All India Coordinated Research Project on Agrometeorology

CRIDA, Santoshnagar, Hyderabad – 500 059

Daily Crop Weather Information as on 04 January 2022

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Significant Weather Features (IMD)

- I. Wet spell over northwest & central India till 9th January:
- The Western Disturbance as a trough in westerlies in lower & middle tropospheric levels with its axis at 5.8 km above mean sea level roughly along Long. 55°E to the north of Lat. 30°N persists. Under its influence, an induced cyclonic circulation has formed over southwest Rajasthan & adjoining Pakistan at lower tropospheric levels. There is moisture feeding from Arabian Sea over northwest India and likely to continue during next 2 days. Under its influence:

  i) Fairly widespread to widespread light/moderate rainfall/snowfall very likely over Western Himalayan Region on 04th & 05th and scattered on 06th January. Isolated heavy rainfall/snowfall very likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad on 04th & 05th and over Himachal Pradesh & Uttarakhand on 05th January.

  ii) Scattered to fairly widespread light/moderate rainfall very likely over Punjab, Haryana, Chandigarh & Delhi, north Rajasthan, West Uttar Pradesh during 04th to 06th; isolated to scattered over south Rajasthan, Gujarat, West Madhya Pradesh and East Uttar Pradesh on 05th & 06th January.

  iii) Isolated heavy rainfall is very likely over Punjab on 05th January. iv) Isolated thunderstorm activity accompanied with Hailstorms very likely over Punjab and Haryana & Chandigarh on 05th; over East Uttar Pradesh & West Madhya Pradesh on 6th January.
- Thereafter, an intense Western Disturbance is very likely to affect Northwest India from the night of 06th January, 2022 onwards. Under its influence, an induced cyclonic circulation very likely to form over southwest Rajasthan & neighbourhood on 07th January, 2022. High moisture feeding from Arabian Sea is also very likely over northwest India during 07th to 09th January, 2022. Under its influence:

  i) Fairly widespread to widespread rainfall/snowfall very likely over Western Himalayan Region during 07th to 09th January and decrease thereafter.

ii)Isolated heavy rainfall/snowfall likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad during 07th to 09th and over Himachal Pradesh on 08th & 09th January.

iii) Scattered to fairly widespread light/moderate rainfall/thunderstorm over plains of northwest & adjoining central India during 07-09 January.

iv) Isolated heavy rainfall is very likely over Punjab on 07th & 08th & over Haryana on 08th January.

v) Isolated thunderstorm activity accompanied with Hailstorms very likely over Punjab on 07th; East Uttar Pradesh, West Madhya Pradesh and Rajasthan on 07th and over East Madhya Pradesh on 07th & 08th January, 2022.

- Dense Fog in isolated pockets in night/morning hours very likely over East Uttar Pradesh during next 24 hours; over Bihar, West Bengal & Sikkim, Odisha during next 3 days and over west Assam & Meghalaya and Tripura during next 2 days.
- 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, GilgitBaltistan, Muzaffarabad; at isolated places over Himachal Pradesh, Punjab, Haryana, West Rajasthan, Assam & Meghalaya, Tamil Nadu. Puducherry & Karaikal and Kerala & Mahe.
- Fog observed (at 0830 hours IST of today): Dense to very dense fog in isolated pockets over East Uttar Pradesh; Dense fog in isolated pockets over Bihar, Assam, Tripura and West Bengal and Moderate fog in isolated pockets over Manipur, Delhi and East Rajasthan.
- Minimum Temperature Departures (as on 04-01-2022): Minimum temperatures are markedly above normal (5.1°C or more) at many places over Himachal Pradesh; at a few places over West Rajasthan and Gujarat state; at isolated places over Punjab; appreciably above normal (3.1°C to 5.0°C) at a few places over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, East Rajasthan, Konkan & Goa and Madhya Maharshtra; at isolated places over West Madhya Pradesh and Haryana, Chandigarh & Delhi; above normal (1.6°C to 3.0°C) at many places over Andaman & Nicobar Islands, Vidarbha, Kerala & Mahe, Coastal Karnataka, Lakshadweep and Marathwada; at a few places over Rayalaseema, South Interior Karnataka, Telangana and Coastal Andhra Pradesh & Yanam; at isolated places over East Madhya Pradesh. They are below normal (-1.6°C to -3.1°C) at a few places over Bihar; at isolated places over East Uttar Pradesh, West

Bengal & Sikkim and Tamil Nadu Puducherry & Karaikal and near normal over rest parts of the country. Today, the Lowest minimum temperature 4.5°C reported at Nowgong (East Madhya Pradesh) over the plains of the country.

