



KMD

# AGROMETEOROLOGICAL BULLETIN

## KENYA METEOROLOGICAL DEPARTMENT

23rd Dekad, 11th to 20th August, 2009

Issue No. 23/2009, Season: JAS

### HIGHLIGHTS

- *During the 23rd Dekad i.e. 11th – 20th August, 2009, light to moderate was received over the Western, Nyanza and parts Central Rift Valley with Kakamega, Kisii, Kisumu, Kericho, Kitale, Eldoret and Nakuru recording 44.5, 109.8, 53.5, 116.6, 65.8, 35.5, and 4.7mm respectively. The Coastal regions experienced insignificant light rainfall with Mombasa, Mtwapa and Malindi recording Dekadal rainfall totals of 2.4, 8.9 and 4.5mm respectively. Central Province, Nairobi area and its environs experienced cloudy mornings with light rains/drizzle over the high ground areas. The rest of the Country experienced mainly dry and sunny conditions during the Dekad (Fig 1&2)*
- *Day time temperatures were relatively high due to reduced 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 27.5, 31.0, 27.6, 22.5, 25.7, 22.1, 22.1 22.3, 25.6, 23.0, 25.9, 27.7 and 28.6 deg. Celsius respectively. The rest of the country experienced warm conditions with Lodwar, Mandera, Wajir and , Garissa, recording a Dekadal Mean day Maximum of 34.8, 34.3, 33.6 and 33.7 deg. Celsius respectively. (Fig 2&3)*
- *Night temperatures were relatively lower over Western and Central Rift Valley, Central Highlands, Nairobi area and its environs due to reduced cloud cover during the Dekad with Nyahururu, Narok, Eldoret Airport, Nakuru, Nyeri, Embu, Thika, Kabete and Dagoretti recording a Dekadal mean minimum of 7.3, 10.5, 10.0, 12.7, 12.5, 13.6, 12.1, 12.4 and 12.1 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's health conditions remains 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 the associated impacts are being experienced in many parts of the Country especially in North Western and Northern Districts, Eastern, Central, Coast, Northeastern, Nyanza and parts of Northern and Southern Rift Valley provinces due the current drought*

## **CROP AND WEATHER REVIEW** (11th to 20th August, 2009)

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

Cool and cloudy mornings with light rains/ drizzle over high ground areas was experienced in Central province, Nairobi area and its environs during the Dekad. The maize crop is at harvesting stage with below normal yields being expected. Harvesting of the bean crop is complete with below normal yields being reported. (Fig1-4).

### **Eastern Province:**

Cool and cloudy mornings with light rains/ drizzle over high ground areas, was experienced over most places bordering Mt. Kenya (Embu, Runyenjes, Chogoria, Chuka and Meru) during the Dekad. The maize crop is at harvesting stage with below normal yields being expected. Harvesting of the bean crop is complete in most areas with below normal yields being reported. In the low lying areas of Embu, Meru, and Mbeere Districts the maize crop has withered due to insufficient rainfall. (Fig1-5)

In the Southern Lowlands of the Eastern Province (Machakos, Makueni, Mwingi and Kitui districts), sunny conditions was experienced over most places during the Dekad. Both maize and beans crops have dried up due in most areas due to lack of rainfall resulting in a total season crop failure. (Fig1-6).

### **Coast Province:**

Insignificant light rainfall was experienced over few places during the Dekad (Lamu, Malindi, Kwale and Voi). At Lamu, the maize crop is at harvesting stages with normal yields being expected. For areas around Mshabaha the maize crop is at the harvesting stage with below normal yields being reported due to previous poor farming practices. (Figs.1-4)

**North Eastern Province:**

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

Famine/hunger is still being experienced in most places in the region and malnutrition levels are expected to be on rise due to the current drought.

**Western Province:**

Light to moderate rainfall were experienced over over few 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. Harvesting of the bean crop is complete with normal yields being reported. (Figs.1-4).

