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Engendering Mining Communities: Examining the Missing Gender Concerns in Coal Mining Displacement and Rehabilitation in India

NESAR AHMAD AND KUNTALA LAHIRI-DUTT

Forced displacement by development projects seriously affects the well-being of communities, revealing mixed and varied outcomes. Although scholars and policymakers have recognized the need for new forms of interventions, gender aspects of displacement and rehabilitation remain mostly unexamined in the empirical literature, which largely assumes that women's and men's experiences of displacement and rehabilitation processes are similar. Consequently, rehabilitation policy remains largely gender-blind, insensitive to the differential impacts upon and diverse concerns of women and men affected by development projects. Seeking to fill this knowledge gap, this article brings into focus how the restructuring of state-controlled coal mining in the regions of Jharkhand in Eastern India and the resulting displacement of local communities, including adivasi (indigenous) communities, affect women in gender-specific ways. Displacement from the original habitations often means not only the physical relocation but also the loss of livelihoods derived from the subsistence resources offered by the local environment. For women in these communities, the value of these resources cannot be overstated. This article argues for a refocus of policy debates on displacement and rehabilitation in ways that can engender the meaning of 'the community' and offer a gender-specific appreciation of issues regarding resource control and livelihood.

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Introduction: Development and Displacement

The last two decades have witnessed an enormous increase in the number of internally displaced people in the countries of South Asia, with eviction of indigenous people from their lands a recurrent theme in many development projects. In India, no reliable numerical figures are available on the total number of displaced people (DPs, also known as Project Affected People or PAPs), especially in mining-related displacement.¹ Mineral reserves, still seen as 'endowments of nature', form the basis for the accumulation of national wealth, and are different from each other in their geological occurrence and hence methods of extraction. Minerals are often spread over large tracts, and therefore cut across multiple administrative units. Even with coal, which comes under a central administration, the state-owned mining company Coal India Limited (CIL), the project-oriented nature of mining operations makes it difficult to obtain any reliable data on displacement caused in extracting the resource.² Whilst the numbers of internally displaced people has raised alarm (see Banerji et al., 2005), state-controlled coal mining and the displacement of *adivasis* have attracted less attention from scholars than either big dam projects³ or the forest question,⁴ despite their largest segment of inhabitants being from various indigenous groups. This neglect might be because of the remoteness of mineral-bearing tracts, and the project-to-project nature of mines. Unlike large dam projects, mining projects are in scattered locations in remote and rural areas and have short gestation periods beginning with exploratory surveys to the point of project construction. Consequently, displacement caused by large coal mining projects, in areas of aggressive mining expansion in eastern India including the state of Jharkhand, often funded by international donor agencies such as the World Bank, has raised serious questions of accountability in the neoliberal development agenda (see Dias, 2005 for more on the role of the World Bank). The ever-expanding and encroaching coal mines in recent years have been responsible for the displacement of a significant number of indigenous populations in India and their impacts have been disastrous for both women and men of these communities (as recorded in our Oral Testimony Project; see Lahiri-Dutt, 2002).

The consequences of individual mining projects vary with local circumstances, but the common features in eastern India are general pauperization, the impoverishment of communities and the feminization of that poverty. Displacement of local communities in the name of national interest by mining development projects continues to adversely affect both

women and men in local communities (Mallik and Chatterji, 1997). Displacement has an undermining influence on social bonds and cultural roots of the entire community, with devastating and disruptive effects on the lives of women living at a subsistence level. The economic and socio-cultural consequences of displacement are traumatic. When communities are forced to leave the land that they have lived on for generations, they not only lose farming land but are also deprived of the forests, waters in ponds, streams and springs, and grazing lands on which their life was dependent. The social bonds that existed between individuals are ruined, and there is often a lack of trust in rehabilitation colonies among those who have been displaced and resettled. This is only the physical displacement, involving relocation of the community. There is, however, yet another process at work—that of the inevitable ‘secondary’ displacement, with its short-and-long term impacts such as the loss of commons, decay of agriculture and displacement of peasantry, all eroding the livelihood bases of the community.⁵ Physical removal from the original place of residence—primary dislocation—has complex outcomes and is more visible and measurable; displacement from access to local natural resources and resource-based traditional occupations happens imperceptibly over a longer duration of time and leads to the complete destruction of livelihood bases.

The effects of displacement are not gender-neutral, given that women and men have well-demarcated gender roles in indigenous communities, and that the impacts of mining on women and men are not the same. Wherever an entire community suffers from the losses of environmental resources, women suffer most. This is because the gender roles of women and men in poor communities are different from those in the higher classes; women in poor communities are primarily responsible for collecting the subsistence resources that build up the family’s overall livelihood. In indigenous communities, the status of women in some productive systems is not unequal to that of men, but at the same time they remain responsible for collecting the essentials for subsistence: food, fodder, fuel and water (Agarwal, 1992). This gender division of labor makes women still more dependent on resources offered by the local environment (Leach, 1992). Often, these chores and responsibilities are not written in law, and do not translate into better status or more power over decision-making. Indian women, especially those living in villages, do not have legal rights over land, and are rarely the titleholders.⁶ The compensation process usually assumes the adult man as the head of household, and fails to consider the needs and requirements of women. Compensatory jobs, if any, also go usually to men and women have to go back home or look for wage labor

work outside (Fernandes, 1998; Ganguly-Thukral, 1996). In such circumstances, where only men are seen as legitimate wage earners, women who are left in the community to care for children while their husbands are away can find themselves overwhelmed with new responsibilities. The resettlement and rehabilitation (R&R) process has continued to remain a gender-blind⁷ interventionist measure primarily looking at housing and other such practical needs of communities. As noted by Kumar (2005), the time has come for the Indian R&R policy to incorporate recent feminist arguments and approaches arising out of empirical research and social activism. The governmental approach to R&R has so far remained 'management oriented' (for more on this approach, see Mathur, 2006), whereas the NGO sector has put up major resistances against such displacement (see, for example, <http://www.minesandcommunities.org/Mineral/women4.htm>). The policies related to R&R⁸ have no provision for women-headed households, widows without adult sons, or for adult daughters of the family. This article intends to offer results from a recent survey by way of putting a strong case for making R&R policy processes more gender-sensitive.

