

# All India Coordinated Research Project on Agrometeorology

## CRIDA, Santoshnagar, Hyderabad – 500 059

### Daily Crop Weather Information as on 09 Jul 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.
- The moist easterly winds in lower level from Bay of Bengal has started to establish over eastern India. It is likely to spread into northwest India covering Punjab and north Haryana by 10th July. Accordingly, southwest monsoon likely to advance over remaining parts of West Uttar Pradesh, some more parts of Punjab, Haryana and Rajasthan and Delhi around 10th July.
- A low pressure area is likely to form over westcentral & adjoining Northwest Bay of Bengal off north Andhra Pradesh-south Odisha coasts around 11th July.
- Under the influence of these conditions:
  - (i) Scattered to widespread rainfall very likely over Northwest India from 9th July onwards and isolated heavy rainfall also very likely over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad & Punjab on 11th & 12th; Uttarakhand & West Uttar Pradesh on 12th; Himachal Pradesh, East Rajasthan & Haryana, Chandigarh & Delhi during 10th-12th and East Uttar Pradesh during 09th-10th July, 2021. Isolated very heavy rainfall also very likely over Uttarakhand on 11th & 12th, July, 2021.
  - (ii) Scattered to widespread rainfall with isolated heavy falls very likely over Central India (Madhya Pradesh, Vidarbha, Chhattisgarh and Odisha) during next 5 days and isolated very heavy rainfall also very likely over Vidarbha and Chhattisgarh on 08th & 09th; West Madhya Pradesh on 10th & 11th and East Madhya Pradesh on 09th July, 2021.
- Due to strengthening of Southwest Monsoon over Arabian Sea and likely formation of a Low Pressure Area over Westcentral & adjoining Northwest Bay of Bengal around 11th July; enhanced rainfall activity very likely along the west & east coasts likely to continue during next 5 days. Fairly widespread to Widespread rainfall with isolated heavy to very heavy falls very likely over

Maharashtra & Goa, Coastal Andhra Pradesh and Telangana, Karnataka and Kerala & Mahe during 09th -12th July.

- Due to revival of Southwest Monsoon from 8th July; rainfall intensity and distribution very likely to decrease over Northeast India (Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura) from 9th July onwards.
- Moderate to Severe Thunderstorms accompanied with frequent cloud to ground lightning very likely over Uttar Pradesh, Bihar, Madhya Pradesh and Chhattisgarh 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 to 1730 hours IST of Yesterday): at most places over Sub-Himalayan West Bengal & Sikkim and Konkan & Goa; at many places over Jharkhand, Gangetic West Bengal, East Madhya Pradesh and Vidarbha; at a few places over Himachal Pradesh, East Uttar Pradesh, Bihar, Odisha, Chhattisgarh, West Madhya Pradesh and Madhya Maharashtra and at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Uttarakhand, Arunachal Pradesh, Saurashtra & Kutch, Andaman & Nicobar Islands, Telangana, Coastal and North Interior Karnataka, Coastal Andhra Pradesh & Yanam, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal and Lakshadweep.
- Heavy rainfall recorded at isolated places over Vidarbha.
- Heat wave conditions observed in isolated pockets over Haryana, Chandigarh & Delhi, Punjab, West Uttar Pradesh and East Rajasthan.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hrs IST of today): at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Haryana, Chandigarh & Delhi, Uttarakhand, Sub-Himalayan West Bengal & Sikkim, Madhya Maharashtra, East Uttar Pradesh, Bihar, Rayalaseema, Vidarbha, Tamilnadu, Puducherry & Karaikal and Konkan & Goa.
- Maximum Temperature Departures as on 08-07-2021: Maximum temperatures were markedly above normal (5.1°C or more) at isolated places over Haryana, Chandigarh & Delhi; appreciably above normal (3.1°C to 5.0°C) at most places over Himachal Pradesh and Punjab; at a few places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, West Uttar Pradesh, Rajasthan, Gujarat,

West Madhya Pradesh and Kerala & Mahe; at isolated places over Uttarakhand and Tamilnadu, Puducherry & Karaikal; above normal (1.6°C to 3.1°C) at most places over Madhya Maharashtra; at many places over Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and South Interior Karnataka; at isolated places over Gangetic West Bengal and Konkan & Goa. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Vidarbha; at a few places over East Uttar Pradesh, East Madhya Pradesh, Telangana and Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at most places over Chhattisgarh; at many places over Jharkhand, Rayalaseema and North Interior Karnataka; at isolated places over Odisha and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 44.3°C was reported at Ganganagar (West Rajasthan).

