

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 14 December 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Fall in minimum temperatures by 3-5°C over most parts of northwest India during next 4 days. No significant change in minimum temperatures over most parts of Central & East India during next 2-3 days and fall by 2-4°C thereafter.
- Dense fog in isolated pockets very likely over Jammu division, Uttarakhand, Punjab, Haryana & Chandigarh, northwest Rajasthan, northwest Uttar Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Tripura on 14th Dec, 2020. Cold day to severe Cold day condition at a few places very likely over Punjab and Cold day condition at isolated places very likely over Haryana & Chandigarh and northwest Rajasthan during next 24 hours.
- Under the influence of strengthening of the easterly wave, scattered to fairly widespread rain/thundershowers very likely over Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Lakshadweep area during 16th-18th December, 2020. Isolated heavy falls also very likely over Tamil Nadu, Puducherry & Karaikal during 16th-18th December, 2020.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (during 0830 hours IST of yesterday to 0830 hours IST of today): at a few places over Arunachal Pradesh, West Madhya Pradesh and Lakshadweep and at isolated places over Andaman & Nicobar Islands, Assam & Meghalaya, Gangetic West Bengal, Jharkhand, East Madhya Pradesh, Madhya Maharashtra, Konkan & Goa, Marathwada, Vidarbha, Chhattisgarh, Telangana, Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka and Kerala & Mahe.
- Fog observed (0530 hours IST to 0830 hours IST of today): Very dense Fog in isolated pockets over Punjab and Dense fog in isolated pockets over south Jammu, Haryana, West Madhya Pradesh, north Konkan, north Assam, West Rajasthan, Bihar, Sub-Himalayan West Bengal and Tripura.
- Maximum Temperature Departures as on 13-12-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Odisha; above normal

(1.6°C to 3.0°C) at most places over North Interior Karnataka; at a few places over Assam & Meghalaya and at isolated places over Madhya Maharashtra, Telangana, Coastal Andhra Pradesh & Yanam, Tamil Nadu, Puducherry & Karaikal and East Madhya Pradesh. They were markedly below normal (-5.1°C or less) at most places over Punjab; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Haryana, Chandigarh & Delhi and West Rajasthan and at isolated places over West Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at a few places over East Rajasthan, Konkan & Goa, West Uttar Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim and at isolated places over Himachal Pradesh, Gujarat State, Gangetic West Bengal, Andaman & Nicobar Islands and Vidarbha and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 34.5°C was reported at Karwar (Coastal Karnataka) over the country.

- Minimum Temperature Departures as on 14-12-2020: Minimum temperatures are markedly above normal (5.0°C or more) at most places over Madhya Pradesh; at many places over Vidarbha, Madhya Maharashtra and Marathwada; at a few places over Chhattisgarh and Jharkhand and at isolated places over East Rajasthan; appreciably above normal (3.1°C to 5.0°C) at many places over Odisha and Gujarat region; at a few places over Konkan & Goa, Bihar, West Bengal & Sikkim and Assam & Meghalaya and at isolated places over Telangana and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Punjab and East Uttar Pradesh; at a few places over Uttarakhand, Coastal Karnataka, Nagaland, Manipur, Mizoram & Tripura and Arunachal Pradesh and at isolated places over West Rajasthan. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Saurashtra & Kutch and at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and Rayalaseema and near normal over rest parts of the country. The lowest minimum temperature of 4.5°C reported at Sikar (East Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 14 December (Day 1): Dense fog very likely in isolated pockets over Jammu region, Uttarakhand, Punjab, north Haryana, Chandigarh & Delhi, northwest Uttar Pradesh, northwest Rajasthan, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Cold day to severe cold day conditions at a few places very likely over Punjab and Cold day conditions at isolated places over Haryana, Chandigarh & Delhi and northwest Rajasthan. Thunderstorm with lightening very likely at isolated places over Madhya Maharashtra and Konkan & Goa.

