

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

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

### **Daily Crop Weather Information as on 29 Jun 2021**

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

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

- The northern Limit of southwest monsoon (NLM) continues to pass through Lat. 26°N / Long. 70°E, Barmer, Bhilwara, Dholpur, Aligarh, Meerut, Ambala and Amritsar.
- Prevailing meteorological conditions, large scale atmospheric features and the forecast wind pattern by dynamical models suggest that no favourable conditions are likely to develop for further advance of southwest monsoon into remaining parts of Rajasthan, west Uttar Pradesh, Haryana, Chandigarh & Delhi and Punjab during next 5 days.
- Subdued rainfall activity is very likely to prevail over Northwest, Central and Western parts of Peninsular India during next 5 days. Isolated/scattered thunderstorm activity accompanied with lightning & rainfall is also likely over these regions during this subdued monsoon activity period.
- Under the influence of strong moisture laden southwesterly winds; widespread rainfall very likely over Bihar, West Bengal & Sikkim and Northeastern states during next 5 days. Isolated heavy to very heavy rainfall very likely over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura during next 3 days. Isolated extremely falls also likely over Assam & Meghalaya during 29th-30th June and Bihar and Sub-Himalayan West Bengal & Sikkim during 30th June-02nd July, 2021.
- Subsequently, moist easterly winds are likely to pickup in strength, causing enhanced rainfall activity all along the Himalayan foothills of north Bihar, north Uttar Pradesh and Uttarakhand during 01-3 July leading to increased inflow into the rivers originating/flowing over these regions. Isolated heavy to very heavy rainfall very likely over Uttarakhand and Himalayan foothills of East Uttar Pradesh during 01st-03rd July, 2021.
- Strong surface winds (speed reaching 20-30 kmph occasionally) over Haryana and West Uttar Pradesh on 30th June and 01st July, 2021.
- Moderate to severe thunderstorm accompanied by frequent cloud to ground lightning very likely over Bihar, Jharkhand and Gangetic West Bengal during next

24 hours. This may cause injuries leading to casualties to people and animals staying outdoors.

- 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 Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, Coastal Karnataka, Konkan & Goa and Madhya Maharashtra; at many places over Nagaland, Manipur, Mizoram & Tripura, Marathwada, Gujarat region, Vidarbha, Bihar and Lakshadweep; at a few places over Gangetic West Bengal, Odisha, Interior Karnataka, Saurashtra & Kutch, West Madhya Pradesh and Kerala & Mahe and at isolated places over Uttarakhand, Uttar Pradesh, Rajasthan, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, East Madhya Pradesh, Chhattisgarh, Jharkhand, Andaman & Nicobar Islands and Tamilnadu, Puducherry & Karaikal.
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely heavy falls observed at isolated places over Assam & Meghalaya; heavy to very heavy rainfall at isolated places over Arunachal Pradesh and heavy rainfall at isolated places over Konkan & Goa, Madhya Maharashtra, Marathwada, East Madhya Pradesh, Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura and Gujarat region.
- Thunderstorm/Hailstorm observed (from 1730 hrs IST of yesterday to 0830 hours IST of today): at isolated places over Bihar, West Bengal & Sikkim, Chhattisgarh, Madhya Pradesh, Gujarat and Assam & Meghalaya.
- Maximum Temperature Departures as on 28-06-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Haryana, Chandigarh & Delhi and at isolated places over Odisha; above normal (1.6°C to 3.0°C) at many places over Jammu, Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Uttarakhand, Jharkhand, Punjab, Rajasthan and Kerala & Mahe; at a few places over West Madhya Pradesh and South Interior Karnataka and at isolated places over East Madhya Pradesh, Vidarbha, Saurashtra & Kutch, West Bengal & Sikkim and Andaman & Nicobar Islands. They were below normal (-1.6°C to -3.0°C) at many places over Marathwada and at a few places over Nagaland, Manipur, Mizoram & Tripura and Gujarat Region and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 43.2°C was reported at Churu (West Rajasthan).

