# Diversion of Land for Mining Activities Nirmal Sengupta<sup>1</sup>

# Abstract

Minerals are archetypical non-renewable resource. Common property studies have not made much foray into these resources. However, there is a need to shift from this paradigm. One of the important commons problem created by mining activities is that of diversion of land. Using India as a case study this paper lists the varieties of problems created by mining activities in the areas of land use and environment degradation. Thereafter it shows how common property approach can be used or is being used to overcome some of these problems. The paper concludes that in the emerging global order the analytical paradigm of commons would be of substantive use for management of non-renewable resources.

**keywords:** *non-renewable resource, mining, multiple-use commons, commercialization, legal framework* 

# INTRODUCTION

Minerals are archetypical non-renewable resource and were generally out of purview of studies of commons. Exceptions are a couple of studies of oil field extraction (e.g. Libecap and Wiggins, 1984) and deep-sea mining (Bräuninger and König, 2000). They looked at the mining interests of large miners and nations who could not agree on division of the surplus and established that the private owners as a group would benefit from consolidating exploration under a common pool agreement. Local communities and the problems they faced did not even appear in discussions of surplus sharing by interested parties. Local people are displaced by mining activities. Their agricultural land is either lost or degrades. Other avenues of livelihood are lost. Most mining activities

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cause serious health problems, pollution of land and water, deforestation, and loss of biodiversity that often support the local people. These are well documented (e.g. Centre for Science and Environment, 2008). Following McMahon and Remy (2001) problems that mining activities create for local people are (a) economic, (b) environmental, (c) social and cultural, (d) health related, and (e) legal and consultative. But the issue of commons does not arise in any of these studies. Indeed, these studies did not deal much with the property rights in general. Libecap (2007) may be the only scholar to address the evolution of property rights in mining areas. From a premise that mining areas were treated in the past as de facto open access he explains, "Even though formal property rights are the theoretical response to open access involving natural and environmental resources, they typically are adopted late after considerable waste has been endured." As external costs and resource values rise, there finally is a resort to property rights of some type. He did not relate it to common property or any specific form. In this paper I will go into some details of the kind of change and identify the areas where common property issues are arising. The case I have chosen is India and the context is the same as that of Libecap. After making considerable waste and facing increase in value of resources India is now considering property rights regulations in several areas. I will introduce the major ones and analyze to find whether some of these are veering towards common property relations.

# **INDIA – MINING SITUATION**

At the time of independence (1947) India mined only a few minerals. Production was limited to coal, iron, and some minor quantities of oil and gold. At present India produces 10 metallic minerals, 46 non-metallic minerals, 4 fuels including coal, and 3 atomic minerals. In addition there are 23 minor minerals like road metals, building stones, brick-earth, ordinary sand etc. The country is now self-sufficient in most and is a leading exporter of quite a few minerals. In 1947 the value of mineral production was just about Rs. 58 crores. In 2009-10 it stood at Rs. 1,27,900 crores. Steps to boost mineral production were taken up immediately after independence. New deposits were found. New mines were opened. Public sector now accounts for above 70 per cent of mineral production.

It may not be far from the truth that local communities nowhere were happy about the mines (viz. Das, 2009). The levels of discontent varied depending on the extents of adverse and beneficial impacts. In some cases, like that of Uranium mining in Meghalaya, local opposition was faced from the very beginning (Karlsson, 2009). In some other places like the coal mines in Eastern region the opposition started at later date. Initially, the deprived locals were partly compensated by being employed as cheap labor. Following nationalization (1973) and consequent betterment of labor conditions in coal mining activities as they lost their employment opportunities the positive attitude withered away. This and the displacement by upcoming industries developed into intense opposition in the 1970's (Sengupta, 1979; 1982). In coal mines belt (Jharkhand region) it coalesced into regional autonomy movement. They won, but the formation of new State made no significant difference in the conditions in mining areas. The discontent thereafter adopted more radical form. This is the background of the ongoing Naxalite movement in the mining belt. Mining however, was not the sole cause but one of several contributing factors. In case of minor minerals sustained extractions have developed into serious problems. For example, indiscriminate sand mining from the small catchment rivers of south India have reached an alarming situation (Padmalai et. al., 2008). In 2009 Mumbai High Court banned sand mining in the State.

