



# **National Agromet Advisory Service Bulletin**

based on

**Extended Range Weather Forecast (ERFS)** 

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Central Research Institute for Dryland Agriculture (CRIDA),
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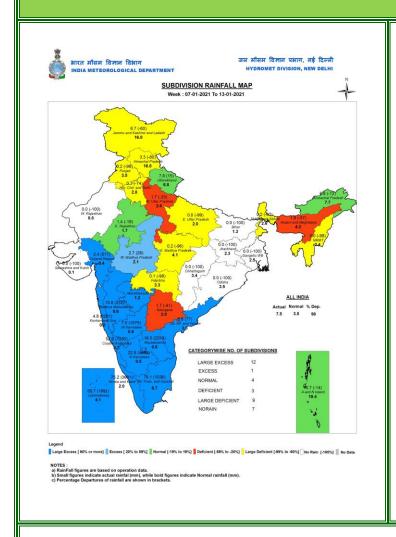
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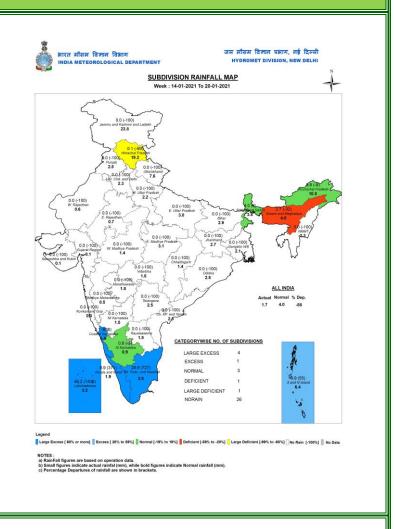
India Meteorological Department (IMD), Earth System Science Organization

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

# Realized Rainfall

(7th Jan. to 20th Jan., 2021)



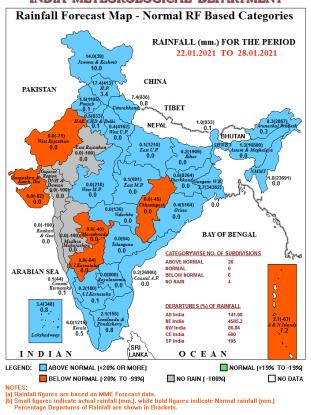


- Normal or above normal rainfall occurred in both the weeks in Arunachal Pradesh, Coastal Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal, Andaman & Nicobar Islands and Lakshadweep.
- Normal or above normal rainfall occurred in either of the two weeks in Uttarakhand, East Rajasthan, Gujarat Region, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Rayalaseema and North Interior Karnataka.
- Below Normal rainfall / no rain occurred in both the weeks over rest of the country.

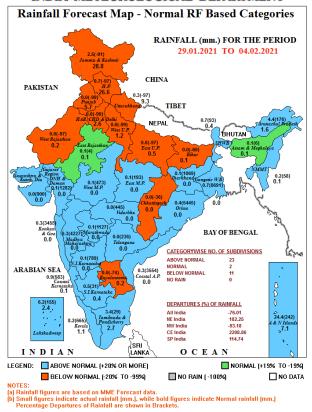
## **Extended Range Forecast System**

Rainfall forecast maps for the next 2 weeks (IC -20 Jan.) (22<sup>nd</sup> Jan. to 4<sup>th</sup> Feb., 2021)

# भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



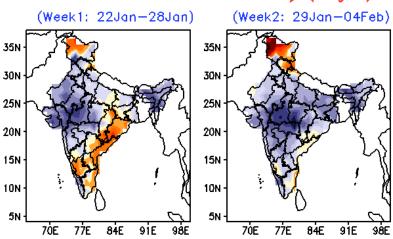
# भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT



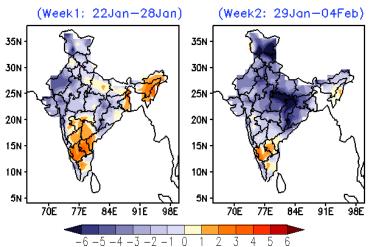
- Week 1 (22.01.2021 to 28.01.2021): Western Disturbance associated rainfall is likely over extreme north India during week 1 over Jammu & Kashmir and Ladakh (UTs), Uttarakhand and Himachal Pradesh. The South peninsula particularly over Kerala and Tamil Nadu will also get rainfall during week 1. Rainfall likely to be below normal over rest of the country.
- Week 2 (29.01.2021 to 04.02.2021: Rainfall over parts of the south peninsula and some parts of northeastern India likely in week 2.

