



KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 03, 2012
21 – 31 JANUARY 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Most stations reported dry conditions countrywide. Only Voi and Msabaha stations in Coast Province recorded 1.11 mm and 0.05 mm of rainfall respectively.

Daytime (maximum) temperature generally increased in most stations in the country with few stations mainly at the coast like Malindi, Mombasa, Msabaha and Mtwapa recording a slight decrease. The highest daytime temperature of 37.0⁰C was recorded in Wajir station in North Eastern Province, while the lowest temperature of 23.4⁰C was recorded in Nyahururu station in Central province. There was a general decrease in night-time (minimum) temperatures in most stations countrywide with a few stations mainly in North Eastern province maintaining an increase trend like in the previous dekad.

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 03; 21 – 31 JANUARY 2012

2.1 NYANZA AND WESTERN PROVINCES

2.1.1 Kakamega

This station reported dry conditions just like in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.4⁰c and 76.0 mm respectively, and Sunshine hours recorded were 10.9 hours per day.

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

2.1.2 Kisi

The station reported dry conditions as compared to 6.4 mm of rainfall received in the previous dekad. The mean air temperature and total pan evaporation recorded were 22.9⁰C and 59.5mm respectively. Sunshine hours reported was 10.5 hours per day.

Harvesting of Maize crop continues in most farms.

2.2 RIFT VALLEY PROVINCE

2.2.1 Kitale

The station reported dry conditions as compared to 7.7 mm of rainfall received in the previous dekad. The average air temperature and total pan evaporation recorded were 19.5⁰C and 63.0 mm respectively. Average sunshine hours reported was 10.6 hours per day.

Land preparation for the next season is ongoing.

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 17.1⁰c and 88.5mm respectively. The sunshine hours recorded was 11.3 hours per day.

Land preparation for the next long season is still underway.

2.3 CENTRAL AND NAIROBI PROVINCES

2.3.1 Nyeri

The station reported dry conditions as compared to 30.1 mm of rainfall in the previous dekad. The average air temperature and total pan evaporation recorded were 17.2⁰c and 56.5mm respectively. There was no report on Sunshine hours.

Maize and beans which were at flowering and harvesting stages respectively were both in poor state due to lack of sufficient rain and damage by insects. Below normal yield is however, expected for both crops.

2.3.2 Kabete

The station reported dry conditions just as in the previous dekad. The average air temperature and total pan evaporation recorded were 12.2⁰c and 74.0 mm respectively. The sunshine hours reported was 11.2 hours.

Maize and beans were at flowering and harvesting stages respectively and in poor state due to insufficient rainfall. Expected yield is below normal. Coffee was at 100% ripeness stage and in moderate state but damaged by leaf rust and leaf minor at less 10% each. Bananas were at 100% appearance of suckers stage and in moderate state though damaged by thrips and cigar end rot at 25% and less than 10% respectively.

2.3.3 Thika

The station reported dry conditions just as in previous dekad. The total mean air temperature and pan evaporation recorded at the station were 19.8⁰c and 71.5 mm respectively. The sunshine hours recorded was 10.2 hours per day

Maize was in maturity stage and in fair state with normal yield expected.

2.3.4. Nyahururu

The station reported dry conditions just as in the previous dekad. The mean air temperature and total pan evaporation recorded were 13.9⁰c and 80.0 mm respectively. Average Sunshine hours recorded was 11.0 hours per day.

Farmers are preparing the land for the next season.

2.3.5. Dagoretti

The station continued to report dry conditions while the average air temperature and total pan evaporation recorded were 19.3⁰c and 70.0 mm respectively. The sunshine hours reported was 10.5 hours per day.

2.4 EASTERN PROVINCE

2.4.1 Meru

The station reported dry conditions just like in the previous dekad. The average air temperature and total pan evaporation recorded were 18.2⁰c and 59.5 mm. Sunshine hours reported were 10.3 hours per day.

Maize and beans were at flowering and harvesting stages, and in fair and poor states respectively. Expected yield for both crops is below normal.

2.4.2 Embu

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

Maize was at flowering stage and in poor state, with below normal yield expected due to insufficient rainfall.

2.4.3 Katumani (Machakos)

The station reported dry conditions just as in the previous dekad. The average air temperature recorded was 21.1⁰c. There was no report on evaporation and sunshine parameters.

Maize was at maturity stage and in fair state. The maize crop was affected by insufficient rainfall, but normal yield is still expected

2.5 COAST PROVINCE

2.5.1 Msabaha

The station received the second highest rainfall of 0.05 mm of rainfall as compared to 0.02 mm of rainfall in the previous dekad. *The* average air temperature and pan evaporation recorded were 27.1⁰c and 52.0mm respectively. There was no sunshine report.

