Government of India
Ministry of Earth Sciences
India Meteorological Department

Press Release
Date: 31st December, 2022
Time of Issue: 1230 hours IST

Subject: (i) Dense to very dense fog in isolated to some pockets over plains of northwest India during next 5 days.
(ii) A fresh cold wave spell very likely to commence in isolated pockets over parts of 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 5-8°C over many parts of Punjab, Haryana, Chandigarh & Delhi, Rajasthan and Uttar Pradesh.
- **Very Dense Fog** was observed in isolated pockets over Punjab, West Rajasthan, Uttar Pradesh, Sub-Himalayan West Bengal and **Dense fog** in isolated pockets over Himachal Pradesh, Haryana, West Madhya Pradesh, Bihar, Assam, Tripura today morning.
- **Rainfall/snowfall** observed at **many places** over Jammu, Kashmir, Ladakh, Gilgit, Baltistan & Muzaffarabad and at **isolated places** over Himachal Pradesh, Punjab, Chandigarh, Sub-Himalayan West Bengal & Sikkim, Arunachal Pradesh, Assam & Meghalaya and Tamilnadu.
- Chief rainfall amount recorded (in cm): **Tamil Nadu:** Sivaganga-1.

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

Fog and Cold Day Warning

- **Dense to very dense fog** very likely in some/many pockets in night/morning hours over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh and in isolated pockets over Bihar during next 5 days. **Dense fog** in isolated pockets over Himachal Pradesh, Uttarakhand during next 3-4 days, Sub-Himalayan West Bengal & Sikkim, Assam & Meghalaya and Nagaland, Manipur, Mizoram & Tripura during next 2 days and over Arunachal Pradesh during next 24 hours.
- **Cold Day conditions** in isolated pockets very likely over Punjab, Haryana & Chandigarh during 01st-02nd Jan; over Uttar Pradesh during 01st-04th Jan; over West Rajasthan during 31st December 2022-01st 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 by 2-4°C over the northwest & adjoining central India during next 2 days and no significant change thereafter. As a result;
  - **Cold wave conditions** in isolated pockets very likely over Himachal Pradesh during 31st Dec-01st Jan; over Punjab and West Rajasthan during 31st Dec-04th Jan; over Haryana & Chandigarh and East Rajasthan during 01st-04th Jan; over Delhi during 03rd-04th Jan; over West Uttar Pradesh during 01st-02nd January, 2023.
- No significant change in minimum temperatures very likely over East India & remaining parts of Central India during next 3 days and rise by 2-3°C thereafter. No significant change in minimum temperatures very likely over remaining parts of the country during next 5 days.

For more details kindly refer:
https://mausam.imd.gov.in/imd_latest/contents/all_india_forcast_bulletin.php

Annexure I

Impact expected and action suggested due to dense to very dense fog in the night/morning hours in some/many pockets over Punjab, Haryana, Chandigarh & Delhi, Uttar Pradesh, in isolated pockets over Bihar during next 5 days and over north Rajasthan during next 2 days.

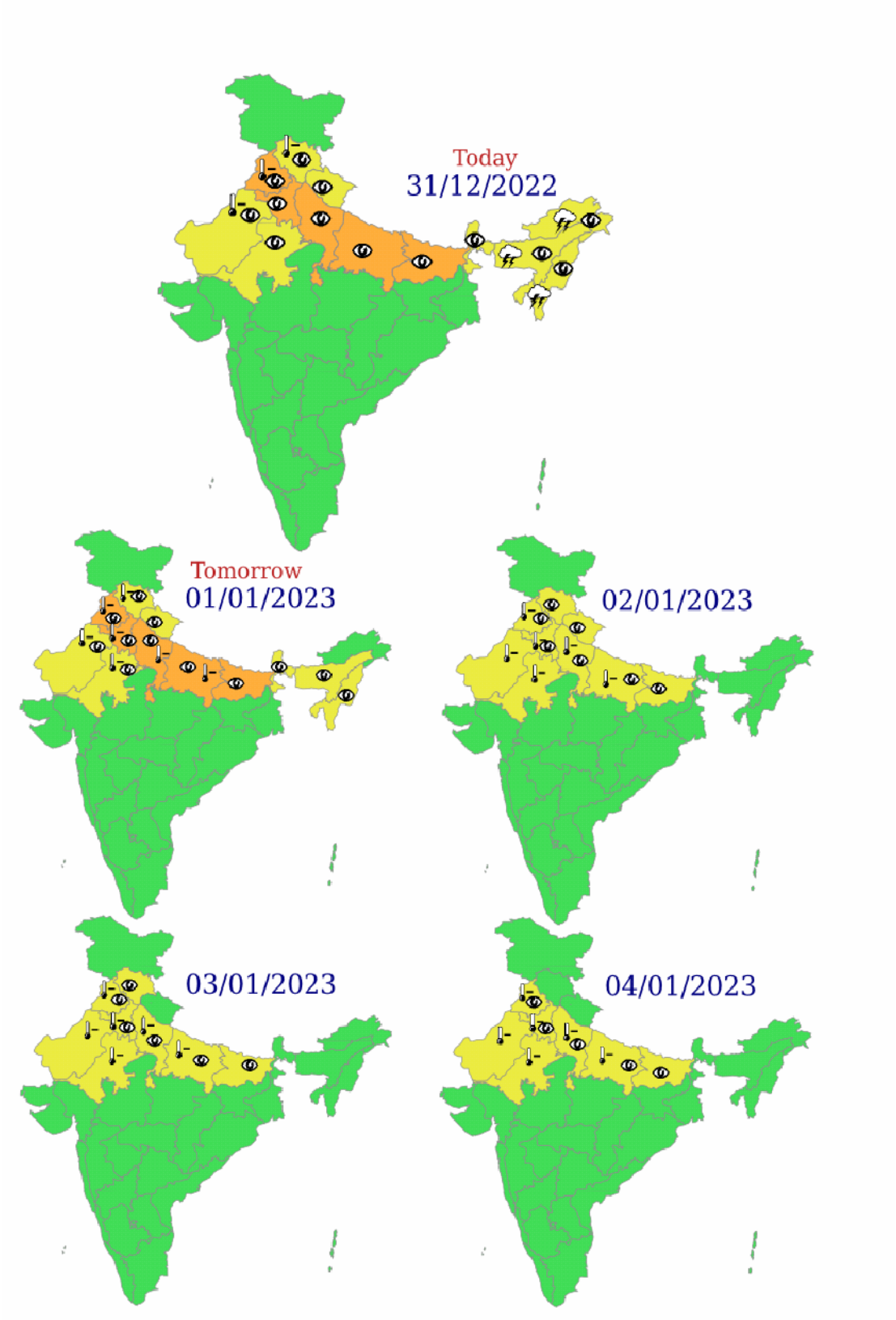
Impact expected:

- **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.

Annexure II


Today
31/12/2022
Tomorrow
01/01/2023
02/01/2023
03/01/2023
04/01/2023

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 Widespred (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