

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 07 August 2021**

**Attention: Rajiv Maheshwari, OSD, ICAR**

#### **Significant Weather Features (IMD)**

- The Low Pressure Area lies over northern parts of East Madhya Pradesh & neighbourhood with associated cyclonic circulation extending upto 4.5 km above mean sea level. The Monsoon trough at mean sea level now passes through Bikaner, Jaipur, centre of Low Pressure Area over northern parts of East Madhya Pradesh & neighbourhood, Daltonganj, Digha and thence east-southeastwards to northeast Bay of Bengal. The Low Pressure Area is likely to become less marked during next 24 hours leading to northward shifting of the West end of the Monsoon trough and hence increase in rainfall activity over Uttarakhand, northern parts of Uttar Pradesh and eastern parts of the country from 10th August.
- Under the influence of the above system:
- Fairly widespread/widespread rainfall very likely over West Madhya Pradesh and East Rajasthan during next 2 days and reduction in rainfall intensity and spread thereafter. Isolated heavy to very heavy falls very likely on 7th August and isolated heavy rainfall on 8th August over West Madhya Pradesh and East Rajasthan.
- Fairly widespread/widespread rainfall over Uttarakhand, Himachal Pradesh, northern parts of Uttar Pradesh, Bihar, Jharkhand, West Bengal & Sikkim from 10th August. Isolated heavy to very rainfall is likely over East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim on 10th & 11th August and over Uttarakhand on 11th August.
- Fairly widespread/widespread rainfall with isolated heavy to very heavy falls very likely to continue over northeastern states till 11th August.
- Reduced rainfall activity likely to continue over Maharashtra and Gujarat state during next 5 days. Rainfall activity is likely to increase over Peninsular India from 10th August with isolated heavy to very heavy rainfall likely over Kerala and Tamil Nadu on 11th August.
- The images showing the latest satellite picture in the figure. 1.

## Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST of yesterday 0830 hours IST of today): at most places over Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe and Lakshadweep; at many places over Gangetic West Bengal, Jharkhand, Uttarakhand, East Rajasthan, West Madhya Pradesh, Vidarbha and South Interior Karnataka; at a few places over Arunachal Pradesh, Bihar, East Uttar Pradesh, Himachal Pradesh, East Madhya Pradesh, Madhya Maharashtra, Chhattisgarh, Tamilnadu, Puducherry & Karaikal and North Interior Karnataka and at isolated places over Odisha, West Uttar Pradesh, Haryana, Chandigarh & Delhi, Punjab, Jammu & Kashmir, West Rajasthan, Gujarat State, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana and Rayalaseema.
- Heavy Rainfall recorded (from 0830 hours IST of yesterday 0830 hours IST of today): Extremely heavy rainfall at isolated places over West Madhya Pradesh; Very Heavy Rainfall at isolated places over East Rajasthan,, Kerala & Mahe and Assam & Meghalaya and heavy rainfall at isolated places over Himachal Pradesh, Bihar, East Uttar Pradesh, West Rajasthan, Tripura, Coastal & South Interior Karnataka, East Madhya Pradesh, and Tamilnadu, Puducherry & Karaikal..
- Thunderstorm observed (from 0830 of yesterday to 0830 hours IST of today): at isolated places over West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, East Uttar Pradesh, Haryana, Chandigarh & Delhi, East Rajasthan, West Madhya Pradesh, Himachal Pradesh, Bihar, Jharkhand and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 06-08-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam; at isolated places over Himachal Pradesh, West Rajasthan, Sub-Himalayan West Bengal & Sikkim and Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at most places over Bihar; at many places over Uttarakhand, Haryana, Chandigarh & Delhi, Konkan & Goa, Rayalseema, Telangana, Chhattisgarh, Odisha, Assam & Meghalaya and Gangetic West Bengal; at a few places over Gujarat state, Madhya Maharashtra and Marathwada and at isolated places over Kerala & Vidarbha. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over West Madhya Pradesh and at isolated places over East Rajasthan and East Madhya Pradesh; below normal (-1.6°C to -3.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Andaman & Nicobar Islands and

near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.4°C was reported at Phalodi (West Rajasthan).

