

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL

BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 23, 2014 11-20 AUGUST, 2014

1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

There was a decrease in rainfall intensity while the spatial distribution slightly increased during the dekad. Rift Valley region still received the highest amount of rainfall countrywide with Kericho station recording 129.7mm, compared to the previous dekad where Eldoret Airport station received the highest rainfall of 139.7mm. Kisii station in Nyanza region received the second highest rainfall of 103.2mm. In Western region, Kakamega station recorded the highest rainfall of 78.0mm. Nyahururu station in Central region received the highest rainfall amount of 48.9mm. In Coastal region, Mtwapa station received the highest rainfall amount of 36.3mm. Moyale station in North Eastern region recorded the highest rainfall of 21.7mm. Nairobi region reported the highest amount of rainfall of 8.3mm at Kabete station, while Marsabit in Eastern region reported the highest rainfall amount of 6.2mm.

Maximum temperatures in most stations continued with an increasing trend with Lodwar station in North Eastern region recording the highest maximum temperature of 34.9°C compared to 34.1°C recorded at the same station in the previous dekad. The minimum temperatures decreased in most stations with Nyahururu station in Central region still recording the lowest temperature of 7.0°C compared to 7.8°C reported 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 23; 11-20 AUGUST 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded rainfall amount of 78.0mm during the dekad. The mean air temperature and pan Evaporation were 20.5°C and 4.3mm respectively. No report on Sunshine duration.

Maize was at maturity stage and in a good state with normal yield expected. The crop is being harvested in some farms.

2.1.2 <u>Kisii</u>

The station recorded rainfall amount of 103.2mm. The mean air temperature and Pan Evaporation were 19.7°C and 3.2mm respectively. There was no record on Sunshine parameter.

Maize was at harvesting stage and in a fair state hence normal yield is expected. Maize planting for second season is underway in some farms.

2.2 RIFT VALLEY REGION

2.2.1 <u>Kitale</u>

The station recorded rainfall amount of 54.9mm. Pan Evaporation recorded was 3.7mm. There was no report on mean air temperature and sunshine duration.

Maize was at maturity stage and in a good state hence normal yield is expected.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 8.2mm. The average air temperature and pan evaporation reported were 16.7°C and 3.9mm respectively. There was no report on sunshine Parameter.

Maize was at flowering stage and in poor state having been affected by insufficient rain during the previous dekad, 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 10.1mm. The average air temperature was 16.4°C. There was no report on pan evaporation and sunshine parameters.

Maize was at maturity stage and in fair state. Although the maize was adversely affected by stalk borer, normal yield is expected.

2.3.2 <u>Kabete</u>

The station recorded rainfall amount of 8.3mm. Evaporation was 2.5mm. No report on Mean air temperature and sunshine parameter.

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

2.3.3<u>Thika</u>

The station received rainfall amount of 1.6mm. The mean air temperature and Pan Evaporation were 18.9°C and 2.8mm respectively. There was no report on sunshine duration.

Land preparation is under way.

2.3.4. <u>Nyahururu</u>

The station received rainfall amount of 48.9mm. The mean air temperature and pan evaporation recorded were 13.8°C and 3.3mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in fair state while potatoes were at harvesting stage and also in fair state normal yield is expected for both crops.

2.3.5. Dagoretti

The station reported rainfall amount of 4.4mm. The average air temperature and pan evaporation recorded were 17.2°C and 2.8mm respectively. Sunshine duration reported was 2.9hrs.

No report on phenological observations.

2.4 EASTERN KENYA REGION

2.4.1<u>Meru</u>

The station recorded rainfall amount of 9.6mm. The average air temperature and Pan Evaporation recorded were 18.0°C and 4.3mm respectively. Sunshine record was 7.6hrs.

Land preparation is under way for next season.

2.4.2 <u>Embu</u>

The station recorded rainfall amount of 5.4mm. Pan Evaporation was 2.1mm. There was no record on the average air temperature and sunshine duration.

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

2.4.3 Katumani (Machakos)

The station received rainfall amount of 2.5mm. The average air temperature reported was 18.1°C. There was no report on pan evaporation and Sunshine duration.

No phenological report.

2.5. COASTAL REGION

2.5.1 <u>Msabaha</u>

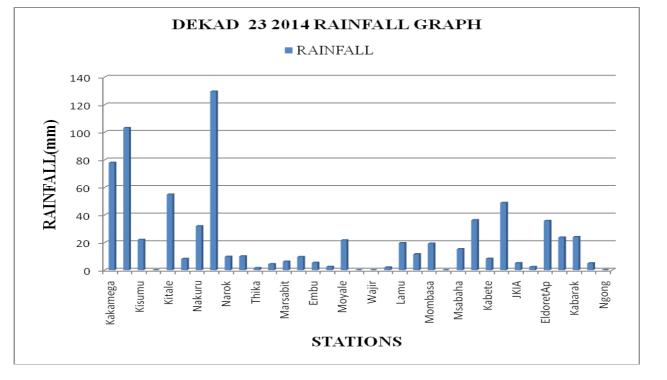
The station received rainfall amount of 15.3mm. The average air temperature and Pan Evaporation recorded were 25.9°C and 3.6mm respectively. There was no report on sunshine duration.

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

2.5.2 <u>Mtwapa</u>

The station received rainfall amount of 36.3mm. The average air temperature and pan evaporation recorded were 25.1°C and 3.6mm respectively. There was no report on Sunshine duration.

