

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

**Daily Crop Weather Information as on 13 January 2022**

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

**Significant Weather Features (IMD)**

- Wet spell over East & adjoining Central India:
- A feeble Western Disturbance seen as a trough in upper tropospheric levels runs along Long. 72°E to the north of Lat. 32°N.
- A trough runs from North Interior Karnataka to north interior Odisha in lower tropospheric levels.
- A cyclonic circulation lies over south Konkan in lower tropospheric levels.
- Under the influence of above systems:
  - i) Isolated light rainfall/snowfall very likely over higher reaches of Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad on 13th & 14th January, 2022.
  - ii) Fairly widespread to widespread light/moderate rainfall very likely over Bihar, Jharkhand, Odisha, West Bengal & Sikkim, Telangana and Coastal Andhra Pradesh during 13th to 14th and isolated to scattered light/moderate rainfall over Vidarbha & Chhattisgarh during 13th to 14th January.
  - iii) Isolated Heavy rainfall very likely over Odisha, Coastal Andhra Pradesh and Telangana on 13th January, 2022.
  - iv) Isolated thunderstorms with lightning/Hail very likely over Chhattisgarh, Telangana and Odisha on today, the 13th January.
  - v) Fairly widespread precipitation very likely over Arunachal Pradesh on 13th and significant decrease thereafter with isolate rainfall on 14th & 15th January. Isolated rainfall very likely over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 13th -15th January.
- Under the influence of a cyclonic circulation over Southwest Bay of Bengal and another over south Tamil Nadu in lower tropospheric levels; isolated light rainfall/thundershower over Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe during next 5 days.
- Two fresh Western Disturbances very likely to affect northwest India, the 1st from 16th January and likely to cause isolated to scattered precipitation on 16th & 17th; the 2nd from 18th and likely to cause light/moderate scattered to fairly

widespread precipitation over Western Himalayan Region and light isolated to scattered rainfall over adjoining plains for subsequent 2-3 days.

- Minimum Temperatures, Cold wave and Fog:
  - i) Cold wave conditions in isolated pockets very likely over northeast Rajasthan, West Uttar Pradesh and West Madhya Pradesh during next 3 days.
  - ii) Cold day conditions in isolated pockets very likely over Gujarat state, Punjab, Haryana & Chandigarh, West Uttar Pradesh, Madhya Pradesh and north Rajasthan during next 2 days.
  - iii) Dense/Very Dense Fog in isolated pockets in night/morning hours very likely over Western Himalayan region, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 2 days; Punjab, Haryana, Chandigarh & Delhi, north Rajasthan during next 3 days and over Uttar Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim during next 5 days.
- 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 most places over Bihar, Jharkhand, West Bengal & Sikkim, Arunachal Pradesh and Assam & Meghalaya; at many places over Odisha and Coastal Andhra Pradesh & Yanam; at a few places over Nagaland, Manipur, Mizoram & Tripura, Chhattisgarh and Telangana and at isolated places over Uttarakhand, East Uttar Pradesh, East Madhya Pradesh, Vidarbha, Tamil Nadu, Puducherry & Karaikal, Kerala & Mahe and Rayalaseema.
- Heavy rainfall recorded (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Telangana.
- Hailstorm reported (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over West Bengal & Sikkim, Jharkhand, Bihar, Chhattisgarh & Telangana.
- Cold Day to severe cold day conditions observed in some parts of West Madhya Pradesh and Cold day conditions in some pockets over East Rajasthan and Gujarat state and in isolated pockets over Punjab, East Madhya Pradesh and West Rajasthan.
- Fog observed (at 0830 hours IST of today): Dense to very dense fog In isolated pockets over Punjab, Delhi, Rajasthan, Uttar Pradesh, West Madhya Pradesh, Bihar and Tripura and Moderate fog in isolated pockets over Uttarakhand, Jharkhand and Sub-Himalayan West Bengal & Sikkim.

