

All India Coordinated Research Project on Agrometeorology

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Daily Crop Weather Information as on 18 February 2020

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Significant Weather Features (IMD)

- The Western Disturbance as a cyclonic circulation over Afghanistan & adjoining Pakistan now lies over Kashmir & neighborhood at 3.6 km above mean sea level. Under its influence, light isolated to scattered rainfall is likely to occur over the Western Himalayan Region during the next 2 days.
- A fresh Western Disturbance is likely to affect Western Himalayan Region & adjoining plains from 20th February. Under its influence, light to moderate isolated to fairly widespread rainfall is likely to occur over northwest India (except Rajasthan) along with thunderstorm, lightning & gusty winds (speed 30-40 kmph) over the same region on 20th and 21st February.
- The images showing the latest satellite picture in the figure. 1.

Main Weather Observations (IMD)

- Rain/Thundershowers observed (from 0830 hours IST yesterday to 0830 hours IST of today): at many places over Arunachal Pradesh and at isolated places over Assam & Meghalaya
- Dense fog observed in isolated parts over coastal Odisha.
- Maximum Temperature Departures as on 17-02-2020: Maximum temperatures were markedly above normal (5.1°C or more) at many places over Jammu, Kashmir & Ladakh, Himachal Pradesh, and West Rajasthan; at a few places over Uttarakhand, Saurashtra & Kutch and Konkan & Goa; appreciably above normal (3.1°C to 5.0°C) at most places over East Rajasthan; at many places over Punjab and Gujarat region; at a few places over Kerala & Mahe; at isolated places over Assam & Meghalaya and West Rajasthan; above normal (1.6°C to 3.0°C) at many places over Haryana, Chandigarh & Delhi; at a few places over Vidarbha, Madhya Maharashtra, and Coastal Karnataka; at isolated places over West Uttar Pradesh, East Madhya Pradesh, Odisha, West Bengal & Sikkim, Interior Karnataka, and Coastal Andhra Pradesh. They were below normal (-1.6°C to -3.0°C) at a few places over Andaman & Nicobar Island; at isolated places over Bihar and Tamil Nadu, Puducherry & Karaikal and near normal over rest Parts of

the Country. Yesterday, the highest maximum temperature of 38.1°C was recorded at Santacruz (Mumbai).

- Minimum Temperature Departures as on 18-02-2020: Minimum temperatures are markedly above normal (5.1°C or more) at a few places over Jammu & Kashmir and Himachal Pradesh; appreciably above normal (3.1°C to 5.0°C) at many places over Assam & Meghalaya and Madhya Maharashtra; at a few places over Sub-Himalayan West Bengal & Sikkim and Saurashtra & Kutch and at isolated places over Uttarakhand and Andaman & Nicobar Islands; above normal (1.6°C to 3.0°C) at most places over Gujarat region; at many places over Konkan & Goa; at a few places over Arunachal Pradesh, West Rajasthan and Bihar and at isolated places over West Uttar Pradesh and Kerala & Mahe. They are appreciably below normal (-3.1°C to -5.0°C) at many places over Chhattisgarh and Rayalaseema; at a few places over Odisha and at isolated places over East Rajasthan, Madhya Pradesh and Telangana; below normal (-1.6°C to -3.0°C) at most places over Jharkhand; at many places over Haryana, Chandigarh & Delhi; at a few places over Gangetic West Bengal and at isolated places over Punjab, East Uttar Pradesh, and Tamil Nadu & Puducherry & Karaikal and near normal over rest parts of the country. The lowest minimum temperature of 5.0°C recorded at Alwar (East Rajasthan) over the plains of the country.

