



## **National Agromet Advisory Service Bulletin**

based on

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

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Issued by

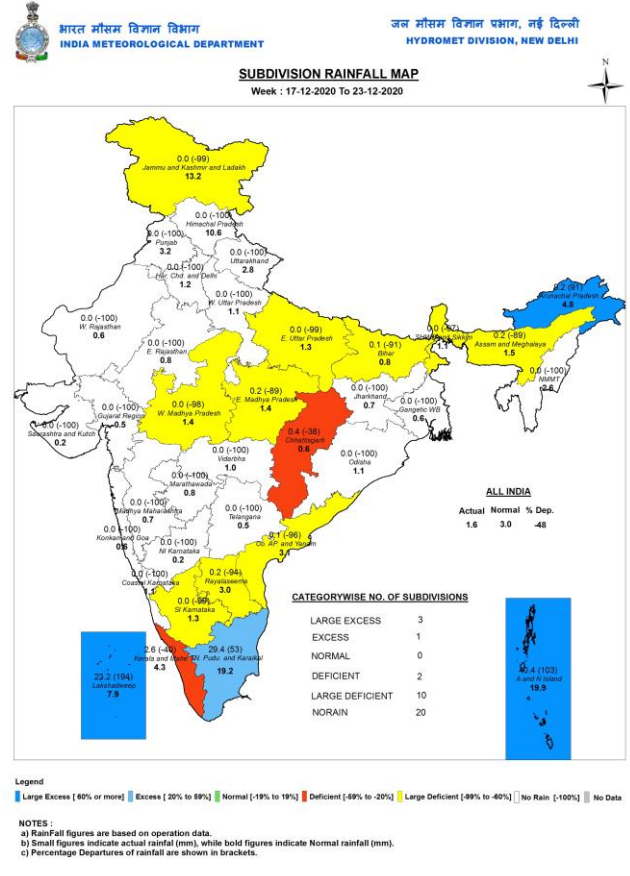
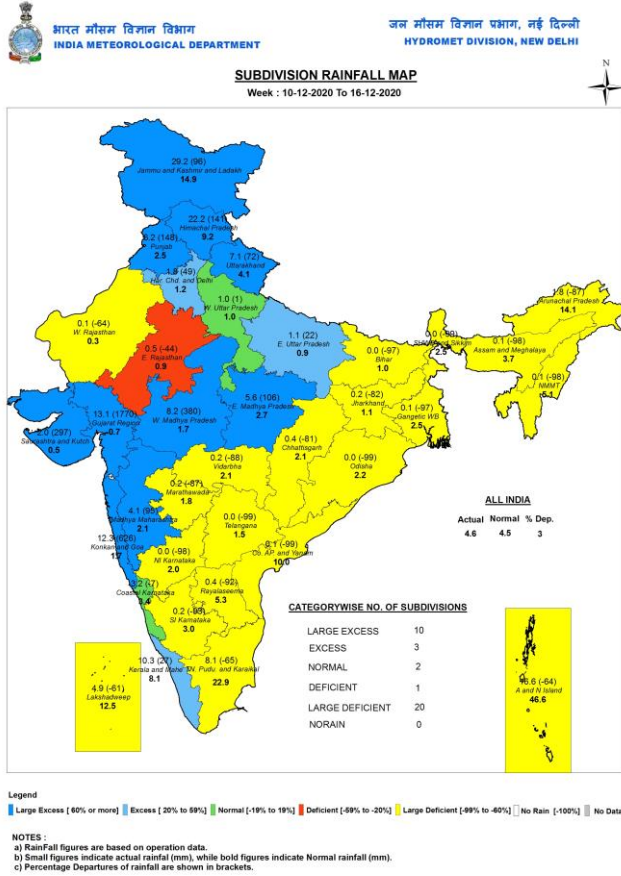
**AICRP on Agro-Meteorology (AICRPAM),  
Central Research Institute for Dryland Agriculture (CRIDA),  
Indian Council of Agricultural Research (ICAR)**

