## **GOVERNMENT OF INDIA** DEPARTMENT OF ATOMIC ENERGY **LOK SABHA UNSTARRED QUESTION NO. 1283**

## **TO BE ANSWERED ON 23.11.2016**

HOSTING OF SCIENTIFIC INSTRUMENTS

## 1283. SHRI DINESH TRIVEDI:

Will the PRIME MINISTER be pleased to state:

- whether the Government has lost out on being the destination for the world's largest telescopes, the Thirty Meter Telescope (TMT); if so, the details thereof and reasons for the same;
- (b) whether the Government has identified sites that are capable of hosting such advanced scientific instruments and if so, the details thereof; and
- the budget allocation available under the ministry to allow clearances of hosting (c) scientific instruments of this nature for the last three budget years?

## ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS AND PRIME MINISTER'S OFFICE (Dr. JITENDRA SINGH):

- (a) The Thirty Meter Telescope (TMT) project is being built by an international consortium of scientific organizations of Japan, China, Canada, India and USA. India is 10% partner in the project. TMT project chose Mauna Kea, Hawaii as its site for building the observatory. However, the work was stopped by the Hawaii Supreme Court. Subsequently, TMT Project Board shortlisted Hanle, Ladakh, India as one of the potential sites for the TMT project along with three others in the northern and few in the southern hemisphere. Though Hanle, Ladakh is one of the great sites for astronomy with good elevation and dry weather, it hosts Indian astronomical observatory with its 2-m optical telescope and Gamma Ray telescopes. Hanle fared poorly in comparison with La Palma in Canary Islands, Spain due to atmospheric turbulence (or seeing), logistics available far away from Ladakh i.e. Mumbai airport. Hanle was not chosen due to scientific merits relative to other sites in the oceans.
- (b) Hanle and its surrounding areas are one of the best sites for astronomy. But compared to Islands mountain tops of Mauna Kea, USA, La Palma, Spain, mountain peaks in Hanle and Tibet have relatively remote and higher atmospheric turbulence for mega scientific project like TMT. Department of Science and Technology and other government departments extended full cooperation and support to Indian astronomy community in this regard.
- (c) Government of India approved India's participation in the TMT project at 10% level with funding outlay of ₹1300/- crore over the next 10 years. It also has budget component to make technology ready to build mid-size astronomy facility with 10-15m diameter in and around Hanle region which is still a great site for 10-m class telescopes.

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