



KENYA METEOROLOGICAL DEPARTMENT

DEKADAL AGROMETEOROLOGICAL BULLETIN

WEATHER AND CROP REVIEW FOR DEKAD 15, 2011 21ST - 31ST MAY, 2011

1. WEATHER HIGHLIGHTS

There was drastic reduction in weather activities observed during the dekad unlike in the previous dekad where most stations received heavy amounts of rainfall especially along the coast. Malindi in Coast Province recorded the highest amount of rainfall of 131.9mm which was a great increase compared to the previous dekad. The second highest rainfall amount of 122.6mm was also observed in the coastal region at Msabaha station. In the Rift Valley region, Kericho station recorded the highest rainfall amount of 105.0mm. Dagoretti and Moi Airbase stations in the Nairobi area received 7.1mm and some traces of rainfall respectively. In the Central region, Nyeri station reported 7.3mm of rainfall while Meru station in the Eastern region reported 1.4mm. North Eastern region continued to report dry conditions.

There was a general reduction in air temperatures observed in most stations throughout the country. For 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 15; 21ST TO 31ST MAY 2011

2.1 NYANZA AND WESTERN PROVINCES

2.1.1 Kakamega

This station recorded rainfall, average air temperature and total pan evaporation of 86.8mm, 20.7⁰c and 44.5mm respectively. Sunshine hours recorded were 6.2 hours per day.

Maize (HBKSK 94) was at 100% ninth leaf stage and in moderate state. Beans were at maturity stage and in good state. Both crops were damaged by hailstones.

2.1.2 Kisii

The station recorded rainfall amount, mean average air temperature and total pan evaporation of 60.5mm, 20.6⁰C and 45.1mm respectively. No sunshine hours were recorded.

Maize and Beans were at flowering stage and in poor state. They were damaged by excessive rainfall and hailstones. Below normal yield is expected for beans.

2.2 RIFT VALLEY PROVINCE

2.2.1 Kitale

Kitale station recorded rainfall, average air temperature and total pan evaporation of 52.0mm, 19.5⁰C and 34.7mm respectively. Sunshine hours recorded were 6.7 hours per day.

Maize (HB628) was at 93% ninth leaf stage and in good state. Beans were at flowering stage and in good state though damaged by hailstones.

2.2.2 Eldoret-Kapsoya

The station recorded rainfall, average air temperature and total pan evaporation of 48.5 mm, 17.6^oc and 8.4mm respectively. Sunshine hours reported were 8.4 hours per day.

Maize (HB628) was at 35% ninth leaf while beans were at emergence stage and both crops were in fair state. Weeding is being carried out in farms.

2.3 CENTRAL AND NAIROBI PROVINCES

2.3.1 Nyeri

The station recorded rainfall, average air temperature and total pan evaporation of 7.3mm, 18.6^oc and 39.2 mm respectively. No sunshine hours were recorded.

Maize (HB513) was at above 100% ninth leaf stage and in moderate state. Beans (GRB/92) were at 70% flowering stage and in moderate state but were damaged by aphids sucking juices from plants.

2.3.2 Kabete

The average air temperature, total pan evaporation and rainfall recorded at Kabete were 18.8^oc, 35.6mm and 5.6mm respectively while no sunshine observation was made. *Maize was at after ninth leaf stage and in fair state. Beans were at flowering stage and in fair state while coffee (SL34) was at 100% berry soft stage and in moderate state but was damaged by leaf rust and die bark less than 10% each. Bananas were at 100% appearance of suckers stage and in moderate state but damaged by thrips and cigar end rot.*

2.3.3 Thika

The dekadal mean air temperature at Thika was 20.8^oc while total evaporation was 35.0mm. No report on sunshine was recorded. *Maize was at flowering stage and in fair state though affected by insufficient rain. Beans were at maturity stage and in fair state. Normal yield is expected for both crops as harvesting of beans in some areas is underway.*

2.3.4 Nyahururu

Nyahururu reported average air temperature of 14.6^oc, total pan evaporation of 49.7mm, 3.7mm of rainfall and 7.9 sunshine hours per day.

Maize, beans and potatoes were at after emergence stage and in fair state. All the three crops were affected by insufficient rain.

2.3.5 Dagoretti

This station reported rainfall, average air temperature and total pan evaporation of 7.1mm, 19.4^oc and 37.1 mm respectively. Sunshine hours recorded were 7.1 hours per day.

Maize was at after ninth leaf stage and in good state, while beans were at after flowering stage and in moderate state.

