

# AGROMETEOROLOGICAL BULLETIN KENYA METEOROLOGICAL DEPARTMENT

28th Dekad, 1st to 10th October, 2009

Issue No. 28/2009, Season: OND

### **HIGHLIGHTS**

- During the 28th Dekad i.e. 1st 10th October, 2009, moderate to heavy rainfall was received over the Western, Eastern, Nyanza, and parts of Central Rift Valley with Kakamega, Kisii, Kisumu, Kericho, Kitale, Eldoret, and Nakuru recording 52.7, 53.4, 27.7,77.5,77.4, and 13.8mm respectively. The Coastal regions experienced substantial rainfall with Voi, Lamu, Mombasa, Mtwapa, msabaha, and Malindi recording Dekadal rainfall totals of 23.6, 12.7, 12.7, 19.7, 19.2 mm and 12.1 mm respectively. Central Province, experienced light rains with Nyahururu, Nyeri and Thika recording Dekadal rainfall totals of 33.1, 19.9 and 5.9mm respectively. Nairobi area and its environs experienced sunny intervals with occasional showers with Kabete, Dagoretti, Wilson and J.K.I.A recording 36.5, 21.3, 25.1, and 7.0 mm respectively. The rest of the Country experienced mainly dry and sunny conditions during the Dekad (Fig 1&2.)
- Day time temperatures relatively decreased due to increased cloud cover over Western, Central Rift Valley, Central Province, Nairobi area and its environs and the Coastal region with Kakamega, Kisumu, Nakuru, Eldoret, Mwea, Nyeri, Meru, Embu, Thika, Dagoretti, Moyale, Makindu and Mombasa recording a Dekadal Mean day Maximum of 27.3, 29.7, 27.6, 24.2, 30.7, 25.9, 26.3,28.0, 29.8, 26.7, 28.3, 31.3 and 30.3 deg. Celsius respectively. The rest of the country experienced warm conditions with Lodwar, Mandera, Wajir and , Garissa, recording a Dekadal Mean day Maximum of 36.0, 36.9, 34.5 and 35.7 deg. Celsius respectively. (Fig 2&3).
- Night temperatures relatively increased over Western and Central Rift Valley, Central Highlands, Nairobi area and its environs due to increased cloud cover during the Dekad with Nyahururu, Narok, Eldoret Airport,

Nakuru, Nyeri, Embu, Thika, Kabete and Dagoretti recording a Dekadal mean minimum of 9.4, 12.9, 11.8, 13.9, 14.7, 15.8, 15.4, 14.3 and 14.6 deg Celsius respectively. (Figs 1-6).

- The pastoral regions and game parks of Southern Rift Valley, North Eastern, South Eastern Lowlands and the Coastal regions, experienced mainly sunny conditions during the Dekad. Pastures and animal health conditions remained generally poor. Death of livestock and wildlife especially the browsers is on the increase due to inadequate water and pastures (Figs. 1-6).
- Famine and hunger and associated impacts continue to be experienced in many parts of the Country due the prolonged drought.

### **CROP AND WEATHER REVIEW; 1ST TO 10TH OCTOBER 2009**

### **Central Province and Nairobi Area**:

Cool and cloudy mornings with occasional showers over high ground areas were experienced in Central province, Nairobi area and its environs during the Dekad. Farmers are waiting for the onset of the short rains. (Fig 1-4).

### **Eastern Province**:

Cool and cloudy mornings with light rains/ drizzle over high ground areas, was experienced over several places bordering Mt. Kenya (Embu, Runyenjes, Chogoria, Chuka and Meru) during the Dekad. (Fig1-5)

In the Southern Lowlands of the Eastern Province (Machakos, Makueni, Mwingi and Kitui districts), sunny conditions were experienced over most places during the Dekad. (Fig1-6).

### **Coast Province:**

Substantial amount of rainfall was experienced over several places during the Dekad (Lamu, Malindi, Kwale). In Lamu, the maize crop harvesting has been completed and farmers are preparing their farms for the second planting. (Figs.1-4).

