

What are Critical minerals?

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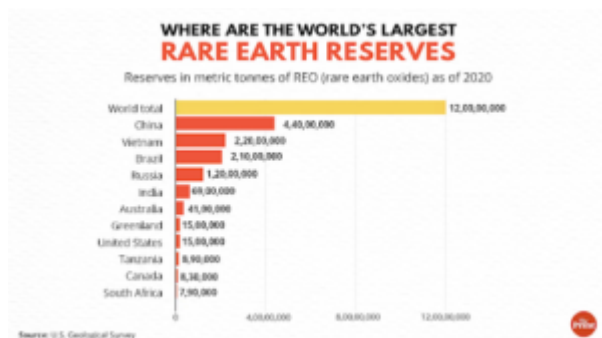
In news- India and Australia have recently decided to strengthen their partnership in the field of projects and supply chains for critical minerals.

What are critical minerals ?

- **Critical minerals are elements that are the building blocks of essential modern-day technologies**, and are at risk of supply chain disruptions.
- **These minerals are now used everywhere from making mobile phones**, computers to batteries, electric vehicles and green technologies like solar panels and wind turbines.
- Such lists **mostly include graphite, lithium and cobalt, which are used for making EV batteries; rare earths** that are used for making magnets and silicon which is a key mineral for making computer chips and solar panels.
- The critical minerals including beryllium, germanium, rare earths (heavy and light), rhenium, tantalum, etc. find specialised use in aerospace, automobiles, cameras, defense, entertainment systems, laptops, medical imaging, nuclear energy, and smartphones.
- These critical minerals would also play a role in nurturing the domestic manufacturing capacity to support the government's low-carbon plans, such as the 100GW solar target, faster adoption and manufacturing of hybrid and electric vehicles, and the National Domestic Efficient Lighting programme.

Distribution of critical minerals around the world-According to the 2019 USGS Mineral Commodity

- Summaries report, **China is the world's largest producer of 16 critical minerals.**



- As per a report on the role of critical minerals by the International Energy Agency, **China is responsible for some 70% and 60% of global production of cobalt** and rare earth elements, respectively, in 2019.
- China's share of refining is around 35% for nickel, 50-70% for lithium and cobalt, and nearly 90% for rare earth elements.
- It also controls cobalt mines in the Democratic Republic of Congo, from where 70% of this mineral is sourced.

KABIL or the Khanij Bidesh India Limited-

- In 2019 India has set up KABIL, a joint venture of three public sector companies, to ensure a consistent supply of critical and strategic minerals to the Indian domestic market.
- The three PSCs are;
 - National Aluminium Company Limited (NALCO).
 - Hindustan Copper Limited (HCL) and
 - Mineral Exploration Corporation Limited (MECL).
- It carry out identification, exploration, development, mining, and processing of strategic minerals overseas for commercial use and meeting India's requirement of these minerals.