



## National Agromet Advisory Service Bulletin

based on

### Extended Range Weather Forecast (ERFS)

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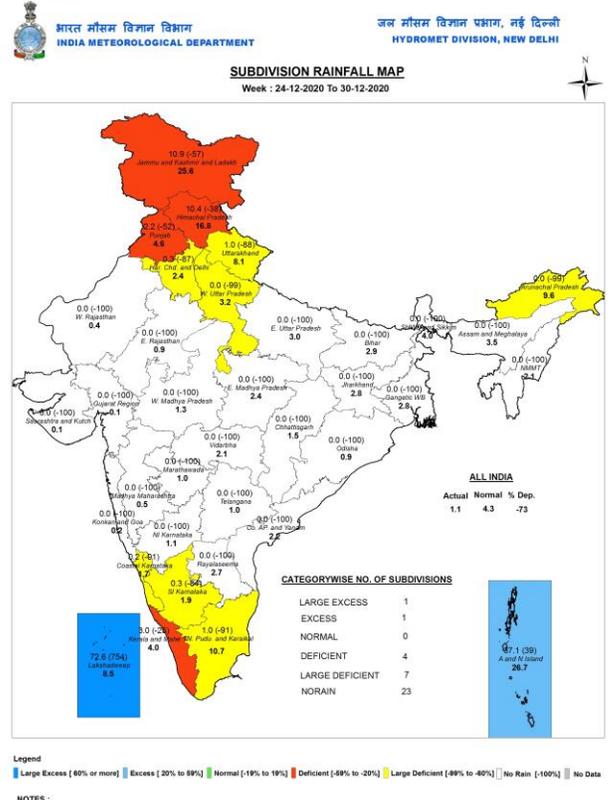
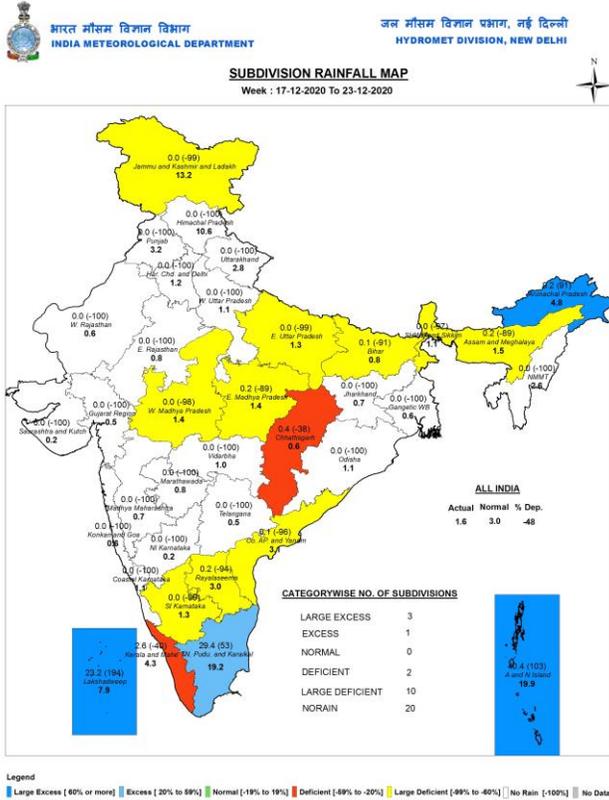
**AICRP on Agro-Meteorology (AICRPAM),  
Central Research Institute for Dryland Agriculture (CRIDA),  
Indian Council of Agricultural Research (ICAR)**

