

**GOVERNMENT OF INDIA
ATOMIC ENERGY
LOK SABHA**

STARRED QUESTION NO:280

ANSWERED ON:12.12.2012

SHORTAGE OF URANIUM

Choudhary Shri Nikhil Kumar;Deo Shri Kalikesh Narayan Singh

Will the Minister of ATOMIC ENERGY be pleased to state:

- (a) whether the nuclear power plants set up in the country are facing shortage of fuel/uranium;
- (b) if so, the details thereof and the reasons therefor along with the action taken/ being taken by the Government in this regard;
- (c) whether the Government proposes to explore an alternate fuel or technology for generation of nuclear power in the country;
- (d) if so, the details thereof; and
- (e) the steps taken/being taken by the Government in this regard?

Answer

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

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

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO.280 FOR ANSWER ON 12.12.2012 BY SHRI KALIKESH N. SINGH DEO AND SHRI NIKHIL KUMAR CHOUDHRY REGARDING SHORTAGE OF URANIUM.

(a)&(b) Out of 19 operating nuclear power reactors in the country with installed capacity of 4680 MW, ten nuclear power reactors with a capacity of 2840 MW i.e Kaiga Generation Station Units 1 to 4 (4X220MW), Narora Atomic Power Station Units 1&2 (2X220 MW), Madras Atomic Power Station Units 1&2 (2X220 MW) and Tarapur Atomic Power Station Units 3&4 (2X540 MW) are fuelled with indigenous uranium, which is not available in the required quantity. These are accordingly operated at lower power levels matching the fuel supply. The remaining nine nuclear reactors with a capacity of 1840 MW are under International Atomic Energy Agency (IAEA) safeguards in accordance with the separation plan. These nine reactors use imported uranium, which is available in required quantity, and are operating at rated capacity. The government has made efforts to augment indigenous uranium supply by accelerating exploration efforts, opening new mines and processing facilities.

(c)to(e) The second stage of Fast Breeder Reactor (FBR) using Plutonium based fuel has been launched and a 500 MW Prototype Fast Breeder Reactor (PFBR) is at an advanced stage of construction. In addition, more units of the same type are planned. The third stage of the Indian nuclear power programme based on utilisation of thorium will be launched after 3 to 4 decades when adequate nuclear installed capacity using fast breeder reactors has been achieved. The 300 MWe Advanced Heavy Water Reactor (AHWR) designed by Bhabha Atomic Research Centre (BARC) is specially meant to be a technology demonstrator for large scale commercial utilisation of thorium. The design of all nuclear systems of the reactor has been completed. Construction of AHWR is planned to be launched by the end of 12th Five Year Plan.