



**KENYA METEOROLOGICAL DEPARTMENT
DEKADAL AGROMETEOROLOGICAL BULLETIN
WEATHER AND CROP REVIEW FOR DEKAD 06, 2013
21-28 FEBRUARY 2013**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

As in the previous dekad, most stations continued to report reduction of rainfall activities in intensity and space. Active weather conditions were realised only in over parts of Eastern and Rift Valley regions. The rest of the country reported insignificant rainfall or dry conditions. During the dekad, the highest rainfall amount observed was 19.1mm at Narok station in the Rift Valley region. The second highest rainfall was 1.8mm reported in Marsabit station in the Eastern Region. at the Coastal region, the highest amount received was 0.03mm at Voi station. Nyeri station recorded the highest amount in central Kenya of 0.02mm while in Nyanza, Kisii station received the highest rainfall of 0.01mm.

There was a drastic change in the maximum temperature from an increasing trend previously to a decreasing in most stations during the current dekad. However, the minimum temperature continued to decrease over most stations. The highest temperature during the dekad which was observed at Mandera in the North-eastern region remained constant at 38.5°C. Previously, the highest temperature was observed at Lodwar in the Rift Valley region. Nyahururu in Central region reported the lowest maximum temperature of 24.05°C which was a slight decrease from 24.25°C. during the previous dekad at the same station. Nyahururu station reported the lowest minimum temperature of 5.9°C which was a significant reduction from 6.9°C observed during the last 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 06; 21-28 FEBRUARY 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

This station received no rainfall compared to 1.1mm reported in the previous dekad. The mean air temperature and pan evaporation reported were 22.8°C and 50.0mm respectively. There was no report on sunshine duration.

Land preparation for the long rain season is still underway.

2.1.2 Kisii

This station recorded 0.01mm of rainfall compared to 15.5mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 22.6°C and 46.0mm respectively. There was no report on sunshine duration.

Land preparation for the next season is in progress.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station received rainfall amount of 0.02mm compared to 3.5mm reported in the previous dekad. The average air temperature and total pan evaporation were 20.3°C and 49.0mm respectively. There was no report on sunshine parameter.

There was no phenological report.

2.2.2 Eldoret-Kapsoya

The station received no rainfall in both the current and the previous dekad. The average air temperature and total pan evaporation were 18.3°C and 69.0mm respectively. There was no report on sunshine.

There was no phenological report.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 0.02mm compared to 7.3mm received in the previous dekad. The average air temperature was 17.9°C. There was no report on pan evaporation and sunshine duration.

Part of the maize crop had reached maturity while some was still in flowering stage. The expected yield is below normal due to adverse effects on the crop from maize stalk borers and dry weather conditions.

2.3.2 Kabete

The station received no rainfall in both the current and the previous dekad. The average air temperature and pan evaporation recorded were 19.4°C and 53.5mm respectively. There was no report on sunshine duration.

Maize and beans were at flowering and harvesting stages respectively. Both are in poor and fair conditions respectively. Below normal yield is expected for both crops due to insufficient rainfall. Coffee was at 100% ripeness stage and in moderate state though had been damaged by leaf minor and leaf rust at less than 10% each. Bananas were at 100% sucker appearance stage but in unsatisfactory state as they had also been damaged by thrips and cigar end rot at 25% and 10% respectively.

2.3.3 Thika

The station received 0.01mm of rainfall as compared to dry conditions in the previous dekad. The mean air temperature and pan evaporation recorded were 20.9°C and 51.0mm respectively. There was no report on sunshine parameter.

Some farmers are still harvesting maize while some have started preparing their farms for the next season.

2.3.4. Nyahururu

The station received 0.01mm of rainfall as compared to dry conditions in the previous dekad. The mean air temperature and pan evaporation recorded were 15.0°C and 53.5mm respectively. The duration of sunshine was 10.4 hours.

Land preparation for the next season is still in progress.

2.3.5. Dagoretti

The station received no rainfall in both the current and the previous dekad. The mean air temperature and pan evaporation recorded were 20.1°C and 56.5mm respectively. There was no sunshine parameter.

