



## **National Agromet Advisory Service Bulletin**

## based on

**Extended Range Weather Forecast (ERFS)** 

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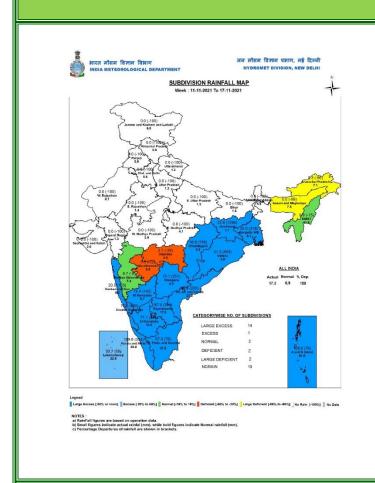
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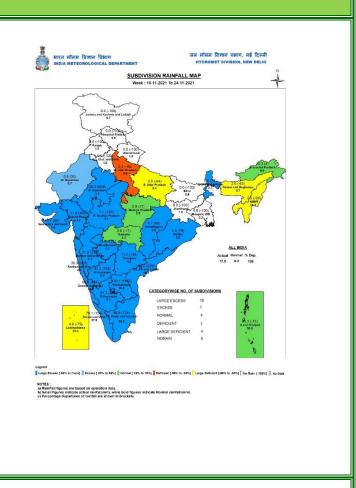
India Meteorological Department (IMD), Earth System Science Organization

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

#### **Realized Rainfall**

(11th to 24th November, 2021)

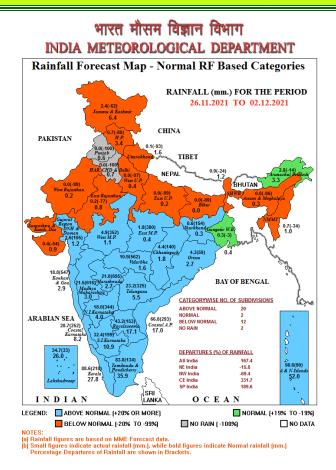


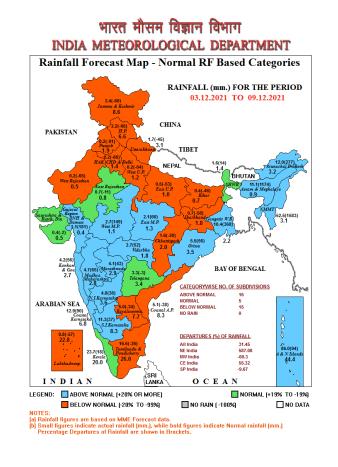


- Normal or above normal rainfall occurred in both the weeks in Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Chhattisgarh, Odisha, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Telangana, Rayalaseema, Coastal Andhra Pradesh & Yanam, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe and Andaman & Nicobar Islands.
- Normal or above normal rainfall occurred in either of the two weeks in East Rajasthan, West Rajasthan, Gujarat Region, Saurashtra & Kutch, West Madhya Pradesh, East Madhya Pradesh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Gangetic West Bengal, Arunachal Pradesh, Nagaland Manipur Mizoram & Tripura (NMMT) and Lakshadweep
- Below Normal rainfall /no rain occurred in both the weeks / either of the two weeks over Jammu & Kashmir and Ladakh (UTs), Uttarakhand, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Uttar Pradesh, Bihar and Assam & Meghalaya.

## **Extended Range Forecast System**

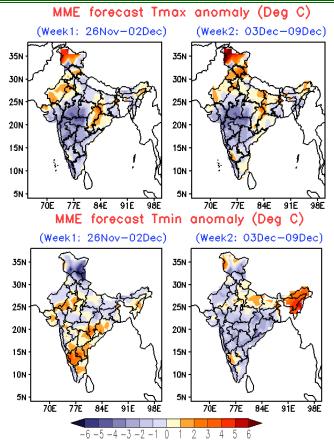
Rainfall forecast maps for the next 2 weeks (IC – 24 November) (26<sup>th</sup> Nov. to 9<sup>th</sup> December, 2021)





- Week 1 (26.11.2021 to 02.12.2021): Active northeast monsoon condition is likely over the southern peninsula regions of India in week 1. The western coastal states from Kerala, Tamil Nadu, South Interior Karnataka and southern parts of Maharashtra (Konkan), Western parts of Madhya Pradesh, coastal Andhra Pradesh will also be active during the period.
- Week 2 (03.12.2021 to 09.12.2021): Mostly weak northeast monsoon rainfall likely in week 2.

