

KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 12, 2013 21-30 APRIL 2013

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities decreased in most stations countrywide during the current dekad. The highest rainfall amount was 141.6mm received at Nyeri station in Central region. This was a drastic reduction compared to 300.3mm received at Mwea station in Eastern region in the previous Dekad. The second highest rainfall of 136.1mm was recorded at Kericho station in Rift-valley province. Kakamega station in Western region received the highest rainfall of 119.6mm. In Nairobi region Kabete station recorded the highest rainfall of 116.1mm. Kisii station in Nyanza region reported the highest rainfall amount of 103.7mm. In North Eastern region Moyale station received the highest amount of rainfall of 96.2mm in Eastern region the highest rainfall of 52.0 mm was reported at Marsabit station. Malindi station in Coastal region reported 46.3 mm as the highest rainfall.

Maximum and Minimum temperatures continued to decrease and increase respectively in most stations. Mandera station in North Eastern region reported the highest maximum temperature of 34.0°C which was a reduction compared to 36.0°C reported in the previous dekad. The lowest maximum temperature of 21.6°C was recorded at Ngong station in Nairobi region compared to 22.2°C reported at the same station in the previous dekad. The lowest minimum temperature of 11.1°C was reported at Nyahururu station in Central region compared to 10.4°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 12; 21-30 APRIL 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received rainfall amount of 119.6mm. The mean air temperature and pan evaporation reported were 21.3°C and 43.3 mm respectively. Sunshine hours reported was 6.9 hours.

Beans and maize are at emergence and flowering stages in fair and good states respectively. Beans have been affected by excessive rainfall in this dekad.

2.1.2 Kisii

This station recorded rainfall amount of 103.7mm. The mean air temperature and total pan evaporation recorded were 20.3°C and 32.2mm respectively. There was no report on sunshine duration.

Beans and maize were at emergence stage and in fair state due to sufficient rainfall experienced in this dekad.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 62.6mm. The average air temperature and pan evaporation were 20.3°C and 40.6mm respectively. There was no report on sunshine parameter.

Maize and beans were at emergence stage and in good condition. Most farmers have completed planting their crops.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 67.2mm. The average air temperature and pan evaporation reported were 18.3°C and 56.7mm respectively. There was no report on sunshine parameter.

Maize and beans were at emergence stage and in good condition.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

The station received rainfall amount of 141.6mm. The average air temperature was 19.5°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans were at emergence and flowering stages and in good and fair states respectively. Beans have been affected by some insects.

2.3.2 Kabete

The station received rainfall amount of 116.1mm. The average air temperature reported was 19.3°C. There was no report on evaporation and sunshine duration.

Maize and beans were at emergence stage and in fair state. Coffee was at 100% pin head. It has been attacked by leaf rust 25%, leaf minor less than 10%. Bananas were at 100% appearance of sucker. It has been damaged by thrips 25%, ciggar and end rot at less than 10%.

2.3.3 Thika

The station received 29.0mm. The mean air temperature and pan Evaporation recorded were 21.7°C and 31.5 mm respectively. There was no report on sunshine parameter.

Maize and beans were at emergence stage and in fair and poor conditions respectively due to excessive rainfall. Potatoes were also at emergence stage and in fair condition.

2.3.4. Nyahururu

The station received 68.8mm of rainfall. The mean air temperature and pan evaporation recorded were 15.6°C and 41.3mm respectively. The duration of sunshine was 6.5 hours.

Maize and beans were at emergence stage and in fair condition respectively. Also potatoes were at emergence and in fair condition.

2.3.5. Dagoretti

The station received rainfall amount of 35.0mm. The mean air temperature and evaporation pan recorded were 19.7°C and 34.0mm respectively. There was no sunshine parameter recorded.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported 36.2mm. The average air temperature and pan evaporation were 19.7°C and 36.7mm respectively. There was no report on sunshine parameter.

Maize and beans were at emergence and flowering stages respectively and in fair state.

2.4.2 Embu

The station received rainfall amount of 13.6mm. The average air temperature and pan evaporation were 16.5°C and 37.6mm. There was no report on sunshine parameter.

Maize and beans were at emergence and flowering stages respectively and in fair state, though beans have been affected by the excessive rains in this dekad.

2.4.3 Katumani (Machakos)

The station received rainfall amount of 9.6mm. The average air temperature was 20.2°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans were at emergence and flowering stages respectively and in good condition.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received rainfall amount of 20.9mm. The average air temperature and pan evaporation recorded were 27.8°C and 41.4mm respectively. There was no report on sunshine hours.

Maize was at emergence stage and in fair condition.

2.5.2 Mtwapa

The station received rainfall amount of 35.2mm. The average air temperature recorded was 27.7°C. There was no report on sunshine and evaporation parameters.