- Minimum Temperature Departures as on 08-07-2021: Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Punjab, ; at isolated places over East Rajasthan and West Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Uttarakhand, Gujarat region and Sub-Himalayan West Bengal & Sikkim and Kerala & Mahe; at a few places over Uttar Pradesh, Bihar, Marathwada; at isolated places over East Madhya Pradesh, Madhya Maharashtra and North Interior Karnataka. They were below normal (-1.6°C to -3.0°C) at isolated places over Tamil Nadu, Puducherry & Karaikal, Telangana, Rayalaseema and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country.

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

- 9 July (Day 1): Heavy to Very Heavy Rainfall very likely at isolated places over East Madhya Pradesh, Vidharbha, Chattisgarh, Coastal & South Interior Karnataka and Kerala & Mahe and Heavy Rainfall at isolated places over Uttarakhand, Uttar Pradesh, West Madhya Pradesh, Jharkhand, Odisha, Andaman & Nicobar Islands, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Konkan & Goa, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, North Interior Karnataka and Tamilnadu, Puducherry & Karaikal. Thunderstorm with gusty wind (speed reaching 40- 50 kmph) very likely at isolated places over Andaman & Nicobar Islands; with gusty wind (speed reaching 30-40 kmph) at isolated places over Punjab, Haryana, Chandigarh & Delhi and East Rajasthan and with lightning very likely at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Uttar Pradesh, Madhya Pradesh,

Vidarbha, Chhattisgarh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Madhya Maharashtra, Marathwada, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Karnataka and Tamilnadu, Puducherry & Karaikal. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over West Rajasthan. Heat Wave conditions very likely in isolated pockets over Punjab, Haryana and West Rajasthan. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest & Westcentral Arabian sea; Lakshadweep area and along & off Kerala & Karnataka coasts; South Bay of Bengal along & off Tamil Nadu & south Andhra Pradesh coasts, Comorin area, Gulf of Mannar and Andaman Sea. Fishermen are advised not to venture into these areas.

- 10 July (Day 2): Heavy to Very Heavy Rainfall very likely at isolated places over West Madhya Pradesh, Andaman & Nicobar Islands, Konkan & Goa, Coastal & South Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and Heavy Rainfall at isolated places over Himachal Pradesh, Uttarakhand, Haryana, Chandigarh & Delhi, Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Madhya Maharashtra, Marathwada, Telangana, Coastal Andhra Pradesh & Yanam and North Interior Karnataka. Thundersquall (speed reaching 50-60 kmph) very likely at isolated places over Andaman & Nicobar Islands; with gusty wind (speed reaching 30-40 kmph) at isolated places over East Rajasthan and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, Madhya Pradesh, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Gujarat Region, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Thunderstorm/Duststorm with lightning & gusty winds (speed reaching 40-50 kmph) very likely at isolated places over West Rajasthan. Strong Winds (speed 40-50 kmph gusting to 60 kmph) very likely over Southwest & Westcentral Arabian sea; Northeast Arabian Sea and along & off Gujarat coast; Lakshadweep area and along & off Kerala & Karnataka coasts; South Bay of Bengal; Westcentral bay of Bengal along & off Tamil Nadu & south Andhra Pradesh coasts, Comorin area, Gulf of Mannar and Andaman Sea. Fishermen are advised not to venture into these areas.
- 11 July (Day 3): Heavy to Very Heavy Rainfall likely at isolated places over Uttarakhand, West Madhya Pradesh, Andaman & Nicobar Islands, Konkan & Goa, ghat areas of Madhya Maharashtra, Telangana, Coastal Andhra Pradesh &

Yanam, Coastal & South Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and Heavy Rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, East Rajasthan, East Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Gujarat Region, Marathwada, Rayalseema and North Interior Karnataka. Thundersquall (speed reaching 50-60 kmph) likely at isolated places over Andaman & Nicobar Islands; with lightning & hail at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; with gusty wind (speed reaching 30-40 kmph) at isolated places over East Rajasthan and with lightning at isolated places over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Gujarat Region, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest & Westcentral Arabian sea; Northeast Arabian Sea and along & off Gujarat coast; Lakshadweep area and along & off Kerala & Karnataka coasts; South Bay of Bengal; Westcentral bay of Bengal along & off Tamil Nadu & south Andhra Pradesh coasts, Comorin area, Gulf of Mannar and Andaman Sea. Fishermen are advised not to venture into these areas.

