



**KENYA METEOROLOGICAL DEPARTMENT  
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 05, 2012  
11 – 20 FEBRUARY 2012**

## **1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

Except for few stations mainly at the coastal region, most of the country reported wetter conditions unlike in the previous dekad, where dry conditions prevailed in most stations. Though the rainfall intensity was low, the spatial distribution was good. This came as a relief from the prolonged dry spell. The highest rainfall amount observed during the dekad was 28.7mm at Kisii in Nyanza region. The same station had recorded 0.01mm during the previous dekad. The second highest rainfall was 20.9mm at Kabarak in Rift Valley region.

In the Eastern region of the country, Meru reported 12.9 mm while Moyale in North Eastern received 10.0mm. Wilson and Kabete meteorological stations both in the Nairobi area received 7.0mm each while in the Western region, Kakamega meteorological station, recorded 2.6 mm of rainfall.

Daytime (maximum) temperature increased in most stations with only a few stations reporting a decrease. The highest daytime temperature during the dekad was 30.9<sup>o</sup>c recorded at Garissa in the North-eastern region, while the lowest was 23.3<sup>o</sup>c recorded at Nyahururu in Central Kenya. There was an increase in night-time (minimum) temperature over most stations except for few stations at the coastal region which reported a decrease.

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 05; 11 – 20 FEBRUARY 2012**

### **2.1 NYANZA AND WESTERN REGIONS**

#### **2.1.1 Kakamega**

This station reported dry conditions just like in the previous dekad. The mean air temperature and total pan evaporation recorded were 21.9<sup>o</sup>c and 61.4 mm respectively, and sunshine hours recorded were 9.7 hours per day. *Farmers at Kakamega and the surrounding areas are busy preparing their land in readiness for the expected long rains season.*

#### **2.1.2 Kisii**

The station reported the highest amount of rainfall countrywide of 28.7 mm as compared to 0.01 mm of rainfall reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 22.8<sup>o</sup>C and 52.7mm respectively. Sunshine hours reported were 8.6 hours per day. *Farmers are preparing their land for the next growing season.*

## 2.2 RIFT VALLEY REGION

### 2.2.1 Kitale

The station received 0.01 mm of rainfall as compared to dry conditions reported in the previous dekad. The average air temperature and total pan evaporation recorded were 21.0°C and 51.5 mm respectively. Average sunshine hours reported were 9.4 hours per day. *Land preparation for the next long season is underway.*

### 2.2.2 Eldoret-Kapsoya

The station received 0.01 mm of rainfall compared to dry conditions reported in the previous dekad. The average air temperature and total pan evaporation recorded were 19.0°C and 84.5mm respectively. The sunshine hours recorded were 10.3 hours per day. *Land preparation for the next long season is underway.*

## 2.3 CENTRAL AND NAIROBI REGIONS

### 2.3.1 Nyeri

The station received 4.9 mm of rainfall compared to dry conditions reported in the previous dekad. The average air temperature and total pan evaporation recorded were 18.3°C and 41.9 mm respectively. There was no report on Sunshine hours.

*Maize crop was at flowering stage but in poor state due to insufficient rain. Below normal yield is expected.*

### 2.3.2 Kabete

The station received 7.0 mm of rainfall as compared to the dry conditions reported in the previous dekad. The average air temperature recorded was 20.0°C, and the sunshine hours reported were 10.3 hours. There was no report on evaporation pan.

*Maize crop is being harvested, but in poor state due to prolonged dry spell hence below normal yield is expected.*

### 2.3.3 Thika

The station received 5.1 mm of rainfall as compared to dry conditions reported in the previous dekad. The total mean air temperature and pan evaporation recorded at the station were 21.1°C and 59.7 mm respectively. The sunshine hours recorded were 9.3 hours per day.

*Land preparation for the next long season is underway.*

### 2.3.4. Nyahururu

The station received 2.2 mm of rainfall as compared dry conditions reported in the previous dekad. The mean air temperature and total pan evaporation recorded were 15.5°C and 62.6 mm respectively. Average Sunshine hours recorded were 9.8 hours per day.