Maize harvesting is still in progress.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station reported rainfall amount of 0.01mm compared to 51.5mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 18.8°C and 40.5mm respectively. There was no report on sunshine parameter.

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

2.4.2 Embu

The station received no rainfall in both the current and the previous dekad. The average air temperature was 20.5°C. There was no report on sunshine and pan evaporation.

Most farmers are harvesting their maize crops.

2.4.3 Katumani (Machakos)

The station received no rainfall in both the current and the previous dekad. The average air temperature was 21.8°C. There was no report on pan evaporation and sunshine parameters.

Harvesting of maize is almost complete in most farms.

2.5 COASTAL REGION

2.5.1. Msabaha

The station received no rainfall in both the previous and current dekad. The average air temperature and total pan evaporation recorded were 27.9°C and 44.0mm respectively. There was no report on sunshine hours.

Most farmers are preparing their land for the next season. Mangoes were at 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received no rainfall in both the current and the previous dekad. The average air temperature and total pan evaporation recorded were 27.2°C and 52.0mm respectively. There was no report on sunshine parameter.

Mangoes are at flowering stage though fruit-setting may be affected by the prevailing dry conditions.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

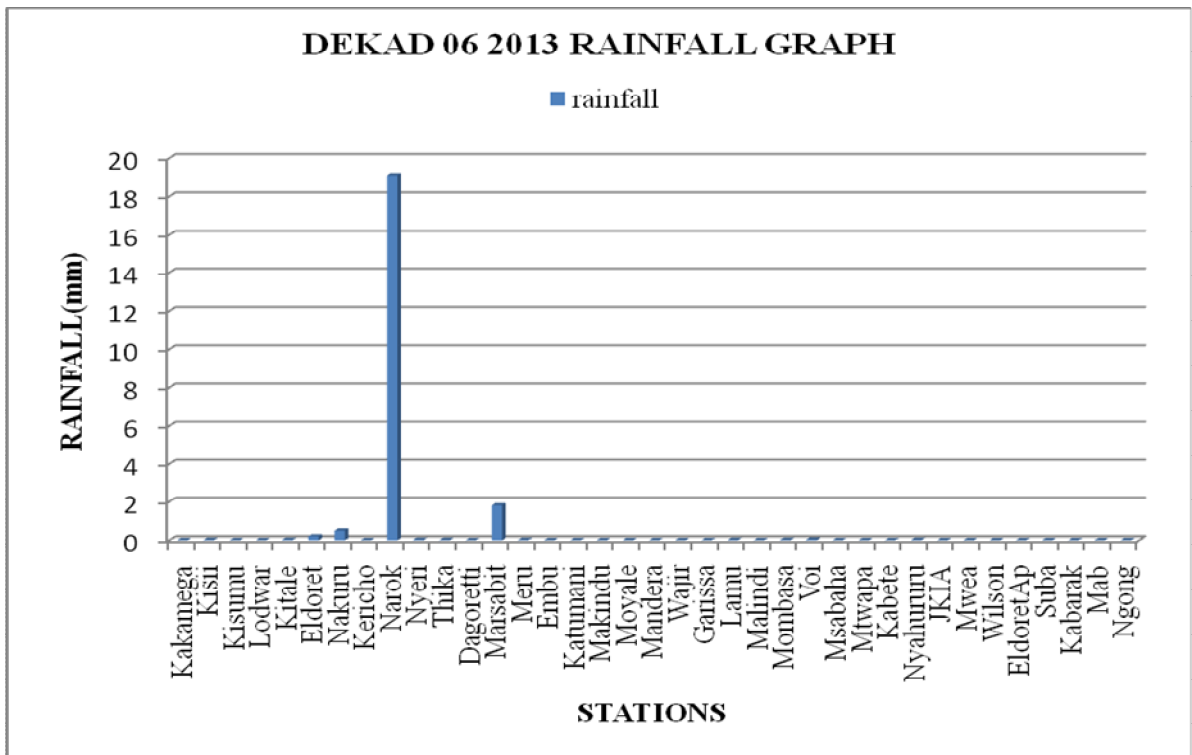


Figure 3.1: Dekadal Rainfall totals for 21-28 February 2013

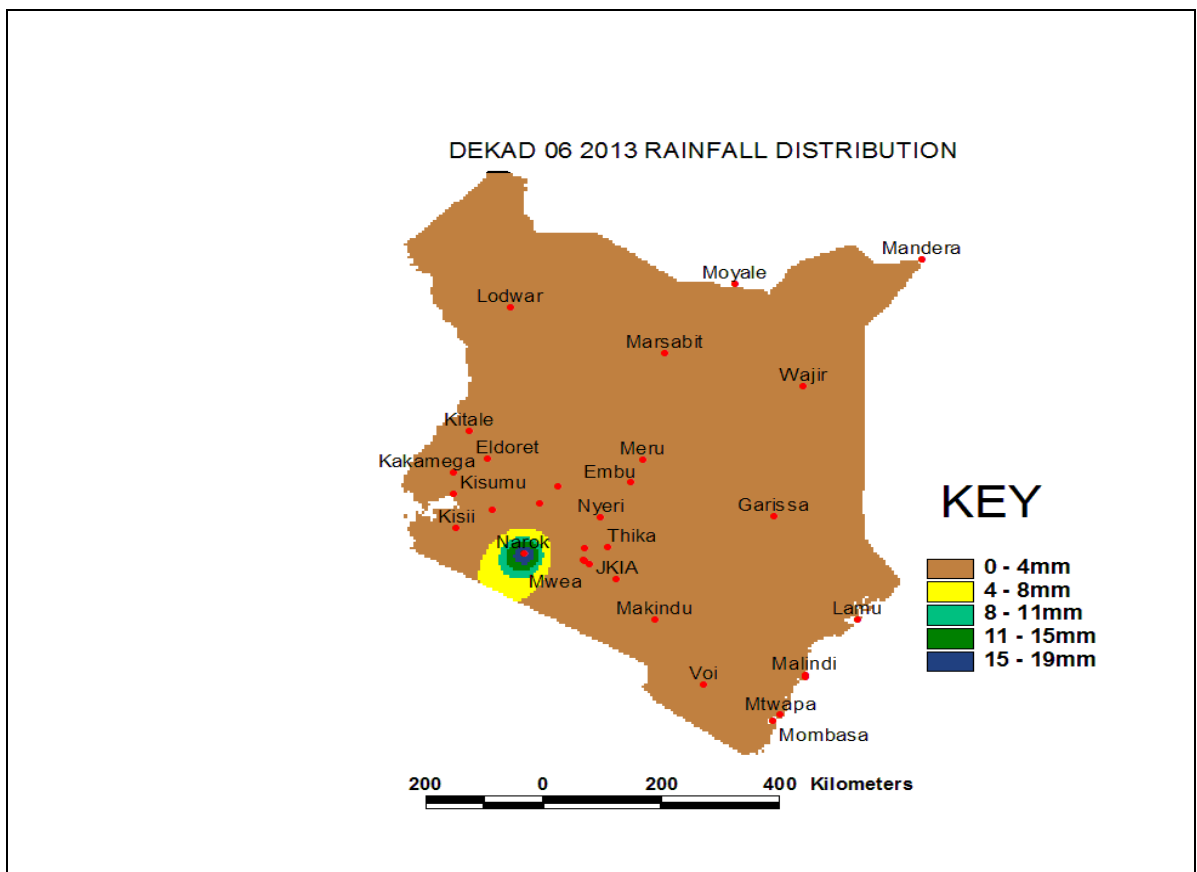


Figure 3.2: Dekadal Rainfall distribution for 21-28 February 2013

