



**Government of India  
Ministry of Earth Sciences  
India Meteorological Department**

**Press Release  
Date: 23<sup>rd</sup> December, 2022  
Time of Issue: 1300 hours IST**

**Subject: (i) Dense to Very Dense Fog conditions likely to continue over Punjab, Haryana, Chandigarh and Uttar Pradesh during next 48 hours and Dense Fog thereafter for subsequent 2-3 days.  
(ii) Depression over southwest Bay of Bengal.**

**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 plains of northwest India.
- ❖ **Cold day to severe cold day conditions** prevailed in many pockets over Punjab; in some pockets over Haryana and **Cold day conditions** in isolated pockets over north Rajasthan.
- ❖ **Dense to Very Dense Fog** observed at isolated pockets over Punjab, Haryana and Bihar; **Dense fog** in isolated pockets over West Rajasthan, Uttar Pradesh, Sub-Himalayan West Bengal & Sikkim, Tripura; **Moderate fog** in isolated pockets over Chandigarh and Delhi.

**Weather systems and forecast & warning:**

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

**Fog Warning**

- ❖ Due to persistence of high moisture and light winds at lower tropospheric levels over Indo-Gangetic plains, **Dense to very dense fog** in many/most pockets very likely to continue over Punjab, Haryana, Chandigarh and Uttar Pradesh in night/morning hours during next 48 hours. Thereafter, **Dense fog** in isolated pockets very likely over Punjab and Haryana & Chandigarh for subsequent 3 days.
- ❖ Dense Fog in isolated pockets also very likely over Himachal Pradesh, Uttarakhand, north Rajasthan, Bihar, Sub-Himalayan West Bengal & Sikkim and Tripura in night/morning hours during next 2-3 days.

**Minimum Temperature Forecast & Cold Wave/Day Warning**

- ❖ No significant change in minimum temperatures likely over northwest India during next 4-5 days. No significant change in minimum temperatures likely over East India during next 24 hours and rise by 2-4°C thereafter. No significant change in minimum temperatures likely over Madhya Pradesh and Maharashtra during next 24 hours and fall by 2-3°C thereafter. Fall by 2-4°C in minimum temperatures likely over Gujarat state during next 2 days and no significant change thereafter.
- ❖ Due to dry north/northwesterly winds from Himalayas over plains of northwest India, **Cold Wave Conditions** very likely in isolated pockets over Punjab and Haryana during 25<sup>th</sup>-27<sup>th</sup>; Saurashtra & Kutch during 24<sup>th</sup>-25<sup>th</sup> December.
- ❖ **Cold Day to severe cold day Conditions** also very likely in isolated pockets over Punjab, Haryana and west Uttar Pradesh; **Cold Day Condition** also very likely in isolated pockets over east Uttar Pradesh during next 2 days.

**(2) Depression over southwest Bay of Bengal.**

The Depression over Southwest Bay of Bengal remained practically stationary during past 06 hours and lay centered at 0830 hours IST of today, the 23<sup>rd</sup> December over Southwest Bay of Bengal near latitude 10.1°N and longitude 84.2°E about 370 km east-northeast of Trincomalee (Sri Lanka), 480 km east of Nagappattinam (Tamil Nadu) and 540 km east-southeast of Chennai (Tamil Nadu).

It is likely to move slowly west-southwestwards towards Comorin Area across Sri Lanka during next 48 hours.

**Warnings:**

**Rainfall warning (Graphics enclosed)**

- ❖ Light to moderate rainfall at many places with heavy rainfall at isolated places is likely over south coastal Tamil Nadu on 25th & 26th December 2022.
- ❖ Light to moderate rainfall at a few places with heavy rainfall at isolated places is likely over south Kerala on 26th December 2022.
- ❖ Light to moderate rainfall at a few places with heavy rainfall at isolated places is likely over Lakshadweep Islands on 27th December 2022.

**Wind warning (Graphics enclosed):**

- ❖ **Southwest Bay of Bengal along & off Tamil Nadu and Sri Lanka coasts:**  
Squally wind speed reaching 45-55 kmph gusting to 65 kmph is likely to prevail till 25th December morning becoming 40-50 kmph gusting to 60 kmph till 26th morning and decrease thereafter.
- ❖ **Adjoining areas of southeast & westcentral Bay of Bengal:**  
Squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail till 24th December morning and decrease thereafter.
- ❖ **Gulf of Mannar and Comorin Area along & off south Tamil Nadu & west Sri Lanka coasts:**  
Squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail on 24th December becoming squally wind speed reaching 45-55 kmph gusting to 65 kmph during 25th and 26th December.
- ❖ **Lakshadweep Islands & adjoining Southeast Arabian Sea:**  
Squally weather with wind speed reaching 40-50 kmph gusting to 60 kmph is likely to prevail on 27th December.

