



## KENYA METEOROLOGICAL SERVICE DEKADAL AGROMETEOROLOGICAL BULLETIN

### WEATHER AND CROP REVIEW FOR DEKAD 20, 11<sup>TH</sup> – 20<sup>TH</sup> JULY 2016

#### 1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

Rainfall activities increased in both intensity and spatial distribution compared to the previous dekad. The highest rainfall amount of 233.1mm was reported at Eldoret Airport station in Rift valley region compared to 59.1mm reported at Nyahururu station in Central region in the previous dekad. The second highest rainfall of 120.9mm was received at Eldoret station in same region. Nyahururu station in Central region recorded the highest rainfall amount of 57.1mm. Western region reported the highest rainfall amount of 46.0mm at Matungu station. Nyanza region reported the highest rainfall amount of 42.6mm at Kisumu station. Mtwapa station in Coastal region recorded the highest rainfall amount of 8.5mm. Eastern region received the highest rainfall amount of 1.4mm at Embu station, while stations in Nairobi and North Eastern regions reported dry conditions.

Both Maximum and Minimum temperatures decreased. The highest Maximum temperature of 33.8°C was recorded at Lodwar Station in North Eastern region compared to 33.9°C reported at the same station in the same region in the previous dekad. Nyahururu station continued to record the lowest Minimum temperature of 8.5°C compared to 9.6°C 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 20, 11<sup>TH</sup> – 20<sup>TH</sup> JULY 2016

##### 2.1 NYANZA AND WESTERN REGIONS

###### 2.1.1 Kakamega

The station received rainfall amount of 31.3mm. Total pan evaporation was 37.8mm. There was no report on mean air temperature.

*Maize is at maturity stage and in a fair state though affected by insufficient rainfall. Normal yield is expected. Beans have been harvested.*

###### 2.1.2 Kisii

The station reported total rainfall amount of 5.7mm. The mean air temperature and total Pan Evaporation recorded were 20.0°C and 46.5mm respectively.

*Maize is at maturity and in a fair state though affected by some disease. Normal yield is expected.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station recorded total rainfall amount of 53.4mm. Total Pan Evaporation reported was 31.4mm. There was no report on the mean air temperature.

*Maize was at flowering stage and in good condition. Normal yield expected. Beans were at harvest stage and in fair state.*

### **2.2.2 Eldoret - Kapsoya**

The station received 120.9mm of rainfall. The mean air temperature and total Pan Evaporation reported were 16.4°C and 40.0mm respectively.

*Maize was at flowering stage and in fair state. Normal yield is expected. Beans have been harvested.*

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

### **2.3.1 Nyeri**

Total amount of rainfall recorded was 0.4mm. The average air temperature reported was 14.9°C. There was no report on total Pan Evaporation.

*Maize is flowering and poor state because it has been affected by stalk borer. Beans are being harvested. Below normal yield is expected for both crops.*

### **2.3.2 Kabete**

The station reported dry conditions. Mean air Temperature was 16.7°C and total evaporation was 17.0mm.

*Both Maize and Beans were in flowering stage and in fair state, hence expected yield is normal.*

### **2.3.3 Thika**

The station reported dry conditions. The average air temperature and total Pan Evaporation recorded were 16.8°C and 15.0mm respectively.

*Maize was at flowering and in fair state though it has been affected by cold weather. Expected yield is normal. Beans and Potatoes have been harvested.*

### **2.3.4 Nyahururu**

The station recorded rainfall amount of 57.1mm, the mean air temperature and total Pan Evaporation reported were 14.2°C and 26.1mm respectively.

*Maize and beans were at emergence and flowering stages respectively. Both crops were in fair state. Potatoes were in maturity stage and in fair state.*

### **2.3.5 Dagoretti**

The station reported dry conditions. Total Pan Evaporation recorded was 18.0 mm. No report on mean air temperature.

*No Phenological report.*

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Embu**

The station reported 1.4mm rainfall amount. Total pan evaporation was 14.4mm. There was no report on the Mean air temperature.

