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

Daily Crop Weather Information as on 29 Jul 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Well Marked Low Pressure Area over coastal Bangladesh & adjoining West Bengal persists. The associated cyclonic circulation extends upto upper tropospheric levels. It is likely to move westwards across West Bengal, Jharkhand and Bihar during next 48 hours. Under its influence:
- i) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls likely over Odisha, Gangetic West Bengal, Jharkhand and Bihar during 29th31st July and over East Madhya Pradesh and Chhattisgarh during 29th July-02nd August. Isolated extremely heavy falls are likely over Gangetic West Bengal on 29th July; over Jharkhand & Chhattisgarh on 30th July and over East Madhya Pradesh on 31st July.
- The western end of the Monsoon trough at mean sea level passes through north of its normal position, while its eastern end is near its normal position. There is high wind convergence from Arabian Sea to plains of northwest India at lower levels. Under its influence:
 - i) Current spell of widespread rainfall activity with isolated heavy to very heavy falls very likely to continue over Jammu and Kashmir, Himachal Pradesh, Uttrakhand, Punjab and Haryana till 30th July and reduction thereafter. Fairly widespread to widespread rainfall with isolated heavy falls very likely over Uttar Pradesh during next 5-days (29th July till 2nd August).
 - ii) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls likely to continue over East Rajasthan and West Madhya Pradesh during 29th July-02nd August. It is likely to increase from 30th July. Isolated extremely heavy falls are likely over East Rajasthan during 30th July-01st August and over West Madhya Pradesh on 31st July, 2021.
- 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 hours IST of today): at most places over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Konkan & Goa, Coastal Karnataka, West Bengal & Sikkim, Bihar, Jharkhand, Odisha and Kerala & Mahe; at many places over East Uttar Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Andaman & Nicobar Islands, Madhya Maharashtra and Gujarat Region; at a few places over Lakshadweep, Rajasthan, Coastal Andhra Pradesh & Yanam and at isolated places over Saurashtra & Kutch, Marathwada, Telangana, Interior Karnataka and Tamilnadu, Puducherry & Karaikal.

- Heavy Rainfall observed (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely Heavy Rainfall at isolated places over Gangetic West Bengal; Very Heavy Rainfall at isolated places over Punjab, Haryana, West Madhya Pradesh and Heavy Rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Odisha, Uttarakhand, East Rajasthan, East Madhya Pradesh, Bihar, Himachal Pradesh, Jharkhand, Konkan & Goa
- Thunderstorm observed (from 1730 hours IST of yesterday to 0830 hours IST of today): at a few places over Assam & Meghalaya; at isolated places over East Uttar Pradesh, Vidarbha, Gangetic West Bengal, Sub-Himalayan West Bengal & Sikkim.
- Maximum Temperature Departures as on 28-07-2021: Maximum temperatures were markedly above normal (5.1°C to more) at a few places over Arunachal Pradesh and Assam & Meghalaya and at isolated places over Telangana; above normal (1.6°C to 3.1°C) at most places over Coastal Karnataka; at many places over Sub-Himalayan West Bengal & Sikkim, Bihar, Coastal Andhra Pradesh & Yanam, North Interior Karnataka and Kerala & Mahe; at a few places over Gangetic West Bengal and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Konkan & Goa, Andaman & Nicobar Islands and Tamilnadu, Puducherry & Karaikal. They were markedly below normal (-5.1°C to Less) at most places over Haryana, Chandigarh & Delhi; at many places over Himachal Pradesh; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and West Rajasthan; appreciably below normal (- 3.1°C to -5.0°C) at many places over East Rajasthan; at isolated places over Chhattsgarh and Odisha; below normal (-1.6°C to -3.0°C) at a few places over Uttarakhand and Saurashtra & Kutch and at isolated places over Gujarat Region and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.5°C was reported at Pilani (East Rajasthan).

• Minimum Temperature Departures as on 29-07-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over Coastal Andhra Pradesh & Yanam and Sub-Himalayan West Bengal & Sikkim; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Saurashtra & Kutch, Madhya Maharashtra, Telangana, Coastal Karnataka, Andaman & Nicobar Islands and Lakshadweep; at isolated places over Kerala & Mahe. They are below normal (-1.6°C to -3.0°C) at many places over Haryana, Chandigarh & Delhi; at a few places over East Rajasthan, West Uttar Pradesh, Vidarbha and Madhya Pradesh; at isolated places over Gangetic West Bengal and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.6°C is reported at Khargone (West Madhya Pradesh).

