

# KENYA METEOROLOGICAL SERVICES DEKADAL AGROMETEOROLOGICAL BULLETIN

# WEATHER AND CROP REVIEW FOR DEKAD 25, 2013 1-10 SEPTEMBER 2013

#### 1. THE HIGHLIHTS ON RAINFALL AND TEMPERATURE

There had been considerable reduction in rainfall activities in the country during the dekad especially in the Eastern part of the country. Kitale station in North Rift region recorded the highest amount of rainfall of 114.9mm in the whole country while in the Central Rift Valley region; Kericho recorded the highest with 102.8mm. The highest rainfall observed in the Western region, was 48.5mm at Kakamega station. In North Eastern region there was no rainfall reported. In Lake Region, Kisii station recorded the highest amount of rainfall of 60.2mm as compared to the previous dekad where it recorded the amount of 76.5mm. Embu station in Eastern region reported the highest amount of 6.6mm, which was a decrease from 14.9mm recorded at the same station in the previous dekad. In Nairobi region, JKIA station recorded the highest amount of rainfall of 6.0mm. In Central region, Nyahururu station recorded the highest amount of rainfall of 39.8mm as compared to the previous dekad of 22.2mm at the same station. In Coast region there was a general increase of rainfall compared to the previous dekad where Mombasa station recorded the highest of 33.2mm.

There was a slight rise in temperature both the Maximum and the Minimum. Mandera station recorded the highest maximum temperature of 35.6°C. Nyahururu station in Central region reported the lowest minimum temperature of 6.9°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 25; 1-10 SEPTEMER 2013

#### 2.1 NYANZA AND WESTERN REGIONS

# 2.1.1 Kakamega

The station received rainfall amount of 48.5mm. The mean air temperature and sunshine hours were 17.8°C and 6.5hrs respectively. The pan evaporation recorded was 38.1mm.

Maize crop was in harvest stage and in good state with normal yields expected. Harvesting of maize is almost complete.

# 2.1.2 Kisii

The station recorded rainfall amount of 60.2mm for the dekad. The mean air temperature and total pan evaporation recorded were 20.2°C and 41.7mm respectively. There was no report on sunshine duration.

Farmers are now busy planting their crops for short rain season.

#### 2.2 RIFT VALLEY REGION

# 2.2.1 **Kitale**

The station received rainfall amount of 114.9mm. The average air temperature and pan evaporation were 18.3 ©C and 33.3mm respectively. There was no report on sunshine duration.

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

# 2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 50mm. The average air temperature and pan evaporation reported were 16.42C and 38.6mm respectively. Sunshine duration recorded was 6.3hrs.

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

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

#### 2.3.1 Nyeri

The station received rainfall amount of 13.3mm. The average air temperature was 17.1°C. There was no report on pan evaporation and sunshine parameters.

Maize crop was at wax ripeness stage and in a poor state with below normal yield expected due to adverse effect by stalk borer.

#### 2.3.2 Kabete

The station recorded rainfall amount of 1.0mm. The average air temperature and pan evaporation recorded were 17.3°C and 32.5mm respectively. There was no report on sunshine duration.

Maize was at wax ripeness stage and in a poor state. Beans were at maturity stage and in a poor state with below normal yield expected. Farmers are preparing their farms for the October-November-December 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 but damaged by thrips, cigar end rot and cigar Toka at less than 10% each.

#### 2.3.3 Thika

The station received rainfall amount of 1.3mm. The mean air temperature and pan evaporation recorded were 19.0°C and 35.8mm respectively. No report on sunshine duration.

Land preparation is going on for the next growing season.

#### 2.3.4. Nyahururu

The station received 39.8mm of rainfall. The mean air temperature and pan evaporation recorded were 13.9°C and 32.1mm respectively. There was no report on sunshine.

Maize was at flowering stage while potatoes were at harvest stage and in a good state. Normal yield expected for maize

#### 2.3.5. Dagoretti

The station received rainfall amount of 0.3mm. The mean air temperature and sunshine duration recorded were 18.0°C and 5.6hours respectively. Evaporation report was 35.8mm

No phenological report

#### 2.4 EASTERN KENYA REGION

#### 2.4.1 Meru

The station reported no rainfall. The average air temperature and pan evaporation were 17.9°C and 48mm respectively. The sunshine hours recorded was 8.4hrs.

Land is being prepared for the short season rain.

#### 2.4.2 Embu

The station recorded rainfall amounts of 6.6mm. Pan evaporation recorded was 29.1mm and no report on sunshine duration.

No phenological report.

# 2.4.3 Katumani (Machakos)

The station recorded no rainfall and average air temperature of 22.1°C. The sunshine duration recorded was and 5.6hrs. There was no report on pan evaporation.

No phenological report

#### 2.5. COASTAL REGION

#### 2.5.1 Msabaha

The station received rainfall amount of 13.1mm. The average air temperature and pan evaporation recorded was 26.3°C and 47.8mm respectively. There was no report on sunshine duration.

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

# 2.5.2 Mtwapa

The station received rainfall amount of 20.2mm. The average air temperature and total pan Evaporation recorded were 49.5°C. There is no report on Pan Evaporation.

Harvesting of maize is over. Mangoes were at flowering stage.