# $\begin{array}{c} \text{Maximum and Minimum temperature anomaly ($^{O}$C) forecast} \\ \text{for next 2 weeks (IC} - 20 \text{ Jan.)} \\ \text{(22$^{nd}$ Jan. to 4$^{th}$ Feb., 2021)} \end{array}$

MME forecast Tmax anomaly (Deg C)



## MME forecast Tmin anomaly (Deg C)



#### **Maximum Temperature (Tmax)**

- Week 1 (22.01.2021 to 28.01.2021): Above normal Tmax over the eastern belt over Odisha, Chhattisgarh, Jharkhand, Coastal Andhra Pradesh, Tamil Nadu, whereas Northwest and Northeast parts of India will have below normal Tmax in week 1.
- Week 2 (29.01.2021 to 04.02.2021): Mainly below normal Tmax likely over the country in week 2.

#### **Minimum Temperature (Tmin)**

• Week 1 (22.01.2021 to 28.01.2021) and Week 2 (29.01.2021 to 04.02.2021): 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 particularly in week 2.

# Strategic Agricultural Planning based on rainfall during next two weeks till 04 February 2021

# **Agro-met Advisories**

#### Kerala

Amount of rainfall received over Kerala is 104.3 mm (1699% large excess) during 01 January 2021 - 22 January 2021. The extended range weather forecast for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) is above normal for week-1 and week-2.

- Due to increase in temperature, there is a chance of attack of sucking pests in vegetables. It is advised to apply 2% Neem oil emulsion once in a week or by spray *Lecanicillium lecani* @ 20 g per litre of water.
- Under prevailing weather condition, there is a chance of nematode attack in banana. It is advised to apply Carbosulfan 6G @ 20 g per pit at the time of planting.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 138.1 mm (901% large excess) during 01 January 2021 - 22 January 2021. The extended range weather forecast for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) is above normal for week-1 and week-2.

- Present weather condition is favorable for blast, smut & leaf folder incidence in paddy. To prevent, 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 Triozhophos 2 ml + Neem oil 5 ml/litre or Phosalone 35 EC 1.5 ml + Neem oil 5 ml/litre or release *Cryptolaemous montrouzieri* beetles @ 10/tree.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 17.4 mm (1141% large excess), Marathwada is 3.0 mm (-17% deficit), Vidharbha is 0.3 mm (-96% large deficit) and Konkan region 5.6 mm (1029% large excess) during 01 January 2021 - 22 January 2021. The extended range weather forecast for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) over Madhya Maharashtra and Konkan is no rainfall, Marathawada is below normal and Vidharbha is above normal for week-1 and above normal over Vidharbha, Marathwada, Madhya Maharashtra and 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

• For the management of pod borer in chickpea, it is advised to spray 5% NSKE or Azadirachtin 1500 ppm @ 25 ml or Quinolphos 25% EC @ 20 ml per 10 litres of water.

#### Madhya Maharashtra

- Under prevailing weather condition, it is advised to give irrigation to wheat crop which is at flowering stage.
- Sowing of groundnut is advised between 15 January to 15 February.

#### Konkan

- Due to increase in temperature, there is a possibility of incidence of rugose spiraling white fly in coconut. If incidence is noticed, spray 50 ml Neem seed kernel extract 0.5% @ 30 ml per 10 litres of water.
- Prevailing weather condition is also congenial for hoppers and powdery mildew disease in mango which is at flower bud stage. Spray Lambda cyhalothrin 5% EC @ 6 ml + Hexaconazole 5% @ 5 ml or wettable Sulphur 80% @ 20 g per 10 litres in water during clear weather.

#### Hisar

Amount of rainfall received over Hisar is 21.5 mm (179% large excess) during 01 January 2021 - 22 January 2021. The extended range rainfall forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) over Hisar is above normal for week-1 and below normal for week-2.

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

#### Karnataka

Rainfall received during 01 January 2021 - 22 January 2021 over South Interior Karnataka is 26.6 mm (1299% large excess) and North Interior Karnataka is 8.1 mm (222% large excess). The extended range weather forecast for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) over South Interior Karnataka 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

• To protect the pulse seeds from storage pests, it is advised to apply oils of castor/ linseed/ honge/ neem @ 3-5 ml per kg of seeds.

• It is advised to manage the humidity in the silk worm rearing house by providing good cross-ventilation. Dust dry slaked lime powder when silkworms settle for moult.

#### North Interior Karnataka

- Farmers are advised to take up the plant protection measures in horticultural crops like citrus, pomegranate, grapes and field crops like onion, chickpea and safflower carefully.
- Harvesting of pigeon pea is advised.
- Vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and *Haemorrhagic Septcaemia*.

#### Uttar Pradesh

Rainfall received during 01 January 2021 - 22 January 2021 over East Uttar Pradesh 0.3 mm (-96% large deficit) and West Uttar Pradesh is 13.1 mm (75% large excess). The extended range weather forecast for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) over East Uttar Pradesh 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

- Under prevailing dry weather condition, farmers are advised to irrigate *rabi* crops.
- Due to foggy weather condition, farmers are advised to watch for aphids in mustard crop. If observed, spray Chlorpyriphos 20% EC @ 1.0 litre/ha or Monocrotophos 36 % SL @ 500 ml/ha with 500-600 litres of water.
- For protection of fog and frost, light irrigation is advised in chickpea, pea and lentil at vegetative stage.