2.4 EASTERN PROVINCE

2.4.1 Meru

The station reported rainfall, average air temperature and total pan evaporation of 1.4 mm, 19.0^oc and 45.4 mm respectively. Sunshine hours recorded were 8.2 hours per day. *No phenological report received.*

2.4.2 Embu

The average air temperature and total pan evaporation reported at the station were 20.5^oc and 37.8mm respectively. Rainfall recorded was 6.3 mm while sunshine hours were 7.5 hours per day. *Maize and Beans were at flowering stage and in fair state as normal yield is expected.*

2.4.3 Katumani (Machakos)

The station reported an average air temperature of 20.0°C and nil rainfall. There was no report on evaporation and sunshine parameters.

Maize was at flowering stage and in poor state while beans were at maturity stage but in failed state. Both crops were adversely affected by insufficient rain. Below normal yield is expected on both crops.

2.5.1 COAST PROVINCE

2.5.1.1 Msabaha

This station reported rainfall, average air temperature and pan evaporation of 122.6mm, 26.9°C and 33.1mm respectively. Sunshine hours recorded were 11.1hours per day. *Mangoes (Ngowe type) were at 100% fruit setting stage and in good state while maize was at after emergence stage and in fair state as weeding is on.*

2.5.2 Mtwapa

The station recorded rainfall, average air temperature and pan evaporation of 74.2 mm, 26.9°C and 37.3mm respectively. There was no report on sunshine hours.

Maize (DH4) was at 100% ninth leaf stage and in moderate state though damaged by birds, animals and stalk borer. Mangoes (Apple) were at 70% ripeness stage and in moderate state. Watermelon(sugar baby) were 100% fifth true leaf stage and in moderate state though damaged by leaf rust, aphids, moths and excessive rain.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

