



**KENYA METEOROLOGICAL DEPARTMENT  
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 03, 2013  
21-31 JANUARY 2013**

**1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

Rainfall activities increased in intensity but reduced in space in most stations compared to the previous dekad. Kericho station in Rift Valley region recorded the highest rainfall amount of 94.4mm compared to 67.8mm received in Meru station in Eastern region in the previous dekad. The second highest rainfall of 49.9mm was received at Kakamega station in Western region. In Central region, the highest rainfall amount of 47.7mm was recorded at Thika station. In Nyanza region, Suba station received the highest rainfall amount of 38.4mm. Katumani station in Eastern region reported the highest amount of rainfall of 31.6mm. In Nairobi region, Wilson station received the highest rainfall amount of 29.6mm. Most stations in Coastal region reported the least amount of rainfall with Msabaha station recording 0.3mm as the highest rainfall. Dry conditions prevailed in most stations in the North Eastern region.

Maximum and minimum temperatures were increasing and decreasing respectively. Wajir station in North Eastern region still reported the highest temperature of 38.0°C compared to 36.6°C reported in the previous dekad. Nyahururu station in Central region reported the lowest maximum temperature of 23.4°C compared to 20.9°C reported in the previous Dekad in the same station. The lowest minimum temperature of 7.5°C was still recorded in Nyahururu station compared to 8.0°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 03; 21-31 JANUARY 2013**

**2.1 NYANZA AND WESTERN REGIONS**

**2.1.1 Kakamega**

This station received rainfall amount of 49.9mm compared to 8.5mm reported in the previous dekad. The mean air temperature and pan evaporation reported were 21.5°C and 53.5mm respectively. There was no report on sunshine hours.

*Most farmers have finished harvesting maize and are preparing their land for the long rain season.*

**2.1.2 Kisii**

This station recorded rainfall amount of 34.3mm compared to 23.2mm reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.5°C and 45.8mm respectively. There was no report on sunshine duration.

*Maize was at maturity stage and in good state and normal yield is expected.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received rainfall amount of 36.2mm compared to 0.2mm reported in the previous dekad. The average air temperature and total pan evaporation were 20.0°C and 60.4mm respectively. There was no report on sunshine parameter.

*There was no phenological report.*

### **2.2.2 Eldoret-Kapsova**

The station recorded rainfall amount of 43.7mm compared to 2.3mm reported in the previous dekad. The average air temperature and pan evaporation recorded were 17.5°C and 63.2mm respectively. There was no report on sunshine parameter.

*There was no phenological report.*

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

### **2.3.1 Nyeri**

The station received rainfall amount of 20.8mm compared to 19.8mm received in the previous dekad. The average air temperature recorded was 18.7°C. There was no report on pan evaporation and sunshine parameters.

*Maize and beans were at flowering and harvesting stages respectively, and both in fair state.*

### **2.3.2 Kabete**

The station recorded rainfall amount of 8.0mm compared to 18.1mm received in the previous dekad. The average air temperature and pan evaporation recorded were 19.4°C and 55.0mm respectively. There was no report on sunshine parameter.

*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 rainfall amount of 47.7mm compared to 25.6mm in the previous dekad. The mean air temperature and pan evaporation recorded were 20.7°C and 56.2mm respectively. There was no report on sunshine hours.

*Maize and beans were at flowering and harvest stages in good and fair states respectively. Potatoes were at maturity and in good.*

### **2.3.4. Nyahururu**

The station received rainfall amount of 42.6mm compared to 8.0mm reported in the previous dekad. The mean air temperature and pan evaporation recorded were 15.4°C and 57.8mm respectively. Sunshine duration reported was 8.9 hours.

*Maize was still in harvesting process and in fair state with normal yield expected.*

### **2.3.5. Dagoretti**

The station reported rainfall amount of 9.8mm compared to 2.9mm recorded in the previous dekad. The average air temperature was 19.8<sup>0</sup>C. There was no report on pan evaporation and sunshine parameters.

