

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

UNSTARRED QUESTION NO:5922
ANSWERED ON:29.04.2015
THERMONUCLEAR REACTOR
Sule Smt. Supriya Sadanand

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) whether India is one of the seven partner countries in the International Thermonuclear Experimental Reactor (ITER) project;
- (b) if so, the details thereof and the objective behind the move;
- (c) whether the Government is considering using the knowledge from ITER to set up its own demonstrator reactor in the country and if so, the details thereof;
- (d) whether the department of atomic energy has given its approval to set up the country's own thermonuclear reactor and if so, the details thereof;
- (e) the amount allocated for this purpose; and
- (f) the time by which this fusion reactor will be set up?

Answer

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

(a) Yes, Sir.

(b) International Thermonuclear Experimental Reactor (ITER) is an international project to demonstrate generation of energy by nuclear fusion reaction between deuterium and tritium, which are different isotopes of hydrogen. The reactor under the ITER project is being constructed at Cadarache, France. There are seven Parties who are participating in the ITER [the European Atomic Energy Community, the Government of People Republic of China, the Government of the Republic of India, the Government of Japan, the Government of Republic of Korea, the Government of Russian Federation and the Government of United States of America (USA)].

India has joined the ITER Project, with the objective of acquiring self-sufficiency in the critical area of fusion reactor technologies and with the aim of accelerating its own domestic fusion energy research programme by contributing 10% of the total ITER cost, while gaining the knowhow for the entire 100% of the project. The Project will enable India to leapfrog to the next stage viz., realizing DEMO/Hybrid fusion reactor and thereby give fillip to the National Fusion Programme.

(c) The prime objective of India's participation in ITER is to use the knowledge to set up its own demonstration thermonuclear reactor in future.

(d) No, Sir.

(e)&(f) Do not arise.