Weather Warning during the next 5 days (IMD)

- 18 February (Day 1): Dense fog very likely in isolated parts over Odisha. Thunderstorm accompanied by lightning likely at isolated places over Arunachal Pradesh.
- 19 February (Day 2): Dense fog very likely in isolated parts over Odisha.
- 20 February (Day 3): Thunderstorm accompanied by lightning & gusting wind (speed reaching 30-40 kmph) likely over Himachal Pradesh, Uttarakhand, Punjab and Haryana, Chandigarh & Delhi.
- 21 February (Day 4): Thunderstorm accompanied by lightning & gusting wind (speed reaching 30-40 kmph) likely over Himachal Pradesh, Uttarakhand, Punjab and Haryana, Chandigarh & Delhi. A strong wind (speed reaching 45-55 kmph) likely to prevail over the South Andaman Sea, Comorin area & South Bay of Bengal.
- 22 February (Day 5): Strong wind (speed reaching 45-55 kmph) likely to prevail over the South Andaman Sea, Comorin area & South Bay of Bengal.
- The weather outlook for seven days i.e., 18 to 26 Feb 2020 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)

Bihar

Weather condition:

Mainly dry weather prevailed during the week. The maximum temperature ranged from 20.5 to 22.0°C and minimum temperature ranged from 6.0 to 9.2 °C.

Contingency measure:

- **Wheat - Sowing:** Low level of soil moisture in the fallow land (after harvesting of paddy) would affect the germination of seeds. For proper germination and crop stand, pre-sowing irrigation is advised. Farmers are advised to complete the timely sown wheat crop at the earliest. Farmers are also advised to give light irrigation in the early sown wheat crop which reaches Crown Root Initiation (CRI) stage (21-25 days after sowing). Application of 30kg nitrogen per hectare is advised 2-3 days after irrigation. Farmers are advised to start the sowing of late varieties of wheat crop. PBW-373, HD-2285, HW-2045, HUUW-234, WR-544, DBW-14, HD-2643, HD-2967, NW-2036 varieties are recommended for late sowing in North Bihar. Farmers are also suggested to procure good quality of seeds of wheat from reputed sources. Application of 40 kg nitrogen, 40 kg phosphorus and 20 kg potash per hectare is advised during land preparation for late sowing. Seeds should be treated with Carbendazim @ 2.0 g per kilogram of seed. For the broadcasting method, seed rate @ 150kg per hectare is advised and 125 kg per hectare is recommended for the seed drill method. Deep sowing of seeds is not advisable. Seed treatment with chlorpyrifos 20EC@ 8 ml/kg of seeds is advised in termite affected land.
- **Rabi Maize - Sowing:** Complete the sowing of rabi maize at the earliest. Weeding is advised in 25-30 days old maize crop. Give light irrigation based on the moisture condition of the field.
- **Potato - Planting:** Complete the planting of potato at the earliest. Weeding and earthing up are advised in early sown potato crop, which has attained a height of 15-20 cm. Give light irrigation as per need.
- **Rai - Sowing/weeding:** Complete the sowing of late varieties of rai such as Rajendraraipicheti (RAURD-9403), Rajendraanukul (RAURD-1002) and Rajendrasuflam (RAURDL-02-01) at the earliest. Weeding is advised in 20-25 days old raicrop. Thinning is advised to maintain the plant to plant spacing at 12-15 cm.

- Fodder crops - Sowing: Sowing of fodder crops such as barseem and oat is advised for milch animals. Seed rate@20kg/hectare for barseem and 80 kg/hectare for oat crop is advised. Gram-Sowing- Farmers are advised to complete the sowing of gram till 10th December. To protect against Kajra caterpillar (cutworm), seeds should be treated with Chlorpyrifos@8ml/kg. Before sowing, treated seeds should be mixed with rhizobium culture (5 packets/hectare) also.
- Garlic - Vegetative: Weeding is advised. Give light irrigation in garlic at a regular interval given low soil moisture and dry condition. Rabi onion-Seedlings- Farmers are advised to remove weeds from onion nursery at a regular interval of 7-10 days. Give light irrigation after weeding. Protect the nursery seedlings from insect-pest and disease infestation.
- Vegetables: Weeding is advised. Give irrigation as per the status of soil moisture. Monitoring is advised for the infestation of fruit and shoot borers brinjal, tomato, chili, gram, and pea. If an infestation occurs, the installation of pheromone traps @ 3-4 traps per acre is advised. If the insect population is observed to be above ETL, then spraying of Spinosad 1.0 ml/4 liter of water is advised. Infested fruits and shoots should be collected and buried before spraying.
- Animal care: Milch animals: a Falling trend of temperature may adversely affect the milk production of milch animals. Farmers are advised to give protein-enriched diets to the animals. Do not keep the animal in the open.

