

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

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

### **Daily Crop Weather Information as on 14 Jul 2021**

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

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

- A Low Pressure Area lies over coastal areas of Kutch & neighbourhood and an off-shore trough at mean sea level lies off Karnataka-Kerala coasts. Under the influence of these conditions: i) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely along the west coast, adjoining inland areas during next 3 days. ii) Isolated extremely heavy falls also very likely over Konkan & Goa during next 3 days and over Madhya Maharashtra on 14th July, 2021.
- A cyclonic circulation lies over south Chhattisgarh & neighbourhood and an east-west shear zone runs across Central India. Under the influence of these conditions: i) Fairly widespread to widespread rainfall with isolated heavy to very heavy falls very likely along over Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam and isolated extremely heavy falls over Telangana during next 24 hours.
- Under the influence of moist easterly winds from the Bay of Bengal in the lower levels, scattered to widespread rainfall very likely over Western Himalayan Region during next 4-5 days. Isolated to scattered rainfall over plains of Northwest India during next 2-3 days and enhanced rainfall activity over the region from 17th July onwards. Heavy rainfall very likely over parts of Northwest India during next 24 hours.
- Moderate to severe thunderstorm with lightning very likely over Haryana, Chandigarh & Delhi, Northwest Uttar Pradesh, East Rajasthan and Kutch Region during next 24 hours. This may cause injuries leading to casualties to people and animals staying outdoors.
- 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 Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad, Uttarakhand, Vidarbha, Sub-Himalayan West Bengal & Sikkim,

Odisha, Assam & Meghalaya, Madhya Maharashtra, Marathwada, Konkan & Goa, Coastal Andhra Pradesh & Yanam, Telangana, Karnataka and Kerala & Mahe; at many places over Himachal Pradesh, Haryana, Chandigarh & Delhi, Chhattisgarh, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Gujarat state; at a few places over Rajasthan, Bihar, Jharkhand, Andaman & Nicobar Islands, Rayalaseema and Lakshadweep and at isolated places over Uttar Pradesh, East Madhya Pradesh, Gangetic West Bengal and Tamilnadu, Puducherry & Karaikal.

- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): Extremely Heavy Rainfall at isolated places over Haryana; Heavy to Very Heavy Rainfall at isolated places over Konkan & Goa, Madhya Maharashtra and Telangana and Heavy Rainfall at isolated places over Kerala & Mahe, Rajasthan, Gujarat state, Himachal Pradesh, Tamil Nadu, Puducherry & Karaikal, West Madhya Pradesh, Coastal Andhra Pradesh & Yanam, West Uttar Pradesh, Odisha and Bihar.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Punjab, Haryana, Assam & Meghalaya, Rajasthan, Himachal Pradesh, Jharkhand, Gujarat State, Marathawada, Vidarbha, Chhattisgarh, Telangana, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, West Uttar Pradesh, Odisha, Gangetic West Bengal and Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad.
- Maximum Temperature Departures as on 13-07-2021: Maximum temperatures were markedly above normal ( $5.1^{\circ}\text{C}$  or more) at isolated places over East Madhya Pradesh; appreciably above normal ( $3.1^{\circ}\text{C}$  to  $5.0^{\circ}\text{C}$ ) at many places over East Uttar Pradesh; at a few places over Bihar, West Madhya Pradesh, Sub-Himalayan west Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura; at isolated places over West Uttar Pradesh and Gujarat region; above normal ( $1.6^{\circ}\text{C}$  to  $3.1^{\circ}\text{C}$ ) at a few places over East Rajasthan and Odisha; at isolated places over Saurashtra & Kutch, Vidarbha and Assam & Meghalaya. They were markedly below normal ( $-5.1^{\circ}\text{C}$  or less) at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at isolated places over Haryana, Chandigarh & Delhi; appreciably below normal ( $-3.1^{\circ}\text{C}$  to  $-5.0^{\circ}\text{C}$ ) at most places over South Interior Karnataka; at many places over Coastal Andhra Pradesh & Yanam and Rayalaseema; at isolated places over Madhya Maharashtra, Telangana and Tamilnadu, Puducherry & Karaikal; below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at most places over Konkan & Goa and North Interior Karnataka; at many places over Uttarakhand and Coastal Karnataka; at isolated places over West Rajasthan, Kerala & Mahe and Andaman

& Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 40.6°C was reported at Raisen (West Madhya Pradesh).

