



KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN
WEATHER AND CROP REVIEW FOR DEKAD 20, 2012
11– 20 JULY 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was an increase in rainfall activities and intensity countrywide during the current dekad. Eldoret airport station in Rift valley region received the highest amount, recording 82.6mm compared to 56.4mm reported in Eldoret Kapsoya station, in the same region, in the previous dekad. Kakamega station in Western region recorded the second highest amount of 81.2mm. Nyahururu station, in Central region reported 60.9mm as the highest in the region. Lamu and Kisii stations recorded 43.2mm and 31.4mm respectively, being the highest amounts in the Coastal and Nyanza region. In Nairobi region, the highest amount of 30mm was recorded at Wilson airport station.

Most stations reported an increasing trend in maximum temperatures, with stations in the Coastal region recording a decrease. Minimum temperatures also reported an increasing trend with a few stations recording a decrease. Lodwar station in the Rift Valley region still reported the highest temperature of 33.6^oC. This was a slight increase from 33.3^oC recorded in the previous dekad at the same station. Nyeri station in Central region still recorded the lowest maximum temperature of 19.1^oc compared to 19.2^oC recorded 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 20; 11 – 20 JULY 2012

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 81.2 mm of rainfall which was an increase from 31.2 mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.2^oc and 41.2 mm respectively. There was no report on sunshine hours.

Maize was in flowering stage, in good state and normal yields is expected. Beans have been harvested.

2.1.2 Kisii

This station recorded 31.4 mm of rainfall compared to 37.6 mm in the previous dekad. The mean air temperature and total pan evaporation recorded were 20.1^oC and 30.3 mm respectively. There was no report on sunshine.

Maize was at flowering stage, in fair state and normal yield is expected.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall of 41.8 mm compared to 27.1 mm reported in the previous dekad. The average air temperature and pan evaporation recorded were 18.4°C and 26.8mm respectively. There was no report on sunshine.

Maize and beans were in flowering and harvesting stages respectively. Both were in a fair state and normal yields are expected.

2.2.2 Eldoret-Kapsoya

The station recorded rainfall amount of 34.6 mm compared to 56.4 mm in the previous dekad. The average air temperature and total pan evaporation recorded were 16.5°C and 35.1mm respectively. There was no sunshine report.

Maize and beans were in flowering and maturity stages respectively. Both were in a fair state and normal yields are expected.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received 34.6mm compared to 2.7 mm of rainfall in the previous dekad. The average air temperature recorded was 15.8°C. There were no reports on total pan evaporation and sunshine hours.

Maize and beans were at flowering and maturity stages respectively. Maize was in fair condition though adversely affected by stalk borers and insects and normal yield is still expected. Beans were in poor state having been adversely affected by insects hence failure yield is expected.

2.3.2 Kabete

The station recorded rainfall amount of 15.7 mm compared to 0.1 mm in the previous dekad. The average air temperature and pan evaporation recorded were 17.2°C and 21.7mm respectively. Sunshine hours reported were 3.4 hours per day.

Maize and beans were at flowering and maturity stages respectively. Maize was in fair condition with normal yield expected, while beans were in poor state and below normal yield is expected.

2.3.3 Thika

The station reported 2.0mm of rainfall compared to 0.2mm in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 18.3°C and 19.5 mm respectively. There was no report on sunshine hours.

Maize and beans were at flowering and harvesting stages respectively. Maize are in fair state and normal yield is expected. Beans are in poor state, having been adversely affected by excessive rainfall hence below normal yield is expected. Potatoes were in maturity stage and in fair state with normal yield being expected as harvesting is in progress.

2.3.4. Nyahururu

The station received rainfall of 60.9mm compared to 43.3 mm reported in the previous dekad. The mean air temperature and pan evaporation recorded were 14.3⁰c and 33.9mm respectively. There was 5.7 hours of sunshine recorded per day.

Maize was at emergence stage. Potatoes and beans were both at flowering stage. Maize was in good state while beans and potatoes were in fair state with normal yield being expected for maize and beans and below normal yields for potatoes.

2.3.5. Dagoretti

The station reported rainfall amount of 8.2 mm compared to 0.03mm recorded in the previous dekad. The average air temperature and total pan evaporation recorded were 16.8⁰c and 24.7mm respectively. There was no sunshine report.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported 2.1mm of rainfall compared to 7.1mm in the previous dekad. The average air temperature and total pan evaporation recorded were 17.0⁰c and 27.6mm respectively. The sunshine data was missing.

