



KENYA METEOROLOGICAL DEPARTMENT

DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 02, 2012

11 – 20 JANUARY 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Dry conditions persisted in most places countrywide. Like in the previous dekad, Nyeri station in central Province recorded the highest amount of rainfall of 30.1 mm compared to 26.5 mm in the previous dekad. The second highest amount of rainfall was 11.2 mm received at Wilson Airport Met station in Nairobi province. Kakamega station in Western Province received 7.7 mm of rainfall. In Nyanza Province, Kisii station recorded 6.4 mm of rainfall. In Eastern province, Makindu station reported 3.7 mm of rainfall. Narok station in Rift Valley reported 2.7 mm of rainfall. In coast province, Voi station received 2.1 mm of rainfall. Rift Valley province had Kericho station reporting 0.3 mm of rainfall. Stations in North Eastern province reported dry conditions.

Daytime (maximum) temperature generally increased in most stations with only a slight decrease reported in Kakamega, Kisii, Voi and Jomo Kenyatta Airport (JKIA) stations. The highest daytime temperature of 37.1 °C was recorded at Garissa station in North Eastern Province, while the lowest temperature of 22.8°C was recorded in Central Kenya at Nyahururu station. There was a general increase in night-time (minimum) temperatures in most stations countrywide.

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 02; 11 – 20 JANUARY 2012

2.1 NYANZA AND WESTERN PROVINCES

2.1.1 Kakamega

This station reported 7.7 mm of rainfall as compared to the dry conditions reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.5^oc and 51.7 mm respectively, and Sunshine hours recorded were 9.4 hours per day.

Land preparation for the next season is going on.

2.1.2 Kisii

The station recorded total amount of rainfall of 6.4 mm as compared to dry conditions reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.4^oC and 36.4mm respectively. Sunshine hours reported were 8.6 hours per day.

Maize planted for the short rain season was at 100% full ripeness stage and in moderate state with normal yield expected. Some farmers have started harvesting.

2.2 RIFT VALLEY PROVINCE

2.2.1 Kitale

The station recorded total rainfall amount of 7.7 mm as compared to dry conditions reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.3⁰C and 48.5mm respectively. Average sunshine hours reported was 9.7 hours per day.

Land preparation for the next season is 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 17.1⁰c and 67.5mm respectively. The sunshine hours recorded were 10.0 hours per day.

Land preparation for the next long season is underway.

2.3 CENTRAL AND NAIROBI PROVINCES

2.3.1 Nyeri

The station recorded rainfall amount of 30.1 mm, which was the highest rainfall in the country as compared to 26.5 mm of rainfall received in the previous dekad. The average air temperature and total pan evaporation recorded were 17.3⁰c and 49.1mm respectively. There was no report on Sunshine hours.

Maize was at 100% tasseling and 95% flowering stages, while beans at 97% ripeness. Maize and beans were in moderate and unsatisfactory states respectively. Maize was affected by stalk borer at 18% and Beans by aphids at 8%. Drought has caused stunted growth of beans at 30%, moisture stress in maize 5% and frost bite has adversely affected maize also, but above normal and normal yield is expected for maize and Beans respectively.

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. There was no sunshine report.

Maize and Beans were at flowering and maturity stages respectively, but both were in poor state due to insufficient rain. 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, while 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 19.9⁰c and 54.5 mm respectively. The sunshine hours recorded were 8.8 hours per day

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

2.3.4. Nyahururu

The station reported dry conditions as compared to 0.01 mm received in the previous dekad. The mean air temperature and total pan evaporation recorded at the station were 14.2⁰c and 61.5 mm respectively. Average Sunshine hours recorded were 10.3 hours per day.

Maize and potatoes have been harvested.

2.3.5. Dagoretti

The station reported dry conditions just as in the previous dekad. The average air temperature was 18.9⁰c, and the sunshine hours reported were 8.9 hours per day. There was no report on evaporation pan.

There was no phenological report.

