

KENYA METEOROLOGICAL DEPARTMENT

DEKADAL AGROMETEOROLOGICAL BULLETIN WEATHER AND CROP REVIEW FOR DEKAD 9, 2011 21–31 MARCH, 2011

1. WEATHER HIGHLIGHTS

Most parts of the country continued to report active weather activities apart from North Eastern province where most stations are still reporting dry conditions. The highest rainfall was reported in Nyanza province where Kisumu, Suba and Kisii stations received 148.7 mm, 118.9 mm and 55.9 mm of rainfall respectively. Rift valley was the third highest rainfall reporting province where Kericho and Narok stations received 89.6 mm and 78.6 mm of rainfall respectively. Apart from Msabaha station, most coastal stations reported active weather, where Voi stations received 74.5 mm of rainfall. This was followed by western province with Kakamega station reporting 65.9 mm of rainfall. Eastern province also received significant amount of rainfall where Katumani and Makindu stations received 47 mm and 46.4 mm of rainfall respectively. Thika and Nyeri stations in central provinces reported 29.3 mm and 9.5 mm of rainfall respectively. Nairobi province had Kabete, JKIA, and Dagoretti stations reporting 24.3 mm, 16.2 mm and 10.1 mm of rainfall respectively.

There was a general decrease in the air temperature reported in most stations. This is attributed to the active weather activities. For more comprehensive summary of rainfall and other meteorological parameters, see Figures 3.1 to 3.4 below.

2. CROP AND WEATHER REVIEW FOR DEKAD 09; 21-31 MARCH 2011

2.1 NYANZA AND WESTERN PROVINCES

2.1.1 Kakamega

This station received 65.9 mm of rainfall which was a reduction from the previous dekad.

The average air temperature, total pan evaporation and sunshine hours recorded were 21.8°c, 58.9 mm and 7.9 hours per day respectively.

Cassava (MM97/2480) was at 98% maturity stage and in moderate state. Farmers have started planting following the onset of the long rainy season.

2.1.2 Kisii

The station received 55.9 mm of rainfall and an average air temperature of 20.8°c. Farmers have started planting following the onset of long rains

2.2 RIFT VALLEY PROVINCE

2.2.1 Kitale

The average air temperature, total pan evaporation and rainfall recorded at Kitale were 19.9°c, 43.3mm and 73.8 mm respectively. There was no report on sunshine hours.

No phenological observations were made as farmers were still preparing their land in readiness for planting.

2.2.2 Eldoret-Kapsoya

The average air temperature and rainfall recorded at the station were 18.5°c and 12.9 respectively. There was no report on sunshine hours and total pan evaporation.

Land preparation for the upcoming season is still in progress.

2.3 CENTRAL AND NAIROBI PROVINCES

2.3.1 Nyeri

The average air temperature, total pan evaporation and rainfall recorded in Nyeri were 19.8°c, 57.8 mm and 9.5 mm respectively. There was no report on sunshine hours.

Land preparation in readiness for the next season is still going on.

2.3.2 Kabete

The average air temperature, total pan evaporation and rainfall recorded in Kabete were 20.0°c, 51.2 mm and 24.3mm respectively. There was no report on sunshine hours.

Land preparation and planting for the MAM season is going on.

2.3.3 Thika

This station received rainfall amount of 29.3 mm. The average air temperature and total pan evaporation recorded were 22.0° c and 50.3 mm respectively. There was no report on sunshine hours.

Farmers are still preparing their farms in preparation for this rainfall season.

2.3.4. Nyahururu

The station received 0.5 mm of rainfall, which was a great reduction. The average air temperature, pan evaporation and sunshine hours reported were 15.9°c, 66 mm and 9.1 hours per day respectively. Farmers started planting on 15th March 2011.

2.3.5. Dagoretti

This station received 10.1 mm of rainfall during the dekad. The average air temperature, pan evaporation and sunshine hours recorded were 20.7°c, 63.1 mm and 8.7 hours per day respectively. Land preparation is still going on.

2.4 EASTERN PROVINCE

2.4.1 Meru

The rainfall, average air temperature and total pan evaporation recorded at the station were 5.7 mm, 20.2°c and 52.0 mm respectively. No report was made on sunshine hours while farmers were still preparing their farms.

2.4.2 Embu

This station received 5.6 mm of rainfall. The average air temperature and total pan evaporation recorded were 22.2°c and 53.3 mm respectively. There was no report on sunshine hours.

Farmers are still preparing their farms for this rainfall season.

2.4.3 Katumani (Machakos)

This station received 47.0 mm of rainfall. The average air temperature recorded was 21.1° c. There was no report on evaporation and sunshine parameters.

Farmers are still preparing farms in readiness for this rainfall season.

2.5 COAST PROVINCE

2.5.1. Msabaha

The station continued to reported dry conditions. The mean air temperature and total pan evaporation recorded were 27.9°c and 71.5 mm respectively. There was no report on sunshine. Mangoes (Ngowe type) were at 100% fruit setting stage and in good state. Most farmers are preparing their land for planting.

