



## **National Agromet Advisory Service Bulletin**

based on

### **Extended Range Weather Forecast (ERFS)**

**Validity: 15 – 28 January 2021**

**Date of issue: 15 January 2021**

Issued by

**AICRP on Agro-Meteorology (AICRPAM),  
Central Research Institute for Dryland Agriculture (CRIDA),  
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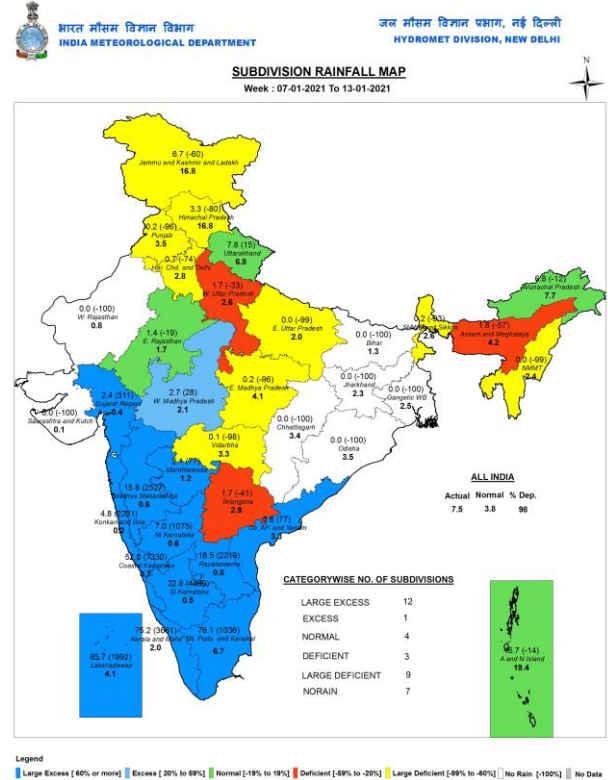
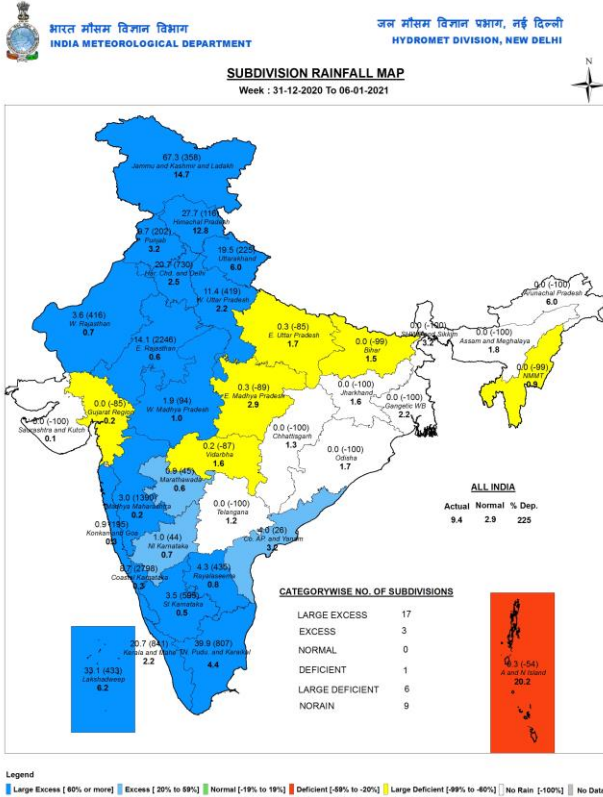
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**India Meteorological Department (IMD),  
Earth System Science Organization**

# Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

## Realized Rainfall

(31<sup>st</sup> Dec. 2020 to 13<sup>th</sup> Jan., 2021)



