

**GOVERNMENT OF INDIA
DEPARTMENT OF SPACE**

**LOK SABHA
UNSTARRED QUESTION NO. 645**

TO BE ANSWERED ON WEDNESDAY, APRIL 27, 2016

THIRTY METRE TELESCOPE

645. SHRI JAYADEV GALLA:

Will the PRIME MINISTER be pleased to state:

- (a) whether Thirty Metre Telescope International Observatory Board has shortlisted Ladakh for setting up world's largest telescope;**
- (b) if so, the details thereof;**
- (c) the total cost of the project and the share of India; and**
- (d) the manner in which Thirty Metre Telescope may assist to explore new vistas in the universe?**

ANSWER

**MINISTER OF STATE IN THE MINISTRY OF PERSONNEL, PG &
PENSIONS AND IN THE PRIME MINISTER'S OFFICE**

(DR. JITENDRA SINGH):

- (a)&(b) The Thirty Meter Telescope (TMT) project is the joint responsibility of the Department of Science & Technology (DST) and the Department of Atomic Energy (DAE) from India. As per the information provided by Indian Institute of Astrophysics (IIA) under DST, the TMT is an international project being funded by scientific organisations of Canada, China, India, Japan and USA. The Evaluation process for an appropriate site includes scientific suitability (water vapour in the atmosphere, atmospheric turbulence and number of cloud-free nights in a year), infrastructure and logistics for**

setting-up of such a large international scientific project. While Mauna Kea, Hawaii is the preferred choice for the TMT project, given the large investments that have already been made and committed, the project is also looking at alternate sites both in the northern and southern hemispheres. Hanle, Ladakh is one of the sites being evaluated for hosting the telescope. Hanle being the protected area in the state of J&K, the project requires clearances from State and Central agencies such as environmental, defence, external affairs and home affairs.

(c) The total cost of TMT project is about 1.5 billion US dollars. The Union Cabinet has given its approval for India's participation in the Thirty Metre Telescope (TMT) project at Mauna Kea, Hawaii, USA at a total cost of ₹ 1299.8 crores from 2014-2023. From the Indian side, this will be a joint project of the Department of Science and Technology (DST) and the Department of Atomic Energy (DAE) with a DST share of ₹ 675.25 crores and DAE share of ₹ 624.55 crores.

(d) TMT will enable scientists to study fainter objects far away from us in the Universe, which gives information about early stages of evolution of the Universe. Also, it will give us finer details of not-so-far-away objects like undiscovered planets and other objects in the Solar System and planets around other stars. TMT being the largest optical and infrared telescope in the northern hemisphere will enable several discoveries which will surely inspire future generations. Project will also provide state-of-the-art high end technologies to the country, which would benefit a number of industries and R&D centers in the country.
