

# KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 28, 2013 1-10 OCTOBER, 2013

# 1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country have enhanced significantly as compared to the previous dekad. Kitale station in Rift Valley region recorded the highest amount of rainfall of 106.7mm in the whole country. In the Western region, Kakamega station recorded the highest amount of 72.4mm while in Lake region, Kisumu station recorded rainfall amount of 48.0mm. In the North Eastern Region, there was great improvement of rainfall with Garissa reporting 11.4mm. Makindu station in the Eastern region reported the highest amount of 15.1mm which was a significant improvement as compared to the previous dekad. In Nairobi region, Kabete Agrometeorological station recorded the highest amount of 47.2mm. In the Coastal region, the distribution was very good compared to the previous dekad. During the dekad, Mtwapa station recorded the highest of 78.5mm which was an improvement as compared to the previous dekad.

Generally, there was a decrease in the maximum temperature over the whole country. The highest observed maximum temperature was 36.6°C at Lodwar station compared to 37.5°C reported in Mandera during the previous dekad. The minimum temperature increased slightly in the whole country. Nyahururu station in Central region reported the lowest of 6.5°C compared to the previous dekad where it recorded 8.4°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 28; 1-10 OCTOBER 2013

#### 2.1 NYANZA AND WESTERN REGIONS

#### 2.1.1 Kakamega

The station received rainfall amount of 72.4mm. The mean air temperature and pan evaporation were 20.9°C and 37.4mm respectively. There was no report on sunshine duration

Beans were at emergence stage and in a fair state

#### 2.1.2 Kisii

The station recorded rainfall of 30.7mm. The mean air temperature and pan evaporation were  $20.3^{\circ}$ C and 38.9mm respectively. There was no report on sunshine.

Both maize and beans were in the emergence stage and in fair state. Most farmers are doing their first weeding.

# 2.2 RIFT VALLEY REGION

## 2.2.1 Kitale

The station received rainfall amount of 106.7mm. The average air temperature was 19.7°C. There was no report on Evaporation pan and sunshine duration.

Maize was at harvest stage and in good state as normal yield is expected. Farmers are still harvesting their maize crop.

## 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 48.1mm. The average air temperature and Evaporation pan reported were  $17.2^{\circ}$ C and 53.6mm respectively. There was no Sunshine.

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

## 2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

## 2.3.1 <u>Nyeri</u>

The station received rainfall amount of 18.8mm. The average air temperature was 18.8°C. There was no report on pan evaporation and sunshine parameters.

Harvesting of the maize crop continued. Below normal yield is expected due to adverse effect on the crop by the stalk borer. Land preparation for the short rains is in progress.

## 2.3.2 Kabete

The station recorded rainfall amount of 7.6mm. The average air temperature and pan evaporation recorded were 18.9°C and 44.1mm respectively. There was no report on sunshine duration.

Farmers are still preparing 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 rainfall amount of 0.4mm. The mean air temperature and pan evaporation recorded were  $21.2^{\circ}$ C and 45.9mm respectively. No report on and sunshine duration.

Land preparation is going on for the next growing season.

#### 2.3.4. <u>Nyahururu</u>

The station received 47.2mm of rainfall. The mean air temperature and pan evaporation recorded were  $14.2^{\circ}$ C and 41.5mm 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 rainfall amount of 2.4mm. The mean air temperature and Evaporation pan were 19.7°C and 48.4mm respectively. There was no report on sunshine duration.

No phenological report

# 2.4 EASTERN KENYA REGION

# 2.4.1 <u>Meru</u>

The station reported rainfall amount of 5.6mm. The average air temperature and pan evaporation were 19.8°C and 54.1mm respectively. There was no report on sunshine duration.

Land is being prepared for the short season rain.

# 2.4.2 <u>Embu</u>

The station recorded rainfall amounts of 6.0mm. Pan evaporation recorded was 41.0mm and no report on sunshine duration.

Land preparation is on going for the short rain season.

## 2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 4.2mm. The average air temperature was 20.3°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 63.6mm. The average air temperature and pan evaporation recorded was 26.8°C and 44.9mm respectively. There was no report on sunshine duration.

Mangoes were at 100% fruit setting stages and in good state as farmers continue preparing their farms for short rain season.

#### 2.5.2 <u>Mtwapa</u>

The station received rainfall amount of 78.5mm. The average air temperature recorded was  $26.4^{\circ}$ C. There was no report on sunshine duration and pan Evaporation.

Mangoes were at flowering stage and in fair state as land preparation is underway.

