# SINGRAULI: THE COAL CURSE

A FACT FINDING REPORT ON THE IMPACT OF COAL MINING ON THE PEOPLE AND ENVIRONMENT OF SINGRAULI

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Cover image: A landscape view of the region

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# INTRODUCTION

India is now the second fastest growing economy in the world, and its hunger for energy to power this growth is enormous. The 12th Plan period, which runs from 2012 to 2017, sets a national target of 100,000 MW installed generating capacity. This is double the target of the 11th Plan and aims to add as much energy in five years as the country has since independence. Coal is seen as the mainstay of this energy juggernaut.

Such excessive reliance on coal is fast becoming unsustainable. Not only do serious environmental issues surround mining, pollution and climate change, but the country cannot acquire energy security from a heavy dependency on the mineral. Even the Planning Commission, in its discussion on the approach to the 12th Plan, admitted "coal availability will be a major constraint in the future." While India, under international political pressure to address climate change, has started to position itself as a country that is taking steps towards building a low-carbon economy, the reality is that India is going to have to address the shift away from coal for its national interests: to obtain energy security, to be able to preserve its last remaining forests and to protect the communities that reside in and around those forests.

One of the biggest challenges the country and the Government face today is to cater for growing energy needs without compromising social and environmental justice. It is a time when there is an articulated position by the Government and planners that what we must aspire for is "sustainable growth" and not "economic growth at all costs". 'Sustainable development' has been defined as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

In order for sustainability to be achieved, India must adopt an integrated approach to energy planning and reassess the energy targets to include ambitious energy efficiency targets that would serve to reduce demand. Further, the capacity for decentralised generation and renewable energy should also be enhanced.

The real test of whether sustainability is at all a criterion in decision-making will be reflected in decisions the Government takes and the policies they formulate – not in the public speeches government representatives make.

The proof of the pudding is in the eating.

There are alternative energy solutions to coal, which will allow India's last remaining forests and the communities and tribal populations living around them to be preserved and protected. In light of this, the debate around forests and coal mining essentially becomes one of "growth at any cost" versus "sustainable development." To bring facts from the ground to bear on the political discussions about mining in the central and eastern parts of the country, Greenpeace organised a Fact Finding Mission to Singrauli – the energy capital of the country and home to tribal communities, forest dwellers and some of the most threatened forests remaining in central India. The Singrauli region spreads across the states of Uttar Pradesh (Sonebhadra district) and Madhya Pradesh (Sidhi and Singrauli districts). The Fact Finding team visited specific villages in both UP and MP.

<sup>&</sup>lt;sup>1</sup>http://planningcommission.nic.in/plans/planrel/12appdrft/pc\_present.pdf

The role of the Fact Finding Mission was to bear witness to the impacts of rampant coal mining on communities and the environment. It was also to speak with multiple stakeholders to understand what lay ahead for this region if it were to play its part in the development strategy being drawn up in the 12th Plan, which would open up large tracts of forest land for coal mining, depriving the communities who depend upon this land for resources. It would also mean that the area, already acknowledged as one of the most polluted<sup>2</sup> regions in the country, would see an exponential increase in toxic contamination.

### METHODOLOGY

The Fact Finding team, comprising of respected figures in the fields of human rights, social justice, mining and environment and journalism visited the Singrauli region (both the areas in Uttar Pradesh and Madhya Pradesh) between 9th and 11th of July 2011. They had meetings with villagers and village councillors, in which men and women from various tribal and non-tribal communities shared their experiences and problems with the team. They were also taken to areas that had direct impacts on the villages visited such as ash ponds, mining overburdens, and discharge points from thermal power plants.

The team also spoke to government representatives, namely the office of the Collector of Singrauli district and to the senior management of Northern Coalfields Limited. The team was shown the operations of one of the largest mines in the area: the Nigahi mines. The team was unable to meet with the District Forest Officer, but members of Greenpeace later visited the region to gather information from this Officer and health workers in the Singrauli district.

The team also relied on earlier investigation reports and popular writing on this subject to clarify and substantiate its discussions and observations.

Greenpeace and the Fact Finding team thank the people and local community groups of Chilika Daad, Belwada, Dibulganj and Moher villages; the officials of the collector's office in Singrauli; the Collector of Singrauli district; the district forest officials and the members and senior management of Northern Coalfields Limited for sharing their information with the Fact Finding team.

## MEET THE FACT FINDING TEAM

#### Retired Justice Suresh Hosbet:

Justice Suresh was a Judge In the Bombay High Court. He retired in 1991; and since then, is active in the field of human rights. He has conducted a large number of public hearings / inquiries on human rights issues and violations, and has, along with others, issued several reports thereon, including reports relating to the Mumbai and Gujarat riots. He is the author of a book, 'All Human Rights are Fundamental Rights', which has been published by Universal Law Publishers. He is also a guest lecturer in the University of Mumbai.

#### Kalpana Kannabiran:

Kalpana Kannabiran, a sociologist and legal researcher, is currently Director, Council for Social Development, Hyderabad. She is part of Asmita Resource Centre for Women and has been closely involved with struggles for women's rights, disability rights and adivasi rights.

#### Paranjoy Guha Thakurta:

Paranjoy Guha Thakurta is an independent journalist and an educator. His work experience, spanning 34 years, cuts across different media: print, radio, television

<sup>&</sup>lt;sup>2</sup>http://moef.nic.in/downloads/public-information/Industrial%20Clusters\_env\_assessment.pdf



and documentary cinema. He is a writer, speaker, anchor, interviewer, teacher and commentator in three languages: English, Bengali and Hindi. His main areas of interest are the working of India's political economy and the media, on which he has authored/co-authored books and directed/produced documentary films. He lectures on these subjects to general audiences and also trains aspiring – and working -- media professionals. He participates frequently in seminars, is a regular contributor to newspapers, magazines and websites and is featured on television channels and radio programmes as an anchor as well as an analyst and commentator.

#### R Sreedhar:

R.Sreedhar is a Geologist from IIT Roorkee who has worked with mainstream exploration organisations like the Atomic Minerals Divisions, DAE and later with ONGC Ltd until 1985, when he moved out to begin working with communities on environmental and alternate technology issues. He co-founded TARU ('91), Indian Network on Ethics and Climate Change ('94), BCIL ('95), mines minerals and PEOPLE ('99), Environics Trust ('03) and the EIA Resource and Response Centre ('08).

He has been actively involved in institutional and network development, research, implementation of alternate technologies and providing techno-legal support for human rights and environmental litigations. Currently, he is the Managing Trustee of Environics Trust; Chairperson of mm&P; a mentor at BCIL and a visiting faculty at the Ambedkar University, New Delhi.

# OVERVIEW OF SINGRAULI



The Singrauli region spreads across the states of Uttar Pradesh (Sonebhadra district) and Madhya Pradesh (Sidhi and Singrauli districts) and has been for a long time promoted as India's energy capital. It continues to be considered as South Asia's biggest industrial area¹. Literature points out that ever since 1840, when coal was discovered in Singrauli, the area's development has revolved around exploiting this mineral resource². Today Singrauli's landscape hosts some of the oldest thermal power stations and operational coal mines in India, set up by the National Thermal Power Corporation (NTPC) and Northern Coalfields Ltd. There is also an aluminium smelting plant and other industrial and commercial operations.

According to the International Accountability Project, the region has seen the systematic appropriation of prime agricultural land, firstly for a reservoir and dam (the Rihand Dam was constructed in 1961), and subsequently for coal mines, coal-fired power plants, coal slurry disposal areas, railroad lines and other infrastructure, and eucalyptus "forest offset" plantations<sup>3</sup>. The landscape of the region today appears to have been overcome by an energy juggernaut, an overwhelming and advancing force that crushes any other manner in which the region can be approached or understood. Yet, just two generations ago, smallholders were tending their parcels of agricultural land and the area's original tribal inhabitants were essentially dependent

¹http://en.wikipedia.org/wiki/Singrauli

<sup>&</sup>lt;sup>2</sup>http://www.blacksmithinstitute.org/projects/display/147

<sup>3</sup>http://www.accountabilityproject.org/article.php?list=type&type=53

upon its forests. The social and demographic profile of the area has undergone a significant transformation with the massive industrial changes to the landscape.

An important change in the last decade in Singrauli has been the affirmative push of the private sector to tap the area's coal reserves for large-scale power generation. Several big energy players in the country find a place in Singrauli's future-scape: Reliance, Hindalco, Essar, Jaypee, Dainik Bhaskar (DB) Power and many other state government-led special purpose vehicles (SPV), set up as public-private



partnerships, are looking to operate mines as well as build super critical and mega thermal power plants in the area.

It is in this context that one needs to examine the push for coal-fired thermal power in Singrauli. Take, for example, Reliance Power Ltd., which is commissioning the 3960 MW Sasan Ultra Mega Power Project (six units of 660 MW) through its whollyowned subsidiary Sasan Power Ltd. in Sasan village, Singrauli district, Madhya Pradesh. Two coal blocks, both located on forest land, have been allocated to Sasan Power by the Ministry of Coal. Both the Moher and Moher-Amlohri Extension blocks are under the command area of the government-owned Northern Coalfields Ltd. The coal produced from these mines would be exclusively used for power generation by Sasan Power, as well as another power plant belonging to Reliance Power. The target capacity of the mine is twenty million tonnes per annum, with the life of the mine proposed as twenty-nine years. Big industrial players now have a stake in the region and are lobbying for fast tracking forest clearance processes.

Similarly, the 1320 MW Nigrie Super Thermal Power Project (two units of 660 MW) of the Jaypee Group in Singrauli is expected to utilise coal from two coal blocks, the Amelia (North) coal block and the Dongri Tal II coal blocks. This mining is to be carried out through a public-private joint venture, a special project vehicle formed by the Jaypee Group and Madhya Pradesh State Mining Corporation Limited. To transport this coal from the mine in Amelia to the power plant in Nigrie a railway line will have to be constructed, yet the land that such associated mining infrastructure

will require rarely features in discussions over the approval of the coal blocks<sup>4</sup>. There are many other thermal power plants and coal mines already under construction in the region and further areas demarcated for several future ones.

With these forceful players seeking to mark their place on Singrauli's map, there have been several intra- and inter-ministerial adjustments to ensure that the industrial expansion in the region continues unabated. On 13th January 2010, Singrauli was one of the areas where the Ministry of Environment and Forests (MoEF) imposed a temporary moratorium on mining, whereby no new projects would be considered for environmental clearance, a requirement prescribed by the Environment Impact Assessment Notification of 2006. The moratorium was the result of the region being one of the areas identified as critically polluted by the Central Pollution Control Board and Indian Institute of Technology (IIT) Delhi in the *Comprehensive Environmental Assessment of Industrial Clusters* prepared for the MoEF. As part of this exercise, eighty-eight industrial clusters including Singrauli were assessed with the aim of identifying polluted industrial areas and prioritising the needs for intervention, with the larger purpose of improving the environment. Singrauli had a Critical Environment Pollution Index of 81.73, making it a critically polluted area as per the parameters of the report<sup>5</sup>.

Yet, the moratorium on further environmental clearances in Singrauli was lifted on 5th July 2011, based on assurance from central and state pollution control boards that they had initiated the preparation of action plans to tackle pollution and improve the environment in the area. Therefore, all pending approvals for environmental and forest clearance (the latter required under the Forest (Conservation) Act of 1980) could now be processed by the MoEF with conditional cautions and safeguards.

The lifting of this moratorium also needs to be understood in the context of the "go, no-go" controversy between the Ministry of Coal and the MoEF, which disallowed mining in certain areas of dense forest cover and is looked into in detail in this report's sections on both forests and policy. It is important to note that several coalfields in the Singrauli region moved from being "no-go" areas for mining, to being granted a "go" status around the same time that the moratorium on future clearances was lifted. The 'go,no-go' discussion began in 2009 and was initiated by both the MoEF and Ministry of Coal. A Group of Ministers, chaired by Finance Minister Pranab Mukherjee, is currently discussing the issue and is likely to make recommendations to the Cabinet.

Close study of the Singrauli region over the last several decades has shown acute pollution, unemployment and displacement-related problems to be sustained. Many village panchayats, such as Kuldumri (Anpara - Sonebhadra district in the state of Uttar Pradesh), Chilika Dand (Shaktinagar in the state of Uttar Pradesh), have been twice or three times displaced since the region began to be tapped for its industrial and energy potential. The people displaced have since lived in plots as small as thirty by fifty feet that they received in the form of compensation. This compensatory land cannot be sold, and access to employment diminishes with the area's forests and agricultural lands. More details are presented in the sections that follow.

Today, the region of Singrauli is poised at the centre of a debate in which the emphasis on double figure economic growth and political arguments for large-scale energy generation remain alarmingly disconnected from the voices of discontent on the ground. As large tracts of agricultural lands, common lands and forest continue to be overtaken for sweeping industrial expansion, direct and indirect displacement of communities can only continue to increase. With pre-existing issues of environmental degradation, displacement and deprivation of local communities screaming for attention, the coming days in Singrauli are going to throw many uncomfortable realities in the face of India's reckless energy push.

 $<sup>^4</sup>www.sing rauli district.org,\ http://indiatogether.org/2011/jul/env-sing.htm$ 

<sup>&</sup>lt;sup>5</sup>In an office memorandum dated 15.3.2010, the MoEF gave a full listing of areas in each of the polluted regions that were being considered as critically polluted. Areas from both Madhya Pradesh and Uttar Pradesh portions of Singrauli were included on that list.



## MAJOR COAL RELATED INDUSTRIES IN SINGRAULI REGION

#### Northern Coalfields Limited (NCL)

A wholly owned subsidiary of Coal India Ltd., NCL is conducting the largest mining operations of any company in Singrauli. It produces coal through mechanised opencast mines, powering 10,515 MW of electricity from pithead power plants belonging to National Thermal Power Corporation (NTPC), Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd (UPRVUNL) and Renupower division of M/s. Hindalco Industries<sup>6</sup>.

#### National Thermal Power Company (NTPC)

India's largest power company, set up in 1975 to accelerate national power development. NTPC has a total generating capacity of 34,854 MW, but plans to generate 75,000 MW by 2017<sup>7</sup>. The first plant set up by NTPC was a pithead power plant in Singrauli, with an installed capacity of 2000 MW.

