

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

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

### **Daily Crop Weather Information as on 30 Jun 2021**

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

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

- The northern Limit of southwest monsoon (NLM) continues to pass through Lat. 26°N / Long. 70°E, Barmer, Bhilwara, Dholpur, Aligarh, Meerut, Ambala and Amritsar.
- Prevailing meteorological conditions, large scale atmospheric features and the forecast wind pattern by dynamical models suggest that no favourable conditions are likely to develop for further advance of southwest monsoon into remaining parts of Rajasthan, west Uttar Pradesh, Haryana, Chandigarh & Delhi and Punjab during next 6-7 days. Hence, subdued rainfall activity is very likely to continue to prevail over Northwest, Central and Western parts of Peninsular India during next 6-7 days. Isolated/scattered thunderstorm activity accompanied with lightning & rainfall is also likely over these regions during this period.
- Under the influence of strong moist southwesterly winds at lower tropospheric levels from Bay of Bengal to northeast & adjoining east India; fairly widespread to widespread rainfall with isolated heavy rainfall very likely over Bihar, West Bengal & Sikkim and Northeastern states during next 6-7 days. Isolated heavy to very heavy rainfall very likely over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura during next 3 days. Isolated extremely falls also likely over Assam & Meghalaya on 30th June & 01st July; over Bihar during 30th June-02nd July and over Sub-Himalayan West Bengal & Sikkim on 30th June, 02nd & 03rd July, 2021.
- Due to strengthening of moist easterly winds along the northern Uttar Pradesh and Uttarakhand from tomorrow, the 1 July, 2021, enhanced rainfall activity with isolated heavy falls very likely over East Uttar Pradesh during next 5 days: over Uttarakhand from 01st to 04th July and over West Uttar Pradesh on 02 July, 2021. Isolated very heavy rainfall also likely over Uttarakhand on 02nd July, 2021.
- Due to likely dry westerly/southwesterly winds from Pakistan to northwest India at lower levels, Heat wave conditions in isolated/some pockets over Punjab, Haryana, Chandigarh & Delhi, Rajasthan, West Uttar Pradesh during next 2 days and over and West Madhya Pradesh during next 24 hours.

- Strong surface winds (speed reaching 20-30 kmph occasionally) over Haryana and West Uttar Pradesh on 30th June and 01st July, 2021.
- Moderate to severe thunderstorm accompanied by frequent cloud to ground lightning very likely over Bihar and Jharkhand 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 Arunachal Pradesh, Assam & Meghalaya, Lakshadweep and Sub-Himalayan West Bengal & Sikkim; at many places over Andaman & Nicobar Islands, Nagaland, Manipur, Mizoram & Tripura, Bihar, Konkan & Goa; at a few places over Gangetic West Bengal and Vidarbha and at isolated places over Odisha, Jharkhand, Uttarakhand, East Uttar Pradesh, Rajasthan, Madhya Pradesh, Gujarat state, Marathawada, Chhattisgarh, Madhya Maharashtra, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal.
- Extremely heavy rainfall recorded at isolated places over Assam & Meghalaya and Sub-Himalayan West Bengal & Sikkim; Heavy to very rainfall at isolated places over Bihar and heavy rainfall at isolated places over Arunachal Pradesh, Tripura, East Uttar Pradesh, Tamilnadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hrs IST of yesterday to 0830 hours IST of today): at isolated places over Assam & Meghalaya, West Bengal & Sikkim, Jharkhand, Madhya Pradesh, Saurashtra & Kutch, Marathawada, Vidarbha and Telangana.
- Maximum Temperature Departures as on 29-06-2021: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Punjab and Haryana, Chandigarh & Delhi; at many places over Uttarakhand and Kerala & Mahe; at a few places over Rajasthan, Uttar Pradesh, Madhya Maharashtra and South Interior Karnataka; at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Himachal Pradesh, Jharkhand, Odisha and Saurashtra & Kutch; at a few places over Gangetic West Bengal, Telangana, North & Coastal Karnataka and Vidarbha; at isolated places over Nagaland, Manipur, Mizoram & Tripura, Gujarat Region and Konkan & Goa. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim and Arunachal Pradesh; at isolated places

over Bihar; below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at a few places over Assam & Meghalaya and near normal over rest parts of the country. Yesterday, the highest maximum temperature of  $45.8^{\circ}\text{C}$  was reported at Ganganagar (West Rajasthan).

