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

Daily Crop Weather Information as on 03 March 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A fresh Western Disturbance is seen as a cyclonic circulation over Iran & neighborhood at mid-tropospheric levels. Under its influence, an induced cyclonic circulation very likely to form over southwest Rajasthan & adjoining Pakistan at lower tropospheric levels by tomorrow night, 04 March 2020. High moisture feeding on the Arabian sea is also likely over northwest India at lower & mid-tropospheric levels mainly on 5th & 6th March 2020. Under its influence, Widespread rainfall/snowfall is most likely over the Western Himalayan region from 05th to 07th March 2020. Fairly widespread to widespread rainfall very likely over Punjab, Haryana, Chandigarh, Delhi, and Uttar Pradesh during the same period. Thunderstorm accompanied with lightning, hail & gusty wind (speed reaching 30-40 kmph) is likely to occur at isolated over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Himachal Pradesh, Uttarakhand, Uttar Pradesh, north Rajasthan and at a few places over Punjab and Haryana during 05th-06th March 2020. Heavy rain/snowfall likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan from 05th to 07th and over Himachal Pradesh on 5th & 6th and over Uttarakhand on 06th March 2020; heavy rainfall at isolated places is also very likely over Punjab on 05th & 6th; over Haryana, Chandigarh and West Uttar Pradesh on 06th March 2020.
- Due to very likely confluence between westerly winds associated with the Western Disturbance and moist low-level easterly wind from Arabian Sea mainly during 04th-06th March over East & adjoining Central India moderate scattered to fairly widespread rainfall very likely over Odisha, West Bengal & Sikkim, Bihar, Jharkhand, Chhattisgarh, Madhya Pradesh, and Northeastern states during 04th-06th March 2020. Isolated thunderstorm accompanied by lightning/hail is also very likely over these areas during the same period.
- 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 many places over Assam & Meghalaya and Arunachal Pradesh; at isolated places over East Madhya Pradesh, Odisha, West Bengal & Sikkim, Coastal Karnataka, Kerala & Mahe, and Tamil Nadu, Puducherry & Karaikal.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over East Madhya Pradesh, Jharkhand, Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya.
- Maximum Temperature Departures as on 02-03-2020: Maximum temperatures were markedly above normal (5.1°C or more) at many places over Jammu, Kashmir & Ladakh; appreciably above normal (3.1°C to 5.0°C) at a few places over Himachal Pradesh; at isolated places over Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura and Kerala & Mahe; at a few places over Assam & Meghalaya; at isolated places over Punjab, West Uttar Pradesh, West Madhya Pradesh, Konkan & Goa, Gangetic West Bengal, Tamil Nadu, Puducherry & Karaikal, and Lakshadweep. They were below normal (-1.6°C to -3.0°C) at most places over Chhattisgarh; at many places over South Interior Karnataka; at a few places over Telangana and Arunachal Pradesh; at isolated places over East Madhya Pradesh, Madhya Maharashtra and North Interior Karnataka and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.2°C was recorded at Punalur (Kerala).
- Minimum Temperature Departures as on 03-03-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at many places over East Madhya Pradesh; at a few places over Rajasthan; at isolated places over Gujarat Region, West Madhya Pradesh, Uttar Pradesh, Bihar, Assam & Meghalaya, and Nagaland, Manipur, Mizoram & Tripura; above normal (1.6°C to 3.0°C) at many places over Punjab, Saurashtra & Kutch, Kerala & Mahe and Tamil Nadu, Puducherry & Karaikal; at a few places over Jammu & Kashmir and Ladakh; at isolated places over Haryana, Chandigarh & Delhi, West Bengal & Sikkim, Madhya Maharashtra, Vidarbha, Telangana, Coastal Karnataka, and Andaman & Nicobar Islands. They are below normal (- 1.6°C to -3.0°C) at isolated places over Coastal Andhra Pradesh and near normal over rest parts of the country. The lowest minimum temperature of 10.0°C recorded at Karnal (Haryana) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 03 March (Day 1): Thunderstorm accompanied with lightning & hail very likely at isolated places over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura; with lightning at isolated places over Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh, South Interior Karnataka, Tamil Nadu, Puducherry & Karaikal, and Kerala & Mahe.
- 04 March (Day 2): Thunderstorm accompanied with lightning & hail very likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan; with lightning at isolated places over Himachal Pradesh, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal & Sikkim, Odisha, Assam & Meghalaya, and Kerala & Mahe.
- 05 March (Day 3): Thunderstorm accompanied with lightning, Hail & gusty wind (speed reaching 30-40 kmph) likely at isolated places over Punjab, Haryana, Chandigarh & Delhi, and Uttar Pradesh; at isolated places over Gangetic West Bengal and Odisha; with Hail at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Himachal Pradesh, Uttarakhand, Rajasthan, Madhya Pradesh, Vidarbha, Chhattisgarh, Bihar, Jharkhand and with lightning at isolated places over SubHimalayan West Bengal & Sikkim, Assam & Meghalaya, Coastal Andhra Pradesh & Yanam, Telangana Kerala & Mahe. Heavy Rain/Snow likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, and Himachal Pradesh; Heavy Rain at isolated places over Punjab.
- 06 March (Day 4): Thunderstorm accompanied with lightning, Hail & gusty wind (speed reaching 30-40 kmph) likely at a few places over Punjab, Haryana, Chandigarh & Delhi, and Uttar Pradesh; with Hail at isolated places over Himachal Pradesh, Uttarakhand, Rajasthan, Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Vidarbha, West Bengal & Sikkim, Odisha, Assam & Meghalaya, and Coastal Andhra Pradesh & Yanam. Heavy Rain/Snow likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Himachal Pradesh, and Uttarakhand; Heavy Rain at isolated places over Punjab, Haryana, Chandigarh & Delhi, and West Uttar Pradesh.
- 07 March (Day 5): Thunderstorm accompanied with lightning likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan, Uttarakhand, East Madhya Pradesh, Chhattisgarh, Jharkhand, West Bengal & Sikkim, and Assam & Meghalaya. Heavy Rain/Snow is likely at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan.

