



KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN
WEATHER AND CROP REVIEW FOR DEKAD 09, 2012
21 – 31 MARCH 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

During the current dekad, most stations countrywide, reported some significant amount of rainfall compared to the previous dekad. The highest rainfall received during the dekad was 69.2mm at Kisii station in the Nyanza region. During the last dekad, the same station received 15.1mm, also the highest rainfall observed for that dekad. Kericho station in Rift Valley province recorded 15.8mm while Kakamega in Western received 15.0mm. The highest rainfall observed at the coastal strip was 1.1mm at Voi station. In North Eastern Province, Lodwar station recorded the highest amount of 0.5 mm while both Nyeri and Nyahururu stations in the central Kenya region reported 0.01 mm each. Marsabit station in the Eastern region, also received 0.01 mm. Finally, Kakamega station in the western region of the country reported nil rainfall.

Unlike in the previous dekad when maximum temperature had increased over most stations, during the current dekad, a decrease was observed except for a few stations that continued to report an increase in the maximum temperature. The highest maximum temperature recorded countrywide, was 38.6^oc at Mandera in North Eastern. This was an increase from the previous maximum temperature of 37.7^oc at the same station during the last dekad. The lowest maximum temperature was 25.2^oc recorded at Nyahururu in Central Kenya just as in the last dekad. Most stations continued to report an increase in the nighttime (minimum) temperatures.

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 09; 21 – 31 MARCH 2012

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 15.0 mm of rainfall compared to 0.8 mm received in the previous dekad. The mean air temperature and total pan evaporation recorded were 24.0^oc and 54.0 mm respectively. *There was no report on sunshine hours.*

Land preparation and in some areas planting for the long rains season continued during the dekad.

2.1.2 Kisii

As mentioned above in the highlights, the station received the highest rainfall amount countrywide of 69.2 mm compared to 15.1 mm reported in the previous dekad. The

mean air temperature and total pan evaporation recorded were 22.8⁰C and 59.2 mm respectively. There was no report on Sunshine hours.

Some farmers have started planting while others are still preparing their land.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received 5.3 mm of rainfall compared to 0.6 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 22.4⁰C and 63.3 mm respectively. There was no report on sunshine hours.

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

2.2.2 Eldoret-Kapsoya

The station reported dry conditions just as in the previous dekad. The average air temperature and total pan evaporation recorded were 19.8⁰c and 87.0 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 0.01 mm of rainfall as compared to dry conditions reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.7⁰c and 68.5 mm respectively. There was no report on sunshine hours.

Farmers have started planting their crops.

2.3.2 Kabete

The station reported dry conditions just as in previous dekad. The average air temperature and pan evaporation recorded were 20.7⁰c and 73.4 mm respectively. There was no report on Sunshine hours.

Land preparation for the long rains season is still 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 22.1⁰c and 72.0 mm respectively. There was no report on sunshine hours.

Land preparation is still going on.

2.3.4. Nyahururu

The station received insignificant rainfall amount of 0.01mm compared to dry conditions reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 16.5⁰c and 88.5 mm respectively. Average Sunshine hours recorded were 9.9 hours per day.

Farmers are still preparing the land for the next season.

2.3.5. Dagoretti

The station reported dry conditions just as in the previous dekad. The average air temperature and pan evaporation recorded were 21.6⁰c and 83.5 mm. There was no sunshine hours report.

Land preparation for the next season is still going on, and a few farmers have started planting.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported dry conditions just as in the previous dekad. The average air temperature and pan Evaporation recorded were 19.9⁰c and 60.0 mm respectively. There was no report on Sunshine hours.

Land preparation for next season is going on.

2.4.2 Embu

The station reported dry conditions just as in the previous dekad. The average air temperature and evaporation pan recorded were 21.4⁰c and 74.0 mm respectively. There was no report on Sunshine hours.

Land preparation has started in most farms.

