

Case Study No. 5, written by Ajoy Konar, 2007

ICML's Sarishatali Coal Mine, West Bengal, India: Solving Environmental Problems through BPD

Overview

This case study investigates the success of ICML led mining initiatives near the Jharkhand-West Bengal border of eastern India. ICML, which was set-up by a large Calcutta power utility as India's first privately owned and operated mining initiative, is part of a World Bank program called the BPD that encourages partnerships between private companies, government bodies and civil society with the goal of inspiring a more socially and environmentally aware approach to coal mining (ODI, 2008).

Background

The Sarishatali coal mine of Integrated Coal Mining Limited (ICML) runs its activity in Barabani, which is located in the Burdwan District (Bardhaman), near the West Bengal - Jharkhand border of the Ranigunj coal belt, in eastern India. It has been producing coal since May, 2002, and produces about 2,500,000 metric tonnes per annum. The colliery has an operational area of 6.5 sq. km. The coal produced by ICML helps fuel the thermal power plants of Calcutta Electric Supply Corporation (CESC), ICML's parent company.

Although the area around the West Bengal - Jharkhand border is arid and receives patchy rainfall, the local community are dependent on agriculture. Only one crop (rice paddy) is grown here as water is a constant problem in this part of the district. River Ajay is to the north, marking the natural boundary between West Bengal and Jharkhand, but despite this limited water resource and the short rainy season, the district remains almost dry and it's extremely hard for local farmers to make a living.

It's not only the people of the Burdwan (Bardhaman) district, but also the adjacent blocks of West Bengal and Jharkhand who share the same fate. Apart from local agricultural work, which is limited, people of this region are mainly employed as agricultural labourers in the green belts of the Bardhaman, Hoogly and Nadia districts of West Bengal, or as labourers in the surrounding brick fields.

Summary of Issues

- To date, nationalised Indian coal companies such as ECL, BCCL and CCL have a poor record on initiating programs that mitigate the adverse social and environmental impacts related to coal mining.
- The inhabitants of the West Bengal-Jharkhand border region can benefit from the new work opportunities generated by the ICML mining project, as their traditional agriculture-dependent livelihoods are often very precarious.

What is the BPD?

The Natural Resources Cluster (oil, gas and mining sector) of the World Bank's Business Partners for Development Program operated from 1998 to 2002. The \$3 million action research programme produced practical examples, based on 'focus projects' around the world, of how three-way partnerships involving companies, government authorities and civil society organisations can be a more effective means of mitigating social risks and promoting community development. Working in different countries and at different stages of project development, the performance of these 'tri-sector partnerships' was systematically tested in relation to both business benefit and development impact.

Continued from page 1 - Background

In the off-season they usually work under the local coal mafias mining coal in the several illegal mines that pepper the area. Along with the people of Barabani, at least 2,000 people from Jharkhand cross the river everyday to also work in these collieries. A whole days work, which varies from 10 to 12 hours, earns them between 40 to 50 rupees, which is far less than the daily wages from agricultural labouring.

