PrePublication Draft version.

Online version at:

http://www.sciencedirect.com/science/article/pii/S0301421516302749

"We don't want to eat coal": Development and its Discontents in a Chhattisgarh district in India.

Devleena Ghosh
Faculty of Arts and Social Sciences
University of Technology Sydney

Devleena.Ghosh@uts.edu.au http://dx.doi.org/10.1016/j.enpol.2016.05.046

India's energy needs and development imperatives mandate an increase in power generation which at the current time is largely dependent on fossil fuel. The discourses surrounding development in these contexts subsume the rights of forest dwelling people to the necessities of power generation. This article discusses the responses of a community of *adivasis* in Chhattisgarh to the imminent takeover of their land for new mines. The article then discusses the ramifications of ignoring the displacement of these people and the loss of their land and livelihoods and sets out some policy recommendations to remediate the impact of land acquisition through the strengthening of already existing laws and Government Acts. It calls for a holistic look at India's energy sources, methods to ensure compliance with compensation awarded, clarification of some parts of the Lands Acquisition Act and the speedy and implementation of Community Forest Rights under the Forest Rights Act.

1.1 INTRODUCTION

The fieldwork for this research was carried out in the Surguja district of Chhattisgarh, one of India's fastest developing states. It has one of highest Scheduled Tribe or *adivasi* populations, (sometimes called 'tribal'), accounting for about 10 per cent of the *adivasis* in India (Census of India, 2011). Forests occupy 41.33% of the state and contain resources essential to the livelihood of the *adivasis* who live in them. Chhattisgarh is also

rich in mineral resources, ranking second in the nation for coal reserves and production, contributing over 18% to the total national coal production. According to the Government of Chhattisgarh Mineral Resources Department, the 12 coalfields of the State contain an estimated 44,483 million tonnes of coal (Coal Deposits in Chhattisgarh, 2015). Chhattisgarh is thus at the nexus of debates about climate change and fossil fuel, energy security, development and the question of who bears the costs inherent in pursuing the latter two goals.

In India, resource extraction and developmental imperatives have been linked since colonial times and continue to the present day. Coal as a fuel was crucial to European developmental discourses of the 19th century. These discourses were a complex of the values and institutions of modernity including individualism, secularism, rationality, the rule of law, the market economy and representative government. Modernity was assumed to be inevitable, universal, permanent and Western with an "ineluctible destiny to transform the whole world into a replica of itself" (Washbrook, 1997, 411). Frederick Lugard's influential book on the 'dual mandate' for British colonial rule drew on the colonial experience of India and Africa to argue for the sacred trust of colonial officials who undertook the 'grave responsibility' of the imperial project. Colonial power was to ensure inter alia "the institution of courts of justice, the supervision of native courts, the protection of the peasantry from oppression by their rulers, and the deposition of the latter when incorrigible, the reorganisation or imposition of taxation for revenue, the prohibition of slave-raiding or slave-dealing ..." (Lugard, 1922, 17-18). Such duties might involve "the disposal in some cases of unused lands or minerals" for example because "the civilised nations have at last recognised that while on the one hand the abounding wealth of the tropical regions of the earth must be developed and used for the benefit of mankind, on the other hand an obligation rests on the controlling Power not only to safeguard the material rights of the natives, but to promote their moral and educational progress" (Lugard, 1922, 17-18). Lugard goes on to add that the Crown alone should acquire rights in perpetuity in lands and minerals, acting as "trustee for the natives on the one hand, and as custodian for the development of the country for the needs of civilised mankind on the other" (26). Contra Lugard, the Indian state now prefers private investment to develop land and minerals, nor is it necessarily effective in safeguarding 'the material rights of the natives' but the argument that such development is for the 'benefit of mankind' is still powerful though translated, in this case, to 'national benefits or priorities' (The Guardian, 2015).

