



KENYA METEOROLOGICAL DEPARTMENT

## DEKADAL AGROMETEOROLOGICAL BULLETIN WEATHER AND CROP REVIEW FOR DEKAD 5, 2013 11-20 FEBRUARY 2013

### 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities continued to reduce both in intensity and space in most stations compared to the previous dekad. Dry conditions prevailed in most stations in North Eastern, Coastal and Nairobi regions. The highest rainfall of 51.5mm was received in Meru station in Eastern region. The second highest rainfall of 15.5mm was recorded in Kisii station in Nyanza region. In Central region, Nyeri station received the highest rainfall amount of 7.3mm. Kitale station reported 3.5mm which was the highest rainfall in the Rift Valley region. In Western region, the highest amount recorded was 1.1mm at Kakamega station

Maximum temperatures drastically increased in most stations apart from Lamu station in the coastal region, while minimum temperatures were on a decreasing trend. Lodwar station in Rift Valley region recorded the highest temperature of 38.5°C compared to 37.7°C reported in Wajir station in North Eastern region in the previous dekad. Nyahururu station in Central region reported the lowest maximum temperature of 24.2°C which was an increase compared to 23.3°C reported in the previous dekad at the same station. The lowest minimum temperature observed during the dekad was 6.9°C at Nyahururu station compared to 7.5°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 05; 11-20 FEBRUARY 2013

#### 2.1 NYANZA AND WESTERN REGIONS

##### 2.1.1 Kakamega

This station received rainfall amount of 1.1mm compared to 17.1mm reported in the previous dekad. The mean air temperature and pan evaporation reported were 21.9°C and 48.9mm 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 15.5mm compared to 45.3mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.9°C and 40.0mm respectively. There was no report on sunshine duration.

*Harvesting of Maize is in progress while some farmers have started preparing their farms.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received rainfall amount of 3.5mm compared to 9.2mm reported in the previous dekad. The average air temperature and total pan evaporation were 20.3°C and 50.1mm respectively. There was no report on sunshine parameter.

*There was no phenological report.*

### **2.2.2 Eldoret-Kapsoya**

The station recorded no rainfall in the current dekad compared to 3.5mm reported in the previous dekad. The average air temperature and total pan evaporation were 17.7°C and 70.0mm 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 7.3mm compared to 9.7mm received in the previous dekad. The average air temperature and pan evaporation were 19.3°C and 48.9mm respectively. There was no report sunshine duration.

*Maize in some areas has attained wax ripeness stage and is in poor state due to dry conditions and diseases mainly maize stalk borer.*

### **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 20.4°C and 63.0mm respectively. There was no report on sunshine duration.

*Maize and beans were at flowering and harvesting stages respectively. Maize in some areas has wilted due to dry conditions experienced in the last two dekads. 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 in both the current and the previous dekad. The mean air temperature and pan evaporation recorded were 21.7°C and 62.0mm respectively. There was no report on sunshine parameter.

*Maize is in maturity stage. Harvesting is in progress in most farms.*

### **2.3.4. Nyahururu**

The station received no rainfall in both the current and the previous dekad. The mean air temperature and pan evaporation recorded were 15.6°C and 60.5mm respectively. The duration of sunshine was 10.5 hours.

*Land preparation for the next season is in progress.*

### **2.3.5. Dagoretti**

As in the previous dekad, the station received nil rainfall. The mean air temperature and total pan evaporation recorded were 21.0°C and 67.0mm respectively. There was no sunshine parameter.

*Maize harvesting is in progress.*

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Meru**

The station reported 51.5mm of rainfall compared to 1.4mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.3°C and 51.5mm 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 recorded no rainfall as compared to 0.1mm received in the previous dekad. The average air temperature and total pan evaporation were 20.9°C and 66.5mm respectively. There was no report on sunshine parameter.

*Maize is at maturity stage and some farmers have started harvesting.*

### **2.4.3 Katamani (Machakos)**

The station received no rainfall in both the current and the previous dekad. The average air temperature was 22.1°C. There was no report on pan evaporation and sunshine parameters.

*Maize was in harvesting stage and harvesting is ongoing in most farms. Below normal yields are expected due to dry spells in the previous dekads.*

## **2.5 COASTAL REGION**

### **2.5.1. Msabaha**

The station received no rainfall compared to 0.5mm received in the previous dekad. The average air temperature and total pan evaporation recorded were 27.6°C and 47.0mm respectively. There was no report on sunshine parameter.

