

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 17 June 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Northern Limit of Monsoon (NLM) continues to pass through Lat.23°N/Long.60°E, Kandla, Ahmedabad, Indore, Raisen, Khajuraho, Fatehpur, Bahraich and Lat.28°N/Long.81.5°E.
- A cyclonic circulation lies over East Uttar Pradesh & neighbourhood and extends upto 3.6 km above mean sea level.
- A trough at mean sea level runs from central Pakistan to Bangladesh and extends upto 0.9 km above mean sea level.
- A cyclonic circulation lies over north Konkan & neighbourhood between 3.1 & 7.6 km above mean sea level.
- A shear zone at 3.1 km above mean sea level runs from Jharkhand to the cyclonic circulation over Konkan region.
- Under the influence of above systems: i) Widespread rainfall activity very likely along the West Coast with isolated heavy to very heavy falls over Coastal Karnataka on 17th & 21st June and over Konkan & Goa 17th & 18th and heavy falls over Coastal Karnataka during 18-20th June and over Konkan & Goa during 19-21st June. ii) Widespread rainfall with isolated heavy to very heavy falls very likely over Northeast, East & adjoining Central India during next 5 days.
- Isolated to fairly widespread rainfall with isolated thunderstorm, lightning and gusty winds very likely over Western Himalayan Region and plains of northwest India during 19th-21st June.
- Heat wave to severe heat wave conditions over West Rajasthan and heat wave conditions over East Rajasthan and Punjab during next 2-3 days.
- 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 Bihar, Jharkhand, Chhattisgarh, West Bengal &

Sikkim, Konkan & Goa, Andaman & Nicobar Islands, Coastal & North Karnataka, Kerala & Mahe, Madhya Maharashtra, Telangana, Lakshadweep, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram and Tripura; at many places over Uttarakhand, East Uttar Pradesh, Odisha and Coastal Andhra Pradesh & Yanam; at a few places over Madhya Pradesh and South Interior Karnataka; at isolated places over Gujarat state, Marathwada, Vidarbha and Tamil Nadu, Puducherry & Karaikal.

- Rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today) (4 cm or more): Basti (CWC)-33; Basti (Observatory)-12; Goa/Panjim and Karwar-14 each; Mormugao, Honavar and Mangalore-12 each; Vengurla-11; Siddarthnagar and Shirali-9; Daltonganj and Pendra Road-8 each; Kaushambi, Gorakhpur, Gowda, Ayodhya and Sundargarh-7; Kolhapur, Bahraich and Long Island-6 each; Bhaunagar, Harnai, Ratnagiri, Dehradun, Varanasi, Malda and Cherrapunji-5 each and Belgaum/Sambre, Cannur, Jalgaon, Barabanki, Jamshedpur, Goalpara, Majbat, Itanagar and Comilla-4 each.
- Yesterday, Heat wave conditions were observed over some parts and severe heat wave conditions in one or two pockets over West Rajasthan.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Saurashtra & Kutch, Uttarakhand, Assam & Meghalaya, Tripura, West Bengal & Sikkim, Odisha, Jharkhand, Bihar, Konkan & Goa, Marathawada, Vidharbha, Telangana and Coastal Karnataka.
- Maximum Temperature Departures as on 16-06-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over west Rajasthan; at a few places over East Rajasthan; at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, South Interior Karnataka and Tamil Nadu, Puducherry & Karaikal ; above normal (1.6°C to 3.0°C) at most places over Punjab; at many places over Haryana, Chandigarh & Delhi; at a few places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Saurashtra & Kutch; at isolated places over West Uttar Pradesh, West Madhya Pradesh, Assam & Meghalaya, gangetic West Bengal, Coastal Andhra Pradesh and Andaman & Nicobar Islands. They were markedly below normal (-5.1°C or less) at many places over Chhattisgarh; at a few places over Odisha; at isolated places over East Uttar Pradesh and East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Marathwada; at isolated places over Bihar, Jharkhand, Madhya Maharashtra and Telangana and below normal (-1.6°C to -3.0°C) at many places over Coastal & North Interior Karnataka; at a few places over Arunachal Pradesh and SubHimalayan West Bengal &

Sikkim; at isolated places over Gujarat Region and Konkan & Goa and near normal over rest parts of the country. Yesterday, the highest Maximum temperature of 47.4°C was reported at Bikaner and Jaisalmer (West Rajasthan).