#### Jaypee Nigrie Super Thermal Power Plant

Comprises two super-critical units of 660 MW, planned for construction in Nigrie village in Singrauli, Madhya Pradesh. The first unit is expected to be commissioned at the end of April 2013, and the second at the end of October 2013. The plant will use coal from two captive coal blocks, Amelia (North) and Dongri Tal II, with total reserves of 250 million tonnes of coal.

#### Hindalco Industries (Aditya Birla Group)

The Mahan Aluminium Project is a smelter-power plant complex that boasts a 359-kilotonnes-per-annum aluminium smelter and a 900 MW coal-fired captive thermal power plant. The project has access to the Mahan coal block through a joint venture with Essar Power. Hindalco's share of the coal block is about 3.6 million tonnes per annum.

#### Mahan Coal Limited

A 50:50 joint venture firm, between Aditya Birla Group's flagship Hindalco Industries and Essar Power. Coal produced by Mahan Coal Ltd. will fuel the proposed power plants of both Essar and Hindalco. The environment ministry has not granted forest clearance for this coal block as yet.

#### **DB Power Limited**

A company promoted by the Dainik Bhaskar Group. DB Power has signed a memorandum of understanding with the Government of Madhya Pradesh to generate 1200 MW. Over the next three to five years, the company plans to set up facilities to generate more than 5000 MW of power, largely based on coal.

#### Anpara Thermal Power Plant

Located at Anpara in Sonebhadra district, Uttar Pradesh, this is the largest power station in the state. It has a generating capacity of 1630 MW and draws coal from NCL's open mines in Khadia, Kakri and Beena. It is run by the state-owned Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVNL).

<sup>&</sup>lt;sup>6</sup>See http://www.ncl.nic.in/

<sup>7</sup>http://www.ntpc.co.in/index.php?option=com\_content&view=article&id=28%3Aabout-us&catid=31%3Ageneral&Itemid=41&lang=en

#### Sasan Ultra Mega Thermal Power Project (Reliance Power)8

The 3960 MW project of Sasan Power Limited has been started in an area close to Sasan village, in the Singrauli district in Madhya Pradesh. Sasan UMPP is a pithead power project and has been allocated three captive coal mine blocks – Moher, Moher Amlori extension and Chhatrasal – with reserves of almost 750 million tonnes in total. The plans for development of these mines were approved in a record period of around seven months. The approved plan for the three mines together envisages production of twenty-five million tonnes of coal per annum, some of the largest-scale coal production in India. Together with these mines, Sasan UMPP would on completion become the largest integrated power plant and coal mine complex in the country. The scale of the project can be better appreciated with the fact the project and coal mine would together involve almost 10,000 acres of land, of which almost 7,000 acres would be coal mines.

#### Lanco Anpara Power Private Limited

This company owns the 1200 MW Lanco Anpara Thermal Power Plant (two units of 600 MW) in Anpara village, Sonebhadra district, Uttar Pradesh. It is adjacent to the existing Anpara A & B thermal power plant of Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVNL) and is situated on the bank of the Rihand Reservoir, which is also the source of water supply to the thermal power plant.

Coal is the primary fuel for this plant and is being obtained from NCL's Khadia Coal Mine Expansion. The land allotted to Lanco was originally intended for the expansion of the existing Anpara A & B thermal power plant.

#### Chitrangi Power Project

Chitrangi Power project, by Reliance Power, is a 3,960 MW coal based power project at Singrauli District in Madhya Pradesh. The coal for the project would be sourced from captive coal mines allocated to the company as well as from linkages which the Government may allocate for the project. The project would be using super-critical technology and would have 6 units of 660 MW each.

#### M P Sanik Coal Mines Limited

M.P. Sainik Coal Mining Pvt. Ltd. is a Joint Venture Company with the M P Government. The coal block is located in the Mohan Ban Reserve Forest in the Amelia block of Singrauli district.

<sup>8</sup>http://www.reliancepower.co.in/business\_areas/power\_projects/coal\_based\_projects/sasan.htm

# DISPLACEMENT, RESETTLEMENT AND REHABILITATION IN SINGRAULI

Some of the discussions in the other chapters of this report also have a bearing on the issues of displacement, rehabilitation and resettlement in Singrauli.

It is a sad irony that regions that are rich in natural and mineral resources are often so poor in human rights, suffering long histories of exploitation, deprivation and development-induced displacement of local communities for others' access to those minerals. Singrauli is no exception. The lack of basic facilities in the villages in the region is striking. Health centres, functioning schools, clean water facilities, and even electricity are absent. This is the paradox that is Singrauli: the energy capital of the country that lights up cities and powers our industries, but has left the people who forfeited their land for the greater "public good" with precious little.

Singrauli region's tryst with displacement dates back to the 1960s, when the country was busy constructing its "temples of modern India". One such house of worship was the Rihand Dam in Sonebhadra district of Uttar Pradesh, in the heart of what would later become India's energy capital. This was the first time that the people of Singrauli experienced displacement, as they were asked to give up their homes, their agricultural lands and their access to forests to make way for India on the path of nation building. Many livelihoods, previously such self-contained and natural-resource-dependent occupations as grazing, harvesting of non-timber forest produce and settled and shifting cultivation agriculture, were inhibited by this displacement.

Since then, Singrauli has witnessed a spiral of development-induced displacement as land has been appropriated for dams, reservoirs, coal mines, power plants and waste disposal areas. Support infrastructure for this industry has also come up in the form of rail lines for coal linkages for power plants, roads for coal transportation as well as housing and recreational facilities for the employees of the various industries operating in the area. The people who belonged here have lost their land and their traditional livelihoods and gained little in return.

In total, the construction of the Rihand Reservoir displaced some 200,000 people and caused around 50,000 communities to disappear¹. In the 1970s and 1980s, the World Bank provided the Indian government with the seed money to transform Singrauli into a coal-producing, coal-burning pocket of economic activity, leading to the environmental degradation of the region. In 1977, the World Bank loaned \$150 million to the National Thermal Power Corporation (NTPC) to help finance the construction of the Singrauli Super Thermal Power Plant, the first coal-fired power plant in the region, and three years later financed an expansion of the same plant. It also helped finance one of the first open-pit coal mines in the area, Dudhichua, in 1985².

Until the 1970s, the displaced communities received only meagre compensation towards their losses, and there was minimal understanding of resettlement and

<sup>&</sup>lt;sup>1</sup>Jan Lok Hit Samiti Report; Smitu Kothari 1988

<sup>&</sup>lt;sup>2</sup>Dana Clark, Jonathan Fox and Kay Treakle, Singrauli: An Unfulfilled Struggle for Justice.

rehabilitation of the affected people<sup>3</sup>. In 1997 the Central Government produced a resettlement and rehabilitation policy, but even this has done very little to address the plight of the people affected by projects in Singrauli.

#### The real narratives of multiple displacements are clearly visible in two instances:

1) The Chilika Daad village panchayat in Sonebhadra district of Singrauli region is a cruel example of people displaced several times by different projects and rendered only poor rehabilitation. There are 600 families in the village, a total of around 12,000 people. Forty per cent are categorised as Scheduled Caste, five per cent as Scheduled Tribes, thirty per cent as Other Backward Classes and the rest as general population. The village comprises of both tribal and non-tribal populations with settlements divided accordingly.

The only access to Chilika Daad is through a narrow underpass, over which runs a railway line that transports coal. The first thing that one sees on entering the village is the huge overburden of the NCL Khadia mine standing precariously a mere fifty metres from the village. The village is surrounded on one side by the railway line, the other by the haul road that transports coal in trucks from the mine, and on the third side by the NTPC thermal power plant in Shaktinagar. Ramnarayan, a resident of Chilika Daad, explains, "We were given pattas [title deeds] in 1995. We only got awasi patta [right to live on the land] so we cannot sell this land; we don't even get a loan against the patta."

National Coalfield Ltd. (NCL)'s Khadia mining project began in 1981, years after Chilika Daad village panchayat had been rehabilitated to this location. The villagers protested against the mines for two years, but were eventually forced to concede to government plans. Now, due to the blasting in the mines, every single house has a cracked ceiling or a cracked wall. Ayodhya Gupta shared that "Blasting happens twice every day, at 1pm and 6pm. The whole area shakes as if there has been an earthquake. Look at our houses. There is not a single building in the entire village that does not have cracks in the ceiling and walls. There have also been instances of buildings collapsing."

According to Narmada Prasad Kushwaha, a project-affected person from the village, "People displaced by Rihand Reservoir were first settled nearby. However the Government had misjudged the catchment area of the reservoir and soon, in 1962, people again got displaced as the area they settled in was taken over by the water. The people then bought land in Kota [a place near the Khadia mines in Singrauli] with the compensation that they got and settled there. In 1977 the land was again notified and acquired by NTPC for its Shaktinagar themal power plant, a fifteen day notice was given and there was forced eviction. They got compensation worth Rs. 2000/acre at that time and were rehabilitated to this place [Chilika Daad]. Each person got plots of thirty by fifty feet, which is in NTPC's name. People built their own houses."

Ramadhar Mishra of Chilika Daad panchayat sums the villagers' misfortune when he says, "first the village was relocated and then the railway line and NCL overburden came. We were cheated." The sixteen villages of this Panchayat have been surrounded by NTPC's Shaktinagar plant, a mine overburden and a railway line since the late 1970s. Neither the companies, nor the government machinery has bothered to deliver on the many promises made to the people.

2) Dibulganj village of Kuldumri panchayat<sup>4</sup> - one of the largest in the Sonebhadra district of Uttar Pradesh - has story similar to that of Chillika Dand. This too is a village with both tribal and non-tribal communities and people speak of multiple displacement and a failure on the part of the companies and government to fulfil the promises made to them. When they were displaced by the reservoir of the Rihand

<sup>&</sup>lt;sup>3</sup>Economic & Political Weekly December 19, 2009 vol xliv no 51.

<sup>&</sup>lt;sup>4</sup>More information on Dibulganj in the discussion on environmental impacts

Dam, they were resettled in Kuldumri village, which was later acquired by the Uttar Pradesh State Electricity Board in 1978 – 79.

## TRIBAL COMMUNITIES AND DISPLACEMENT

If one were to overlay areas with rich mineral resources in the country with those with forests, and again with those with tribal belts, it would be found that the regions are almost the same. Thus, many development projects in India are located in areas that are densely inhabited by tribal people<sup>5</sup>. Tribal people constitute 8.6 per cent of India's population, and about forty per cent of them have been displaced by development projects (Fernandes 2008). A report of the Official Working Group on Development and Welfare of Scheduled Tribes during the 8th Five-Year Plan (1990-1995) on the rehabilitation of tribal people, based on a comprehensive study of 110 projects, has concluded that of the 1.694 million people displaced by these projects, almost fifty per cent (814,000) were tribal people (Government of India,1993).

Those tribal, forest and other ethnic minority communities whose identity is based on the territory they have traditionally occupied are particularly vulnerable to the disruptive and impoverishing effects of resettlement. Their living systems have often not been recognised in official parlance and have not been accorded rights (ownership, habitation or use) over the land that they have been living on for generations. Therefore, when it comes to instances of compensation and rehabilitation, they are particularly disadvantaged<sup>6</sup>. Whenever awarding of rights have happened in the past, they have almost certainly not taken into account the issues of continued access to commons, which has value both for the conservation of that land and for the carrying out of practices related to livelihood dependence. More recently, laws such as the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, or FRA7, which attempt to address the issues of both individual and customary community rights, have not been fully implemented. We were assured by the Collector of Singrauli that the new administration is ensuringthat there is compliance with the requirements of the FRA. Resettlement literature is full of case studies demonstrating how industrial- and infrastructurerelated projects (dubbed as development) ignore the customary rights of the tribal and forest-dwelling communities and treat them as encroachers.

According to District Collector of Singrauli P. Narahari: "In the last two years in Singrauli district of Madhya Pradesh alone, 4000 people have been given individual rights (pattas) and another 7000-8000 applications are being processed. District administration has set up teams to facilitate the filling of claims for the community rights under FRA. There are sixty-four applications for community rights under the FRA under process. The main issue is that the people do not file for applications due to the lack of awareness. There are hardly any community rights that have been registered and the district administration has set up a group to look into and facilitate the filling of claims for community rights under the FRA."

Tribal communities such as Baigas, Gonds, Agarias, Panikas, Khairawars in Singrauli region have always been heavily dependent on forests for their food, fuel and livelihood needs. Mayaram, a tribal woman from Belwada<sup>8</sup> who has been displaced by the ash pond of the Anpara Thermal Power Plant, says, "Earlier there was a lot of *Bagai* grass in this region, which we used to make *charpai* [cots] for our own use as well as for sale. We would sell the grass to people outside for thirty rupees a kilo, or three thousand rupees a quintal. Now the grass has stopped growing in the region because of the ash pond."

The Fact Finding team visited Moher village, in Singrauli district of Madhya Pradesh

<sup>&</sup>lt;sup>5</sup>Tribal land Issues in India - Communal Management, Rights and Displacement, Hari Mohan Mathur.

<sup>&</sup>lt;sup>6</sup>Comments on Draft OP/BP 4.12: Involuntary Resettlement, November 17, 1999, Center for International Environmental Law.

<sup>&</sup>lt;sup>7</sup>More details in the chapter on Legal Regulation

<sup>&</sup>lt;sup>8</sup>Belwada is a village in Sonebhadra District of Uttar Pradesh.



where forest land, earlier classified as "no-go" by the MoEF (refer to the Forests and Environment section for details), has been diverted to be mined by Reliance for the Sasan Ultra Mega Thermal Power Plant<sup>9</sup>. The villagers shared that there was a Baiga hamlet further ahead into the Moher forests but are not sure if these people had received any compensation after the land was acquired for the Sasan project. The Baiga tribals in and around the Moher forests in Singrauli have been living there for decades, but they do not have any legal documents or land records to prove their customary rights. This has deprived them of a right to rehabilitation and compensation<sup>10</sup>.

