



**KENYA METEOROLOGICAL SERVICE
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 15, 2014
21-31 MAY, 2014**

1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE

There was a drastic reduction in rainfall activities both in space and in intensity during this dekad, with dry conditions being reported in Eastern and North-eastern regions. Western region received the highest amount of rainfall countrywide with Kakamega recording 105.7mm. Kitale station in Rift valley region received the second highest rainfall of 59.9mm. In Nyanza region Kisii station recorded 56.1mm. Lamu station recorded the highest amount of rainfall of 48.7mm in coastal region. Meru station received the highest rainfall amount of 15.2mm in Eastern region. In central region the highest rainfall of 14.1mm was recorded at Nyahururu station. In Nairobi region the highest rainfall amount of 9.2mm was recorded at Dagoretti corner station, while Wajir station in North Eastern region reported the highest amount of rainfall of 1.6mm.

Maximum temperatures were on a decreasing trend unlike in the previous dekad where most stations recorded an increase. Mandera station in North Eastern region recorded the highest maximum temperature of 36.4°C compared to 36.5°C recorded at Lodwar station in the same region in the previous dekad. The minimum temperatures continued to decrease in most stations with Nyahururu station in Central region recording the lowest temperature of 7.9°C compared to 7.4°C reported in the same station 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 15; 21-31May 2014

2.1 NYANZA AND WESTERN REGIONS

2.1.1 Kakamega

The station recorded rainfall amount of 105.7mm during the dekad. The mean air temperature and pan evaporation reported were 21.5°C and 4.1mm respectively. Sunshine duration reported was 6.1 hours.

Maize and beans were at flowering and maturity stages respectively and in good state. Normal yield is expected due to sufficient rainfall.

2.1.2 Kisii

The station recorded rainfall amount of 56.1mm. The mean air temperature and Pan Evaporation were 20.3°C and 3.6 mm respectively. There was no record on Sunshine parameter.

Maize and beans were at flowering and maturity stages respectively and in good state. Expected yield for both crops is normal.

2.2 RIFT VALLEY REGION

2.2.1 Kitale

The station recorded rainfall amount of 59.9mm. Mean air temperature and Pan Evaporation recorded were 19.9°C and 3.3mm respectively. There was no report on sunshine duration.

Maize and beans were at emergence and flowering stages respectively. Both crops were in good state and expected yield for beans is normal

2.2.2 Eldoret-Kapsoya

The station received rainfall amount of 25.3mm. The average air temperature and Pan Evaporation reported were 18.7°C and 4.7mm respectively. There was no report on sunshine Parameter.

Maize and beans were at emergence stage but in poor state due to insufficient rain.

2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION

2.3.1 Nyeri

The station received rainfall amount of 6.1mm. The average air temperature was 18.3°C. There was no report on pan evaporation and sunshine parameters.

Maize was in emergence stage and in a fair state though adversely affected by diseases mainly stalk borer. Beans were in flowering stage but in a fair state though adversely affected by other insects. Expected yield is normal.

2.3.2 Kabete

The station recorded rainfall amount of 2.3mm. Mean air temperature and Pan Evaporation were 18.5°C and 3.2mm respectively.

Maize and beans were at emergence stages and in fair state.

2.3.3 Thika

The station recorded rainfall amount of 13.6mm. The mean air temperature and pan evaporation recorded were 20.7°C and 3.2mm respectively. There was no report on sunshine duration.

Maize was at flowering stage while beans at maturity stage but both crops were in poor state due to insufficient rainfall. Potatoes were in maturity and also affected by insufficient rainfall. Expected yield for both crops is below normal.

2.3.4. Nyahururu

The station received rainfall amount of 14.1mm. The mean air temperature and pan evaporation recorded were 15.5°C and 3.7mm respectively. There was no report on sunshine duration.

Maize was at emergence stage and in poor state while potatoes were at flowering stage also in poor state due to insufficient rain during the dekad. Expected yield for potatoes is below normal.

2.3.5. Dagoretti

The station reported rainfall amount of 9.2mm. The average air temperature and pan evaporation were 19.1°C and 3.4mm respectively. Sunshine duration was 5.6hrs.

2.4 EASTERN KENYA REGION

2.4.1 Meru

The station recorded rainfall amount of 15.2mm. The average air temperature and Pan Evaporation recorded were 19.1°C and 4.4mm respectively. Sunshine record was 8.3hrs.

