



National Agromet Advisory Service Bulletin

based on

Extended Range Weather Forecast (ERFS)

Validity: 19 November – 02 December 2021

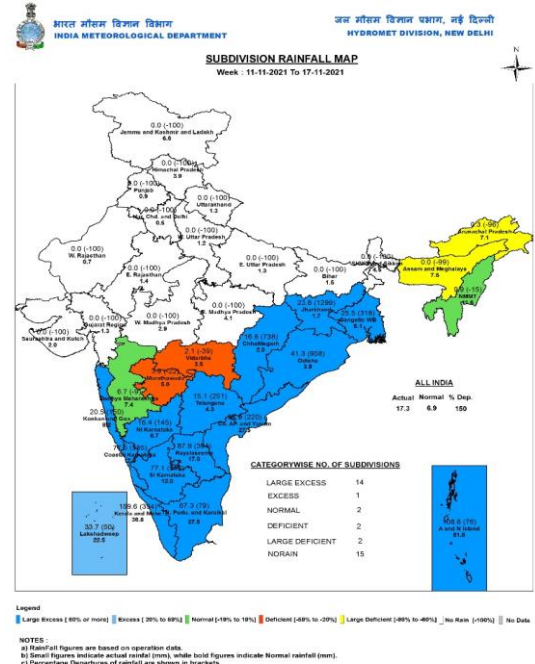
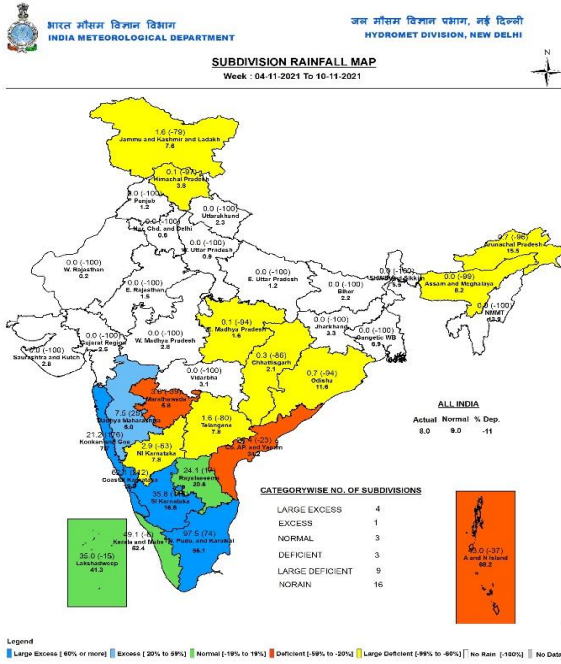
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**AICRP on Agro-Meteorology (AICRPAM)
Central Research Institute for Dryland Agriculture (CRIDA)
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&
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Earth System Science Organization**

Realized Rainfall and Extended Range Forecast (Rainfall and Temperature)

Realized Rainfall (4th to 17th November, 2021)

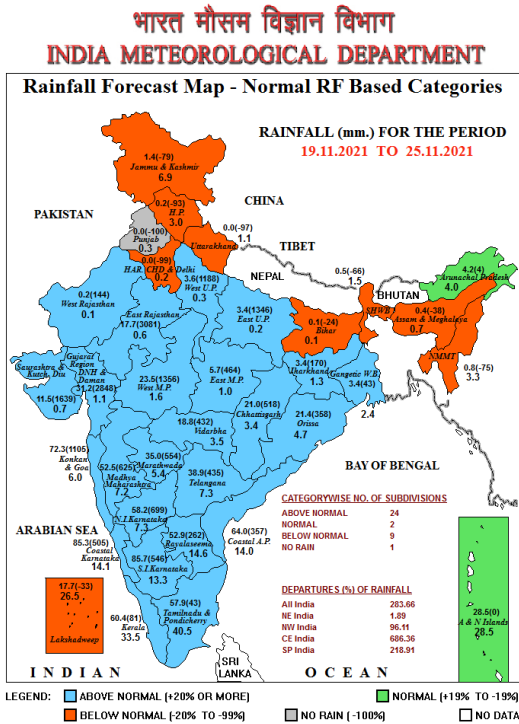


- Normal or above normal rainfall occurred in both the weeks in Konkan & Goa, Madhya Maharashtra, Coastal Karnataka, South Interior Karnataka, Rayalaseema, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe and Lakshadweep.
- Normal or above normal rainfall occurred in either of the two weeks in Chhattisgarh, Jharkhand, Odisha, Gangetic West Bengal, Nagaland Manipur Mizoram & Tripura (NMMT), Telangana, Coastal Andhra Pradesh & Yanam. North Interior Karnataka and Andaman & Nicobar Islands
- 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, East Rajasthan, West Rajasthan, West Madhya Pradesh, East Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Gujarat Region, Saurashtra & Kutch, Marathwada and Vidarbha.