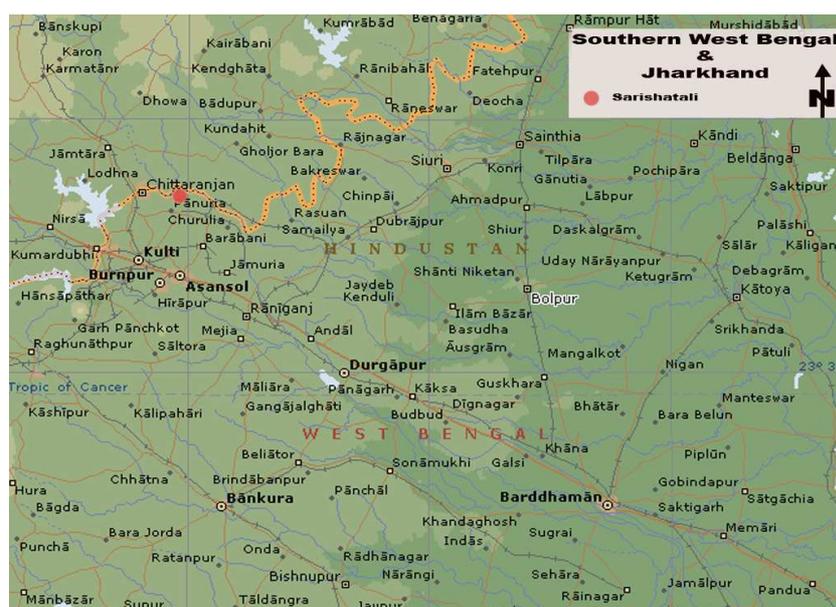
The Ranigunj coal belt of eastern India stretches for 1500 sq. km. It was the first coal belt to be discovered in India, and is the richest. With the exception of a few privately owned collieries, like Bengal Emta and ICML, the government owned Coal India Limited controls most of the mines along the belt under its subsidiary, Eastern Coal Fields Limited (ECL), etc. Due to perennial losses suffered by Coal India Limited over the past six years caused by mismanagement of their vast holdings and oversized workforce, many mines have been shut down, particularly in the area controlled by the ECL along the Ranigunj coal belt.



Environmentally polluting cooking coal processing plants, Jharkhand, India

Consequently, several thousand workers in the area, formerly employed by ECL, had to find alternative work, turning to the illegal mines run by coal mafias. Most of the coal produced in the illegal collieries is used for brick production in the brick fields of Bardhaman and neighbouring districts.

To date, seven local villages, namely, Madanpur, Sarishatali, Rakhakura, Diguli, Anandapur, Rasulpur and Nutandihi have so far participated in ICML-related activities. Prior to starting its mining activities, ICML undertook developmental projects through tri-sector partnerships to solve the problems of the local inhabitants which may originate for its activities.



Map of Burdwan District (Bardhaman), near the West Bengal - Jharkhand border

Why is Integrated Coal Mining Limited (ICML) Different?

Established by CESC, one of Calcutta's main power utilities, ICML was formed to set up and operate a planned coal mine located near the village of Sarshatali in West Bengal. The Sarshatali Coal Mining project was the first privately owned and operated mining initiative in India, providing the unique opportunity for the private sector to take the lead to ensure that the local community and the environment are protected against the adverse effects of mining.

The International Finance Corporation (IFC) of the World Bank agreed in principle to part-finance this project, but would only provide equity and loans if certain conditions were met, including an effectively managed resettlement of the approximately 215 households affected by the mine development, the mitigation of any social and environmental impacts, and the distribution of benefits to local communities associated with the mine.

In an effort to identify and prioritise social development needs in the mine impact area, and to determine the best strategy to develop trust among the local community, the ICML and its partner organisations designed a comprehensive survey. Over a four-month period in 1999, ICML worked alongside ASHA (the Association for Social and Health Advancement), a community development non-governmental organisation (NGO) based in Calcutta, Suchetana (a local NGO), the Office of the District Administrator, and community leaders (village- and 'block'-level Panchayat), to undertake a survey for the local community that incorporated a livelihoods assessment and trust-building measures (LATM).



Location of two mine sites in District Burdwan

Some ICML Initiate Community Development Programs

Income Generation Program

For use in a power plant, coal with a Volatile Matter (VM) 20 or higher is preferred, but typically Indian power plants use coal with a VM 12 or higher. Below this value, the coal, locally known as Jhama, is usually discarded. But if processed, this coal can be used in various ways, particularly for domestic activities such as for cooking fuel. In an effort to make dispossessed locals from the seven mine-affected villages more financially independent, ICML started distributing this processed low-grade coal among the villagers. Using a quota system, villagers were allotted a quantity of the coal for their own personal use or to be sold to earn a little extra cash.