*Farmers are preparing the land for the next season.*

### 2.3.5. Dagoretti

The station received 0.4 mm of rainfall as compared to dry conditions reported in the previous dekad. The average air temperature pan evaporation recorded were 20.6°C and 85.0 mm. The sunshine hours reported were 10.2 hours per day.

*Land preparation for the next season is going on.*

## 2.4 EASTERN REGION

### 2.4.1 Meru

The station received 12.9 mm of rainfall as compared to dry conditions reported in the previous dekad. The average air temperature recorded was 19.5<sup>0</sup>c. There was no report on pan evaporation and sunshine hours.

*Maize was at harvesting stage and in poor condition due to insufficient rainfall. Expected yield is below normal.*

### 2.4.2 Embu

The station received 1.7 mm of rainfall as compared to dry conditions reported in the previous dekad. The average air temperature recorded was 21.6<sup>0</sup>c. There was no report on Sunshine hours and evaporation pan.

*Maize was at harvesting stage and in poor state due to current drought. Expected yield is below normal.*

### 2.4.3 Katumani (Machakos)

The station received 4.6 mm of rainfall as compared to dry conditions reported in the previous dekad. The average air temperature recorded was 22.2<sup>0</sup>c. There was no report on evaporation and sunshine parameters.

*Maize was at harvesting stage and in fair state. The maize crop was affected by insufficient rainfall, but normal yield is still expected*

## 2.5.0 COASTAL REGION

### 2.5.1. Msabaha

The station received 0.06 mm of rainfall as compared to 0.04 mm of rainfall received in the previous dekad. The average air temperature and pan evaporation recorded were 28.0<sup>0</sup>c and 57.0mm respectively. There was no sunshine report.

*Land preparation for the next season is going on.*

### 2.5.2 Mtwapa

This station received 0.2mm of rainfall as compared to dry conditions in the previous dekad. The average air temperature recorded was 27.4<sup>0</sup>c. There was no evaporation and sunshine reports.

*Maize was at harvesting stage and in fair state. Below normal yield is expected because stalk borer, excessive weeds and insufficient rain have adversely affected the crop. Watermelon was at 100% consumer ripeness stage and in bad state due to prolonged dry spell.*

