

GOVERNMENT OF INDIA  
DEPARTMENT OF ATOMIC ENERGY  
**LOK SABHA**  
**UNSTARRED QUESTION NO.2134**  
TO BE ANSWERED ON 18.12.2013

**THORIUM BASED REACTORS**

2134. SHRI P.C. MOHAN:

Will the PRIME MINISTER be pleased to state:

- (a) whether the Government is considering the option of Thorium Based Power Projects in order to achieve self-reliance in the atomic energy sector;
- (b) if so, whether the Government has identified such Thorium reserves;
- (c) if so, the details thereof; and
- (d) the details of subsidy being provided by the Government for the research of necessary techniques and technologies for the construction of the said projects?

**ANSWER**

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

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- (a) Yes sir.
- (b) Yes sir.
- (c) The Atomic Minerals Directorate for Exploration and Research (AMD), a constituent unit of Department of Atomic Energy (DAE), has established the presence of abundant quantity of thorium reserves contained in the mineral monazite occurring in the beach sand placer deposits along the eastern and western coasts and in the inland placers in parts of Kerala, Tamil Nadu, Odisha, Andhra Pradesh, West Bengal and Maharashtra.  
  
As on September 2013, AMD has established in-situ resources of 11.93 million tonnes of monazite in the placer deposits in India, which contains about 1.07 million tonnes of thorium oxide (ThO<sub>2</sub>). Indian monazite on an average contains about 9 – 10% of ThO<sub>2</sub>.
- (d) Entire programme for conducting research in technology and technical know-how required for construction of Thorium based energy projects is being carried out by the Department of Atomic Energy in house and no subsidy is being provided to any agency.