2.4.3 Katumani (Machakos)

The station reported dry conditions just as in the previous dekad. The average air temperature recorded was 22.4⁰c. 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 just as in the previous dekad. The average air temperature and pan evaporation recorded were 28.1⁰c and 66.0 mm 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 28.0⁰c and 66.7 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

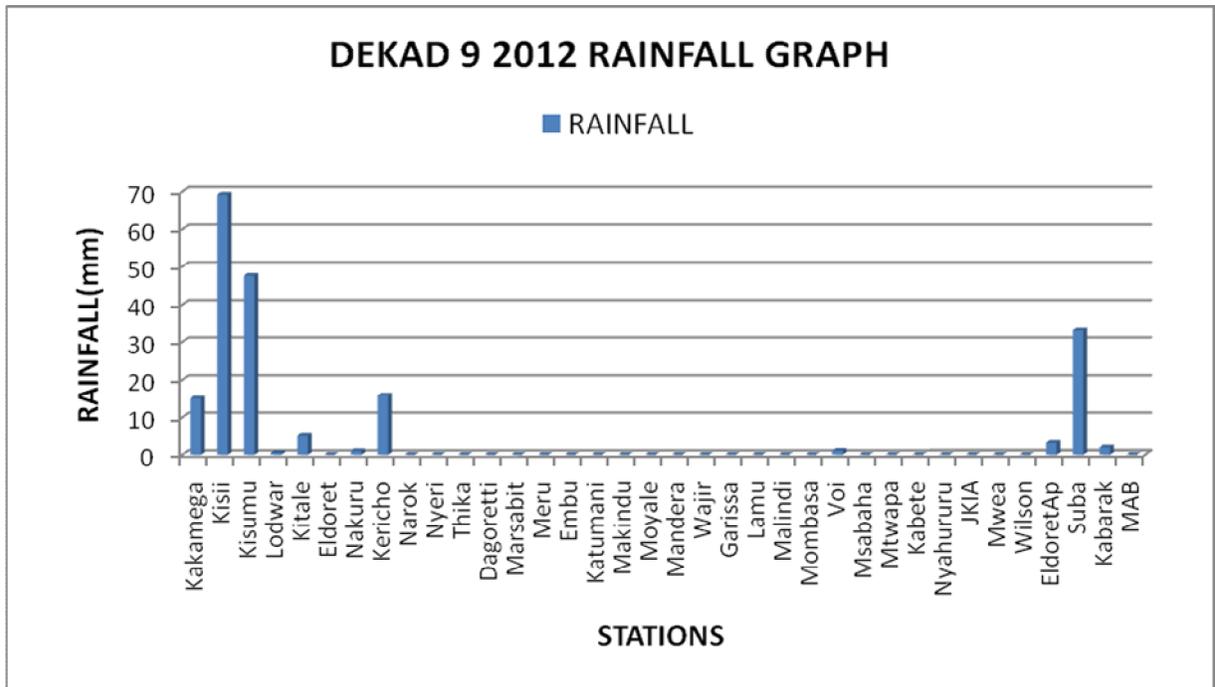


Figure 3.1: Dekadal rainfall totals for 21-31 March 2012

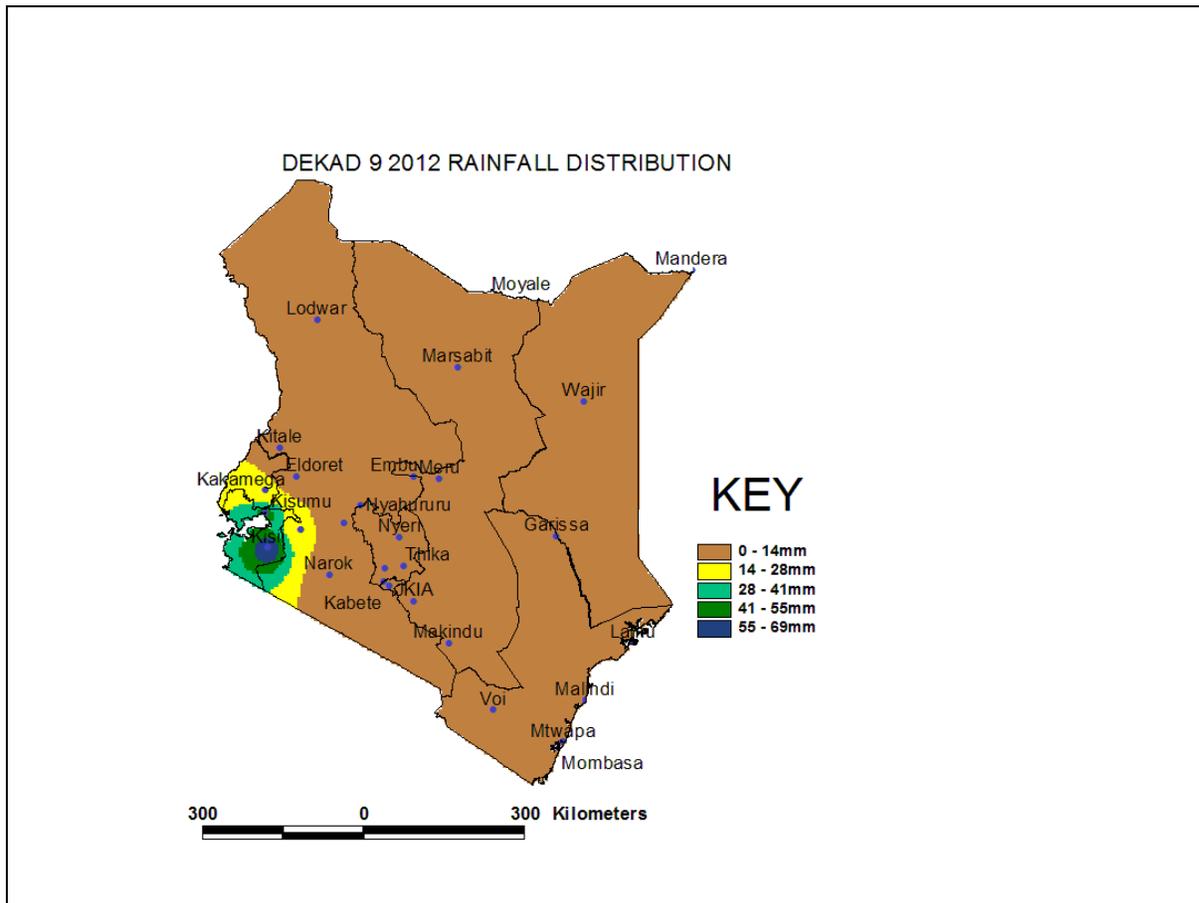


Figure 3.2: Dekadal rainfall distribution

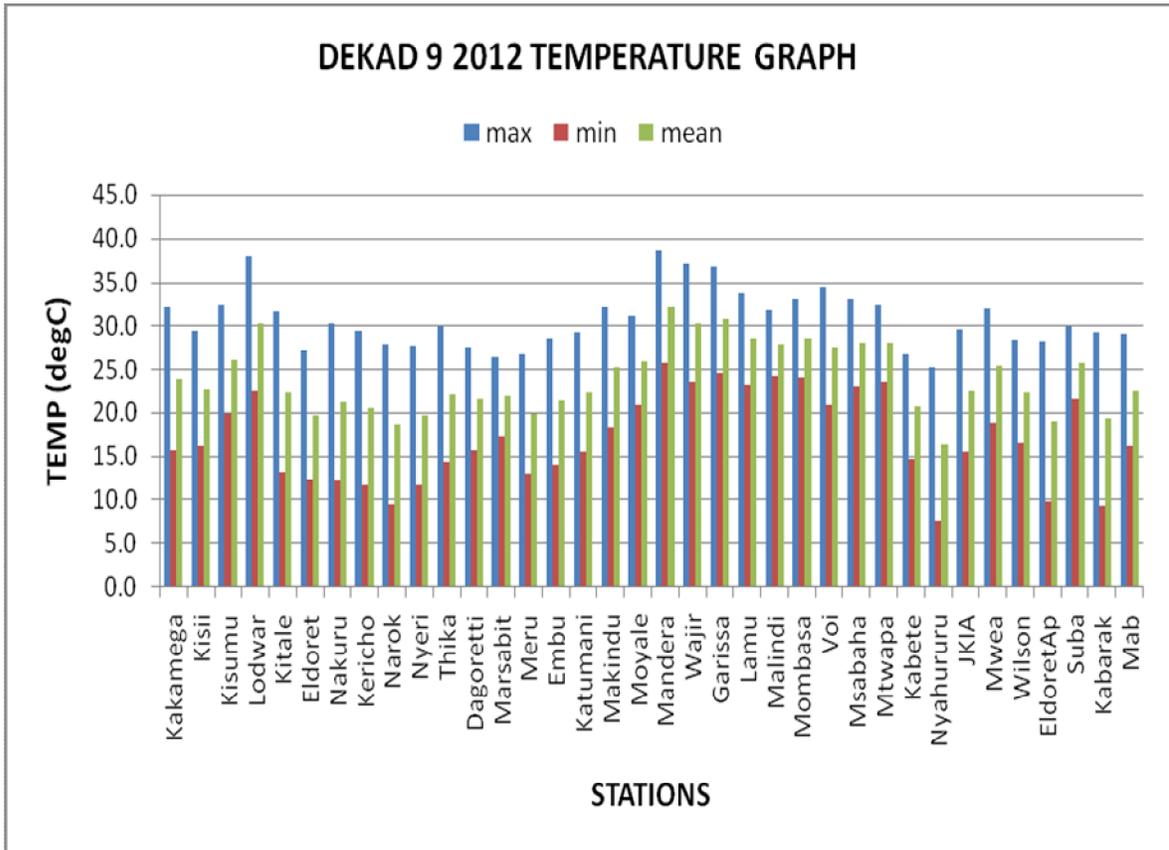


Figure 3.3: Maximum, Minimum and Average temperature in ⁰C

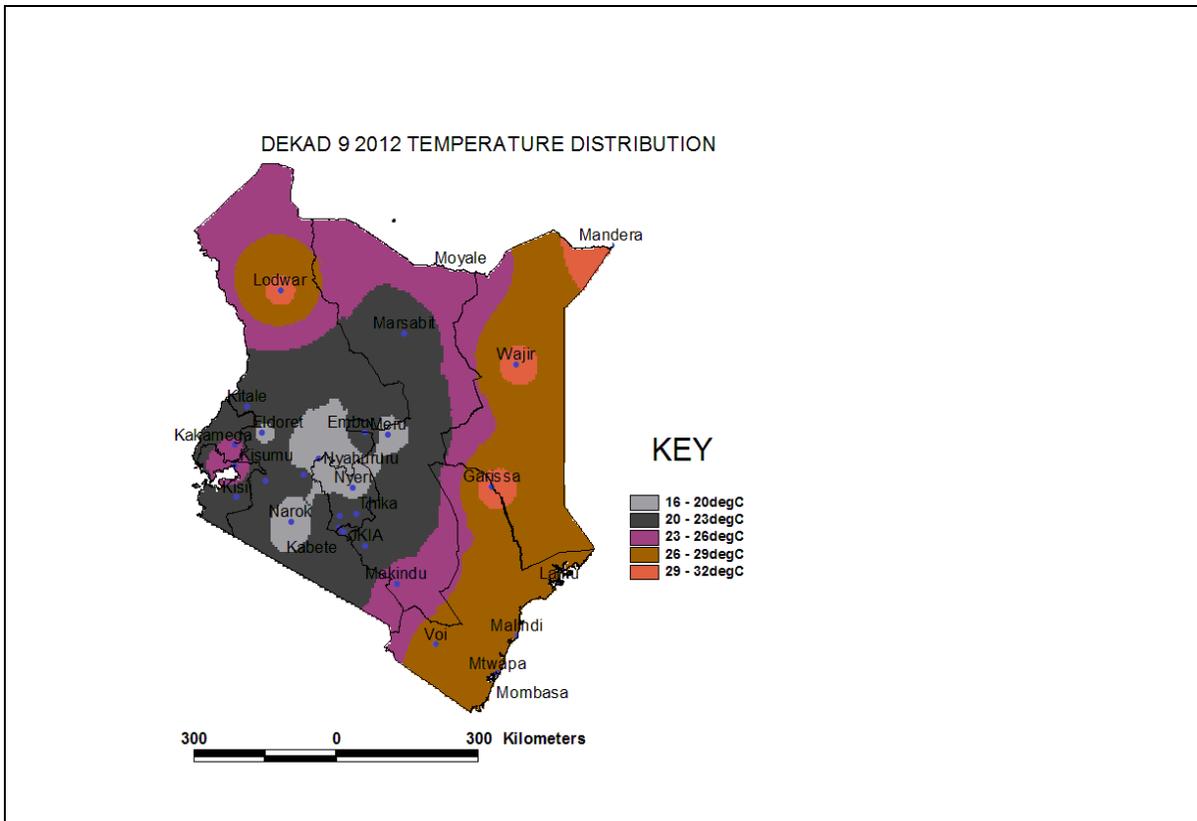


Figure 3.4: Mean temperature distribution

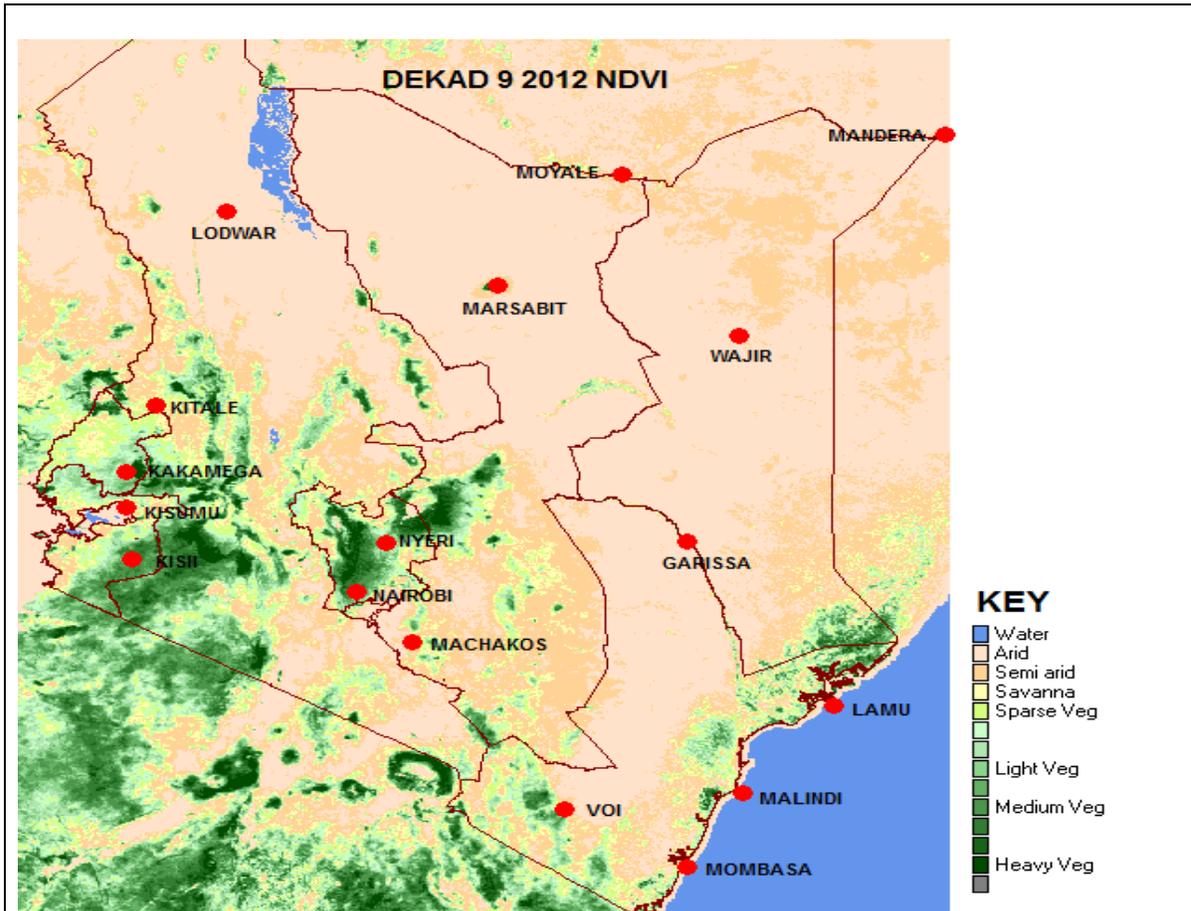


