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

#### **Daily Crop Weather Information as on 28 August 2020**

Attention: Rajiv Maheshwari, OSD, ICAR

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

- The Well Marked Low Pressure Area lies over north Chhattisgarh & adjoining East Madhya Pradesh. It is very likely to move west-northwestwards across north Madhya Pradesh and south Uttar Pradesh during next 2 days and weaken gradually.
- Western end of the Monsoon Trough runs near its normal position and the eastern end runs to the south of its normal position. The western end is likely to remain along its normal position during next 2 days and shift northwards to the foothills of Himalayas thereafter for subsequent 4-5 days.
- In addition, the convergence of strong lower level southwesterly winds from Arabian Sea and easterly winds from Bay of Bengal is very likely over the plains of Northwest India during next 2-3 days.
- Under the influence of the above systems: a) Widespread rainfall with heavy to very heavy falls likely over Vidharbha & Chhattisgarh on today, the 28th August, 2020; over West Madhya Pradesh on 28 & 29; over Gujarat state and Konkan & Goa on 29 Aug. Widespread rainfall with Isolated Extremely Heavy falls are very likely over East Madhya Today, the 28th August, 2020. b) Scattered to fairly widespread rainfall with Isolated heavy falls very likely over Uttarakhand & West Uttar Pradesh till 31st; over Punjab today, the 28th; over Haryana, Chandigarh & Delhi on 28th & 29th; over West Rajasthan during 29th-31st; over East Rajasthan during 28th-31st August, 2020. Isolated heavy to very heavy falls are very likely over East Rajasthan on 29th & 30th August, 2020.
- Moderate thunderstorm accompanied with lightning at isolated places very likely over Punjab, Haryana, Chandigarh, West Uttar Pradesh, East Rajasthan, Madhya Pradesh and Chhattisgarh during next 12 hours.
- The images showing the latest satellite picture in the figure. 1.

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

- Rain/Thundershowers observed (from 0830 to 1730 hrs IST of yesterday): at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Saurashtra & Kutch, East Madhya Pradesh, Vidarbha and Gangetic West Bengal; at many places over Bihar and Sub-Himalayan West Bengal & Sikkim; at a few places over Himachal Pradesh, Uttarakhand, east Uttar Pradesh, West Madhya Pradesh, Konkan & Goa, Jharkhand and Odisha; at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Rajasthan, coastal & north Interior Karnataka, Telangana, Coastal Andhra Pradesh & Yanam, Tamil Nadu & Puducherry, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- Heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hrs IST of today): at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Bihar, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam and Tamil Nadu, Puducherry & Karaikal.
- Maximum Temperature Departures as on 27-08-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Kerala & Mahe and South Interior Karnataka and at isolated places over Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Assam & Meghalaya; at a few places over Uttarakhand, Madhya Maharashtra, Konkan & Goa, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands and at isolated places over Haryana, Chandigarh & Delhi and East Madhya Pradesh. They were markedly below normal (-5.1°C or less) at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad; at a few places over Odisha; appreciably below normal (-3.1°C to -5.0°C) at most places over Chhattisgarh; at a few places over Telangana and Jharkhand and at isolated places over Vidarbha and Gangetic West Bengal; below normal (- 1.6°C to -3.0°C) at a few places over West Rajasthan and at isolated places over Himachal Pradesh, Coastal Andhra Pradesh &Yanam and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.0°C was reported at Narsinghpur (East Madhya Pradesh).
- Minimum Temperature Departures as on 27-08-2020: Minimum temperatures were above normal (1.6°C to 3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura; at a few places

over Punjab, Himachal Pradesh, Uttarakhand, Bihar, South Interior Karnataka, Andaman & Nicobar Islands; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Haryana, Chandigarh & Delhi, Rajasthan, Madhya Pradesh, Assam & Meghalaya and Madhya Maharashtra. They were below normal (-1.6°C to -3.0°C) at a few places over Chhattisgarh and Odisha and at isolated places over Telangana and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 19.2°C was reported at Mandla (East Madhya Pradesh) over the plains of the country.

