GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 1963
ANSWERED ON 12/12/2024

DOPPLER RADAR STATION AT BALASORE

1963. SHRI NIRANJAN BISHI:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the new Doppler Weather Radar (DWR) Network offers more advantages over the previous weather prediction system, if so, the details thereof;
(b) by when the Doppler Radar Station sanctioned at Balasore will become functional;
(c) whether there are plans to open Doppler Radar Stations in the western and southern parts of Odisha;
(d) the number of new DWRs deployed across the country, State-wise;
(e) the number of States that depend on DWRs deployed in neighbouring States for weather prediction; and
(f) whether there are plans to deploy DWRs in all States, including Bihar, as per the recommended distance factor for accurate predictions?

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

(a) Yes. The Doppler Weather Radars(DWRs) network is mainly used to monitor localized thunderstorms and heavy rainfall and to issue timely nowcast warnings for up to 3 hours. The DWR data are also ingested in the Numerical Weather Prediction (NWP) models, especially in Nowcast models, for the prediction of rainfall and thunderstorms in 6 to 12 hours in advance. Suitable warnings and alerts are issued with the help of these DWRs.

(b) The State Government is expected to hand over the building for DWR at Balasore by March, 2025. After the building is handed over to IMD, the installation and commissioning of DWR Balasore will be completed.

(c) Yes. Three DWRs are planned in the State of Odisha (at Balasore, Sambalpur, and Bhubaneswar).

(d) Currently, 39 Doppler Weather Radars (DWRs) are installed at various locations across the country. The State and location-wise details are given in Annexure-1. The newly launched Mission Mausam is intended to augment the Doppler Weather Radars (DWRs) network across the country for complete radar coverage and to enhance the accuracy of the weather forecasting system.Mission Mausam was launched in September 2024 and planned to install 87 more DWRs by 2026.

(e) 14 States and UTs depend on DWR deployed in neighbouring States.

(f) It is intended to augment the Doppler Weather Radars (DWRs) network across the country for complete radar coverage, including Bihar and UTs, and to enhance the accuracy of the weather forecasting system.

Annexure-1

Doppler Weather Radars (DWRs)Network:			
S. No.	**State**	**Name of Station**	**DWR type**
1.	West Bengal	Kolkata	S-Band
2.	Andhra Pradesh	Machilipatnam	S-Band
3.		Visakhapatnam	S-Band
4.		Sriharikota (ISRO)	S-Band
5.	Telangana	Hyderabad	S-Band
6.	Delhi	Palam	S-Band
7.		HQ New Delhi	C-Band (Polarimetric)
8.		Aya Nagar	X-Band
9.	Maharashtra	Nagpur	S-Band
10.		Mumbai	S-Band
11.		Mumbai Veravali	C-Band
12.		Solapur	C-Band
13.	Tripura	Agartala	S-Band
14.	Bihar	Patna	S-Band
15.	Uttar Pradesh	Lucknow	S-Band
16.	Punjab	Patiala	S-Band
17.	Assam	Mohanbari	S-Band
18.	Madhya Pradesh	Bhopal	S-Band
19.	Odisha	Paradip	S-Band
20.		Gopalpur	S-Band
21.	Tamil Nadu	Karaikal	S-Band
22.		Chennai (NIOT)	X-Band
23.		Chennai	S-Band
24.	Goa	Goa	S-Band
25.	Gujarat	Bhuj	S-Band
26.	Rajasthan	Jaipur	C-Band (Polarimetric)
27.	Jammu & Kashmir	Srinagar	X-Band
28.		Jammu	X-Band
29.		Banihal Top	X-Band
30.	Kerala	Kochi	S-Band
31.		VSSC (ISRO) Thiruvananthpuram	C-Band
32.	Uttarakhand	Mukteshwar	X-Band
33.		Surkanda Devi	X-Band
34.		Lansdowne	X- Band
35.	Ladakh	Leh	Transportable X-Band
36.	Himachal Pradesh	Kufri	X-Band
37.		Jot	X-Band
38.		Murari Devi	X-Band
39.	Meghalaya	Cherapunji (ISRO)	S-Band

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