## All India Coordinated Research Project on Agrometeorology CRIDA, Santoshnagar, Hyderabad – 500 059

## **Daily Crop Weather Information as on 09 Jun 2022**

## Attention: Rajiv Maheshwari, OSD, ICAR

## Significant Weather Features (IMD)

- Advancement of Southwest Monsoon:
- The Northern Limit of Monsoon (NLM) continues to pass through Lat. 15°N/ Long. 60°E, Lat. 15°N/ Long.70°E, Karwar, Chikmagaluru, Bengaluru, Puducherry, Lat.14°N/Long.84°E,Lat.17.0°N/Long.87°E, Lat.20.0°N/Long.89.5°E, Lat.22.0°N/90°E, Lat.25.0°N/89°E, Siliguri and 27.50°N/88°E.
- Conditions are favorable for further advance of monsoon into some more parts of central Arabian sea, Goa, some parts of south Maharashtra, some more parts of Karnataka, remaining parts of Tamilnadu, some parts of south Andhra Pradesh, some more parts of westcentral & northwest Bay of Bengal during next 48 hours.
- Conditions would continue to become favourable for further advance of monsoon into more parts of Maharashtra, entire Karnataka, more parts of Andhra Pradesh and more parts of westcentral & northwest Bay of Bengal during subsequent 2 days.
- Rainfall/thunderstorm Forecast & Warnings:
- Under the influence of north-south trough from Sub-Himalayan West Bengal to interior Odisha and strong southwesterly winds from Bay of Bengal to northeast India in lower tropospheric levels:

o Widespread light/moderate rainfall with isolated heavy to very heavy rainfall very likely over Arunachal Pradesh and Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura during next 5 days. Isolated extremely heavy rainfall also likely over Arunachal Pradesh on 10th & 11th June and over Assam & Meghalaya during next 5 days.

o Isolated/scattered rainfall with thunderstorm/lightning/gusty winds very likely over Bihar, Jharkhand, Odisha and Gangetic West Bengal during next 5 days. Isolated heavy rainfall likely over Bihar today.

• Under the influence of strong westerly/southwesterly winds along the west coast in lower tropospheric levels: o Fairly widespread/ widespread light/moderate rainfall with thunderstorm/lightning very likely over Karnataka, Kerala & Mahe and Lakshadweep; scattered to fairly widespread rainfall over Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal and Telangana during next 5 days. Isolated heavy rainfall very likely over South Interior Karnataka on 12th; Coastal Karnataka during 09th-13th and over Kerala & Mahe on 11th & 12th June, 2022.

o Fairly widespread to widespread rainfall with thunderstorm/lightning/gusty winds very likely over Konkan & Goa and scattered to fairly widespread rainfall with thunderstorm/lightning/gusty winds over Madhya Maharashtra and Marathwada during next 5 days. Isolated heavy rainfall also likely over Konkan & Goa on 10th & 13th and isolated very heavy rainfall on 11th & 12th June, 2022.

- Heat wave warnings: Heat wave conditions in isolated places very likely over
  o Punjab, Haryana-Delhi, south Uttar Pradesh, northwest Rajasthan, north
  Madhya Pradesh, interior Odisha and Jharkhand on 09th & 10th June.
  o Uttarakhand, Chhattisgarh, south coastal Andhra Pradesh, Telangana and
  Vidarbha on 09th June, 2022.
- The images showing the latest satellite picture in the figure. 1.

## Main Weather Observations (IMD)

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at most places over Assam & Meghalaya, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh; at many places over Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Coastal & South Interior Karnataka, Lakshadweep, Kerala & Mahe; at a few places over Konkan & Goa, Madhya Maharashtra, Marathawada, Bihar, North Interior Karnataka and at isolated places over Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Gujarat state, west Madhya Pradesh, Vidarbha, Chhattisgarh, Tamil Nadu, Puducherry & Karaikal, Jharkhand and Odisha.
- Isolated extremely heavy rainfall reported over Bihar, very heavy rainfall over Assam & Meghalaya and heavy rainfall over Marathwada, Madhya Maharashtra, Arunachal Pradesh and Sub-Himalayan West Bengal.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Saurashtra & Kutch, Madhya Maharashtra, Konkan & Goa, North Interior Karnataka, Telangana, Coastal Andhra Pradesh, Sub-Himalayan West Bengal & Sikkim, Bihar and Assam & Meghalaya.
- Yesterday, Heat Wave Conditions prevailed in some parts of east Vidarbha and in isolated pockets over Uttarakhand, northwest Rajasthan, Punjab, Haryana & Delhi, south Uttar Pradesh, northeast Madhya Pradesh, Chhattisgarh western parts of Jharkhand and interior Odisha.