2.4 EASTERN PROVINCE

2.4.1 Meru

The station reported dry conditions, which was a reduction from 12.1 mm of rainfall received in the previous dekad. The average air temperature and total pan evaporation recorded was 18.6⁰c. There was no report on Evaporation Pan and sunshine hours.

Maize and beans were at flowering and maturity stages respectively.

2.4.2 Embu

The station reported dry conditions just as in the previous dekad. The average air temperature and evaporation pan recorded were 20.3⁰c and 62 mm respectively. Sunshine hours reported were 10.7 hours per day.

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 21.3⁰c. There was no report on evaporation and sunshine parameters.

Maize was at flowering stage and in fair state. Normal yield is being expected though the crop has been adversely affected by insufficient rainfall.

2.5.0 COAST PROVINCE

2.5.1. Msabaha

The station received 0.02 mm of rainfall as compared to 0.03 mm of rainfall in the previous dekad. The average air temperature and pan evaporation recorded were 27.9⁰c and 57.5mm respectively. There was no sunshine report.

Maize was at harvesting stage and in fair state. Although it has been adversely affected by insufficient rainfall, normal yield is still expected. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station reported dry conditions just as in the previous dekad. The average air temperature recorded was 27.7⁰c. There was no evaporation and sunshine report.

Maize was at flowering stage and in fair state. Below normal yield is expected as 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. ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

