

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 17, 2015

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities decreased both in intensity and spatial distribution during the dekad in the country. The highest rainfall amount of 92.4mm was recorded at Kitale station in Rift Valley region compared to 116.4mm received at JKIA station in Nairobi region in the previous dekad. Western region reported the second highest rainfall amount of 77.9mm at Kakamega station. Nyahururu station in Central region recorded the highest rainfall amount of 26.3mm. Nyanza region recorded the highest rainfall amount of 21.3mm at Kisii station. In North Eastern region, Moyale station recorded the highest rainfall amount of 8.6mm. Dagoretti station in Nairobi region received the highest rainfall amount of 7.1mm. Coastal region reported the highest rainfall amount of 6.6mm at Malindi station. Embu station in Eastern region recorded the highest rainfall amount of 1.7mm.

Maximum and minimum temperatures were generally on a decreasing trend during the dekad. North-eastern region continued reporting the highest maximum temperature of 35.4°C at Lodwar station compared to 36.8°C reported at Mandera station in the previous dekad. Nyahururu station in Central region continued to report the lowest Minimum temperature of 9.8°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 17: 11- 20 JUNE, 2015

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 77.9mm during the dekad. The mean air temperature and Pan Evaporation recorded were 21.2°C and 3.8mm respectively. The sunshine hrs reported was 5.1hrs/day.

Maize and beans were at flowering and harvest stages respectively and both are in good state. Normal yield is expected for both crops.

2.1.2 <u>Kisii</u>

The station reported rainfall amount of 21.3mm. The mean air temperature and Pan Evaporation recorded were 20.1°C and 2.2mm respectively. There was no report on sunshine parameter.

Maize and beans were at flowering and maturity stages respectively and in fair state. Normal yield are expected for both crops.

2.2 RIFT VALLEY REGION

2.2.1 Kitale.

The station reported rainfall amount of 92.4mm. The mean air temperature and Pan Evaporation recorded were 19.1°C and 2.7mm respectively. There was no report on sunshine duration.

Maize and beans were at emergence and flowering stages respectively and both are in good state. Normal yield is expected for beans.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 42.7mm. The mean air temperature and Pan Evaporation recorded were 17.5°C and 3.3mm respectively. There was no record on sunshine duration.

Maize and beans were at emergence and flowering stages respectively and both in good state.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

The station received rainfall amount of 0.4mm. The average air temperature was 17.7°C. There was no report on Pan Evaporation and sunshine parameters.

Maize and beans were both at flowering stage and in fair state respectively. Normal yield is expected for maize while for beans, below normal is expected as they had been adversely affected by blight.

2.3.2 Kabete

The station received rainfall amount of 2.0mm. The Pan Evaporation recorded was 2.4mm. There was no report on Mean air temperature and sunshine duration.

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

2.3.3 Thika

The station experienced dry condition during the dekad. The mean air temperature and Pan Evaporation recorded were 17.9^{III}C and 2.4mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in excellent state. Potatoes and beans were at maturity and flowering stages respectively and both in fair state. Above normal yield is expected for maize while beans and potatoes normal yield is expected.

2.3.4 <u>Nyahururu</u>

The station reported rainfall amount of 26.3mm. The mean air temperature and Pan Evaporation recorded were 15.9° C and 3.5mm respectively. There was no report on sunshine hours.

Maize and Potatoes were at emergence and flowering stages respectively and both in fair state. Normal yield is expected for potatoes.

2.3.5. Dagoretti

The station reported rainfall amount of 7.1mm. There was no report on mean air temperature, Pan Evaporation and sunshine hours.

Maize was at 23% tasseling stage and in good state.

2.4 EASTERN KENYA REGION

2.4.1 <u>Embu</u>

The station received rainfall amount of 1.7mm. There was no report on mean air temperature, Pan Evaporation and sunshine parameters.

Maize and Beans were both at flowering and harvest stages respectively and both are in fair state with normal yield expected. Harvesting of beans has started.

2.4.2 Meru

The station received rainfall amount of 0.8mm. The mean air temperature and Pan Evaporation recorded were 17.6°C and 3.3mm respectively. There was no report on sunshine duration.

Maize and Beans were at flowering and harvest stages respectively and both are in fair state. Normal yield is expected for both crops. Most farmers have finished harvesting beans.

2.4.3 Katumani (Machakos)

The station reported dry condition during the dekad. The Pan Evaporation recorded was 3.2mm. There was no report on average air temperature and Sunshine duration.

Maize was at flowering stage and in fair state while beans were at maturity stage and in good state. Normal yield is expected for beans but for maize below normal yield is expected.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 5.7mm. The average air temperature and Pan Evaporation recorded were 26.8°C and 5.1mm respectively. There was no report on sunshine duration.

Maize was at flowering stage and in fair state while mangoes were at 100% fruit setting stage and in good state. Normal yield is expected for maize.

2.5.2 <u>Mtwapa.</u>

The station received rainfall amount of 0.5mm. The average air temperature and Pan Evaporation recorded were 25.7°C and 3.9mm respectively. There was no report on Sunshine duration.

Maize was at tasseling stage and in good state. Mangoes were at harvest stage and in good state with normal yield expected.

