

## Mining Without Consent

Chromite Mining in Manipur

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The recent identification of chromite deposits in two districts of Manipur, Ukhrlul and Chandel, has led the government to grant mining clearances disregarding constitutional provisions. While environmental degradation and tribal displacement due to chromite mining in Odisha is well documented, the administration is yet to learn from Odisha's mistakes.

Chromite is a versatile element that is used in metallurgical, refractory, chemical and non-ferrous alloy industries. Owing to its multiple uses, chromite is a valuable and strategic raw material. Most of the chromite resources in the world are located in South Africa, that contributes to more than 50% of the world-trade in chromite (Pariser: 2013), and Kazakhstan. In India, more than 93% of chromite deposits are located in Odisha, mainly in the Sukinda valley in Cuttack and Jajpur districts (IBM: 2012).

The world production of chromite increased from 23.5 million tonnes in 2009 to 30 million tonnes in 2010 (IBM: 2012). The production of chromite from Indian mines registered a 24% increase in 2010-11 compared to 2009-10 (IBM: 2012). India accounts for 17% of the world production of chromite, making it a significant exporter of the mineral (USGS: 2011).

The Indian Bureau of Mines 2013 report indicated that Manipur has 6.66 MT (3% of total chromite reserves in India) chromite resources of ophiolite belt in Ukhrlul (5.5 MT) and Chandel (1.1 MT) districts (IBM: 2013). Chromite deposits have been found in the villages of Phangrei, Shirui, Lunghar, Chingai, Kalhang Khunou, Poi, Halang, Pushing, Shingcha, Gamnom, Yantem, Hangkao, Apong, Ningthi, Pihang, Chattrick Khunou, Nambisha and Kangpat in Ukhrlul District and Kwatha, Sibong, Khulangthabi and Minou-Mangkang villages in Chandel District.

The ore found here is high grade with Cr<sub>2</sub>O<sub>3</sub> (chromium oxide) content varying from 44% to 59% (GSI: 2011). The chromite bearing areas in the two districts have flat topped low hills and rolling grasslands intersected by rivers. The forest cover of the two districts, based on satellite image, is 81.74% of geographical areas measured in square kilometres (FSI: 2011).

## Violation of Procedures

The government of India, through the Indian Bureau of Mines and the Ministry of Mines, granted mining leases and licenses to private companies during 2007-2012 in the ophiolite belt of Ukhrul and Chandel districts of Manipur (Fig:1). The provisions of the Memorandum of Understanding (MoU) signed between the government of Manipur and the lessees include transfer of huge amount of land, raw materials, water and the right to mine.

However, the agreement between the Manipur government and the lessees was reportedly signed without informing the people of the land. No proper environmental impact assessment (EIA) was conducted either. Various civil society groups and local people raised objections against the state government for not seeking prior consent from the people.

**Fig: 1. Chromite Prospecting Licences Granted in Ukhrul District**

Company	Village	Area in Hectare	Date of grant	Period in years
Anand Exports, Ltd. Orissa	Chingai, Halang	1500	14.11.2011	03
Visa Steel Ltd, Orissa	Kalhang Khunou	900	08.11.2011	03
Balasore Alloys Ltd, Orissa	Maku Chingjao-Ningthi	2000	10.11.2011	03
Visa Steel Ltd, Orissa	Shingcha	1600	09.11.2011	03
Anand Exports, Ltd. Orissa	Nambisha	900	23.02.2011	03

**Source:** Indian Bureau of Mines 2012.

In India, sanctions for chromite mining depend on both the central and state governments. A clear set of rules for obtaining environmental clearances for industrial and infrastructure related projects is prescribed by the Environmental Impact Assessment (EIA) Notification, 1994 issued by the Ministry of Environment and Forest (MoEF). The MoEF is mandated to carry out an appraisal, scoping and screening of projects, conduct public consultations with local communities affected by projects and prepare a report. This is to ensure that mining projects that are ecologically destructive are not permitted. Further these assessments are supposed to identify “no go” areas, factoring effective forest and wildlife acts for protection of biodiversity as well as laws regulating mine closure and mine restoration. The Ministry is also supposed to conduct post-project monitoring.