The inextricable links between coal and progress in India has a long history. In 1865, William Jevons wrote that, since the repeal of the Corn Laws, British subsistence depended upon coal rather than corn, marking "the ascendency of the manufacturing interest, which is only another name for the development of the use of coal" (Jevons, 1865). Jevons argued that "almost all the arts and inventions we have of late contributed, spring from our command of coal" and predicted a grim future for Britain when her coal supplies ran out. Similarly, in 1885, the chemist Thomas Fletcher suggested that when the English ran out of coal, they would be surpassed by their colonial subjects who would someday visit the ruins of imperial London and walk among the crumbled stones of Westminster Abbey (Thorsheim, 2006, 46). In the same vein, the necessity of coal to India's future was summed up in this pronouncement by a judge of the Supreme Court of India in 2014:

"Coal is king and paramount Lord of industry is an old saying in the industrial world. Industrial greatness has been built upon coal by many countries. In India, coal is the most important indigenous energy resource and remains the dominant fuel for power generation and many industrial applications" (*The Deccan Chronicle*, 2014)

India's successive governments, whether preferring the command or liberalized economy, see coal mining and coal power in almost the same way as Lord Dalhousie, Governor-General of India, 1848-1856, who claimed that he had let loose in India the "great engines of social improvement, which the sagacity and science of recent times had previously given to Western nations-I mean Railways, uniform Postage, and the Electric Telegraph". In contrast to this rosy picture of social and economic enhancement is the fact that one of the main reasons for the depletion of forests in 19th century India was the construction of railways. Wood was used not only for sleepers, but also as fuel for powering engines before coal became viable. The formation of the forest department at this time was no coincidence as the railway project was central to the imperial agenda of early colonial forestry in India. This exploitation of India's forests and the pressure on forest-dwelling people meant that when the forests were declared as "reserved" for government and commercial use only, forest-dwellers were forced to move out. Tribals had been living in, conserving and depending on forests for their livelihood for centuries when the British started regulating forests in the second half of the 19th century. The Forest Charter of 1855 made timber a state property and 10 years later, the first Indian Forest Act was enacted, followed by two more, in 1878 and 1927. These sought to take

over forests to exploit their commercial potential and, as a result, put paid to the locals' dependence on them and most uses of the forest by locals were prohibited unless specifically permitted.

The rhetoric of modernity that equated colonial governance and technological transformation has power and resilience to this day. Modernity's authoritative narrative of developmentalism, its equation of progress with technology and growth has continued into 21st century India. Nehru's famous dictum about dams being the temples of modern India (Akbar, 2011) has parallels in the statements made by current Indian leaders about the essential place that coal-fired power has in developmental goals and poverty reduction (*inter alia* Roy, 2015; Allard, 2014; Hayden, 2015). India has a massive development imperative. Nearly half of the children in India are malnourished (World Bank, 2010a), 404 million people have no electricity and over half the population lives in impermanent mud and thatch housing (Sant & Gambhir, 2015, 291). The average GNI per capita in India (\$3280 per year 2009 \$ PPP) is about a third of the world average and a tenth of the OECD average (World Bank Indicators, 2010).

There has been a range of arguments on how development can be achieved in India in the context of a chaotic, if vibrant, democratic regime. Meghnad Desai, for example, claims that, for the first forty years of India's existence, economic development benefited elite households by, simultaneously, slowing the rate of overall growth and enabling the wealthy to monopolise public sector jobs by investing heavily in higher education whilst primary education was neglected (Desai, 2010, pp. 8 – 16). Similarly, Harriss and Corbridge note that India's current high rates of economic growth have not led to corresponding reduction in poverty (Harriss & Corbridge, 2010, pp. 38 – 60). Many policy makers contend that India's economy needs to grow at 8 – 10 percent per year for two to three decades to meet these human development deficits and provide essential public services such as infrastructure, education and health and to create productive and adequately remunerated employment. Such growth, when combined with a burgeoning population and limited natural resources, is sure to make a significant impact on such resources and the environment. Oskarsson points out, for example, that local, natural resource-based livelihoods tend to be lost when dominant interests move into marginal lands and the equity outcomes of land-hungry projects are meagre (2010, 200). Recommendations by policy makers regarding 'sustainable' growth, where the main concerns relate to quality of air and water, productivity of land,

preservation of biodiversity and ecological health (Parikh, 2012, 31) are therefore often subsumed to the necessity of coal as a source of energy for India's growth ambitions.