2.5.2 Mtwapa

The station received 12.8 mm of rainfall. The mean air temperature and total pan evaporation and sunshine hours reported were 28.7° c, 64.8 mm respectively. There was no report on sunshine hours.

Mangoes (Apple) were at 100% fruit setting stage and in moderate state however, fruits are falling due to drought. Most farmers have started preparations for long rains planting.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

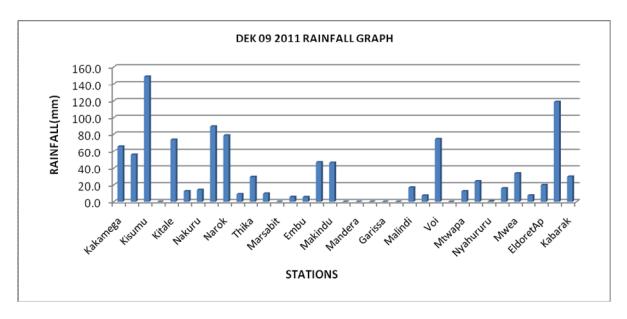


Figure 3.1: Actual Rainfall

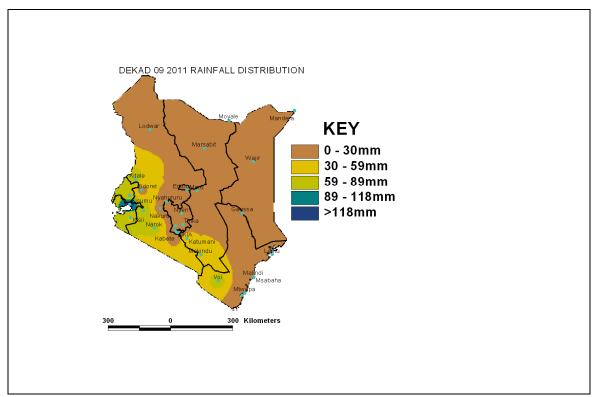


Figure 3.2: Rainfall distribution

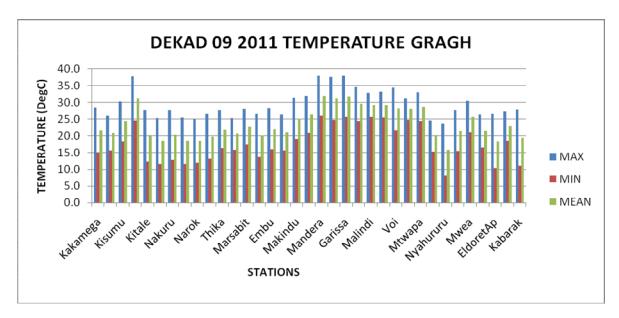


Figure 3.3: Mean Temperature

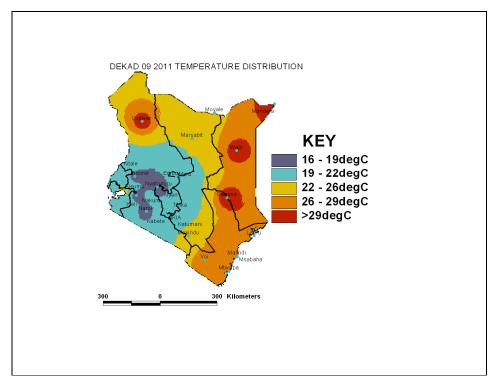


Figure 3.4: Mean Temperature Distribution

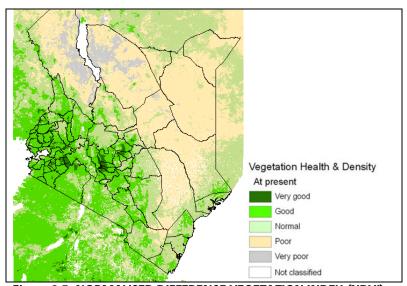


Figure 3.5: NORMALISED DIFFERENCE VEGETATION INDEX (NDVI)

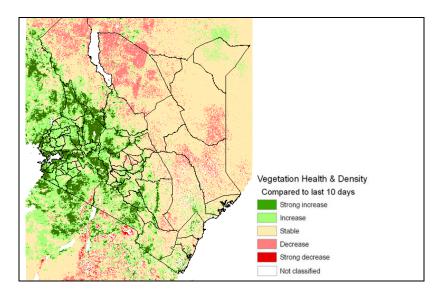


Figure 3.6: VEGETATION HEALTH AND DENSITY COMPARISON TO THE LAST 10 DAYS

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT TEN DAYS (1ST TO 10TH APRIL 2011)

Maintenance of rainfall activities is expected over the Western region, Central Highlands, Nairobi area and parts of the South Eastern lowlands of the country, during the next ten days. The active weather in most parts of the country will be a real boost to the germination of crops which are mostly in the emergence stage, while others are yet to be planted in a few areas. The maintenance of these rains will also cause a big relief for the pastoralist communities who have been experiencing prolonged drought.

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

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