

KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 15, 2013 21-31 MAY 2013

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country increased slightly compared to the previous dekad. The Coastal region recorded the highest amount of rainfall with Msabaha, Malindi and Lamu recording 151.8mm, 108.2mm and 87.3mm respectively. In Western region Kakamega station recorded 40.8mm down from 4.6mm received during the previous dekad. Suba station in Nyanza region recorded the highest rainfall of 42.7mm in the region. In the Rift Valley region, the highest rainfall of 65.1mm was received at Kericho meteorological station up from 56.5mm. Nyahururu station in Central region reported the highest rainfall of 7.1mm. In North Eastern region the highest rainfall of 2.8mm was reported at Mandera station as compared to 1.9mm recorded in Moyale the previous dekad. Embu station in Eastern region reported the highest rainfall of 8.6mm up from 6.0mm. Nairobi region recorded insignificant amount of rainfall.

Maximum temperature increased significantly compared to the previous dekad while minimum temperature decreased slightly. Mandera station in North Eastern region continued to report the highest maximum temperature of 35.9°C compared to 35.3°C reported in the previous dekad. Nyahururu station in Central region reported the lowest minimum temperature of 5.5°C compared to 5.8°C reported in the same station during 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 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received rainfall amount of 40.8mm. The mean air temperature and pan evaporation reported were 21.1°C and 52.3 mm respectively. There was no report on sunshine hours.

Maize crop has reached flowering stage and are being adversely affected by excessive rainfall together with the beans which are in their maturity stage.

2.1.2 Kisii

This station recorded rainfall amount of 40.7mm. The mean air temperature and total pan evaporation recorded were 20.6°C and 45.7mm respectively. There was no report on sunshine duration.

Maize crop is in the 9th leaf stage and in fair state while beans crop are in flowering stage and in a fair state. In general view both crops are doing well.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 20.6mm. The average air temperature and pan evaporation were 19.9©C and 42.6mm respectively. There was no report on sunshine parameter.

Maize crop is in the 9th leave stage while most beans have flowered. Both crops are suffering from water stress due lack of rainfall.

2.2.2 Eldoret-Kapsoya

Maize is at the ninth leaf stage while beans are in the flowering stage. Both crops are affected by insufficient rainfall.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

The station received rainfall amount of 1.1mm. The average air temperature was 18.4°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans were at emergence and flowering stages 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 0.5mm. The average air temperature recorded was 19.5°C. There was no report on sunshine hours and pan evaporation.

Maize and beans were at emergence stage and in fair state. Few farmers have started weeding their crops. 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%, cigar and end rot at less than 10%.

2.3.3 Thika

The station received nil rainfall. The mean air temperature and pan evaporation recorded were 20.4°C and 40mm respectively. There was no report on sunshine hours.

Maize and beans were at flowering stage and in poor condition due to excessive rainfall during the previous dekad. Potatoes were also at flowering stage and in poor condition.

2.3.4 Nyahururu

The station received 7.0mm of rainfall. The mean air temperature and pan evaporation recorded were 13.9°C and 41mm respectively. There was no report on sunshine hours.

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

2.3.5 Dagoretti

The station received rainfall amount of 0.0mm. The mean air temperature and evaporation pan recorded were 18.8°C and 39.5mm respectively. There was no report on sunshine hours.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported traces of rainfall. The average air temperature and pan evaporation were 18.5°C and 47.5mm respectively. There was no report on sunshine parameter.

Maize crop had attained ninth leaf stage while the beans are still in the flowering stage. Both crops are being affected by insufficient rain.

2.4.2 Embu

The station recorded rainfall and pan evaporation amounts of 8.6mm and 39.1mm respectively. There was no report on sunshine and Temperature parameters.

Maize and beans were at flowering stages and in fair state though both crops are suffering from moisture stress.

2.4.3 Katumani (Machakos)

The station recorded no rainfall. The average air temperature was 19.2°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans are in the flowering and maturity stages respectively but in poor condition due to the insufficient rains.

2.5 COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 151.8mm. The average air temperature and pan evaporation recorded was 26.8°C and 44.5mm respectively. There was no report on sunshine hours.

Maize was at emergence stage and in fair condition but affected by insufficient rainfall in the previous dekad.

2.5.2 Mtwapa

The station received rainfall amount of 16.1mm. The average air temperature and pan evaporation recorded were 26.8°C and 44.6mm respectively. There was no report on sunshine hours.

