

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 24 February 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Weather Systems and associated forecast & warnings:
 1. A Western Disturbance as a cyclonic circulation lies over north Pakistan & adjoining Jammu & Kashmir at lower tropospheric levels and another Western Disturbance over northeast Afghanistan in middle tropospheric levels.
 2. A cyclonic circulation lies over West Madhya Pradesh & adjoining East Rajasthan and a trough runs from this cyclonic circulation to Nagaland in lower tropospheric levels. Under the influence of above systems:
 - i) Scattered to fairly widespread light/moderate rainfall/snowfall with isolated thunderstorm & lightning activity very likely over Jammu-Kashmir-GilgitBaltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand during next 2 days and isolated rainfall/snowfall during subsequent 2 days. Isolated hailstorm also likely over Uttarakhand during next 2 days.
 - ii) Isolated to scattered light rainfall very likely over Punjab, Haryana-Chandigarh and West Uttar Pradesh during next 3 days. Isolated light rainfall very likely over Delhi on 25th & 26th February and over East Uttar Pradesh on 24th February, 2022.
 - iii) Isolated to scattered light/moderate rainfall with isolated thunderstorm & lightning very likely over Bihar, Jharkhand, Odisha and West Bengal & Sikkim on 24th & 25th February, 2022.
 - iv) Scattered to fairly widespread rainfall with isolated thunderstorm & lightning over Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura over the region on 25th & 26th February, 2022. Isolated hailstorm also likely over Assam & Meghalaya during next 2 days.
 3. A cyclonic circulation is likely to form over south Andaman Sea & neighbourhood around 27th February, 2022. Under its influence:
 - i) Widespread light/moderate rainfall with isolated heavy falls very likely over Andaman & Nicobar Islands on 27th & 28th February, 2022.
 - ii) Squally winds (40-50 gusting to 60 Kmph) is very likely over south Andaman Sea on 27th and over south Andaman Sea & adjoining Southeast Bay of Bengal on 28th February, 2022.

- 4. A fresh Western Disturbance is very likely to influence northwest India from 28th February, 2022. It is very likely to cause scattered to fairly widespread light/moderate rainfall/snowfall over Western Himalayan Region during 28th February to 02nd March, 2022 and isolated light rainfall over adjoining plains of northwest India on 01st & 02nd March, 2022.
- 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 Jammu-Kashmir-Gilgit-BaltistanMuzaffarabad; at a few places over Himachal Pradesh, Uttarakhand and Andaman & Nicobar Islands and at isolated places over West Uttar Pradesh, Gangetic West Bengal, Nagaland-Manipur-Mizoram-Tripura, Kerala-Mahe, Tamil Nadu-Puducherry-Karaikal and Andaman & Nicobar Islands.
- Thunderstorm observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Jammu-Kashmir-Gilgit-BaltistanMuzaffarabad and Himachal Pradesh.
- Minimum Temperature Departures (as on 24-02-2022): Minimum temperatures are markedly above normal (5.1°C or more) at isolated places over West Rajasthan; appreciably above normal (3.1°C to 5.0°C) at many places over East Rajasthan, Madhya Maharashtra and Marathwada; at a few places over Haryana-Chandigarh-Delhi, East Uttar Pradesh, East Madhya Pradesh and Andaman & Nicobar Islands; at isolated places over West Madhya Pradesh, Vidarbha and Jharkhand; above normal (1.6°C to 3.0°C) at many places over Uttarakhand, Bihar and Gangetic West Bengal; at a few places over Himachal Pradesh, Odisha, Chhattisgarh and Saurashtra & Kutch; at isolated places over Punjab, Gujarat Region and Tamil Nadu-Puducherry-Karaikal. They are below normal (-1.6°C to -3.0°C) at a few places over Arunachal Pradesh and South Interior Karnataka; at isolated places over Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Coastal Andhra Pradesh and near normal over rest parts of the country. Today, the lowest minimum temperature of 7.3°C is reported at Amritsar (Punjab) over the plains of the country.
- Maximum Temperature Departures (as on 23-02-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over Madhya Pradesh; at a few places over Vidarbha; at isolated places over Madhya Maharashtra and Jharkhand; above normal (1.6°C to 3.0°C) at most places over East Rajasthan; at many places over West Rajasthan; at a few places over Arunachal Pradesh, Marathwada, Coastal Karnataka and Kerala & Mahe; at