• The weather outlook for seven days i.e., 03 to 11 March 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 (Konkan Region)

Weather condition:

The atmospheric condition was clear during morning hours around Dapoli during last week. Therefore 5.8 to 9.6 hours of bright sunshine was recorded last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V., Dapoli. The maximum and minimum temperatures ranged from 34.0 to 36.2 °C and 14.7 to 17.0 °C, respectively. Wind velocity ranged from 2.4 to 3.5 kmph and wind was blowing from a westerly direction.

Contingency measure:

- Lablab bean: Harvest mature lablab bean pod and dry it for 4 to 5 days in sunlight
 and then follow threshing or harvest the pods along with plant and dry for 3 to 4
 days in sunlight. After drying follow threshing of pods. Properly stored dried
 grain.
- Mango: To protect the pea-size fruits of mango from hoppers, thrips and powdery mildew disease, as per blossom protection schedule for mango crop, take a fourth spray of Thiomethoxam 25%WG @ 1 gm per 10 liter of water (15 days after 3rd spray) Also add Hexaconazole 5% @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water for control of powdery mildew. To improve production and quality of mango fruits, spray 1 % Potassium nitrate at pea, marble, and egg fruit stages.
- The pre-harvest bagging with newspaper bag of size 25 X 20 cm at marble to egg stage as per the recommendation of D.B.S.K.K.V. helps to reduce the fruit drop, increases the fruit weight, pulp weight, produce spongy tissue free fruit, controls the attack of fruit fly on fruits and produces spotless fruits of mango. The forecast for a decrease in humidity and an increase in temperature may lead to accelerating evaporation, hence provide irrigation to newly planted mango orchard also use a straw mulch to reduce evaporation losses.
- Coconut: There is the possibility of an incidence of rugose spiraling whitefly on coconut, Nymphs, and adults suck the sap from the lower surface of leaves and produce a honeydew sugary substance which develops the growth of sooty mold

fungus. For the protection of plants from whitefly, incidence spray water onto leaves regularly. Also, for control of black fungus spray 1% starch solution on leaves. The forecast for a decrease in humidity and an increase in temperature may lead to accelerating evaporation, hence provide irrigation to coconut orchard also use a straw mulch to reduce evaporation losses. There is a forecast for an increase in temperature, hence provide shed to the newly planted coconut orchard to protect from sun scorching.