#### Eastern Uttar Pradesh

- Under prevailing dry and cold weather conditions, straw mulching and intercultural operations are advised in the field to maintain the moisture.
- Under prevailing weather conditions, there is a possibility for attack of fruit borers in brinjal. Hence, it is advised to save crop by using suitable plant protection measures.

#### Jammu

Amount of rainfall received over Jammu is 34.5 mm (-42% deficit) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Jammu is above normal for week-1 and below normal for week-2.

• Monitoring is advised in *rabi* pulses for wilt and blight attack. If observed, apply Bavistin/Carbendazim @ 3g/litre of water.

• Due to favourable weather conditions, there is a chance of *alternaria* blight in mustard crop. If observed, spraying of Mancozeb @ 0.25% is advised.

#### West Bengal

Amount of rainfall received over West Bengal is 0.0 mm (-100% large deficit) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over West Bengal is above normal for week-1 and week-2.

- Under prevailing weather conditions, stem rot may appear in potato crop. It is advised to apply Mancozeb @ 2.0 g per litre of water.
- Prevailing weather condition is also congenial for white streak disease in pulses. 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 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Odisha is above normal for week-1 and week-2.

- It is optimum time for sesame sowing with varieties Uma, Usha, Kalika, Nirmala, Prachi and Amrit.
- For the management of whiteflies in tomato and brinjal crop, spray Neem-based pesticide (Azadirachtin) 1500 ppm @ 600 ml/acre by mixing in 200 litres of water.

#### Assam

Amount of rainfall received over Assam is 8.6 mm (-21% deficit) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Assam is above normal for week-1 and normal for week-2.

- Prevailing cloudy and heavy fog weather condition may trigger the incidence of wilt disease in the *rabi* pulse crops. To manage, it is advised to drench the field with Bavistin @ 1ml/litre of water.
- Under prevailing weather condition, it is advised to irrigate boro rice to maintain standing water of 5±2 cm depth.

#### **Himachal Pradesh**

Amount of rainfall received over Himachal Pradesh is 30.4 mm (-44% deficit) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Himachal Pradesh is above normal for week-1 and below normal for week-2.

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

## Gujarat

Amount of rainfall received over Gujarat is 2.5 mm (253% large excess) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Gujarat is no rainfall for week-1 and above normal for week-2.

- Present weather condition is favourable for aphid incidence in mustard crop. To control, spray Neem based insecticide 20 ml (1 EC) to 40 ml (0.15 EC) in 10 litres water.
- Present weather condition is also favourable for leaf blight disease incidence in wheat crop. To control, give two sprays of Mancozeb 75 WP @ 27 g in 10 litres of water at an interval of 15 days during initial incidence of disease is advised.

#### **Andhra Pradesh**

Amount of rainfall received over Andhra Pradesh is 22.8 mm (613% large excess) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Andhra Pradesh is above normal for week-1 and below normal for week-2.

• Present weather condition is favourable for incidence of blast, leaf folder and stem borer in rice. To control the blast disease, farmers are advised to spray Tricyclazole @ 0.6 g/litre of water and to control leaf folder and stem borer spray Acephate @ 1.5g/ litre or Chlorantraniliprole@ 0.4 ml/litre of water.

#### Uttarakhand

Amount of rainfall received over Uttarakhand is 27.3 mm (16% excess) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Uttarakhand is above normal for week-1 and below normal for 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 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 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 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Bihar is above normal for week-1 and below normal for week-2.

- Prevailing weather condition is highly favorable for infestation of late blight disease in potato crop. Farmers are advised to spray Dithane M-45 or Redomil @ 1.5 g/litre of water.
- Due to low temperature and less soil moisture condition, it is advised to apply irrigation to the vegetable crops such as french bean, pea and cauliflower.

#### **Punjab**

Amount of rainfall received over Punjab is 10.0 mm (-5% deficit) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Punjab is above normal for week-1 and below normal for week-2.

• Prevailing weather is congenial for white rust disease in oilseed crop. To protect, it is advised to spray Ridomil Gold @ 250 g/100 litres of water per acre.

#### Jharkhand

Amount of rainfall received over Jharkhand is 0.0 mm (-100% large deficit) during 01 January 2021 - 22 January 2021. The extended range weather forecast provided for next two weeks (22 - 28 January 2021 and 29 January - 04 February 2021) on rainfall over Jharkhand is above normal for week-1 and week-2.

• Under prevailing weather conditions, farmers may go for sowing of summer vegetable crops like sponge gourd, bottle gourd, pumpkin, water melon, musk melon etc. in pits.

#### Disclaimer:

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