

KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN WEATHER AND CROP REVIEW FOR DEKAD 07, 2013 01-10 MARCH 2013

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was a drastic increase in rainfall activities both in space and in intensity in most stations countrywide; however dry conditions prevailed in most stations in Eastern region. Coastal region received the highest amount of rainfall countrywide with Mtwapa and Malindi stations recording 101.8mm and 76.6mm respectively. Kisii station reported the highest rainfall amount of 71.8mm in Nyanza region. In Western region Kakamega station received the highest rainfall amount of 67.4mm. Kericho station in Rift Valley region recorded highest rainfall amount of 40.7mm. In Central region, Thika station received the highest rainfall amount of 27.5mm. Moi Airbase station in Nairobi region received the highest rainfall amount of 26.5mm. In Eastern region, Katumani station received the highest amount of rainfall of 4.6mm. The least rainfall activities were realised in North-eastern region with Lodwar station reporting only 1.7mm as the highest rainfall.

Both Maximum and Minimum temperatures drastically increased in most stations country wide. The highest Maximum temperature of 38.8°c was recorded at Lodwar station in North-eastern region. This was a slight increase compared to 38.5°C recorded at Mandera station in the same region in the previous dekad. Nyahururu station in Central region reported the lowest maximum temperature of 25.8°C compared to 24.0°C reported in the previous Dekad in the same station. The lowest minimum temperature of 7.7°C was reported at Nyahururu station compared to 5.9°C reported in the previous dekad at the same station.

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 07; 01-10 MARCH 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 67.4mm of rainfall compared to 1.1mm reported in the previous dekad. The mean air temperature and pan evaporation reported were 23.4°C and 51.2mm respectively. There was no report on sunshine duration.

Land preparation for the long rain season is still going on but a few farmers have started planting.

2.1.2 <u>Kisii</u>

This station recorded rainfall amount of 71.8mm compared to 0.01mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 23.2°C and 47.3mm respectively. There was no report on sunshine duration.

Land preparation for the next season is still in progress.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 8.6 compared to 0.02mm reported in the previous dekad. The average air temperature and total pan evaporation were 22.2^{IIC} and 56.2mm respectively. There was no report on sunshine parameter.

There was no phenological report.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 2.7mm compared to 0.2mm reported in the previous dekad. The average air temperature and total pan evaporation were 19.1^{II}C and 76.9mm respectively. There was no report on sunshine parameter.

There was no phenological report.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 7.0mm compared to 0.02mm received in the previous dekad. The average air temperature was 20.8°C. There was no report on pan evaporation and sunshine duration.

Some maize plants are still in maturity stage, while others have been harvested and land preparation is underway for the long rain season.

2.3.2 Kabete

The station received rainfall amount of 8.3mm compared to dry conditions in the previous dekad. The average air temperature and pan evaporation recorded were 20.7°C and 64.8mm respectively. There was no report on sunshine duration.

Maize and beans were at flowering and harvesting stages respectively and in poor condition. Below normal yield is expected for both crops due to insufficient rainfall. Coffee was at 100% ripeness stage and in moderate state though had been damaged by leaf minor and leaf rust at less than 10% each. Bananas were at 100% sucker appearance stage but in unsatisfactory state as they had also been damaged by thrips and cigar end rot at 25% and 10% respectively.

2.3.3 Thika

The station received 27.5mm compared to 0.01mm received in the previous dekad. The mean air temperature and pan evaporation recorded were 22.7°C and 61.0mm respectively. There was no report on sunshine parameter.

Most farmers are still preparing their farms for the next season but a few have started planting.

2.3.4. <u>Nyahururu</u>

The station received 0.4mmmm of rainfall compared to 0.01mm in the previous dekad. The mean air temperature and pan evaporation recorded were 16.7°C and 69.9mm respectively. The duration of sunshine was 10.2 hours.

Land preparation for the next season is still in going on.

2.3.5. Dagoretti

The station received rainfall amount of 6.8mm compared to dry conditions in the previous dekad. The mean air temperature and pan evaporation recorded were 21.6°C and 65.3mm respectively. There was no sunshine parameter.

Land preparation for the long rains is underway.

2.4 EASTERN KENYA REGION

2.4.1 <u>Meru</u>

The station reported dry conditions compared to 0.01mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 20.4°C and 52.0mm respectively. There was no report on sunshine parameter.

Most farmers have finished harvesting maize and land preparation is underway.

2.4.2 <u>Embu</u>

The station received rainfall amount of 0.3mm compared to dry conditions in the previous dekad. The average air temperature was 21.9°C. There was no report on sunshine and pan evaporation.

Land preparation is underway in most farms.

2.4.3 Katumani (Machakos)

The station received rainfall amount of 4.7mm compared to dry conditions in the previous dekad. The average air temperature was 22.9°C. There was no report on pan evaporation and sunshine parameters.

Land preparation is going on.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received rainfall amount of 59.7mm compared to dry conditions in the previous dekad. The average air temperature recorded was 29.1°C. There was no report on evaporation and sunshine hours.

Land preparation for the next season is underway. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 <u>Mtwapa</u>

The station received rainfall amount of 101.8mm compared to dry conditions in the previous dekad. The average air temperature and total pan evaporation recorded were 27.2°C and 52.0mm respectively. There was no report on sunshine parameter.

Mangoes are still at flowering stage and in good condition.

