

# All India Coordinated Research Project on Agrometeorology

## CRIDA, Santoshnagar, Hyderabad – 500 059

### Daily Crop Weather Information as on 15 Jun 2022

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

#### Significant Weather Features (IMD)

- Advance of Southwest Monsoon:
- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 21°N/ Long. 60°E, Lat. 21°N/ Long. 70°E, Diu, Nandurbar, Jalgaon, Parbhani, Bidar, Tirupati, Puducherry, Lat. 14°N/ Long. 84°E, Lat. 17.0°N/ Long. 87°E, Lat.20.0°N/89.5°E, Lat.22.0°N/90°E, Lat.25.0°N/89°E, Balurghat and Supaul, 26.50°N/86°E.
- Conditions are favorable for further advance of Southwest monsoon into some more parts of north Arabian sea, some more parts of Gujarat state, some parts of south Madhya Pradesh, entire Madhya Maharashtra, Marathwada, Karnataka and Tamil Nadu, some parts Vidarbha and Telangana, some more parts of Andhra Pradesh, Westcentral & northwest Bay of Bengal, some parts of Odisha, Gangetic West Bengal, Jharkhand, entire Sub-Himalayan West Bengal and some more parts of Bihar during next 48 hours.
- Rainfall/thunderstorm Forecast & Warnings:
- Under the influence of strong southwesterly winds from Bay of Bengal to northeast & adjoining east India in lower tropospheric levels:
  - i) Isolated heavy to very heavy rainfall very likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 5 days. Isolated extremely heavy rainfall also likely over Sub-Himalayan West Bengal & Sikkim on 16th, Arunachal Pradesh on 15th & 16th, Assam & Meghalaya during 15th-17th June, 2022.
  - ii) Fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds over Bihar, Jharkhand, Odisha and Gangetic West Bengal during next 5 days. Isolated heavy rainfall likely over Bihar during 15th-18th; over Gangetic West Bengal on 15th; over Jharkhand during 15th - 17th June, 2022
  - iii) Isolated heavy rainfall also likely over south Madhya Pradesh on 15th & 16th & over Chhattisgarh during 15th-17th June.
- Under the influence of an off-shore trough and westerly winds along the west coast in lower tropospheric levels: Isolated heavy rainfall very likely over Coastal

Andhra Pradesh on 15th & 18th; Telangana on 15th; Rayalaseema on 15th & 18th; over Coastal & South Interior Karnataka and Tamilnadu, Puducherry & Karaikal on 15th, 17th & 18th and Kerala & Mahe during 15th-18th June, 2022.

- Under the influence of Western Disturbances and lower level easterlies: i) Fairly widespread to widespread rainfall over Western Himalayan region and scattered to fairly widespread rainfall over Punjab, Haryana, Chandigarh & Delhi & East Uttar Pradesh during 16th-18th June. ii) Isolated heavy rainfall likely over Jammu, Kashmir, Ladakh, Gilgit- Baltistan & Muzaffarabad during 16th-18th; Himachal Pradesh & Uttarakhand on 16th & 17th, north Punjab on 16th June.
- The images showing the latest satellite picture in the figure. 1.

### **Main Weather Observations (IMD)**

- Rainfall/thundershower observed (from 0830 hours IST to 1730 hours IST of yesterday): at most places over Arunachal Pradesh, Assam & Meghalaya and Lakshadweep; at a few places over Sub-Himalayan West Bengal & Sikkim, East Rajasthan and South Interior Karnataka and at isolated places over Nagaland, Manipur, Mizoram & Tripura, Gangetic West Bengal, Odisha, Gujarat region, Konkan & Goa, Vidarbha, North Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- Yesterday's Isolated heavy rainfall occurred over Meghalaya.
- Thunderstorm observed (from 2030 hours IST of yesterday to 0530 hours IST of today): at isolated places over Saurashtra & Kutch, East Madhya Pradesh, Assam & Meghalaya, Tripura, Kerala & Mahe, Coastal Andhra Pradesh & Yanam, Chhattisgarh, East Bihar, East Rajasthan, Rayalaseema, Vidarbha, Gangetic West Bengal, Jharkhand and Odisha.
- Yesterday, heat wave conditions prevailed in isolated pockets over north interior Odisha, Jharkhand, East Uttar Pradesh, Southwest Bihar.
- Maximum Temperature Departures (as on 14-06-2022): Maximum temperatures were markedly above normal (5.1°C or more) at most places over Jharkhand; at many places over Uttarakhand; at isolated places over Odisha; appreciably above normal (3.1°C to 5.0°C) at most places over Himachal Pradesh and Punjab; at many places over Jammu & Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, East Uttar Pradesh, Chhattisgarh and Kerala & Mahe; at a few places over Bihar and Coastal Andhra Pradesh & Yanam; at isolated places over Vidarbha, Gangetic West Bengal, Madhya Maharashtra, Telangana and Rayalaseema; above normal (1.6°C to 3.0°C) at many places over Karnataka; at a few places over Andaman & Nicobar Islands and East Madhya Pradesh. They were markedly below normal (-