**&**

**India Meteorological Department (IMD),  
Earth System Science Organization**

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

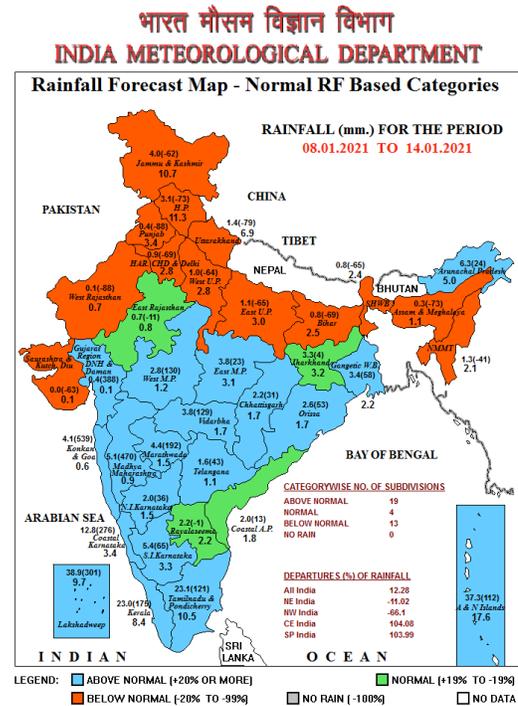
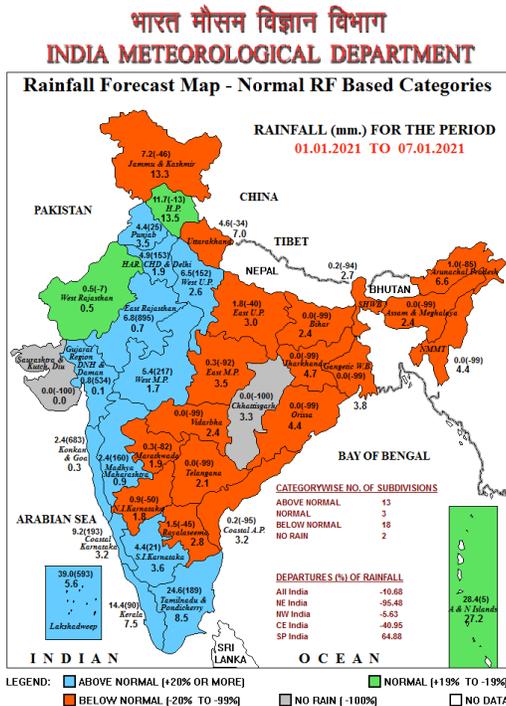
## Realized Rainfall (17<sup>th</sup> to 30<sup>th</sup> December, 2020)



- Normal or above normal rainfall occurred in both the weeks in Andaman & Nicobar Islands and Lakshadweep.
- Normal or above normal rainfall occurred in either of the two weeks in Arunachal Pradesh, Tamil Nadu, Puducherry & Karaikal.
- 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 – 30 Dec.) (1<sup>st</sup> to 14<sup>th</sup> Jan., 2021)



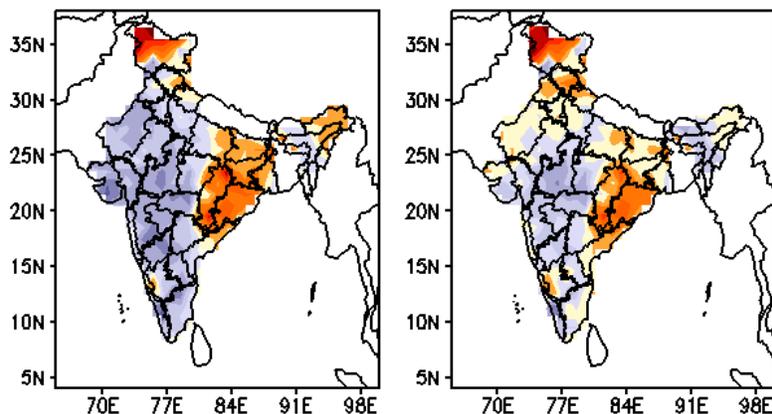
- **Week 1 (01.01.2021 to 07.01.2021) and Week 2 (08.01.2021 to 14.01.2021):** South Peninsula and adjoining regions will remain active with above normal rainfall over the region. Western Disturbance associated rainfall is also likely over north India, however, it is expected to be below normal during the entire period.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 30 Dec.)  
(1<sup>st</sup> to 14<sup>th</sup> Jan., 2021)**