Maize and beans were at emergence and flowering stages respectively and in fair state. Both crops have been affected by insufficient rainfall during the dekad.

2.4.2 Embu

The station reported rainfall amount of 12.2mm. The average air temperature and Pan Evaporation were 14.9mm and 3.5mm respectively. There was no report on Sunshine duration.

Maize and beans were at flowering stages and in a fair state. Expected yield for beans is below normal.

2.4.3 Katamani (Machakos)

The station reported rainfall amount of 2.7mm. The average air temperature reported was 19.3°C. There was no report on pan evaporation and Sunshine duration.

Maize and beans were at flowering and harvesting stages respectively. Both crops are in poor state due to insufficient rainfall. Expected yield for both crops is below normal.

2.5. COASTAL REGION

2.5.1 Msabaha

The station received rainfall amount of 40.3mm. The average air temperature and Pan Evaporation recorded were 26.8°C and 4.0mm respectively. There was no report on sunshine duration.

Maize was in emergence stage and in fair state due to sufficient rain during the dekad. Mangoes were in 100% fruit setting stage and in good state.

2.5.2 Mtwapa

The station received rainfall amount of 48.0mm. The average air temperature and pan evaporation recorded were 26.4°C and 4.7mm respectively. Sunshine duration reported was 6.3 hours.

Maize was at flowering stage and in a fair state though affected by excessive rainfall, birds and diseases mainly maize stalk borer. Mangoes were in maturity stage and in a good state and the expected yield is normal.

