

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

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

### **Daily Crop Weather Information as on 15 July 2020**

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

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

- Under the influence of strengthening of lower level easterlies and the Monsoon trough: a) Fairly widespread rainfall with isolated heavy falls is likely over the plains of Northwest India during 16-18 July, 2020 with maximum intensity and distribution of rainfall on 16th & 17th July. b) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls are likely over Odisha & Bihar and isolated heavy falls are likely over Jharkhand and West Bengal during next 2 days.
- Under the influence of strong lower level wind convergence along the West coast, isolated heavy to very heavy falls are likely over north Madhya Maharashtra, south Gujarat region and north Konkan during 15-16 July, 2020 with Isolated extremely heavy falls over north Madhya Maharashtra and north Konkan on 15th July and over south Gujarat region on 16th July.
- Intense thunderstorm & lightning potential zone: Moderate to severe thunderstorm & lightning very likely over Punjab, Madhya Pradesh, Vidarbha, north interior Maharashtra and Coastal Andhra Pradesh & Yanam 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 to 1730 hours IST of yesterday): at most places over Konkan & Goa, Chhattisgarh and Coastal Karnataka; at many places over Gangetic West Bengal and Andaman & Nicobar Islands; at a few places over Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Bihar, Jharkhand, Odisha, East Rajasthan, East Madhya Pradesh, Vidarbha, Saurashtra & Kutch, Madhya Maharashtra, North Interior Karnataka and Lakshadweep; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim, West Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Telangana, Marathwada, Gujarat region and Kerala & Mahe.

- Heavy rainfall observed at isolated places over Konkan & Goa and Mumbai ( SCZ).
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over Chhattisgarh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Vidarbha, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Chandigarh, Himachal Pradesh, Uttarakhand, East Uttar Pradesh, East Rajasthan, West Madhya Pradesh, Gujarat Region, Bihar, Jharkhand, Marathawada, Vidharbha, Coastal Andhra Pradesh & Yanam, Telangana, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal.
- Maximum Temperature Departures as on 14-07-2020: Maximum temperatures were above normal (1.6°C to 3.0°C) at most places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and West Rajasthan; at many places over Uttarakhand, Punjab, West Madhya Pradesh, Jharkhand and Kerala & Mahe; at a few places over Haryana, Chandigarh & Delhi, East Rajasthan, Gujarat region, Arunachal Pradesh, Gangetic West Bengal and Lakshadweep; at isolated places over Saurashtra & Kutch, East Madhya Pradesh, Vidarbha, Madhya Maharashtra, Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram & Tripura, Bihar and Tamilnadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C ) at a few places over East Uttar Pradesh, Rayalaseema and Telangana; at isolated places over Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam and South Interior Karnataka and near normal over rest parts of the country. Yesterday, the highest Maximum temperature of 42.8°C was reported at Bikaner (West Rajasthan).
- Minimum Temperature Departures as on 14-07-2020: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over West Rajasthan; at a few places over Uttarakhand and at isolated place over Madhya Pradesh; above normal (1.6°C to 3.0°C) at many places over Haryana, Chandigarh & Delhi, West Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Punjab, Gangetic West Bengal, Jharkhand and Gujarat region; at isolated places over Himachal Pradesh, Bihar, Odisha, Telangana and Vidarbha. They were below normal (-1.6°C to -3.0°C) at isolated places over Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 19.2°C was reported at Nalgonda (Telangana) over the plains of the country.

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

- 15 July (Day 1): Heavy to very heavy rainfall at a few places with extremely heavy falls at isolated places very likely over Konkan & Goa; Heavy to very heavy rainfall with extremely heavy falls at isolated places over Madhya Maharashtra; Heavy to very heavy rainfall at isolated places over West Madhya Pradesh, Odisha and Gujarat region and heavy rainfall at isolated places over Uttarakhand, Uttar Pradesh, Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Saurashtra & Kutch, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalseema and Karnataka. Thunderstorm accompanied with lightning at a few places over Madhya Pradesh, Vidarbha and Chhattisgarh; at isolated places over East Uttar Pradesh, East Rajasthan, Bihar, Jharkhand, Gangetic West Bengal, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Marathawada, Madhya Maharashtra, Telangana and Rayalaseema. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest, Westcentral and Eastcentral Arabian Sea. Squally weather (wind speed reaching 40- 50 kmph) along & off south Gujarat-Maharashtra-Karnataka coasts. Fishermen are advised not to venture into Sea over these areas.
- 16 July (Day 2): Heavy to very heavy rainfall with extremely heavy falls at isolated places over Gujarat region; Heavy to very heavy rainfall at isolated places over West Madhya Pradesh, Saurashtra & Kutch, Madhya Maharashtra & Konkan & Goa and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, north Punjab, north Haryana & Chandigarh, East Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Punjab, Haryana, Chandigarh & Delhi, Bihar, Jharkhand, Gangetic West Bengal and Coastal Andhra Pradesh & Yanam. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest, Westcentral and Eastcentral Arabian Sea. Squally weather (wind speed reaching 40- 50 kmph) along & off south Gujarat-Maharashtra-Karnataka coasts. Fishermen are advised not to venture into Sea over these areas.
- 17 July (Day 3): Heavy to very heavy rainfall at isolated places likely over Assam & Meghalaya and Saurashtra & Kutch and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Punjab, Haryana & Chandigarh, Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim,

