



KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN
WEATHER AND CROP REVIEW FOR DEKAD 08 2013
11-20 MARCH 2013

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities continued to increase especially in intensity in most stations countrywide; most stations reported active weather except Lodwar station in north eastern region which reported dry conditions. The highest rainfall of 135.3mm was recorded in Voi station at the coastal region. The second highest rainfall of 92.1mm was received at Kisumu station in Nyanza region. Marsabit station recorded 82.9mm being the highest rainfall in eastern region. In Nairobi region Moi Air Base station received the highest amount of rainfall of 64.9mm. In Rift valley region Eldoret Airport received the highest amount of rainfall of 53.6mm. Nyahururu station in central region reported the highest amount of rainfall of 51.4mm. In North eastern region the highest amount of rainfall of 37.7mm was received at Moyale station. Coastal region received the highest amount of rainfall 34.9mm at Mombasa station. Kakamega station in western region reported 31.0mm as the highest rainfall.

Maximum and minimum temperatures were decreasing and increasing respectively in most stations. The highest Maximum temperature of 37.7°C was recorded at Mandera station in North-eastern region. This was a decrease compared to 38.8°C recorded at Lodwar station in the same region in the previous dekad. The lowest maximum temperature of 23.7°C was recorded at Ngong station in Nairobi region. This was a decrease compared to 25.8°C recorded at Nyahururu station in Central region 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 08; 11-20 MARCH 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 31.0mm of rainfall compared to 67.4mm reported in the previous dekad. The mean air temperature and pan evaporation reported were 22.3°C and 46.2mm respectively. There was no report on sunshine parameter.

Most farmers are still planting but a few crops have germinated in some farms.

2.1.2 Kisii

This station recorded rainfall amount of 49.7mm compared to 71.8mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.4°C and 38.7mm respectively. There was no report on sunshine duration.

Most farmers have started planting their crops.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 7.9mm compared to 8.6mm reported in the previous dekad. The average air temperature and total pan evaporation were 20.7°C and 108.5mm respectively. There was no report on sunshine parameter.

Land preparation is still underway.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 41.2mm compared to 2.7mm reported in the previous dekad. The average air temperature and total pan evaporation reported were 19.2°C and 68.2mm respectively. There was no report on sunshine parameter.

Land preparation is still underway.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 0.2mm compared to 7.0mm received in the previous dekad. The average air temperature was 20.7°C. There was no report on pan evaporation and sunshine duration.

Land preparation is still in progress.

2.3.2 Kabete

The station received rainfall amount of 22.7mm compared to dry conditions in the previous dekad. The average air temperature and pan evaporation recorded were 19.8°C and 44.2mm respectively. There was no report on sunshine parameter.

Most farmers are preparing their land for the long rain season, while a few farmers are still harvesting their maize crops which are in poor state, and below normal yield is expected. 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 22.3mm compared to 27.5received in the previous dekad. The mean air temperature and pan evaporation recorded were 22.7°C and 48.2mm 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. Nyahururu

The station received 51.4mm of rainfall compared to 0.4mm in the previous dekad. The mean air temperature and pan evaporation recorded were 16.1°C and 56.9mm respectively. The duration of sunshine was 7.7 hours.

Land preparation for the next season is still underway

2.3.5. Dagoretti

The station received rainfall amount of 53.6mm compared to 6.8mm reported in the previous dekad. The mean air temperature recorded was 20.9°C. There were no sunshine and evaporation parameters.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported 8.2mm compared to dry conditions reported in the previous dekad. The average air temperature and total pan evaporation recorded were 20.5°C and 46.7mm respectively. There was no report on sunshine parameter.

Land preparation is in progress in most farms.

2.4.2 Embu

The station received rainfall amount of 47.3mm compared to 0.3mm in the previous dekad. The average air temperature and evaporation pan recorded were 21.9°C and 47.3mm respectively. There was no report on sunshine parameter.

Most famers have started planting their crops.

2.4.3 Katumani (Machakos)

The station received rainfall amount of 18.8mm compared to 4.7mm 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 still underway.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received rainfall amount of 12.4mm which is a reduction compared to 59.7mm received in the previous dekad. The average air temperature recorded was 29.4°C. There was no report on evaporation and sunshine hours.

Land preparation is still in progress.

Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received rainfall amount of 87.8mm compared to 101.8mm in the previous dekad. The average air temperature and total pan evaporation recorded were 28.9°C and 52.0mm respectively. There was no report on sunshine parameter.