Place and Displacement

With all the attention now on 'place' in the days of globalization, displacement due to neoliberal development has received less attention from scholars. Some experts have suggested that we need to redefine 'development' itself and create an alternative paradigm. According to Tulpule (1996: 2992),

Vast segments of our population have been entirely left out of this development. Worse still, hundreds of millions of the poorest and most downtrodden of our citizens are being forced to pay the cost of this development through ejection from their homes and lands, deprivation of the resources of their livelihood such as land, water, jungles, fisheries, etc., spreading unemployment among organised industries and marginalisation of small industries and craftsmen.... At the other end, a small segment of the society which is the main beneficiary of this development amasses vast wealth and political power and indulges in obscene conspicuous consumption.

Looking at the issue of displacement from an operational point of view, de Wet (2001) has noted that not everyone can win, given current political

realities and power differentials, logic and the bureaucracy of planning and implementation, funding and decreasing options offered to people who are being moved against their will. Social scientists such as Muggah (2003) have theorized displacement in broader terms of political economy of development, blurring the boundaries of simplistic categories such as internal displacement and involuntary resettlement.⁹ Muggah argues that a closer analysis of supposedly distinct categories such as 'displacement due to conflict' and 'displacement due to development' may reveal similarities and negate distinctions between the two.

It is generally assumed by the media, politicians and the educated middle class that all people benefit from a development project. However, many of these mining projects have historically excluded indigenous people, and especially women of these groups, from the social and economic benefits they produce, whether it is from the jobs due to a lack of skills, or from decision-making processes due to a lack of formal education, or from accessing profits generated from the mineral revenues due to a lack of ownership and control over land and water. As communities are burdened with the negative impacts, such as the loss of traditional livelihoods, environmental degradation and social and economic instability after mine development, the gender dimensions of livelihood reconstruction become an important area of inquiry for comparison and learning.

One perspective in contemporary literature on displacement suggests that gender assessment is a useful planning tool that can be incorporated into all aspects of project analysis, design, implementation and monitoring (Kolhoff, 1996; Kuyek, 2003; Overholt, 1991). Legislation should make it mandatory to conduct impact assessment of the project from the gender perspective to reveal how the prescribed social roles for women and men are affected in a development project, requiring proponents of projects to conduct a gender assessment, as well as the development of 'good practices' to guide the assessment (Archibald and Crncovich, 1999).

Another view is that gender cannot be grafted onto existing planning traditions, and that gender concerns require their own separate tradition (Moser, 1993). Young (1993) argues that incorporating a gender assessment into the current process may fail to acknowledge the complexity of gender inequalities within society. She proposes development of separate principles in combination with state, community and family level initiatives. Yet, scholars feel that the inclusion of gender and women as factors to be examined in a social assessment may not result in any significant changes in the way companies and governments respond to the findings

or to the specific problems that emerge for women and families (Overholt, 1998: 25). Manchanda (2004: 4179) argues that in gendering displacement, one must be wary of 'infantilisation' of women. For her, 'The contemporary image of the forcibly displaced, the refugee and the internally displaced, fleeing life and livelihood threatening situations, is a woman usually with small children clinging to her.' Thus, we see that the mine development policies are insensitive to gender roles and responsibilities, or clearly discriminate against women either by completely ignoring their needs and/or infantilizing them.

Displacement, forcible eviction and dispossession are undeniable realities of life in the coal mining regions of India. Large-scale acquisition of land is the most important driver of this displacement; the Indian constitution, courts and government justify themselves in the name of 'public good', as evident in the following statement of the Supreme Court:

The power to acquire private property for public use is an attribute of sovereignty and is essential to the existence of a government. The power of eminent domain was recognized on the principle that the sovereign state can always acquire the property of a citizen for public good, without the owner's consent.... The right to acquire an interest in land compulsorily has assumed increasing importance as a result of requirement of such land more and more everyday, for different public purposes and to implement the promises made by the framers of the Constitution to the people of India.

The imagined 'public' in these ideologies does not clearly include women in displaced communities as valid and able citizens. The 'eminent domain' concept that the Indian Constitution follows gives 'the highest and most exact idea of property remaining in the government, or in the aggregate body of the people in their sovereign capacity.'¹⁰ This concept is the primary mover of the infamous Land Acquisition Law, enabling the state to dislodge indigenous communities from their homes. In Jharkhand, the Coal Bearing Areas Act (CBAA) supersedes the non-transferability of indigenous lands that is also enshrined as a legal instrument. Over the last three decades of extensive mining development, the power of the state has led, not only to involuntary and forced displacement (Fernandes and Thukral, 1989), but also to dispossession through the destruction of livelihoods of entire communities, turning humans into faceless Project Affected People (PAPs). The process of change has been aided by immigration, through the erosion of local environmental resources, through

dereliction of the lands that have traditionally provided subsistence resources, through poor implementation of national safeguards and the neglect of international guidelines of care, and through stripping communities of customary rights, many of which are not formalized in law.

Robinson's 2002 work put the question of development and displacement of indigenous peoples in the domain of migration, following some previous approaches to environmental refugees. Colchester (1995) raised questions of the implications of indigenous people's rights in the context of sustainable resource use. He noted that tensions between local claims to own and control land and a national development policy which excludes indigenous peoples from the process have reached a high level: 'the three central claims are: the right to ownership and control of their territories, the right of self-determination, and the right to represent themselves through their own institutions' (p. 61). Political scientists such as Ivison et al., (2000) describe the political theory of rights; the local community must have rights over local natural resources, and this is the principle of 'primacy of rights.' A 'right' gives the holder authorization to use resources from a particular source and includes the particular social privileges and obligations associated with that right (see Zwarteveen and Meinzen-Dick, 2001, in the context of water rights). The legitimacy of right-holders' claims is linked to social relations of authority and power. However, there are significant differences between various kinds of rights; for example, between user rights and ownership rights such as those customary uses of *gair majurwa* lands (Lahiri-Dutt et al., 2004). Another strand of thought in this set is that of 'conflicts' of interests between those of the state/mining companies and local indigenous communities (Ali, 2003).

