



# **National Agromet Advisory Services Bulletin**

**Date of issue: 17 February 2023**

based on

**Extended Range Weather Forecast (ERFS)**

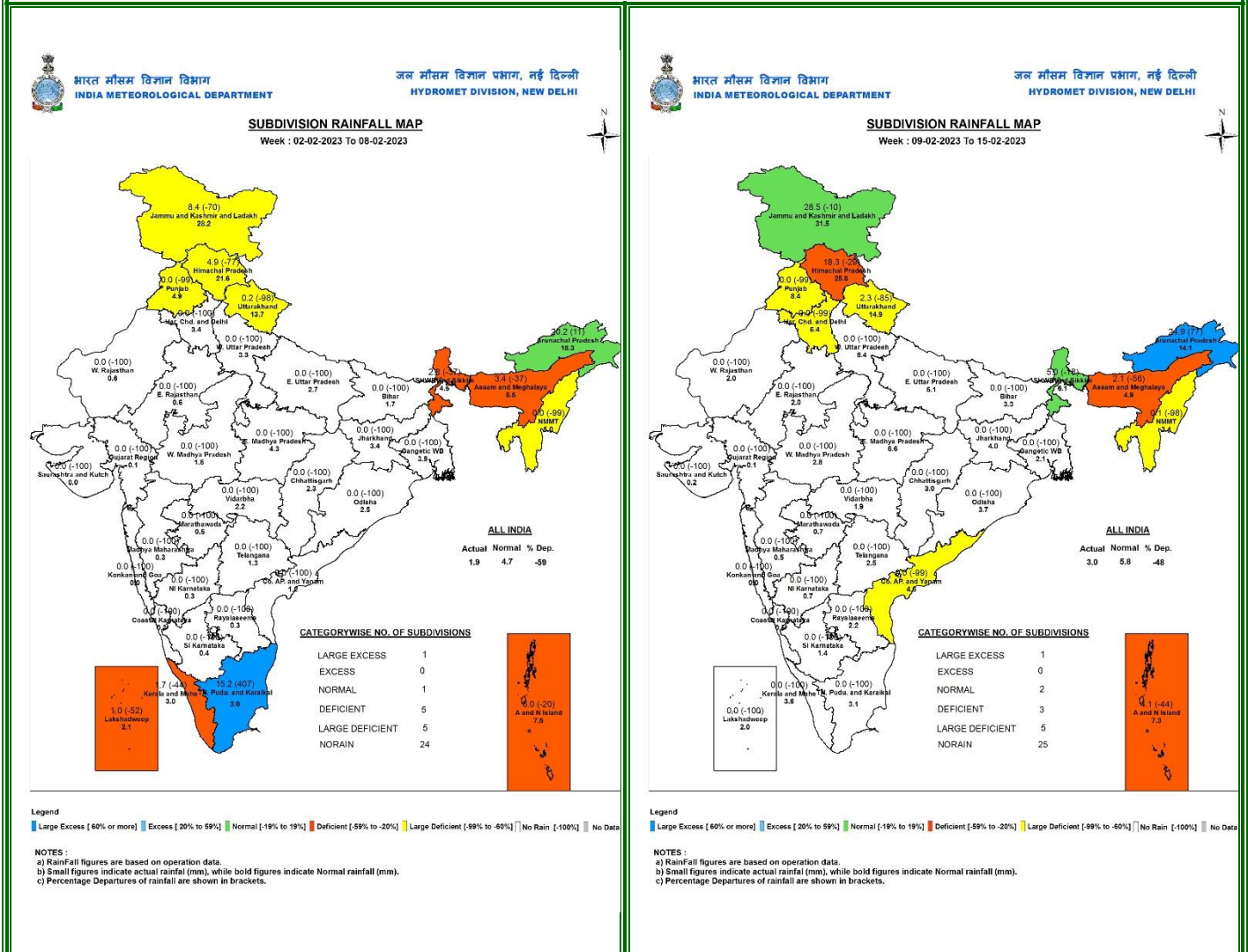
**Validity: 17 February - 02 March 2023**