- Maximum Temperature Departures (as on 03-01-2022): Maximum temperatures were appreciably above normal (3.1°C to 5.0°C) ; at a few places over Himachal Pradesh; at isolated places over Punjab, West Rajasthan and Saurashtra & Kutch; above normal (1.6°C to 3.0°C) at most places over Uttarakhand; at many places over West Uttar Pradesh, Assam & Meghalaya, Konkan & Goa, Coastal Karnataka and Kerala & Mahe; at a few places over Gujarat region; at isolated places over Haryana. They were appreciably below normal (-3.1°C to -5.0°C) at many places over Bihar; below normal (-1.6°C to -3.0°C) at many places over East Uttar Pradesh; at a few places over East Madhya Pradesh and at isolated places over West Bengal & Sikkim and Madhya Maharashtra and near normal at rest parts of the country. Yesterday, the highest maximum temperature of 36.4°C was reported at Alapuzha & Kottayam (Kerala).

Weather Warning during the next 5 days (IMD)

- 04 January (Day 1): Heavy rainfall/snowfall at isolated places very likely over Jammu & Kashmir, Ladakh, GilgitBaltistan & Muzaffarabad. Dense fog in isolated pockets very likely over East Uttar Pradesh, Bihar, West Bengal & Sikkim, Odisha, west Assam & Meghalaya and Tripura. Cold day conditions at isolated places very likely over Bihar. Thunderstorm accompanied with lightning at isolated places very likely over Andaman & Nicobar Islands. 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.
- 05 January (Day 2): Heavy rainfall/snowfall at isolated places very likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh, Uttarakhand and heavy rainfall at isolated places over north Punjab. Thunderstorm accompanied with lightning & hail at isolated places very likely over Punjab, Haryana, Chandigarh & Delhi and with lightning at isolated places over Uttar Pradesh, Rajasthan and West Madhya Pradesh. Dense fog in isolated pockets very likely over Bihar, West Bengal & Sikkim, Odisha, west Assam & Meghalaya and Tripura. Cold day conditions at isolated places very likely over Bihar.
- 06 January (Day 3): Thunderstorm accompanied with lightning & hail at isolated places very likely over East Uttar Pradesh and West Madhya Pradesh and with lightning at isolated places over West Uttar Pradesh and East Madhya Pradesh.

Dense fog in isolated pockets very likely over Bihar, West Bengal & Sikkim and Odisha.

- 07 January (Day 4):Heavy rainfall/snowfall at isolated places likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad and heavy rainfall at isolated places over Punjab. Thunderstorm accompanied with lightning & hail at isolated places likely over Punjab, East Uttar Pradesh, Rajasthan and Madhya Pradesh.
- 08 January (Day 5): Heavy rainfall/snowfall at isolated places likely over Jammu & Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad, Himachal Pradesh and heavy rainfall at isolated places over Punjab and Haryana. Thunderstorm accompanied with lightning & hail at isolated places likely over East Madhya Pradesh and with lightning at isolated places over Punjab, Rajasthan, Vidarbha, West Madhya Pradesh and Tamilnadu, Puducherry & Karaikal.
- The weather outlook for seven days i.e., 04 Jan to 12 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)

West Bengal

Weather condition:

Weather conditions during the 52nd week at Mohanpur, West Bengal: Maximum temperature: 25.0 to 25.8 ^{o}C, Minimum temperature: 11.5 to 15.5 ^{o}C, bright sun shine hours: 0.2 to 5.5 hours, Morning-time relative Humidity: 89 to 91 %, after noon-time R.H: 55 to 65 %, weekly total pan evaporation: 4.8 mm, total weekly rainfall: 0.0 mm and average daily wind speed is 0.0 km/h.

