

# **All India Coordinated Research Project on Agrometeorology**

## **CRIDA, Santoshnagar, Hyderabad – 500 059**

### **Daily Crop Weather Information as on 04 February 2022**

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

#### **Significant Weather Features (IMD)**

- The Western Disturbance lies as a cyclonic circulation over north Pakistan & adjoining Jammu & Kashmir between 3.1 to 5.8 km above mean sea level with the trough aloft in middle & upper tropospheric levels with its axis at 7.6 km above mean sea level roughly along Long. 74°E to the north of Lat. 25°N. An induced Low Pressure Area lies over north Rajasthan & adjoining Haryana and associated cyclonic circulation in lower tropospheric levels. High moisture feeding from Arabian Sea and Bay of Bengal to northwest India at lower & middle tropospheric levels is very likely to continue during next 24 hours.
- Under its influence:
  - i) Fairly widespread to widespread light/moderate rainfall/snowfall very likely to continue over Western Himalayan Region on 04th February. Isolated Heavy rainfall/snowfall and hailstorm very likely over Uttarakhand on 04th February, 2022.
  - ii) Isolated to Scattered light/moderate rainfall very likely over Punjab, Haryana, Chandigarh, Delhi and Uttar Pradesh on 04th February.
- The WD and its induced Cyclonic Circulation/Low is very likely to move east-northeastwards during next 24 hours, as a result there will be high moisture feeding from Bay of Bengal to East & adjoining northeast India on 04th February, 2022 due to confluence between westerlies and southeasterlies from the Bay of Bengal at lower tropospheric levels. As a result:
  - i) Fairly widespread to widespread light/moderate rainfall with thunderstorm/lightning and hailstorm at isolated places very likely over Bihar, West Bengal & Sikkim, Odisha & Jharkhand on 04th February, 2022.
  - ii) Widespread light/moderate rainfall with thunderstorm/lightning likely over northeast India on 04th & 05th February, 2022. Isolated heavy rainfall/snowfall likely over Arunachal Pradesh on 04th & 05th and heavy rainfall over west Assam & Meghalaya on 04th February, 2022. Isolated hailstorm also likely over West Assam & Meghalaya and over Arunachal Pradesh on 04th February, 2022.

- Dense Fog conditions in isolated pockets in night/morning hours very likely over Punjab and Haryana, Chandigarh & Delhi 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 to 1730 hours IST of Yesterday): at most places over Himachal Pradesh and Uttarakhand; at many places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad and Punjab; at a few places over Haryana, Chandigarh & Delhi and Nagaland, Manipur, Mizoram & Tripura and at isolated places over Uttar Pradesh.
- Cold to Severe Cold Day conditions prevailed in isolated pockets over Haryana, Delhi and West Uttar Pradesh.
- Fog observed (during 0530 hours IST of today): Very Dense fog in isolated pockets over North Punjab, Northwest Rajasthan, Southwest Uttar Pradesh and Northwest Madhya Pradesh and Shallow to Moderate fog in isolated pockets over Haryana & Delhi.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0530 hours IST of today): at isolated places over North Haryana, East Uttar Pradesh, Bihar, Jharkhand, Odisha, Sub-Himalayan West Bengal & Sikkim and East Madhya Pradesh.
- Minimum Temperature Departures (as on 03-02-2022): Minimum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over East Rajasthan and Gujarat state; at many places over Punjab, West Rajasthan, Gangetic West Bengal; above normal (1.6°C to 3.0°C) at most places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Uttarakhand, Haryana, Chandigarh & Delhi, Kerala & Mahe; at many places over East Uttar Pradesh, West Madhya Pradesh and South Interior Karnataka; at a few places isolated places over East Madhya Pradesh, Odisha, Telangana and Tamilnadu, Puducherry & Karaikal. They were below normal (-1.6°C to -3.0°C) at a few places over Andaman & Nicobar Islands, SubHimalayan West Bengal & Sikkim; at isolated places over North Interior Karnataka and near normal over rest parts of the country. Yesterday, the Lowest minimum temperature of 7.9°C reported at Meerut (West Uttar Pradesh) over the plains of the country.
- Maximum Temperature Departures (as on 03-02-2022): Maximum temperatures were above normal (1.6°C to 3.0°C) at a few places over East Madhya Pradesh, Vidarbha and Rayalaseema and at isolated places over West Madhya Pradesh, Telangana, Kerala & Mahe, Tamilnadu, Puducherry & Karaikal, Odisha and

