



**KENYA METEOROLOGICAL DEPARTMENT  
DEKADAL AGROMETEOROLOGICAL BULLETIN**

**WEATHER AND CROP REVIEW FOR DEKAD 16, 2013  
01-10 JUNE 2013**

**1. HIGHLIGHTS ON RAINFALL AND TEMPERATURE**

Rainfall activities in the Country have significantly decreased as compared to the previous dekad. Kisumu station in Nyanza region recorded highest amount of rainfall of 54.3 mm compared to 151.8 mm that was recorded in Msabaha station in the Coastal region in the previous dekad. In Western region Kakamega station recorded 17.1mm, a decrease compared to 40.8mm received the previous dekad. Mtwapa station in the Coastal region recorded the highest rainfall of 33.3mm. Eldoret airport station in the Rift-valley region recorded the highest rainfall of 51.2mm, a slight decrease from 56.5 mm that was received in Kericho station in the last dekad. In Central region the highest rainfall of 18 mm was recorded at Nyahururu station while in North Eastern region the highest rainfall of 1.42mm was reported at Wajir station. Embu station in Eastern region again reported the highest rainfall of 2.6mm which is a decline compared to 8.6mm that was recorded at the same station in the last dekad. Nairobi region received no rainfall in the dekad.

Maximum Temperatures reduced considerably as contrasted to the previous dekad while the Minimum Temperatures decreased in most parts of the country. In the dekad, Lodwar station reported the highest maximum temperature of 34.3°C compared to 35.9°C reported in the previous Dekad at Mandera station. Nyahururu station in Central region still reported the lowest temperature of 7.3°C compared to 5.5°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 16; 01-10 JUNE 2013**

**2.1 NYANZA AND WESTERN REGIONS**

**2.1.1 Kakamega**

This station received rainfall amount of 17.1mm. The mean air temperature and pan evaporation reported were 20.5°C and 35.1 mm respectively. There was no report on sunshine hours.

*Maize crop has reached flowering stage and in a good state while beans were at harvest stage and in a fair state as normal yield is expected for maize.*

**2.1.2 Kisii**

This station recorded rainfall amount of 9.51mm. The mean air temperature and total pan evaporation recorded were 20.1°C and 36mm respectively. There was no report on sunshine duration.

*Both maize and beans were in flowering stage and in a fair state.*

## **2.2 RIFT VALLEY REGION**

### **2.2.1 Kitale**

The station received rainfall amount of 11.2mm. The average air temperature and pan evaporation were 19.3°C and 33.2mm respectively. There was no report on the sunshine parameter.

*Maize crop is in the ninth leaf stage while most beans have flowered. Both crops are in a good state.*

### **2.2.2 Eldoret-Kapsoya**

The station received rainfall amount of 36.4mm. The average air temperature and pan evaporation reported were 16.9 °C and 50.9mm respectively. There was no report on sunshine parameter.

*Maize is at the ninth leaf stage while beans are in the flowering stage and in a poor state. Below normal yield is expected for beans as they had been adversely affected by insufficient rainfall.*

## **2.3 CENTRAL KENYA HIGHLANDS AND NAIROBI AREA REGION**

### **2.3.1 Nyeri**

The station received rainfall amount of 0.03mm. The average air temperature was 17.4°C. There was no report on pan evaporation and sunshine parameters.

*Maize and beans were at emergence and flowering stages and in fair state. The maize crop is being affected by the maize stalker borer and beans by some other insects.*

### **2.3.2 Kabete**

The station received rainfall amount of 0.01mm. The average air temperature and pan evaporation recorded were 16.9°C and 33.3mm respectively. There was no report on sunshine hours.

*Maize was at emergence stage and in a fair state. Beans were at flowering stage and in a poor state with below normal yield being expected. Coffee was at 100% berry soft stage and in a moderate state but damaged by leaf rust and leaf minor at less than 10% each. Bananas were at 100% appearance of sucker stage and in a moderate state but had been damaged by thrips, cigar end rot and cigar Toka at less than 10% each.*

### **2.3.3 Thika**

The station received 0.01rainfall. The mean air temperature recorded was 19.6°C. There was no report on sunshine hours and pan evaporation.