### **North Eastern Province**:

Sunny and dry conditions were experienced in the region (Mandera, Moyale, Wajir and Garissa) during the Dekad. Pasture and drinking water for both human and animal (livestock and wildlife) was scarce, while conditions of animals remained generally poor. Death of livestock and wildlife is on the rise as drought conditions continues to bite. (Figs.1, 2, 3, 4,5 &6).

Famine is still being experienced in most places in the region causing high malnutrition levels.

### Western Province:

Moderate to heavy rainfall was experienced over several places of this region (Kakamega, Bungoma, Busia) during the Dekad. Generally most crops (cash and food crops) are doing well and corresponding to normal growth. The maize crop is at flowering stage and is corresponding to normal growth with normal yields being expected. (Figs.1-4).

### Nyanza and Central Rift Valley:

Moderate to heavy rainfall was experienced over most places in this region (Kisumu, Nyamira, Kisii, Eldoret, Kitale, Kericho) during the Dekad. In areas around Kisii, weeding is still in progress while in Kitale farmers continue with the harvesting of maize with a lot of rainfall reported hampering the exercise. In Kisumu weeding is going on and beans have started flowering. (Figs.1-4).

### Northern and Southern Rift Valley:

Northerwestern Rift Valley (Lodwar, Lokitang) experienced generally sunny and dry conditions during the Dekad. This has resulted in inadequate pastures and water sources for livestock, wildlife and human use leading to death of livestock and wildlife. (Figs.1-6).

Famine/hunger and its related impacts is still being experienced and malnutrition levels are still high and on the rise.

The pastoral regions of Southern Rift Valley(Narok, Kajiado, Mara) experienced mainly sunny and dry conditions resulting in inadequate water sources for livestock, wildlife and human use. Pastures remained inadequate resulting in poor animal health (both livestock and game).

Pastolarists have driven their livestock into the National parks/game reserves posing unfair competetation to the only available pastures and water for the wildlife. Death of livestock and wildlife is on the rise as current drought conditions continues to bite. (Figs.1, 2, 3, 4,5 &6).

For the farming community, wheat and maize crops are experienced water stress and have wilted due to lack of rainfall, with poor or no yields being expected.

Famine/hunger and its related impacts is being experienced and malnutrition levels are still high and on the rise.

