

What is Biomining?

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In news

Bruhat Bengaluru Mahanagara Palike (BBMP) plans to process tonnes of waste through biomining

What is Biomining of solid waste?

- Bio mining is a process by which garbage is treated with bio organisms or natural elements like air and sunlight
- The idea of bio mining is to expose the accumulated waste to bio organisms and to air and sun so that the biodegradable waste among the layers get decomposed through the natural process.
- Whatever is left over will be the non-biodegradable material, which has to be dealt with separately

Biomining used to extract metals

- Biomining is also used **to extract metals of economic interest** from rock ores or mine waste **using microorganisms (microbes)**.
- Biomining techniques may also be **used to clean up sites that have been polluted with metals**.
- Some **microbes can oxidize valuable metals bound in solid minerals**, allowing them to dissolve in water.
- Metals currently bio mined are copper, uranium, nickel, and gold that is commonly found in sulfidic (sulfur-bearing) minerals.