*Maize was at harvesting stage and in fair state. Land preparation is in progress for the next long rain 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 21.6°C and 64.5mm respectively. There was no report on sunshine parameter.

*Mangoes were still in dormant stage.*

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

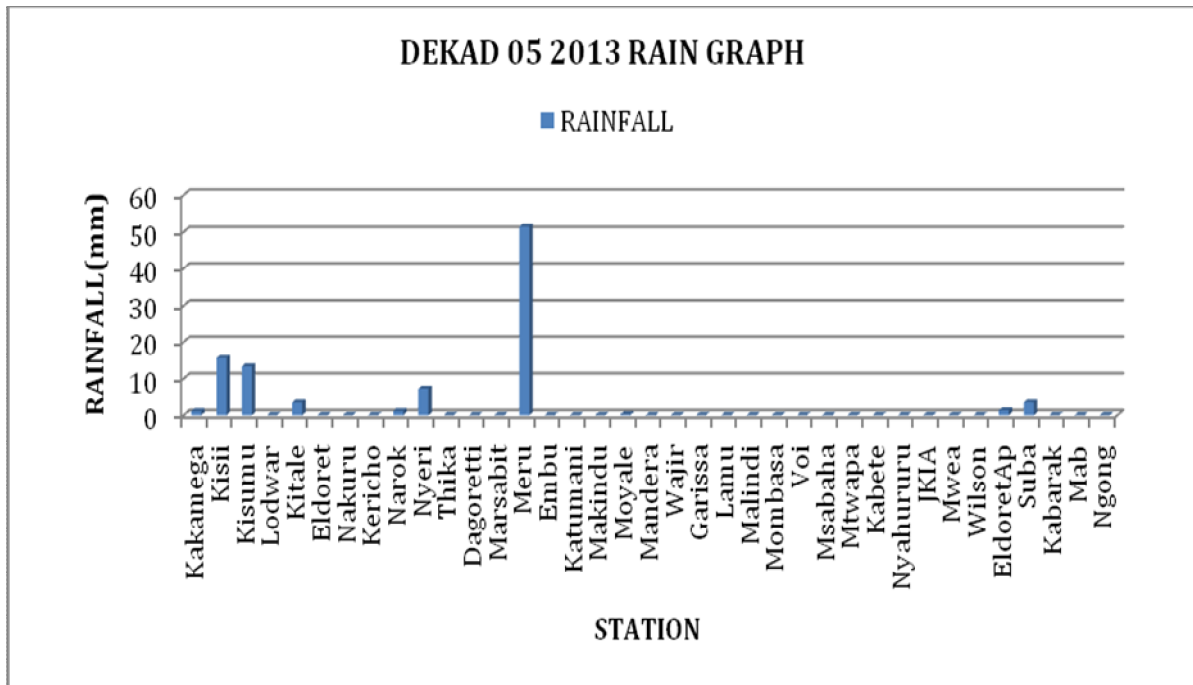


Figure 3.1: Dekadal Rainfall totals for 11-20 February 2013

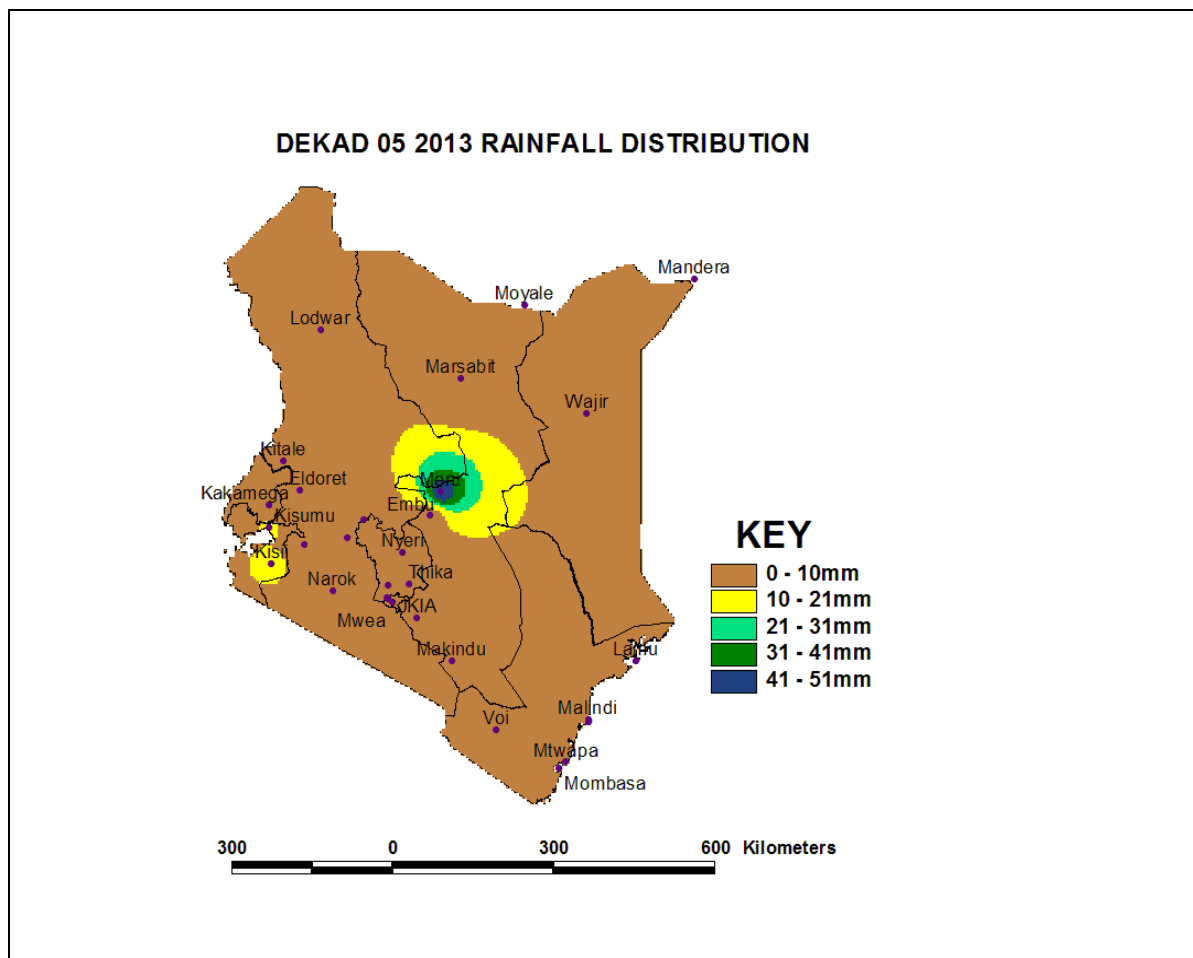


Figure 3.2: Dekadal Rainfall distribution for 11-20 February 2013