## Maximum and Minimum temperature anomaly (OC) forecast for next 2 weeks (IC – 24 November) (26th Nov. to 9th December, 2021)



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

Week 1 (26.11.2021 to 02.12.2021) and Week 2 (03.12.2021 to 09.12.2021): Mostly below normal Tmax likely over west-central and southern parts of India. However, some parts of Odisha and Chhattisgarh, Northeast states and parts of northern India including Jammu & Kashmir (UTs), Himachal Pradesh and adjoining regions will have above normal Tmax.

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

- Week 1 (26.11.2021 to 02.12.2021): Tmin with slight negative anomaly likely over northwest and adjoining northern India over Jammu & Kashmir (UTs) and Himachal Pradesh region in week 1. However, remaining regions of India will have normal to slightly above normal Tmin particularly over southern part and southeastern part of India.
- Week 2 (03.12.2021 to 09.12.2021): The regions of above normal Tmin over central India and south peninsula in week 1 have been reduced in week 2 with more parts having weak anomalies except the region of northeast India and Uttar Pradesh, Bihar and northern parts of Madhya Pradesh.

#### Strategic Agricultural Planning based on rainfall during next two weeks till 09 December 2021

## **Agro-met Advisories**

#### Kerala

Amount of rainfall received over Kerala is 939 mm (110% large excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) is above normal for week-1 and normal for week-2.

- During rainy season, there is a chance of foot rot disease in pepper. As a prophylactic measure add 2 kg Trichoderma to a mixture of 90 kg FYM &10 kg neem cake and kept for two weeks with sufficient moisture, then add 2.5 kg of this mixture to each matured vine to control foot rot of pepper.
- Due to high relative humidity, there is a chance of downy mildew attack in cucurbitaceous vegetables. It is advised to spray 2.5 g Mancozeb per one litre of water under the leaves during clear sky weather.

#### Tamil Nadu

Amount of rainfall received over Tamil Nadu is 541 mm (62% large excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) is above normal for week-1 and below normal for week-2.

- Under the prevailing weather condition, farmers are advised to drain out the stagnated water from the nursery fields of chilli.
- Prevailing weather condition are congenial for Yellow Mosaic Virus incidence in pulses. Farmers are advised to go for foliar spray of Notchi leaf extract 10% at 30 DAS or Neem formulation @ 3 ml/litre or spray Methyl demeton 25 EC 500 ml per ha.

#### Maharashtra

Rainfall received over Madhya Maharashtra is 129 mm (38% excess); Marathwada is 112 mm (26% excess); Vidarbha is 62 mm (-11% deficit) and Konkan region is 190 mm (43% excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Konkan, Vidarbha, Marathwada and Madhya Maharashtra is above normal for week-1 and; week-2.

#### Konkan

- Due to the chances of dry weather condition from 26 November, farmers are advised to start the spraying operation in mango and cashewnut orchard for control of pest and disease under clear weather conditions.
- Due to prevailing rainfall and cloudy weather condition, there is possibility for Anthracnose disease incidence on vegetative flush and inflorescence of mango. Farmers are advised to spray Azoxystrobin 23% SC @ 6 ml per 10 litres of water.

#### Vidarbha

- Under prevailing weather condition, need based protective irrigation is advised in vegetables.
  Transplanting of brinjal, tomato, cabbage cauliflower and seed sowing of radish, carrot and leafy vegetables may be initiated during this period.
- For delayed sowing of irrigated wheat (November 15-December 15) it is advised to use varieties–*PDKV Sardar (AKAW 4210-6), AKAW 4627, AKW-1071 (Purna), AKW-381, HI 977.*

## Madhya Maharashtra

- For the management of shoot fly in sorghum, it is advised to spray of Imidacloprid @ 5 ml per 10 litres of water during clear weather condition.
- Farmers are advised to go for irrigated wheat sowing by November 15. The recommended varieties are *Trimbak, Tapovan, Godavari* and rainfed varieties are *Panchavati, Netravati and Sharad.*

#### Marathwada

- Due to cloudy weather condition, infestation of insect and flower drop may observe in pigeon pea. For management of pod borer, it is advised to spray of Emamectin benzoate 5 SG @ 4.4 g or Flubendiamide 39.35 SC @ 2 ml or Chlorantraniliprole 18.5 SC @ 3 ml per 10 litres of water.
- Due to continuous cloudy weather during last few days infestation of leaf spot disease may observed in turmeric. To control this, it is advised to spray of Azoxystrobin 18.2% + Difenoconazole 11.4% @ 10 ml + 5 ml sticker per 10 litres of water.