- Minimum Temperature Departures as on 14-07-2021: Minimum temperatures are above normal (1.6°C to 3.0°C) at many places over Madhya Pradesh, East Rajasthan and East Uttar Pradesh; at a few places over Bihar, West Uttar Pradesh and Sub-Himalayan West Bengal & Sikkim and at isolated places over West Rajasthan. They are appreciably below normal (-3.0°C to -5.0°C) at a few places over Telangana and at isolated places over Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at most places over Konkan & Goa; at many places over Coastal Karnataka; at a few places over Haryana, Chandigarh & Delhi, Marathwada, Coastal Andhra Pradesh & Yanam and Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.0°C is reported at Rajnandangaon (Chhattisgarh).

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

- 14 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 ghat area of Madhya Maharashtra and Telangana; Heavy to very heavy rainfall at a few places over Coastal Karnataka and at isolated places over Gujarat Region and Marathwada and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, Vidarbha, Chhattisgarh, Bihar, Sub-Himalayan West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Coastal Andhra Pradesh & Yanam, Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & gusty winds (30-40 kmph gusting to 50 kmph) very likely at isolated places over Telangana and Kerala & Mahe; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, West Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh &

Yanam and Rayalaseema. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely along & off Gujarat-Maharashtra-Goa coasts & adjoining Arabian Sea; Strong wind (speed 40-50 kmph gusting to 60 kmph) very likely along & off Karnataka-Kerala coasts & adjoining Arabian Sea and Lakshadweep area. Fishermen are advised not to venture into these areas.

- 15 July (Day 2): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Konkan & Goa; Heavy to very heavy rainfall at a few places over Coastal Karnataka and at isolated places over Gujarat Region, ghat area of Madhya Maharashtra and Interior Karnataka and heavy rainfall at isolated places over Himachal Pradesh, West Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Saurashtra & Kutch, Marathwada, Telangana and Kerala & Mahe. Thunderstorm accompanied with lightning & gusty winds (30-40 kmph) very likely at isolated places over Telangana and Kerala & Mahe; with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and Rayalaseema. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely along & off Gujarat-Maharashtra-Goa coasts & adjoining Arabian Sea; Strong wind (speed 40-50 kmph gusting to 60 kmph) very likely along & off Karnataka-Kerala coasts & adjoining Arabian Sea and Lakshadweep area. Fishermen are advised not to venture into these areas.
- 16 July (Day 3): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Konkan & Goa, Coastal Karnataka and Kerala & Mahe; Heavy to very heavy rainfall at a few places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Madhya Maharashtra and North Interior Karnataka and heavy rainfall at isolated places over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Gujarat Region and Kerala & Mahe. Thunderstorm accompanied with lightning very likely at isolated places over Himachal Pradesh, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, Andaman & Nicobar Islands, Tamilnadu, Puducherry & Karaikal. Squally Weather (speed 45-55 kmph gusting to 65 kmph) very likely along & off Gujarat-Maharashtra-Goa coasts & adjoining Arabian Sea. Fishermen are advised not to venture into these areas.

- 17 July (Day 4): Heavy to Very Heavy Rainfall at isolated places likely over Himachal Pradesh, Uttarakhand, Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Andaman & Nicobar Islands, Arunachal Pradesh, Assam & Meghalaya, Konkan & Goa and Karnataka and heavy rainfall at isolated places over East Rajasthan, Madhya Pradesh, Jharkhand, Odisha, Nagaland, Manipur, Mizoram & Tripura and Marathwada. Thunderstorm accompanied with lightning & gusty winds (30-40 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim, Odisha and Tamilnadu, Puducherry & Karaikal.
- 18 July (Day 5): Heavy to Very Heavy Rainfall at isolated places likely over Himachal Pradesh, Uttarakhand, Uttar Pradesh, East Rajasthan, Arunachal Pradesh, Assam & Meghalaya and Konkan & Goa and heavy rainfall at isolated places over Punjab, Haryana, Chandigarh & Delhi, West Rajasthan, Madhya Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra and Karnataka. Thunderstorm accompanied with lightning & gusty winds (40-50 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Rajasthan, Bihar, Jharkhand, West Bengal & Sikkim, Odisha and Tamilnadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 14 Jul to 22 Jul 2021 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 weather prevailed during this week with 23.0mm rainfall. The maximum temperature remains above normal by 1 to 6 °C and was recorded in the range between 35.8 to 41.2 °C. The minimum temperature remain variable and was recorded in the range between 22.2 to 28.2 °C. The morning and evening relative humidity observed in the range of 43 to 74 % and 23 to 38 %, respectively. The total evaporation observed 94.8 mm and bright sunshine during this period remain in the range of 8.6 to 9.3 hrs.

