

All India Coordinated Research Project on Agrometeorology

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Daily Crop Weather Information as on 06 January 2022

Attention: Rajiv Maheshwari, OSD, ICAR

Significant Weather Features (IMD)

- Wet spell over Northwest & Central India till 9th January:
- A fresh Western Disturbance lies as a cyclonic circulation over western parts of Afghanistan & neighbourhood at lower tropospheric levels with a trough aloft in middle & upper tropospheric levels along Long. 56°E to the north of Lat. 24°N. Under its influence, an induced cyclonic circulation is very likely to form over southwest Rajasthan & neighbourhood on 07th January, 2022. This Western Disturbance is likely to move eastwards, deepen further into the Arabian Sea and reach North Pakistan region during next 24 hours. It is likely to persist over North Pakistan region for subsequent 3-4 days. Yesterday's Western Disturbance as a cyclonic circulation over Afghanistan & neighbourhood, now seen as a cyclonic circulation over north Pakistan & adjoining Punjab and the induced cyclonic circulation now lies over southeast Rajasthan & neighbourhood at lower tropospheric levels.
- Under the influence of above systems:
 - i) Isolated to scattered light rainfall/snowfall very likely over Western Himalayan Region and light isolated to scattered rainfall over northwest India, Madhya Pradesh and Gujarat on today.
 - ii) It is very likely to increase from tomorrow, the 07 January, 2022 with fairly widespread to widespread light/moderate rainfall/snowfall over Western Himalayan Region till 09th and decrease significantly thereafter.
 - iii) Isolated heavy rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 07th and isolated Heavy to Very Heavy falls on 08th. Isolated heavy rainfall/snowfall very likely over Himachal Pradesh on 08th & 09th and over Uttarakhand on 08th January.
 - iv) Fairly widespread to widespread light/moderate rainfall very likely over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, West Uttar Pradesh during 07th-09th and decrease significantly thereafter. Isolated heavy rainfall very likely over Punjab on 07th & 08th and over Haryana, Chandigarh & Northwest

Uttar Pradesh on 08th January. Light to moderate rainfall likely over Delhi on 08th January.

v) Isolated thunderstorms with lightning/Hail very likely over Uttarakhand, West Uttar Pradesh, Rajasthan, Punjab, Haryana, Chandigarh & Delhi during 07th- 08th; over West Madhya Pradesh during 06th-08th and over East Madhya Pradesh, Vidarbha & Chhattisgarh during 08th-10th January.

vi) Rainfall activity over Tamilnadu & adjoining Andhra Pradesh is likely to increase from 10th January. Isolated heavy rainfall likely over Tamilnadu on 10th January.

- Minimum temperatures are above normal by 3-6°C over most parts of Northwest & central India and Gujarat and near normal over rest parts of North India.
- No Cold Wave Conditions likely over North India during next 5 days.
- Dense Fog in isolated pockets in night/morning hours very likely over Bihar, West Bengal & Sikkim during next 2 days and over Odisha, Gangetic West Bengal, west Assam & Meghalaya, Manipur, Mizoram and Tripura during next 24 hours.
- 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, Ladakh, Gilgit-Baltistan, Muzaffarabad, Himachal Pradesh, Punjab, Uttarakhand, Uttar Pradesh and Haryana, Chandigarh & Delhi; at many places over Rajasthan; at a few places over Gujarat State and at isolated places over Madhya Pradesh.
- Fog observed (at 0830 hours IST of today): Very Dense fog in some pockets over Bihar; Dense Fog in isolated pockets over West Bengal & Sikkim & Odisha; Moderate fog in isolated pockets over East Uttar Pradesh, Rajasthan, Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and Delhi and Shallow fog in isolated pockets over Uttarakhand, Gujarat State, Haryana, Jharkhand, Assam and Tripura.
- Minimum Temperature Departures (as on 06-01-2022): Minimum temperatures are markedly above normal (5.1°C or more) at many places over Punjab, Rajasthan and Gujarat State; at a few places over West Madhya Pradesh, West Uttar Pradesh and Himachal Pradesh and at isolated places over Uttarakhand; appreciably above normal (3.1°C to 5.0°C) at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Madhya Pradesh and East Uttar Pradesh and at isolated places over Tamil Nadu Puducherry &

Karaikal; above normal (1.6°C to 3.0°C) at many places over Bihar, Sub-Himalayan West Bengal & Sikkim, Marathwada and Vidarbha; at a few places over Madhya Maharashtra and at isolated places over Chhattisgarh, Konkan & Goa, Rayalaseema, Telangana and Andaman & Nicobar Islands Kerala & Mahe. They are below normal (-1.6°C to -3.1°C) at isolated places over Gangetic West Bengal, Nagaland, Manipur, Mizoram & Tripura and North Interior Karnataka and near normal over rest parts of the country. Today, the Lowest minimum temperature of 8.6°C is reported at Chapra (Bihar) over the plains of the country.