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 APRIL 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 and afternoon/night showers over several places in the first half of the forecast period, reducing to few places in the second half. The showers are expected to be heavy on the second day around Kisumu, the Nandi hills and extending into parts of central Rift Valley (around Nakuru).

The forecast weather conditions are expected to continue improving the germination of maize and bean in the above-mentioned counties.

- + **Over the Northwestern counties (Turkana, West Pokot etc), sunny** intervals will be predominant during the forecast period. However, light to moderate rainfall is expected in areas immediately bordering Uganda.

The expected light rains will help replenish the pasture and general vegetation of the region.

- + **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc)** Cloudy morning with light rains and afternoon/ night

showers over several places will be experienced in the first half of the forecast period. Second half will be characterized by cloudy early morning with light rains over few places giving way to sunny intervals later in the day.

The expected Improvement in rainfall activities will spur the germination of maize and beans being planted in the region.

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** The first half will be characterized by light to moderate afternoon showers in areas of Mandera, Moyale, Marsabit and Isiolo. Sunny period will prevail in the second half of the forecast period.

The showers will improve the pasture for the animals kept in these regions.

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** Cloudy morning with light to moderate rains and afternoon showers are likely over several places during the first half of the forecast period. This will be particularly so in areas bordering the central highlands and also Tanzania. Sunny intervals are expected in the second half of the forecast period.

The expected showers will improve the pasture for livestock and wildlife in the region and also spur the germination of maize and beans currently being planted.

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** showers are expected in the morning in the south coast in the first two days and the last three days of the forecast period. An improvement in cloud cover will prevail over the other areas for much of the forecast period. 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 expected showers and light rains will continue spurring the growth of mango trees and also help the germination of other crops being planted for the long rains season. Sunny and hot weather conditions will favour the ongoing harvesting of watermelon.

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

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