**Nyanza and Central Rift Valley:**

Light to moderate rainfall were experienced over few places in this regions (Kisumu, Nyamira, Kisii, Eldoret, Kitale, Kericho) during the Dekad. In areas around Kisumu maize and sorghum crops harvesting is complete with below normal yields being reported. (Figs.1-4).

In areas around Eldoret Kapsuya and Kitale the maize crop is at the flowering stages and is wilting due to insufficient rainfall. Harvesting of the bean crop is complete with reports of poor yields.

In areas around Kisii maize crop harvesting has started with normal yields being reported. A few farmers have started land preparation in readiness for the next season. (Figs.1-4).

### **Northern and Southern Rift Valley:**

Northern 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 animals` health (both livestock and game).

Pastoralists have driven their livestock into the National parks /game reserves posing unfair competition 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.

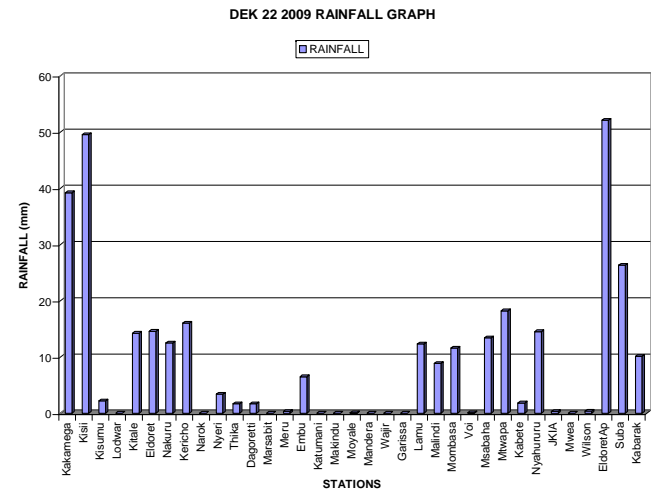
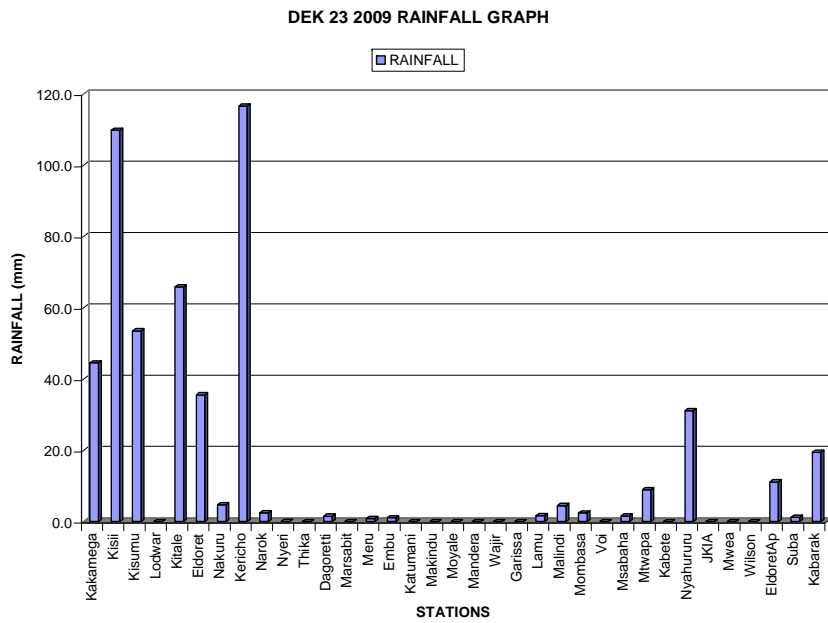
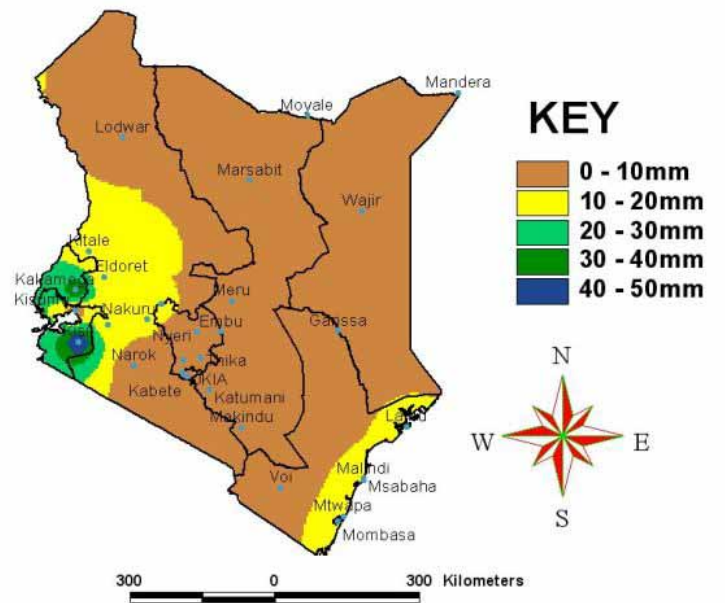
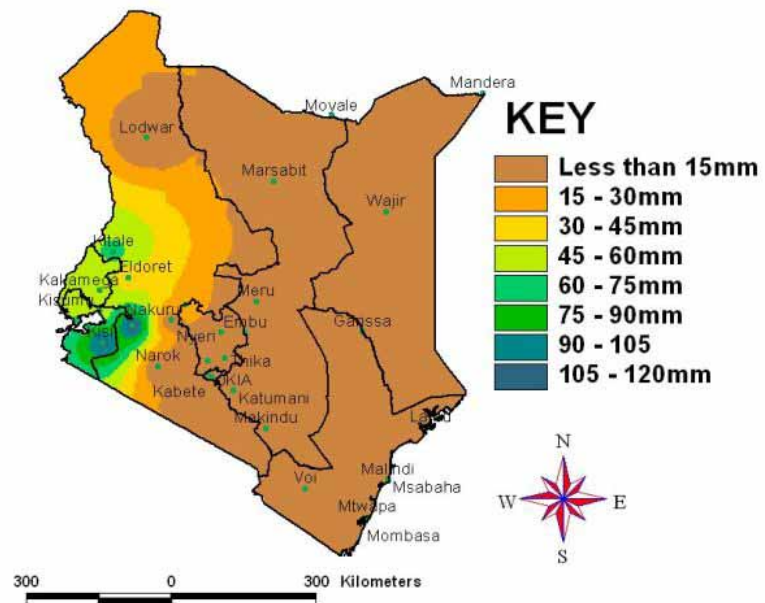
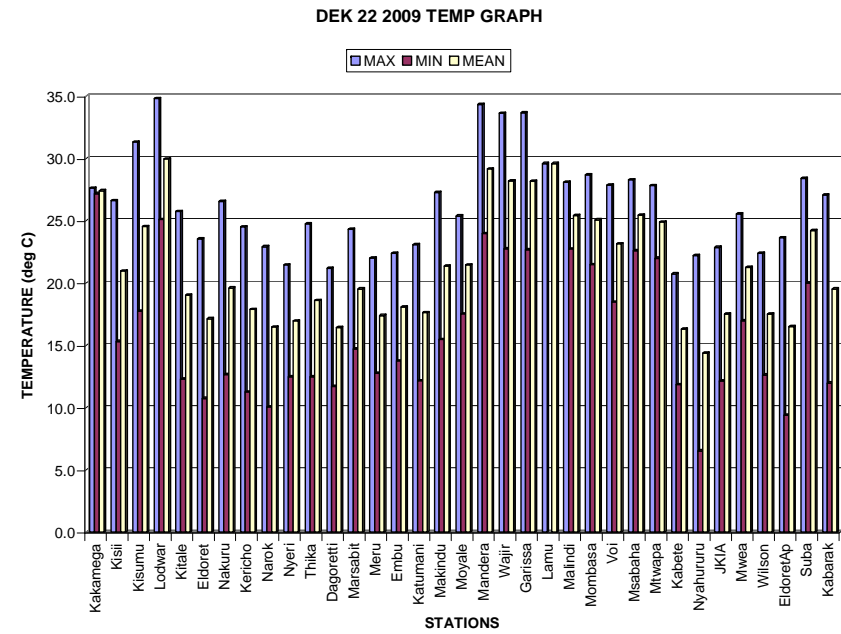
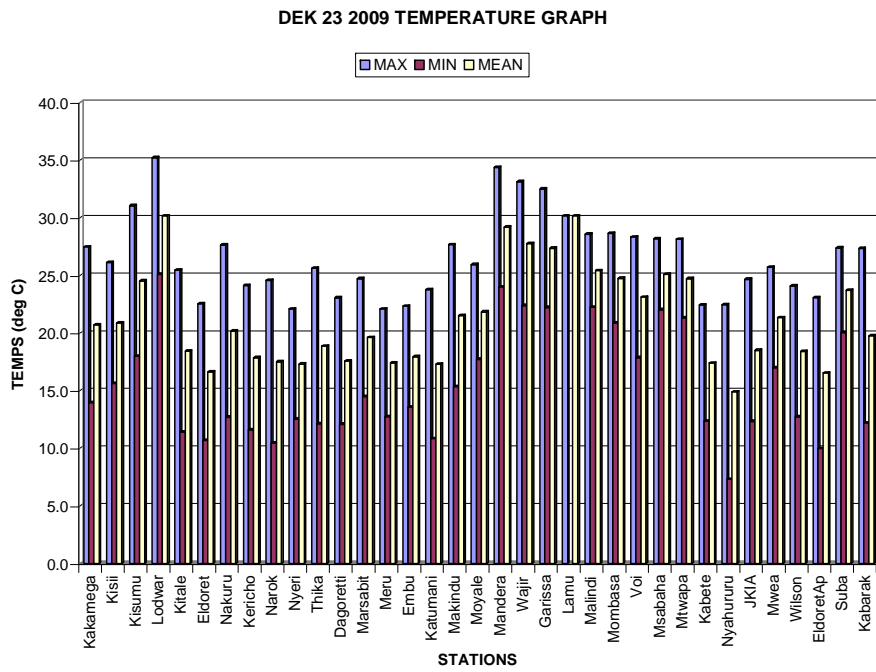