Contingency measure:

- Boro Rice: Start preparation of nursery or seedbed for Boro Paddy.Those who are interested in Sudha Boro Rice cultivation may germinate the seeds with the help of Sampad Seed Germinator . After germination seedlings should be sown in 50 ft X 4 ft seedbed for cultivation in 1 bigha land. Seed rate is 1-1.5 Kg per bigha.Polythene sheet must be applied on 1.5 ft. Stand and lower portion must be dubbed with mud so that cold wind can?t damage the new seedlings.;
- Potato: Prepare the land for late plantimg of Potato (Variety : Kufri Jyoti). But March harvesting may hamper the productivity. Collect the seed from certified source and treat it with trichoderma viridi or pseudomonas fluorescence

solution.;

- Spinach: Direct seeded spinach , radish , carrot etc may be sown as 2-2.5 months crop in the fields where newly sown Potato or Mustard are totally affected due to water logging condition for recent depression rainfall.

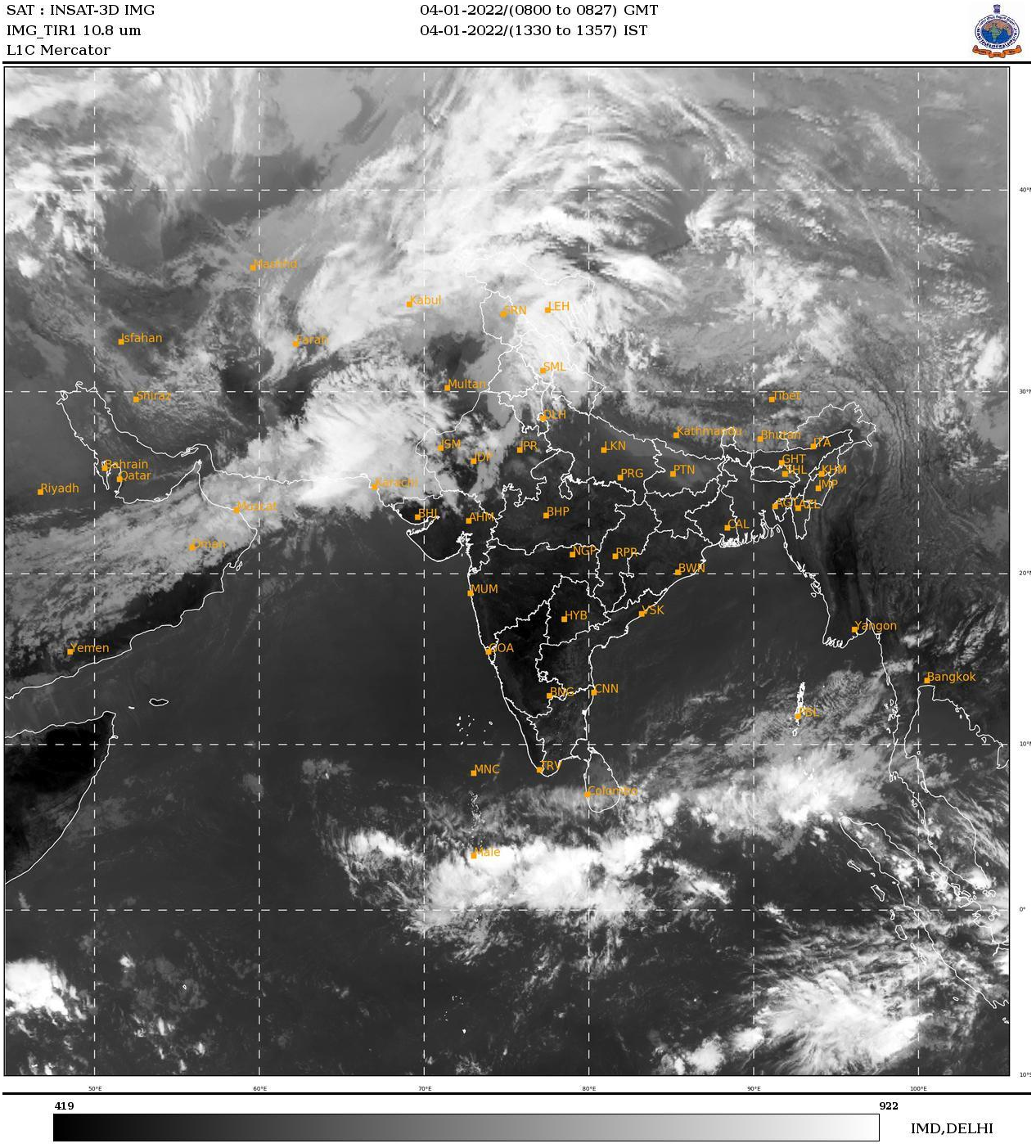

Figure: 1. Latest available satellite picture as on 04 Jan 2022 at 1357 Hrs (IST). (Source: IMD).

