

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 21 (21-31 July), 2015

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities increased in intensity and decreased in spatial distribution. The highest rainfall amount countrywide of 136.7mm was recorded at Kakamega station in Western region compared to Eldoret Air port station in Rift Valley province which reported the highest rainfall amount of 65.4mm in the previous dekad. The second highest rainfall of 112.0mm was received at Eldoret station in the Rift Valley region. Kisii station In Nyanza region reported the highest rainfall amount of 57.1mm. In Central region Nyahururu station recorded the highest rainfall amount of 45.0mm. Mombasa station in coastal region received the highest amount of rainfall of 29.0mm. In Nairobi region the highest rainfall amount of 18.4mm was reported at Wilson station. Embu station in Eastern region recorded the highest rainfall amount of 10.1mm, while Moyale station in North Eastern region reported the highest amount of rainfall of 4.9mm.

Maximum and Minimum temperatures decreased and increased respectively in most stations during the dekad. Lodwar station in North-eastern region reported the highest maximum temperature of 34.9°C compared to 34.7°C recorded at same station in the previous dekad. The lowest minimum temperature of 8.0°C was reported at Nyahururu station in Central region compared to 5.6°C in the same station during 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 21: 21- 31 JULY, 2015

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station reported rainfall amount of 136.7mm during the dekad. The mean air temperature was 20.9°C. No report on sunshine and Evaporation parameters.

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

2.1.2 **Kisii**

The station received total rainfall amount of 57.1mm. The mean air temperature and Pan Evaporation recorded were 20.5°C and 3.3mm respectively. There was no report on sunshine parameter.

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

2.2 RIFT VALLEY REGION

2.2.1 Kitale.

The station reported total rainfall amount of 96.8mm. The mean air temperature and Pan Evaporation recorded were 18.9°C and 3.8mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in good state, hence normal yield is expected. Beans were at harvest stage and in fair state. Below normal yield is expected due to insufficient rainfall.

2.2.2 Eldoret-Kapsoya

The station reported rainfall amount of 112.0mm. The mean air temperature and Pan Evaporation recorded were 17.4°C and 4.4mm respectively. There was no sunshine duration report.

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

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received total rainfall amount of 2.9mm. The average air temperature was 16.5°C. There was no report on Pan Evaporation and sunshine parameters.

Maize was at flowering stage and in poor state, below normal yield is expected due to adverse affect by stalk borer and insufficient rainfall.

2.3.2 Kabete

The station reported rainfall amount of 11.2mm. The mean Pan Evaporation recorded was 2.6mm. There was no report on a air temperature and sunshine duration.

Both maize and beans were in flowering stage and in fair state with normal yield expected.

2.3.3 Thika

The station reported rainfall amount of 6.3mm. The mean air temperature and Pan Evaporation recorded were 18.5©C and 2.8mm respectively. There was no report on sunshine duration.

Maize was at maturity stage and in good state hence above normal yield is expected. Some farmers have started harvesting maize.

2.3.4 Nyahururu

The station reported rainfall amount of 45.0mm. The mean air temperature and Evaporation recorded were 14.6°C and 3.4mm respectively. There was no report on sunshine hours.

Maize was at emergence and in fair state, while Potatoes were at harvest stages in fair state hence normal yield is expected.

2.3.5. Dagoretti

The station reported rainfall amount of 3.1mm. The Mean air Temperature and Pan Evaporation recorded were 17.2°C and 2.6mm respectively. There was no report on sunshine hours.

Maize was at 100% flowering stage and in good state.

2.4 EASTERN KENYA REGION

2.4.1 Embu

The station received total rainfall amount of 10.1mm. There was no report on Mean air Temperature, Pan Evaporation and sunshine hours.

Maize was at flowering stage and in fair state with normal yield expected. Beans have been harvested.

2.4.2 Meru

The station received rainfall amount of 2.9mm. The mean air temperature recorded were 17.8°C and. There was no report on Pan Evaporation and sunshine duration.

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

2.4.3 Katumani (Machakos)

The station reported dry conditions during the dekad. The Mean air Temperature and Pan Evaporation recorded were 18.3°C and 3.7mm respectively. There was no report on Sunshine duration.

Maize was at harvest stage and in fair state but below normal yield is expected due to insufficient rainfall. Most farmers are harvesting maize.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 21.5mm. The average air temperature recorded was 25.9°C. There was no report on sunshine duration and Pan Evaporation.

Maize was at maturity stage and in fair state, hence normal yield is expected. Harvesting had started in some farms. Mangoes were at 100% ripeness stage and in good state.

2.5.2 Mtwapa.

The station received rainfall amount of 13.6mm. The average air temperature was 25.3°C. There was no report on Sunshine duration and Pan Evaporation.

Maize was at maturity stage and in good state; hence normal yield is expected though maize had been adversely affected by birds, animals and stalk borer. Mangoes are in dormant stage.

3.0 ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS.