Indigenous community processing coal to make Jhama

Now, villagers had an alternative source of income if they were faced with drought or lost their land, as a single truck-load of Jhama can earn between 6,000 and 8,000 rupees (AUD 174-230)¹. Both men and women can earn from 80 to 250 rupees a day by processing and selling this coal, which is not only used for domestic activities but also in the brick fields. Before this ICML initiative, the local coal mafia controlled the entire Jhama industry. But now, under the ICML, locals can earn much higher wages than they were paid in the past, and the most vulnerable groups like women and members of the Santal tribe can join the labour market. In this way,

these groups have a better chance of climbing out of the poverty trap, gaining access to healthcare, education and shelter. Distributing the Jhama among local villagers has, however, presented problems for the ICML, as they can only sell the Jhama. Moreover, no contract can be signed between local affected people, local NGOs and the company regarding distribution of Jhama as it is forbidden by the central government rule.

¹ Based on conversion rates as of 28 January 2008.

Beginning of the Story

In May 2001, ICML formed a partnership with the district authority of district level government, known as Burdwan Zilla Parishad (BZP), and the local community to construct a link-road of 10.5 km to transport coal from the mine site to the nearest railway station at Barabani.

The process culminated in the signing of a Memorandum of Understanding (MOU) by:

- ICML/CESC;
- BZP; and
- Barabani Panchayat, Samity (local government at the 'block' level, representing the three local Gram Panchayats of Jamgram, Panchra and Barabani, which covered the area affected by the road).

An integral part of the BZP's development plan, the road has given the local community better access to the nearest market, school and hospital, not to mention ICML facilities and mine sites.

The success of the link-road project has inspired a series of other partnership initiatives, focusing on community healthcare (with the local NGO ASHA), afforestation programs at the mine site and, projects relating to income generation for local villagers.

Continued from page 3 - Some ICML Initiate Community Development Programs

But ICML is practicing this distribution in consultation with local community leaders and Gram Panchayet (Local self government) to maintain its program and to prevent fighting between the inhabitants of different villages for Jhama. Of course completely unofficially!

Health Care

In December 2000, ICML started a partnership with a local NGO, ASHA, which specialises in health sector, and local panchayet (local self government in village and block level), with the goal of identifying the most significant health issues facing the local community. Support was given by an advisory committee which included the Asansol Mines Board, the District Health Office and Barabani Panchayet Samiti.

The agreed vision of this health partnership initiative was to promote healthy communities, free from infectious diseases, malnutrition and addiction, and to provide the local community with basic health care services through the pooling of resources from all the partners.

The scope of the program included activities such as increasing the availability of safe drinking water for communities around the mine site, improving sanitation conditions in the operational area, improving primary immunisation coverage for children (in particular for polio and measles), controlling communicable diseases (particularly TB, leprosy and malaria), promoting family planning measures, promoting mother and child health care, and improving nutritional status among women and children.

As well as organising health camps, between 2004-2005, ICML helped to distribute safe drinking water in the



Eastern states of India including Jharkhand and West Bengal

Jamuria block with the assistance of the Government of West Bengal's Department of Public Health. Another ICML led initiative was the construction of the boundary wall and a block at the local block hospital.

In an effort to encourage good sanitation practices among children and to ensure a clean school environment, ICML constructed a modern outdoor toilet block and supplied clean drinking water to the local Nutandihi primary school (See image below). ICML has also introduced a public health awareness education program to ensure that the school kids actually use these facilities.



Labour slums for workers from ECL mines, Jharkhand India

Construction of Link Roads in the Villages

As well as construction of the 10.5 km link road from Sarishatali coal mine to Barabani Railway station, several other link roads have been constructed since 2002 as part of the BPD "focus-group" Tri-Sector Partnership Initiative. The concrete road at the nearby Madanpur village is one example.

At the nearby village of Hosainpur, however, ICML faced a unique problem. From the outset of the ICML Tri-Sector Initiative, it was agreed that ICML would coordinate all its projects in consultation with community leaders, the local self government, and local NGOs, and that any construction would be outsourced to external contractors appointed by the local district government, or Burdwan Zilla Parishad.

But Hosainpur's villagers rejected outright any possibility of outsourcing labour to Zilla Parishad appointed external contractors. Instead, they insisted that they should supervise and undertake the road construction themselves.

Continued from page 3 - Some ICML Initiate Community Development Programs

This was unacceptable, as the local villagers didn't have the experience or expertise to take on this kind of project without it becoming a debacle, so a compromise was made that all members of the special partnership would together decide on a suitable contractor, and the villagers would supervise every phase of the road's construction.

