

KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 18, 2013 21-30 JUNE 2013

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the Country have significantly decreased as compared to the previous dekad. Kakamega station in Western region recorded 87.6 mm of rainfall, which was the highest amount of rainfall recorded in the whole country. Mtwapa station in the Coastal region recorded the highest rainfall of 63.7mm. In Central region, the highest rainfall of 17.1 mm was recorded at Nyahururu station while in North Eastern region the highest rainfall of 4.0mm was reported at Moyale station. Embu station in Eastern region reported the highest rainfall of 3.1mm a decrease as compared to 19.6mm that was recorded at the same station in the last dekad. In Nairobi region, Kabete station recorded the highest rainfall of 0.9mm, which is quite insignificant in the agriculture.

The Maximum Temperatures increased significantly in most parts of the country compared with previous dekad while Minimum Temperatures decreased considerably. In the dekad, Lodwar station reported the highest maximum temperature of 34.2°C compared to 33.8°C reported in the same station in the previous dekad. Nyahururu station in Central region still reported the lowest temperature of 6.7°C compared to 9.8°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 18; 21-30 JUNE 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received rainfall amount of 87.6mm. The mean air temperature and sunshine hours were 20.5°C and 7.9hrs respectively. There was no report on pan evaporation.

Maize crop is approaching wax ripeness stage with normal yields being expected while beans harvesting is over.

2.1.2 <u>Kisii</u>

This station recorded rainfall amount of 15.7mm. The mean air temperature and total pan evaporation recorded were 20.0°C and 35.4mm respectively. There was no report on sunshine duration.

Maize crop was at flowering stage while beans are at harvesting stage. Normal yield for beans is expected.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 19.8mm. The average air temperature and pan evaporation were 18.6^{III}C and 30.6mm respectively. There was no report on sunshine parameter.

Maize was at flowering stage and in good state while beans were at maturity stage and in fair state. They are in good state with normal yield expected.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 7.7mm. The average air temperature and pan evaporation reported were 16.6 ^{III}C and 42.2mm respectively. There was no report on sunshine parameter.

Maize is at flowering stage and in fair state while beans are in the flowering stage and in a poor state. Below normal yield is expected for beans as they had been adversely affected by excessive rainfall.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

The station received rainfall amount of 1.6mm. The average air temperature was 16.3°C. There was no report on pan evaporation and sunshine parameters.

Maize crop was at flowering stage and in a poor state while beans were at maturity stage and in fair state. The maize crop is being affected by the maize stalker borer and beans by some other insects.

2.3.2 Kabete

The station received rainfall amount of 0.9mm. The average air temperature and pan evaporation recorded were 15.8°C and 18.9mm respectively. There was no report on sunshine hours.

Maize was at emergence stage and in a fair state. Beans were at flowering stage and in a poor state with normal yield being expected. Coffee was at 100% berry soft stage and in a moderate state but damaged by leaf rust and leaf minor at less than 10% each. Bananas were at 100% appearance of sucker stage and in a moderate state but had been damaged by thrips, cigar end rot and cigar Toka at less than 10% each.

2.3.3 <u>Thika</u>

The station received no rainfall. The mean air temperature and pan evaporation recorded were 18.2°C and 19.5mm respectively. There was no report on sunshine hours and pan evaporation.

Maize crop is approaching wax ripeness stage and in poor state as they had been adversely affected by insufficient rainfall while beans have been harvested.. Below normal yield is expected for both crops.

2.3.4 <u>Nyahururu</u>

The station received 17.1mm of rainfall. The mean air temperature and pan evaporation recorded were 13.8°C and 33.1mm respectively. There was no report on sunshine hours.

Maize was at emergence stage while beans were at flowering stage and in a fair state. Potatoes are at maturity stage and in a good state. Normal yield is expected for both beans and potatoes.

2.3.5 Dagoretti

The station received no rainfall. The mean air temperature and evaporation pan recorded were 16.5°C and 19mm respectively. Sunshine hours reported was 1.1hours per day.

2.4 EASTERN KENYA REGION

2.4.1 <u>Meru</u>

The station reported no rainfall. The average air temperature and pan evaporation were 17.0°C and 33mm respectively. There was no report on sunshine parameter.

Maize was at flowering stage but in a poor state with normal yield expected as it has been adversely affected by insufficient rainfall. Beans had been harvested.

2.4.2 <u>Embu</u>

The station recorded rainfall and pan evaporation amounts of 3.1mm and 21.3mm respectively. There was no report on sunshine and Temperature parameters.

Maize was at flowering stage while beans were at maturity stage and in poor state due to moisture stress.

2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 0.3mm. The average air temperature was 16.8°C. There was no report on pan evaporation and sunshine parameters.

Maize was at flowering stage and in a poor state due to moisture stress. Below normal yield is expected.

2.5 COASTAL REGION

2.5.1. <u>Msabaha</u>

The station received rainfall amount of 55.0mm. The average air temperature and pan evaporation recorded was 25.4°C and 28mm respectively. There was no report on sunshine hours.

Maize was at flowering stage and in fair condition while Mangoes were at 100% fruit setting stage and in good state.

2.5.2 <u>Mtwapa</u>

The station received rainfall amount of 63.7mm. The average air temperature and pan evaporation recorded were 25.10C and 33.7mm respectively. There was no report on sunshine hours.

Maize was at flowering stage, in good condition even though they are being affected by excessive rainfall, stalk borer, and destroyed by wild animals.

Mangoes were at harvesting stage and in a poor state as a storm and animals have affected them.