During the Fact Finding team's visit, the people of Moher shared that they were not certain that Reliance would keep its promises of providing employment to the affected communities and a good rehabilitation package, but were fearful of repression if they were to offer any opposition to the compensation package being offered. The State administration did counter these claims and reiterated that no protests had so far taken place.

The villagers in Moher were also not sure what their rights or remedies would be in the event that the company failed to deliver on its promises. They had no idea of what would happen to people who did not own land and what would become of them in the future.

<sup>&</sup>lt;sup>9</sup>Post Gorbi, Tehsil and District Singrauli, Madhya Pradesh.

<sup>&</sup>lt;sup>10</sup>We have been informed by the local administration that all FRA rights holders have been considered as land owners (bhumiswamis) and compensation has been paid to them akin to other land owners, and similar facilities of R&R package is being extended to the FRA rights holders. This may however not be fully be implemented yet.



## WOMEN AND DISPLACEMENT

Women are traditionally responsible for taking care of the food, nutrition and water requirements of a family, as well as the wellbeing of children, the elderly and cattle. Following displacement they continue to play this role, but are forced to do so with only the meagre resources made available to them. Displacement from village commons or commonly used or held areas (grazing lands, sacred groves, cremation groups and so on) hits women hard because they are most often the ones who go out to gather and collect non-timber forest products like sag (green leafy vegetables), chirongi, mahua, ber and gum, as well as firewood for household consumption. Once displaced from the region, they are left with no other option but to buy things like firewood from the local markets, which adds to the drain in household budgets.

Jasoda Devi, a member of the Mahila Mandal (women's group) in Kuldumri village, Sonebhadra district of UP, says, "There is no water in the village, the hand pumps have all gone dry. We have to go as far as two or three kilometres to fetch water for domestic purposes. The Mahila Mandal has written so many times to the district administration for hand pumps, but nothing has happened. The NTPC colony has all the facilities, can't they supply us with the water that they drink?"

Additionally, access to resources in the post-displacement scenario is almost always mediated via husbands, who now assume the role of "'sole' bread earners" Women lose access to their former work gathering forest products when they are displaced and often experience a related decline in their status, which is otherwise relatively higher in tribal communities. When jobs are given to families (except for those families which are headed by women) it inevitably goes to the male member in the family. However, there have been instances in which employment has not been granted at all. While these details are discussed in the subsequent section the statement of Saraswati Vishwakarma from the Mahila Mandal of Dibulganj village is relevant here to understand the disempowerment of women: "We have been displaced twice and also lost our agricultural land. My sons were picked up by the police on 18th April 2010 and accused with false charges when they asked for employment and were sent to Mirzapur."

<sup>&</sup>lt;sup>11</sup>Dewan, R. 2008. Development Projects and Displaced Women. In Mathur, H.M., ed. India Social Development Report 2008: Development and Displacement. Delhi: Oxford University Press/Council for Social Development.



Saroj Devi, an Anganwadi<sup>12</sup> worker living in Chilika Daad village for the last thirty years, identifies another critical problem that women have faced due to inadequate rehabilitation. She says, "We got such small plots, there is not enough space to build toilets for each family. The women in this village go to the mine overburden to defecate. Earlier the area behind this village was a forest and then life was easier, but now it is so difficult for us. We need to go either very early in the morning or late in the evening when there are no fears of workers or people being around."

## DISPLACEMENT AND UNEMPLOYMENT

Displacement is closely linked to the issue of unemployment in the entire Singrauli region. The displaced communities are all either farmers, agricultural labourers or tribal people, dependent on forests for their survival. For many tribal and forest-dwelling communities, grazing lands, forests, ponds, fisheries, wildlife, riverbeds, and other such shared resources are a major source of sustenance. For example, seventy to eighty per cent of the non-timber forest produce that forms a major component of many households' income comes from common resources<sup>13</sup>. Such communities lack the skills to survive in different environments, and so displacement robs them of their sources of employment.

According to the resettlement and rehabilitation policy of Coal India Limited, a project-affected person is eligible for employment if he was in possession of two acres of land prior to displacement. The policy excludes people who have less than two acres of land from its purview and is indifferent to the plight of landless labourers and communities who have been dependent on forests but do not have legal documents to prove their rights.

Across the villages visited during the Fact Finding Mission, and from the testimonies of the people who shared their problems with the Fact Finding team, it was clear that in addition to the broken promises of infrastructure, employment and better life, the rehabilitation packages neither took care of whole families nor of future generations. Landless persons were completely deprived of any manner of compensation, and left with no prospect of livelihood.

<sup>&</sup>lt;sup>12</sup>Kindergarten or child care center

<sup>&</sup>lt;sup>13</sup>Beck, T., and G.M. Ghosh. 2000. Common Property Rights and the Poor - Economic and Political Weekly. 35 (3): 147–53

## PEOPLE'S VOICES

Acute unemployment is one of the biggest issues in the Singrauli area. As revealed by documents obtained under the Right To Information Act of 2005, 2,205 people were promised jobs by the Anpara Thermal Power Plant, but only 234 received employment in reality. Statements by villagers from Kuldumri Panchayat in Sonebhadra district corroborate the evidence gathered in these documents. Kuldumri resident Ramchandra Jaiswal says, "Lanco and Anpara companies assured us in writing that they will give us employment by the 30th May, at the rate of 300 people every month. But nothing seems to move even now. How can we believe that the new projects will give us jobs when the previous projects have just not delivered?"

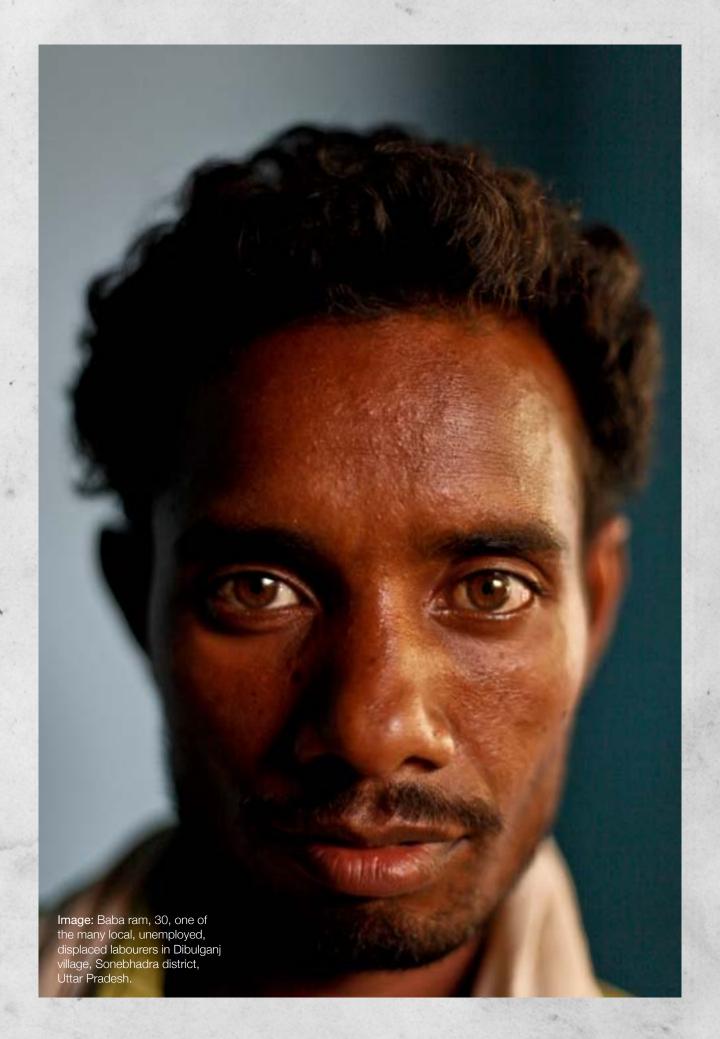
The village has a large number of unemployed people affected by the project and left with no means of earning a living. One, Raman Dharkar, said "When I went to the companies to ask for a job, they put a lot of false cases on me through the "Goonda Act" and several other legal clauses."

Ranjit Gupta and Sitasaran Gupta, Secretary and member of the Yuva Visthapit Seva Samiti respectively, shared that the companies do not employ local people even as daily wage earners. They prefer to take migrant populations from neighbouring states that are ready to work for wages lower than stipulated and do not raise their voice against the contractors and company officials who siphon off money. There many criminal cases registered against villagers just because they have dared to question the company on their employment.

Ramshubhag Shukla, a resident of Chilika Daad affected by mining projects, says, "The employment status of this village is very bad. There is no one in this room who is employed. NTPC promised us employment when they acquired our land and out of the 600 families displaced, 200 were given class IV jobs [the lowest grade of employment in the government sector] in NTPC." The local people are employed at the mines as labourers. Exploitation is common, as the daily wage fixed by the government is Rs.156 per day, yet the contractor rarely pays the labourers Rs.100. Anyone who raises the issue with either the contractor or the company officials gets himself blacklisted from the roll.

Singrauli's future is etched with the ambitions of several private and public sector mining and thermal power operation, some of which are already under construction or negotiation. With large tracts of agricultural lands, common lands and forest being taken over for large-scale industrial expansion, the instances of direct and indirect displacement are only on the rise. With pre-existing issues remaining unresolved the coming days are only likely to exaggerate the existing uncomfortable realities that people living in India's energy capital face today.

<sup>&</sup>lt;sup>14</sup>The Goonda Act exists in the state of Uttar Pradesh and not Madhya Pradesh



# FOREST AND ENVIRONMENTAL IMPACTS IN SINGRAULI

The forests in and around Singrauli coalfields are essentially dry peninsular sal forests, northern dry mixed deciduous forests, Boswellia forests and southern dry mixed deciduous forests<sup>1</sup>. If one is to refer to the topography of Singrauli district in Madhya Pradesh and rest of the Mirzapur region in Sonebhadra, Uttar Pradesh it is recorded to be variable, with an altitude ranging from 243 to 609 metres above mean sea level. It comprises of two distinct morphological units: the plateaus of the mining area and the plain areas formed by the valleys of the Rihand River and its tributaries<sup>2</sup>.

The contest to change the use of the region's forest land began way back with the operation of the first set of coal mining projects. The existing operations of Northern Coalfields Ltd. (NCL) in the Singrauli region has already converted several forest areas into overburden hills towering over the resettled village panchayats (village councils) in the area. As 105-year-old Baiju Gupta of Chilika Dand gram panchayat in Singrauli district recalls, "When I came here in 1978, displaced by NTPC's thermal power plant, there was thick forest in the area. There was wildlife right here next to the road at twelve in the afternoon. People came to hunt here. Today it's all gone, and all we have is a mine overburden hill."

Singrauli's future is etched with the ambitions of several private and public sector mining and thermal power operations, many of which are already under construction or negotiation. This is happening even though crucial issues of environmental pollution (as well as forest land diversion) remain completely unresolved. The people of Dibulganj village in Anpara, Sonebhadra district of Uttar Pradesh, repeatedly pointed to the issue of the pollution in Singrauli. Ram Chandra Verma, whose family resides in Dibulganj, says "Earlier we could sleep on the terrace but it is just not possible now. If you put a white sheet on the bed at night, in the morning it is layered with black. This problem increases during the night and has become more severe since 2007, when the Lanco thermal plant was established in the area." The Lanco plant is in fact the second thermal power plant near Dibulganj. The first is the 1630 MW Anpara Thermal Power Plant, which is state-owned and forced the village to be displaced to make room for its construction. The land next to Anpara plant was originally acquired for its expansion, but later handed over to a private company for the construction of a 1200 MW plant by Lanco. This newer plant is even closer to the village than the first one.

#### According to the findings of the Blacksmith Institute:

A widely cited but unpublished study by Electricité de France reveals that Singrauli's thermal power plants release about 720 kilograms of mercury per year. The UN cited an Indian Central Pollution Control board estimate that "17 percent of power plant mercury emissions are from the Singrauli region." Fly ash, the by-product of coal combustion, is also a significant problem. The coal-burning power plants release about six million tons of fly ash a year, making land unfit for cultivation. In parts of Singrauli, the fly ash lies in piles five feet thick<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup>Das, Mihir K., Ajay K. Awasthi, Rakesh Pandey, Ajay Dwivedi, Monica Kaul. Mapping of Forest Types and Land Use/Land Cover of Singrauli Coal Field Area Using Satellite Remote Sensing Techniques. Journal of Tropical Forestry. January-June 2007, Vol 23 (I&II)
<sup>2</sup>ihid.

<sup>3</sup>http://www.blacksmithinstitute.org/projects/display/147



It has been highlighted in the Overview chapter that the Singrauli region is one of the eighty-eight industrial clusters assessed for their pollution index by the Central Pollution Control Board and Indian Institute of Technology (IIT) Delhi in the Comprehensive Environmental Assessment of Industrial Clusters prepared for the MoEF. This study found Singrauli (both in MP and UP) to be "critically polluted", with an overall index of 81.73. This places serious doubts over the prudence of further industrial expansion in the region. The Madhya Pradesh Pollution Control Board has subsequently created an Action Plan for Improvement of Environmental Parameters in Critically Polluted Area-"Singrauli-MP."<sup>4</sup>, but ground level action is far from realised and industrial expansion continues unabated, with moratoriums on fresh environment and forest clearances lifted.

Evidence continues to emerge in the narratives of affected people. According to Ranjit Gupta, Yuva Visthapit Seva Samiti, Dibulganj village, "There is a ash pipeline for the Anpara and Lanco projects that is often opened up to avoid the choking of the ash dyke. This is randomly done at various points and there is no pattern. The last time it happened was the twenty-second of February 2011<sup>5</sup>. It leads to a lot of pollution and water logging with ash in the area. When it dries up the wind blows it into the village."