- 12 July (Day 4): Heavy to Very Heavy Rainfall likely at isolated places over Uttarakhand, Andaman & Nicobar Islands, Konkan & Goa, ghat areas of Madhya Maharashtra, Telangana, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka, Kerala & Mahe and Tamilnadu, Puducherry & Karaikal and Heavy Rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Gujarat State, Marathwada, Rayalseema and North Interior Karnataka. Thundersquall (speed reaching 50-60 kmph) likely at isolated places over Andaman & Nicobar Islands; with gusty wind (speed reaching 30-40 kmph) at isolated places over East Rajasthan and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Gujarat Region, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest & Westcentral Arabian sea; Northeast Arabian Sea and along & off Gujarat coast; Lakshadweep area and along & off Kerala & Karnataka coasts; South Bay of Bengal; Westcentral bay of

Bengal along & off Tamil Nadu & south Andhra Pradesh coasts, Comorin area, Gulf of Mannar and Andaman Sea. Fishermen are advised not to venture into these areas.

- 13 July (Day 5): Heavy to Very Heavy Rainfall likely at isolated places over Uttarakhand, Andaman & Nicobar Islands, Konkan & Goa, ghat areas of Madhya Maharashtra, Telangana, Coastal Andhra Pradesh & Yanam, Coastal & South Interior Karnataka and Kerala & Mahe and Heavy Rainfall at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Odisha, Gujarat State, Marathwada, Tamilnadu, Puducherry & Karaikal, Rayalseema and North Interior Karnataka. Thundersquall (speed reaching 50-60 kmph) likely at isolated places over Andaman & Nicobar Islands; with gusty wind (speed reaching 30-40 kmph) at isolated places over East Rajasthan and with lightning at isolated places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, West Rajasthan, Gujarat Region, Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema and Tamilnadu, Puducherry & Karaikal. Strong Winds (speed 40-50 kmph gusting to 60 kmph) likely over Southwest & Westcentral Arabian sea; Northeast Arabian Sea and along & off Gujarat coast; Lakshadweep area and along & off Kerala & Karnataka coasts; South Bay of Bengal; Westcentral bay of Bengal along & off Tamil Nadu & south Andhra Pradesh coasts, Comorin area, Gulf of Mannar and Andaman Sea. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 09 Jul to 17 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)

### **Maharashtra-Vidarbha**

#### **Weather condition:**

Weekly average means (27 MW) at AICRPAM Akola centre: T max 36.4°C (normal 33.3°C), T min 26.2°C (normal 24.3°C). RH I 68 % (normal 80 %), RH II 40 % (normal 57 %). Evaporation rate 8.5 mm (normal 6.5 mm), Wind 7.7 km/hr (normal 11.6 km/hr) and BSH 7.9 hrs (normal 4.9 hrs). Maximum temperature across the week was 3.1°C above normal with a deviation of +0.1 to +5.4°C from normal. Minimum temperature across the week 1.9° above normal with a deviation of +0.6 to +2.9°C from normal.

