

2026-01-22

Time of Issue: 13:44:00 hours IST  
(Mid-Day)

## ALL INDIA WEATHER SUMMARY AND FORECAST BULLETIN

### Significant Weather Features

#### Weather Forecast and warning:

- Fairly widespread to widespread rainfall/snowfall over Jammu-Kashmir-Ladakh, Himachal Pradesh and Uttarakhand on 22<sup>nd</sup> & 23<sup>rd</sup> January.
- Fairly widespread to widespread light to moderate rainfall over Punjab on 22<sup>nd</sup> & 23<sup>rd</sup> with isolated/scattered light to moderate rainfall over Haryana Chandigarh & Delhi, West Uttar Pradesh and Rajasthan on 22<sup>nd</sup> & 23<sup>rd</sup> and East Uttar Pradesh on 23<sup>rd</sup> & 24<sup>th</sup> January.
- Thunderstorm activity accompanied with **lightning & wind speed reaching 40-50 kmph gusting to 60 kmph** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab and Rajasthan on 22<sup>nd</sup> and 23<sup>rd</sup>; Uttarakhand, Haryana, Chandigarh, Delhi and Uttar Pradesh on 23<sup>rd</sup> January.
- Isolated heavy rainfall/snowfall** over Kashmir valley on 22<sup>nd</sup> & 23<sup>rd</sup> and higher reaches of Himachal Pradesh and Uttarakhand on 23<sup>rd</sup> and heavy rainfall over Punjab on 23<sup>rd</sup> January.
- Hailstorm activity** likely over Himachal Pradesh, Uttarakhand, Haryana and West Uttar Pradesh on 23<sup>rd</sup>; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab and north Rajasthan on 22<sup>nd</sup> & 23<sup>rd</sup> January.
- Thunderstorm activity accompanied with lightning** also likely over Gujarat Region and Saurashtra & Kutch on 22<sup>nd</sup>; Tamil Nadu, Puducherry & Karaikal on 25<sup>th</sup> & 26<sup>th</sup> and over Kerala & Mahe on 26<sup>th</sup> with isolated heavy rain likely over Tamil Nadu, Puducherry & Karaikal on 25<sup>th</sup> January.

#### Forecast of minimum temperatures:

- Rise in minimum temperatures by 2-4°C likely over Northwest India during next 24 hours; gradual fall by 2-4°C during subsequent 2 days and rise by 2-4°C thereafter during subsequent next 4 days.
- Rise in minimum temperatures by 2-3°C likely over Central India during next 24 hours; gradual fall by 3-4°C during subsequent 2 days and rise by 2-3°C during subsequent 2 days and no significant change thereafter.
- Rise in minimum temperatures by 2-3°C likely over Maharashtra during next 24 hours; gradual fall by 2-3°C during subsequent 2 days and rise by 2-3°C during subsequent 3 days and no significant change thereafter.
- No significant change in minimum temperatures likely over Gujarat during next 24 hours and gradual fall by 2-3°C during subsequent 2 days and gradual rise by 2-4°C thereafter during subsequent next 4 days.
- No significant change in minimum temperatures likely over rest parts of the country.

#### Dense Fog & Cold wave Warnings:

- Dense to very dense fog** conditions likely during morning/ night hours in isolated pockets over Punjab and Haryana & Chandigarh on 25<sup>th</sup> & 26<sup>th</sup> and **dense fog conditions** at isolated places over 24<sup>th</sup> & 25<sup>th</sup> January.
- Dense fog** conditions also likely during morning/night hours in isolated pockets over Rajasthan during 24<sup>th</sup> -26<sup>th</sup>; Sub-Himalayan West Bengal & Sikkim till 24<sup>th</sup> January.
- Cold day** conditions likely during in isolated pockets over Himachal Pradesh and Uttarakhand on 23<sup>rd</sup> January.

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**Main Weather Observations:**

- **Rainfall distribution** (from 0830 hours IST of yesterday to 0830 hours IST of today): **at isolated places** over Andaman & Nicobar Islands; **Dry** over rest of the country.
- **Significant rainfall recorded(in cm)** (from 0830 hours IST of yesterday to 0830 hours IST of today):  
**Andaman & Nicobar Islands:** Nancowry (dist Nicobar) 1.
- **Dense to Very Dense fog(visibility <200 m) conditions** prevailed in some parts of Punjab and Haryana and dense fog prevailed over isolated places over Uttar Pradesh, Sub-Himalayan West Bengal and Meghalaya.
- **Visibility reported (in meters ?200 m):** **Meghalaya:**Barapani (100); **Punjab:**Patiala (20)/Amritsar (50); Ludhiana (50); **Haryana:**Bhiwani (20), Karnal (20); **West Uttar Pradesh:**Agra (IAF) (100); Sub-Himalayan West Bengal: Jalpaiguri (50).
- **Severe cold wave to cold wave conditions** at isolated places over Himachal Pradesh & **Cold wave conditions** prevailed in some parts of Punjab.
- **Ground frost conditions** have been observed in isolated pockets of Uttarakhand.
- **Minimum Temperature Departures (as on 22-01-2026):** **below normal(-1.6°C to -3.0°C)** at few places over Jharkhand, Haryana-Chandigarh-Delhi, Punjab, Coastal Karnataka, North Interior Karnataka, South Interior Karnataka and Kerala & Mahe; at isolated places over Odisha, West Uttar Pradesh, Jammu-KashmirLadakh-Gilgit-Baltistan-Muzaffarabad, Konkan & Goa, Chhattisgarh, Telangana and Tamil Nadu, Puducherry & Karaikal. **appreciably below normal(-5.0°C to -3.1°C)** at few places over North Interior Karnataka; at isolated places over Assam & Meghalaya, Odisha, Uttarakhand, East Madhya Pradesh, Gujarat Region, Telangana, Tamil Nadu, Puducherry & Karaikal, South Interior Karnataka and Kerala & Mahe. **markedly below normal(<-5.0°C )** at most places over Coastal Andhra Pradesh & Yanam and Rayalaseema; at few places over Gangetic West Bengal, West Madhya Pradesh, East Madhya Pradesh and Tamil Nadu, Puducherry & Karaikal; at isolated places over Assam & Meghalaya, Sub Himalayan West Bengal & Sikkim, Jharkhand, Bihar, West Uttar Pradesh, Himachal Pradesh, Jammu-KashmirLadakh-Gilgit-Baltistan-Muzaffarabad, West Rajasthan, Gujarat Region, Saurashtra & Kutch, Konkan & Goa, Madhya Maharashtra, Vidarbha and South Interior Karnataka. **The lowest minimum temperature** of 3.4°C is reported at Amritsar (Punjab) over the Plains of India.
- **Maximum Temperature Departures (as on 21-01-2026):** **The highest maximum temperature** of 34.2°C is reported at SURAT (GUJARAT), and KARWAR (KARNATAKA).