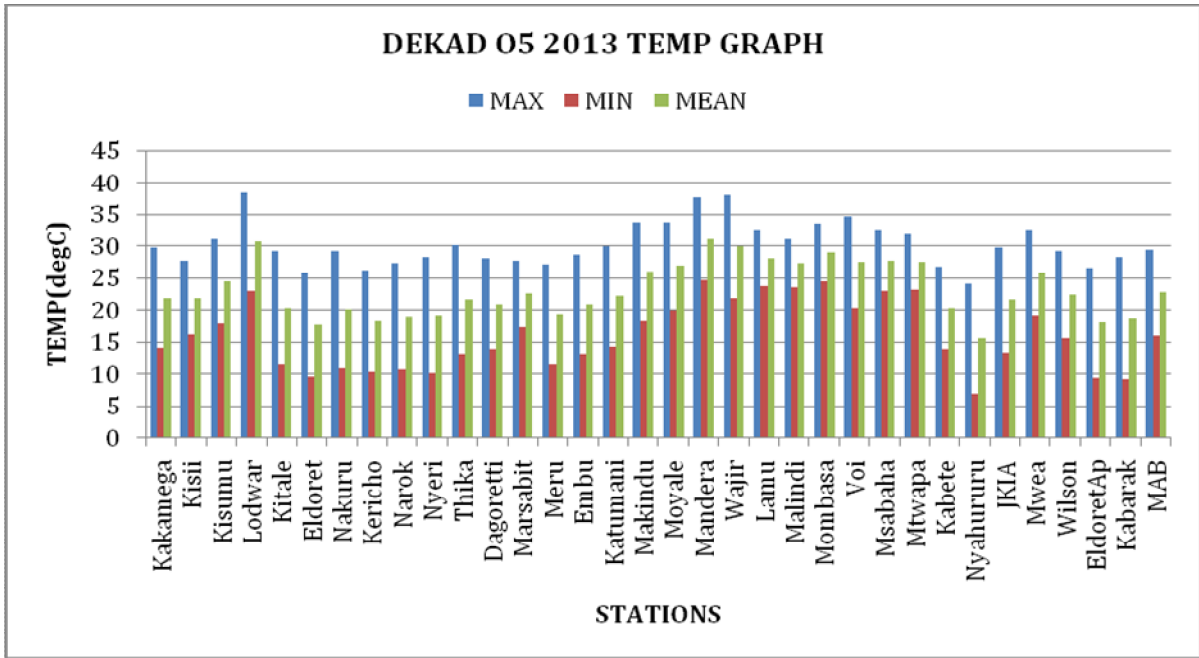


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 05, 2013

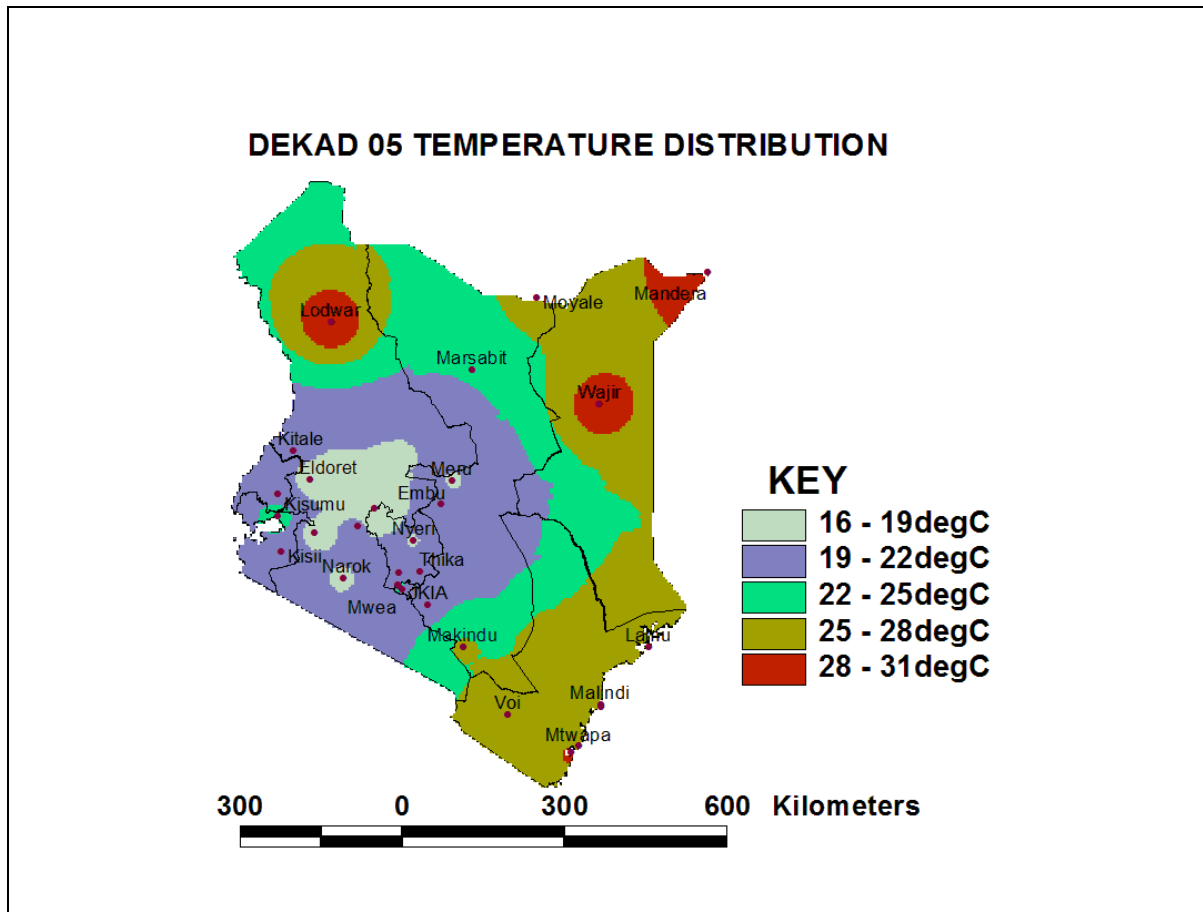


Figure 3.4: Mean temperature distribution for dekad 05, 2013

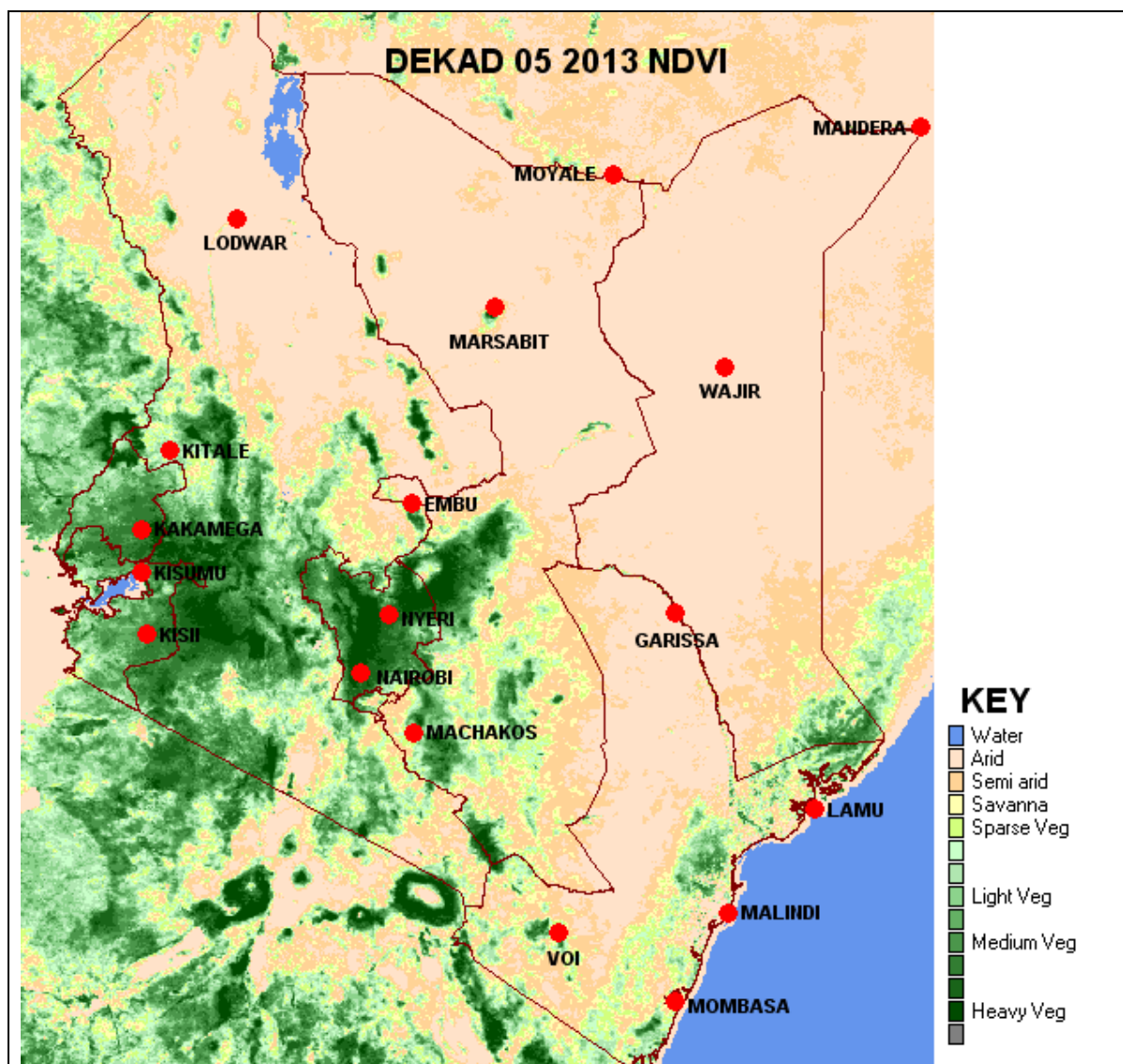


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-28 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, occasional afternoon/night showers accompanied by thunderstorms are expected over few places during the forecast period;

*Sunny conditions favour land preparation which is in progress in the areas.*

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

*The prevailing sunny conditions continue to have negative impact on the pasture and 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;

*The expected sunny weather is detrimental 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. However, isolated showers over few places may be realized on the seventh day;

*The expected rainy conditions are important to pastures 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. However, isolated showers over few places may be realized on the seventh day;

*The showers expected are important to the growth of crops grown in the area.*

- ✚ **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 with the exception of the seventh day which is expected to experience showers over few places in the morning.

*The prevailing sunny conditions have negative impact on growth of the crops and pasture growing in the region.*

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

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