



Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 30th December, 2022
Time of Issue: 1300 hours IST

Subject: (i) Dense fog conditions likely to continue over plains of northwest India during next 4-5 days.
(ii) A fresh cold wave spells likely to commence over northwest India from 01st January, 2023 onwards.

Weather observed during past 24 hours ending at 0830 hrs IST of today:

- ❖ **Minimum temperatures** are in the range of 7-10°C over many parts of Punjab, Haryana, Chandigarh & Delhi, Rajasthan, Uttar Pradesh and Madhya Pradesh.
- ❖ Today morning, **Very Dense Fog** observed in some pockets over East Uttar Pradesh; in isolated pockets over West Uttar Pradesh and **Dense Fog** in some pockets over Punjab and in isolated pockets over Bihar.
- ❖ **Rainfall/snowfall** observed at most places over Jammu, Kashmir, Ladakh, Gilgit-Baltistan & Muzaffarabad; at many places over Himachal Pradesh; at isolated places over Uttarakhand and isolated rainfall over Punjab, Haryana, Chandigarh and West Rajasthan.
- ❖ Chief rainfall amount recorded (in cm): Jammu & Kashmir: Kupwara-4, Ramban: Batote-2, Anantnag: Pahalgam-2; Baramula: Gulmarg-2.; Himachal Pradesh: Chamba: Saloni-3, Kullu: Kasol. Kothi-2 each.

Minimum Temperature Forecast, Cold Wave/Cold Day & Fog Warnings (Annexure I & II):

Fog and Cold Day Warning

- ❖ **Due to light winds and high moisture near surface over Indo-Gangetic plains, dense to very dense fog** very likely in some/many pockets over Punjab and Haryana, Chandigarh & Delhi; in isolated/some pockets over Uttar Pradesh during 31st December-04th January and Dense fog in isolated over north Rajasthan during 31st December-02nd January.
- ❖ **Dense Fog** also very likely in isolated pockets over Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 2 days.
- ❖ Cold Day Conditions very likely in isolated pockets over Punjab, Haryana-Chandigarh-Delhi during 01st-03rd and over Uttar Pradesh on 02nd & 03rd January, 2023.

Minimum Temperature Forecast & Cold Wave Warning

- ❖ Due to northwesterly winds from Himalayas over plains of northwest India, minimum temperatures very likely to fall gradually by 3-5°C over the same region during next 3 days and no significant change thereafter. As a result;
 - **Cold Wave Conditions** very likely in isolated pockets over Punjab, Haryana-Chandigarh-Delhi during 01st-04th; over Himachal Pradesh, Uttarakhand and north Rajasthan during 02nd-04th and over West Uttar Pradesh on 03rd & 04th January, 2023.
- ❖ No significant change in minimum temperatures likely over many parts of East India during next 2 days and rise by 2-3°C thereafter. No significant change in minimum temperatures likely over Madhya Pradesh during next 24 hours and fall by 2-3°C for subsequent 2 days.

Weather systems and forecast & warning:

- Under the influence of Western Disturbance as a cyclonic circulation over north Pakistan and induced cyclonic circulation over Punjab & neighbourhood in lower tropospheric levels, isolated to scattered light rainfall/snowfall likely over Western Himalayan Region on today, the 30th December, 2022. It is likely to move away from Indian region by tomorrow, 31st, December, 2022.

- A fresh feeble Western Disturbance is very likely to cause light isolated to scattered rainfall/snowfall over Western Himalayan Region on 3rd & 04th January, 2023.

For more details kindly refer:

https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php

Annexure I

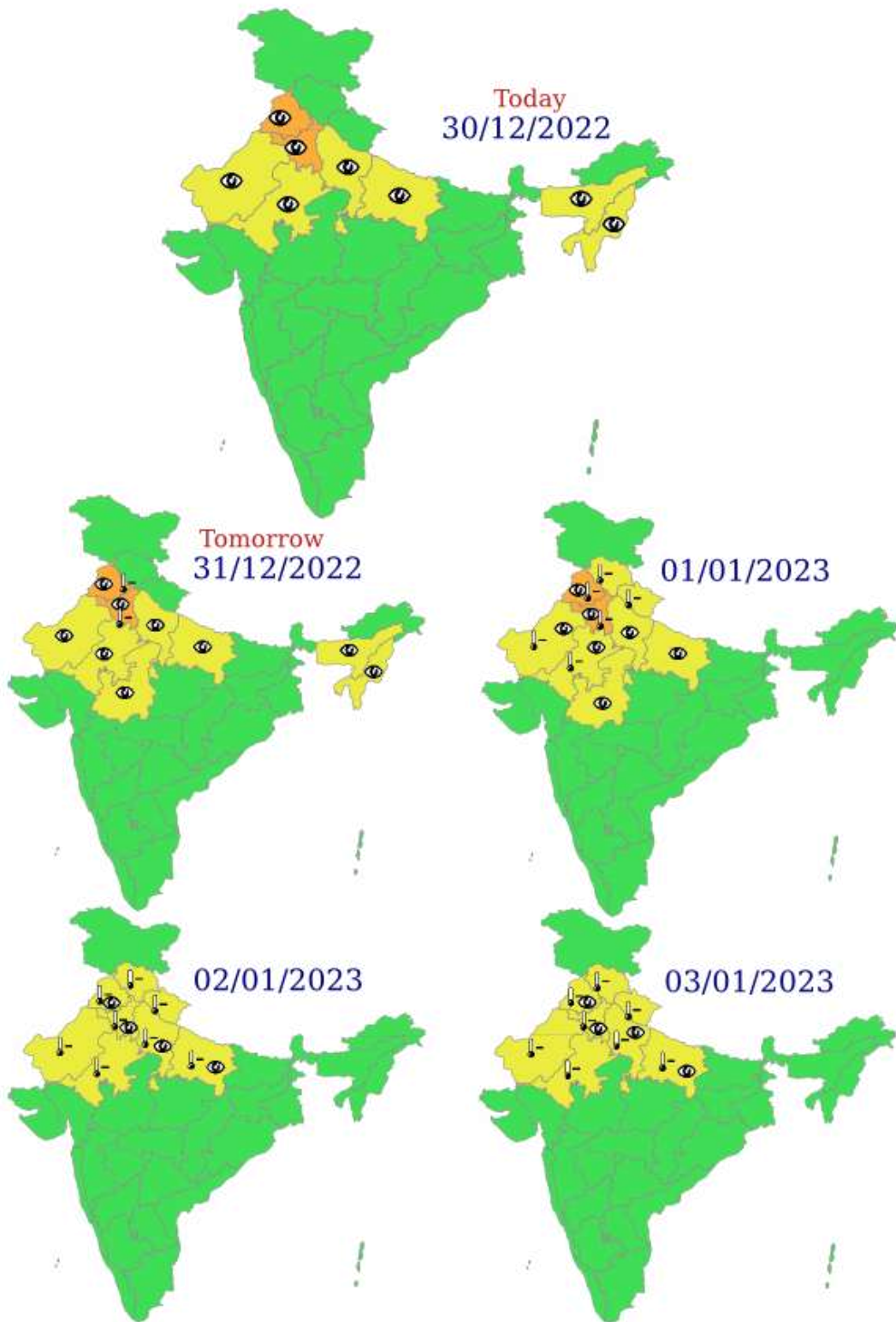
Impact expected and action suggested due to dense to very dense fog in the night/morning hours some/many parts over Punjab, Haryana, Chandigarh & Delhi and in isolated/some pockets over Uttar Pradesh during next 5 days.

Impact expected:

- **Transport and Aviation:**
 - May affect some airports, highways and railway routes in the areas of met- sub-division.
 - Difficult driving conditions with slower journey times.
 - Some road traffic collisions
- **Power Sector:**
 - Chances of Tripping of Power lines in the very dense fog routes
- **Human Health:**
 - Lung related health impacts: Dense fog contains particulate matter and other pollutants and in case exposed it gets lodged in the lungs, clogging them and decreasing their functional capacity which increases episodes of wheezing, coughing and shortness of breath
 - Impact on people having asthma bronchitis: Long time exposure to dense fog may cause respiratory problem for people having asthma bronchitis and other lung related health problems.
 - Causes Eye Irritation: Dense fog contains pollutions of various types and these Pollutants in the air if exposed may tend to irritate the membranes of the eye causing various infections leading to redness or swelling of the eye.

Action suggested:

- **Transport and Aviation:**
 - Careful while driving or outing through any transport.
 - Use fog lights during driving.
 - Be in touch with airlines and Railway and State transport for schedule of your journey.
- **Power Sector:**
 - To keep ready Maintenance Team
- **Human Health:** To avoid outing until unless emergency and to cover the face.



Legends:

Heavy Rain: 64.5 to 115.5 mm; **Very Heavy Rain:** 115.6 to 204.4 mm; **Extremely Heavy Rain:** >204.4 mm.

Region wise classification of meteorological Sub-Divisions:

- 1) **Northwest India:** Western Himalayan Region (Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh and Uttarakhand); Punjab, Haryana-Chandigarh-Delhi; West Uttar Pradesh, East Uttar Pradesh, West Rajasthan and East Rajasthan.
- 2) **Central India:** West Madhya Pradesh, East Madhya Pradesh, Vidarbha and Chhattisgarh.
- 3) **East India:** Bihar, Jharkhand, Sub-Himalayan West Bengal & Sikkim; Gangetic West Bengal, Odisha and Andaman & Nicobar Islands.
- 4) **Northeast India:** Arunachal Pradesh, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura.
- 5) **West India:** Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra and Marathwada.
- 6) **South India:** Coastal Andhra Pradesh & Yanam, Telangana, Rayalaseema, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka, Kerala & Mahe, Tamil Nadu, Puducherry & Karaikal and Lakshadweep.

SPATIAL DISTRIBUTION (% of Stations reporting)			
% Stations	Category	% Stations	Category
76-100	Widespread (WS/ Most Places)	26-50	Scattered (SCT/ A Few Places)
51-75	Fairly Widespread (FWS/ Many Places)	1-25	Isolated (ISOL)

WARNING

WARNING (TAKE ACTION)
ALERT (BE PREPARED)
WATCH (BE UPDATED)
NO WARNING (NO ACTION)

Probabilistic Forecast

Terms	Probability of Occurrence (%)
Unlikely	< 25
Likely	25 - 50
Very Likely	50 - 75
Most Likely	> 75

 Heavy Rain	 Heavy Snow	 Thunderstorm	 Dust Storm
 Strong Winds	 Visibility	 Cyclone	 Squall/ Hail
 Frost	 Cold Wave	 Heat Wave	 Sea State