*Maize and Beans were at flowering and maturity stages respectively and in fair state. Hence normal yield is expected.*

### **2.4.2 Meru**

The station recorded total rainfall amount of 0.4mm. The Average air Temperature and total pan evaporation reported were 16.6°C and 25.4mm. There was no sunshine parameter.

*Maize was at flowering stage and in poor state hence below normal yield is expected.*

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

The station reported dry conditions. The mean air temperature and total Pan Evaporation reported were 15.9°C and 24.5mm respectively.

*Maize and beans were both at flowering and maturity stages but in poor and fair states respectively with below normal yields expected due to insufficient rain. Harvesting of beans has started in some nearby farms.*

## **2.5 COASTAL REGION**

### **2.5.1 Msabaha**

The station recorded 3.6mm of rainfall. The average air temperature was 25.2°C. Total evaporation was 48.6 mm. There was no report on sunshine duration.

*Maize was at maturity stage though affected by some unidentified diseases; hence below normal yield is expected. Mangoes were at 100% fruit setting stage and in good state.*

### **2.5.2 Mtwapa**

The station received total rainfall amount of 2.1mm. The Mean air temperature reported was 25.1°C. Total pan evaporation was 40.5mm. There was no report on sunshine parameter.

*Maize was at flowering stage while mangoes were at harvest stage but both in fair state. Maize had been adversely affected by insufficient rain, insects and stalk borer while mangoes were affected by insects.*