In the village of Nutandihi, a separate gravel road has been constructed to be used by students of the local secondary school though there is the main link road from Sarishatoli to Barabani to avoid accidents.

Construction/ Renovation of School Building

In another BPD inspired initiative, ICML rebuilt and renovated a number of primary school buildings in the villages of Sarishatoli and Nutandihi, which had been seriously damaged. Another project successfully completed in Nutandihi, is the construction of a complete block and a

compound wall at the local secondary school. This is the only secondary school in the area.



Nutandihi Primary School

Conclusion: Success or Failure?

In theory, at least 10% of the project cost for any mining project should be set aside specifically for mine site rehabilitation after mine closure². The reality, however, is very different, and very few mine operators practice any sort of mine site rehabilitation at all. A handful of examples where mine site rehabilitation programs were actually introduced include ECL's open cast coal mines in the Hazaribagh district of Jharkhand, where there was an attempt to reforest the mine site after closure. ECL's covered mines in the Ranigunj coal belt, however, were abandoned without any attempt to reclaim the mine-degraded land. Most of these covered mines have now been taken over by local coal mafias.

In addition to ensuring environmental rehabilitation after mine closure, every mining project must spend a percentage of its total annual budget on damage control, as well as ensuring the local population and economy develops in a sustainable way and isn't adversely impacted by mining-related operations. Unfortunately, the ICML is one of the only mine operators in India that incorporates comprehensive developmental initiatives into its overall management strategy.

On a brighter note, ICML can be used as an example for India's big mine operators on how to run a profitable mine, while guaranteeing that the local community and environment are protected. Clearly, the BPD 'focus project' in Jethwai has been a great success, and the ICML experience has shown that the 'tri-sector' partnerships that involve private companies, governmental bodies and civil groups can be an extremely effective way to successfully implement developmental programs. Continuing on in this direction, the ICML plans to spend 5,000,000 rupees (about AUD 140,650) in the financial year 2006 - 2007 for new development projects for seven other local villages in the vicinity of their mining operations.

² Chapter 5 of the Mineral Conservation and Development Rules, 1988, states that "Every holder of a prospecting license or mining lease shall undertake the phased restoration, reclamation and rehabilitation of lands affected by prospecting or mining operations and shall complete this work before the conclusion of such operations and the abandonment of prospect or mine". The provisions of Mineral Concession Rules and Mineral Conservation and Development Rules are, however, not applicable to coal, atomic minerals and minor minerals. In the case of coal mining, the operators have to comply with inspection and appropriate enforcement of conservation measures by the Coal Controller under the Coal Mines (Conservation and Development) Act, 1974 with a view to ensuring scientific mining (Indian Ministry of Mines Website, 2007).

Bibliography

Indian Ministry of Mines Website [Accessed 29 January 2008] <http://mines.nic.in/minleg.html>.

ODI (Overseas Development Institute) Website [Accessed 29 January 2008] <http://www.odi.org.uk/bpd-naturalresources/index.html>

Artisanal and Small-Scale Mining (ASM) in Asia-Pacific Portal – <http://www.asmasiapacific.org>

ASM Asia-Pacific Case Study Series

This series of case studies documents concrete examples of equitable, effective, and sustainable local-level partnerships including small-scale miners or their communities as a guide to develop better policy and practice in the Asia-Pacific region.

The project has been led by Kuntala Lahiri-Dutt. The case studies have been edited by Joel Katz and designed by Rachel P Lorenzen.

Artisanal and Small-Scale Mining (ASM) in Asia-Pacific Portal

The ASM Asia Pacific Portal is the public interface of a loose network of individuals and institutions working on poverty eradication, development and livelihoods in Artisanal and Small-scale Mining (ASM) in the Asia-Pacific region.

The portal's mandate is to disseminate knowledge about ASM in the Asia-Pacific, to document best practice in community development and environmental management, and to promote fellowship and cooperation among stakeholders interested in poverty eradication and sustainable development.