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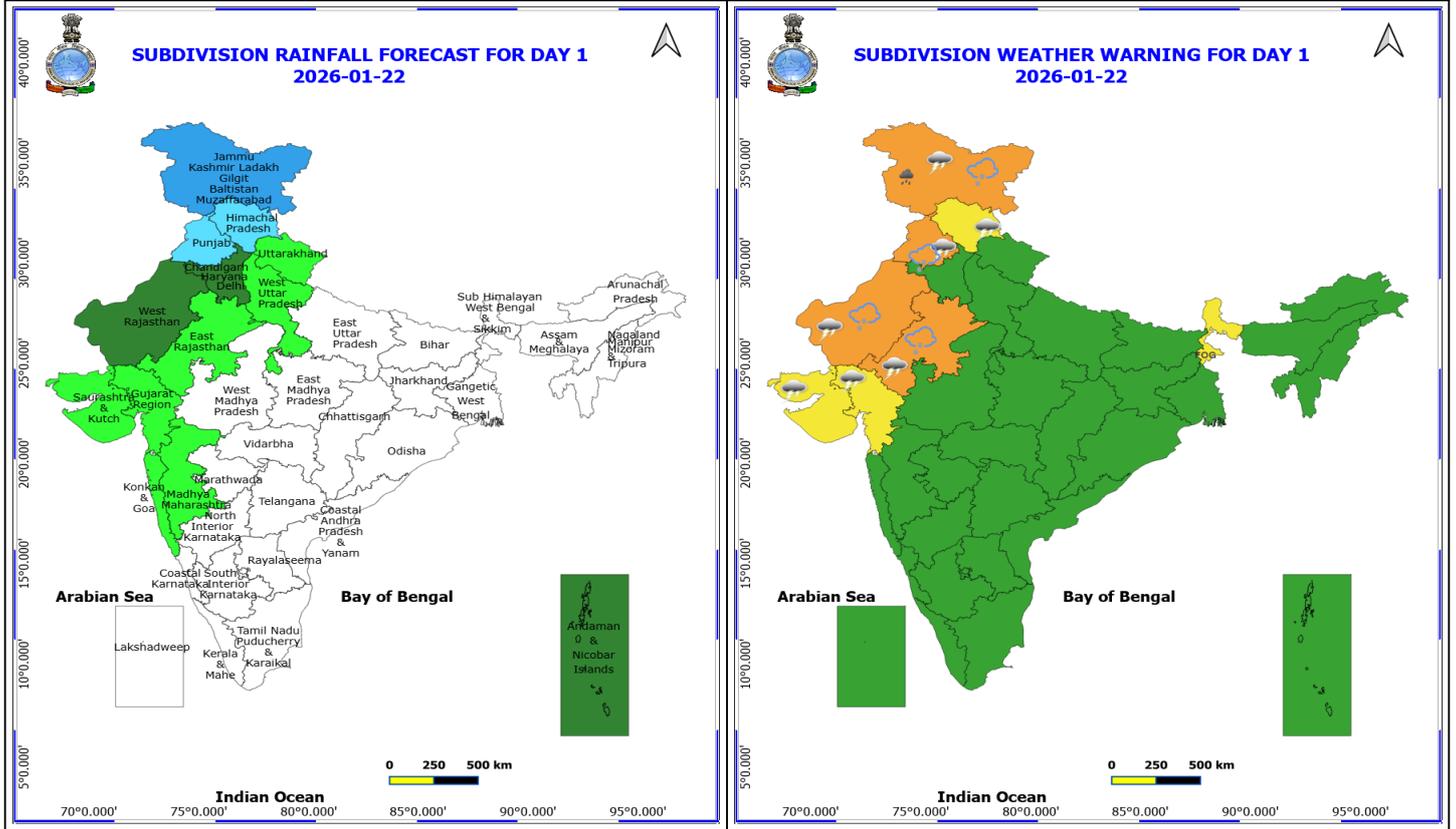
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### Meteorological Analysis (Based on 0830 hours IST)

- The **Western disturbance** now seen as a Trough in middle & upper Tropospheric westerlies with its axis at 5.8 km above mean sea level roughly along Long. 60°E to the north of Lat. 25°N.
- The **Western Disturbance** as a cyclonic circulation over north Pakistan at 3.1 km has merged with the above system.
- The upper air **cyclonic circulation** over northeast Assam & neighbourhood at 1.5 km above mean sea level persists.
- **Subtropical westerly Jet Stream** with core winds of the order of 110 knots at 12.6 km above mean sea level prevails over Northeast India.
- The **upper air cyclonic circulation** over southeast Arabian sea and adjoining Lakshadweep at 0.9 km above mean sea level persists.
- A fresh **western disturbance** is likely to affect northwest India from 26<sup>th</sup> January 2026.

### Weather Outlook for subsequent 3 days

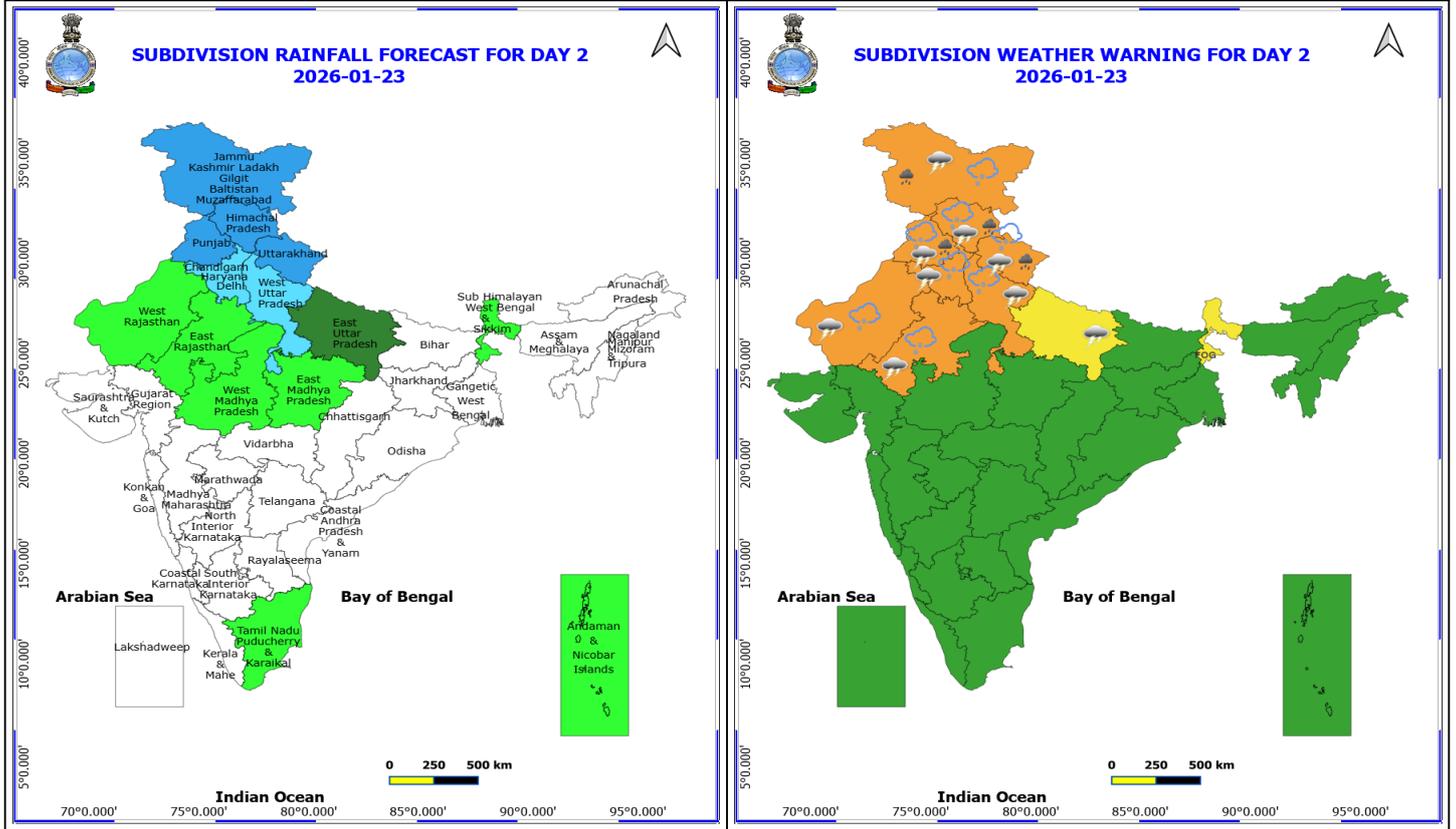
- Fairly widespread to widespread rainfall/snowfall activity likely over Western Himalayan Region.
- Fairly widespread to widespread rainfall activity likely over Punjab, Haryana, Delhi.
- Isolated/Scattered rainfall activity is likely over Uttar Pradesh, Rajasthan and West Madhya Pradesh.
- Isolated rainfall activity is likely over Lakshadweep and Nicobar islands.