Normal yield is expected for the maize crop, which was at harvesting stage. However, the crop, which was in fair state, has been performing poorly due to insufficient rainfall. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

This station reported dry conditions just as in the previous dekad. The average air temperature recorded was 27.1⁰c. There was no evaporation and sunshine report.

Maize was at flowering stage and in fair state. Below normal yield is expected because stalk borer, excessive weeds and insufficient rain have adversely affected the crop. Watermelon was at 100% consumer's ripeness stage and in bad state due to insufficient rainfall.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

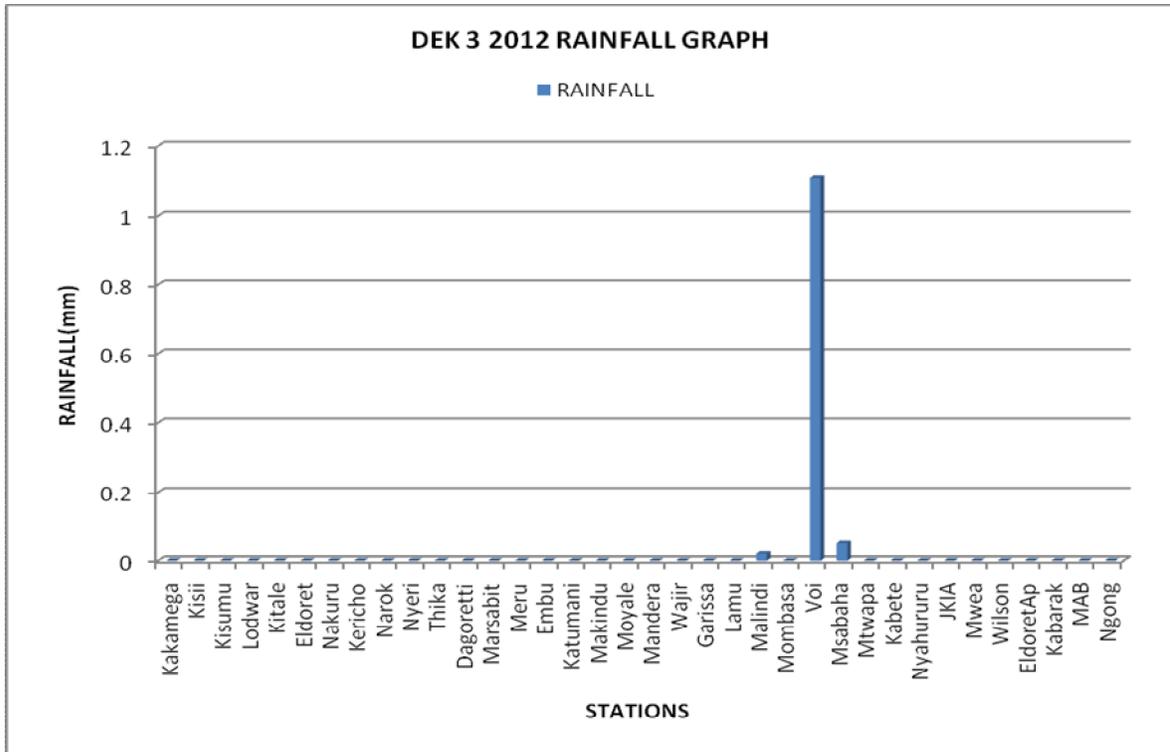


Figure 3.1: Dekadal total rainfall amounts for 21-31 January 2012