**Sea condition:**

- ❖ **Southwest Bay of Bengal along & off Tamil Nadu and Sri Lanka coasts:**  
Sea condition is likely to be rough to very rough till 26th December morning and improve thereafter.
- ❖ **Adjoining areas of southeast & westcentral Bay of Bengal:**  
Sea condition is likely to be rough till 24th December morning and improve thereafter.
- ❖ **Gulf of Mannar and Comorin Area along & off south Tamil Nadu & west Sri Lanka coasts:**  
Sea condition is likely to be rough to very rough during 25th and 26th December.
- ❖ **Lakshadweep Islands & adjoining Southeast Arabian Sea:**  
Sea condition is likely to be rough to very rough on 27th December.

**Fishermen Warning (Annexure III):**

**Fishermen are advised not to venture into**

- ❖ Southwest Bay of Bengal and along & off Sri Lanka coast during 23rd–25th December.
- ❖ Gulf of Mannar and Comorin Area along & off south Tamil Nadu and west Sri Lanka coasts during 23rd-26th December.
- ❖ Sea areas of Lakshadweep Islands & adjoining Southeast Arabian Sea during 27th December.

For more details kindly refer: [https://mausam.imd.gov.in/imd\\_latest/contents/all\\_india\\_forecast\\_bulletin.php](https://mausam.imd.gov.in/imd_latest/contents/all_india_forecast_bulletin.php)

**Impact expected and action suggested due to Dense/Very Dense fog in** many/most pockets very likely to continue over Punjab, Haryana, Chandigarh and Uttar Pradesh in night/morning hours during next 48 hours. Thereafter, **Dense fog** in isolated pockets very likely over Punjab and Haryana & Chandigarh for subsequent 3 days. **Dense Fog** in isolated pockets also very likely over Himachal Pradesh, Uttarakhand, north Rajasthan, Bihar, Sub-Himalayan West Bengal & Sikkim and Tripura in night/morning hours during next 2-3 days.