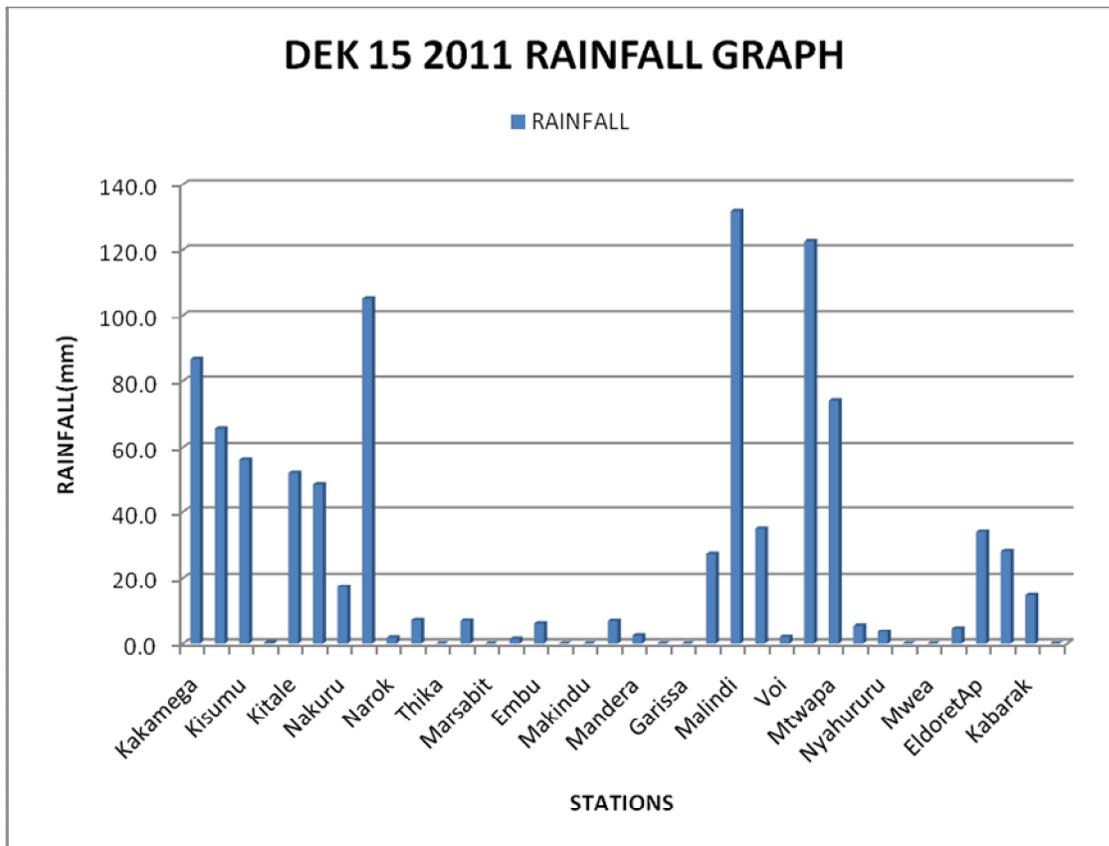


Figure 3.1: Actual Rainfall

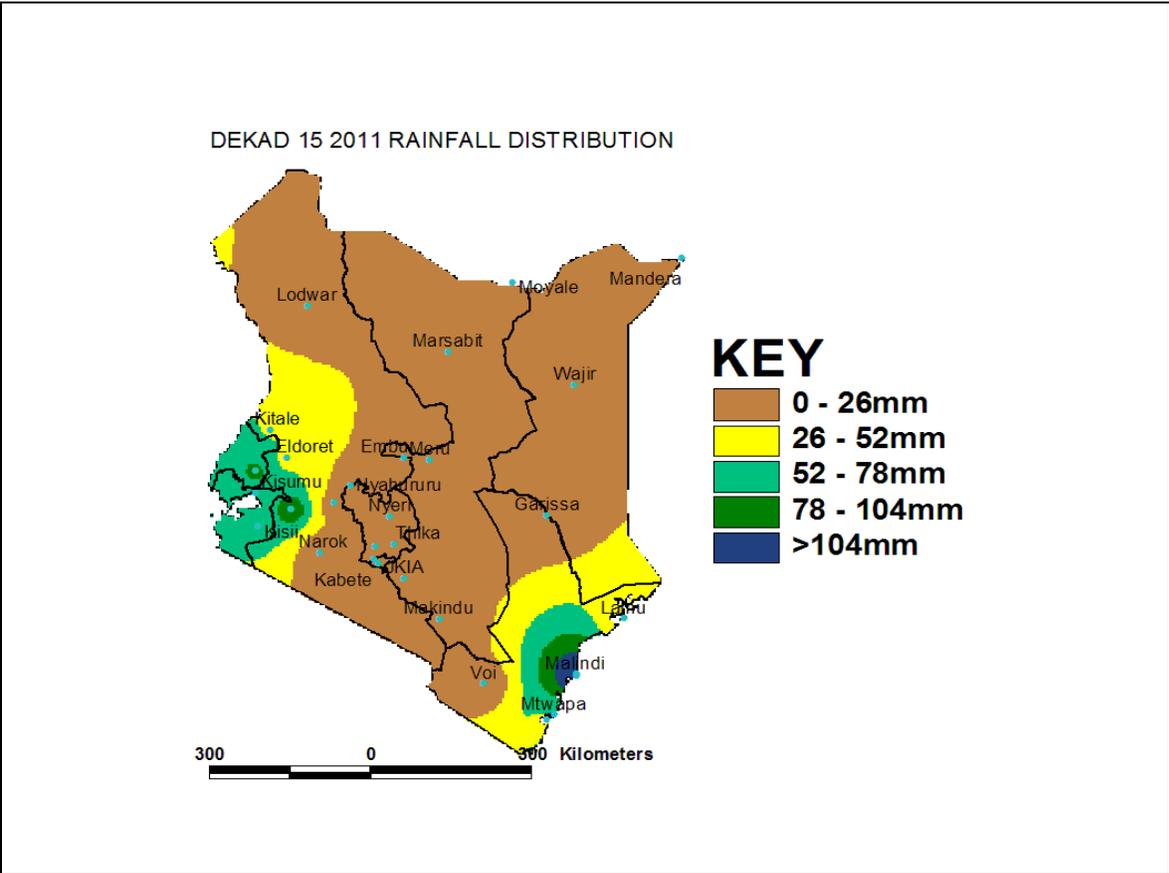


Figure 3.2: Rainfall distribution

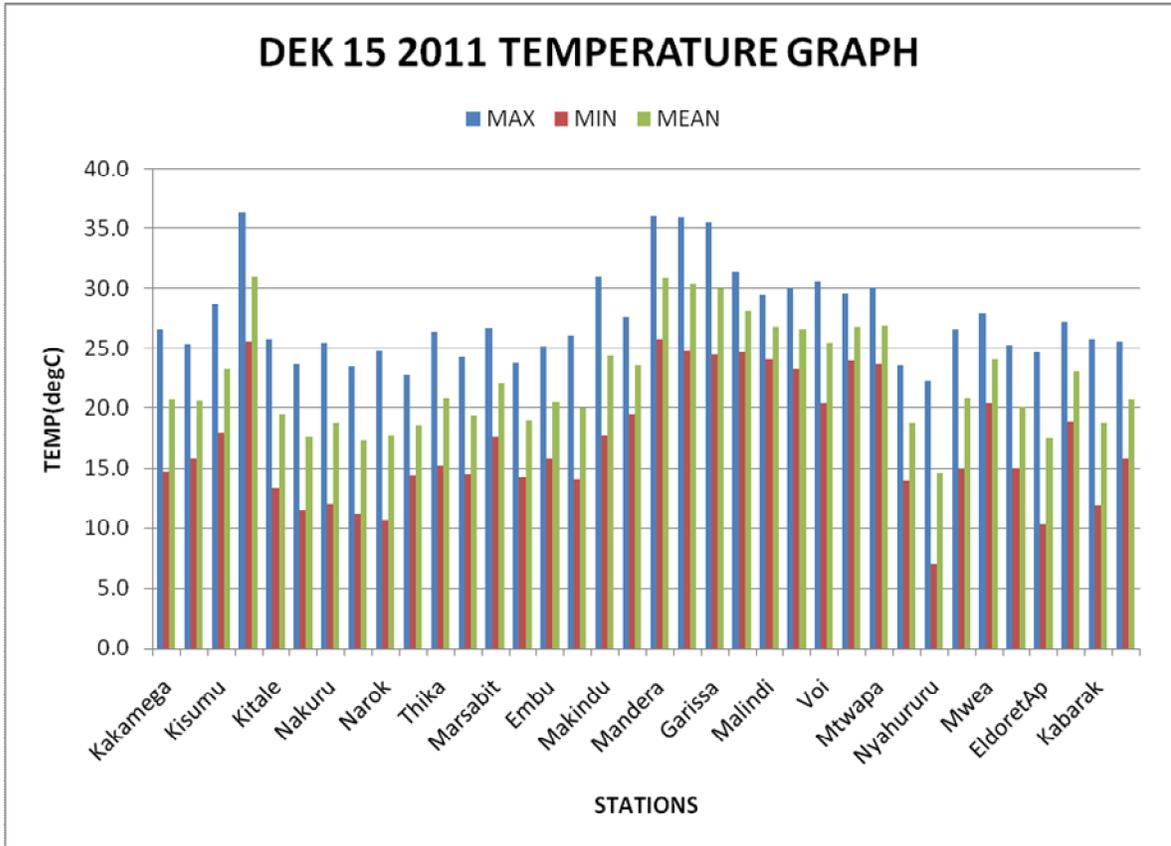


Figure 3.3: Mean Temperature

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 1ST TO 10TH JUNE 2011

- ✚ **Counties within the Lake Victoria Basin, Highlands west of the Rift Valley, Central and south Rift Valley (Kitale, Kakamega, Kisumu, Kisii, Migori, Nyamira, Kericho, Bomet, Uasin-Gishu, Nakuru, Narok, Nyandarua, etc)** will experience mainly sunny intervals in the morning and afternoon/ night showers and thunderstorms over several places throughout the forecast period. Occasional morning rains are also likely over few places. *This will benefit the beans and maize which are in their maturity stages.*
- ✚ **The Northwestern counties (Turkana, West Pokot etc),** will experience mainly sunny intervals over most areas throughout the forecast period but few areas close to the Kenyan Ugandan border may experience occasional light to moderate afternoon showers. *The livestock kept in these areas are likely to lack adequate pasture and water.*
- ✚ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc)** will experience cool cloudy morning with light rains/drizzle over few places then sunny intervals and showers over few places in the afternoons during the first half of the forecast period. The second half of the forecast period will be characterized by mainly sunny intervals and occasional afternoon/night showers over few places in the afternoon/night. *Therefore, the crops grown in these areas are expected to well during the forecast period.*
- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa,etc),** will experience mainly sunny intervals throughout the forecast period. *These weather conditions are expected to diminish water and pasture hence negatively affecting the livestock.*
- ✚ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** will experience mainly sunny intervals throughout the forecast period. *No major positive impact is expected on the crops.*
- ✚ **The Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale,etc)** will experience light to moderate morning showers over several places during much of the forecast period. *The crops grown in these areas are therefore expected to grow well.*

For feedback or further guidance, Contact:

Director,
Kenya Meteorological Department,
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

©2011 The Kenya Meteorological Department