Gangetic West Bengal. They were markedly below normal ( $-5.1^{\circ}\text{C}$  or less) at Many places over Himachal Pradesh, Uttarakhand, Punjab and Haryana, Chandigarh & Delhi; at a few places over West Uttar Pradesh and at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan Muzaffarabad, West Rajasthan and Sub-Himalayan West Bengal & Sikkim; appreciably below normal ( $-3.1^{\circ}\text{C}$  to  $-5.0^{\circ}\text{C}$ ) at isolated places over East Rajasthan and Assam & Meghalaya; below normal ( $-1.6^{\circ}\text{C}$  to  $-3.0^{\circ}\text{C}$ ) at a few places over East Uttar Pradesh and Andaman & Nicobar Islands and at isolated places over Gujarat State, Konkan & Goa and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the Highest maximum temperature of  $36.1^{\circ}\text{C}$  was reported at Anantapur (Rayalaseema) over the country.

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

- 04 February (Day 1): Heavy rainfall/snowfall at isolated places very likely over Uttarakhand and Arunachal Pradesh and heavy rainfall at isolated places over Bihar, Jharkhand, West Bengal & Sikkim and west Assam & Meghalaya. Thunderstorm with lightning and hail at isolated places very likely over Uttarakhand, Bihar, Jharkhand, West Bengal & Sikkim, Odisha, Arunachal Pradesh and Assam & Meghalaya and with lightning at isolated places over Himachal Pradesh, Northwest Uttar Pradesh, East Uttar Pradesh, Chhattisgarh and Nagaland, Manipur, Mizoram & Tripura. Dense Fog in isolated pockets very likely over Punjab, Haryana-Chandigarh-Delhi.
- 05 February (Day 2): Heavy rainfall/snowfall at isolated places very likely over east Arunachal Pradesh. Thunderstorm with lightning at isolated places very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 06 February (Day 3): No Weather Warning.
- 07 February (Day 4): No Weather Warning.
- 08 February (Day 5): No Weather Warning.
- The weather outlook for seven days i.e., 04 Feb to 12 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)**

#### **Jammu**

#### **Weather condition:**

Cloudy weather prevailed during this week with 17.4 mm rainfall observed in two rainy day. The maximum was observed below normal by 1 to 4 °C and remain in the range of 15.4 to 18.4 °C. The minimum temperature remained mainly above normal by 1 to 3 °C during this period and recorded in range of 2.4 to 9.6 °C, respectively. The morning and afternoon relative humidity were observed in the range of 78 to 97 % and 52 to 88 %, respectively. The evaporation and sunshine remained in the range of 0.3 to 1.0 mm/day and 0.0 to 5.5 hrs, respectively.

