

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

## WEATHER AND CROP REVIEW FOR DEKAD 30, 2013 21-31 OCTOBER, 2013

#### 1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country have maintained the trend of the previous dekad with slight differences. Kisii station in Lake Region recorded the highest amount of rainfall of 95.3mm in the entire country. In the Western region, Kakamega station recorded the highest amount of 72.0mm which was a big improvement from the previous dekad. In the Rift Valley region Kericho station reported the highest amount of 72.9mm which was down from 129.7mm recorded in Kabarak the previous dekad. In the North Eastern region, there was an improvement in rainfall amount with Moyale station reporting 17.8mm as compared to 3.2mm recorded at the same station the previous dekad. In the Eastern region, Marsabit station reported the highest amount of 65.8mm which was an improvement as compared to the previous dekad. In Nairobi region, Ngong station recorded the highest amount of 6.5mm while in Central region; Nyahururu station recorded the highest amount of 37.1mm. In the Coastal region, the distribution varied with Mtwapa station recording the highest amount of 48.8mm.

Generally, there was a slight increase in the maximum temperature over the whole country. The highest observed maximum temperature was  $36.6^{\circ}$ C at Lodwar station compared to  $37.1^{\circ}$ C reported in the same station during the previous dekad. The minimum temperature increased slightly in the whole country. Nyahururu station in Central region reported the lowest of  $7.6^{\circ}$ C compared to the previous dekad where it recorded  $6.6^{\circ}$ 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 30; 21-31 OCTOBER 2013

#### 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station received rainfall amount of 72.0mm. The mean air temperature and pan evaporation were 21.1°C and 49.3mm respectively. There was no report on sunshine duration

Beans were at flowering stage and in a good state with normal yield being expected.

## 2.1.2 **Kisii**

The station recorded rainfall of 95.3mm. The mean air temperature and sunshine duration were  $20.8^{\circ}\text{C}$  and 8.2 hours respectively. There was no report on Pan Evaporation

Both maize and beans were in the emergence and flowering stages respectively and in fair state. Most farmers are still weeding.

## 2.2 RIFT VALLEY REGION

## 2.2.1 **Kitale**

The station received rainfall amount of 22.1mm. The average air temperature and Evaporation Pan were 19.8°C and 29.9mm respectively. There was no report on sunshine duration.

Maize was at harvest stage and in good state as normal yield is expected. The maize crop is being adversely affected by excessive rainfall. Most farmers have completed harvesting their maize crop.

## 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 27.7mm. The average air temperature and Evaporation pan reported were 23.5°C and 53.2mm respectively. There was no Sunshine.

Maize was at harvest stage and in fair state as normal yield is expected.

## 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

## 2.3.1 <u>Nyeri</u>

The station received rainfall amount of 5.2mm. The average air temperature was 19.8°C. There was no report on pan evaporation and sunshine parameters.

Farmers have completed preparing their farms and are now busy planting their crops.

## 2.3.2 Kabete

The station recorded trace in rainfall amount. The average air temperature and pan evaporation recorded were 19.9°C and 37.5mm respectively. There was no report on sunshine duration.

Farmers have prepared their farms for the short rains season. Coffee was at 100% berry hard 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.

#### 2.3.3 **Thika**

The station received no rainfall. The mean air temperature and pan evaporation recorded were 21.9°C and 60.5mm respectively. No report on and sunshine duration.

Planting is underway.

#### 2.3.4. Nyahururu

The station received 37.1mm of rainfall. The mean air temperature and pan evaporation recorded were  $14.7^{\circ}$ C and 42.1mm respectively. There was no report on sunshine.

Maize was at maturity stage and in a good state while potatoes were at harvest stage and in a fair state. Normal yield is expected for both crops.

## 2.3.5. <u>Dagoretti</u>

The station received trace rainfall amount and mean air temperature of 20.7°C respectively. Evaporation pan and sunshine duration were 48mm and 9.0hours respectively.

Planting has taken place and now waiting for the seeds to germination

#### 2.4 EASTERN KENYA REGION

## 2.4.1 **Meru**

The station reported rainfall amount of 23.1 mm. The average air temperature and Pan Evaporation were  $20.4 \, ^{0}$ C and 52.6 mm respectively. There was no report on sunshine duration.

Most farmers have finished planting their farms.

## 2.4.2 Embu

The station recorded rainfall amounts of 11.9mm. There was no report on Sunshine and Pan Evaporation.

Planting is going on.

## 2.4.3 Katumani (Machakos)

The station recorded no rainfall. The average air temperature was 21.3°C. There was no report on sunshine duration and pan evaporation.

No phenological report

## 2.5. COASTAL REGION

#### 2.5.1 Msabaha

The station received rainfall amount of 37.6mm. The average air temperature and pan evaporation recorded was 26.8°C and 48.6mm respectively. There was no report on sunshine duration.

Most farmers have started planting their seeds for short rains season (OND). Mangoes were at 100% fruit setting stages and in good state

## 2.5.2 Mtwapa

The station received rainfall amount of 48.8mm. The average air temperature and Pan Evaporation were 27.2°C and 55.8mm respectively. There was no report on sunshine duration.

Planting of maize crop is continuing around Kilifi County. Mangoes were at flowering stage and in fair state.

