

**GOVERNMENT OF INDIA  
ATOMIC ENERGY  
LOK SABHA**

UNSTARRED QUESTION NO:2270  
ANSWERED ON:18.12.2013  
NUCLEAR PROGRAMME  
Gowda Shri D.B. Chandre

**Will the Minister of ATOMIC ENERGY be pleased to state:**

- (a) whether the Government has abandoned the nuclear programme charted by the father of our nuclear programme Dr. Homi Jahangir Bhabha;
- (b) if so, the details thereof and the reasons therefor;
- (c) whether some of the fast breeder reactors, which were based on pressurised heavy water reactors, have not yet been installed;
- (d) if so, the facts of the matter and the reasons therefor;
- (e) whether the Government proposes to run the nuclear programme as was conceptualized by Dr. Bhabha; and
- (f) if not, the reasons therefor?

**Answer**

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

(a) No, Sir.

(b) Does Not arise.

(c)&(d) The technology of fast breeder reactors, being pursued by Bhartiya Nabhikiya Vidyut Nigam Limited (BHAVINI), a Public Sector Undertaking under the Department of Atomic Energy (DAE), is not based on the pressurised heavy water reactors. The fast breeder reactors utilise mixed oxide (Uranium oxide plus plutonium oxide) as fuel and liquid sodium as coolant. India's first fast breeder reactor, the Prototype Fast Breeder Reactor (PFBR) is in an advanced stage of construction at Kalpakkam.

(e)&(f) Yes, sir. The Indian nuclear power programme, as conceptualised by Dr. Bhabha envisages use of Uranium-235, Plutonium, and Uranium-233 (obtained from irradiated thorium) as the main components of nuclear fuel, to be used in three sequential stages, respectively. This programme is robust and is on course.