#### Hisar

Amount of rainfall received over Hisar is 26 mm (108% large excess) during 01 October - 24 November 2021. The extended range rainfall forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Hisar is no rainfall for week-1 and below normal for week-2.

- Farmers are advised for sowing of barley with recommended varieties *BH 393*, *BH 902*, *BH 88* and *BH 986*.
- There is a possibility of fall in night temperature and variable weather. Therefore, farmers are advised to keep the animal under sheds and cleans around to control fly and mosquito in cattle shade.

#### Karnataka

Rainfall received during 01 October - 24 November 2021 over South Interior Karnataka is 472 mm (152% large excess) and North Interior Karnataka is 158 mm (22% excess). The extended range

weather forecast (rainfall) for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and week-2.

#### North Interior Karnataka

- In the areas where heavy and continuous rainfall has been received during past 8-10 days may adversely impact the growth and development of crops. Therefore, it is advised to drain out excess and standing water by making proper channels in the field.
- As the soil moisture condition is good, sowing of chickpea and wheat (irrigated and *Dicoccum*) may be taken up.

#### South Interior Karnataka

• Under prevailing weather condition, sowing of horse gram- (var. *PHG-9*, *KBH-1*, *Niger*); field bean (var. *HA-3* and 4) and sunflower (var. *KBSH-1*, 41, 42, 44 and 53); cowpea (var. *KBC-1*, *TVX-944* and *PKB-4*) for vegetable purpose is advised.

#### **Uttar Pradesh**

Rainfall received during 01 October - 24 November 2021 over East Uttar Pradesh is 87 mm (116% large excess) and West Uttar Pradesh is 93 mm (226% large excess). The extended range weather forecast (rainfall) for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and; week-2.

#### Western Uttar Pradesh

- As per forecast clear weather appearing from coming week. Therefore, farmers are advised harvest mature paddy crop.
- For the management of leaf webber in pigeon pea, it is advised to spray Emamectin benzoate 5% SG @ 250g/ha or Cypermethrin 25% EC @ 500ml/ha with 500 litres of water solution.

#### Eastern Uttar Pradesh

• Intercultural operation is advised to check the evapotranspiration losses and proper utilization of nutrient to the crop.

#### Iammu

Amount of rainfall received over Jammu is 106 mm (75% large excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Jammu is below normal for week-1 and week-2.

• Due to the presence of sufficient moisture in the soil, farmers are advised to continue the sowing of wheat varieties. Recommended varieties for rainfed condition are *PBW-396*, *PBW-175* and *RSP-81* (*jitto*) and *PBW-550*, *DBW-17*, *DBW-222*, *DBW-187*, *Raj-3077*, *RSP-303*, *WH-542*,

WH-1105, PBW-502, and HD-2687 under irrigated areas.

• Under prevailing weather condition, it is advised to spray Imidacloprid @ 1ml/3litres of water to control cabbage butterfly, and caterpillar in cole crops.

#### Assam

Amount of rainfall received over Assam is 141 mm (-22% deficit) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Assam is below normal for week-1 and above normal for week-2.

- Current weather is favourable for sowing of carrot seeds in main field. Recommended varieties are *Nantes, Pusa Kesar, Chutney*.
- Farmers who have already planted the potato crop, it is advised to adopt mulching under rainfed condition by using water hyacinth as mulch material to increase the tuber yield and also reduces rodent damage of tubers.

#### Chhattisgarh

Amount of rainfall received over Chhattisgarh is 62 mm (-8% deficit) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Chhattisgarh is above normal for week-1 and below normal for week-2.