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**AICRP on Agro-Meteorology (AICRPAM)  
Central Research Institute for Dryland Agriculture (CRIDA)  
Indian Council of Agricultural Research (ICAR)  
&  
India Meteorological Department (IMD)  
Earth System Science Organization**

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

## Realized Rainfall (2<sup>nd</sup> February to 15<sup>th</sup> February 2023)

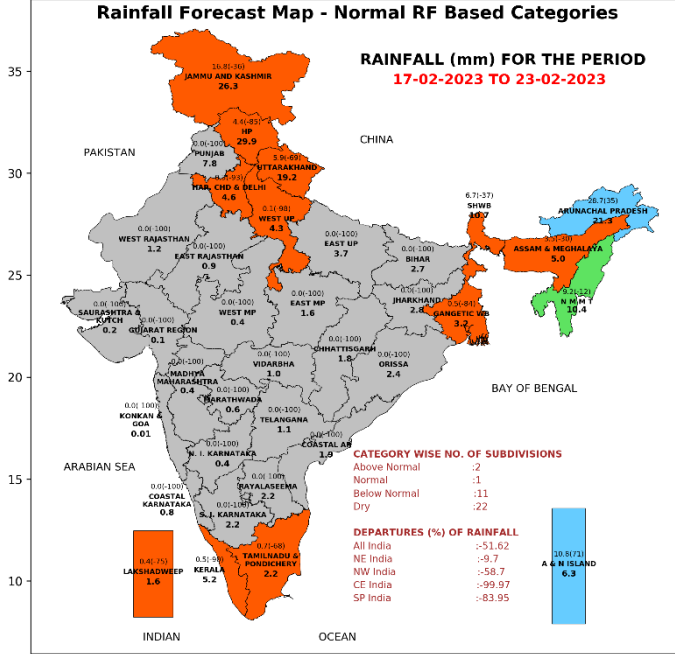


- Normal or above normal rainfall occurred in both the weeks in Arunachal Pradesh.
- Normal or above normal rainfall occurred in either of the two weeks in Jammu Kashmir & Ladakh (UTs), Sub-Himalayan West Bengal and Tamil Nadu Puducherry & Karaikal.
- Below Normal rainfall/no rain occurred in both the weeks over rest of the States & UTs.

## Extended Range Forecast System

### Rainfall forecast maps for the next 2 weeks (IC- 15<sup>th</sup> February) (17<sup>th</sup> February to 2<sup>nd</sup> March 2023)

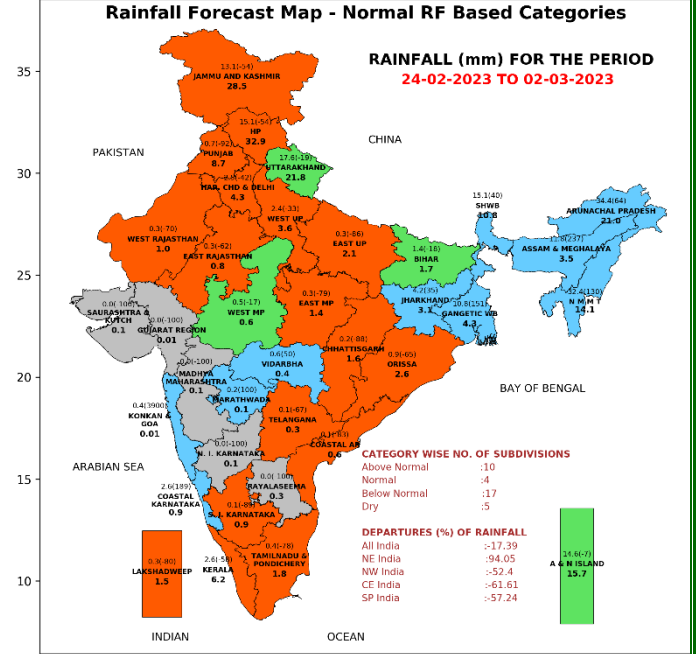
#### INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



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

NOTES:  
(a) Rainfall figures are based on MME forecast data.  
(b) Small figures indicate actual rainfall (mm), while bold figure indicates normal rainfall (mm)  
Percentage departures of rainfall are shown in brackets.