**22 January (Day 1)**

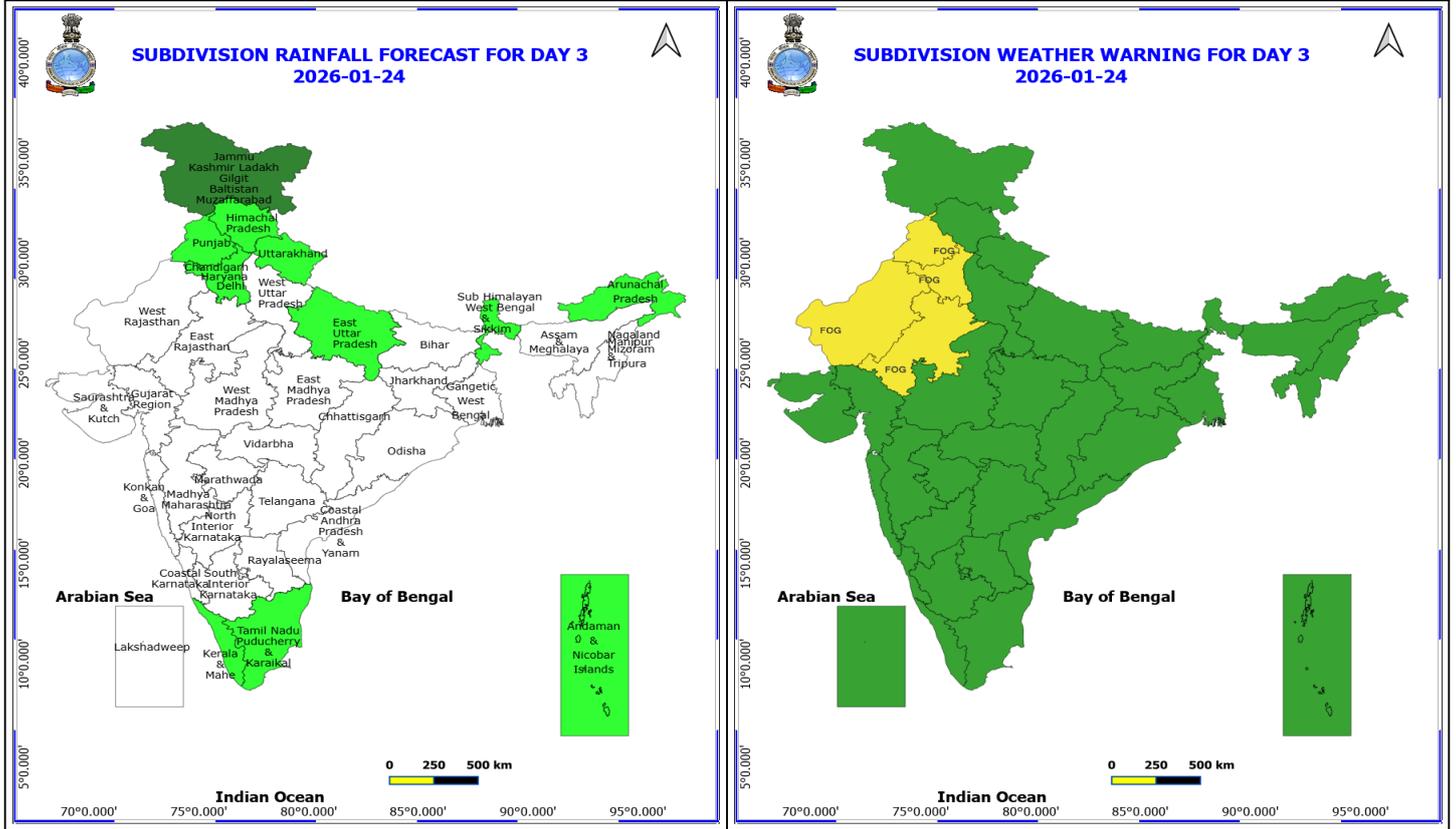
- ❖ **Heavy Rainfall** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad.
- ❖ **Thunderstorm accompanied with Hailstorm** very likely at isolated places over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab and Rajasthan.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** very likely at isolated places over Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab and Rajasthan.
- ❖ **Thunderstorm accompanied with Lightning** very likely at isolated places over Gujarat State.
- ❖ **Dense Fog** very likely at isolated places over Sub Himalayan West Bengal & Sikkim.
- ❖ **Squally winds with speeds of 45 to 55 kmph, gusting up to 65 kmph**, are expected over parts of the northwest Arabian Sea and adjoining areas, as well as along and off the Somalia coast and the western parts of the southwest Arabian Sea.