One major characteristic of the displaced population is that most of them do not have significant amounts of property or assets; they are generally landless or marginal farmers coming from poor families of Scheduled Caste and Scheduled Tribe communities which form the lowest strata of society. According to an estimate by the Commissioner of ST and SC, over 40 percent of those displaced up to 1990 came from these communities, even though the tribal people make up only 7.5 per cent of India's total population.¹¹ These are big numbers, but at the time of this study, the Government of India did not have any national R&R policy.¹² Some of the state governments and selected public sector companies, whose operations displace people on a large scale, for example Coal India Limited (CIL, 1994) and National Thermal Power Corporation (NTPC, 1993), have their own rehabilitation policies, but these are barely ever implemented. However, the rehabilitation of displaced people in

the country continues to remain gender-blind, and neglects to take up the welfare of women in the displaced communities as an essential part of the rehabilitation process. This is probably because rehabilitation is not perceived by these companies as an intrinsic human right of DPs. Pressures from external funding agencies like the World Bank (as in the case of CIL) or the concern to complete the project on time (as in the case of NTPC) remain greater incentives in designing R&R policies.

The laws that are instrumental in land acquisition, such as the Land Acquisition Act and Coal Bearing Areas (Acquisition and Development) Act, have no provisions for rehabilitation, and only compensation for land is adequately considered in those acts.

The Scene of the Survey

The lack of gender-based information and the top-down approach to the issue of R&R encouraged us to take our project into the local domain, amongst the displaced communities in one chosen area of eastern India where women and men have traditionally performed different roles, and reveal how women are affected differently than men by displacement. This article is based on a study conducted in the Hazaribagh and Chatra districts in Jharkhand, India, in 2001. The objective is to contribute to developing a gender-sensitive Resettlement and Rehabilitation (R&R) policy in India. First, we present an assessment of the losses incurred by the families of the selected women and the impacts upon women, and in the final part evaluate the impact of the company's efforts to restore the incomes and livelihoods of the women and their families. Jharkhand, literally meaning 'the land of forests' (*Jhar*—forests or jungle, and *Khand*—land including hills and plateaus), was constituted in 2000 as a separate state of India. The Jharkhand state is co-extensive with the Chotanagpur plateau, the Singbhum hills and the Santhal Parganas with 18 districts of the erstwhile Bihar state. The land comprises a complex geological structure with old erosional surfaces that were once covered by forests that have now become degraded dry deciduous and scrub jungles. Innumerable stream channels, many of which come to life only during the monsoons, dissect the region. The hills and river valleys of Jharkhand have been inhabited by a large number of autochthonous communities—the *adivasis* or indigenous peoples, identified by the constitution of India as Scheduled Tribes—having a wide variety of cultures and economies. These communities have lived in this land for many generations, tilling the land in

small clearings or gathering food from the forests, hunting and fishing or practicing crafts for a living. They maintain distinct forms of kinship, language, religion, art and aesthetic systems through ordinary day-to-day practices, expressed in the long history of their struggle to maintain self-identity.

Jharkhand is now one of the fastest-growing states of India. The industrialization process, which began in the mid-19th century, depended heavily on mineral exploitation. The working of Jharia, Bokaro and Karakpura coalfields began in 1856, and in recent decades the region has been one of the favorite destinations of mining, power, irrigation and other large industrial projects. Ekka and Asif (2000) estimate that in total, 1,495,947.04 acres of land were acquired for development projects during the period 1950–90, and these projects have displaced 1,503,017 people during the same period. Of the various projects, coal mining is one that continues to displace thousands of people.¹³

For the purpose of studying the gendered impact of displacement on women, we interviewed 46 randomly chosen women displaced by coal mines, with the help of two local non-governmental organizations, Prerana Resource Centre and Chotanagpur Adivasi Seva Samiti. Although our study population was only a small fraction of the total number of displaced women, we believe that they represent the suffering and trauma of mining-induced displacement for women in such communities in general. These participants, 46 in total, from two districts, Hazaribagh and Chatra, comprised of Scheduled Castes¹⁴ (SC—26, 57 percent), Scheduled Tribes (ST—15, 33 percent), Other Backward Castes (OBCs—3, 7 percent), and Muslims (2, 3 percent). The lives of these women, before the advent of mining and displacement, were based on agriculture and the collection of produce of the forests. All but two of the women were illiterate. Of the 46 women, 37 were married, eight were widows, and one unmarried. Their ages ranged from 16 to 60 years, with an average age of 35 years.

Four major mining projects were responsible for displacing these women: Parej East OCP (Open Cut Project) in Hazaribagh district, Ashoka OCP, Piparwar OCP in Chatra district of the operation of Central Coal Limited (CCL), a subsidiary of public sector Coal India Limited (CIL), and a private company Tata Iron and Steel Company (TISCO). The largest number of our research participants came from Parej East (24), followed by Piparwar (15), Ashoka (6), and TISCO (1).

The impacts of displacement have focussed around six indicators: homelessness, loss of livelihood, marginalization and food insecurity,

ill health, psychological stresses, and social and cultural disintegration. These indicators are based on Cernea's (2000) important work suggesting an 8-point risk model to understand the impact of involuntary displacement on people and our observations during the fieldwork.

Impacts of Displacement on Women

Homelessness

Almost all the women surveyed had lost their homes to the mining projects and, at the time of interview, about 30 percent of them were living in temporary huts, some already for as long as ten years. The temporary homes included CCL's miners' quarters and guards' rooms (called 'bar-racks'), and relatives' homes. Many of the homes are built of raw materials that have to be procured from the market at a price, and hence have fallen into disrepair. Toilets and other sanitary facilities are almost always absent from these houses. Taking shelter in relatives' houses has at times caused ill feeling amongst kin, leading to an overall loosening of the social fabric.