### 3.0 ANALYSIS OF RAINFALL, TEMPERATURE AND VEGETATION CONDITIONS

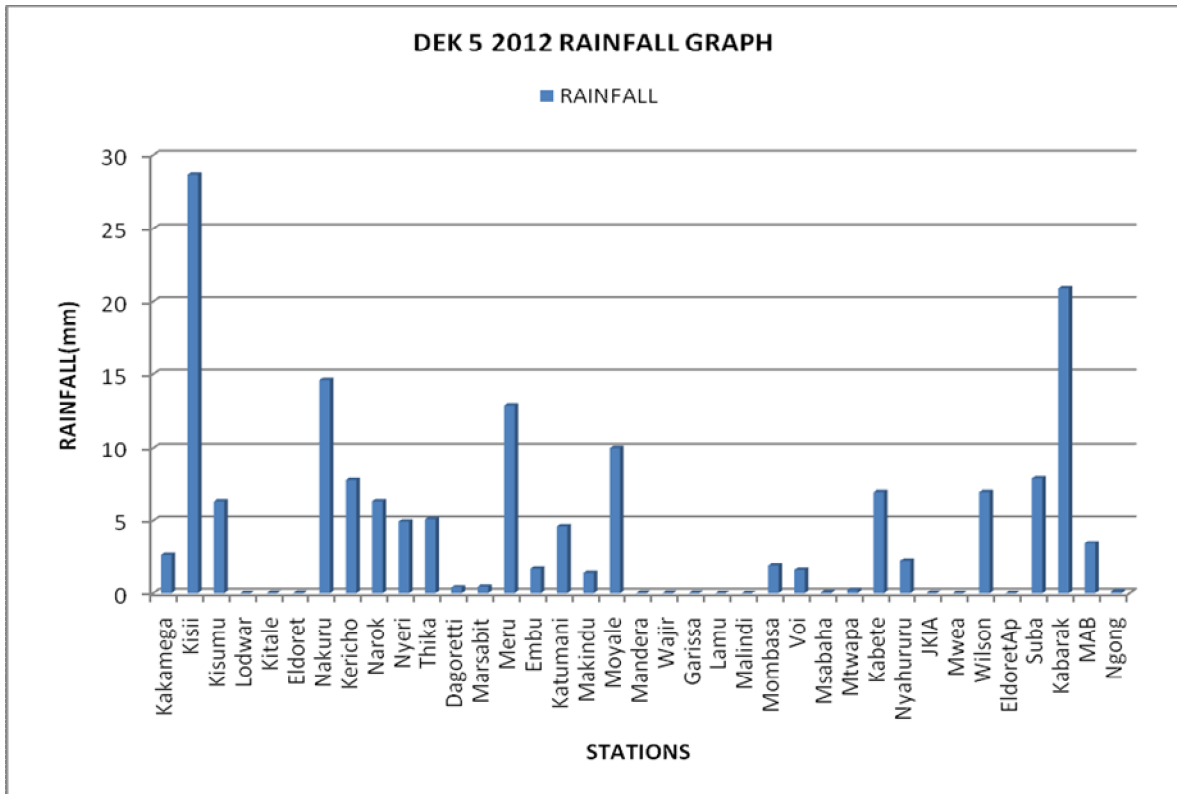


Figure 3.1: Dekadal Rainfall totals for 11 - 20 February 2012

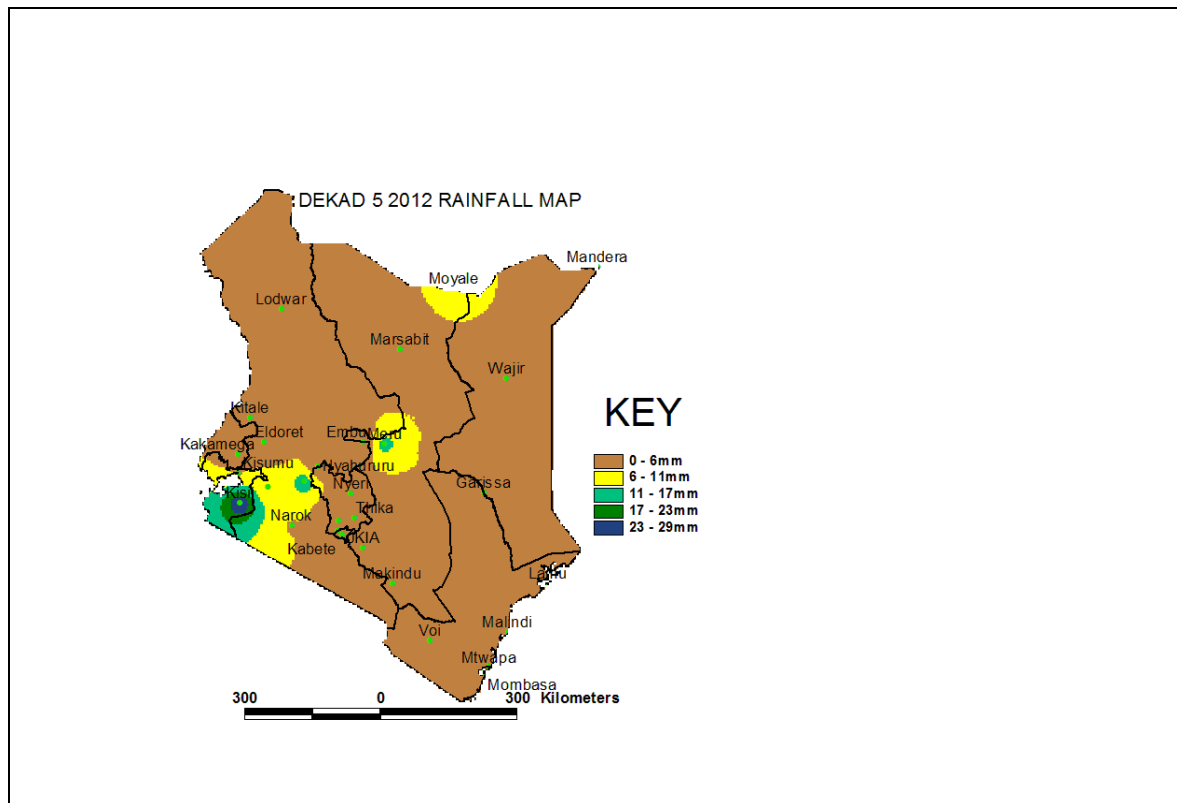


Figure 3.2: Dekadal Rainfall distribution

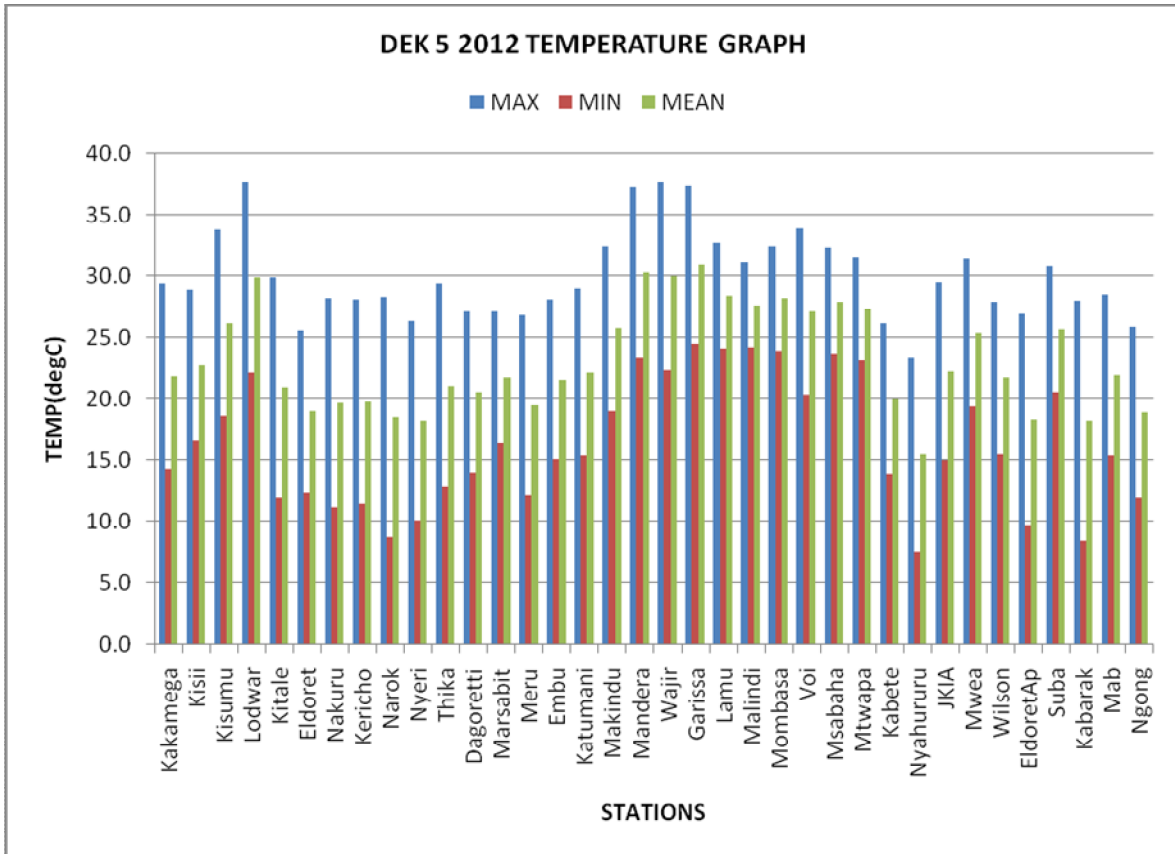


Figure 3.3: Maximum, Minimum and Average temperature in  $^{\circ}\text{C}$

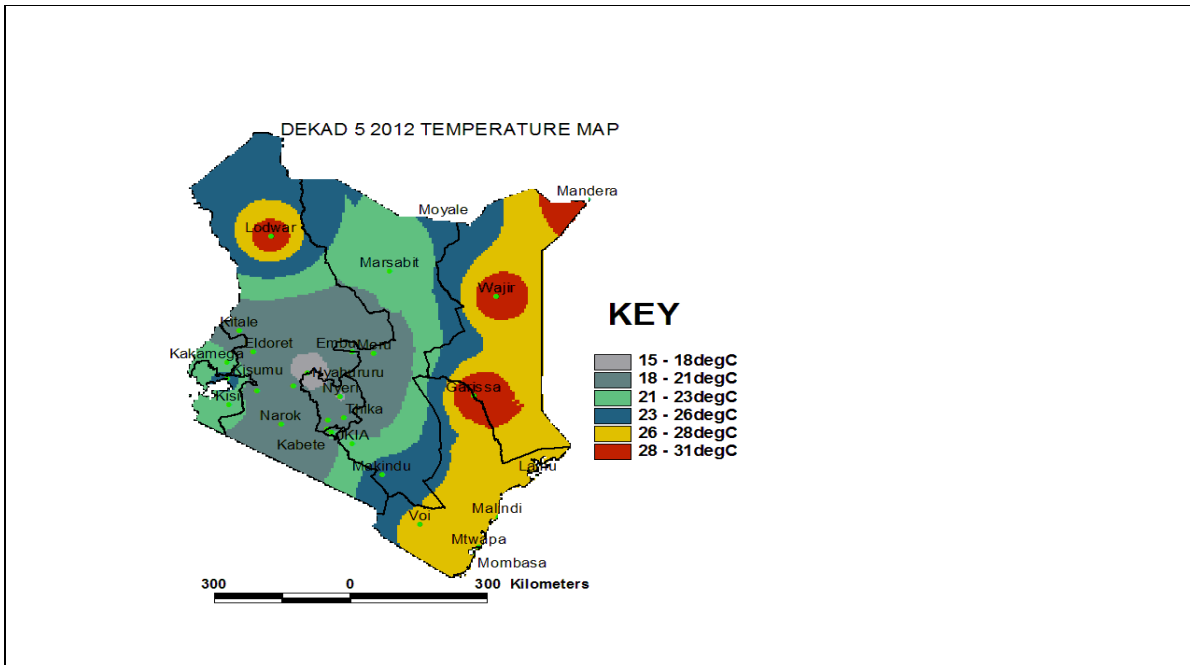


Figure 3.4: Mean Temperature distribution

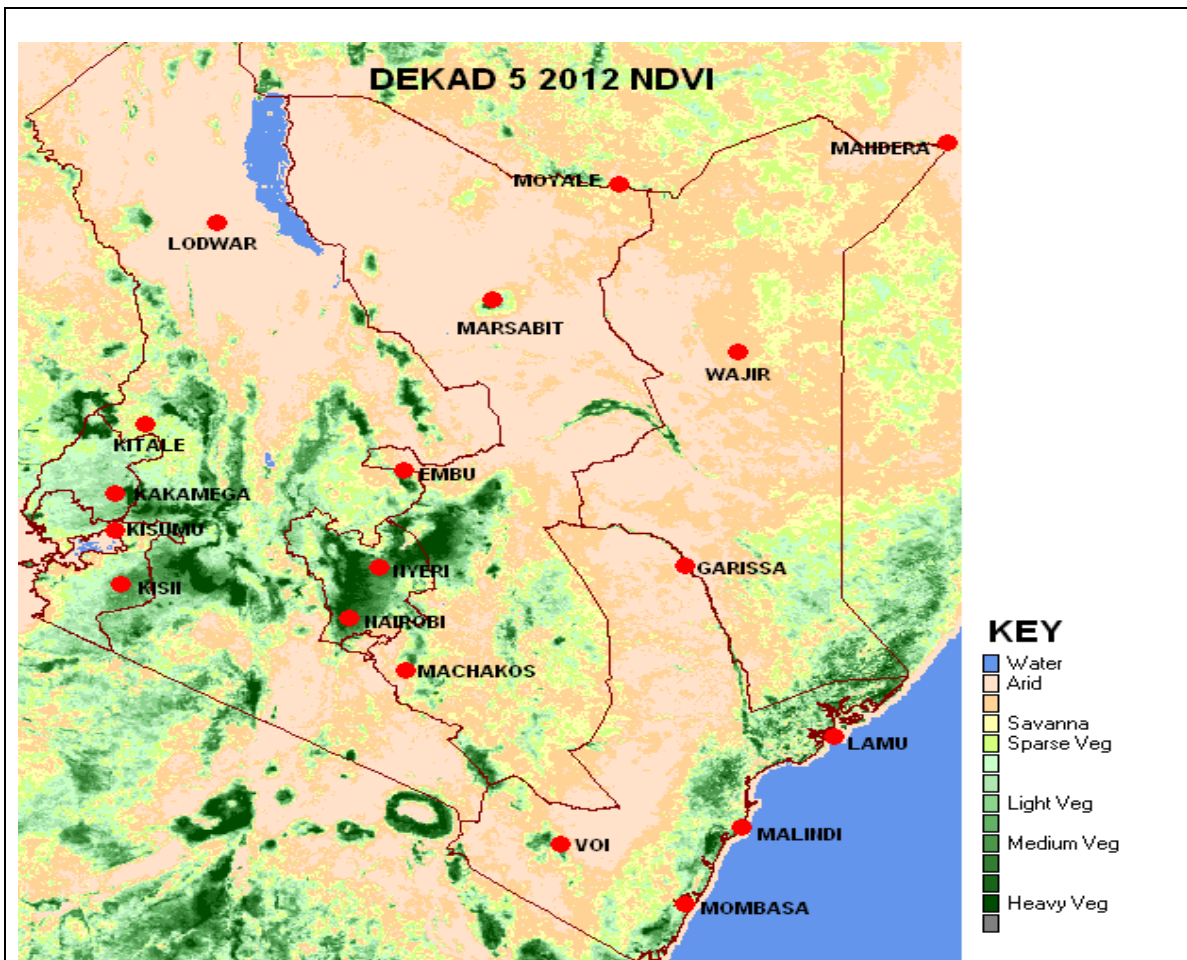


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 9 DAYS; 21-29 FEBRUARY 2012

- **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 over most places. Showers and thunderstorms will be experienced over a few places in the second half of the forecast period.