Maize was at emergence stage and in good condition. Mangoes were at fruit setting stage and in good condition.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

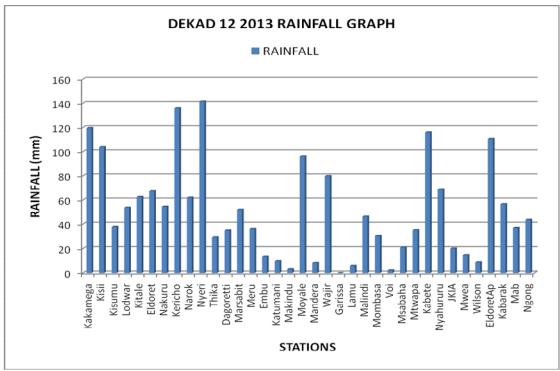


Figure 3.1: Dekadal Rainfall totals for 21-30 April 2013

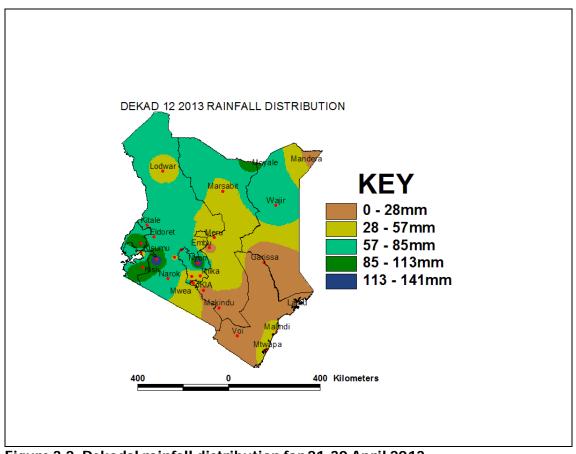


Figure 3.2: Dekadal rainfall distribution for 21-30 April 2013

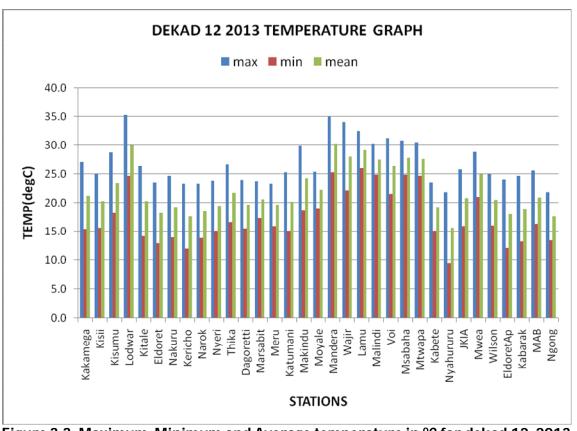


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 12, 2013

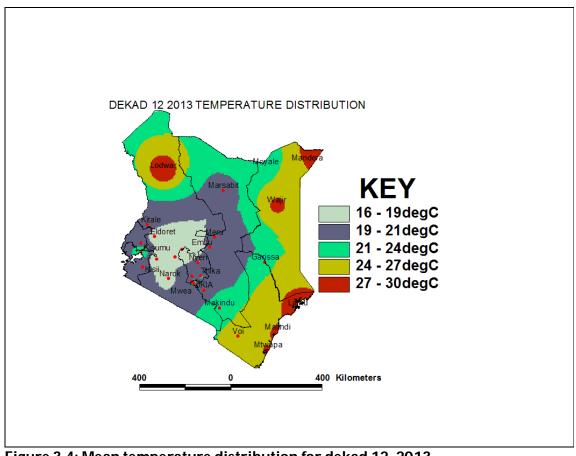


Figure 3.4: Mean temperature distribution for dekad 12, 2013

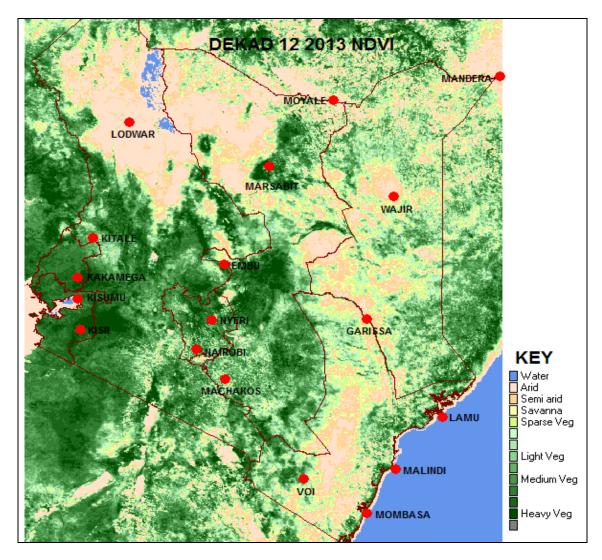


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 MAY 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 in the mornings rains over a few places throughout the forecast period. Afternoons are expected to experience showers and thunderstorms over several places for the first 6 days of the forecast period, reducing to over few places thereafter.

The showers continue to benefit the maize crop but it has started having adverse effect to the beans because of its excessiveness.

Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience rains over few places for the first half of the forecast period breaking into sunny intervals thereafter. Showers and thunderstorms over a few places are expected in the afternoon for the entire forecast period.

The showers will continue to benefit the pasture 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 rains over a few places in the morning for the first 6 days, followed by cloudy early morning with rains over few places for the rest of the forecast period. Showers and thunderstorms over few places are expected in the afternoon throughout the forecast period.

The showers are beneficial to the crops growing in these regions.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience rains over few places in the morning throughout the entire forecast period. In the afternoon, sunny intervals are expected for the entire forecast period.

The showers continue to replenish the pastures for the animals and vegetation in these regions.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience rains over a few places in the morning for the first half of the forecast period, followed by sunny intervals in the morning for the rest of the entire period. Showers over few places are expected throughout the forecast period in the afternoon.

The showers are beneficial to the growing crops in these regions.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience morning showers over few places for the first 3 days, breaking into several places for the next 3 days then reducing to few places for the rest of the forecast period. Showers over few places are expected for the first seven days of the period breaking to sunny intervals thereafter.

The showers are beneficial to the growing crops in these regions.

For feedback or further guidance, Contact:

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