



**KENYA METEOROLOGICAL SERVICE
DEKADAL AGROMETEOROLOGICAL
BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 20, 2014
11-20 JULY, 2014**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was an increase in intensity while the spatial distribution of rainfall remained the same as in the previous dekad. Rift Valley region received the highest amount of rainfall countrywide with Kitale station recording 50.7mm, compared to the previous dekad where the same station received the highest rainfall of 47.8mm. Kakamega station in Western region received the second highest rainfall of 48.5mm. In Nyanza region, Kisii station recorded the highest rainfall of 39.6mm. Kabete station recorded the highest amount of rainfall of 25.0mm in Nairobi region. Msabaha station received the highest rainfall amount of 21.6mm in Coastal region. In Central region the highest rainfall of 18.9mm was recorded at Nyahururu station. In Eastern region the highest rainfall amount of 4.7mm was recorded at Embu station while Marsabit station in North Eastern region reported the highest amount of rainfall of 2.0mm.

Maximum temperatures in most stations had a decreasing trend while the minimum temperatures had an increasing trend during the dekad. Lodwar station in North Eastern region recorded the highest maximum temperature of 33.9°C compared to 34.3°C recorded at the same station in the previous dekad. The minimum temperatures increased in most stations with Nyahururu station in Central region recording the lowest temperature of 8.1°C compared to 7.0°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 20; 11-20 JULY 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded rainfall amount of 48.5mm during the dekad. The mean air temperature and evaporation reported were 20.6°C and 3.9mm respectively. Sunshine duration reported was 6.5 hours.

Maize was at flowering and in a good state. Normal yield is expected.

2.1.2 Kisii

The station recorded rainfall amount of 39.6mm. The mean air temperature and Pan Evaporation were 20.2°C and 3.4mm respectively. There was no record on Sunshine parameter.

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

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station recorded rainfall amount of 50.7mm. Mean air temperature and Pan Evaporation recorded were 19.1°C and 3.2mm respectively. There was no report on sunshine duration.

Maize was at flowering stage while beans were at harvesting stage and both are in good state hence normal yield is expected for both crops.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 30.5mm. The average air temperature and evaporation reported were 17.2°C and 3.5mm respectively. There was no report on sunshine Parameter.

Maize and beans were at flowering and maturity stages respectively and both crops are in poor state due to insufficient rain, hence below normal yield is expected for both crops.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 2.3mm. The average air temperature was 16.7°C. There was no report on pan evaporation and sunshine parameters.

Maize was at wax ripeness and in a fair state though adversely affected by stalk borer. Normal yield is expected.

2.3.2 Kabete

The station recorded rainfall amount of 25.0mm. Mean air temperature and evaporation were 17.4°C and 2.5mm respectively. No report on sunshine parameter.

Both Maize and beans were at flowering stages and in fair state.

2.3.3 Thika

The station recorded rainfall amount of 3.7mm. The mean air temperature was 18.2°C while evaporation was 3.0mm. There was no report on sunshine duration.

Maize was at maturity stage with normal yield being expected.

2.3.4. Nyahururu

The station received rainfall amount of 18.9mm. The mean air temperature and pan evaporation recorded were 15.0°C and 3.9mm respectively. There was no report on sunshine duration.

Maize was at emergence stage and in fair state while potatoes were at maturity stage and also in fair state though below normal yield is expected.

2.3.5. Dagoretti

The station reported rainfall amount of 8.5mm. The average air temperature and pan evaporation recorded were 17.0°C and 2.6mm respectively. No Sunshine duration reported.

No report on phenological observations.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station recorded rainfall amount of 1.3mm. The average air temperature and Pan Evaporation recorded were 17.5°C and 3.7mm respectively. Sunshine record was 6.5hrs.

Maize was at harvesting stage and in poor state having been affected by insufficient rainfall during the dekad, therefore below normal yield is expected.

2.4.2 Embu

The station recorded rainfall amount of 4.7mm. There was no record on the average air temperature and sunshine duration. Pan Evaporation was 2.3mm.

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

2.4.3 Katumani (Machakos)

The station reported rainfall amount of 0.01mm. The average air temperature reported was 17.9°C. There was no report on pan evaporation and Sunshine duration.

Maize was at harvesting stage and in poor state due to insufficient rain hence below normal yield expected.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 21.6mm. The average air temperature and Pan Evaporation recorded were 25.9°C and 3.7mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in fair state therefore normal yield is expected. Mangoes are at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received rainfall amount of 13.0mm. The average air temperature and pan evaporation recorded were 25.0°C and 4.0mm respectively. Sunshine duration reported was 6.7 hours.