- Minimum Temperature Departures as on 30-06-2021: Minimum temperatures are above normal ( $1.6^{\circ}\text{C}$  to  $3.0^{\circ}\text{C}$ ) at many places over East Uttar Pradesh, Gangetic west Bengal, Jharkhand, Madhya Pradesh, Kerala; at a few places over Uttarakhand, Himachal Pradesh, Punjab, Haryana, Odisha, Chattisgarh, Rayalseema; isolated places over South Interior Karnataka. They are appreciably below normal ( $-3.1^{\circ}\text{C}$  to  $-5.0^{\circ}\text{C}$ ) at a few places over Rajasthan and below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at a isolated places over Gujarat region and near normal over rest parts of the country.

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

- 30 June (Day 1): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Bihar, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; Heavy to Very Heavy Rainfall at isolated places over Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura and Heavy Rainfall at isolated places over East Uttar Pradesh, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam, Telangana and Tamilnadu, Puducherry & Karaikal. Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over East Uttar Pradesh and with lightning at isolated places over 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, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Heat Wave conditions in some pockets with severe heat wave conditions very likely in isolated pockets over West Rajasthan; Heat Wave to severe heat wave conditions in isolated pockets over Haryana, Chandigarh & Delhi; Heat Wave conditions in some pockets over Punjab and in isolated pockets over Jammu division, West Uttar Pradesh, East Rajasthan and northwest Madhya Pradesh. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea, Northwest Arabian sea. Fishermen are advised not to venture into these areas.
- 01 July (Day 2): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Bihar and Assam & Meghalaya; Heavy to Very Heavy Rainfall at isolated places over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura and Heavy Rainfall at isolated places over Uttarakhand, East Uttar Pradesh, Gangetic West

Bengal, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Himachal Pradesh, Uttarakhand and East Uttar Pradesh and with lightning at isolated places over Punjab, Haryana, Chandigarh & Delhi, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Andaman & Nicobar Islands, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Heat Wave conditions in isolated pockets over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh and Rajasthan. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest and Westcentral Arabian Sea, North Arabian sea and along & off Gujarat coast. Fishermen are advised not to venture into these areas.

- 02 July (Day 3): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places very likely over Bihar and SubHimalayan West Bengal & Sikkim; Heavy to Very Heavy Rainfall at isolated places over Uttarakhand and Assam & Meghalaya and Heavy Rainfall at isolated places over Himachal Pradesh, Uttar Pradesh, Gangetic West Bengal, Arunachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Telangana and Tamilnadu, Puducherry & Karaikal. Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and with lightning at isolated places over East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea, North Arabian sea and along & off Gujarat coast. Fishermen are advised not to venture into these areas.
- 03 July (Day 4): Heavy to Very Heavy Rainfall with extremely heavy falls at isolated places likely over Sub-Himalayan West Bengal & Sikkim and Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, east Uttar Pradesh, Bihar, Arunachal Pradesh, Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal. Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and with lightning at isolated places over East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry &

Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea, Northwest Arabian sea. Fishermen are advised not to venture into these areas.

- 04 July (Day 5): Heavy to Very Heavy Rainfall likely at isolated places over Sub-Himalayan West Bengal & Sikkim and Heavy Rainfall at isolated places over Uttarakhand, east Uttar Pradesh, Bihar, Assam & Meghalaya and Tamilnadu, Puducherry & Karaikal. Thunderstorm with lightning & gusty winds (speed reaching 30-40 kmph) likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and with lightning at isolated places over Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Coastal Andhra Pradesh & Yanam and Tamilnadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest and Westcentral Arabian Sea, Northwest Arabian sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 30 Jun to 08 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 no rainfall. Both maximum and minimum temperatures remains variable and was recorded in the range between 36.8 to 41.4 0C and 24.0 to 27.5 0C. The morning and evening relative humidity observed in the range of 46 to 62 % and 21 to 33 %, respectively. The total evaporation observed 75.0 mm and bright sunshine during this period remain in the range of 4.5 to 9.4 hrs.