Weather Warning during the next 5 days (IMD)

- 29 July (Day 1): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over Gangetic West Bengal; Heavy to Very Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, East Madhya Pradesh, West Uttar Pradesh, Bihar, Jharkhand and Odisha and Heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Uttar Pradesh, Rajasthan, West Madhya Pradesh, Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Konkan & Goa. Thunderstorm accompanied with lightning very likely at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over North, Southwest, Central Arabian Sea and along & off Gujarat-MaharashtraKarnataka coasts; (speed 40-50 kmph gusting to 60 kmph) over Northwest & Westcentral Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal coast. Fishermen are advised not to venture into these areas.
- 30 July (Day 2): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over East Rajasthan, Jharkhand and Chhattisgarh; Heavy to Very Heavy Rainfall at isolated places over Uttarakhand, West Rajasthan, Madhya Pradesh and Bihar and Heavy rainfall at isolated places over Himachal Pradesh, Haryana, Uttar Pradesh, Odisha, West Bengal & Sikkim, Assam & Meghalaya, Madhya Maharashtra and Konkan & Goa. Thunderstorm accompanied with lightning very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over North, Southwest and Central Arabian Sea and along & off Gujarat-

- MaharashtraKarnataka coasts; (speed 40-50 kmph gusting to 60 kmph) over Northwest & Westcentral Bay of Bengal and along & off north Andhra Pradesh-Odisha-West Bengal coast. Fishermen are advised not to venture into these areas.
- 31 July (Day 3): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places very likely over East Rajasthan and Madhya Pradesh; Heavy to Very Heavy Rainfall at isolated places over East Uttar Pradesh, West Rajasthan, Jharkhand and Chhattisgarh and Bihar and Heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Bihar, Odisha, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Madhya Maharashtra and Konkan & Goa. Strong winds (speed 45-55 kmph gusting to 65 kmph) very likely over North, Southwest and Central Arabian Sea and along & off Gujarat-MaharashtraKarnataka coasts; (speed 40-50 kmph gusting to 60 kmph) over Central Bay of Bengal. Fishermen are advised not to venture into these areas.
- 01 August (Day 4): Heavy to Very Heavy Rainfall with Extremely Heavy Falls at isolated places likely over East Rajasthan; Heavy to Very Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, West Rajasthan, Chhattisgarh, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Konkan & Goa. Thunderstorm accompanied with lightning likely at isolated places over Andaman & Nicobar Islands. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over North and Central Arabian Sea and along & off Gujarat-Maharashtra-Karnataka coasts; (speed 40-50 kmph gusting to 60 kmph) over Central Bay of Bengal. Fishermen are advised not to venture into these areas.
- 02 August (Day 5): Heavy to Very Heavy Rainfall at isolated places likely over East Rajasthan and West Madhya Pradesh and Heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, West Rajasthan, East Madhya Pradesh, Chhattisgarh and Assam & Meghalaya. Thunderstorm accompanied with lightning likely at isolated places over Andaman & Nicobar Islands. Strong winds (speed 45-55 kmph gusting to 65 kmph) likely over North and Central Arabian Sea and along & off Gujarat-Maharashtra-Karnataka coasts; (speed 40-50 kmph gusting to 60 kmph) over Central Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 29 Jul to 06 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)

Kerala

Weather condition:

In Vellanikkara, the maximum temperature ranges from 25.1 to 31.2 Deg C, minimum temperature ranges from 22.2 to 24.3 Deg C. Morning relative humidity ranges from 092% to 099% and afternoon relative humidity ranges from 070% to 099%. Wind speed ranges from 0.3 to 2.3 km/h. Evaporation ranges from 0.7 to 2.6 mm. Sunshine hours range from 0.0 to 5.3 hours. 5 cm morning soil temperature ranges from 23.5 to 26.0 Deg C and afternoon soil temperature ranges from 28.2 to 32.2 Deg C.

