



**KENYA METEOROLOGICAL DEPARTMENT  
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 04, 2013  
01-10 FEBRUARY 2013**

**1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

Rainfall activities drastically reduced both in intensity and in space in most stations compared to the previous dekad. Active weather was realised in a few regions namely Rift Valley, Nyanza, Western and Central. The rest of the regions reported insignificant rainfall hence dry conditions. Narok station in Rift Valley region recorded the highest amount of rainfall of 47.1mm countrywide compared to 94.4mm received in Kericho station in Rift Valley region in the previous dekad. Nyanza region received the second highest rainfall of 45.3mm in Kisii station. Kakamega station reported 17.1mm which was the highest amount in the western region. In Central Kenya region, Nyeri station reported the highest amount of 9.7mm while at the Coast, the highest rainfall of 1.5mm was received at Voi station. The highest amount of rainfall in Nairobi area was of 1.4mm at JKIA while in Eastern Kenya region insignificant rainfall of 0.1mm was observed in Embu station. Dry conditions prevailed in most stations in the North Eastern region.

Maximum temperatures reduced while minimum temperatures drastically increased in most stations. Wajir station in North Eastern region still reported the highest temperature of 37.7<sup>0</sup>C compared to 38.0<sup>0</sup>C reported in the previous dekad. Nyahururu station in Central Kenya region reported the lowest maximum temperature of 23.3<sup>0</sup>C compared to 23.4<sup>0</sup>C reported in the previous Dekad in the same station. The lowest minimum temperature during the dekad was 7.8<sup>0</sup>C also in Nyahururu compared to 7.5<sup>0</sup>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 04; 01-10 FEBRUARY 2013**

**2.1 NYANZA AND WESTERN REGIONS**

**2.1.1 Kakamega**

This station received rainfall amount of 17.1mm compared to 49.9mm reported in the previous dekad. The mean air temperature and pan evaporation reported were 21.6<sup>0</sup>C and 45.7mm respectively. There was no report on sunshine duration.

*Land preparation for the long rain season is underway*

**2.1.2 Kisii**

This station recorded rainfall amount of 45.3mm compared to 34.3mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.3<sup>0</sup>C and 39.3mm respectively. There was no report on sunshine duration.

*Harvesting of Maize is in progress.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received rainfall amount of 9.2mm compared to 36.2mm reported in the previous dekad. The average air temperature and total pan evaporation were 19.4°C and 48.7mm respectively. There was no report on sunshine parameter.

*There was no phenological report.*

### **2.2.2 Eldoret-Kapsova**

The station recorded rainfall amount of 3.5mm compared to 43.7mm reported in the previous dekad. The average air temperature was 18.3°C. There was no report on sunshine and pan evaporation.

*There was no phenological report.*

## **2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION**

### **2.3.1 Nyeri**

The station received rainfall amount of 9.4mm compared to 20.8mm received in the previous dekad. The average air temperature and pan evaporation were 18.3°C and 56.3mm respectively. There was no report sunshine duration.

*Maize is in wax ripeness stage, while has been harvested.*

### **2.3.2 Kabete**

The station received no rainfall compared to 8.0mm reported in the previous dekad. The average air temperature and pan evaporation recorded were 18.9°C and 50.0mm respectively. The sunshine duration was 7.6 hours.

*Maize and beans were at flowering and maturity stages respectively. Both crops were in fair state. 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 no rainfall compared to 47.7mm in the previous dekad. The mean air temperature and pan evaporation recorded were 20.9°C and 41.0mm respectively. There was no report on sunshine parameter.

*Maize is in maturity stage, while beans have been harvested.*

### **2.3.4. Nyahururu**

The station received no rainfall compared to 42.6mm reported in the previous dekad. The mean air temperature recorded was 15.0°C. There was no report on pan evaporation and sunshine parameters.

*Land preparation is in progress.*

### **2.3.5. Dagoretti**

The station reported no rainfall compared to 9.8mm recorded in the previous dekad. The average air temperature was 19.7<sup>0</sup>C. There was no report on pan evaporation and sunshine parameters.

