

China Suspends Rare Earth Exports

Prelims - Current events of national and international importance.

Mains (GS I) - Distribution of key natural resources across the world.

Why in news?

Recently, China has suspended the export of key rare earth metals and magnets as a part of China's retaliation for US tariff increase.

- **Rare Earth Elements (REEs)** - They are a set of **17 silvery-white soft heavy metals**.
- It is also called **rare earth oxides**.
- The 17 rare earth elements are,

Atomic Number	Element	Symbol
21	Scandium**	Sc
39	Yttrium	Y
57	Lanthanum	La
58	Cerium	Ce
59	Praseodymium	Pr
60	Neodymium	Nd
61	Promethium*	Pm
62	Samarium	Sm
63	Europium	Eu
64	Gadolinium	Gd
65	Terbium	Tb
66	Dysprosium	Dy
67	Holmium	Ho
68	Erbium	Er
69	Thulium	Tm
70	Ytterbium	Yb
71	Lutetium	Lu

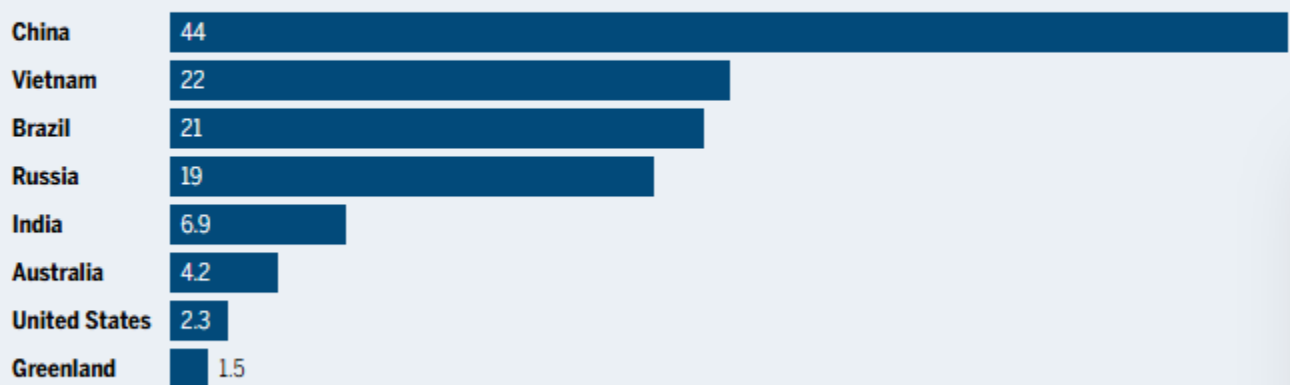
- Scandium and yttrium are not part of the lanthanide family, but they are included because they occur in the same mineral deposits as the lanthanides and have similar chemical properties.
- All Rare earth elements are **considered metals**.
- **Properties** - Malleable with high melting and boiling points.

- They exhibit both strong magnetic and luminescent properties due to their unique electronic structure.
- **Significance** - Rare earth metals are vital in advanced electronics, defence and medical equipment's and renewable energy.
- They are critical in green technologies, to support net zero carbon emissions goals.
- **Resource distribution** - China has the largest reserves and production, followed by countries like Brazil, Vietnam, and Russia.
- China account for 90% of global production and it also controls refining technologies related to rare earth elements.

Countries with the Most Rare Earth Minerals

Based on the latest data, the top countries with the largest rare earth element (REE) reserves are:

All figures in million metric tons



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- **Suspension on export** - The Chinese government ordered restrictions on the export of key rare earth metals, which are refined entirely in China, as well as rare earth magnets.
- Key heavy rare earth metals which that are covered under restriction are samarium, gadolinium, terbium, dysprosium, lutetium, scandium and yttrium.
- **Retaliation on US** - This suspension was in response to [reciprocal tariffs](#) imposed by US which led to trade war between the world's two largest economies.
- It is primarily aimed to prevent supplies from reaching certain companies, including American military contractors.
- **New regulatory system** - The metals, and special magnets made with them, can now be shipped out of China only with special export licenses.
- The licensing regime for other countries is yet to set up by China which, effectively halts shipments.
- **Impact of Rare earth element export suspension** -It is likely to trigger a global supply crunch especially affecting major REE-consuming countries like the US, Japan, Vietnam, and Germany.
- It could affect the production of Electric vehicles, defence equipment and advanced electronics.
- India has limited impact due to relatively low domestic consumption but it still relies heavily on China for Rare Earth metals with 65% of imports are from China.

References

1. [The New York Times| China Halts Metal Exports](#)
2. [Rare Elements Resources| Rare Earth Elements](#)

