

GOVERNMENT OF INDIA  
DEPARTMENT OF ATOMIC ENERGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO.3202**  
TO BE ANSWERED ON 31.03.2022

**IMPORT OF RARE EARTH ELEMENTS**

3202 Shri Abir Ranjan Biswas:

Will the PRIME MINISTER be pleased to state:

- (a) whether it is a fact that India has the fifth largest reserves of rare earth elements but it imports most of its requirements from China;
- (b) if so, the reasons therefor;
- (c) the details of the current status of the pact between India's Indian Rare Earths Limited (IREL) and Toyota Group firm Toyota Tsusho Corporation; and
- (d) the quantity of rare earth elements mined in India since 2017, year-wise?

**ANSWER**

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

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(a)&(b) Yes, Sir. As per the report of the U.S. Geological Survey, Mineral Commodity Summaries, January, 2022 India has the world's fifth-largest reserves of Rare Earth Elements.

Indian resource is significantly lean with reference to grade (0.056%-0.058%) and it is tied with radioactivity making the extraction long, complex, and expensive. While the content of RE in ore available in China is of average grade 6% and found in association with priced economic minerals absorbing cost of production of RE and free of radioactivity.

Rare earth comprises of seventeen elements and are classified as light RE elements (LREE) and heavy RE elements (HREE). Some REE which are available in India such as Lanthanum, Cerium, Neodymium, Praseodymium, Samarium, etc. are in supply surplus, while Dysprosium, Terbium, Europium, etc. which are classified as HREE are having supply constraint. These HREE are not available in Indian deposits in extractable quantity.

- (c) There is no pact between IREL (India) Limited and Toyota Tsusho Corporation. However, an agreement has been entered between the two companies for supply of rare earth concentrate in the form of mixed Rare Earths Chloride.
- (d) In Indian resources, Rare Earth Elements are not available on standalone basis. REE is extracted from a mineral, monazite, which is found in association with suite of six other minerals, commonly known as Beach Sand Minerals (ore). The content of REE in the ore is only to the tune of 0.056%-0.058%.

The ore mined by IREL (India) Limited during the period is as under:

<b>Year</b>	<b>Quantity mined (lakh tons)</b>
2017-2018	38.87
2018-2019	65.40
2019-2020	49.95
2020-2021	51.31

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