*Maize was at maturity stage and in good state while beans have been harvested.*

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Meru**

The station reported rainfall amount of 4.7mm compared to 67.8mm reported in the previous dekad. The average air temperature and total pan evaporation recorded were 18.5<sup>0</sup>C and 44.7mm respectively. There was no report on sunshine parameter.

*Maize was at maturity stage and in fair state with normal yield expected, while beans are being harvested.*

### **2.4.2 Embu**

The station recorded rainfall amount of 13.0mm compared to 8.4mm received in the previous dekad. The average air temperature and total pan evaporation were 19.9<sup>0</sup>C and 56.0mm respectively. There was no report on sunshine parameter.

*Maize and beans were at maturity and harvesting stages respectively. Both crops are in fair state with normal yield expected.*

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

The station received rainfall amount of 31.6mm compared to 17.3mm reported in the previous dekad. The average air temperature recorded was 21.0<sup>0</sup>C. There was no report on evaporation pan and sunshine parameters.

*Maize was in flowering stage and in poor state due to the dry spell experienced during previous dekads and below normal yield is expected. Harvesting of beans has been completed.*

## **2.5 COAST REGION**

### **2.5.1. Msabaha**

The station received rainfall amount of 0.3mm compared to 0.5mm received in the previous dekad. The average air temperature and total pan evaporation recorded were 27.2<sup>0</sup>C and 47.8mm respectively. There was no report on sunshine parameter.

*Maize was at flowering 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 compared to 8.9mm in the previous dekad. The average air temperature and total pan evaporation recorded were 27.7<sup>0</sup>C and 67.0mm respectively. There was no report on sunshine parameter.

Mangoes were at dormant stage.