# DIVERSIONS OF FOREST LAND FOR NON-FOREST USE

As the mining and thermal power expansion in Singrauli continues, almost all the coal blocks today being allocated for mining are located in forest areas. The MoEF recently<sup>6</sup> received a proposal for the diversion of 965.50 hectares of forest land in favour of M/s Sasan Ultra Mega Power Project Ltd., of the Reliance Power company, for their Chhatrasal Captive Coal Block. This includes 30.21 hectares of forest land for infrastructure development in Singrauli district, Madhya Pradesh. Chhatrasal coal

<sup>&</sup>lt;sup>4</sup>http://www.cpcb.nic.in/upload/NewItems/NewItem\_152\_Final-Book\_2.pdf <sup>5</sup>A video of this is available with villagers and was shared with Fact Finding team. <sup>6</sup>5.7.2011, as indicated on the MoEF website.

block has already been allocated to Sasan Power Ltd. by the Ministry of Coal (www. singraulidist.org), but its environment- and forest-related approvals are pending. The permission to prospect for coal over a further 1,223.75 hectares of forest land in Singrauli district of Madhya Pradesh<sup>7</sup>. was granted on 12th July 2006 to CMPDI by the Government of Madhya Pradesh. Two other coal blocks under the command area of NCL, Moher and Moher-Amlohri Extension, have already been allocated to Sasan Power Ltd. by the Ministry of Coal. The coal produced from these mines would be exclusively used for power generation by Sasan Power, as well as another power plant belonging to Reliance Power.

As indicated in the table below, 5,872.18 hectares of forest from the Singrauli region have been officially diverted for non-forest use since the initiation of the Forest Conservation Act in 1980. This is 5,760.55 hectares of forest and 111.60 hectares of revenue forest. However, it does not include the several instances of encroachment on forest land that may have occurred as a result of the existing and proposed industrial operations.

As per the data available with the Divisional Forest Office, 3,229.06 hectares of forest are awaiting approval for diversion in Singrauli. Another 788.49 hectares have received Stage I (in principle) approval from the Ministry of Environment and Forests and the Stage II (final) clearance is pending.

Data of forest land diverted in Singrauli since 1980, proposed forest land diversion and diversion approved in principle diversion.

The second secon	Sr. No.	Name of Region	Name of Project	Com- partment No.				Approved by Gol Compartment / Date	Class	Detail
					Forest Land	Revenue Forest Land	Total			
	1	2	3	4	5	6	7	8	9	10
	1	Baidhan	N.C.L Amlori Coal Project	R269, R270, R268, R267	1195.000	0.000	1195.000	(i) 8-194/84 FC Dated: 10/06/85 (ii) 8-195/84 FC Dated 30/12/87 (iii) 8-100/97 FC Dated 08/10/2002	Coal	
	2	Baidhan	N.C.L. Nigahi Coal Project	R271, R272, R273, 267, P266, P265	874.146	0.000	874.146	8-62/FC dated:18/06/87	Coal	
	3	Baidhan	N.C.L. Jayant Coal Project	P266, P263	100.000	0.000	100.000	(i) 8-158/90 FC dated: 20/03/93	Coal	
STATE OF STATE OF STREET	4	Baidhan	N.C.L. Jayant Coal Project	P266	68.290	0.000	68.290	8-158/90 FC 16/01/97	Coal	

<sup>&</sup>lt;sup>7</sup>Singrauli is the 50th district of Madhya Pradesh State of Union Republic India. It was granted district status on 24th May 2008, with its headquarters at Waidhan.

5	Baidhan	N.C.L. Jayant Coal Project	P263	50.881	0.000	50.881	8-93/99 FC 25/01/2000	Coal	
6	Baidhan	N.C.L. Dudhichua Coal Project	P263, P262, P261	194.780	0.000	194.780	(i) 8-13/93 FC 16/11/94 (ii) 8-13/93 FC Dated: 10/11/04	Coal	
7	Gorbi	N.C.L. Gorbi Extension Coal Project	P192	83.270	0.000	83.270	8-417/89 FC Dated 16/08/90	Coal	This coal project is closed since Year 1996. However, by converting into status-quo forest land is not returned by Project.
8	Baidhan	N.C.L. Block B Gorbi Coal Project	P277, P278, R276	447.000	0.000	447.000	8-59/05 FC Dated: 11/09/2006	Coal	382.000 ha Forest land out of 447.000 ha approved Forest land is transferred to N.C.L. for use. Process to transfer remaining 86.000 ha is under progress.
9	Baidhan	N.C.L. Bina Extension Coal Project	P259, P260	378.935	0.000	278.935	8-58/05 FC Dated: 13/08/2007	Coal	100.000 ha Forest land out of 378.935 ha approved Forest land is transferred to N.C.L. for use. Process to transfer remaining 278.935 ha is under progress.
10	Baidhan	Road Construc- tion up to N.C.L. N.C.L. HQ Singrauli Morawa	P266	0.875	0.000	0.875	8-58/05 FC Dated 13/08/2007	Coal	

11		Sasan Ultra Mega Power Plant	P423	312.828	8.110	320.938	8-53/2007 FC Dated: 16/4/2009	Plant	312.828 ha forest land of Sasan Power plant is being transferred to Applicant company for use. A letter is written to Collector, Singrauli for transfer of 8.110 ha revenue forest land.
12	Baidhan	Sasan Ultra Mega Power Coal Project	R270, 271, 282, P278, P285	991.810	72.21	1064.020	8-92/2008 FC Dated: 25/03/2010	Coal	920121 trees were found in 991.81 ha of forest land affected by Sasan Ultra Mega Power Coal Project. As per condition, 10% of log-felling will be carried out in 10 years. 92,012 trees should be cut down in First Year (2010-11). Therefore, 37,238 trees by applicant. Project requested for transfer of 140.000 areas. Transfer of such land is under progress.
13	Baidhan	Sasan Ultra Mega Power Project O.B. Dump and other semi- structures	P285	101.890	31.300	133.190	8-91/2008 FC Dated: 28/05/2010	O.B. Dump	14,787 trees are found in Proposed area of 101.890 forest land area of Sasan Ultra Mega Power Project where 10% log-felling should be carried out every year.

									Therefore, total 32 ha area forest land comprising 17 ha having no tree and 15 ha area having 1478 trees transferred to applicant.
14	Baidhan	N.C.L. Khadia Extension Project	P261	180.000	0.000	180.000	8-85/2005 FC dated 14/09/2010	Coal	12.50 ha forest land out of 180 ha. Area forest land in N.C.L. Khadia Extension had been transferred for use. Transfer of remaining 167.50 ha ls under progress.
15	Baidhan	132 KV Electric line Shaktinagar, Rihand	404, 409, 396, 399	15.999	0.000	15.999	8-169/84 Dated 8/7/84	Electric line	
16	Baidhan, Bargawa jiyavan Karthua	400 KV Singrauli Lucknow Panipat Electric Line	R299- 302, R307- 309, 234, 848, 849, P310, P287, P206, P847, P878, P839	151.540	0.000	151.540	8-213/84 FC Dated: 29/9/84	Electric Line	
17	Baidhan, Bargawa jiyavan Karthua	400 KV Electric Line Singrauli- Jaipur	R234, 773, 848, P287, P206, P207, P778, P776, P844, P845, P847	52.312	0.000	52.312	8-611/84 FC Dated 30/04/85	Electric Line	

									1000
18		400 KV Electric Line Vindhyachal- Jabalpur Via Jaisingh Nagar	R375, 374, 377, 329, 330, 383, 663, P607, P610, P609, P611, P612, P613, P655, P657, P658,	123.864	0.000	123.864	8-410/89/ FC Dated: 15/6/10	Electric Line	
19	West Sarai, Baidhan	400 KV Electric Line Vindhy- achal-Bina Double Circuit Line	R311, 698, P645, P647	18.469	0.000	18.469	8-410/89/ FC Dated: 15/6/10	Electric Line	
20	Mada	400 KV Vindhyachal- Korba Electric Line	P422	5.720	0.000	5.720	8-326/85/ FC Dated: 10/2/87	Electric Line	
21	Mada, Baidhan, Bargawa jiyavan	500 KV Rihand Maugunj Delhi Electric Line	414, 417, 407, 406, 403, 402, 396, 399, 400, 299, 300, 301, 302, 307, 308, 309, 233, 235, 236, 773, 772, P419, P221, P213, P774, P776	142.232	0.000	142.232	8-41/88/ FC Dated: 12/1/89	Electric Line	

22	Baidhan	Merigo Round System Electric Railway Line	R396, 397, 409, 410	38.732	0.000	38.732	8-176/88/ FC Dated: 11/4/89	Railway Line
23	Mada, Baidhan, Bargawa jiyavan, Karthua	400 KV Rihand Shankargarh Electric Line	414, 417, 407, 402, 408, 396, 399, 400, 299, 300, 301, 302, 307, 308, 309, 235, 234, 773, 848, P419, P420, P287, P310, P207, P778, P774, P776, P845, P847	138.620	0.000	138.620	8-10/87/FC Dated: 8/9/87	Electric Line
24	Baidhan, East Sarai	400 KV Vindhyachal- Rewa-Jabalpur Electric Line	311, 312, 313, 335, 337, P255	19.642	0.000	19.642	8-9/89/ FC Dated: 29/8/89	Electric Line
25	Baidhan, East Sarai, West Sarai, Jiyavan	400 KV Vindhyachal- Satna-Sagar/ Bina Electric Line	309, 311, P317, 291, 294, P644, 697, P645, 698, 700	31.625	0.000	31.625	8-18/2004/ FC Dated: 21/3/2005	Electric Line
26	Mada	400 KV Vindhyachal- Korba Single Circuit Electric Line	P421, P422	12.870	0.000	12.870	6MPC009/ 2004-BHO/ 1280 Dated: 30/6/05	Electric Line

		29.220	0.000	29.220	Dudhichua Project Safety Zone	
		5760.550	111.620	5872.170		

Forest Division Officer

Forest Division, Singrauli (S.)

The allocation and diversion of these and many other coal blocks needs to be understood in two other contexts. These are examined in detail in the chapter on Legal Regulation around mining.

- a) The setting up of coal mines and thermal power stations is linked to the establishment of ancillary activities. Yet project authorities do not disclose this entirely at the time of approval. Further, in many instances the construction of a thermal power plant makes later mining approval a *fait accompli*.
- b) The negotiations over the "no-go" areas between the Ministry of Coal and Ministry of Environment and Forests (MoEF) have also determined how these coal blocks are being traded and forests clearances sought. While the Ministry of Coal has allocated the coal blocks, approvals must be sought from the MoEF if forest land needs to be used for mining purposes.

When the "go, no-go" list for coal mining in the country was first released in March 2010, several forest blocks of Singrauli coalfields across the states of Uttar Pradesh and Madhya Pradesh were categorised as "no-go" zones. This included forest areas such as Mahan, Chhatrasal, Amelia and Dongri Tal II as coalfields not to be mined. The conversation around "go" and "no-go" zones was initiated by the Ministry of Coal and the Ministry of Environment and Forests to identify which blocks in India's existing nine coalfields could be allowed to be mined, and which others would remain untouched for use as strategic energy reserves in the future. The latter had to satisfy a limited forest density criteria of more than ten per cent.

In a list available with Greenpeace, procured through the Right to Information Act of 2005, file notes indicate that the first "go, no-go" list specified 222 coal blocks in the central and eastern coalfields to be withheld from granting coal mining approvals. This accounted for forty-eight per cent of the area considered for classification. By a year later, the negotiations had led to a different scenario: the number of "no-go" coal blocks had come down to 153. On 1st March 2011, the then Minister of Environment and Forests Jairam Ramesh submitted in the Rajya Sabha that Mahan's forest would be let out to Essar and Hindalco companies, and possession of Chhatrasal would go to Reliance's Sasan power plant operations. Dongri Tal II and Amelia have been allocated to Jaypee. Each of these area allocations is towards feeding the coal requirements of thermal power plants belonging to the same corporations<sup>8</sup>.

<sup>&</sup>lt;sup>8</sup>Ministry of Environment and Forests (MoEF).2011. Environmental Clearance to Pending Projects. Press Information Bureau, 1st March 2011



Details of First-stage Approved Projects under Forest Conservation Act 1980

Sr. No.	Name of Circle	Name of Forest Division	Detail of Project Proposal	Forest Area (in Ha.)	Date of sending First ap- proval to Gol	Date of first approval receipt	Date of Acknowl- edgement / certificate to Applicant	Date of sending execution report for formal approval to Gol	Where is Pending
1	Rewa	Singrauli	Amiliya (North) Coal Block Project M.P. State Mining Corp.	728.750	2-Mar-07	27-Feb-09	03/07/2010 14/10/2010	-	Additional Princi- ple Chief Conservator Forest (Land Managment) MP, Bhopal
2	Rewa	Singrauli	Mahan Coal Field Essar Power MP Limited Project (2000 MW)- For transporta- tion of es- sential Coal	1.837	30-Dec- 10	20-Jan-11	1-Feb-11	-	Applicant
3	Rewa	Singrauli	2000 MW Mahan Su- per Thermal Power (Essar Power Ltd.)	34.980 (Revenue Forest land)	15-Sep- 06	2-Apr-09	15-Apr-09	-	Applicant
4	Rewa	Singrauli / Sidhi	132 KV Sidhi to Devsar	4.1850	26-Mar- 10	20-May-10	25-May-10	-	Money deposited by Applicant
5	Rewa	Singrauli / Sidhi	220 KV Sidhi-Bar- gawa Electric Line	18.741	24-Sep- 10	3-Dec-10	8-Dec-10	-	Additional Princi- ple Chief Conservator Forest (Land Managment) MP, Bhopal

# THE MAHAN COAL BLOCK CONTROVERSY

The above points can be illustrated in the context of the pending approval of the Mahan coal block. This block is in Singrauli district of Madhya Pradesh, and approval is in favour of Mahan Coal Limited (MCL), a joint venture company between Hindalco Industries Limited and Essar Power M.P Limited. The Ministry of Coal has allocated the block to MCL to mine coal for the two ventured companies. The total coal reserves are about 144 million tonnes; the grade of coal is E to F. The Mahan coal block is to produce 8.5 million tonnes of coal per annum by the open cast mining system (www.singraulidist.org).

On 8th July 2011, the Minister of Environment and Forests issued an explanation highlighting the process and status of the forest land diversion of the Mahan coal block to Essar and Hindalco's joint venture. The order highlighted that the Forest Advisory Committee (FAC) of the MoEF had looked into this matter four times between July 2008 and December 2009 and was unable to arrive at a decision

due to the complexity of issues involved. The chronology of the note indicates that around the same time the Mahan coal block was privileged to a "go" status, the FAC had set up a sub committee to go to the local area and give its recommendations.