Odisha, Gujarat region, Madhya Maharashtra, Konkan & Goa, Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Punjab, Haryana, Chandigarh & Delhi, Bihar, Jharkhand and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest, Westcentral and Eastcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.

- 18 July (Day 4): Heavy to very heavy rainfall at isolated places likely over Uttarakhand, East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Coastal Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Himachal Pradesh, West Uttar Pradesh, Punjab, Haryana & Chandigarh, Bihar, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Rayalseema, South Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Moderate to Severe thunderstorm accompanied with lightning at a few places likely over East Uttar Pradesh and thunderstorm accompanied with lightning at isolated over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Rajasthan, Punjab, Haryana, Chandigarh & Delhi, Bihar, Jharkhand and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest, Westcentral and Eastcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.
- 19 July (Day 5): Heavy to very heavy rainfall at isolated places likely over Uttarakhand, East Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Coastal Karnataka and Kerala & Mahe and heavy rainfall at isolated places over Himachal Pradesh, West Uttar Pradesh, Bihar, Nagaland, Manipur, Mizoram & Tripura, Punjab, Haryana & Chandigarh, East Rajasthan, Madhya Pradesh, Vidharbha and Konkan & Goa. Moderate to Severe thunderstorm accompanied with lightning at a few places likely over East Uttar Pradesh and thunderstorm accompanied with lightning at isolated over Himachal Pradesh, Uttarakhand, West Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Rajasthan, Punjab, Haryana, Chandigarh & Delhi, Bihar, Jharkhand and Tamil Nadu, Puducherry & Karaikal. Strong Wind (speed reaching 45-55 kmph) very likely over Southwest, Westcentral and Eastcentral Arabian Sea. Fishermen are advised not to venture into Sea over these areas.
- The weather outlook for seven days i.e., 15 to 23 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)

### Maharashtra

#### Weather condition:

Atmospheric condition was clear during morning hours around Dapoli during last week. Therefore 0.0 to 3.6 of Bright sunshine hours was recorded during last week. During last week 558.4 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 27.0 to 30.0 and 22.5 to 25.0 °C respectively. Wind velocity ranged from 3.9 to 14.4 km and wind was blowing from easterly Direction.

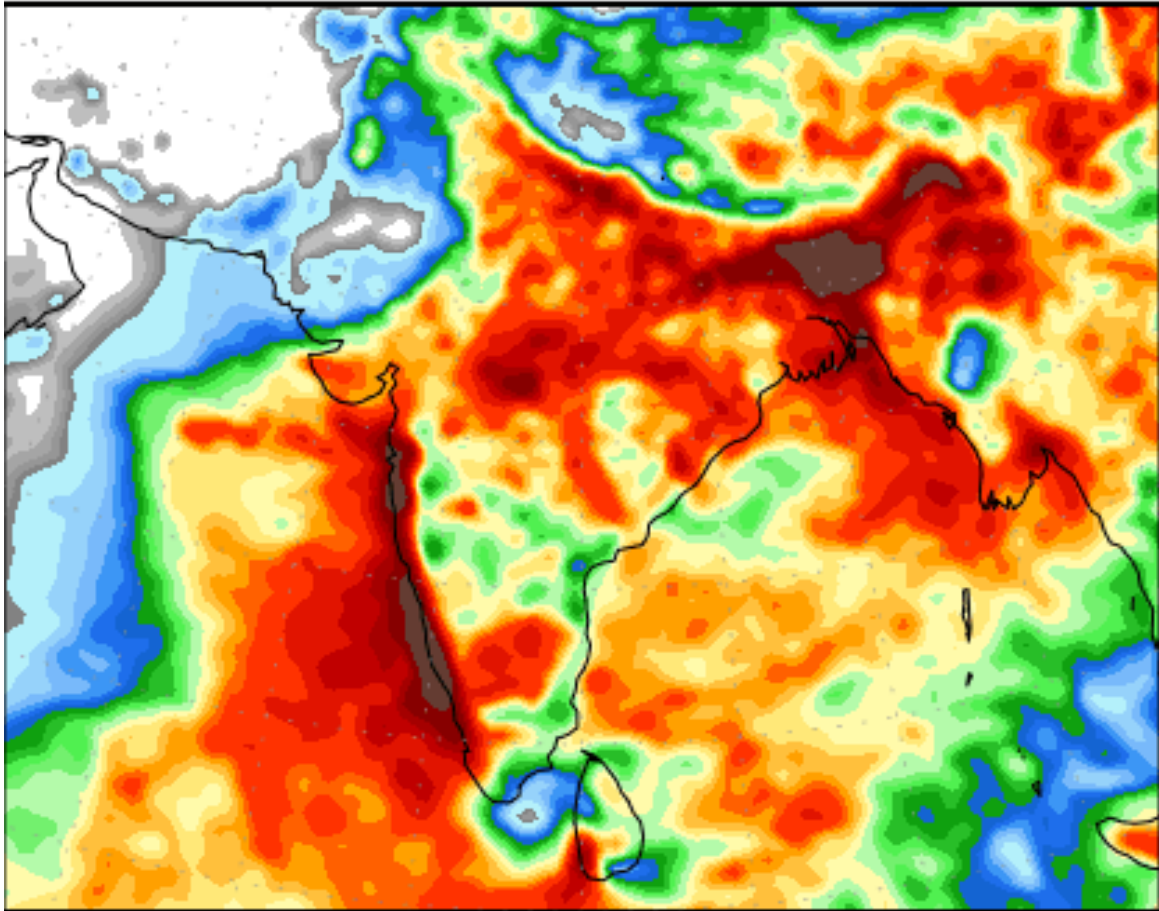
#### Contingency measure:

- **Kharif rice:** Maintain optimum water level of 2.5 to 5cm upto 30 days after transplanting. Complete the transplanting of the rice. Seedlings with 5 to 6 leaves with height of 12 to 15 cm and 20-21 days old seedling in case of early rice varieties and 27 to 30 days old seedling in case of midlate and late rice varieties. Prepare field for transplanting by puddling. At the time of puddling apply 87 kg urea, 313 kg single super phosphate and 84 kg muriate of potash per hectare when intensity of rainfall is low. If incorporation of 5 tonnes of glyricidia leaves per hectare is done then reduce the dose of nitrogenous fertilizers to 50 percent.
- Transplant 2-3 rice seedlings per hill in case of straight varieties and one seedling per hill in case of hybrid at a spacing of 15 x 15 cm (early) or 20 x 15 cm (midlate and late varieties). follow upright and shallow (2.5 to 3.5 cm) transplanting of seedling.
- For controlling the crabs from rice field, use bait prepare with the help of cook rice from 1 kg of raw rice and add insecticide Acephate 75WP @ 75 gm and make 100 arecanut size balls and keep them in each crab burrow and close it with wet mud. On the next day if some of the burrows are found open, again put the bait. For better control continue it for 7 days and also perform cooperatively with other farmers (Note: insecticide is not under label claim).
- **Finger millet:** Carry out transplanting of finger millet seedlings when intensity of rainfall is low. Transplant 2 finger millet seedlings at spacing of 20x15 cm by Thomba method. Prepare Thomba across the slope. Apply 35 kg urea and 100 kg single super phosphate per acre in thomba at the time of transplanting.
- **Mango:** Due to cloudy rainy weather, there is possibility for incidence of anthracnose disease on new flush of mango. If incidence is noticed, spray 0.1% Thiophanate methyl 70 %WP @ 10 gm per 10 liter of water. To protect the re-established mango and cashewnut grafts those disturb due to Nisarg cyclone from fungal diseases and stem borer attack, it is advised to undertake 2nd spray with 1%

bordomixuture and also with Chlorpyriphos 20%EC @ 2ml per liter of water separately.

- **Cashewnut:** To protect the re-established mango and cashewnut grafts those disturb due to Nisarg cyclone from fungal diseases and stem borer attack, it is advised to undertake 2nd spray with 1% bordomixuture and also with Chlorpyriphos 20%EC @ 2ml per liter of water separately.
- **Brinjal:** Apply 2nd split dose of nitrogen @ 43 kg urea per acre to brinjal crop after 3 to 5 weeks of transplanting.
- **Turmeric:** Apply 1st split dose of nitrogen @ 35kg urea per acre to turmeric crop after 6 weeks of planting.
- **Milch animals/ Goat:** During rainy season, farm animals shows symptoms like Diarrhea, reduction in feed intake and weight loss due to worms, if infection of worms is observed in farm animals worms, give Fenbendazole @ 5 ml or Albendazol 7.5 ml per kg weight of farm animals.





**Figure:2. Precipitation forecast for 15 to 23 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.*