



KENYA METEOROLOGICAL DEPARTMENT

DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 08, 2012 11 – 20 MARCH 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Most stations reported dry conditions countrywide compared to the previous dekad where rainfall occurred in most stations. The highest rainfall of 15.1 mm occurred in Kisii station in Nyanza Province as compared to 59.5mm of rainfall received in the previous dekad. The second highest rainfall observed during the dekad was 0.6 mm at Kitale station in the Rift Valley region. Wajir station in North Eastern received 0.9 mm of rainfall. Stations in other regions namely Western, Central, Nairobi, Eastern and Coast reported dry conditions.

Maximum temperature increased in most stations, except for a few stations mostly in North Eastern region that reported a decrease. The highest maximum temperature recorded was 37.7 °C at Manderu in North Eastern Province, while the lowest maximum temperature was 25.5 °C recorded at Nyahururu in Central Kenya. Most stations reported an increase in the minimum temperature.

For 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 2012

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

During the dekad, this station received 0.8 mm of rainfall compared to 77.4 mm received in the previous dekad. The mean air temperature and total pan evaporation recorded were 22.5°C and 51.0 mm respectively. There was no report on sunshine hours. *Land preparation for the long rains season is still going on.*

2.1.2 Kisii

The station received the highest rainfall countrywide of 15.1 mm. This was a drastic reduction from the 59.5 mm reported during the previous dekad. The mean air temperature and total pan evaporation recorded were 23.2°C and 50.6 mm respectively. There was no report on Sunshine hours. *Land preparation for next season is still going on.*

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received 0.6 mm of rainfall compared to 39.3 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 20.9°C and

53.6 mm respectively. There was no report on sunshine hours. *Land preparation for the next long season is underway.*

2.2.2 Eldoret-Kapsoya

The station reported dry conditions compared to 20.2 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 18.6⁰c and 83.0 mm respectively. There was no sunshine hours report. *Land preparation for the next long season is underway.*

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station reported dry conditions compared to 2.4 mm of rainfall reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.3⁰c and 63.0 mm respectively. There was no report on Sunshine hours. *Land preparation is going on for the next season.*

2.3.2 Kabete

The station reported dry conditions compared to 5.0mm rainfall reported previously. The average air temperature and pan Evaporation recorded were 20.5⁰c and 71.5 mm respectively. There was no report on sunshine hours. *Land preparation for the long rains season is going on.*

2.3.3 Thika

The station reported dry conditions just like in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 21.9⁰c and 67.5 mm respectively. There was no report on sunshine hours. *Land preparation is going on.*

2.3.4. Nyahururu

The station reported dry conditions as compared to 35.0 mm of rainfall reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 15.7⁰c and 81.5 mm respectively. Average Sunshine hours recorded were 10.4 hours per day. *Farmers are preparing the land for the next season.*

2.3.5. Dagoretti

The station reported dry conditions as compared to 5.5 mm of rainfall reported in the previous dekad. The average air temperature and total pan evaporation recorded were 21.6⁰c and 61.0 mm respectively. There was no sunshine hours report. *Land preparation for the next season is going on.*

2.4 EASTERN REGION

2.4.1 Meru

The station reported nil rainfall compared to 7.4 mm received in the previous dekad. The average air temperature and total pan evaporation recorded were 19.6⁰c and 56.5 mm respectively. There was no report on sunshine hours. *Land preparation for next season is going on.*

2.4.2 **Embu**

The station reported nil rainfall compared to 5.4 mm reported in the previous dekad. The average air temperature and evaporation pan recorded were 21.4⁰c and 70.0 mm respectively. There was no report on Sunshine hours. *Maize harvesting is still going on, with below normal yield expected.*

2.4.3 **Katumani (Machakos)**

The station reported dry conditions as compared to 1.6 mm of rain reported in the previous dekad. The average air temperature recorded was 23.3⁰c. There was no report on evaporation pan and sunshine parameters. *Land preparation for the next season has started.*

2.5.0 **COASTAL REGION**

2.5.1. **Msabaha**

The station reported dry conditions as compared to 0.01mm of rainfall received in the previous dekad. *The average air temperature and pan evaporation recorded were 28.1⁰c and 59.5 mm of Rain respectively. There was no sunshine report. Land preparation for the next season is going on.*

2.5.2 **Mtwapa**

This station reported dry conditions just as in the previous dekad. The average air temperature and pan evaporation recorded were 28.7⁰c and 66.5 mm respectfully. There was no report on sunshine hours. *Land preparation for the next season has started, and Watermelon harvesting is going on.*