2.4.2 Embu

The station recorded rainfall of 11.7mm compared to 16.7mm in the previous dekad. The average air temperature and pan evaporation were 16.5⁰c and 13.8 mm respectively. There was no sunshine report.

Maize was at flowering stage, in fair state and normal yield is expected.

2.4.3 Katumani (Machakos)

The station reported dry conditions in both this and the previous dekad. The average air temperature recorded was 16.7⁰c. There was no report on pan evaporation and sunshine parameters.

Maize was at flowering stage, in good state and normal yields are expected.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received rainfall of 18.7mm compared to 2.0mm in the previous dekad. The average air temperature and pan evaporation recorded were 25.5⁰c and 31.1 mm respectively. There was no sunshine report.

Maize was at flowering stage and in fair state hence normal yield is expected.

2.5.2 Mtwapa

This station recorded rainfall of 8.8mm compared to 16.8mm in the previous dekad. The average air temperature and pan evaporation were 25.0⁰c and 34.8 mm respectively. There was no report on sunshine parameter.

Maize was at flowering stage and in fair state. It has been adversely affected by stalk borer, excessive weed growth and animal interference though normal yield is still expected.

3. ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

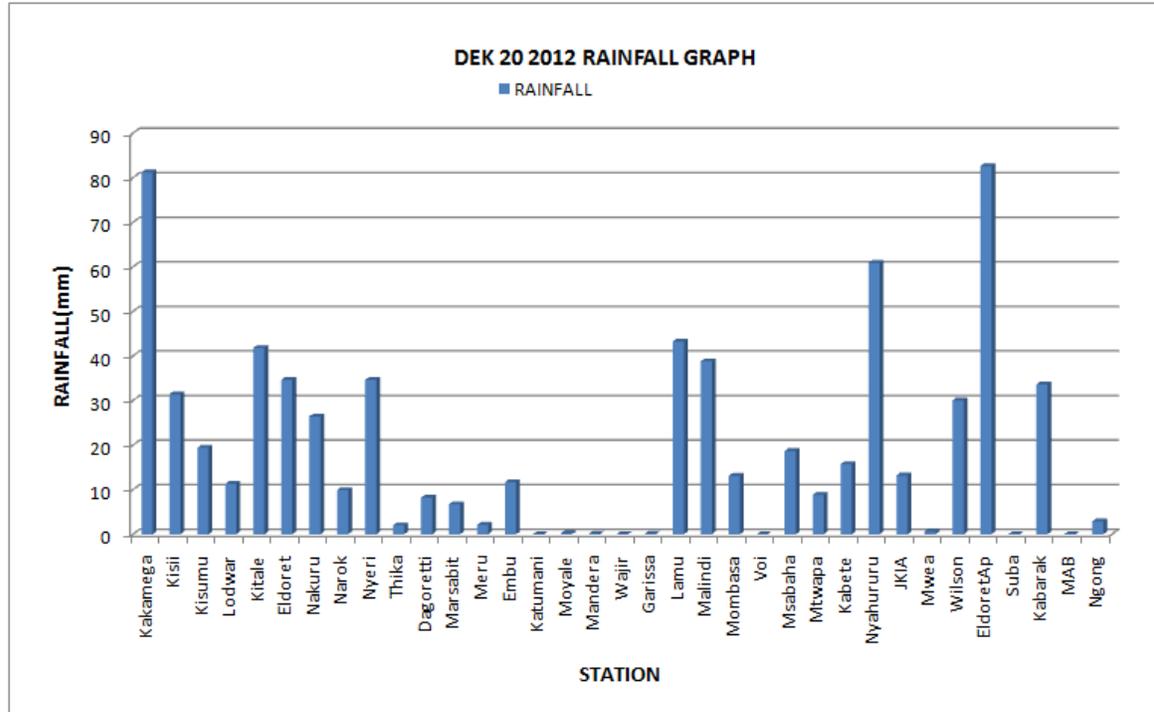


Figure 3.1: Dekadal rainfall totals for 11-20 July 2012

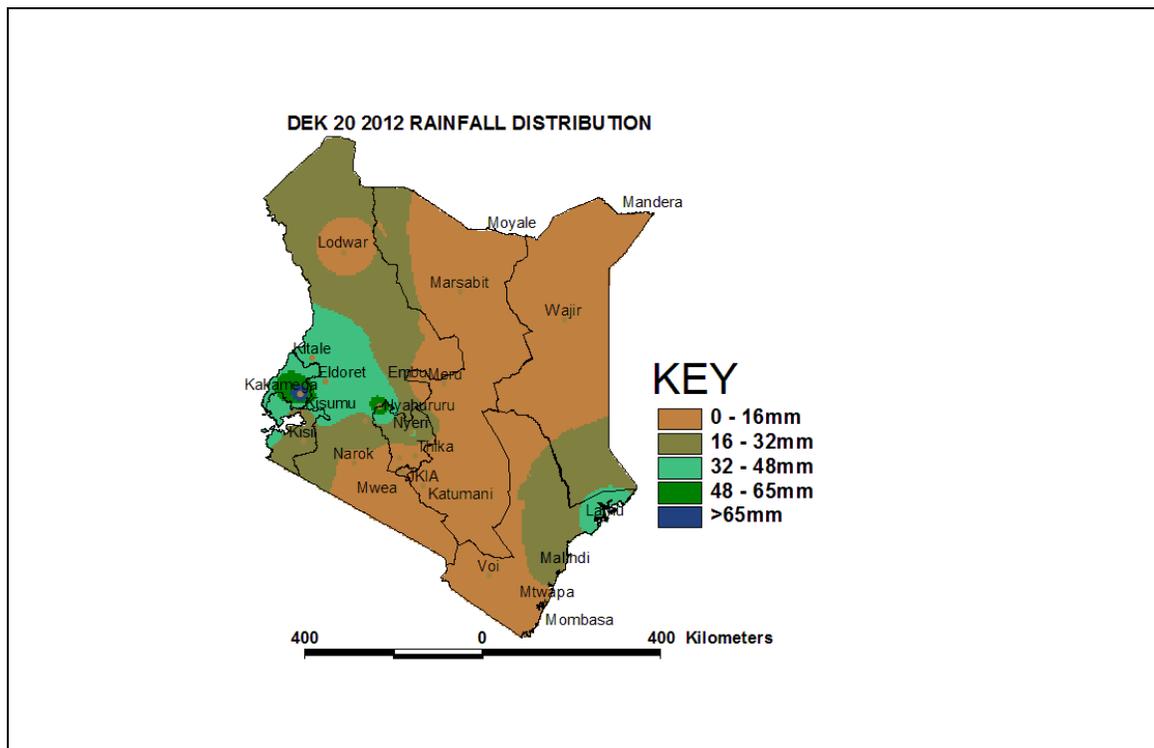


Figure 3.2: Dekadal rainfall distribution

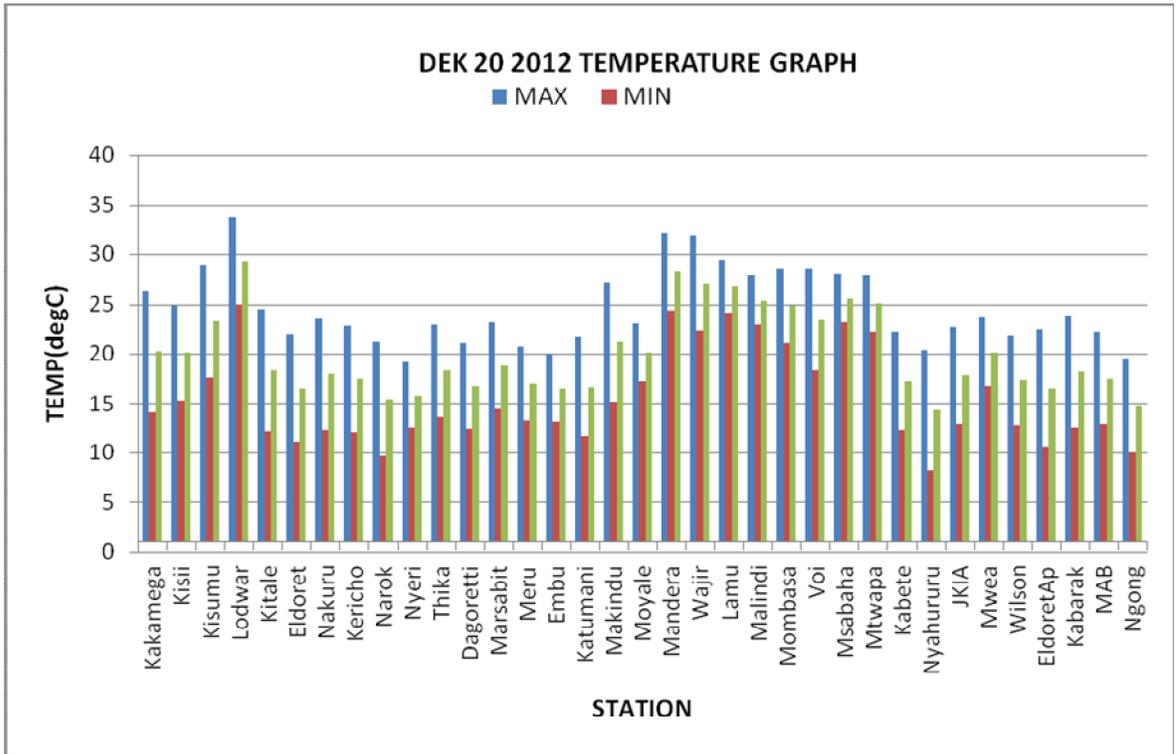


Figure 3.3: Maximum, Minimum and Average temperature in ⁰c

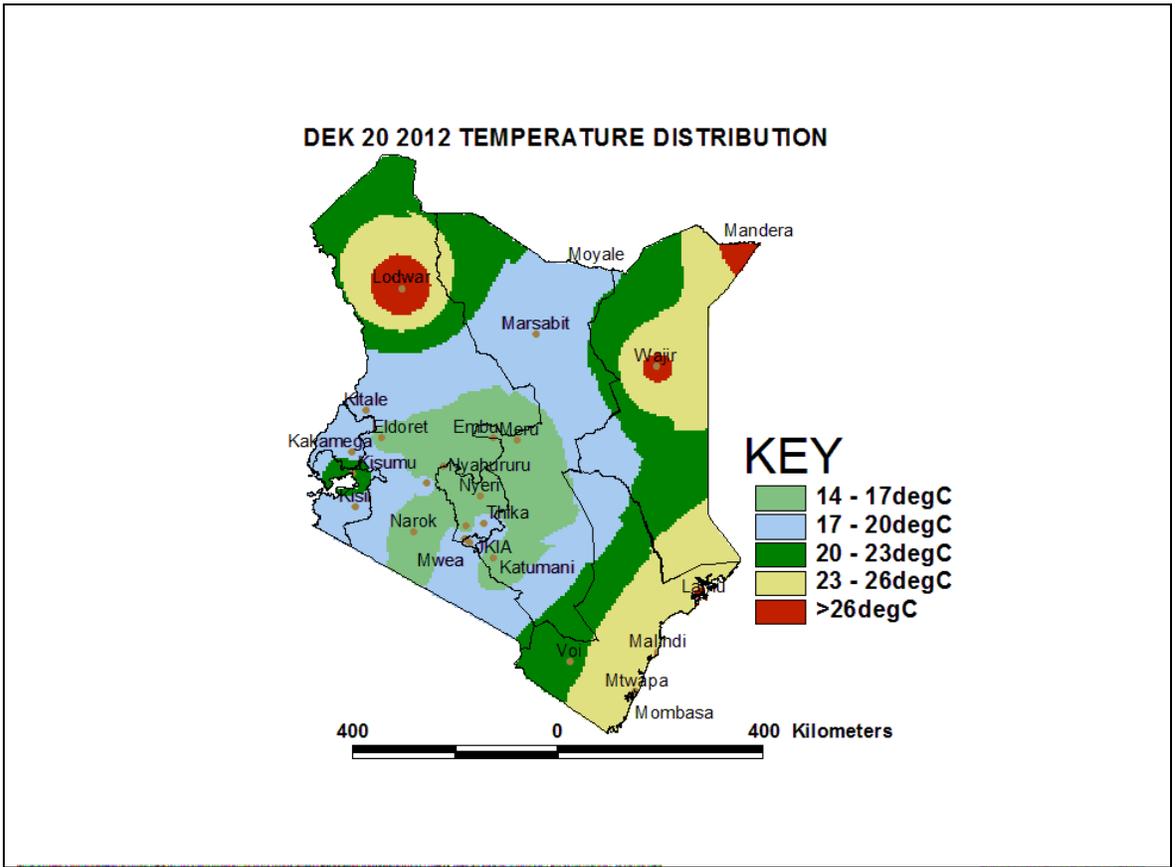


Figure 3.4: Mean temperature distribution

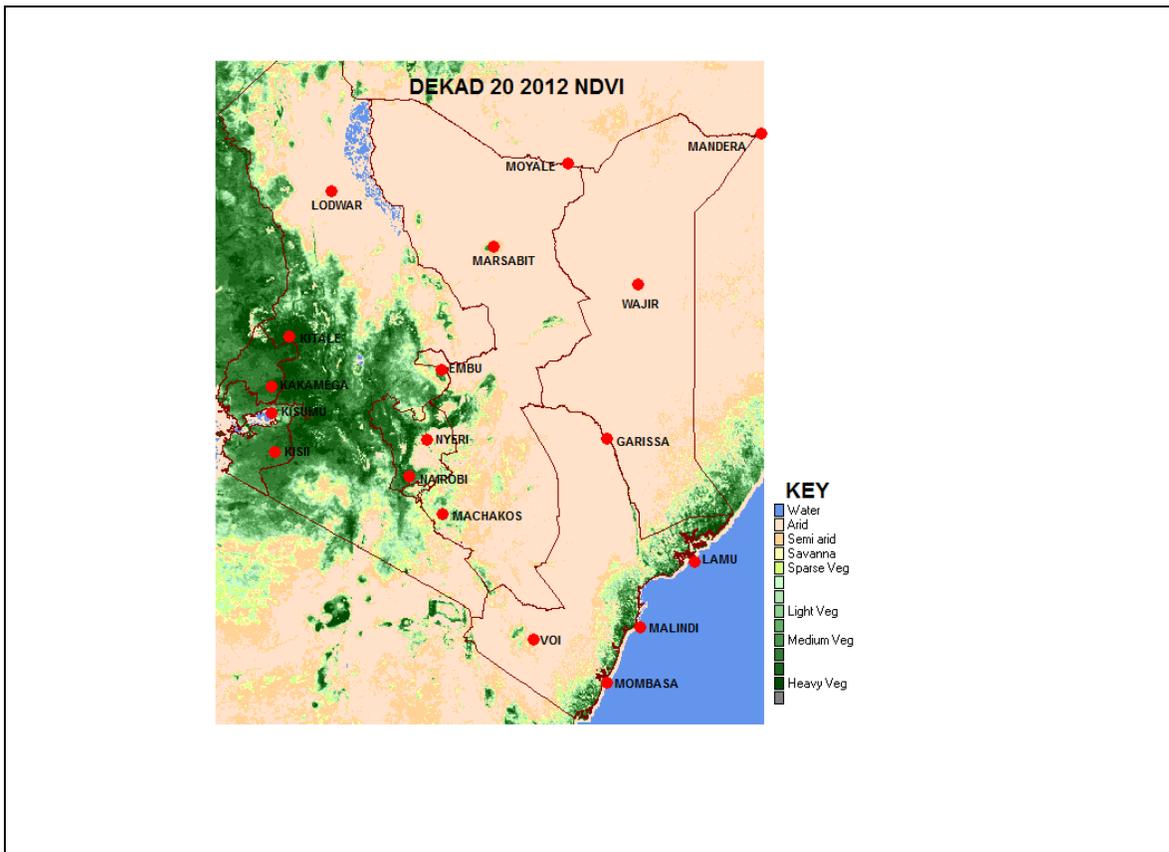


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-31 JULY 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)** , are expected to experience sunny intervals in the morning and light afternoon/night showers accompanied by thunderstorms over several places for much of the period. The rainfall is expected to reduce towards the end of the forecast period over south Nyanza area. Low temperatures are expected over parts of the rift valley which include the Narok County