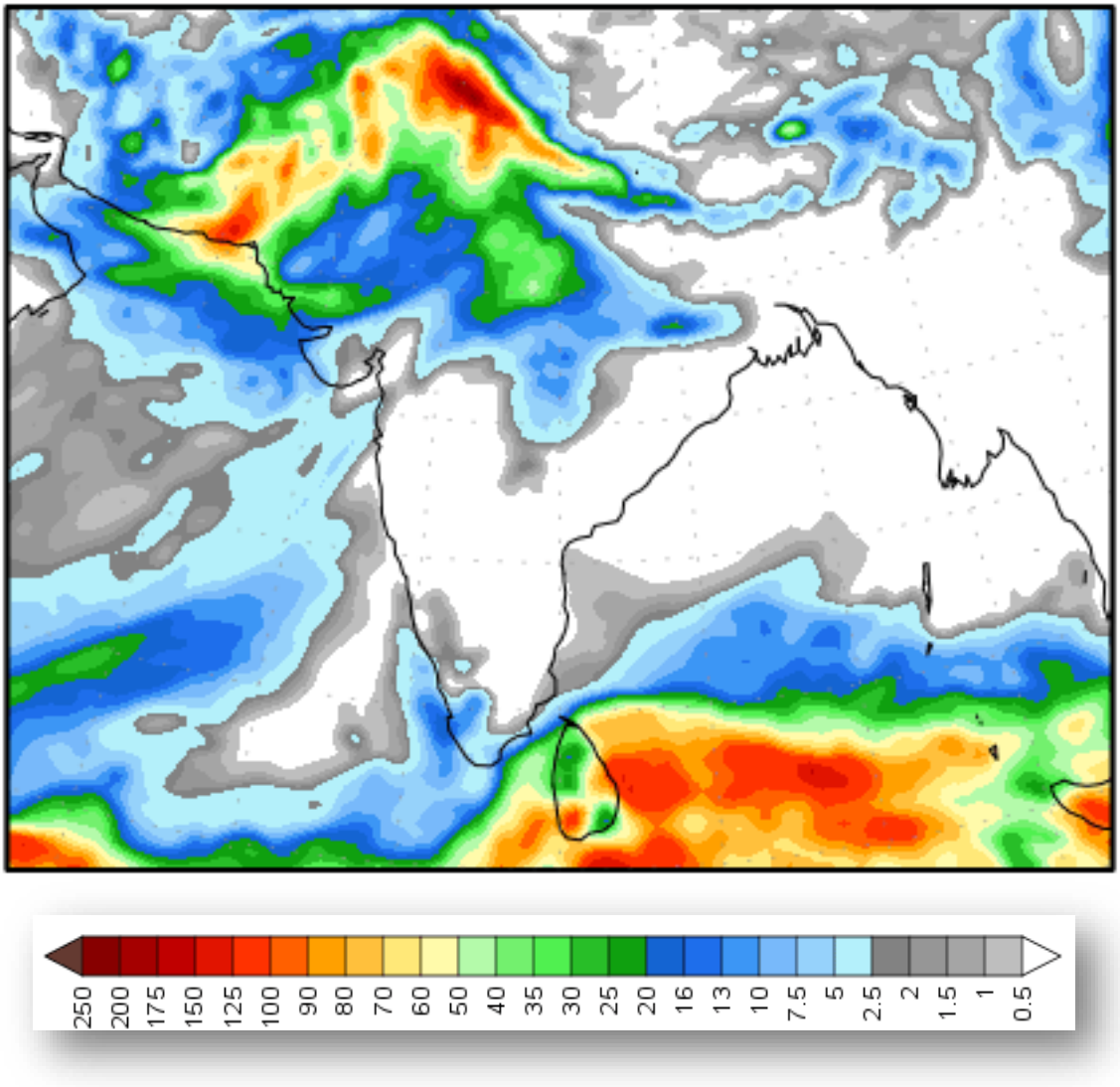

Figure:2. Precipitation forecast for 04 Jan to 12 Jan 2022 (Source: NOAA NCEP).

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