



National Agromet Advisory Service Bulletin

based on

Extended Range Weather Forecast (ERFS)

Validity: 11 - 24 December 2020

Date of issue: 11 December 2020

Issued by

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

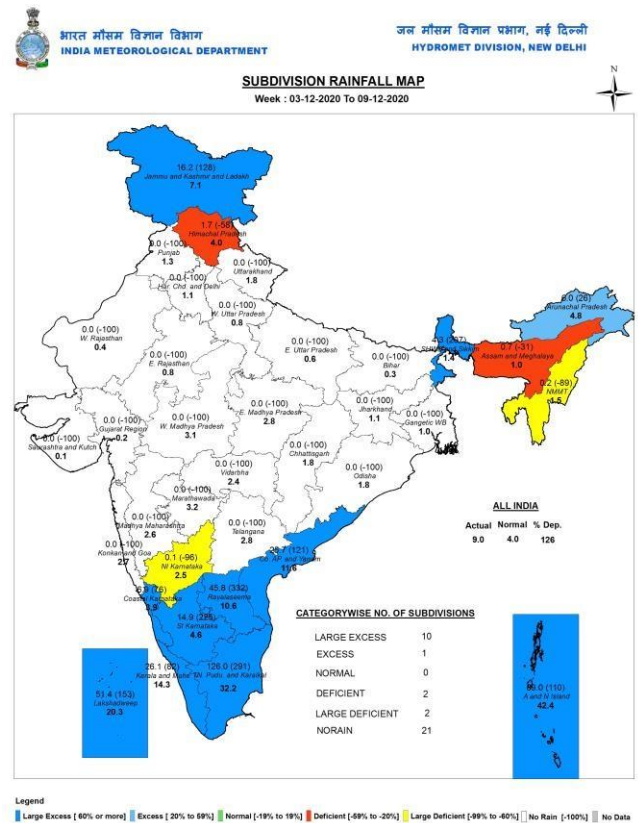
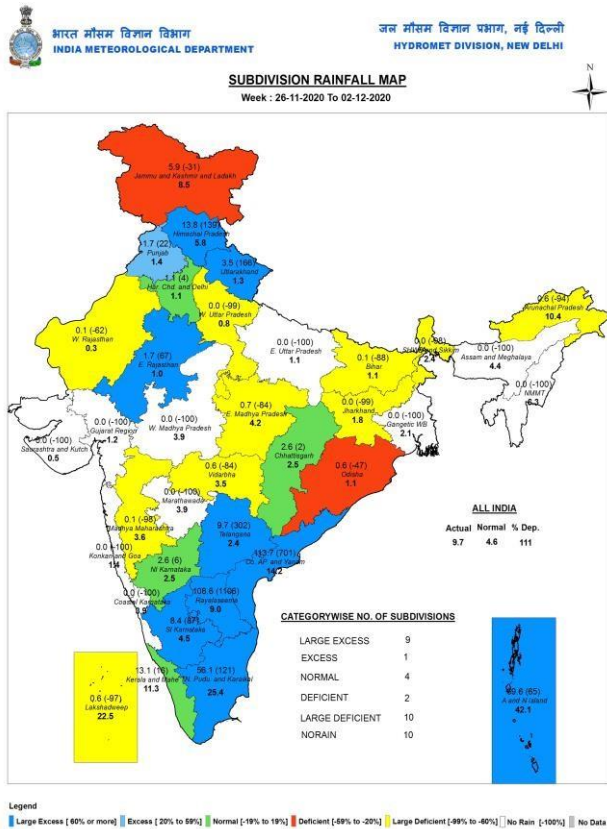
&

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

Realized Rainfall and Extended Range Forecast (Rainfall and Temperatures)

Realized Rainfall

(26th Nov. to 9th December, 2020)