## 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

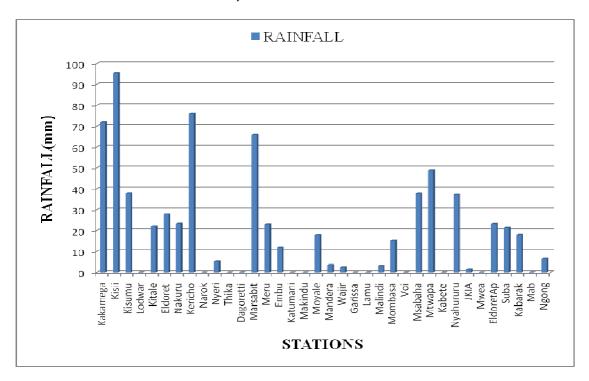


Figure 3.1: Dekadal rainfall totals for 21st to 31st October 2013

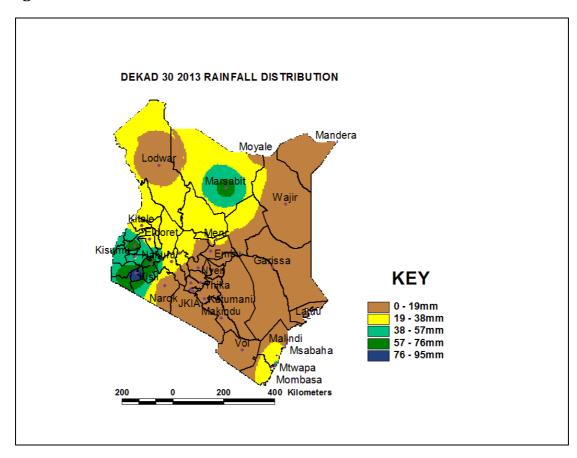


Figure 3.2: Dekadal rainfall distribution for dekad 30, 2013

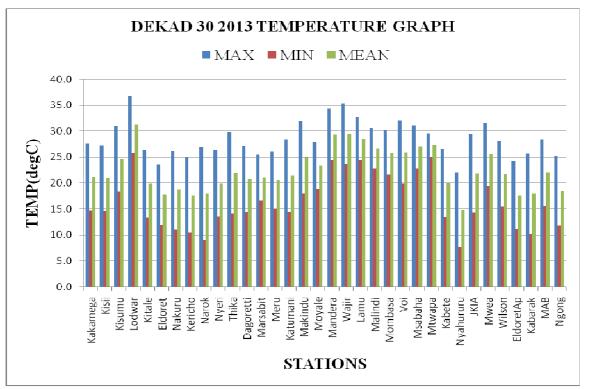


Figure 3.3: Maximum, Minimum and Average temperature in <sup>0</sup>C for dekad 30, 2013

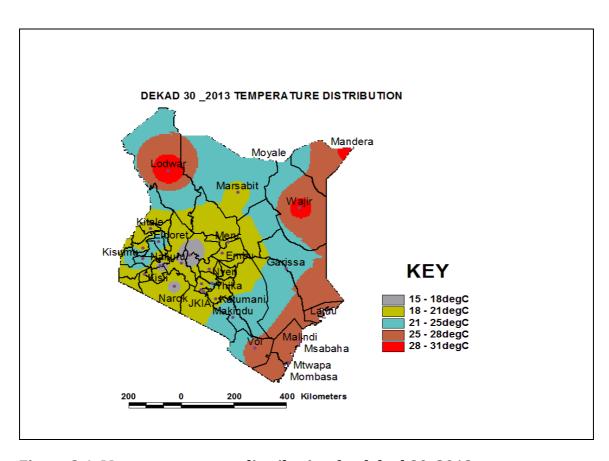
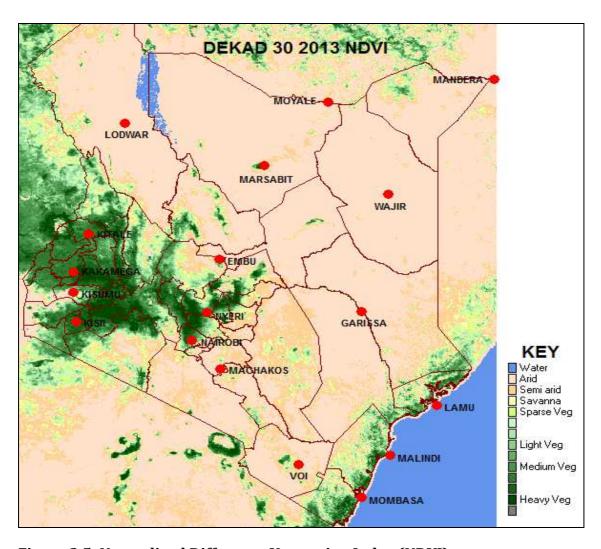


Figure 3.4: Mean temperature distribution for dekad 30, 2013



**Figure 3.5: Normalized Difference Vegetation Index (NDVI)** 

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 1-10 NOVEMBER 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 during the first half of the forecast period and sunny weather with rain over few places in the last half of the forecast period. Showers and thunderstorms are likely in afternoon over several places in the forecast period.

The showers are expected to improve the state of the already emerged crops in the region.

❖ Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning and showers over few places throughout the forecast period.

The sunny weather is expected to deteriorate the state of pasture and vegetation conditions in these counties.

❖ The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience early morning rains over several places in the morning giving way to sunny interval and sunny interval with showers over several places in the afternoon throughout the forecast period.

The expected showers will initiate the germination of the seeds, which is already under soil.

❖ Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience sunny intervals and rains over several places throughout the forecast period.

The wet weather being expected will enhance resurgence of pasture and vegetation in these counties, and may solve multiple of problems facing people in these counties.

❖ Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience sunny intervals in morning and afternoon showers over few places with sunny interval throughout the forecast period.

The wet weather forecasted is expected to assist the germination of the seeds already planted by the farmers.

❖ In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience sunny intervals in the morning with showers over few places and in the afternoon sunny intervals throughout the forecast period.

The showers expected will help the seeds to germination and revive the pastures and vegetation in the area.

## For feedback or further guidance, Contact:

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