

# All India Coordinated Research Project on Agrometeorology

## CRIDA, Santoshnagar, Hyderabad – 500 059

### Daily Crop Weather Information as on 15 June 2020

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

#### Significant Weather Features (IMD)

- Southwest Monsoon has further advanced into some more parts of north Arabian Sea, Gujarat state, entire Diu, some more parts of Madhya Pradesh, remaining parts of Chhattisgarh, Jharkhand and Bihar and some parts of East Uttar Pradesh.
- The Northern Limit of Monsoon (NLM) now passes through Lat.23°N/Long.60°E, Kandla, Ahmedabad, Indore, Narsinghpur, Umaria, Balia and Lat.28°N/Long.84°E.
- Conditions are becoming favourable for further advance of Southwest Monsoon into some more parts of East Madhya Pradesh and East Uttar Pradesh during next 48 hours.
- An east-west trough runs from northwest Rajasthan to Gangetic West Bengal at lower tropospheric levels and an east-west shear zone is seen from Sub-Himalayan West Bengal to north Konkan across the cyclonic circulation over southeast Uttar Pradesh, south Madhya Pradesh, north Madhya Maharashtra between 3.1 and 5.8 km above mean sea level.
- Under the influence of above systems, fairly widespread to widespread rainfall very likely to continue over Maharashtra, Chhattisgarh, West Bengal & Sikkim, Odisha, Jharkhand and Bihar during next 2-3 days; Scattered heavy to very heavy falls and isolated extremely heavy falls over Konkan & Goa, isolated heavy to very heavy falls over interior Maharashtra, Sub-Himalayan West Bengal & Sikkim and Odisha and isolated heavy falls over central India and Bihar, Jharkhand and Gangetic West Bengal during next 2-3 days.
- Widespread rainfall with isolated heavy falls likely to continue over northeast India and scattered to fairly widespread rain with isolated heavy to very heavy rainfall over Gujarat state during next 4-5 days.
- A Low Pressure Area is likely to form over north Bay of Bengal & neighbourhood around 19th June
- 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, Odisha, West Bengal & Sikkim, Saurashtra & Kutch, Konkan & Goa, Vidarbha, Coastal & North Interior Karnataka, Kerala & Mahe, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Lakshadweep; at many places over Uttarakhand, Madhya Pradesh, Gujarat region, Madhya Maharashtra, South Interior Karnataka and Andaman & Nicobar Islands; at few places over Chhattisgarh, Telangana and Coastal Andhra Pradesh & Yanam and at isolated places over Rajasthan, Uttar Pradesh, Marathwada, Tamil Nadu, Puducherry & Karaikal and Rayalseema..
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttar Pradesh, Uttarkhand, Bihar, Gujarat, Madhya Pradesh, Jharkhand, Chhattisgarh, Arunachal Pradesh, Assam & Meghalaya, West Bengal & Sikkim, Odisha, Vidarbha and Coastal Andhra Pradesh & Yanam.
- Maximum Temperature Departures as on 14-06-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Assam & Meghalaya, Saurashtra & Kutch and Konkan & Goa; above normal (1.6°C to 3.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, West Rajasthan, Arunachal Pradesh, Rayalaseema and Andaman & Nicobar Island; at isolated places over Uttarakhand, Punjab, Haryana, Chandigarh & Delhi and Coastal Andhra Pradesh & Yanam . They were markedly below normal (-5.1°C or less) at most places over Jharkhand; at a few places over Odisha, East Madhya Pradesh and Marathwada; at isolated places over Chhattisgarh; appreciably below normal (-3.1°C to -5.0°C) at a few places over Sub-Himalayan West Bengal & Sikkim and Bihar; at isolated places over West Uttar Pradesh, West Madhya Pradesh and Gangetic West Bengal and below normal (-1.6°C to -3.0°C) at isolated places over Coastal & south Interior Karnataka and Tamil Nadu, Puducherry & Karaikal and near normal over rest parts of the country. Yesterday, the highest Maximum temperature of 44.9°C was reported at Ganganagar (West Rajasthan).
- Minimum Temperature Departures as on 15-06-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at isolated places over West Rajasthan, Andaman & Nicobar Islands and Sub-Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over Tamilnadu, Puducherry & Karaikal

