

All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 03 February 2021

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- The Western Disturbance as a cyclonic circulation lies over East Afghanistan & adjoining Pakistan and extends upto 5.8 km above mean sea level with the trough aloft with its axis at 7.6 km above mean sea level now runs roughly along Long. 66°E to the north of Lat. 26°N. The induced cyclonic circulation lies over northwest Rajasthan & neighbourhood extending upto 1.5 km above mean sea level.
- Under the influence of the above systems; scattered to fairly widespread light to moderate rain/snow with isolated thunderstorm, lightning & hail very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad on 03rd February; over Himachal Pradesh on 03rd & 04th February and over Uttarakhand on 04th & 05th February.
- Interaction between this Western Disturbance and lower level southeasterlies from the Bay of Bengal is likely to cause isolated to fairly widespread light to moderate rain/thundershowers with isolated lightning & hail over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, northwest Madhya Pradesh and West Uttar Pradesh on 04th February and over East Madhya Pradesh & north Chhattisgarh on 05th February, 2021.
- No significant change in Minimum temperatures very likely during next 2 days and fall by 4-6°C over Northwest India thereafter from 06th morning.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST of yesterday to 0830 hours IST of today): at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and at isolated places over Punjab, Haryana, Coastal Andhra Pradesh, Tamil Nadu and Kerala.
- Today, Cold Wave conditions observed in isolated pockets over East Madhya Pradesh, Bihar, Odisha and Gangetic West Bengal.

- Fog (observed at 0830 hrs IST of today): Dense to Very Dense Fog in a few pockets over Bihar; Very Dense Fog in isolated pockets over Uttar Pradesh; Dense Fog in isolated pockets over Assam & Meghalaya and Moderate Fog in isolated pockets over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad.
- Maximum Temperature Departures as on 02-02-2021: Maximum temperatures were markedly above normal (5.1°C or more) at many places over West Rajasthan; at a few places over West Madhya Pradesh and at isolated places over East Rajasthan, Haryana, Chandigarh & Delhi and Konkan & Goa; appreciably above normal (3.1°C to 5.0°C) at most places over Himachal Pradesh; at many places over Gujarat state and Uttarakhand; at a few places over Coastal Karnataka and at isolated places over East Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Punjab; at many places over Arunachal Pradesh and Assam & Meghalaya; at a few places over East Uttar Pradesh and at isolated places over Vidarbha and West Uttar Pradesh. They were markedly below normal (-5.1°C or less) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; appreciably below normal (-3.1°C to -5.0°C) at isolated places over Gangetic West Bengal and North Interior Karnataka; below normal (-1.6°C to -3.0°C) at a few places over SubHimalayan West Bengal & Sikkim, Madhya Maharashtra and Andaman & Nicobar Islands and near normal over rest parts of the country. Yesterday, the highest maximum temperature of 36.5°C was reported at Vengurla (Konkan & Goa) and Kottayam (Kerala) over the country.
- Minimum Temperature Departures as on 03-02-2021: Minimum temperatures are markedly above normal (5.1°C or more) at many places over Punjab; appreciably above normal (3.1°C to 5.0°C) at many places over Himachal Pradesh, Haryana, Chandigarh & Delhi, West Rajasthan, West Uttar Pradesh and Andaman & Nicobar Islands and at isolated places over West Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal; above normal (1.6°C to 3.0°C) at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over Gujarat Region, East Rajasthan, South Interior Karnataka, Rayalseema and Marathwada and at isolated places over Kerala & Mahe and Coastal Andhra Pradesh & Yanam. They are markedly below normal (-5.1°C or less) at a few places over Odisha and Gangetic West Bengal; appreciably below normal (-3.1°C to -5.0°C) at many places over Bihar and Vidarbha; at a few places over East Madhya Pradesh, Sub-Himalayan West Bengal & Sikkim and Nagaland, Manipur, Mizoram & Tripura; below normal (-1.6°C to -3.0°C) at most places over Jharkhand and Chhattisgarh; at many places over Telangana; at a few places over Assam & Meghalaya and at isolated places over Madhya Maharashtra and near

