GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
RAJYA SABHA
UNSTARRED QUESTION NO. - 1304
ANSWERED ON – 09/12/2021

TECHNOLOGY FOR EARTHQUAKE FORECASTING

1304. Shri Vivek K. Tankha:

Will the Minister of Earth Sciences be pleased to state:

(a) whether the country has its own method or technology to forecast any intense shaking of earth's surface apart from the instrument of the seismometer, if so, the details thereof;
(b) whether it is a fact that the country does not have such satellite system and information recorder to get an advance report of unnatural earthquake;
(c) if so, whether there is any tie-up with foreign country/countries to get advance information, time, location and intensity of an earthquake; and
(d) if so, the details thereof and if not, reasons therefor along with plan details of Government?

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

(a)and (b) There is no technology or knowledgeavailable so far to forecast the intense shaking of the earth. No country in the world, including India, has developed any such technology to predict/forecast the earthquakes.However, Earthquake Early Warning (EEW) System is another tool developed in recent times for issue of earthquake alert/warning based on P-wave arrival time after the occurrence of an earthquake. The warning time will range from a few seconds to a little more than a minute and will primarily be a function of the distance of the user from the epicentre. There are instruments available to sense primary waves of an earthquake and by the help of suitable/fast communication systems at place, the Earthquake Early Warning may be issued at farther locations before the arrival of secondary waves/surface waves which might cause critical shaking or damage. The development and deployment of such systems may be useful for issue of warning for shutting critical operations/industries and safeguard of human lives.

(c) and (d) As mentioned earlier that there is no technology available in the world to predict/forecast the earthquakes with reasonable degree of occurrence time, location, intensity and magnitude.

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