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

- 28 August (Day 1): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over East Madhya Pradesh; heavy to very heavy rainfall at isolated places over West Madhya Pradesh, Vidarbha and Chhattisgarh and heavy rainfall at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Arunachal Pradesh, Assam & Meghalaya, Gujarat State, Konkan & Goa and Telangana. Moderate to severe thunderstorm accompanied with lightning at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 29 August (Day 2): Heavy to very heavy rainfall at isolated places likely over East Rajasthan, West Madhya Pradesh, Gujarat State and Konkan & Goa and heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, East Madhya Pradesh, Haryana, Chandigarh & Delhi, West Rajasthan, ghat areas of Madhya Maharashtra. Thunderstorm accompanied with lightning likely at isolated places over Rajasthan, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Interior Karnataka. Strong Wind (speed reaching 45-55 kmph) likely over Southwest Arabian Sea. Squally weather with wind (speed reaching 45-55 kmph) over Gujarat coast. Fishermen are advised not to venture into these areas.
- 30 August (Day 3): Heavy to very heavy rainfall at isolated places likely over East Rajasthan and Saurashtra & Kutch and heavy rainfall at isolated places over Uttarakhand, West Uttar Pradesh, West Rajasthan, West Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim, Gujarat region, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Rajasthan, Jharkhand, Interior Karnataka, Tamilnadu,

Puducherry & Karaikal and Kerala & Mahe. Strong Wind (speed reaching 45-55 kmph) likely over Southwest Arabian Sea. Squally weather with wind (speed reaching 45-55 kmph) over Gujarat coast. Fishermen are advised not to venture into these areas.

- 31 August (Day 4): Heavy rainfall at isolated places likely over Uttarakhand, Uttar Pradesh, Rajasthan, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Rajasthan, Jharkhand, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Strong Wind (speed reaching 45-55 kmph) likely over Southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- 01 September (Day 5): Heavy rainfall at isolated places likely over Uttarakhand, East Rajasthan, Uttar Pradesh, north Madhya Pradesh, Bihar, SubHimalayan West Bengal & Sikkim, Assam & Meghalaya, Andaman & Nicobar Islands, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning likely at isolated places over Rajasthan, Jharkhand, Tamilnadu, Puducherry & Karaikal and Kerala & Mahe. Strong Wind (speed reaching 45-55 kmph) likely over Southwest Arabian Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 28 Aug to 05 Sep 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)**

### **Jharkhand**

#### Weather condition:

During this week rainfall 177.0 mm has been received, which is higher and better than normal rainfall i.e. 65.1 mm. Maximum and minimum temperature range between 29.2 to 34.9 and 20.5 to 26.8 respectively. Maximum and minimum actual average temperatures are 32.4 and 23.0, whereas normal maximum and minimum temperature are 28.8 and 22.7 respectively.

#### **Contingency measure:**

 General: Good amount of rain has been received during last few days and either drizzle or light rain is also expected in coming days. Hence, farmers are requested to prepare their field for sowing of different crops. During these days, at the time of spraying of any pesticides mix Tipol or Sandovit (@ 5ml per 10 liter of solution) or prepare the solution in soap water and spraying must be done during clear weather condition. Maintain the drainage of excess water from crops/vegetables field. And also maintain water stagnation in rice field by strengthening the bunds. Farmers wishing to cultivate early potato/table pea are requested to manage improved seed, fertilizers etc., select suitable field (well drained field) and prepare the field during favorable weather condition. In fallow field of upland, farmers may complete the sowing of Horse gram and Niger during favorable weather.

- Horse Gram: Farmers wishing to cultivate Horse gram may select improved varieties like V.L.G.-19 or Birsa kulthi-1. 8 kg of seed is required for sowing in 1 acre. After field preparation, sow the seed in line at a distance of 30 cm. (Row to row) and 10 cm. (Plant to plant). Before sowing, seeds must be treated with Rhizobium culture.
- Niger: Farmers wishing to cultivate Niger may select improved varieties like Birsa niger-1, Birsa niger-2, Birsa niger-3, Pooja-1 etc. 2.5 kg of seed is required for sowing in 1 acre. After preparing the field, sow the seed in line at a distance of 30 cm (Row to row) and 15 cm. (Plant to plant). Farmers who wish to sow the seed by broadcasting method must have to increase the seed rate (3.5 kg per acre).
- Maize: It is the time of watch and ward where the crops are at grain filling stage. Alternative methodology is to tag shinning wire around the field, which repels the birds. If the crops are attacked by fruit borer, spray neem based insecticide on upper part of the plant @ 2-3 ml. per liter of water.
- Rice: Direct seeded timely sown minimum duration rice variety either are at flowering stage or approaching this stage. This stage is susceptible to the attack of Gandhi bug insects which suck the sap of flower. Hence, farmers should have to be alert regarding attack of the insect. To control the insects dusting of Chlorpyriphos/Quinolphos/Methyl Parathion dust @ 10 kg per acre is recommended. After dusting of the insecticide, these insects migrate to nearby field. Hence, Dusting should be performed in different fields at a time during clear weather. In absence of the insecticide, dusting of coal or wood ash mixed with kerosin oil is also effective against this insect.
- Potato: Farmers wish to cultivate early potato may arrange improved seed, fertilizers etc. Recommended early varieties are Kufri Ashoka and Kufri Pukhraj. 12 quintal seeds (germinated tubers of 20-30 gram each), 40 kg Urea, 70 kg D.A.P., 80 kg Muriate of Potash and 10 kg Sulphur are required for cultivation in 1 acre.
- Vegetable Pea: Farmers wish to cultivate early table pea may arrange improved seed, fertilizers etc. Recommended early variety is Arkel. 40 kg seeds, 35 kg Urea, 200 kg S.S.P., 25 kg Muriate of Potash are required for cultivation in 1 acre.

