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

## **Daily Crop Weather Information as on 20 August 2020**

Attention: Rajiv Maheshwari, OSD, ICAR

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

- The Well Marked Low Pressure Area lies over north interior Odisha & adjoining Jharkhand. It is very likely to move nearly westwards across Chhattisgarh & Madhya Pradesh during next 3-4 days.
- The monsoon trough is active and south of its normal position. An east-west shear zone runs roughly along Lat. 20°N across central India between 3.6 km & 7.6 km above mean sea level tilting southwards with height.
- In addition to above above systems, there is convergence of strong southwesterly/southerly winds at lower levels over northwest India very likely to continue till today, the 20 August, 2020. Under the influence of this system: (i) Widespread rainfall with isolated heavy to very heavy falls very likely over Odisha on today, the 20 August; over Chhattisgarh, Madhya Pradesh, Vidarbha and Telangana on 20 & 21; over Gujarat and Rajasthan till 23 August, 2020. (ii) Isolated extremely heavy falls are likely over odisha, Chhattisgarh & Telangana on today, the 20 August; over west Madhya Pradesh on 21; over East Rajasthan on 22 and over Gujarat state on 22 & 23 August, 2020. (III) Fairly widespread to widespread rainfall activity with Isolated heavy to very heavy falls very likely over northwest India including Western Himalayan region on today, the 20 August, 2020 and its intensity & distribution decrease significantly thereafter.
- Moderate to severe thunderstorm accompanied with lightning at isolated places very likely over Chhattisgarh, West Uttar Pradesh, Rajasthan and Assam & meghalaya during next 12 hours.
- The images showing the latest satellite picture in the figure. 1.

## **Main Weather Observations (IMD)**

Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hrs IST of today): at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Haryana, Chandigarh & Delhi, East Rajasthan, West Madhya Pradesh, Konkan & Goa, Madhya Maharashtra, Marathwada, Vidarbha, Telangana, Coastal Karnataka, Chhattisgarh, Odisha, Jharkhand and West Bengal

- & Sikkim; at many places over Himachal Pradesh, Punjab, East Uttar Pradesh, East Madhya Pradesh, Gujarat State, Coastal Andhra Pradesh & Yanam; at a few places over West Uttar Pradesh, West Rajasthan, Interior Karnataka, Kerala & Mahe and Lakshadweep and at isolated places over Bihar, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands.
- Heavy to very heavy rainfall observed at isolated places over East Rajasthan and heavy rainfall at isolated places over Konkan & Goa, Telangana, Odisha, West Bengal & Sikkim and Assam & Meghalaya.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hrs IST of today): Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Uttar Pradesh, Rajasthan, East Madhya Pradesh, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Odisha, Chhattisgarh, West Bengal & Sikkim and Assam & Meghalaya.
- Maximum Temperature Departures as on 19-08-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Kerala & Mahe and Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) a few places over Himachal Pradesh, Bihar and Assam & Meghalaya and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, East Madhya Pradesh, South Interior Karnataka, Gangetic West Bengal and Andaman & Nicobar Islands. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Telangana; at a few places over West Uttar Pradesh and at isolated places over Uttarakhand, Haryana, Chandigarh & Delhi and Odisha; below normal (-1.6°C to -3.0°C) at a few places over West Madhya Pradesh, Madhya Maharashtra, Chhattisgarh and Coastal Andhra Pradesh & Yanam and at isolated places over Punjab, East Rajasthan, East Uttar Pradesh, Gujarat Region, Marathwada and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 39.4°C was reported at Phalodi (West Rajasthan).
- Minimum Temperature Departures as on 20-08-2020: Minimum temperatures are above normal (1.6°C to 3.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, East Uttar Pradesh, Bihar, Kerala & Mahe and Andaman & Nicobar Islands; at isolated places over West Rajasthan, Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra, Vidarbha and Tamil Nadu, Puducherry & Karaikal. They are below normal (-1.6°C to -3.0°C) at many places over isolated places over Haryana, Chandigarh & Delhi and at isolated places over Punjab, East Rajasthan, Odisha and Assam & Meghalaya and near normal

over rest parts of the country. The lowest minimum temperature of 19.4°C reported at Chandrapur (Vidarbha) over the plains of the country.