- Arecanut: Due to the forecast for the decrease in humidity and an increase in temperature may lead to accelerating evaporation, hence provide irrigation to recant orchard
- Watermelon: Install cue lure "Rakshak" trap @ 4nos. per hectare at the time of initiation of flowering in watermelon crop for effective control of fruit fly. Collect and destroy all infected fruits. For the protection of watermelon fruits from sun scorching, cover the fruits with paddy straw or grasses.
- Okra: There is the possibility of incidence of aphids on okra crop which develops into the growth of black fungus on leaves and inflorescence. If the incidence is noticed, collect and destroy all infected shoots and leaves, spray Dimethoate 30%EC@10 ml per 10 liters of water. Also, use yellow sticky cards in the field to attract sucking pest
- Milch animal: Provide clean, hygienic and plenty amount of drinking water to farm animals. To reduce the stress of heat in farm animals, provide roughages by mixing with a solution of 1% jaggery and 0.5% salt separately. To protect animals from heat, sprinkle cold water on animals during the afternoon, it will help to maintain the body temperature.
- Poultry: There is a possibility for an increase in temperature during the day hence protect poultry birds from heat. In poultry shed, increase the water pot and provide adequate and clean water for drinking. Also, feed should be given in the morning or evening hours. To protect the birds from Ranikhet disease, vaccination against Ranikhet disease in poultry birds under the supervision of a veterinary officer is advocated.

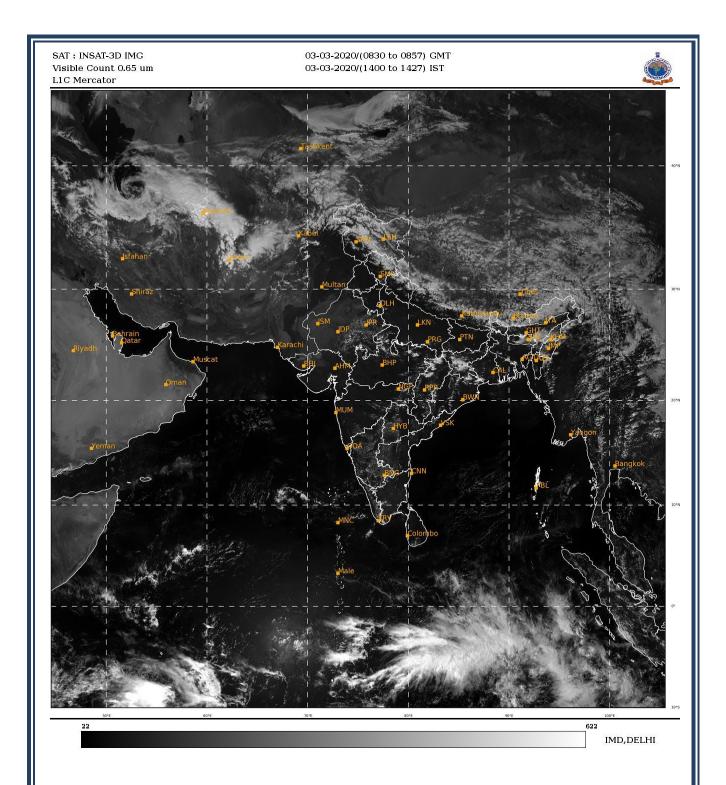
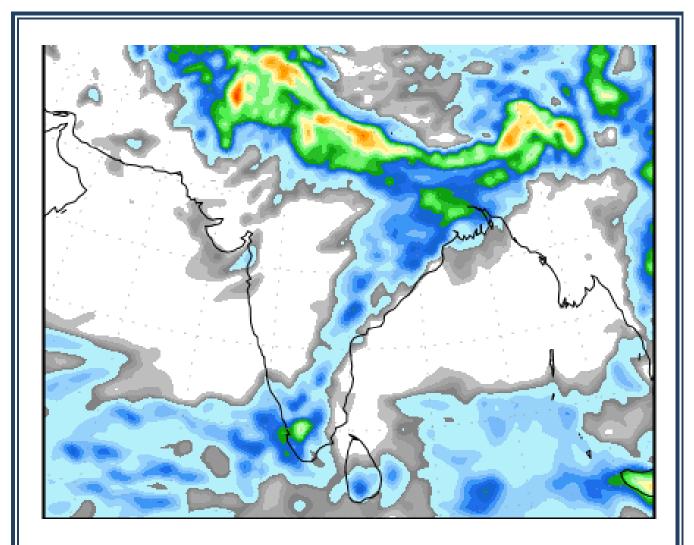


Figure: 1. Latest available satellite picture as on 03 March 2020 at 1427 Hrs (IST). (Source: IMD).



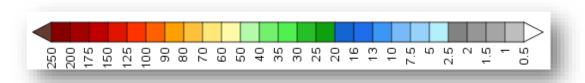


Figure: 2. Precipitation forecast for 03 to 11 March 2020 (Source: NOAA NCEP).

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