Global commodity boom from around 2003 greatly increased the values of mineral resources. It led to a mad rush for quick profit multiplying the problems of unregulated use. Popular discontent increased sharply. The government initiated several legislative reforms to take charge of the situation. In this article I will focus on three specific issues that are of foremost important at present. These important issues of present also raise a common property question and hence are relevant for this conference.

# THREE CURRENT ISSUES

# Benefit sharing

Subsequent to economic liberalization India began to encourage private participation and foreign direct investment. National Mineral Policy (1993) laid down the guidelines on the hope that this will facilitate high end technology for exploration and mining. But it did not attract much of private capital or FDI in the mining sector even after the commodity boom began. In 2006, 100% FDI was allowed in mining. But this made no difference. It was clear that the archaic Mines and Minerals Development and Regulation Act (1957), in spite of several amendments, were not conducive to encourage private investors or FDI. In 2006 a High Level Committee (Hoda Committee) was formed to review the existing laws and suggest ways to capitalize on the country's mineral resources. Subsequently, a revised National Mineral Policy was promulgated in 2008. The revised policy endorsed suggestions of the Hoda committee on promoting investments but also developed the social and environmental safeguard clauses included in the 1993 Policy. The original version of NMP was formulated in the background of increasing discontent of the local and tribal population and rising awareness about sustainable development. The 2008 revision suggested frameworks for action in the areas of sustainable development and protection of the interest of displaced locals and indigenous (tribal) population. For effective implementation of this policy India government has prepared a new draft Mines and Minerals (Development and Regulation) Act, 2010 which may be introduced any day now.

Inter alia the draft Bill proposes to make it mandatory for all mining lease holders including Public Sector Undertakings to share 26 per cent of their profits after tax with local persons and families affected by mining projects. Such a provision does not exist in the 1957 Act or any later amendments. Nor is there any parallel in mining industry in any other country. The benefit sharing principle however, is the guiding principle of Convention of Biodiversity. As CBD experience shows, the distribution of the benefit shares may be a complex task. Some of the State governments have proposed creation of a District Mineral Foundation for disbursement of the benefits to locals. As can be expected, there are some oppositions, citing in particular that this will make investment in mining sector unattractive. Whether the clause would be retained in this form when the Bill is passed is to be seen. But if it gets through this probably will be a landmark in the global history of mining policies.

#### Illegal mining

The Constitution of India confers the ownership rights over mines to State governments. The Union government retains the regulatory authority over major minerals. Formally, mining rights are granted to agencies against payments of royalty. However, unauthorized or illegal mines are quite common. In her empirical study of eastern Indian collieries some ten years back Lahiri-Dutt (2003) found these illegal mines. She observed that these were by the poor local people and officials tolerated these as merely law and order problems including safety issues. In her opinion these so-called peoples' mines were re-assertion of their traditional rights to by local population.

Global commodity boom brought qualitative changes in the situation. Prices of metals and metallic ores increased rapidly drawing attention of big players. Seeking formal permission was a time consuming process. More than that there was no guarantee that a particular aspirant will obtain the right to extract. Instead, illegal mining if possible, offers extra advantage. There is no need to observe environmental and other regulations and no need to pay royalty. But illegal activity is possible only if the law enforcing authority turns a blind eye. Thus came about the nexus of political leaders and illegal mining companies. Although the prices of many other commodities increased in India the problem was rampant in its most abundant mineral resource, in iron ore mining. Price of iron ore soared from around Rs 1,200 per tonne in 2002 to around Rs 6,000 per tonne in 2006-2007 (Guha Thakurta and Das, 2010). Iron ore export from India increased rapidly. Extraction, transportation, and shipping of iron ore need a lot of heavy equipments. Neither could it be done by small players nor could it remain undetected unless the law enforcing authorities opt to remain ignorant.

