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

Daily Crop Weather Information as on 11 January 2022

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Significant Weather Features (IMD)

- Enhanced rainfall/thunderstorms activity over East & adjoining Central India:
- The Western Disturbance as a cyclonic circulation lies over northwest Rajasthan & adjoining central Pakistan in lower & middle tropospheric levels.
- A trough runs from North Interior Karnataka to north Madhya Maharashtra at lower tropospheric levels. A cyclonic circulation lies over north Konkan & neighbourhood and a trough runs from the the cyclonic circulation to Jharkhand at lower tropospheric levels. The cyclonic circulation over Southwest Bay of Bengal & neighbourhood at lower tropospheric levels. Confluence of winds from Arabian Sea and Bay of Bengal at lower tropospheric levels is very likely over East & adjoining central India during next 4 days.
- Under the influence of above systems:
 - i) Isolated light/moderate rainfall/snowfall very likely over Western Himalayan Region on 11th and dry weather for subsequent 4-5 days.
 - ii) Scattered to fairly widespread light/moderate rainfall very likely over Vidarbha, Chhattisgarh, Bihar, Jharkhand, Odisha West Bengal & Sikkim, Telangana and Coastal Andhra Pradesh during 11th to 14th January. Isolated Heavy rainfall very likely over south Chhattisgarh on 11th; over Odisha on 11th & 13th and over Telangana during 11th-13th January, 2021. Isolated thunderstorms with lightning/Hail very likely over Vidarbha, Chhattisgarh, Jharkhand, Bihar & Gangetic West Bengal on 11th; over Odisha on 11th & 13th; over Sub-Himalayan West Bengal & Sikkim on 12th January, 2022.
 - iii) Scattered to fairly widespread rainfall/snowfall very likely over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during 11th-13th January.
- Under the influence of cyclonic circulation over Southwest Bay of Bengal & neighbourhood at lower tropospheric levels, isolated light rainfall/thundershower over Tamilnadu, Puducherry & Karaikal and Kerala & Mahe during next 4-5 days.

- Cold wave conditions in isolated pockets very likely over Punjab, Haryana & Chandigarh during 13th-15th and over northeast Rajasthan during 12th-14th January, 2022. Cold day conditions in isolated pockets very likely over Punjab, Haryana & Chandigarh, West Uttar Pradesh, north Rajasthan, Madhya Pradesh and Gujarat state during next 2 days.
- Dense/very dense Fog in some/isolated pockets in night/morning hours very likely over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh during next 4-5 days; over north Rajasthan & north Madhya Pradesh during next 2 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
- 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 Uttarakhand; at many places over Telangana; at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Odisha, Chhattisgarh and Vidarbha and at isolated places over Uttar Pradesh, East Madhya Pradesh, Bihar and Jharkhand.
- Heavy Rainfall observed in isolated places over Telangana.
- Thunderstorm accompanied with Hail observed in isolated places over Telangana.
- Cold Day conditions observed in many parts and severe cold day conditions in isolated pockets over East Rajasthan and West Madhya Pradesh and cold day conditions in isolated pockets over Gujarat state.
- Fog observed (at 0830 hours IST of today): Dense to very dense fog in some parts over Punjab, Haryana, Chandigarh & Delhi and Bihar and in isolated pockets over Himachal Pradesh and northwest Rajasthan and Moderate fog in isolated pockets over Uttar Pradesh.
- Minimum Temperature Departures (as on 11-01-2022): Minimum temperatures are markedly above normal (5.1°C or more) at many places over Bihar and Jharkhand; at a few places over East Madhya Pradesh, East Uttar Pradesh and Gangetic West Bengal and at isolated places over Odisha; appreciably above normal (3.1°C to 5.0°C) at most places over Punjab; at many places over Assam & Meghalaya, Telangana, Marathwada and Rayalaseema; at a few places over Sub-

Himalayan West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over West Uttar Pradesh and Tamil Nadu, Puducherry & Karaikal; at a few places over Coastal Andhra Pradesh & Yanam and at isolated places over Madhya Maharashtra. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Gujarat State and at isolated places over Konkan & Goa; below normal (-1.6°C to -3.0°C) at many places over East Rajasthan and North Interior Karnataka; at a few places over West Madhya Pradesh and at isolated places over Himachal Pradesh and near normal over rest parts of the country. Today, the Lowest minimum temperature of 3.5°C is reported at Sikar (East Rajasthan) over the plains of the country.

• Maximum Temperature Departures (as on 10-01-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at a few places over Assam & Meghalaya and Bihar; at isolated places over West Bengal & Sikkim; above normal (1.6°C to 3.0°C) at many places over Nagaland, Manipur, Mizoram & Tripura; at a few places over East Uttar Pradesh, Coastal Andhra Pradesh & Yanam, Rayalaseema, Tamil Nadu, Puducherry & Karaikal and Kerala & Mahe. They were markedly below normal (-5.0°C or less) at many places over East Rajasthan; at a few places over West Madhya Pradesh and Vidarbha; at isolated places over Konkan & Goa and East Madhya Pradesh; appreciably below normal (-3.1°C to -5.0°C) at many places over Gujarat; at a few places over Himachal Pradesh, Haryana, Chandigarh & Delhi and Odisha; at isolated places over West Rajasthan; below normal (-1.6°C to -3.0°C) at a few places over Madhya Maharashtra, Telangana and Andaman & Nicobar Islands and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 35.2°C was reported at Punalur (Kerala).

