

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

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

### **Daily Crop Weather Information as on 06 July 2020**

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

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

- Under the influence of well marked low pressure area over Kutch & neighbourhood, widespread rainfall activity likely over Gujarat State during next 2 days and decrease thereafter. Isolated heavy to very falls with extremely heavy falls very likely over Saurashtra & Kutch during next 24 hours and isolated heavy to very heavy falls thereafter. Isolated heavy to very heavy falls also very likely over Gujarat region during next 2 days.
- Under the influence of a low pressure area over Southeast Jharkhand & neighbourhood, fairly widespread to widespread rainfall with isolated heavy to very heavy falls likely over Odisha, West Bengal, Jharkhand and Bihar during next 2 days and isolated heavy falls thereafter.
- The monsoon trough is south of its normal position. Under its influence, fairly widespread to widespread rainfall very likely over parts of central & northwest India during next 4-5 days. Isolated heavy falls also likely over the region during the same period.
- Intense thunderstorm & lightning potential zone: Moderate to intense thunderstorm & lightning very likely over Gujarat state, Madhya Pradesh, South Uttar Pradesh, Bihar, Chhattisgarh, Gangetic West Bengal, Odisha, Jharkhand and north Coastal Andhra Pradesh 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 Uttarakhand, West Bengal & Sikkim, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura; Konkan & Goa, Gujarat state, Madhya Pradesh, Assam & Meghalaya; at many places over Coastal Karnataka, Coastal Andhra Pradesh & Yanam, Bihar, Jharkhand, Odisha, Telangana, Madhya Maharashtra, Marathwada, Kerala & Mahe and Vidarbha; at a few places over East Uttar Pradesh, south interior Karnataka and Andaman &

Nicobar Islands and at isolated places over Himachal Pradesh, North interior Karnataka and West Uttar Pradesh

- Yesterday, Heavy rainfall observed (from 1130 hours IST to 1730 hours IST of yesterday) at isolated place over Konkan & Goa and Saurashtra & Kutch.
- Thunderstorm observed (from 1730 hours IST yesterday to 0530 hours IST of today): at isolated places over Saurashtra & Kutch, West Rajasthan, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand, Bihar, Coastal Andhra Pradesh & Yanam and Gangetic west Bengal.
- Maximum Temperature Departures as on 05-07-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over West Rajasthan; above normal (1.6°C to 3.0°C) at many places over Sub-Himalayan West Bengal & Sikkim; at a few places over Gangetic west Bengal and Lakshadweep; and at isolated places over East Madhya Pradesh, Bihar, Jharkhand, Assam & Meghalaya, Konkan & Goa and Kerala & Mahe. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Haryana, Chandigarh & Delhi, Saurashtra & Kutch and Telangana; at a few places over Coastal Andhra Pradesh & Yanam and west Uttar Pradesh; below normal (-1.6°C to -3.0°C) at many places over West Madhya Pradesh, Punjab; at a few places over Rayalaseema and Tamil Nadu, Puducherry & Karaikal; and at isolated places over Konkan & Goa and Madhya Maharashtra, East Rajasthan and East Uttar Pradesh and 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 05-07-2020: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over West Rajasthan and West Madhya Pradesh and above normal (1.6°C to 3.0°C) at a few places over West Bengal & Sikkim and Andaman & Nicobar Islands and at isolated place over East Rajasthan, Gujarat region, Madhya Pradesh, Telangana, Odisha and Assam & Meghalaya. They were below normal (-1.6°C to -3.0°C) at a few places over Haryana, Chandigarh & Delhi and Punjab and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, Vidarbha and Coastal Andhra Pradesh and near normal over rest parts of the country. Today, the lowest minimum temperature of 20.4°C reported at Chandrapur (Vidarbha) over the plains of the country.