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

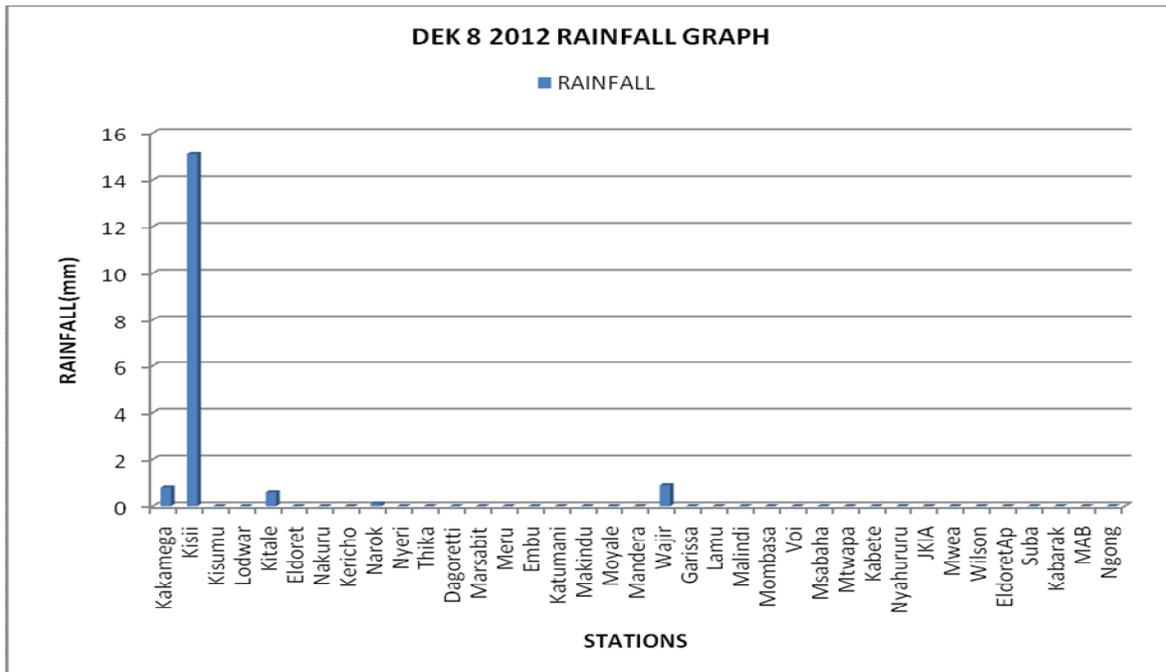


Figure 3.1: Dekadal rainfall totals for 11 - 20 March 2012

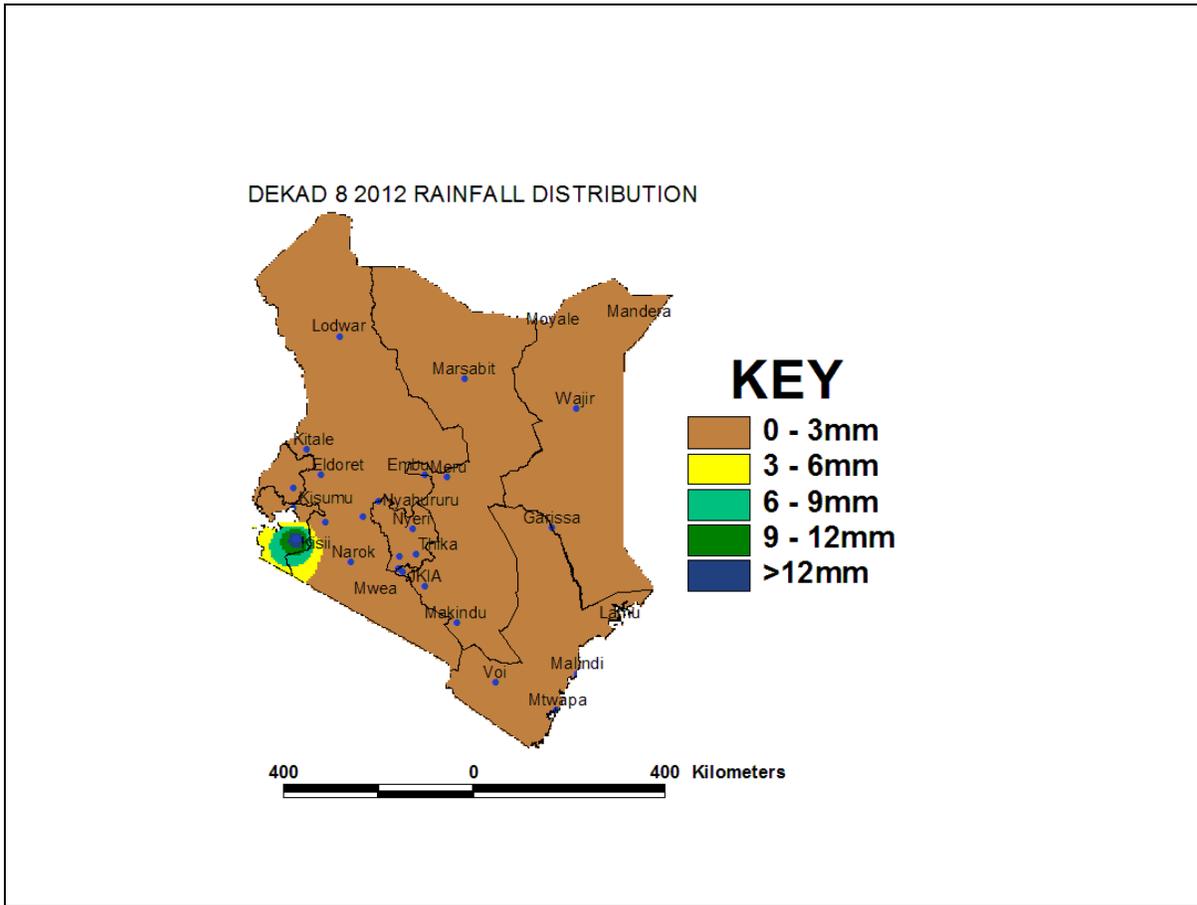


Figure 3.2: Dekadal rainfall distribution

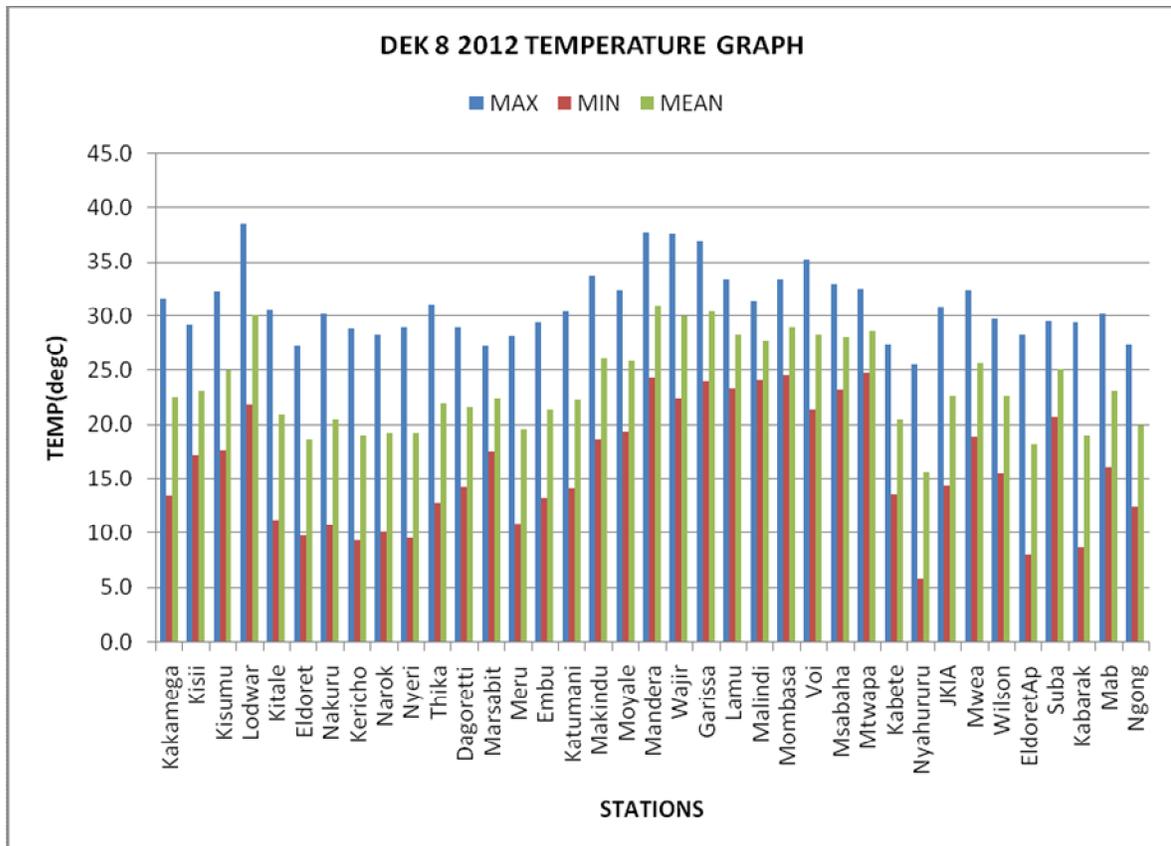


Figure 3.3: Maximum, Minimum and Average temperature in ⁰C

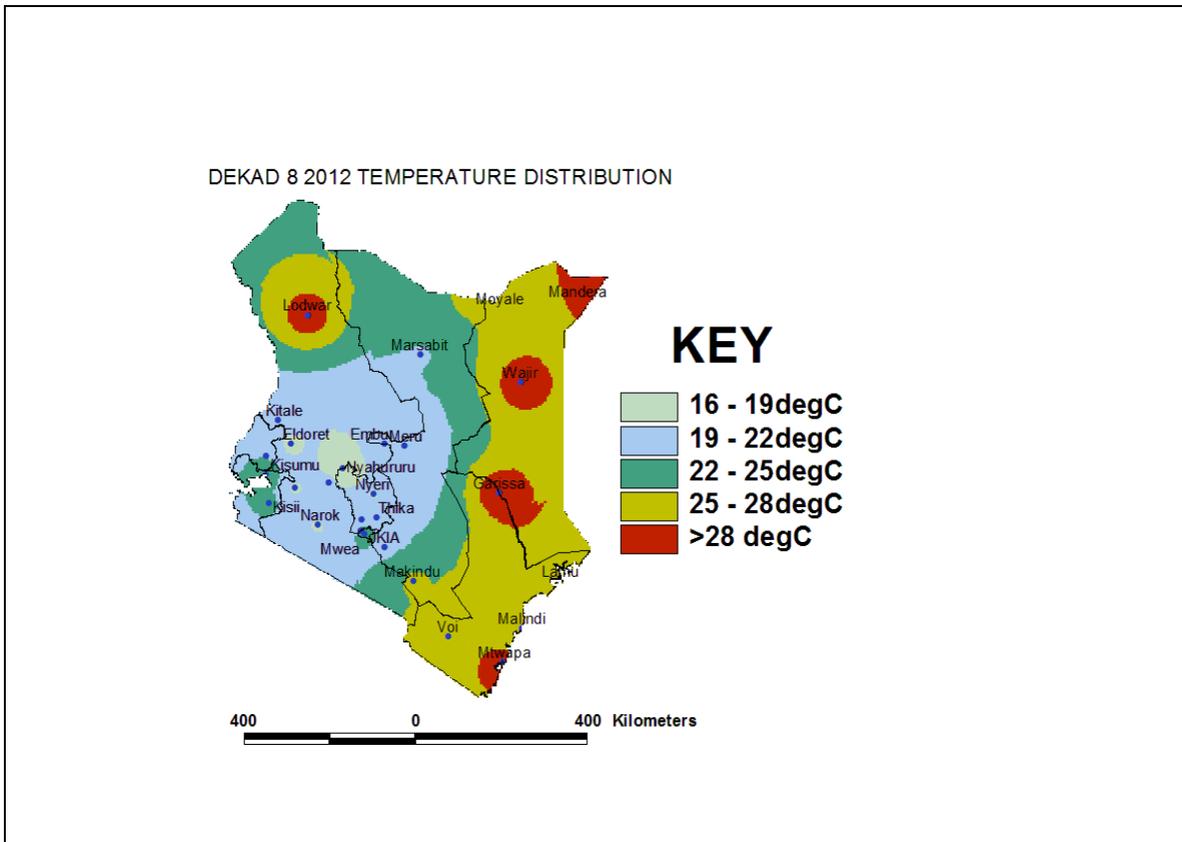


Figure 3.4: Mean Temperature distribution

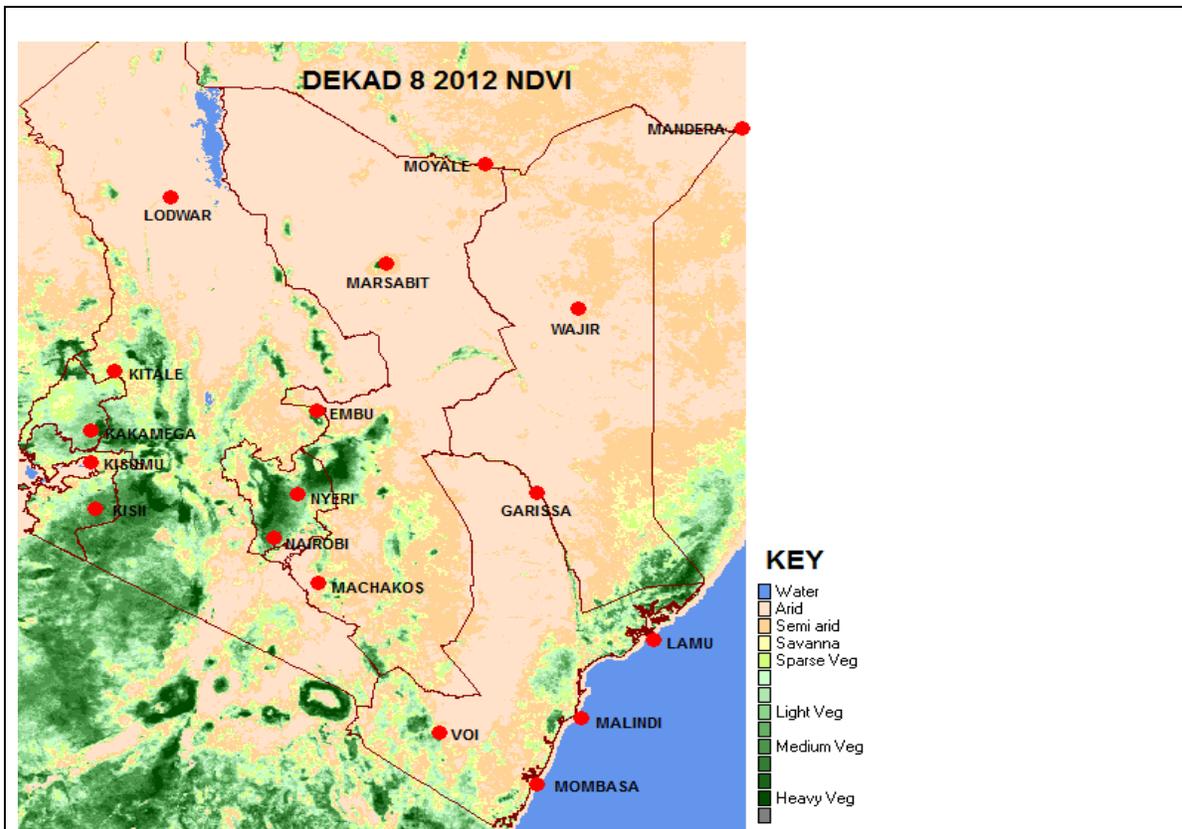


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-31 MARCH 2012

- **Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Central and south Rift Valley (Kitale, Kakamega, Kisumu, Kisii, Migori, Nyamira, Kericho, Bomet, Uasin-Gishu, Nakuru, Narok, Nyandarua, etc)** will experience