Maize was at maturity stage and in a fair state though adversely affected by insects, birds, animals, diseases mainly maize stalk borer and excessive weed growth. Mangoes were at harvesting stage and in a fair state hence normal yield is expected for both crops.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

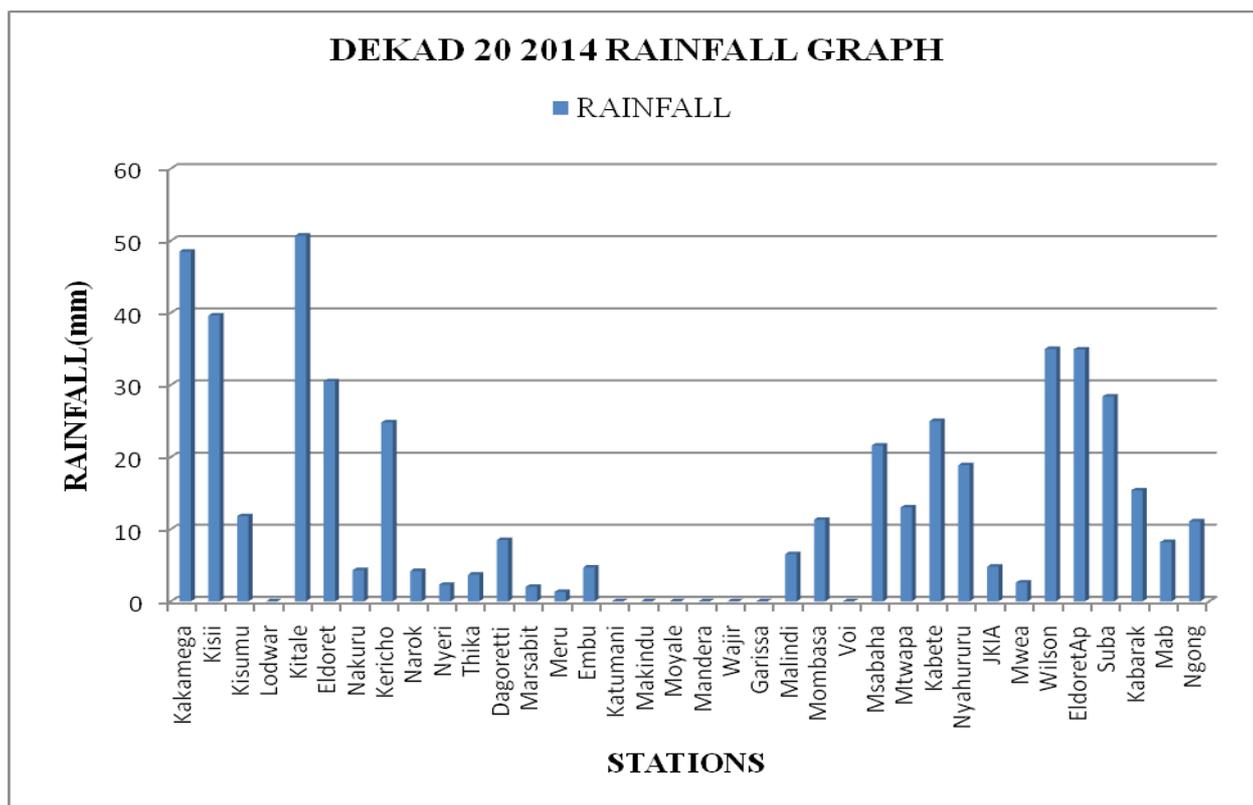


Figure 3.1: Dekadal rainfall totals for 11- 20 JULY 2014

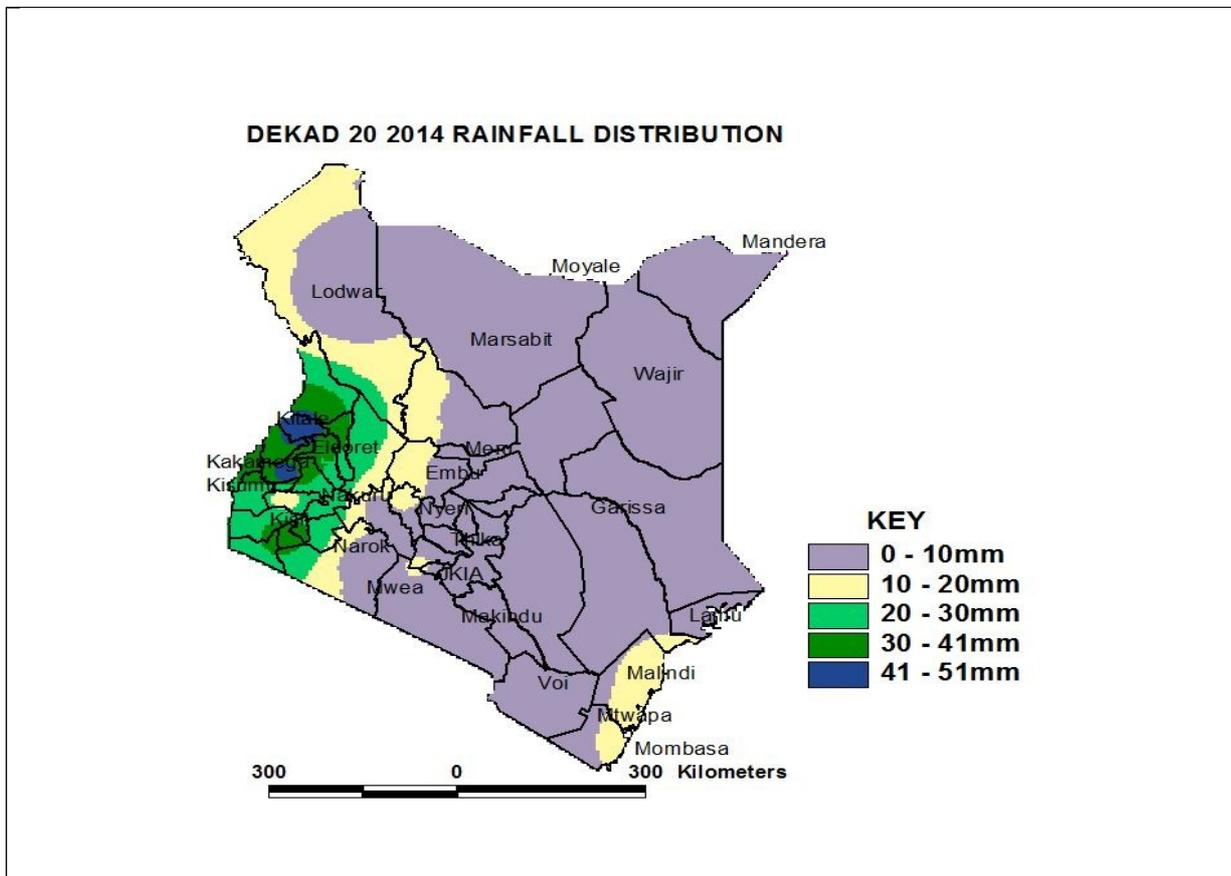


Figure 3.2: Dekadal rainfall distribution for dekad 20, 2014

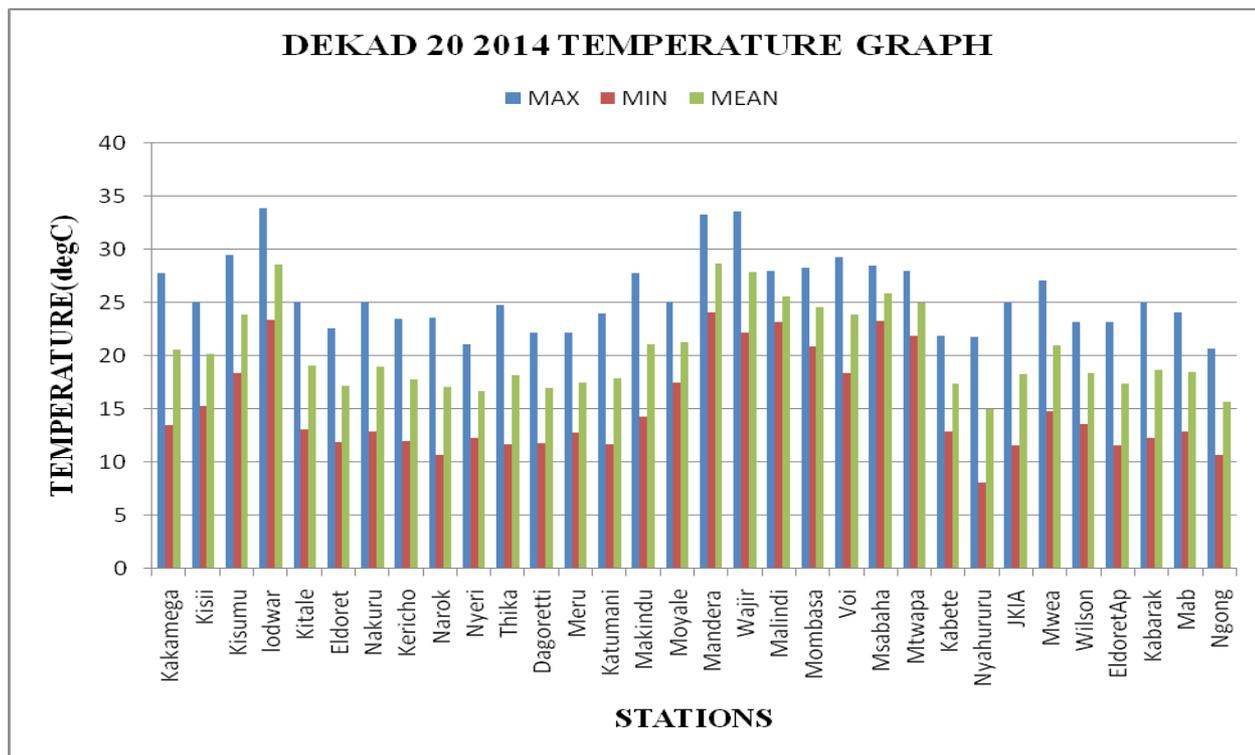


Figure 3.3: Maximum, Minimum and Average temperature for dekad 20, 2014.

DEKAD 20 2014 TEMPERATURE DISTRIBUTION

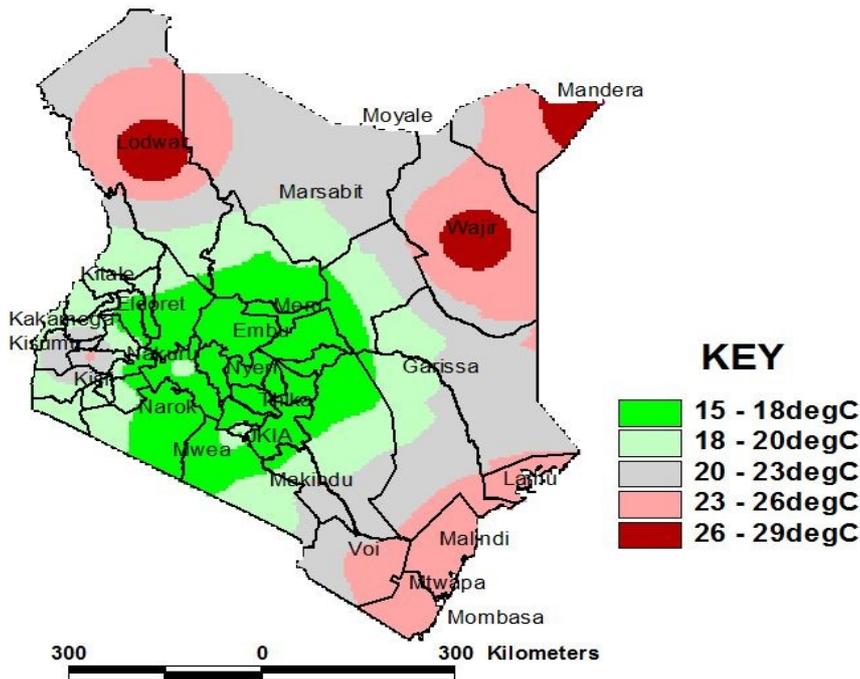


Figure 3.4: Mean temperature distribution for dekad 20, 2014

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS;21-31 JULY 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),** mornings are expected to experience rains over few places giving way to sunny intervals for the entire