- Minimum Temperature Departures (as on 13-01-2022): Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over Nagaland, Manipur, Mizoram & Tripura; appreciably above normal (3.1°C to 5.0°C) at many places over West Bengal & Sikkim, Jharkhand and Rayalaseema; at a few places over Odisha, Bihar, Coastal Andhra Pradesh & Yanam, Telangana, Tamil Nadu, Puducherry & Karaikal, Punjab and Andaman & Nicobar islands and at isolated places over Assam & Meghalaya; above normal (1.6°C to 3.0°C) at most places over Chhattisgarh; at many places over Uttarakhand; at a few places over Marathwada and at isolated places over West Rajasthan and East Uttar Pradesh. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Saurashtra & Kutch, East Rajasthan, West Madhya Pradesh and North Interior Karnataka and at isolated places over Konkan & Goa and East Madhya Pradesh; below normal (-1.6°C to -3.0°C) at most places over Coastal Karnataka; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over South Interior Karnataka and at isolated places over Madhya Maharashtra and near normal over rest parts of the country. Today, the Lowest minimum temperature of 4.2°C reported at Meerut (West Uttar Pradesh) over the plains of the country.
- Maximum Temperature Departures (as on 12-01-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Himachal Pradesh; at isolated places over Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at a few places over Rayalaseema and Kerala & Mahe; at isolated places over Assam & Meghalaya. They were markedly below normal (-5.0°C or less) at many places over East Rajasthan and Odisha; at a few places over West Madhya Pradesh, Saurashtra & Kutch and Telangana; at isolated places over Punjab and East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at most places over Vidarbha, Gujarat region and Marathawada; at many places over Jharkhand, Chhattisgarh, Madhya Maharashtra and Konkan & Goa; at a few places over West Uttar Pradesh, Gangetic West Bengal, West Rajasthan and North Interior Karnataka; at isolated places over Haryana, Chandigarh & Delhi; below normal (-1.6°C to -3.0°C) at many places over Uttarakhand; at a few places over East Uttar Pradesh, Bihar and Coastal Karnataka; at isolated places over Sub-Himalayan West Bengal & Sikkim and Andaman & Nicobar Islands and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 36.0°C reported at Punalur (Kerala).

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

- 13 January (Day 1): Heavy rainfall at isolated places very likely over Odisha, north Coastal Andhra Pradesh & Yanam and Telangana. Thunderstorm accompanied with lightning & hail at isolated places very likely over Odisha, Chhattisgarh, Telangana and with lightning at isolated places over Coastal Andhra Pradesh & Yanam. Cold wave conditions in isolated pockets very likely over northeast Rajasthan and West Madhya Pradesh. Cold day conditions in some parts very likely over West Madhya Pradesh and in isolated pockets over Gujarat state, east Madhya Pradesh, Punjab, Haryana, Chandigarh, north Rajasthan and Uttar Pradesh. Dense to Very Dense Fog in some parts very likely over Punjab, East Uttar Pradesh, north Rajasthan and in isolated pockets over Haryana, West Uttar Pradesh and dense fog in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, plains of Himachal Pradesh, Uttarakhand, northwest Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 14 January (Day 2): Thunderstorm accompanied with lightning at isolated places very likely over Chhattisgarh, Odisha, Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Telangana. Cold wave conditions in isolated pockets very likely over northeast Rajasthan, West Uttar Pradesh and West Madhya Pradesh. Cold day conditions in isolated pockets very likely over Gujarat state, West Madhya Pradesh, Punjab, Haryana, Chandigarh, north Rajasthan and Uttar Pradesh. Dense to Very Dense Fog in some parts very likely over Punjab, East Uttar Pradesh, north Rajasthan and in isolated pockets over West Uttar Pradesh and dense fog in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, plains of Himachal Pradesh, Uttarakhand, Haryana, northwest Madhya Pradesh, Bihar, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 15 January (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Coastal Andhra Pradesh & Yanam, Tamilnadu, Puducherry & Karaikal and Telangana. Cold wave conditions in isolated pockets very likely over northeast Rajasthan and West Uttar Pradesh. Cold day conditions in isolated pockets very likely over Uttar Pradesh. Dense to Very Dense Fog in some parts very likely over East Uttar Pradesh, north Rajasthan and in isolated pockets over West Uttar Pradesh and dense fog in isolated pockets over Punjab, Haryana, Bihar and Sub-Himalayan West Bengal & Sikkim.

- 16 January (Day 4): Dense to Very Dense Fog in isolated pockets likely over East Uttar Pradesh and dense fog in isolated pockets over West Uttar Pradesh, Bihar and Sub-Himalayan West Bengal & Sikkim.
- 17 January (Day 5): Thunderstorm accompanied with lightning at isolated places likely over Tamilnadu, Puducherry & Karaikal. Dense to Very Dense Fog in isolated pockets likely over East Uttar Pradesh and dense fog in isolated pockets over West Uttar Pradesh, Bihar, Odisha and Sub-Himalayan West Bengal & Sikkim.
- The weather outlook for seven days i.e., 13 Jan to 21 Jan 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)