5.1°C or less) at isolated places over Rajasthan, Arunachal Pradesh, Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim; appreciably below normal (-3.1°C to -5.0°C) at isolated places over Nagaland, Manipur, Mizoram & Tripura; below normal (-1.6°C to -3.0°C) at isolated places over West Madhya Pradesh, Gujarat Region and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 45.3°C reported at Varanasi (East Uttar Pradesh).

- Minimum Temperature Departures (as on 14-06-2022): Minimum temperatures were markedly above normal (5.1°C or more) at isolated places over Rajasthan; (appreciably above normal (3.1°C to 5.0°C) at most places over Haryana, Chandigarh & Delhi, Uttar Pradesh, Jharkhand; at a few places over Odisha and at isolated places over Vidarbha, Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over Chhattisgarh; at a few places over Sub-Himalayan West Bengal & Sikkim, Telangana, Rayalaseema; at isolated places over Madhya Pradesh. They were below normal (-1.6°C to -3.0°C) at a few places over Rajasthan and at isolated places over Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the lowest minimum temperature of 20.0°C was reported at Aurangabad (Marathwada) over the plains of the country.

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

- 15 June (Day 1): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Arunachal Pradesh, Assam & Meghalaya; heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over south Madhya Pradesh, East Bihar, Jharkhand, Gangetic West Bengal, Chhattisgarh, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Uttarakhand; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, Madhya Pradesh, Vidarbha, Chhattisgarh, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, East Rajasthan, Bihar, Odisha, Madhya Maharashtra, Marathwada, Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over off Kerala and Karnataka coasts and Lakshadweep area. Strong winds of 40-50 kmph gusting to 60 kmph likely over

south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.

- 16 June (Day 2): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Arunachal Pradesh, Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim; heavy to very heavy rainfall at isolated places over Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Punjab, Haryana, Chandigarh & Delhi; with lightning/gusty winds (speed 30-40 kmph) at isolated places over Himachal Pradesh, Uttarakhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over south east Arabian Sea, off Kerala and Karnataka coasts. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.
- 17 June (Day 3): Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Assam & Meghalaya; heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Bihar, Jharkhand, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh & Yanam, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Telangana, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over south east Arabian Sea, off Kerala and Karnataka coasts, along and off Gujarat coast, north east Arabian Sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.

- 18 June (Day 4): Heavy to very heavy rainfall at isolated places likely over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Bihar, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh & Yanam, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Telangana, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off Gujarat coast, north east Arabian Sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.
- 19 June (Day 5): Heavy to very heavy rainfall at isolated places likely over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya, Nagaland, Manipur, Mizoram, Tripura; heavy rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Bihar, Arunachal Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, Coastal & South Interior Karnataka, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Coastal Andhra Pradesh & Yanam, Rayalaseema; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad, Uttar Pradesh, West Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Telangana, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe, Lakshadweep. Squally weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over along and off Gujarat coast, north east Arabian Sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea and adjoining west central Arabian Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 15 Jun to 23 Jun 2022 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)