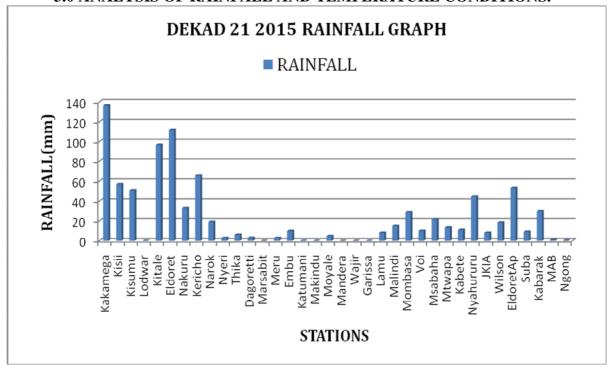


Figure 3.1: Dekadal rainfall totals for 21 -31 JULY 2015

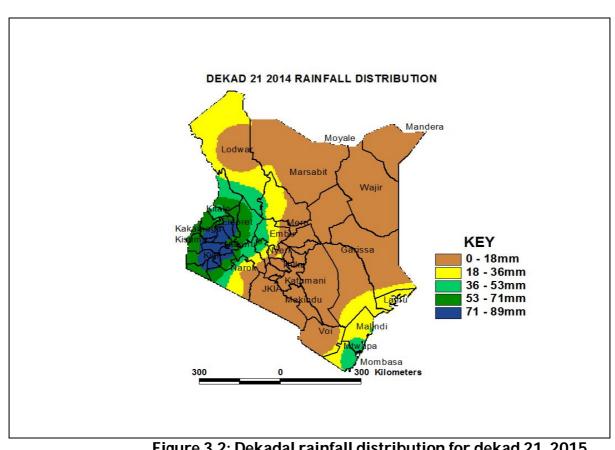


Figure 3.2: Dekadal rainfall distribution for dekad 21, 2015

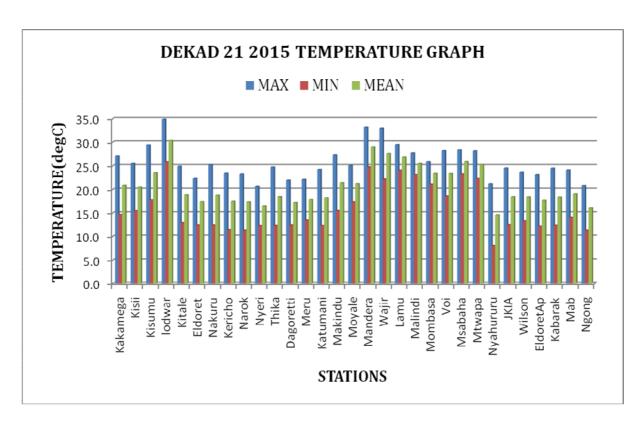


Figure 3.3: Maximum, Minimum and Average temperature for dekad 21, 2015

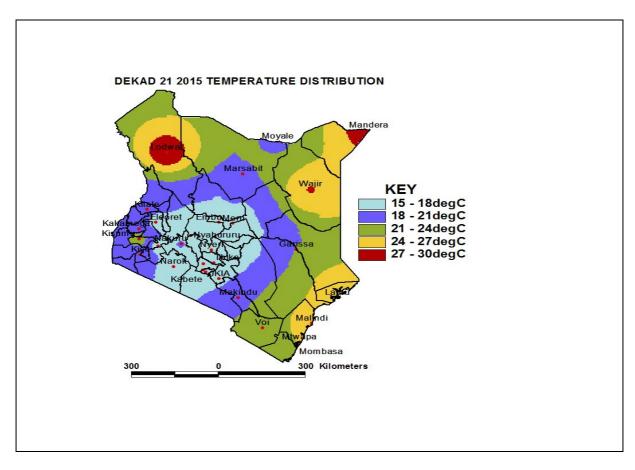


Figure 3.4: Mean temperature distribution for dekad 21, 2015

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 AUGUST, 2015.

❖ 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), are expected to experience morning sunny intervals on the first day of the forecast period, followed by rains over few places on the second day and breaking into sunny intervals thereafter. Afternoons are expected to experience showers and thunderstorms over several places on the first two days, reducing to few places for the rest of the forecast period.

The morning sunny intervals will enhance the drying of maize, which are in harvesting stage in places like Kisumu. The afternoon showers will be of great benefit to the crops that are still in flowering and maturity stages in places like Kitale, Kisii, Eldoret and Kakamega. They will also replenish the soil with moisture for the growth of pasture and vegetation that supports livestock keeping in this region.

❖ The Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning throughout the forecast period. Afternoons are expected to experience showers and thunderstorms over few places on the first day of the forecast period, breaking into sunny intervals thereafter.

The afternoon showers will be of great advantage to the growth of pasture and vegetation for livestock kept in these regions.

❖ The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience mainly cool and cloudy conditions with rains over few places in the morning for the first five days then increasing to several places on 6th day. For the remaining forecast period, cool cloudy conditions giving way to sunny intervals will be expected. Afternoons will experience showers over few places on the first day of the forecast period, followed by sunny intervals for the next two days, then sunny intervals with some showers over few places on the fifth day, breaking into sunny intervals thereafter.

The morning rains and afternoon showers will be of great benefit to the development of crops that are in the emergence and flowering stages in places like Nyahururu, Nyeri and Embu.

❖ Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience in the morning sunny intervals for the first four days of the forecast period, followed by rains over few places for the next two days, breaking into sunny intervals thereafter. Afternoons are expected to experience sunny intervals throughout the forecast period.

The expected rains will be of benefit to the growth of pasture and vegetation that supports the livestock kept in these regions.

❖ Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience morning cool and cloudy conditions giving way to sunny intervals for the first five days of the forecast period, followed by cool and cloudy conditions with rains over few places on the sixth day, then cool and cloudy conditions giving way to sunny intervals thereafter. Afternoons are expected to experience sunny intervals throughout the forecast period.

The expected rains are of great benefit to the pasture and vegetation growth for livestock kept in this region, while the sunny intervals will enhance the drying of maize that is at maturity stage in places like Katumani.

❖ In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience in the morning sunny intervals on the first day of the forecast period, followed by showers over few places for the next two days, increasing into showers over several places for the next two days and reducing to few places thereafter. Afternoons are expected to experience sunny intervals throughout the forecast period.

The morning showers will continue benefiting the development of Maize that is at flowering and maturity stages in places like Lamu and Mtwapa respectively.

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;

© 2015 Kenya Meteorological Services.