3.0 ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS.

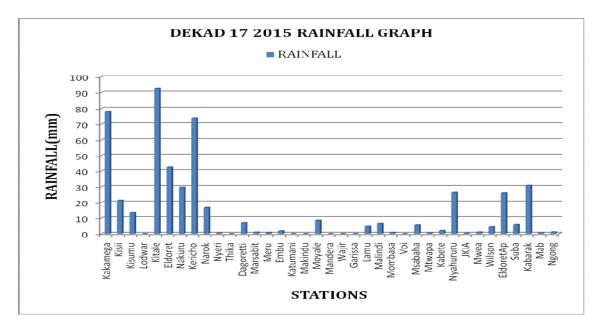


Figure 3.1: Dekadal rainfall totals for 11 –20 JUNE 2015

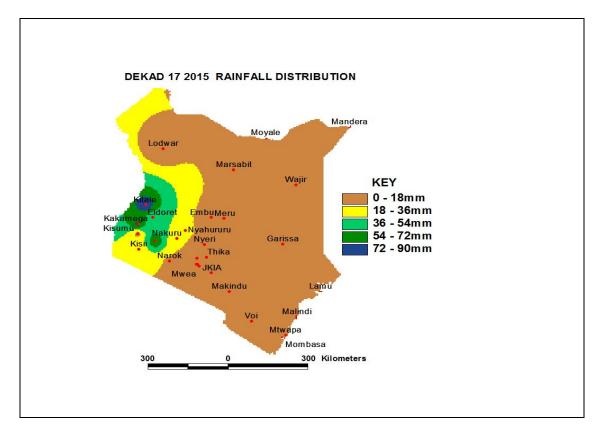


Figure 3.2: Dekadal rainfall distribution for dekad 17, 2015

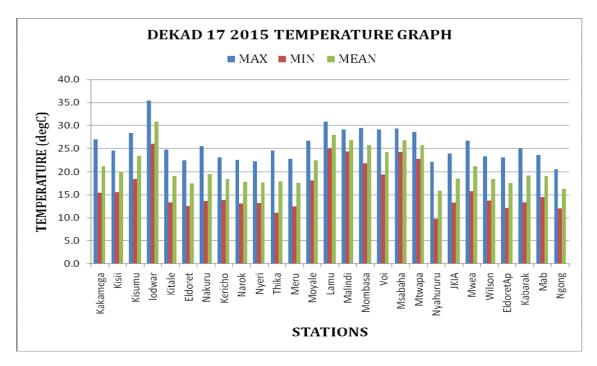


Figure 3.3: Maximum, Minimum and Average temperature for dekad 17, 2015

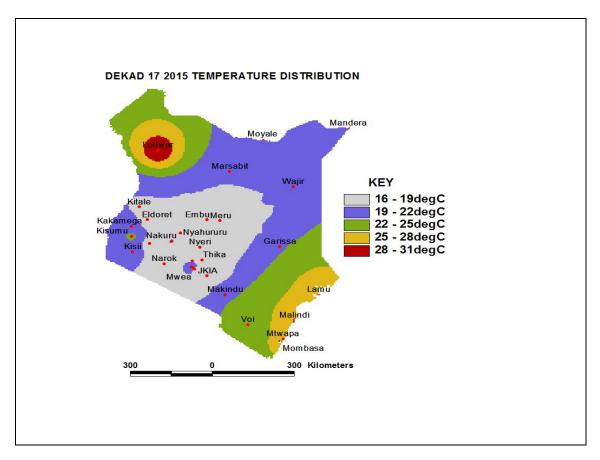


Figure 3.4: Mean temperature distribution for dekad 17, 2015

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-30 JUNE, 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 sunny intervals in the morning throughout the forecast period with occasional rains over few places. Afternoon/evening showers and thunderstorms expected over few places on the first day then improving to several places before reducing to few places on the last two days.

The rains and showers will be of great benefit to the crops, which are mostly in emergence and flowering stages in places like Kitale, Kisii etc. They will also replenish the soil with moisture that will affect positively on 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 the entire day for part of the forecast period with the exception of the first to fourth days which will experience afternoon/evening showers and thunderstorms over few places.

The afternoon showers will be of advantage to the growth of pasture and vegetation that supports 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 mainly sunny intervals in the morning with the exception of the second to fourth days which will experience rains over few places. Afternoon/evening showers are expected over few places from the second day of the forecast period.

Morning rains and afternoon/evening showers will be of great benefit to the development of crops that are in the emergence and flowering stages in places like Nyahururu, Nyeri, Meru, etc.

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

The sunny conditions will be of disadvantage 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 sunny intervals the entire day throughout the forecast period.

The sunny condition will be of disadvantage to the pasture and vegetation growth for livestock rearing in this region also to the maize that is at flowering stage in places like Katumani.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience morning showers over few places on the first two days of the forecast period. The rest of the days will experience sunny intervals the entire day.

The showers will continue benefiting the growth and development of Maize that is at flowering stage in places like Msabaha and Mtwapa. In addition, it will benefit the growth of mangoes that are in fruit setting stage in places like Msabaha.

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