*Maize was at flowering stage while beans and potatoes were both at maturity stage but all the three crops were in poor state as they had been adversely affected by insufficient rainfall. Below normal yield is expected for all the three crops.*

### **2.3.4. Nyahururu**

The station received 18.0mm of rainfall. The mean air temperature and pan evaporation recorded were 14.5°C and 31.8mm respectively. There was no report on sunshine hours.

*Maize was at emergence stage while bean and potatoes were at flowering stages but all in good state. Normal yield is expected for beans and potatoes.*

### **2.3.5 Dagoretti**

The station received rainfall amount of 0.0mm. The mean air temperature and evaporation pan recorded were 17.6°C 35mm respectively. There was no report on sunshine hours.

## **2.4 EASTERN KENYA REGION**

### **2.4.1 Meru**

The station reported 1.3mm of rainfall. The average air temperature and pan evaporation were 16.3°C and 32.3mm respectively. There was no report on sunshine parameter.

*Maize crop had attained ninth leaf while the beans were at maturity stage but both in poor state and adversely affected by insufficient rainfall. Below normal yield is expected for both crops.*

### **2.4.2 Embu**

The station recorded rainfall and pan evaporation amounts of 2.6mm and 30.6mm respectively. There was no report on sunshine and temperature parameters.

*Maize was at flowering stage while beans were at maturity stage and in fair state though both crops were suffering from moisture stress.*

### **2.4.3 Katumani (Machakos)**

The station recorded no rainfall. The average air temperature was 16.3°C. There was no report on pan evaporation and sunshine parameters.

*Maize and beans are in the flowering and maturity stages respectively but in poor condition due to the insufficient rains.*

## **2.5 COASTAL REGION**

### **2.5.1 Msabaha**

The station received rainfall amount of 13.5mm. The average air temperature and pan evaporation recorded was 26.2°C and 37mm respectively. There was no report on sunshine hours.

*Maize was at emergence stage and in fair condition Mangoes were at 100% fruit setting stage and in good state.*

### **2.5.2 Mtwapa**

The station received rainfall amount of 33.3mm. The average air temperature and pan evaporation recorded were 25.5°C and 31.8mm respectively. There was no report on sunshine hours.

*Maize was at flowering stage and in good condition even though they are being affected by excessive rainfall, stalk borer and destroyed by wild animals.*

