

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

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

### **Daily Crop Weather Information as on 18 July 2020**

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

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

- The monsoon trough is south of its normal position, it is most likely to shift northwards gradually towards foothills of Himalayas from today, the 18th July onwards. In addition, convergence of moist southerly/southwesterly winds from Bay of Bengal over Northeast & adjoining East India and from Arabian Sea over northwest India at lower tropospheric levels very likely from tomorrow onwards.
- Due to above favourable meteorological conditions, rainfall distribution & intensity is very likely to increase over the northern parts of the country. Fairly widespread to widespread rainfall with isolated heavy to very heavy falls is very likely over Northwest India during 18th - 20th July, 2020 and over Northeast & adjoining East India during 18th -22nd July. Isolated Extremely heavy fall also very likely over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya during 19th- 22nd July and over Arunachal Pradesh during 19th-20th July.
- Intense thunderstorm & lightning potential zone: Moderate to severe thunderstorm & lightning very likely over Uttrakhand, Haryana, Punjab, West Uttar Pradesh, Bihar, North Rajasthan and South Coastal Andhra Pradesh and Sub-Himalayan West Bengal 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 to 1730 hours IST of yesterday): at most places over Konkan & Goa, Karnataka, Kerala & Mahe and Lakshadweep; at many places over Saurashtra & Kutch, Madhya Maharashtra and Arunachal Pradesh; at a few places over Himachal Pradesh, Andaman & Nicobar Islands and West Bengal & Sikkim; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Vidarbha, Rajasthan, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.

- Maximum Temperature Departures as on 17-07-2020: Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at many places over East Rajasthan; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Madhya Pradesh; at isolated places over East Uttar Pradesh, Gangetic West Bengal and Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Himachal Pradesh, Uttarakhand, East Uttar Pradesh and Bihar; at many places over Saurashtra & Kutch and Jharkhand; at a few places over West Uttar Pradesh, Vidarbha, Odisha and Nagaland, Manipur, Mizoram & Tripura; at isolated places over Madhya Maharashtra and Arunachal Pradesh. They were appreciably below normal (-3.1°C to -5.0°C) at isolated places over Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands; below normal (-1.6°C to -3.0°C ) at a few places over Coastal Karnataka; at isolated places over Konkan & Goa and South Interior Karnataka and were near normal over rest parts of the country. Yesterday, The highest Maximum temperature of 43.8°C was reported at Phalodi (West Rajasthan).
- Minimum Temperature Departures as on 17-07-2020: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Uttarakhand; at a few places over Haryana, Chandigarh & Delhi; at isolated places over Punjab and west Rajasthan; above normal (1.6°C to 3.0°C) at most places over Nagaland, Manipur, Mizoram & Tripura; at many places over Himachal Pradesh, Uttar Pradesh, Bihar and Jharkhand; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and East Rajasthan and at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya. They were below normal (-1.6°C to -3.0°C) at isolated places over Madhya Pradesh and were near normal over rest parts of the country. Yesterday, The lowest minimum temperature of 20.0°C was reported at Khandwa & Khargone (West Madhya Pradesh) over the plains of the country.

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

- 18 July (Day 1): Heavy to very heavy rainfall very likely at isolated places over Uttarakhand, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya and heavy rainfall at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, northwest Madhya Pradesh, Bihar, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Coastal Karnataka and Kerala & Mahe. Light to moderate thunderstorm accompanied with lightning very likely at a few places over Bihar. Thunderstorm accompanied with lightning at isolated places over

Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, North Rajasthan, Jharkhand, Sub-Himalayan West Bengal & Sikkim, South Coastal Andhra Pradesh and Assam & Meghalaya. ♦ Strong Wind (speed reaching 45-55 kmph) very likely over Southwest and Westcentral Arabian Sea. Squally weather (wind speed reaching 40-50 kmph) along & off south Gujarat coast. Fishermen are advised not to venture into Sea over these areas.

- 19 July (Day 2): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places over Sub-Himalayan West Bengal & Sikkim; heavy to very heavy rainfall with extremely heavy falls at isolated places over Arunachal Pradesh and Assam & Meghalaya; Heavy to very heavy rainfall at isolated places likely over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and Bihar and heavy rainfall at isolated places over Himachal Pradesh, northeast Rajasthan, north Madhya Pradesh, Gangetic West Bengal, Odisha, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Telangana, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Light to moderate thunderstorm accompanied with lightning very likely at a few places over Bihar. Thunderstorm accompanied with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Jharkhand, West Bengal & Sikkim, Odisha and Assam & Meghalaya. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.
- 20 July (Day 3): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places over Sub-Himalayan West Bengal & Sikkim; heavy to very heavy rainfall with extremely heavy falls at isolated places over Arunachal Pradesh and Assam & Meghalaya; Heavy to very heavy rainfall at isolated places likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Bihar and Nagaland, Manipur, Mizoram & Tripura and heavy rainfall at isolated places over East Madhya Pradesh, Jharkhand, Gangetic West Bengal, Odisha, Rayalaseema, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal and Lakshadweep. Thunderstorm accompanied with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Bihar, Jharkhand and Gangetic West Bengal. Strong Wind (speed reaching 45-55 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.