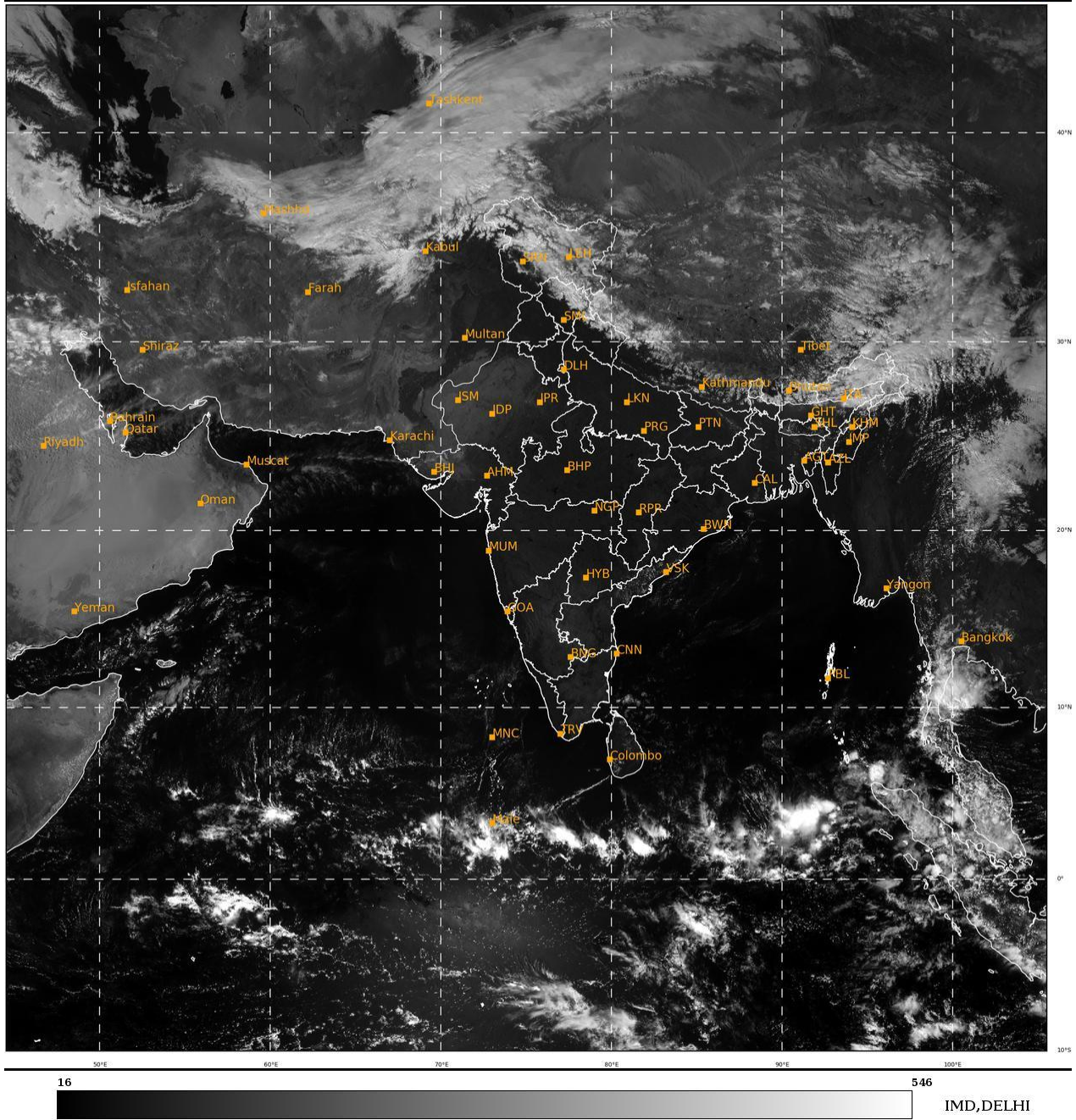


Figure: 1. Latest available satellite picture as on 18 February 2020 at 1357 Hrs (IST).
(Source: IMD).

