

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 31, 2014 01- 10 NOVEMBER, 2014

HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was an increase in rainfall activities both in spatial and intensity during the dekad. The highest rainfall activities were realized in Eastern region with Embu, Marsabit and Mwea stations recording 164.0, 145.5 and 96.1mm of rainfall respectively. The second highest rainfall of 81.1mm was received in coastal region at Mombasa station. Nyeri station in central region received the highest amount of rainfall of 75.0mm. In North-Eastern region, the highest rainfall amount of 63.3mm was reported at Garissa station. Kisii station in Nyanza region recorded the highest amount of rainfall of 57.4mm. In Nairobi region, Ngong station received the highest rainfall amount of 24.0mm. Nakuru station in Rift Valley recorded the highest amount of rainfall of 19.5mm, while Western region received the highest amount of rainfall of 10.3mm at Kakamega station.

Maximum temperatures in most stations continued to decrease just like in the previous dekad. North-Eastern region reported the highest temperature of 36.2°C at Lodwar station compared to 35.6°C reported at Wajir station in the same region in the previous dekad. Minimum temperatures continued to decrease with Nyahururu station in central region still reporting the lowest minimum temperature of 8.0°C.

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 31: 01 - 10 NOVEMBER, 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded a decrease in rainfall amount of 10.3mm compared to 46.5mm in the previous dekad. The mean air temperature reported was 21.7°C. There was no report on Sunshine duration and Pan Evaporation.

Beans were at maturity stage and in good state with normal yield expected.

2.1.2 <u>Kisii</u>

The station reported a reduction in rainfall amount of 57.4mm compared to 80.0mm recorded in the previous dekad. The mean air temperature and Pan Evaporation recorded were 20.7°C and 3.6mm respectively. There was no record on Sunshine parameter.

Maize crop was at flowering stage and in fair state.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station recorded rainfall amount of 10.4mm. Pan Evaporation recorded was 4.0mm. There was no report on mean air temperature and sunshine duration.

No phenological report.

2.2.2 Eldoret-Kapsoya

The station recorded rainfall amount of 8.0mm. The mean air temperature and Pan Evaporation recorded were 17.8°C and 5.3mm respectively. There was no record on sunshine duration.

Maize was at harvest stage and in poor state hence below normal yield is expected.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

The station received rainfall amount of 75.0mm. The average air temperature was 18.6°C. There was no report on pan evaporation and sunshine parameters

Both maize and beans crops were at emergence stage and in fair state though beans had been adversely affected by leaf hoppers.

2.3.2 Kabete

The station recorded rainfall amount of 20.5mm. There were no report on mean air temperature, Pan Evaporation and sunshine parameters.

Farmers have finished planting.

2.3.3 Thika

The station recorded rainfall amount of 50.2mm. The mean air temperature and Pan Evaporation recorded were 21.5^{III}C and 4.6mm respectively. There was no report on sunshine duration.

Maize, beans and potatoes were all at emergence stage and in fair state.

2.3.4. Nyahururu

The station reported rainfall amount of 22.3mm. The mean air temperature and Pan Evaporation recorded were 14.5°C and 4.0mm respectively. There was no report sunshine duration.

Maize was still at maturity stage and in fair state. Potatoes were at flowering stage and in fair state. Normal yield for both crops is expected.

2.3.5. Dagoretti

The station reported rainfall amount of 16.7mm. Pan evaporation and Sunshine recorded were 4.1mm and 8.2hrs/day respectively. There was no report on average air temperature.

2.4 EASTERN KENYA REGION

2.4.1 <u>Meru</u>

The station recorded rainfall amount of 32.7mm. The average air temperature recorded was 19.3°C. The Sunshine duration reported was 7.6 hr/day. There was no report on pan evaporation.

Both maize and beans were at emergence stage and in fair state.

2.4.2 <u>Embu</u>

The station recorded rainfall amount of 164.0mm. There was no report on mean air temperature, pan Evaporation and sunshine parameters.

Both maize and beans were at emergence stage and in fair state.

2.4.3 Katumani (Machakos)

The station reported rainfall amount of 27.6mm. The average air temperature reported was 20.7°C. There was no report on pan evaporation and Sunshine parameters.

Both maize and beans were at emergence stage though most farmers are planting again due to poor germination caused by insufficient rainfall during onset of the short rain season.

2.5. COASTAL REGION

2.5.1 <u>Msabaha</u>

The station received rainfall amount of 63.5mm. The average air temperature and pan Evaporation recorded were 27.5°C and 3.7mm respectively. There was no report on sunshine duration.

Maize was still at emergence stage and in fair state. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 <u>Mtwapa</u>

The station received rainfall amount of 13.4mm. The average air temperature recorded was 27.5°C. There was no report on pan Evaporation and Sunshine duration parameters.