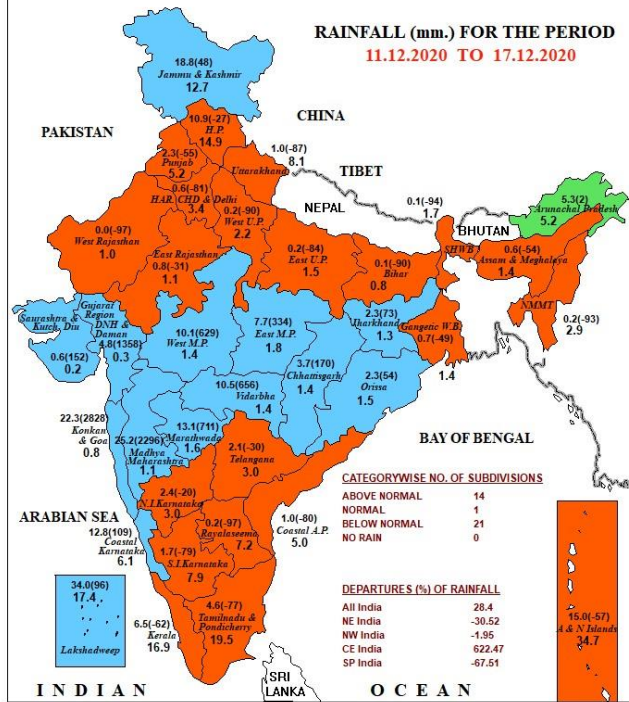
- Normal or above normal rainfall occurred in both the weeks in South Interior Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu Puducherry & Karaikal, Kerala & Mahe, Andaman & Nicobar Islands
- Normal or above normal rainfall occurred in either of the two weeks in Jammu & Kashmir and Ladakh (UTs), Himachal Pradesh, Uttarakhand, Punjab, Haryana Chandigarh & Delhi, East Rajasthan, Chhattisgarh, SubHimalayan West Bengal & Sikkim, Arunachal Pradesh, Coastal Karnataka, North Interior Karnataka, Telangana, 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 – 09 Dec.) (11th to 24th December, 2020)

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

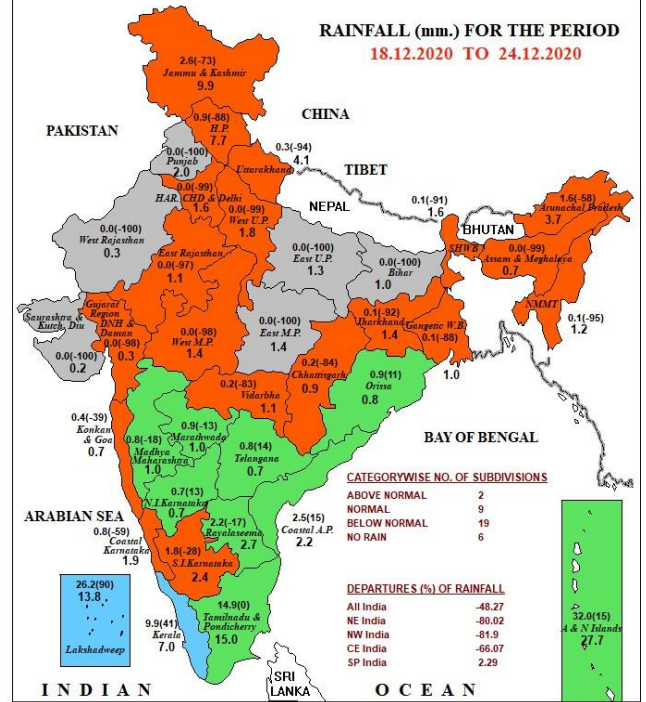
Rainfall Forecast Map - Normal RF Based Categories



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.

भारत मौसम विज्ञान विभाग INDIA METEOROLOGICAL DEPARTMENT

Rainfall Forecast Map - Normal RF Based Categories



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.