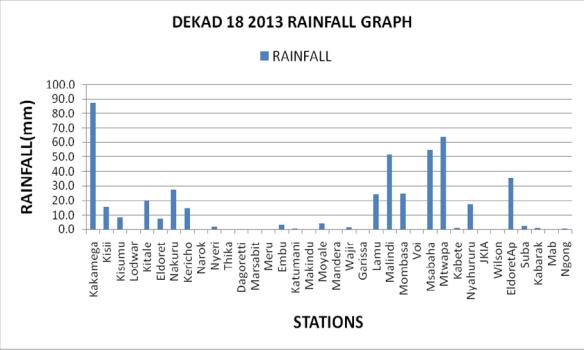


Figure 3.1: Dekadal Rainfall totals for 21st to 30 June 2013

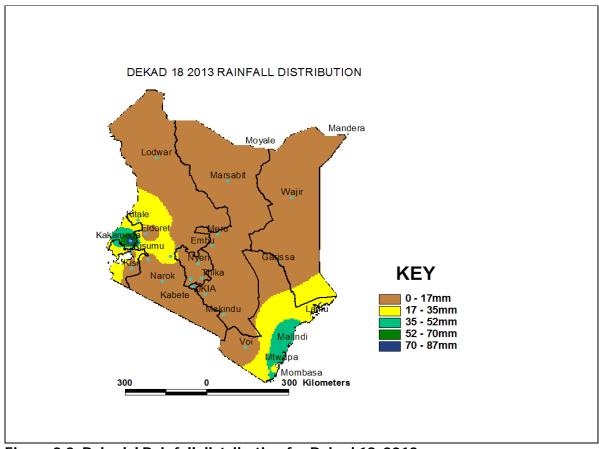


Figure 3.2: Dekadal Rainfall distribution for Dekad 18, 2013

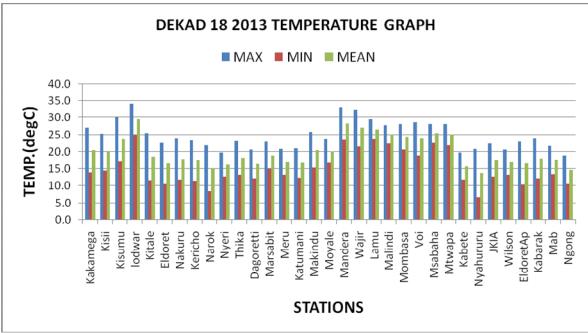


Figure 3.3: Maximum, Minimum and Average temperature in ^oC for dekad 18, 2013

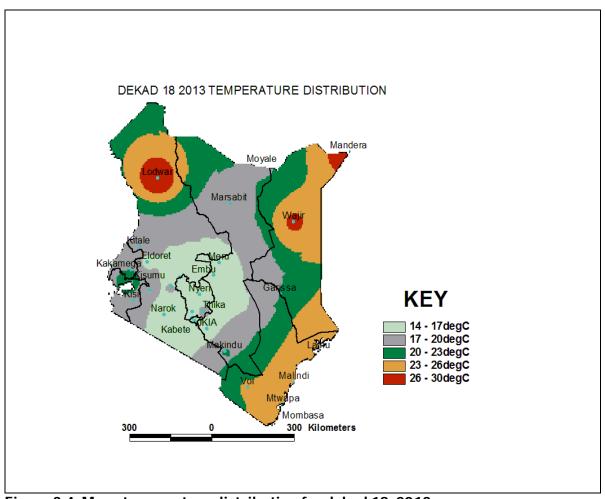


Figure 3.4: Mean temperature distribution for dekad 18, 2013

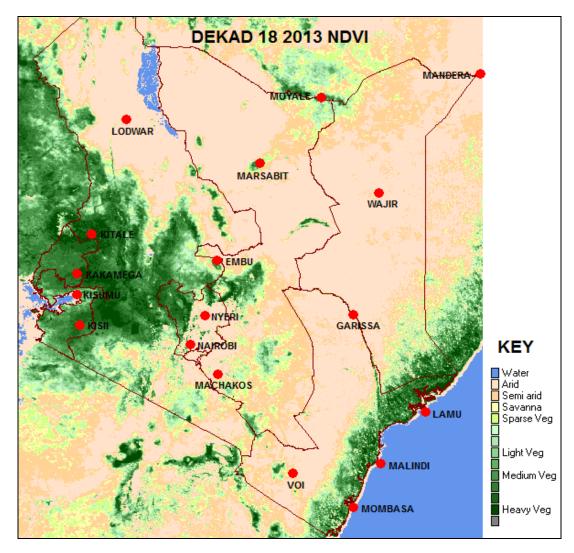


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 JULY 2013
 - 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 while afternoons are expected to experience showers and thunderstorms over few places for the entire forecast period.

The showers continue to be of great benefit to the crops which are now in their flowering stage.

Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning and afternoon for the entire forecast period.

The dry conditions will impact negatively on the pastures and vegetation cover 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 cloudy early mornings with light rains giving way to short, sunny intervals for the rest of the day throughout the entire forecast period.

The light rains are expected to benefit the crops growing in these regions.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to continue experiencing sunny intervals in the morning and afternoon over the entire forecast period.

The dry conditions are expected to be unfavorable to the pastures and vegetation in these regions.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience sunny intervals in the morning and the afternoon for the entire forecast period.

The dry conditions are expected to impact negatively on the growing crops and pastures in these regions.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience showers over few places in the mornings and sunny intervals in the afternoons for the entire forecast period.

The morning showers continue to benefit the growing crops in these regions.

For feedback or further guidance, Contact:

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