## GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES LOK SABHA UNSTARRED QUESTION NO. 2138 TO BE ANSWERED ON WEDNESDAY, 2<sup>ND</sup> AUGUST, 2023

#### **DOPPLER WEATHER RADARS**

### 2138. SHRI MADDILA GURUMOORTHY:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) the details of Doppler Weather Radars commissioned by the Government, State/UT-wise;
- (b) the expected benefits due to the same; and
- (c) the details of such radars proposed to be commissioned by the Government?

### ANSWER THE MINISTER OF EARTH SCIENCES (SHRI KIREN RIJIJU)

- (a) At present India Meteorological Department (IMD) is operating 37 numbers of Doppler Weather Radars (DWRs) across the country, which comprises of 22 S-Band DWRs, 4 C-Band DWRs and 11 X-Band DWRs. The details of the radars are given in Annexure.
- (b) The DWRs are used to monitor thunderstorms, tropical cyclones and other severe weather events. The radar data products such as reflectivity and the radial velocity are assimilated in various numerical models for generating operational forecasts at different temporal and spatial resolutions. The assimilation of the radar products improves the model initial conditions and thereby the forecasts. These products are also used for the nowcast and very short range weather forecasts, up to 12 hours, issued by IMD using High resolution Rapid Refresh (HRRR) regional model.
- (c) Another 20 more DWRs are at different stage of commissioning in a phased manner by IMD to bring the entire country under the radar coverage.

# **Details of DWR Network**

S. N o.	STATION	State	Туре
1.	AGARTALA	Tripura	S-BAND
2.	AYA NAGAR	NEW DELHI	X-BAND
3.	BHOPAL	MADHYA PRADESH	S-BAND
4.	BHUJ	GUJARAT	S-BAND
5.	BANIHAL	JAMMU & KASHMIR	X-BAND
6.	CHENNAI	TAMILNADU	S-BAND
7.	CHERAPUNJEE	MEGHALAYA	S-BAND
8.	GOA	GOA	S-BAND
9.	GOPALPUR	ODISHA	S-BAND
10.	HYDERABAD	TELANGANA	S-BAND
11.	JAIPUR	RAJASTHAN	C-BAND
12.	JAMMU	JAMMU & KASHMIR	X-BAND
13.	JOT	HIMACHAL PRADESH	X-BAND
14.	KARAIKAL	PUDUCHERRY	S-BAND
15.	KOLKATA	WEST BENGAL	S-BAND
16.	KOCHI	KERALA	S-BAND
17.	KUFRI	HIMACHAL PRADESH	X-BAND
18.	LEH	LADAKH	X-BAND
19.	LUCKNOW	UTTAR PRADESH	S-BAND
20.	MACHILIPATNAM	ANDHRA PRADESH	S-BAND
21.	MOHANBARI	ASSAM	S-BAND
22.	MUKTESHWAR	UTTARAKHAND	X-BAND
23.	MUMBAI (B)	MAHARASHTRA	S-BAND
24.	MURARI DEVI	HIMACHAL PRADESH	X-BAND
25.	NAGPUR(M)	MAHARASHTRA	S-BAND
26.	NEW DELHI (HQ)	NEW DELHI	C-BAND
27.	NEW DELHI (PALAM)	NEW DELHI	S-BAND
28.	PALLIKARANAI	TAMILNADU	X-BAND
29.	PARADEEP	ODISHA	S-BAND
30.	PATIALA	PUNJAB	S-BAND
31.	PATNA	BIHAR	S-BAND
32.	SRIHARIKOTA	ANDHRA PRADESH	S-BAND
33.	SRINAGAR	JAMMU & KASHMIR	X-BAND
34.	SURKANDA DEVI	UTTARAKHAND	X-BAND
35.	THIRUVANANTHAPURAM	KERALA	S-BAND
36.	VERAVALI	MAHARASHTRA	C-BAND
37.	VISAKHAPATNAM	ANDHRA PRADESH	S-BAND