- Minimum Temperature Departures as on 07-08-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at most places over Haryana, Chandigarh & Delhi; at many places over Gujarat Region; at a few places over Punjab, West Rajasthan, Telangana, Coastal Andhra Pradesh & Yanam, Odisha and West Bengal & Sikkim; at isolated places over East Uttar Pradesh, East Madhya Pradesh, Rayalaseema and Tamil Nadu, Puducherry & Karaikal. They are below normal (-1.6°C to -3.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at isolated places over East Rajasthan and West Madhya Pradesh and near normal over rest parts of the country. Today, the lowest minimum temperature of 17.0°C is reported at Narsinghpur (East Madhya Pradesh).

### **Weather Warning during the next 5 days (IMD)**

- 07 August (Day 1): Heavy to very heavy Rainfall very likely at isolated places over East Rajasthan, West Madhya Pradesh, Assam & Meghalaya and Kerala & Mahe; heavy rainfall at isolated places over Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest and Westcentral Arabian Sea; (speed 40-50 kmph gusting to 60 kmph) over Southeast Arabian Sea along & off Kerala coast and Lakshadweep area. Fishermen are advised not to venture into these areas.
- 08 August (Day 2): Heavy to very heavy Rainfall very likely at isolated places over Assam & Meghalaya; heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over Southwest and Westcentral Arabian Sea; (speed 40-50 kmph gusting to 60 kmph) over

Southeast Arabian Sea along & off Kerala coast and Lakshadweep area. Fishermen are advised not to venture into these areas.

- 09 August (Day 3): Heavy rainfall very likely at isolated places over Uttarakhand, East Uttar Pradesh, Madhya Pradesh, Bihar, SubHimalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning very likely at isolated places over Bihar, Jharkhand, West Bengal & Sikkim and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 10 August (Day 4): Heavy to very heavy rainfall likely at isolated places over East Uttar Pradesh, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim; heavy rainfall at isolated places over Uttarakhand, Bihar, Jharkhand, Assam & Meghalaya, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Tamilnadu, Puducherry & Karaikal. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into these areas.
- 11 August (Day 5): Heavy to very heavy rainfall likely at isolated places over Uttarakhand, East Uttar Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Sub-Himalayan West Bengal & Sikkim, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal; heavy rainfall at isolated places over Bihar, Jharkhand, Himachal Pradesh, Gangetic West Bengal, Andaman & Nicobar Islands and Coastal & South Interior Karnataka. Thunderstorm accompanied with lightning likely at isolated places over Odisha and Tamilnadu, Puducherry & Karaikal. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over Southwest and Westcentral Arabian Sea; (speed 40-50 kmph gusting to 60 kmph) over Southeast Arabian Sea along & off Kerala coast and Lakshadweep area. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 07 Aug to 15 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)

### **Konkan region**

#### **Weather condition:**

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 0.0 to 3.7 Bright sunshine hours was recorded during last week. During last week 89.8 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 27.5 to 29.0 and 22.0 to 24.3 oC respectively. Wind velocity ranged from 8.8 to 10.5 km and wind was blowing from south westerly Direction.

#### **Contingency measure:**

- General advise: During rainy season, to enhance adhesion of pesticide sprays to plant surfaces and increase their resistance to rain, mix sticker into spraying solution.
- SMS advisory: Keep bunds weed free to remove the alternate host plant of major pest of rice crop helps to reduce the incidence of army worm, blue beetle and leaf folder etc.
- Kharif rice: Due to forecast for light to moderate rainfall, maintain optimum water level of 5 cm in transplanted rice field by repairing the bunds. Apply second split dose of nitrogenous fertilizer @870 gms urea/guntha to rice crop at 30 to 40 days after transplanting when intensity of rainfall is low. Due to intermittent rainfall and cloudy weather condition, there is possibility of incidence of blue beetle and caseworm on low land rice, hence observe crop regularly for infestation of pest. If incidence of blue beetle is noticed on rice crop, spray Quinalphos 25% EC @ 20 ml or Triazophos 40% EC @ 12.5 ml or Lambda cyhalothrin 5% EC @ 5 ml per 10 liter of water during clear weather (no rainfall). If incidence of rice case worm is noticed on rice crop, then flood the field with water followed by dragging the rope to dislodge the cases and drain out water from field. Collect the cases and destroy then maintain the water level of 5 cm in the field with fresh water. Due to intermittent rainfall and cloudy weather, there is possibility of incidence of leaf folder in transplanted rice crop, hence observe crop regularly for infestation of pest. For control of leaf folder apply Cartap hydrochloride 4% granule @7.5 kg or Chlorantraniliprole 0.4% granule @ 4 kg or Fipronil 0.3% granule @8.3 kg per acre in moist soil.
- Finger millet: Due to forecast for light to moderate rainfall, follow weeding in finger millet crop at one month after transplanting as per requirement and apply second split dose of nitrogenous fertilizers @870 gms urea/guntha to finger

millet.

