

## Rat-Hole Mining

### Why in News?

Recently, several workers have been trapped for more than 12 hours in a rat-hole mine after it was flooded with water in Dima Hasao district, Assam.

- **Rat-hole mining** – It is a method of extracting coal from narrow and horizontal seams.
- The term “rat hole” refers to the narrow pits dug into the ground, typically just large enough for 1 person to descend and extract coal.
- It is prevalent in **Meghalaya**.
- **Process** – Once the pits are dug, miners use ropes or bamboo ladders to reach the coal seams.
- The coal is then manually extracted using primitive tools such as pickaxes, shovels and baskets.

Types of Rat-Hole mining	
Side cutting	Box cutting
Narrow tunnels are dug on the hill slopes and workers go inside until they find the coal seam.	A rectangular opening is made.
<b>Size</b> – Very thin, less than 2 m in most cases.	<b>Size</b> – Varying from 10-100 sqm and through that a vertical pit is dug, 100-400 feet deep.

- **Issues** – The mines are typically unregulated and lacking safety measures such as proper ventilation, structural support or safety gear for the workers.
- The mining process cause land degradation, deforestation and water pollution.
- Unregulated mining lead to water with high concentrations of sulphates, iron, and toxic heavy metals, low dissolved oxygen, and high biochemical oxygen demand.

*The two rivers, Lukha and Myntdu, became too acidic to sustain aquatic life because of unregulated mining in Meghalaya.*

- Its hazardous working conditions, environmental damage and numerous accidents leading to injuries and fatalities.
- **Ban** – The National Green Tribunal (NGT) banned the practice in 2014 and retained the ban in 2015.



## Reference

[The Indian Express| Rat Hole Mining trapped workers in Assam](#)

## Related News Article

[Rat Hole Mining to rescue trapped workers in Uttarakhand](#)