#### **Contingency measure:**

- Maize: Sowing Start sowing the recommended var. of maize (Vivek-25,Vivek QOM-9 HM-5 and HQPM-1) with seed rate of 20-30 kg/ha after receipt of rain at vattar condition. Treat the seed with Bavistin @ 3g/Kg of seed before sowing.
- Paddy: Nursery raising Maintain regular supply of water to save the germinating and growing of rice seedlings from intense heat. Farmer may go for transplanting of rice seedling. Transplant 2-3 healthy seedlings per hill free from pests and diseases. Keep the rice nursery and bund free from weeds either by hand weeding or by application of butachlor weedicide@30 kg/ha.
- Green Manuring: Vegetative: To enhance the biomass apply urea 2kg /kanal to dhaincha crop. Incorporation of dhaincha may be taken up before flowering stage in the transplanted rice field.
- Summer Fodder: Vegetative: Start sowing of fodder crops such as Jowar mixed with cowpea.
- Vegetables: Tomato, brinjal & chilly Okra Sowing /transplanting Sowing Farmers can go for transplanting from nursery area to field wherever soil moisture is available. Continue sowing at vattar condition of soil.
- Floriculture: Rainy annuals Nursery raising/ transplanting Transplanting of rainy seasonal annuals (gaillardia, balsam, cosmos, portulaca, kochia, sunflower, morning glory, gomphrena, celosia etc.) may be done wherever sufficient moisture is available. Milky mushroom Spawn run Disinfect the crop room. Farmers interested in growing milky mushroom should book the spawn of milky mushroom from a reliable agency.
- Horticulture: Mango Citrus Young/Bearing Young/Bearing Remove malformed portion in mango plant and spray 0.5gm carbendazim/ltr water. Spray dimethoate @ 1ml/ltr during clear weather to control mango hopper. 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 @

