

# KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN WEATHER AND CROP REVIEW FOR DEKAD 09 2013 21-31 MARCH 2013

#### 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities continued to increase both in intensity and space in most stations countrywide. Marsabit station in the Eastern Region recorded the highest rainfall amount of 265.6mm which was a great increase compared to 135.3mm received in Voi station at the coastal region in the previous Dekad. The second highest rainfall of 240.4mm was received at Ngong station in Nairobi region. Thika station in Central region recorded the highest rainfall amount of 175.5mm. In Nyanza region Kisii station reported the highest rainfall amount of 169.9mm. Moyale station in North Eastern region reported the highest rainfall amount of 143.9mm. In Western region Kakamega station reported the highest rainfall amount of 138.2mm. Coastal region received the lowest rainfall with Mtwapa station reporting 70.6mm as its highest rainfall.

Maximum temperatures continued to decrease in most stations, while the minimum temperatures were also on a decreasing trend, though some stations still reported an increase as in previous Dekad. Mandera station in North Eastern region still reported the highest maximum temperatures of 35.2°C compared to 37.7°C in the previous Dekad. The lowest maximum temperature of 22.7°C was recorded at Ngong station in Nairobi region which was a reduction compared to 23.7°C reported at the same station in the previous Dekad. The lowest minimum temperature of 9.1°C was reported in Nyahururu station in Central region compared to 8.1°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 09; 21-31 MARCH 2013

#### 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

This station received 138.2mm of rainfall compared to 31.0mm reported in the previous dekad. The mean air temperature reported was 21.4°C. There was no report on sunshine and evaporation parameters.

Beans and maize in most farms are in emergence stage and in good state due to sufficient rainfall in this current dekad.

# 2.1.2 Kisii

This station recorded rainfall amount of 169.9mm compared to 49.7mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.7°C and 46.7mm respectively. There was no report on sunshine duration.

Beans and maize are in emergence stage and in good stage.

#### 2.2 RIFT VALLEY REGION

# 2.2.1 Kitale

The station received rainfall amount of 110.8mm compared to 7.9mm reported in the previous dekad. The average air temperature and total pan evaporation were 20.7©C and 43.4mm respectively. There was no report on sunshine parameter.

Some farmers have started planting their crops.

# 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 117.9mm compared to 41.2mm reported in the previous dekad. The average air temperature and total pan evaporation reported were 18.6©C and 63.9mm respectively. There was no report on sunshine parameter.

Planting of crops is in progress in most farms.

#### 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

# 2.3.1 **Nyeri**

The station received rainfall amount of 15.9mm compared to 0.2mm received in the previous dekad. The average air temperature was 20.1°C. There was no report on pan evaporation and sunshine duration.

Some farmers have started planting their crops.

# 2.3.2 **Kabete**

The station received rainfall amount of 144.2mm compared to 22.7mm reported in the previous dekad. The average air temperature reported was 19.8°C. There was no report on evaporation and sunshine duration.

Land preparation is still in progress. 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 175.5mm compared to 22.3mm received in the previous dekad. The mean air temperature recorded was 21.6°C. There was no report on sunshine and evaporation parameters.

Most crops are in their emergence stage and in good state.

#### 2.3.4. Nyahururu

The station received 72.8mm of rainfall compared to 51.4mm in the previous dekad. The mean air temperature and pan evaporation recorded were 16.0°C and 46.8mm respectively. The duration of sunshine was 6.2 hours.

Planting is underway in some farms.

# 2.3.5. Dagoretti

The station received rainfall amount of 115.6mm compared to 53.6mm reported in the previous dekad. The mean air temperature and evaporation pan recorded were 20.3°C and 49.6mm respectively. There was no sunshine parameter.

#### 2.4 EASTERN KENYA REGION

# 2.4.1 Meru

The station reported 107.5mm compared to 8.2mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.7°C and 54.5mm respectively. There was no report on sunshine parameter.

Maize and beans are at emergence stage and in fair state.

#### 2.4.2 Embu

The station received rainfall amount of 103.9mm compared to 47.3mm in the previous dekad. There was no report on average air temperature, pan evaporation and sunshine parameters.

Maize and beans are at emergence stage and in fair state.

# 2.4.3 Katumani (Machakos)

The station received rainfall amount of 93.7mm compared to 18.8mm in the previous dekad. The average air temperature was 21.1°C. There was no report on pan evaporation and sunshine parameters.

Maize and beans are at emergence stage and in good state.

#### 2.5 COASTAL REGION

#### 2.5.1. Msabaha

The station received rainfall amount of 40.3mm compared to 12.4mm received in the previous dekad. The average air temperature and pan evaporation recorded were 29.0°C and 53.9mm respectively. There was no report on sunshine hours.

Planting of crops is in progress.

## 2.5.2 Mtwapa

The station received rainfall amount of 70.6mm compared to 87.8mm in the previous dekad. The average air temperature recorded was 28.6°C. There was no report on sunshine and evaporation parameters.

Most farmers are still planting their crops. Mangoes are still at flowering stage and in good condition.

