



KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN
WEATHER AND CROP REVIEW FOR DEKAD 22, 2012
01– 10 AUGUST 2012

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

The current dekad showed some increase in rainfall activities both in space and intensity in most stations. North Eastern stations continued to report dry conditions. Kisii station in Nyanza region recorded the highest rainfall of 119.5mm countrywide. This was a major improvement from 20.1mm reported in the same station in the previous dekad. The second highest rainfall of 119.2 mm was reported at Kakamega station in western region. Eldoret airport station reported 119.1 mm as the highest rainfall in Rift Valley region. In central region, Nyahururu station received the highest rainfall of 75.2 mm. Msabaha station in the coastal region recorded 53.7 mm as the highest rainfall. Dagoretti station in Nairobi region received the highest rainfall of 47.3 mm. In Eastern region, Meru station recorded 12.3 mm as the highest rainfall. Lodwar station received only 1.9 mm as the highest rainfall in the North Eastern region.

Most stations reported an increase in maximum temperatures. Mandera station in North Eastern region still reported the highest maximum temperature of 35.4°C, which was an increase compared to 34.1°C reported in the previous dekad. Nyahururu station in Central region still recorded the lowest maximum temperature of 19.8°C compared to 18.8°C recorded in the previous dekad. The minimum temperature was on a decreasing trend unlike in the previous dekad where it was increasing.

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 22; 01 – 10 AUGUST 2012

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received 119.2 mm of rainfall which was an increase from 14.9 mm reported in the previous dekad. The mean air temperature recorded was 20.4°C. There was no report on total pan evaporation and sunshine hours.

Maize was at maturity stage, in good conditions and normal yield is expected.

2.1.2 Kisii

This station recorded 119.5mm of rainfall compared to 20.1 mm in the previous dekad. The mean air temperature and total pan evaporation recorded were 20°C and 40mm respectively. There was no report on sunshine.

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

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall of 7.8 mm compared to 121.6mm reported in the previous dekad. The average air temperature and total pan evaporation were 19.5°C and 29.8mm respectively. There was no report on sunshine hours.

Maize and beans were in flowering and harvesting stages respectively. Both crops are in fair state and normal yield is expected.

2.2.2 Eldoret-Kapsoya

The station recorded rainfall amount of 21.6 mm which was a decrease from 29 mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 16.9°C and 29.1mm respectively. There was no sunshine report.

Maize and beans were at flowering and harvesting stages respectively. Maize is in good condition and normal yield is expected, while beans is being harvested and below normal yield is expected since it has been adversely affected by excessive rainfall and birds.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received 6.3mm compared to 11.6 mm of rainfall in the previous dekad. The average air temperature recorded was 16.5°C. There were no reports on total pan evaporation and sunshine hours.

Maize was at flowering stage, in fair state and normal yield is still expected though they had been adversely affected by stalk borer. Harvesting of beans is completed.

2.3.2 Kabete

The station recorded rainfall amount of 22.5mm compared to 7.6mm in the previous dekad. The average air temperature and pan evaporation recorded were 17.2°C and 28mm respectively. Sunshine hours reported was 5 hours per day.

Maize was at flowering stage, in fair state and normal yield is expected. Harvesting of beans is complete.

2.3.3 Thika

The station reported 35.8mm of rainfall compared to 3.7mm in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 18.5°C and 31.3 mm respectively. There was no report on sunshine hours.

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

2.3.4. Nyahururu

The station received rainfall of 75.2mm which was an increase from 68.7mm reported in the previous dekad. The mean air temperature and pan evaporation recorded were 13.6°C and 32.2mm respectively. There was 4.5 hours of sunshine recorded per day.

Maize and beans were both in flowering stage. Maize was in good state while beans was in fair state and normal yield is expected for both crops. Potatoes were in flowering stage, fair state and normal yield is expected.

2.3.5. Dagoretti

The station reported rainfall amount of 47.3mm compared to 0.4mm recorded in the previous dekad. The average air temperature and total pan evaporation recorded were 17.2⁰C and 35.3mm respectively. There was no sunshine report.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported 12.3mm of rainfall compared to 3.9 mm in the previous dekad. The average air temperature and total pan evaporation recorded were 17.9⁰C and 47.3mm respectively. There was no report on sunshine hours.

Maize was at maturity stage, in poor state and below normal yield is expected since it has been adversely affected by insufficient rainfall.

