GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION NO. 861
TO BE ANSWERED ON WEDNESDAY, 7TH FEBRUARY, 2024

DOPPLER WEATHER RADARS

861. SHRI SUDHAKAR TUKARAM SHRANGARE:
SHRI RANJEETSINGH NAIK NIMBALKAR:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) the difference between C-Band and X-Band Radars along with the coverage range of each of the C and X bands;
(b) the reasons for which C-Band radar is proposed to be installed at Aurangabad (Maharashtra) instead of X-Band Doppler Weather Radar (DWR), as demanded;
(c) the present status of the implementation of the project along with the details of sites selected for the purpose; and
(d) the fresh steps taken by the Government to install an X-Band Doppler radar at a suitable site in Aurangabad (Maharashtra) in order to provide correct weather information to the farmers of whole of the Marathwada Region?

ANSWER
THE MINISTER OF EARTH SCIENCES
(SHRI KIREN RIJIJU)

(a)-(b) C-Band radars are functioning at about 5 cm wave length, whereas X-Band radars functions at 3 cm. The C-Band radar antennas are larger than the X-Band radar antennas. The C-Band radar provides the radial coverage of 250 kms from its centre, whereas X-Band radar covers 100 kms. India Meteorological Department (IMD) has proposed toinstall C-Band radar at Aurangabad in Maharashtra due to its better radial coverage. It will cover the Aurangabad as well as adjoining areas of Marathwada region.

(c) Site survey for the installation has been completed and the radar is proposed to be installed at Mhaismal Hills, Aurangabad and necessary approvals are being sought from the Forest Department for the land acquisition. Tender for the procurement and installation of C band DWR at Aurangabad has already been published.

(d) The C band Doppler radar is much superior and has larger area coverage when compared to the X band Doppler radar. And hence there is no requirement for X band Doppler radar at this location.

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