



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

**Press Release
Date: 20th December, 2022
Time of Issue: 1230 hrs IST**

**Subject: (i) Dense to Very Dense Fog conditions likely to continue over Punjab, Haryana, Chandigarh & Delhi, Himachal Pradesh and Uttar Pradesh during next 2 days and decrease in intensity thereafter.
(ii) Cold wave conditions over Himachal Pradesh, Punjab, Haryana and north Rajasthan during next 5 days.**

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

- ❖ **Minimum temperatures** are in the range of 3-5°C over parts of Punjab and Haryana and in the range of 6-9°C over rest parts of Punjab, Haryana, Chandigarh & Delhi and many parts of Uttar Pradesh and Bihar; in isolated pockets over north Rajasthan and north Madhya Pradesh.
- ❖ **Cold Wave Conditions** observed in isolated pockets over Punjab and Himachal Pradesh.
- ❖ Dense to very dense fog observed most parts of Punjab, Haryana, Chandigarh & Delhi; in some parts of Uttar Pradesh.

Weather systems and forecast & warning:

(1) Minimum Temperature, Cold wave and Fog forecast:

- ❖ Due to moisture and light winds at lower tropospheric levels over Indo-Gangetic plains, **Dense to very dense fog** in many/some pockets very likely over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh in night/morning hours during next 2 days and **dense fog** in isolated pockets for subsequent 3 days; **Dense fog** in isolated pockets also very likely over Himachal Pradesh during next 5 days; over northwest Rajasthan, Bihar and Sub-Himalayan West Bengal & Sikkim during next 2 days.
- ❖ No significant change in minimum temperatures likely over northwest India during next 2 days and fall by 2°C thereafter. No significant change in minimum temperatures likely over East India during next 2 days and rise by 2-3°C thereafter.
- ❖ Due to dry north/northwesterly winds from Himalayas over plains of northwest India, **Cold Wave Conditions** likely to continue in isolated pockets very likely over Himachal Pradesh, Punjab, Haryana and north Rajasthan during next 5 days with isolated **Severe Cold Wave Conditions** over Punjab during 22nd-25th December.

(2) Low pressure area over central parts of South Bay of Bengal & adjoining East Equatorial Indian Ocean

A **Low Pressure Area** lies over central parts of South Bay of Bengal & adjoining East Equatorial Indian Ocean. It is likely to move west-northwestwards slowly towards Sri-Lanka coast during next 2 days.

Warnings:

(i) Wind warning:

- ❖ **Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph** is likely over Andaman Sea; Southwest & adjoining Southeast Bay of Bengal along & off Sri Lanka coast on 20th December.
- ❖ **Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph** is likely to prevail over Southwest Bay of Bengal, along & off Sri-Lanka coast, Gulf of Mannar, Comorin area and south Tamil Nadu during 21st-22nd December.
- ❖ **Squally weather with wind speed reaching 35-45 kmph gusting to 55 kmph** is likely to prevail over Comorin area, Gulf of Mannar and along & off south Tamil Nadu coast on 23rd December.

(ii) Sea condition likely to be rough and Fishermen are advised not to venture over the above mention areas during the period

For more details kindly refer:

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

Annexure I



Today
20/12/2022



Tomorrow
21/12/2022



22/12/2022



23/12/2022



24/12/2022

Impact expected and action suggested due to Dense/Very Dense fog in the night/morning hours many/some parts very likely over Punjab, Haryana, Chandigarh & Delhi and Uttar Pradesh in night/morning hours during next 2 days and **dense fog** in isolated pockets for subsequent 3 days; **Dense fog** in isolated pockets over northwest Rajasthan, Bihar and Sub-Himalayan West Bengal & Sikkim 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