Loss of Livelihood

Of the total number, 90 percent of the women lost the agricultural lands owned by their families to the mining projects (Figure 1). However, only 17 of them had accurate knowledge about the size of the land lost. This fact of minimal awareness of one's possessions itself illustrates the low status of women in the family and society.

Figure 1
Awareness of Land Lost

<i>Awareness of Land lost</i>	<i>No. of Women</i>	<i>Percentage</i>
Had no land	4	9
Had land but do not know how much	21	45
Know how much land was lost	17	37
Not available	4	9
Total	46	100

For women who knew how much land they had lost, the average was around 5.30 acres of revenue land per family (Figure 2). This high average is due to the fact that these women (who were aware) came from slightly

better-off families. However, most of the land that was lost was in fact *gair majurwa* land, meaning land without proper legal papers or a deed. Often people use these lands as community pastures or for farming as a matter of tradition, but these *de facto* details are not recorded in government books. Consequently, no one in the villages was compensated for the lost *gair majurwa* land. However, the importance of these commons to the women of local communities as a source of subsistence resources cannot be overstated. Similarly, natural water sources such as springs that do not belong to any particular individual but provide water to all the families in the communities, were not compensated for.

Figure 2
Size and Type of Land Lost (of those women who knew)

<i>Type of Land</i>	<i>Number of Families</i>	<i>Average Loss per Family (acres)</i>
Revenue land	17	5.3
Ghairmajarua-khas	9	7.3
Ghairmajarua-aam	4	9.6

Most of the women were engaged in farming of one sort or the other before displacement (Figure 3). They also worked in forests to collect forest produces. After displacement, they lost the earlier work on fields and in forests, and now only 63 percent women reported to be working at all, as compared to the 90 percent, working earlier. The forest-work done by women earlier was not paid work but it provided these communities with many forest produces. Mahua was one of the most important forest produces collected by the families. The families had their own mahua trees as well as common trees which were lost to the mines. Mahua is a flower which is dried in the sun and is kept for later use. Often collection involves the whole family, with women and children playing the major role. Mahua is used mainly for making liquor, but is also used as a food item. The families used to sell collected mahua to earn money. The forest provided a range of other products used as food and medicine which were not available, or available in very small quantities, after displacement.¹⁵ Firewood was also collected by almost all families, and was sold by some to earn money. But since the women had been relocated to places away from the forest, it was not possible for them to collect these produces. The mining activity has also destroyed forest resources. Most of the mining done uses the opencast method, which destroys everything on the land.

Figure 3
Work Done by Women (before and after displacement)

Work	Before Displacement				After Displacement			
	1st	2nd	3rd	Total	1st	2nd	3rd	Total
Agriculture	30	5	6	41	6	3	3	12
Forest	9	29	1	39	13	9	3	25
Wage or farm laborer	1	2	6	9	1	3	2	6
Liquor making	0	4	1	5	1	0	1	2
Coal collection	0	1	1	2	4	2	0	6
Other	1	0	12	13	4	4	2	10
Total	41	39	27	–	29	21	11	–

Note: 1st, 2nd and 3rd indicate the first, second and third main income-generating occupation of the respondents, as told by them.

Marginalization and Food Insecurity

Entire families were pauperized after displacement from their original homes and consequent separation from the local environment. Their land and trees were lost, the number of animals they reared went down, and the number of families owning animals declined sharply. Their access to common land and forest trees was lost or the forest declined after mining. Leaves and flowers of different trees were used as vegetables and their fruits eaten; some roots and leaves were used for treating fevers and arthritis. In particular, the loss of *mahua* trees was a big setback for the families. *Mahua* flowers are used for many purposes. Families eat dried and processed *mahua* in many ways. Most importantly, *mahua* is used to make a local alcoholic drink which is of great importance to the indigenous people. Women made and sold *mahua* to earn cash for their other needs. *Dori*, the seeds of *mahua* trees, would be crushed to get oil, which was used to make food and for applying to the body. Compensation given for the loss of trees was nominal, with no provision of compensation for trees on common lands or the trees in forests. Thus, food security deteriorated significantly after displacement. Families lost their land with *mahua* and other trees, resulting in 39 families reporting negative changes in their eating habits. Traditional agricultural produces like *mahua*, corn, *bajra* and pulses are consumed less frequently after displacement. The consumption of these staple cereals declined sharply for about two-third of the families. Rice and wheat replaced these cereals, as these food items were available in the market, clearly indicating the entrance of a cash-based economy in which indigenous women are at a disadvantage. Since women have become jobless and now live in their homes doing

household chores, they have much less access to money. In other words, whatever cash flow there is after displacement due to (for example) the compensatory job, is in men's control. In the earlier system with lesser cash flow, women had access to and a level of control over the sources of food itself, such as agriculture and forest products. This gave them a certain level of security in terms of food in spite of their unequal status in society.

Families' consumption of vegetables, pulses, meat, eggs and fish also declined sharply, as evidenced by the fact that 52 percent, 54 percent and 26 percent of the women reported that they would in the past consume pulses, vegetables and eggs/meat/fish respectively, seven days a week, before displacement. After displacement, these percentages fell to 4 percent, 13 percent and 0 percent respectively. In contrast, the percentages of those who said that they rarely consume these items increased from 22 percent to 24 percent, 28 percent to 33 percent and 23 percent to 39 percent respectively. Meat, fish and eggs were earlier available as most of the families used to have animals like goats, chickens, pigs, which provided meat, as well as cows, buffalos and oxen. The number of families owning these animals as well as the average number of animals per family declined considerably after displacement (see Figure 4). Wild animals from the forest and fish from common water sources were also available earlier, access to which declined later as the commons were lost.