and Lakshadweep; at a few places over Rayalseema and Haryana, Chandigarh & Delhi and at isolated places over Uttar Pradesh, East Rajasthan, Saurashtra & Kutch, Madhya Maharashtra, Telangana, Coastal Andhra Pradesh & Yanam and Bihar. They are appreciably below normal (-3.1°C to -5.0°C) at isolated places over Madhya Pradesh and Odisha; below normal (-1.6°C to -3.0°C) at a few places over Gujarat Region and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and near normal over rest parts of the country. Today, the lowest minimum temperature of 18.0°C was reported at Sundargarh (Odisha) over the plains of the country.

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

- 15 June (Day 1): Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Uttarakhand, Uttar Pradesh, East Rajasthan and with lightning very likely at isolated places over Coastal Andhra Pradesh & Yanam, Gujarat state, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura. Heavy to very heavy rainfall very likely at isolated places over Konkan & Goa, Coastal Karnataka, Gujarat region, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya; heavy rainfall at isolated places over Odisha, Kerala & Mahe, Madhya Maharashtra, Saurashtra & Kutch, Madhya Pradesh, Vidarbha, Chhattisgarh, Gangetic West Bengal, Andaman & Nicobar Islands, Bihar, Jharkhand, Arunachal Pradesh and Nagaland, Manipur, Mizoram & Tripura. Heat wave conditions very likely at isolated places over West Rajasthan. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian sea and westcentral Bay of Bengal. Fishermen are advised not to venture into sea over these areas.
- 16 June (Day 2): Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over East Rajasthan and with lightning very likely at isolated places over Uttar Pradesh, Gujarat state, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura. 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 at isolated places over Madhya Maharashtra, Gujarat region, Odisha; heavy rainfall at isolated places over Kerala & Mahe, Marathwada, Saurashtra & Kutch, East Madhya Pradesh, Vidarbha, Chhattisgarh, West Bengal & Sikkim, Andaman &

Nicobar Islands, Jharkhand, Coastal Karnataka, Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Heat wave conditions very likely at isolated places over West Rajasthan. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian sea and westcentral Bay of Bengal. Squally Weather (wind speed reaching 45-55 kmph) over Maharashtra coast. Fishermen are advised not to venture into sea over these areas.

- 17 June (Day 3): Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over East Rajasthan and with lightning very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura. 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 at isolated places over Gujarat region; heavy rainfall at isolated places over Madhya Maharashtra, Coastal Karnataka, Odisha, Saurashtra & Kutch, West Bengal & Sikkim, Andaman & Nicobar Islands, Jharkhand, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Heat wave conditions very likely at isolated places over West Rajasthan. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian sea and central Bay of Bengal. Squally Weather (wind speed reaching 45-55 kmph) over Gujarat-Maharashtra coasts. Fishermen are advised not to venture into sea over these areas.
- 18 June (Day 4): 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 Rajasthan and with lightning very likely at isolated places over Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura. Heavy to very heavy rainfall at isolated places likely over Gujarat state, West Bengal & Sikkim and Jharkhand; heavy rainfall at isolated places over Konkan & Goa, Coastal Karnataka, Odisha, Bihar, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian sea and central Bay of Bengal. Squally Weather (wind speed reaching 45-55 kmph) over Gujarat-Maharashtra coasts. Fishermen are advised not to venture into sea over these areas.

- 19 June (Day 5): Thunderstorm accompanied with lightning & gusty wind (speed reaching 30-40 kmph) very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Uttar Pradesh and East Rajasthan and with lightning very likely at isolated places over Arunachal Pradesh and Assam & Meghalaya. Heavy to very heavy rainfall at isolated places likely over Gujarat state, Odisha, West Bengal & Sikkim and Jharkhand; heavy rainfall at isolated places over Konkan & Goa, East Madhya Pradesh, Chhattisgarh, Coastal Karnataka, Bihar and Assam & Meghalaya. Strong Wind (wind speed reaching 50-60 kmph) very likely over Southwest & adjoining Westcentral Arabian Sea; (wind speed reaching 40-50 kmph) over eastcentral Arabian sea and central Bay of Bengal. Squally Weather (wind speed reaching 45-55 kmph) over Gujarat-Maharashtra coasts. Fishermen are advised not to venture into sea over these areas.
- The weather outlook for seven days i.e., 15 to 23 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)**