*Maize harvesting is in progress.*

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Meru**

The station reported rainfall amount of 1.4mm compared to 4.7mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 18.6<sup>0</sup>C and 52.0mm 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 recorded rainfall amount of 0.1mm compared to 13.0mm received in the previous dekad. The average air temperature and total pan evaporation were 19.9<sup>0</sup>C and 47.0mm respectively. There was no report on sunshine parameter.

*Maize is at maturity stage, while beans have been harvested.*

### **2.4.3 Katumani (Machakos)**

The station received no rainfall compared to 31.6mm reported in the previous dekad. The average air temperature and total pan evaporation were 20.7<sup>0</sup>C and 80.5mm respectively. There sunshine duration was 9.5 hours.

*Maize was in maturity stage and in poor state due to the dry spell experienced during previous dekads and below normal yield is expected.*

## **2.5 COASTAL REGION**

### **2.5.1. Msabaha**

The station received rainfall amount of 0.5mm compared to 0.3mm received in the previous dekad. The average air temperature and total pan evaporation recorded were 27.3<sup>0</sup>C and 55.1mm respectively. There was no report on sunshine parameter.

*Maize was at harvesting stage and in fair state. Although there has been insufficient rain in the current dekad, normal yield is still expected.*

*Mangoes were at 100% fruit setting stage and in good state.*

### **2.5.2 Mtwapa**

This station recorded dry conditions both in the current and previous dekad. The average air temperature and total pan evaporation recorded were 27.4<sup>0</sup>C and 52.5mm respectively. There was no report on sunshine parameter.