- Maximum Temperature Departures (as on 05-01-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) at many places over East Madhya Pradesh; at isolated places over West Madhya Pradesh; above normal (1.6°C to 3.0°C) at most places over Assam & Meghalaya and Jharkhand; at many places over Vidarbha, Chhattisgarh and Kerala & Mahe; at a few places over Arunachal Pradesh, Sub-Himalayan West Bengal & Sikkim, Gujarat Region and Andaman & Nicobar Islands; at isolated places over Odisha, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Tamilnadu, Puducherry & Karaikal, Lakshdweep and Coastal Andhra Pradesh & Yanam. They were markedly below normal (-5.0°C or less) at most places over West Rajasthan; at many places over Bihar and Himachal Pradesh; appreciably below normal (-3.1°C to -5.0°C) at most places over Haryana, Chandigarh & Delhi and Punjab; at many places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at a few places over East Rajasthan; below normal (-1.6°C to -3.0°C) at many places over West Uttar Pradesh; at a few places over Gangetic West Bengal and at isolated places over East Uttar Pradesh and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 35.6°C was reported at Punalur (Kerala).

Weather Warning during the next 5 days (IMD)

- 06 January (Day 1): Thunderstorm accompanied with lightning & hail at isolated places very likely over West Madhya Pradesh and with lightning at isolated places over East Madhya Pradesh. Dense fog in isolated pockets very likely over Bihar, West Bengal & Sikkim, Odisha, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura. Strong winds (speed 40-50 kmph gusting to 60 kmph) very likely over Gulf of Mannar and Comorin area. Fishermen are advised not to venture into this area.
- 07 January (Day 2): Heavy rainfall/snowfall at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and heavy rainfall at isolated places very likely over Punjab. Thunderstorm accompanied with lightning & hail at isolated places very likely over Punjab, Haryana, Chandigarh

& Delhi, Rajasthan and West Madhya Pradesh and with lightning at isolated places over West Uttar Pradesh, East Madhya Pradesh and Madhya Maharashtra. Dense fog in isolated pockets very likely over Bihar and Sub-Himalayan West Bengal & Sikkim.

- 08 January (Day 3): Heavy to very heavy rainfall/snowfall at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; heavy rainfall/snowfall at isolated places over Himachal Pradesh and Uttarakhand and heavy rainfall at isolated places over Punjab and Haryana, Chandigarh & Delhi and West Uttar Pradesh. Thunderstorm accompanied with lightning & hail at isolated places very likely over Uttarakhand, West Uttar Pradesh, Madhya Pradesh and Vidarbha and with lightning at isolated places over Punjab, Haryana, Chandigarh & Delhi, East Uttar Pradesh, Madhya Maharashtra and Marathwada.
- 09 January (Day 4): Heavy rainfall/snowfall at isolated places likely over Himachal Pradesh. Thunderstorm accompanied with lightning & hail at isolated places likely over East Madhya Pradesh and Vidarbha and with lightning at isolated places over Telangana, Marathwada, Chhattisgarh and Tamilnadu, Puducherry & Karaikal.
- 10 January (Day 5): Heavy rainfall at isolated places likely over Tamilnadu, Puducherry & Karaikal. Thunderstorm accompanied with lightning & hail at isolated places likely over Chhattisgarh and with lightning at isolated places over East Madhya Pradesh, Vidarbha Telangana and Tamilnadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 06 Jan to 14 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)

Jammu

Weather condition:

Mainly clear weather prevailed during this week with 0.8mm of rainfall. The maximum temperature remains above normal by 1 to 2 °C except on 26 th Dec, the temperature remained below normal by 5 °C and was in the range of 14.4 to 21.4 °C, while minimum temperature remain below normal by 1 to 3 °C and was recorded in the range of 1.5 to 6.0 °C. The morning and evening relative humidity was observed in the range of 81 to 94

% and 41 to 86 %, respectively. The total evaporation observed 11.0 mm and sunshine in the range of and 0.0 to 7.6 hrs during this period.