Figure 4
Average Number of Animals per Woman/Family

<i>Animal</i>	<i>Before Displacement</i>		<i>After Displacement</i>	
	<i>No. of Women/ Families Having Animals</i>	<i>Average no. of Animals per Woman/Family</i>	<i>No. of Women/ Families having Animals</i>	<i>Average no. of Animals per Woman/Family</i>
Cow	27	9	17	5
Buffalo	10	6	4	3
Ox	25	3	9	3
Goat	36	9	20	4
Chickens	30	14	13	8
Pigs	18	9	9	5
Others	4	4	1	6

Families' access to the Public Distribution System (PDS)¹⁶ declined after displacement. Most of the displaced families were not given new ration cards after the displacement. Poor families' access to PDS shops is in any case very low, and declined further after displacement. Access to

safe and adequate water sources has been a critical area affecting women's food security. Whilst wells now became the main source of drinking water for most of them, before displacement they had access to other sources of water, such as natural springs and streams (*jharna*) and shallow wells/ponds (*dadi*). These natural water sources have disappeared, and the sense of close community ties that build up amongst women at these water places has also been lost.

Health and Illnesses

Displacement also caused the health of families in general and women and children in particular to deteriorate. Families' access to government hospitals, traditional medicinal systems and CCL's health centers declined after displacement and their visit to untrained or semi-trained health practitioners increased. Most of the families (about two-thirds) used to avail services provided by untrained or semi-trained private health practitioners, and this proportion increased after displacement to about three-fourths. Ironically, however, the share of families availing of CCL's health services declined after displacement, although two-thirds of the families received jobs with CCL after displacement. This happened because the families were now been relocated to places away from the CCL's hospital. In effect, the families' access to the governments or the company's health centers declined, and their dependence on private health practitioners increased.

More than 70 percent of women felt that their husbands' health status had worsened after displacement, and 80 percent women felt the same about their children (Figure 5). Thirteen women (30 percent) said that they were sick at the time of interview. Twenty-five percent observed an increase in the occurrence of malaria after displacement, especially for children.

Figure 5
Status of Health: Women's Perception

<i>Family Members</i>	<i>Perception of Women About Status of Health</i>	<i>Before Displacement</i>	<i>After Displacement</i>
Woman	Good	39 (85 percent)	12 (26 percent)
	Bad	5 (11 percent)	32 (70 percent)
Husband	Good	30 (65 percent)	10 (21 percent)
	Bad	7 (15 percent)	27 (59 percent)
Children	Good	33 (72 percent)	9 (19 percent)
	Bad	8 (17 percent)	32 (70 percent)

Note: Percentages in brackets are percentages of the total (46).

Psychological Trauma

Displacement has also had a psychological dimension as many women reported mental stress after their displacement. Pressures were related to the uncertainty of residence, the responsibility of rebuilding livelihoods, increased joblessness and resultant idleness, increased drinking by husbands, wife-beating and domestic violence including quarrels, and the shock and trauma of losing the few assets that they had possessed. The stress of adjusting to a new location was not easy to cope with; the frustrating impacts on women were evident in their reporting of sleeplessness, becoming short-tempered, feeling tense, and depressed. About 30 percent of women sampled had been living in temporary homes for up to 10 years. Almost all women whose husbands obtained jobs with CCL reported that domestic quarrels, violence and drinking of their husbands had increased. Though drinking is part of *adivasi* culture, liquor-distillation being the occupation of women, the drinking habits changed as the money started coming in. Earlier, it was home-made liquor taken occasionally and taken in moderation, mostly at home or in the vicinity.

Social and Cultural Risks

As the displaced families become scattered in different rehabilitation colonies, seek refuge in relatives' homes, or obtain CCL's miners' quarters or coolie barracks, the process uproots people socially and culturally as age-old social and cultural networks are disrupted. This affects women most, as their conventional support systems are lost. The traditional communal systems of conflict-resolution and coping with emergencies also break down. In about 60 percent of the cases, women said that earlier conflicts would be resolved by the caste panchayat or village panchayat. However, many of these conventional systems lost their powers and women were left to solve their problems themselves. The nuclear family now assumed a greater importance, not the traditional panchayats.

As far as cultural impacts are concerned, 43 percent of the women noticed changes in the way they celebrated festivals like *Karma* and *Sarhul*. Women's role and status during those celebrations were not the same as before. In the new places now they were supposed to remain spectators, and not participate in these festivals. For children, orchestras, cinema and TV had become more important than the traditional tribal dances and songs. More than 50 percent of the women observed such changes in their children's behavior.

Compensation, Resettlement, Rehabilitation: Women's Problems Ignored

As mentioned above, the displacing agencies are not bound legally to rehabilitate displaced families. The CCL in this case had provided people with small cash compensations for the land and homes that they lost, and also gave jobs to some of the families (about two-thirds of the selected women's families) according to the R&R policy of CIL. However, the situation of rehabilitation can hardly be considered satisfactory. Not all the families were living at the rehabilitation centres of CCL. Those who did were from Pindra rehabilitation center, Premnagar rehabilitation center (displaced by East Parej Open Cast Project) and Chirayatand rehabilitation center, and New Mangardaha (Benti Rehabilitation Centre—I displaced by Ashoka and Pirarwar Open Cast Projects). These people were not happy. The company had allotted them plots at the rehabilitation centre but none of them were given *pattas* of the land they were living on. That means they had no legal right over the land they were living on at the rehabilitation centers. The rehabilitation centers lacked very basic necessities like drinking water and sanitation and health and education services.

As noted earlier in this article, wells were the main source of drinking water for the women and families before and after displacement. The supposed 'development' brought about by the mines in the area had no impact on this. Only two women took water from hand pumps and five from pipes. Women who reported taking water from pipes were those who lived in the CCL's guards' quarters, or those who were living at the Pindra rehabilitation site, displaced by Parej East OCP. The pipes, which carried water to the CCL officers' colony, ran through these places. People living at Pindra rehabilitation center made a hole in the pipe running near the rehabilitation center and used the water. The water flowing in the pipe was untreated as it was treated only near the officers' colony. Families living in the Barracks and at Pindra Rehabilitation site thus got untreated water. The wells, from which these women took water, had in some cases been dug by CCL, which had also dug wells at some of the rehabilitation sites. Some of the families had also dug their own wells.

