

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 5, 2014 11-20 FEBRUARY, 2014

1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country increased in intensity in some stations as compared to the previous dekad. Nairobi region received the highest amount of rainfall countrywide with Ngong' station recording 134.0mm as compared to 77.9mm recorded in Narok station in Rift Valley region in the previous dekad. In Eastern region, Mwea station received the highest amount of rainfall of 90.9mm. Thika station in central region recorded the highest amount of rainfall of 73.0mm. The Coastal region had Voi station reporting 39.3mm. Kabarak station in Rift Valley region received the highest amount of rainfall of 35.9mm. In Western region, Kakamega station reported the highest amount of rainfall of 21.7mm. Suba station in Nyanza region recorded the highest amount of rainfall of 3.4mm. The least rainfall was in North Eastern region with Moyale station recording 1.0mm.

Generally, there was an increase in the maximum temperature over the whole country especially in North Eastern region. Lodwar station recorded the highest maximum temperature of 39.0°C compared to 37.8°C in the same station. The minimum temperature increased in most stations in the whole country with Nyahururu station in Central region recording the lowest temperature of 10.3°C compared to 8.0°C reported in the same station in the previous dekad.

For a 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 5; 11-20 FEBRUARY 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 <u>Kakamega</u>

The station received rainfall amount of 21.7mm. The mean air temperature and pan evaporation were 20.9°C and 38.7mm respectively. Sunshine duration was 6.5hrs

No phenological report

2.1.2 Kisii

The station recorded rainfall amount of 1.1mm. The mean air temperature and Pan Evaporation were 21.0°C and 35.3mm respectively. Sunshine duration was 5.8hours.

Farmers have harvested their maize crops.

2.2 RIFT VALLEY REGION

2.2.1 **Kitale**

The station received rainfall amount of 35.5mm. The average air temperature and pan Evaporation were 20.0 $^{\circ}$ C and 42.5mm respectively. There was no report on sunshine duration.

No phenological report.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 1.3mm. The average air temperature and pan evaporation reported were 17.6 and 42.3mm respectively. There was no report on sunshine duration.

No phenological report.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 60.5mm. The average air temperature was 20.0°C. There was no report on pan evaporation and sunshine parameters.

Maize crop was at the flowering stage while beans were at harvest stage and both crops were in failure state due to insufficient rainfall.

2.3.2 Kabete

The station recorded rainfall amount of 70.5mm. The average air temperature recorded was 19.9°C. There was no report on sunshine duration and Pan Evaporation.

Maize was at flowering stage and beans were at maturity stage and both crops were in a failure state due to too much heat. Below normal harvest is being expected.

2.3.3 Thika

The station recorded rainfall amount of 73.0mm. The mean air temperature and pan evaporation recorded were 21.8°C and 44.5mm respectively. There was no report on sunshine duration.

Maize was at mature stage and in poor state while beans and potatoes were both at harvest stage and in poor state due to insufficient rain. Below normal yield in all crops is expected.

2.3.4. Nyahururu

The station recorded rainfall amount of 51.9mm. The mean air temperature and pan evaporation recorded were 16.3°C and 39.9mm respectively. There was no report on sunshine duration.

No phenological report.

2.3.5. Dagoretti

The station reported rainfall amount of 35.1mm. The average air temperature and Pan Evaporation were 20.1°C and 38.6mm respectively. The sunshine duration was 4.2hrs.

Maize was at flowering stage and in good state.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station recorded rainfall amount of 0.8mm. The average air temperature and Pan Evaporation recorded were 19.3°C and 33.4mm respectively. Sunshine duration was 6.2hrs.

Maize and beans were at maturity and harvest stages respectively. Both crops were in fair state. Normal yield in both crops were expected.

2.4.2 Embu

The station reported rainfall amount of 30.0mm. Pan Evaporation was 45.5mm. There was no report on Temperature and Sunshine duration.

Both maize and beans were at flowering and maturity stage respectively and in poor state as they had been adversely affected by insufficient rain. Below normal yield is expected for both crops.

2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 19.0mm. The average air temperature reported was 21.1°C and sunshine duration was 5.6hrs. There was no report on pan evaporation.

Maize was at flowering stage and in poor state due to adverse effect by too much sun. Below normal yield is expected for the crop.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received 0.01mm of rainfall. The average air temperature and pan evaporation recorded were 28.3°C and 48.5mm respectively. There was no report on sunshine duration.

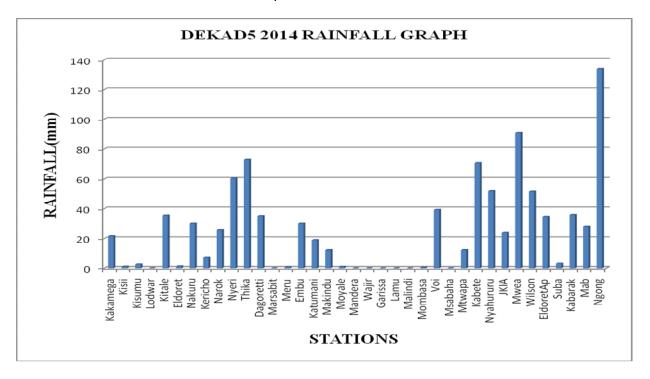
Due to severe weather maize crop dried prematurely. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received rainfall amount of 12.3mm. The average air temperature and Pan Evaporation recorded were 27.5°C and 56.3mm respectively. There was no report on sunshine duration.