### 3. ANALYSIS OF RAINFALL AND TEMPERATURE CONDITIONS

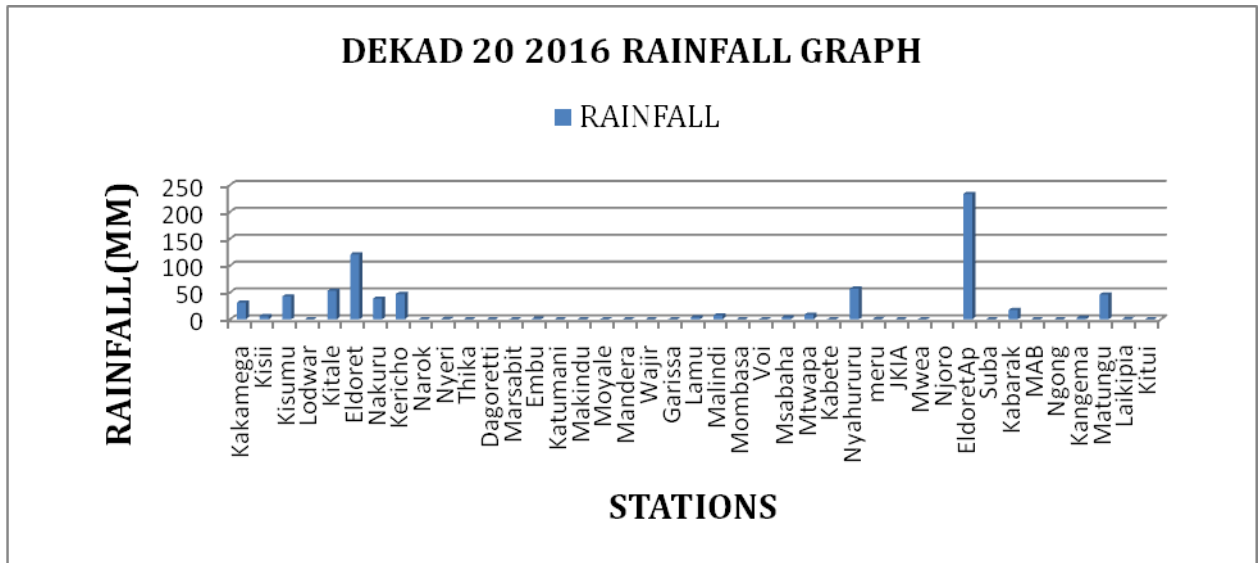


Figure 3.1: Dekadal rainfall totals for dekad 20, 2016