Weather Warning during the next 5 days (IMD)

• 11 January (Day 1): Heavy rainfall at isolated places very likely over Odisha, south Chhattisgarh and Telangana. Thunderstorm accompanied with lightning & hail at isolated places very likely over Vidarbha, Chhattisgarh, Bihar, Jharkhand, Gangetic West Bengal, Odisha, Meghalaya and Telangana and with lightning at isolated places over Arunachal Pradesh. Cold wave conditions in isolated pockets very likely over northeast Rajasthan. Cold day conditions very likely in a few places over Haryana and isolated pockets over Punjab, West Uttar Pradesh, north Rajasthan, Madhya Pradesh and Gujarat state. Dense to very dense fog in some parts very likely over Punjab, Haryana, Chandigarh & Delhi and in isolated pockets over East Uttar Pradesh, northwest Rajasthan and dense fog in isolated

- pockets over Jammu division, plains of Himachal Pradesh and Uttarakhand, West Uttar Pradesh, northeast Rajasthan, north Madhya Pradesh.
- 12 January (Day 2): Heavy rainfall at isolated places very likely over Telangana. Thunderstorm accompanied with lightning & hail at isolated places very likely over Sub-Himalayan West Bengal and Sikkim and with lightning at isolated places over Vidarbha, Chhattisgarh, Odisha, Arunachal Pradesh, Assam & Meghalaya, Nagaland, Manipur, Mizoram & Tripura, Coastal Andhra Pradesh & Yanam and Telangana. Cold wave conditions in isolated pockets very likely over Punjab, Haryana, northeast Rajasthan. Cold day conditions very likely in isolated places over Punjab, Haryana, West Uttar Pradesh, north Rajasthan and Madhya Pradesh. Dense to very dense fog in some parts very likely over Punjab, Haryana, Chandigarh & Delhi and in isolated pockets over East Uttar Pradesh, northwest Rajasthan and dense fog in isolated pockets over Jammu division, plains of Himachal Pradesh and Uttarakhand, West Uttar Pradesh, northeast Rajasthan, north Madhya Pradesh.
- 13 January (Day 3): Heavy rainfall at isolated places very likely over Odisha and Telangana. Thunderstorm accompanied with lightning & hail at isolated places very likely over Odisha and with lightning at isolated places over Vidarbha, Chhattisgarh, Coastal Andhra Pradesh & Yanam and Telangana. Cold wave conditions in isolated pockets very likely over Punjab, Haryana, northeast Rajasthan. Dense to very dense fog in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi and dense fog in isolated pockets over Jammu division, plains of Himachal Pradesh and Uttarakhand and Uttar Pradesh.
- 14 January (Day 4): Thunderstorm accompanied with lightning at isolated places likely over Odisha, Coastal Andhra Pradesh & Yanam and Telangana. Cold wave conditions in isolated pockets likely over Punjab and Haryana. Dense fog in isolated pockets likely over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh.
- 15 January (Day 5): Dense fog in isolated pockets likely over Punjab and Haryana, Chandigarh & Delhi.
- The weather outlook for seven days i.e., 11 Jan to 19 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)

Marathwada

Weather condition:

From 01.01.2022 to 06.01.2022 during this week Weather condition of Parbhani center no rainfall was recorded. The Maximum temperature was range from 27.5 to 29.3 0C and minimum temperature range from 11.6 to 15.5 0C. Relative humidity (RH-I) ranged between 86 % - 93 % and relative humidity (RH-II) recorded was 36 % to 53 % The wind speed varied 1.6 to 3.8 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.
- Pigeon pea: Harvest the mature pigeonpea crop, threshing of harvested crop should be done after drying and store the grains at safe places.
- Chick pea: Due to cloudy weather condition if infestation of pod borer is observed in timely sown chickpea crop for management of pod borer 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: Due to cloudy weather condition if stem borer is observed in wheat crop for management take a spray of Cypermethrin 10 EC @ 11 ml per 10 liter of water.
- Safflower: Due to cloudy weather condition infestation of Aphids may observed in Safflower, for management take a spray of Dimethoate 30 % @ 13 ml or Acephate 75 % @ 15 gram per 10 liter of water. Due to cloudy and humid weather leaf spot disease may observed in safflower for management take a spray of Mancozeb + Carbendazim compound fungicide @ 20 gm per 10 liter of water.
- Rabi sorghum: For management of stem borer and fall armyworm in Rabi Sorghum crop 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.
- Grape: For management of Downy mildew in grape orchard take a spray of Amisulbrom 17.5% SC 0.375 ml or Fluopicolide 4.44% + Fosetyl AL 66.67% compound fungicide @ 2.5 gm or Dimethomorph 50% WP 0.50 to 0.75 gm per liter of water. To improve fruit size dipping of fruits in solution of 20 PPM Gibberellic acid should be done.

