Coal Bed Methane

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Why in news?

Coal's Ministry has asked Coal India Limited (CIL) to produce 2 MMSCBs per day of coalbed methane (CBM) gas in the next two or three years.

What does CBM consist of?

- CBM is an unconventional natural gas form in coal deposits and carbon seam formed during the gasification process.
- India has the fifth largest proven coal reserves in the world.
- The vast majority of the best prospective areas for CBM development are in eastern India, situated in DamodarKoel valley and Son valley.
- CBM projects exist in Raniganj South, Raniganj East and Raniganj North areas in the Raniganj coalfield, the Parbatpur block in Jharia coalfield and the East and west Bokaro coalfields.

Applications- Generation of power, Auto-fuel compressed gas (CNG), as nitrogen feedstock, Production of cement, methane and steel.

Issues –

1. Methane is a CBM mining greenhouse gas. The global carbon mining methane emissions are estimated to account for about 8% of total global emissions of methane.
2. Disruption of drilled lands and their effect on habitats of wildlife leads to damage of ecosystems.
3. Production behaviour in CBM at an early stage of recovery is complex and difficult to predict.
4. Another issue is the possible impact on downstream water

sources of water of CBM development.

5. High-salinated water to be disposed of in order to release the methane is a risk because it could have adverse effects on freshwater ecosystems.