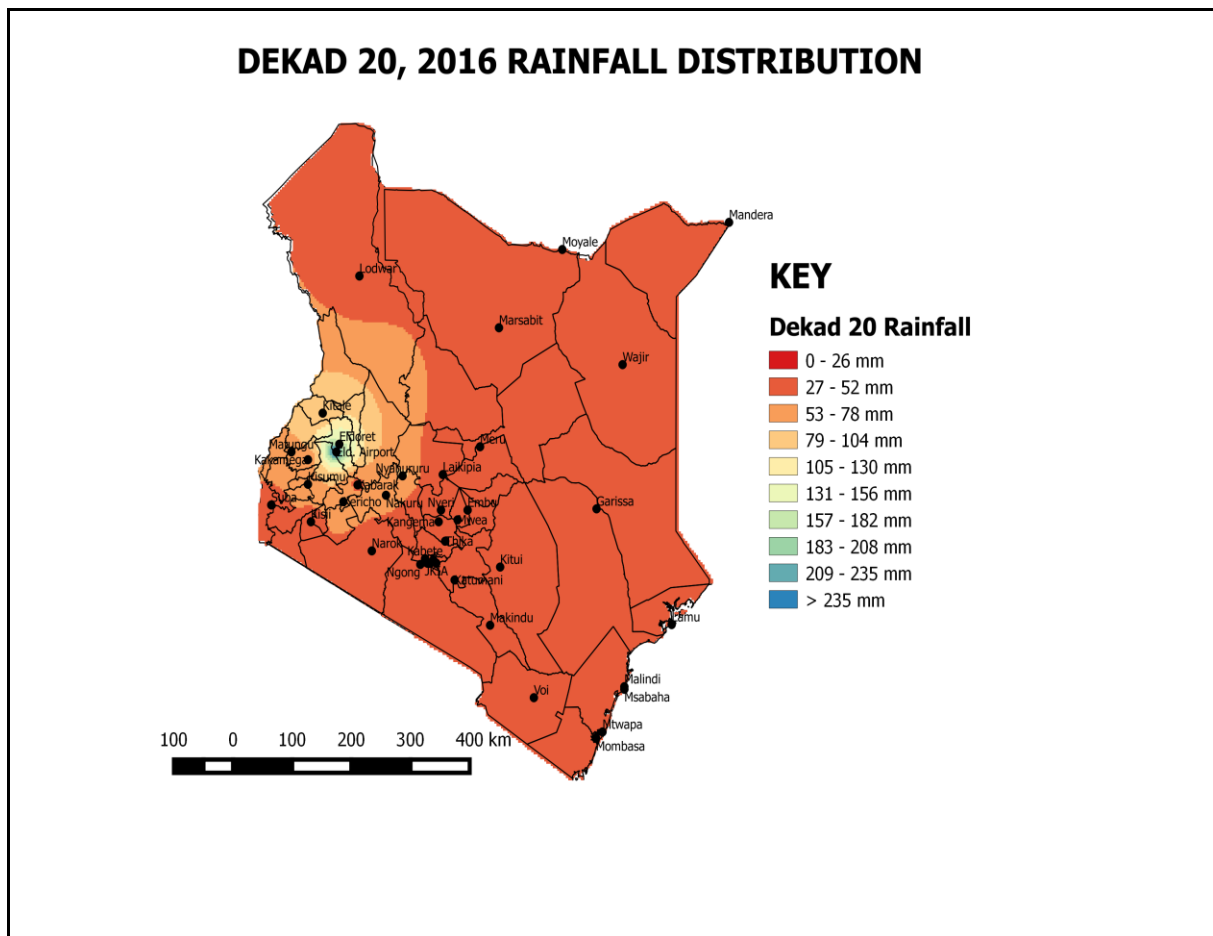
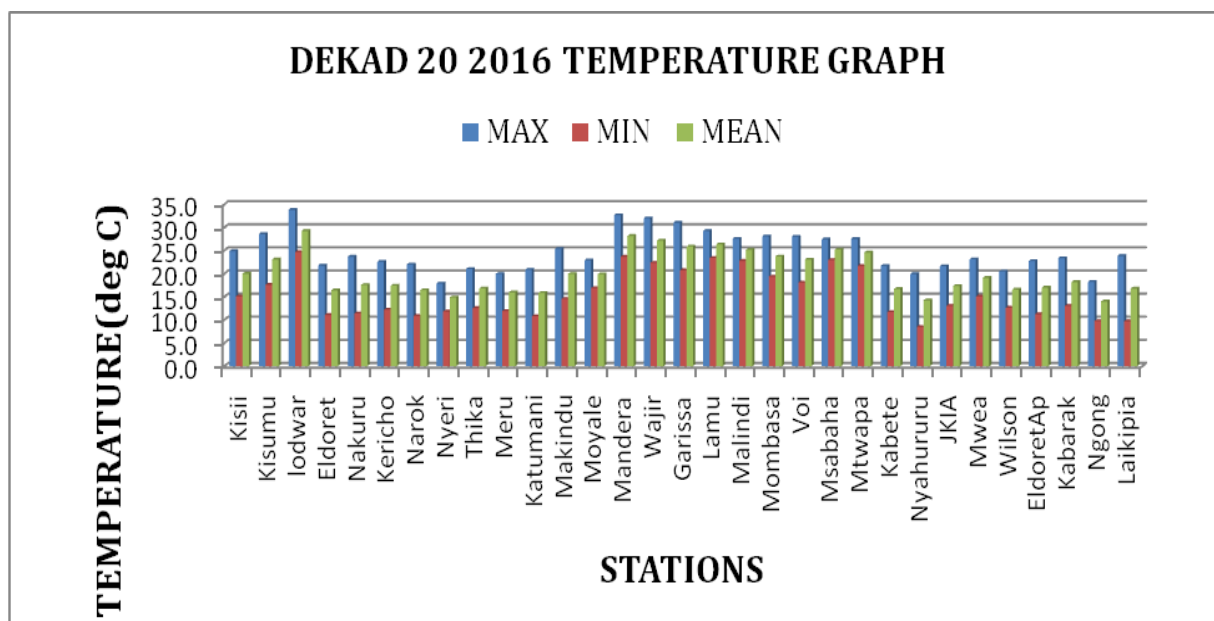
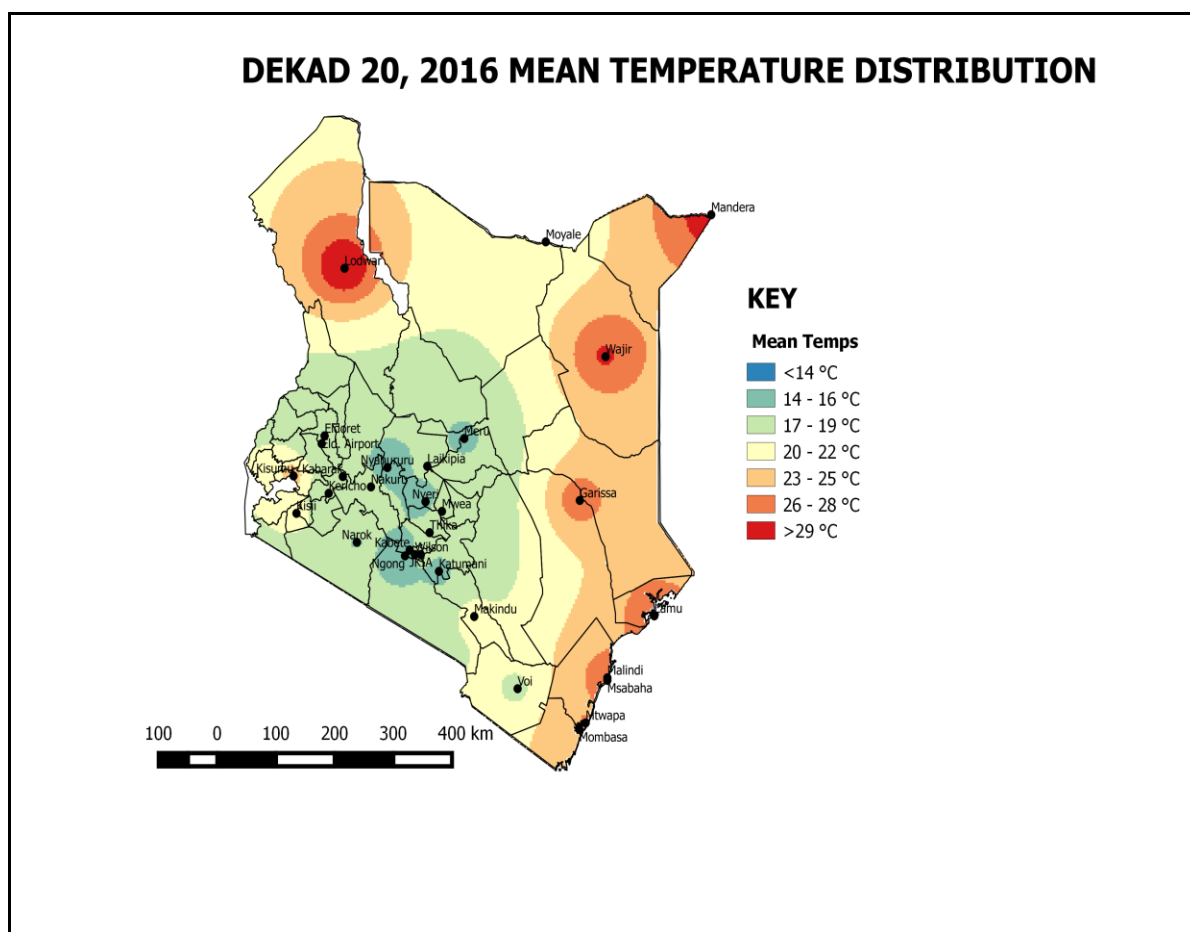