- Banana: Give support to banana trees with the help of bamboo sticks. Irrigation management should be done as per requirement in Banana orchard.
- Mango: For management of jassid in Mango orchard take a spray of Dimethoate 30% @ 13ml or Buprofezin 25% @ 20 ml or Thiamethoxam 25% 2 gm per 10 liter of water.
- Vegetable: For management of shoot borer and fruit borer in brinjal Make use of Pheromone traps @ 2 per acre or take a spray of Chlorantraniliprole 18.5 % SC @ 4 ml or Chloropyriphos 20 % EC @ 20 ml or Cypermethrin 10 % EC @ 11 ml per 10 liter of water
- Floriculture: Harvesting of mature flower (Chrysanthemum, Tuberose, Gladiolus) should be done.
- Animal: Now a days FMD disease is observed in animals Affected animal shows high fever, vesicles on nostrils, mouth and cloven foot occurs which ruptures on progression, depression, hypersalivation, loss of appetite, weight loss, growth retardation and a drop in milk production, which can persist even after recovery. For management Separation of FMD affected animals from healthy animals will prevent the spread of disease. Vaccination prevents the occurrence of the disease. Vaccination of the animals is carried out initially at the age of 3 months and then booster vaccination is carried out annually. Apply curtains of gunny bags to poultry, Sheep and Goat animal shed to protect the animals from cold, during early morning in future. As per requirement use electric bulbs in poultry shed.

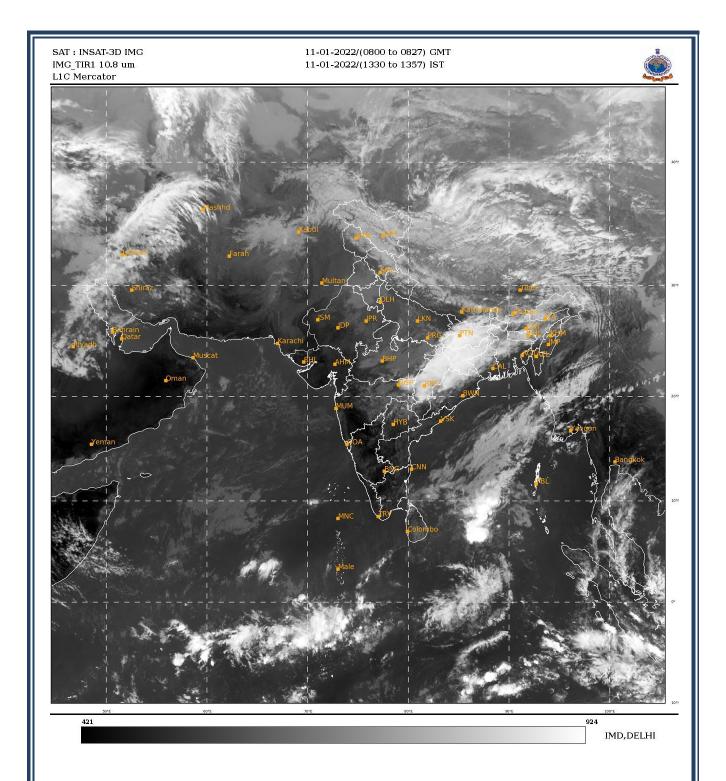


Figure: 1. Latest available satellite picture as on 11 Jan 2022 at 1357 Hrs (IST). (Source: IMD).

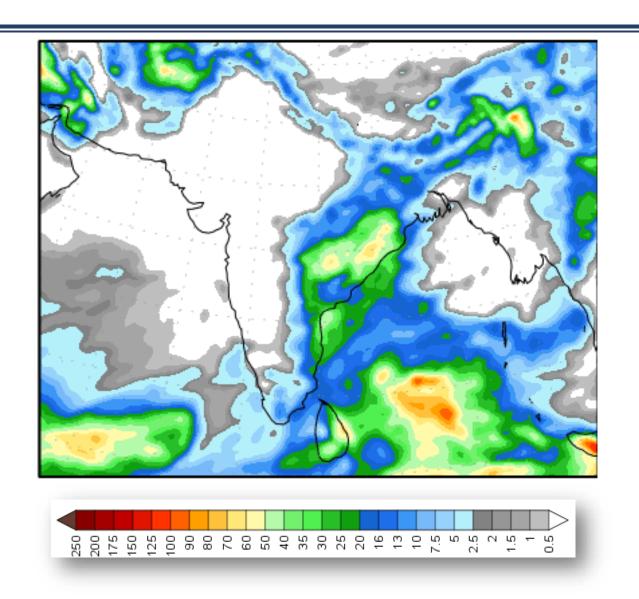


Figure: 2. Precipitation forecast for 11 Jan to 19 Jan 2022 (Source: NOAA NCEP).

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