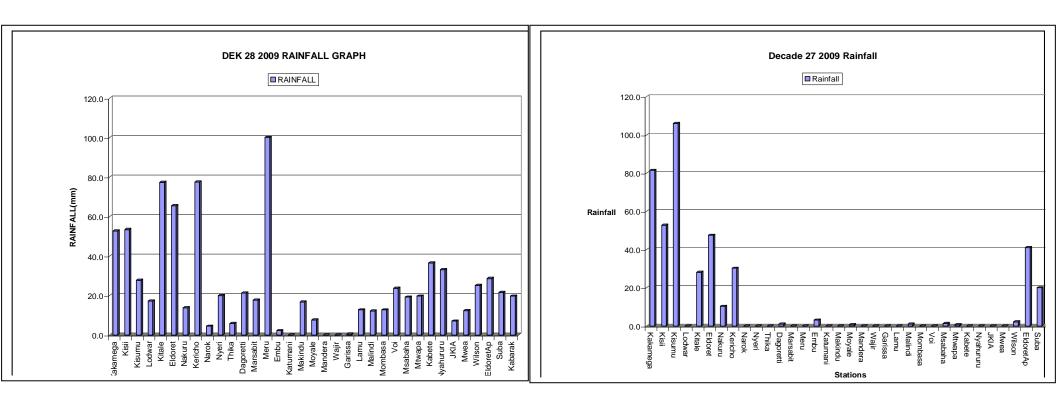
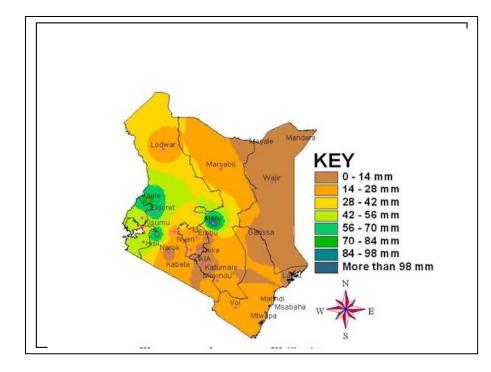
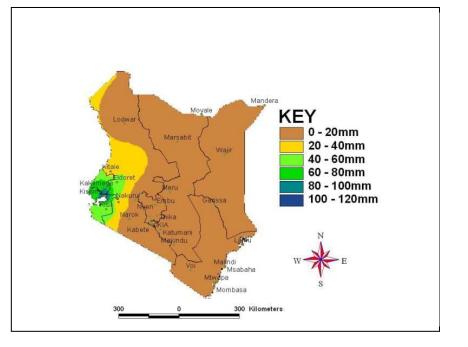
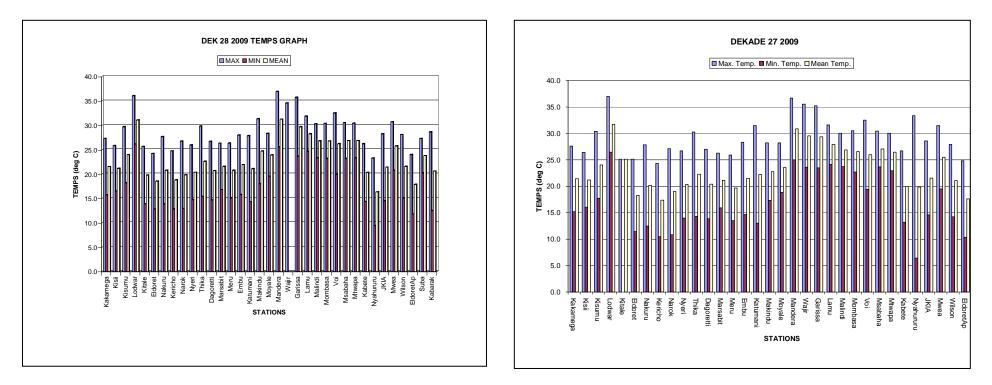


Fig. 1: Actual Rainfall (1st to 10th October, 2009) and (21st to 30th September, 2009) in mm

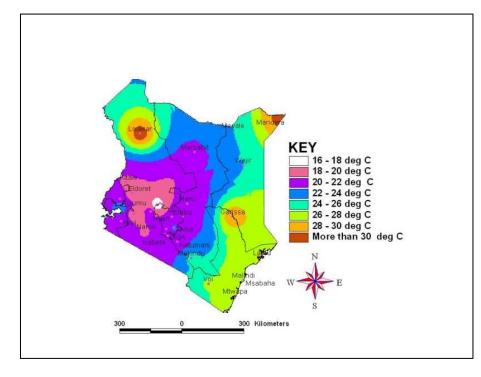


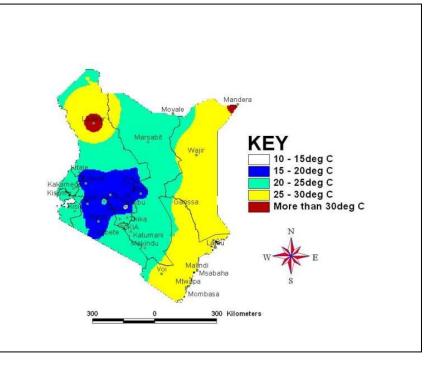


Figs. 2: Dekads 28 and 27, 2009 rainfall distribution.