The showers will continue flourishing the crops which are flowering especially maize in Kisii and Kitale.

- + **Over the Northwestern counties (Turkana, West Pokot etc)**, are expected to experience mainly sunny intervals at the beginning of the forecast period, afternoon showers over few places in the afternoon are expected from the 3rd to 4th day of the forecast period, especially to the west of Lake Turkana.

The afternoon showers will continue to replenish the pasture and general vegetation of the region.

- ✚ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc)** , are expected to experience cool cloudy conditions with light rains/drizzle in the mornings which will give way to sunny intervals in the afternoons occasional afternoon showers are expected over few places which may intensify on the 3rd to 5th days of the forecast. Relatively low temperatures are expected at the beginning with slight improvement in the middle of the forecast period

The rains will continue benefiting the growing crops in the region especially maize which is approaching the maturity stage.

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** are expected to experience mainly sunny intervals.

The continued sunny conditions will continue having a negative impact on the pasture and crops grown in this region.

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc),** mainly sunny intervals is expected for much of the forecast period

The sunny intervals will have a negative impact on the pasture for livestock and crops grown in this region.

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** ,occasional light to moderate morning showers are expected over few places on the first and the last two days of the forecast period.

The rains will continue benefiting the growing crops in the region especially maize which is in flowering stage.

For feedback or further guidance, Contact:

Director,
Kenya Meteorological Department,
Agro meteorological 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

©2012 The Kenya Meteorological Department