

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

**Daily Crop Weather Information as on 29 January 2022**

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

**Significant Weather Features (IMD)**

- Rainfall Forecast & Warnings:
- Isolated to scattered light/moderate rainfall very likely over Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Nagaland Manipur-Mizoram-Tripura during 31st January to 02nd February, 2022.
- Isolated light rainfall very likely over Tamilnadu-Puducherry-Karaikal and Kerala-Mahe during next 2 days and dry weather thereafter.
- Light isolated rainfall/snowfall is likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during next 4 days and increase thereafter.
- Surface winds (speed 15-25 kmph) likely over Punjab, Haryana, Delhi and Uttar Pradesh during next 3 days.
- Under the influence of a fresh active Western Disturbance & its induced cyclonic circulation:
- Fairly widespread to widespread light/moderate rainfall/snowfall very likely over Western Himalayan Region during 02nd to 04th February. Isolated heavy rainfall/snowfall is also likely over Jammu, Kashmir, Gilgit, Baltistan & Muzaffarabad and Himachal Pradesh on 03rd February, 2022.
- Under the influence of interaction between mid-tropospheric southwesterlies associated with the above Western Disturbance and lower level southeasterlies from the Bay of Bengal:
- Scattered to fairly widespread light/moderate rainfall very likely over Punjab, Haryana, Chandigarh, Delhi and Uttar Pradesh during 02nd to 04th February, 2022.
- Scattered to fairly widespread light/moderate rainfall with isolated hailstorms likely over Bihar, Jharkhand, West Bengal & Sikkim on 03rd & 04th and over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura on 04th & 05th February, 2022.
- Cold Wave, Fog and Cold Day Warning:
- Gradual rise by 4-6°C in minimum temperatures till 03rd February and fall by 3-4°C thereafter very likely over most parts of Northwest & Central India.

- No significant change in minimum temperatures very likely over East India during next 2 days and gradual rise by 2-3°C during next 3 days.
- Gradual rise by 2-4°C in minimum temperatures during next 5 days very likely over Gujarat & Maharashtra.
- Maximum temperatures are very likely to rise by 3-5°C over most parts of Northwest & Central India till 2nd February and fall thereafter.
- Cold wave conditions in isolated pockets very likely over Punjab, East Rajasthan and Saurashtra & Kutch during next 24 hours and abate thereafter. Cold day conditions in isolated pockets very likely over Uttar Pradesh during next 24 hours and abate thereafter.
- Cold wave conditions in isolated pockets very likely over Madhya Pradesh & Odisha during next 2 days; over Chhattisgarh, Jharkhand and West Assam during next 24 hours and gradually abate thereafter. Cold Day conditions in isolated pockets very likely over Madhya Pradesh and Bihar during next 24 hours and gradually abate thereafter.
- Dense Fog conditions in isolated pockets in night/morning hours very likely over Himachal Pradesh, Uttarakhand and Terai belt of Uttar Pradesh during next 24 hours.
- The images showing the latest satellite picture in the figure. 1.

### **Main Weather Observations (IMD)**

- Rainfall/thundershower observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu-Kashmir-Ladakh-GilgitBaltistan-Muzaffarabad, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura and Tamil Nadu, Puducherry & Karaikal.
- Cold Day conditions at most places with Severe Cold Day conditions at isolated places prevailed over Vidharbha; Cold day to Severe Cold Day at a few places over East Uttar Pradesh, Madhya Pradesh & Bihar; Severe Cold Day conditions at isolated places over plains of Uttarakhand; Cold Day conditions at most places over Jharkhand and at isolated places over northwest Uttar Pradesh and north Chhattisgarh.
- Cold Wave conditions prevailed over most parts of Vidarbha and East Madhya Pradesh; in some parts of Marathwada and West Madhya Pradesh and in isolated pockets of East Rajasthan.
- Fog observed (at 0830 hours IST) of today: Dense to Very Dense Fog in isolated pockets over Uttarakhand and Uttar Pradesh; Dense Fog in isolated pockets over

Himachal Pradesh and Assam; Shallow to Moderated Fog in isolated pockets over Bihar and Shallow Fog in isolated pockets over Punjab, Haryana, East Madhya Pradesh and Sub-Himalayan West Bengal & Sikkim.

