

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 24 January 2020

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- A fresh and active Western Disturbance is very likely to affect Western Himalayan region from the night of 27th January, 2020 onwards. It is very likely to cause fairly widespread to widespread rain/snow over Western Himalayan Region with isolated heavy rain/snow over Jammu & Kashmir and Himachal Pradesh.
- Isolated to scattered rain/thunderstorm on 27th and scattered to fairly widespread rain/thunderstorm on 28th & 29th January over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and isolated to scattered over Rajasthan and north Madhya Pradesh and East India. Thunderstorm accompanied with lightning & hail at isolated places also likely over plains of northwest India on 27th & 28th January.
- Strong surface wind (20-25 kmph) likely to continue till night of today over plains of north India followed with its weakening to 5-15 kmph on 25th January and further weakening of winds likely on 26th January.
- Mainly dry weather likely to prevail over the country except western Himalayan regions and northeastern states where isolated to scattered rain is likely till 26th January.
- The images showing the latest satellite picture in figure. 1.

Main Weather Observations (IMD)

- Rain/Thunder showers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at isolated places over Sub-Himalayan West Bengal & Sikkim and Assam & Meghalaya.
- Maximum Temperature Departures as on 23-01-2020: Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at most places over Konkan & Goa; at many places over Kerala & Mahe; at a few places over Coastal Karnataka and at isolated places over Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at a few places over Tamil-Nadu, Puducherry & Karaikal, Rayalaseema, Chhattisgarh and Lakshadweep; at isolated places over Jammu & Kashmir and Himachal

Pradesh. They were appreciably below normal (-3.1°C to -5.0°C) at a few places over West Madhya Pradesh and West Bengal & Sikkim and at isolated places over East Madhya Pradesh; below normal (-1.6°C to -3.0°C) at most places over West Uttar Pradesh; at many places over Haryana, Chandigarh & Delhi; East Uttar Pradesh, and at isolated places over Punjab, Gujarat Region and Assam & Meghalaya and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 37.6°C was recorded at Karwar (Coastal Karnataka).

- Minimum Temperature Departures as on 24-01-2020: Minimum temperatures are appreciably above normal (3.1°C to 5.0°C) at a few places over Madhya Maharashtra and Marathawada; above normal (1.6°C to 3.0°C) at most places over Kerala; at many places over Coastal Karnataka; at a few places over Saurashtra & Kutch, Konkan & Goa, Telangana, South Interior Karnataka, Tamil-Nadu, Puducherry & Karaikal, Coastal Andhra Pradesh & Yanam, Odisha and Assam & Meghalaya and at isolated places over Himachal Pradesh, Gangetic West Bengal, Andaman & Nicobar Islands and Lakshadweep. They are appreciably below normal (-3.1°C to -5.0°C) at a few places over Jammu & Kashmir and at isolated places over Madhya Pradesh; below normal (-1.6°C to -3.0°C) at a few places over Bihar and at isolated places over Rajasthan, East Madhya Pradesh and Sub-Himalayan West Bengal & Sikkim and near normal over rest parts of the country. Today, the lowest minimum temperature of 3.2°C recorded at Amritsar and Churu (Punjab and West Rajasthan) over plains of the country.

Weather Warning during next 5 days (IMD)

- 24 January (Day 1): Dense fog very likely in isolated parts over Odisha.
- 25 January (Day 2): Dense fog very likely in isolated parts over Punjab and Haryana & Chandigarh.
- 26 January (Day 3): Dense fog very likely in isolated parts over Punjab and Haryana, & Chandigarh and Uttar Pradesh (valid upto 0830 hours IST of 27th January). Strong wind (speed reaching 45-55 kmph) likely to prevail over Northwest & West-central Arabian Sea.
- 27 January (Day 4): Thunderstorm accompanied with hail & lightning likely at isolated places over Punjab, Haryana, Chandigarh & Delhi and Rajasthan. Strong wind (speed reaching 45-55 kmph) likely to prevail over Northwest & West-central Arabian Sea.
- 28 January (Day 5): Heavy rain/snow likely at isolated places over Jammu & Kashmir and Himachal Pradesh. Thunderstorm accompanied with hail & lightning likely at isolated places over Punjab, Haryana, Chandigarh & Delhi,

West Uttar Pradesh and Rajasthan; with lightning at isolated places over East Uttar Pradesh.

- The weather outlook for the period of seven days i.e., 24 Jan to 01 Feb 2020 forecasted (Provided by Real-Time Weather Forecasts from NOAA/NCEP collected from <http://monsoondata.org/wx2/>) rain/thunder shower may occur over Some parts of Extreme northern parts of India. (Fig. 2).