The Minister's note highlighted a range of factors against the allocation of this area for coal mining. These include its rich biodiversity, and the destruction of forest cover that will be caused by mining, as well as the interference with wildlife habitat. Referring to the fact that the there is no coal linkage that has been envisaged as of date for the balance requirement of the thermal power plant, the Minister used strong words when he wrote: "I am not entirely clear why such a good quality forest area should be broken up for such a partial requirement. Sal is the predominant species in the forest. *Sal* is a good coppice but is very difficult to grow through raising plantations." The note also refers to the fact that the sub committee of the FAC found the quality of forest and the tree cover to be much higher than claimed by the companies.

This note also remarks on the *fait accompli* issue. It says that a factor weighing in favour of the diversion of the Mahan coal block is the Rs. 3600 crores that have already been invested in power plants linked with it. The crux of the matter is unfortunately rendered to a mere footnote: "This leaves aside the question on why the plants were started in the first place when the forest clearances had not been obtained. *Fait Accompli* has become too far common in environment and forest clearances."

As per the decision of the MoEF, the approval of Mahan forest land diversion has now been transferred to the Group of Ministers<sup>9</sup> looking at issues of "go, no-go" areas, with a recommendation that an alternative coal linkage be provided for the power plants in question. No other reason but the lack of final decision within the MoEF has been cited as to why such a matter should be transferred to this Group, which has no jurisdiction under the Forest (Conservation) Act of 1980 to take decisions on forest land diversion.

# OTHER RELATED DIVERSIONS OF FOREST LAND

Even though the loss of forest land to coal mining is the largest type of diversion, it is also important to ascertain the amount of forest land that is diverted in addition to set up thermal power plants, or activities that assist with their operation. Forest land diversion is being sought under the Forest (Conservation) Act of 1980 for many activities other than coal mining in the Singrauli region. A few examples are:

- As of 25th April 2011, one of the forest land diversion approvals pending includes the requirement of two hectares in favour of Water Resources
   Department of the State for laying of a water pipeline from Gopad River to the Jaypee Nigrie Super Thermal Power Plant located at Nigrie village, Singrauli district, Madhya Pradesh.
- As of July 2011, the diversion of 951.62 hectares of forest land for the construction of the Rihand Super Thermal Power Project in Sonebhadra district, Uttar Pradesh, was pending approval by the MoEF.
- In 2002, 3.98 hectares of forest land was diverted for the construction of a KBJ railway line and Public Works Department's diversion for NCL's Khadia project in Sonebhadra district of Uttar Pradesh.
- In 2001, 12.5 hectares of forest land was diverted for the construction of NTPC's Beechpur Phase II project.

<sup>&</sup>lt;sup>9</sup>This Group of Ministers was established on 3rd February 2011.

These activities represent the range of additional forest land diversions linked to coal mining in the Singrauli region. In some instances, this forest land diversion is directly related to the setting up of a power plant for which a mine linkage is being sought. In other instances it is for smaller ancillary activities like roads, railway lines and water pipelines. There is no consolidated record of the cumulative forest land diverted for all the activities related to setting up a mine or thermal power plant. These are often sought as separate approvals from the Forest Advisory Committee and don't always form a part of the proposal for setting up a thermal power station or a mine.

As this report went to print, an article in the Economic Times of 29th July 2011 stated that a panel appointed by the Group of Ministers considering the "go, no-go" issue, and headed by Planning Commission member B. K. Chaturvedi, had called for the entire issue to be dropped on the grounds that the concept was not consistent with existing forest laws.

In Annexure 1 to this report is enclosed a letter sent by former Environment Minister Jairam Ramesh on the 24th of May 2010, that speaks of the pulls and pushes from industry that are working to dilute and, where possible, remove any restrictions on mining in the coal-bearing forests in the country. This letter was accessed by Greenpeace via the Right to Information Act of 2005.

While the battle is on to preserve the forests that lie above coal, many forest areas have already been lost forever in the creation of India's energy hub in Singrauli region.

# FINDINGS AT BELWADA VILLAGE, BUDDHI TEHSIL, SONEBHADRA DISTRICT, UTTAR PRADESH

The Fact Finding team visited the Belwada village to see the fly ash pond used by the 1630 MW Anpara Thermal Power Plant<sup>10</sup>, run by Uttar Pradesh Rajya Vidyut Utpadan Nigam. The team also interacted with the villagers in the region.

This region has a majority population (eighty-five per cent) of tribals, including Khawar, Panika, Gond, Baiga and Agaria. Other castes include Dharkar, Chamar, Dhobi, Kumhar and others.

The Fact Finding team saw breakages in the pipeline in various places en route from the power plant to the ash pond. The team met a group of villagers from Belwada (fifty to sixty people) near the ash dyke.

The villagers reported that the ash from the pond had contaminated their ground water and had destroyed the fertility of what remained of their agricultural land. They all complained that the ash was the biggest pollutant in their lives, and said that the company sometimes opened up the pipeline to avoid it becoming clogged. The villagers claimed that there was a high incidence of malaria and other neurological problems in the region, which they linked directly to the impact of the ash pond.

The villagers showed the team an opening that led directly from the ash pond into the Rihand Reservoir, the source of drinking water for the entire Singrauli region. Indian coal is known to have high ash content and low calorific value, qualities which lead to a huge amount of coal ash being produced by coal-fired power plants. This ash is known to be toxic and have serious environmental impacts.

Hardeo Singh, a resident of Belwada, spoke of the tribal population in the village, which depended on the forests for their livelihood and so lost their livelihood after the ash pond was built. Pointing to the forests beyond the ash pond, he spoke of the supplies of *ber, amla, chironji, tendu* and *mahua* that they used to sell. "Ab to bas ped hai, phal nahi hote," he says. Now there are only trees, there are no fruits on the trees.

<sup>10</sup>http://www.uprvunl.org/anpara.htm

"We could at least collect *Katha* (catachew), *Sababar* (medicinal plants), *gondh* (gum) and *kakor* leaves from the jungle earlier, but now that is also not possible. There were so many medicinal plants in the forests that we used for treatment. Now they are all disappearing."

Here too the villagers spoke of the empty promises made to them, of jobs, roads, health care and education facilities that simply hadn't materialised. "Everything has finished because of the ash pond and now no local people are employed by the company," says Harijan, a resident of Belwada village. "Earlier there were fish in the village ponds, now there are no fish. Now there is nothing. There are poles for electricity but no electricity. When [the company] acquired land they promised us roads, schools, electricity – all of this, but nothing came."

A lot of people in the village reported that they have cases registered against them in the local police station after they protested against the company and demanded employment. They speak of ninety people were booked under the Goonda Act<sup>11</sup>.

There is palpable anger at the situation the villagers find themselves in. Udaisiya, a man in his forties, says, "All our wells were drowned by this ash pond and now we have no drinking water source. We have to drink this contaminated water. Our cattle are dying drinking this water, now our children will also die...they can now drop a bomb in this place and kill all of us. Why should we live like this?"

# NORTHERN COALFIELDS LIMITED RESPONSE ON ENVIRONMENTAL ISSUES

The Fact Finding team was shown operations of the Nigahi mines by officials of NCL. V. K. Singh, Chairman and Managing Director of Northern Coalfields Limited (NCL), made a presentation to the team on the operations of the company and its policies. In his presentation he listed the various achievements of the company, which included the coal extraction it had achieved, its contribution to the national exchequer and a list of activities the company undertook as part of its corporate social responsibility.

Post the presentation, the Fact Finding team and Greenpeace members had the opportunity to interact with the officials of the company and clarify issues. The various issues raised included the impact from NCL's mining operations on the villages close to the mines, with specific questions on Chilika Dand and the plight of the people living there. Impacts on health, water and environment, forest degradation and rehabilitation and resettlement of communities were raised with the company as they had been the recurrent issues over the course of the visit

NCL Chairman and Managing Director V. K. Singh's response on the impacts of mining was that his company had undertaken a lot of afforestation activities in the region. Quoting a CMPDI report on the Remote Sensing Land Reclamation activities of NCL, which contained data up to 2009, he pointed out that 83.96 per cent of the land acquired had been reclaimed. Within that, 60.80 per cent has been revegetated and 23.15 per cent has been backfilled. He also said that satellite images used to track the forest cover in the region showed it to be increasing.

However, when pressed to answer questions about the quality of plantation forests, Singh admitted that there had been no assessment of the biodiversity in the afforested areas. He acknowledged that environmental consciousness was limited in earlier decades and this had led to eucalyptus plantations. This limited consciousness was something he claimed to be changing.

<sup>&</sup>lt;sup>11</sup>Prevention of Dangerous Activities of Bootleggers, Drug Offenders, Forest Offenders, Goondas Immoral Traffic Offenders and Slum Grabbers and Video Pirates – Uttar Pradesh enforces this law, Madhya Pradesh doesn't

# POLLUTION AND HEALTH

Singrauli holds the dubious distinction of ninth highest Comprehensive Environmental Pollution Index (CEPI) in a selection of 88 highly polluted industrial blocks; its value of 81.73 clearly indicates that the area is critically polluted. The Fact Finding team was told in a number of villages and even by high ranking officials in Northern Coalfields Limited (NCL), that given that their visit was during the monsoon season, the air quality was much better. Normally, and especially in summer months, the air quality is very poor. Villagers living in the proximity of ash ponds and mines said that their lives during those months were living hell.

The small alleys of Singrauli's villages are witness to multiple health problems. People often complain of respiratory ailments, tuberculosis, skin diseases, polio, joint pains and many instances where they experience a sudden drop in energy and ability to carry out normal activities. Given the thick history of industrial activity in the region, it isn't always possible to attribute the increase of ill-health to one operation over another, but people's testimonies and medical reports are important parameters to find these linkages. For instance, the Chilika Dand village in Shaktinagar, Sonebhadra, Uttar Pradesh, which is profiled in the chapter on Displacement, Resettlement and Rehabilitation in Singrauli. This village is surrounded by NCL's mine overburden, a railway line carrying coal and a NTPC's thermal power plant, each playing a part in contaminating water, polluting air and creating noise beyond acceptable parameters. The reality is that neither of these operations takes responsibility to mitigate these health impacts, nor do they ensure specialised medical care. In Dibulganj village, people living in the proximity of both the Anpara Thermal Power Plant and its ash pond complain not only of their own health problems, but those of their livestock that graze in an area covered with ash.

To understand the kinds of health problems faced by the people of the region, a Greenpeace member visited the NCL Nehru Hospital to better understand the situation, as a follow-up to the Fact Finding Mission and on request of the Fact Finding team. The Chief Medical Officer, Dr. Maheshwari, did not share information and claimed that there was no data available on of the diseases prevalent in the region. Similarly, neither was any data on the health of the people in the region available at the district level. The Chief Medical Officer claimed that no assessment had been undertaken in the district.

Dr. R. B. Singh, a surgeon and senior medical officer who has been practicing in the district hospital for the past twenty-two years, is of the opinion that the mining in the region is definitely taking a toll on the health of the people. He spoke of a "high instance of pollution in the area, which is the prime reason for the increased incidents of allergy, asthma, bronchitis, malaria, typhoid, amoebiasis, diarrhea, tuberculosis, silicosis and chronic skin diseases like atopic dermatitis, psoriasis, fungal infections etc."

Dr. Singh also referred to the impacts of the mercury pollution in the region (there are various reports that have studied the mercury contamination in the region and the impacts of this contamination, which include negative long term effects on brain development of children, fertility and impotency.

He felt strongly that the concentration of particulate pollution in the atmosphere reduced lung capacity, and that this was the reason for a large number of patients



with some form of lung disease. He also spoke of an unusual number of lightning strikes, caused by the blasts and the high presence of coal, as well as other metals and chemicals existing in the air. "Every monsoon, there are at least thirty to forty cases of lightning striking in the region," said Dr. Singh, "and a few people also die.

"There is slow poison in the region, which is killing people. If the government wants to keep exploiting the resources in this region then they should remove people from this region and only have industries here. That will at least prevent the people from suffering."

Coal and its waste products (fly ash, bottom ash, boiler slag and others) contain many heavy metals and other toxic impurities, which are dangerous if released into the environment. These include arsenic, lead, mercury, nickel, vanadium, beryllium, cadmium, barium, chromium, copper, molybdenum, zinc, selenium and radium. Coal also contains low levels of uranium, thorium, and other naturally occurring radioactive isotopes whose release into the environment may lead to radioactive contamination<sup>1</sup>. While these substances are trace impurities, enough coal is burned that significant amounts of these substances are released.

In all the villages in the proximity of the coal mines and/or thermal power plants visited by the Fact Finding team, residents complained not only of health problems, but also of a complete lack of access to health facilities. Many women complained of being shunted between the local health facilities and the NCL Nehru Hospital, which didn't always accommodate them.

The other issue that arose repeatedly in the villages was the lack of clean water for drinking and cooking purposes, which the women claimed added further to their woes. NCL has provided Greenpeace with a report from Central Mine Planning and Design

¹http://www.ornl.gov/info/ornlreview/rev26-34/text/colmain.html

Institute Limited (CMPDI), which finds the air, water and noise pollution in the region to be below the prescribed limits. This doesn't corroborate with the CEPI data, which ranks Singrauli as ninth in its list of eighty-eight industrial blocks for which they have prepared a comprehensive pollution index. Neither does it seem to reflect the experience and testimonies we heard from the people in the region.

In fact, in a report by the Central Pollution Control Board with the help of its Zonal offices, the National Institute of Hydrology (NIH) and the Pollution Control Research Institute (PCRI) of Bharat Heavy Electricals Ltd. (BHEL) clearly indicates ground water pollution in the Singrauli region on account of coal mining<sup>2</sup>.