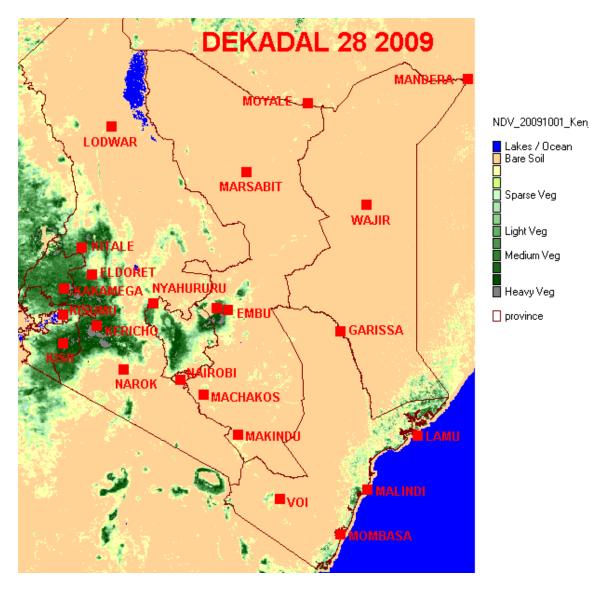
Figs 3: Mean Temperatures (1st to 10th October, 2009) AND (21st to 30th September, 2009) deg. Celsius



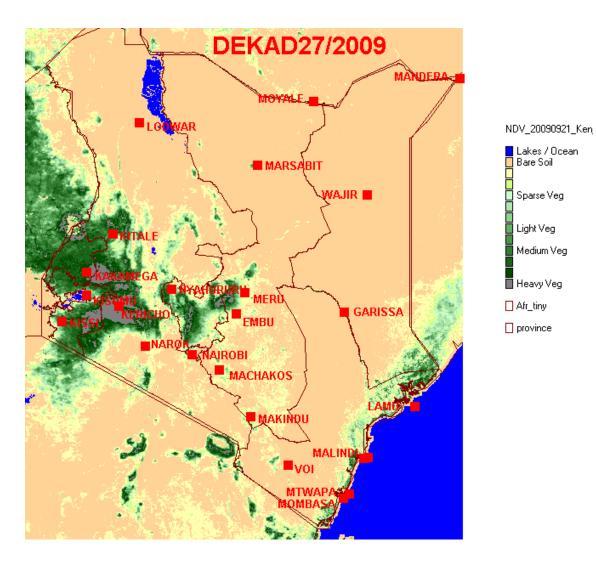


Figs. 4: Dekads 28 and 27, 2009 mean temperatures distribution

### FIG 5: DEKAD 28 Normalized Difference Vegetation Index (1st to 10th October, 2009)



## FIG 6: DEKAD 27 Normalized Difference Vegetation Index (21st to 30th September, 2009)



### EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS (11th –20th October, 2009)

During the next 10 days (1st –10th October, 2009) the Western regions are expected to experience a pickup of rainfall activities. Crops are expected to continue doing well and correspond to normal growth with normal yields being expected.

Nyanza and Central Rift Valley are expected to experience more rains over several places. In areas around Kisumu, weeding is in progress and beans will continue flowering.

Central Highlands, Nairobi area and its environs, are expected to experience a pickup of rainfall during the dekad.

In Eastern Province regions of Embu and Meru districts, bordering Mt Kenya, are expected to experience cool and cloudy mornings with heavy rains over high ground areas.

In South-Eastern lowlands, generally sunny intervals at the beginning of the period giving way to morning rains and afternoon showers over few places occasionary increasing to several places as the period progresses. Previously there was crop failure hence famine/hunger and the related impacts are expected to continue.

The Coastal region will experience morning showers over few places increasing to several places.

In the Northern and Southern Rift Valley, Northeastern, parts Eastern Provinces of Kenya, hot and dry conditions are expected. Famine/hunger and the related impacts are expected to be on the rise due to inadequate rainfall during the last season. Death of livestock is expected to be on the rise due to lack of pastures and water both for human and animal use. Food relief efforts are expected in the region to avert loss of human lives due to hunger.

In the pastoral regions and game parks/reserve of Northwestern, Northeastern, Northern Rift Valley, Southern Rift Valley and Southeastern Lowlands, pickup of rains is expected.

This product should be used in conjunction with Kenya Meteorological Department weather forecasts. For more information, Contact

The Kenya Meteorological Department Agrometeorological 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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