isolated places over Haryana-Chandigarh, Assam & Meghalaya, Odisha, Gujarat Region and Tamil Nadu-Puducherry-Karaikal. They were markedly below normal (-5.1°C or less) at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad; appreciably below normal (-3.1°C to -5.0°C) at isolated places over Himachal Pradesh; below normal (-1.6°C to -3.0°C) at isolated places over East Uttar Pradesh, West Bengal & Sikkim and Coastal Andhra Pradesh & Yanam and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.8°C was reported at Akola (Vidarbha) over the country.

Weather Warning during the next 5 days (IMD)

- 24 February (Day 1): Thunderstorm accompanied with lightning and hail at isolated places very likely over Uttarakhand and Assam-Meghalaya and with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, East Uttar Pradesh, East Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, West Bengal-Sikkim and Andaman & Nicobar Islands.
- 25 February (Day 2): Thunderstorm accompanied with lightning and hail at isolated places very likely over Uttarakhand and Assam-Meghalaya and with lightning at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab, Haryana-Chandigarh-Delhi, Bihar, Jharkhand, West Bengal-Sikkim, Odisha, Nagaland-Manipur-Mizoram-Tripura and Andaman & Nicobar Islands.
- 26 February (Day 3): Thunderstorm accompanied with lightning at isolated places very likely over Arunachal Pradesh, Assam & Meghalaya, Nagaland-Manipur-Mizoram-Tripura and Andaman & Nicobar Islands.
- 27 February (Day 4): Heavy rainfall at isolated places likely over Andaman & Nicobar Islands. Thunderstorm accompanied with lightning & gusty winds (speed 30-40 kmph) at isolated places likely over Andaman & Nicobar Islands. Squally Weather (speed 40-50 kmph gusting to 60 kmph) likely over south Andaman Sea. Fishermen are advised not to venture into these areas.
- 28 February (Day 5): Heavy rainfall at isolated places likely over Andaman & Nicobar Islands. Thunderstorm accompanied with lightning & gusty winds (speed 40-50 kmph) at isolated places likely over Andaman & Nicobar Islands. Squally Weather (speed 40-50 kmph gusting to 60 kmph) likely over south Andaman Sea & adjoining Southeast Bay of Bengal. Fishermen are advised not to venture into these areas.
- The weather outlook for seven days i.e., 24 Feb to 04 Mar 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)

Himachal pradesh

Weather condition:

The maximum temperature ranged between 16.0 to 18.5 °C which was above normal by 1.1 to 2.5 °C and minimum temperature ranged between 3.0 to 5.0 °C which was below normal by 1.0 to 3.7 °C. No rainfall was received during the week against the normal of 33.2 mm. The relative humidity varied between 32-85 % and sunshine hours between 9.0-10.5 hrs/day with variable sky conditions (Octa 0-2). The evaporation rate varied 2.4-2.9 mm per day.

Contingency measure:

- Rabi Crops: Wheat: In wheat crop where weeds are 2-3 leaves stage, spray isoproturon @ 70 g or Vesta @ 16 g per 30 litres of water in one kanal for the control of weeds.
- Storage of Grains: Grains should be properly dried to right moisture level before storing. Godowns should be properly cleaned by removing all the grains and other storage matter of previous crop.
- Mustard: Thinning and weeding is recommended in timely sown mustard crop. Keeping in view of relative humidity farmers are advised for monitoring of mustard crop against attack of white rust. If infection is high than spraying of Dithane - M -45 @ 2 gram/ litre of water of water is advised. Keeping in view of weather, farmers are advised for monitoring of mustard crop against aphid attack.
- Fodder Crops: Intercultural operations on already sown berseem, lucerne and oats for fodder of Rabi season also advised. The lantana weeds in the grasslands may be cut so that regenerated growth during September can be sprayed with 1% glyphosate for its control.
- Vegetable Crops: Add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.
- Onion & Garlic: Sowing of garlic and onion is advised. Farmers are advised to monitor their fields regularly. Spray of Imidacloprid 17.8 % SC@ 1.0 ml/3 lit of water is recommended against white flies and other sucking pests in all crop and vegetables when sky is clear.
- Radish & Turnip: Thinning of turnip, carrot and radish is advised. Maintain a plant to plant distance of 7 -10 cm.