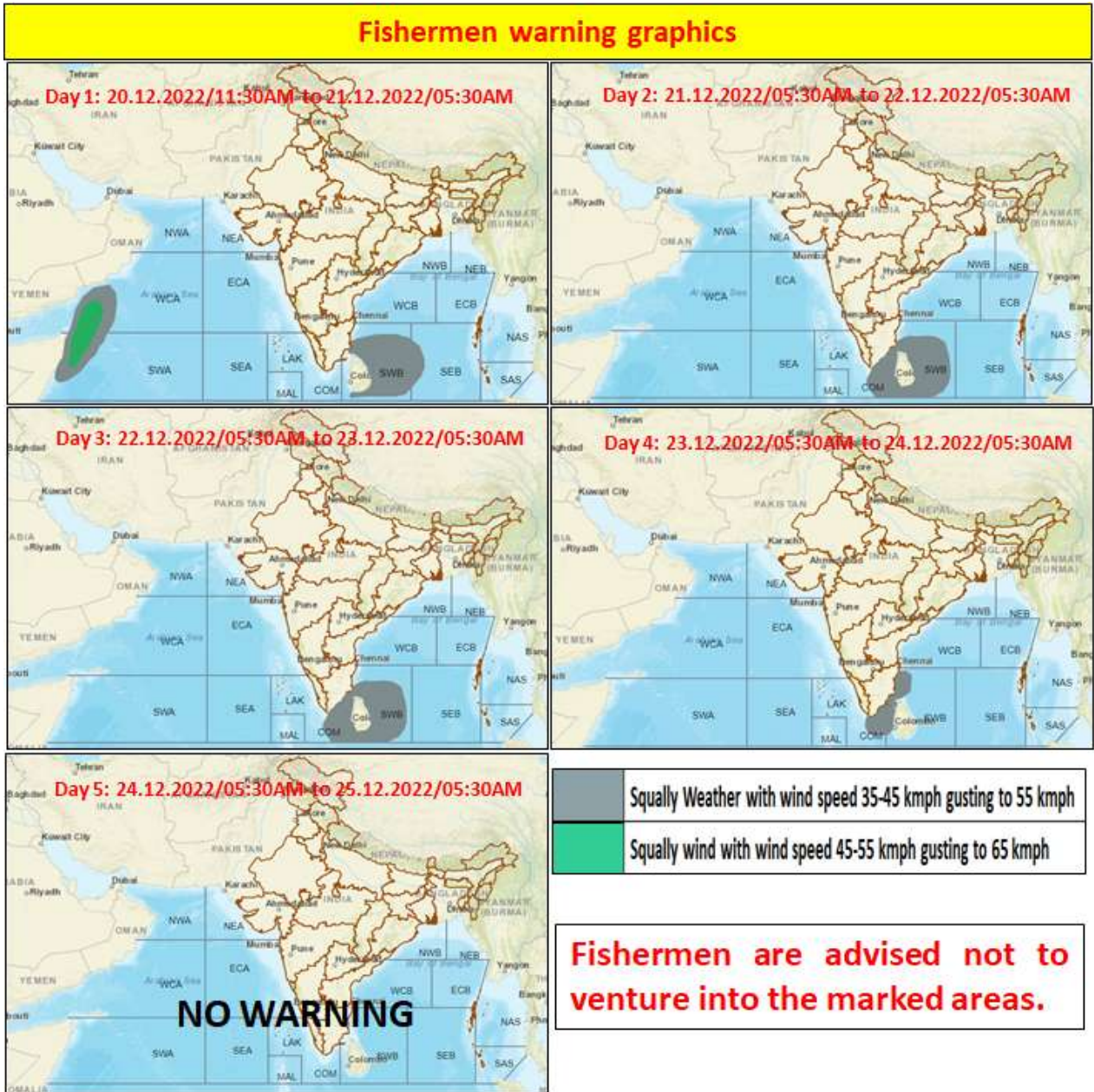
Impact expected and action suggested due to Cold wave/Severe Cold wave conditions in isolated parts over Himachal Pradesh, Punjab during next 5 days; over north Rajasthan during 22nd-25th and over Haryana during 23rd-25th December.

Impact expected:

- An increased likelihood of various illnesses like flu, running/ stuffy nose or nosebleed, which usually set in or get aggravated due to prolonged exposure to cold.
- Do not ignore shivering. It is the first sign that the body is losing heat. Get Indoors.
- Frostbite can occur due to prolonged exposure to cold. The skin turns pale, hard and numb and eventually black blisters appear on exposed body parts such as fingers, toes, nose and or earlobes. Severe frostbite needs immediate medical attention and treatment.
- Impact on agriculture, crop, livestock, water supply, transport and power sector at some places.

Action suggested:

- Wear several layers of loose fitting, light weight; warm woolen clothing.
- Cover your head, neck, hands and toes adequately as majority of heat loss occurs through these body parts. Wear several layers of loose fitting, light weight; warm woolen clothing rather than one layer of heavy cloth.
- Eat vitamin-C rich fruits & vegetable and drink sufficient fluids preferably warm fluids to maintain adequate immunity.
- Avoid or limit outdoor activities.
- Keep dry, if wet, change cloths immediately to prevent loss of body heat. Wear insulated/waterproof shoes.
- Warm the affected area of the body slowly with lukewarm water; do not rub the skin vigorously.
- If the affected skin area turns black, immediately consult a doctor.
- Maintain ventilation while using Heaters to avoid inhaling toxic fumes.
- Take safety measures while using electrical and gas heating devices.
- Extreme care needed for vulnerable people.
- Seek medical attention as soon as possible for someone suffering from frostbite/ Hypothermia.
- Protect livestock from cold weather. (For details kindly refer NDMA guidelines: https://ndma.gov.in/Resources/awareness/Cold_Wave)



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