- Minimum Temperature Departures (as on 29-01-2022): Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Coastal Karnataka, Tamil Nadu, Puducherry & Karaikal and Andaman & Nicobar Islands; at isolated places over Kerala & Mahe; above normal (1.6°C to 3.0°C) at a few places over South Interior Karnataka and Rayalaseema. They are markedly below normal (-5.1°C or less) at many places over Vidarbha; at a few places over Madhya Pradesh and Marathwada; at isolated places over East Rajasthan and Telangana; appreciably below normal (-3.1°C to -5.0°C) at most places over Chhattisgarh; at many places over East Uttar Pradesh, Odisha, Jharkhand, Assam & Meghalaya and Madhya Maharashtra; at a few places over Haryana-Chandigarh-Delhi, West Uttar Pradesh, Bihar, West Bengal & Sikkim, Arunachal Pradesh and Gujarat State; at isolated places over Coastal Andhra Pradesh & Yanam; below normal (-1.6°C to -3.0°C) at most places over Nagaland-Manipur-Mizoram-Tripura; at a few places over Himachal Pradesh; at isolated places over West Rajasthan and near normal over rest parts of the country. The Lowest minimum temperature of 2.6°C reported at Bhilwara (East Rajasthan) and Nowgong (East Madhya Pradesh) over the plains of the country.
- Maximum Temperature Departures (as on 28-01-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at isolated places over Konkan & Goa; ; above normal (1.6°C to 3.0°C) at many places over Kerala & Mahe and at a few places over Coastal Karnataka. They were markedly below normal (-5.1 or less) at many places over Sub-Himalayan West Bengal & Sikkim; at a few places over Gangetic West Bengal, Madhya Pradesh & Vidharbha; at isolated places over East Uttar Pradesh, Bihar & Telangana; appreciably below normal (-3.1°C to -5.0°C) at most places over Jharkhand & Chhattisgarh; at many places over Odisha, Madhya Maharashtra & Marathawada; at a few places over West Uttar Pradesh, North Interior Karnataka & Tamil Nadu, Puducherry & Karaikal; at isolated places over Assam & Meghalaya & Nagaland, Manipur, Mizoram & Tripura; below normal (-1.6°C to -3.0°C) at most places over Uttarakhand & South Interior Karnataka; at a few places over Haryana, East Rajasthan & Gujarat Region; at a few places over Saurashtra & Kutch & Rayalaseema; at isolated places over Andaman & Nicobar Islands & Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the Highest maximum temperature of 36.5°C was reported at Kottayam ( Kerala) & Manglore (Coastal Karnataka) over the plains of the country.

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

- 29 January (Day 1): Dense to Very Dense Fog in isolated pockets very likely over East Uttar Pradesh and Dense Fog in isolated pockets over Himachal Pradesh, Uttarakhand and West Uttar Pradesh. Cold Day to Severe Cold Day conditions in isolated pockets very likely over East Uttar Pradesh and Cold Day conditions in isolated pockets over West Uttar Pradesh, Madhya Pradesh and Bihar. Cold Wave conditions in isolated pockets very likely over Punjab, East Rajasthan, Madhya Pradesh, Chhattisgarh, Jharkhand, Odisha, West Assam and Saurashtra & Kutch.
- 30 January (Day 2): Dense Fog in isolated pockets very likely over East Uttar Pradesh. Cold Day conditions in isolated pockets very likely over East Uttar Pradesh and Bihar. Cold Wave conditions in isolated pockets very likely over Madhya Pradesh and Odisha.
- 31 January (Day 3): No weather warning.
- 1 February (Day 4): No weather warning.
- 2 February (Day 5): Strong Winds (speed reaching 40-50 kmph gusting to 60 kmph) likely over Northeast Arabian Sea and along & off north Gujarat coast.
- The weather outlook for seven days i.e., 29 Jan to 06 Feb 2022 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)**

#### **Marathwada**

#### **Weather condition:**

From 22.01.2022 to 28.01.2022 during this week Weather condition of Parbhani center no rainfall was recorded. The Maximum temperature was range from 23.6 to 30.6 0C and minimum temperature range from 8.0 to 12.5 0C. Relative humidity (RH-I) ranged between 67 % - 93 % and relative humidity (RH-II) recorded was 29 % to 38 % The wind speed varied 3.4 to 5.4 km/hr.