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

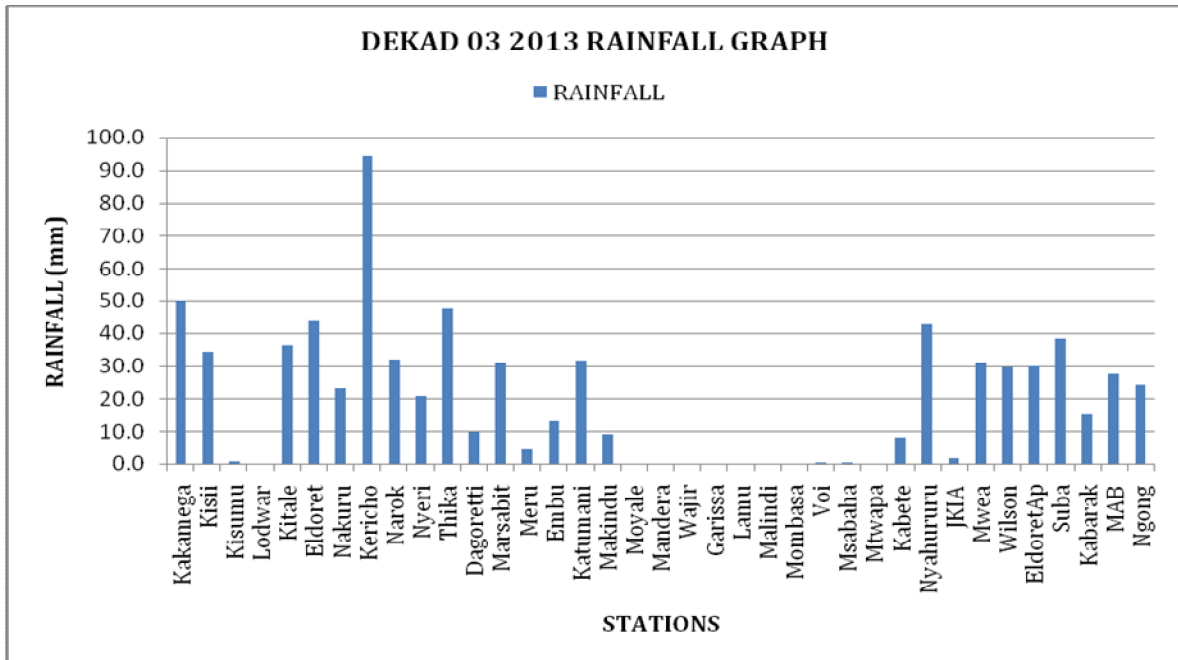


Figure 3.1: Dekadal Rainfall totals for 21-31 January 2013

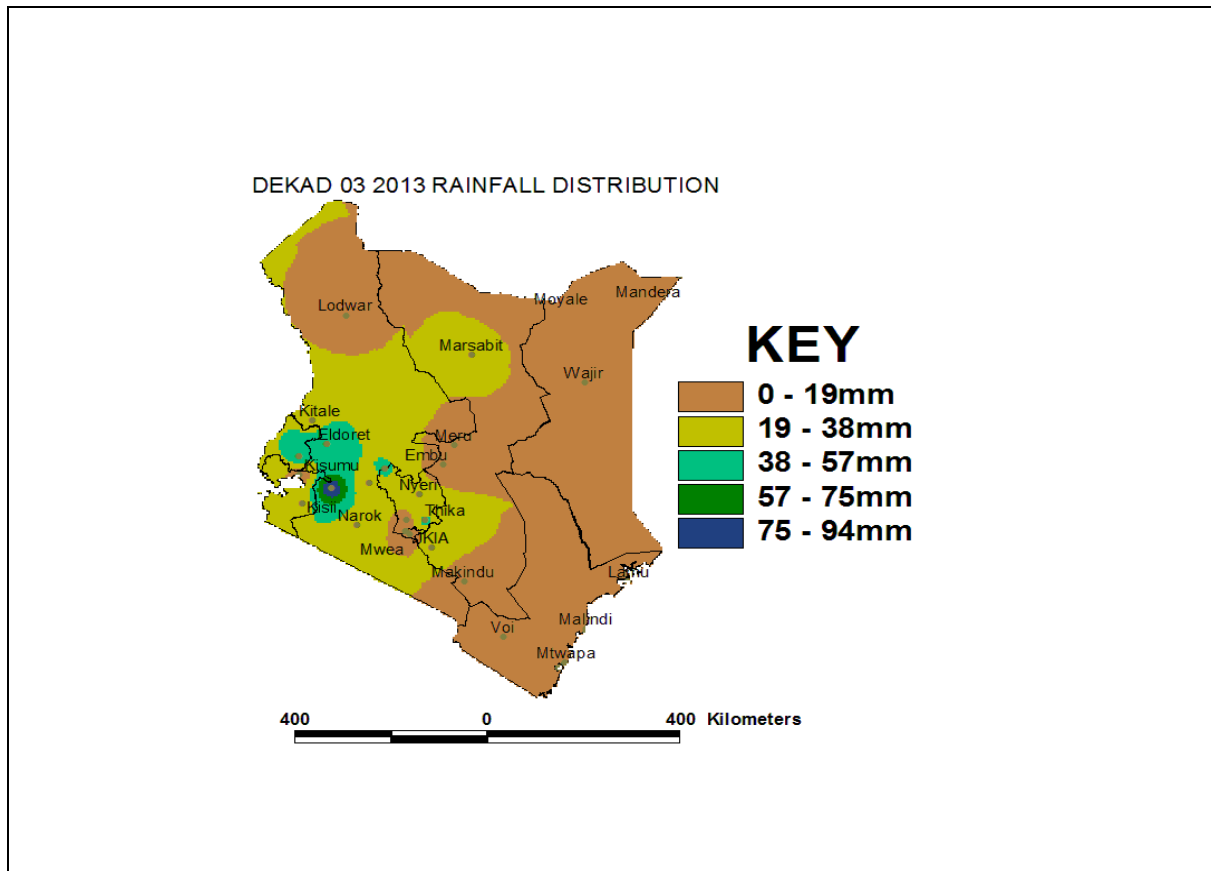