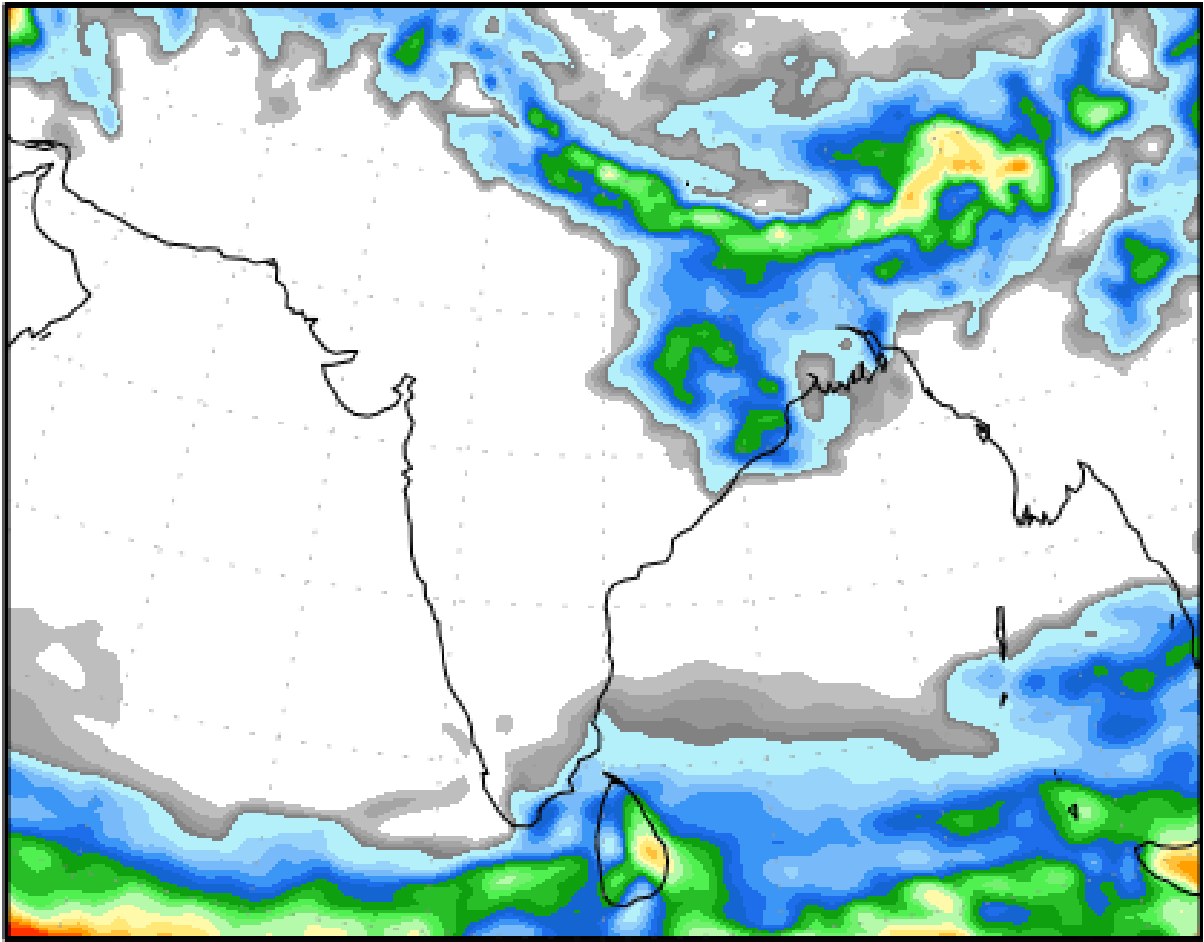


Figure:2. Precipitation forecast for 18 to 26 Feb 2020 (Source: NOAA NCEP).

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