- Minimum Temperature Departures as on 29-06-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over Punjab, East Rajasthan, Uttarakhand, West Uttar Pradesh and Odisha; at a few places over East Uttar Pradesh and Gangetic West Bengal and at isolated places over West Rajasthan, Himachal Pradesh, Jharkhand, Chhattisgarh and Madhya Pradesh. They are below normal (-1.6°C to -3.0°C) at a few places over Gujarat region; at isolated places over Coastal Andhra Pradesh & Yanam and Madhya Maharashtra and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.5°C reported at Bulsar (Gujarat region) over the plains of the country.

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

- 29 June (Day 1): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Assam & Meghalaya; Heavy to Very Heavy Rainfall at isolated places over Bihar, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh and Heavy Rainfall at isolated places over Gangetic West Bengal and Nagaland, Manipur, Mizoram & Tripura. Thunderstorm with lightning very likely at isolated places over East Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathawada 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.
- 30 June (Day 2): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; Heavy to Very Heavy Rainfall at isolated places over Bihar, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura and Heavy Rainfall at isolated places over Gangetic West Bengal and Telangana. Thunderstorm with lightning very likely at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea, North Arabian sea and along & off Gujarat coast. Fishermen are advised not to venture into these areas.

- 01 July (Day 3): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Bihar and SubHimalayan West Bengal & Sikkim; Heavy to Very Heavy Rainfall at isolated places over Assam & Meghalaya and Heavy Rainfall at isolated places over East Uttar Pradesh, Gangetic West Bengal, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Thunderstorm with lightning & gusty winds (30-40 kmph) very likely at isolated places over Punjab, Haryana, Chandigarh & Delhi and West Uttar Pradesh and with lightning at isolated places over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea, North Arabian sea and along & off Gujarat coast. Fishermen are advised not to venture into these areas.
- 02 July (Day 4): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places likely over Bihar and Sub-Himalayan West Bengal & Sikkim; Heavy to Very Heavy Rainfall at isolated places over Uttarakhand, East Uttar Pradesh and Assam & Meghalaya and Heavy Rainfall at isolated places over Himachal Pradesh, West Uttar Pradesh, Gangetic West Bengal, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura and Tamilnadu, Puducherry & Karaikal. Thunderstorm with lightning & gusty winds (30-40 kmph) likely at isolated places over Punjab and Haryana, Chandigarh & Delhi and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Coastal Andhra Pradesh & Yanam, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea, North Arabian sea and along & off Gujarat coast. Fishermen are advised not to venture into these areas.
- 03 July (Day 5): Heavy to Very Heavy Rainfall likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Assam & Meghalaya, Arunachal Pradesh and Tamilnadu, Puducherry & Karaikal. Thunderstorm with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Madhya Pradesh, Vidarbha,

Chhattisgarh, Bihar, Jharkhand, 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, North Arabian sea and along & off Gujarat coast. Fishermen are advised not to venture into these areas.

- The weather outlook for seven days i.e., 29 Jun to 07 Jul 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)