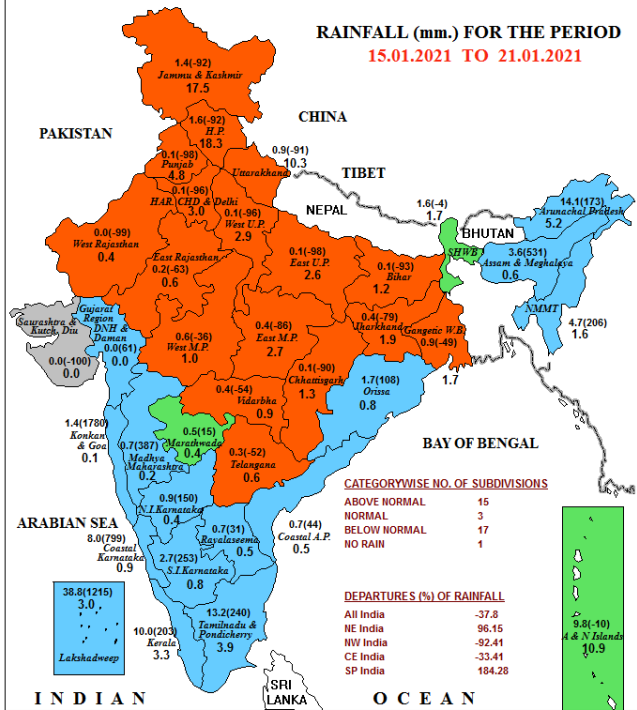
- Normal or above normal rainfall occurred in both the weeks in Uttarakhand, East Rajasthan, West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Marathwada, Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.
- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir (UT), Ladakh (UT), Himachal Pradesh, Punjab, Haryana Chandigarh & Delhi, West Uttar Pradesh, West Rajasthan, Gujarat Region, Arunachal Pradesh and Andaman & Nicobar Islands.
- Below Normal rainfall / no rain occurred in both the weeks over rest of the country.

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC – 13 Jan.) (15<sup>th</sup> to 28<sup>th</sup> Jan., 2021)

#### भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

##### Rainfall Forecast Map - Normal RF Based Categories



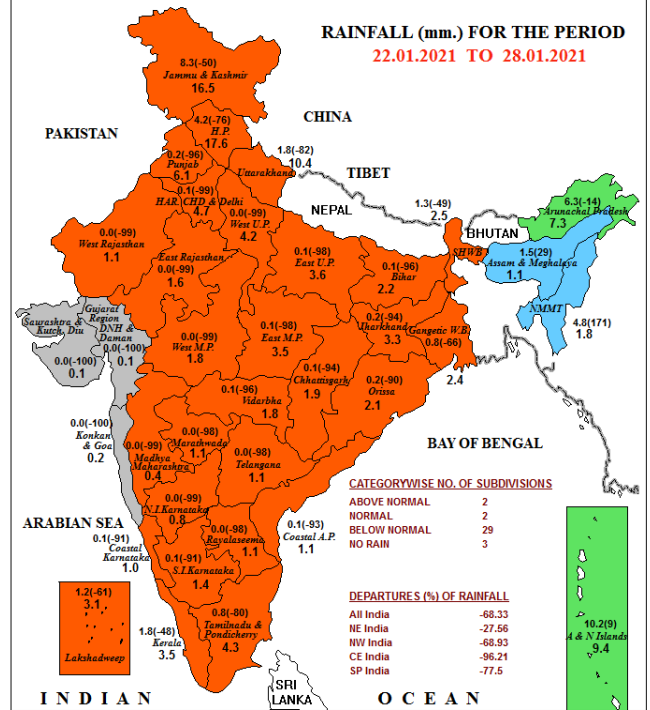
LEGEND: ■ ABOVE NORMAL (+20% OR MORE) ■ NORMAL (+19% TO -19%)  
■ BELOW NORMAL (-20% TO -99%) ■ NO RAIN (-100%) ■ NO DATA

**NOTES:**

- (a) Rainfall figures are based on MME Forecast data.  
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)  
 Percentage Departures of Rainfall are shown in Brackets.

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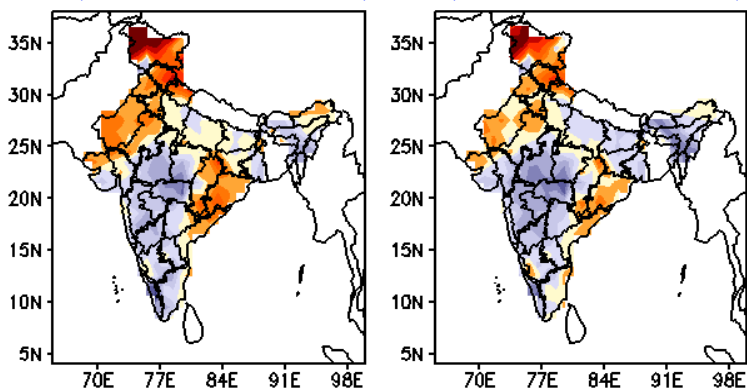
- **Week 1 (15.01.2021 to 21.01.2021) and Week 2 (22.01.2021 to 28.01.2021):** South Peninsula along with Maharashtra and adjoining Kerala and Karnataka coast will remain active in week 1. The region over the north-eastern parts of India will be active in week 1. Western Disturbance associated rainfall is also likely over extreme north India during week 1 and week 2, however, it will be associated with subdued rainfall. During week 2, there will be subdued rainfall activity over major parts of India.