2.4.2 Embu

The station recorded rainfall of 3.8mm compared to 2.5mm in the previous dekad. The average air temperature and total pan evaporation were 18.3⁰C and 32.2mm respectively. There was no sunshine report.

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

2.4.3 Katumani (Machakos)

The station recorded rainfall of 2.8mm The average air temperature recorded was 17.9⁰C. There was no report on pan evaporation and sunshine parameters.

Maize was at harvesting stage, in good state and normal yield is expected.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received rainfall of 53.7mm compared to 10.7mm in the previous dekad. The average air temperature and pan evaporation recorded were 25.8⁰C and 35.2mm respectively. There was no sunshine report.

Harvesting of maize is complete.

2.5.2 Mtwapa

This station recorded rainfall of 28.6mm compared to 4.3mm in the previous dekad. The average air temperature was 25.8⁰C. There was no report on total pan evaporation and sunshine parameters.

Maize was at maturity stage and in poor state hence, below normal yield is expected due to the adverse effect caused by stalk borer, animals and rot due to unforecasted rains.

3. ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

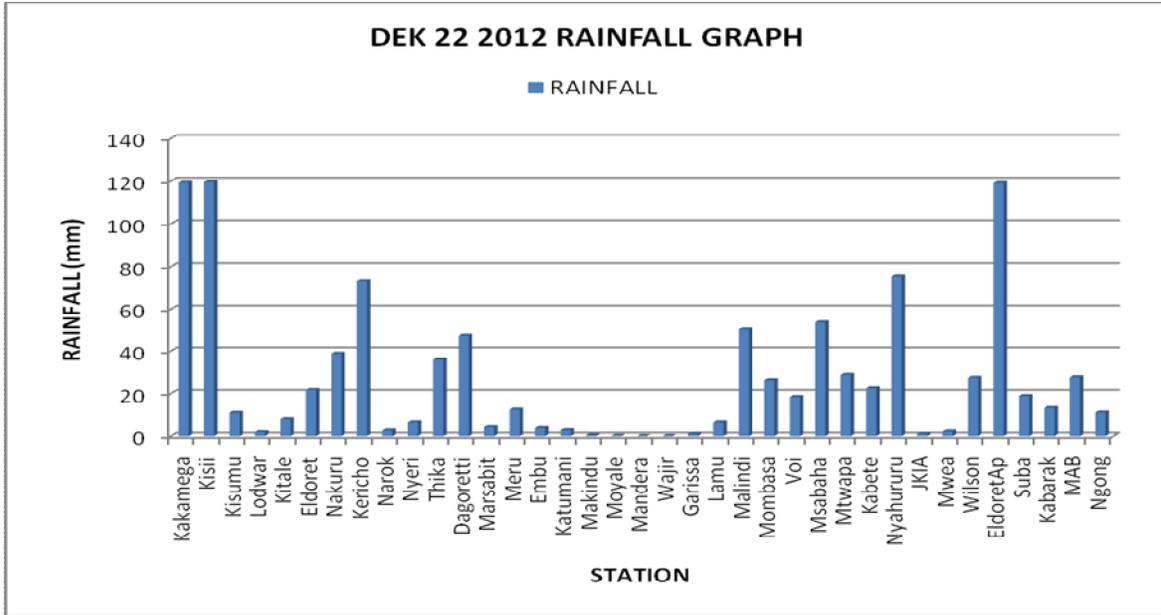


Figure 3.1: Dekadal rainfall totals for 1-10 August 2012

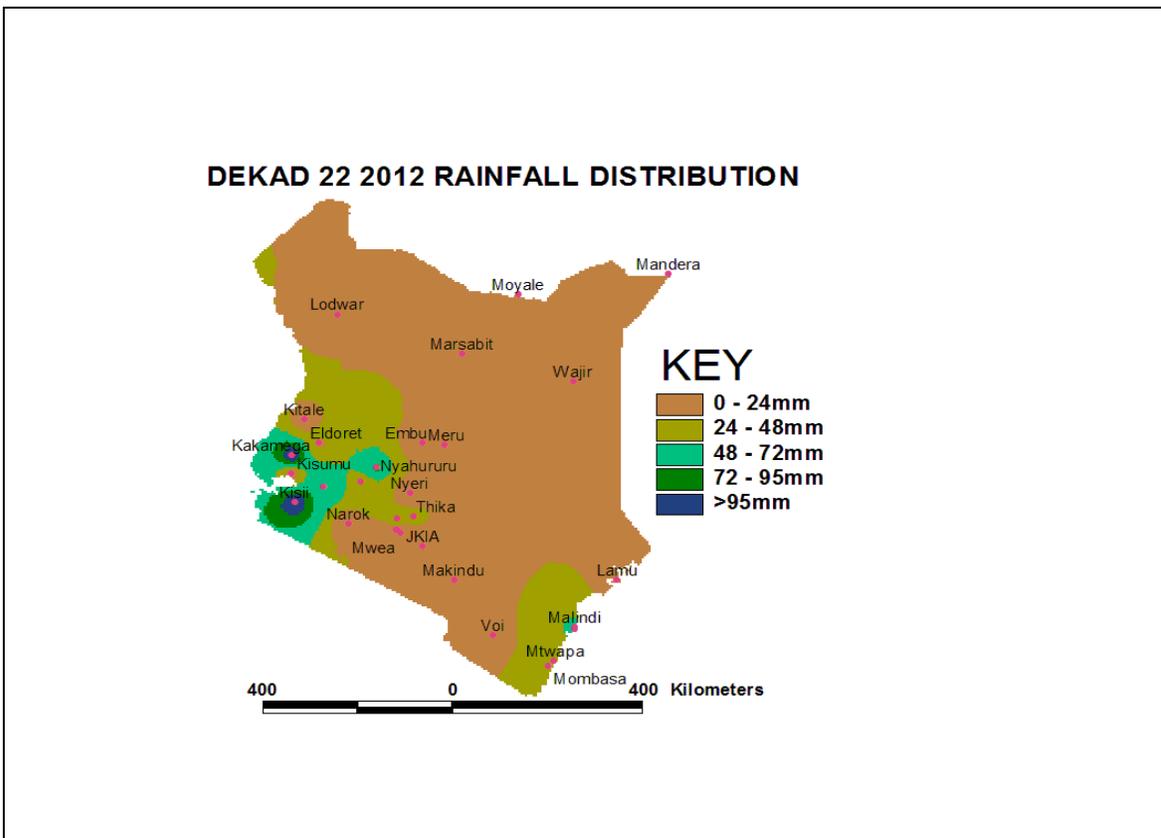


Figure 3.2: Dekadal rainfall distribution

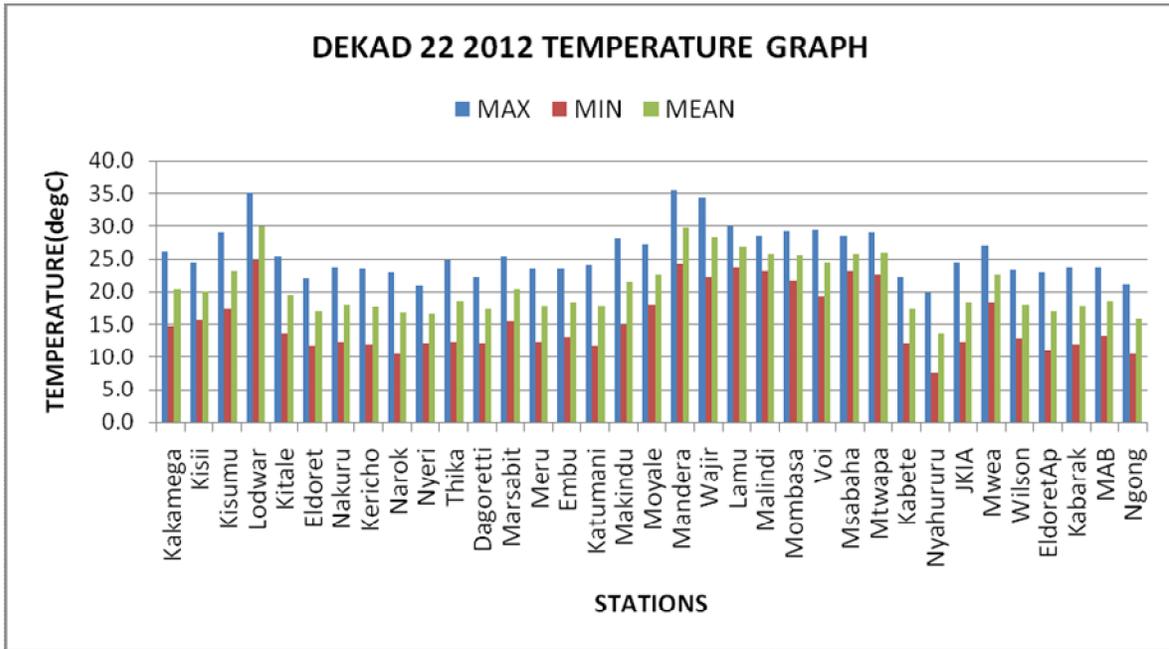


Figure 3.3: Maximum, Minimum and Average temperature in ⁰C

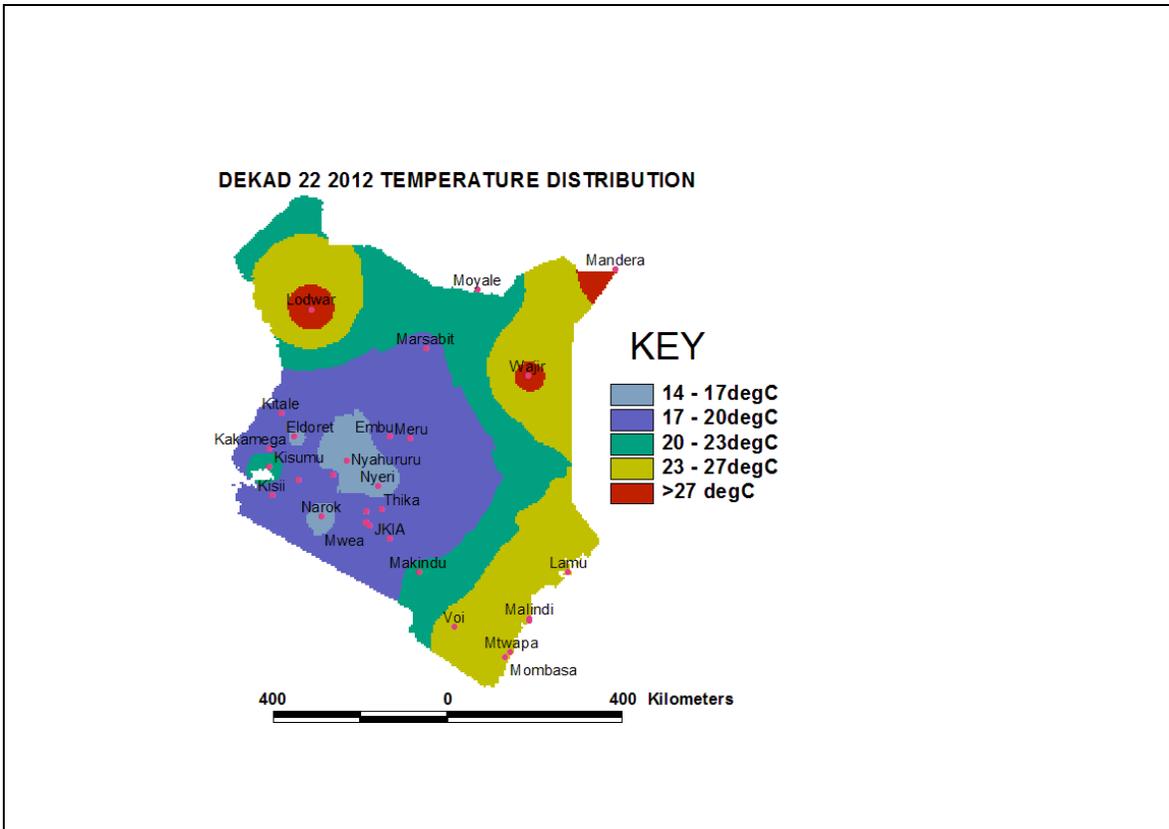


Figure 3.4: Mean temperature distribution

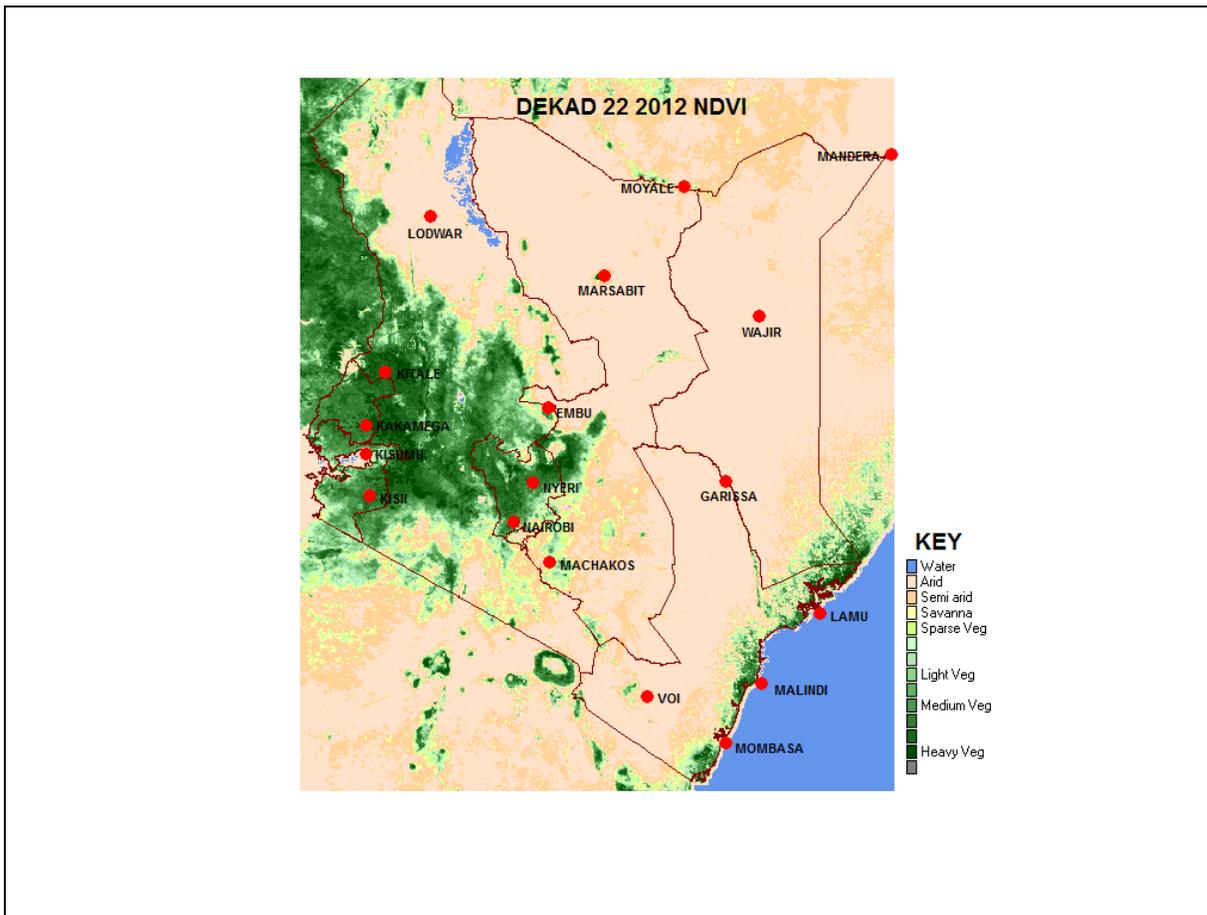


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 AUGUST 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 with occasional morning rains over few places and afternoon/night showers accompanied by thunderstorms over several places for much of the period.

The showers will continue to flourish the flowering crops especially maize in Kitale and Eldoret.

- ✚ **Over the Northwestern counties (Turkana, West Pokot etc),** are expected to experience mainly sunny intervals over most places. Afternoon showers are expected over few places bordering Uganda.

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, cloudy conditions in the morning with light rains/drizzle over mainly the high ground areas giving way to short sunny intervals for much of the forecast period. Moderate afternoon / night showers are expected over few places in mid of the forecast period.

The rains will continue benefitting the growing crops which are approaching the maturity stage in most of these counties.

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** Sunny intervals expected throughout the forecast period.

The 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),** Sunny intervals expected throughout much of the forecast period, with a chance of showers over few places on the first two days.

The sunny interval will continue having negative impact on the pasture for the animals kept in this region.

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc) ,** are expected to experience light to moderate morning showers over several places in the first two days of the forecast period giving way to mainly sunny intervals for the remainder of the period.

The rains will continue benefitting crops which are still in the farm.

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