



**KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 20, 2013
11-20 JULY, 2013**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the Country have decreased considerably as compared to the previous dekad of nineteenth. Nyahururu station in Central region recorded the highest amount of rainfall of 76.1mm in the country. Msabaha station in the Coastal region recorded the highest rainfall of 1.13mm, a significant decrease as compared to the previous Dekad. In North Eastern there was no rainfall recorded while Embu station in Eastern region reported the highest amount of rainfall of 5.21mm an increase from 1.21mm recorded at the same station in the last dekad. In Nairobi region, there was no rainfall reported.

The Maximum Temperature decreased significantly in most parts of the country compared to the previous dekad while Minimum Temperature increased considerably. In the dekad, Lodwar station reported the highest maximum temperature of 33.7°C. Narok station in Rift Valley region reported the lowest temperature of 7.5°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 20; 11-20 JULY 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received no rainfall. The mean air temperature and sunshine hours were 19.7°C and 8.7hrs respectively. The pan evaporation recorded was 34.9mm.

Maize crop is in wax ripeness stage and in good state with normal yields expected.

2.1.2 Kisii

The station recorded no rainfall. The mean air temperature and total pan evaporation recorded were 20.5°C and 36mm respectively. Sunshine duration recorded was 9.8hrs.

Maize crop was approaching wax ripeness stage and in fair state as normal yields expected.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 19.3mm. The average air temperature and pan evaporation were 18.3°C and 33.3mm respectively. There was no report on sunshine duration.

Maize is at flowering stage and in good state while beans are at maturity stage and in good state. Normal yield expected for both crops.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 45.2mm. The average air temperature and pan evaporation reported were 15. °C and 53.2mm respectively. Sunshine duration recorded was 8.0hrs.

Maize was at flowering stage and in fair state. Normal yield expected while beans had already been harvested.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 7.4mm. The average air temperature was 16.5°C. There was no report on pan evaporation and sunshine parameters.

Maize crop was at wax ripeness stage and in a poor state with below normal yield expected due to adverse affect by stalk borer while beans, have been harvested.

2.3.2 Kabete

The station recorded no rainfall. The average air temperature and pan evaporation recorded were 16.1°C and 38.5mm respectively. Sunshine duration recorded was 7.9hrs.

Maize was at flowering stage and in a fair state. Beans were at maturity stage and in a fair state with normal yield expected. Coffee was at 100% berry soft stage and in a moderate state but damaged by leaf rust and leaf minor at less than 10% each. Bananas were at 100% appearance of sucker stage and in a moderate state but damaged by thrips, cigar end rot and cigar Toka at less than 10% each.

2.3.3 Thika

The station received no rainfall. The mean air temperature and pan evaporation recorded were 18.4°C and 34.5mm respectively. . Sunshine duration recorded was 6.3hrs.

Maize crop was at maturity stage, and in poor state. Insufficient rainfall has adversely affected the crop with below normal yield is expected.

2.3.4. Nyahururu

The station received 76.1mm of rainfall. The mean air temperature recorded was 14.9°C. There was no report on sunshine hours and pan evaporation.

Maize was at flowering stage while beans were at maturity stage and in a fair state. Potatoes are at harvesting stage and in a good state. Normal yield expected for both beans and potatoes.

2.3.5. Dagoretti

The station received no rainfall. The mean air temperature and evaporation pan recorded were 17.8°C and 38mm respectively. Sunshine hours reported was 7.9hours per day.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported rainfall amount of 4.6mm. The average air temperature and pan evaporation were 16.6°C and 27mm respectively. Sunshine hours recorded was 3.3hrs.

Maize was at flowering stage but in a poor state with below normal yield expected. This is due to adverse effects of insufficient rainfall.

2.4.2 Embu

The station recorded rainfall amounts of 5.2mm. The average air temperature was 12.6°C. Sunshine hours and pan evaporation parameters recorded were 3.6hrs and 22.2mm respectively.

Maize was at mature stage and in poor state due to moisture stress. Below normal yields is expected

2.4.3 Katumani (Machakos)

The station recorded no rainfall. The average air temperature and sunshine duration were 17.8°C and 7.4hrs respectively. There was no report on pan evaporation.

Maize was at harvesting stage and in poor state as had been adversely affected by insufficient rainfall with below normal yield expected. Farmers have started harvesting their crop.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received rainfall amount of 1.13mm. The average air temperature and pan evaporation recorded was 25.5°C and 39.6mm respectively. The sunshine duration was 7.1hours.

Maize was at maturity stage and in fair condition while Mangoes were at 30% new leaves and 70% flowering stages and in good state.