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

(Week1: 01Jan–07Jan)

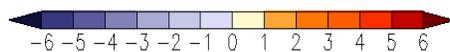
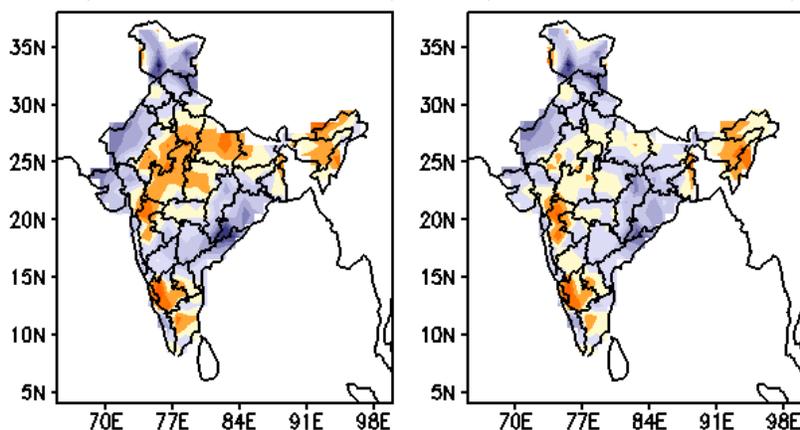
(Week2: 08Jan–14Jan)



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

(Week1: 01Jan–07Jan)

(Week2: 08Jan–14Jan)



**Maximum Temperature (Tmax)**

- **Week 1 (01.01.2021 to 07.01.2021) and Week 2 (08.01.2021 to 14.01.2021):** Over Northwest and west central parts of India, Tmax is likely to be below normal in week 1 and in some parts over central India in week 2. Above normal Tmax likely over eastern belt over Odisha, Chhattisgarh, Jharkhand, Bihar and adjoining region during week 1 and week 2.

**Minimum Temperature (Tmin)**

- **Week 1 (01.01.2021 to 07.01.2021) and Week 2 (08.01.2021 to 14.01.2021):** Very low temperature with cold waves likely to continue over many parts of northwest India and eastern coastal region of Odisha, Chhattisgarh and adjoining region during week 1 and week 2. However, parts of the central and northeastern Indian region will be slightly above normal.

## Strategic Agricultural Planning based on rainfall during next two weeks till 14 January 2021

### Agro-met Advisories

#### Kerala

Amount of rainfall received over Kerala is 365.1 mm (-26% deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) is above normal for week-1 and week-2.

- For the management of white fly in chilly, it is advised to apply 2% Neem oil garlic emulsion or spray 20g *Lecanicillium lecanii* per one litre of water in ten days intervals.
- Under prevailing weather condition, there is a chance of nematode attack in banana. It is advised to apply Carbosulfan 6G, 20 g/pit at the time of planting.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 477.5 mm (6% excess) during 01 October 2020 - 31 December 2020. The extended range weather forecast for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) is above normal for week-1 and week-2.

- 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.
- 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.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 170.0 mm (65% large excess), Marathwada is 106.7 mm (7% excess), Vidharbha is 52.0 mm (-36% deficit) and Konkan region 254.2 mm (82% large excess) during 01 October 2020 - 31 December 2020. The extended range weather forecast for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) over Marathawada and Vidharbha is below normal and above normal over Madhya Maharashtra and Konkan for week-1 and above normal over Vidharbha, Marathwada, Konkan and Madhya Maharashtra for week-2.

#### Marathwada

- Due to decrease in temperature, it is advised to irrigate the banana and grape orchard to protect them from low temperature injury.
- For the management of pod borer in long duration pigeon pea varieties, it is advised to spray Quinalphos 25% @ 20 ml or Emamectin benzoate 5% @ 4.4 g per 10 litres of water.