- Maximum Temperature Departures (as on 08-06-2022): Maximum temperatures were markedly above normal (5.1°C or more) at a few places over Uttarakhand and Jharkhand; appreciably above normal (3.1°C to 5.0°C) at many places over Punjab; at a few places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Vidarbha, Chhattisgarh, Telangana, Odisha, Coastal Andhra Pradesh & Yanam and Nagaland, Manipur, Mizoram & Tripura; at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, Uttar Pradesh, East Madhya Pradesh, Kerala & Mahe; above normal (1.6°C to 3.0°C) at a few places over Konkan & Goa, Madhya Maharashtra, Tamil Nadu, Puducherry & Karaikal and Bihar; at isolated places over East Rajasthan, Saurashtra & Kutch, Marathwada, North Interior Karnataka, Gangetic West Bengal and Assam & Meghalaya and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 46.2°C was reported at Ganganagar (West Rajasthan) and Bramhapuri (Vidarbha).
- Minimum Temperature Departures (as on 09-06-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Himachal Pradesh, East Rajasthan and Gangetic West Bengal and at isolated places over Punjab, East Madhya Pradesh and Vidarbha; above normal (1.6°C to 3.0°C) at most places over Uttarakhand, Chhattisgarh and Odisha; at a few places over Haryana, Chandigarh & Delhi, Uttar Pradesh, West Madhya Pradesh, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Bihar and Nagaland, Manipur, Mizoram & Tripura and Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Rajasthan, Saurashtra & Kutch, Telangana, Tamil Nadu, Puducherry & Karaikal and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country. Today, the lowest minimum temperature of 20.0°C is reported at Udgir (North Interior Karnataka) over the plains of the country.

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

09 June (Day 1): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Meghalaya; Heavy to very heavy rainfall at isolated places over Assam, Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh and heavy rainfall at isolated places over Bihar, Coastal Karnataka and Nagaland. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places very likely over Andaman & Nicobar Islands; gusty winds (speed 30-40 kmph) at isolated places over West Madhya Pradesh, Vidarbha, Jharkhand, Gangetic West Bengal, Madhya Maharashtra, Marathwada, Konkan & Goa, Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and

Lakshadweep and with lightning at isolated places over Jammu-Kashmir, Himachal Pradesh, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Bihar, Sub-Himalayan West Bengal & Sikkim, Chhattisgarh and Gujarat state. Heat wave conditions in isolated places very likely over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, south Uttar Pradesh, West Rajasthan, Chhattisgarh, Vidarbha, Madhya Pradesh, Coastal Andhra Pradesh, Telangana, Jharkhand and Odisha. Squally Weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, east central Bay of Bengal and north Andaman Sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea, south west Bay of Bengal. Fishermen are advised not to venture into these seas.

- 10 June (Day 2): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Meghalaya, Arunachal Pradesh; heavy to very heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam and heavy rainfall at isolated places over Nagaland, Manipur, Konkan & Goa and Coastal Karnataka. Thunderstorm accompanied with lightning/gusty winds (speed 40-50 kmph) at isolated places likely over Andaman & Nicobar Islands; gusty winds (speed 30-40 kmph) at isolated places over Madhya Pradesh, Vidarbha, Madhya Maharashtra, Konkan & Goa, Karnataka, Coastal Andhra Pradesh & Yanam, Rayalaseema, Telangana, Tamil Nadu, Puducherry & Karaikal, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep and with lightning at isolated places over Jammu-Kashmir, Himachal Pradesh, Uttarakhand, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Bihar, Gangetic West Bengal, Chhattisgarh and Gujarat state. Heat wave conditions in isolated places very likely over Punjab, Haryana, Chandigarh & Delhi, south Uttar Pradesh, West Rajasthan, Madhya Pradesh, Jharkhand and Odisha. Squally Weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off south Maharashtra, Goa, Karnataka coasts, east central Bay of Bengal and adjoining north east Bay of Bengal and Andaman Sea. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea. Fishermen are advised not to venture into these seas.
- 11 June (Day 3): Heavy to very heavy rainfall with extremely heavy falls at isolated places very likely over Meghalaya, Arunachal Pradesh; heavy to very heavy rainfall at isolated places over Assam, Konkan & Goa and heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, ghat areas of Madhya Maharashtra, Coastal Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at

isolated places very likely over Madhya Pradesh, Vidarbha, Chhattisgarh, Madhya Maharashtra, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Telangana, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, Gangetic West Bengal, Bihar, Odisha and Gujarat state. Heat wave conditions in isolated places very likely over Jharkhand. Squally Weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off north Kerala, along and off south Maharashtra, Goa, Karnataka coasts, east central Bay of Bengal and adjoining north east Bay of Bengal. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea. Fishermen are advised not to venture into these seas.

