

COAL MINING AND SOME GEOMORPHOLOGICAL ASPECTS OF BAPUNG AREA OF JAINTIA HILLS OF MEGHALAYA, NORTH-EASTERN INDIA

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Abstract

Coal extraction in Bapung area is done by primitive mining method commonly known as 'rat-hole' mining. In this method the land is, first cleared by cutting and removing the vegetation and then pits ranging from 5 to 100 m² are dug vertically into the ground to reach the coal seam. Thereafter, horizontal tunnels are made into the seam for extraction of coal, which is brought into the pit by using a conical basket or a wheel barrow. The coal is taken out of the pit and dumped on nearby un-mined areas, from where it is carried to the larger dumping sites near highways for its transportation and trade. The entire process of mining is done manually employing small implements, and most of the mining activities are small scale ventures controlled by individuals who own the land. The impact of indiscriminate, haphazard and unscientific mining landscape and environment is evident from the data analysed. The coal contains high amounts of sulphur (3.582 – 5.03wt%) while the water is acidic (pH about 3) in the area.

Keywords: Bapung area, Rat hole mining, Coal mine, Primitive mining, Pit, mining activities, Sulphur.