GOVERNMENT OF INDIA
MINISTRY OF MINES
LOK SABHA
UNSTARRED QUESTION NO. 17
ANSWERED ON 07.12.2022

BEACH AND SAND MINERALS

17. SHRI JAYADEV GALLA:

Will the Minister of MINES be pleased to state:

(a) the amount of beach and sand minerals present in the country from which rare earth metals can be extracted;

(b) whether India is the 4th largest reserve in the world for rare earth metals;

(c) if so, the mineral-wise details of the deposits present in the country;

(d) the amount of rare earth metals used by the country along with the amount that is being imported, classified metal-wise for the last ten years;

(e) whether the Government aims to improve mining of rare earth metals in the country from beach and sand minerals; and

(f) if so, whether private players are likely to be allowed to mine rare earth metals and if so, the number of private players currently mining rare earth metals in the country?

ANSWER

THE MINISTER OF MINES, COAL AND PARLIAMENTARY AFFAIRS
(SHRI PRALHAD JOSHI)

(a) & (c): The mineral monazite, containing ~ 55 - 60% total Rare Earth Elements (REE), is the major source for REE in India as on date. As per the information provided by Department of Atomic Energy (DAE), Monazite (containing thorium and rare earth elements) in association with other economic heavy minerals such as ilmenite, rutile, zircon, garnet and sillimanite in unconsolidated form are found along the coastal and inland placer sands of the country. State-wise details of in-situ monazite and total heavy mineral resource established by AMD as on September, 2022 are given below**:**

State	Deposits	Resource (in million tonnes)	
		Monazite	Total Heavy Minerals (THM)
Odisha	13	3.22	351.36
Andhra Pradesh	25	4.05	359.79
Tamil Nadu	50	2.47	298.42
Kerala	35	1.84	242.88
Maharashtra	5	0.004	5.64
Gujarat	2	0.07	12.53
West Bengal	1	1.20	5.45
Jharkhand	1	0.21	1.12
Total	132	13.07	1,277.20

(b): Yes, Sir. As per the report of the U.S. Geological Survey, Mineral Commodity Summaries, January, 2022, India is placed as having world's fourth-largest reserves of Rare Earth Elements.

(d): As per data provided by Ministry of Commerce & Industry, import figures are as under:

[Values are in Million USD, figures of FY2022-23 are Provisional and Subject to Change]

(2012-13 to 2016-17)

Itchs	Commodity	Unit	2012-13		2013-14		2014-15		2015-16		2016-17	
			Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
28461010	Cerium Oxides	KGS	64722	1.03	67077	0.64	34852	0.55	32351	0.46	68871	0.31
28469010	Rare Earth Oxides Nes	KGS	4363	0.16	129835	5.70	872	0.06	5769	0.15	791	0.04
28469020	Rare Earth Fluorides Nes	KGS			5000	0.03	1000	0.05	5	0.01	109	0.01
28469030	Rare Earth Chlorides Nes	KGS	1155	0.05	1005	0.02	21002	0.07	7005	0.01	21001	0.04
28469090	Other Compnds Inorgnc/ Orgnc Of Rare Earth Materials	KGS	151247	3.86	169823	3.45	850069	5.35	242741	4.13	260171	3.70
Grand Total			**221487**	**5.09**	**372740**	**9.84**	**907795**	**6.08**	**287871**	**4.76**	**350943**	**4.09**

(2017-18 to 2022-23)

Itchs	Commodity	Unit	2017-18		2018-19		2019-20		2020-21		2021-22		2021-22(Till Sep'21)		2022-23(Till Sep'22)	
			Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value	Qty	Value
28461010	Cerium Oxides	KGS	968463	0.70	103955	0.46	102495	0.52	184250	2.04	112639	1.16	91876	0.98	138432	1.30
28469010	Rare Earth Oxides Nes	KGS	4321	0.14	4604	0.16	10848	0.20	15176	0.20	17638	0.29	12185	0.21	5136	0.13
28469020	Rare Earth Fluorides Nes	KGS	3013	0.03	7	0.03	3	0.01	102	0.01	3025	0.01	25	0.00	0	0.00
28469030	Rare Earth Chlorides Nes	KGS	14002	0.04	14002	0.03	15004	0.02	20000	0.03	30002	0.05	20002	0.03	10000	0.02
28469090	Other Compnds Inorgnc/Orgnc Of Rare Earth Materials	KGS	1346497	7.60	1052906	9.31	832370	11.35	510167	7.31	557031	7.66	350855	4.77	273614	2.95
Grand Total			**2336296**	**8.51**	**1175474**	**10.00**	**960720**	**12.10**	**729695**	**9.59**	**720335**	**9.17**	**474943**	**6.00**	**427182**	**4.39**

(e) & (f): Rare Earth metals are not mined, rather they are produced through a series of beneficiation and extraction processes. As per the extant rules, private players are not allowed to mine rare earth elements associated with monazite from beach sand.

*****