*Mangoes were at harvesting stage and in a good condition.*

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

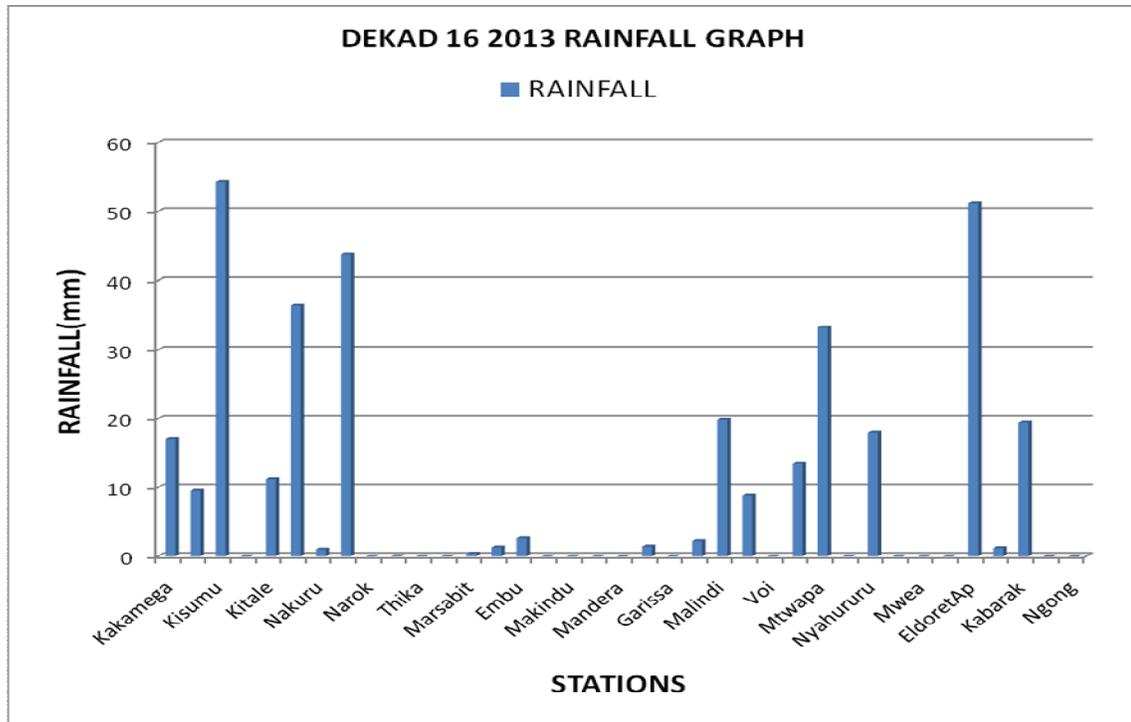


Figure 3.1: Dekadal rainfall totals for 1<sup>st</sup> to 10 June 2013

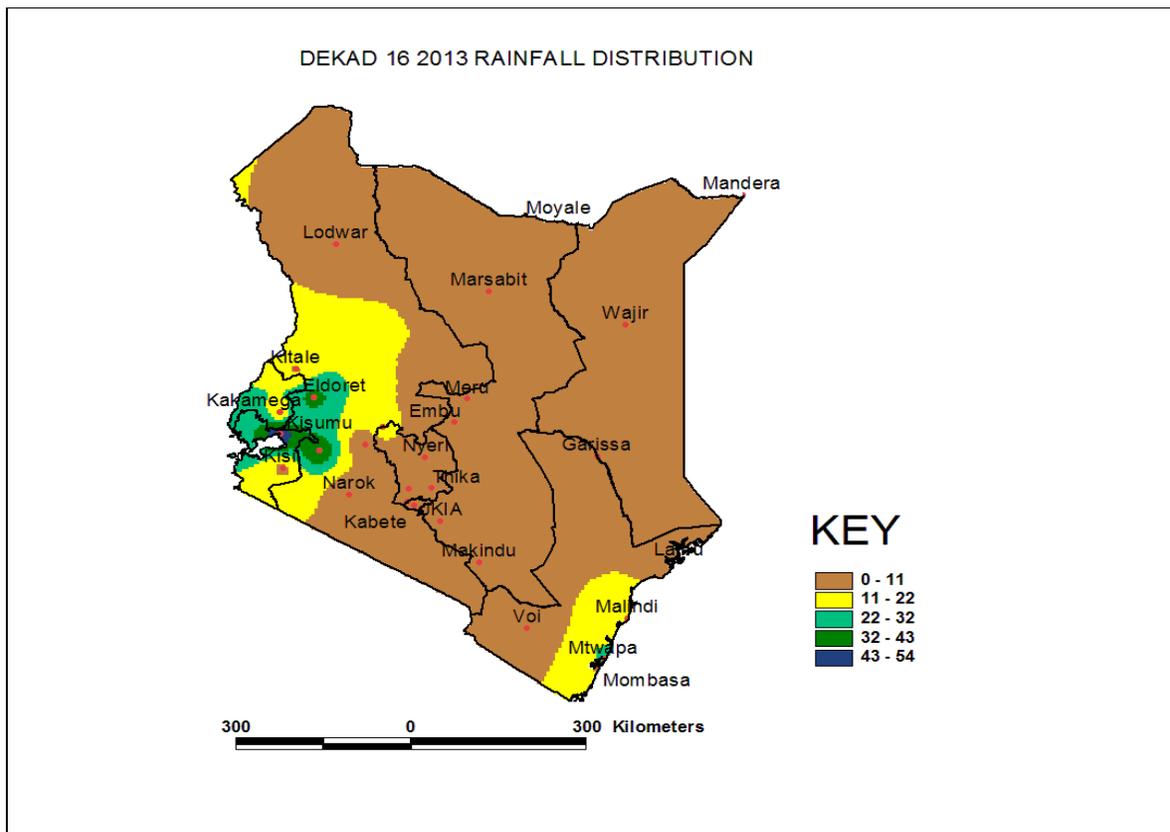


Figure 3.2: Dekadal rainfall distribution for Dekad 16, 2013

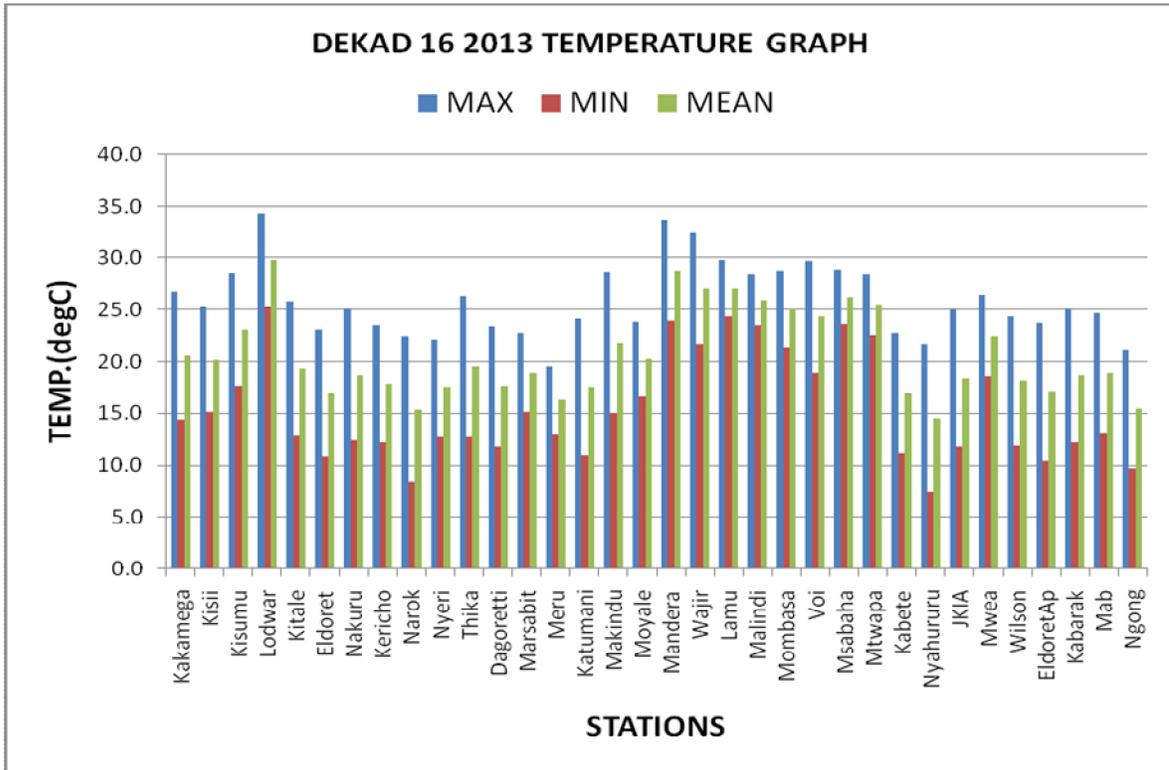


Figure 3.3: Maximum, minimum and average temperature in °C for dekad 16, 2013

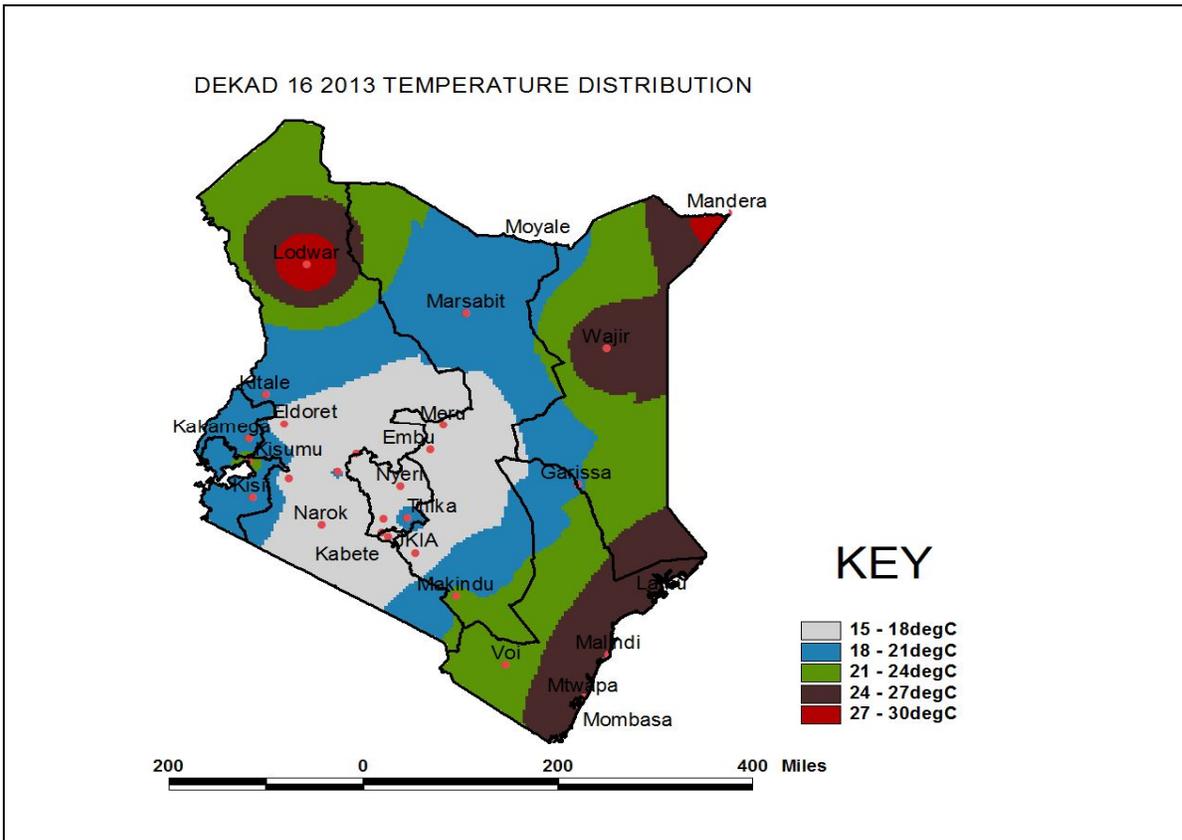


Figure 3.4: Mean temperature distribution for dekad 16, 2013

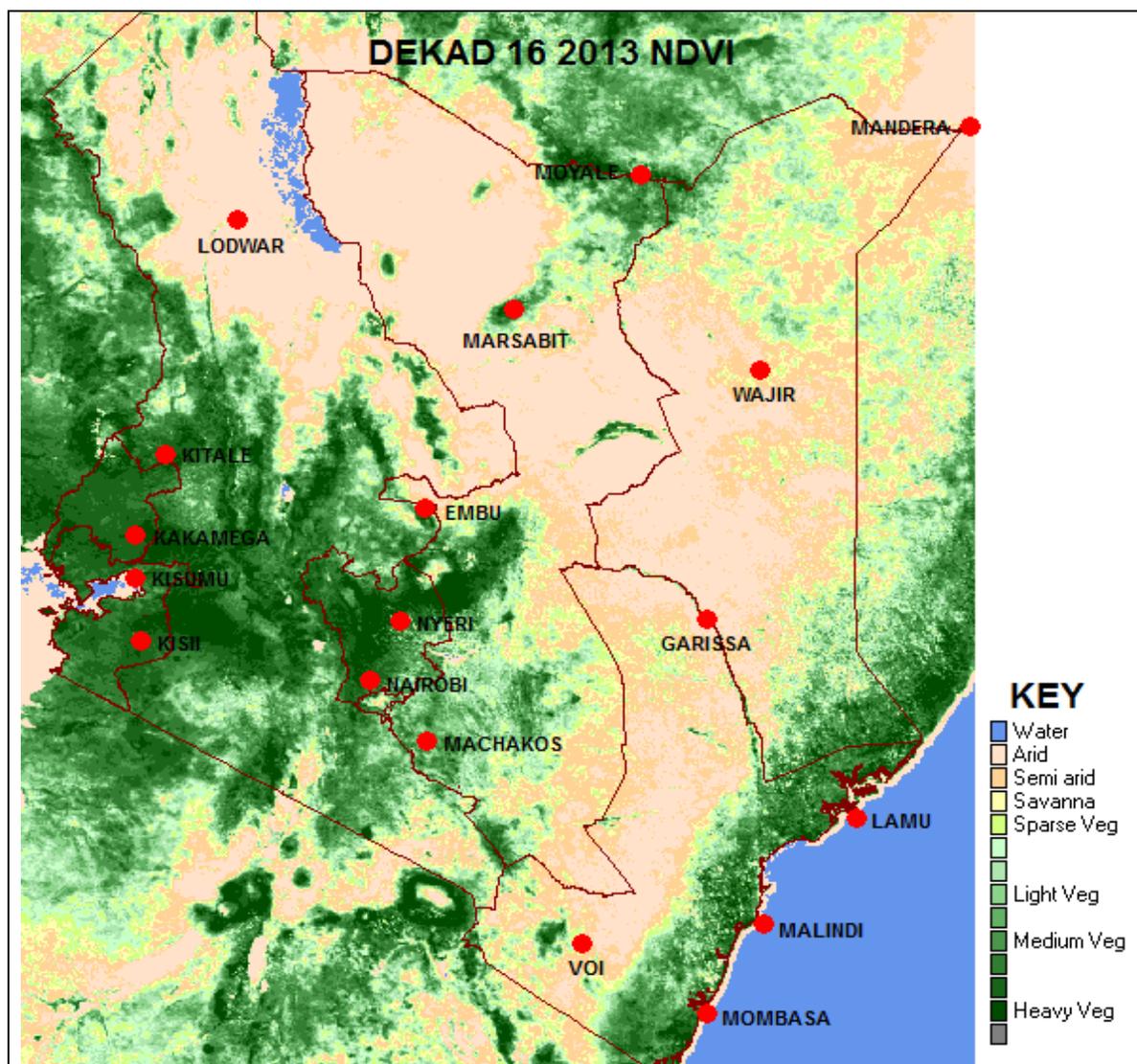


Figure 3.5: Normalized Difference Vegetation Index (NDVI)

