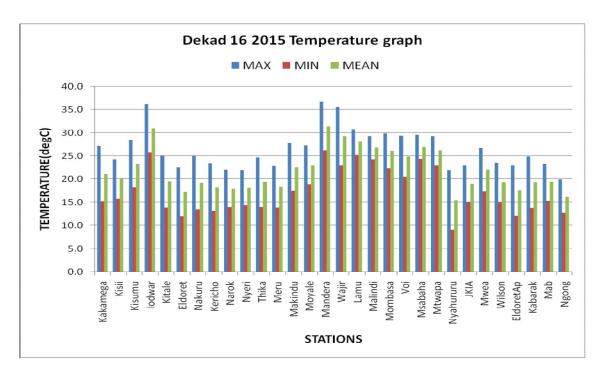


Figure 3.3: Maximum, Minimum and Average temperature for dekad 16, 2015

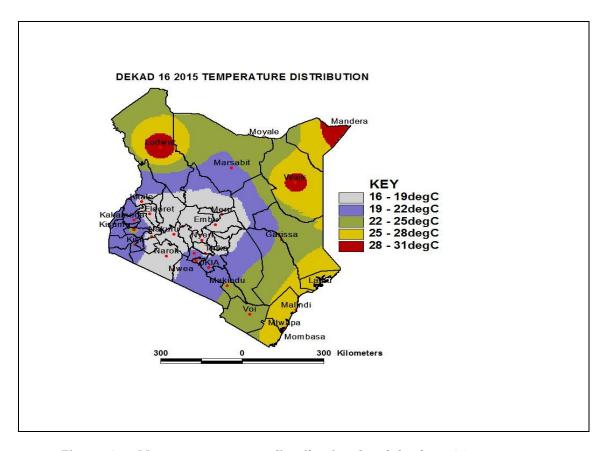


Figure 3.4: Mean temperature distribution for dekad 16, 2015

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 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 sunny intervals in the morning throughout the forecast period with occasional rains over few places. Afternoon/evening showers and thunderstorms over several places reducing into few places from the 14th day improving to several places thereafter.

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 throughout the entire forecast period.

The sunny condition will be of disadvantage 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 cloudiness with occasional morning rains over few places throughout the forecast period. Afternoon/evening showers are expected over few places for much 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 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 throughout 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 sunny intervals the entire day throughout the forecast period.

The sunny condition will be of disadvantage 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 sunny interval throughout the forecast period.

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

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