- 12 June (Day 4): Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Meghalaya; heavy to very heavy rainfall at isolated places over Assam, Arunachal Pradesh, Konkan & Goa and heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, ghat areas of Madhya Maharashtra, Coastal & South Interior Karnataka and Kerala & Mahe. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Madhya Pradesh, Vidarbha, Chhattisgarh, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Telangana, Tamilnadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, northeast Uttar Pradesh, Gangetic West Bengal, Bihar, Odisha and Gujarat state. Squally Weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off north Kerala, along and off south Maharashtra, Goa, Karnataka coasts, east central Bay of Bengal and adjoining north east Bay of Bengal. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea. Fishermen are advised not to venture into these seas.
- 13 June (Day 5): Heavy to very heavy rainfall with extremely heavy falls at isolated places likely over Meghalaya; heavy to very heavy rainfall at isolated places over Assam, Arunachal Pradesh and heavy rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Nagaland, Manipur, Konkan & Goa and Coastal Karnataka. Thunderstorm accompanied with lightning/gusty winds (speed 30-40 kmph) at isolated places likely over Madhya Pradesh, Vidarbha, Chhattisgarh, Madhya Maharashtra, Marathawada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Rayalaseema, Karnataka, Telangana, Tamilnadu,

Puducherry & Karaikal, Kerala & Mahe and Lakshadweep and with lightning at isolated places over northeast Uttar Pradesh, East Rajasthan, Gangetic West Bengal, Bihar, Odisha and Gujarat state. Squally Weather (wind speed 40-50 kmph gusting to 60 kmph) very likely over east central Arabian Sea, along and off north Kerala, along and off south Maharashtra, Goa, Karnataka coasts, east central Bay of Bengal and adjoining north east Bay of Bengal. Strong winds of 40-50 kmph gusting to 60 kmph likely over south west Arabian Sea. Fishermen are advised not to venture into these seas.

• The weather outlook for seven days i.e., 09 Jun to 17 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)**

## Assam

## Weather condition:

Weather during the last week was clear to cloudy. Daily average maximum temperature was 32.8°C which was 1.4°C above normal and the average daily minimum temperature was 23.8°C which was 0.2°C below normal for the week. Total BSSH was 30.3 hrs with an average of 5.1 hrs/day. The daily average evaporation rate was 2.8 mm/day and the average daily wind speed during the week was 2.1 kmph. Daily average RH during morning and afternoon hour was 91.4% and 72.0% respectively.

## **Contingency measure:**

- Sali rice (Nursery preparation): Farmers can start nursery bed preparation for sowing of Sali rice seeds. About 6 7 such beds will be required to transplant one bigha of land and a recommended quantity of 650g to 1 kg of seeds should be sown in each bed. Collect seeds of recommended Sali rice varieties viz., Ranjit, Ranjit Sub 1, Bahadur, Satyaranjan, Basundhara, Mahsuri, Ketekijoha etc. for obtaining higher yield. Select varieties like Satyaranjan and Basundhara, having crop duration of 130-135 days, in double cropping areas. Select water submergent tolerant rice varieties such as Jalashree, Jalkunwari, Ranjit Sub-1, Swarna Sub-1, etc. in flood affected areas.
- Boro rice: Boro paddy varieties are now in dough to mature stage. Attack of rice bug in milky/ dough stage cause empty grains and leads to sever loss. To control the pest, apply 5% malathion dust @ 2-3 kg per bigha of land. Application of fertilizer and chemicals should be adopted only in rain free weather.
- Ahu rice: Spraying of Flubendiamide 39.35 SC (@ 1.25 ml per 10 lit of water) or Flubendiamide 20% WG (@ 2.5 grams per 10 lit of water) or Fipronil (@ 7.5 ml per 10 lit of water) is advocated when moderate infestation of stem borer, thrips, leaf & plant hoppers is observed in ahu rice crop. Generally, about 55-65 lit water is required for spraying in one bigha area of land. Alternatively, farmers can go for dusting of Chlorantraniliprole 0.4G (@ 1.5 kg per bigha) to control the pests.
- Kharif Maize (Vegetative stage): To control infestation of stem borer, apply fenitrothion 50EC solution prepared by mixing 1.0 lit chemical in 200-250 litres of water for spraying in 7.5 bigha land. Alternatively, Endosulfan 1.5lit/ha should be sprayed with the same volume of water. Light hoeing and earthing up should be done as and when necessary. Maintain adequate drainage channel of 25cm width, 15 cm deep at 6m distance to drain put excess amount of rain water from crop field.