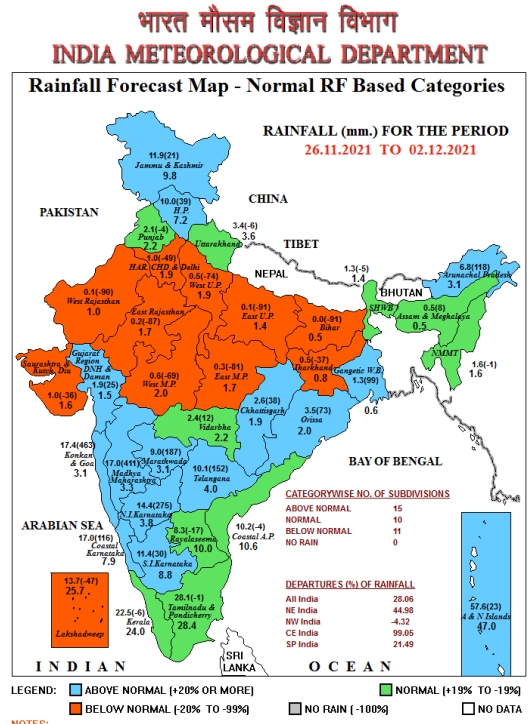
Extended Range Forecast System

Rainfall forecast maps for the next 2 weeks (IC – 17 November)

(19th November to 2nd December, 2021)



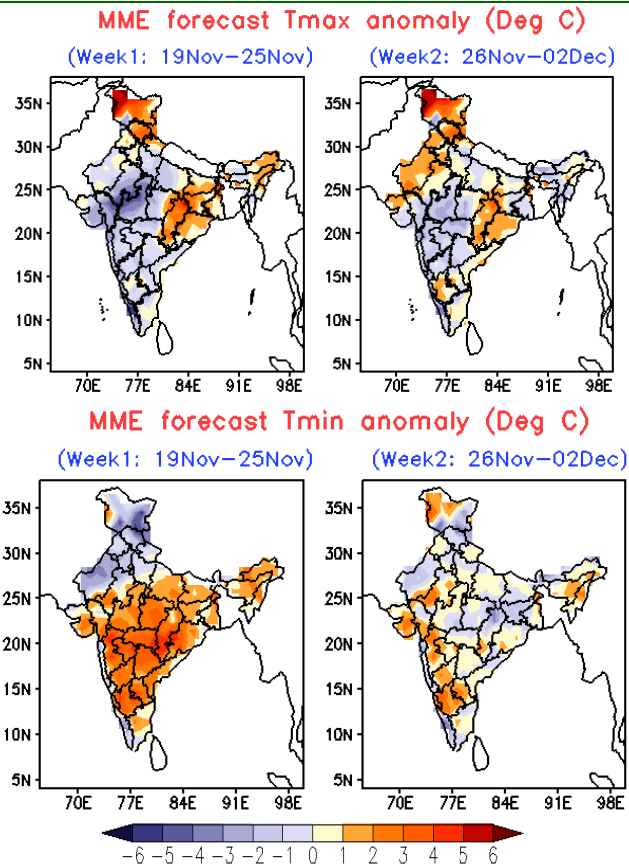
NOTES:
 (a) Rainfall figures are based on MME Forecast data.
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 Percentage Departures of Rainfall are shown in Brackets.



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 (a) Rainfall figures are based on MME Forecast data.
 (b) Small figures indicate actual rainfall (mm.), while bold figures indicate Normal rainfall (mm.)
 Percentage Departures of Rainfall are shown in Brackets.

- **Week 1 (19.11.2021 to 25.11.2021):** Active northeast monsoon condition is likely over the southern peninsula regions of India in week 1. The western coastal states from Kerala, South Interior Karnataka and southern parts of Maharashtra (Konkan), Gujarat and western parts of Madhya Pradesh, Odisha, coastal Andhra Pradesh and adjoining regions in east coast will also be active during the period.
- **Week 2 (26.11.2021 to 02.12.2021):** Mostly normal northeast monsoon rainfall likely to occur.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 17 November)
(19th Nov. to 2nd December, 2021)**



Maximum Temperature (Tmax)

- **Week 1 (19.11.2021 to 25.11.2021):** Mostly below normal Tmax 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, Himachal Pradesh and adjoining regions will have above normal Tmax.
- **Week 2 (26.11.2021 to 02.12.2021):** Mostly similar patterns like week 1 with some more parts of northwest India likely with above normal Tmax.