#### **Contingency measure:**

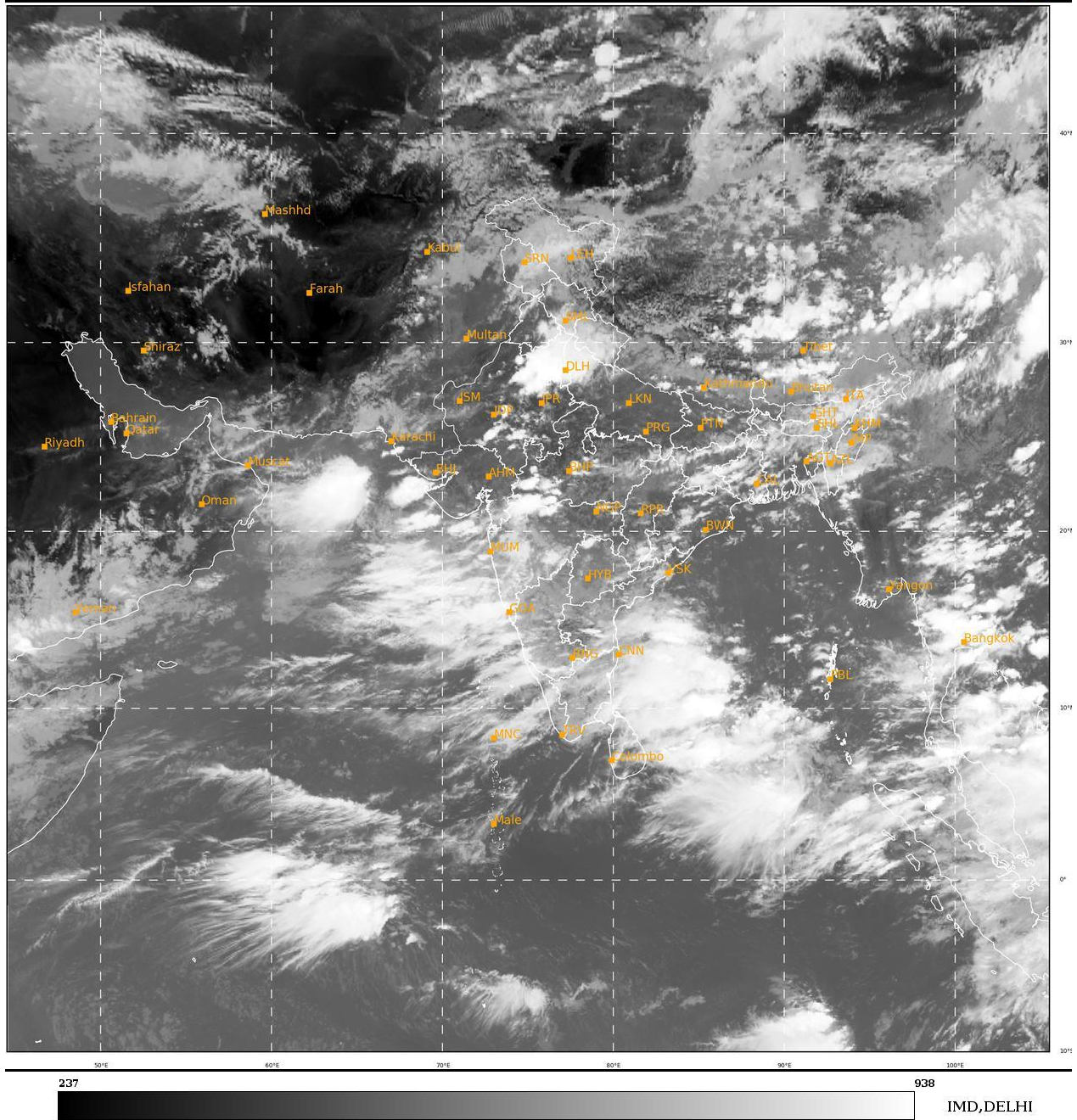
- Paddy: Transplanted Direct seeded Nursery Transplanting 25 days old crop Irrigate late sown nursery as per requirement. Transplanting of 20-30 days old/ 4-6 leaved rice seedlings (varieties: IET-1410, PC-19, SJR-5, Jaya, Basmati 370 and Ranbir Basmati) is recommended. Apply the basal dose of fertilizer at time of transplanting after irrigation. Give irrigation to transplanted field as per requirement. Apply butachlor ai @ 1.5kg/kanal in standing water after 3-4 days of transplanting and keep the water standing in field for 5-7 days. To control weeds Spray Bispyribac-sodium@25gm ai in 500lts of water/ha in 25 days old crop during clear weather.
- Maize: Sowing Farmers may go for sowing of maize crop in rainfed areas (var. Vivek-25, Vivek QOM-9, HM-5 and HQPM-1) with seed rate of 20-30 kg/ha wherever soil moisture is available. Treat the seed with Bavistin @ 3g/Kg of seed to manage soil borne diseases.
- Pulses: Kharif Mash Sowing Farmers may go for sowing of Mash (var.:Pant U-19, Uttara) & Moong (var.:SML-668) wherever soil moisture is available. Inoculate the seed with Rhizobium culture before sowing to get better yield.
- Kharif Fodder (maize+ cowpea+charri) & bajra Sowing Sowing of the mixed fodder crop can be undertaken wherever soil moisture is available.
- Floriculture: Chrysanthemum Mother stock Cutting preparation should be started. Treat the cuttings with IBA @200ppm and plant in sand.
- Vegetables: Okra Turmeric Brinjal Cucurbits tomato/brinjal/ chilly etc Sowing Vegetative Fruiting Fruiting Rainy season crop for late farmers is recommended after receipt of rain at vattar condition of soil @ 15kg/ha and at double spacing 60×60cm. Varieties recommended: Varsha Uphaar, Arka Anamika. Give irrigation. Earthing up is recommended. Cover ridges with grass to conserve soil moisture. Apply of dichlorovos @ 2.0ml/lit of water during clear weather to