- Cabbage & Cauliflower: Advised to complete transplanting of seedlings of cabbage, cauliflower, knoll khol and broccoli are advised. Mix well rotten FYM prior to transplanting. The downy mildew is expected in cruciferous vegetables, for control spray redomil M -Z @ 25 g per litres of water at 15 days interval.
- Potato: Farmers are advised to start earthing -up in potato if crop has attained a height of 15 -22 cm. If so required, the practice may be repeated after 15 days . Due to high relative humidity, infection of blight may occur in potato and tomato. Constant monitoring is advised. If symptoms appears than spray of Carbandizam @ 1.0 gm / litre of water or Dithane - M -45 @ 2.0 gm / litre of water is recommended.
- Poly House Agriculture: Advised tomato, cucumber and capsicum sowing and transplanting. For control of powdery mildew, aphids and spodoptera spray recommended chemicals. Keep yellow sticky trap in polyhouse and after transplanting drench plant with imidachlorpid. Leaf spot/blight is expected in shimla mirch and tomato for control spray tilt 1ml per liters of water. TEA: Training, skiffing and cleaning work can be completed in the tea orchards. Do lopping of the tree in the tea orchards to have more sunlight. The skiffed material may be used to prepare compost so that it could be applied in next season.
- Livestock: Ecto-parasite attack is expected in this weather for control spray Butox @ 2 ml per litre in cowshed Give mixture of hay & green fodder. The weather is suitable for the attack of pink eye disease in newly born calves, for control prepare the solution of 1% boric acid in boiled water and wash eyes at regular interval of three hours. Give mixture of hay & green fodder. Advised not to allow animals to eat lantana these days. Dry bedding may be provided to save the animals from cold. Young calves must be kept in the sheds during nights.
- Poultry: Make sure to deworm your older flocks every month against round-worms. Ensure proper ventilation in poultry houses. Replace the poultry houses with fresh litter and keep the houses clean and ensure drinking water to the birds. For precautionary measures spray formaline 40% @ 1litre in 9 litres of water in outside or surrounding of farm. Provide vitamin A and vitamin B-complex with water. Ensure proper space for egg laying of birds and provide 14- to 16 hours light including day light. Normal feeding schedule should be continued and add mineral in the diet if stress is seen.
- Mushrooms: Dingri can be sown in closed room, maintain temperature of 25-28 degree Celsius and relative humidity of 80-85 % for good crop. Advised ti fill compost bags with span for button mushrooms.
- Horticultre: Keep the basins of the plants free from weeds. The new growth appearing below bud union may be cut. If a termite outbreak appears on the

trees, spray Chlorpyrifos 20 EC @ 3ml/l. Monitor foliar pest on plants of Citrus species. Spray Chlorantraniliprole 18.5SC @ 0.4 ml/l or lambda cyhalothrin 4.90CS @ 0.8 ml/l for pomegranate butterfly. Advised recommended spray of chemicals for control of citrus canker. In peach gum is coming out from tree trunk, for control bordeaux paint may be applied in the affected area. Advised planting of strawberry. Wrapping of plastic sheets around mango trunk should be done for preventing climbing of young mealy bugs. Apply grease to seal any cracks in the polythene sheets. If the stem borer problem is there in spray insecticide or control them with applying kerosene oil. Keep the basins of the plants free from weeds. Prepare the pits for planting the winter plants like peacunnut, walnut, almond plum and peach. In peach gum is coming out from tree trunk, for control bordeaux paint may be applied in the affected area.

- Fruit Trees: Sowing of mango, litchi, guava, papaya, pecanut and kagzi lime is recommended under these weather conditions. Air layering of litchi, guava, kagzi lime and lemon is recommended. Side veneer grafting in mango and inverted T-budding in citrus is recommended. Transplanting of seedlings of rough lemon (Khatti) in the nursery beds, if not done during July. Weeding in nursery is recommended.