2.5.2 Mtwapa

The station received rainfall amount of 0.02mm. The average air temperature and pan evaporation recorded were 24.9°C and 46.5mm respectively. Sunshine hours recorded was 8.1hrs.

Maize was at maturity stage and in fair state but adversely affected by birds, animals and stalk borer though normal yield is expected. Harvesting of early maize is going on all over the region. Mangoes were at harvesting stage and in fair state.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

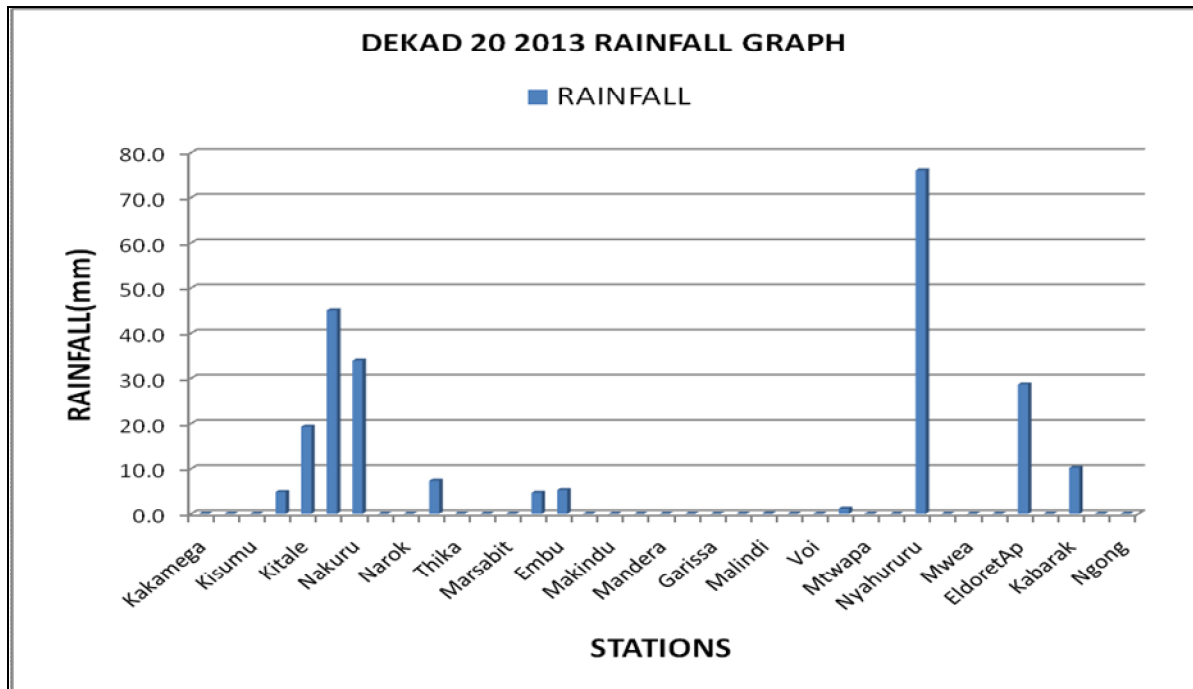


Figure 3.1: Dekadal rainfall totals for 11th to 20th July 2013

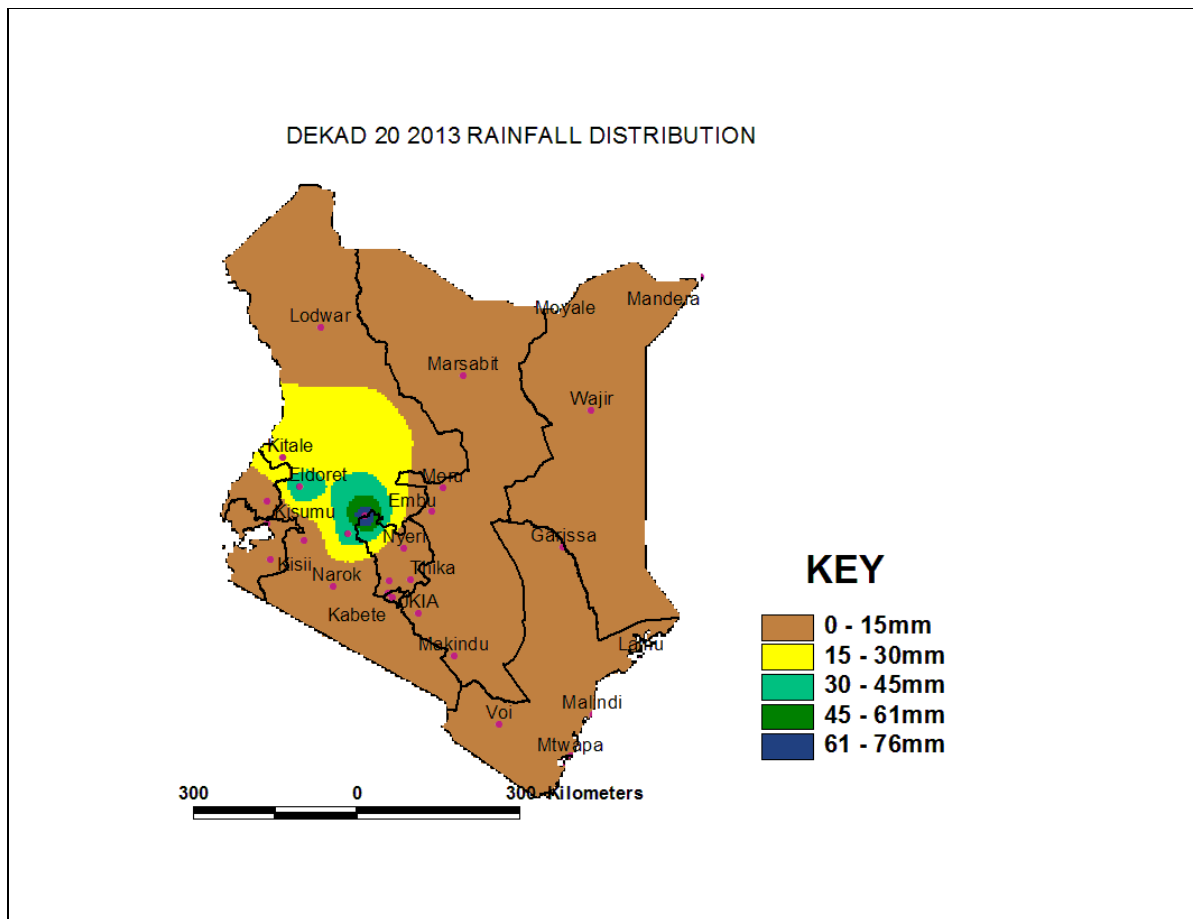