#### **Contingency measure:**

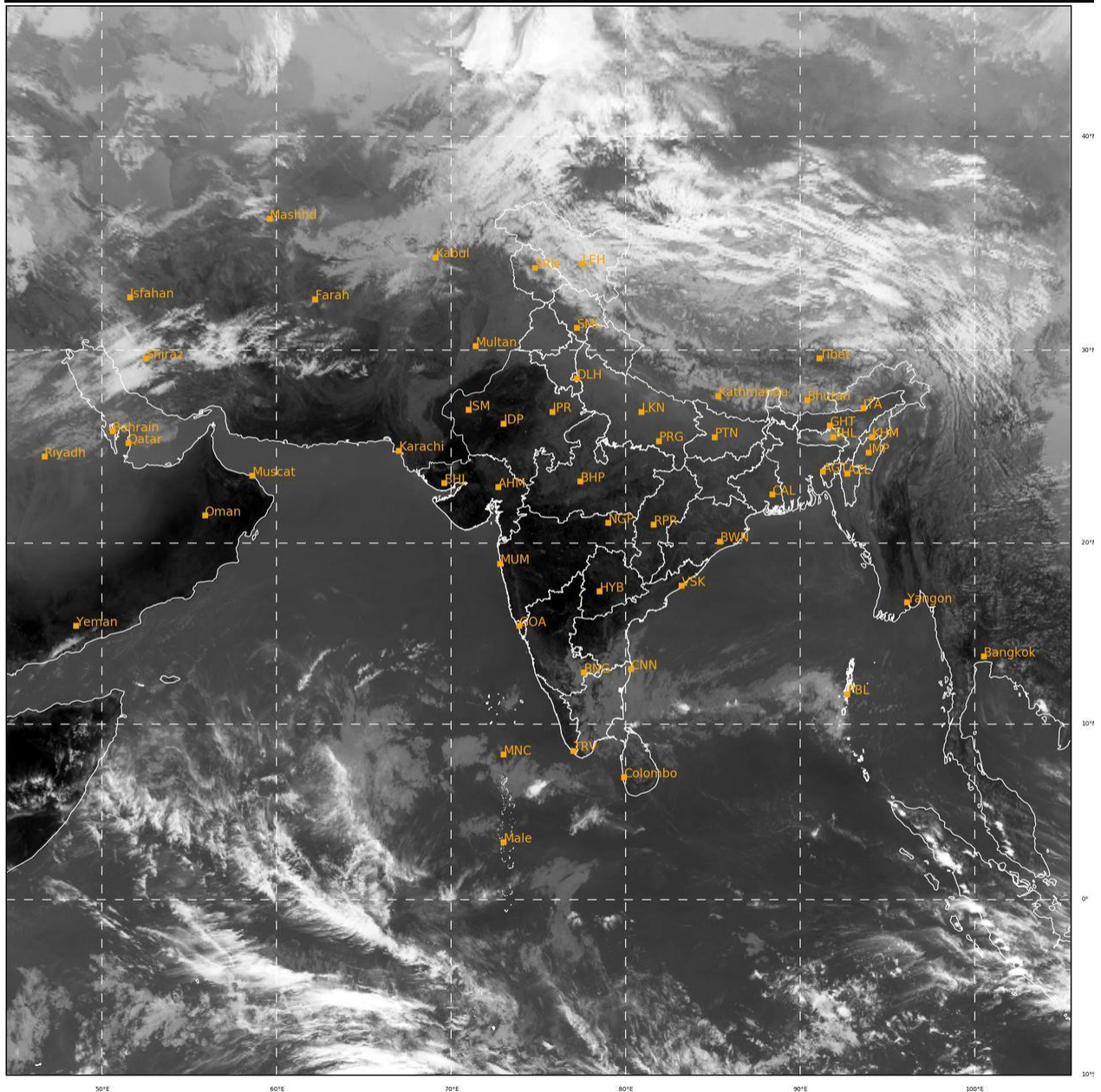
- Cotton: Avoid further extended growth after multiple picking. If the cotton crop is of 180 days then complete the picking of cotton as early as possible and remaining plant parts should be collected and destroy properly after final picking.
- Pigeonpea: Harvest the mature pigeonpea crop, threshing of harvested crop should be done after drying and store the grains at safe places.