**Maximum and Minimum temperature anomaly ( $^{\circ}$ C) forecast  
for next 2 weeks (IC – 13 Jan.)  
(15<sup>th</sup> to 28<sup>th</sup> Jan., 2021)**

**MME forecast Tmax anomaly (Deg C)**

(Week1: 15Jan–21Jan)

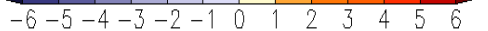
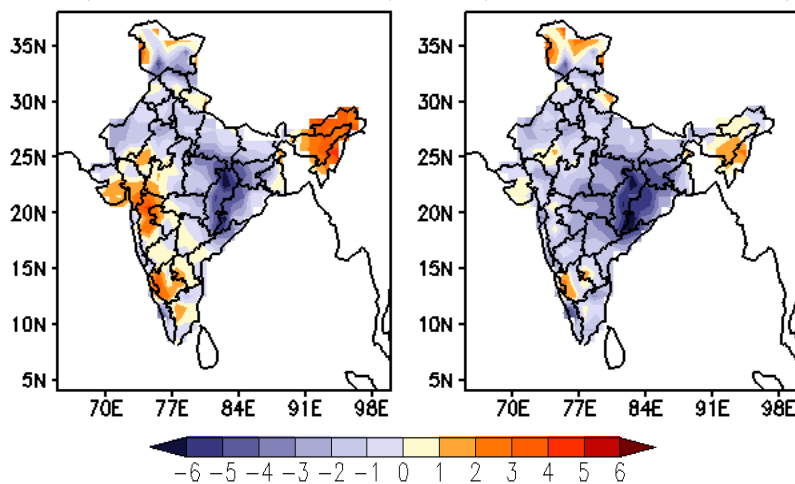
(Week2: 22Jan–28Jan)



**MME forecast Tmin anomaly (Deg C)**

(Week1: 15Jan–21Jan)

(Week2: 22Jan–28Jan)



**Maximum Temperature (Tmax)**

- **Week 1 (15.01.2021 to 21.01.2021) and Week 2 (22.01.2021 to 28.01.2021):** Above normal Tmax likely over northern and north-western parts of India, eastern belt over Odisha, Chhattisgarh, and Jharkhand region. Slightly below normal Tmax will prevail over west central parts and southern parts of India during the period.

**Minimum Temperature (Tmin)**

- **Week 1 (15.01.2021 to 21.01.2021) and Week 2 (22.01.2021 to 28.01.2021):** Below normal Tmin over northern and north-western India during week 1 and week 2 with eastern parts (Chhattisgarh and interior Odisha and adjoining regions) will have slightly higher negative anomalies compared to that over the northwest India. The western parts and north-eastern parts of India will have positive anomalies during week 1.

## Strategic Agricultural Planning based on rainfall during next two weeks till 28 January 2021

### Agro-met Advisories

#### Kerala

Amount of rainfall received over Kerala is 101.9 mm (2215% large excess) during 01 January 2021 - 15 January 2021. The extended range weather forecast for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) is above normal for week-1 and below normal for week-2.

- For the management of tea mosquito bug in cashew nut, it is advised to spray *Beauveria bassiana* @ 20 g per litre or Thiomethoxam @ 0.2 g per litre.
- Under prevailing weather condition, there is a chance of leaf webbers in cabbage. It is advised to spray a solution of 5% Neem seed kernel extract and also apply Neem cake as a basal application.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 133.9 mm (1074% large excess) during 01 January 2021 - 15 January 2021. The extended range weather forecast for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) is above normal for week-1 and below normal for week-2.

- Present weather condition is favorable for powdery mildew incidence in pulses. It is advised to spray Neem Seed Kernel Extract (NSKE) 5% or Neem oil 3% twice at 10 days intervals from initial disease appearance or Spray Carbendazim 1g/litre or Wettable Sulphur 2.5 g/litre.
- Prevailing weather condition is favorable for mealy bug incidence in guava. It is advised to apply Triozophos 2 ml + Neem oil 5 ml/litre or Phosalone 35 EC 1.5 ml + Neem oil 5 ml/litre or release *Cryptolaemus montrouzieri* beetles @ 10/tree.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 18.5 mm (1960% large excess), Marathwada is 3.0 mm (43% excess), Vidharbha is 0.3 mm (-95% large deficit) and Konkan region 5.6 mm (1312% large excess) during 01 January 2021 - 15 January 2021. The extended range weather forecast for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) over Madhya Maharashtra and Konkan is above normal, Marathwada is normal and Vidharbha is below normal for week-1 and below normal over Vidharbha, Marathwada and Madhya Maharashtra and no rainfall over Konkan for week-2.