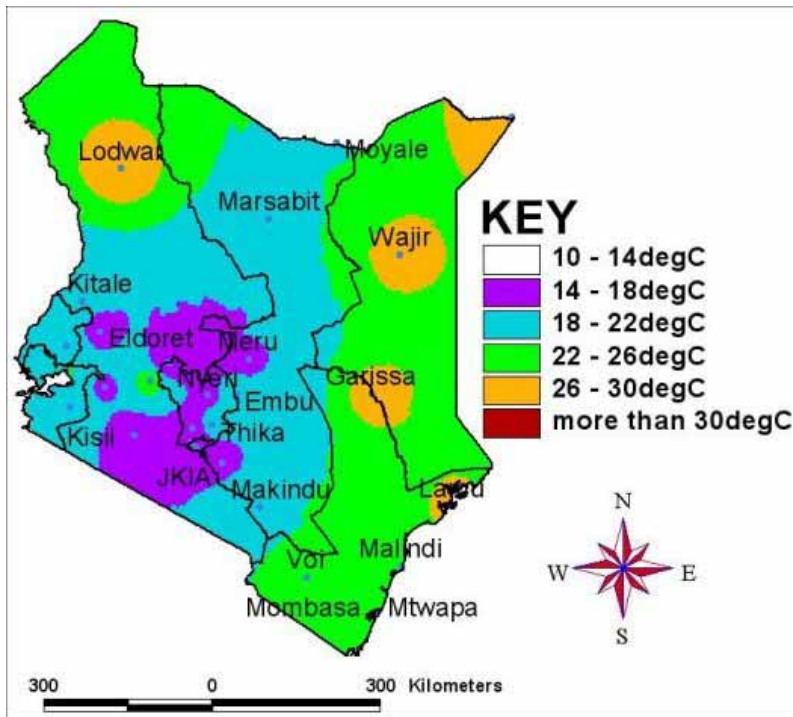
Fig. 1: Actual Rainfall (11th to 20<sup>th</sup> August, 2009) and (1st to 10th August, 2009) in mm