# 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

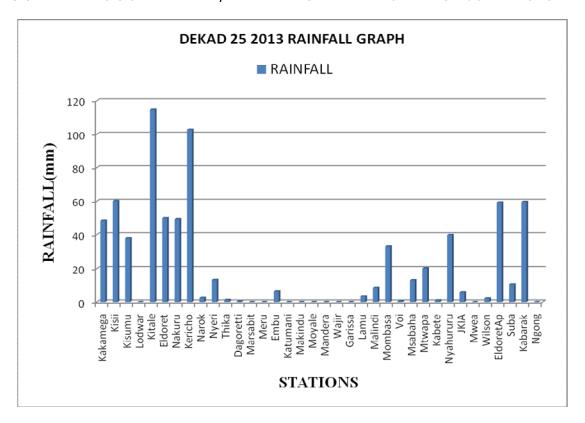


Figure 3.1: Dekadal rainfall totals for 1st to 10th September 2013

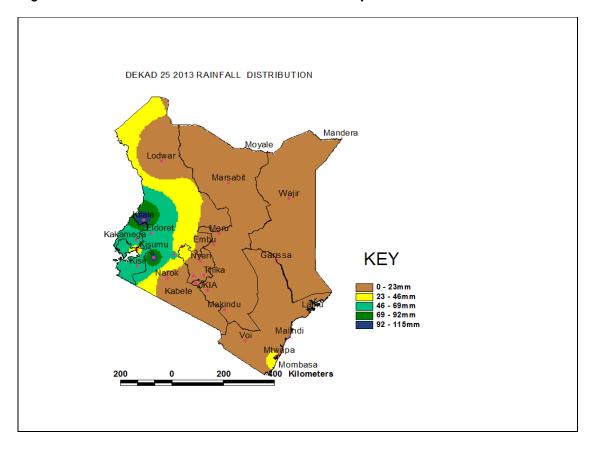


Figure 3.2: Dekadal rainfall distribution for dekad 25, 2013

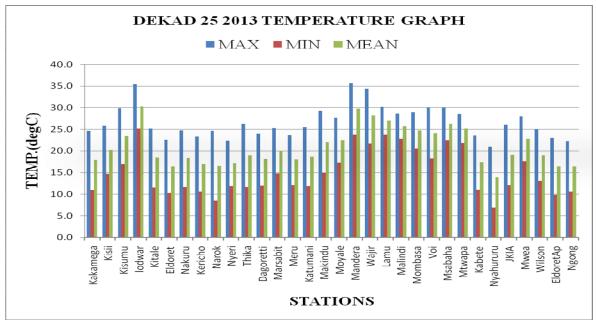


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 25, 2013

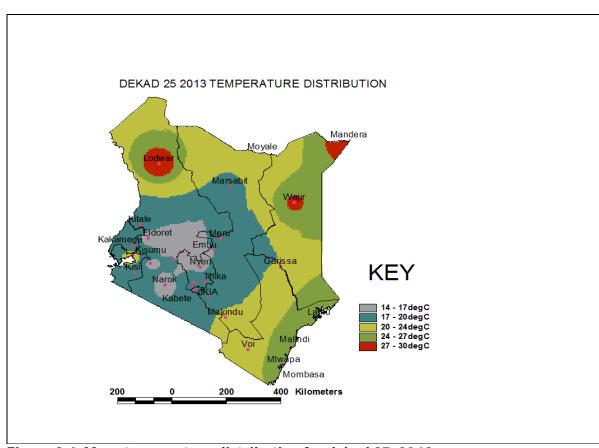


Figure 3.4: Mean temperature distribution for dekad 25, 2013

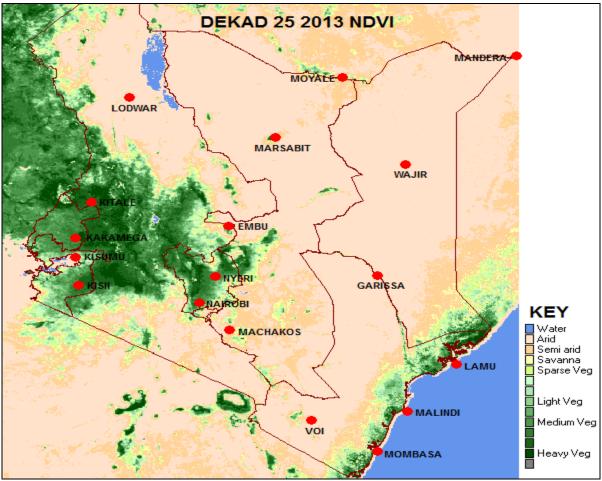


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

# 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS 11-20 September 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 throughout the forecast period. Showers and thunderstorms are likely over several places in the afternoon for the entire forecast period.

The showers will benefit the already planted crops in Kisii at the same time interfere with the harvest in the rest of the region.

♣ Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning and afternoon during the entire forecast period.

The dry conditions might worsen the state of pastures and vegetation cover in these regions thus causing animal-human and human-human conflict.

➡ The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga), are expected to experience cloudy mornings breaking into sunny intervals and sunny intervals in the afternoon with showers over few places.

The cloudy-wet conditions will benefit the crops, which are in the wax ripeness stages.

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

Dry conditions might deteriorate the state of pasture and vegetation in these counties, which may cause conflict to the hostile tribes, living there due to water and pasture competition.

■ Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui), are expected to experience sunny intervals in the morning and the afternoon for the entire forecast period.

Dry conditions are expected to exacerbate the situations of crops and pastures in these regions.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience sunny intervals with showers over few places in the morning giving way to sunny intervals for the rest of the forecast period.

The morning showers continue to benefit crops and vegetation in these regions.

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# For feedback or further guidance, Contact:

Director,

Kenya Meteorological Services, Agro meteorological 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

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