Mangoes are still at flowering stage and in good condition.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

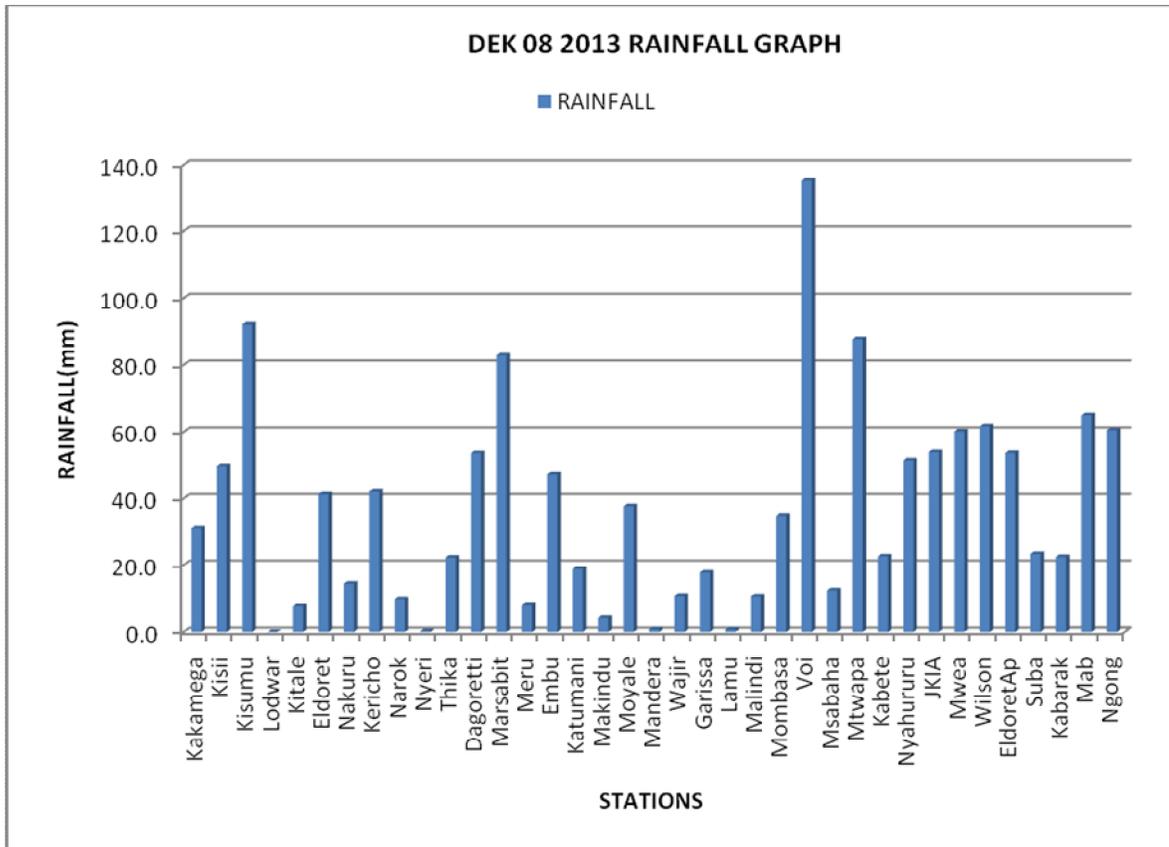


Figure 3.1: Dekadal Rainfall totals for 11-20 March 2013

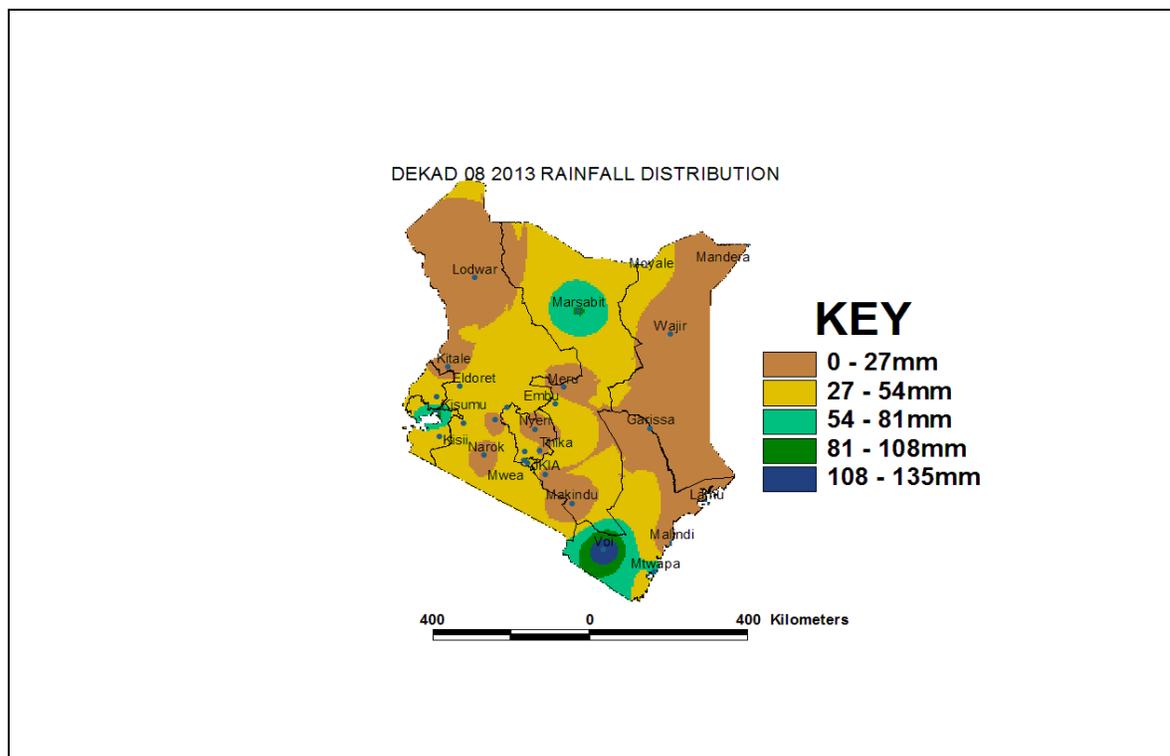


Figure 3.2: Dekadal Rainfall distribution for 11-20 March 2013

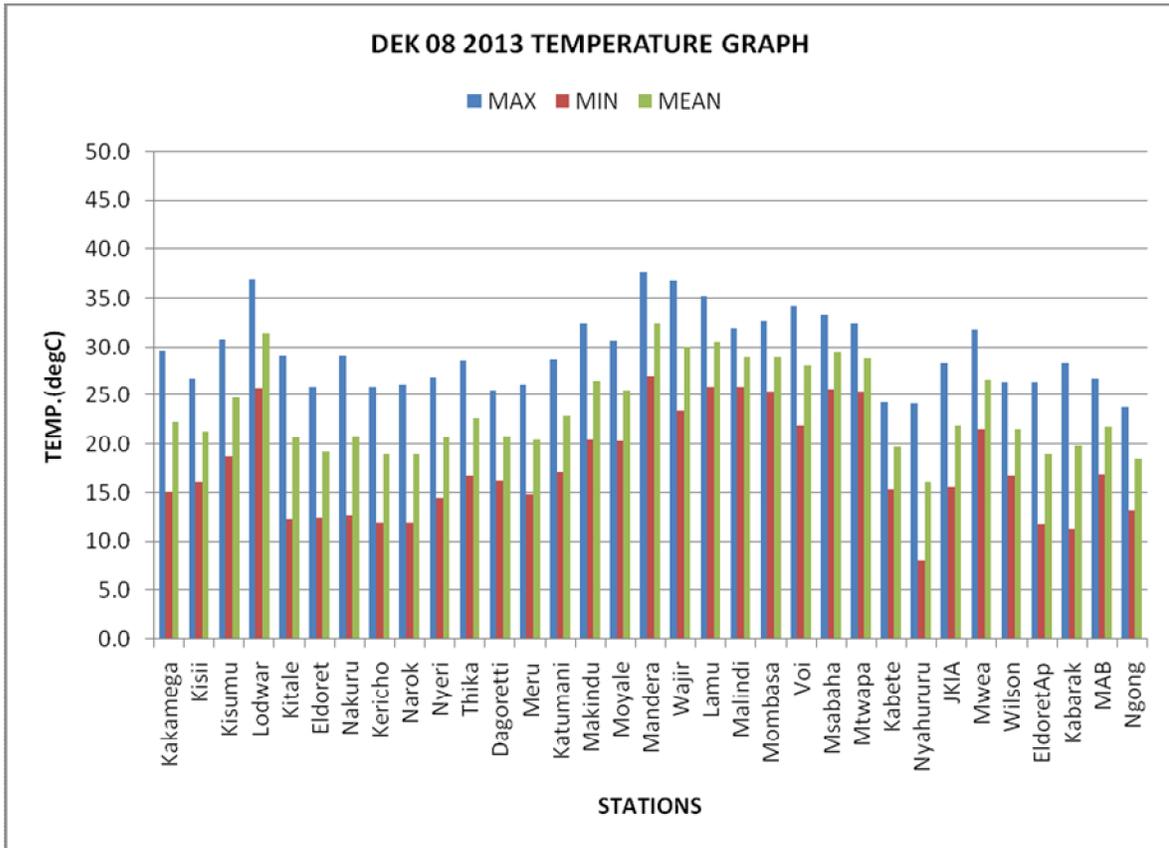


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 08 2013

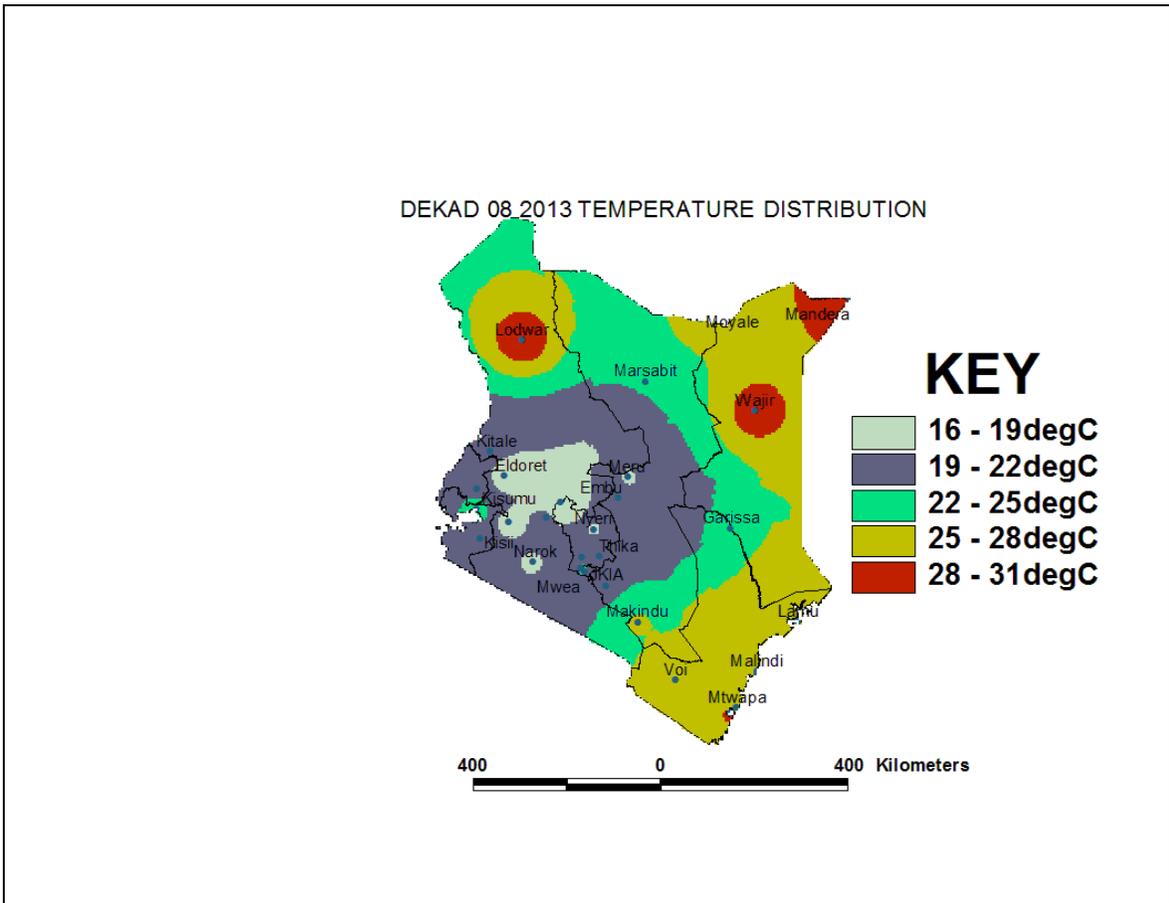


Figure 3.4: Mean temperature distribution for dekad 08 2013

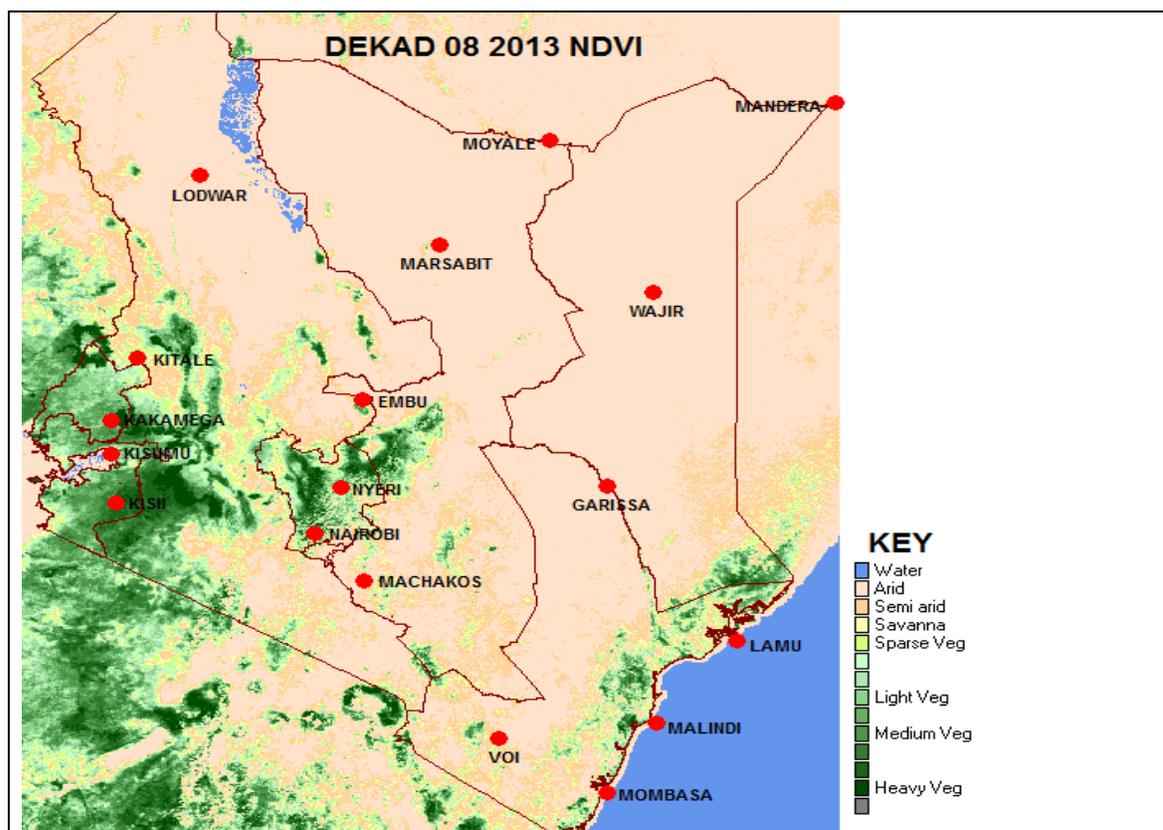


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-31 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, followed