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

- 20 August (Day 1): Heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places very likely over Odisha, Chhattisgarh and Telangana; heavy to very heavy rainfall at at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Rajasthan, East Madhya Pradesh, Vidarbha, Gangetic West Bengal, Gujarat Region, Konkan & Goa and Coastal Andhra Pradesh & Yanam and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttar Pradesh, West Madhya Pradesh, Jharkhand, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Saurashtra & Kutch, Madhya Maharashtra, Marathwada and Coastal Karnataka. Moderate thunderstorm accompanied with lightning at isolated places very likely over Himachal Pradesh, Uttarkhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Chhattisgarh, Sub-Himalayan West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Coastal Andhra Pradesh & Yanam. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea. Squally Weather (wind speed reaching 45-55 kmph) over south Gujarat-Maharashtra-Goa coasts; Westcentral Bay of Bengal and along & off Odisha-West Bengal Andhra Pradesh coasts. Fishermen are advised not to venture into these area.
- 21 August (Day 2): Heavy to very heavy rainfall at isolated places with extremely heavy falls at isolated places very likely over West Madhya Pradesh; heavy to very heavy rainfall at at isolated places over East Rajasthan, East Madhya Pradesh, Gujarat state, Konkan & Goa and Madhya Maharashtra and heavy rainfall at isolated places over Uttar Pradesh, West Rajasthan, Vidarbha, Chhattisgarh, Gangetic West Bengal, Jharkhand, Assam & Meghalaya and Telangana. Moderate thunderstorm accompanied with lightning at isolated places very likely over Uttar Pradesh, Rajasthan, Assam & Meghalaya and Coastal Andhra Pradesh & Yanam. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea. Squally Weather (wind speed reaching 45-55 kmph) over south Gujarat-Maharashtra-Goa coasts and along & off Odisha-West Bengal coasts. Fishermen are advised not to venture into these area.
- 22 August (Day 3): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Gujarat region; Heavy to very heavy

rainfall at isolated places with extremely heavy falls at isolated places over East Rajasthan and Saurashtra & Kutch; heavy to very heavy rainfall at at isolated places over West Rajasthan,West Madhya Pradesh, Konkan & Goa and Madhya Maharashtra and heavy rainfall at isolated places over Uttar Pradesh, Gangetic West Bengal, Odisha and Marathawada. Moderate thunderstorm accompanied with lightning at isolated places very likely over Uttar Pradesh, Rajasthan and Coastal Andhra Pradesh & Yanam. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea. Squally Weather (wind speed reaching 45-55 kmph) over Eastcentral Arabian sea along & off south Gujarat-Maharashtra-Goa coasts and along & off Odisha-West Bengal coasts. Fishermen are advised not to venture into these area.

- 23 August (Day 4): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places likely over Saurashtra & Kutch; Heavy to very heavy rainfall at isolated places over Gujarat region; heavy to very heavy rainfall at isolated places over Rajasthan, Odisha, Konkan & Goa and Madhya Maharashtra and heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Chhattisgarh, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Marathawada, Coastal Andhra Pradesh & Yanam, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Moderate thunderstorm accompanied with lightning at isolated places likely over Coastal Andhra Pradesh & Yanam. Strong Wind (speed reaching 50-60 kmph) likely over Southwest & adjoining Westcentral Arabian Sea. Squally Weather (wind speed reaching 45-55 kmph) over Northeast & Eastcentral Arabian sea along & off south Gujarat-Maharashtra-Goa coasts. Fishermen are advised not to venture into these area.
- 24 August (Day 5): Heavy to very heavy rainfall at isolated places over Jharkhand, Gangetic West Bengal and Odisha and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat region, Konkan & Goa, Madhya Maharashtra, Marathawada, Coastal Andhra Pradesh & Yanam, Telangana, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal. Moderate thunderstorm accompanied with lightning at isolated places likely over Coastal Andhra Pradesh & Yanam. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea. Squally Weather (wind speed reaching 45-55 kmph) over Northeast & Eastcentral Arabian sea along & off

- south Gujarat-Maharashtra-Goa coasts. Fishermen are advised not to venture into these area.
- The weather outlook for seven days i.e., 20 to 28 Aug 2020 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)**

#### **Uttar Pradesh**

#### Weather condition:

Medium to heavy Cloud coverage in the atmosphere during 19-23 August and light to moderate rainfall may be appear on 19-21 August, therefore high humid condition may be prevailing due to heavy cloud coverage. Maximum and minimum temperature may be 1-2 °C higher to its normal. North-East/ South- East winds may be prevailing 8.6 to 26.3 km/hr range during this week as per fore cast received.