### Gujarat

#### Weather condition:

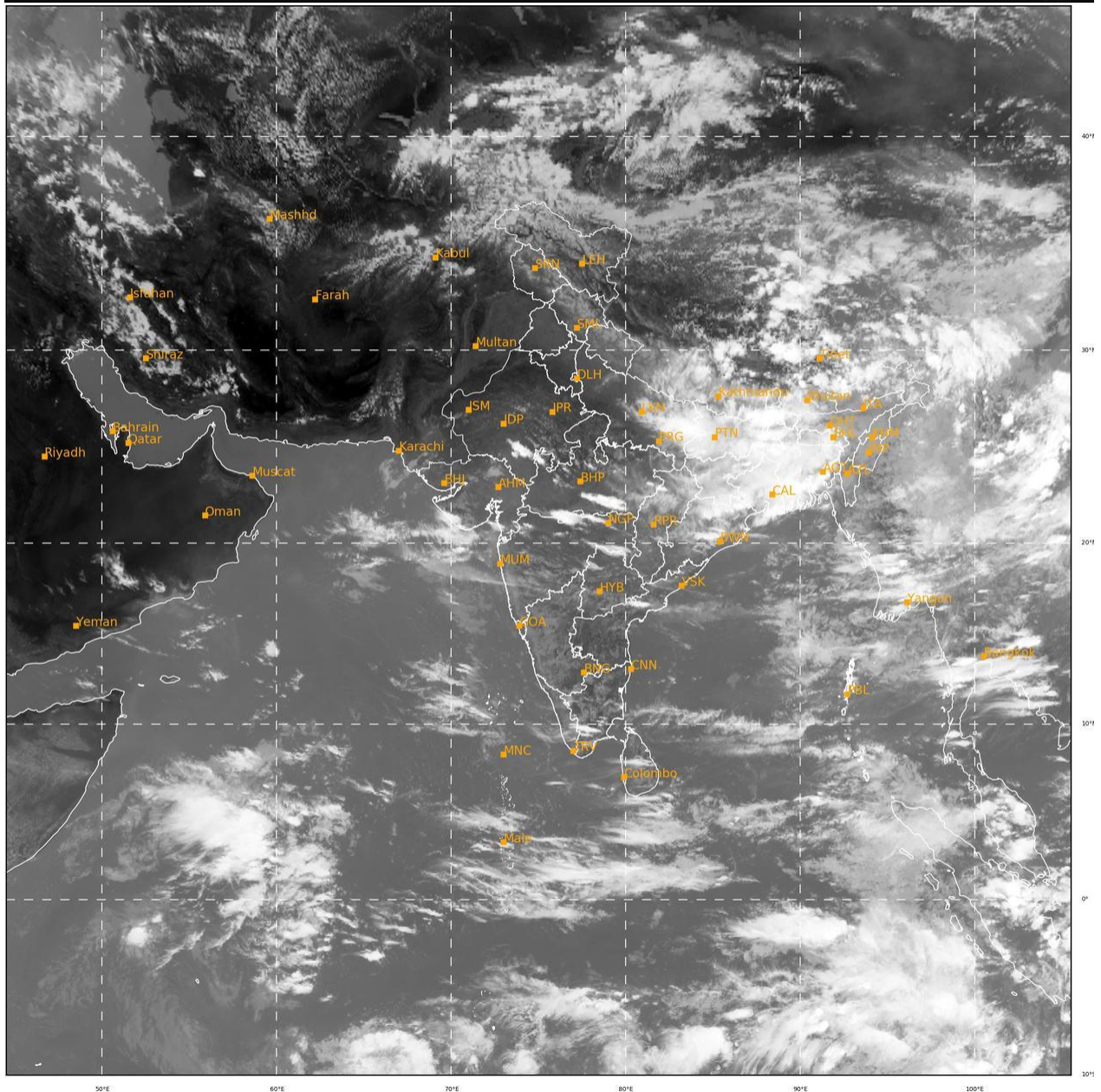
The actual maximum temperature was 5.5 °C and the actual minimum temperature was 1.4 °C lower as compare to their normals. Total BSS was 14.0 hrs. with an average of 2.0 hrs. The daily average evaporation and wind speed was 2.9 mm and 4.9 km/hr respectively. The daily average RH during morning and afternoon was 93.4 % and 75.7 % respectively.