#### Marathwada

- Under prevailing weather condition, there is a chance of aphids in safflower crop. Spray Dimethoate 30% @ 13 ml or Acephate 75% @ 10 g per 10 litres of water.
- For the management of sigatoka disease in banana orchard, it is advised to spray Propiconazole 10 ml + Sticker per 10 litres of water.

### *Vidharbha*

- Under prevailing cold weather condition, it is advised to apply organic mulches in fruit crops tree basins for thermal insulation to reduce cooling of soil surface.
- Due to decrease in minimum temperature, it is advised to keep the animals and poultry birds in closed shelter and provide straw mulch to protect from cold.

### *Madhya Maharashtra*

- For the management of pod borer in chickpea crop, it is advised to spray Emamectin benzoate @ 4 g per 10 litres of water.
- To protect mango orchard from powdery mildew disease and hoppers, it is advised to spray Imidachloprid 17.8 SL @ 4 ml and 80% wettable Sulphur @ 25 g in 10 litres of water.

### *Konkan*

- Due to the chance of cloudy and rainy weather condition, there is a possibility of incidence of anthracnose disease in mango orchard. It is advised to spray Carbendazim 12% + Mancozeb 63% combination fungicide @ 10 g per 10 litres of water.
- For the prevention of bird flu disease in poultry, it is advised to spray 1% Sodium hypochloride to sanitize the poultry shed and surrounding areas. In deep litter system of rearing of poultry birds, mix 2% Calcium carbonate (Chunna) into bed.

### **Hisar**

Amount of rainfall received over Hisar is 21.5 mm (313% large excess) during 01 January 2021 - 15 January 2021. The extended range rainfall forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) over Hisar is below normal for week-1 and week-2.

- Under prevailing weather conditions, farmers are advised to give need-based irrigation in wheat crop.
- Under prevailing cold conditions, it is advised to keep the animals under shed and provide clean and provide 50 g iodized salt and 50 to 100 g mineral mixture daily with animal feed/fodder to keep them healthy.

### **Karnataka**

Rainfall received during 01 January 2021 - 15 January 2021 over South Interior Karnataka is 26.1 mm (1910% large excess) and North Interior Karnataka is 8.1 mm (437% large excess). The extended range weather forecast for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and below normal over South Interior Karnataka and North Interior Karnataka for week-2.

### *South Interior Karnataka*

- For the management of leaf hopper and powdery mildew disease incidence in mango orchard, spraying of Carbaryl 50WP @ 4 g/litre of water or Imidachlorprid @ 0.3ml/litre of water is advised.

### **Uttar Pradesh**

Rainfall received during 01 January 2021 - 15 January 2021 over East Uttar Pradesh 0.3 mm (-93% large deficit) and West Uttar Pradesh is 13.1 mm (168% large excess). The extended range weather forecast for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and week-2.

#### *Western Uttar Pradesh*

- Under prevailing dry weather condition, farmers are advised to irrigate their *rabi* crops.
- To protect the vegetable crops from frost, it is advised to spray 2% Urea or to provide light irrigation.

#### *Eastern Uttar Pradesh*

- Under prevailing dry and cold weather conditions, straw mulching and intercultural operations are advised in the field to maintain the moisture.

### **Jammu**

Amount of rainfall received over Jammu is 76.9 mm (116% large excess) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Jammu is below normal for week-1 and week-2.

- For the management of purple blotch or stemphylium blight in onion crop, it is advised to spray the crop with Mancozeb @ 2.5g /litre of water or Ridomil-MZ @ 2.5g/litre of water.
- Prevailing weather condition is congenial for collar rot and root rot disease in chickpea crop. It is advised to rogue out the affected plants and drench the affected patches of the field with Thiram or Captan @ 2g/litre of water.

### **West Bengal**

Amount of rainfall received over West Bengal is 0.0 mm (-100% large deficit) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over West Bengal is below normal for week-1 and week-2.

- Due to cold weather conditions, it is advised to protect the seedlings of boro rice by covering the nursery bed with polythene and keep the stagnant water in the nursery bed especially during night.