My argument in this article is that, despite these urgent human imperatives, the developmental rhetoric and practices current in India still retain their exploitative colonial heritage, maintain relations of uneven development and discrimination and come at substantial cost to communities. Examples include the physical deterioration of local environments because of extractive modes of development and industrialization and the lack of redistribution of incomes back to the region relative to the resources extracted. Consequently, government policies should pay attention to the mitigation of these impacts, especially where they involve land and livelihood alienation.

1.2 BACKGROUND

Economic and social development as well as the amelioration of poverty is inextricably linked to the availability of modern energy services. Indian electrical installed capacity has grown rapidly from 1350 MW in the year 1947 to more than 140,000 MW in 2010. There is still, however, a massive deficit between demand and supply. In 2007–08, the total shortage of energy was estimated to be 9.9%, and the peak shortages were as high as 16.6% (Ministry of Power, 2005–06). India's per capita energy supply is low; the percapita total primary energy supply in the country was only 0.51 tons of oil equivalent in 2006, which is about one-ninth of the average for Organization for Economic Cooperation and Development countries, just over a quarter of the global average, and about one-third that of China (IEA, 2008).

Chikatur et al (2009) provide somewhat grim statistics for electric power availability in India. Per-capita electricity consumption in the country was only 503 kWh in 2006, about one-fourth that of China and just over one-sixteenth that of the OECD average (IEA, 2008). Nor is power supply in the country robust, with fluctuating voltages and frequent interruptions. In fact, this deficit of a sufficient and reliable supply of power is responsible for sluggish industrial development and economic growth since coal-fired/based thermal power plants form a significant percentage of the power generation in the country (Sant & Gambhir, 2015, 294). Out of the total installed capacity of 2,07,006.04 MW, coal based thermal power plants generate 117,833.38 MW of power or about 56.92% (Generation: Overview, 2015).

India's post independence nation building agenda emphasised coal mining and coal based power generation, specifically to strengthen public sector based industrialisation. During the country's 1st Five Year Plan period (1951-56), the Government decided that there was a clear need for increasing coal production through the systematic and scientific development of the coal industry. The first major step towards the planned development of the Indian Coal Industry was the setting up of the National Coal Development Corporation (NCDC), a Government of India Undertaking, in 1956 with the collieries owned by the railways as its nucleus (Coal Mining in India, 2015).

Almost two decades later, in 1973, the Union Government in India, led by Prime Minister Indira Gandhi, nationalised private coal mines with the enactment of the Coal Mines (Nationalisation) Act, 1973 which is now the Central legislation determining the eligibility of coal mining in India (Coal Mining in India, 2015). Among the bodies incorporated in November 1975 was Coal India Limited (CIL), under the Ministry of Coal, which has seven wholly owned coal producing subsidiaries and is the largest coal producing company in the world. The 1973 Act was amended in June 1993 to allow captive mining by the private sector for power generation and the washing of coal. The production of coal assumed greater significance after 2003 when Government of India announced a mission "Power to all by 2012" (Shahi, 2003). This mission envisaged the addition of a capacity of 1,00,000 megawatts of power by 2012, and a corresponding increase in coal production in the Tenth to Eleventh Plan periods (i.e. 2002-12).

The Planning Commission of India (now defunct) pointed out that the dominance of coal in the energy mix was likely to continue into the foreseeable future (Planning Commission, 2015). The Report of the Expert Committee on India's Energy Policy, 2006, also stated that the production of coal would need to expand to over 2 billion tonnes per annum based on the domestic quality of coal to meet the energy deficit in the country. The report also recommended that domestic coal production should be stepped up by allotting coal blocks to central and state public sector units and captive mines of notified end users. Coal blocks held by Coal India Limited (CIL) that could not be brought into production by 2016-17, either directly or through joint ventures, should be made available to other eligible candidates for development and for bringing into production by 2011-12 (Integrated Energy Policy Report, 2006).