- Minimum Temperature Departures as on 17-06-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over West Rajasthan and at isolated places over East Rajasthan and Haryana, Chandigarh & Delhi; above normal (1.6°C to 3.0°C) at many places over Punjab, SubHimalayan West Bengal & Sikkim, Lakshadweep and Andaman & Nicobar Islands; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Saurashtra & Kutch, Bihar, Assam & Meghalaya and Tamil Nadu, Puducherry & Karaikal and at isolated places over Himachal Pradesh, Uttarakhand, Odisha, Gangetic West Bengal & Sikkim, Rayalseema and Nagaland, Manipur, Mizoram & Tripura. They are appreciably below normal (- 3.1°C to -5.0°C) at a few places over East Madhya Pradesh and at isolated places over West Madhya Pradesh; below normal (-1.6°C to -3.0°C) at many places over Chhattisgarh and Vidarbha; at a few places over East Uttar Pradesh and Telangana and at isolated places over Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Today, the lowest minimum temperature of 19.3°C was reported at Malanjkhanda (East Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 17 June (Day 1): Heavy rainfall at a few places with very heavy falls at isolated places very likely over Konkan & Goa; heavy to very heavy rainfall at isolated places over Chhattisgarh, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Madhya Maharashtra and heavy rainfall at isolated places over East Uttar Pradesh, Madhya Pradesh, Vidarbha, Bihar, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Telangana, Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Uttarakhand and East Uttar Pradesh and with lightning at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Madhya Maharashtra and Coastal Karnataka. Heat wave conditions at a few places with severe heat wave conditions in isolated pockets very likely over West Rajasthan and heat wave conditions in isolated pockets over Punjab and East Rajasthan. Strong Wind (wind speed reaching 45-55 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea and north Bay of Bengal; (wind

speed reaching 40-50 kmph) over eastcentral Arabian sea. Squally Weather (wind speed reaching 45-55 kmph) over Andaman Sea, along & off Karnataka-GoaMaharashtra coasts. Fishermen are advised not to venture into sea over these areas.

- 18 June (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 at isolated places over East Madhya Pradesh, Chhattisgarh, Bihar, Assam & Meghalaya and Konkan & Goa; heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Jharkhand, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Coastal Karnataka. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand and East Uttar Pradesh and with lightning at isolated places over Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state and Madhya Maharashtra. Heat wave conditions at a few places with severe heat wave conditions in isolated pockets very likely over West Rajasthan and heat wave conditions in isolated pockets over Punjab and East Rajasthan. Strong Wind (wind speed reaching 45-55 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea and north Bay of Bengal; (wind speed reaching 40-50 kmph) over eastcentral Arabian sea. Squally Weather (wind speed reaching 45-55 kmph) over Andaman Sea, along & off Karnataka-GoaMaharashtra coasts. Fishermen are advised not to venture into sea over these areas.
- 19 June (Day 3): Heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Bihar and Odisha; heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Jharkhand, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa and Coastal Karnataka. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh and with lightning at isolated places over Jharkhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Gujarat state. Heat wave conditions in isolated pockets very likely over West Rajasthan. Strong Wind (wind speed reaching 45-55 kmph) very likely over Southwest & adjoining Westcentral

Arabian Sea and (wind speed reaching 40-50 kmph) over eastcentral Arabian sea. Fishermen are advised not to venture into sea over these areas.

- 20 June (Day 4): Heavy to very heavy rainfall at isolated places over Jharkhand and Odisha; heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh and with lightning at isolated places over Jharkhand, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong Wind (wind speed reaching 45-55 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea. Fishermen are advised not to venture into sea over these areas.
- 21 June (Day 5): Heavy to very heavy rainfall at isolated places over Chhattisgarh, Jharkhand and Coastal Karnataka; heavy rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Madhya Pradesh, Bihar, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Gujarat state, Konkan & Goa, Coastal Andhra Pradesh & Yanam, South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh and with lightning at isolated places over Jharkhand, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong Wind (wind speed reaching 45-55 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea. Fishermen are advised not to venture into sea over these areas.
- The weather outlook for seven days i.e., 17 to 25 June 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)

Jammu

Weather condition:

Mainly clear to partially cloudy weather prevailed during this week with 28.0 mm rainfall in two rainy days. The maximum temperature remained below normal by 1 to 5 °C except on 6th June the maximum temperature remained above normal by 13 °C and was in the range of 26.8 to 36.6 °C. The minimum temperature remained variable and was in the range of 21.2 to 24.8 °C. The morning and evening relative humidity observed in the range of 51 to 94 % and 30 to 95 %, respectively. The total evaporation observed 55.0 mm and sunshine in the range of and 0.7 to 8.6 hrs during this period.