*The sunny intervals will favour the harvesting and land preparation activities going on in preparation for the long rains season while the light showers are expected to benefit the cassava crop in places like kakamega and to replenish pasture in various places.*

- **The Northwestern counties (Turkana, West Pokot etc),** will experience mainly sunny periods throughout the forecast period. Light showers are likely to occur over a few places in the second half of the forecast period.

*The light showers will slightly improve the pasture which had been greatly stressed by the ongoing dry spell in these regions.*

- 🇰🇪 **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, etc)** Will experience sunny intervals in the first two days of the forecast period, cloudy morning conditions and afternoon/night showers and thunderstorms over few places in the second half of the forecast period.

*The showers will be beneficial to the Maize crop which has been adversely affected due to the prolonged dry spell in the area.*

- 🇰🇪 **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa, Moyale etc),** Sunny conditions to prevail over most places for much of the forecast period. Light showers are expected over areas bordering Ethiopia in second half of the forecast period particularly over Marsabit and Moyale areas.

*The showers will continue to replenish the pasture which has been adversely affected due to prolonged dry spell in turn negatively affecting the animals kept in these regions.*

- 🇰🇪 **Southeastern lowlands (counties of Taita Taveta, Makueni, Machakos, Kitui, Mwingi, etc)** Sunny conditions to prevail over most places for much of the forecast period. Morning rains and afternoon showers are expected over a few places in the half of the forecast period.

*The rain conditions will continue to boost the crops which were in otherwise very poor state due to the dry spell being experienced countrywide.*

- 🇰🇪 **The Coastal strip (counties Mombasa, Malindi, Kilifi, Lamu, Kwale, etc)** Sunny conditions to prevail during the forecast period over most places. Light morning showers are expected in the south coast in the second half of the forecast period.

*The showers will be beneficial to the mango trees in these areas.*

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

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