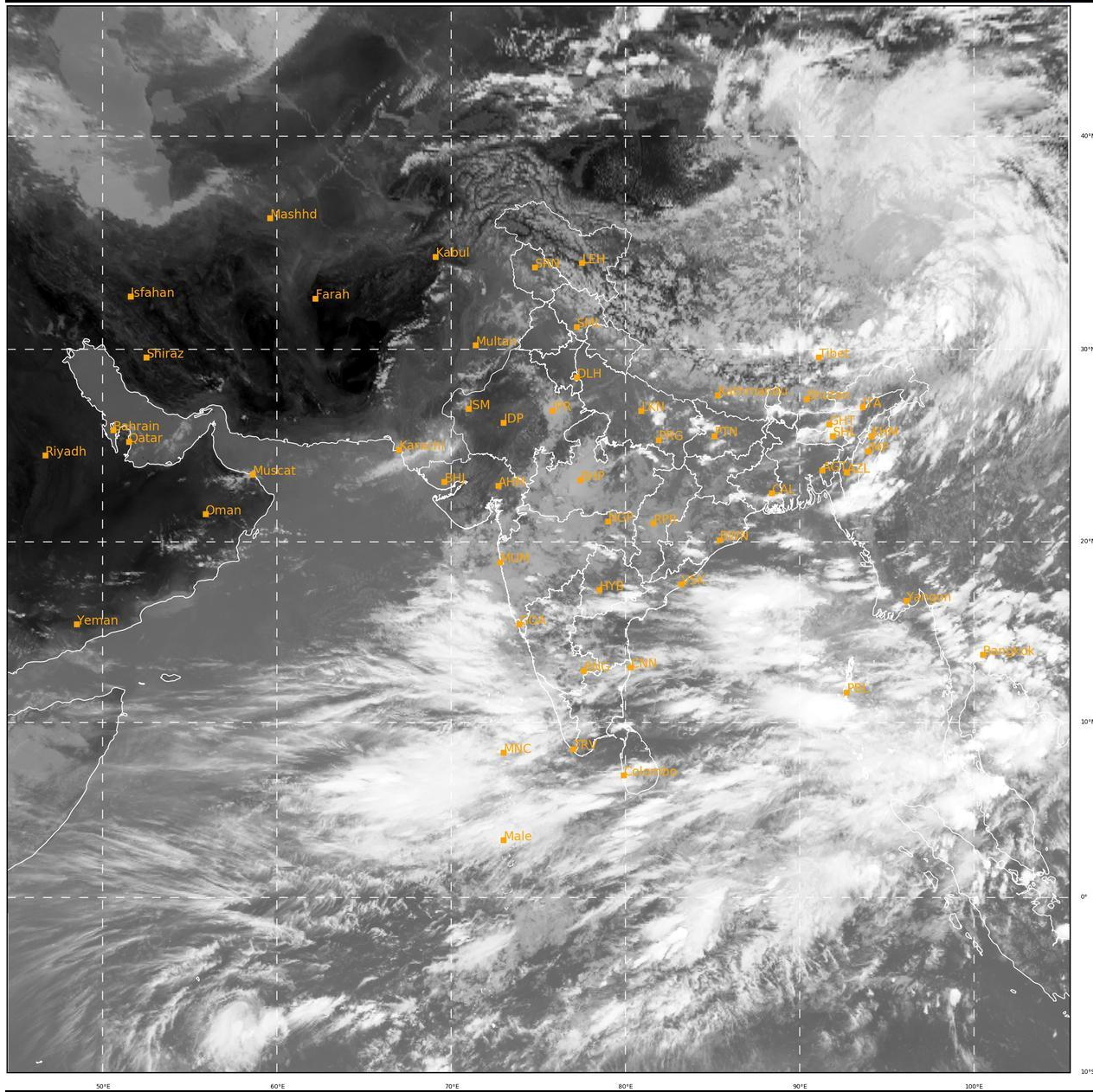
#### **Contingency measure:**

- The forecast (IMD) indicates heavy to very heavy rainfall and thunderstorm with lightning during 08-09 July and heavy rainfall during 10-12 July very likely to occur at isolated places over Vidarbha. The remaining sowing should be done only after receipt of sufficient rains. Avoid sowing under inadequate soil moisture condition. In earlier sown kharif crops undertake inter culture operation (weeding/hoeing) during clear weather, for management of weeds and improved soil aeration.
- In kharif planning for cotton crop recommended deshi varieties include AKA-5, AKA-7 and AKA-8 with seed rate of 12 to 15 kg/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.
- 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).
- Hereafter avoid sowing of greengram / blackgram as sole crop. It can be sown in intercropping after receipt of sufficient rain.
- Recommended sorghum varieties are early duration- CSH-30, medium duration- CSH-35, SPH-1635 and improved- SPV-669, PDKV- Kalyani, CSV-20, CSV-27, CSV-34.
- The new plantation should be done only after receipt of sufficient rains. In mandarin and sweet orange orchards, dead twigs be removed and cut ends be smeared with bordeaux paste (1 kg lime+ 1 kg CuSo4 + 10 litre water). Also

apply bordeaux paste at the base of the tree upto 1 m above ground level. During this month there is rapid spread of citrus canker in acid lime (lemon) hence the affected leaves, branches should be pruned and burnt. Spray copper oxychloride 180 gm with streptomycin 6 gm in 60 litres of water.