**&**

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

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

## Realized Rainfall (10<sup>th</sup> to 23<sup>rd</sup> December, 2020)

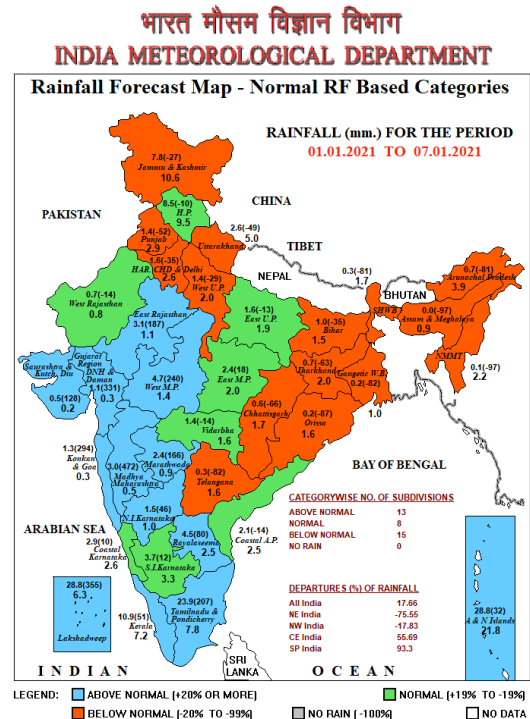
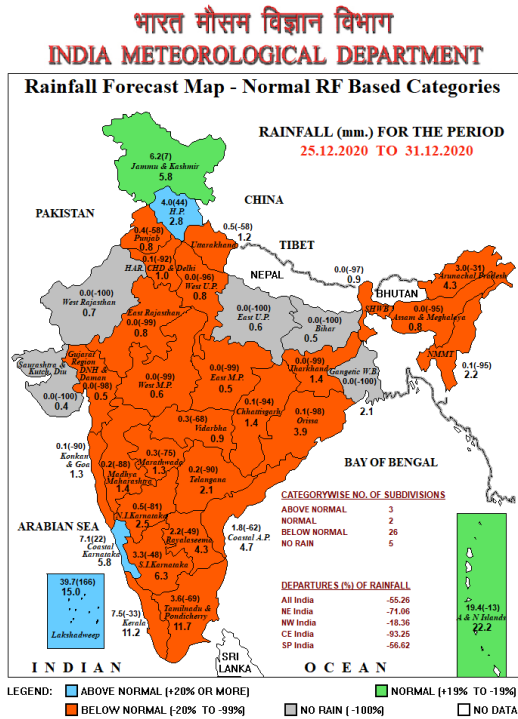


- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir (UT), Ladakh (UT), Himachal Pradesh, Uttarakhand, Punjab, Haryana Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Gujarat State, Konkan & Goa, Madhya Maharashtra, Arunachal Pradesh, Coastal Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, Andaman & Nicobar Islands and Lakshadweep.
- 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 – 23 Dec.)

(25<sup>th</sup> Dec. 2020 to 7<sup>th</sup> Jan., 2021)



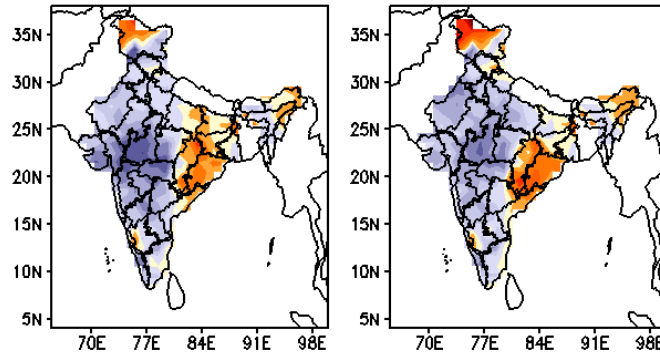
- **Week 1 (25.12.2020 to 31.12.2020):** Reduced rainfall activity likely in week 1 over most parts of India
- **Week 2 (01.01.2021 to 07.01.2021):** Rainfall is likely to increase over southern parts of India and adjoining equatorial Indian Ocean.

**Maximum and Minimum temperature anomaly ( $^{\circ}\text{C}$ ) forecast  
for next 2 weeks (IC – 23 Dec.)  
(25<sup>th</sup> Dec. 2020 to 7<sup>th</sup> Jan., 2021)**

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

(Week1: 25Dec-31Dec)

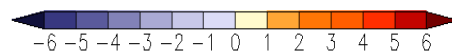
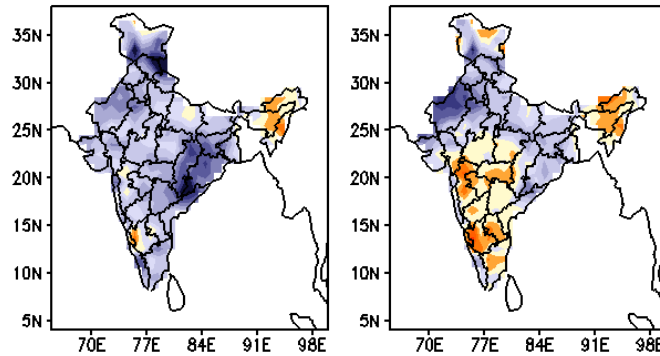
(Week2: 01Jan-07Jan)