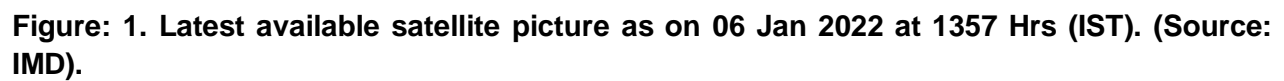
Contingency measure:

- Wheat: Very Late sown (Irrigated) Rainfed Normal sown Early sown
Sowing/germination Sowing/germination CRI (20-25 Days)/ Tillering (30-45 Days) Tillering Sowing of late sown wheat varieties (PBW-757, WH-1021, Raj-3765, Raj-3077) may be continued with the increase in seed rate. Treat the seed with vitavax or bavistin or agrozim @ 2g/kg of seed before sowing to avoid the crop from seed borne disease. Apply recommended dose of fertilizer as basal dose. Farmers may go for sowing of WH-1080, Raj-3077 with enhanced seed rate 125 kg /ha without any further delay wherever sufficient moisture is available in soil. Apply half dose of urea and full dose phosphorous and potassium fertilizer. Apply 2nd dose of urea (25%) as top dressing during clear weather. Apply Isoproturon @ 0.75kg a.i + 2, 4-D ethyl ester @ 500 ml/ ha or Metribuzin @ 0.7 kg ai./ha in the evening, if crop is 30-35 days old to control weeds.
- Oilseeds: Mustard: Vegetative Spray cypermethrin 10EC @ 1ml/lt or chloropyriphos 3EC @ 2ml/lt to control mustard sawfly. To control mustard, aphid, spray Methyl demeton 25EC @ 0.03%, if 40-45% plant infestation is recorded or 50-60 aphids /plant on 10cm central shoot length are observed. Do not spray when the honeybees and other pollinators are foraging in the field.
- Rabi pulses: Pea: Early sown Late sown Chickpea Lentil Branching Flowering Vegetative Early Vegetative Apply suplex @ 2.5g/lt of wate, if powdery mildew infection caused due to cloudy weather and high humidity. Farmers may go for nipping in 3-4 week old crop. Give weeding to late sown crop at vattar condition of soil.
- Vegetables: Radish/Broccoli / Cauliflower/ Knolkhol Coriander, fenugreek, Palak Potato Onion/garlic Peas Harvest Harvest (Tuber formation) Bulb/clove Pod bearing Harvesting and cleaning of crops is recommended. Harvesting and cleaning of crops is recommended. Provide earthing-up operations along with split N doses during.as it attains height of 15-22 cm. Spray mancozeb @0.25% or metalaxy+mancozeb @0.25%, if symptoms of late blight and early blight are observed Give intercultural operations to keep the field weed free. Provide adequate support to the plants for potential yield.
- Rabi Fodder: Barseem: Cutting If stem rot is observed, with hold irrigation for a few days after each cutting and give one spray of carbendazim 50WP @ 0.1%.
- Floriculture: Rose/ Chrysanthemum/ Marigold Gladiolus Vegetative/ Flowering Vegetative Prune dry and old shoots of rose. Spray mixture of Bavistin

- + Dithane M-45 (1gm+2gm) @ 3gm/lit of water, if leaf spot observed in chrysanthemum. Staking is recommended in chrysanthemum. Hoeing and weeding is recommended. Cut the shoots up to the height of 10-15 cm, if shoots are 20-30 cm high or after 30-45 days after planting to enable the plant grow erect.
- Horticulture: Mango/ Citrus/ Guava: Young Bearing Provide thatching prepared from Sarkanda or any other material to young plants to protect them from low temperature. Plough orchard area between plants. Keep the orchard clean when soil reaches vattar condition. Prune the citrus orchard wherever harvesting is complete. Apply 2% methyl parathion dust @250gm/basins or alternatively use alkathane or sticky grease band, 15-20 cm wide, 0.5 m above ground level to check mealy bugs.
 - Button mushroom: (A bispora) Oyster mushroom: Spawn run Fruiting Spawn arrangement Before spawning, check the moisture, pH and ammonia in the compost. Maintain temperature from 16 to 18°C in the cropping room, if fruit bodies are coming out. Maintain temperature from 23 to 24°C in the cropping room, if the bags are under spawn run condition. Provide proper ventilation in the cropping room. Maintain 1000-1500 ppm CO₂ during fruiting. spray 0.05% chlorothalonil, if any competitive mould is visible in the cropping bag. Maintain hygiene condition in & around the cropping room. Winter species of oyster mushroom may be grown. Spawn may be arranged at an earliest for cultivation of Oyster mushroom after second fortnight of January.
 - Sericulture: Mulberry Cocoon crop Tree plantation Chawki / late age rearing Give irrigation to Mulberry Farm / individual mulberry trees periodically at an interval of 15-20 days. Cocoons harvested if not sold/utilized, should be kept away from rodents and pests attack.
 - Apiculture: Migrate colonies to areas having floral resources (near toria/vegetable crops). Provide winter packing to bee colonies to protect them from cold. Reduce the entrance.
 - Live stock: Dairy animals/ Sheep & Goat Put some bedding material like puaal etc. to keep animals warm. Provide dry bedding during night. Do not allow animals to leave khurli early in morning directly to open area. Provide hay of green forage like stala, lobia, maize, jowar and bajra etc. with kadbi and other green grasses to the milch animals in order to enhance milk production and also to prevent from bloat (aafara). Give special care to young calves as they are more sensitive to pneumonia. Protect the pregnant and milch animals from cold and feed them mineral mixture regularly. To avoid cracking or fissuring of teats in cold dry weather, clean the teats with warm water and apply ghee or butter after

every milking.