# 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

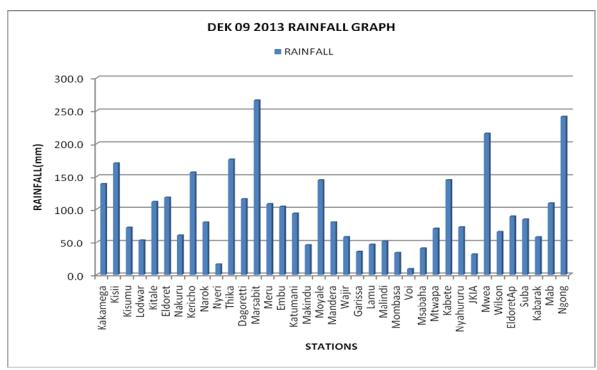


Figure 3.1: Dekadal Rainfall totals for 21-31 March 2013

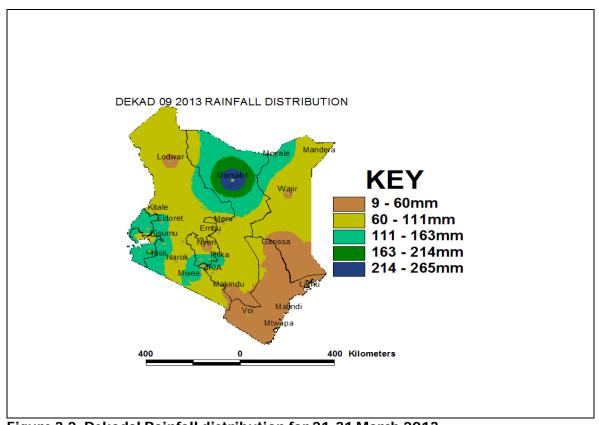


Figure 3.2: Dekadal Rainfall distribution for 21-31 March 2013

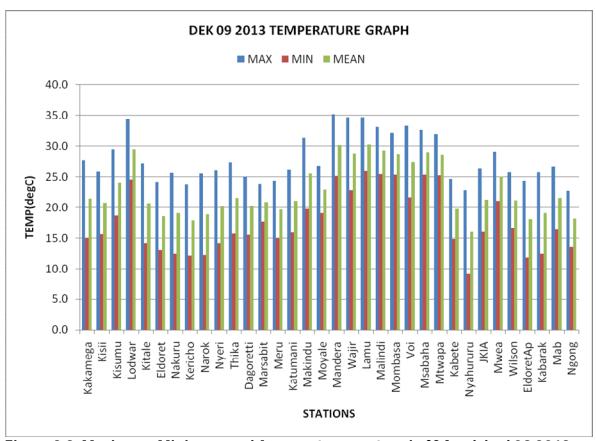


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 09 2013

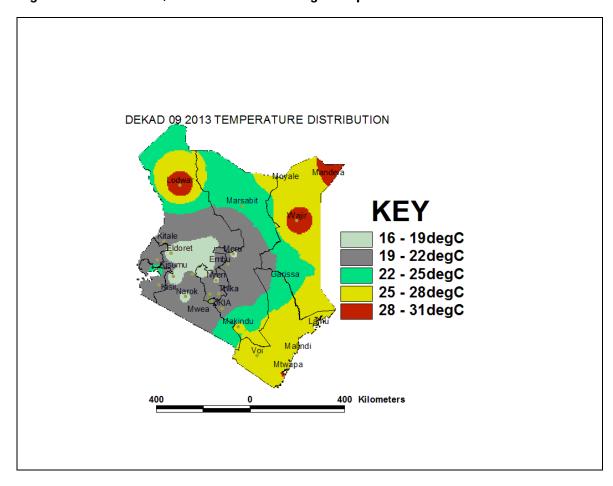


Figure 3.4: Mean temperature distribution for dekad 09 2013

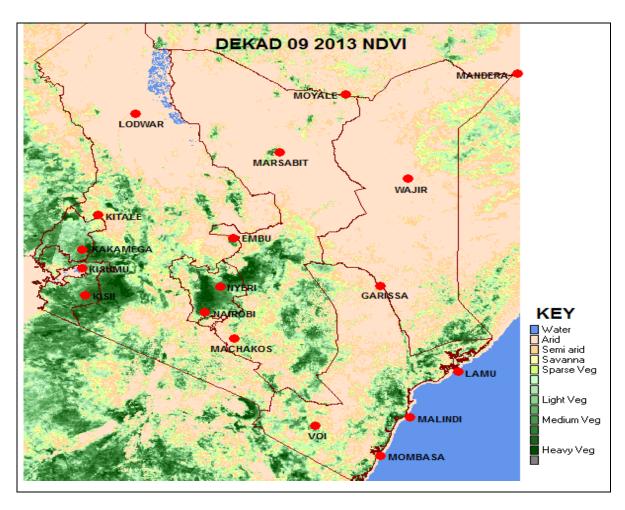


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

# EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS 01-10 APRIL 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 first two days, followed with rains over few places for the rest of the entire forecast period. Afternoons are expected to experience mainly showers and thunderstorms over several places for the forecast period.

The showers will continue benefiting 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 first two days followed by showers over few places on the third day, then sunny intervals on fourth and fifth day, followed by showers over few places for the rest of the forecast period.

The showers will continue 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 cloudy early mornings giving way to sunny intervals for the first two days, then rains over few places on the next three days, followed by rains over several places for the rest of the forecast period. The afternoons are expected to experience mainly showers over a several places for the entire forecast period.

The expected showers are of great benefit to the germinating crops in 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 are of great benefit to 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 for the entire forecast period. Afternoons are expected to experience mainly showers over a few places for the entire forecast period.

The showers are beneficial to the crops which are in their emergence stage in these regions.

➡ In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),
Expected in the morning to receive showers over few places on the first two days,
followed by showers over several places for the rest of the forecast period

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

## For feedback or further guidance, Contact:

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