normal over rest parts of the country. Today, the lowest minimum temperature of 4.0°C is reported at Mandla (East Madhya Pradesh) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 03 February (Day 1): Dense Fog in isolated pockets very likely over Bihar and Assam & Meghalaya. Cold Wave conditions in isolated pockets very likely over Odisha. Thunderstorm accompanied with lightning & hail at isolated places very likely over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad and Himachal Pradesh and with lightning at isolated places over Punjab, Haryana, Chandigarh & Delhi and north Rajasthan. Strong Winds (speed reaching 45-55 kmph gusting to 65 kmph) very likely over Gulf of Mannar and Comorin Area and Squally Weather (speed reaching 45-55 kmph gusting to 65 kmph) over Southwest Bay of Bengal. Fishermen are advised not to venture into these areas.
- 04 February (Day 2): Thunderstorm accompanied with lightning & hail at isolated places very likely over Himachal Pradesh, Uttarakhand, Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, north Rajasthan and West Madhya Pradesh and with lightning at isolated places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and East Uttar Pradesh. Strong Winds (speed reaching 45-55 kmph gusting to 65 kmph) very likely over Gulf of Mannar and Comorin Area. Fishermen are advised not to venture into these areas.
- 05 February (Day 3): Dense Fog in isolated pockets very likely over Punjab, Haryana, Chandigarh & Delhi and north Rajasthan. Thunderstorm accompanied with lightning & hail at isolated places very likely over Uttarakhand, East Madhya Pradesh and Chhattisgarh and with lightning at isolated places over East Uttar Pradesh and Jharkhand. Strong Winds (speed reaching 40-50 kmph) very likely over Gujarat coast. Fishermen are advised not to venture into these areas.
- 06 February (Day 4): Dense Fog in isolated pockets likely over Punjab, Haryana, Chandigarh & Delhi, West Uttar Pradesh, north Rajasthan and Odisha. Thunderstorm accompanied with lightning at isolated places likely over Chhattisgarh and Jharkhand. Strong Winds (speed reaching 40-50 kmph) likely over Gujarat coast. Fishermen are advised not to venture into these areas.
- 07 February (Day 5): Dense Fog in isolated pockets likely over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh
- The weather outlook for seven days i.e., 03 to 11 February 2021 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)

Konkan region

Weather condition:

Atmospheric condition was cloudy during morning hours around Dapoli during last week. Therefore 7.6 to 9.2 Bright sunshine hours was recorded during last week. During last week 0.0 mm rainfall was recorded at Agrometeorological observatory, Dr. B.S.K.K.V. Dapoli. The maximum and minimum temperature ranged from 30.2 to 33.3 and 11.1 to 14.5 oC respectively. Wind velocity ranged from 2.5 to 3.2 km and wind was blowing from south westerly Direction.

Contingency measure:

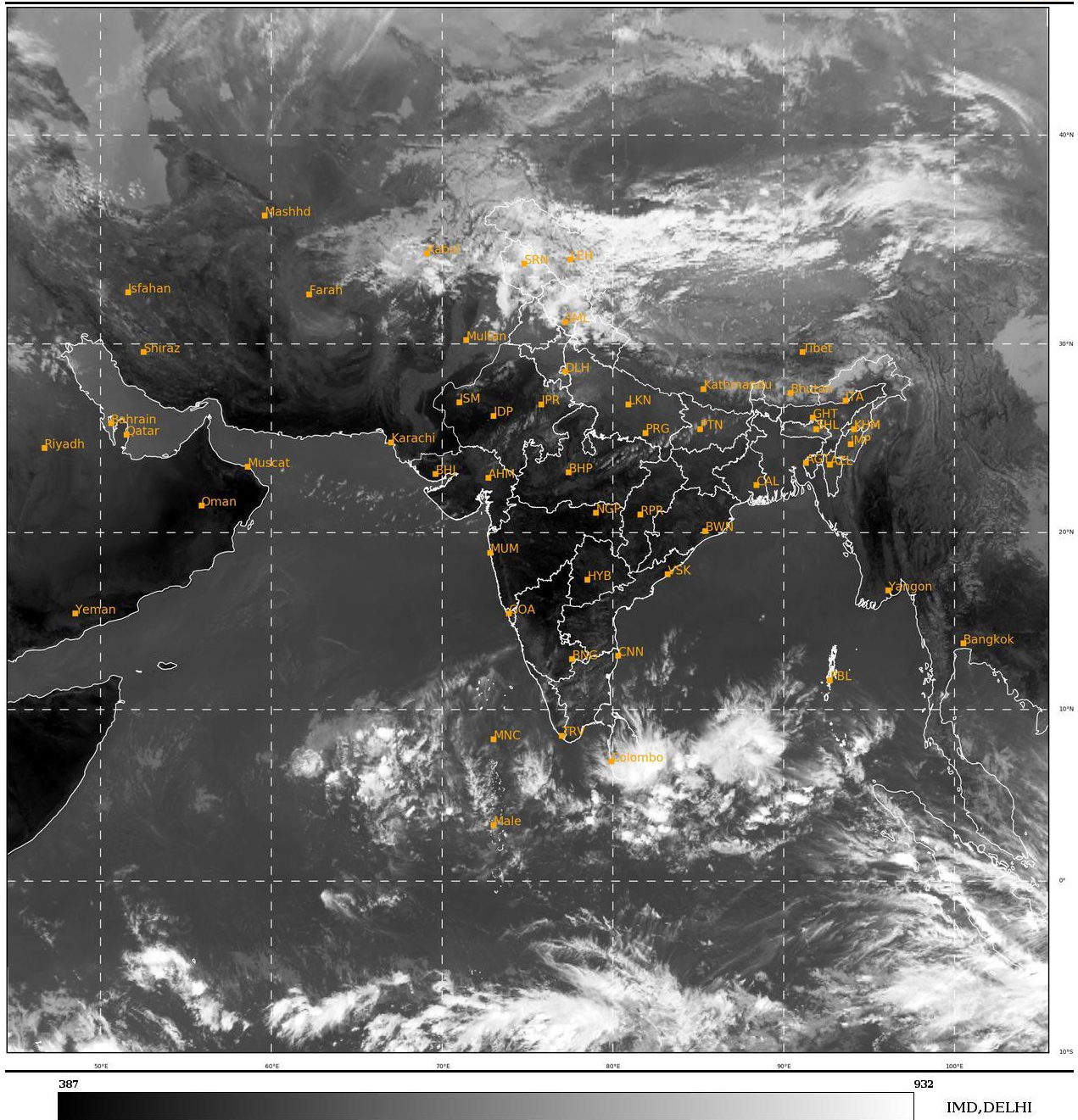
- **Mango:**For increasing the production and quality improvement of mango fruits, spray 1 % Potassium nitrate at pea marble and arecanut size stage of mango fruits.The pre-harvest bagging with newspaper bag of size 25 X 20 cm at marble to egg stage as per recommendation of D.B.S.K.K.V. helps to reduce the fruit drop, increases the fruit weight, pulp weight, produce spongy tissue free fruit, controls attack of fruit fly on fruits and produces spotless fruits of mango.Spraying of 55% cow urine at pea size fruits of mango 3 to 6 sprays at weekly interval as per availability is suggested for increasing yield of mango.To prevent the recurrent flowering in fruit bearing mango tree, spray gibberellic acid 50 PPM (1 gram per 20 liter of water 1st spray at the time of flower opening and then mustard sizes fruit stage).There is forecast for decrease in humidity during next five days, hence to minimize the pre-mature fruit drop of mango, apply 150 to 200 liter of water per tree after fruit setting at 15 days interval for 3 to 4 times also use straw mulch to reduce evaporation losses.There is possibility incidence of hoppers, midge fly and powdery mildew disease on mango inflorescence. For management of pest and disease, spray of Imidacloprid 17.8% SL @ 6 ml per 10 liter of water before the flower opening to avoid the adverse effect on pollinators. Also add Hexaconazole 5% @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water for control of powdery mildew disease during clear weather. Note: avoid spraying during flowering to fruit setting period for effective pollination. If it is not possible to postpone the spraying till fruit set due to heavy incidence of insect and pest, then avoid spraying during morning hours (9.00 am to 12.00 pm) which is active period of pollinators for pollination.There is possibility of incidence of thrips on mango inflorescence and fruit, if incidence is noticed, spray Spinosad 45%SC @ 2.5 gms per 10 liter of water.To protect the pea size fruits of mango from hoppers, thrips and powdery mildew diseases, as per blossom protection schedule for mango crop, take a fourth spray of Thiomethoxam