#### Contingency measure:

- Land preparation for kharif crops. Purchase certified seed for kharif crops only from authorized dealer. Seed treatment with mercuric fungicide like Thiram, Captan etc.is recommended before sowing of crops.
- Pearl millet : Sowing of kharif pearl millet should be done with the onset of monsoon when sufficient rainfall received for sowing. Seed rate should be 4 kg/ha with 45 x 10 cm spacing. Select varieties like GHB-538, 558, 577, 719, 732, 744 for kharif sowing. The field should be ploughed once or twice followed by harrowing to create fine tilth.
- Cotton: If irrigation facility available, sown cotton. cotton can sown at 120 cm x 45 cm spacing.
- Chilli : For control of thrips, spray Profenofos 20 ml or neem seed oil 50 ml in 10 liter water. In case of severe attack, spray Spinosad or Spinetoram 3 ml per 10 liter of water.
- Vegetable Crop: Growth: Thrips and Mite: Due to hot and dry condition if mite and thrips incidence occurs spray Methyl-o-dematone 25 EC 10 ml in 10 lit water.
- Mango: Reduction of high temperature effect of mango fruits can be managed by irrigating the orchard. Install nauroji fruit fly trap @ 10 trap per hector in mango orchard nearby to sapota orchard.
- Papaya : Protect the papaya fruits using gunny bags under high temperature condition.
- Cattle: Vaccinate the animals against outbreaks of diseases like Foot & Mouth disease (FMD), Haemorrhagic Septicaemia (H.S.) and Black quarter (B.Q.) during onset of monsoon. Keep animal indoor in rainy condition. Keep fodder at safe place to avoid spoilage from rainfall. Spray phenyl in the animal shed to avoid flies and mosquitos.

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

29-06-2021/(0900 to 0927) GMT  
29-06-2021/(1430 to 1457) IST

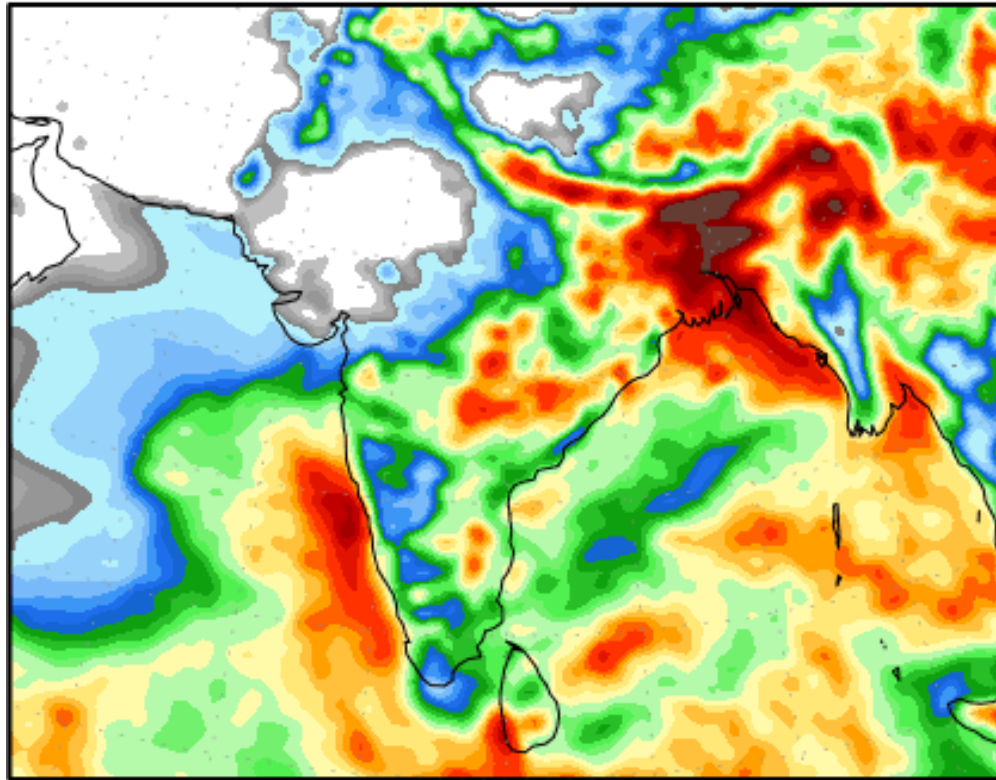


194

944

IMD, DELHI

Figure: 1. Latest available satellite picture as on 29 Jun 2021 at 1457 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 29 Jun to 07 Jul 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.*