Figure 3.2: Dekadal rainfall distribution for the period 21-31 January 2013

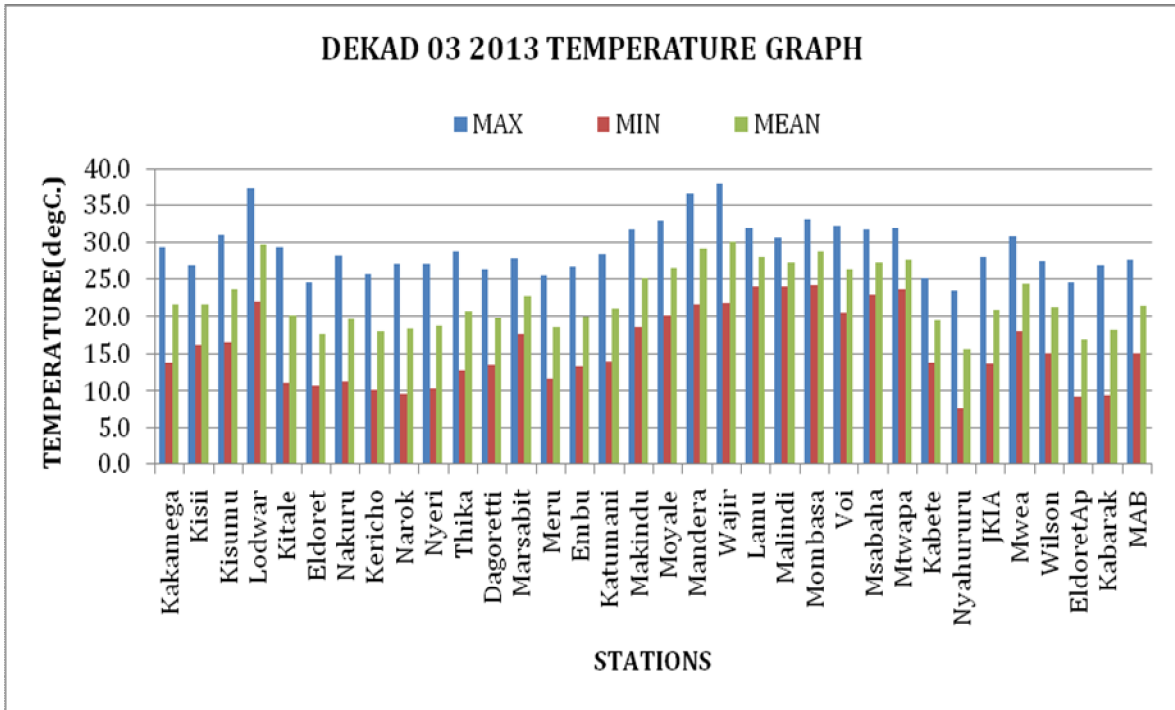


Figure 3.3: Maximum, Minimum and Average temperature in <sup>0</sup>C for dekad 03, 2013