One effect of displacement was the decline in women's access to various sources of drinking water. Before displacement, most of the families had access to more than one source. They could take water from a well, or a *dadi* or a *jharna* (stream), or nearby river. So if in summer one or two

sources dried up, they would continue to get water from other sources. But now many women said that they had problems in getting water in summer, when their sole source of water dried up. The falling water level due to mining made this happen more often.

Another concern was the distance one had to cover to fetch water. For most women, safe drinking water was available in the village before displacement and usually they did not have to walk more than 1 km to fetch water. This situation was the same for most women even after displacement, except for a few, who have to walk about 2–3 km to reach a water source. Women of Benti village (in Chatra district), for instance, have to walk about 2 km. Some women told us that in summer, when the local water sources run dry, they are forced to walk even longer distances.

Practical gender needs were raised by women included in the study; bathing and defecating had become difficult. All women said that earlier there would usually be ponds or a *jharna* (natural spring) in the village. The traditional and natural sources of water also disappeared as the villages were mined, and about 55 percent of women said that a pond or *jharna* in the village provided the source of water. A woman in the barracks said that she bathed once in about ten days because for each bath she had to walk to the river. Men, she said, could go there more often, but for women, trekking such long distances becomes difficult in view of their various responsibilities at home. Similarly, about 60 percent of women said that they had problems in finding a place to defecate, as forests are disappearing fast and becoming thinner due to mining. Some of them also noted the lack of privacy, due to there being men onlookers everywhere.

The educational and medical facilities available at the rehabilitation centers were in a miserable state. Pindra rehabilitation center, where families from Parej village were dumped forcibly by the police, had buildings for a school and a hospital, but even after four years, there were neither doctors nor teachers. A woman noted that the CCL had originally intended to run the hospital and the school, but has now shifted the responsibility to the government. The Premnagar rehabilitation center, where Turi families had been given plots, had no health facility; however, there was one CCL health center nearby. In the Chirayatand rehabilitation center, where families displaced by Ashoka and Piperwar projects have been rehabilitated, there was one health center, where a doctor was said to be coming. But there was no medicine center at New Mangardaha (Benti Rehabilitation Centre—1), where families displaced by the same projects were rehabilitated, and a private practitioner had opened office.

Employment and Livelihood

Giving jobs to the displaced families in its subsidiary companies is one of the major planks of the CIL's R&R policy. But the CIL was not able to give employment to persons from about 30 percent of the displaced families during 1980–85, according to a Ministry of Home Affairs' study (Fernandes, 1998), which is the latest available data on CIL's compensatory jobs. However, in this study, 33 percent of the women reported that none of their family members was given a job with the company (Figure 6). In practical terms, this means that the CIL provided jobs to only two-thirds of the displaced families. However, as noted earlier, as many as 90 percent of the women had lost land to mining. But since the CIL's rehabilitation policy had provisions to give jobs only to those families who had lost at least 2 acres of irrigated land, or 3 acres of un-irrigated land, or 2 acres of un-irrigated land and a matriculation certificate, many of the displaced families would not qualify to get a job with the company. In the initial years, in Parej area, the company had given jobs to a few such families who had even less than the required land. However, they had to fulfil the requirement by taking land from other families of the village who had some extra land. Usually, those families who had extra land tended to use it to get jobs for their close male relatives like sons-in-law or brothers-in-law or cousins. Later, company officials stopped this practice, and the practice of fulfilling the requirement for sufficient land by taking land from some other family was also abolished. The Parej East OCP was, until 2002, part of the World Bank-funded India Coal Sector Rehabilitation Project, which insisted on downsizing and retrenchment of surplus staff.¹⁷

Figure 6
Employment Given to the DPs by the CIL's Subsidiaries

<i>Name of Company</i>	<i>Number of Displaced Families</i>	<i>Estimated Number of Displaced Persons*</i>	<i>Jobs Given to One Member of Family</i>	<i>Percentage of Families</i>
Eastern Coalfields Ltd.	14,750	81,100	4,915	33.32 percent
Central Coalfields Ltd.	7,928	43,600	3,984	50.25 percent
Western Coalfields Ltd.	6,232	34,300	2,250	36.10 percent
Bharat Coking Coal Ltd.	3,841	21,100	752	19.58 percent
Total	32,751	180,100	11,901	30.33 percent

Source: MoHA, GoI, 1985, cited in Fernandes 1998.

Note: *Calculated as 5.5 persons per family.

Another reason appears to be tactical in nature. Earlier in Parej village, people's discontent and anger was very high, and they vehemently resisted the company's entry. In such a situation, giving them jobs was the cost of winning their consent. Later, as some of the villagers left the village after getting jobs with the company, their unity was broken and their resistance weakened, making the company officials more reluctant to give jobs. However, from the perspective of the rehabilitation of women, what is disappointing is that none of the women from the sample families was given jobs with the CCL. Altogether, very few women from the displaced villages got any jobs with the company, and of those who did, most were from families in which there was no adult man to take the job. In 15 cases, no one got a job as compensation; in 17 cases the husband was awarded with one; in seven cases the son, and 'other relatives' in another seven cases. The perceived masculinity of mining jobs—even though they are now mostly done by machines—contradicts the reality of back-breaking work that women did and still do in almost all sectors of the industry and elsewhere in the Indian economy (see Lahiri-Dutt, 2006).

The Rehabilitation Policy of CIL does not restrict a woman from receiving a compensatory job, but the patriarchal Indian society considers it 'obvious' that only men take employment. When we spoke with local men, it was stated clearly that as long as men were around, women should not join CCL. Interestingly, this patriarchal restriction on women working with CCL was not applied to other subsistence work, which they did before displacement and some of them continued to do even after displacement, or the wage labor they did occasionally. Having said this, it must be mentioned that CIL's policy is also not very encouraging for women. The technological upgrading and mechanization of the mines have so far helped only in throwing women out of the mine industry in India (see Lahiri-Dutt, 2001 for a detailed discussion).