## Coercing the Tribals

The Indian Constitution recognises that tribal lands and forests must be given special protection. The Forest Rights Act, 2006, empowers tribal and forest dwelling communities to play a decisive role in the management of natural resources. In addition to this, the Constitution also appends that land under the fifth and sixth schedules of the constitution cannot be alienated to non-tribals or industries. Despite these enabling provisions in the constitution and the Forest Rights Act, 2006, the rights of the tribals are being undermined

by the Manipur state government in order to pave way for the mining industry.

The Manipur (Hill Areas) District Council (Third Amendment) Act, 2008 enacted by the Manipur legislative assembly is partially responsible for this as it discourages the idea of collective land ownership practised by tribals. It takes away land ownership rights from the village chiefs and empowers the members of the Autonomous District Councils to “allot, occupy, use and alienate land” without consulting the local tribal community. Through the provisions of this Act the state government seeks to take control over the tribal land and forests in clear infringement of tribal rights.

Moreover, it appears that the government of India assumes that all minerals found underground are state property. Ownership of the land is irrelevant, and the owner of the land earmarked for mining is not even granted preference in the grant of mining leases. The Mines and Minerals (Development and Regulation) Act, 1957, provides detailed procedures for a company or individual to obtain permission to search for minerals and to mine them. All power to grant permission rests with the state government, though central government approval is required as well. With such authority vested in it, the government of Manipur has acquired the lands and resources of the tribals without their consent.

However there are several judgments by the Supreme Court which have ruled against such indiscretion of the state. In the recent case of *State of Kerala vs Jenmis* (Land owners of Kerala) 2013, the Supreme Court ruled that the ownership of minerals should be vested with the owner of the land and not with the government. The three-judge bench headed by Justice R M Lodha noted that “there is no law in the country which declares that state is the owner of sub-soil or mineral wealth”. Referring to various acts regulating extraction of underground natural resources, the bench said that nowhere do the laws declare the proprietary right of the state. It ruled that the assertion of government to collect duty or tax is in the realm of its sovereign authority, but that does not extend it a proprietary right. The court rejected the argument that individual owners cannot claim any proprietary right on the sub-soil resources as section 425 of the Mines and Minerals (Development and Regulation) Act, 1957 prohibits carrying out of any mining activity in this country except in accordance with a permit, license or mining lease.

## **False Promises**

In areas where industries or mining operations are to be set up, the government often acquires land from the local community by promising them social and economic development of the area along with employment opportunities. But employment trends (in terms of employment) in India show a declining rate of employment despite an increase in industrial and mining activities in the country. This can be somewhat attributed to the use of modern technology which has rapidly reduced the labour requirement per unit of output. In case of mining, the beneficiaries are largely non-local mining experts. Skilled workers such as engineers, technicians, explorer, managers, etc. are usually outsiders. Other than

providing manual labour, there is very little opportunity for the local population to find work in mining companies. The extracted ore is usually processed outside the mining belt, further reducing job opportunities for the locals. Transportation of raw materials etc. is usually undertaken by outsiders as the locals do not possess the infrastructure to cater to the transport requirements of the mining industry

## **Health Hazards**

Many studies have shown the environmental degradation and health hazards caused by chromite mining. The heavy metal contamination of agricultural soil, plants and water around chromite mining areas in Vietnam (Kien et al., 2010), Zimbabwe (Maponga and Ruzive: 2002), China (Ma and Garbers: 2006) and Pakistan (Kfayatullah et al.: 2001) is well documented. Hexavalent chromium or Chromium-IV, one of the most toxic forms of chromium, is produced during smelting of chromite ore. The adverse effects of Hexavalent chromium contaminated water became known in the 1960s in Hinkley, a town in California. It caused an array of health problems such as skin rashes, ulcers, respiratory problems, lung cancer, weakened immune system, alteration of genetic material, kidney, liver damage and more (Fryzek et al.: 2001).

