GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOKSABHA
UNSTARRED QUESTION NO. 1353
TO BE ANSWERED ON 9th FEBURUARY, 2022

SEISMOGRAPH IN ALIRAJPUR

1353. SHRI GUMAN SINGH DAMOR:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Government proposes to set up a seismometer in Alirajpur district to measure the intensity of earthquake tremors being felt in 100 villages located on the bank of Narmada river in the district;
(b) if so, the time by which it is likely to be set up;
(c) whether many houses have got damaged due to constant earthquake tremors reported in this area;
(d) if so, whether the Government is likely to provide compensation for damage caused to houses after making due evaluation in this regard; and
(e) 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)and (b) As per the earthquake catalogue of National Center for Seismology (NCS) under Ministry of Earth Sciences (MoES), a total of 18 small earthquakes of magnitude ranging between 2.7 and 3.8 were recorded during the period from the year 1960 to 2020 within 100 Km radius of the Alirajpur district, Madhya Pradesh. Out of total 18 earthquakes, an earthquake of maximum magnitude (M:3.8) occurred on 27.07.2003 at about 70 Km south of the Alirajpur. In the past, the area has experienced an earthquake of magnitude5.0 in year 1863 at about 80 Km south-east of the Alirajpur. Recently, the area has experienced two earthquakes of magnitudes 3.3 on 02.01.2021 and 2.9 on 20.10.2021 respectively. NCS is continuously monitoring the earthquake activity in and around the country with 152 permanent seismic stations having a minimum detection threshold down to the magnitude 3.0 in Central Part of India. Out of these 152 stations, about 9 permanent seismic stations namely Indore, Surat, Narmadanagar, Akola, Bhopal, Bhavnagar, Nashik, Udaipur, and Palghar, etc are located around the Alirajpur district, which are capable of locating earthquakes of magnitude 3.0 and above. However, the micro earthquakes with magnitude less than 3.0, which are generally non-damaging, may not be detected by the existing seismological network. Such micro earthquakes with shallow focal depth may have generated shaking with rumbling sounds to alert people of the nearby villagers of the district. National Centre for Seismology is poised to detect lower limit of magnitude (M 3.0) of earthquake from its existing National Seismological Network for the country.

(c) to (e) NCS is mandated to keep round-the-clock monitoring of seismic activity in the country and in its neighbourhood. The Center is not involved in assessment of damage to the houses caused by the earthquakes. It is to mention that the Alirajpur district falls under Zone-III and close to Zone-II as per seismic zoning map of India prepared by the Bureau of Indian Standards (BIS). Hence, the area has broadly less exposure to seismic hazard than the vulnerable cities lie in Zone IV and V. Therefore, appropriate steps may be taken as per BIS code to ensure that the dwellings and other structures in the area are properly engineered.

As per Disaster Management Division, Ministry of Home Affairs, the primary responsibility for disaster management rests with the State Governments. The State Governments provide financial relief to the affected people in the wake of notified disasters (including earthquakes), from the State Disaster Response Fund (SDRF) already placed at their disposal. However, in the event of disaster of a severe nature, additional financial assistance is extended from the National Disaster Response Fund (NDRF) as per the laid down procedure, which includes an assessment based on the visit of an Inter-Ministerial Central Team (IMCT). However, Ministry of Home Affairs does not have any information about damaged houses due to earthquake tremors in the said area.

*****