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

Mangoes were at harvesting stage and in a good condition.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

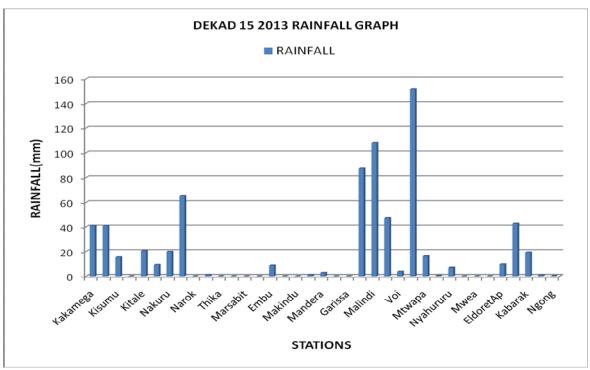


Figure 3.1: Dekadal Rainfall totals for 21-31 MAY 2013

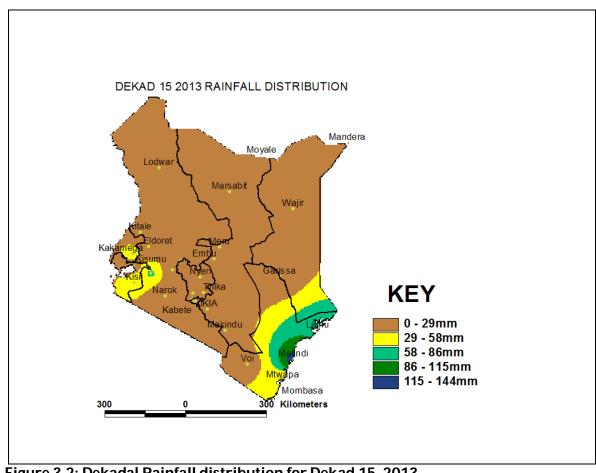


Figure 3.2: Dekadal Rainfall distribution for Dekad 15, 2013

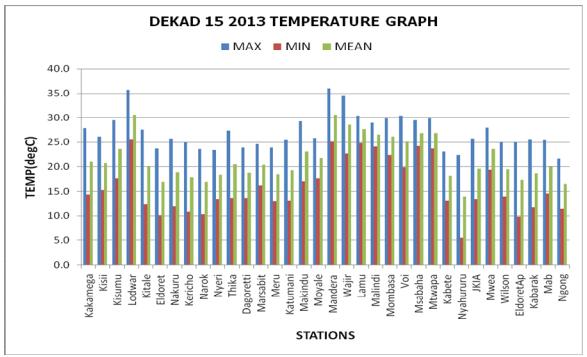


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 15, 2013

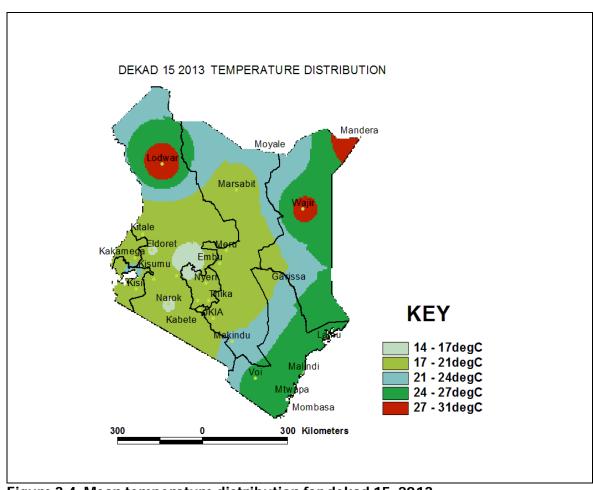


Figure 3.4: Mean temperature distribution for dekad 15, 2013

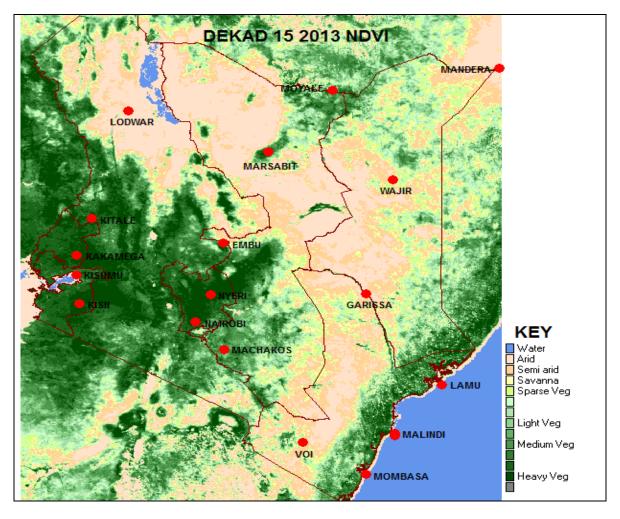


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 JUNE 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 for the entire forecast period. 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 which will break into sunny intervals over the entire forecast period. Showers over a few places are to be experienced in the afternoon for the entire forecast period too.

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

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

The dry conditions are likely to be detrimental 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 morning showers over few places for the entire forecast period. In the afternoon, showers over few places are expected for the entire forecast period.

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

For feedback or further guidance, Contact:

Director.

Kenya Meteorological Department,

Agro meteorological Advisory Services Division,

Dagoretti Corner, Ngong Road, P.O. Box 30259, 00100 GPO, Nairobi

Tel: +254 (0)20 3867880-7/3876957/3873682; Fax: +254 (0)20 3876955

E-mail: agromet@meteo.go.ke;

Website: www.meteo.go.ke

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