GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. 1312
ANSWERED ON 14/12/2023

NEW DOPPLER WEATHER RADAR NETWORK

1312.   SHRI JAGGESH:

Will the Minister of **Earth Sciences** be pleased to state:

(a)   whether it is a fact that the new Doppler Weather Radar Network offers more advantages as compared to the previous weather prediction system;
(b)   the number of new Doppler Weather Radars deployed across the country, State-wise;
(c)   the number of States that are depending on Doppler Weather Radars deployed in neighbouring State for prediction of weather conditions;
(d)   whether Government has initiated measures to deploy Doppler Weather Radars in each and every State as per the recommended distance factor for accurate prediction; and
(e)   if so, the details thereof?

ANSWER
THE MINISTER OF EARTH SCIENCES
(SHRI KIREN RIJIJU)

(a)   The weather predictions are made using data from multiple observational systemswhich include surface observations, upper air observations, Doppler Weather Radar (DWR) observations, and national and international satellite-based observations.The data from these observational systems are assimilated to various state-of-the-art regional and global dynamical models to generate real time weather forecasts at various spatial and temporal scales.The inclusion of DWRsobservation network helps in further improving the accuracy of the model forecasts and warnings at local scale in terms of severity and detection of cyclones, heavy rains and thunderstorms.

(b)   Currently, there are 39 DWRs installed at various locations and well distributed across the country. The locations of theseRadars have been distributed in the best possible way to monitor severe weather conditions across multiple States of the Indian region.The details of DWRs network over Indian States are provided in Annexure-1.

(c)   Currently, the States of Arunachal Pradesh, Chhattisgarh, Haryana, Jharkhand, Karnataka, Manipur, Nagaland, Punjab and Telangana are depending upon the DWRs of the neighbouring States.

(d)-(e) Procurements are in process for 12 C-Band DWRs to be installed at Aurangabad, Port Blair, Ranchi, Ahmedabad, Mangalore, Balasore, Malda, Agatti, Bangalore, Sambalpur, Raipur and 16 X-Band DWRs to be installed in North East region at Guwahati, Jorhat, Tezpur, Silchar, Imphal, Aizawl, Dimapur, Dhubri, Seppa, Miao and urban regions of Pune, Varanasi, Kolkata, Kozhikode, Bhubaneswar and Purnea.

DWR network over India with location names and name of states

S. No	States	Name of Station	DWR type
1.	West Bengal	Kolkata	S-Band
2.	Andhra Pradesh	Machilipatnam	S-Band
3.		Visakhapatnam	S-Band
4.		Hyderabad	S-Band
5.		Sriharikota (ISRO),	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.	Uttarkhand	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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