Currently, the Government of India estimates the hard coal reserves at around 301.56 billion tonnes, of which 125,909 million tonnes are proven. An official website claims

that Indian coal offers "a unique ecofriendly fuel source" to the domestic energy market well into the next century (Coal - Indian Energy Choice, 1915). These hard coal deposits spread over 27 major coalfields, are mainly confined to the eastern and south central parts of the the country. (Coal Reserves, 2015). Coal India Chairman and Managing Director, S. Narsingh Rao, said at the Fourth Coal Summit in 2012, that India's complete coal demand could not be met from indigenous sources till the 13th Five-Year Plan period despite production growing at 8 to 9% because of a "need to supply coal to additional 90,000 MW capacity over the 306 million tonnes supplied to thermal electricity generation plants currently" (Saikia, 2012). The implication is that the area under mining as well as imports would increase.

About 88% of the total coal production in the country is produced by various subsidiaries (a total of 390 mines) of Coal India Ltd. which is the largest supplier of coal in the country. Although Coal India is currently State controlled, there are stringent efforts underway to open the industry to Indian private investors through on public-private partnership (PPP) in the form of mining, development and operations (MOD) agreement for exploration of coal mines by private entities in close association with Coal India Limited (CIL) to push up coal production and introduce new technology.

The newly elected Indian Government under Prime Minister Narendra Modi is enthusiastic about private sector involvement. It is now about to sign off on the next significant reform in the coal sector by allowing state utilities to commercially mine the fuel, after which private companies will also be able to do so. One official of the coal ministry remarked that the "restart of commercial mining by state utilities will be the first step towards opening the coal sector. This will help in testing the waters before allowing private companies to mine commercially" (Singh, 2015). Very recently, the Ministry of the Environment also considerably reduced the amount of time to grant environmental and forest clearances and further declared that the goal was to approve infrastructure, industrial and mining projects within a hundred days (The Economic Times, 2016). The Coal Ordinance of 2014 enabled a company or joint venture to "carry on coal mining operations in India, in any form either for own consumption, sale or for any other purpose". This ordinance came just weeks after the Supreme Court cancelled more than two hundred coal licences held by private sector industrial groups, following allegations of corruption and mismanagement in their allocation (Chilkoti & Crabtree, 2014). The Comptroller and Auditor General found that the Indian government missed

out on nearly \$34 billion in royalties by selling private companies coal concessions at negotiated prices rather than auctioning them(Bajaj, 2012).

1.3 METHODOLOGY

This article emerges from a larger project on coal and climate change that uses a set of mixed methodologies. Archival research provided the historical context of coal mining and the discourses of developmentalism in 19th century Europe in general and India in particular. Policy documents and publications of the Indian central and state governments as well as the websites of the relevant Ministries (Coal, Power, Environment and so on) were also consulted. These helped to frame the current structure of coal mining and, in particular, the development paradigms in Chhattisgarh (the field site) and in India at large.

The most substantial part of the research for this project consisted of an ethnography of a field site near a coal mine in the state of Chhattisgarh. This forest village inhabited by *adivasis* (indigenous to the area), amongst others, was likely to be affected by projected new coal mines. I undertook participant observation in this village on three visits in 2014 and 2015, attending village meetings, meetings of NGOs working in the villages and conducted fifteen to twenty semi-structured interviews with villagers, NGO workers, lawyers and journalists. The information gathered by the participant observation was enriched with another fifteen interviews held in other cities with *inter alia* a judge of the High Court, an advocate who prosecuted the Coal Block Allocation case in the Supreme Court, a former Minister of Environment in the Government that set up both the National Green Tribunal and the Forest Rights Act and other NGO workers, activists, lawyers and academics*.