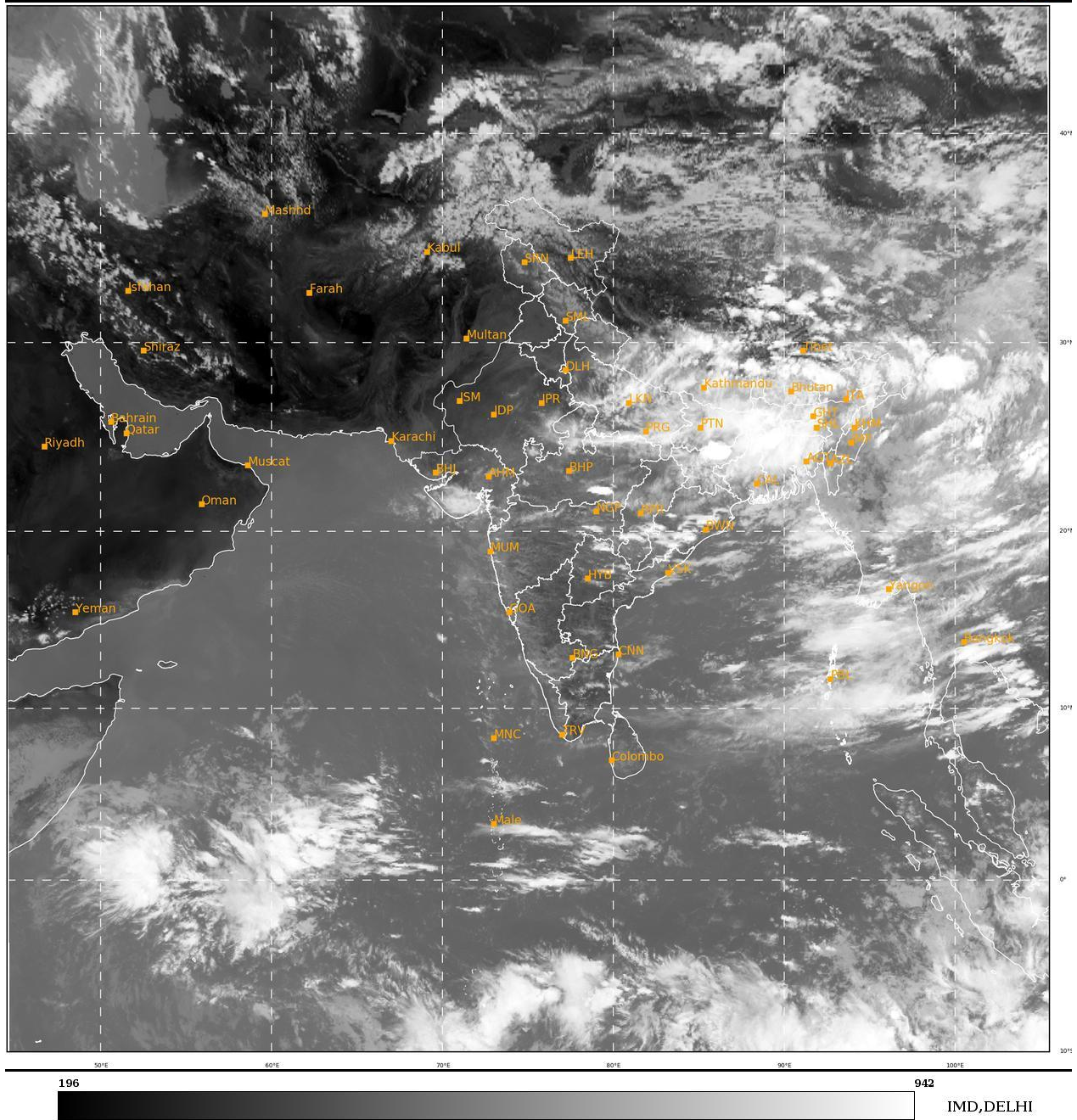


1ml/lit during clear weather to control citrus psylla, leaf miner, if observed.

- Sericulture: Mulberry Cocoon crop Tree plantation Harvested cocoons Basin should be prepared around mulberry trees. 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 or migrate to cooler places or cover them with wet gunny bags. Provide water source in the apiary.
- 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.
- Poultry: Provide fresh cool and clean drinking water. 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 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 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. Supplementary mineral mixture should be given regularly to the milking and pregnant animals. \*Cover face with thick cloth or wear mask and maintain social distance while doing agricultural operations in field

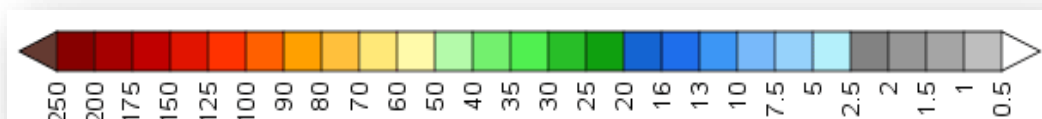
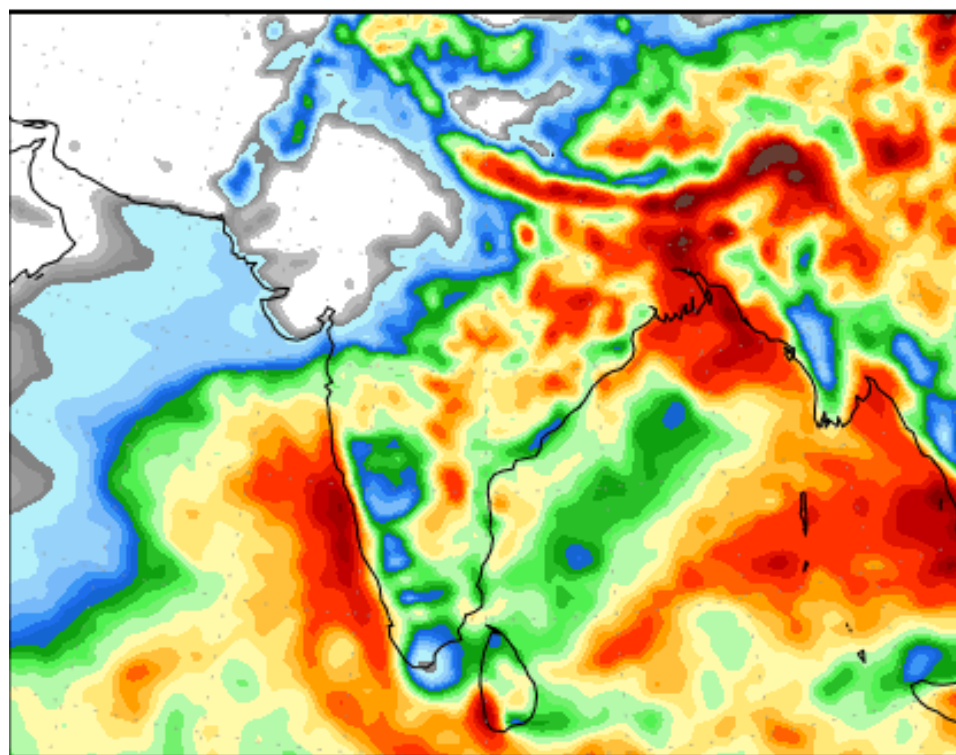
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30-06-2021/(0800 to 0827) GMT  
30-06-2021/(1330 to 1357) IST



**Figure: 1. Latest available satellite picture as on 30 Jun 2021 at 1357 Hrs (IST). (Source: IMD).**





**Figure:2. Precipitation forecast for 30 Jun to 08 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.*