# THE HEALTH IMPACTS OF KEY HARMFUL SUBSTANCES PRESENT IN COAL ASH3

Antimony Eye irritation, heart damage, lung problems

Arsenic Cancer, skin lesions, hand warts

Barium Gastrointestinal problems, muscle weakness, heart damage

Beryllium Lung cancer, pneumonia, respiratory problems

Boron Reproductive problems, gastrointestinal problems

Cadmium Lung disease, kidney disease, cancer

Chromium Cancer, ulcers and other stomach problems

Cobalt Lung, heart, liver and kidney problems, dermatitis

Copper Respiratory and nervous system damage, liver disease

Lead Nervous system damage, brain damage, development and behavioural problems

Manganese Nervous system damage, muscle problems, neurological problems

Mercury Cognitive deficiency, stunted growth, behavioural problems

Molybdenum Mineral imbalance, anaemia, developmental problems

Nickel Cancer, lung problems, allergic reactions

Selenium Birth defects, impaired bone growth in children

Vanadium Birth defects; lung, throat and eye problems

Zinc Gastrointestinal and reproductive problems

Chlorides High blood pressure

Fluorides Dental fluorosis, skeletal fluorosis

Nitrates React in stomach to form carcinogenic substances

Sulphates Stimulate the gastrointestinal tract

<sup>&</sup>lt;sup>2</sup>http://cpcb.nic.in/upload/NewItems/NewItem\_47\_foreword.pdf

<sup>3</sup>http://www.atsdr.cdc.gov/toxfaqs/index.asp; http://www.lf.gov.cn/pub/htm/life/shuiwenxinxi/shuihuanjing/2006-04-24-7849.htm



# LEGAL REGULATION OF COAL MINING IN INDIA

The contents of this chapter include extracts of a legal research paper by the Alternate Law Forum<sup>1</sup> that was commissioned by Greenpeace.

This part of the report takes a bird's eye view of some of the key legal regulations and policies that govern coal extraction in India. While some of these laws emanate from the explicit mandate of enabling coal extraction, others are geared towards regulating land diversion/acquisition and compensation in case of such diversion/acquisition. These laws tend to facilitate centralised regulation and management of coal reserves in India. It is important to note that even as this report is being written, two very key pieces of legislation (an amendment to the Mines and Minerals (Development and Regulation) Act 1957, and the Draft Land Acquisition and Rehabilitation and Resettlement Bill, 2011), as well as an inter-ministerial deliberation on forest areas that are available for coal extraction ("go, no-go") are ongoing. These three issues are at the centre of this debate.

### NATIONAL MINERAL POLICY, 2008

In pursuance of the 1991 economic reforms, the National Mineral Policy was announced in March 1993. It emphasised encouraging private investment, including foreign direct investment and attracting state-of-the-art technology in the mineral sector.

In 2008, a new National Mineral Policy was introduced to further streamline and simplify the procedures for the granting of mineral concessions, developing a sustainable framework for the optimum utilisation of mineral resources, and "improving the lives of people living in the mining areas."

The lofty intent of these policies is in stark contrast to the reality of the situation on the ground, as has been detailed in earlier chapters. It is clear that the State has only favoured industry and that issues of social and environmental justice have been treated with disdain.

Singrauli is evidence that the State has operated in stark contrast to the provisions outlined in the Model State Mineral Policy (below). This model policy was intended to guide the National Mineral Policy. However, the rush to exploit mineral resources and the government-industry nexus has ensured that the provisions of this model law remain only on paper and have not been translated into reality on the ground.

### REGULATIONS RELATING TO MINING

Under the Constitution of India, both the Central Government and the State Government hold complementary powers to pass laws related to mines and minerals. Various statutes have been passed by the Central Government, a brief overview of which is given below.

<sup>1</sup>http://www.altlawforum.org/

The Mines and Minerals (Development & Regulation) Act (MMDRA), 1957 and the Mines Act, 1952, constitute the basic laws governing the mines and minerals sector in India. In addition, laws have been passed to specifically regulate the mining of coal and labour employed in the coal extraction industry. Two separate ministries have been set up under the Union Government to oversee activities in each domain<sup>2</sup>.

### MINES AND MINERALS (DEVELOPMENT AND REGULATION) ACT, 1957

The MMDRA is the main legislation governing the mines and minerals sector in India. The Act has been amended seven times since its inception<sup>3</sup> - most recently in 1999. An Act to replace the MMDRA has been drafted to overhaul the existing regime entirely, but this has yet to be passed by Parliament. Moves to ensure that communities displaced by mining get to share in the financial benefits are being countered by industry lobbies, and it remains to be seen what form this amendment will finally take.

The Act imposes a duty on the Central Government "to take all such steps as may be necessary for the conservation and systematic development of minerals in India and for the protection of environment by preventing or controlling any pollution which may be caused by prospecting or mining operations." For this purpose, the Central Government is empowered to make such rules as it sees fit<sup>4</sup>. Thus, under the Act, the obligation to develop minerals is seen as being coterminous with the obligation to conserve the environment.

There are three layers of regulations on those conducting mining operations. First, they must be in compliance with the MMDRA. Secondly, they must follow all rules laid down under the MMDRA. Two sets of rules (the Mineral Concession Rules, 1960 and the Mineral Conservation and Development Rules, 1988) have been framed under the MMDRA. Thirdly, mining operations must comply with the terms of the permit/license/lease that they have been issued. Although the Act itself is silent on environmental norms, there are fairly extensive environmental norms contained in the rules and the terms of the license.

Coal mining is predominantly the domain of the public sector. This can be traced back to the legislating of the Coal Mines (Nationalisation) Act in 1973, whereby all coal mines were nationalised. This complete exclusivity has been diluted over the years. In 1976, through an amendment to the Coal Mines (Nationalisation) Act, two exceptions were introduced. Firstly captive mining by private companies engaged in production of iron and steel and, secondly, sub-leases for coal mining were awarded to private parties. A further amendment in 1993 saw the opening up of private sector participation in captive coal mining for generation of power, for washing of coal obtained from a mine or for other end uses to be notified by Government from time to time in addition to the existing provision for the production of iron and steel. Through another notification in 1996, mining of coal for captive use for cement production has also been permitted.

As per guidance given on the Ministry of Coal website, land is mainly acquired under the Coal Bearing Areas (Acquisition and Development) Act, 1957 and in certain cases under the Land Acquisition Act, 1894. Forest land is obtained by invoking the provision of the Forest (Conservation) Act, 1980.

<sup>&</sup>lt;sup>2</sup>The responsibilities of each ministry are set out in the Government of India (Allocation of Business) Rules, 1961, as amended from time to time. <sup>3</sup>Respectively in 1958, 1960, 1972, 1978, 1986, 1994 and 1999.

<sup>&</sup>lt;sup>4</sup>Section 18, Mines and Minerals (Development and Regulation) Act, 1957



# LEGISLATIONS RELATING TO ACQUISITION AND REGULATION OF LAND

#### COAL BEARING AREAS (ACQUISITION AND DEVELOPMENT) ACT, 1957

Under the 1957 Act, coal-bearing land may be acquired by the Central Government. The Coal Bearing Areas (Acquisition and Development) Act, 1957 provides for the acquisition of land containing or likely to contain coal deposits and for matters connected therewith. Under the provisions of this Act, the land is acquired by government companies only for coal mining and activities strictly related to mining purposes. Land acquisition under this act will be subject to the provisions of the new Land Acquisition and Resettlement and Rehabilitation Bill, 2011 (in draft) when passed.

#### LAND ACQUISITION ACT, 1894

The Coal Bearing Areas (Acquisition and Development) Act, 1957 is strictly for the acquisition of land for mining purposes. When it comes to other requirements related to the mining process, such as permanent infrastructure, offices, residences and so on, land is acquired under the Land Acquisition Act, 1894. This act is perceived to be outdated and has recently even been called a "fraud" by the Supreme Court<sup>5</sup>.

#### LAND ACQUISITION AND RESETTLEMENT AND REHABILITATION BILL, 2011 (IN DRAFT)

The Rural Development Ministry is currently engaged in drafting this new Bill. In the foreword, the Rural Development Minister Jairam Ramesh wrote, "In every case, land acquisition must take place in a manner that fully protects the interests of landowners and also of those whose livelihoods depend on the land being acquired.

<sup>&</sup>lt;sup>5</sup> http://www.indianexpress.com/news/land-act-a-fraud-learn-from-gujarat-says-sc/827449/



Under our Constitution, land is a State subject but land acquisition is a Concurrent subject. So far, the basic law governing the land acquisition process has been the Land Acquisition Act, 1894. Although it has been amended from time to time, it is painfully evident that the basic law has become archaic<sup>6</sup>."

He goes on to add that, "Land Acquisition and Rehabilitation and Resettlement (R&R) need to be seen necessarily as two sides of the same coin. R&R must always, in each instance, necessarily follow upon acquisition of land. Not combining the two – R&R and land acquisition – within one law, risks neglect of R&R. This has, indeed, been the experience thus far."

This Bill is going to be a critical piece of legislation and will be the centre of heated debate and discussion in the coming days.

# OTHER RELEVANT CONSTITUTIONAL PROVISIONS AND STATUTES

Owing to the fact that coal mining is taking place predominantly in adivasi areas and scheduled areas, it would also be necessary to look at the relevant provisions of law in this regard.

#### FIFTH AND SIXTH SCHEDULE AREAS

Article 244 of the Constitution provides that the provisions of the Fifth Schedule shall apply to the administration and control of the Scheduled Areas and Scheduled Tribes in any state other than the states of Assam, Meghalaya, Tripura and Mizoram, which fall under the Sixth Schedule. The powers of the President and the Governor are vast

<sup>&</sup>lt;sup>6</sup> http://www.rural.nic.in/Final.pdf

and aimed towards protecting the interests of scheduled tribes. Further, Article 243 M states that the provisions of Part IX of the Constitution (relating to the Panchayats, their constitution, composition, duration, power, etc.) shall not be applicable to these Scheduled Areas.

In a landmark judgment in 1997, which has come to be referred to as the Samata judgment in reference to the NGO in whose name the case was filed, the Supreme Court ruled that the State had no right to grant leases - even on government-owned forest land - to private companies on areas governed by the Fifth Schedule of the Constitution and that only cooperative societies solely run by the Scheduled Tribes could mine in such areas, subject to compliance with the Forest (Conservation) Act and the Environment Protection Act. The Andhra Pradesh government was directed to stop all private mining within the Scheduled Areas<sup>7</sup>. (Annexure XX Lists the areas in the Fifth Schedule). In the 2001 case of Balco Employees Union v/s Union of India and ors, the Supreme Court restricted the scope of the Samata judgment, by disagreeing with its findings and applicability in the state of Madhya Pradesh on various grounds. The Court stated that provisions of the Constitution may only be interpreted by a bench of five judges. In the Samata case, the Fifth Schedule of the Constitution was interpreted by a bench of three judges, on majority of two to one.

## PROVISIONS OF THE PANCHAYATS (EXTENSION TO THE SCHEDULED AREAS) ACT, 1996 (PESA)

Through the enactment of the Provisions of the Panchayats (Extension to Scheduled Areas) Act, 1996, the provisions of Part IX Q of the Constitution that relate to Panchayats have been extended to Scheduled Areas.

Section 4(i) of PESA states that the Gram Sabha or the Panchayats at the appropriate level shall be consulted before making the acquisition of land in the Scheduled Areas for development projects and before resettling or rehabilitating persons affected by such projects in the Scheduled Areas, the actual planning and implementation of the projects in the Scheduled Areas shall be coordinated at the State level.

While PESA is a radical legislation, it has not been implemented as required. According to a committee appointed by the Ministry of Panchayati Raj to draft model guidelines for PESA, the problems with the legislation include the fact that suitable amendments to Panchayat-related legislations in Fifth Schedule states have not been made. State laws have generally taken advantage of the ambiguity of the Gram Sabha or Panchayat's provision and ignored the Gram Sabha in statutory provisions. The state of Madhya Pradesh made elaborate rules related to consultation with the Gram Sabha but this has not been followed adequately. Moreover, the formal responsibility of implementing the PESA rests with both the Ministry of Panchayati Raj and the Ministry of Tribal Affairs which are functioning in isolation8.

# PRINCIPLES, POLICIES AND LAWS GOVERNING ENVIRONMENT AND FORESTS

The mining of coal results in large-scale environmental damage, including deforestation, soil erosion, water shortages and pollution, coal fires and the emission of greenhouse gases. Excavation operations strip land bare, lower water tables, generate huge waste mountains and dust particles and debris. It also leads to the loss of fertile soils through erosion, while run off into nearby water bodies clogs rivers and disrupts aquatic life<sup>9</sup>.

<sup>&</sup>lt;sup>7</sup>http://www.mmpindia.org/samatha%20vs%20AP.htm

<sup>&</sup>lt;sup>8</sup>C.R.Bijoy, Shankar Gopalakrishnan and Shomona Khanna, "India and the Rights of Indigenous Peoples: Constitutional, legislative and Administrative Provisions Concerning Indigenous and Tribal Peoples in India and their Relation to International Law on Indigenous Peoples, Asia Indigenous Peoples Patc (AIPP), Chiang Mai, 2010, pp.70-71.

<sup>&</sup>lt;sup>9</sup>The True Cost of Coal, Greenpeace International, December 2008.

The Supreme Court has recognised the importance of sustainable development, which it defined as "development that meets the needs of the present without compromising the ability of the future generations to meet their own needs," 10 and has recognised the following principles as being inherent to the understanding of sustainable development and as a part of the law of the land:

#### PRECAUTIONARY PRINCIPLE

This implies that statutory authorities must anticipate, prevent and attack the causes of environmental degradation. Where there are threats of serious and irreversible damage, lack of scientific evidence certainly should not be used as the reason for postponing measures to prevent environmental depredation. The onus of proof is on the actor or the developer/industry to show that his action is environmentally benign.

#### POLLUTER PAYS PRINCIPLE

As interpreted by the Supreme Court, this means that the absolute liability for harm to the environment extends not only to compensate the victims of pollution but also to the cost of restoring the environment. If the activity carried on is hazardous or inherently dangerous, the person carrying on such activity is liable to make good the loss caused to any other person by his/her activity, irrespective of whether s/he took reasonable care while carrying on his/her activity.

