

All India Coordinated Research Project on Agrometeorology
CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 21 August 2021

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Significant Weather Features (IMD)

- The monsoon trough passes through Bikaner, Jaipur, Gwalior, Satna, Ambikapur, Balasore and thence southeastwards to northwest Bay of Bengal.
- A cyclonic circulation lies over northeast Rajasthan & neighbourhood and another cyclonic circulation lies over northeast Madhya Pradesh & neighbourhood in lower tropospheric levels. The Western Disturbance as a trough in upper tropospheric westerlies with its axis at 5.8 km above mean sea level runs roughly along Long. 68°E to the north of Lat. 28°N. Under its influence:
 - (i) Fairly widespread to widespread rainfall with isolated heavy falls very likely over Himachal Pradesh, Uttarakhand, Uttar Pradesh and Bihar during next 4 days. Isolated heavy to very heavy rainfall is also very likely over Uttarakhand during next 5 days; over West Uttar Pradesh on 21st August, 2021. Scattered to fairly widespread rainfall is very likely over Haryana & Chandigarh, Punjab and East Rajasthan during next 3-4 days with isolated heavy to very heavy falls over Haryana on 21st and heavy falls over East Rajasthan on 21st & 22nd August, 2021.
- A cyclonic circulation lies over Vidarbha & neighbourhood in mid tropospheric levels. A trough runs from northeast Madhya Pradesh to south south Gujarat and another trough runs from Vidarbha to north coastal Tamil Nadu in mid tropospheric levels.
- Due to above meteorological conditions:
 - (i) Fairly widespread to widespread rainfall activity is very likely over Gujarat Region, Maharashtra, Madhya Pradesh and Chhattisgarh on 21st August. Isolated heavy rainfall likely over Gujarat Region on 21st; West Madhya Pradesh on 21st & 22nd August, 2021. Rainfall activity is likely to decrease thereafter over these areas.
 - (ii) Scattered to fairly widespread activity very likely over southern Peninsular India during next 5 days. Isolated heavy rainfall is also very likely over Tamil Nadu, Puducherry & Karaikal during 21st-23rd; Kerala & Mahe on 21st & 22nd; Rayalaseema on 23rd & 24th; Coastal Andhra Pradesh & Yanam on 21st August, 2021.

(iii) Fairly widespread to widespread rainfall activity very likely to continue over Northeast India and Sub-Himalayan West Bengal & Sikkim during next 5 days. Isolated heavy to very heavy falls over Sub-Himalayan West Bengal & Sikkim on 23rd & 24th August and isolated very heavy rainfall over Arunachal Pradesh and Assam & Meghalaya on 23rd & 24th and Nagaland, Manipur, Mizoram & Tripura on 23rd August, 2021.

- Moderate to severe thunderstorm with lightning very likely over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Madhya Pradesh, Tamilnadu and East Rajasthan during next 24 hours. This may cause injuries leading to casualties to people and animals staying outdoor.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rainfall/Thundershowers observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Sub-Himalayan West Bengal & Sikkim, Uttarakhand, Jharkhand and Konkan & Goa; at many places over Gangetic West Bengal, Odisha, Chhattisgarh, Uttar Pradesh, Himachal Pradesh and East Madhya Pradesh; at a few places over West Madhya Pradesh, Vidarbha, Marathawada, Haryana, Chandigarh & Delhi, Madhya Maharashtra and Gujarat region and at isolated places over Assam & Meghalaya, Bihar, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, East Rajasthan, Coastal Andhra Pradesh & Yanam, Saurashtra & Kutch, Coastal Karnataka and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0530 hours IST of today): at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttar Pradesh, Delhi, East Madhya Pradesh, Odisha, Tamilnadu, Puducherry & Karaikal and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 20-08-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over West Rajasthan; at isolated places over Saurashtra & Kutch and Kerala & Mahe; above normal (1.6°C to 3.0°C) at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over Andaman & Nicobar Islands and at isolated places over East Madhya Pradesh, East Rajasthan, South Interior Karnataka, Madhya Maharashtra and Tamil Nadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C or less) at a few places over Vidarbha; at isolated places over Marathawada; appreciably below normal (-3.1°C to -5.0°C) at a few places over Himachal Pradesh and Uttarakhand; at isolated places over

Telangana; below normal (-1.6°C to -3.0°C) at most places over Gujarat state; at many places over Gangetic West Bengal, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Nagaland, Manipur, Mizoram & Tripura; at a few places over Assam & Meghalaya, Arunachal Pradesh and SubHimalayan West Bengal & Sikkim; at isolated places over Odisha, Rayalaseema and North Interior Karnataka and near normal over rest of the country. Yesterday, the highest maximum temperature of 41.8°C was reported at Ganganagar (West Rajasthan).