Contingency measure:

- Paddy (virippu): Tillering stage- Bacterial Leaf blight- To control and prevent Bacterial Leaf blight in paddy, dissolve 20 g of cow dung in one litre of water and spray the supernatant liquid by mixing with 20g of pseudomonas in one litre of water.
- Banana: Blast and pitting disease: Ensure drainage facilities in low land banana plantations. Appearance of small sunken brown spots on matured fruits is the symptom of blast and pitting disease. To prevent the disease, cut and remove dried leaves from the garden and protect the bunches with bunch cover. If the disease is occurring regularly and bunch maturing coincides with rainy season, spray fungicide like azoxystrobin 0.5 milli litre or tebuconazole + trifloxystrobin (Nativo) 0.5 gram per litre of water within one month of bunch emergence. Nutmeg- Leaf fall- As a precautionary measure to manage leaf fall during rainy season, spray 1% bordeaux mixture.
- Ginger and Turmeric: Soft rot- During rainy season, apply mixture of 15 gram bleaching powder and 250 gram lime in to the basin of three meter square bed to avoid the spreading of soft rot in ginger and turmeric.
- Cucurbitaceous Vegetables: Downy mildew: Due to high relative humidity, there is a chance of downy mildew attack in cucurbitaceous vegetables. Spray 2.5gm Mancozeb per one litre of water under the leaves.
- Animal Husbandry: Avoid water logging in the cattle shed premises to prevent mosquito breeding. If required apply mosquito / fly repellant on the animal body and in the cattle shed.

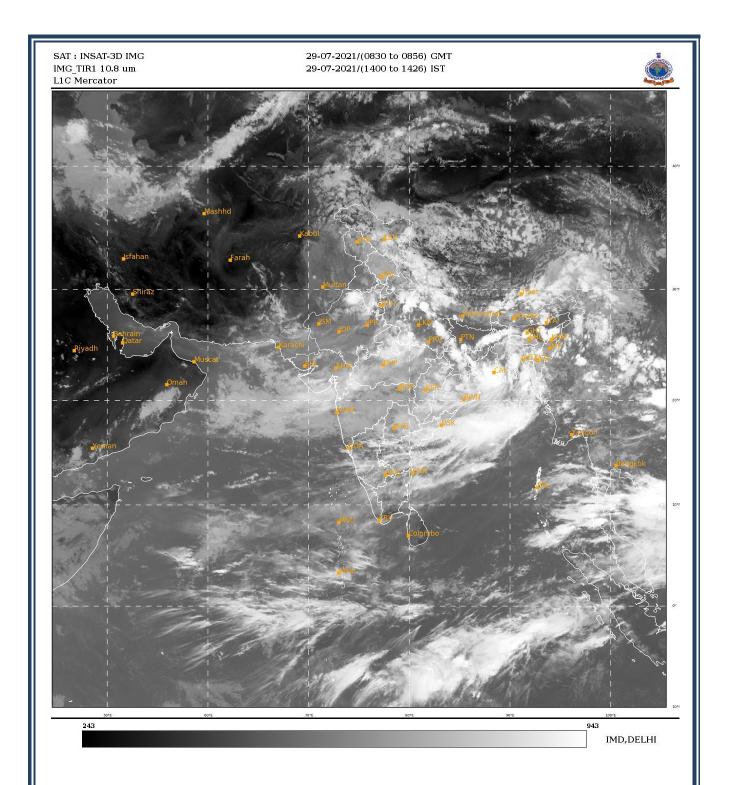


Figure: 1. Latest available satellite picture as on 29 Jul 2021 at 1426 Hrs (IST). (Source: IMD).

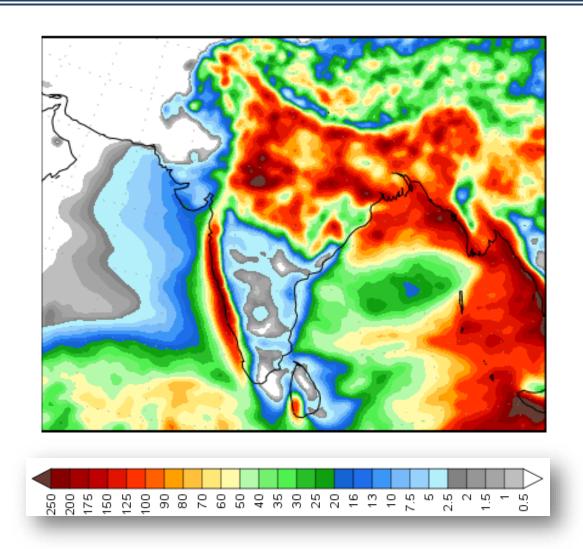


Figure: 2. Precipitation forecast for 29 Jul to 06 Aug 2021 (Source: NOAA NCEP).

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.