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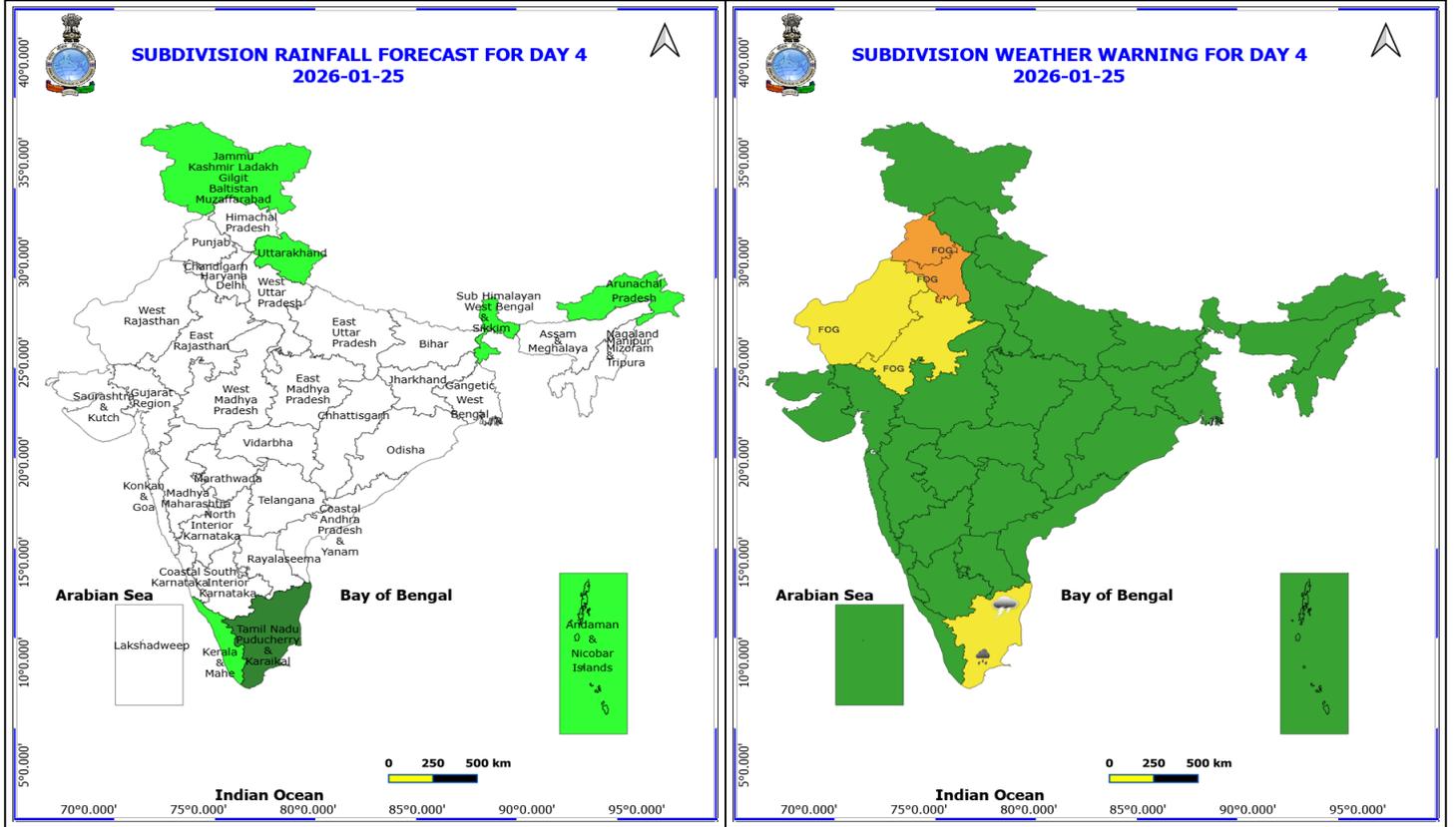
**23 January (Day 2)**

- ❖ **Heavy Rainfall** very likely at isolated places over Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab and Uttarakhand.
- ❖ **Thunderstorm accompanied with Hailstorm** very likely at isolated places over Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Rajasthan, Uttarakhand and West Uttar Pradesh.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(40-50kmph)** very likely at isolated places over Haryana, Chandigarh & Delhi, Himachal Pradesh, Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab, Rajasthan, Uttarakhand and West Uttar Pradesh.
- ❖ **Thunderstorm accompanied with lightning & gusty winds(30-40kmph)** very likely at isolated places over East Uttar Pradesh.
- ❖ **Dense Fog** very likely at isolated places over Sub Himalayan West Bengal & Sikkim.
- ❖ **Squally winds with speeds of 45 to 55 kmph, gusting up to 65 kmph**, are expected over most parts of the northwest Arabian Sea, along and off the Oman coast, in parts of the west-central Arabian Sea, along and off the Somalia coast, and across the western parts of the southwest Arabian Sea.



**24 January (Day 3)**

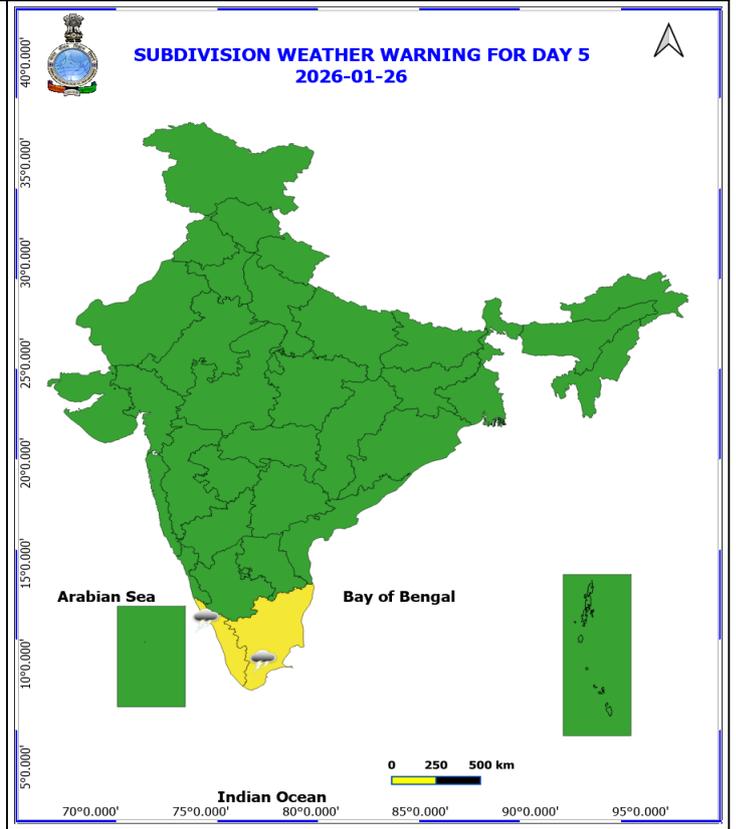
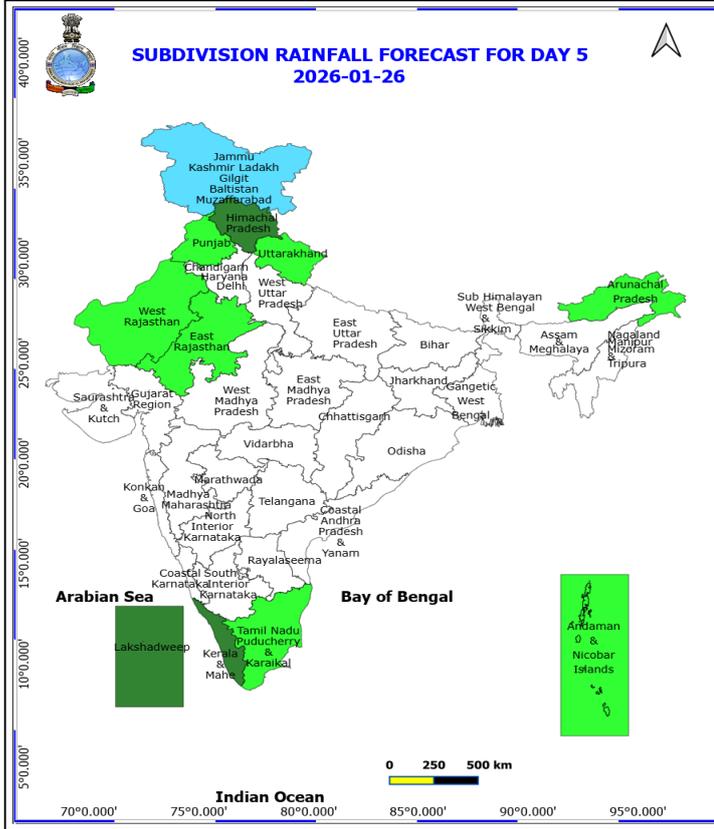
- ❖ **Dense Fog** very likely at isolated places over Haryana, Chandigarh & Delhi, Punjab and Rajasthan.
- ❖ **Squally winds with speeds of 45 to 55 kmph, gusting up to 65 kmph**, are expected along and off the Somalia coast, as well as over the western parts of the southwest Arabian Sea.