Figure 3.2: Dekadal Rainfall distribution for Dekad 20, 2013

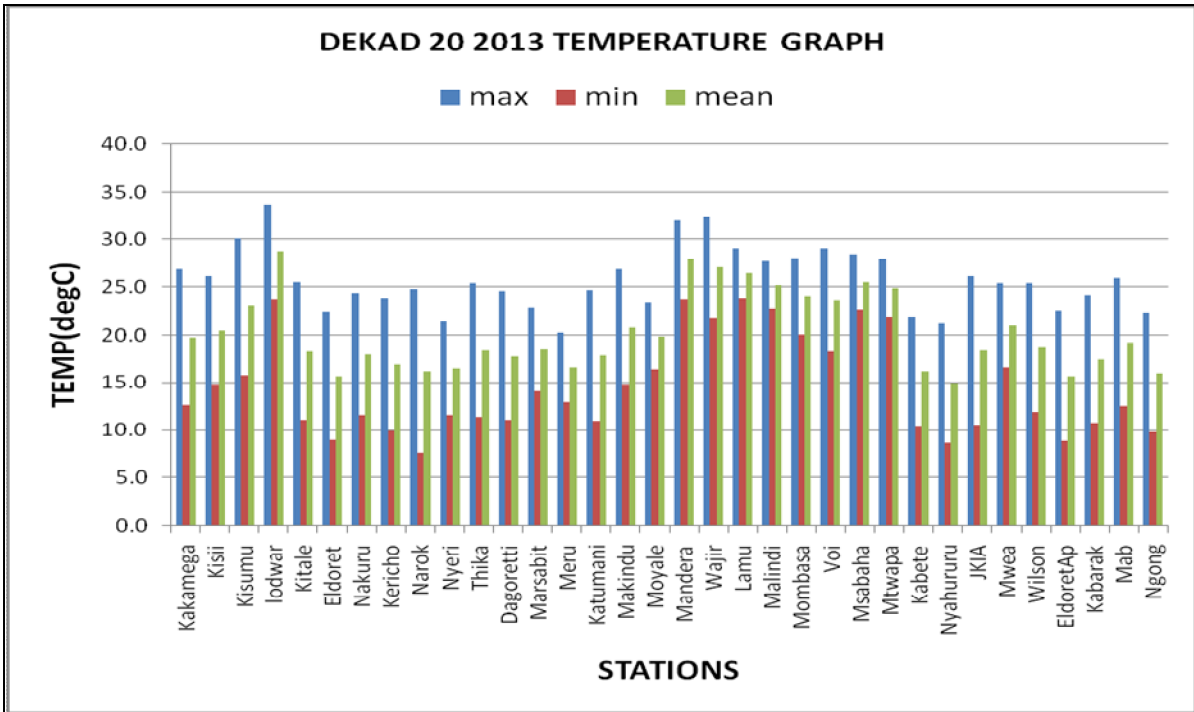


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 20, 2013

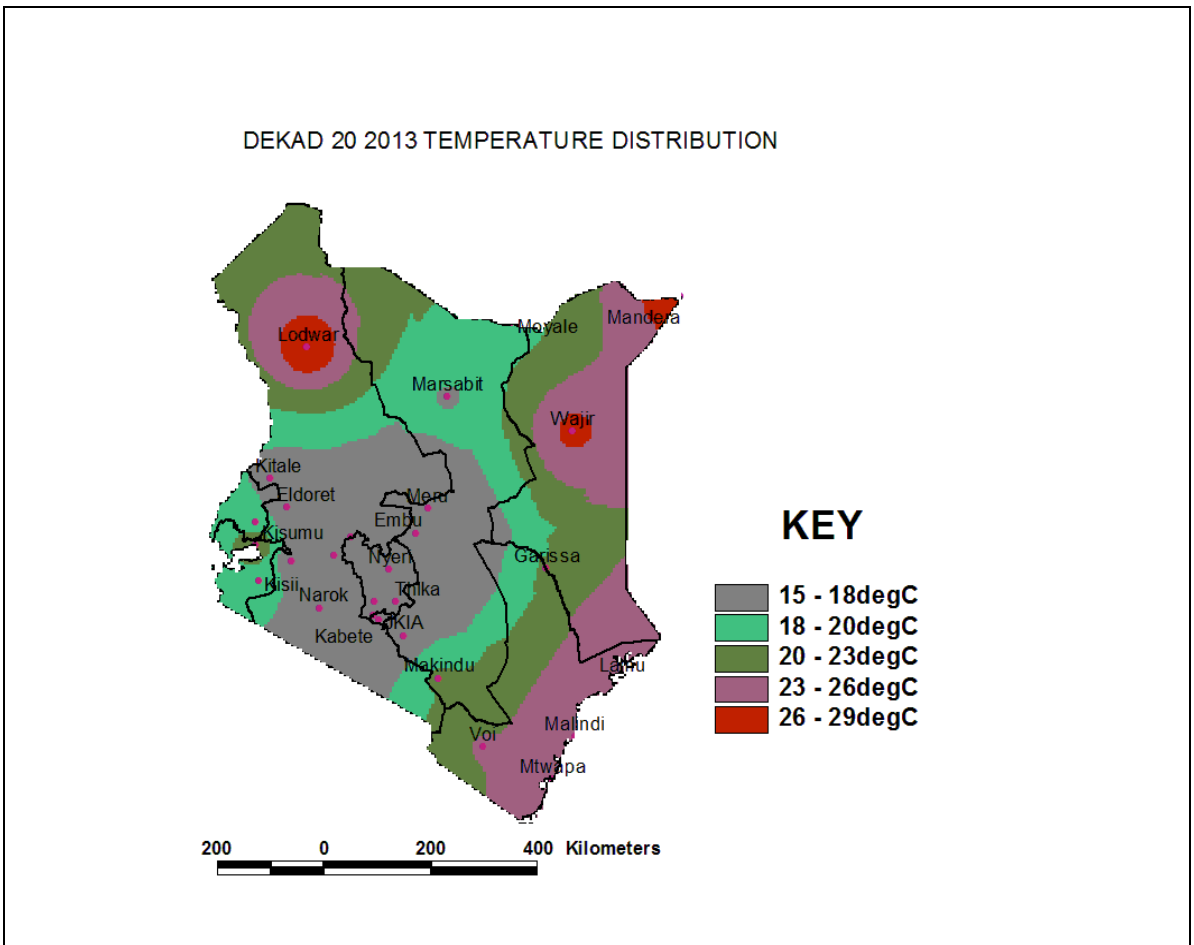


Figure 3.4: Mean temperature distribution for dekad 20, 2013

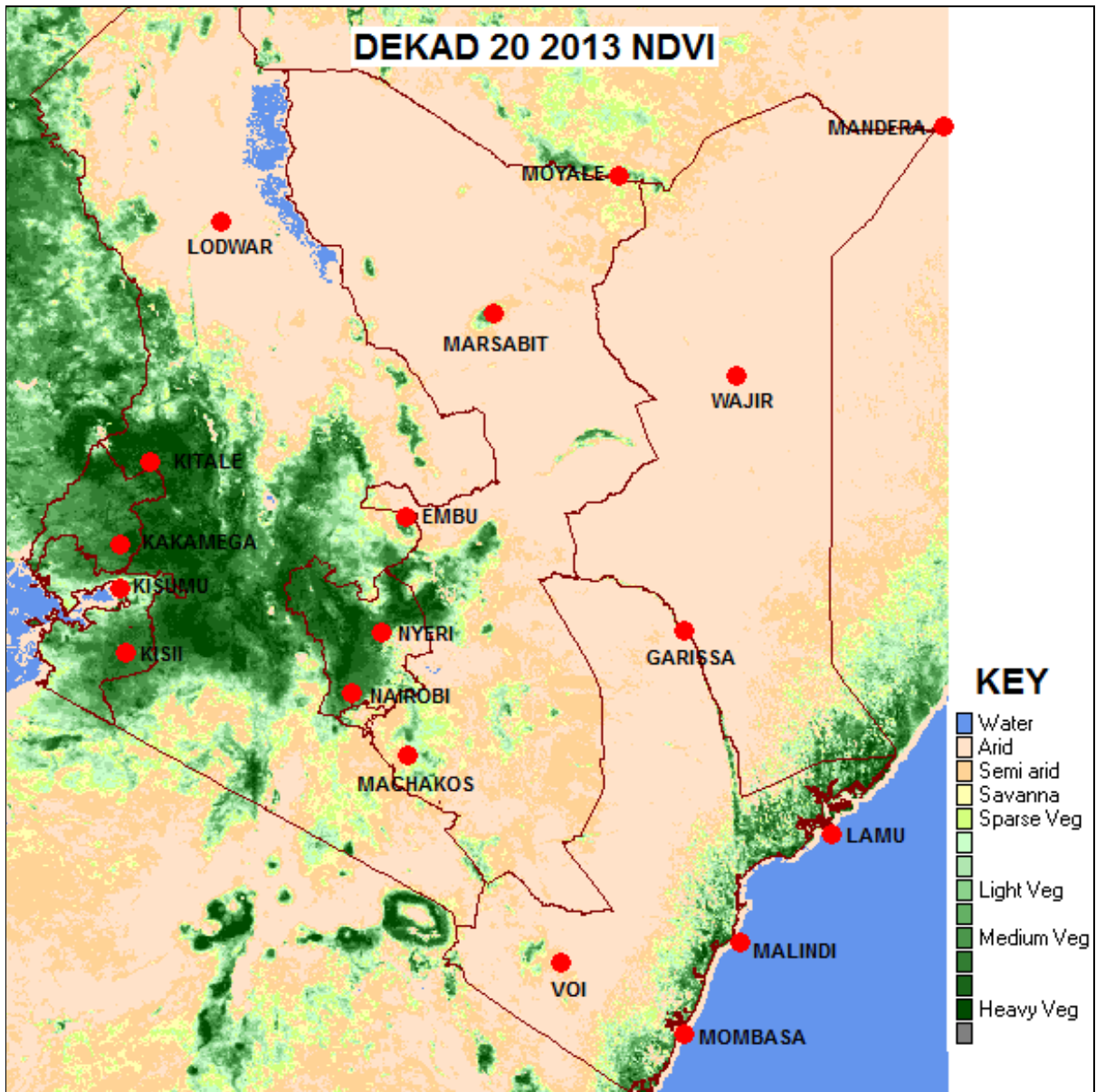


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS 21-31 July 2013

- ✚ 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 while afternoons are expected to experience showers and thunderstorms over few places for the entire forecast period.

The showers continue to be of great benefit to some crops that are now in their wax ripeness stage and the vegetation growing in the region.

- ✚ **Over the Northwestern counties (Turkana, West Pokot and Samburu),** are expected to experience sunny intervals in the morning and afternoon for the entire forecast period.

The dry conditions will influence negatively on the pastures and vegetation cover 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 breaking into sunny intervals and sunny intervals in the afternoon throughout the entire forecast period.

The dry conditions will influence the crops growing in the region and vegetation negatively.

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to continue experiencing sunny intervals in the morning and afternoon over the entire forecast period.

Dry conditions expected to be unfavorable to the pastures and vegetation in these regions.

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals in the morning and the afternoon for the entire forecast period.

Dry conditions expected to impact negatively on the growing crops and pastures in these regions.

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** are expected to experience sunny and showers over few places in the mornings and sunny intervals in the afternoons for the entire forecast period.

The morning showers continue to benefit crops and vegetation in these regions.

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