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 fair state hence normal yield is expected for both crops. Green and dry maize harvesting continues.



3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

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

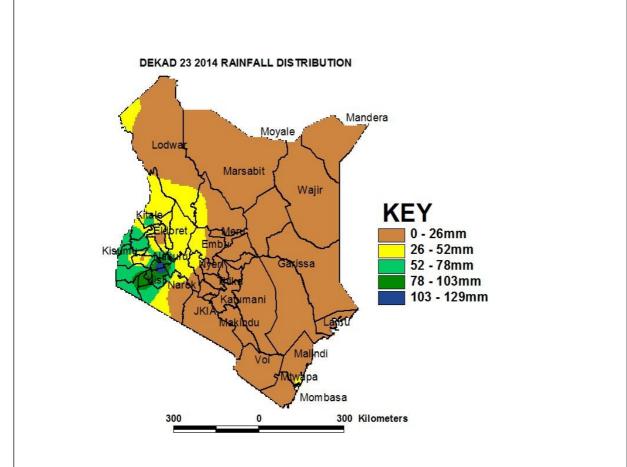
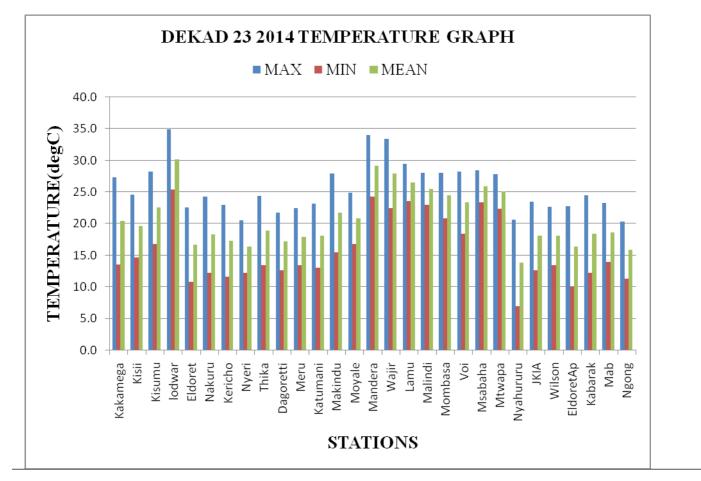


Figure 3.2: Dekadal rainfall distribution for dekad 23, 2014



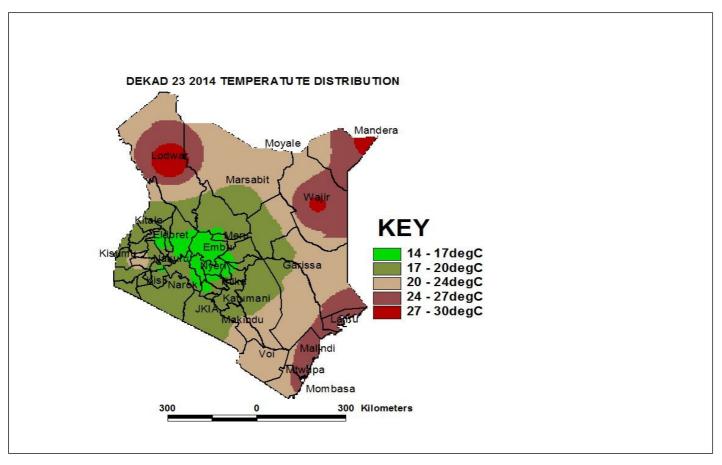


Figure 3.3: Maximum, Minimum and Average temperature for dekad 23, 2014.

Figure 3.4: Mean temperature distribution for dekad 23, 2014

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS;21-31 AUGUST 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 mainly sunny intervals for the first four days, breaking into rains over few places for the next two days, then breaking into sunny interval for the remaining forecast period. Afternoon are expected to experience showers and thunderstorms over few places for the first two days, breaking into several places for the next four days and finally reducing to few places for the rest of the forecast period.

The showers are beneficial to the growth of the maize crop, which is in its flowering stage in places like Eldoret in this region.

The Northwestern counties (Turkana, West Pokot and Samburu), Are expected to experience in the morning sunny intervals throughout the forecast period. Afternoons are expected to experience sunny intervals for the first three days, followed by showers and thunderstorms over few places for two days, and then breaking into sunny intervals for the remaining forecast period.

The showers will replenish the 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 cool cloudiness for the first two days, followed by cloudiness breaking into sunny intervals with rains over few places for the next four days then coldness breaking into sunny intervals for the rest the forecast period. Afternoons are expected to have sunny intervals for the first two days, breaking into showers over a few places for the next four days then sunny intervals for the rest of the forecast period.

The showers will benefit the Maize crop which is in the flowering stage in places like Nyahururu, while the sunny intervals are beneficial to crops in the harvesting stage in places Embu, Kabete etc.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience sunny intervals throughout the entire forecast period.

The expected sunny condition will continue to impact negatively on pasture and vegetation in the region.

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience sunny intervals in the morning throughout the forecast period. Afternoons are expected to experience sunny intervals for the first two days, followed by showers over few places for the next two days, and then breaking into sunny intervals for the remaining forecast period.

The showers will be beneficial to the to pasture and vegetation in the region.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience in the morning showers over few places for the first three days, breaking into sunny intervals for the remaining forecast period. Afternoons are expected to experience mainly sunny intervals for the entire forecast period.

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

For feedback or further guidance, Contact: Director,

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