## 25 January (Day 4)

- ❖ **Heavy Rainfall** likely at isolated places over Tamil Nadu Puducherry & Karaikal.
- ❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Tamil Nadu Puducherry & Karaikal.
- ❖ **Dense Fog** likely at isolated places over Rajasthan.
- ❖ **Dense to Very Dense Fog** likely at isolated places over Haryana, Chandigarh & Delhi and Punjab.

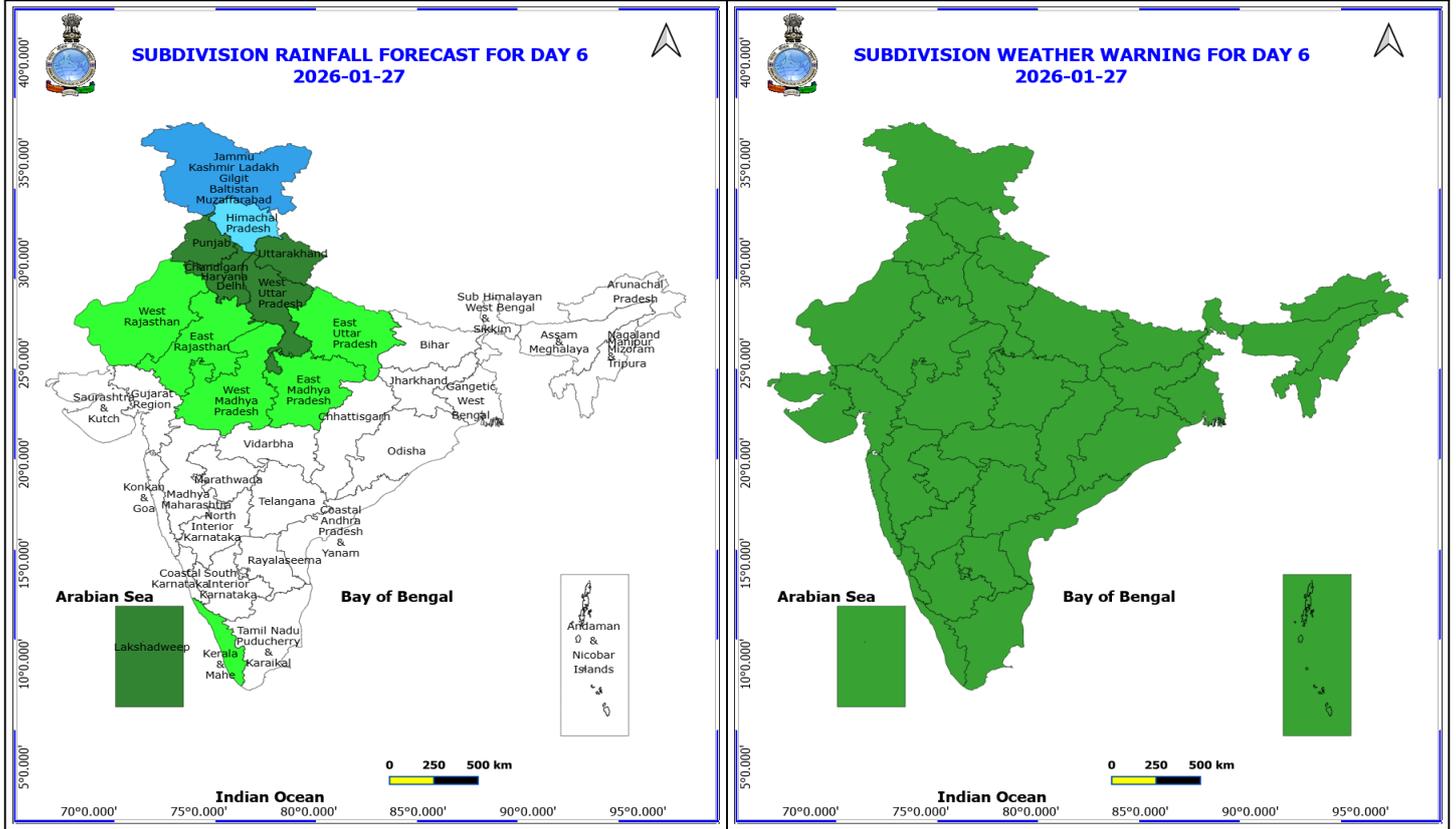
**No Fishermen Warning**



**26 January (Day 5)**

❖ **Thunderstorm accompanied with Lightning** likely at isolated places over Kerala & Mahe and Tamil Nadu Puducherry & Karaikal.