3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

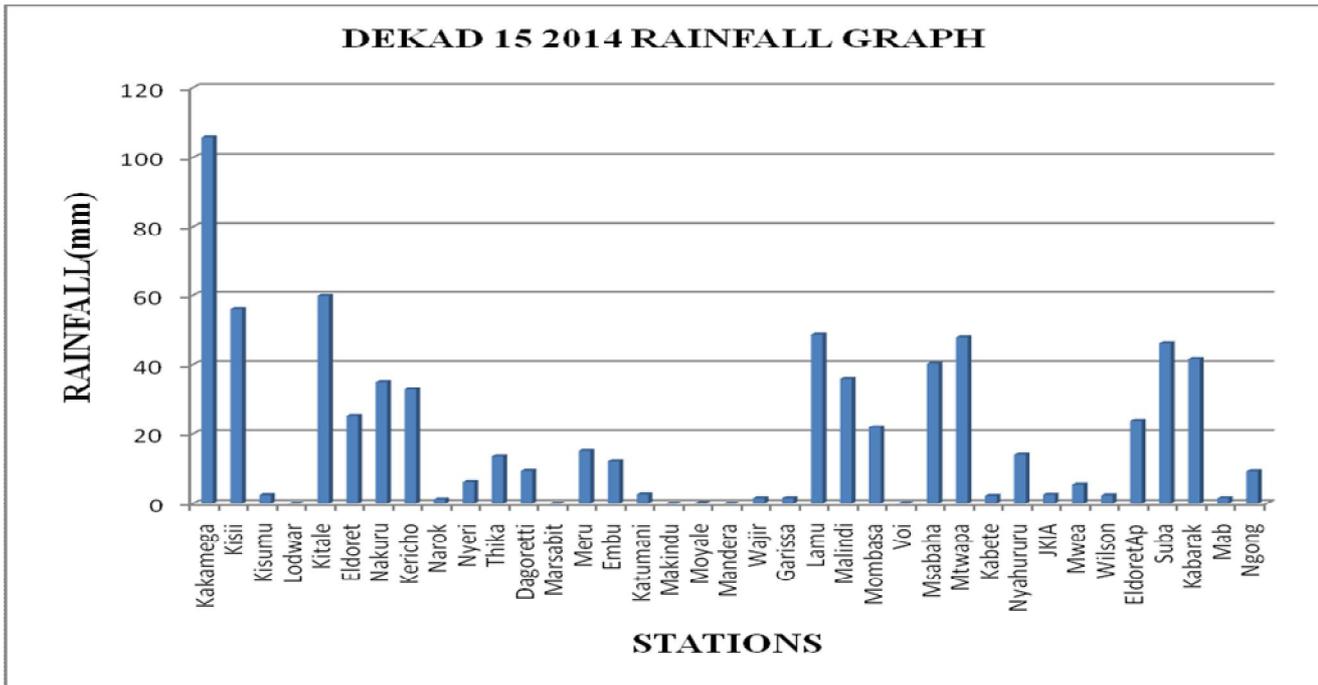


Figure 3.1: Dekadal rainfall totals for 21- 31 May 2014

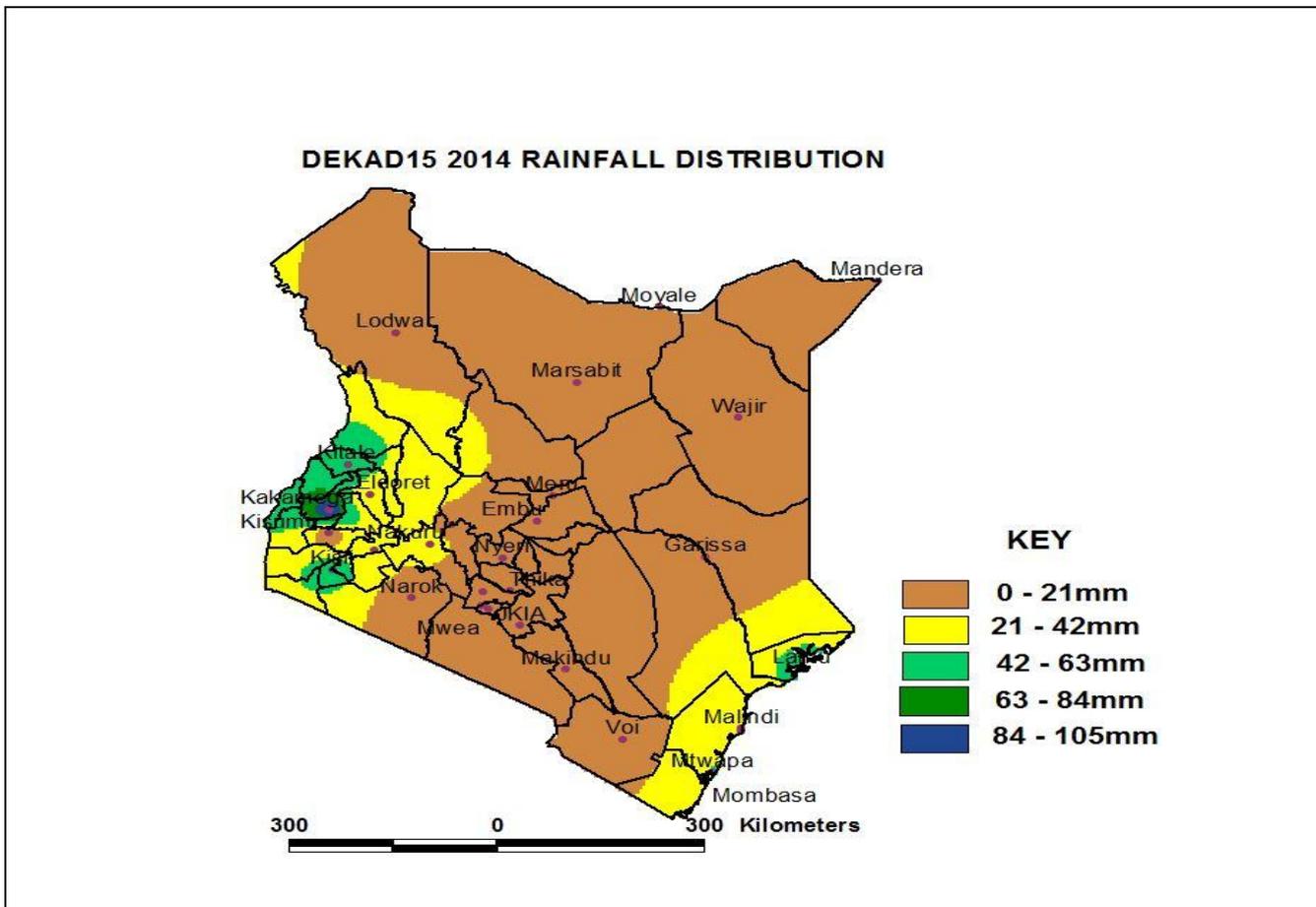


Figure 3.2: Dekadal rainfall distribution for dekad 15, 2014

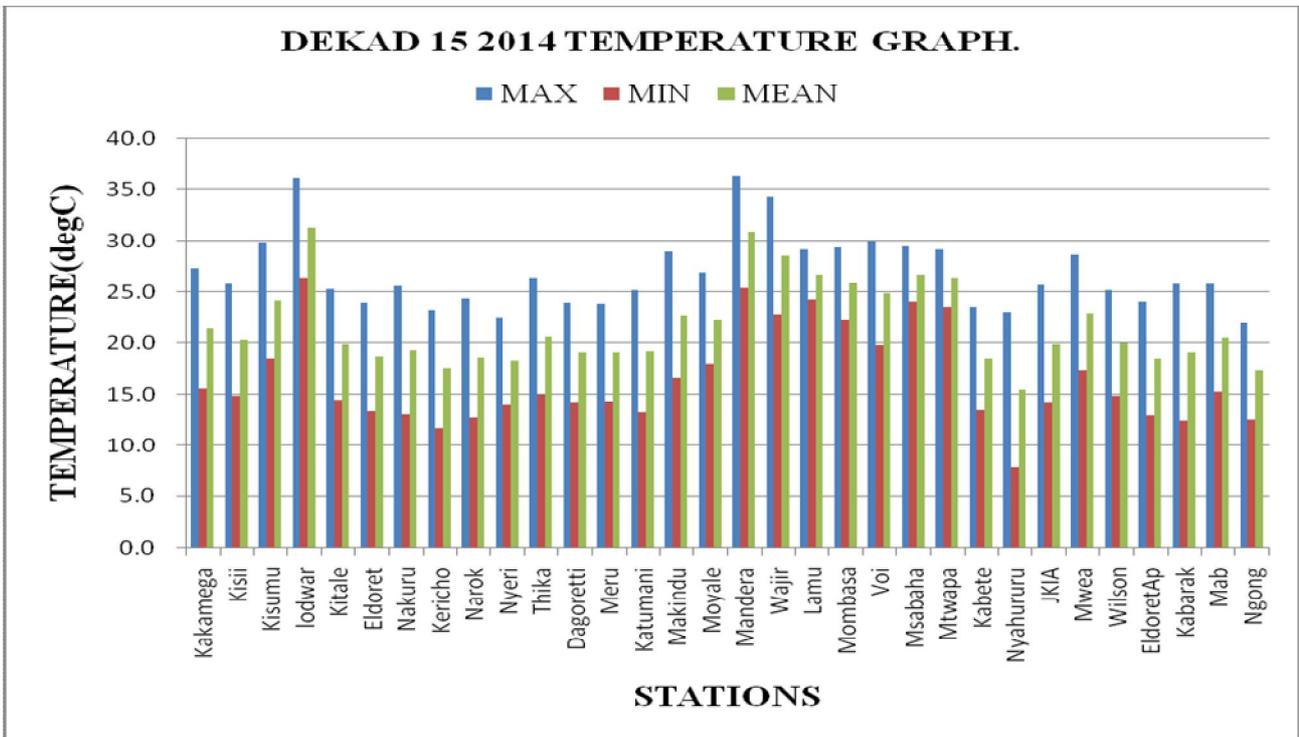


Figure 3.3: Maximum, Minimum and Average temperature in °C for dekad 15, 2014

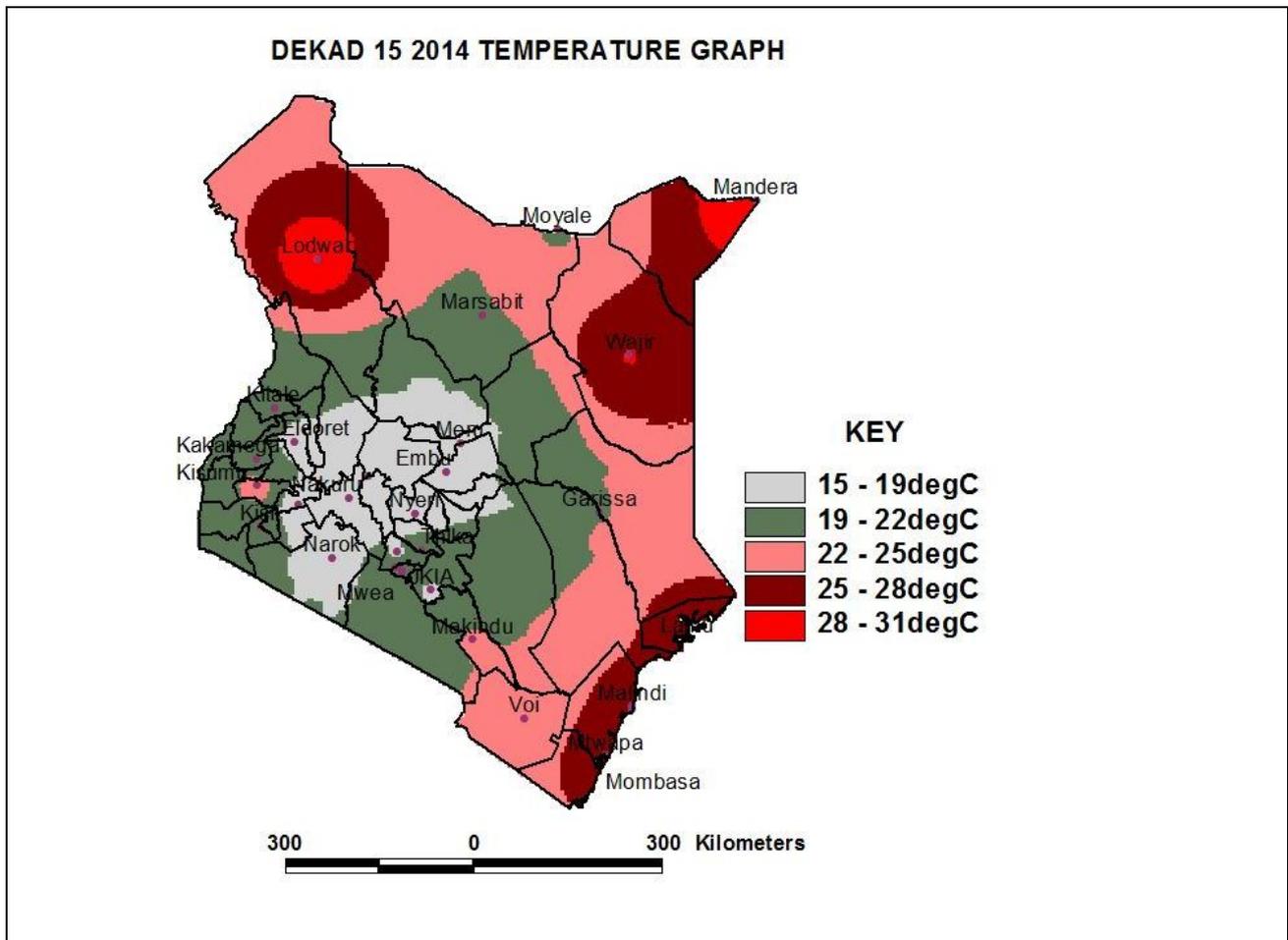


Figure 3.4: Mean temperature distribution for dekad 15, 2014

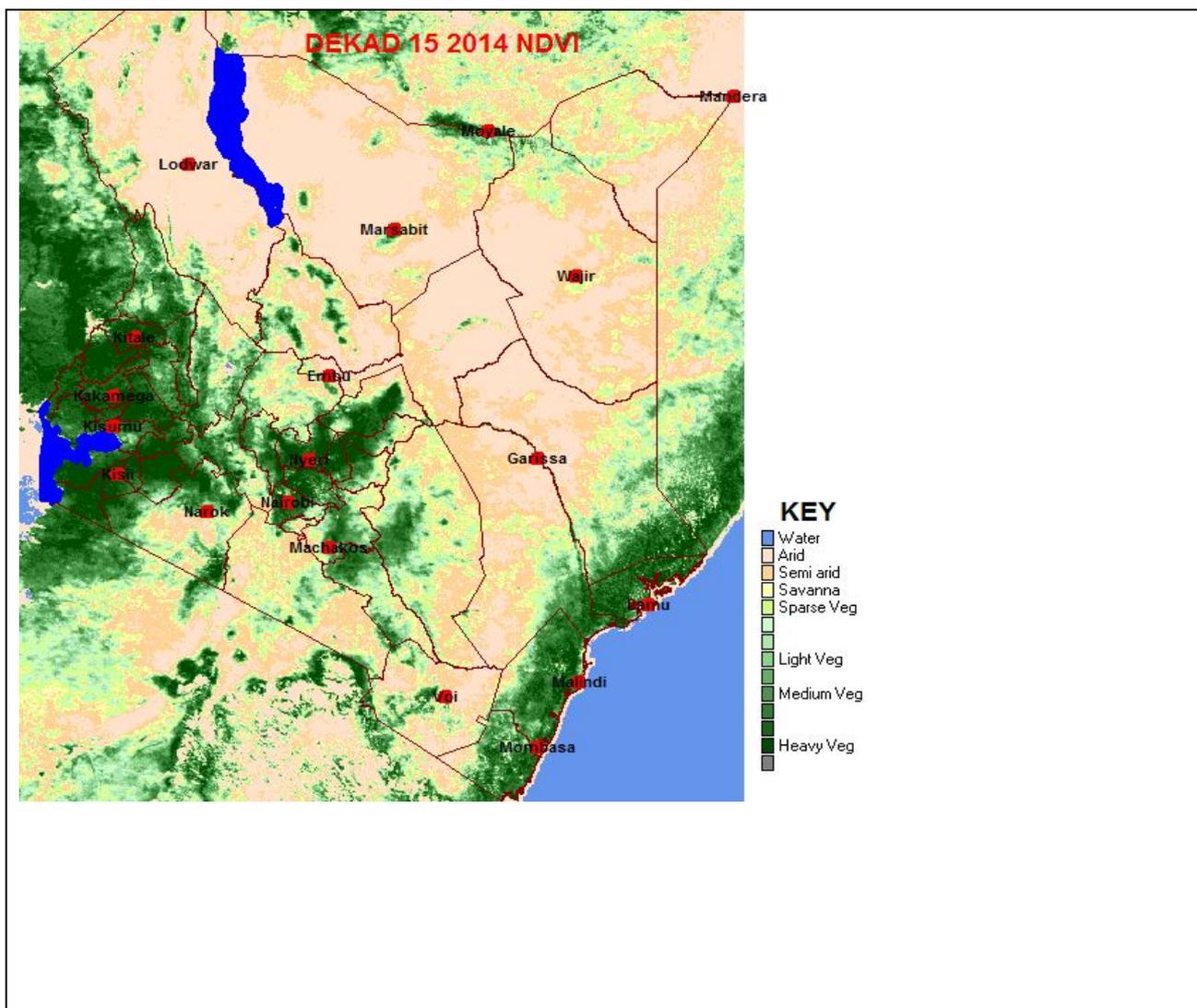


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS; 01-10 June 2014

- ❖ **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 mainly sunny intervals with rains over few places for the first two days breaking