25%WG @ 1 gm per 10 liter of water (15 days after 3rd spray) Also add Hexaconazole 5% @ 5 ml or wettable Sulphur 80% @ 20 gm per 10 liter in water for control of powdery mildew. for control premature fruit drop add 2% urea @20 gms per liter of water in to the insecticide solution.The recommended dose of insecticides is applicable for manually operating sprayer

- Cashewnut:There is possibility of incidence of tea mosquito bugs and thrips on the fruits of cashewnut, to protect the cashew during fruit bearing stage, spray Lambda cyhalothrin 5% EC @6 ml or Acetamiprid 20%SP @ 5 gms per 10 liter of water during clear weather. (insecticide is not under label claim).There is possibility for incidence of cashew apple and nut borer, if incidence is noticed spray Profenophos 50%EC @ 15 ml per 10 liter of water.For increasing yield and size of cashewnut, spray entire tree with 25% cow urine @ 5 lit per tree and drench the solution of 25% cow urine @ 10 liter per tree at a monthly interval from vegetative flush stage for 4 times.
- Coconut:Apply 3rd split dose of fertilizers of 750 gm urea and 667 gm muriate of potash in circular basin to above five-year-old coconut palm. Apply 1/5th ,2/5th, 3/5th and 4/5th of above-mentioned fertilizer dose per tree for 1,2,3 and 4-year-old coconut plantation, respectively.Apply 10 kg neem cake and micro nutrients (zinc, boron, molybdenum and copper) 200 gms per plant at the time of 2nd to 3rd split dose of fertilizer.
- Groundnut:Provide irrigation to groundnut crop at 10 to 12 days interval
- Lablab bean:Provide irrigation to lablab bean crop where crop is in flowering to pod filling stage.There is possibility of incidence of aphids on lablab crop grown on residual moisture which develop into growth of black fungus on leaves and inflorescence. If incidence is noticed, spray Dimethoate 30%EC@12 ml per 10 liter of water.
- Chilli:There is possibility of incidence of leaf curl disease in chilli due to thrips, white flies and mites which results into curling of leaves and stunted growth of plant. For management of sucking pest, spray cow urine 10% and Azadirachtin 10000 PPM @3 ml per liter of water alternatively, seven days after transplanting at 10-15 days interval. Install blue sticky paper trap into field.
- Okra:For management of sucking pest in summer okra, install the yellow sticky trap in field.
- Cucurbitaceous crops:There is possibility of incidence of leaf miner in cucurbitaceous crop, if incidence is noticed, spray 4% NSKE or Azadirachtin 10000 PPM @20 ml or Profenophos 50%EC @ 15 ml or Lambda cyhalothrin 5%EC @6 ml per 10 liters of water.