#### NATIONAL ENVIRONMENT POLICY, 2006

The dominant theme of the NEP is that while conservation of environmental resources is necessary to secure livelihoods and well-being of all, the most secure basis for conservation is to ensure that people dependent on particular resources obtain better livelihoods through the conservation of that resource, rather than its degradation. Laws relating to forest areas include the Indian Forest Act, 1927, the Forest (Conservation) Act, 1980 and the National Forest Policy, 1988. Several states also have their own forest acts which reflect the spirit of the Indian Forest Act. For the purpose of this report we will essentially look at the Forest Conservation Act, which deals with the diversion of forest land, and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 which is a more recent statute and has an important bearing on the rights of local communities residing in, and dependent upon, forests.

#### THE NATIONAL FOREST POLICY, 1988

This policy emphasises forest protection and conservation. On diversion of forest lands for non-forest purposes (para 4.4), it provides that this should be subject to the most careful examinations by specialists from the standpoint of social and environmental costs and benefits. In particular it requires that mining and industrial development should be consistent with the needs for conservation of forests. It emphasises that projects involving such diversion should allocate funds for regeneration/compensatory afforestation. It also requires that no mining lease should be granted to any party, private or public, without a proper mine management plan appraised from the environmental angle and enforced by adequate machinery.

#### FOREST (CONSERVATION) ACT, 1980

Section 2 of the Act makes it mandatory for the State Government to seek the approval of Central Government before a state 'dereserves' a reserved forest; uses forest land for non-forest purposes; assigns forest land to a private person or corporation (user agency); or clears forest land for the purpose of reforestation. Since mining is a non-forest activity, the approval of the Central Government is required for any non-forest activity within the area of any forest. Section 3 of the Act introduces the Forest Advisory Committee which is to advise the Central Government on the granting of approval and other related matters. Proposals from forest land diversion are received from the State Forest Departments rather than the project authorities which are ultimately going to use the land for mining or construction of thermal power

 $<sup>^{\</sup>rm 10}\mbox{Vellore}$  Citizens Welfare Forum vs. Union of India & ors. AIR 1996 SC 2715

plants and are thereby the user agencies. The report of the Divisional Forest Officer (DFO) is an important basis on which a proposal is to be considered for forest land diversion or not based on certain appraisal parameters listed in the Forest Conservation Act.

The 12.12.1996 order of the Supreme Court in the case of T.N.Godavarman v/s Union of India, the applicability of the Forest (Conservation) Act was extended to any area that satisfies the dictionary definition of a forest, whether or not it is an officially recorded as government forest land. In many states the process of demarcating forest lands is still incomplete.

## SCHEDULED TRIBES AND OTHER TRADITIONAL FOREST DWELLERS (RECOGNITION OF FOREST RIGHTS) ACT 2006 (FRA)

The FRA, which came into effect in 2006, aims to recognise the rights of forest-dwelling Scheduled Tribes and Other Traditional Forest Dwellers. This is both in terms of right of occupation and cultivation/harvesting of forest resources.

The main rights included in the FRA are:

- 1. Right to hold and live in forest land
- 2. Right to collect and use forest produce
- 3. Right to fish and graze livestock
- 4. Right of access to biodiversity and community and the right to intellectual property related to biodiversity and cultural diversity
- 5. Traditional customary rights but excluding the right of hunting wild animals

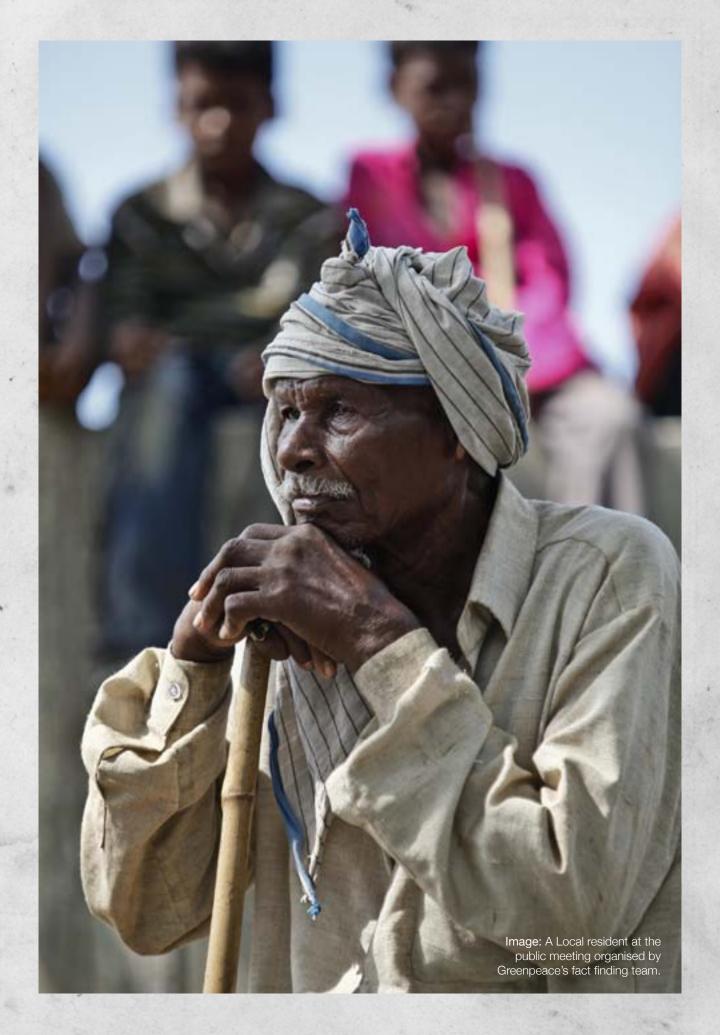
All of these apply to members of Scheduled Tribes and Other Traditional Forest Dwellers who have been resident for at least three generations prior to 13th December 2005.

As per Section 3.2 the government can clear forest land for specific purposes such as building of roads, schools, irrigation canals and non-conventional sources of energy, among others<sup>11</sup>. However, this is only provided that two conditions are met: consent of the Gram Sabha is sought and accorded, and that clearance does not exceed one hectare in each case.

While the FRA is an important piece of legislation towards ensuring the recognition of individual and community rights, there have been numerous problems with its implementation. Many state governments are yet to begin seriously implementing the Act. While the Act provides for the definition of Gram Sabha and Panchayat at both the revenue village and the panchayat level, state governments have mostly not recognised revenue villages as units of decision making under the Act, thus making it more difficult for tribal forest dwellers to represent their interests. The mandatory resolutions of the Gram Sabhas, which are a fundamental feature of the Act, have not been enforced in most parts of the country.

The Forest Rights Committee, to be elected under the Act with adequate representation of Scheduled Tribes and women, has not been constituted properly with violations both in terms of composition and the manner in which they are functioning. In many places, the functioning and role of the Forest Rights Committee is being undermined by forest officials reluctant to part with existing powers. Community rights granted under the legislation, including the right to collect, use and dispose of minor forest produce have been totally ignored so far. There have been very few examples where development projects have actually complied with the provisions of the Forest Rights Act, including obtaining the consent of the Gram Sabha<sup>12</sup>.

<sup>&</sup>lt;sup>11</sup>Complete list: a) schools; (b) dispensary or hospital; (c) anganwadis; (d) fair price shops; (e) electric and telecommunication lines; (f) tanks and other minor water bodies; (g) drinking water supply and water pipelines; (h) water or rain water harvesting structures; (i) minor irrigation canals; (j) non-conventional source of energy; (k) skill upgradation or vocational training centers; (l) roads; and (m) community centers <sup>12</sup>Council for Social Development, Summary Report on the Implementation of the Forest Rights Act, August 2010, available at www. forestrightsact.com/component/k2/item/15 accessed on 15 May 2011.



### THE FOREST RIGHTS ACT AND FOREST (CONSERVATION) ACT CONNECT:

Communication from the Ministry of Environment and Forests to all the states and union territories to ensure implementation of the FRA, 2006 dated 30.07.2009



#### F. No. 11-9/1998-FC (pt) Government of India Ministry of Environment and Forests (FC Division)

Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi – 110510. Dated : 30.07.2009

To

The Chief Secretary / Administrator (All State/UT Governments except J&K)

Subject: Diversion of forest land for non-forest purposes under the Forest (Conservation) Act, 1980 - ensuring compliance of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006.

Sir,

I am directed to invite the attention of the State Government to the operationalization of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 which has become effective from 01.01.2008. It is observed that the proposals under the Forest (Conservation) Act, 1980 are being received from different states/UT Governments with the submission that the settlement of rights under Forest Rights Act, 2006 (FRA) will be completed later on.

Accordingly, to formulate unconditional proposals under the Forest (Conservation) Act, 1980, the State/UT Governments are, wherever the process of settlement of Rights under the FRA has been completed or currently under process, required to enclose evidences for having initiated and completed the above process, especially among other sections, Sections 3(1)(i), 3(1)(e) and 4(5). These enclosures of evidence shall be in the form of following:

- a. A letter from the State Government certifying that the complete process for identification and settlement of rights under the FRA has been carried out for the entire forest area proposed for diversion, with a record of all consultations and meetings held;
- b. A letter from the State Government certifying that proposals for such diversion (with full details of the project and its implications, in vernacular / local languages) have been placed before each concerned Gram Sabha of forest-dwellers, who are eligible under the FRA;
- c. A letter from each of the concerned Gram Sabhas, indicating that all formalities/processes under the FRA have been carried out, and that they have given their consent to the proposed diversion and the compensatory and ameliorative measures if any, having understood the purposes and details of proposed diversion.



- d. A letter from the State Government certifying that the diversion of forest land for facilities managed by the Government as required under section 3(2) of the FRA have been completed and that the Gram Sabhas have consented to it.
- e. A letter from the State Government certifying that discussions and decisions on such proposals had taken place only when there was a quorum of minimum 50% of members of the Gram Sabha present;
- f. Obtaining the written consent or rejection of the Gram Sabha to the proposal.
- g. A letter from the State Government certifying that the rights of Primitive Tribal Groups and Pre-Agricultural Communities, where applicable, have been specifically safeguarded as per section 3(1)(e) of the FRA.
- h. Any other aspect having bearing on operationalisation of the FRA.

The State/UT Governments, where process of settlement of Rights under the FRA is yet to begin, are required to enclose evidences supporting that settlement of rights under FRA 2006 will be initiated and completed before the final approval for proposals.

This is issued with the approval of Minister of Environment and Forests.

(C.D. Singh) Sr. Assistant Inspector General of Forests

#### Copy to:-

- 1. The PMO (kind attention: Director, PMO)
- 2. Secretary, Ministry of Tribal Afffairs, Shastri Bhawan, New Delhi.
- 3. The Principal Chief Conservator of Forests, All States / UTs.
- 4. The Nodal Officer (FCA), O/o the PCCFs, All States / UTs.
- 5. All Regional Offices of MoEF located at Bhopal, Shillong, Bangalore, Bhubaneshwar, Lucknow and Chandigarh.
- 6. The RO (HQ), MoEF, New Delhi.
- 7. Monitoring Cell, FC Division, MoEF, New Delhi for placing the same on the website of the MoEF.
- 8. Guard File.

(C.D. Singh) Sr. Assistant Inspector General of Forests



#### WILDLIFE PROTECTION ACT, 1972

This was enacted to protect wild animals, birds and plants. It provides for the notification of areas as national parks and sanctuaries, which then are subject to restrictions on land use. The Act empowers the State Government to declare areas sanctuaries or national parks, if it considers them to be of adequate ecological, faunal, floral, geomorphological, natural or zoological significance, for the purpose of protecting, propagating or developing wildlife or its environment.

The laws presently in place to prevent or minimise pollution include the umbrella legislation of the Environment Protection Act, 1986 and the rules thereunder; the Air (Prevention and Control of Pollution) Act, 1981; and the Water (Prevention and Control of Pollution) Act, 1974. Details of these laws are given below.

#### ENVIRONMENT PROTECTION ACT, 1986 AND THE RULES THEREUNDER

The Environment Protection Act serves as an umbrella legislation to provide a framework to coordinate the activities of various central and state authorities established under previous laws to protect the environment. It also empowers the government to set standards for protecting and improving the quality of the environment as well as preventing, controlling and abating environmental pollution and taking appropriate measures to ensure the maintenance of these standards. This includes the power to restrict and stop industries, operations and processes that are being carried out in ecologically sensitive areas.

For the abatement of the pollution problems associated with coal mines, the Central Pollution Control Board has developed the National Environmental Standards and Code of Practice, which are under consideration of the Ministry of Environment and Forests for notification under the Environment (Protection) Act, 1986. It is under this law that the Environmental Impact Assessment (EIA) notifications, dated 1994 and 2006, were brought about. These make it mandatory for new projects or activities to obtain environmental clearance before they may commence. This includes the mining of minerals.

As per the Environment Impact Assessment (EIA) notification, 2006 (earlier 1994), activities such as mining, power generation, construction of roads/highways and the setting up of various kinds of industrial projects need to be preceded by a process of assessing potential environmental impacts. This process includes putting into place a terms of reference, conducting a Environment Impact Assessment (EIA) and carrying out a public consultation process which includes a public hearing and seeking written responses. It is only after this that the completion of these mandatorysteps and the appraisal of project documents by a thematic expert committee that a project is granted environmental clearance and construction can begin.

Since 2006, all coal mining projects between five and fifty hectares of mining lease area are classified as category B projects, to be appraised at the state level by the State Environment Impact Assessment Authority (SEIAA). All projects with mining leases above fifty hectares are Category A projects and are appraised by the Ministry of Environment and Forests through its expert appraisal committees (EACs).

With regard to thermal power plants, any plant with a capacity greater than 500 MW is Category A and requires central level clearance, and any below 500 MW is Category B and requires SEIAA approval.

A mine or a plant fitting the specifications of Category B will be treated as Category A if located in whole or in part within ten kilometres from the boundary of:

- (i) protected areas notified under the Wild Life (Protection) Act, 1972,
- (ii) critically polluted areas as notified by the Central Pollution Control Board from time to time,
- (iii) notified eco-sensitive areas,
- (iv) inter-state boundaries and international boundaries.

## AIR (PREVENTION AND CONTROL OF POLLUTION) ACT, 1981 AND THE WATER (PREVENTION AND CONTROL OF POLLUTION) ACT, 1974

These Acts provide for the prevention, control and abatement of air and water pollution. They also confer powers on the pollution control boards to ensure the control and abatement of pollution and to set standards and prescribe rules to manage pollution.