- Minimum Temperature Departures as on 20-08-2021: Minimum temperatures were above normal (1.6°C to 3.0°C) at many places over Rajasthan and Uttarakhand; at a few places over Haryana, Chandigarh & Delhi and at isolated places over Himachal Pradesh, Punjab, Bihar, Sub-Himalayan West Bengal & Sikkim, Coastal Andhra Pradesh & Yanam and Kerala & Mahe. They were below normal (-1.6°C to -3.0°C) at isolated places over Gujarat Region, Konkan & Goa, West Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 17.5°C was reported at Bulsar (Gujarat Region) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 21 August (Day 1): Heavy to very heavy rainfall very likely at isolated places over Uttarakhand, Haryana & West Uttar Pradesh and Heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Delhi, Bihar, Himachal Pradesh, East Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Gujarat Region, Coastal Andhra Pradesh & Yanam, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Jharkhand, Madhya Pradesh, Telangana, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 22 August (Day 2): Heavy to very heavy rainfall very likely at isolated places over Uttarakhand and Heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar, West Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Jharkhand, Rayalaseema, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.

- 23 August (Day 3): Heavy to very heavy rainfall likely at isolated places over Uttarakhand and Sub-Himalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Bihar, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Uttar Pradesh, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, Rayalaseema, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 24 August (Day 4): Heavy to very heavy rainfall likely at isolated places over Uttarakhand and Sub-Himalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Bihar, Arunachal Pradesh, Assam & Meghalaya, Uttar Pradesh and Rayalaseema. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, Gangetic West Bengal, Rayalaseema, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 25 August (Day 5): Heavy to very heavy rainfall likely at isolated places over East Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim and Heavy rainfall at isolated places over Uttarakhand, Bihar, Arunachal Pradesh, Assam & Meghalaya, West Uttar Pradesh and Nagaland, Manipur, Mizoram & Tripura and Rayalaseema. Thunderstorm accompanied with lightning likely at isolated places over Uttarakhand, Uttar Pradesh, Rayalaseema, Coastal Andhra Pradesh & Yanam and Bihar. Strong winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 21 Aug to 29 Aug 2021 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>) rain/thundershower may occur over Some parts of Extreme northern parts of India. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Western U.P

Weather condition:

Medium to heavy Cloud coverage in the atmosphere during 18-22 August and light to moderate rainfall may be appear from 19- 22 August, therefore high humid condition may be prevailing due to heavy cloud coverage. Maximum and minimum temperature may be 1-2 0C higher to its normal. North-East/ South- East winds may be prevailing 9.9 to 16.0 km/hr during this week as per IMD fore cast received.

Contingency measure:

- Paddy: Farmers are advised stop irrigation due rainfall forecast from 19 to 22 August, weeding should be done and top dressed 1/4 urea after 20 to 25 days after planting. If grassy and broad leaf weeds are seen in paddy field, spray bispyriback sodium 10% SC 0.20 lt. with 500 lt of water solution after 10-15 days of transplanting at 3.0 cm standing water. If seen 2 insect Leaf roller and Hispa/ leaf spray Quenalphas 25EC 1.5 lt/ha with 600 lt. water.
- Maze: Farmers are advised stop irrigation due rainfall forecast from 19 to 22 August, top dressing 1/4 urea at Knee high stage. Spray Forete -10G @ 10 kg/ha for control of shoot borer.
- Sorghum : Farmers are advised stop irrigation due rainfall forecast from 19 to 22 August, weeding should be done and plant population should be maintain by thinning.
- Pearl millet : Pearl millet sowing should be done by the composite varieties such as ICMB-155, WCC-69, ICTP-8203, Raj-171 and hybrid varieties such as Pusa-322, Pusa-32 and ICMH-451. Weeding and thinning should be completed within 15 to 20 days after sowing.
- Pigeon pea: Weeding should be done and plant population should be maintain by thinning.
- Black gram: Weeding should be done and plant population should be maintained by thinning.
- Green gram: Farmers are advised for sowing of green gram in vacant field. Suitable varieties are Pant moong-1, 3, 4, Narendra moong-1, 4, PDM-11, Malveeya jyoti, Samrat, Malveeya janchetna, Malveeya janpriya, Malveeya jagrati,Asha, Meha, MH-2-15,and TM-9937 for the purpose.
- Ground nut: Earthing should be done timely. Possibility of white grubs and Termite used 10kg/ha Forete-10G as profailatic topdressing in the field.
- Brinjal / Chilies: Transplanting should be done with new seedlings. Pick up mature fruits from standing crop, watching insect & pest, if need apply recommended dose of insecticide/ Neem oil . Weeding must be completed.
- Leafy Vegetable: Cutting, marketing and sowing. Jowar / Maize Mucchari + Lobia + Moongbeen : Sowing of Jowar varieties as Pusa chari-23, SSG-98-8MFSH-