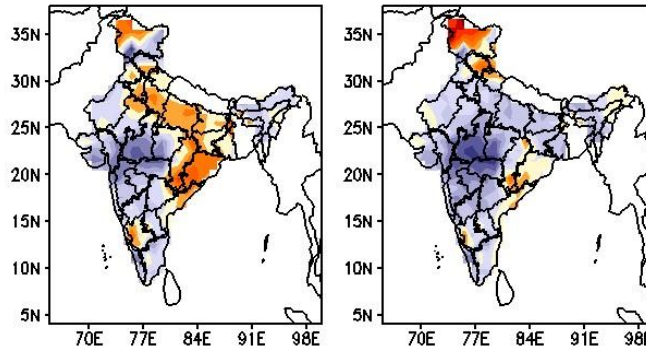
- Week-1 (11.12.2020 to 17.12.2020):** Western Disturbance influence over northern India is likely in week-1. Some parts of western coastal region like Konkan & Goa and adjoining Maharashtra, adjoining Arabian Sea likely to get some rainfall activity in Week-1.
- Week-2 (18.12.2020 to 24.12.2020):** Rainfall over the south Peninsula with south Bay of Bengal and north equatorial Indian Ocean will be active in Week-2.

**Maximum and Minimum temperature anomaly ($^{\circ}\text{C}$) forecast
for next 2 weeks (IC – 09 Dec.)
(11th to 24th December, 2020)**

MME forecast Tmax anomaly (Deg C)

(Week1: 11Dec–17Dec)

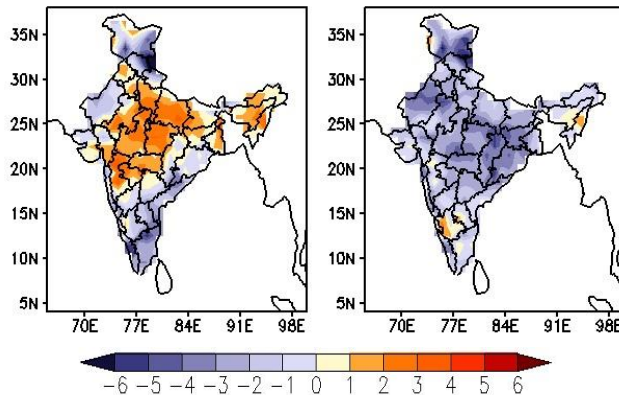
(Week2: 18Dec–24Dec)



MME forecast Tmin anomaly (Deg C)

(Week1: 11Dec–17Dec)

(Week2: 18Dec–24Dec)



Maximum Temperature (Tmax)

- **Week-1 (11.12.2020 to 17.12.2020):** Tmax over western part likely to be below normal, whereas, Tmax over the eastern parts including Odisha, Gangetic West Bengal, Bihar and Uttar Pradesh and some parts of north India will be slightly above normal to normal during week-1,
- **Week-2 (18.12.2020 to 24.12.2020):** Mostly below normal Tmax over the country in Week-2.

Minimum Temperature (Tmin)

- **Week-1 (11.12.2020 to 17.12.2020):** Minimum temperature (Tmin) will be slightly above normal over northcentral parts of India in week-1.
- **Week-2 (18.12.2020 to 24.12.2020):** Mainly below normal Tmin in week-2 over most parts of India.

Strategic Agricultural Planning based on rainfall during next two weeks till 24 December 2020

Agro-met Advisories

Kerala

Amount of rainfall received over Kerala is 351.5 mm (-27% deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast for next two weeks (11 - 17 December and 18 - 24 December 2020) is below normal for week-1 and above normal for week-2.

- Under prevailing weather condition, there is a chance of leaf folder attack in *mundakan* paddy. To control, it is advised to use trichogramma cards @ 2CC per one acre. If attack is severe, spray Chlorantraniliprole @ 3 ml per 10 litres of water.
- For the management of fruit borer in cowpea, it is advised to apply 5% Neem kernel suspension or spray Flubendamide 2 ml per 10 litres of water or Chlorantraniliprole 3 ml per 10 litres of water.

