

## Rat-Hole Mining in Meghalaya

### What is the issue?

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- A coal mine in Meghalaya's East Jaintia Hills collapsed recently, trapping at least 15 workers who are feared dead.

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- It has thrown light on a dangerous procedure known as "rat-hole mining".

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### What is rat-hole mining?

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- It involves digging of very small tunnels, usually only 3-4 feet high, which workers (often children) enter and extract coal.

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- The rat-hole mining is broadly of two types - side-cutting and box-cutting.

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- In side-cutting procedure, narrow tunnels are dug on the hill slopes and workers go inside until they find the coal seam.

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- The coal seam in hills of Meghalaya is very thin, less than 2 m in most cases.

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- In the box-cutting type, a rectangular opening is made, varying from 10 to 100 sq m.

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- Through this, a vertical pit, 100 to 400 feet deep, is dug.

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- Once the coal seam is found, rat-hole-sized tunnels are dug horizontally through which workers can extract the coal.

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## Why is it very prevalent?

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  - In Jharkhand, the coal layer is extremely thick, where open-cast mining can be done.
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    - But no other method would be economically viable in Meghalaya, where the coal seam is extremely thin.
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      - Removal of rocks from the hilly terrain and putting up pillars inside the mine to prevent collapse would be costlier.
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        - So despite a ban, rat-hole mining remains the prevalent procedure for coal mining in Meghalaya.
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          - Rat-hole mining is the locally developed technique and the most commonly used one.
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            - It is not regulated by any law, and coal extraction has been made by unscrupulous elements in a most illegal and unscientific manner.
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              - Meghalaya's annual coal production of nearly 6 million tonnes is mostly said to have come through rat-hole mining.
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## What are the impacts?

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  - **Ecology** - Rat-hole mining in Meghalaya had caused the water in the Kopili river (flows through Meghalaya and Assam) to turn acidic.
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    - The entire roadsides in and around mining areas are used for piling of coal.
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      - This is getting to be a major source of air, water and soil pollution.
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        - Off road movement of trucks and other vehicles in the area causes further damage to the ecology of the area.
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          - **Risk to lives** - Due to rat-hole mining, during the rainy season, water flood into the mining areas resulting in death of many.
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- If water has seeped into the cave, the worker can enter only after the water is pumped out.
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## What are the shortcomings?

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- **Ban** - The National Green Tribunal (NGT) has banned rat-hole mining in 2014, and retained the ban in 2015.
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- The ban was on grounds of the practice being unscientific and unsafe for workers.
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- The NGT order bans not only rat-hole mining but all “unscientific and illegal mining”.
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- But orders of the Tribunal have been violated without exception.
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- The State Government has failed to check illegal mining effectively.
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- It has also not framed the mining policy, mining plan and the guidelines as directed under the orders of the Tribunal.
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- The state has in place the Meghalaya Mines and Mineral Policy, 2012; but the NGT finds it inadequate.
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- **Protection** - Constitution's 6th Schedule intends to protect the community's ownership over its land and autonomy and consent over its nature of use.
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- Coal mining currently underway in Meghalaya was a corruption of this Constitutional Provision.
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- Private individuals with interests in earning monetary benefits from minerals vested under the land are engaging in coal mining.
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- They are attempting to legitimize this act by claiming immunity through tribal autonomy over land ownership.
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**Source: Indian Express**

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