#### **Contingency measure:**

- Paddy: 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 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: Top dressing 1/4 urea at Knee high stage. Spray Forete -10G @ 10 kg/ha for control of shoot borer.
- Sorghum: Weeding should be done and plant population should be maintain by thinning.
- Pearl millet: Sowing of pearlmillet 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.
- Pegionpea: 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: Favorable weather condition for sowing of green gram. 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 varities 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 for fodder.
- 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.

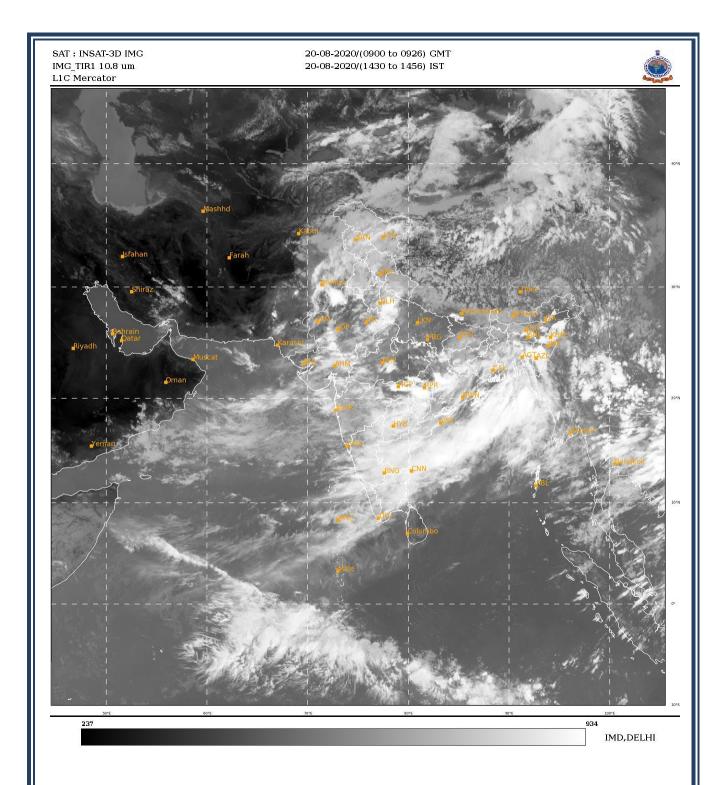
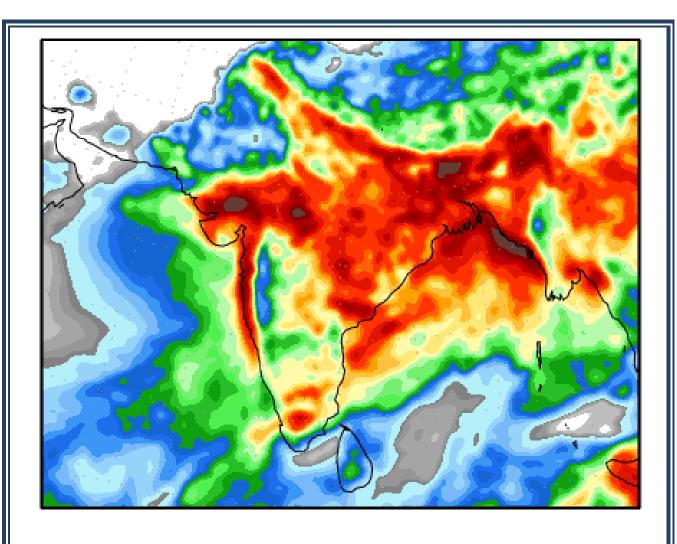


Figure: 1. Latest available satellite picture as on 20 August 2020 at 1456 Hrs (IST). (Source: IMD).



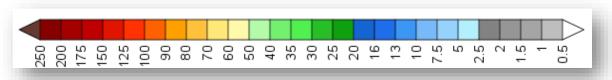


Figure: 2. Precipitation forecast for 20 to 28 Aug 2020 (Source: NOAA NCEP).

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