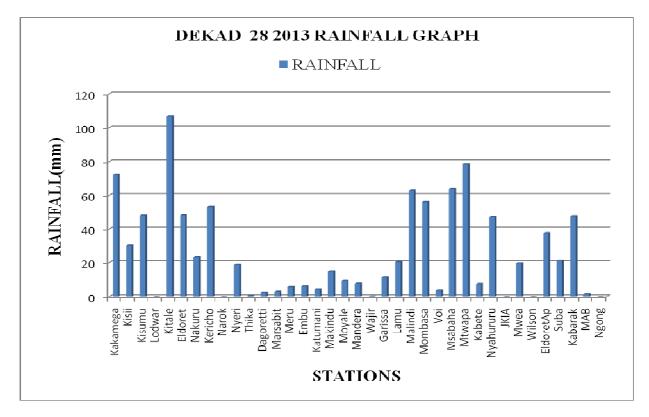


Figure 3.1: Dekadal rainfall totals for 1st to 10th October 2013

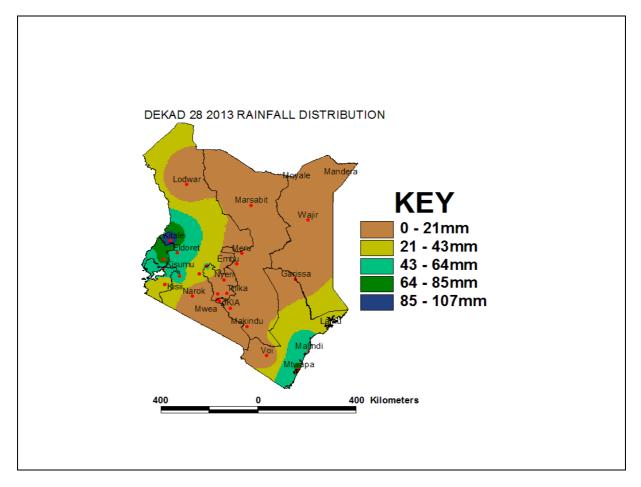


Figure 3.2: Dekadal rainfall distribution for dekad 28, 2013

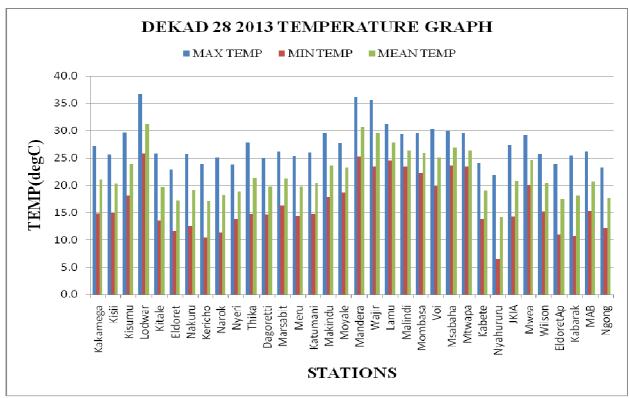


Figure 3.3: Maximum, Minimum and Average temperature in <sup>0</sup>C for dekad 28, 2013

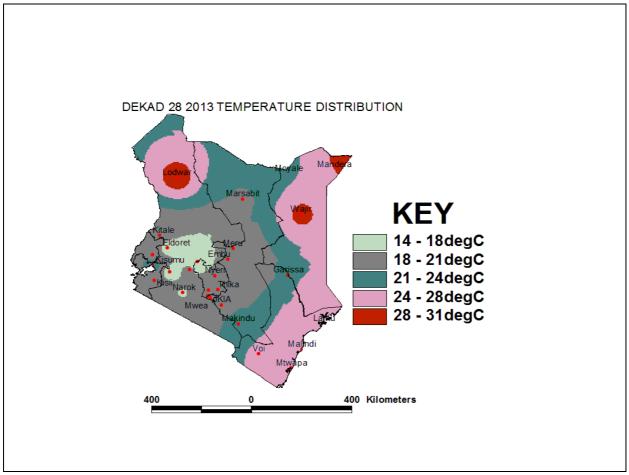


Figure 3.4: Mean temperature distribution for dekad 28, 2013

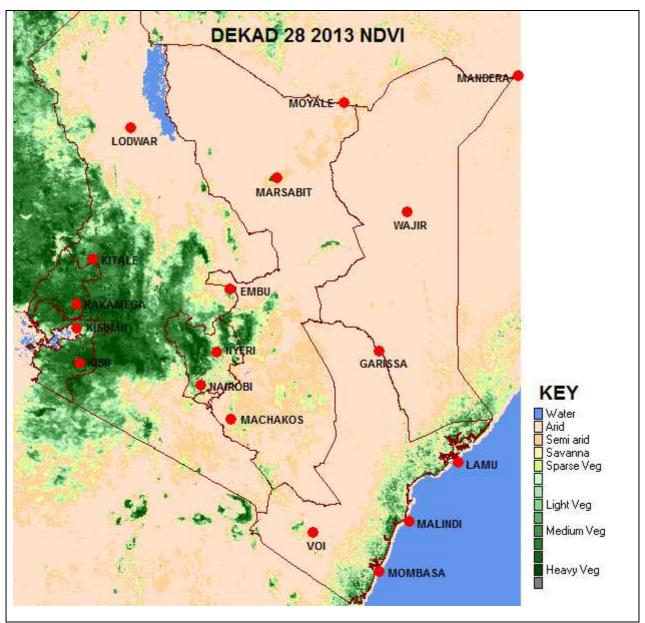


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 11-20 OCTOBER 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, showers and thunderstorms are likely in afternoon over few places in the whole forecast period.

The showers are expected to benefit the emerging crops in Kisii but disrupt the harvesting activities in some other parts of the region.

**4** Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals throughout the forecast period.

The sunny weather is expected to deteriorate the 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 cool and cloudy early mornings giving way to sunny intervals in the morning and afternoon throughout the forecast period. Afternoon showers are also expected over few places the last two days of the forecast period.

The expected showers will enhance the land preparation activity.

*Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo)*, are expected to experience sunny intervals over the whole forecast period.

Dry conditions are expected to degenerate the state of pasture and vegetation in these counties, and may cause conflict to the people living there due to water and pasture scarcity

Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience sunny intervals the whole day throughout the forecast period.

Dry conditions are expected to worsen the situations of pastures in these regions.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience sunny intervals throughout the forecast period.

The sunny condition is expected to aid land preparation process.

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