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

- 06 July (Day 1): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Saurashtra & Kutch; heavy to very heavy rainfall

at isolated places over Uttarakhand, West Uttar Pradesh, Madhya Pradesh, Odisha and Gujarat region and heavy rainfall at isolated places over Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Rajasthan, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Konkan & Goa, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Madhya Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Coastal Andhra Pradesh & Yanam and Rayalseema. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest, Westcentral, Eastcentral and Northeast Arabian Sea and along & off GujaratMaharashtra coast. Squally Weather (speed reaching 40-50 kmph) over North Bay of Bengal and along & off Gangetic West Bengal-Odisha coasts. Fishermen are advised not to venture into sea over these areas.

- 07 July (Day 2): Heavy to very heavy rainfall at isolated places over Uttarakhand and Saurashtra & Kutch and heavy rainfall at isolated places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat region, Konkan & Goa, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning at isolated places over East Uttar Pradesh, Rajasthan, Madhya Pradesh, Bihar, Jharkhand and Sub-Himalayan West Bengal & Sikkim. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest, Westcentral and Northeast Arabian Sea and along & off Gujarat coast. Squally Weather (speed reaching 40-50 kmph) over Eastcentral Arabian Sea. Fishermen are advised not to venture into sea over these areas.
- 08 July (Day 3): Heavy to very heavy rainfall at isolated places over Assam & Meghalaya and Saurashtra & Kutch and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, SubHimalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Coastal Karnataka. Thunderstorm accompanied with lightning at isolated places over Himachal Pradesh, East Rajasthan, Madhya Pradesh, Bihar, Jharkhand and West Bengal & Sikkim. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest, Westcentral and Northeast Arabian Sea and along & off Gujarat coast.

Squally Weather (speed reaching 40-50 kmph) over Eastcentral Arabian Sea. Fishermen are advised not to venture into sea over these areas.

- 09 July (Day 4): Heavy to very heavy rainfall with extremely heavy falls at isolated places over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Bihar, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Karnataka. Thunderstorm accompanied with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, East Rajasthan Madhya Pradesh, Bihar, Jharkhand and Gangetic West Bengal. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest, Westcentral and Northeast Arabian Sea. Squally Weather (speed reaching 40-50 kmph) over Eastcentral Arabian Sea and along & off Gujarat coast. Fishermen are advised not to venture into sea over these areas.
- 10 July (Day 5): Heavy to very heavy rainfall with extremely heavy falls at isolated places over Assam & Meghalaya; Heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh and heavy rainfall at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, Madhya Pradesh, Bihar, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Konkan & Goa, Coastal Andhra Pradesh & Yanam and Karnataka. Thunderstorm accompanied with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, East Rajasthan Madhya Pradesh, Bihar, Jharkhand and Gangetic West Bengal. Strong Wind (speed reaching 50-60 kmph) very likely over Southwest, Westcentral and Northeast Arabian Sea. Squally Weather (speed reaching 40-50 kmph) over Eastcentral Arabian Sea and along & off Gujarat coast. Fishermen are advised not to venture into sea over these areas.
- The weather outlook for seven days i.e., 06 to 14 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)**

### **North Karnataka**

### Weather condition:

In the Northern Dry Zone of Karnataka cloudy condition prevailed. All the districts received moderate to rather heavy rainfall except Belagavi and Dharwad districts where deficit rainfall has been received compared to normal during the previous week.