#### Vidharbha

- Under prevailing cold weather condition, it is advised to apply light and frequent irrigation in

field crops, orchards and vegetable crops to protect them from cold injury.

- 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 blight disease in onion, it is advised to spray Mancozeb @ 25 g or Chlorothalonil @ 20 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*

- There is a possibility of incidence of tea mosquito bugs and thrips on the fruits of cashew nut. It is advised to spray Lambda cyhalothrin 5% EC @ 6 ml or Acetamiprid 20% SP @ 5 g per 10 litres of water.

#### **Hisar**

Amount of rainfall received over Hisar is 8.6 mm (-57% deficit) during 01 October 2020 - 31 December 2020. The extended range rainfall forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) over Hisar is above normal for week-1 and below normal for week-2.

- Under prevailing weather conditions, farmers are advised to apply need-based irrigation and sowing of late sown wheat varieties.
- Under prevailing cool and dry weather conditions, it is advised to keep the animals under shed and provide clean and plenty of water and feed and green fodder.

#### **Karnataka**

Rainfall received during 01 October 2020 - 31 December 2020 over South Interior Karnataka is 203.0 mm (-1% deficit) and North Interior Karnataka is 179.8 mm (30% excess). The extended range weather forecast for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) over South Interior Karnataka is above normal and North Interior Karnataka is below normal for week-1 and above normal over South Interior Karnataka and North Interior Karnataka for week-2.

#### *South Interior Karnataka*

- Prevailing weather condition is optimum for harvesting, sun drying and winnowing of *kharif* crops like ragi, maize and groundnut.
- Farmers are advised to manage the humidity in the silkworm rearing house by providing good cross-ventilation and dust dry slaked lime powder when silkworms settle for moult.

### *North Interior Karnataka*

- Under prevailing weather conditions, harvesting and sun drying of pigeon pea crop is advised.
- It is advised to vaccinate the livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and Haemorrhagic Septicaemia.

### **Uttar Pradesh**

Rainfall received during 01 October 2020 - 31 December 2020 over East Uttar Pradesh 9.1 mm (-81% large deficit) and West Uttar Pradesh is 5.4 mm (-83% large deficit). The extended range weather forecast for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) over East Uttar Pradesh is below and West Uttar Pradesh is above normal for week-1 and below normal over East Uttar Pradesh and West Uttar Pradesh for week-2.

### *Western Uttar Pradesh*

- To protect the vegetable crop from frost, it is advised to spray 2% Urea or to provide light irrigation.
- Due to chances of rainfall, farmers are advised not to irrigate in gram, pea and lentil crops.

### *Eastern Uttar Pradesh*

- Intercultural operation is advised to check evaporation losses.

### **Jammu**

Amount of rainfall received over Jammu is 108.1 mm (-19% deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Jammu is below normal for week-1 and week-2.

- Due to the decrease in minimum temperature, farmers are advised to go for sowing of very late sown wheat varieties viz., Raj 3077, HD-2285, Raj-3765 and HD-2402.
- 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 80.6 mm (-48% deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over West Bengal is below normal for week-1 and above normal for 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.

- For the management of mite attack in chilli, it is advised to apply Pegasus @ 1 g/litre of water.

### **Odisha**

Amount of rainfall received over Odisha is 166.6 mm (27% excess) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Odisha is below normal for week-1 and above normal for week-2.

- Due to cloudy weather condition, there is a chance of leaf blight disease incidence in potato crop. To manage, spray of Mancozeb 75% WP @ 600 g/acre or Carbendazim 12% + Mancozeb 63% WP @ 400 g/acre.
- To manage pod borer in pigeon pea crop, it is advised to spray Chlorpyrifos 50% + Cypermethrin 5% EC @ 400 ml/acre or Profenophos 50% EC @ 400 ml/acre.