Agricultural activities (AICRPAM-CRIDA)

Himachal Pradesh

Weather condition:

The maximum and minimum temperature ranged between 13.5 to 15.5 °C and 1.0 to 5.5 °C which was below normal by 0.1 to 1.1 °C and 0.8 to 3.9 °C. 18.0 mm rainfall was received during the week against the normal of 15.9 mm. The relative humidity varied between 57-100% and sunshine hours between 0.0-9.0 hrs/day with variable sky conditions (Octa 4-8). The evaporation rate varied between 1.4-2.6 mm per day.

Contingency measure:

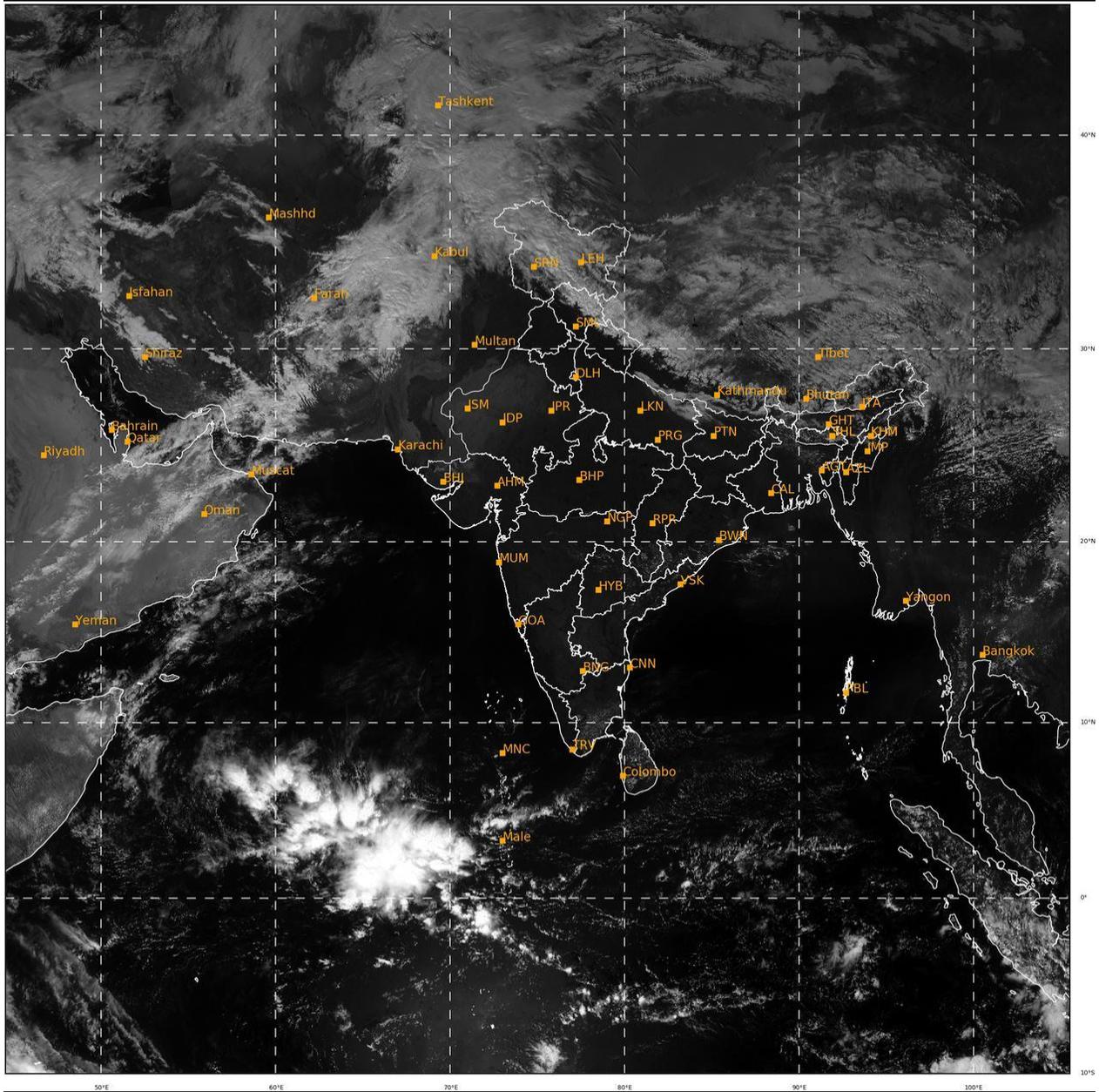
- RABI CROPS: In the early planted wheat crop where weeds are 2-3 leaves stage, spray isoproturon @ 80 gram per 30-32 litres of water in one kanal for the control of weeds. Thinning and weeding is recommended in timely sown mustard crop.
- FODDER CROP: Intercultural operations on already sown berseem, lucerne and oats for fodder of Rabi season. The lantana weeds in the grasslands may be cut so that regenerated growth during September can be sprayed with 1% glyphosate for its control. Complete Sowing of berseem, lucerne and oats for fodder. Mix seed of gobhi sarson to have nutritious production of fodder during first-cut.
- VEGETABLE CROPS: Add mulch material in space between two rows of vegetables crops for conservation of soil moisture and maintaining the soil temperature.
- TOMATO, CHILLI, CAPSICUM AND BRINJAL: Weeding and hoeing in all crops and vegetables should be done for optimum growth. For shoot and fruit borer in brinjal and tomato crops, infested fruits and shoots should be collected and buried inside the soil. In present weather conditions, rouging of viral infested crop should be done in chillies. Infected crop should be uprooted and buried in the soil. After rouging, spraying of Imidacloprid @ 0.3 ml per litre of water is advised to control the vector.
- CAULIFLOWER AND OTHER VEGETABLES: The downy mildew is expected in cruciferous vegetables, for control spray redomil M-Z @ 25 g per litres of water at