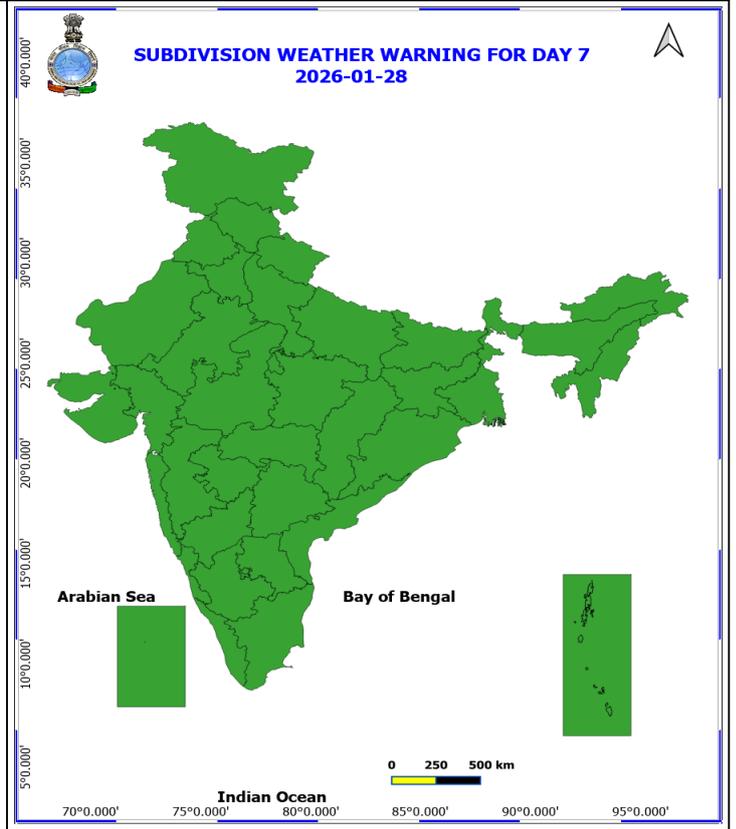
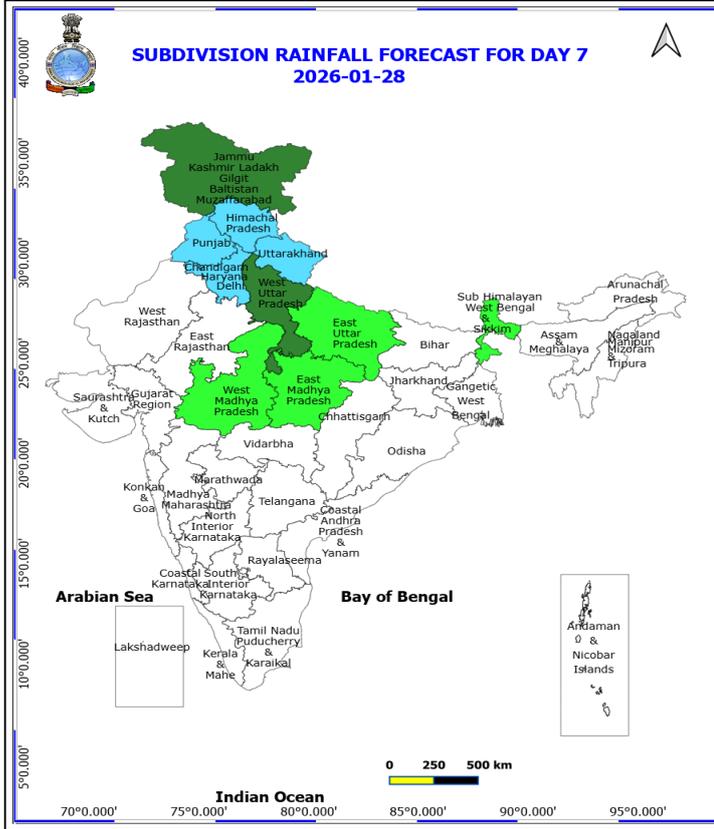
**No Fishermen Warning**



**27 January (Day 6)**

**No Warning**  
**No Fishermen Warning**

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**28 January (Day 7)**

**No Warning**

**No Fishermen Warning**



**Table-1**

**7 Days Rainfall Forecast**

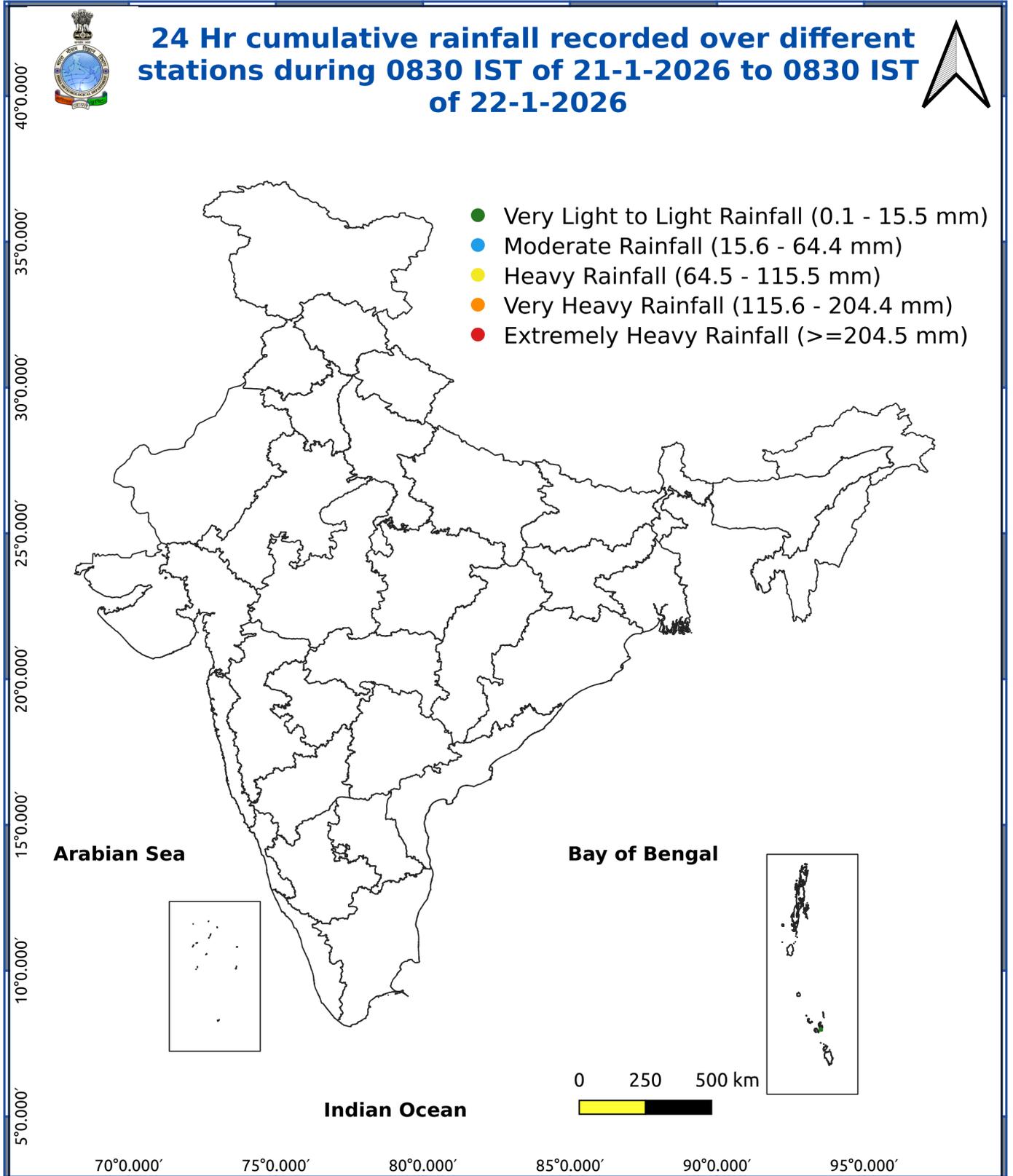
S.No.	Subdivision	22- Jan	23- Jan	24- Jan	25- Jan	26- Jan	27- Jan	28- Jan
		Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7
1	ANDAMAN & NICOBAR ISLANDS	SCT	ISOL	ISOL	ISOL	ISOL	DRY	DRY
2	ARUNACHAL PRADESH	DRY	DRY	ISOL	ISOL	ISOL	DRY	DRY
3	ASSAM & MEHGHALAYA	DRY						
4	N. M. M. & T.	DRY						
5	S.H. WEST BENGAL & SIKKIM	DRY	ISOL	ISOL	ISOL	DRY	DRY	ISOL
6	GANGETIC WEST BENGAL	DRY						
7	ODISHA	DRY						
8	JHARKHAND	DRY						
9	BIHAR	DRY						
10	EAST UTTAR PRADESH	DRY	SCT	ISOL	DRY	DRY	ISOL	ISOL
11	WEST UTTAR PRADESH	ISOL	FWS	DRY	DRY	DRY	SCT	SCT
12	UTTARAKHAND	ISOL	WS	ISOL	ISOL	ISOL	SCT	FWS
13	HARYANA, CHD & DELHI	SCT	FWS	ISOL	DRY	DRY	SCT	FWS
14	PUNJAB	FWS	WS	ISOL	DRY	ISOL	SCT	FWS
15	HIMACHAL PRADESH	FWS	WS	ISOL	DRY	SCT	FWS	FWS
16	JAMMU AND KASHMIR AND LADAKH	WS	WS	SCT	ISOL	FWS	WS	SCT
17	WEST RAJASTHAN	SCT	ISOL	DRY	DRY	ISOL	ISOL	DRY
18	EAST RAJASTHAN	ISOL	ISOL	DRY	DRY	ISOL	ISOL	DRY
19	WEST MADHYA PRADESH	DRY	ISOL	DRY	DRY	DRY	ISOL	ISOL
20	EAST MADHYA PRADESH	DRY	ISOL	DRY	DRY	DRY	ISOL	ISOL
21	GUJRAT REGION	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
22	SAURASHTRA & KUTCH	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
23	KONKAN & GOA	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
24	MADHYA MAHARASHTRA	ISOL	DRY	DRY	DRY	DRY	DRY	DRY
25	MARATHWADA	DRY						
26	VIDARBHA	DRY						
27	CHATTISGARH	DRY						
28	COASTAL ANDHRA PRADESH	DRY						
29	TELANGANA	DRY						
30	RAYALASEEMA	DRY						
31	TAMILNADU & PUDUCHERRY	DRY	ISOL	ISOL	SCT	ISOL	DRY	DRY
32	COSTAL KARNATAKA	DRY						
33	NORTH INTERIOR KARNATAKA	DRY						
34	SOUTH INTERIOR KARNATAKA	DRY						
35	KERALA	DRY	DRY	ISOL	ISOL	SCT	ISOL	DRY
36	LAKSHDWEEP	DRY	DRY	DRY	DRY	SCT	SCT	DRY

