

KENYA METEOROLOGICAL DEPARTMENT DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 10, 2012 01 – 10 APRIL 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Most stations continued to report significant amounts of rainfall countrywide. The highest amount observed countrywide during the dekad, was 113.3mm at Kabarak station in the central Rift Valley region. The same station had received 2mm of rainfall during the previous dekad. The second highest amount observed was 98.3mm at Kakamega in Western Kenya region. In Nairobi area, the highest amount recorded was 87.6mm at Dagoretti station.

In the Eastern region, Makindu station recorded 81.1 mm while in Nyanza, Suba station reported 61.7 mm. The highest rainfall recorded in Central was 60.4mm at Kabete station. Finally, over the Coastal region, Msabaha station received 55.7 mm.

As in the previous dekad, maximum (daytime) temperature continued to decrease over most stations. The highest maximum temperature observed during the dekad was $38.0^{\circ}c$ at Mandera in the North-Eastern region, while the lowest maximum temperature was $23.4^{\circ}c$ at Nyahururu station in Central Kenya. Most stations continued to report an increase in the minimum (night-time) 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 10; 01 – 10 APRIL 2012

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 98.3 mm of rainfall compared to 15.0 mm received in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.9° c and 40.1 mm respectively.

Most farmers in Kakamega county continued to plant their crops during the dekad.

2.1.2 <u>Kisii</u>

The station received 39.8 mm of rainfall. This was a significant decrease from 69.2mm recorded during the previous dekad. The mean air temperature and total pan evaporation recorded were 21.0° C and 33.8 mm respectively.

Some farmers have started weeding, and crops are in good condition.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received 30.7 mm of rainfall compared to 5.3 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 21.1° C and 32.4 mm respectively.

Crops are at emergence state and in good condition.

2.2.2 Eldoret-Kapsoya

The station reported 34.4mm of rainfall compared to dry conditions reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.4° c and 51.6 mm respectively.

Most crops are at emergence state and in good condition.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station reported 19.1 mm of rainfall compared to 0.01mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 20.2^oc and 42.1 mm respectively.

Farmers are dry planting, since rainfall has not started well.

2.3.2 <u>Kabete</u>

The station reported 60.4mm of rainfall compared to dry conditions reported in the previous dekad. The average air temperature and pan evaporation recorded were 18.7° c and 36.9 mm respectively.

Planting is underway.

2.3.3 <u>Thika</u>

The station reported 37.6 mm of rainfall compared to dry conditions reported in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 21.7° c and 34.1 mm respectively.

Maize, beans and potatoes planted are in emergency stage and in good condition.

2.3.4. <u>Nyahururu</u>

The station received 14.7 mm of rainfall compared to 0.01 mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 16.4° c and 53.2 mm respectively.

Farmers have started planting.

2.3.5. Dagoretti

The station reported 87.6 mm of rainfall compared to dry conditions reported in the previous dekad. The average air temperature pan evaporation recorded were 20.1° c and 46.1 mm.

Farmers have started planting in most farms.

2.4 EASTERN REGION

2.4.1 <u>Meru</u>

The station recorded 42.8 mm of rainfall compared to dry conditions reported in the previous dekad. The average air temperature and pan Evaporation recorded were 20.1° c and 42.8 mm respectively.

Most farmers are planting crops.

2.4.2 <u>Embu</u>

The station recorded 46.9 mm of rainfall compared to dry conditions in the previous dekad. The average air temperature and evaporation pan recorded were 21.1° c and 36.9 mm respectively.

Most farmers have finished planting their crops.

2.4.3 Katumani (Machakos)

The station recorded 61.8 mm of rainfall compared to dry conditions in the previous dekad. The average air temperature recorded was 20.8^oc. There was no report on evaporation pan.

Planting is underway in most farms.

2.5.0 COAST REGION

2.5.1. Msabaha

The station recorded 55.7 mm of rainfall compared to dry conditions in the previous dekad. *The* average air temperature and pan evaporation recorded were 28.4°c and 43.6 mm respectively.

Planting is underway in most farms.

2.5.2 Mtwapa

This station recorded 24.7 mm of rainfall compared to dry conditions reported in the previous dekad. The average air temperature recorded was 28.7^oc. There was no report on pan evaporation.

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 1st to 10th April 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; 11-20 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).

These weather conditions are favourable to the crops that are still germinating in most farms in these regions.

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 rain conditions will have positive impacts on the general vegetation thereby improving the pasture conditions for livestock kept in this 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 rainy conditions will be useful to the crops some farmers have started planting in most farms.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc), The 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 showers will be of great importance to the animals and plants in these regions and for the a few crops which have been grown by some farmers.

The Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale, etc) Showers are expected in the morning in 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 shower conditions will be favorable to the mango trees grown in these areas.

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