- 15 December (Day 2): Thunderstorm with lightening very likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Madhya Maharashtra and Konkan & Goa.
- 16 December (Day 3): Heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe.
- 17 December (Day 4): Heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal. Cold Wave conditions at isolated places over Punjab, Haryana, Chandigarh & Delhi and north Rajasthan. Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe.
- 18 December (Day 5): Heavy rainfall likely at isolated places over Tamil Nadu, Puducherry & Karaikal. Cold Wave conditions at isolated places over Punjab, Haryana, Chandigarh & Delhi and north Rajasthan. Thunderstorm accompanied with lightning likely at isolated places over Tamil Nadu, Puducherry & Karaikal, Lakshadweep and Kerala & Mahe.
- The weather outlook for seven days i.e., 14 December to 22 December 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)

Jharkhand

Weather condition:

During this week atmospheric temperature has been 10°C. Maximum and minimum temperature range between 24.6 to 27.5°C and 5.4 to 8.2°C respectively. Maximum and minimum actual average temperatures are 25.8°C and 6.7°C, whereas normal maximum and minimum temperature are 23.9 °C and 8.6°C respectively.

Contingency measure:

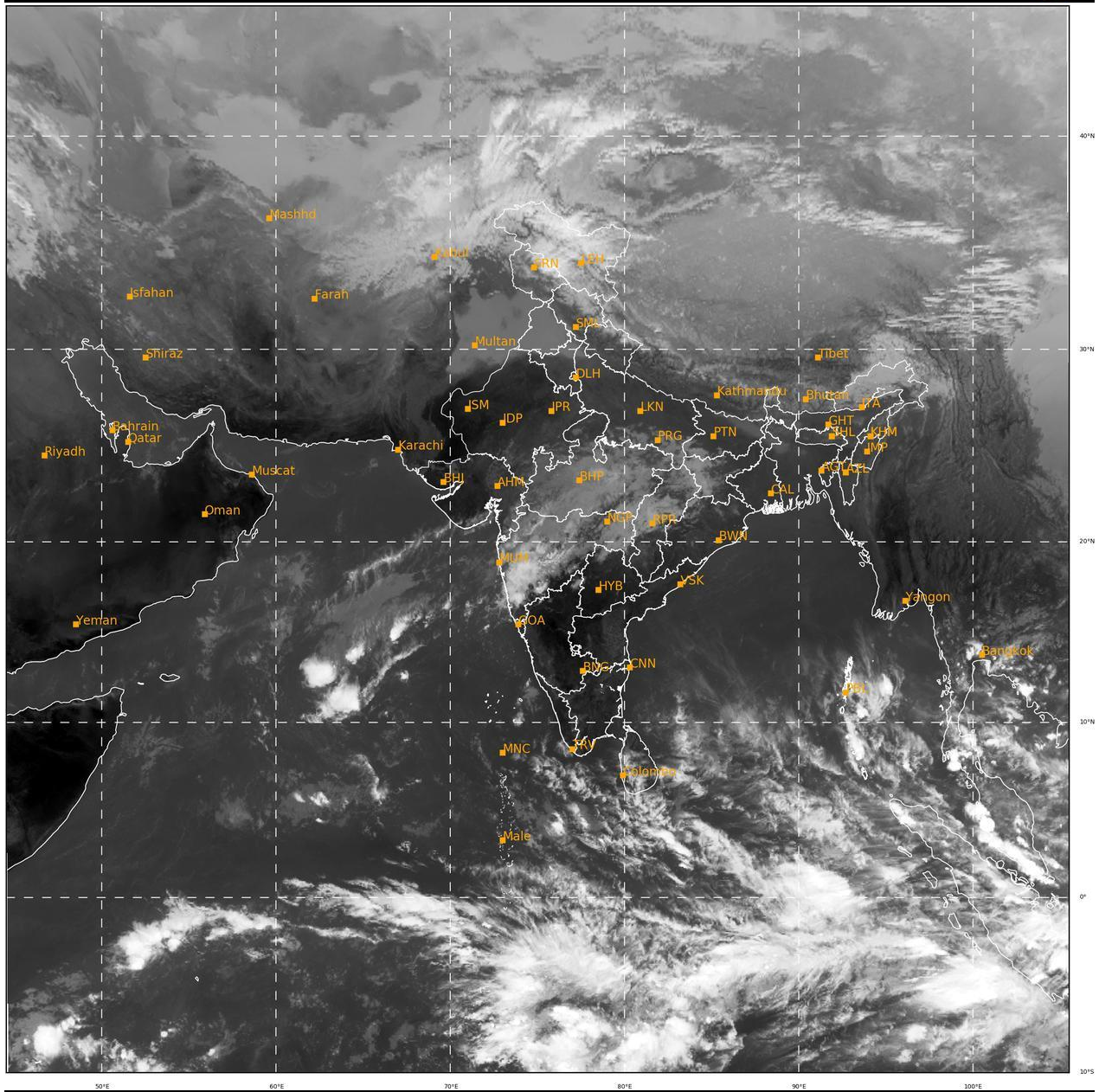
- General: Inter culture operation must be done to conserve soil moisture as well as to control weeds in different crop and vegetable field. After inter-culture operation irrigate the field and broadcast urea as per the requirement. Farmers wishing to cultivate wheat after harvesting of rice must select its late variety. Spray neem based insecticide in different crops/vegetables at initial stage to control the aphids, but at later stage (when the insect population is much more) spray insecticide like Prophenophos @ 1 ml. per liter of water.