Legend	Category	%Stations
WS	Widespread/Most Places	76-100
FWS	Fairly Widespread/Many Places	51-75
SCT	Scattered/ A Few Places	26-50
ISOL	Isolated Places	1-25
DRY	No Rain	0

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## Impact and Actions

### Impact expected and action suggested due to isolated thunderstorm with lightning/gusty & Squally winds & Hailstorm over

**Isolated hailstorm** activity likely over Himachal Pradesh, Uttarakhand, Haryana and West Uttar Pradesh on 23<sup>rd</sup>; Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Punjab and north Rajasthan on 22<sup>nd</sup> & 23<sup>rd</sup> January.

**Thundersquall (wind speed reaching 50-60 kmph)** likely over Jammu-Kashmir-Ladakh-Gilgit-Baltistan-Muzaffarabad, Himachal Pradesh, Punjab and Rajasthan on 22<sup>nd</sup> and 23<sup>rd</sup>; Uttarakhand, Haryana, Chandigarh, Delhi and Uttar Pradesh on 23<sup>rd</sup> January.

#### Impact expected:

Breaking of tree branches, uprooting of large avenue trees. Large dead limbs blown from trees. Damage to Standing crops.

Minor to Major damage to banana and papaya trees.

Minor to major damage to power and communication lines due to breaking of branches.

Strong wind/hail may damage plantation, horticulture and standing crops.

Hail may injure people and cattle at open places.

Partial damage to vulnerable structures due to strong winds.

Minor damage to kutcha houses/walls and huts.

Loose objects may fly.

#### Action suggested:

People are advised to keep a watch on the weather for worsening conditions and be ready to move to safer places accordingly.

Stay indoors, close windows & doors and avoid travel if possible.

Take safe shelters; do not take shelter under trees.

Do not lie on concrete floors and do not lean against concrete walls.

Unplug electrical/ electronic appliances.

Immediately get out of water bodies.

Keep away from all the objects that conduct electricity.

## Agromet advisories for various parts of the country

### Agromet advisories for likely impact of Heavy Rainfall/ Snowfall

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In **Jammu & Kashmir**, make necessary arrangement to drain out excess water from wheat, mustard, chickpea, pea and vegetables fields. Gently shake the trees to remove snow immediately from the branches.

In **Himachal Pradesh**, harvest the matured vegetables and keep the harvested produce in safe places. Make necessary arrangements to drain out excessrainwater from the standing crops, vegetable fields and fruit orchards.

In **Uttarakhand**, harvest matured rapeseed & sugarcane and keep the harvested produce in safe places. Make necessary arrangements to drain excess water from standing crop fields and vegetables.

In **North Punjab**, make necessary arrangements to drain out excessrainwater from the standing crops such as wheat, mustard, sugarcane, orchards and vegetable crops.

#### **Agromet advisories for likely impact of Hailstorm**

Use hail nets to protect orchards and vegetable plants in Jammu & Kashmir, Himachal Pradesh, Uttarakhand, Punjab, Haryana, West Uttar Pradesh and Rajasthan.

#### **Livestock**

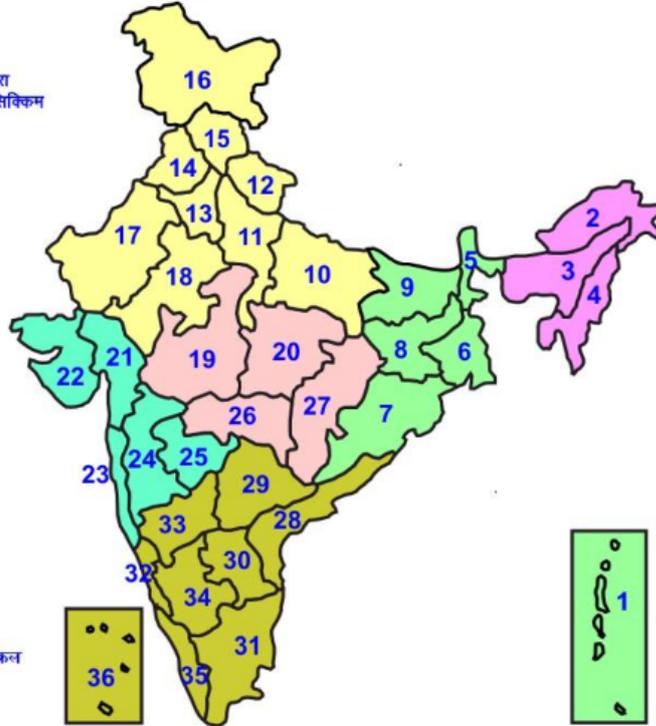
Keep the animals inside the shed during heavy rainfall and hailstorm period and provide them balanced feed. Store feed and fodder in a safe place to prevent spoilage.

#### **Agromet advisories for likely impact of Thunderstorm / Gusty Winds**

Provide mechanical support to horticultural crops and staking or support to vegetables and young fruit plants / fruit-bearing plants to avoid lodging due to strong winds.