SAT : INSAT-3D IMG
 IMG_TIR1 10.8 um
 L1C Mercator

03-02-2021/(0800 to 0827) GMT
 03-02-2021/(1330 to 1357) IST



**Figure: 1. Latest available satellite picture as on 03 February 2021 at 1357 Hrs (IST).
 (Source: IMD).**

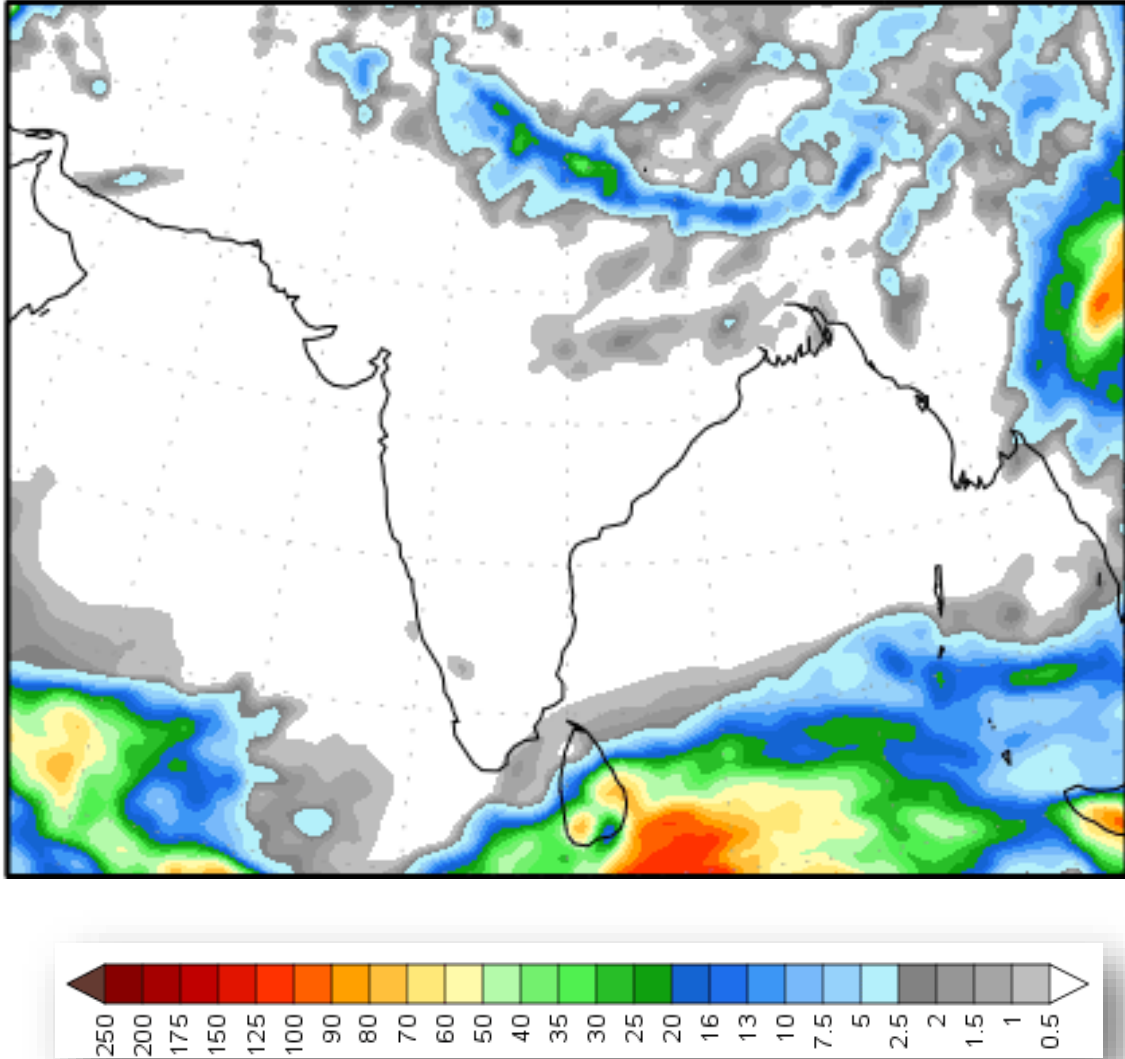


Figure:2. Precipitation forecast for 03 to 11 February 2021 (Source: NOAA NCEP).

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.