### Contingency measure:

- Wheat: Normal sown Late/Very late sown (Irrigated) Flag leaf(70-80days)/ Jointing(50-55 days) CRI (21-25days)/ Tillering (30-45days)/ Apply urea as 2nd top dress in normal sown wheat . Weed control application in wheat crop by hand hoe or apply metribuzine @200 gm a.i./ha or isoproturon @ 0.75 a.i.+2,4-D ethyl ester @500ml /ha after receipt of rain for control of both types of weed (broad & narrow leaves), when crop is 30-35 days old.
- Oilseeds: Mustard: Flowering/pod formation Apply mancozeb @ 0.25%, if symptoms of white rust appear. Spray mancozeb @2.5gm/lit of water, if attack of alternaria blight is observed.
- Rabi pulses: Gram: Branching/pod formation Monitor crop for wilt and blight attack due to favourable weather conditions, if observed, apply bavistin/carbendazim @ 3gm/litre of water.
- Vegetables: Onion/garlic Potato Cole Crops (Cabbage, Cauliflower) Tomato/brinjal, capsicum Cucurbits Corm development Curing Head formation/harvesting Seed sowing Sowing Weeding and hoeing is recommended. Remove the haulms of crop and leave crop in field for curing for 15 days. Spray malathion @2ml./lit of water to control cabbage butterfly Nursery bed preparation is recommended due to sufficient soil moisture. Prepare field for sowing due to sufficient soil moisture.
- Floriculture: Marigold Chrysanthemum Gladiolus Nursery/ Transplanting Harvesting vegetative Nursery raising of hybrid marigold is recommended. Transplanting of nursery of pusa narangi gainda is recommended. Heading back of chrysanthemum and application of FYM is recommended. Earthing up at vattar condition is recommended.
- Button mushroom (A bispora): Fruiting Due to the chances of drop in maximum & minimum temperature farmers are advised to maintain the temperature 16°C to 18°C during fruiting and 23°C to 24°C during spawn run. Don't allow room temperature to fall below 16°C make necessary arrangement to increase the temperature during these days. Spray chlorothalonil @ 0.5% if competitor moulds

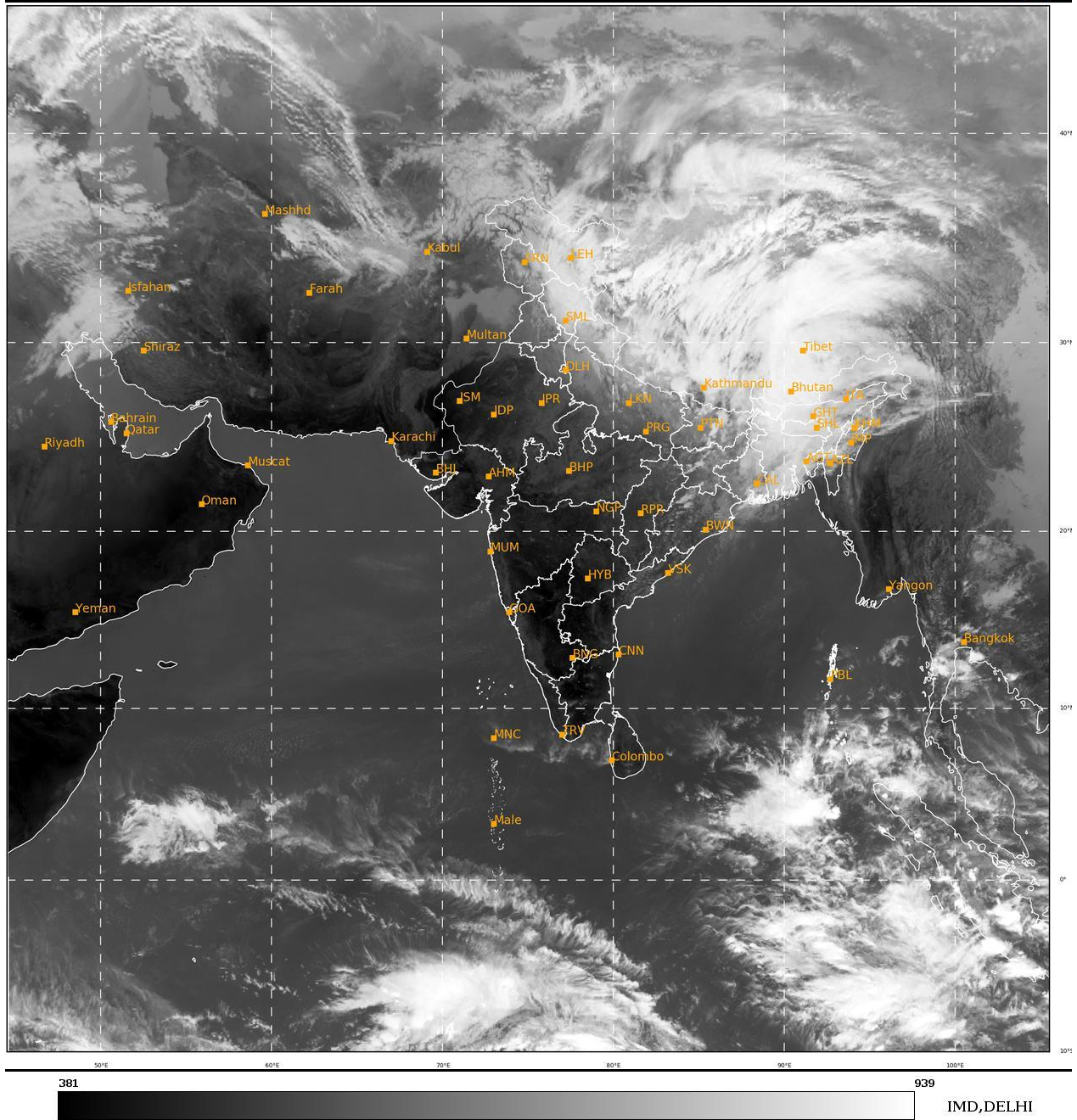
are observed. If wet bubble disease is observed dispose the infected fruit bodies after dipping them in 2% formalin solution and cover the infected area with common salt.