- Wheat: To keep the field weed free, spray the weedicide Isoproturon (300 gm ai) and 2,4-D (200 gm ai) in 240 liter of water in one acre of land in between 25-35 days of sowing. Farmers who are not interested to use chemical pesticide may conduct inter - culture operation after 20-25 days of sowing. After inter culture operation irrigate the field and broadcast urea 20-22 kg per acre), next day of irrigation Farmers wish to cultivate wheat crop must select its recommended late varieties (H.I.-1583, D.B.W.-107, H.D.-3118 etc.). Late sowing requires slightly higher seed rate (50 kg per acre) and reduced spacing ie., 18 cm (row to row) and 7 cm (plant to plant). Before seeding the seed must be treated with the fungicide Bavistin (2 - 2.5 gm per kg seed).
- Mustard:In mustard crop an optimum spacing (10 cm between plant and 30 cm between row) is essential for its vigorous growth. Hence to maintain the optimum plant population per unit area thinning is essential after 25-30 days of sowing and extra plant may be used as sag.
- Rapeseed:Spray immediately the fungicide Redomyl M. Z. (@1.5 gm per liter of water) as and when the white powder appears on leaves and stems.
- Pigeon pea (Red gram/ Arhar) Most of the crops are at fruiting stage. Attack of Fruit borer insect is possible at this stage. Spray immediately the insecticide Endoxacarb @ 0.5 ml per liter of water to control the insect.
- Chick pea:Nipping (pruning of upper parts of the plant) should be done in 30 to 40 days (before flowering stage) old crops. It enables the plant to bear more and more branches and subsequently flowers and pods. After nipping farmers may generate