For those who cannot be given jobs in the mines, the R&R policy recommends giving contract jobs if available, and also notes that the contractors be persuaded to employ the displaced persons on a preferential basis. The dump yards (known as 'local sale depots' in the Ashoka-Piperwar area) where coal is stored for sale by some authorized sellers, had also for a while become a source of jobs for local people as loaders of trucks. However, this proved to be a temporary arrangement as for the last year these dumping yards were empty in the Parej area. In the Ashoka-Piperwar area, some people continued to get jobs at the 'local sale dump'. Some people, mainly women of Turi tola (of Parej village) living in miners' quarters and who were supposed to move to the Premnagar rehabilitation

site, were promised work making cane baskets for the mines. The company built a tank in which people would soak the canes before making baskets and provided shade under which they could sit and work at Premnagar rehabilitation center. For the first two to three months, they were given canes through a contractor, and could earn Rs 1,000 to 1,500 per month, but at the time of the survey this job had not been available for the past year. In its rehabilitation policy, the company also asserts that the DPs would be given contract jobs in the company if possible, but this did not work as CCL's contract work involved a lot of money and bribes too.

CIL's Rehabilitation Policy devotes one sentence to women: 'Special attempts would be made to ensure that women will be given adequate access to income-generating opportunities offered under this policy' (CIL, 1994: 351). These income-generating opportunities included training the women to make carpets (*dari*) and rear animals, at least in the two areas of our study. In the Parej area, the company was implementing the Indigenous People's Development Program (IPDP) funded by the World Bank. IPDP was a special program being implemented in the 24 mining project areas of CIL subsidiaries. The program was being implemented by the Xavier Institute of Social Services (XISS), Ranchi, in the Parej East project area. Only 36 percent (15 percent for carpet-making and 11 percent for animal husbandry) of women received some training for income-generation. They were given a stipend for six months of training, and after the training they were given money (or goats) to start their own business. We asked the women who received training whether they benefited from the training. Seven (about 60 per cent) out of 12 women said they had received some sort of benefit. Three received goats or chickens, and the four others got some other benefits.

Women displaced by the mines perhaps did not require formal training for animal husbandry, as most of them had many animals before displacement. However, after displacement, both the number of families keeping animals and the average number of animals per family declined sharply (see Figure 4). Lack of space in their new homes, especially for those living in small temporary huts and homes in rehabilitation colonies, made grazing for animals difficult. The disappearing forest is yet another reason for the declining number of animals with the families.

However, the carpet-making training given to some women was a new occupation, aimed at generating additional incomes. The trainer in Durukasmar village, where the training center was run under IPDP, pointed out that women were interested only in the stipend but were disinclined

to learn the trade. When we enquired about this lack of interest, women pointed out that carpet-making involves the purchase of expensive raw materials and proper marketing. Both can only be done in the state capital, Ranchi, which involves a day's trip and further transport costs.

It is clear that the rehabilitation of people displaced by CCL projects has been far from comprehensive. The policy failed to address the loss of employment and livelihoods of women, further marginalizing them. Most of the women had no cash-earning work, whereas their earlier roles as participants in their families' economic activity were taken away. This made them sit idly most of the time, as the forest was now as far away as 8–10 kms in some cases. The reduced access to the forest also made women and children suffer greater food insecurity than men because of the secondary status of women in the family. Also, their access to food outside the home is limited; roadside *dhabas* (small hotels) in mining areas sell foodstuffs, and the weekly *haat* (market) offer country liquors such as *handia* and cooked meat, but obtaining them involves cash expenditure for women and children who do not control their meager incomes.

Displacement and the Changing Status of Women

From this localized case study, it was clear that with displacement and relocation, the place of women changed in the family and the community. Yet households continue to be regarded by officials as units with joint-utility functions. In fact, they are contested terrains, with women and men wielding differential power and control over household resources. Women's lower bargaining power is evident from the gender-based division of labor in which women take important but unpaid and informal roles in collecting and preparing foodstuff, fuel and water, childcare and care for the elderly. New gender roles dictate that women no longer remain productive and equal partners in the community; in most cases, they are meant to remain at home taking little part in income-generating activities. At the same time, their household chores, including the collection of water and fuel from the now-distant forests, have increased. Men who now work for CCL or local contractors in the dumps, have become more prominent as major breadwinners, with women being confined to the four walls of the house where they face increased violence. Overall, there has been a devaluation of the roles and tasks that women traditionally perform, and also a relegation of women as such to a lower status, as gendered roles and functions have taken on different meanings.

This devaluation has directly to do with the way gender roles have been created and recreated during the process of compensation and rehabilitation established by the government agencies or the mining company. The visiting officials used men in the villages as legitimate representatives, voicing the sentiments of 'the community'. Women often remained uninformed, or received information from the male members of the family. They generally did not have details of cash or monetary compensation for the land that the family had lost. The cash money for compensation was given to men, and the jobs too usually went to men. Intra-household inequities were not negligible in the previous situation, but at the same time women enjoyed some status and support networks developed over time in their original locations. Displacement and the half-hearted R&R, as practiced now in the mining areas, is obviously insensitive to these gendered realities. Unless the R&R policy is made more gender-sensitive, it would be difficult for any significant development to take place in the Indian mineral tracts.

Conclusion

Mining continues to remain a masculine domain in terms of the nature of its work in spite of much evidence to the contrary (Lahiri-Dutt and Macintyre, 2006), and this has led to a masculine corporate culture that keeps women invisible in the workplace and in the community, permeating into the community development and R&R policies (Lahiri-Dutt, 2006). In view of differential access to land, means of production, incomes and property ownership, women's conditions of work remain dependent on survival strategies of households in specific relation to land and environmental resources.