Tamil Nadu

Amount of rainfall received over Tamil Nadu is 434.1 mm (8% excess) during 01 October 2020 - 11 December 2020. The extended range weather forecast for next two weeks (11 - 17 December and 18 - 24 December 2020) is below normal for week-1 and 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 165.9 mm (65% large excess), Marathwada is 106.5 mm (10% excess), Vidharbha is 51.7 mm (-33% deficit) and Konkan region 248.6 mm (80% large excess) during 01 October 2020 - 11 December 2020. The extended range weather forecast for next two weeks (11 - 17 December and 18 - 24 December 2020) over Madhya Maharashtra, Vidharbha, Konkan and Marathawada is above normal for week-1 and below normal over Vidharbha and Konkan and normal over Marathwada and Madhya Maharashtra for week-2. *Marathwada*

- For management of leaf spot diseases in turmeric crop, it is advised to spray Azoxystrobin 18.2% + Difenconazole 11.4% SC @ 10 ml per 10 litres of water.

Vidharbha

- Under prevailing weather condition, transplanting of 4-6 week old seedlings of tomato, brinjal, cabbage and cauliflower and seed sowing radish carrot, leafy vegetables is advised.

- For the management of pod borer incidence in pigeon pea, it is advised to spray 5% NKSE or Azadirachtin 300 ppm @ 50 ml per 10 litres of water or Azadirachtin 1500 ppm @ 25 ml or Quinolphos 25% EC @ 20 ml or Thiodicarb 75% WP @ 20 g per 10 litres of water.

Madhya Maharashtra

- Due to cloudy weather condition, there is a chance of pod borer in chickpea. It is advised to spray 5% Neem ark and use T-shaped bird perches @ 50 per ha in the field.
- For the management of aphids in safflower crop, it is advised to spray *Metarhizium anasopli* 50 g or Dimethoate 30% concentration 10 ml per 10 litres of water.

Hisar

Amount of rainfall received over Hisar is 6.5 mm (-57% deficit) during 01 October 2020 - 11 December 2020. The extended range rainfall forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) over Hisar is below normal for week-1 and week-2.

- Due to anticipated weather condition, 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. Therefore, 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 - 11 December 2020 over South Interior Karnataka is 202.2 mm (2% excess) and North Interior Karnataka is 179.8 mm (33% excess). The extended range weather forecast for next two weeks (11 - 17 December and 18 - 24 December 2020) over South Interior Karnataka and North Interior Karnataka is below normal for week-1 and below normal over South Interior Karnataka and 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 maize and groundnut crops 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 - 11 December 2020 over East Uttar Pradesh 8.0 mm (-81% large deficit) and West Uttar Pradesh is 4.4 mm (-84% large deficit). The extended range weather forecast for next two weeks (11 - 17 December and 18 - 24 December 2020) over East Uttar Pradesh and West Uttar Pradesh is below normal for week-1 and no rain 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 viz., HUW-234, K-7903, UP-2338, K-9162, K-9533, HD-2643, HP1744, NW-1014, K-8020, UP-2425, NW-2036, DBW-14, K-9423, PBW-524, NW-1076 and HUW-510.
- Due to no rainfall condition, 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.
- Under the prevailing weather conditions, sowing of chickpea, mustard, potato, pea and other *rabi* vegetables is advised.

Jammu

Amount of rainfall received over Jammu is 69.3 mm (-14% deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Jammu is above normal for week-1 and below normal for week-2.

- Under prevailing weather conditions, farmers may go for sowing of late sown wheat with varieties WH-1021, PBW-590, PBW-373, Raj-3077, Raj-3765, and DBW-16.
- For the management of downey mildew disease in vegetable and horticultural crops, it is advised to spray Mancozeb @ 0.25%.

Chhattisgarh

Amount of rainfall received over Chhattisgarh is 91.8 mm (25% excess) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Chhattisgarh is above normal for week-1 and below normal for week-2.