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

(Week1: 25Dec-31Dec)

(Week2: 01Jan-07Jan)



**Maximum Temperature (Tmax)**

- **Week 1 (25.12.2020 to 31.12.2020) and Week 2 (01.01.2021 to 07.01.2021):** Tmax over Northwest and west central parts of India is likely to be below normal in week 1 & week 2. Slight above normal Tmax over eastern belt over Odisha, Chhattisgarh and adjoining region.

**Minimum Temperature (Tmin)**

- **Week 1 (25.12.2020 to 31.12.2020):** Cold wave condition is likely to continue over many parts of India including the eastern belts of Odisha, Bihar, Chhattisgarh in week 1.
- **Week 2 (01.01.2021 to 07.01.2021):** The cold wave condition is likely to continue over Northwest India in week 2, whereas, Tmin is likely to increase over southern India and central parts of India in week 2.

## Strategic Agricultural Planning based on rainfall during next two weeks till 07 January 2021

### Agro-met Advisories

#### Kerala

Amount of rainfall received over Kerala is 364.4 mm (-24% deficit) during 01 October 2020 - 25 December 2020. The extended range weather forecast for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) is below normal for week-1 and above normal for week-2.

- Due to increase in temperature, there is a chance of jassid attack in okra crop. To control, it is advised to apply 2% Neem oil emulsion once in a week or spray *Lecanicillium lecanii* at 20 g per litre of water.
- Under prevailing weather condition, there is a chance of leaf folder attack in *mundakan* paddy. It is advised to use *Trichogramma* cards @ 2CC per one acre. If attack is severe, spray Chlorantraniliprole @ 3 ml per 10 litres of water.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 469.8 mm (6% excess) during 01 October 2020 - 25 December 2020. The extended range weather forecast for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) is below normal for week-1 and above normal for week-2.

- Under the prevailing weather conditions, farmers are advised to monitor borer incidence in sorghum. If incidence is noticed, spray Methyl demeton 25 EC 500 ml/ha or Dimethoate 30 EC 500 ml/ha.
- 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 (66% large excess), Marathwada is 106.7 mm (8% excess), Vidharbha is 52.0 mm (-35% deficit) and Konkan region 254.2 mm (82% large excess) during 01 October 2020 - 25 December 2020. The extended range weather forecast for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) over Madhya Maharashtra, Vidharbha, Konkan and Marathawada is below normal for week-1 and above normal over Vidharbha, Marathwada, Konkan and Madhya Maharashtra for week-2.

#### Marathwada

- 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. To protect, 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 8.3 mm (-54% deficit) during 01 October 2020 - 25 December 2020. The extended range rainfall forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) over Hisar is below normal for week-1 and week-2.

- Under prevailing weather conditions, farmers are advised to apply need-based irrigation and sowing of late sown wheat varieties.
- There is a higher chance of decrease in night-time temperature. It is advised to keep the animals under shed and clean around to control fly and mosquitos in cattle shade.

#### **Karnataka**

Rainfall received during 01 October 2020 - 25 December 2020 over South Interior Karnataka is 202.5 mm (normal rainfall) and North Interior Karnataka is 179.8 mm (31% excess). The extended range weather forecast for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) over South Interior Karnataka and North Interior Karnataka is below normal for week-1 and normal over South Interior Karnataka and above normal over 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 - 25 December 2020 over East Uttar Pradesh 9.1 mm (-80% large deficit) and West Uttar Pradesh is 5.4 mm (-82% large deficit). The extended range weather forecast for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) over East Uttar Pradesh is no rainfall and West Uttar Pradesh is below normal for week-1 and normal over East Uttar Pradesh and below normal over West Uttar Pradesh for week-2.

#### *Western Uttar Pradesh*

- Farmers are advised for sowing of late sown wheat varieties in irrigated condition. Recommended varieties are HUW-234, K-7903, UP-2338, K-9162, K-9533, HD-2643, HP-1744, NW-1014, K-8020, UP-2425, NW-2036, DBW-14, K-9423, PBW-524, NW-1076 and HUW-510.
- Due to no rainfall conditions, farmers are advised to irrigate the timely sown wheat after 20-25 days of sowing.

