

KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 32, 2013 11-20 NOVEMBER, 2013

1. HIGHLIHTS ON RAINFALL AND TEMPERATURE

Rainfall activities in the country continued to reduce both in space and intensity compared to the previous dekad. Rift Valley region received the highest amount of Rainfall countrywide with Eldoret airport station reporting rainfall amount of 127.7mm. The second highest Rainfall 99.3mm was received at Kisii station in Nyanza Region. Meru station in Eastern region recorded the highest rainfall of 88.1mm. In North Eastern Region, Mandera station received 50.7mm as the highest Rainfall. Kabete station in Central Region recorded the highest amount of Rainfall of 50.7mm. In Western Region, Kakamega station reported the highest amount of Rainfall of 34.9mm. Coastal region reported the lowest Rainfall with Msabaha station recording the highest rainfall amount of 12.1mm.

Generally, there was an increase in the maximum temperature over the whole country. The highest observed maximum temperature was 34.9° C at Lodwar station compared to 34.8° C reported in the same station during the previous dekad. There was a decrease in minimum temperatures in most stations. Nyahururu station in Central region reported the lowest minimum temperatures of 9.7° C compared to the previous dekad where it recorded 9.9° 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 32; 11-20 NOVEMBER 2013

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station received rainfall amount of 34.9mm. The mean air temperature and pan evaporation were 21.1° C and 36.4mm respectively. There was no report on sunshine duration.

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

2.1.2 **Kisii**

The station recorded rainfall of 99.3mm. The mean air temperature and Evaporation Pan were 20.3°C and 32.8 mm. Sunshine report was 6.5 4.6 hours.

Maize is at emergence stage while beans were at maturity stage and in fair state

2.2 RIFT VALLEY REGION

2.2.1 **Kitale.**

The station received rainfall amount of 29.7mm. The average air temperature and Evaporation Pan were 19.6°C and 35.7mm respectively. There was no report on sunshine duration.

Farmers have completed harvesting.

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 34.2mm. The average air temperature and Evaporation pan reported were 17.2°C and 49.7mm respectively. There was no Sunshine.

Farmers are harvesting their maize.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 <u>Nyeri</u>

The station received rainfall amount of 18.2mm. The average air temperature was 19.7°C. There was no report on pan evaporation and sunshine parameters.

Farmers have completed planting.

2.3.2 Kabete

The station recorded 50.7mm of rainfall amount. The average air temperature and pan evaporation recorded were 19.6° C and 46.2mm respectively. There was no report on sunshine duration.

Farmers are busy planting.

2.3.3 Thika

The station received rainfall of 3.1 mm. The mean air temperature and pan evaporation recorded were 21.7^{0} C and 41.1 mm respectively. No report on sunshine duration.

Planting is underway.

2.3.4. Nyahururu

The station received 31.4mm of rainfall. The mean air temperature and pan evaporation recorded were 15.3° C and 34.4mm respectively. There was no report on sunshine.

Maize was at maturity stage and in a good state while potatoes were at emergence stage and both crops are in good state.

2.3.5. Dagoretti

The station received rainfall amount of 28.9 mm and mean air temperature of $20.2 ^{\circ}\text{C}$ respectively. Evaporation pan and sunshine duration were 43.4 mm and 6.9 hours respectively.

Both maize and beans are at emergence stage.

2.4 EASTERN KENYA REGION

2.4.1 **Meru**

The station reported rainfall amount of 88.1mm. The average air temperature and Pan Evaporation were 19.3°C and 31.2mm respectively. There was sunshine report of 6.7hrs.

Maize and beans are at emergence stage and both are in fair state.

2.4.2 Embu

The station recorded rainfall amounts of 0.83mm. Pan Evaporation was 44.3mm. There was no report on mean air temperature and Sunshine. *Both maize and beans are at emergence stage and in fair state.*

2.4.3 Katumani (Machakos)

The station recorded rainfall amount of 5.4mm. The average air temperature was 21.1°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 12.1mm. The average air temperature and pan evaporation recorded was 27.5°C and 43.6mm respectively. There was no report on sunshine duration.

Maize is at emergence stage and in fair state.

2.5.2 Mtwapa

The station received rainfall amount of 6.6mm. The average air temperature and Pan Evaporation were 26.8°C and 57.1mm respectively. There was no report on sunshine duration.

