

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
STARRED QUESTION NO : 53
TO BE ANSWERED ON 24/11/2011

NON-AVAILABILITY OF URANIUM

* 53 SHRI N.K. SINGH:

Will the PRIME MINISTER be pleased to state:

- (a) Whether it is a fact that our nuclear plants are presently starved because of non-availability of uranium;
- (b) if so, whether it is a fact that there are massive untapped reserves of uranium, estimated over one lakh tonnes, in the states of Jharkhand, Meghalaya, Andhra Pradesh, Rajasthan and Tamil Nadu; and
- (c) the reasons that these reserves have remained untapped and we have been pursuing foreign sources?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS
AND PRIME MINISTER'S OFFICE (SHRI V. NARAYANASAMY):

- (a) to (c) A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO RAJYA SABHA STARRED QUESTION NO. 53 FOR ANSWER ON 24.11.2011 BY SHRI N.K. SINGH REGARDING NON-AVAILABILITY OF URANIUM.

- (a) Out of 20 nuclear power reactors with an installed capacity of 4780 MW, presently one reactor (RAPS-1 100 MW) is under extended shut down to meet regulatory requirements and 19 reactors are in operation. Ten reactors with a capacity of 2840 MW comprising KGS 1 to 4 (4 x 220 MW), NAPS 1 & 2 (2 x 220 MW), MAPS 1 & 2 (2 x 220 MW) and TAPS 3 & 4 (2 x 540 MW) are fuelled by indigenous uranium, which is not available in the required quantity. These are accordingly being operated at lower power levels matching the fuel supply. The remaining 9 reactors which are under International Atomic Energy agency (IAEA) safeguards use imported fuel and are operating at rated capacity.
- (b) Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of Department of Atomic Energy, is engaged in survey and exploration activities since its inception with a mandate to identify and evaluate uranium resources required for the successful Implementation of atomic energy programme of the country. Activities of AMD are spread along the length and breadth of the country, utilising state-of-the-art technology for uranium exploration.

Details of uranium resources established in different states as on September 30, 2011 are as given below:

Sl. No.	State	Uranium resources established (tonnes U ₃ O ₈)
1.	Andhra Pradesh	84256
2.	Jharkhand	50978
3.	Meghalaya	19738
4.	Rajasthan	6726
5.	Karnataka	4682
6.	Chhattisgarh	3986
7.	Uttar Pradesh	785
8.	Himachal Pradesh	784
9.	Maharashtra	355
10.	Uttarakhand	100
	Total	1,72,390

[1 tonne of U₃O₈ = 0.848 tonnes of uranium metal]

Presently there are 6 existing uranium production centre/mines viz. Jaduguda, Bhatin, Narwapahar, Bagjata, Turamdih and Banduhurang, Jharkhand; 2 are committed production centre viz. Mohuldih, Jharkhand and Tummalapalle, Andhra Pradesh; and 2 are Planned production centre at Kylleng-Pyndengsohiong, Mawthabah, Meghalaya and Lambapur-Peddagattu, Andhra Pradesh (Red Book 2009).

- (c) Techno-economically viable uranium reserves of the country are developed by the Uranium Corporation of India Limited (UCIL) in line with the requirement of uranium for indigenous nuclear programme. As stated above, in Jharkhand, UCIL operates 6 mines and two process plants. Entire uranium production of the country is met from these centres. A large underground mine and process plant at Tummalapalle in Andhra Pradesh is under construction which is scheduled to be commissioned during this year. Lambapur uranium project in Nalgonda district of Andhra Pradesh is under pre-project activities. An underground mine and process plant at Gogi in Karnataka is under pre-project stage. Construction of this project is likely to start in 2012. Development of uranium resources at Kyelleng Pyndengsohiong Mawathabah in Meghalaya shall be taken up after obtaining the approval of Government of India. This will lead to development of other deposits like Wahkyn in this area. Development of uranium resources available at Rohil in Rajasthan is linked with establishing source of water in this area. Exploration in this regard is in progress by AMD. Uranium resources from foreign countries shall be utilised in safeguarded power reactors. With the fruition of International cooperation, uranium has been imported for use in the reactors placed under IAEA safeguards as per the Separation Plan. Light Water Reactors to be set up, as additionality to the indigenous programme to enable faster nuclear capacity addition, will also be fuelled by imported uranium.