### **Kerala**

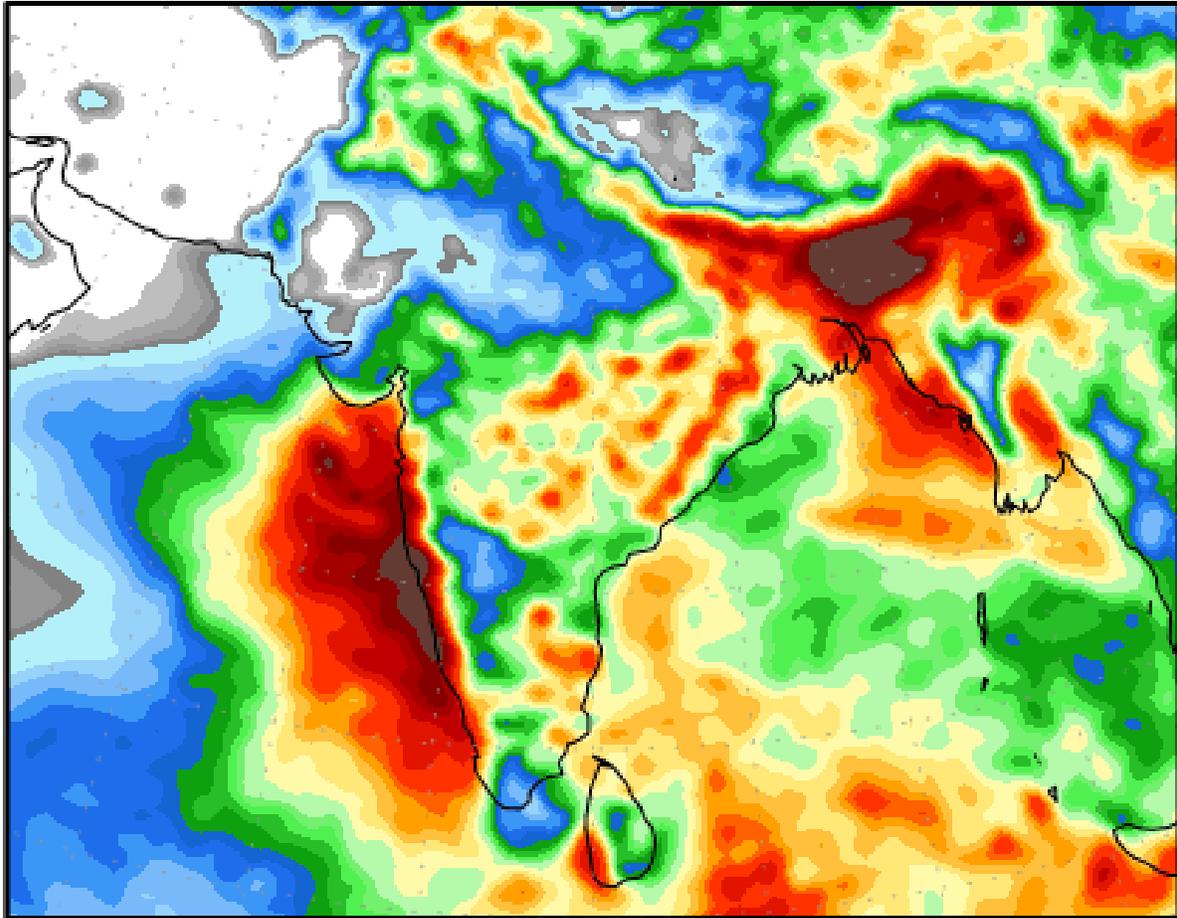
#### **Weather condition:**

In Vellanikkara, the maximum temperature ranges from 29.9 to 32.8 Deg C, minimum temperature ranges from 22.4 to 25.7 Deg C. Morning relative humidity ranges from 092% to 098% and afternoon relative humidity ranges from 058% to 076%. Wind speed ranges from 1.2 to 2.9 km/h. Evaporation ranges from 2.3 to 3.4 mm. Sunshine hours range from 0.0 to 8.2 hours. 5 cm morning soil temperature ranges from 26.9 to 28.5 Deg C and afternoon soil temperature ranges from 32.6 to 35.2 Deg C.

#### **Contingency measure:**

- Paddy (Virippu)- Land preparation to transplanting- Transplant seedlings at 4 to 5 leaf stage. The root of seedlings should be soaked for 30 minutes in a solution of Pseudomonas culture @ 10 g per one litre of water for one kg of seeds to control sheath blight, sheath rot, leaf spot disease etc. in future.
- Coconut- Bud rot- Ensure drainage facilities in water logged areas. Open the coconut base to retain excess rainwater. As a prophylactic measure to bud rot disease in coconut, 1% Bordeaux mixture can be sprayed on coconut crown.
- Nutmeg- Leaf fall- As a precautionary measure to manage leaf fall during rainy season, spray 1% bordeaux mixture. Pesticides should not be applied during rainy period.
- Vegetables (Chilly, Bringal)- Management- Dipping roots in Pseudomonas solution can be recommended before planting seedlings.
- Animal Husbandry- Avoid waterlogged area for construction of poultry shed. Extend overhanging roof in order to avoid rainwater falling inside the shed.





**Figure:2. Precipitation forecast for 15 Jun to 23 Jun 2022 (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.*