with rains over few places for the last three days of the forecast period. Showers and thunderstorms over several places are expected in the afternoon for the entire forecast period.

The showers are of great benefit to the crops which are mainly in their emergence stage in these regions.

- **Over the Northwestern counties (Turkana, West Pokot and Samburu)**, are expected to experience mainly sunny intervals in the morning for the entire forecast period. Showers and thunderstorms over a few places are expected to dominate in the Afternoons for the entire forecast period.

The showers are beneficial to replenish 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 mainly cloudy mornings giving way to sunny intervals, then rains over several places on the last three days of the forecast period. The afternoon

session is expected to experience mainly showers over a few places with sunny intervals in between, for the entire forecast period.

The expected showers will continue to benefit the germinating in some of these regions.

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo)**, are expected to experience mainly rains over few places in the morning for the entire forecast period. Afternoons are expected to have showers over a few places for the entire forecast period.

The expected showers will continue to replenish the pasture for the animals and vegetation in these regions.

- ✚ **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 for the entire forecast period.

The showers are favourable for the crop planting which is in progress in most farms in these regions.

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)**, Sunny intervals are mainly expected in the morning, followed by showers over a few places on the last three days of the forecast period. Sunny intervals will dominate in the afternoon for the entire forecast period.

The dominant sunny intervals are not beneficial for the crops which have already been planted in this region.

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