- 21 July (Day 4): Heavy to very heavy rainfall with extremely heavy falls likely at isolated places over Assam & Meghalaya and SubHimalayan West Bengal & Sikkim; Heavy to very heavy rainfall at isolated places over Himachal Pradesh, Bihar, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura; heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Jharkhand, Gangetic West Bengal, Odisha and Coastal Andhra Pradesh. Thunderstorm accompanied with lightning at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Bihar and Jharkhand. Strong Wind (speed reaching 45-55 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.
- 22 July (Day 5): Heavy to very heavy rainfall with extremely heavy falls likely at isolated places over Assam & Meghalaya and SubHimalayan West Bengal & Sikkim; Heavy to very heavy rainfall at isolated places over Himachal Pradesh, Bihar, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura; heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Jharkhand, Gangetic West Bengal, Odisha and Coastal Andhra Pradesh. Thunderstorm accompanied with lightning at isolated places over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Bihar and Jharkhand. Strong Wind (speed reaching 45-55 kmph) likely over Southwest and Westcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.
- The weather outlook for seven days i.e., 18 to 26 July 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)

### **Assam**

#### **Weather condition:**

Weather during the last week was mainly clear to cloudy. Daily average maximum temperature was 30.5°C which was 1.8°C below normal and the average daily minimum temperature was 24.8°C which was 0.2°C below normal for the week. Total BSSH was 8.9 hrs with an average of 1.3 hrs/day. The daily average evaporation rate was 1.8 mm/day and the average daily wind speed during the week was 2.7 kmph. Daily average RH during morning and afternoon hour was 97.7% and 87.0%, respectively.

### Contingency measure:

- Sali rice:- Farmers are advised to maintain proper drainage facility to avoid water stagnation in the newly prepared nursery bed. Application of fertilizer may be avoided during rainy days. In flood affected areas, farmers are advised to go for preparation of community nursery for cultivation of varieties suitable for staggered planting viz., Gitesh and Prafulla; which can be transplanted up to September also. Again, medium duration varieties like Manohar Sali, Biraj, Andrewasali can also be selected for post flood cultivation; as it can be sown in nursery from mid July to 1st week of August. When rainfall recedes, during the final puddling in main field, apply recommended fertilizer dose per bigha of land as 18kg Urea, 17kg SSP and 9kg MOP in case of semi dwarf variety; and 6kg Urea, 8kg SSP and 2kg MOP for tall variety. The recommended age of seedling is 20-25 days for short and medium duration; 30-35 days for medium and long duration varieties.
- Colocasia (corm growth stages):- Maintain proper drainage facility in colocasia crop field. Blight is a major problem in colocasia crop, which can be controlled by spraying solution of Mancozeb 75WP @ 2gm/lit water at an interval of 14 days. Again, in the endemic areas of red and other soil insects apply Malathion 5% dust @ 2.6kg in per bigha land and mix thoroughly in the soil. However, application of chemicals may be avoided during coming 5 days, as moderate to heavy amount of rainfall is predicted.
- Pigeon pea (Sowing of seeds):- Sowing of arhar seeds in the medium to upland condition where water inundation is not a problem may be done during this July month. The recommended variety is T-21 with crop duration ranging from 170-200 days. Well drained sandy loam to loamy soils is most suitable for this crop. Farmers may postpone the land preparation activity as heavy rainfall is predicted during the coming 5 days.
- Ginger (sucker emergence):- Drainage system in the ginger crop field may be improved. Present weather is favourable for incidence of rhizome rot disease in ginger. To control rhizome rot disease of ginger, go for soil drenching with Copper oxychloride solution @ 3gm/lit of water at 60 and 90 days after planting. Similarly, to control shoot borer and leaf roller infestation, spray dimethoate 0.05% solution. Chemical spraying may be done during the fair weather only.
- Plantation crop (Various):- Maintain proper drainage facility in coconut, citrus, papaya, banana and other vegetable orchard to drain out excess amount of water from the crop field. Timely weeding in orchard helps in checking weed growth and enhances crop growth and development. In citrus, proper disposal of the fallen fruits helps in reducing the infestation of the Fruit sucking moth. To control mosaic and

leaf curl disease in papaya crop, rogue out the affected plants and spray Malathion 0.1% solution. Avoid application of chemical during cloudy days.