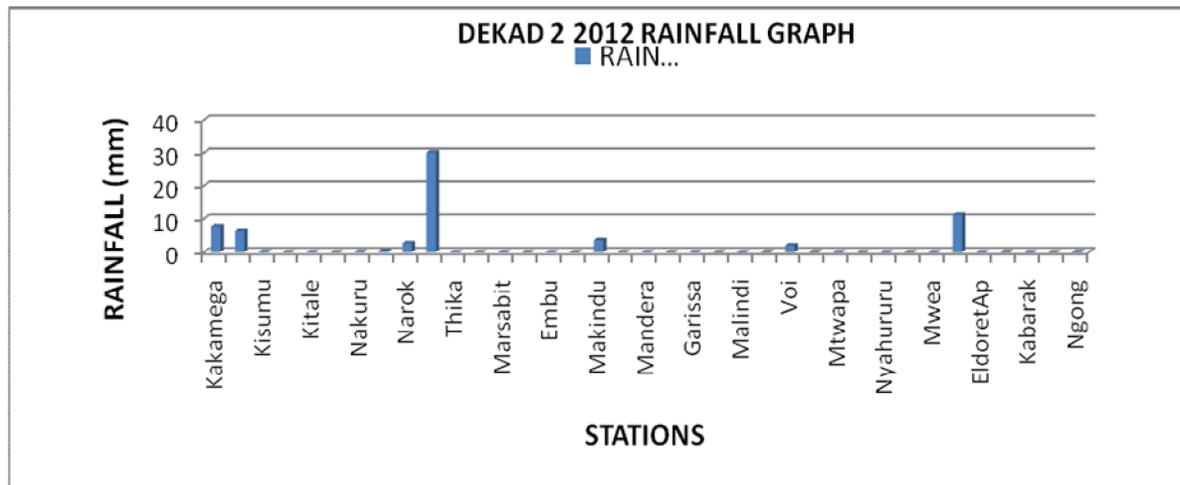


Figure 3.1: Actual dekadal Rainfall amounts for 11 – 20 January 2012

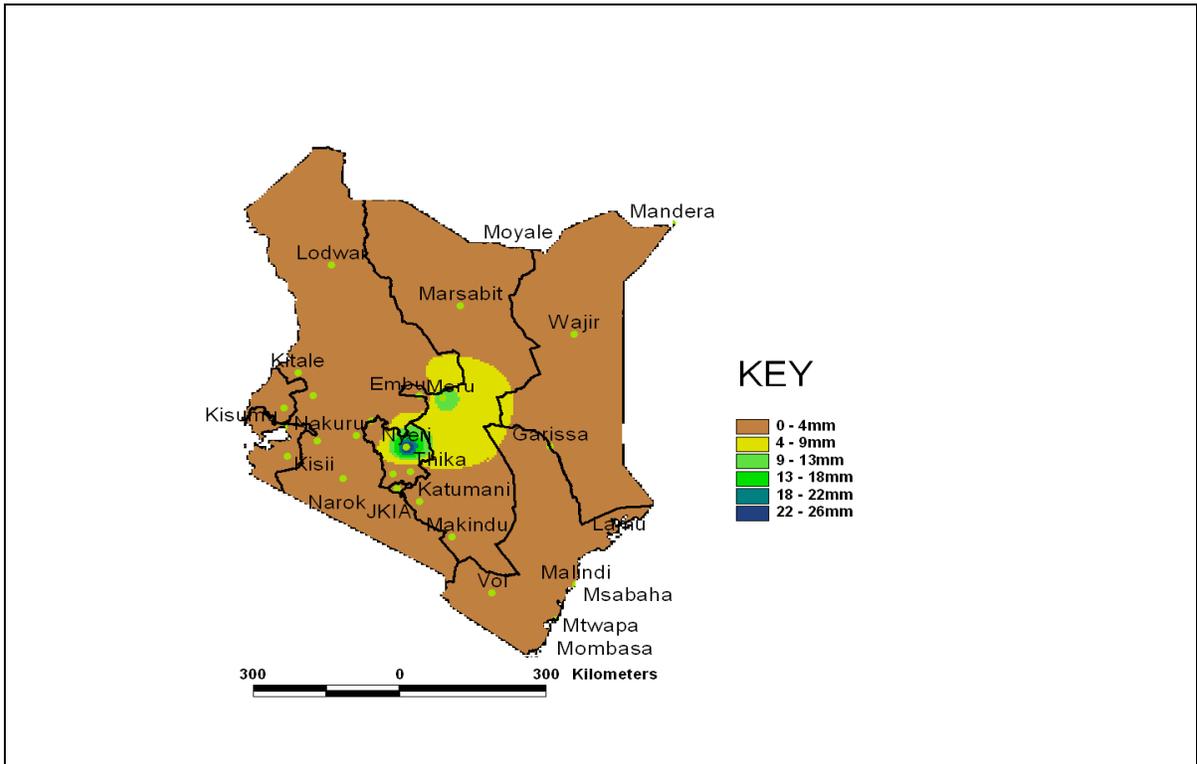


Figure 3.2: Dekadal Rainfall distribution

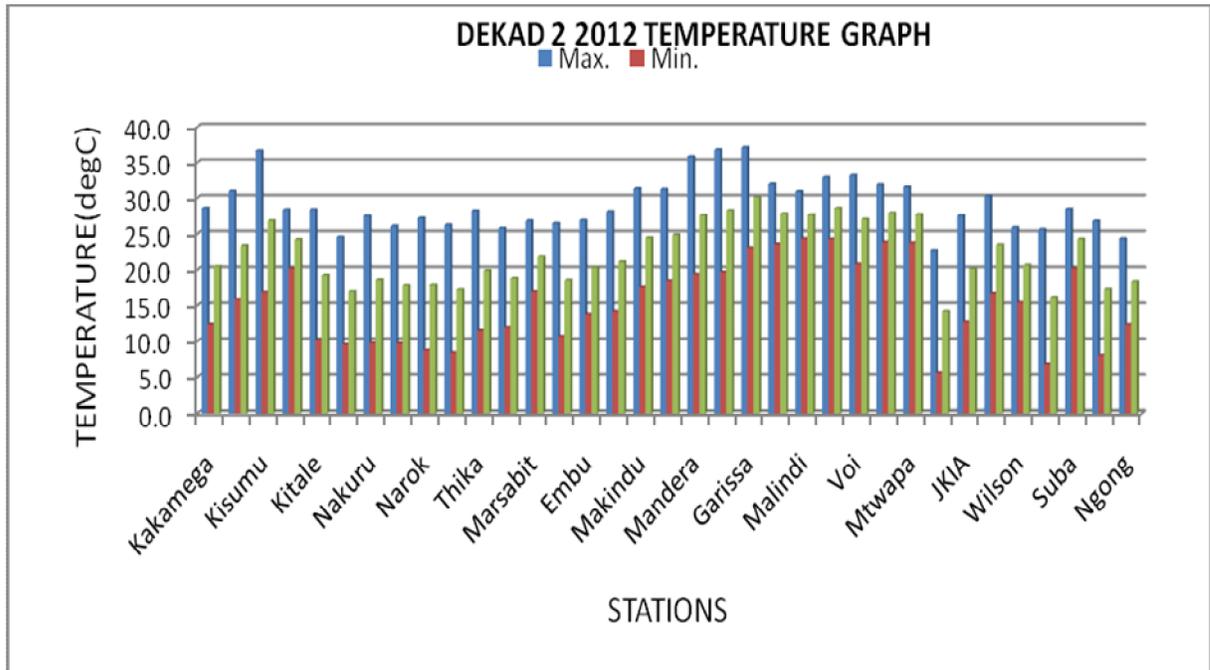


Figure 3.3 Maximum, Minimum and Average Temperature distribution

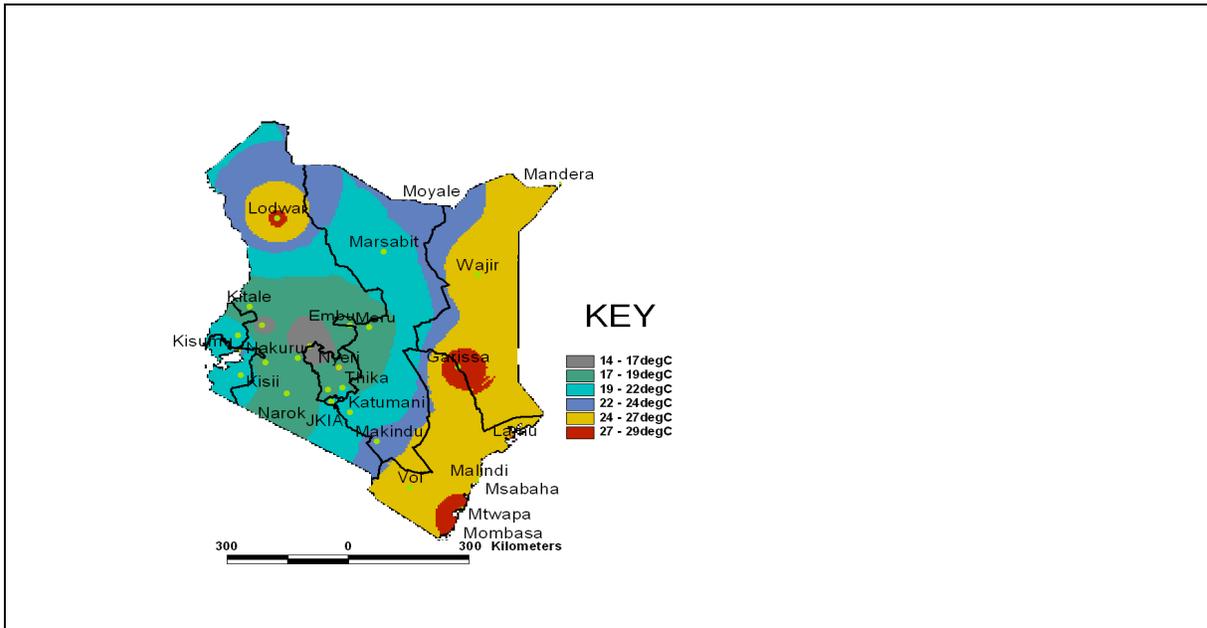


Figure 3.4: Mean Temperature distribution

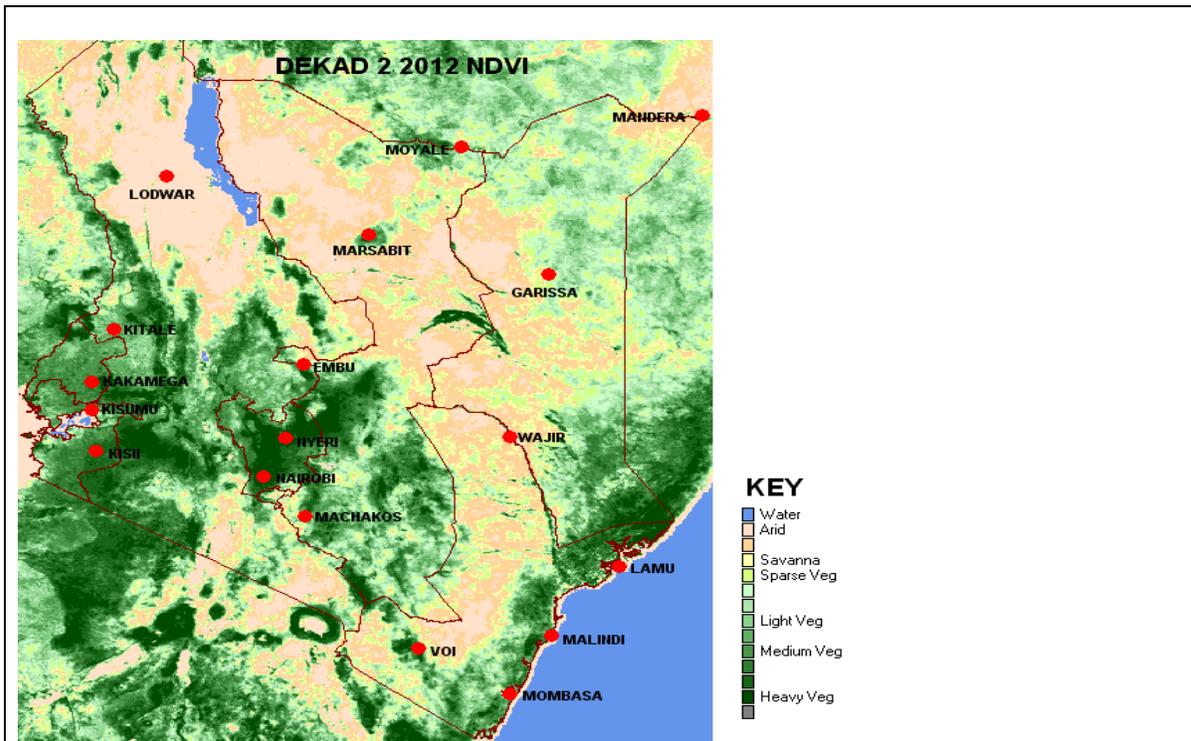


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21 – 31 JANUARY 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. However localized areas within some counties in the south-Rift, south Nyanza are likely to experience very light afternoon showers and thunderstorms on the second and third day of the forecast period.

These conditions are suitable for the land preparation going on in most farms in these regions.

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

The predicted weather conditions are expected to exacerbate the water scarcity in these areas thereby impacting negatively on livestock production.

- ✚ **In the Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc),** sunny periods are likely to prevail for much of the forecast period while slight improvement in cloud cover is expected in the first day of the forecast.

These conditions will continue to cause soil moisture stress in these areas hence impacting negatively on the maize and beans

- ✚ **In Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** sunny periods will prevail throughout the forecast period but some clouds will be observed on the first day of the forecast.

These weather conditions will negatively affect the livestock kept in the region due to lack of pasture and water.

- ✚ **In Southeastern lowlands (counties of Taita Taveta, Makeni, Machakos, Kitui, Mwingi, etc),** sunny intervals are expected to dominate for much of the forecast period. Light rains are expected to occur in the first and second day of the forecast period.

The dominant sunny conditions continue to have a negative impact on the crops which were planted in the short rain season.

- ✚ **The Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** will experience sunny intervals will be dominant during the period, but there is likelihood of very light morning showers in the south coast during the first day.

The sunny periods continue to have negative impact on *the mango trees in these areas.*

For feedback or further guidance, Contact:

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