Maize was at wax maturity stage and in a failure state as it had been adversely affected by insufficient rainfall and below normal yield is expected. Mangoes were at flowering stage and in moderate state.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS



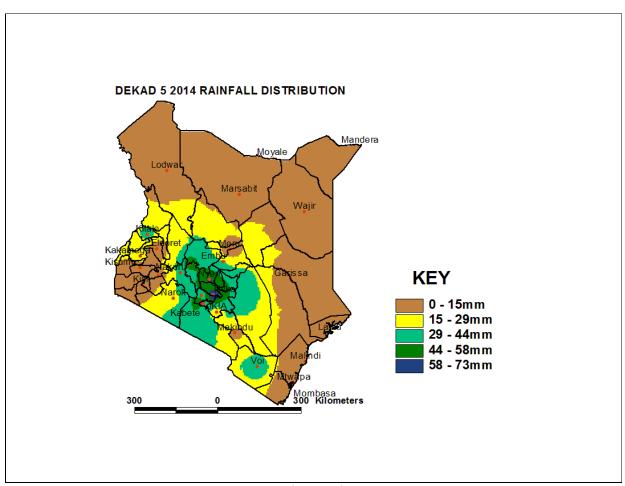


Figure 3.1: Dekadal rainfall totals for 11th to 20th February 2014

Figure 3.2: Dekadal rainfall distribution for dekad 5, 2014

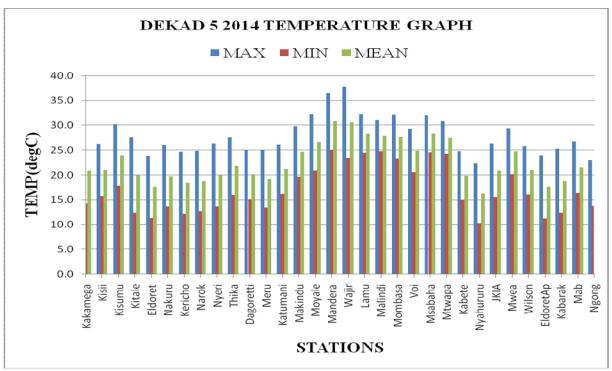


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 5, 2014

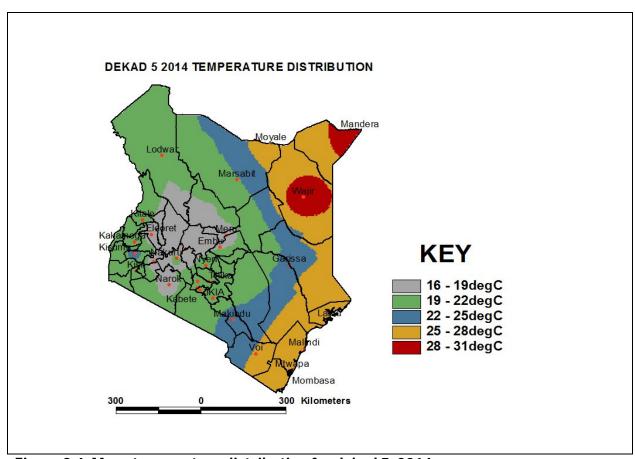


Figure 3.4: Mean temperature distribution for dekad 5, 2014

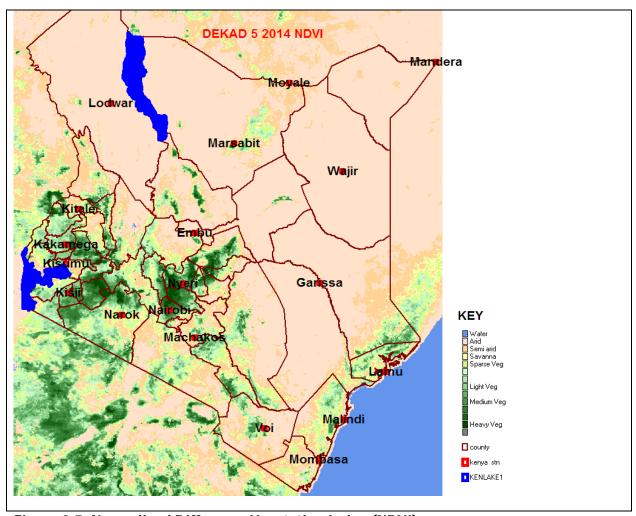


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-28 FEBRUARY 2014

❖ Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Nyamira, Kericho, Bomet, Uasin-Gishu, Nakuru, Narok, Trans Nzoia, Elgeyo Marakwet, Nandi, Laikipia, Kajiado, Vihiga and Busia), are expected to experience sunny intervals in the morning throughout the forecast period. Afternoon Showers and thunderstorms over few places are expected throughout the forecast period.

The afternoon showers will continue to improve the state of the few crops, which are still in farms in the region.

❖ Over the Northwestern counties (Turkana, West Pokot and Samburu), Sunny intervals are expected the whole day in the entire forecast period.

The dry condition is expected to have adverse effects to the pasture and vegetation in this region.

❖ The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience mainly sunny intervals in the morning throughout the forecast period. Afternoons is expected to have mainly sunny intervals for the first three days, showers over few places for the next three days, breaking into sunny interval on the last day of the focused period.

The expected showers will continue to enhance the state of the crops in the region.

❖ Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience mainly sunny intervals throughout the forecast period.

This dry condition will continue to weaken the state of pasture and vegetation in this region.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience mainly sunny intervals the whole day for the entire focused period.

The sunny condition forecasted will have adverse effect on crops, pasture and vegetation in the region.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), is expected to experience mainly sunny intervals the whole day for the entire focused period.

The sunny interval is expected will have a negative impact on the crops in this region.

For feedback or further guidance, Contact:

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