- Horticulture: Mango/ Citrus/ Guava Young Bearing Refill the pits for spring plantations after mixing FYM and chloropyriphos to control termites. Sterilize the pits prepared for guava plantation with formalin in wilt affected areas. Treat mango basin with 2% methyl parathion dust during clear weather to check mealy bug during clear weather. Spray dinocap @ 0.5ml/lit during clear weather to check powdery mildew in mango prevalent due to present RH. Prune and destroy dead, diseased shoots in citrus. Spray copper oxychloride @ 3gm/lit in citrus during clear weather to check dieback, gummosis in citrus canker prevalent due to present temperature. Drench guava basin with carbendazim @ 1gm/lit in citrus.
- Sericulture: Silkworm crop: Harvested cocoon crop Pack cocoon loosely in muslin cloth bags. Keep the bags in wire mesh covered racks to avoid rodent attack till marketing. Keep cocoon bags in well ventilated rooms to avoid dampness.
- Apiculture: Protect bee colonies from extreme climatic conditions through reduced entrance and proper packing.
- Fisheries: Fingerlings: Avoid manure/fertilizer/feed for some days, if algal bloom appears in the fish pond. Remove algal bloom by the addition of fresh water in to the fish pond. If possible add tube well water to raise the water temperature of the pond.
- Poultry: Keep the chicks warm by giving them artificial heat according to age. Protect the pregnant and milch animals from cold and feed them mineral mixture regularly. Give special care to young calves as they are more sensitive to pneumonia. Provide dry bedding during night. Use dry gunny bags as bedding material for protection against low night temperatures.
- Live stock: Dairy animals/ Sheep & Goat To avoid cracking or fissuring of teats in cold dry weather, clean the teats with warm water and apply ghee or butter after every milking. Give special care to young calves as they are more sensitive to pneumonia. Use dry gunny bags as bedding material for protection against low night temperatures. Do not allow animals to leave khurli early in morning directly to open area. Provide hay of green forage like stala, lobia, maize, jowar and bajra etc. with kadbi and other green grasses to the milch animals in order to enhance milk production and also to prevent from bloat (aafara). Protect the pregnant and milch animals from cold and feed them mineral mixture regularly.