15 days interval. In low hill areas of the State, transplant mid season cauliflower. Cabbage, Knol Khol, Broccoli and Chinese cabbage and direct sowing of radish, carrot, turnip, spinach and fenugreek can be done in mid hill areas of the State. Advised to complete transplanting of cauliflower. Nursery sowing of cauliflower (late group), cabbage, Knol Khol, Broccoli and chinese cabbage.

- **ONION AND OTHERS VEGETABLES:** It is time for planting of onion bulbs in 30X10 cm spacing for harvesting green onion in October. 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. In vegetables (brinjal, cauliflower, cabbage, tomato etc), for monitoring of borer insect, farmers are advised to use pheromone trap @ 3-4/acre. For control spraying of Spinosad 1.0 ml/4 litre of water is advised against fruit borer, diamond back moth.
- **RADISH AND TURNIP & PEAS:** Sowing of radish, carrot, turnip, palak and methi carrot, broccoli, lettuce can be completed in mid hill areas of the State. In mid hill region nursery sowing of Chinese cabbage). For the control of damping off disease in vegetable crop mix thoroughly Dithane M 45 dust 10-15 g in 1 X 3metre beds. Advised pea sowing. Seed should be treated with fungicides, Captan or Thiram @ 2.0 gm/kg and after that with crop-specific Rhizobium culture. A solution of jaggary and water after boiling should be allowed to cool down and then seeds along with Rhizobium should be thoroughly mixed. The mixture should be allowed to dry in a shade. It is highly recommended that the treated seeds should be sown after 24 hours of treatment.
- **POTATO:** Advised to complete potato sowing in lower & mid hill regions plain regions of H.P and procure good quality seed. 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.
- **TEA:** Training, skiffing and cleaning work can be completed in the tea. 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:** Temperature is falling and a cold wave has gripped the area, so protect the newly born calves and animals from cold. Feed pregnant and lactating cows and buffalos with balance feed including mineral mixture. For the control of ticks and mites in animals spray butox @2ml per litre on animals? body /skin and

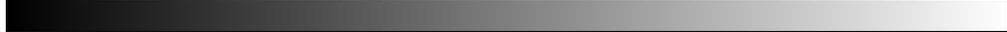
@1-3 ml/l of water in cowsheds. Also keep the cowshed clean and do not allow the water to stagnate in the cow shed. For milch animals follow schedule of 1 kg feed+50g mineral mixtures per 2 litres of milk. This schedule will maintain the reproductive ability of animals. For control do the deworming of animals. Dairy animals are deficient in minerals elements which are the sole reason of repeat breeding and other gyne related diseases in animals.

- **HORTICULTURE:** 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. 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. Irrigation should be done in all orchards. The ensuing weather is conducive for the attack of leaf minor in Citrus. For its control, spray 10 ml Matasystox or Malathion 10 ml in 10 litre of water. For the control of Citrus canker spray Streptocycline sulphate 500 ppm solution. Remove the shoots below the graft or bud unions. Prepare the pits for planting the winter plants like peacn nut, walnut, almond plum and peach. Prepare the pits for planting the winter plants like peacn nut, walnut, almond plum and peach. In peach gum is coming out from tree trunk, for control bordeaux paint may be applied in the affected areas.
- **MUSHROOM:** Dingri can be sown in closed room, maintain temperature of 25-28 °C and relative humidity of 80-85 % for good crop. Advised to fill compost bags with span for button mushrooms.