#### 4. EXPECTED WEATHER AND CROP CONDITIONS DURING THE NEXT 10 DAYS 11-19 June 2013

- ✚ 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 ), are expected to experience sunny intervals in the morning for the first 8 days forecast period then break into rains over a few places for the last 2 days. Afternoons are expected to experience showers and thunderstorms over few places for the entire forecast period.

*The showers continue to be of great benefit to the crops which are now in their flowering stage.*

- ✚ Over the Northwestern counties (Turkana, West Pokot and Samburu), are expected to experience sunny intervals in the morning and afternoon for the entire forecast period.

*The dry conditions will impact negatively on the pastures and vegetation cover in these regions.*

- ✚ **The Central highlands including Nairobi area (counties of Meru, Murang'a, Kiambu, Nyeri, Nairobi, Embu, Nyandarua, Tharaka and Kirinyaga),** are expected to experience cloudy early mornings which will break into sunny intervals over the entire forecast period. Showers over a few places are to be experienced in the afternoon but will experience sunny intervals on the last day.

*The showers continue to benefit the crops growing in these regions.*

- ✚ **Northeastern counties (counties of Marsabit, Mandera, Wajir, Garissa and Isiolo),** are expected to continue experiencing sunny intervals in the morning and afternoon over the entire forecast period.

*The dry conditions are expected to be unfavorable to the pastures and vegetation in these regions.*

- ✚ **Southeastern lowlands (counties of Taita Taveta, Makeni, Machakos and Kitui),** are expected to experience sunny intervals in the morning and the afternoon for the entire forecast period.

*The dry conditions are expected to impact negatively on the growing crops and pastures in these regions.*

- ✚ **In the Coastal strip (counties of Mombasa, Malindi, Kilifi, Lamu, Kwale, etc),** are expected to experience showers over few places in the mornings and sunny intervals in the afternoons for the entire forecast period.

*The morning showers continue to benefit the growing crops in these regions.*

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

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