

KENYA METEOROLOGICAL DEPARTMENT

DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 06, 2012 21 – 29 FEBUARY 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Most stations countrywide reported some rainfall but with low intensity just as in the previous dekad. Dry conditions persisted over the North-Eastern and Coastal regions. The highest rainfall received during the dekad was 37.1 mm at Kisumu in the Nyanza region. During the previous dekad, the station had recorded only 6.3 mm. The second highest rainfall observed was 33.2mm at Narok in the Rift Valley region. The highest amount reported in the Central region was 15.2 mm at Thika while in Western Kenya, Kakamega received 15.0mm which was the highest amount in the region. The highest rainfall observed over the coastal region, was at Voi station while in the Nairobi area, Wilson station recorded the highest amount of 10.6 mm.

Maximum temperature increased in most stations, though a few stations reported a decrease. The highest maximum temperature of 38.0°C was observed at Wajir station in North Eastern Province, while the lowest maximum temperature of 23.8°C was recorded at Nyahururu station in the Central region. Almost half of the stations reported an increase in nighttime (minimum) temperatures, while the other half reported a decrease.

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 06; 21 – 29 FEBRUARY 2012

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 15.0 mm of rainfall as compared to 2.6 mm of rainfall received in the previous dekad. The mean air temperature and total pan evaporation recorded were 22.4°c and 39.5 mm respectively, and Sunshine hours recorded were 7.8 hours per day. Land preparation for the long rains season is ongoing.

2.1.2 Kisii

The station recorded 10.1 mm of rainfall compared to 28.7 mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.6°C and 27.6mm respectively. Sunshine hours reported were 8.3 hours per day. *Land preparation for the next season is still going on.*

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received 6.0 mm of rainfall as compared to 0.01 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 21.1°C and 35.0 mm respectively. Average sunshine hours reported were 7.0 hours per day. *Land preparation for the next long season is underway.*

2.2.2 Eldoret-Kapsoya

The station received 11.8 mm of rainfall compared to 0.01 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 17.8°c and 59.3mm respectively. The sunshine hours recorded were 7.9 hours per day. *Land preparation for the next long season is underway.*

2.3 NAIROBI AREA AND CENTRAL KENYA REGION

2.3.1 **Nyeri**

The station received 9.2 mm of rainfall compared to 4.9 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 18.9°c and 37.3 mm respectively. There was no report on Sunshine hours. *Harvesting of the maize crop is underway with below normal yield expected.*

2.3.2 Kabete

The station received 0.0 mm of rainfall as compared to 7.0 mm reported in the previous dekad. The average air temperature and evaporation pan recorded were 20.6°c, and 51.5 mm respectively. Sunshine hours reported were 9.4 hours per day. *Land preparation for the long rains season has started.*

2.3.3 Thika

The station received 5.1 mm of rainfall as compared to dry conditions reported in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 21.1°c and 59.7 mm respectively. The sunshine hours recorded were 9.3 hours per day. *Land preparation is going on.*

2.3.4. Nyahururu

The station received 8.7 mm of rainfall as compared to 2.2 mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 15.4°c and 50.7 mm respectively. Average Sunshine hours recorded were 9.0 hours per day. *Farmers are cultivating their land for the next season.*

2.3.5. Dagoretti

The station received 8.0 mm of rainfall as compared to 0.4 mm reported in the previous dekad. The average air temperature and pan evaporation recorded were 20.9°c and 48.5 mm respectively. The sunshine hours reported were 9.3 hours per day. *Land preparation for the next season is going on.*

2.4 EASTERN REGION

2.4.1 Meru

The station received 5.6 mm of rainfall as compared to 12.9 mm reported in the previous dekad. The average air temperature and evaporation pan recorded were 19.5°c and 37.6mm respectively. Sunshine hours reported were 8.4 hours per day. Some farmers have started harvesting maize, with below normal yield expected.

2.4.2 Embu

The station received 5.6 mm of rainfall as compared to 1.7 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 21.4°c and 23.5 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 received 0.01 mm of rainfall as compared to 4.6 mm reported in the previous dekad. The average air temperature recorded was 22.3°c. There was no report on evaporation and sunshine parameters. *Maize harvesting is going on, with normal yield expected*

2.5 COASTAL REGION

2.5.1. Msabaha

The station received 0.6 mm of rainfall as compared to 0.06mm received in the previous dekad. *The* average air temperature and pan evaporation recorded were 28.0°c and 47.6mm respectively. There was no sunshine report. *Land preparation for the next season is going on.*

2.5.2 Mtwapa

This station received 0.4mm of rainfall as compared to 0.2 mm reported in the previous dekad. The average air temperature and Pan evaporation recorded were 28.1°c and 50.5 mm respectively. There was no sunshine report. *Maize is being harvested, with below normal yield expected. Watermelon was at 100% consumer's ripeness stage and in bad state due to prolonged dry spell.*

