

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 4480
TO BE ANSWERED ON FRIDAY, JULY 19, 2019**

CLOUD BURST

4480. SHRI TIRATH SINGH RAWAT:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether cloud-bursting incidents are recurring in hilly areas of Uttarakhand especially in various divisions of Garhwal, if so, the details thereof;**
- (b) whether heavy loss takes place in absence of early weather warning systems, if so, the details thereof;**
- (c) whether the Government possesses any technology or proposes to develop any technology to predict such incidents so that harm caused by such severe calamities may be mitigated; and**
- (d) if so, the details thereof?**

ANSWER

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

- (a) Yes Sir, Cloud burst incidents in the hilly areas of Uttarakhand are taking place frequently. Cloud burst events are mostly reported to occur around the southern rim of the Himalayas generally between elevation range of 1000 m and 2500 m within a small geographic area of 20-30 km having rainfall greater than 100 mm / hour.**

In Garhwal region, cloud bursts are taking place in many parts. One recent incident of cloud burst was reported on June 2, 2019 in Lambagad village, Gairsain region, in Chaimoli district and another on July 4, 2019 in Charansig village, Agustmuni region, in Rudraprayag district, in Garhwal region.

Due to relatively smaller region in which occurrences of cloud burst events take place within the Himalayas, it is very difficult to get their record/report.

A recent compilation from different sources, like newspapers recording etc., 30 cloud burst events have occurred over the southern rim of the Himalayas during 1970-2016, and around 17 cloud burst events among them occurred in Garhwal region of Uttarakhand.

- (b) Yes Sir. Losses do take place due to the cloud burst events. However, details of losses are not available with India Meteorological Department (IMD).**
- (c) & (d) Advancement and up-gradation of Early Warning System is a continuous process in IMD. With the advancement of weather prediction system, heavy loss to life and property is anticipated to reduce. IMD is issuing 'Mountain Weather Bulletin' for Western Himalayan Region including Garhwal region with the forecast & warning for next 5 days. In addition to this, nowcast warnings for thunderstorm activity along with intensity of severe weather expected are issued by Meteorological Centre Dehradun for the region, as and when required. To help detecting cloud bursts and nowcasts, IMD will be installing 10 X-band radars over NW Himalayan states of Jammu and Kashmir, Uttarakhand and Himachal Pradesh.**