control Fruit borer attack. Regular hand picking of infested fruits and shoots and their proper disposal is recommended. Cucurbits tomato/brinjal/ chilly Give (prophylactic spray) Dithane M-45 @2.5gm/lit during clear weather to check any kind of infection in crop.

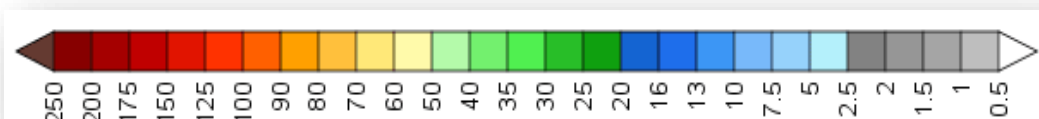
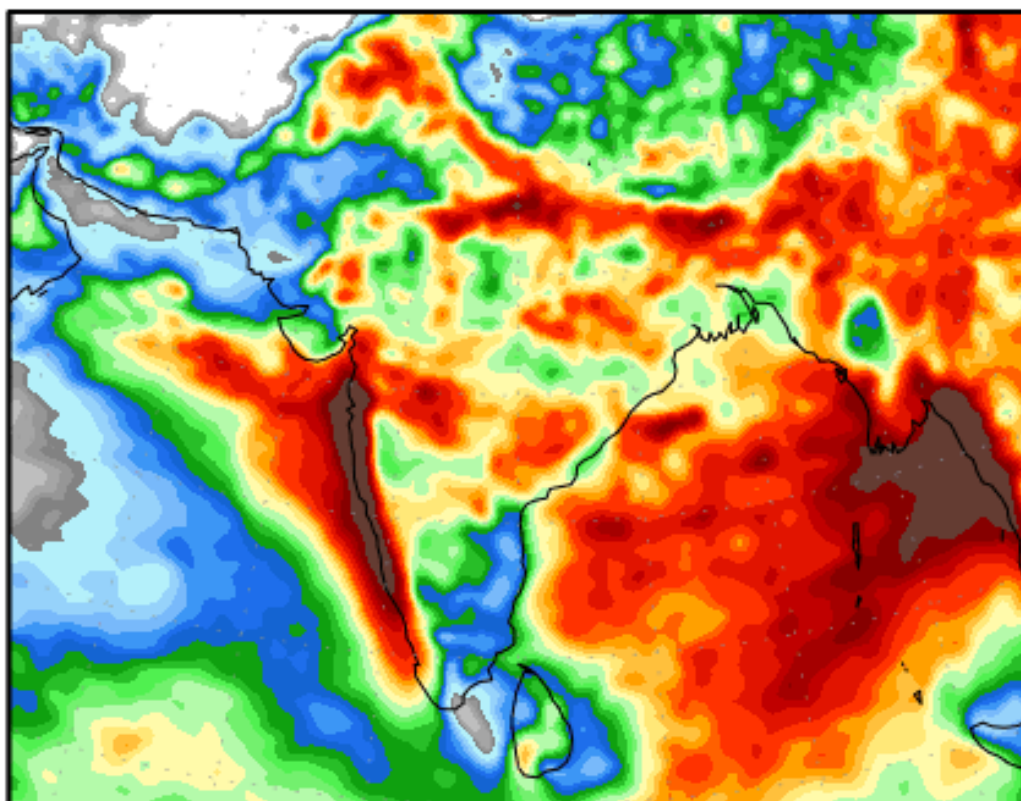
- Sericulture: Mulberry Cocoon crop Tree plantation Harvested cocoons Pruning of dead wood is recommended. Give irrigation as per requirement. The bags should be kept in wire mesh covered racks to avoid rodent attack till sale of the crop.
- Horticulture: Mango Citrus Young/Bearing Young/Bearing Apply need based irrigation. Remove water suckers. Pits for rainy season plantation may be dug. Due to rise in temperature farmers are advised to protect young fruit plants from heat by providing thatches/cover but ensure free circulation of air. Spray dimethoate @ 1ml/lit during clear weather to control citrus psylla, leaf miner, if observed. Milky mushroom Spawn run Spawning of milky mushroom must be completed before 15 of July Casing layer may be applied on the upper surface of Bags of milky mushroom in which spawn run has completed. Apiculture To control mite, dust sulphur on top bars @ 1g/frame or oxalic acid treatment @ 3.5% / litre water.
- Fisheries: Carp farming Fry/ yearlings Farmers who have stocked fish livestock in their ponds are advised to maintain proper water level in their fish ponds. Those who have not still stocked the fish seed, they may go for fresh stocking of carp fish seeds, available from the reliable sources. Fish farmers who have already stocked fish seed, should apply supplementary feed @2-3% of total estimated fish biomass present in the ponds.
- Live stock: Dairy animals/ Sheep & Goat 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. Sheep and goat should be allowed to graze/browse during cooler parts of the day i.e. morning and evening. Supplementary mineral mixture should be given regularly to the milking and pregnant animals. If not vaccinated yet, get the animals vaccinated against foot and mouth and Gal Gotu diseases. Poultry Vaccinate chicks against new castle disease and gumbroo disease. Spread clean litter material uniformly in the poultry house at thickness of 2-3 inches. \*Cover face with thick cloth or wear mask and maintain social distance while doing agricultural operations in field

14-07-2021/(0800 to 0827) GMT  
14-07-2021/(1330 to 1357) IST



**Figure: 1. Latest available satellite picture as on 14 Jul 2021 at 1357 Hrs (IST). (Source: IMD).**





**Figure:2. Precipitation forecast for 14 Jul to 22 Jul 2021 (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.*