income by selling the pruned parts as Chana sag. However, this practice is strictly adopted in those field where soil moisture is not a limiting factor.

- Potato:Broadcast urea after earthing up in 25-30 old crop. Before urea application, weeding and irrigation is must. If the symptoms of blight disease (small, light brown spots appear on lower leaves and later it spread on upper leaves also, resulted into fall of leaves) appears in the crop immediately spray the fungicide Redomyl M. Z. (@ 1.5 gm per litre of water). In early potato, which is approaching maturity stage within 7-10 days, remove the upper leaves of the plant. Removing of leaves helps in hardening of the tuber and its skin. After digging of early potato, the field may be used for cultivation of onion.
- Vegetable Pea:At existing weather condition, there is a chance of the attack of powdery mildew disease, in which white powder appears on leaves, fruits and stem. To control this disease, spray Kairathen @ 1.5 ml per liter of water or Sulfex @ 3 gm per liter of water.

SAT : INSAT-3D IMG
IMG_TIR1 10.8 um
LIC Mercator

14-12-2020/(0800 to 0826) GMT
14-12-2020/(1330 to 1356) IST



404

937

IMD, DELHI

Figure: 1. Latest available satellite picture as on 14 December 2020 at 1356 Hrs (IST). (Source: IMD).

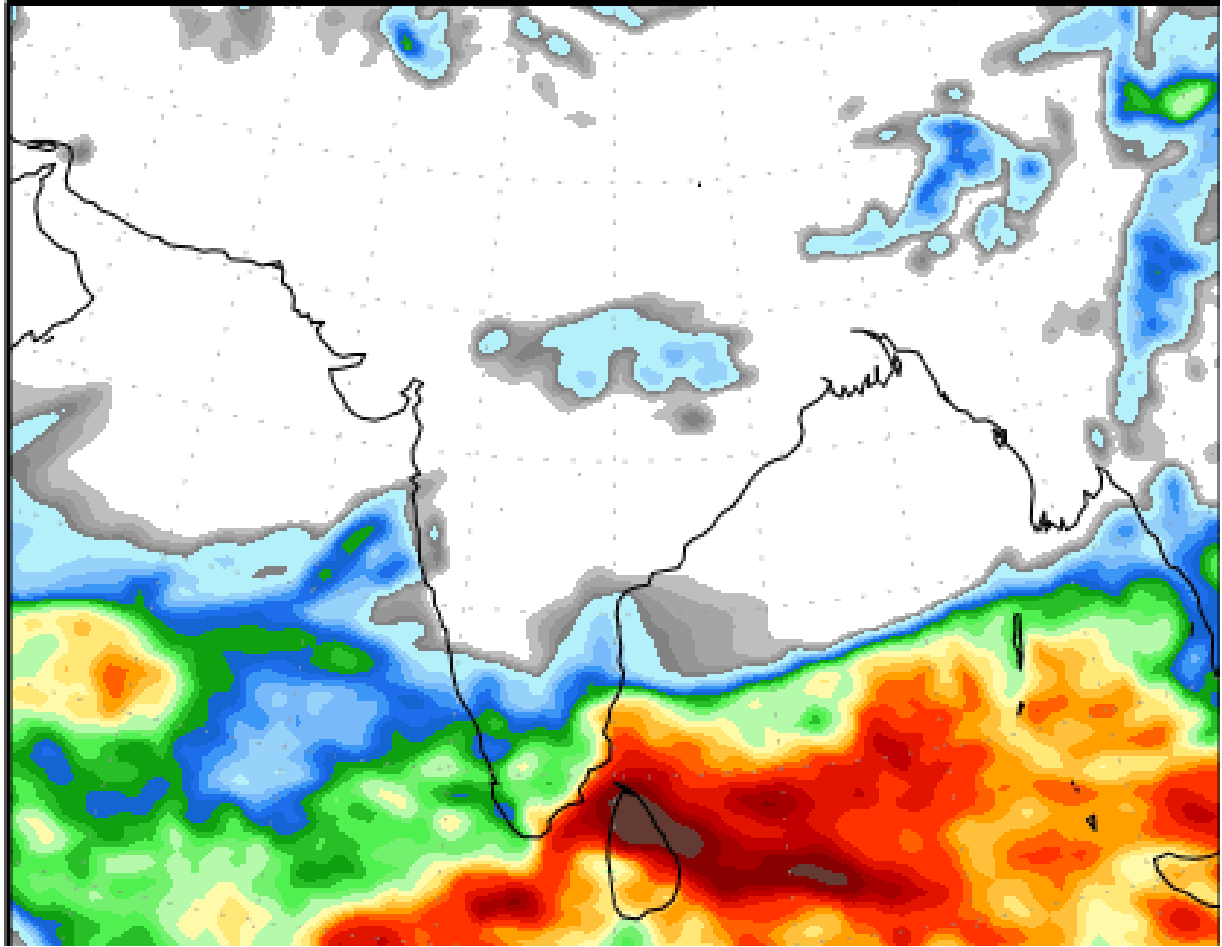


Figure:2. Precipitation forecast for 14 to 22 December 2020 (Source: NOAA NCEP).

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