GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
RAJYA SABHA
UNSTARRED QUESTION NO. 162
TO BE ANSWERED ON 03.02.2022

DEVELOPMENT OF INDIGENOUS RARE EARTH MINERALS

162 Smt. Phulo Devi Netam:

Will the PRIME MINISTER be pleased to state:

(a) whether Government intends to privatise the rare earths mining sector either partially or fully;

(b) if so, the detail thereof;

(c) whether Government intends to address the gap in indigenous processing units for rare earth minerals in India and reduce the reliability on Chinese processors;

(d) if so, the detail thereof and if not, the reasons therefor;

(e) whether Government has or intends to frame any policies to support the development of an indigenous lab-to-product ecosystem to support India's strategic and commercial interests in the rare earth minerals sector; and

(f) if so, the detail thereof and if not, the reasons therefor;

ANSWER

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

(a)&(b)The principal ore of rare earth (RE) in India is BSM sand, within which a prescribed substance Monazite occurs. Monazite is a phosphate compound of Uranium, Thorium and RE. Due to association with radioactive elements, mining, processing and refining is kept under Government control and is carried out by a CPSE under the Department of Atomic Energy (DAE). After liberation of radioactivity, the rare earths are available under Open General License (OGL) and hence available to all, including private sector since Independence. However, till date, no private sector has shown interest in this area. As such, industry driving demand for RE products viz. Defence, Electric Vehicles and Hybrid vehicles, Robotics, CNC technologies, etc. are either absent or in nascent stage in India. In addition, the sector was open for private players from 1998–2019 by introducing a policy for exploitation of BSM extending opportunity for bringing in state of the art technology, FDI and establish industry in the value chain. However, none of the above objectives were fulfilled.

(c)&(d) Rare earth comprises of seventeen elements and are classified as light RE elements (LREE) and heavy RE elements (HREE). Some RE which are available in India such as Lanthanum, Cerium, Neodymium, Praseodymium and Samarium, etc are in supply surplus while Dysprosium, Terbium, Europium which are classified as HRE are not available in Indian deposits in extractable quantity. The import of HREE are in miniscule quantities for applications in laboratory scale. Hence, dependence on China is only for HREE in miniscule quantities. The Government is actively working on capacity building for consumption of the RE within the Country. In this regard, recently, to enhance consumption of RE in Indian industries, specially Electric Vehicles, Government has announced a PLI scheme vide item No. 6 of Notification No. S.O. 4632 (E) dated 9th November, 2021 of Ministry of Heavy Industries.

(e)&(f) The Government has plans to develop indigenous technology to meet the domestic demand, from both strategic and commercial sectors. In India, capacity and capabilities in terms of mining, processing, extraction, refining and production of RE oxides/compounds is adequately available, which is under Government control due to operation being associated with radio-active elements. RE in the form of oxides/ compounds, duly liberated from radioactivity is available for all including the private sector since Independence. As regards lab-to-product ecosystem, a Rare Earth Theme Park is being setup which will upscale the scientific principles proven at laboratory to pilot scale and demonstrate the same to aspiring Industries willing to set up commercial operations. Besides, the Theme Park will also undertake skill development activities to develop the workforce of future. In addition, an aspiring Industry is being developed under incubation mode to upscale the technology to produce neodymium metal (for making neodymium permanent magnets) from Indian resources.

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