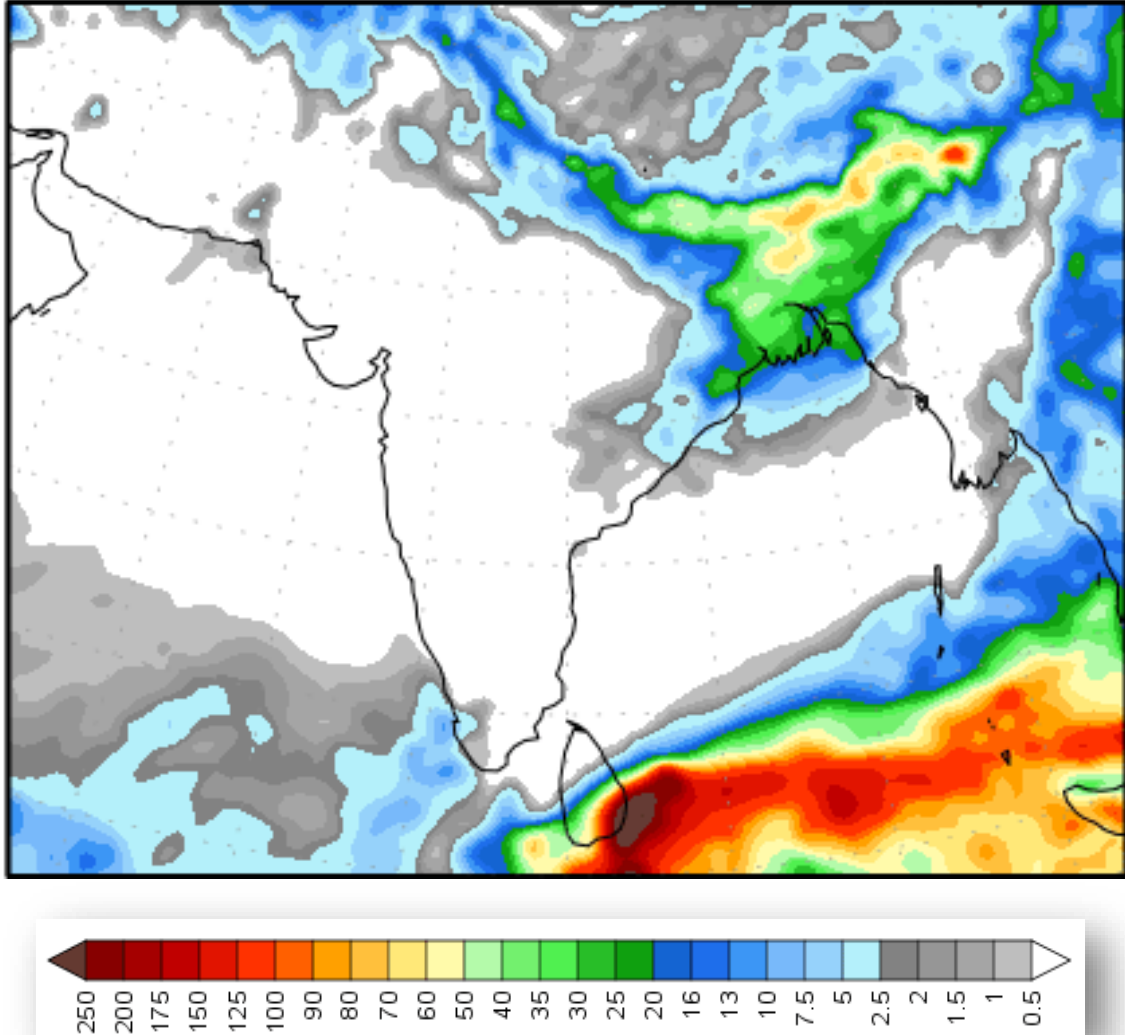


SAT : INSAT-3D IMG  
IMG\_TIR1 10.8 um  
L1C Mercator

04-02-2022/(0800 to 0826) GMT  
04-02-2022/(1330 to 1356) IST



**Figure: 1. Latest available satellite picture as on 04 Feb 2022 at 1356 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 04 Feb to 12 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.*