### **Maharashtra-Vidarbha**

#### **Weather condition:**

Weekly average means (23 MW) at AICRPAM Akola centre: T max 36.0 °C (normal 40.5 °C), T min 24.7 °C (normal 27.0 °C). RH I 73% (normal 62 %), RH II 38% (normal 30%). Evaporation rate 8.7 mm (normal 13.7 mm), Wind speed 9.9 km/hr (normal 14.0 km/hr) and BSH 6.5 hrs (normal 8.3 hrs). Maximum temperature across the week was 6.0°C below normal and the minimum temperature was 3.3°C below normal. In Vidarbha subdivision rainfall from March 1 to 25 May amounted to 41.7 mm (+85) and during June 1-8 it was 29.5 mm (+98%). Akola location recorded 10.9 mm rains during 1-10 June.

#### **Contingency measure:**

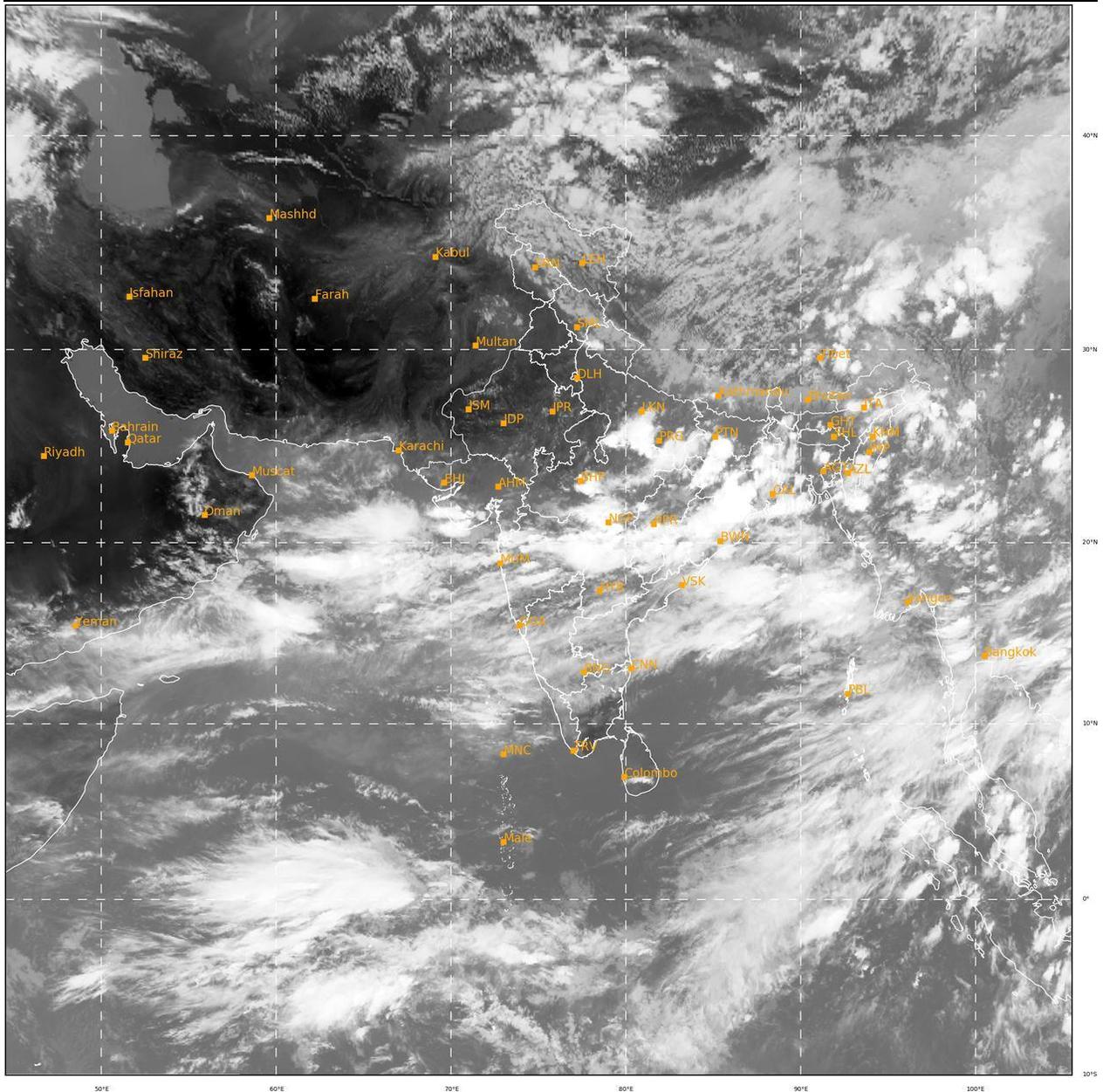
- The forecast suggests light rains very likely at isolated places on 9th and 11th June. While Heavy rains are very likely at isolated places on 12th and 13th June.. After the onset of monsoon does not hurry for sowing till sufficient rainfall of 75 -100 mm occurs in two to three days.
- Undertake remaining harvesting of matured summer crops and vegetables and ensure safe placement of harvested produce to protect from sudden rain/thunderstorm. Keep farm animals indoor during thunderstorm/lightning.