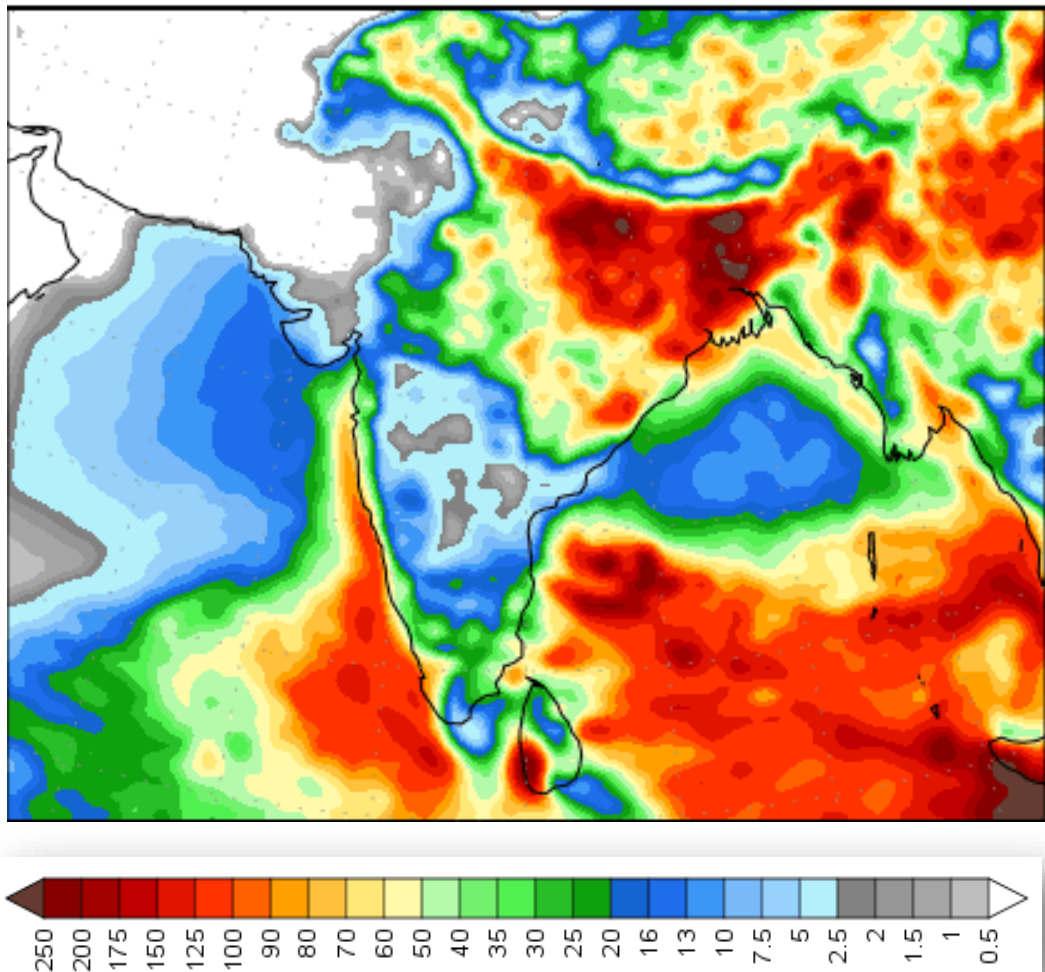
- Groundnut: Due to forecast for light to moderate rainfall carryout interculture operation, follow weeding and earthing up in groundnut crop at 30-35 DAS
- Mango: Due to forecast for light to moderate rainfall, carryout the paclobutrazol application in mango orchard. Apply paclobutrazol for regular flowering to the mango trees having age of 10 years and above. Before application, first measure east-west and north-south diameter of the tree canopy and average it and then calculate dose @ 3 ml per meter diameter of tree canopy. Mix this quantity of paclobutrazol in 3 to 5 lits. of water. Apply this solution uniformly in 25 to 30 holes at uniform distance with 10 to 12 cm depth in circular fashion at half distance of tree cover (just inside the manuring ring) from the base of tree. For making hole crowbar can be used. Ensure the drenching of uniform quantity in each hole and closed or plug hole after application. Before application of paclobutrazol make area weed free. apply paclobutrazol by observing low intensity of rainfall.
- Mango new plantation: Complete the fertilizer application in newly planted mango orchard and follow weeding and earthing up. For management of fungal disease, spray copper oxychloride 0.3% @ 3 gms per liter of water or 1% Bordomixture during clear weather (no rainfall).
- Cashewnut: Due to forecast for light to moderate rainfall, carryout the fertilizer application in cashew orchard. For above 4-year-old cashewnut tree apply 40 kg FYM, 2 kg urea, 1.5 kg single super phosphate and 500 g muriate of potash per tree by digging circular ring just inside the spread of tree and fill the circular ring with soil after application of fertilizer. Apply 1/4th, 1/2 and 3/4th of abovementioned fertilizers dose per tree for 1,2 and 3-year-old cashew plantation, respectively. Note: Apply fertilizers when the intensity of rainfall is low
- Coconut: Due to forecast for light to moderate rainfall, undertake control measures in bud rot fungal disease infected young coconut palm, if incidence noticed clean the crown region and drench 1% bordomixture into it. Also, as preventive measure, spray 1 % bordomixture mixing with sticker on to crown region during clear weather (no rainfall).
- Arecanut: Due to forecast for light to moderate rainfall, start the fertilizer application in arecanut orchard. For 3-year-old arecanut palm apply 1st split dose of 10 kg F.Y.M./compost alongwith 12 kg green manures + 160 g urea + 500 g single super phosphate + 125 g muriate of potash per tree by digging circular ring about 1 meter from base of tree and fill the circular ring with soil after