The matter could not remain out of public eye for a long time. Investigations were made, culprits identified, operations of mines were suspended. By the time of writing this article Karnataka State government was in a deep soup. In its press release on November 15, 2010 the Union government informed that 16 State governments have reported that they have detected 41,578 cases of illegal mining in the year 2009. These mines

displaced communities, undermined rights of local people, and bypassed every environmental regulation.

#### The sacred mountain

Dongria Kondh tribe in the eastern Indian State of Orissa is one of the many indigenous communities of India. In general, the so-called Indian tribes (scheduled tribes) are not really as backward as the term 'tribe' implies (Sengupta, 1982; 1988). However, Dongria Kondhs are relatively backward. Numbering just about 8,000 they live in the Niyamgiri hills depending for their livelihood on the hill ecology. They consider the mountain as their god Niyam Rajah. Dongria Kondhs worship the sacred mountain. The hill was found to have rich bauxite deposits. Vedanta Resources, a London-based mining conglomerate signed a Memorandum of Understanding with the Orissa government in June 2003 to set up a 1-million-tonne alumina refinery at the foothills. Almost immediately the Dongria Kondhs came out to defend the hill. Their protests drew wide attention. Besides, environmental concerns were raised about the ecological destruction to be caused.

Following the sustained agitation reputed global agencies like Norwegian government's pension fund and Church of England exited on ethical grounds, from Vedanta's shareholding. Ministry of environment and forests appointed a Committee (Saxena Committee) which submitted its report showing "Vedanta has consistently violated the Forest Conservation Act, Forest Rights Act, the Environment Protection Act, and the Orissa Forest Act in active collusion with the State government officials." In August 2010 the Environmental Ministry of India blocked Vedanta Resources from exploiting the mountain on the grounds that it violated the Forest Rights Act. Future course of events would decide whether it is just a temporary relief. This case is significant for many different reasons. In particular, it has raised complex questions about development and land use pattern. Until now Indian policy makers behaved as if extraction of valuable minerals is of paramount interest for development. It must override any other interest in land use. For the first time mining interests were subsumed to interests in eco-system preservation. It has also brought out squarely the issue of indigenous peoples rights

over land as against compensations and employment guarantee. It is also the first case in India to uphold religious significance of places over mining interests in it.

# THE CONTEXT AS COMMONS

The sacred mountain case fits readily into commons framework. Niyamgiri hill is rich not only in bauxites but also in biodiversity and medicinal plants. It has livelihood resources for Dongria Kondhs and is of religious significance for them. The hill has a position of importance in the local eco-system. The Dongria Kondhs could have destroyed its biodiversity and medicinal plants by pursuing their livelihood interests to the extreme. That this was done shows that they had developed institutional structure and operational rules towards this end. In other words they treated the hill as common pool resource even though they might not have formal right over it. Following the discovery of bauxite ore possible other uses of the land came to fore. This sacred hill case clearly brings out that the conflict between multiple uses of the commons, a topic that is being studied by scholars of commons (Edwards and Steins, 1996).

The opposition to the mining company was because it was about to subvert all other uses and interests and uphold only one use. What is the solution? Without readily concluding that bauxite deposits in Niyamgiri hill must never be extracted, or that it must be mined, one may investigate other possibilities. The tribe did not only obtain their livelihood but also sustained other resources like biodiversity, medicinal plants, and ecosystem. If they could accommodate several other interests would they be able to accommodate mining interests too in their operational rules? The mining company too may work out operational rules so as to accommodate other uses of the hill resources. In a developing world the traditional commons are finding new opportunities to use their vitalities in new spheres of activities while retaining their resilience. Short (2008) for example, describes adaptation of traditional English and Welsh commons to the twenty first century realities. Murota and Glazyrina (2010) introduce a case in east Russia where local people resisted gold mining but heartily adopted a National Park with appropriate operational rules preserving their interests. Indeed, for coal mines in India Lahiri-Dutt (2007) and Das and Joe (2008) made efforts to develop such an approach

though with moderate success. For the analysts of commons it is a challenging task to develop useful frameworks for such transformation (viz. Edwards and Steins, 1996; 1998).