- Okra (rainy season crop):- Farmers cultivating rainy season okra crop may select Pusa Sawani, Arka Anamika and Parbhani Kranti etc. which are tolerant / resistant to YMV or other local varieties. Sowing of seeds may be completed within this week. For rainy season crop, planting distance of 45cmX30cm should be maintained. Pre-sowing soaking of seeds in water for 24 hours, enhances germination percentage of the seeds. After sowing in the pit, covered with sand or FYM. Again, the crop sown during the spring-summer season is ready for the harvest. Fruit should be picked up at an interval of 4-5 days.
- Fisheries (various):- Protect the fisheries from intrusion of flood water and unwanted species of fishes by putting nylon net or other obstructions structures around the unit. After recession of floods, go for removal of unwanted weeds and fishes from the pond. Again, stirring of water with a bamboo pole will also help in increasing the amount of dissolve oxygen in the pond.



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

18-07-2020/(0530 to 0557) GMT  
18-07-2020/(1100 to 1127) IST

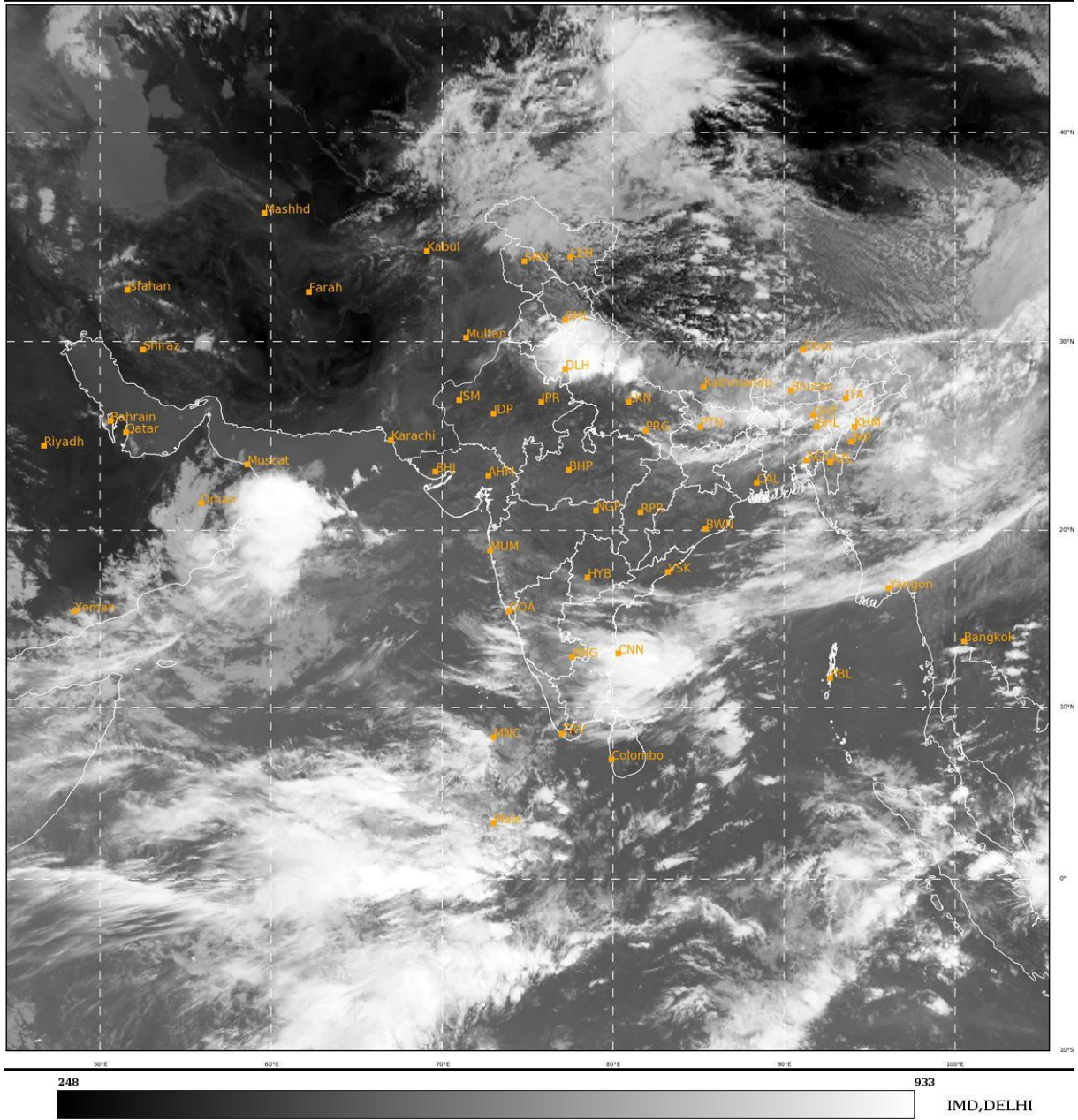
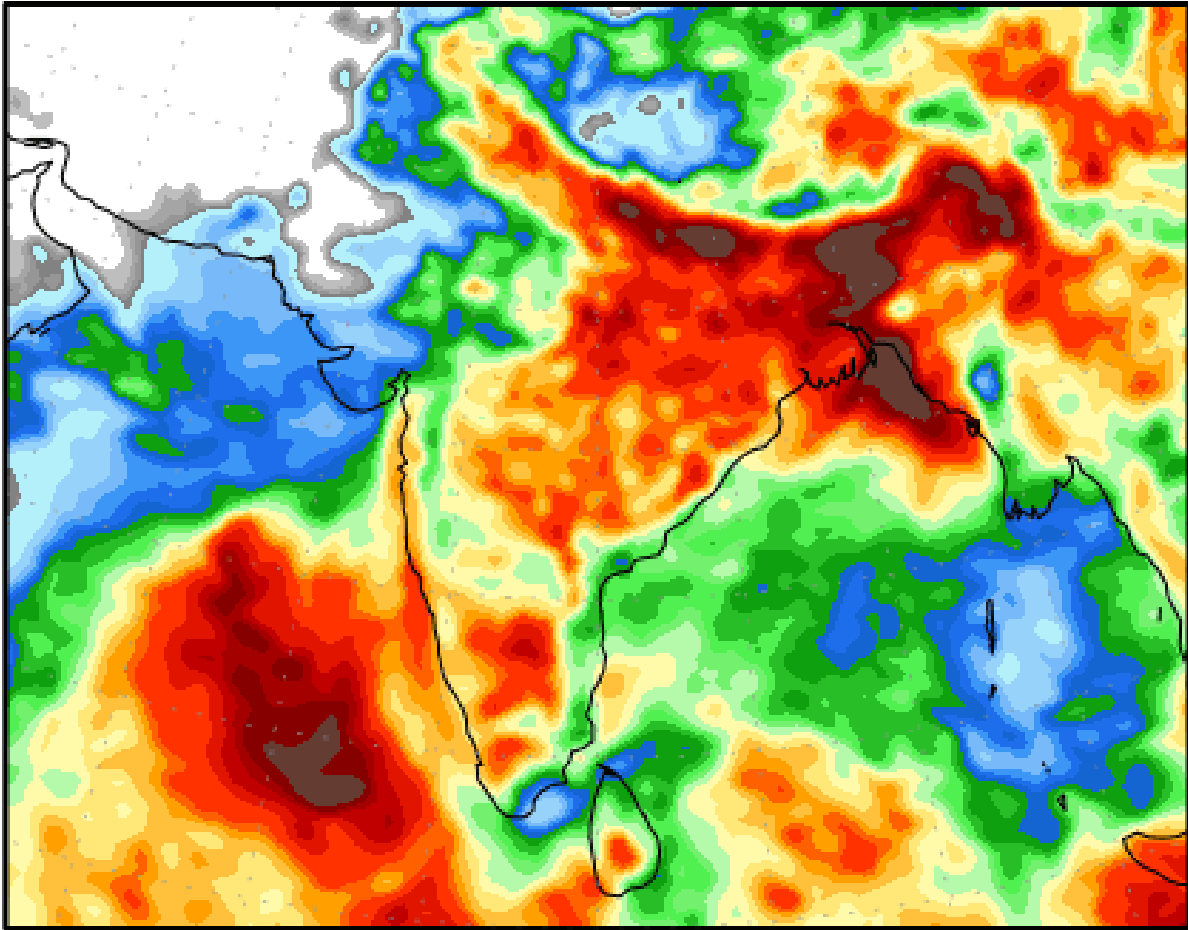


Figure: 1. Latest available satellite picture as on 18 July 2020 at 1127 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 18 to 26 July 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.*