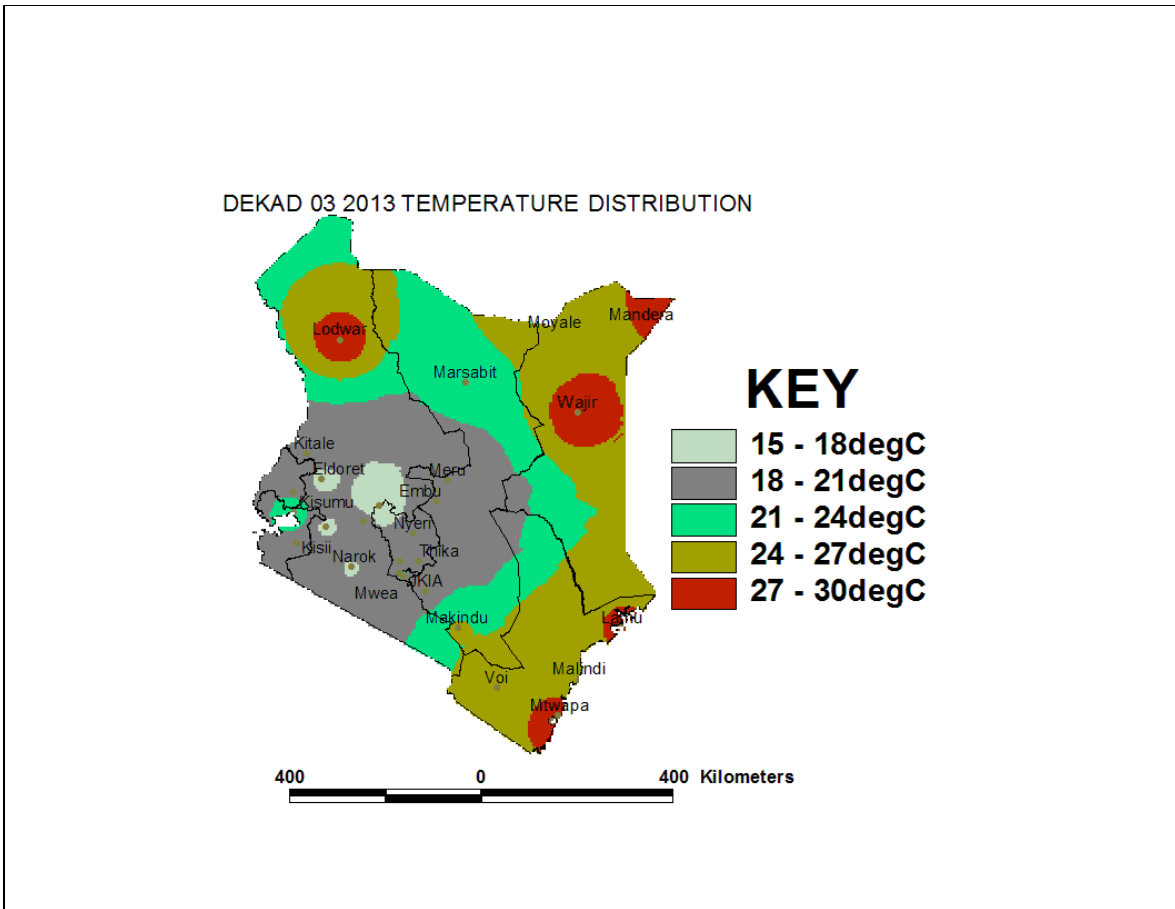


Figure 3.4: Mean temperature distribution for dekad 03, 2013

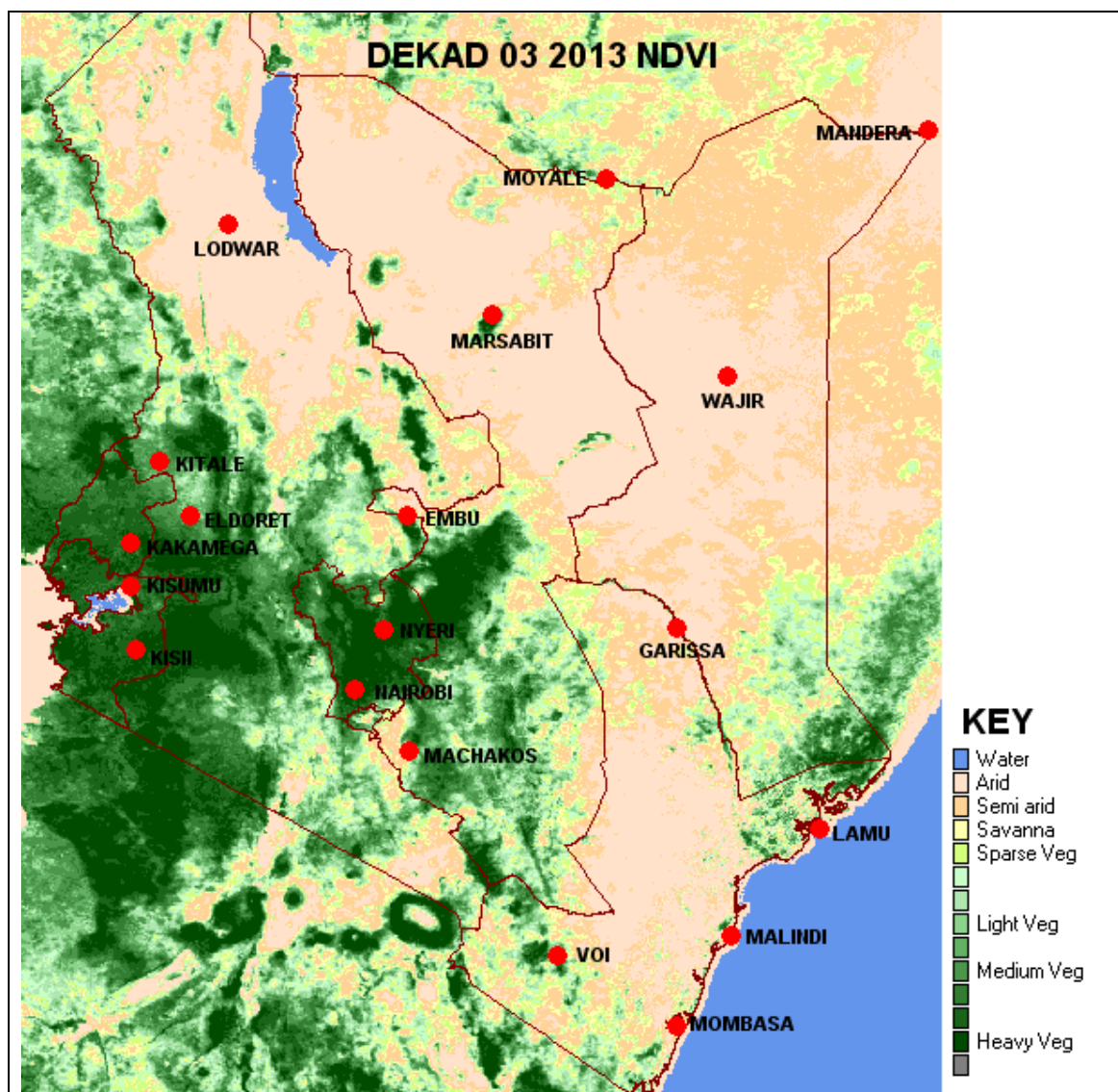


Figure 3.5: Normalized Difference Vegetation Index (NDVI) for dekad 03, 2013

**4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS;  
1-10 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 and afternoon showers and thunderstorms over few places during the first six days of the forecast period, followed by sunny intervals for the next three afternoons then showers and thunderstorms over few places in the Southern parts on the last afternoon of the forecast period.

*The sunny conditions favour the farmers who are harvesting their maize in places like Kakamega, Kisumu and Kitale.*

- ✚ **Over the Northwestern counties (Turkana, West Pokot and Samburu),** are expected to experience sunny periods for the first four days followed by sunny intervals the remaining days of the forecast period.

*The prevailing sunny conditions have a 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 sunny intervals in the morning for the entire forecast period. These areas are expected to experience mainly sunny intervals in the afternoon with a chance of showers over few places for the first three days followed by sunny intervals for the remaining afternoons.

*The showers will continue to benefit the crops which are still in farms in this region.*

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to experience sunny intervals in the entire forecast period with a chance of showers over few places on the second day of the forecast period.

*The showers are of great benefit to the pasture and a few crops which are still in farms in this region.*

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience sunny intervals in the morning for the entire forecast period followed by afternoon showers over few places on the first three days. Sunny intervals are expected to dominate afternoons of the remaining forecast period.

*The showers will continue benefiting the growing crops in this region and vegetation for animals will also be replenished.*

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** are expected to experience mainly sunny intervals in the morning with a chance of showers over few places during the first two days followed by sunny intervals for the remaining days of the forecast period.

*The showers are of great benefit to the crops grown in this region.*

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

Director,  
Kenya Meteorological Department,  
Agrometeorological Advisory Services Division,  
Dagoretti Corner, Ngong Road, P.O. Box 30259, 00100 GPO, Nairobi  
Tel: +254 (0)20 3867880-7/3876957/3873682; Fax: +254 (0)20 3876955  
E-mail: agromet@meteo.go.ke;  
Website: www.meteo.go.ke

©2013 The Kenya Meteorological Department