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Figure: 1. Latest available satellite picture as on 24 January 2020 at 1356 Hrs (IST).
(Source: IMD).

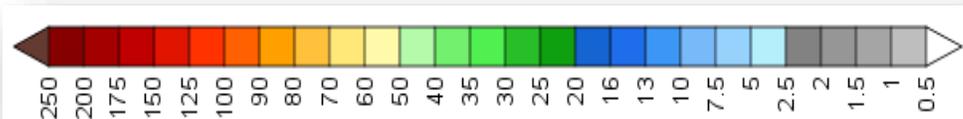
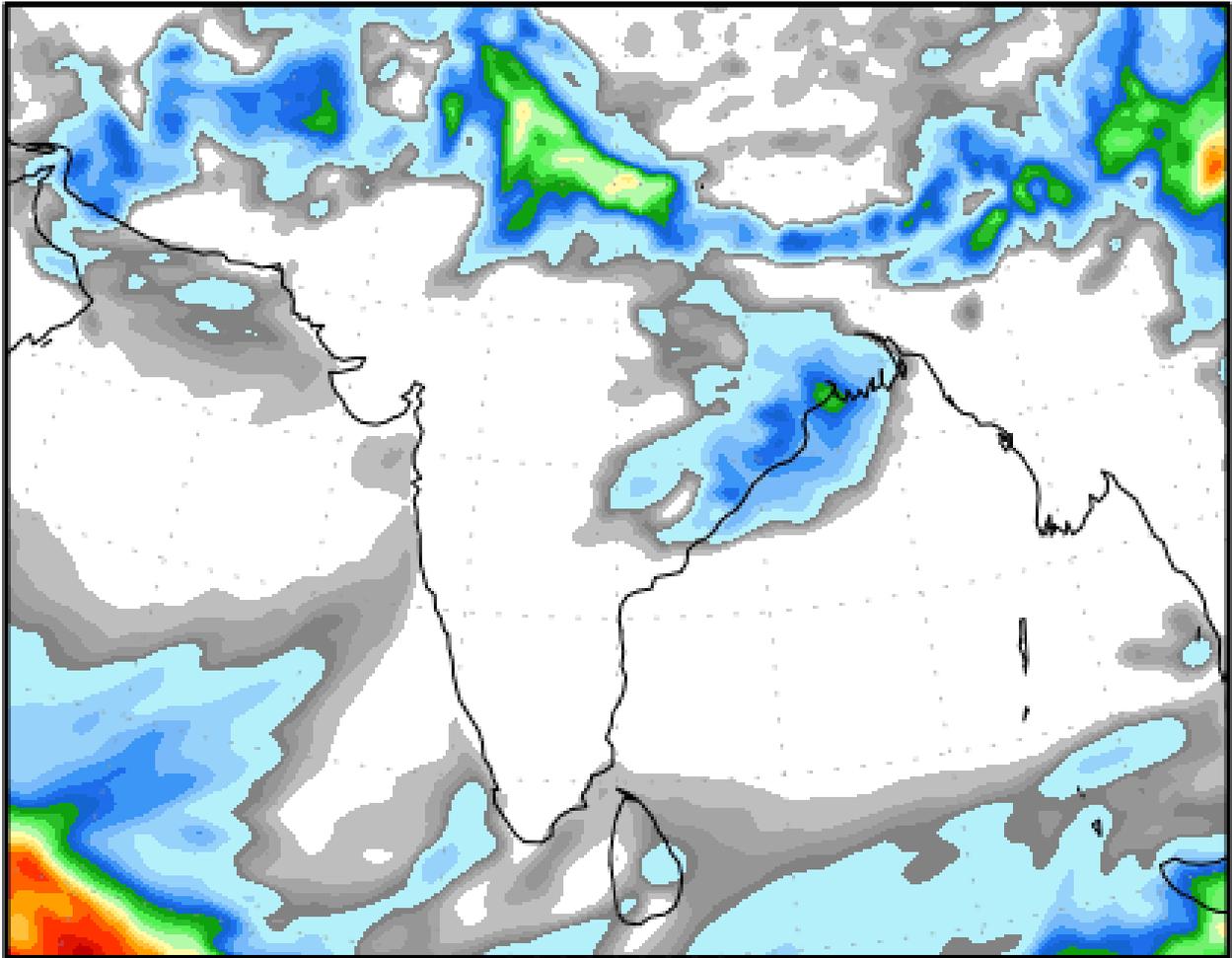


Figure:2. Precipitation forecast for 24 Jan to 01 Feb 2020 (Source: NOAA NCEP).

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