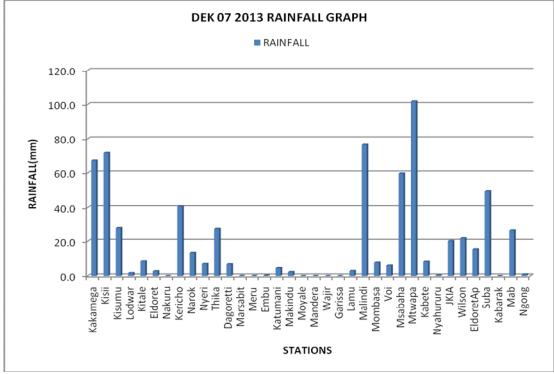


Figure 3.1: Dekadal Rainfall totals for 01-10 March 2013

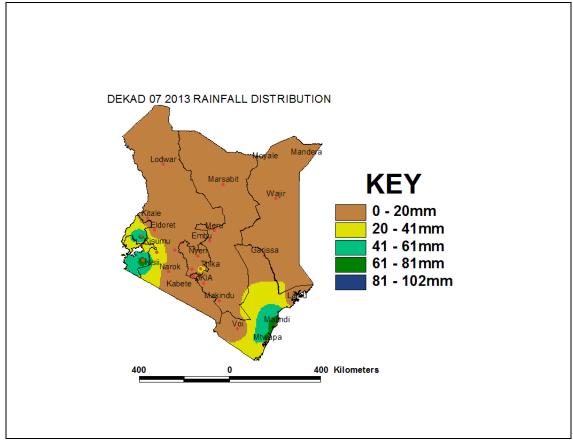


Figure 3.2: Dekadal Rainfall distribution for 01-10 March 2013

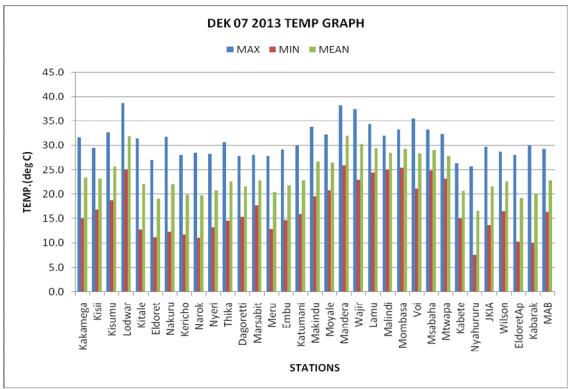


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 07 2013

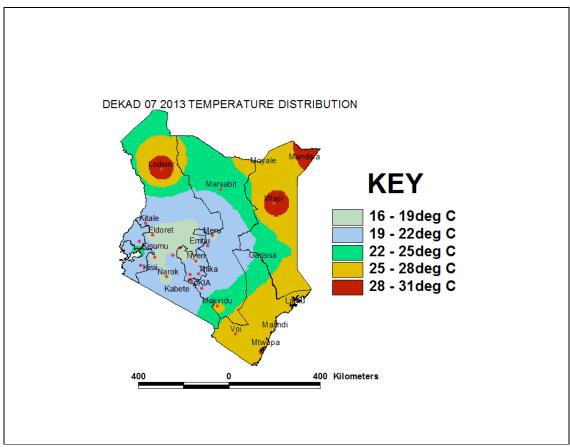


Figure 3.4: Mean temperature distribution for dekad 07 2013

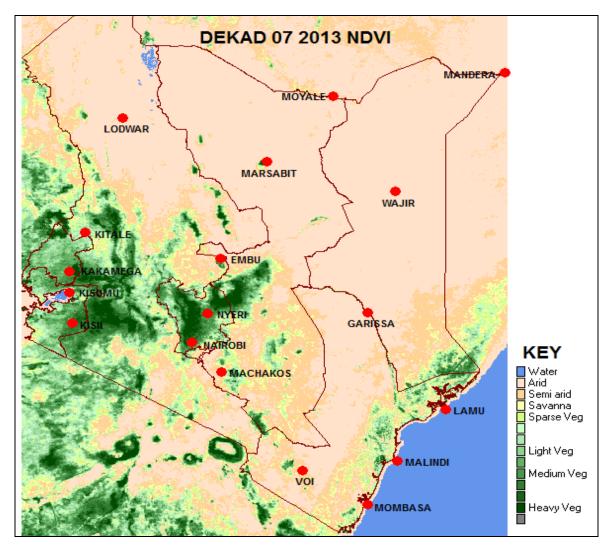


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 10-20 MARCH 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 mainly sunny intervals in the morning, with rains over few places for the last two days of the forecast period. Showers and thunderstorms over a few places are expected in the afternoon for the entire forecast period.

The showers favour land preparation and planting of crops which is in progress in some of these regions.

Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience mainly sunny intervals in the morning, sunny conditions in the afternoon except on the last two days of the forecast period where showers and thunderstorms over few places will be realized.

The expected showers will be of great benefit to the pasture and vegetation cover in these regions after experiencing long dry spell conditions.

The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience mainly cloudy mornings except for the last two days which is expected to have cloudy mornings, giving way to sunny intervals, then rains over a few places. The afternoon session is expected to experience mainly sunny intervals, then showers over a few places on the last two days of the forecast period.

The expected showers are of great benefit for the land preparation and the planting of crops which is going on in some of these regions.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience in the morning mainly sunny intervals, with rains over a few places on the last day of the forecast period. Afternoons' are expected to experience mainly showers over a few places.

The expected showers are very beneficial to the pasture and vegetation in the region after a long dry spell.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience mainly sunny intervals in the morning. Afternoons are expected to experience mainly sunny intervals, with showers over a few places on the second day of forecast period;

The showers are favourable for the ongoing land preparation in most farms in this region.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), Sunny intervals are mainly expected in the morning except on the second day of the forecast period where showers over a few places is expected to be realized. Sunny intervals will dominate in the afternoon for the entire period.

The showers are of great benefit to the land preparation, crops being planted and pasture growing in the region.

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

© 2013 The Kenya Meteorological Department