Preparatory tillage of fields for *Kharif* sowing may immediately be completed. For effective in situ moisture conservation, preparatory tillage operations should be along the contour and across the field slope. For the ensuing *Kharif* season ensure the availability of seeds as per the crop/cultivar planning and ensure other inputs (Fertilizers / Biofertilizers) in advance. For use of own seeds for crop like soybean to test seed viability conduct a simple germination test.

- Undertake remaining harvesting of matured summer crops (groundnut, sesame, sunflower, etc.) and keep harvested produce in a safe place In *Kharif* planning for cotton crop recommended deshi varieties include AKA-5, AKA-7, and AKA-8 with a seed rate of 12 to 15kg/ha and spacing of 60 x 15 cm. American improved varieties include AKH-081 (60x15cm with seed rate 15 to 20 kg/ha), AKH-09-5(Suvarna Shubhra), PKV Rajat and AKH 8828 (60x30cm with seed rate 10 to 12 kg/ha). Cotton deshi hybrid PKVDH-1, PKV-Suvarna is recommended with seed rate @ 3.0 to 3.5 kg/ha and spaced at 60x45 cm. Recommended Bt cotton varieties may also be preferred. Apply seed treatment with Tiaram @ 4 gm + Rhizobium + PSB @25 gm and Tricoderma @ 4 gm per kg seed.
- Pigeon pea varieties to be chosen as per the soil type are - early duration varieties for medium soil type(TAT-10, ICPL 87, AKT-8811), medium duration varieties for medium to heavy soil type (BSMR-736, PKV Tara, BSMR-853) and long duration varieties for heavy soil type (ICPL-87119, C-11). Recommended greengram varieties are PKV- green gold, PKV mug -8802, PKV-AKM-4 and for black gram PKV udid-15, TAU-1, TAU-2 and PDKV black gold (AKU-10-1).
- In mriga bahar harvested mandarin and sweet orange orchards, dead twigs be removed and cut ends be smeared with bordeaux paste ( 1 kg lime+ 1 kg CuSo<sub>4</sub> + 10 litre water). Dug pits for new plantation may be filled up to 10-15 cm above surface level with mixture of 1 part FYM, 2 part soil, 2 kg single super phosphate and 100 g chlorpyriphos powder. Planting shall be undertaken upon the receipt of sufficient monsoon rains. Considering irrigation facility and market response, the cultivation of vegetables like bitter gourd, tinda, ridge gourd, smooth gourd, bottle gourd, ginger, turmeric, coriander, etc can be initiated during this period.
- Undertake nursery seed sowing of vegetables like chilli, tomato and brinjal for *Kharif* transplanting. Seed treatment with bio-fungicide Trichoderma is advisable. Farmers should keep and maintain and repair the animal shed before the onset of monsoon.