application of fertilizer. Apply 1/3rd and 2/3rd of above-mentioned fertilizers dose per tree for 1 and 2-years old arecanut plantation, respectively. For minimizing fruit cracking in arecanut, apply 600g micro nutrients (60 g Boron, 300 g Zinc, 60g Manganese, 120 g Iron and 30g Copper) Apply fertilizers when the intensity of rainfall is low. Due to forecast for light to moderate rainfall, complete the protective spraying of 1% Bordeaux mixture against Koleroga fungal disease in arecanut, if has not undertaken earlier.

- Vegetable crop: Apply third split dose of nitrogen @ 10 gms urea per vine to cucurbitaceous crops at 60 DAS. Follow weeding and give earthing up at the time of fertilizer application. Apply fertilizers when the intensity of rainfall is low. Due to forecast of cloudy weather and increase in humidity, there is possibility of incidence of downy mildew in cucurbitaceous vegetables, if incidence noticed, remove and destroy infected leaves and take a spray of Mancozeb or Zineb 2.5 gm /lit of water at an interval of 10 to 15 days during clear weather (no rainfall). There is possibility of incidence of shoot and fruit borer on Brinjal, if incidence is noticed, collect and destroy all infected shoots and fruits and spray Deltamethrin 2.8%EC @ 10 ml per 10 liter of water during clear weather (no rainfall). There is possibility for incidence of fruit fly on fruits of cucurbitaceous crops. For effective control of fruit fly, install cue lure 'Rakshak' trap @ 2 nos. per acre at the time of initiation of flowering.
- Tuber crops: Due to forecast for light to moderate rainfall, apply second split dose of nitrogen to tuber crop. Follow weeding and give earthing up at the time of fertilizer application.







**Figure:2. Precipitation forecast for 07 Aug to 15 Aug 2021 (Source: NOAA NCEP).**

*Disclaimer: The predictability of weather depends on many dynamic factors. The success of Agromet advisories provided here depends on the accuracy of the forecasts. In no event will India Meteorological Department (IMD) and Indian Council of Agricultural Research (ICAR) be liable to the user or 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 on this bulletin.*