## LEGENDS

- 1 अंडमान और निकोबार द्वीप समुह
- 2 अरुणाचल प्रदेश
- 3 असम और मेघालय
- 4 नागालैंड मनीपुर मीजोरम और त्रिपुरा
- 5 उप हिमालय पश्चिम बंगाल एवं सिक्किम
- 6 पश्चिम बंगाल
- 7 ओडिसा
- 8 झारखंड
- 9 बिहार
- 10 पूर्वी उत्तर प्रदेश
- 11 पश्चिम उत्तर प्रदेश
- 12 उत्तराखंड
- 13 हरियाणा चंडिगढ़ एवं दिल्ली
- 14 पंजाब
- 15 हिमाचल प्रदेश
- 16 जम्मू एवं कश्मीर एवं लद्दाख
- 17 पश्चिम राजस्थान
- 18 पूर्वी राजस्थान
- 19 पश्चिम मध्य प्रदेश
- 20 पूर्वी मध्य प्रदेश
- 21 गुजरात क्षेत्र
- 22 सौराष्ट्र एवं कच्छ
- 23 कोंकण एवं गोवा
- 24 मध्य महाराष्ट्र
- 25 मराठावाडा
- 26 विदर्भ
- 27 छत्तीसगढ़
- 28 तटीय आंध्र प्रदेश एवं यनम
- 29 तेलंगाना
- 30 रायलसीमा
- 31 तमिलनाडु, पुदुचेरी एवं कराईकल
- 32 तटिय कर्नाटक
- 33 आंतरिक उत्तरी कर्नाटक
- 34 आंतरिक दक्षिणी कर्नाटक
- 35 केरल एवं माहे
- 36 लक्षद्वीप



1. Andaman & Nicobar Islands
2. Arunachal Pradesh
3. Assam & Meghalaya
4. Nagaland, Manipur, Mizoram & Tripura
5. Sub-Himalayan West Bengal & Sikkim
6. Gangetic West Bengal
7. Orissa
8. Jharkhand
9. Bihar
10. East Uttar Pradesh
11. West Uttar Pradesh
12. Uttarakhand
13. Haryana, Chd & Delhi
14. Punjab
15. Himachal Pradesh
16. Jammu & Kashmir and Ladakh
17. West Rajasthan
18. East Rajasthan
19. West Madhya Pradesh
20. East Madhya Pradesh
21. Gujarat
22. Saurashtra
23. Konkan & Goa
24. Madhya Maharashtra
25. Marathawada
26. Vidharbha
27. Chhattisgarh
28. Coastal Andhra Pradesh & Yanam
29. Telangana
30. Rayalaseema
31. Tamilnadu, Puducherry & Karaikal
32. Coastal Karnataka
33. North Interior Karnataka
34. South Interior Karnataka
35. Kerala & Mahe
36. 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)

### Subdivision Colour

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

### Probabilistic Forecast

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

- |                          |                 |                      |                    |
|--------------------------|-----------------|----------------------|--------------------|
| Heavy Rain               | Very Heavy Rain | Extremely Heavy Rain | Heavy Snow         |
| Thunderstorm & Lightning | Hailstorm       | Dust Storm           | Dust Raising Winds |
| Strong surface winds     | Heat Wave       | Hot Day              | Warm Night         |
| Cold Wave                | Cold Day        | Ground Frost         | Fog                |
| Hot & Humid              |                 |                      |                    |

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## LEGENDS

### 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: 64.5 to 115.5 mm/cm \*  
Very Heavy: 115.6 to 204.4 mm/cm\*  
Extremely Heavy: > 204.4 mm/cm \*



When maximum temperature of a station reaches  $\geq 40^{\circ}\text{C}$  for plains and  $\geq 30^{\circ}\text{C}$  for hilly regions  
(a) Based on Departure from normal

Heat Wave: Maximum Temperature Departure from normal  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
Severe Heat Wave: Maximum Temperature Departure from normal  $\geq 6.5^{\circ}\text{C}$

(b). Based on Actual maximum temperature

Heat Wave: When actual maximum temperature  $\geq 45^{\circ}\text{C}$ .  
Severe Heat Wave: When actual maximum temperature  $\geq 47^{\circ}\text{C}$

(c). Criteria for heat wave for coastal stations

When maximum temperature departure is  $> 4.5^{\circ}\text{C}$  from normal. Heat Wave may be described provided maximum temperature  $\geq 37^{\circ}\text{C}$



When maximum temperature remains  $40^{\circ}\text{C}$

Warm Night: When minimum temperature departure  $4.5^{\circ}\text{C}$  to  $6.4^{\circ}\text{C}$ .  
Severe Warm Night: When minimum temperature departure  $> 6.4^{\circ}\text{C}$ .



When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions.

(a). Based on departure

Cold Wave: Minimum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
Severe Cold Wave: Minimum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$

(b) Based on actual Minimum Temperature (for Plains only)

Cold Wave : When Minimum Temperature is  $\leq 4.0^{\circ}\text{C}$   
Severe Cold Wave: When Minimum Temperature is  $\leq 2.0^{\circ}\text{C}$

(c) For Coastal Stations

When Minimum Temperature departure is  $\leq -4.5^{\circ}\text{C}$  & actual Minimum Temperature is  $\leq 15^{\circ}\text{C}$



When minimum temperature of a station  $\leq 10^{\circ}\text{C}$  for plains and  $\leq 0^{\circ}\text{C}$  for hilly regions  
Based on departure

Cold Day: Maximum Temperature Departure from normal  $-4.5^{\circ}\text{C}$  to  $-6.4^{\circ}\text{C}$ .  
Severe Cold Day: Maximum Temperature Departure from normal  $\leq -6.5^{\circ}\text{C}$



Phenomenon of small droplets suspended in air and the horizontal visibility  $< 1\text{km}$

Moderate Fog: When the visibility between 500-200 metres  
Dense Fog: when the visibility between 50- 200 metres  
Very Dense Fog: when the visibility  $< 50$  metres



Sudden electrical discharges manifested by a flash of light (Lightning) and a sharp rumbling sound (thunder)



An ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind.



Ice deposits on ground

Air temperature  $\leq 4^{\circ}\text{C}$  ( over Plains)



A strong wind that rises suddenly, lasts for atleast 1 minute.

Moderate: Wind speed 52-61 kmph  
Severe: Wind speed 62-87 kmph  
Very Severe: Wind speed  $> 87$  kmph



Effect of various waves in the sea over specific area

Rough to very rough: Wind speed 41-62 kmph (22-33 knots) & Wave height 2.5-6 metre  
High to very high: Wind speed 63-117 kmph ( 34-63 knots) & Wave height 6-14 metre  
Phenomenal: Wind speed  $> 117$  kmph ( $> 63$  knots) & Wave height  $> 14$  metre



Cyclonic Storm: Wind speed 62-87 kmph (34-47 knots)  
Severe Cyclonic Storm: Wind speed 88-117 kmph (48-63 knots)  
Very Severe Cyclonic Storm: Wind speed 118-165 kmph (64 - 89 knots)  
Extremely Severe Cyclonic Storm: Wind speed 166-220 kmph (90 -119 knots)  
Super Cyclone Storm: Wind speed  $> 220$  kmph ( $> 119$  knots)

\*Red color warning does not mean "Red Alert" Red color warning means "Take Action"

Forecast and warning for any day is valid from 0830 hours IST of day till 0830 hours IST of next day

For more details kindly visit <https://mausam.imd.gov.in> or contact 011-2434-4599

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