forecast period. Afternoon/evening showers and thunderstorms are expected over several places throughout the forecast period. The rainfall is expected to be relatively intense.

The rains and showers are of great importance for the growth of the maize crop which is in its flowering stage in the regions.

❖ **The Northwestern counties (Turkana, West Pokot and Samburu),** Are expected to experience sunny intervals in the morning throughout the forecast period and afternoon/evening showers and thunderstorms over few places on the first 5 days of the forecast period.

The showers will impact positively on 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 early morning cloudiness accompanied by occasional light

rains/drizzle over few places giving way to sunny intervals. Showers are expected in the afternoon over few places throughout the forecast period.

The rains/drizzle and showers will benefit the Maize crop which is in the flowering stage.

- ❖ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo)**, are expected to experience sunny intervals throughout the forecast period. The last 2 days are expected to experience rains over few places in the morning.

The expected rains will impact positively on pasture and vegetation in the region.

- ❖ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui)**, are expected to experience sunny intervals throughout the forecast period.

The sunny conditions will impact negatively on pasture and vegetation in the region.

- ❖ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)**, are expected to experience showers in the morning and mainly sunny intervals in the afternoon during the forecast period except on the 2 day only sunny intervals will prevail in the morning.

The showers will benefit the development of the Maize crop, which is in the flowering stage.

For feedback or further guidance, Contact:

Director,
Kenya Meteorological Services,
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

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