

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA UNSTARRED QUESTION No. 4491
TO BE ANSWERED ON MARCH 20, 2020**

FREQUENT EARTHQUAKES NEAR DAMS

4491. PROF. SAUGATA RAY:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government has taken serious note on frequent earthquakes happening within ten kilometres radius of major dams of the country;**
- (b) if so, the details thereof;**
- (c) the number of such tremors happened during the last three years in the country;**
- (d) whether the huge water storage are behind the frequent tremors near such dams; and**
- (e) if so, the details thereof and the corrective measures taken to safeguard such dams?**

**ANSWER
MINISTER OF SCIENCE AND TECHNOLOGY
AND EARTH SCIENCES
(DR. HARSH VARDHAN)**

(a & b) Yes Sir. The National Centre of Seismology (NCS) monitors the earthquake activity in the country on 24X7 basis. Also, the Hydro-Power Project Authorities have placed seismic systems in and around dam sites to monitor the seismicity close to dams. The Central Water Commission, Ministry of Jal Shakti, is nodal agency for carrying out periodic inspection of dams to ensure their safety.

- (c) A total 18 earthquakes with magnitude 3.0 and above have been recorded by NCS network in the close vicinity of major dams during the last three years.**
- (d) The occurrence of earthquakes in and around dams is not always associated with the huge water storage. It depends upon the pre-existing geological / tectonic setting of the region. The reservoir triggered events have been reported in different parts of the world in active tectonics regime. In India, such events have been reported mainly from Koyna-Warna region, which hosts a major dam.**
- (e) The major dams in India have been designed and constructed taking into consideration the seismic vulnerability of the region. However, the Central Dam Safety Organization, under Central Water Commission carry out regular inspection for Dam safety.**