### **Assam**

Amount of rainfall received over Assam is 215.0 mm (9% excess) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Assam is below normal for week-1 and week-2.

- 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.
- For the management of caterpillars and leaf eaters in cole crops, spraying of Malathion 50 EC @ 1.5ml/litre of water is advised.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 77.9 mm (-15% deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Himachal Pradesh is normal for week-1 and below normal for week-2.

- Due to chances of frost occurrence, farmers are advised to protect the crop by applying light irrigation and mulching in crops during evening hours.
- For conservation of soil moisture and maintaining the soil temperature, it is advised to add mulch material in space between two rows of vegetables crops.
- Due to decrease in temperature, 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 23.7 mm (-21% deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Gujarat is above normal for week-1 and week-2.

- For the management of leaf curl disease in papaya, it is advised to uproot and destroy the infected papaya plant. If heavy incidence is noticed, spray Neem oil 1 ml per litre of water or Dimethoate 30 EC 10 ml in 10 litres water.
- Due to cold weather condition, it is advised to protect the newly born calves from cold wind and keep the animals indoor during night.

### **Punjab**

Amount of rainfall received over Punjab is 20.7 mm (-21% deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Punjab is above normal for week-1 and below normal for week-2.

- Due to the chance of rainfall, farmers are advised to give need-based irrigation in oilseed & vegetable crops and in fruit orchards.
- For the management of late blight disease in potato, it is advised to spray Indofil M-45/Mass M-45/Markzeb/Antracol/Kavach @ 500-700 g or Copper Oxychloride 50 WP/Mark copper @ 750-1000 g/acre in 250-350 litres of water at 7 days interval.

### **Andhra Pradesh**

Amount of rainfall received over Andhra Pradesh is 343.2 mm (54% excess) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Andhra Pradesh is below normal for week-1 and normal for week-2.

- The prevailing weather conditions are favorable for the incidence of sigatoka leaf spot disease in banana. To prevent, it is advised to spray Propiconazole @ 1 ml/litre of water, thrice at weekly interval.

### **Uttarakhand**

Amount of rainfall received over Uttarakhand is 17.8 mm (-71% large deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Uttarakhand is below normal for week-1 and week-2.

- To protect the crops from frost/cold injury, it is advised to apply light irrigation in the evening and cover the young plants with gunny bags or straw.
- It is advised to add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.

### **Chhattisgarh**

Amount of rainfall received over Chhattisgarh is 92.6 mm (21% excess) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January

2021 and 08 - 14 January 2021) on rainfall over Chhattisgarh is no rainfall for week-1 and above normal for week-2.

- Due to the chance of cloudy weather conditions, there may be infestation of pod borer in pigeon pea. It is advised to spray Indoxacarb @ 300 g/ha dissolved in 500 litres of water.
- Under prevailing weather condition, sowing of sunflower is advised with recommended varieties Modern, TNAU, SUF-7, BSH-1, KBSH-1, DRSH-1, Jwalamukhi, surya etc.

### **Madhya Pradesh**

Amount of rainfall received over Madhya Pradesh is 37.9 mm (-34% deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Madhya Pradesh is below normal for week-1 and above normal for week-2.

- Due to cloudy weather condition, there may be a chance of aphid attack in lentil. Monitoring and application of insecticide is advised.

### **Bihar**

Amount of rainfall received over Bihar is 30.1 mm (-59% deficit) during 01 October 2020 - 31 December 2020. The extended range weather forecast provided for next two weeks (01 - 07 January 2021 and 08 - 14 January 2021) on rainfall over Bihar is below normal for week-1 and week-2.

- Monitoring of pod borer is advised in chickpea. To manage, spray Profenophos 50 EC @ 1.5 litres mixed in 600-800 litres of water per hectare.
- Under prevailing weather conditions, sowing of late varieties of wheat crop PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036 is advised for North Bihar region.

### **Disclaimer:**

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