Inquiries of this kind are needed not just for the Niyamgiri hill area. Though they have not been able to register as much success as the Dongria Kondhs in almost all the mining regions the local population face the same set of problems and resist advances of mining industry in varying degrees. Their common interest in specific type of land use brings them into the purview of analysis of commons. Using greater imagination institutions may be devised for accommodating multiple uses and interests. Within a year after sand mining was stopped by the order of the High Court the State government developed regulatory policies for sand mining that are likely to be effective. The mining activity has resumed.

Benefit sharing as such does not imply common property regime. Unless it is combined with informed choice this is just compensation against forcible displacement. Benefit sharing in mining is not similar to sharing traditional knowledge. While knowledge is a public good in the case of minerals one's use subtracts from the others. Besides CBD benefit sharing mechanism is based on volunteerism. It admits institutions of commons by mandating discussions and mutual agreement. The proposed Mining Act does not make it clear whether land will be acquired (at least for the Public Sector mining companies) by using doctrines like Eminent Domain or in more amicable manners. I stress that the position is not yet clear. India has introduced several laws that acknowledge community rights even if nominally so. The Panchayat Acts extend some rights to village bodies (Gram Sabhas) to decide land use. Other Acts restrict alienation of landholding from indigenous communities (Scheduled tribes). A law passed in 2008 says companies can only locate on forest land after first obtaining the permission of tribal people living there. These provisions may be upheld before pursuing mining interests. If the local people willingly share their rights over land with the mining or any other non-traditional activity then it is a multiple use situation. Specification of rates for sharing benefits would be an indicative principle facilitating the transformation.

Finally we turn to the issue of illegal mining. Lahiri Dutt described these as people's mines in coal belt, as assertion of rights by locals. Even if this explanation was correct in the past there are two objections against favoring illegal mines.

- Firstly, the rights over mineral deposits, even on private land, are clearly defined in Indian Constitution. It rests with the State who grants appropriation rights. Instead of considering extractions by local people as illegal and being tolerant about it the State should legitimize this kind of extraction. By doing so the State would be able to regulate extraction activities that may damage the eco-system. It can also prevent outsiders and big players taking advantage of the tolerant attitude and operate side by side. Clearly defined property rights always facilitate better management.
- Secondly, the practice of illegal mines is not likely to remain confined to the locals for ever. As mineral prices increase the high margins lure big players. Already it is happening in the iron ore sphere. The large scale illegal operation by politician-mining agency nexus are certainly not people's mines. Illegal mining should be checked. There is no need to have a second thought on this.

Consequent upon the rapid growth of the mining sector in India the organizational set up is in turmoil. Many new changes are happening. I have shown here that some of these invite scholars of commons to intervene. There are areas where investigations based on commons framework are necessary. Innovative solutions can be found. There are literature and experimental cases from which guidance may be obtained.

# CONCLUSION

Minerals are non-renewable resources. Whatever be the institutional arrangement extraction of any mineral leads to depletion of its stock. This justifies the reluctance of scholars to study mineral resources as common pool resource. Efforts to define sustainability for non-renewable resources had to take recourse to considerations like equity, in one or the other form. These are valuable approaches but are not within the ambits of studies of commons. However, minerals are located within physical systems.

Extractions of minerals affect land resources and their surrounding environments. Sustainable management of land and environment in mineral extraction process is a common pool resource issue. Governance systems have come a long way from its single minded pursuit of mineral extraction at any cost. Today it is universally recognized that development needs not only minerals but also sustainable land and environment management. Essentially this is the recognition of multiple use of mineral rich land resources. This is very much an issue of common pool resource management.

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