Figure 3.2: Dekadal rainfall distribution for dekad 20, 2016



**Figure3.3: Maximum, Minimum and Average temperature for dekad 20, 2016**



**Figure 3.4: Mean temperature distribution for dekad 20, 2016**

#### **4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 21<sup>ST</sup> – 30<sup>TH</sup> JULY, 2016.**

- ❖ **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),** Mornings are expected to experience sunny intervals, while Afternoons are expected to experience showers and thunderstorms over several places throughout the forecast period.

*The Showers and sunny intervals will be of great benefit to the maize that is at flowering stage in Kitale, Kisii, Eldoret and maturity stage at Kakamega and Kisumu.*

- ❖ **The Northwestern counties (Turkana, West Pokot and Samburu),** are expected to experience sunny intervals in morning for first 3 days while Afternoons will experience showers and thunderstorms for the next 2 days, then sunny intervals thereafter.

*The showers and thunderstorms will replenish the pasture and vegetation for livestock kept in this region.*

- ❖ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga),** Mornings are expected to be cool and cloudy breaking into sunny intervals throughout the forecast period with occasional light rains over a few place. Afternoons are expected to experience showers over few places in the high ground areas for the first 4 days of the forecast period followed by sunny intervals thereafter.

*The rains will continue benefiting the crops, which are in their emergence at Kabete, and Nyahururu and flowering stage in Thika, Nyeri and Embu.*

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

*Sunny intervals continue to have negative impact on the pasture and vegetation for the animals kept in these areas.*

- ❖ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** are expected to experience cool and cloudy mornings giving way to sunny intervals throughout the forecast period.

*The sunny intervals continue to have negative impact on the vegetation and pasture for the animals kept in these areas.*

- ❖ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** Mornings are expected to experience sunny intervals for the first 3 days of the forecast period followed by showers over a few places.

*The showers continue to benefit maize crop which are at flowering and mangoes which are at 100% fruit setting stage in Msabaha and Mtwapa respectively.*

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

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