Installation of equipments for predicting earthquakes

†1291. SHRI RAM NATH THAKUR: Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether Government is seriously doing research on earthquake prediction in order to predict earthquakes, if so, the details thereof; and
- (b) the total number of places in the country where instruments have been installed for predicting earthquakes as of now, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF EARTH SCIENCES (SHRI Y. S. CHOWDARY): (a) and (b) To date, there is no proven scientific technique available, anywhere in the world, to predict/forecast the occurrence of earthquakes with reasonable degree of accuracy with regard to space, time and magnitude. Nevertheless, efforts are being made world-over including India, to monitor and study various earthquake precursory phenomena in critical seismotectonic regions, which would not only help understand the earthquake generation processes better but also lead to identifying possible earthquake precursors, which may serve as useful predictors in future.

As part of this, a Programme on 'Seismicity and Earthquake Precursor' has been initiated by Ministry of Earth Sciences (MoES), through a multi-institutional and multi-disciplinary mechanism to adopt an integrated approach of generation, assimilation and analyses of a variety of earthquake precursory phenomena in critical seismotectonic environments in the country in a comprehensive manner. For earthquake precursory studies three Multi – Parametric Geophysical Observatories (MPGOs) have been set up at Ghuttu, Central Himalaya, Shillong, Eastern Himalaya and in Imphal (Manipur), under Geosciences Programme of Ministry of Earth Sciences (MoES).

MoES has also initiated a major project on drilling a deep bore hole in the seismically active Koyna-Warna region in Maharashtra, to study in detail the ongoing earthquake generation processes in the region. The proposed scientific deep drilling investigations in the seismically active Koyna region will provide a unique opportunity and the much desired data sets to better understand the mechanisms of faulting, physics of reservoir triggered earthquakes and also contribute towards earthquake hazard assessment and develop models for earthquake forecast in future.

[†] Original notice of the question was received in Hindi.