The interviews were on a number of topics, ranging from questions about government policies on the environment and development, livelihood and land, impact on forests and threats to wildlife, climate change, the methods of opposition and protest undertaken by the affected villagers and legal remedies for violations of rights.

2.1 LOCAL CONTEXT: CHATTISGARH

The Chhattisgarh government, like other state governments, has increasingly played a significant role in the coal mining and thermal power sector through setting up their own companies as well as through joint venture projects or MoUs with private sector mining and thermal power companies. In the 10 year period from 2001-2011, it has

formalised one hundred and thirty-three Memorandums of Understand (MoUs) with a range of private players most of whom have a coal mining and/or captive coal based thermal power related component. The proposed investment is at least Rs. 1,921,260.09 million (State Investment Promotion Board, 2015).

The Hasdeo Arand forests spanning north Chhattisgarh's Korba and Surguja districts comprise some of central India's most pristine and dense contiguous tracts of forests, and are home to perennial water sources, rare plants as well as wildlife species, including elephants and leopards. However, this area also holds vast coal reserves; the Hasdeo Arand Coalfield mapped by the Ministry of Coal has over a billion metric tonnes of proven coal reserves, across an area of 1878 square kilometres, 1502 square kilometres of which consist of forests (Choudhury, 2015).

2.2 The PESA and FRA

In India, the main instrument for acquiring land has been the colonial Land Acquisition Act, 1894 (replaced in September 2013 by the Right to Fair Compensation and Transparency in the Land Acquisition, Rehabilitation and Resettlement Act, 2013). In addition, the Coal Bearing Areas (Acquisition and Development) Act 1957 applied specifically to coal extraction (Bedi, 2013, 102). In December 2014, the central government moved to hasten coal mining and the acquisition of rural land from individuals and communities by corporations. After it failed to pass its controversial coal mining bill by the Upper House (Rajya Sabha) of Parliament, it re-issued another ordinance, which was ratified by both houses of Parliament, to auction lands and forests across over 90 coal blocks (or mines) to permit the commercial mining of coal (Phukan, 2015). Another ordinance sought to dilute the public hearing, consent and social impact assessment provisions of the Right to Fair Compensation and Transparency in the Land Acquisition, Rehabilitation and Resettlement Act, 2013 for a range of projects wanting to acquire land, including power projects (Madhavan, 2015).

The enactment of two landmark pieces of legislation in 1996 and 2006 transformed discourses around the ownership, governance and management of forests in India, making some attempts to ameliorate the continuing injustices suffered by India's *adivasis* and other forest-inhabiting communities from the time of British rule to independent India. One was the Panchayat (Extension to Scheduled Areas) Act 1996 or PESA. This mandated consultation with Gram Sabhas (Village Assemblies) or Panchayats before land in Scheduled areas could be acquired for development projects. The other

was the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (FRA) (Ahmad, 2014, pp. 258 – 60). The Preamble to the latter spoke of remediation, saying "forest rights on lands and their habitat were not adequately recognised in the consolidation of state forests during the colonial period as well as in independent India resulting in historical injustice to the forest-dwelling scheduled tribes and other traditional forest dwellers who are integral to the survival and sustainability of the forest ecosystem".

The FRA put in place a clear legal mechanism for recognition of rights both at an individual and community level for tribal as well as other traditional forest dwelling communities, including forest workers who have been living in a designated forest area for 75 years or three generations. The 2012 Rules under the FRA clearly define the rights, which can be claimed by Gram Sabhas as Community Forest Rights (CFRs). These include rights for seasonal and continuous access and settlement for forest communities (including pastoral); ownership, management, use and disposal of forest produce (including water bodies); the protection and management of forest resources; and rights to biodiversity and intellectual property (Ministry of Tribal Affairs, 2006, 2012).