*Mangoes were still in dormant stage.*

### 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

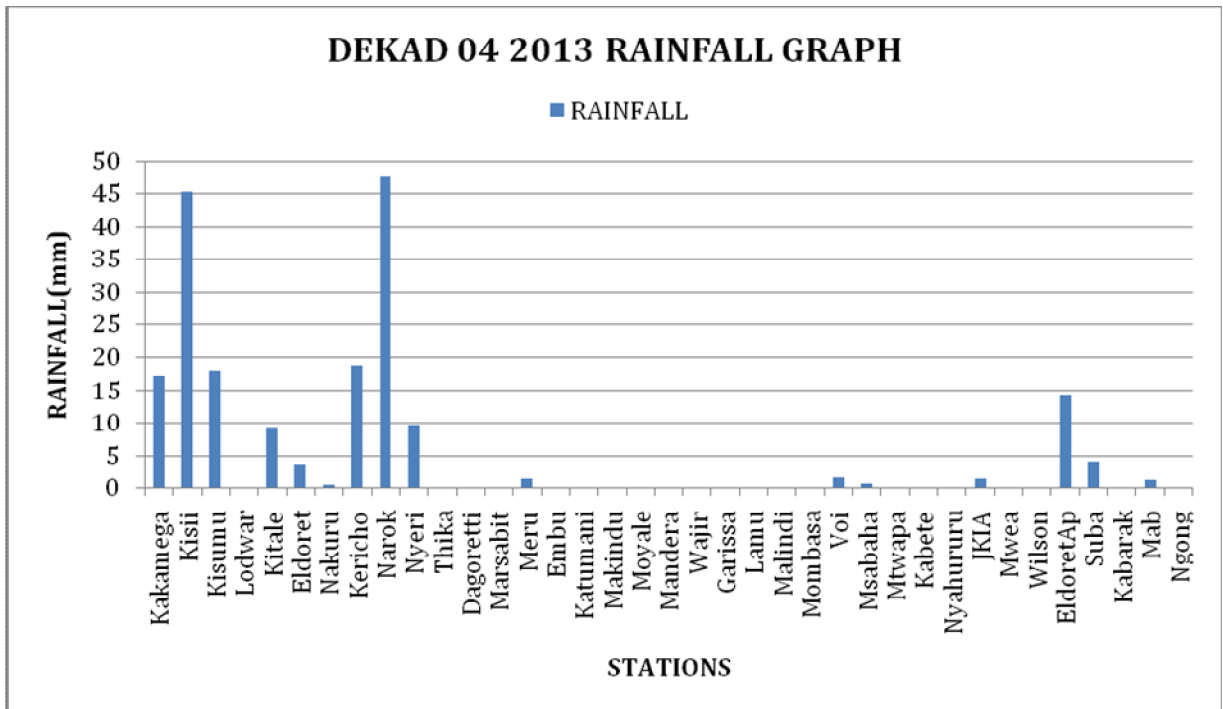


Figure 3.1: Dekadal Rainfall totals for 01-10 February 2013

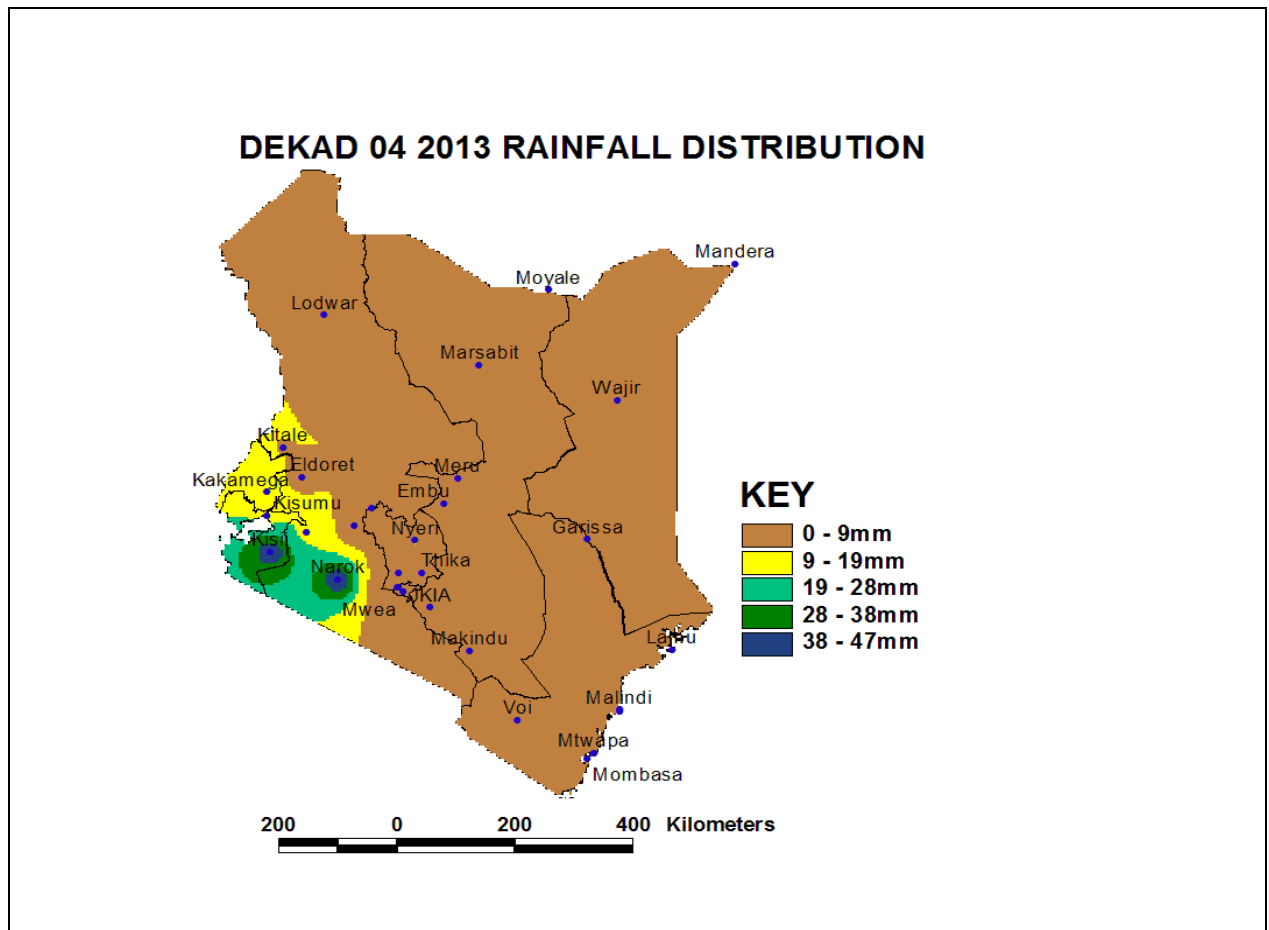


Figure 3.2: Dekadal rainfall distribution for 01-10 February 2013

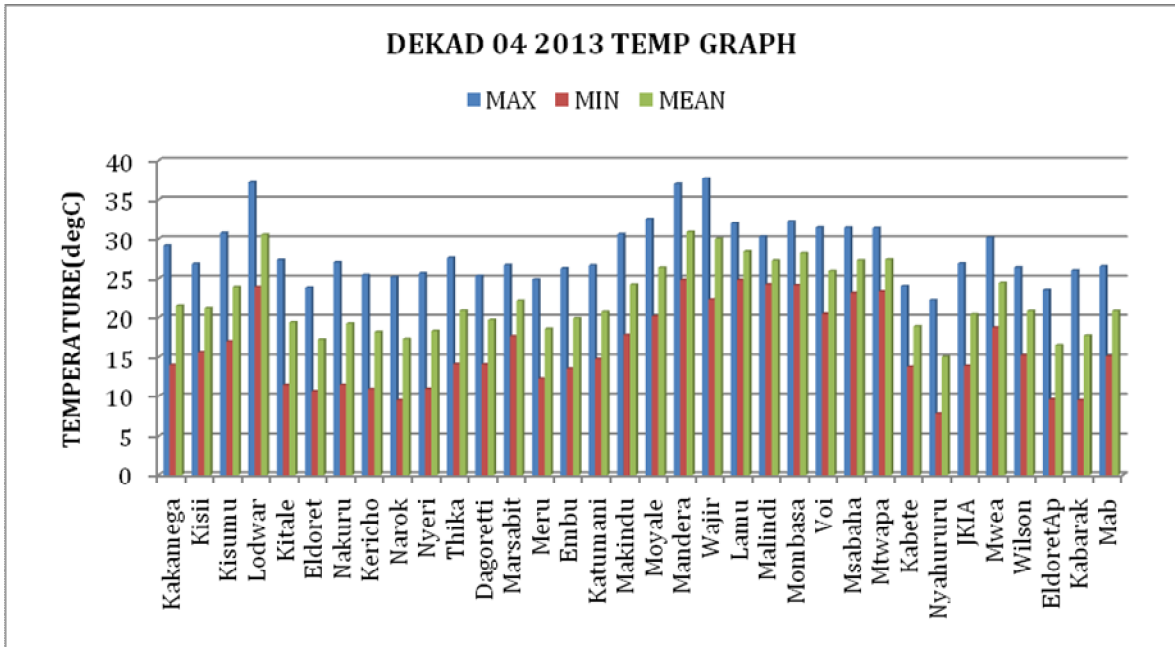


Figure 3.3: Maximum, minimum and average air temperature in °C for dekad 04 2013

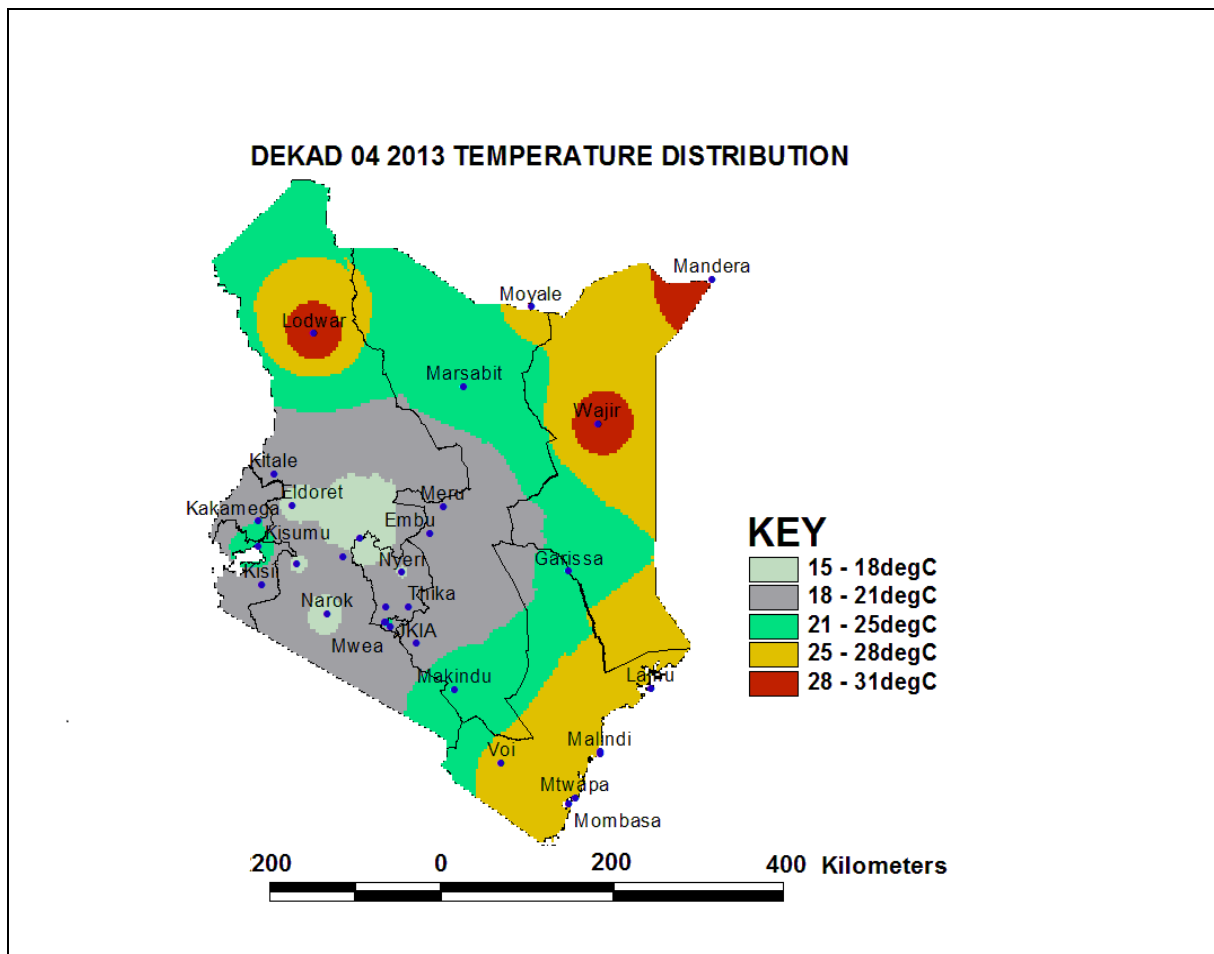


Figure 3.4: Mean temperature distribution for dekad 04, 2013

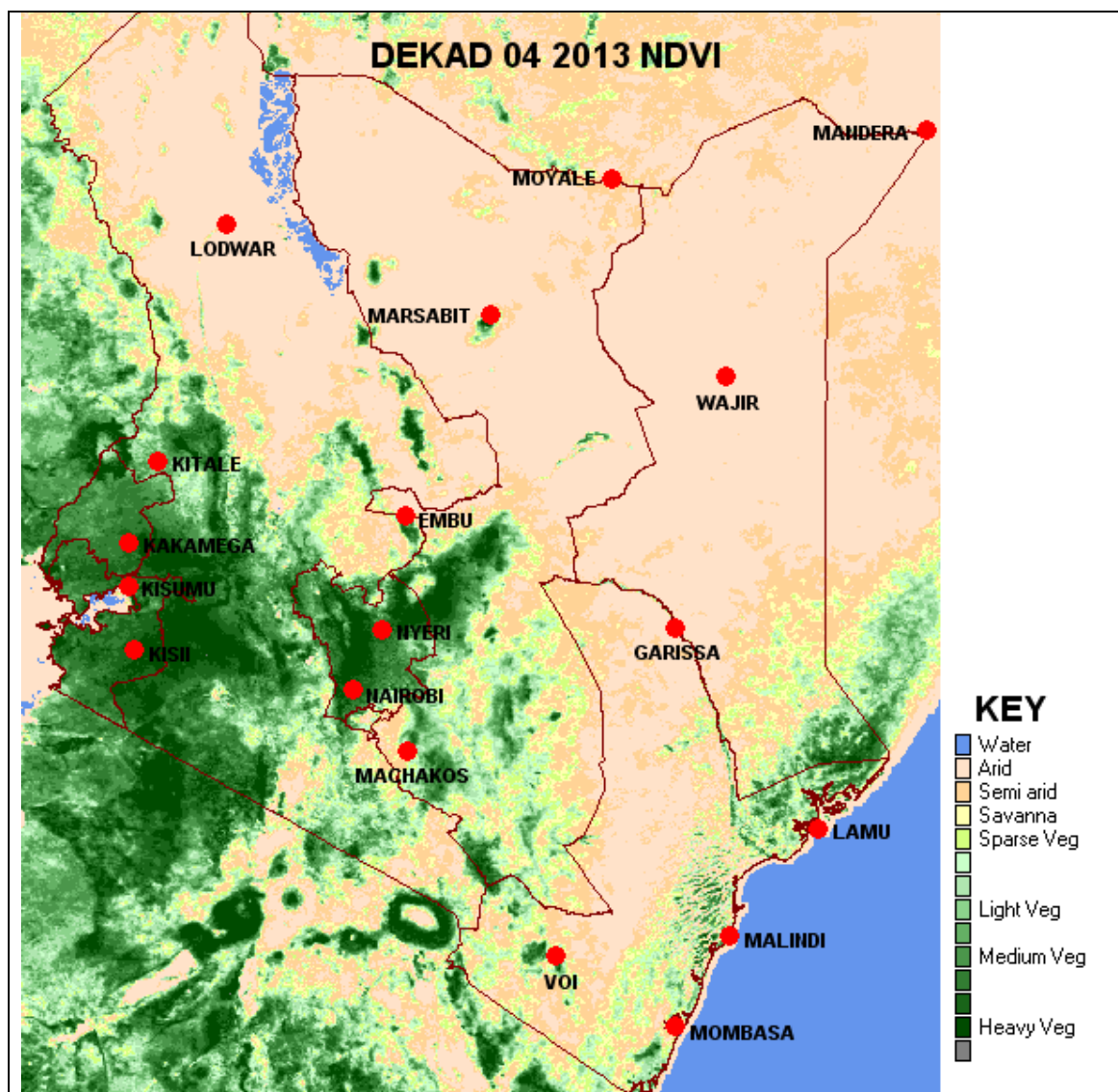


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 FEBRUARY 2013

- Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Central and South Rift Valley (Siaya, Homabay, Baringo, Kitale, Kakamega, Kisumu, Kisii, Migori, 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. However, afternoon/night showers accompanied by thunderstorms are expected over few places (Southern parts) on the second, third, fifth and sixth days of the forecast period;

*The forecast sunny conditions and occasional showers are expected favour the land preparation in progress over these counties.*

- ✚ **The Northwestern counties (Turkana, West Pokot and Samburu)**, are expected to experience mainly sunny intervals the whole day throughout the forecast period;

*The expected sunny conditions will continue to have negative impacts on the pasture and general vegetation cover in the region.*

- ✚ **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 mainly sunny intervals throughout the day for the entire forecast period although showers are expected over a few places on the fifth day of the forecast period;

*The expected showers are of great importance to the crops which are still in farms in this region.*

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

*The prevailing sunny conditions continue to have negative impact on the pasture and vegetation cover in the region.*

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui)**, are expected to experience mainly sunny intervals throughout the day for the entire forecast period;

*The forecast weather conditions are not expected to have major agricultural impacts since maize and beans are at maturity stage or being harvested. However, the conditions will have negative impacts on livestock due to the degeneration of pasture and general vegetation cover.*

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)**, are expected to experience mainly sunny intervals throughout the day for the entire forecast period however;

*The prevailing sunny conditions will have negative impacts on the growth and development of the perennial fruit trees growing in the region.*

**For feedback or further guidance, Contact:**

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