Contingency measure:

- Paddy Nursery raising Transplanting Farmers are advised to go for nursery raising of Basmati 370 and Ranbir Basmati without any further delay. Treat seed with Carbendazim or Bavistin @ 2gm/Kg of seed. Keep the already sown nursery area free from weeds by mechanical methods or use butachlor granules 5G @ 30 kg/ha after emergence of 1st leaf. Maintain regular supply of water preferably during morning hours. If required, apply urea to rice seedlings just after disappearance of irrigation water. Clean bunds of the main field. Initiate land preparation of the fields where rice seedlings are to be transplanted and also apply the recommended quantity of well rotten FYM/Compost @ 15 tonnes /ha with the first ploughing for its better mixing. Pulses Summer pulses (mash) Pod maturity Due to chances of rainfall, immediate Picking of the mature pods is recommended. Maize Land preparation/ sowing Farmers can go for sowing of early sown maize crop after receipt of rain.
- Farmers are advised to apply 15 tonnes of well rotten FYM 15 days before sowing and incorporate thoroughly into soil with first ploughing and reduce 25% of N, P & K from the recommended dose.
- Vegetables: Cucurbits Summer crop (I crop) Rainy season (II crop) Okra Summer crop (I crop) Rainy season (II crop) Turmeric /Ginger Harvesting Sowing Harvesting Sowing Sowing Irrigation is recommended as per requirement. To control fruit fly attack, use pheromone traps @ 1-2 traps/kanal. Apply malathion @ 1.5ml/lit during clear day. Prepare land for the sowing of rainy season bitter gourd, sponge gourd & bitter gourd. Harvest the crop after every 3rd day and avoid application of any insecticide having high residual values. Prepare land for the sowing of rainy season Okra. Complete the sowing before rainy season (within week), if not done yet. Summer Fodder (maize +cowpea+ chari) and bajra Early vegetative Postpone irrigation due to chances of rainfall.

- Floriculture: Rainy annuals Chrysanthemum Nursery raising Cutting Start land preparation and sowing of seeds for raising nursery of rainy annuals after receipt of rain can be taken up. Farmers may go for cutting preparation and rooting in sand.
- Horticulture Mango Citrus Young/Bearing Young/Bearing Postpone irrigation due to chances of rainfall. During clear day, Farmers may spray imidacloprid @ 0.3ml/ltr water to check leaf hopper & dimethoate @ 1ml/ltr to control mango hopper. Spray dimethoate @ 1ml/ltr during clear day to control citrus psylla, leaf miner & butterfly. Mushroom Milky mushroom Milky mushroom spawn may be booked at the earliest and the spawning can be done in the months of May to June. Heap wheat straw in store for the upcoming season during June-September.
- Sericulture Mulberry Cocoon crop Tree plantation Harvested cocoons Basin should be prepared around mulberry trees. Postpone irrigation due to chances of rainfall. Prune the dead wood. Pack the cocoons harvested during April month in loosely packed muslin cloth bags. The bags should be kept in wire mesh covered racks to avoid rodent attack till sale of the crop.
- Apiculture Protect colonies from high temperature by shifting to shady areas/ cooler places or cover with wet gunny bags. To control mite, dust sulphur on top bars @ 1g/frame /oxalic acid treatment @ 3.5% per litre water.
- Fisheries (Carp Farming) Yearlings/ fish seed Farmers should maintain the optimum water level in order to avoid any harm due to rising temperature especially during day time.
- Poultry Proper ventilation must be maintained at poultry house. Vaccinate chicks against new castle disease and gumbroo disease. Spread clean litter material uniformly in the poultry house at thickness of 2-3 inches.
- Live stock: Dairy animals/ Sheep & Goat Sheep and goat should be allowed to graze/browse during cooler parts of the day i.e., morning and evening. Provide adequate amount of fresh cool and clean drinking water to the animals at frequent intervals to save animals from heat stroke. Provide water bath 3-4 times in a day. Sprinkle water in sheds to reduce heat stress or keep all the animals under shade and if possible provide coolers to cross bred cattles during the day time. If not vaccinated yet, get the animals vaccinated against foot and mouth and Gal Gotu diseases.
*Cover face with thick cloth or wear mask while doing agricultural operations in field