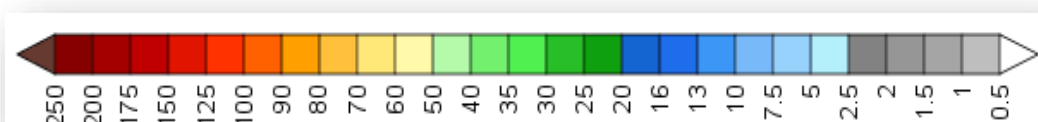
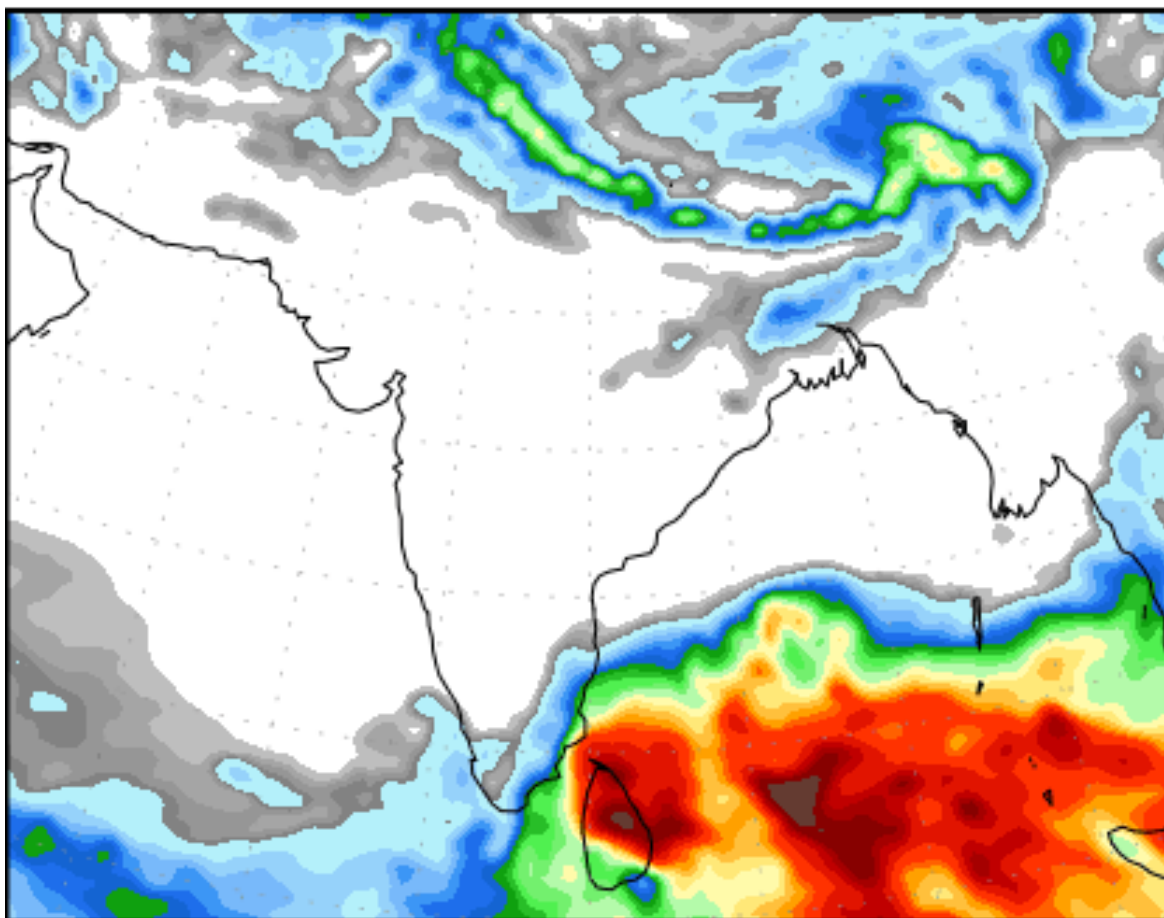


Figure:2. Precipitation forecast for 24 Feb to 04 Mar 2022 (Source: NOAA NCEP).

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