Maize was at emergence stage and in good state while mangoes were still at flowering stage and also in good state.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

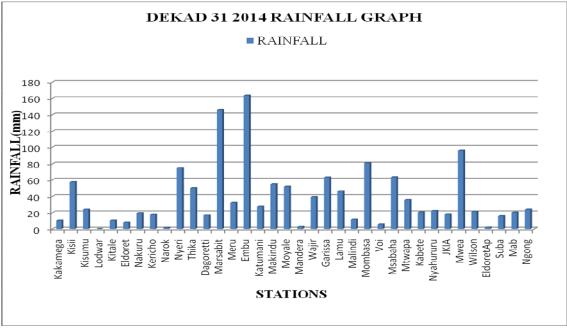


Figure 3.1: Dekadal rainfall totals for 01 - 10 NOVEMBER 2014

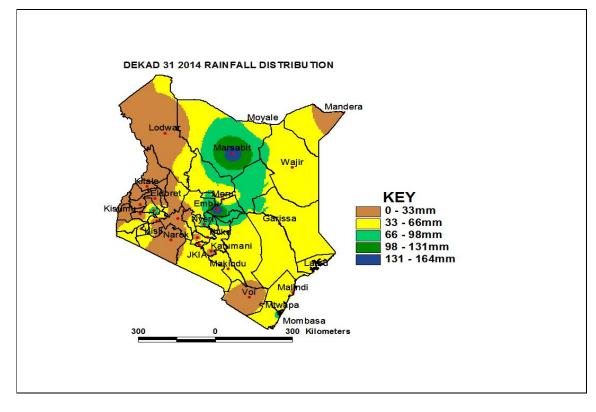


Figure 3.2: Dekadal rainfall distribution for dekad 31, 2014

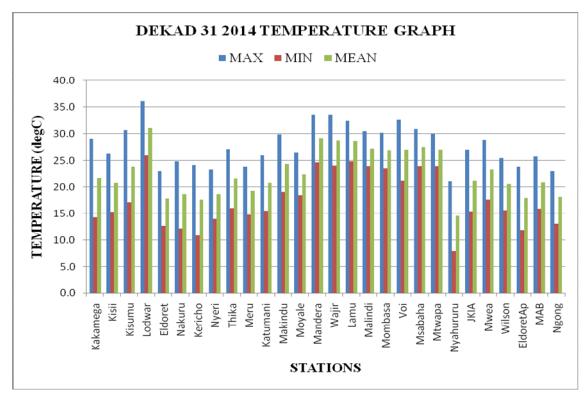


Figure 3.3: Maximum, Minimum and Average temperature for dekad 31, 2014.

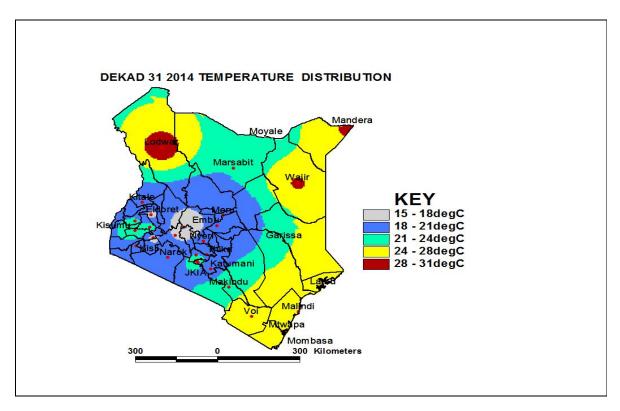


Figure 3.4: Mean temperature distribution for dekad 31, 2014

EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 NOVEMBER 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), are expected to experience mainly sunny intervals in the morning for the entire forecast period with occasional rains over few places. Afternoon/evening are expected to have showers and thunderstorms over several places throughout the forecast period.

The rains and showers will boost soil moisture that will be beneficial to the growth and development of Maize crop that are still in flowering stage, it will also favour the growth of pasture and vegetation that will support livestock keeping.

The Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals the entire day on the first five days of the forecast period. For the last two days of the period, sunny intervals in the morning and afternoon showers over few places.

The showers will continue to replenish the growth of pasture and vegetation to benefit the 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 cloudy early mornings with rains over few places and afternoon showers over few places throughout the forecast period.

The rains and showers will replenish soil moisture that will benefit the crops like maize that is in emergence stage in places like Embu and Meru.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience sunny intervals the entire day on the first two days of the forecast period the rains over few places in the morning and showers over few places in the Afternoon for the remainder of the forecast period.

The rains and showers are of great importance to the pasture and vegetation growth that mainly sustain livestock keeping in this region.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience sunny intervals in the morning throughout the forecast period and afternoon/evening showers over several places on the first three days reducing to few places for the remainder of the forecast period.

The showers are of great benefit to maize crop that is in the emergence stage and to the pasture and vegetation growth for livestock rearing in this region.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience showers over several places in the morning on the first three days reducing to few places for the rest of the period and sunny intervals in the afternoon throughout the forecast period.

The sunny conditions will be beneficial to the development of mangoes that are in flowering and fruit setting stages in the north coast, while the showers will be beneficial to the growth and development of maize crop that is in the emergence stage in places like Msabaha.

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