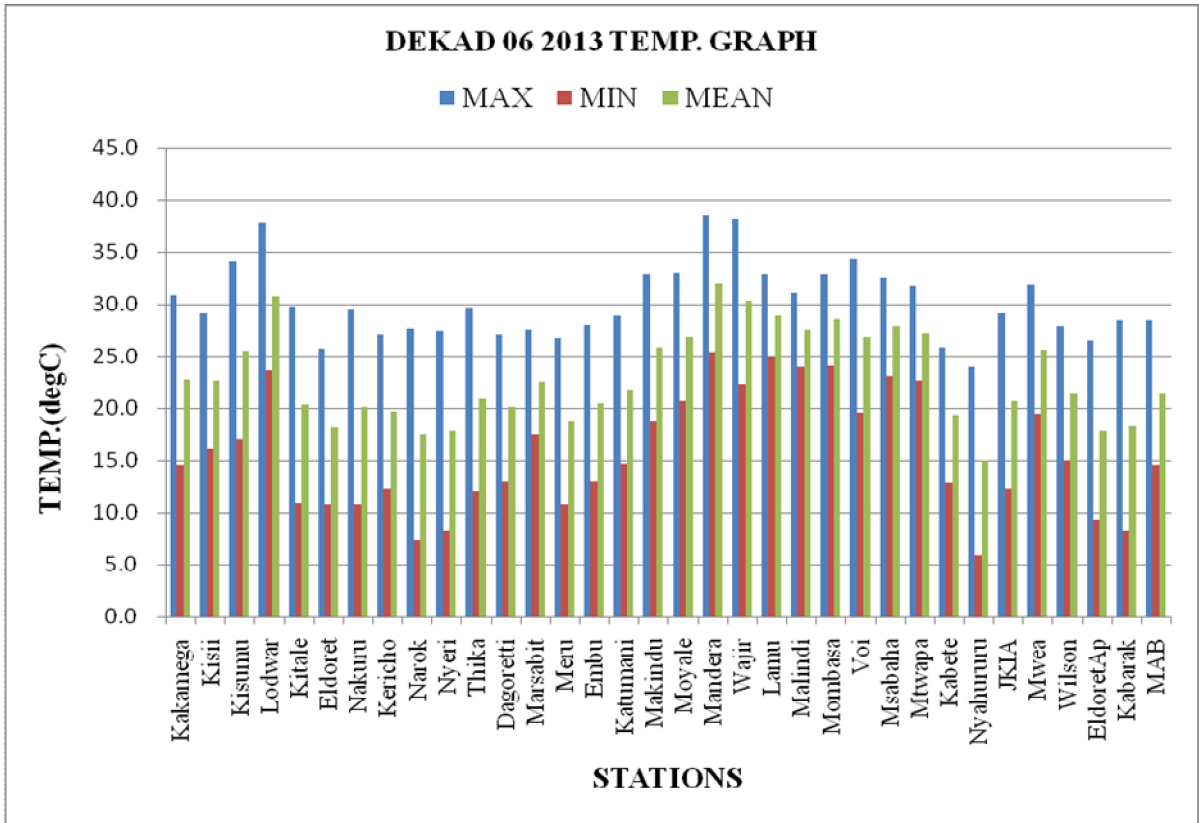


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 06 2013

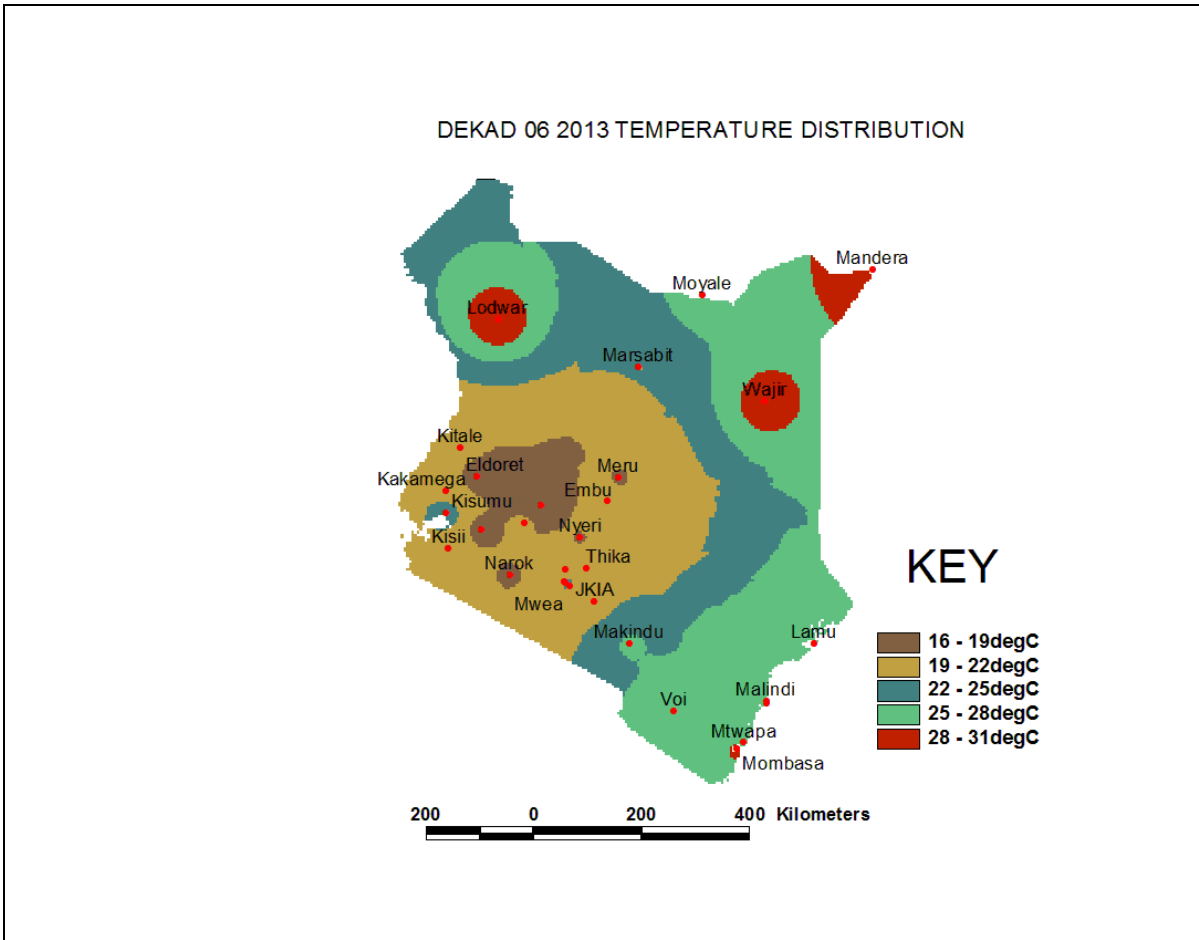


Figure 3.4: Mean temperature distribution for dekad 06 2013

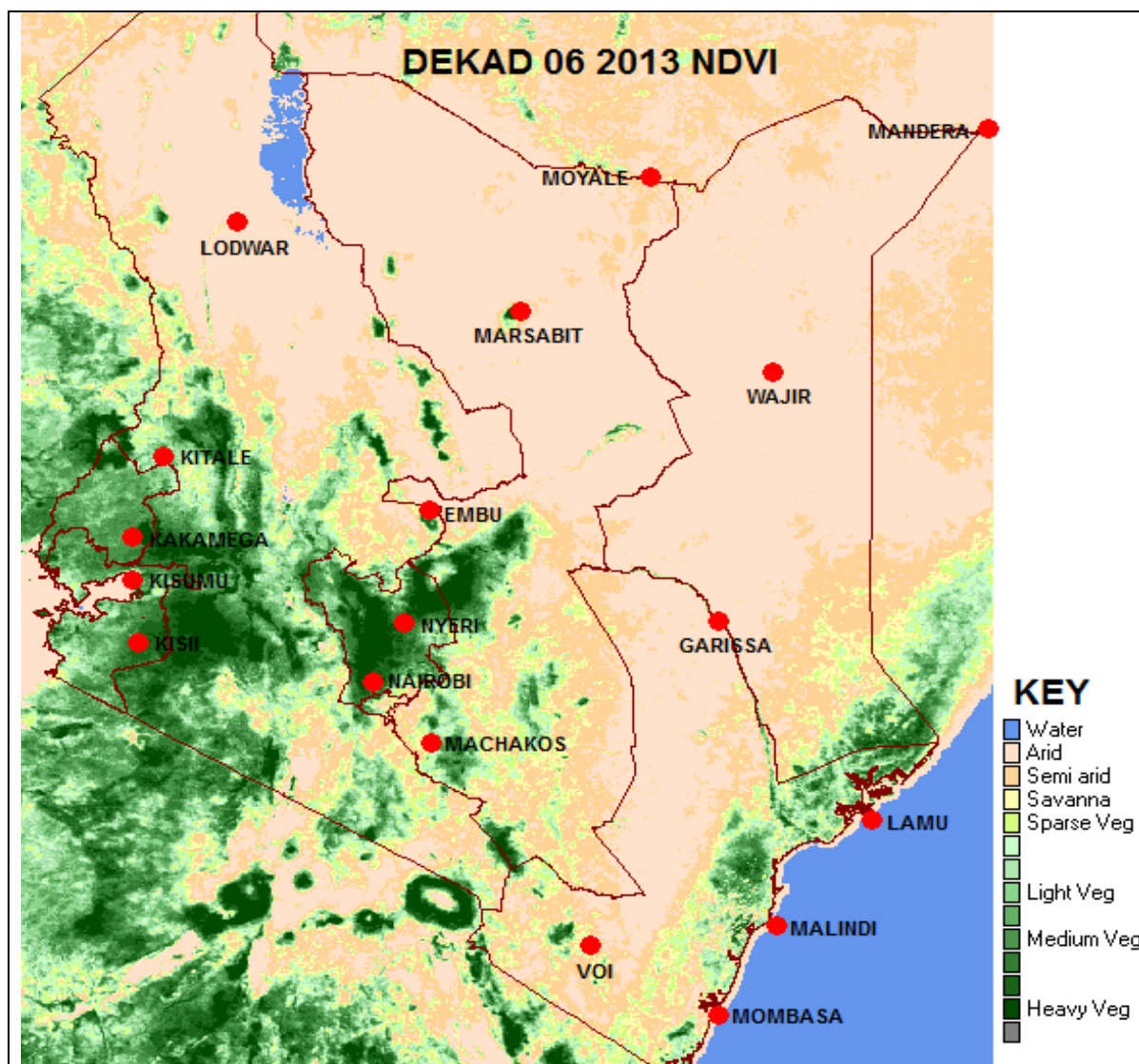


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 MARCH 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 mainly sunny intervals in the morning throughout the forecast period. Mainly sunny intervals are expected in the afternoon for the first half of the forecast period followed by showers and thunderstorms for the rest of the period.

Alternating sunny and wet conditions favour land preparation which is in progress in many of these counties.

- ✚ Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience mainly sunny conditions the whole day for the entire forecast period;

The prevailing dry conditions continue to have negative impact on the pasture 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 mainly sunny intervals in the morning session for the entire forecast period, followed by sunny intervals in the first half of the forecast period and mainly sunny intervals and showers over few places for the next four days and sunny intervals on the last day of the forecast period;

The expected showers are beneficial for the land preparation going on in most of these regions.

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to experience sunny conditions throughout the day for the entire forecast period;

The expected sunny conditions are of negative impact to pastures and vegetation in the region.

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals in the morning for the first half of the forecast period followed by mainly sunny intervals and rains over few places for the next two days and sunny intervals for the remaining period. Sunny intervals are expected in the afternoon for the first half of the forecast period, followed by showers over few places for the next four days then sunny intervals on the last day of the forecast period;

The alternating sunny and wet conditions are favourable for the ongoing land preparation.

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** Sunny intervals are expected in the morning for the first half of the forecast period, followed by mainly sunny intervals and showers over few places for the next four days then sunny intervals on the last day of the forecast period. Sunny intervals are expected in the afternoon for the entire forecast period;

The prevailing sunny conditions continue to have negative impact on growth of the crops and pastures growing in the region.

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