

Impending Closure of the Kudremukh Iron Ore Mines - Wise or Otherwise ?

In a recent editorial of the Journal, attention of the readers was drawn to the fate of Kudremukh iron ore project, a prestigious mining and processing industry operating in the Western Ghat region (*Sahyadri*) of Karnataka. This industry was planned to exploit the huge magnetite iron ore resources, estimated at a billion tonnes, forming a part of the Kudremukh range at an average elevation of 2000 m, overlooking the west coast of India some 50 km away. After considerable delay this industry started operations in 1980 and has been successfully producing 5 million tonnes of concentrate analyzing over 67% Fe per year. The importance of this project lay in the novel way of transport of the concentrate in slurry form down the ghats to Mangalore port by pipeline.

Since the grant of the mining lease to the Company, Kudremukh has been declared a National Park and a decision also taken by the Central and State governments not to renew the mining lease.

In the editorial referred to above we had pleaded for a reconsideration of what, in our opinion, was a decision taken in a most casual way to close down the project, the only one of its kind in the whole of Asia and with potential for establishing a flourishing iron and steel industry along the west coast of Karnataka. Our efforts obviously have fallen on deaf ears and there does not appear to be any hope of reconsideration of the decision already taken. The Kudremukh iron ore company too seems to be reconciled to its fate and is reported to be on the look out for an alternative mining site in Karnataka in the Bellary region. What will happen to the Kudremukh concentrator plant and the pipeline, erected at great cost, is not known. The object of the present note is to forewarn the authorities concerned, especially the State Government, of the great environmental disaster that may overtake the region if immediate steps are not taken to set right the problem.

Option of Renewal of Lease

A mining lease granted by Government to a mining company guarantees certain rights and privileges to conduct mining operations in accordance with the existing rules and regulations. In order to enable the company to bring in more capital for investment, and to provide a fair return on the capital invested, one of the clauses in the mining lease provides an assurance of renewal for a further period. In view of this legal position it seems unclear as to why an organisation like the Indian Bureau of Mines has failed to come forward to the aid of the industry in obtaining a renewal of the lease period.

The earlier editorial had made a special plea for the continuation of the project, the

only one of its kind to treat low grade ore and transport concentrates in slurry form, a technology quite new to the country.

In view of the decision to close down the mine it is still not clear as to what is going to happen to the concentrator plant and the 67 km long pipeline. The adoption of a scorched earth policy is going to be disastrous and will create greater environmental damage than the continuation of the project.

Are We Really Conserving our Mineral Resources?

The Indian Bureau of Mines is an organization set up after independence by the Government of India with the object of promoting mineral development and the conservation of mineral resources. We are astonished to find that in their latest Mineral Year Book, no mention is made of the fate awaiting Kudremukh iron ore mine.

Obviously the closing down of the project has the blessing of the Bureau, despite the fact that one of its primary functions is to see that mineral resources are conserved. The Bureau, in our opinion ought to have given prime attention to the utilization of the hard ore as well as the weathered ore. As far as we are aware, no beneficiation studies have been carried out despite the fact that technical committees have recommended initiation of such studies. The refusal to renew the lease for another twenty years and treating the hard ore was an unwise decision, against the principles of mineral conservation. With the decision to close down the mine the substantial reserve of nearly 500 million tonnes of ore close to the coast will probably be lost forever.

Fate of the Lakhya Earthen Dam

The spectre of the fate of the earthen dam 100 m high, at Lakhya, behind which are stacked millions of tonnes of discarded tailings in the form of fine slime presents a picture too ghastly even to contemplate. To have allowed such storage of easily erodable material in an area receiving 6000 mm of rainfall in a short span of just sixty days was itself a great folly. A small breach in this earthen dam is sure to create an avalanche, the entire mass of tailings behind the dam being washed down into the Bhadra river. The future of the Bhadra reservoir itself is at stake as this large volume of silt will fill the reservoir and put it out of commission. If such a thing were to happen, it would be the greatest environmental disaster ever witnessed in the country. Immediate attention has to be given for the safe disposal of the tailings by taking it, like the concentrate, down the ghats and to the coast, either for land reclamation or disposal at sea.

Question of Recovery of Iron in Discarded Tailings

These tailings too are not just waste products to be simply thrown away. The shortsighted

policy adopted by the company in exploiting only the safe weathered ore for export has resulted in a considerable part of the iron amounting to over 20% Fe remaining in the tailings. As a result of premature closure this iron will also be lost.

Obligation of the Government

It is possible that some of these aspects discussed above have been considered by the Company but the public has not been kept informed of the results of the studies or of any action taken. These aspects now gain added importance when a decision has been taken to close down operations. The local area has benefitted least from the company. Now after twenty and odd years of operation should the operations of the company leave behind a legacy of environmental destruction with the added threat of the bursting of the earthen dam at Lakhya and the letting down of millions and millions of tonnes of silt to the Bhadra river and the reservoir at Lakkavalli.

Preservation of the environment of *Sahyadri* and economic progress of the region are not as incompatible as made out to be. Environmental protection and human degradation are also equally incompatible. The best way out is to balance judiciously both the requirements and to recycle part of the wealth generated in such projects into more rigorous environmental protection measures in the immediate neighbourhood as in improving the quality of life of the human population inhabiting the area, which is equally important.

A very great responsibility rests with the State Government as well as the Indian Bureau of Mines to safeguard the interests of the people of Chikmagalur district.

It is very easy to direct closure of operations but not so easy to prevent the pernicious consequences which may follow. Let us not forget that we are not only 'the inheritors of the past but also trustees of the future'.

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