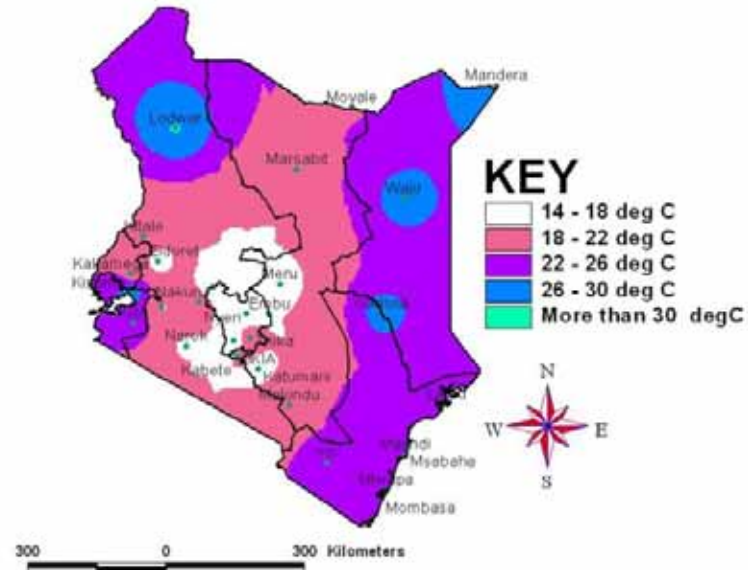
Figs. 2: Dekads 23 and 22 , 2009 rainfall distribution.



Figs 3: Mean Temperatures (11th to 20th July, 2009) AND (1st to 10th August, 2009) deg. Celsius