#### INDIA METEOROLOGICAL DEPARTMENT Rainfall Forecast Map - Normal RF Based Categories



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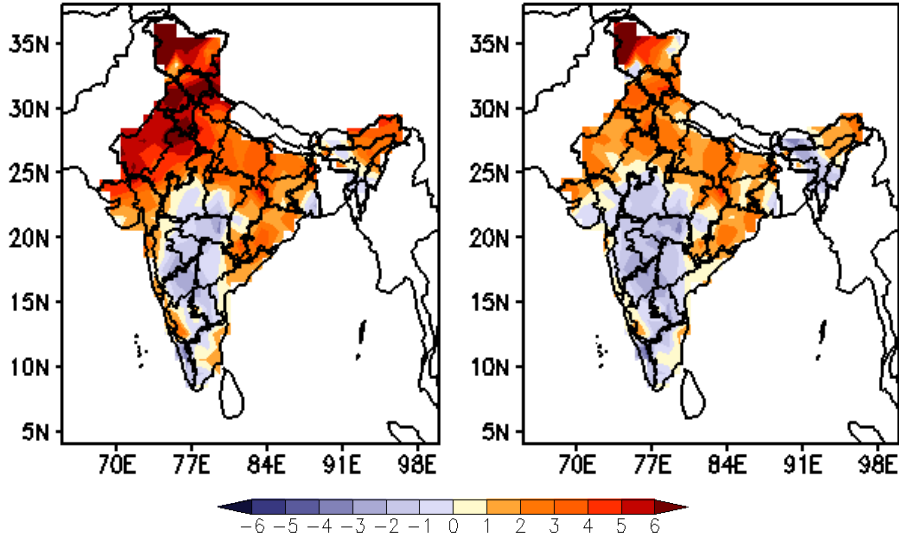
- Week 1 (17.02.2023 to 23.02.2023) and Week 2 (24.02.2023 to 02.03.2023):** Rainfall activity is likely to be above normal over Arunachal Pradesh during week 1 and over northeast & adjoining east India during week 2.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for the next 2 weeks (IC- 15<sup>th</sup> February)  
(17<sup>th</sup> February to 2<sup>nd</sup> March 2023)**

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

(Week1: 17Feb–23Feb)

(Week2: 24Feb–02Mar)



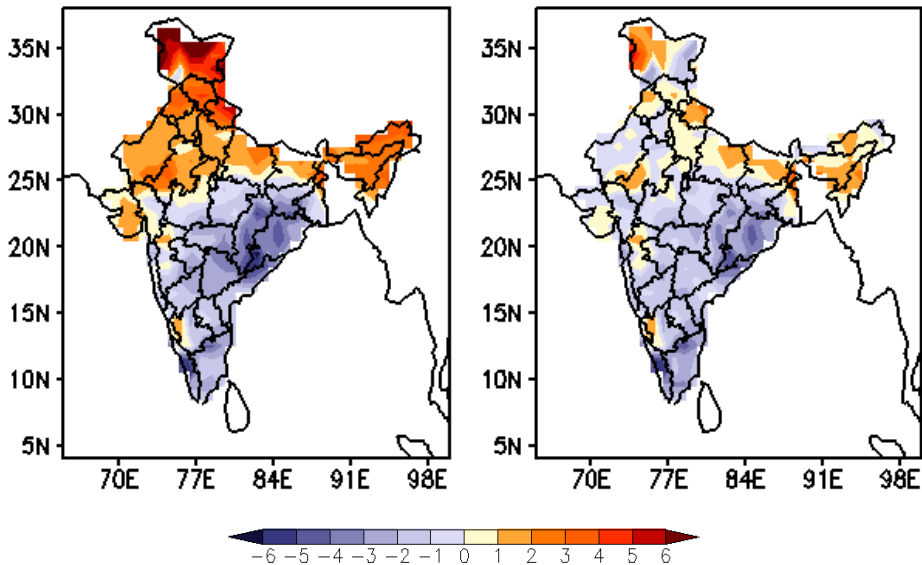
**Maximum Temperature (Tmax)**

- **Week 1 (17.02.2023 to 23.02.2023) and Week 2 (24.02.2023 to 02.03.2023):** Tmax is likely to be above normal over most parts of northern and adjoining central India.