### **Jharkhand**

#### **Weather condition:**

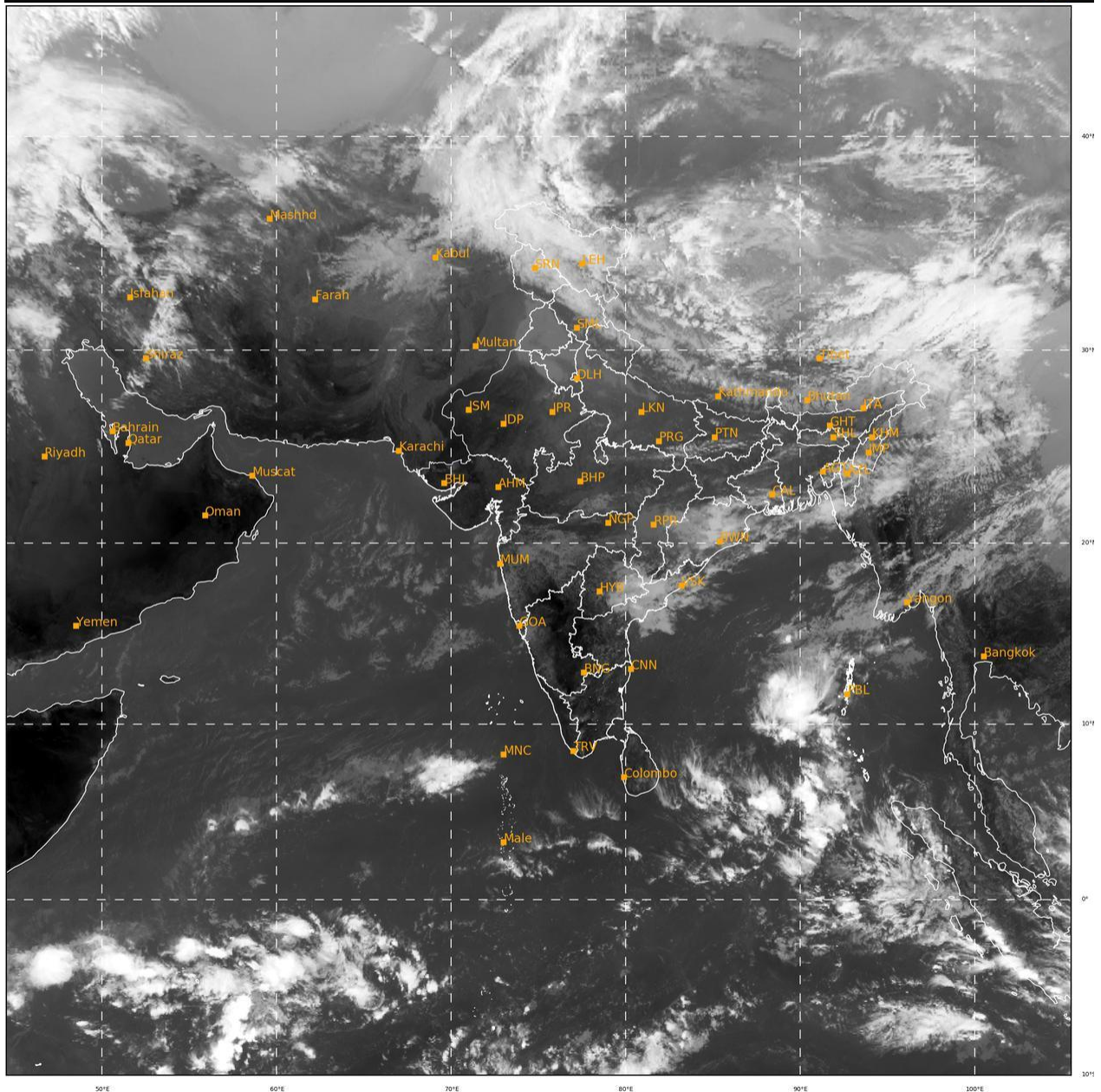
Daily maximum and minimum temperature ranged from 18.4 to 24.7 and 3 to 10.5 deg C, respectively. Weekly maximum and minimum temperature were 21.0 and 5.6 deg C against its normal value of 22.2 and 7.5 deg C, respectively.