into sunny intervals for the next two days followed by rains over few places then sunny intervals thereafter. Afternoon showers and thunderstorms are expected over several places reducing to few places towards the end of the forecast period.

The morning rains and Afternoon showers are of great importance for the growth of the maize and Beans crops in the regions.

- ❖ **The Northwestern counties (Turkana, West Pokot and Samburu),** Are expected to experience sunny intervals throughout the forecast period.

The sunny conditions will have a negative impact on pasture and vegetation in this region.

- ❖ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga),** are expected to experience mainly early morning cloudiness with light rains over few places for the first half of the forecast period breaking into sunny intervals thereafter. Afternoons are expected to experience showers and thunderstorms over several places reducing to few places for the last three days of the forecast period.

The expected showers will continue to benefit the crops and vegetation in this region.

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

The expected sunny conditions will influence the state of pasture and vegetation negatively in this region.

- ❖ **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos and Kitui),** mornings are expected to experience mainly sunny intervals throughout the forecast period, with afternoon showers over few places on 4th and 10th of the forecast period.

The showers are expected to continue replenishing the crops, pasture and vegetation in the region.

- ❖ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** are expected to experience morning showers over few places for the first three days increasing to several for the next two days thereafter reduce to few places for the rest of the forecast period. Afternoons are expected to experience mainly sunny intervals for the first two days and showers over few places for the next two days breaking into sunny intervals for the next three days then showers over few places thereafter.

The showers will continue to benefit the development of the crops 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

©2014 Kenya Meteorological Service