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IMG\_TIR1 10.8 um  
LIC Mercator

15-06-2020/(0930 to 0956) GMT  
15-06-2020/(1500 to 1526) IST

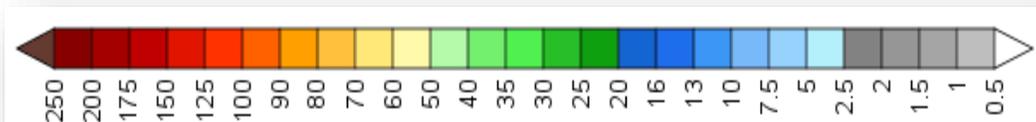
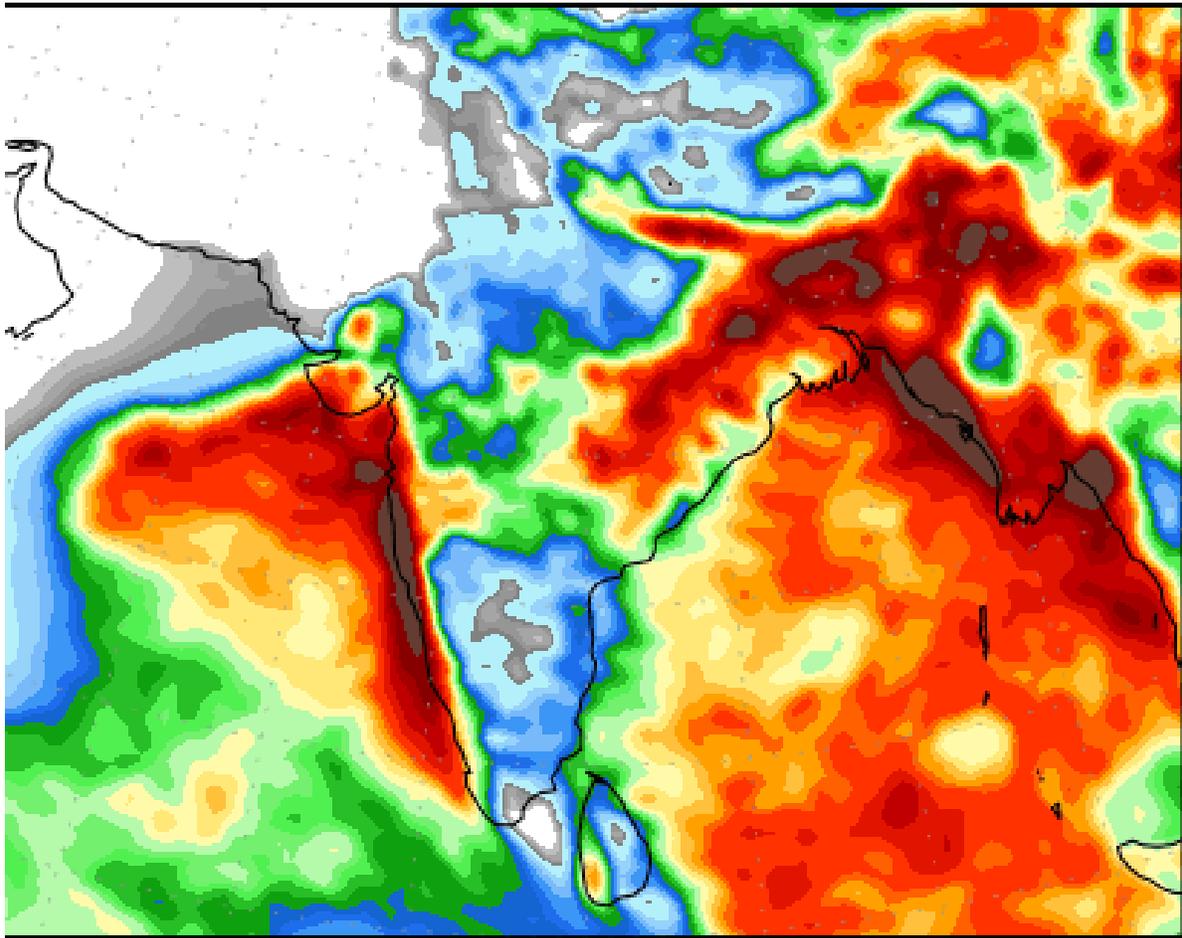


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IMD, DELHI

**Figure: 1. Latest available satellite picture as on 15 June 2020 at 1526 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 15 to 23 June 2020 (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.*