- Rabi Sorghum: Infestation of stem borer and fall armyworm may observed in Rabi sorghum for management take a spray of Thiamethoxam 12.6 % + Lambda cyhalothrin 9.5 ZC @ 5 ml or Spinetoram 11.7 SC @ 4 ml per 10 liter of water.
- Summer Groundnut: As per forecast of fall in minimum temperature & cold wave at isolated places, postponed the sowing of summer groundnut. Seed treatment with Thiram @3 gm or Carbendazim @ 2.5 gm or Tricoderma @ 5 gm per Kg seed should be done, after that make use of Rhizobium liquid and PSB @ 10 ml per Kg seed, after seed treatment dry the seed in shade before sowing.
- Safflower: Infestation of Aphids may observed in safflower for management of take a spray of Dimethoate 30 % @ 13 ml or Acephate 75 % @ 15 gram per 10 liter of water. For management of leaf spot disease in safflower take a spray of Mancozeb + Carbendazim compound fungicide @ 20 gm per 10 liter of water.
- Chickpea: Due to decrease in minimum temperature flower dropping may observed in chickpea for management take a spray of Urea @2% (200 gm per 10 liter of water) where the gram crop is in flowering condition. If infestation of pod borer is observed in chickpea crop for management make use of T shaped bird perches @ 20 per acre and two pheromone traps per acre. take a spray of 5 % NSKE or Emamectin Benzoate 5 % @ 4.5 gm or Chlorantraniliprole 18.5% @ 3 ml or Flubendiamide 20% @ 5 gm per 10 liter of water.
- Wheat: To increase yield in wheat crop take two spray of 19:19:19 water soluble fertilizer @ 2 Kg per 100 liter of water during 50 to 55 DAS and 75 DAS. For the control of field rats in wheat crop prepare a mixture with 1 part Zinc Phosphide + 1 part Jaggery + 50 parts wheat flour and edible oil. Apply this mixture in the burrows and close them.
- Summer soybean: For management of sucking pests (whiter fly and jassid) in soybean Thiamethoxam 12.6% + Lambda Cyhalothrin 9.5% ZC @ 2.5 ml or Betacyfluthrin 8.49% + Imidaclopride 19.81% @ 7 ml per 10 liter of water.
- Sugarcane: Plantation of seasonal sugarcane crop can be done upto 15th February. For management of stem borer in Sugarcane crop take a spray of Chlorpyriphos 20% @ 25 ml or chlorantraniliprole 18.5 % @ 4 ml per 10 liter of water. For management of white fly in sugarcane take a spray Dimethoate 30% EC 36 ml per 10 liter of water.
- Turmeric: Harvesting of turmeric crop is generally start in the month of February, stop irrigation the crop 15 days before harvesting.
- Banana: As per forecast of fall in minimum temperature & cold wave at isolated places, to reduce the effect of low temperature in Banana orchard flood irrigation should be applied during evening. Provision of artificial wind breaks should be done around the orchard.

- Mango: For protection of inflorescence in Mango dusting of 300 mesh sulfur should be done so that powdery mildew and blight can be control. Jassids may observed in Mango orchard for management take a spray of Dimethoate 30% @ 13ml or Buprofezin 25% @ 20 ml or Thiamethoxam 25% 2 gm per 10 liter of water.
- Grape: As per forecast of fall in minimum temperature & cold wave at isolated places, Cracking may observed due to low temperature during early in the morning to protect the fruits from cracking proper irrigation management should be done in grape orchard. Provision of artificial wind breaks should be done around the orchard. Dip the bunch of grapes in solution of 20 PPM Gibberellic Acid.
- Citrus: Due to decrease in minimum temperature mulching should be done in citrus orchard. Irrigate the orchard during evening. Take a spray of 00:00:50 @ 15 gm per liter of water.
- Pomegranate: Cracking may observed in pomegranate due to difference in maximum and minimum temperature. To protect the fruits from cracking proper irrigation management should be done in pomegranate orchard. irrigate the orchard during evening i.e. after 4 pm to reduce the coldness in orchard.
- Floriculture: Due to decrease in minimum temperature, apply irrigation during evening to protect the floriculture crop from cold injury. Harvesting of mature flower (Chrysanthemum, Tuberose, Gladiolus) should be done.
- Vegetable: Due to decrease in minimum temperature, apply irrigation during evening to protect the vegetable crop from cold injury. For management of Thrips in Chilli take alternate spray of Emamectin Benzoate 5% SG @ 4 gm or Fenpropathrin 30% EC @ 3.5 ml or Spinosad 45% SL @ 3.2 ml or Fipronil 5% SC 20 ml or Acitamapride 7.7% SG @ 8 ml per 10 liter of water.
- Fodder Crop: Irrigation management should be done in fodder crops as per requirement
- Mulberry sericulture: To increase the mulberry leaf production growth promoter godrej (Vipul) 20 ml per 10 liter of water spray at 15 days interval 2 sprays will increase the leaf yield by 20 percent. If there is powdery mildew and leaf spot disease infestation spray Bavestin (Carbendazim) fungicide @ 20 ml per 10 liter of water. From second year onwards the yield of V-1 mulberry variety will be 20 tons per acre.
- Animal husbandry: Due to decrease in minimum temperature, Apply curtains of gunny bags to poultry, Sheep and Goat animal shed to protect the animals from cold, during early morning. Make use electric bulbs in poultry shed.

SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
LIC Mercator

29-01-2022/(0800 to 0827) GMT  
29-01-2022/(1330 to 1357) IST

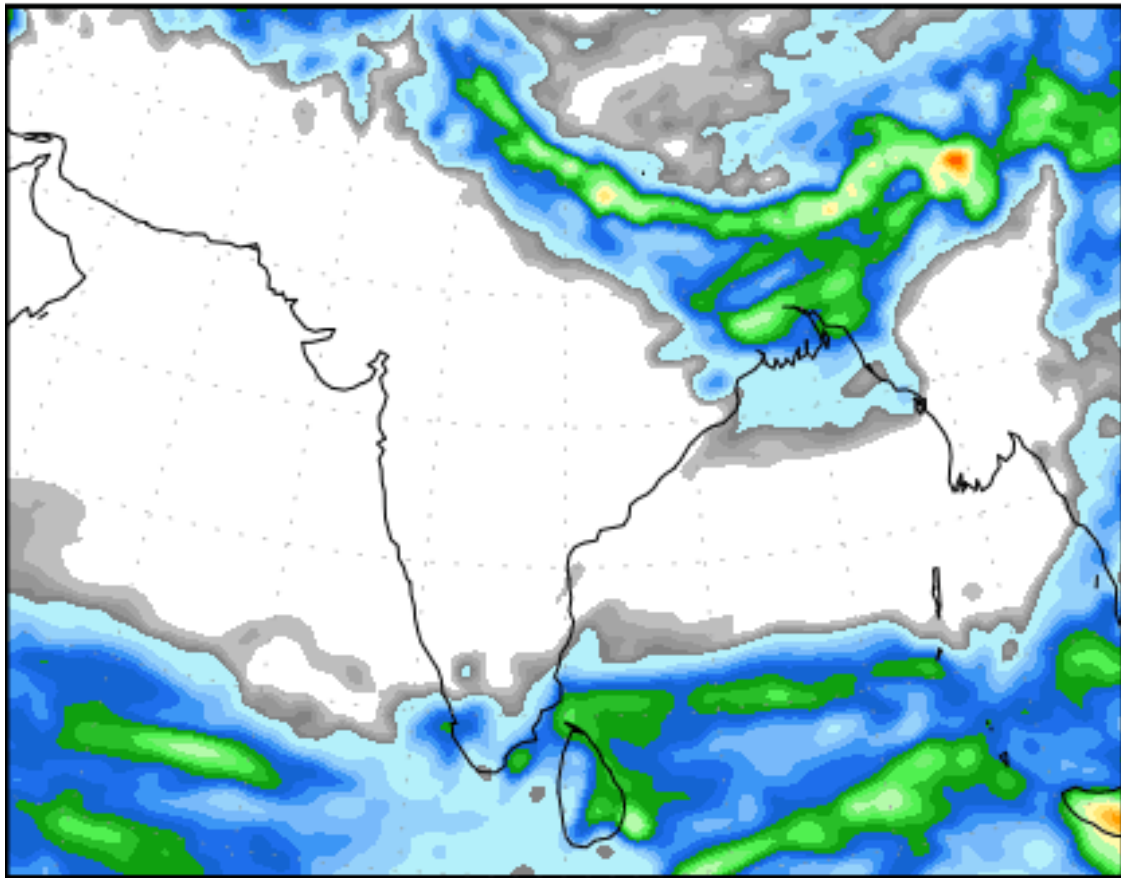


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IMD, DELHI

Figure: 1. Latest available satellite picture as on 29 Jan 2022 at 1357 Hrs (IST). (Source: IMD).



**Figure:2. Precipitation forecast for 29 Jan to 06 Feb 2022 (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.*