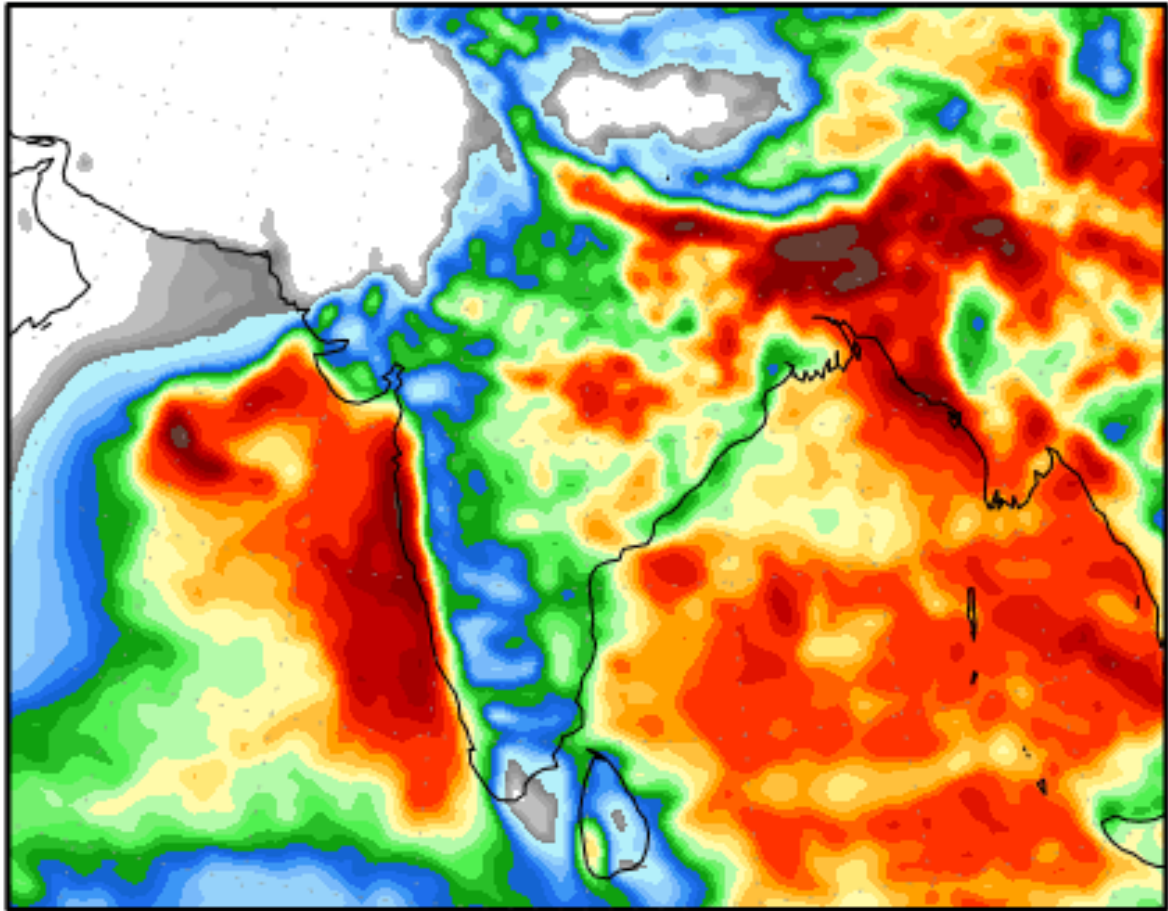


Figure:2. Precipitation forecast for 17 to 25 June 2020 (Source: NOAA NCEP).

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