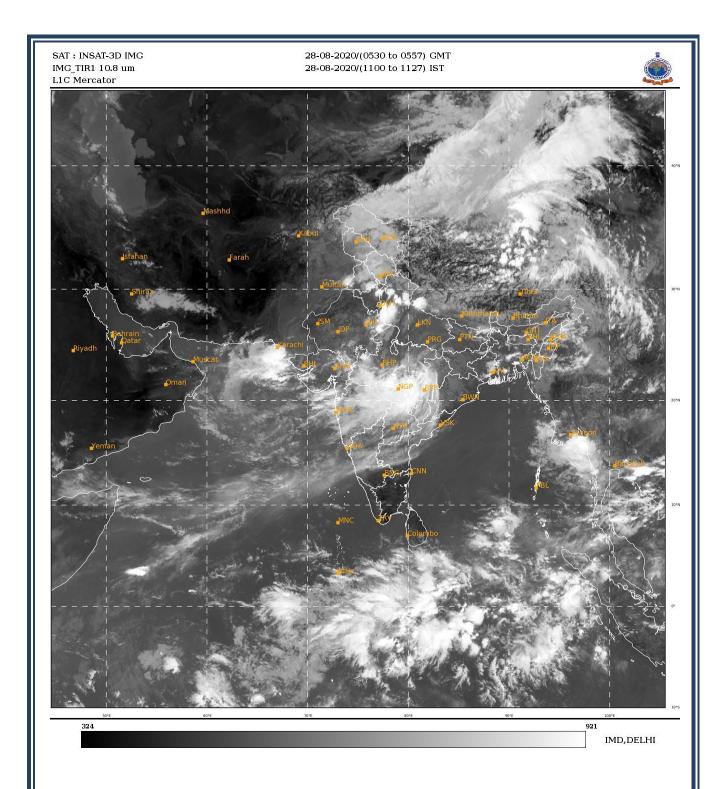
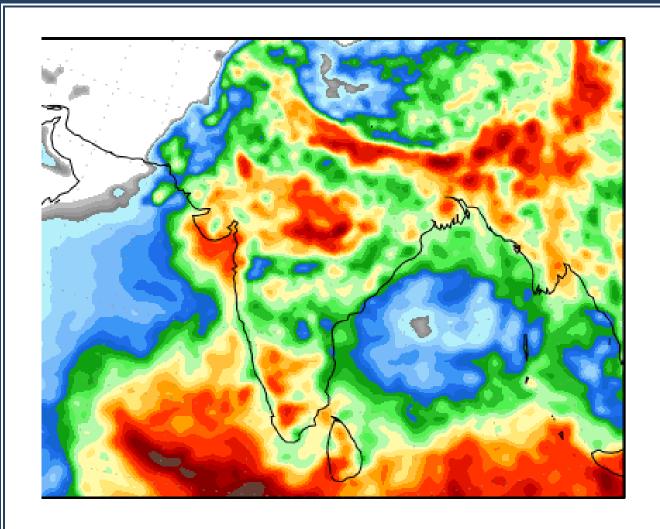


Figure: 1. Latest available satellite picture as on 28 August 2020 at 1127 Hrs (IST). (Source: IMD).



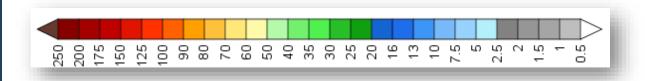


Figure: 2. Precipitation forecast for 28 Aug to 05 Sep 2020 (Source: NOAA NCEP).

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.