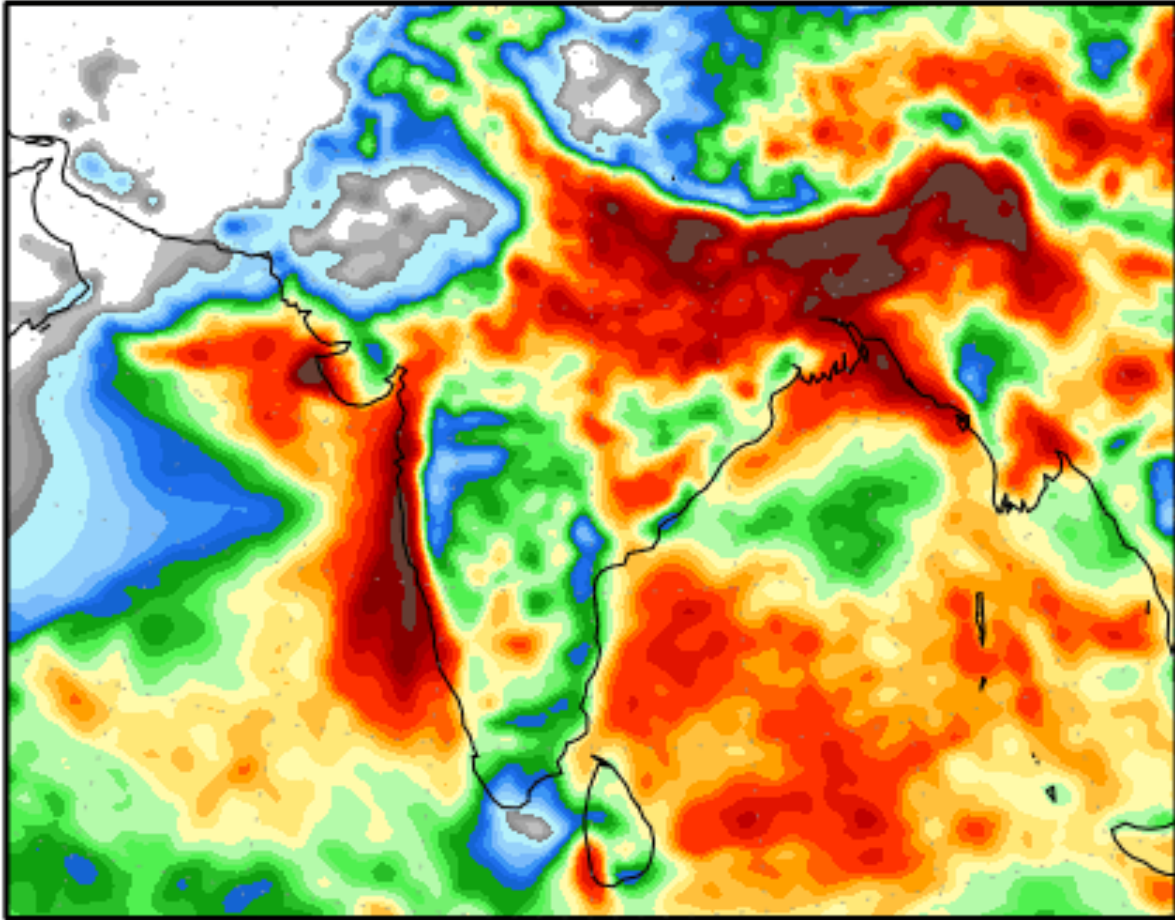
### Contingency measure:

- Weather Based advisories Plant Protection: As per the forecast given by the India Meteorological Department, moderate rainfall is expected at many places in the district during the next five days. Plant protection measures may be taken up carefully in the morning hours, mixing adhesive gum in the spray mixture.
- *Kharif* sowing: Moderate rainfall has been received at many places during the previous week. As per the forecast moderate rainfall is expected at many places during the next five days. Wherever, sufficient rainfall has been received take up sowing of the following crops, immediately.
- Shallow black soil and red soils: Sowing of Greengram, redgram, Bajra, Sesamum, Niger, Navane and groundnut (bunch type), Horsegram, Castor, may be taken up in preference. To make efficient use of available soil and water resources and to get higher returns, intercropping systems of Bajra + Groundnut (bunch); Bajra + Redgram; Bajra + Castor; Groundnut (bunch) + Redgram, Bajra + Groundnut (bunch type) may be taken up.
- Medium deep and deep black soils : Sowing of Greengram, redgram, Bajra , Navane and groundnut (bunch type), Castor, Onion, Chilli may be taken up in preference. To make efficient use of available soil and water resources and to get higher returns, intercropping systems of Bajra + Groundnut (bunch ) in 2:4 row proportion; Bajra + Redgram; Bajra + Castor; Bajra + Groundnut (bunch type) may be taken up. Use short duration varieties of redgram for sowing. Use wilt resistant variety TS-3R. Grow two thick rows of bajra or maize as catch crops, in the borders of the Onion and groundnut field which helps in managing insect pests in the later stages. Mix some quantity of tall sorghum seeds with redgram seeds which facilitate in the management of pod borer in the later stages. Purchase certified seeds from registered dealer and get receipt for the same.
- Soil and moisture conservation: Sow the crop in rows across the slope. This will facilitate better conservation of moisture in the soil. Repair of bunds, water retention structures should be taken up. Plough the land across the slope which is to be spared for sowing of Rabi crops so as facilitate better conservation of Soil and soil moisture.
- Live stock management: Vaccinate livestock against Foot and Mouth disease (FMD vaccination), Black Quarter disease (BC vaccination) and Haemorrhagic Septicaemia. Care should be taken that excess moisture is not there in the Vermin-compost pits.

Vaccinate (ET vaccine) sheep and goats against Enterotoxemia. Maintain sufficient moisture in the vermicompost pits.

- Agro- advisories FIELD CROPS: Seed treatment Bajra, Greengram and Pigeonpea To induce drought resistance in crops, it is advised to follow special cultivation practices as suggested below before sowing.
- Bajra: Soak the seeds in water for 10 hrs and dry under shade. Take up sowing in wider row spacing up to 135 cm.
- Greengram and Pigeonpea: Soak seeds in CaCl<sub>2</sub> solution (2%) for 1 hour and dry under shade for 7 hours and then go for recommended seed treatment Seed treatment Treat the seeds of groundnut, redgram, greengram with Rhizobium and that of sorghum and bajra with Azetobactor + PSB before sowing. Treat the seeds of all the crops with Capton or Thiram or Carbandizeme at the rate of 2 gram per Kg of seeds or Trichoderma at the rate of 4 gram per Kg of seed before sowing.
- Sugarcane: Since monsoon rains have started, to facilitate good vegetative growth, top dress the crop with Nitrogen and Potash fertilizers. To manage striga weed, irrigate the crop, spread sugarcane trash in between the rows and take up spraying of 1 kg of 2,4 D dissolved in 500 liter on the weed.
- HORTICULTURAL CROPS: Citrus: To manage Bacterial blight disease, spray the crop with 3 gram Copper Oxy-chloride or 1 per cent Bordo mixture dissolved in one liter of water or 300 ppm Streptomycin (3 gram in 10 liters of water).
- Grapes: To manage Anthracnose disease, take up spraying of 1 ml Thiophenate Methyl dissolved in one liter of water.
- Pomegranate: To manage sucking pests, take up spraying of 0.3 ml Imidacloprid or 0.25 ml Thiamethaxam dissolved in one liter of water. To manage Bacterial blight disease, spray the crop with streptomycin sulphate 0.5 g. + copper oxychloride 2 g. dissolved in one liter water. Then take up spraying of micro nutrients viz., 1 g. Zinc Sulphate + 1 g. Magnesium Sulphate + 1 g. Barax + 1 g. Calcium dissolved in one liter of water.
- Watermillon, Bhendi and tomato: To manage sucking pests in watermillon, Bhendi and tomato, take up spraying of 1.7 ml Dimethoate or 2 ml Melathion and 1 per Joggery syrup dissolved in one liter of water.
- Brinjal: To manage branch cutting and fruit borer in Brinjal, remove the infested branch along with the larva and burn. After this spray the crop with Carbaryl 4 g. or Melathion 2 ml or Quinolphos 2 ml dissolved in one liter of water. Repeat the same spray at 15 days interval.





**Figure:2. Precipitation forecast for 06 to 14 July 2020 (Source: NOAA NCEP).**

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