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

(Week1: 17Feb–23Feb)

(Week2: 24Feb–02Mar)



**Minimum Temperature (Tmin)**

- **Week 1 (17.02.2023 to 23.02.2023) and Week 2 (24.02.2023 to 02.03.2023):** Tmin is likely to be above normal over northern and adjoining northeast India. However, it is likely to be slightly below normal over east central parts of India.

## **Agromet Advisories**

### **Uttar Pradesh**

04 mm (-80% large deficit) rainfall was received over East Uttar Pradesh and 12 mm of rainfall received over West Uttar Pradesh (-52% deficit) during 01 January - 16 February 2023. The extended range weather forecast (rainfall) for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) is no rainfall over East Uttar Pradesh and below normal over West Uttar Pradesh for week-1 and; below normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

#### *Western Uttar Pradesh*

- Due to forecast of increase in temperature and no rainfall during next week, farmers are advised to provide irrigation in wheat crop which is at tillering, jointing and PI stages. Top dress  $\frac{1}{4}$  urea at optimum moisture during CRI stage.
- Under optimum moisture condition, sowing of *zaid* maize crop is advised.

#### *Eastern Uttar Pradesh*

- Because of no rainfall forecast in the coming week, farmers are advised to provide light irrigation in wheat and other standing crops.
- Under prevailing cool and dry weather condition, farmers are advised to start fields preparation for early sowing of okra with recommended varieties like *A-4*, *Parbani Kranti*, *Arka Anamika* etc.

### **Punjab**

15 mm (-57% deficit) rainfall received over Punjab during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Punjab is no rainfall for week-1 and; below normal for week-2.

- Prevailing high temperature conditions are not favourable for pollination and fertilization stage of the wheat crop, which is currently at anthesis stage. Therefore, farmers are advised to apply light irrigation to the wheat crop or apply two sprays of 2% Potassium nitrate (13:0:45) by dissolving 4 kg potassium nitrate in 200 litres of water at boot leaf and anthesis stages or apply two sprays of salicylic acid by dissolving 15 gram salicylic acid in 450 ml of ethyl alcohol using 200 litres of water per acre at boot leaf and early milk stages.
- Due to prevailing dry weather condition, farmers are advised to apply need based irrigation to the crops.

### **Rajasthan**

23 mm (175% large excess) rainfall received over East Rajasthan during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over East Rajasthan is no rainfall for week-1 and; below normal for week-2.

- Keeping in view of increasing temperature, farmers are advised to start field preparation for sowing of early maturing okra with improved varieties such as *A-4*, *Parbani Kranti* and *Arka anamika* cultivars.

### **Haryana**

12 mm (-52% deficit) rainfall received over Haryana during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Haryana is below normal for week-1 and; week-2.

- Due to possibility of dry and clear weather, farmers are advised to apply the irrigation and fertilizer in wheat and barley crop as per need.

### **Uttarakhand**

33 mm (-56% deficit) rainfall received over Uttarakhand during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Uttarakhand is below normal for week-1 and; normal for week-2.

- Farmers are advised to irrigate the crops/orchards to reduce the impact of high temperature.
- Farmers are also advised to add mulch material in the space between two rows of vegetable crops for conservation of soil moisture and maintaining the soil temperature.

### **Assam**

The amount of rainfall received over Assam was 6 mm (-77% large deficit) during 01 January - 16 February 2023. The extended range weather forecast (rainfall) for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) is below normal for week-1 and; above normal for week-2.

- Since deficit to large deficit in rainfall was received in most districts of Assam, a standing water of 5±2 cm depth in the boro rice is advised to maintain optimum crop growing environment.
- Under prevailing dry period (December- March), irrigation is advised in coconut orchard at 15 days interval to reduce the immature nut fall from the bunch.