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

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

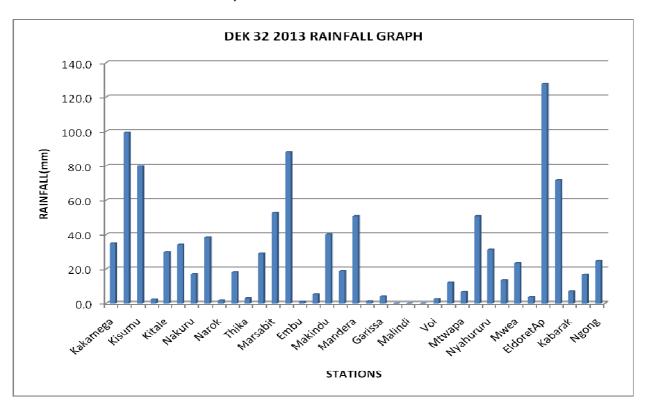


Figure 3.1: Dekadal rainfall totals for 11th to 20th November 2013

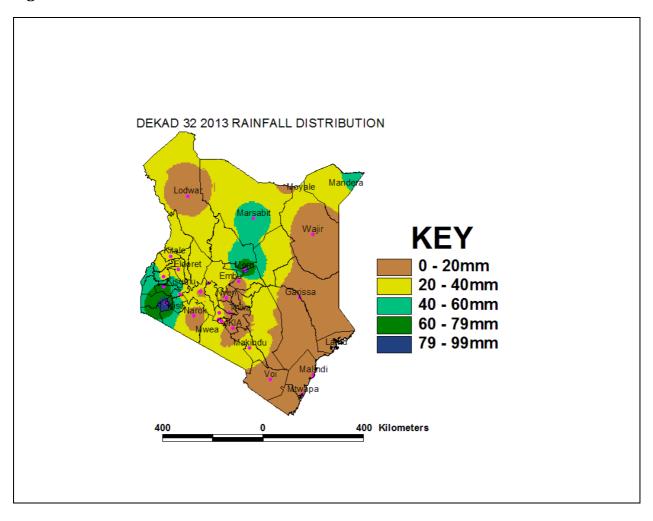


Figure 3.2: Dekadal rainfall distribution for dekad 32, 2013

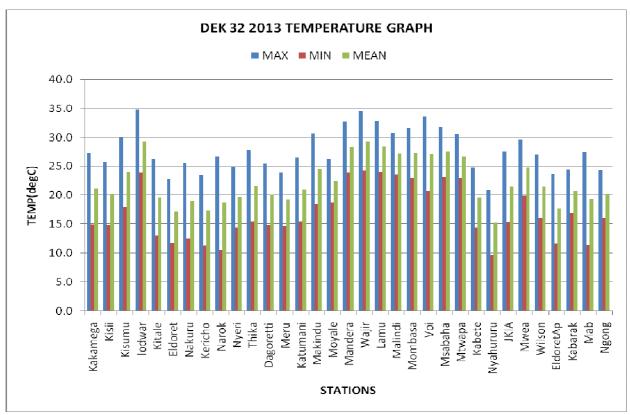


Figure 3.3: Maximum, Minimum and Average temperature in ⁰C for dekad 32, 2013

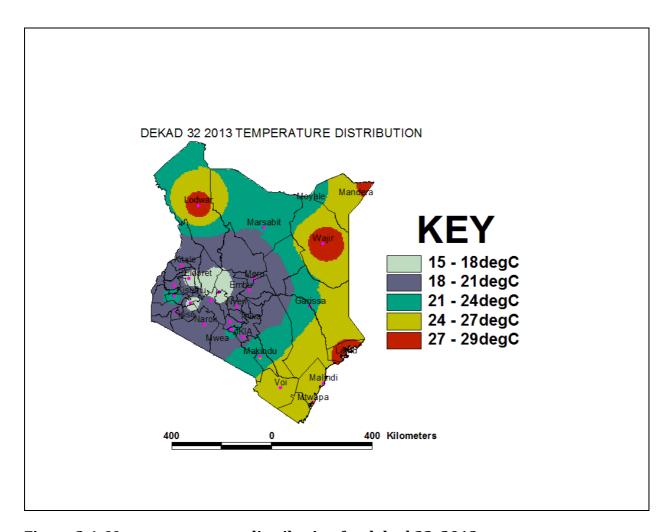


Figure 3.4: Mean temperature distribution for dekad 32, 2013

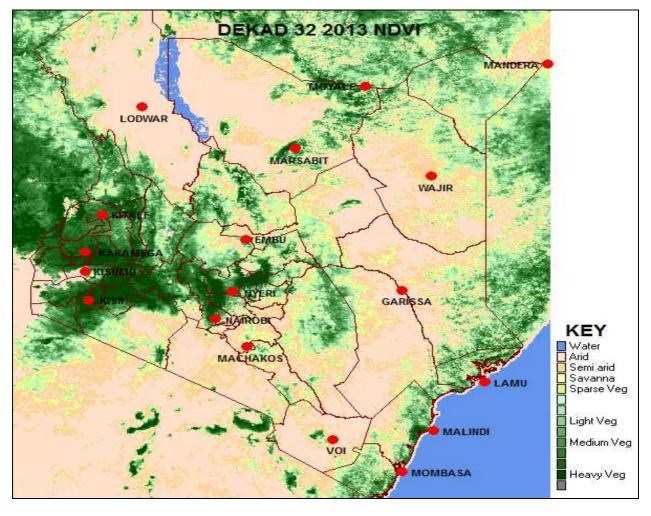


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

- 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21-30 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 forecast period. Showers and thunderstorms are likely to occur in the afternoon over several places for the first two days of the forecast period, reducing to few places thereafter.

The showers will continue to benefit the crops especially Maize which is in flowering stage in this region.

❖ Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning and showers over few places in the Afternoon for first three days of the forecast period, followed by sunny intervals thereafter.

The afternoon showers will continue to enhance 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 cloudy mornings, breaking into sunny intervals

throughout the forecast period. Afternoons are expected to have showers over few places for the first four days of the forecast period, increasing to several places for the next three days and reducing to few places thereafter.

* The expected showers will be of great importance to the crops, which are mainly in emergence stage in this region.

Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo), are expected to experience sunny intervals in the morning. Afternoons are expected to experience sunny intervals for the first four days of the forecast period, followed by showers over a few places for the next two days, breaking into sunny intervals thereafter

The expected showers will continue to enhance the pasture and vegetation in this region.

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

The expected Afternoon showers will be very beneficial to crops which in emergence stage and will improve pasture/Vegetation in this region.

In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc), are expected to experience rains in the morning over a few places for the first half of the forecast period breaking into sunny intervals thereafter. Afternoons are expected to experience showers over a few places throughout the forecast period.

The expected showers will have a positive impact on Vegetation and crops that are mainly in emergence stage in this region.

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

©2013 The Kenya Meteorological Services