The findings in this study raise broader issues concerning the possibility of creating an alternative, feminist model of development in India's mining areas capable of integrating gender-specific concerns regarding the social reproduction of displaced communities. By bringing out the gender-segregated impacts of displacement, our research enhances the visibility of women in development, displacement and rehabilitation, and opens up a dialogue towards empowering the women in local communities on how to put an end to gender-based relations of domination, and how to redefine 'development'. The redefinition can happen through not only the resource distributive issues, but through the non-distributive issues promoting women's capabilities in society with a view to empowering them.

From a policy perspective, environmental policy must be strengthened by gender-aware social sciences. Environmental Impact Analysis and clearance from the environmental departments of State Pollution Control Boards have now become mandatory before large-scale projects such as coal mines are started. However, environmental management should involve caring for people, and this awareness has not yet strongly developed amongst these officials in India. Social impact analyses, with gender analysis as an important component, are yet to be treated as a prerequisite for such projects. R&R programs need to respond to the complex ways in which women and men use power and resources through their different identities, access and entitlements. This will make the notions of a 'displaced person' or a PAP gender-inclusive, and help to divert some of the interventions towards women as well as men. This would begin with the recognition that women are every bit as much economic citizens as men, with entitlement to the full realization of their human rights. Women need to be made co-beneficiaries with men in any resettlement benefit packages, and for women-headed-households special assistance should be given before, during and after displacement. The inclusion of gender issues and social equity in assessment, design and implementation and monitoring must be made a compulsory element for large-scale development projects like coal mines.

NOTES

1. We can hazard some estimates by referring to earlier calculations. According to Fernandes (1998), about 16 million people have been displaced by various development projects across the country between 1950 and 1990. Arundhati Roy (1999) estimates the number of people displaced by big dams alone in post-independence India at 33 million. N.C. Saxena (quoted in Roy, 1999), Secretary to the Planning Commission, suggested in a lecture that the total number might be as high as 50 million.
2. According to Fernandes (1998), more than 2.5 million Indians have been displaced by mines since independence. However, coal mining has increased greatly since then, so we may safely conclude this to be a very conservative figure.
3. See Ganguly-Thukral's 1992 report, or Baviskar's 2002 follow-up on displacement due to a large river valley project.
4. See Fernandes (1996) for an example of *adivasi*/forest dweller-social activist ties.
5. The qualitative consequences of forced displacement have been studied by Pandey (1996) in a survey carried out in five villages in Talcher, Orissa. He found an increase in employment from 9 percent to around 44 percent, accompanied by a large shift from primary to tertiary occupations, with a reported reduction in the level of earnings

- by as much as 50–80 percent, particularly amongst the indigenous communities and scheduled castes. Ota (1996) points out that the percentage of landless families after relocation has doubled. Reddy (1997) notes that around the coal mining area of Singrauli, the proportion of landless people increased dramatically from 20 percent before displacement to 72 percent after. Pandey et al. (1997) note a considerable decline in common property resources around the villages where mining projects were started.
6. The gender gap in property rights has been explored extensively by Agarwal (1995) in her comprehensive book on gender and property rights in South Asia.
 7. The resettlement and rehabilitation policy of Coal India Ltd., the public sector coal mining company in India, devotes one sentence to women: 'Special attempts would be made to ensure that women will be given adequate access to income generating opportunities offered under this policy.' (see CIL, 1994 reprinted in Fernandes and Paranjpe, 1997).
 8. In the past, R&R policies were made by individual state governments in India. The National Policy on Resettlement and Rehabilitation was formulated in 2003 by the Ministry of Rural Development, based on recommendations made in 1998 by the Hamumantha Rao Committee, constituted to look into the Tehri Dam Project in the Himalayas. There are critiques of this policy, which primarily note that the 'right to life' implies a 'better life than before' and not just food, clothes and shelter (Government of India).
 9. Muggah (2003) asserts that until recently, programs implemented to resettle populations were placed into separate categories, and thus categorized 'displacement due to development' and 'displacement due to war' as different. Development-induced resettlement and rehabilitation is planned and established in law, sometimes with obligations of compensation to the displaced party.
 10. *Black's Law Dictionary*, Sixth Edition, 1990, p. 523.
 11. This ratio seems to be increasing. A recent official report based on a comprehensive study of 110 projects concludes that of the 1.7 million people displaced by these projects, almost 50 percent (814,000) were tribals (quoted in Pandey, 1998: 4). Another study of 20 representative dams finds that 59 percent of the total displaced by these dams were tribals (Kothari, 1996: 1477). According to the Central Water Commission's 1990 *Register for Large Dams*, of the 32 dams of more than 50 meters height completed between 1951 and 1970, only nine (22.13 percent) were in tribal areas.
 12. In 2003, the Government of India came out with its first R&R policy, which is available on the government's website.
 13. About one-third of the total land acquired in the state of Jharkhand during 1950–91 was for mining, which was responsible for 27 percent of the total displacement (coal mining 18 percent and non-coal mining 9 percent) (Ekka and Asif, 2000).
 14. As per the Constitution of India, people listed as SC belong to the lowest social category. They are also known as *dalits* or *harijans*. Similarly, tribals recorded in this way are called STs but the preferred name is *adivasi* or original inhabitants. Jharkhand has a higher proportion of tribals and SCs than many other states of the country.
 15. In the course of discussions, women listed as many as 30 items that they had previously collected from the forest. These items included leaves, flowers, and roots used for food and medicine, wild fruits, bamboo, sticks to make brooms, wood for house building, and fuelwood. Most important was *mahua*, which would provide them both food security and monetary benefits.

16. Government ration shops providing cereals and other items on subsidized rates.
17. The company is downsizing. The total number of employees with CIL and its subsidiaries declined from 641,093 in 1995 to 457,108 in 2005 (Government of India, 2006: 79). This is being achieved through VRS and other ways. The company calls this practice 'rationalization of manpower'.

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