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

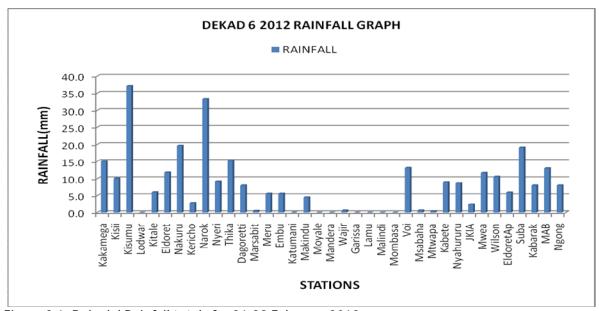


Figure 3.1: Dekadal Rainfall totals for 21-29 February 2012

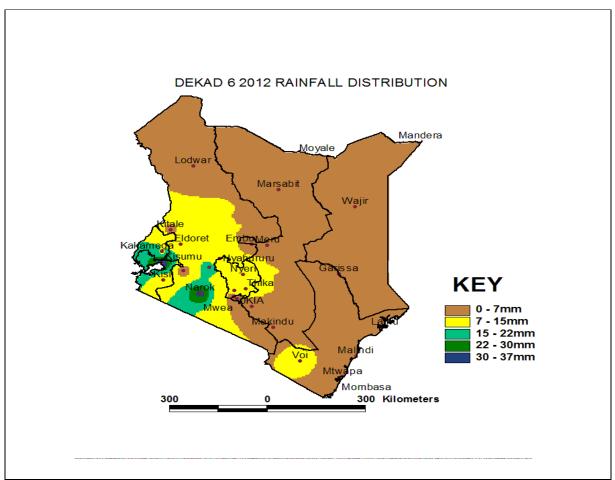


Figure 3.2: Dekadal Rainfall distribution

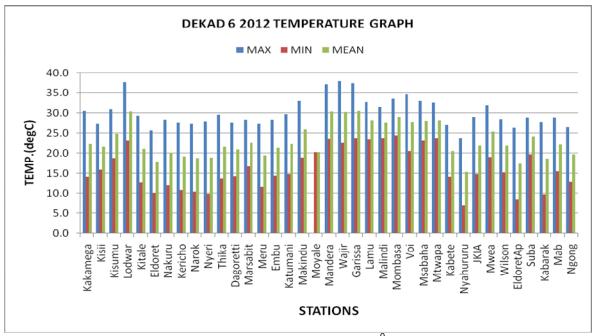


Figure 3.3: Maximum, Minimum and Average temperature in ⁰c

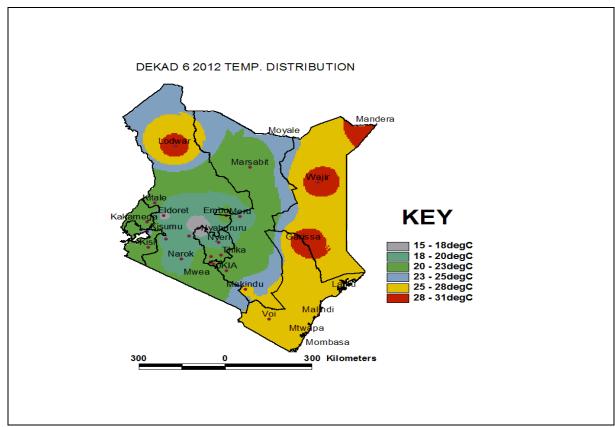


Figure 3.4: Mean Temperature distribution

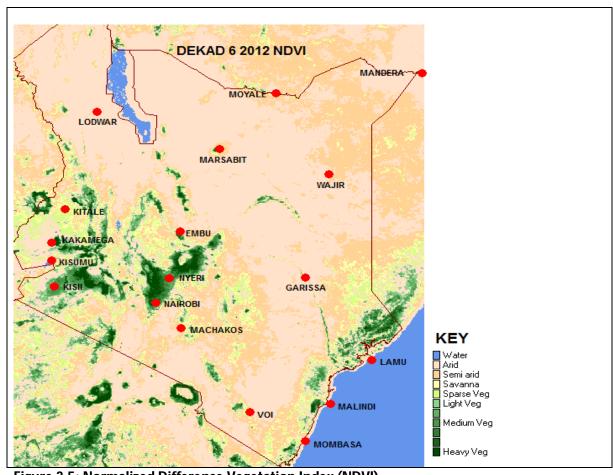


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10DAYS; 01-10 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 sunny intervals in the morning throughout much of forecast period. Isolated showers may occur over few places over the extreme south Nyanza area bordering Tanzania in mid of the forecast period. These weather conditions are beneficial to the crops some farmers have started planting in these regions.
 - **★ The Northwestern counties (Turkana, West Pokot etc),** will experience sunny periods throughout the forecast period. *These weather conditions are not are not beneficial to the pasture for animals kept in these regions.*
 - ➡ The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc) Will experience sunny periods throughout the forecast period.

The sunny periods will help in land preparation which is going on in most farms.

- ♣ Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc), Sunny conditions to prevail over most places for much of the forecast period. These dry conditions are not beneficial to the animals kept in these regions.
- **♣ Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** Will experience sunny periods for much of the forecast period. *These conditions are favorable for the land preparation going on in these regions.*
- ➡ The Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale, etc) Sunny conditions to prevail during the forecast period over most places. The sunny conditions are not favorable to the mango trees in these areas.

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