Minimum Temperature (Tmin)

- **Week 1 (19.11.2021 to 25.11.2021):** Tmin with slight negative anomaly over northwest and adjoining northern India likely over Jammu & Kashmir and Himachal Pradesh region in week 1. However, remaining regions of India will have above normal Tmin.
- **Week 2 (26.11.2021 to 02.12.2021):** 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.

Strategic Agricultural Planning based on rainfall during next two weeks till 02 December 2021

Agromet Advisories

Kerala

Amount of rainfall received over Kerala is 912 mm (112% large excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) is above normal for week-1 and normal for week-2.

- There is a chance for phytophthora disease in pepper and coconut due to rainy condition. To manage, farmers are advised to provide proper drainage facilities and spray 1% Bordeaux mixture during low rainfall condition.
- Due to high relative humidity, there is a chance for downy mildew incidence 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 521 mm (68% large excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) is above normal for week-1 and normal for week-2.

- Farmers are advised to drain out the stagnated water from the nursery fields of chilli due to rainy condition.
- 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 117 mm (29% excess); Marathwada is 105 mm (21% excess); Vidarbha is 59 mm (-13% deficit) and Konkan region is 168 mm (29% excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Konkan, Vidarbha, Marathwada and Madhya Maharashtra is above normal for week-1; and over Konkan, Madhya Maharashtra and Marathwada is above normal while Vidarbha receives normal rainfall during week-2.

Konkan

- Due to chances of light to moderate rain with cloudy weather, there is possibility for incidence of Anthracnose disease on mango. To protect, it is advised to spray Carbendazim 12% + Mancozeb 63% combination fungicide @ 10 g per 10 litres in water.
- Because of rainy weather, it is advised to complete the harvesting of matured rice varieties during morning hours and keep harvested produce in safe and protective shed for threshing and drying.

Vidarbha

- Under prevailing weather condition, nursery sowing of onion is advised. Recommended white onion varieties are *Akola safed*, *Phule safed*, *Yashoda*, *Bhima Shweta*; Red onion varieties: *Pusa Red*, *Niphad 53*, *Agrifound light red*, *N 2-4-1*, *Arka Pragti*.
- Under prevailing weather condition, there is chance of *Helicoverpa* infestation in pigeon pea. Hence, farmers are advised to monitor the field for the presence of eggs & small larvae. To control, they are advised to install pheromone traps @ 5 per ha and erect bird perches randomly in pigeon pea field to encourage predation by insectivorous birds.

Madhya Maharashtra

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

Marathwada

- Due to cloudy weather condition, infestation of insect and flower drop may observe in pigeon pea crop. 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.
- As light rainfall is expected at isolated places during next five days, farmers are advised to harvest mature fruits of custard apple.

Hisar

Amount of rainfall received over Hisar is 26 mm (120% large excess) during 01 October - 20 November 2021. The extended range rainfall forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Hisar is below normal for week-1 and 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 clean the shed and surrounding area to control fly and mosquito.

Karnataka

Rainfall received during 01 October - 20 November 2021 over South Interior Karnataka is 454 mm (148% large excess) and North Interior Karnataka is 137 mm (8% excess). The extended range weather forecast (rainfall) for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021)

over South Interior Karnataka and North Interior Karnataka is above normal for week-1 and week-2.

North Interior Karnataka

- Looking to the soil moisture condition, sowing of chickpea and wheat (irrigated and *Dicoccum*) may be taken up.
- Farmers are advised to vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and *Haemorrhagic Septicaemia* and Vaccinate (ET vaccine) sheep and goats against Enterotoxemia.

Uttar Pradesh

Rainfall received during 01 October - 20 November 2021 over East Uttar Pradesh is 87 mm (117% large excess) and West Uttar Pradesh is 92 mm (269% large excess). The extended range weather forecast (rainfall) for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over East Uttar Pradesh and West Uttar Pradesh is above normal for week-1 and below normal over West Uttar Pradesh and East Uttar Pradesh for week-2.

Eastern Uttar Pradesh

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

Jammu

Amount of rainfall received over Jammu is 105 mm (88% large excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Jammu is below normal for week-1 and above normal for 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.
- Earthing up is advised to protect the potato/radish/ turnip/ carrot crops from direct sunlight.

Assam

Amount of rainfall received over Assam is 139 mm (-22% deficit) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Assam is below normal for week-1 and normal for week-2.