- Before transplanting chilli seedlings should be treated with Dimethoate 30 % @ 10 ml + Sulphur (W.P.) 80 % @ 3g + Mancozeb @ 2.5 g per 1 litre of water and brinjal seedlings should be treated with Dimethoate 30 % @ 10 ml in 10 litre of water. As forecast warning includes thunderstorm with lightning very likely to occur at isolated places, keep farm animals indoor during thunderstorm/lightning.



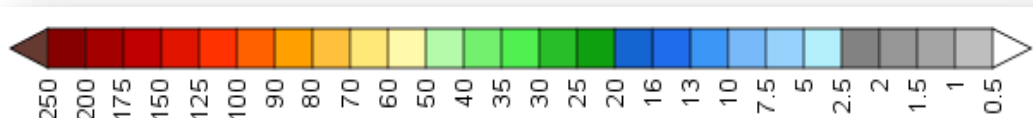
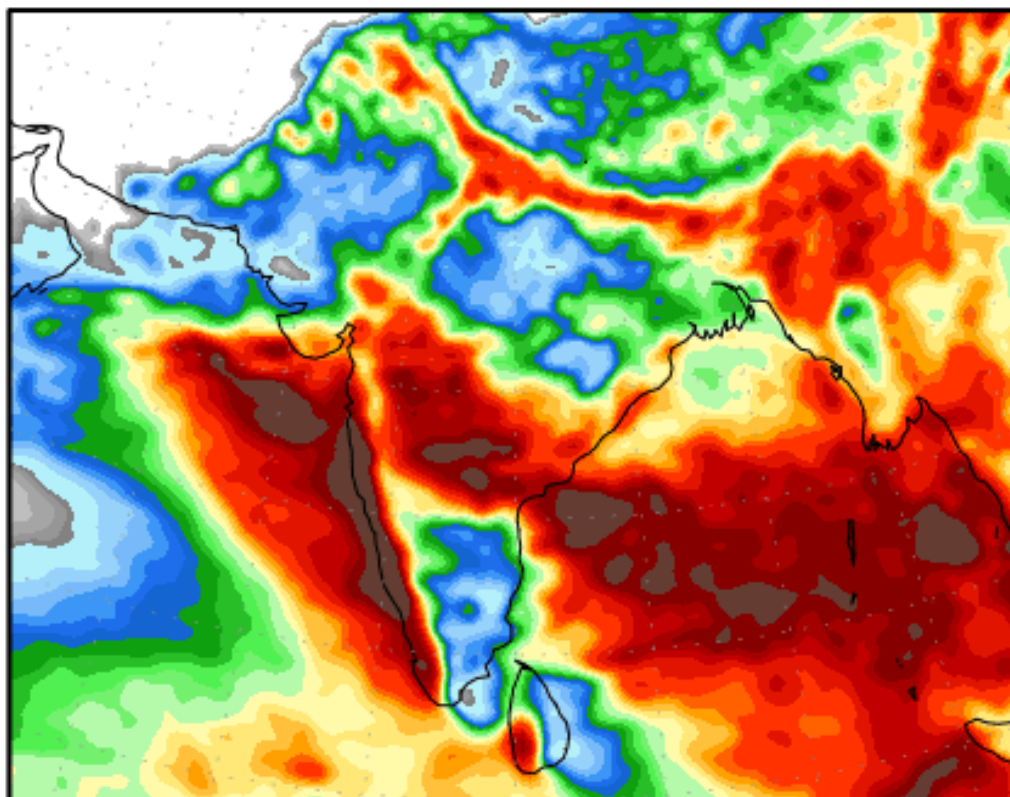


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IMD, DELHI

**Figure: 1. Latest available satellite picture as on 09 Jul 2021 at 1356 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 09 Jul to 17 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.*