

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:2014
ANSWERED ON:06.12.2006
NEUTRINO OBSERVATORY LAB
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Will the Minister of ATOMIC ENERGY be pleased to state:

:

- (a) whether the Government is contemplating to set up neutrino observatory lab in Mysore;
- (b) if so, the salient features thereof;
- (c) the estimated expenditure thereof;
- (d) whether the Government has plans to set up similar labs in other parts of the country; and
- (e) if so, the details thereof?

Answer

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN)

- (a) Yes, Sir. The Government is contemplating to set up Neutrino Observatory Lab at Singara village near Masinagudi in Tamilnadu, which is about 100 km south of Mysore city.
- (b) The salient features of the lab are as under:
 - (i) The primary goal of the laboratory is the study of neutrinos from various natural and laboratory sources.
 - (ii) It will be located under 1 kilometer of rock overburden in a cavern underground to shield cosmic rays.
 - (iii) The size of the cavern will be 120 meters long, 22 meters wide and 30 meters in height.
 - (iv) The experiment will involve detection of neutrinos coming from earth's atmosphere and through their energy and direction measurements, finding exciting properties of the fundamental particle, neutrino. In future, this can also be used for more precise measurements using neutrinos coming from distant accelerators.
 - (v) It will also act as the detector Research and Development centre for particle nuclear physics.
 - (vi) It will also help in generating scientific manpower for future scientific projects.
- (c) Rs.320 crores in the XI plan followed up by Rs.350 crores in the XII plan amounting to a total cost of Rs.670 crores.
- (d) No, Sir.
- (e) Does not arise in view of (d) above.