GOVERNMENT OF INDIA MINISTRY OF EARTH SCIENCES RAJYA SABHA UNSTARRED QUESTION NO. 833 TO BE ANSWERED ON TUESDAY, 27th JULY, 2021

IMPLEMENTING EARTHQUAKE EARLY WARNING SYSTEM

833. LT.GEN. (DR.) D.P.VATS (RETD): SHRI VIJAY PAL SINGH TOMAR:

Will the Minister of **EARTH SCIENCES** be pleased to state:

- (a) whether Government proposes to implement Earthquake Early Warning System and if so, the details and present status thereof along with the time by which the said project is likely to be completed;
- (b) whether this project is working on the prediction of an impending earthquake and process data to farthest cities through GPRS after sensing the primary waves of an earthquake and if so, the details thereof;
- (c) whether there is any technology available with all security features to sense primary waves of an earthquake; and
- (d) if so, the details thereof?

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

- (a) At present, there is no Earthquake Early Warning system functional in the country. However National Centre for Seismology, Ministry of Earth Sciences is planning to develop an Earthquake Early Warning System for Himalayas, purely on research mode.
- (b) At present, there is no proven scientific technique available, anywhere in the world, to predict the occurrence of earthquakes with reasonable degree of accuracy with regard to space, time and magnitude. However, Earthquake Early Warning (EEW) System provides earthquake alert/warning based on the arrival time of Primary wave of an Earthquake. The warning lead time is however of the order of a few seconds.
- (c) and (d) Yes, there are instruments available to sense primary waves of an earthquake. NCS has a network of 115 stations in the country with such instruments.