- Under prevailing clear weather condition, sowing of *rabi* crops is advised.
- Sowing of sunflower is specially advised with recommended varieties TNAU, SUF-7, BSH-1,

KBSH-1, DRSB-1 Jwalamukhi, Surya.

West Bengal

Amount of rainfall received over West Bengal is 80.5 mm (-47% deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over West Bengal is below normal for week-1 and week-2.

- Under prevailing weather condition, there is a chance of attack of black-rot of crucifers in the cabbage and cauliflower. To control, it is advised to spray 1g Streptocycline in 10 litres of water.
- Nursery bed preparation for the sowing of boro rice is advised with recommended varieties Supriya, Jamini, Bhupen, and IET-2233.

Odisha

Amount of rainfall received over Odisha is 166.6 mm (30% excess) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Odisha is above normal for week-1 and normal for week-2.

- Under prevailing weather condition, there is a chance of aphid infestation in early sown mustard crop. To manage, it is advised to keep yellow sticky traps @ 8 traps per acre or spray Thiamethoxam 25% WG @ 40 g/acre or Acetamiprid 20% SP @ 50 g/acre in 200 litres of water.
- Under prevailing weather condition, continue the sowing of rabi crops like maize, wheat, pulses, oil seeds, vegetables and spices.
- To manage pod borer, 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 to kill or put them in a pit and cover the soil.

Assam

Amount of rainfall received over Assam is 214.7 mm (14% excess) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Assam is below normal for week-1 and week-2.

- Due to favorable weather, there is a chance of pod borer in green gram and black gram crop. Farmers are advised to spray Emamectin Benzoate 5% SG @ 5 g/10 litres water to control the pest infestation.
- Prevailing weather condition is also congenial for cut worm infestation in *rabi* maize. To control, it is advised to apply Malathion @ 3.3 kg/bigha as a foliar treatment on seedlings.

Rajasthan

Amount of rainfall received over Rajasthan is 8.8 mm (-62% large deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Rajasthan is below normal for week-1 and week-2.

- Regular monitoring of leaf feeders in cole crop is advised. If pest population is above ETL, spraying of Spinosad @ 1 ml/3 litres of water is advised.
- For the management of mustard sawfly, dusting of Methyl parathion 2% or Carbaryl 5% WP @ 2025 kg/ha is advised.

Himachal Pradesh

Amount of rainfall received over Himachal Pradesh is 50.1 mm (-9% deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Himachal Pradesh is below normal for week-1 and week-2.

- Farmers are advised to put mulching in between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.
- 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 10.6 mm (-63% large deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Gujarat is above normal for week-1 and below normal for week-2.

- Under prevailing cool weather condition, sowing of fenugreek is advised with improved cultivar like Gujarat Fenugreek 1.
- Due to the chance of cloudy and humid weather condition, pick the cotton and store it in safe place is advised.

Punjab

Amount of rainfall received over Punjab is 12.6 mm (-22% deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Punjab is below normal for week-1 and no rain for week-2.

- For the management of late blight disease in potato, it is advised to spray Indofil M-45/Mass M45/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.

Bihar

Amount of rainfall received over Bihar is 30.0 mm (-56% deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Bihar is below normal for week-1 and no rain for week-2.

- Under prevailing weather condition, sowing of late variety of wheat crop is advised. Recommended late sown wheat varieties in North Bihar are PBW-373, HD-2285, HW-2045, HUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036.
- For the management of kajra caterpillar (cut worm), it is advised to treat the seeds with chlorpyrifos @ 8ml/kg.

Jharkhand

Amount of rainfall received over Jharkhand is 67.2 mm (-22% deficit) during 01 October 2020 - 11 December 2020. The extended range weather forecast provided for next two weeks (11 - 17 December and 18 - 24 December 2020) on rainfall over Jharkhand is above normal for week-1 and below normal for week-2.

- Intercultural operation is advised to conserve soil moisture as well as to control weeds in different crop and vegetable field.
- For the management of blight disease in potato crop, it is advised to spray Redomyl M. Z. @ 1.5 g per litre 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.