- Because of sufficient amount of moisture in the soil due to the rains in the last days, farmers are advised for sowing of *rabi* crops.
- As per the weather forecast, there is a possibility of light to moderate rain and cloudy weather in most places in the coming days. Therefore, farmers are advised that do not harvest kharif paddy crop. If harvested, then crop should be kept in dry and safe places.

#### Gujarat

Amount of rainfall received over Gujarat is 41 mm (54% excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Gujarat is below normal for week-1 and normal for week-2.

- Under prevailing weather condition, sowing of *rabi* maize is advised with varieties like *GAYMH-3*, *Ganga Safed-2*, *GM-2*, *GM-6*, *Narmada moti*.
- Monitoring of pink bollworm in cotton crop is advised. To control it, install five pheromone traps (with lure) per hectare. In case of heavy incidence, spray Spinosad 45% SC @ 3 ml in 10 litres water in clear weather condition.

#### Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 58 mm (37% excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Himachal Pradesh is below normal for week-1 and week-2.

- 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. Addition of mulch also prevents the growth of weeds.
- Under prevailing weather condition, suitable varieties of cauliflower, capsicum and tomato should be transplanted in polyhouse.

## Punjab

Amount of rainfall received over Punjab is 35 mm (180% large excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Punjab is above no rainfall for week-1 and below normal for week-2.

- Farmers are advised to complete sowing of long duration varieties of wheat like PBW 869, PBW 824, PBW 803, Sunehri (PBW 766), PBW 1 Chapati, DBW 222, DBW 187, HD 3226, Unnat PBW 343, Unnat PBW 550, PBW 1 Zinc, PBW 725, PBW 677, HD 3086, WH 1105, HD 2967 and durum wheat WHD 943 and PDW 291 under irrigated conditions.
- It is the optimum time for transplanting of late season varieties of cauliflower and also the best time for sowing of spinach, fenugreek, coriander, radish, turnip and main season varieties of pea.

#### **West Bengal**

Rainfall received during 01 October - 24 November 2021 over Gangetic West Bengal is 226 mm (47% excess) and Sub-Himalayan West Bengal is 280 mm (67% large excess). The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Gangetic West Bengal normal and Sub-Himalayan West Bengal is below normal for week-1 and over Gangetic West Bengal above normal and Sub-Himalayan West Bengal is normal for week-2.

• Under prevailing weather condition, it is advised to continue the rice harvesting and after drying and threshing, grains should be properly dried to right moisture level.

#### **Jharkhand**

Amount of rainfall received over Jharkhand is 136 mm (65% large excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Jharkhand is above normal for week-

1 and below normal for week-2.

• Prevailing 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 per litre of water or Sulfex @ 3 g per litre of water.

#### Andhra Pradesh

Rainfall received during 01 October - 24 November 2021 over Rayalaseema is 409 mm (115% large excess) and Coastal Andhra Pradesh and Yanam is 308 mm (5% excess). The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Rayalaseema and Coastal Andhra Pradesh above normal for week-1 and below normal for week-2.

- The present rainy weather conditions are favorable for incidence of bacterial leaf spot and boll rot disease in cotton grown in Krishna, Ananthapurmu, Guntur and Kadapa districts. To control, spraying of Copper oxychloride @ 30 g + Streptocycline @ 1 g in 10 litres of water is recommended.
- Present weather conditions are favorable for the incidence and spread of sigatoka leaf spot disease in banana grown in Ananthapuramu, Vizianagaram, Nellore and West Godavari districts. To prevent, spraying of Propiconazole @ 0.1% or Tebuconazole + Trifoxystrobin @ 1ml/litre for 2-3 times in 25 days interval is recommended.

#### Odisha

Amount of rainfall received over Odisha is 134 mm (8% excess) during 01 October - 24 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (26 November - 02 December 2021 and 03 - 09 December 2021) over Odisha is above normal for week-1 and week-2.

- Due to rain and overcast condition since few weeks, there is a chance of ear head caterpillar infestation in paddy. To manage, it is advised to spray Chlorpyriphos 50% + Cypermethrin 5% EC @ 400 ml/acre or Lambda cyhalothrin @ 400 ml/acre.
- In cloudy condition there are chances of aphid infestation in early sown mustard crop. To manage, it is advised to spray Thiamethoxam 25 % WG @ 40 g/acre or Acetamiprid 20% SP @ 50 g/acre in 200 litres of water.

#### Disclaimer:

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