mainly sunny intervals in the morning for much of the forecast period. Afternoon showers are expected over several places during the first half of the forecast period, reducing to a few places confined in the south rift valley, and south Nyanza in the second half of the forecast period. *The expected thermal and moisture resources will spur the germination of maize and beans already planted in some of the above-mentioned counties.*
- **The Northwestern counties (Turkana, West Pokot etc),** will experience sunny conditions throughout the forecast period. *These dry conditions will continue to impact negatively on the pasture and general vegetation over these counties.*
- **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc)** will experience cloudy early morning showers giving way to sunny intervals for much part of the forecast period. *The sunny periods are useful during the ongoing land preparation and planting as farmers in these counties await the long rains.*
- **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** Sunny intervals will be experienced throughout the forecast period. *As in the Northwestern counties, the forecast dry conditions will continue to have negative impacts on the pasture and the general vegetation over these counties.*
- **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** Improvement in weather development is expected in the first half of the forecast period. Afternoon showers will be experienced in a few places for much of the forecast period. *The showers will be of great importance to the animals and plants in these regions considering the long dry spell which has prevailed in these counties.*
- **The Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** Sunny and hot weather conditions are expected to prevail throughout the forecast period. Increased cloudiness and a possibility of light morning showers are expected in south coast especially in the first half of the forecast period. *The possibility of shower conditions will be favorable to the mango trees grown in these areas.*

For feedback or further guidance, Contact:

Director,
Kenya Meteorological Department,
Agrometeorological 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

©2012 The Kenya Meteorological Department