GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES

RAJYA SABHA UNSTARRED QUESTION NO. 2115

ANSWERED ON 18/12/2025

INSTALLATION OF INSTRUMENTS UNDER MISSION MAUSAM

2115. SHRI SANA SATHISH BABU:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the number of Doppler Weather Radars (DWRs), radiometers and wind profilers currently installed, State-wise and type-wise;
- (b) the criteria adopted to finalise locations for new DWRs, radiometers and wind profilers under Mission Mausam:
- (c) the number of such installations proposed in each coastal State, especially cyclone prone regions and whether geoclimatic risk profiles of States like Andhra Pradesh have been duly considered;
- (d) the timeline fixed for executing these installations; and
- (e) whether Government has conducted any gap analysis to assess radar coverage efficiency in high-risk zones?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND EARTH SCIENCES (DR. JITENDRA SINGH)

- (a)-(c) A total of 47 Doppler Weather Radars (DWRs) have been installed and are currently operational across the country, with details provided in Annexure-1. At present, the IMD has not installed any radiometers or wind profilers. In the coming years, additional DWRs will be installed as per the requirement based on the following factors and criteria
 - Regions not currently under DWR surveillance so that the entire country is covered by radar for round-the-clock monitoring of severe weather.
 - Relatively more radars in the hilly areas, coastal areas, and metro cities, considering the vulnerability.
 - Replacement of old radars.
 - Redundancy in radar availability in the highly vulnerable areas like urban centres and Indian coasts, which are especially vulnerable because of high population density and frequent severe weather.

The geoclimatic risk profiles also will be considered while prioritizing DWRs for the coastal States, including Andhra Pradesh.

The criteria to finalize locations for wind profilers and radiometers are as follows:

- o Major airports as per wind, cloud, and fog vulnerability of these major airports
- o Regions that are especially vulnerable because of high population density and frequent severe weather

(d)-(e) Currently, 47 DWRs are operational across India, covering about 87% of the country's total area, including a couple of radars installed under Mission Mausam. In the coming years, DWRs will be installed as per the requirement to cover the remaining gap areas in the country, provide redundancy, and replacement of old radars in the DWR network under the Mission Mausam.

S. No.	State/Union Territory	DWRs Locations
1.	Andhra Pradesh	Machilipatnam (S-Band)
2.	Andhra Pradesh	Visakhapatnam (S-Band)
3.	Andhra Pradesh	Sriharikota, ISRO (S-Band)
4.	Assam	Mohanbari (S-Band)
5.	Bihar	Patna (S-Band)
6.	Chhattisgarh	Raipur
7.	Goa	Goa (S-Band)
8.	Gujarat	Bhuj (S-Band)
9.	Himachal Pradesh	Jot (X-Band)
10.	Himachal Pradesh	Murari Devi (X-Band)
11.	Himachal Pradesh	Kufri (X-Band)
12.	Kerala	Kochi (S-Band)
13.	Kerala	VSSC, ISRO Thiruvananthapuram (C-Band)
14.	Madhya Pradesh	Bhopal (S-Band)
15.	Maharashtra	Mumbai (S-Band)
16.	Maharashtra	Nagpur (S-Band)
17.	Maharashtra	IITM Solapur (C-Band)
18.	Maharashtra	Veravali (C-Band)
19.	Maharashtra	Mumbai, Juhu (X-band)
20.	Maharashtra	Mumbai, Panvel (X-band)
21.	Maharashtra	Mumbai, Kalyan, Dombivali (X-band)
22.	Maharashtra	Mumbai, Vasai, Virar (X-band)
23.	Maharashtra	Mahabaleshwar (X-band)
24.	Meghalaya	Cherrapunji, ISRO (S-Band)
25.	Odisha	Gopalpur (S-Band)
26.	Odisha	Paradip (S-Band)
27.	Punjab	Patiala (S-Band)
28.	Rajasthan	Jaipur (C-Band)
29.	Tamil Nadu	Chennai (S-Band)
30.	Tamil Nadu	Karaikal (S-Band)
31.	Tamil Nadu	NIOT Chennai (X-Band)
32.	Telangana	Hyderabad (S-Band)
33.	Tripura	Agartala (S-Band)
34.	Uttarakhand	Lansdowne (X-Band)
35.	Uttarakhand	Mukteshwar (X-Band)
36.	Uttarakhand	Surkanda Devi (X-Band)
37.	Uttar Pradesh	Lucknow (S-Band)
38.	West Bengal	Kolkata (S-Band)
39.	Jammu & Kashmir	Banihal Top (X-Band)
40.	Jammu & Kashmir	Jammu (X-Band)
41.	Jammu & Kashmir	Srinagar (X-Band)
42.	Delhi	Ayanagar (X-Band)
43.	Delhi	Palam (S-Band)
44.	Delhi	HQ Mausam Bhawan (C-Band)
45.	Ladakh	Leh (X-Band)
46.	Karnataka	Mangaluru (C-Band)
47.	Chhattisgarh	Raipur (C-Band)
4/.	Cimatusgam	Kaipui (C-Dailu)