#### **Contingency measure:**

- General: Inter culture operations in various crops/vegetables must be done to conserve soil moisture. On the basis of rain forecast, avoid spraying of any pesticide and after rain spell farmers may broadcast urea in crops/vegetables as per their requirement.
- Rice: Farmers wishing to cultivate summer rice may prepare seedbed (nursery) and arrange recommended seed, fungicide for seed treatment, manures and fertilizers. 10 dismil area of nursery bed is needed for transplanting of seedlings in one acre. Before sowing, seed must be treated with appropriate fungicide and apply 1 quintal FYM along with 5 kg Urea, 20 kg S.S.P. and 2 kg Muriate of Potash in nursery bed of 10 dismil area.
- 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: Apply urea @ 40 kg per acre after possible rain as per the requirement of the crop. 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, farmers having assured irrigation facility, may prepare the field for cultivation of different summer vegetables like cauliflower, cabbage, lady's finger, tomato, brinjal, capsicum and cucurbitaceous vegetables like bottle gourd, bitter gourd, pumpkin, water melon, musk melon, sponge gourd, cucumber etc. and the seedlings of desired vegetables may be raised in polybag.
- Fresh Water: Sell the matured fishes of such ponds, where the water dried up completely in February month. However, in those ponds, where water remain all around the year, add cow dung and lime in the pond as a natural foods and alternative feeds like Rice Bran and Mustard cake (each of 5 kg per day per acre area of pond) may also be added.

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

13-01-2022/(0800 to 0827) GMT  
13-01-2022/(1330 to 1357) IST

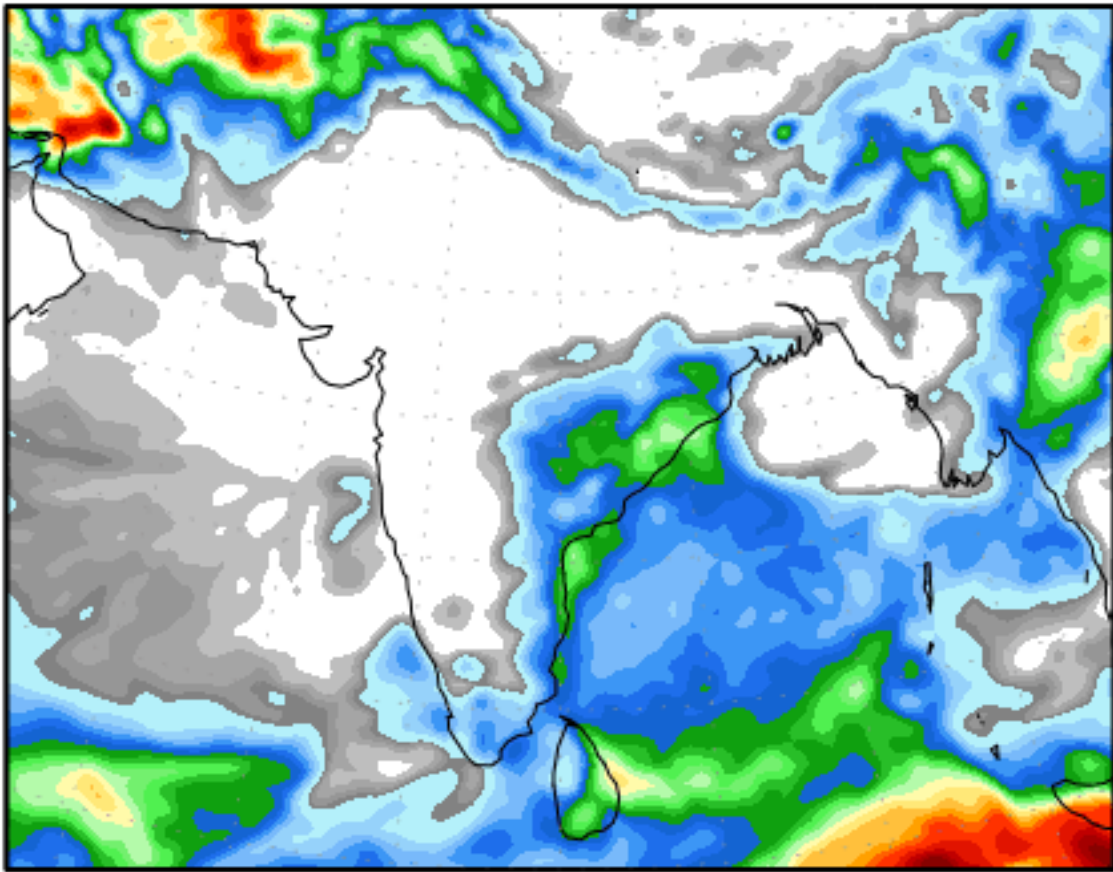


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IMD, DELHI

**Figure: 1. Latest available satellite picture as on 13 Jan 2022 at 1357 Hrs (IST). (Source: IMD).**



**Figure:2. Precipitation forecast for 13 Jan to 21 Jan 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.*