

Lithium reserves in India

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Context:

After recent news about the commercial exploration of lithium in Jammu and Kashmir, Karnataka is looking forward to similar possibilities regarding the lithium reserves in its Mandya district.

About Lithium:

1. Lithium is the lightest metal found on earth.
2. It belongs to the Alkali metal family.
3. Its density is almost half of that of water.

Uses of Lithium :

1. The body of planes and fighter jets is made from lithium.
2. The batteries in mobile phones and smartwatches are made from lithium.
3. Button cells in clocks are made from lithium too.
4. Lithium is considered a strategic element because of its use in batteries used in Electric Vehicles (EVs).
5. It is also used to make alloys with aluminum and magnesium.

Medicinal Uses:

1. Lithium element is used in medication for the treatment of bipolar disorder
2. It is also used as an antidepressant.

About Lithium reserves in India :

1. The discovery of lithium has been made in the Jammu and Kashmir region of India.
2. This is the first major lithium reserve that has been found in India.
3. Previously, a survey led by the Atomic Minerals Directorate for Exploration and Research showed the presence of lithium resources in the Marlagalla area of Karnataka's Mandya district.

Global Lithium Reserves:

1. Three nations of South America: Bolivia, Chile, and Argentina have rich resources of lithium.
2. They are collectively referred to as the 'Lithium Triangle'.
3. China controls 77% of global lithium-ion battery manufacturing currently.