- For the management of fruit and shoot borer in brinjal, farmers are advised to spray solution of Emamectin benzoate 5% SG @ 5g per 10 litres of water.
- To protect poultry birds from cold winds, gunny bags or plastic sheath curtains should be

installed on the side walls of shed house and increase the depth of bedding material (litter) up to six inches.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 57 mm (-14% deficit) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Chhattisgarh is above normal for week-1 and week-2.

- 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.
- Under prevailing weather condition, sowing of mustard crop is advised. Recommended improved varieties of mustard are *Pusa Jai Kisan*, *Pusa Bold*, *Boon*, *Varuna*, *Kranti* and *Chhattisgarh Mustard*.

Gujarat

Amount of rainfall received over Gujarat is 40 mm (67% large excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Gujarat is above normal for week-1 and week-2.

- Land preparation is advised for wheat cultivation with recommended wheat varieties viz., *LOK-1*, *GW-273*, *322*, *366*, *451* *496*, *GJW-463*, *GW-173* and *LOK-11*.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 58 mm (51% excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Himachal Pradesh is below normal for week-1 and above normal for 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.
- Maintain room temperature 18-22°C and relative humidity around 85% for successful cultivation of mushrooms.

Punjab

Amount of rainfall received over Punjab is 35 mm (194% large excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Punjab is nil rainfall for week-1 and normal rainfall 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 - 20 November 2021 over Gangetic West Bengal is 216 mm (49% excess) and Sub-Himalayan West Bengal is 274 mm (65% large excess). The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Gangetic West Bengal above 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.

- Because of rainfall from last two-three days, it is advised that already harvested rice should be dried in the field for 2-3 days and thereafter threshing should be done.

Bihar

Amount of rainfall received over Bihar is 190 mm (185% large excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Bihar is below normal for week-1 and week-2.

- Prevailing weather conditions are congenial for sowing of wheat crop. Farmers are advised to go for timely sowing of the wheat crop with recommended varieties like *PBW-343, PBW-443, K-9107, HD-2733, HD-2824, HUW-206, HUW-468, K-307, CBW-38 and DBW-39*.
- Under prevailing weather condition, planting of potato is advised. *Kufri jyoti, Kufri ashoka, Kufri chandramukhi, Kufri badhsha, Kufri lalima, Kufri sinduri, Kufri arun, Kufri anand, Kufri pusker, Rajendraalu 1, Rajendraalu 2 and Rajendraalu 3*, varieties of potato are recommended for planting in north Bihar region.

Uttarakhand

Amount of rainfall received over Uttarakhand is 204 mm (404% large excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Uttarakhand is below normal for week-1 and normal for week-2.

- Due to prevailing dry weather condition, it is advised to provide light irrigation in vegetable crops/nursery at regular intervals to maintain optimum soil moisture.
- To protect the poultry bird from cold waves, it is advised to maintain heat inside the shed and

increase the thickness of bedding material (litter) up to six inches.

Andhra Pradesh

Rainfall received during 01 October - 20 November 2021 over Rayalaseema is 389 mm (111% large excess) and Coastal Andhra Pradesh and Yanam is 287 mm (1% excess). The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Rayalaseema and Coastal Andhra Pradesh above normal for week-1 and normal for week-2.

- Due to rain, farmers are advised to postpone harvesting of paddy and also after bundling the tillers, spray 5% salt solution to avoid germination of matured grains.
- Utilizing the available soil moisture, farmers are advised to take up sowings of bengal gram in black soils and horse gram in red soils in Ananthapuramu, Kurnool, Guntur, Kadapa and Nellore districts. Recommended high yielding varieties are NBeG - 3, NBeG - 452, NBeG - 119 (Kabuli), JG - 11, NBeG - 49, NBeG - 47.

Odisha

Amount of rainfall received over Odisha is 129 mm (5% excess) during 01 October - 20 November 2021. The extended range weather forecast (rainfall) provided for next two weeks (19 - 25 November 2021 and 26 November - 02 December 2021) over Odisha is above normal for week-1 and week-2.

- After rain in sunny weather there is a chance of ear head caterpillar infestation in paddy. To manage, it is advised to spray Chlorpyrifos 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:

The predictability of weather depends on many factors which are dynamic in nature. The success of Agromet advisories provided here depends on the accuracy of the weather forecast. In no event, India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) will be liable to the user or to any third party for any direct, indirect, incidental, consequential, special or exemplary damages or lost profit resulting from any use or misuse of the information presented in this bulletin.