

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 2303
TO BE ANSWERED ON WEDNESDAY, NOVEMBER 30, 2016**

REPORT ON NATURAL CALAMITIES

2303. MAJ GEN B.C. KHANDURI AVSM (Retd):

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether IIT, Roorkee has sent any report to the Government regarding accurate forecast about the incidents of natural calamities like cloud burst, heavy rains and consequential damage caused due to these natural calamities;**
- (b) if so, the details thereof;**
- (c) whether a presentation was made to the Hon. Minister by the IIT, Roorkee to showcase how an accurate forecast is possible using Digital Alleviation Model; and**
- (d) if so, the action taken/being taken by the Government on this report?**

ANSWER

**MINISTER OF STATE FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)**

- (a) No madam.**
- (b) Does not arise.**
- (c)-(d) Yes Madam. A presentation on the possibilities and potential opportunities for assessing issues like flood and cloud burst forecasting using available satellite based precipitation estimates was made to the Hon. Minister by Prof.Nayan Sharma and Prof. B.R.Gurjar of the Indian Institute of Technology (IIT), Roorkee on 04-11-2015 with past data as a proof of concept. Real issue in real time assessments is the limitation involved in the acquisition of rainfall from remote areas/valleys of Himalayan river catchments and associated limited lead time owing to higher slope terrains like Kedarnath Valley. The satellite derived rainfall over the Himalayas also suffer from serious quality flags dealing with resolution, spatial coverage and orbital scan delay. Due to these critical handicaps, the knowledge application in this case presented by the IIT, Roorkee group can not be taken up for operational utilization particularly for the early warning of flash floods/cloud burst with sediment transport in remote high slope valleys of Himalayas.**