➤ **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:**

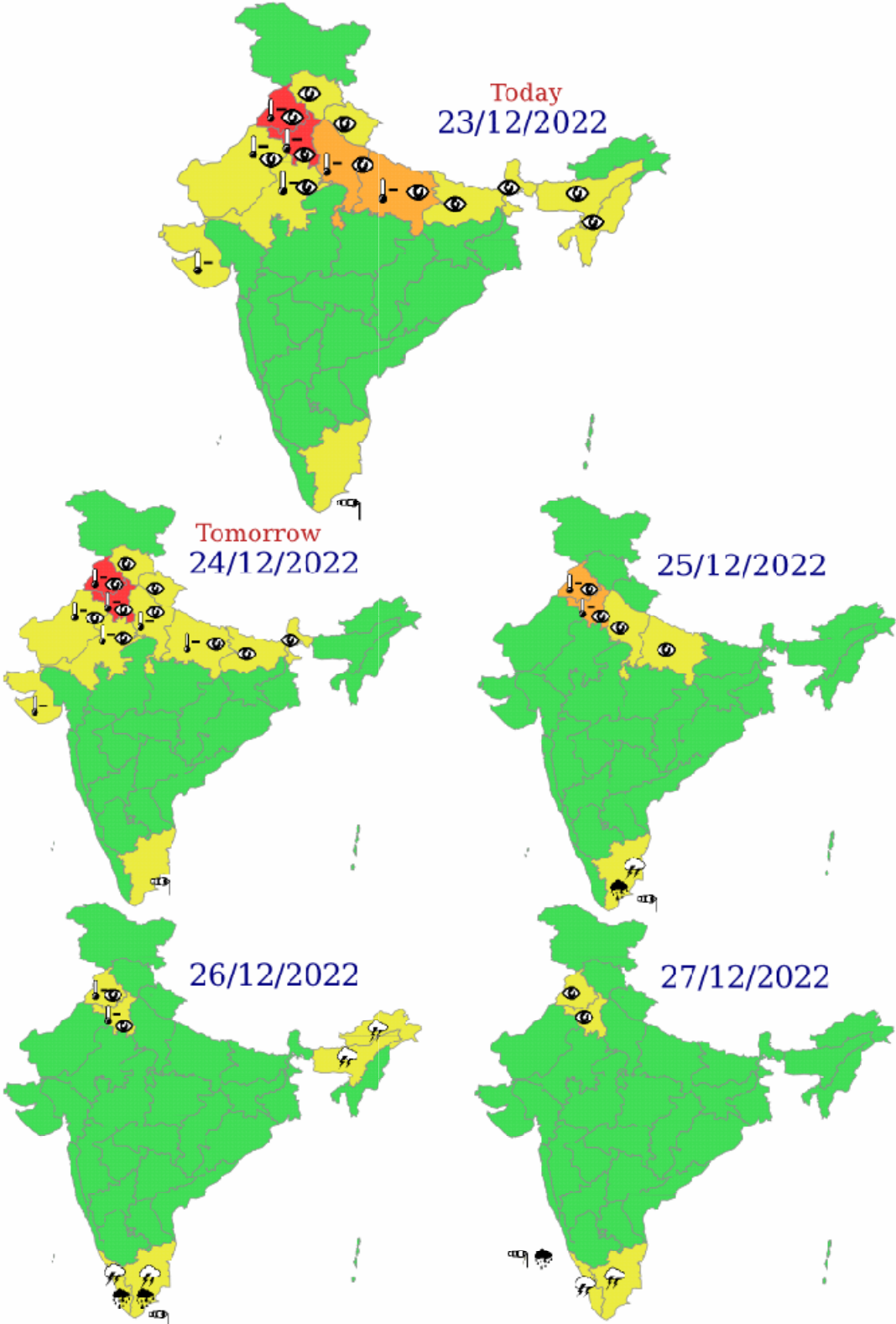
➤ **Transport and Aviation:**

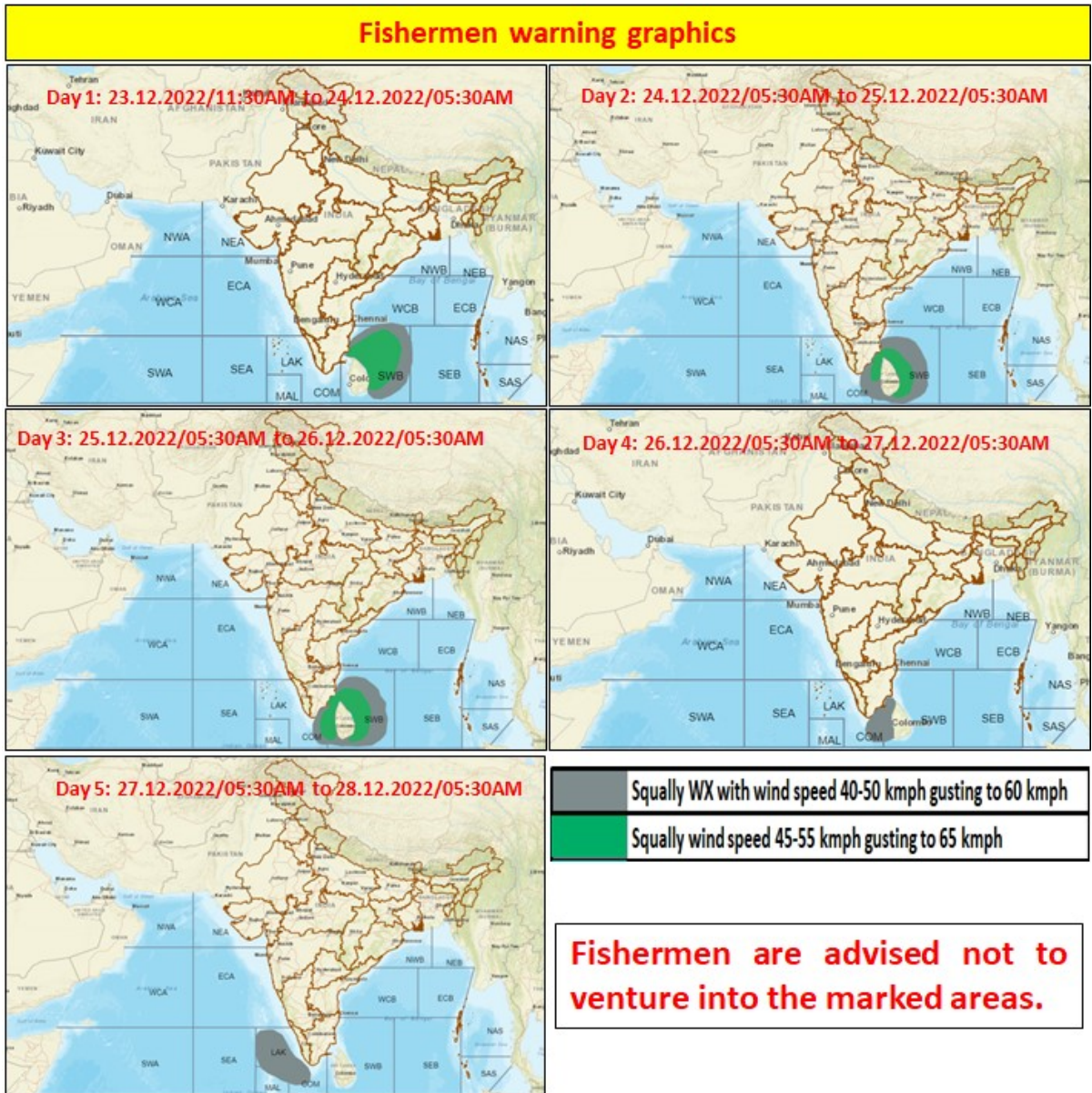
- Careful while driving or outing through any transport.
- Use fog lights during driving.
- Be in touch with airlines and Railway and State transport for schedule of your journey.

➤ **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.

<b>SPATIAL DISTRIBUTION</b> (% 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