#### THE NATIONAL GREEN TRIBUNAL ACT, 2010

This provides for the establishment of a National Green Tribunal for the effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources. According to Section 14, the Tribunal has jurisdiction over all civil cases in which a substantial question relating to environment (including enforcement of any legal right relating to environment) is involved, and such question arises out of the implementation of the enactments in Schedule 1. These include the Water (Prevention and Control of Pollution) Act, 1974, the Water (Prevention and Control of Pollution) Cess Act, 1977, the Forest (Conservation) Act, 1980, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, the Public Liability Insurance Act, 1991 and the Biological Diversity Act, 2002. This sets into place a forum for redressal, applicable to both coal mines and related power generation and infrastructure activities, subject to the violations and jurisdiction of the above mentioned laws.

### ANNEXURE XX: FIFTH SCHEDULED AREAS

#### STATE AREAS

#### Andhra Pradesh

Visakhapatnam, East Godavari, West Godavari, Adilabad, Srikakulam, Vizianagaram, Mahboobnagar, Prakasam (only some mandals are scheduled areas)

#### **Jharkhand**

Dumka, Godda, Devgarh, Sahabgunj, Pakur, Ranchi, Singhbhum (East&West), Gumla, Simdega, Lohardaga, Palamu, Garwa, (some districts are only partly tribal blocks)

#### Chattisgarh

Sarbhuja, Bastar, Raigad, Raipur, Rajnandgaon, Durg, Bilaspur, Sehdol, Chindwada, Kanker

#### **Himachal Pradesh**

Lahaul and Spiti districts, Kinnaur, Pangi tehsil and Bharmour sub-tehsil in Chamba district

#### Madhya Pradesh

Jhabua, Mandla, Dhar, Khargone, East Nimar (Khandwa), Sailana tehsil in Ratlam district, Betul, Seoni, Balaghat, Morena

#### Gujarat

Surat, Bharauch, Dangs, Valsad, Panchmahl, Sadodara, Sabarkanta (only parts of these districts are included)

#### Maharashtra

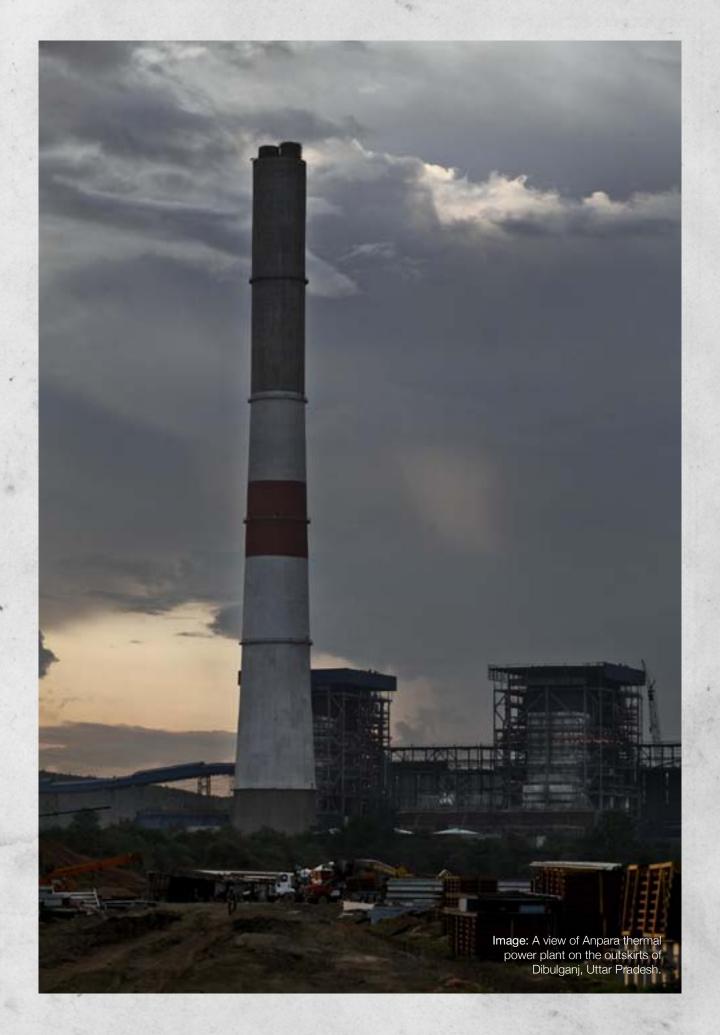
Thane, Nasik, Dhule, Ahmednagar, Pune, Nanded, Amravati, Yavatmal, Gadchiroli, Chandrapur (only parts of these districts are included)

#### Odisha

Mayurbhanj, Sundargarh, Koraput (fully scheduled area in these three districts), Raigada, Keonjhar, Sambalpur, Boudhkondmals, Ganjam, Kalahandi, Bolangir, Balasor (only parts of these districts are included)

#### Rajasthan

Banswara, Dungarpur (fully tribal districts), Udaipur, Chittaurgarh, Siroi (partly tribal areas)



# RECOMMENDATIONS

### LAND ACQUISITION AND REHABILITATION

- Land acquired under the Coal Bearing Areas (Acquisition and Development) Act of 1957 for purposes of resettlement and rehabilitation is unjustified. The people resettled in land acquired under this Act have not been given full rights to the land. This people allotted merely awasi pattas (right to live on land) must be given ownership of their land.
- Land being acquired under the Coal Bearing Areas (Acquisition and Development) Act, 1957, only provides for a one-time settlement and a promise of employment to every person recognised to be affected by the project. This does not include persons who do not own land, and so fails to compensate families who depend on this land for loss of livelihood. This anomaly must be corrected in the new Land Acquisition and Resettlement and Rehabilitation Bill, currently in draft. No land must be acquired until community rights are legally recognised and included in any proposed settlement packages.
- There must be a process to seek the free, prior and informed consent of the communities being displaced. This must include providing the communities with accessible and adequate information and holding a genuine and open public consultation. People have a right to be informed in detail about the proposed project and the impacts it poses for their lives.
- People have a fundamental right to freedom of expression and peaceful assembly and this should not be suppressed by the police. Communities voicing their dissent should not be intimidated, insulted and assaulted.
- The issue of livelihood of affected communities has remained fundamentally unanswered in Singrauli for decades. People are resettled in an urban pattern, which is completely unsuitable for tribal communities and agriculturists. Monetary compensation for land has been the only type of compensation offered. The administration needs to look at giving people a genuine option of maintaining their earlier livelihoods by introducing a land-based compensation system, through which agricultural land acquired is replaced by agricultural land elsewhere.
- The district administration should continuously and adequately monitor resettlement and rehabilitation packages to ensure their proper implementation. If there is any discrepancy, the private company and or the public sector undertaking should be made accountable and penalised for these lapses.
- Northern Coalfields Limited should urgently review their existing resettlement and rehabilitation policy to include and protect the employment rights of landless people, or people who have less than two acres of land, amongst the project-affected communities.
- There must be a comprehensive human rights impact assessment of the mining and industrial projects in the region undertaken by a competent body. The recommendations of this assessment should be made to inform the development



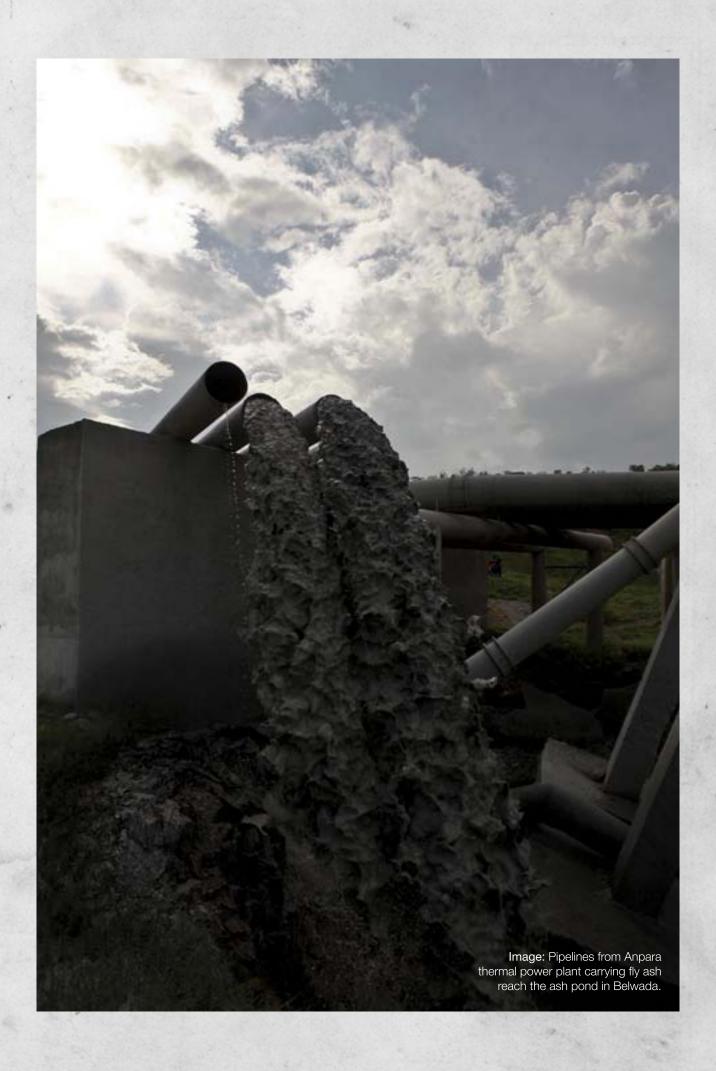
of any future policy on land acquisition and resettlement and rehabilitation. It should also lead to action on the ground to address the grievances of the people whose land has already been acquired, but to whom only inadequate or incomplete resettlement has been extended.

- When offering jobs to displaced families, a fair gender balance needs to be maintained by employing women for at least half of the work force.
- The people displaced often do not have the required skills to find employment. The district administration should ensure that companies displacing people undertake initiatives to build the technical capacities of those people, so that it is easier for them to find suitable jobs.

# ENVIRONMENT, POLLUTION, HEALTH, FOREST RIGHTS AND FOREST DIVERSION

- There should be a moratorium on all new mining in forest areas in the Singrauli region until coal availability in other areas and alternative energy solutions are assessed. Destruction of further forest areas should not be allowed when alternatives exist. There is a need for integrated energy planning to examine the solutions available and to pick the energy pathway that is most sustainable.
- Given the experience of the Singrauli region, it would seem wise to institute a moratorium on new mining in forest areas in all coal fields until a similar options assessment has been carried out.
- State Governments should ensure that the recognition of forest rights has been carried out for the entire area proposed for diversion. This must include community rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006, or FRA. No forest land should be diverted under the Forest (Conservation) Act without also complying with the Forest Rights Act.

- The process outlined in the communication issued by the Ministry of Environment and Forests on the 30th of July 2009 (with respect to diversion of forest land under the Forest (Conservation) Act see Legal Regulations chapter) to ensure compliance with the FRA, should be followed in letter and spirit by state governments. Diversion of forest land where this has not been done should be considered null and void.
- Clearly, some forest areas must be declared permanently off-limits to mining, based on their importance to local communities, role in water recharge, biodiversity values and other crucial criteria. Greenpeace is calling for a multi-sectoral process to assess the "no-go" zones for mining on this basis. The current zones demarcated as off limits on the basis of forest density can be a starting point for this exercise, but parameters must be broadened to include the criteria mentioned above.
- These "no-go" zones for mining should be the first step to a more rational resource use: one that protects India's forests, forest-dependent communities and wildlife. However there should be no dilution of existing legal and regulatory regimes (FCA, FRA, PESA, EPA and others see Legal Regulations chapter for more details).
- "No-go" zones must have a degree of permanence via law, so that they cannot be easily reversed.
- A process of public and expert consultation should be initiated by the chairperson of the Group of Ministers discussing this issue, to enhance participation and ensure that environmental and social concerns are truly reflected.
- There should be immediate action to address the negative environmental and health impacts of the mining and industry operations in Singrauli region.
- There should be immediate action to ensure that the pollution of Rihand Reservoir by the Anpara ash pond is stopped, and any further pollution prevented. There should also be a detailed study of contamination levels in local water sources in response to the health issues that are being reported. Remediation and compensation measures must then be instituted. The polluter(s) must be held liable.
- The community should be able to access information on the pollution in the area and its associated risks and should also have a role to play in being able to identify polluters.
- A health survey needs to be conducted in the areas of Singrauli impacted by operation of thermal power plant and mining. The companies that govern these activities should be held accountable to provide medical assistance free of cost to the affected people.
- There needs to be monitoring of the Comprehensive Environmental Pollution Index, CEPI, on a regular basis to ensure that additional industries and mining operations in Singrauli are forbidden unless the mitigation plans proposed by the state pollution control boards are effective in pollution abatement and ensuring that the index is within safe limits.
- Thermal power plant approvals will not be given till coal linkage has been established and approval for that is sought first with complete disclosure of ancillary activities like water, road, rail etc.
- For each forest area proposed for clearance, there should be an independent and comprehensive assessment of the biodiversity, hydrological status and other relevant qualities of that area to understand the impact its deforestation would have, before mining permission is given.
- Given the experience of the Singrauli region, a similar independent and comprehensive assessment must be carried out in all identified major coal fields, to ensure that lessons are learned and the mistakes of Singrauli are not repeated elsewhere in India's coal bearing regions.



Greenpeace is a global organisation that uses non-violent direct action to tackle the most crucial threats to our planet's biodiversity and environment. Greenpeace is a non-profit organisation, present in 40 countries across Europe, The Americas, Asia and the Pacific.

It speaks for 2.8 million supporters worldwide, and inspires many millions more to take action every day. To maintain its independence, Greenpeace does not accept donations from governments or corporations but relies on contributions from individual supporters and foundation grants.

Greenpeace has been campaigning against environmental degradation since 1971 when a small boat of volunteers and journalists sailed into Amchitka, an area north of Alaska, where the US Government was conducting underground nuclear tests. This tradition of 'bearing witness' in a non-violent manner continues today, and ships are an important part of all its campaign work.



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