3,H Pant-5 and MP chari @ 30-40 kg seeds /ha. with lobia varieties as Rashiyan zoint , UPC-5286, UPC-5287,NP-3, Bundhel lubia-2, UPC-9202 and UPC-4200 @ 15-20 kg seed for mixed cropping or 40 kg seed sown for alone. Used Maize hybrid as Ganga-2, 5,7 or composite as Kishan , African toll and Vijay or indigenous variety Type-41

- Animal : Bathing should be done in animals before milking and fresh water should be used for drinking . Balanced diet should be given for milch animal with 50% green fodder. Common diseases of animals are Anthrax (high fever and enlargement of spleen), the others are Gala Ghotu? (respiratory trouble and ? Surra? (Sudden death of animals after restlessness). The routine immunization of animals becomes necessary since disease decrease milk production capacity among milch animals if need concerned near Veterinary hospital.

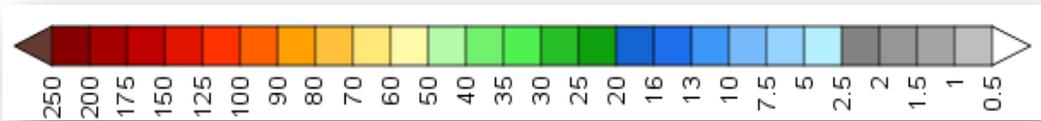
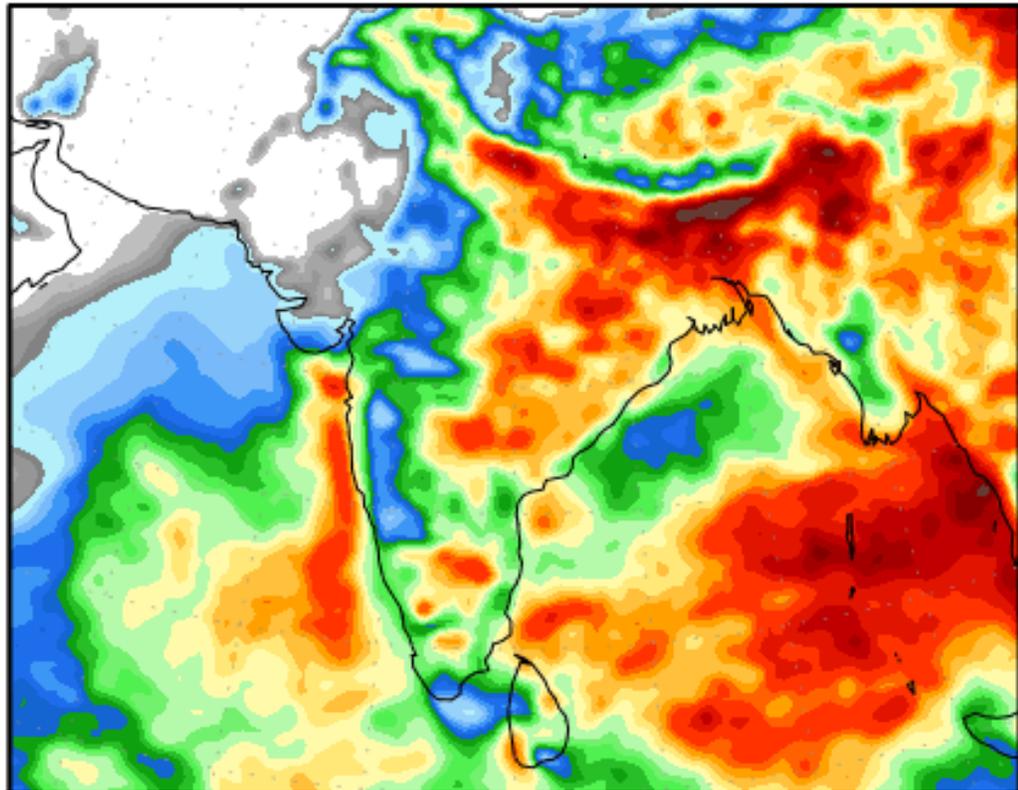


Figure:2. Precipitation forecast for 21 Aug to 29 Aug 2021 (Source: NOAA NCEP).

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