### **Madhya Pradesh**

The amount of rainfall received over East Madhya Pradesh was 04 mm (-85% large deficit) during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over East Madhya Pradesh is no rainfall for week-1 and; below normal for week-2.

- As day temperature is rising, it is advised to provide light irrigation in sugarcane field and vegetable crops.

### **Chhattisgarh**

The amount of rainfall received over Chhattisgarh was 0.1 mm (-99% large deficit) during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Chhattisgarh is no rainfall for week-1 and; below normal for week-2.

- Prevailing temperature is suitable for proper germination of summer vegetables like pumpkin, bitter gourd, bottle gourd, okra etc. Hence, sowing of these vegetables should be completed at the earliest.
- Summer season banana crop is generally affected by heat waves. To protect banana crop, it is advised to grow chari, jowar and sunhemp crops in the periphery of banana fields so that during summer, it will grow up and protect banana crop from heat waves.

### **Odisha**

The amount of rainfall received over Odisha was 0.1 mm (-99% large deficit) during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Odisha is no rainfall for week-1 and; below normal for week-2.

- Prevailing increased temperature and dry weather condition favours thrips infestation in groundnut crop. To control, it is advised to spray 400 ml Dimethoate or 50 ml Imidacloprid in 200 litres water per acre.
- Due to prevailing mild dry weather condition, farmers are advised to irrigate their crop field.

### **Jammu**

The amount of rainfall received over Jammu was 172 mm (7% excess) during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Jammu is below normal for week-1 and; week-2.

- Prevailing weather is congenial for pod borer in pea. If observed then, it is advised to spray the crop with Chlorpyrifos 20 EC @ 2ml/litre or Cypermethrin 10 EC @ 1ml/litre of water.

### **Tamil Nadu**

The amount of rainfall received over Tamil Nadu was 20 mm (9% excess) during 01 January - 16 February 2023. The extended range weather forecast (rainfall) for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) is below normal for week-1 and; week-2.

- Prevailing weather conditions are congenial for rice blast incidence disease in rice crop. For the management, it is advised to spray Carbendazim or Tricyclazole at 2 g/litre of water for 1 kg of seed.

## **Kerala**

The amount of rainfall received over Kerala was 15 mm (3% excess) during 01 January - 16 February 2023. The extended range weather forecast (rainfall) for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) is below normal for week-1 and; week-2.

- Due to high temperature, there is a chance of brown plant hopper infestation in rice crop. For management, it is advised to spray Thiamethoxam @ 2 g per 10 litres of water.
- Since dry and hot weather condition is prevailing, farmers are advised to provide irrigation in banana and coconut orchard as per requirement and mulching is also advised to conserve soil moisture.

## **Maharashtra**

No rainfall over Madhya Maharashtra and Konkan region and 0.5 mm (-97% large deficit) rainfall over Vidarbha and 0.6 mm (-89% large deficit) rainfall was recorded over Marathwada during 01 January - 16 February 2023. The extended range weather forecast (rainfall) for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) is no rainfall over Konkan, Madhya Maharashtra, Marathwada and Vidarbha for week -1 and; above normal over Konkan, Marathwada and Vidarbha and no rainfall over Madhya Maharashtra for week-2, respectively.

### *Vidarbha*

- Due to prevailing dry and hot weather conditions, farmers are advised to ensure irrigation at seed formation/seed filling stage (80 days stage) in irrigated safflower. Avoid over irrigation/water stagnation to prevent incidence of safflower wilt.
- Farmers are advised to complete the sowing of summer green gram (var. *Pusa Vaishakhi*, *PKV-AKM-4* (Vaibhav)) preferably by second week of February. Under assured irrigation facility during peak summer months sowing can be extended till 15 March.