Dekad 22



Dekad 23

Figs. 4: Dekads 22 and 23, 2009 mean temperatures distribution



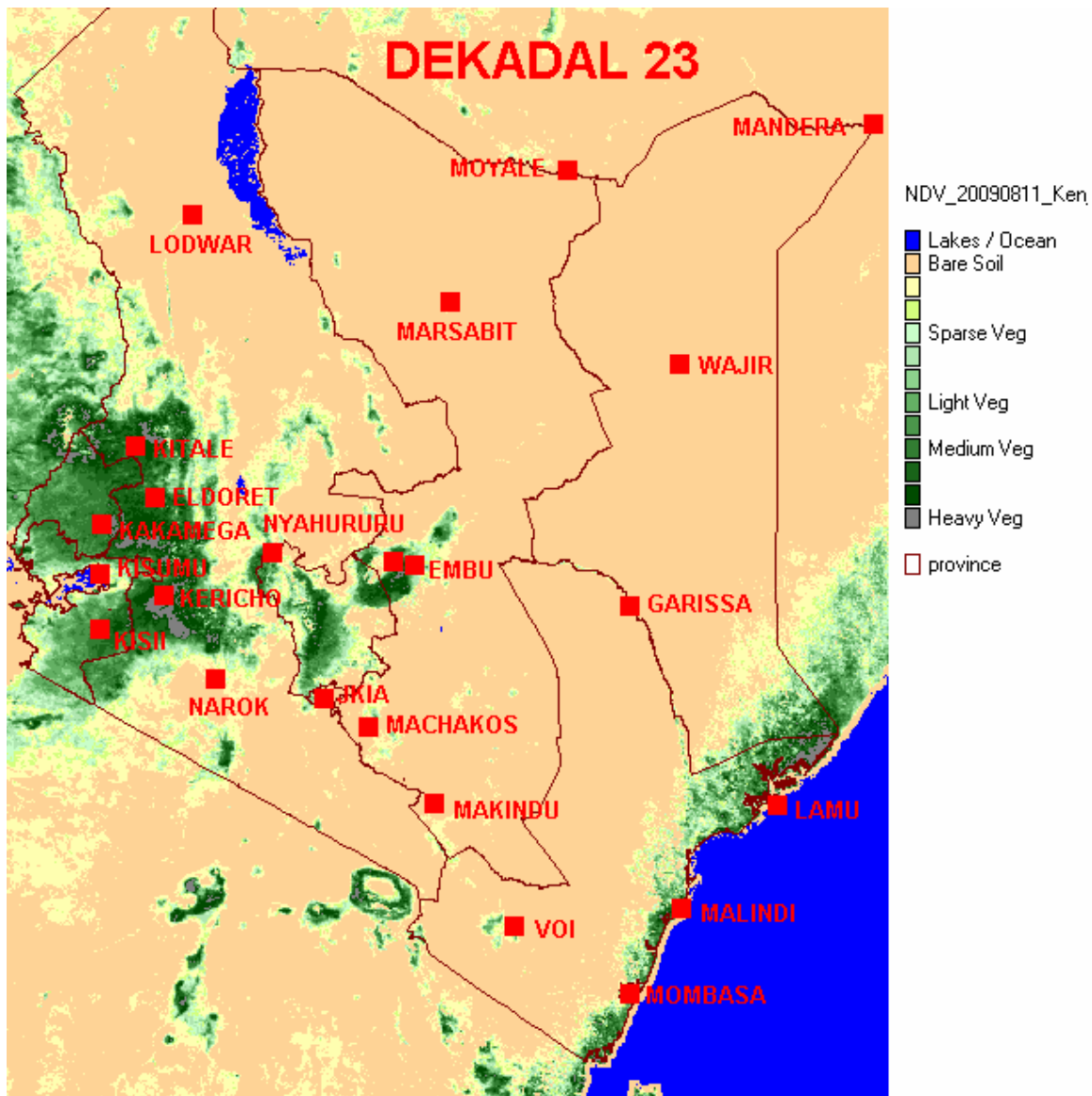


FIG 5: DEKADAL 23 Normalized Difference Vegetation Index (11th to 20th August, 2009)



FIG 6: DEKADAL 22 Normalized Difference Vegetation Index (1st to 10th August, 2009)

## EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS (21st –31st August, 2009)

During the next 10 days (21st –31st August, 2009) the Western regions are expected to experience light to moderate rainfall over few places. 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 light rains over few places, poor crops performance are expected due to reduced rainfall with below normal yields being expected in most areas around Kitale and Eldoret. In areas around Kisumu, harvesting of maize and sorghum is expected to be completed with below normal yields being reported.

Central Highlands, Nairobi area and its environs, are expected to experience light rains over few places, with cold and cloudy mornings with light rains/ drizzle over high ground areas. Harvesting of the maize is expected to continue with poor yields being expected.

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

In South-Eastern lowlands, generally sunny conditions are expected. Most crops have withered with no yields expected. Famine/hunger and the related impacts are expected continue.

The Coastal region is expected to experience light rainfall. Harvesting of the maize is expected to continue with normal yields being expected.

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, sunny and dry conditions are expected to prevail. Lack of pastures and inadequate water sources for human and animal/wildlife use are expected. Poor animals` health both (livestock and game) are expected. Pastoralist may be forced to migration in search of pastures and water for their livestock and this normally results in armed human to human conflicts over these rare recourses.

In summary, poor maize crop performance is expected in most major maize growing areas in the country, due to inadequate rainfall. The pastoral regions and game parks/reserves poor pastures and water sources are expected. Hunger/famine is expected to worsen due to the current drought facing the country.

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

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