Currently in Pennsylvania, more than 285,000 acres of abandoned coal mining land faces the need for an environmental clean up that will cost $16 billion. The number one water pollution problem in this state is related to acid mine drainage (AMD) that resulted from open-pit coal mining. More than 3,000 miles of rivers are void of aquatic life in Pennsylvania due to AMD. Can Bangladesh afford to have fish-less rivers because of AMD?

The most relevant question that the people of Bangladesh should ask before granting permission for open-pit coal mining is, what guarantee can a country like Bangladesh provide to her citizens about the unavoidable damage to the environment, when a country like the US, which has a set of mining laws in place, could not escape severe long-lasting water and soil quality damage? Bangladesh should formulate legal and organisational frameworks similar to those in the US and India before considering active coal mining, and being one of the most densely populated countries in the world it cannot afford to make the same mistakes that other countries made with regard to open-pit coal mining.

Currently, there is a proposed coal policy under review by the government. This policy was drafted by a private organisation, to promote export of coal and mining by foreign companies. The proposed policy advocates the export of two-thirds of the mined coal for the first 10 years, and one-third afterwards. As per the policy, the government will receive a royalty in the range of 6 to 16% (varies across different versions submitted to the government) for export of coal by foreign companies.

However, the fact is that Bangladesh cannot afford to export her coal, given the projected future need for energy in the country, let alone giving away the ownership rights to foreign companies for an insignificant amount of royalty. Coal export in the face of severe shortage of commercial energy resources and increasing demand will go directly against the interests of the people and national energy security. Furthermore, what Bangladesh does not need is a coal policy that contradicts the existing national energy policy of 2004. Instead, the national energy policy needs to be revised to incorporate a coal policy that will help achieve national energy security.

The most pressing issue is the method to be used for coal mining in Bangladesh. Based on publicly available information on socio-economic and environmental feasibility studies done on the possibility of open-pit coal mining in Phulbari and other coal fields in Bangladesh, it is safe to conclude that open-pit coal mining will cause huge economic loss, social unrest, and environmental degradation of unprecedented nature. There are several other viable alternatives to open-pit coal mining that are being practiced in various countries in the world. Given the socio-economic, cultural, and environmental settings, Bangladesh should consider a combination of underground coal mining, extraction of coal bed methane, and underground coal gasification (UCG) projects.

The UCG should be of particular interest for coal fields where coal seams are located at considerable depths, as in Phulbari and Jamalganj. The UCG has been used in the former USSR since the 1950s, and currently this process of mining is being applied in Australia, US, Europe, and Africa. Since UCG does not involve coal removal from underground, there is no need for relocating a huge number of people living in the coalfields. In addition, no damage is done to the environment. Although the amount of recovered coal may not be as high as it is for open-pit coal mining, considering the economic, social, and environmental losses, Bangladesh should seriously consider UCG for the deep coalfields. As per information provided by a leading organisation involved in UCG, this method is clean and cost effective.

Bangladesh is facing a serious challenge in terms of meeting the demands in the energy sector. To meet the national energy security needs, Bangladesh needs to build national capability, formulate legal and organisational frameworks, and mine coal so that she can retain and use the entire quantity to meet domestic energy needs. Finally, in such a national capability-based coal mining, Bangladesh needs to use coal mining methods that best suits the socio-economic, cultural, geologic, and environmental settings.



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