### *Marathwada*

- Due to increase in temperature, earthing up and irrigation management is advised in Mrig bag (June sown) banana orchard. Provision of mechanical support in banana orchard is also recommended.
- For the management of fall armyworm in late sown maize crop, it is advised to spray Emamectin Benzoate 5% @ 4 g or Spinetoram 11.7 SC @ 4 ml per 10 litres of water. Harvesting of timely sown and mature maize crop should be done.

### *Konkan*

- Due to forecast for rise in temperature, it is advised to provide irrigation to newly planted fruit crop orchard, provide shed to protect from sunrays, use straw mulch to reduce evaporation losses.
- To mitigate the effect high temperature and protect from fungal diseases, it is advised to apply Bordeaux mixture to the stem of mango, cashewnut, sapota trees.



- Due to forecast for gradual rise in temperature and decrease in humidity, there is a possibility for pre-mature fruit drop in mango and sun scorching. To minimize fruit drop, it is advised to apply 100 litres /tree at weekly interval as per availability of water, also use straw mulch to reduce evaporation losses.

#### *Madhya Maharashtra*

- In late sown sorghum and chickpea crop, if crop suffers from water stress, spraying of 1% KNO<sub>3</sub> is recommended.

#### **Karnataka**

No rainfall received during 01 January - 16 February 2023 over Coastal Karnataka and the amount of rainfall received over South Interior Karnataka is 1.3 mm (-67% deficit) and 0.2 mm (-94% large deficit) rainfall received over North Interior Karnataka. The extended range weather forecast (rainfall) for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) is no rainfall over Coastal Karnataka, South Interior Karnataka and North Interior Karnataka for week-1 and; no rainfall over North Interior Karnataka and below normal over South Interior Karnataka and above normal over Coastal Karnataka for week-2.

#### *South Interior Karnataka*

- To protect the pulse grains from storage pests, apply oils of castor/ linseed/honge/neem oil @ 3-5 ml per kg of grains.
- To protect the mango orchard from powdery mildew diseases, it is advised to spray Lambda Cyhalothrin 5 EC @ 0.5 ml/litre of water or sulphur dust (SULTAF) 80 W @ 3g/litre of water.

#### **Anantapur**

The amount of rainfall received over Coastal Andhra Pradesh was 1 mm (-91% large deficit) and 0.2 mm (-97% large deficit) rainfall received over Rayalaseema during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) is no rainfall over Coastal Andhra Pradesh and Rayalaseema for week-1 and; below normal over Coastal Andhra Pradesh and no rainfall over Rayalaseema for week-2.

- In Chittoor, Vizianagaram, West Godavari, Krishna, Guntur, Ananthapuramu and Kadapa districts, present weather conditions are favourable for incidence of hoppers in mango. To control the hoppers incidence, spraying of Dimethoate @ 2ml or Chlorpyrifos @ 2.5ml/litre of water is recommended.

#### **Gujarat**

3.0 mm (152% large excess) rainfall received over Gujarat during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Gujarat is no rainfall for week-1 and; week-2.

- To prevent powdery mildew disease in coriander, it is advised to spray Hexaconazole @ 15 ml/10 liters of water.

### **Bihar**

0.2 mm (-99% large deficit) rainfall received over Bihar during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Bihar is no rainfall for week-1 and; normal for week-2.

- Farmers are advised to monitor rapeseed and mustard crop against white rust and alternaria blight. To prevent, application of Mancozeb @ 2.0 g per litre of water is advised.
- Intercultural operations are advised in vegetable crops like in pea, tomato, brinjal, chilli, cabbage etc. and provide light irrigation as per availability of soil moisture.

### **Jharkhand**

No rainfall received over Jharkhand during 01 January - 16 February 2023. The extended range weather forecast (rainfall) provided for the next two weeks (17 - 23 February 2023 and 24 February - 02 March 2023) over Jharkhand is no rainfall for week-1 and; above normal for week-2.

- Prevailing dry and cool temperature, favors the infestation of leaf eating and sucking pests in pigeon pea crop. Hence, farmers are advised to spray Monocrotophos @ 1 ml per liter of water during day time at flowering stage and Indoxacarb at pod formation stage @ 0.5 – 1 ml per liter of water.

### **Disclaimer:**

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