In India, different studies have shown the environmental havoc and sickness caused by chromite mining in Odisha (Dubey, et al.: 2001; Das and Singh: 2011), Karnataka (Krishna, et al.: 2012) Tamil Nadu and Maharashtra, (Rao, et al.: 2011). The case of Sukinda valley in Odisha may be of interest here. The ore deposits are exploited in this belt using open cast mining methods, and majority of these mines are located upstream of the Damasala Nala catchment areas. Seepage takes place from the mines situated on the bank of Damasala Nala, contaminating the water with heavy metals such as Hexavalent chromium. (IBM: 2013; Dubey et al.: 2001).

The 1995 survey data report from the Odisha Voluntary Health Association (OVHA) showed that more than 85% of deaths in the mining areas, and 86% of deaths in the nearby industrial villages occurred due to diseases caused by polluting activities of the mines in the region. The survey report also revealed that villages within 1 km of the sites were the worst affected, with more than 25% of the inhabitants suffering from pollution-induced diseases (Pal: 2010). However, there has been virtually no attempt to clean up this contamination in spite of the local organisations protesting against the mining activities. The Sukinda valley in Odisha is among the top ten of the world's 30 most polluted places (Rao, et al.: 2001; Dhal, et al.: 2013).

A similar tale of environmental destruction and degradation looms large over the mines in Manipur. The chromites are located in the densely forested regions inhabited by the tribal people. Mining will not only result in deforestation and destruction of biodiversity but most importantly, the exhaustion of such non-renewable resources. The extraction and dumping of rock on the surface in the mining process will adversely affect livelihood of tribal

communities. This will also alter the stability of the rock components thereby affecting the quality of water, soil and air in the area. Since chromite mining will employ the open cast method, it will eliminate existing vegetation, destroy the genetic soil profile, displace or destroy wildlife habitats, alter current land uses, and to some extent permanently change the general topography of the area. Mining will disrupt resources upon which people depend on for their subsistence and also generate discontent among people that shall act as an agent for further conflict.

The districts are also a part of a region known for receiving heavy rainfall throughout the year, making the land more vulnerable to contamination by chromite mine run-offs. In these districts, chromite deposits are largely found below the slanting ridges of the unending hills where hundreds of rivulets flow, providing drinking water to the people. For instance, streams emanating from Shirui Kashong that serves as the main source of water for the neighbouring villages will get highly polluted if chromite is mined in Phangrei. Further this will affect rivers such as Rangazak and Challou, the lifeline of the neighbouring villages cultivating rice. Mining of chromite at Shingcha, Maku, Ningthi, Chingai, Halang and Kalhang Khunou will inevitably affect the pristine rivulets flowing through the region and joining rivers such as Maklang, Tuyung, and Chammu in Ukhrul district affecting the soil in downstream villages.

## **Conclusions**

Development through chromite mining in Manipur is not an answer to its economic woes. Exploiting its mineral resources does not necessarily provide solutions to the economic problems and other social issues. Mineral rich states like, Odisha, Chhattisgarh and Jharkhand are afflicted by poverty, as the revenue generated from mining is not utilised for the welfare of the local people. Large-scale exploitation and economic deprivation is one of the causes which has given rise to Maoist insurgency, involving mostly tribal youths, in these regions. Inadequate access to legal means and lack of grievance redressal mechanisms hamper the efforts of the poor tribals to protect themselves from exploitative policies of the state and the corporates. The statutory rights and the constitutional protection given to the tribals are often lost in the pursuit of development. The case of chromite mining in Manipur not only brings to the fore the rights of tribals over their land but also the need for sustainable development.

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