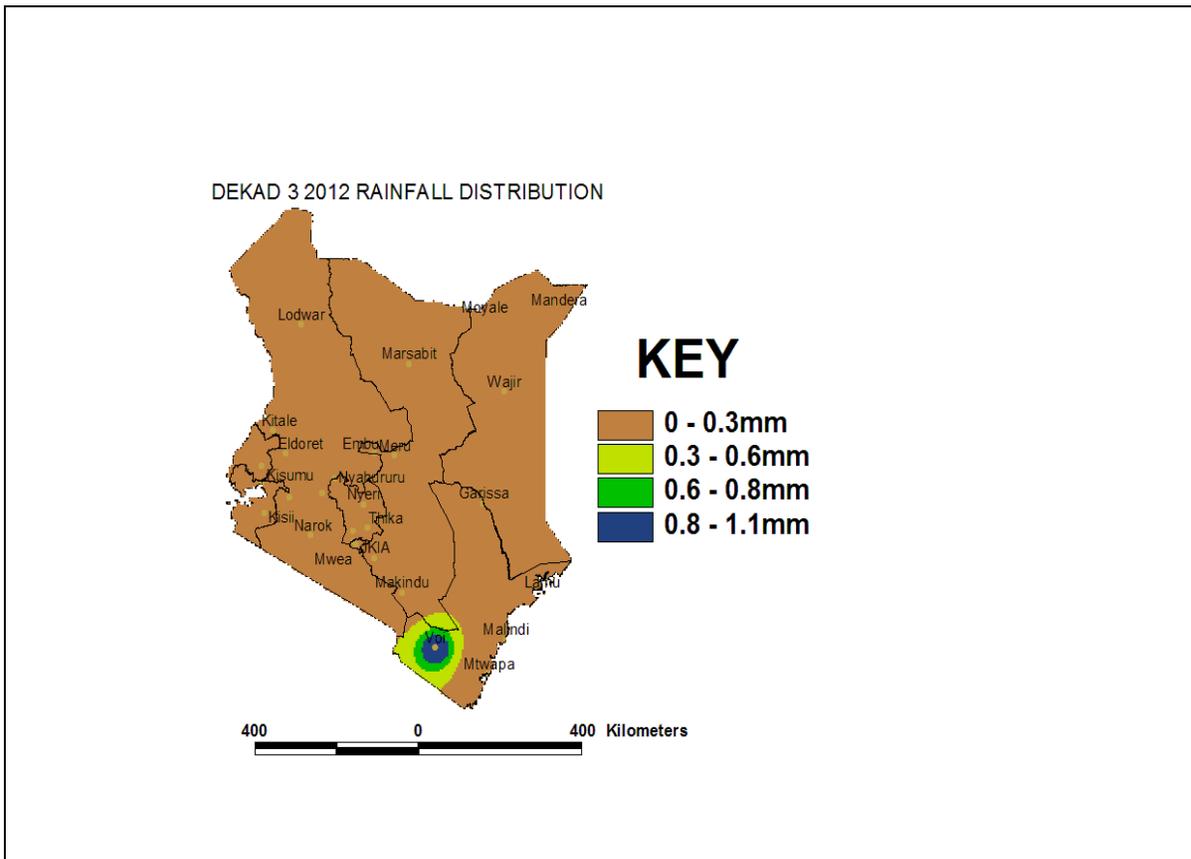


Figure 3.2: Dekadal Rainfall distribution for 21-31 January 2012

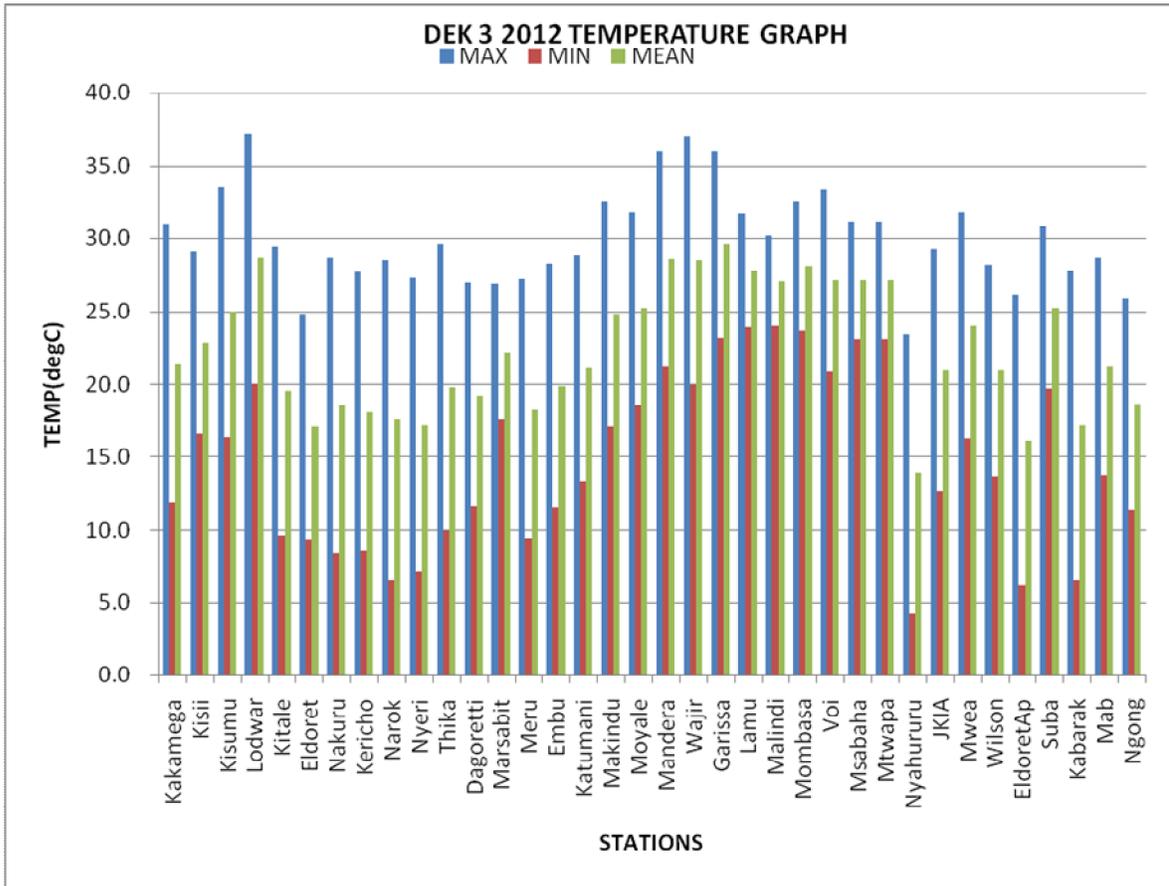


Figure 3.3 Maximum, minimum and average temperature variation

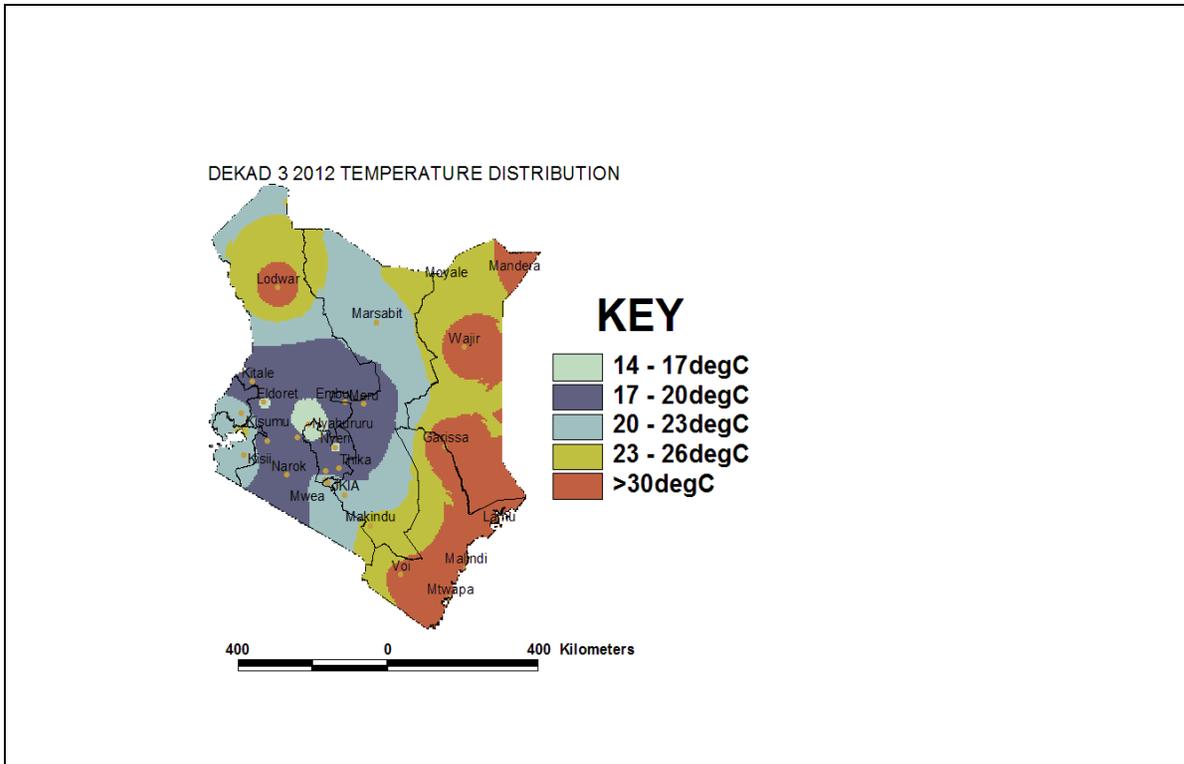


Figure 3.4: Mean Temperature distribution for the dekad

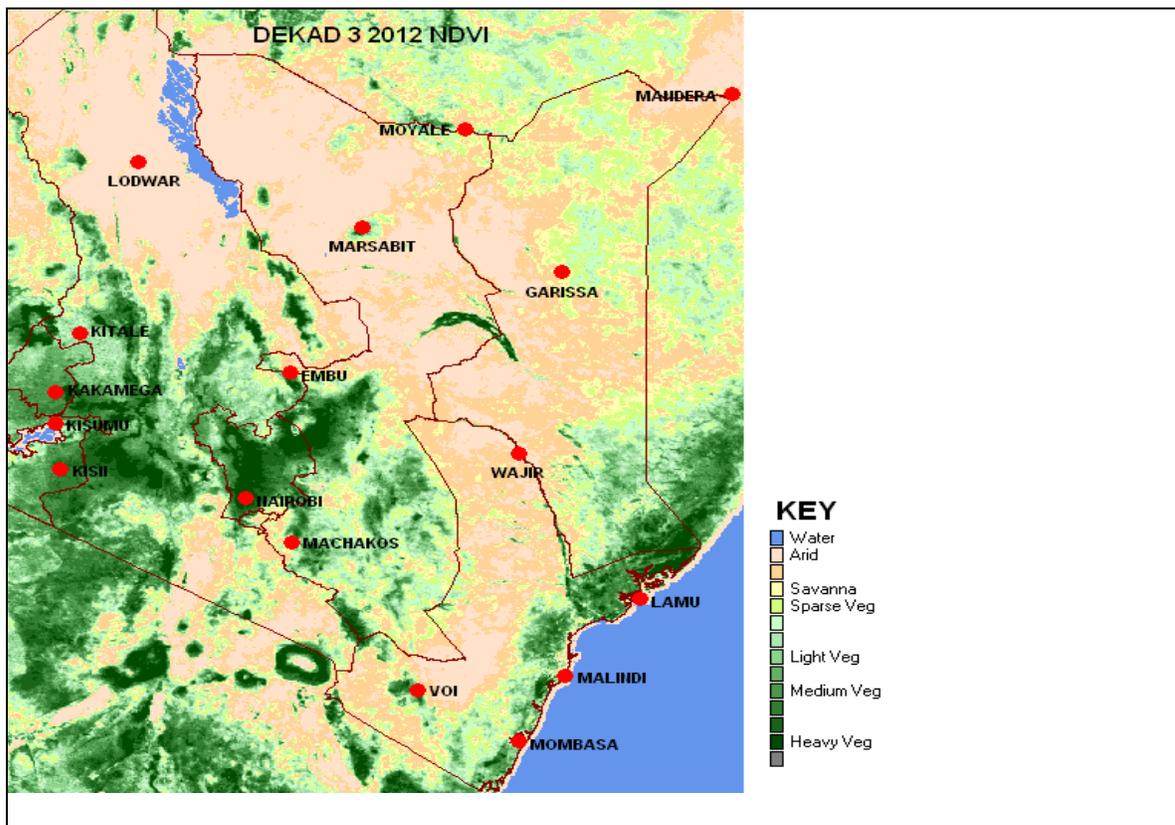


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 1ST TO 10TH FEBRUARY 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 over most places throughout the day for much of the forecast period.

The forecast conditions will favour the land preparation going on in readiness for the next growing season. However, the same conditions will adversely affect the livestock.

- The Northwestern counties (Turkana, West Pokot etc), will experience mainly sunny periods throughout the forecast period.

The forecast dry conditions are expected to impact negatively on the livestock sector. Human and wildlife conflicts are also likely as both compete for the meager water and pasture resources.

- In the Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc), sunny intervals will prevail for much of the forecast period.

The forecast dry conditions will adversely affect the maize and beans which are already suffering from soil moisture stress and general lack of water.

- In Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc), Sunny periods will prevail throughout the forecast period

Like in the Northeastern counties, the forecast dry conditions are expected to impact negatively on the livestock sector. Human and wildlife conflicts are also likely to occur as the competition for water and pasture resources increases.

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** Sunny intervals are expected to dominate for much of the forecast period. However, there is a likelihood of very light morning rains in some localized areas along the Kenya/Tanzania border in the vicinity of Mt. Kilimanjaro on the second and third day of the forecast.

The forecast dry conditions will continue to have adverse effects on the crops which were planted in the short rains season.

- ✚ **The Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale, etc):** Sunny intervals will be dominant during the period.

The forecast sunny periods will continue to impact negatively on the mango and other fruit trees in the region.

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