- Poultry: Cover the poultry shed with gunny bags in order to protect the birds from cold weather. There should be a good source of light and heat in poultry houses. Avoid hurdling of chicks. Well-insulated windows can act as a sun trap during winters. Give vaccination against infectious person dermatitis & Gumbroo to 7 & 14 days chick.
- Fisheries: Fingerling/advanced fingerlings Add regular supplementary feed on daily basis @ 2-3 % of total estimated fish biomass present in the pond In case of appearance of algal bloom in the fish pond, farmers should stop the addition of manure/fertilizer/supplementary feed in the fish pond for some days. Remove algal bloom by the addition of fresh water in to the fish pond.



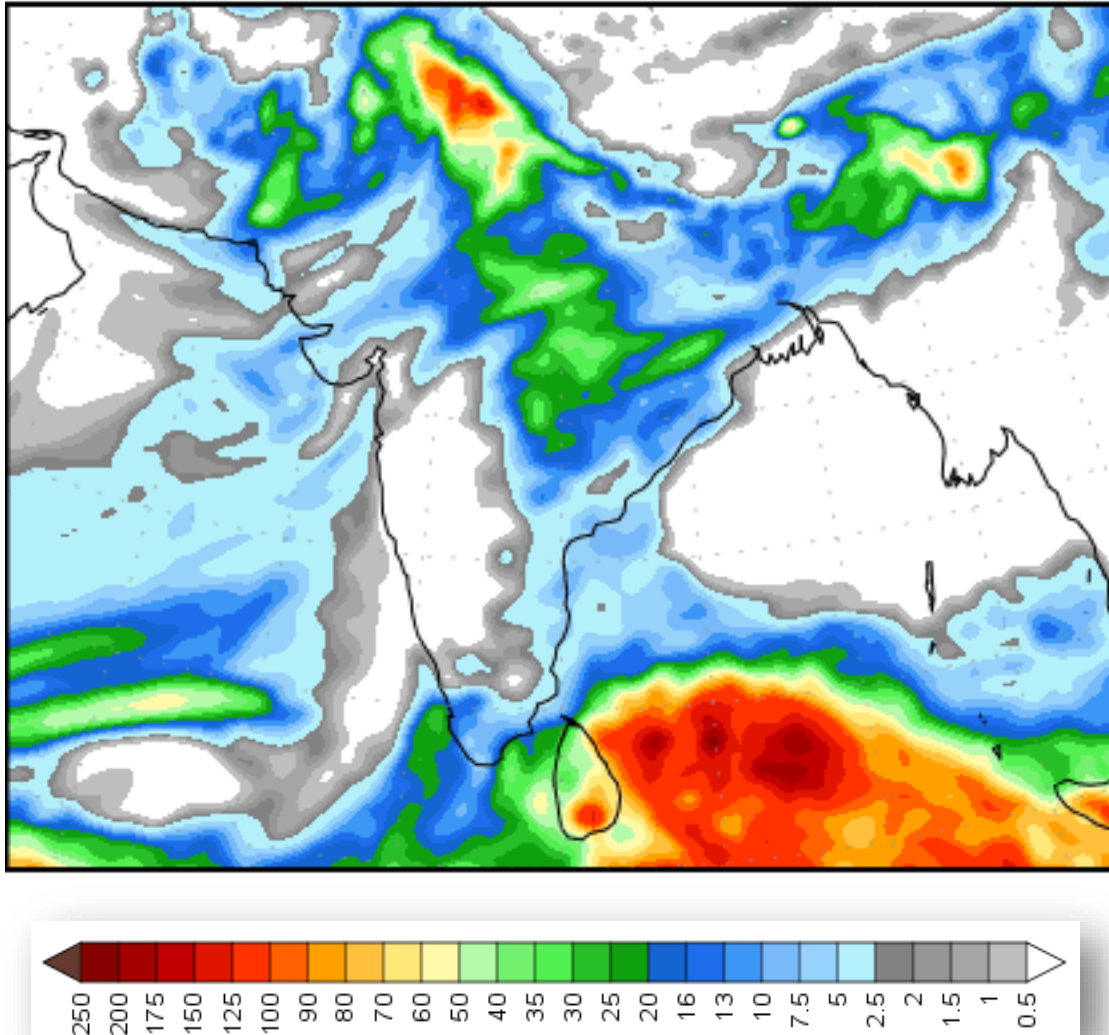


Figure:2. Precipitation forecast for 06 Jan to 14 Jan 2022 (Source: NOAA NCEP).

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