#### *Eastern Uttar Pradesh*

- Intercultural operation is advised to check evaporation losses.

### **Jammu**

Amount of rainfall received over Jammu is 111.6 mm (-15% deficit) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Jammu is normal for week-1 and below normal for 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. Therefore, 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 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over West Bengal is no rainfall for week-1 and below normal for week-2.

- Due to cold weather condition, 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 in the night

time.

- 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 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Odisha is below normal for week-1 and week-2.

- Prevailing weather condition is favourable for sowing of coriander. Recommended high yielding varieties are CO-1, CO-2, CO-3, Swati, Sadhana, Ram Selection and Udi.
- 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. To manage the blister beetles, manually collect the insects and put them in kerosene or put them in a pit and cover the soil.

### **Assam**

Amount of rainfall received over Assam is 215.0 mm (11% excess) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Assam is below normal for week-1 and week-2.

- Because of rainfall deficit condition, it is advised to provide light irrigation immediately after the transplanting of 30-35 days old seedlings of *rabi* vegetables like cauliflower, cabbage, broccoli and knolkhol in the main field.
- Due to decrease in night temperature, there is a chance of aphid attack in rapeseed & mustard crop. To control, it is advised to spray Emamectin Benzoate 5% SG @ 5 g per 10 litres of water.

### **Rajasthan**

Amount of rainfall received over Rajasthan is 9.2 mm (-63% large deficit) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Rajasthan is below normal for week-1 and above normal for week-2.

- Under prevailing weather condition, there is a chance of powdery mildew disease in mustard crop. To control, it is advised to spray Ridomil MZ-2 dose 2g/litre.
- For the management of pod borer in gram, spraying of NPV 250 SL @ 1mm/litre of water is advised.

### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 67.5 mm (-13% deficit) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31



December 2020 and 01 - 07 January 2021) on rainfall over Himachal Pradesh is above normal for week-1 and 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 (-20% deficit) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Gujarat is below normal for week-1 and above normal for week-2.

- For the management of purple blotch blight disease in onion, it is advised to give 3 alternate spray of Propiconazole 20 ml, Mencozeb 25 g and Carbendazim 10 g in 10 liters water at 10 days interval.
- Due to cold weather condition, it is advised to protect the newly born calves from cold wind and keep the animals indoor at night time.

### **Punjab**

Amount of rainfall received over Punjab is 18.5 mm (-18% deficit) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Punjab is below normal for week-1 and week-2.

- Due to the chances of dry weather condition, farmers are advised to give need based irrigation in oilseed crops.
- 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 Oxchloride 50 WP/Mark copper @ 750-1000 g/acre in 250-350 litres of water at 7 days interval.

### **Jharkhand**

Amount of rainfall received over Jharkhand is 67.5 mm (-24% deficit) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Jharkhand is below normal for week-1 and week-2.

- Present weather condition is congenial for the attack of powdery mildew disease in vegetable pea. To control, it is advised to spray Kairathen @ 1.5 ml or Sulfex @ 3 g per litre of water.
- Present weather condition is also conducive for the attack of blight disease in tomato. Therefore,

it is advised to spray Redomyl MZ @ 1.5 g per litre of water.

### **Andhra Pradesh**

Amount of rainfall received over Andhra Pradesh is 343.2 mm (55% excess) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Andhra Pradesh is below normal for week-1 and above normal for week-2.

- Present weather condition is congenial for stem necrosis in groundnut crop. It is advised to spray Monocrotophos @ 1.6 ml or Imidachloprid @ 0.3 ml/litre of water.
- Present weather condition is also favourable for the incidence of mango hoppers in Vizianagaram, Krishna, Ananthapuramu, Kurnool and East Godavari districts. To control, spraying of Dimethoate @ 2ml or Chlorpyrifos @ 2.5ml/litre of water is advised.

### **Uttarakhand**

Amount of rainfall received over Uttarakhand is 16.8 mm (-69% large deficit) during 01 October 2020 - 25 December 2020. The extended range weather forecast provided for next two weeks (25 - 31 December 2020 and 01 - 07 January 2021) on rainfall over Uttarakhand is below normal for week-1 and week-2.

- To protect the crops from frost/cold, it is advised to apply light irrigation in the evening and cover the young plants with gunny bags, 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.

### ***Disclaimer:***

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