- Prevailing weather condition is also congenial for white streak disease in pulses. To control, it is advised to apply Sulfex or Dinocap @ 2.5 g per litre of water.

### **Odisha**

Amount of rainfall received over Odisha is 0.0 mm (-100% large deficit) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Odisha is above normal for week-1 and below normal for week-2.

- For the management of whiteflies in tomato and brinjal crop, it is advised to spray Neem-based pesticide (Azadirachtin) 1500 ppm @ 600 ml/acre by mixing in 200 litres of water.
- Prevailing weather condition is favourable for sowing of coriander. Recommended high yielding varieties are CO-1, CO-2, CO-3, Swati, Sadhana, Ram Selction and Udi.

### **Assam**

Amount of rainfall received over Assam is 1.8 mm (-72% large deficit) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Assam is above normal for week-1 and week-2.

- Under prevailing dry weather condition, it is advised to initiate artificial irrigation in boro rice to maintain standing water of 5±2 cm depth.
- Prevailing weather condition is congenial for late blight disease in potato crops. It is advised to spray Ferbam or Nabam in the recommended dose as a protective measure.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 30.3 mm (-10% deficit) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Himachal Pradesh is below normal for week-1 and week-2.

- Due to higher chances of frost occurrence, farmers are advised to protect the crop by applying light irrigation and mulching in crops during evening hours.
- Farmers are advised to protect the newly born calves and milch animals from cold and provide dry bedding to animals.

### **Gujarat**

Amount of rainfall received over Gujarat is 2.5 mm (312% large excess) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Gujarat is above normal for week-1 and no rainfall for week-2.



- Prevailing weather condition is favorable for sigatoka disease in banana. To control, it is advised to cut and remove infected leaves at every 6 to 8 weeks interval and spray Carbendazim 50 WP @ 10 g or Mencozeb 75 WP @ 27 g or Propineb 70 WP @ 20 g or Propiconazole 25 EC @ 5 ml in 10 litre water at 15 days interval.
- Due to cold weather condition, it is advised to protect the newly born calves from cold wind and keep the animals indoor during night.

### **Andhra Pradesh**

Amount of rainfall received over Andhra Pradesh is 22.8 mm (812% large excess) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Andhra Pradesh is above normal for week-1 and below normal for week-2.

- Present weather condition is congenial for the incidence of hopper in mango orchard. Spraying of Dimethoate @ 2ml/litre or Chlorpyrifos @ 2.5ml/litre of water during initial stage of flowering is advised.

### **Uttarakhand**

Amount of rainfall received over Uttarakhand is 27.4 mm (96% large excess) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Uttarakhand is below normal for week-1 and week-2.

- For the management of gummosis in peach plants, it is advised to spray Copper oxychloride and Streptocycline.

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 0.0 mm (-100% large deficit) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Chhattisgarh is below normal for week-1 and week-2.

- For the management of aphid in mustard crop, it is advised to spray Imidacloprid 17.8 SL @ 250 ml per ha for 2 to 3 times at an interval of 10-15 days.

### **Bihar**

Amount of rainfall received over Bihar is 0.0 mm (-99% large deficit) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over Bihar is below normal for week-1 and week-2.

- Regular monitoring of pod borer in chickpea is advised. If infestation is found, install Pheromone trap @ 3-4 traps per acre or spray Quinalphos 25 EC/Novaluron 10 EC @ 1.0ml/litre of water.
- For the management of fruit borer in tomato, spraying of Indoxacarb 14.5 SC @ 1ml/2.5 litres of

water or Spinosad 48 EC @ 1ml/4 litres water is advised.

### **Rajasthan**

Amount of rainfall received over East Rajasthan is 15.5 mm (544% large deficit) during 01 January 2021 - 15 January 2021. The extended range weather forecast provided for next two weeks (15 - 21 January 2021 and 22 - 28 January 2021) on rainfall over East Rajasthan is below normal for week-1 and week-2.

- Under prevailing weather condition, there is a chance of thrips in timely sown onion crop. To manage, spray Diethane M-45 @ 3 g per litre of water with sticky material (Tipol 1.0 g /litre).
- For the management of pod borer in the gram crop, install Pheromone trap @ 7-10 traps per acre.

### ***Disclaimer:***

*The predictability of weather depends on many factors which are dynamic in nature. The success of Agromet advisories provided here depends on the accuracy of the weather forecast. In no event, India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) will be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information presented in this bulletin.*