- Colocasia (Planting):- April to June is the best planting time for Assam for colocasia as the crop receives sufficient rainfall due to monsoon shower. The best soil is sandy loam or alluvial with abundant organic matter. The land should be ploughed 2-3 times after applying adequate amount of organic manure and wood ash. Small corms or setts cut from large corms may be selected as a planting material.
- Livestock (Various):- To protect the goats and sheep from Contagious Ecthyma disease, immunize them at 6-8 weeks of age with vaccines after proper consultation with a veterinary doctor. Furthermore, in consultation with local veterinarian, care should be taken to provide proper de-worming medicine along with mixtures of essential body salts so as to cure the farm animals from appetite loss disorders.
- Fishery (various):- As sufficient amount of water has found to be accumulated in inland pond under fisheries, stocking with fingerlings or carried over seeds of 15 cm size @ 5000 per hectare of water surface may be advocated. For composite fish farming, stocking density for different species per ha area are: Rahu 750 Nos., Silver carp 1000 Nos., Catla 750 Nos., Grass carp 500 Nos., Mrigal 1000 Nos., and Common carp 1000 Nos.

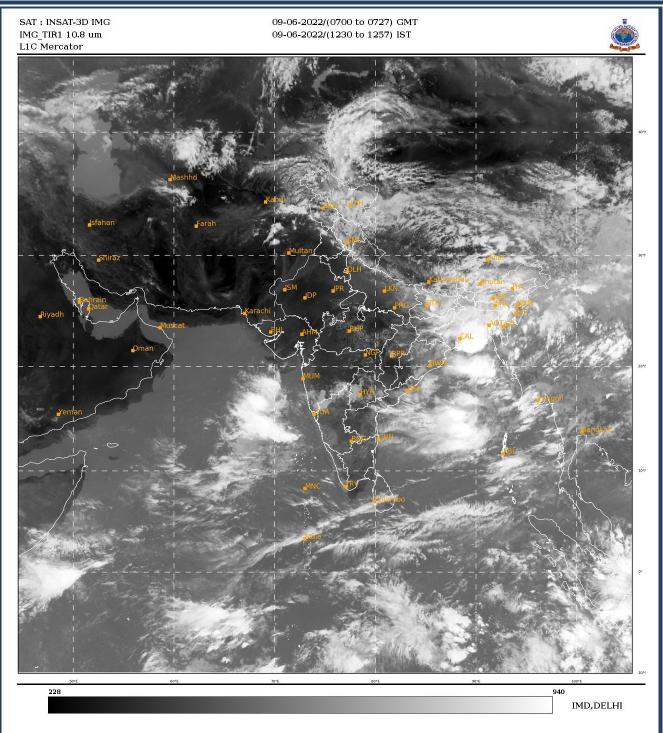
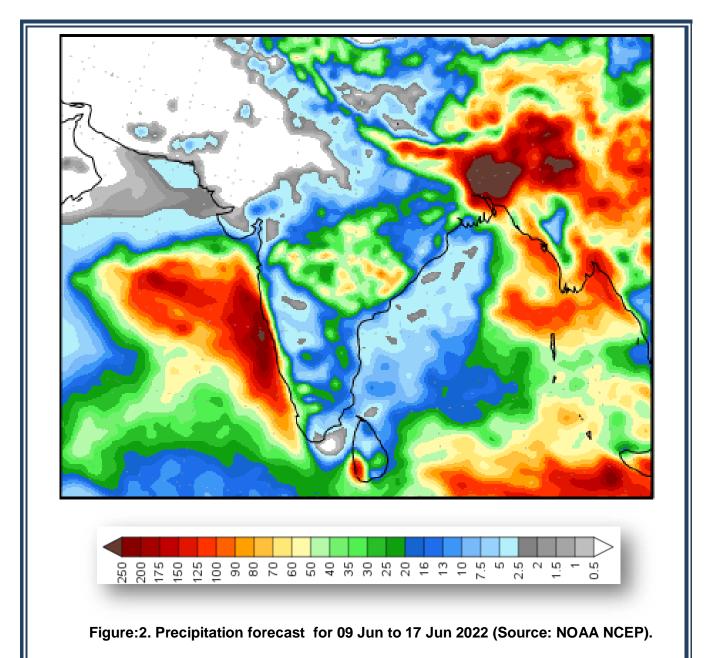


Figure: 1. Latest available satellite picture as on 09 Jun 2022 at 1257 Hrs (IST). (Source: IMD).



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