Kundan Kumar, regional director for Asia at the Washington, DC based Rights and Resources Initiative, says the admission of 'historic injustices' mentioned above makes the FRA highly significant (Seetharaman, 2015). The FRA attempts to redress these injustices and reinstate rights – both individual and communal to tribal people and other traditional forest dwellers to live in, cultivate in and gather forest produce in forests - which since the British era have in law become "State property" while *adivasis*, who have lived in and co-existed with the forests for centuries, have become "encroachers". The critics of the Act, however, rightly point out that the Act tries to limit and to privatize/ individualize ownership of forest lands, yet no doubt precious rights have been sought to be recognized by this Act (Bharadwaj, n.d).

In Hasdeo Arand, villagers, primarily *adivasis* from the Gond community, debated the projected coal mines, which promised to have a profound impact on their lives. Twenty villages in Chhattisgarh united against government's plans to pass a formal resolution against coal mining in their traditional forest land and are now planning their future course of action. They also demanded that the government implement the requirements of both PESA and FRA, mandating *adivasi* involvement in decision-making around

natural resources, including their consent to proposals for destruction of forests for developmental purposes (Das, 2015).

3. DATA

3.1. Development or Destruction?

Kuntala Lahiri-Dutt points out that, during the Raj, the Raniganj-Jharia coal producing areas created an urban belt that serviced the primary colonial enclave of Calcutta but did not stimulate the social and economic development of the immediate hinterlands (2014, 9). The same trend continues in modern India where coal mining has produced extensive urbanised regions but urban growth has not necessarily benefited local communities. According to Kohli, '[T]he development model pursued in India since about 1980 is a pro-business model that rests on a fairly narrow ruling alliance of the political and economic elite'(2007, 113). Thus government intervention is not reduced overall in the economy but works in favour of domestic private sector interests. This elite development alliance is united by strong economic and political incentives in order to exploit India's mineral reserves and often the land required for mining displaces adivasis who do not receive the benefits that are supposed to flow from such development (Oskarsson, 2013). As a Sahara villager, Laksman, said:

The people with positions, influence or means are in a pursuit to acquire every place that belongs to people like us. All over they are planning either power plants or industries. Now we are understanding why people in cities look down upon villages. Why don't they displace people in cities? They can put power plants there as well as coal must be available there too, its not that coal was deliberately put underground the villages only. We want to know why is this so? (Laksman, 2015)

According to Sengupta, within the current context of emphasis on economic growth, several states in India have attempted to institute aggressive developmental policies while compromising human rights and justice (2010, 29). For example, villagers in Sahara who had initially approved a particular mine had assumed that it would not affect the residential part of the village and would provide infrastructure (such as schools and hospitals) and employment for them.

When the news of the mine came, we felt ... we would all benefit financially. When the coal started getting shipped out of here then we realized the

wealth of this place is going elsewhere and here only destruction is happening so we started protesting ... Initially, they told us that the mines will acquire only the farm land and the residential space will be left out. They kept us in the dark. Similarly in Kete, the people there were informed that only forest land would be used to mine coal and residential space will not be touched. So they gave their consent to the mine. It was not taken by force and the people followed what was given in the proposal. Its only after starting of the mine that we realized the whole village will be displaced.

Most villagers agreed with Narad, an articulate and engaging village elder with an eloquent turn of phrase. He said that what was coming to the village was not development but destruction (Hindi: *vikas nahin, vinas hai*). For the villagers, development was a contradictory and contested term since they were acutely aware of the different priorities of the government (*sarkar*), urban areas and *adivasi* needs.

They are fooling us and filling their coffers in the name of our development. The development is of outsiders and foreigners, we are getting destroyed ... Do these office-bearers in big cities produce rice or pulses that they eat? We feed them by ploughing these fields. If they can eat the money they earn from their factories then we will feed them money ... Don't they need to eat rice? He who is interested in digging coal will eat coal only. We don't want to eat coal. (Narad, 2015)

There is a feeling amongst government sources that the wellspring of opposition comes from older villagers who are, due to their age and traditions, inimical to change. One of my interviewees, Arjun, actually went to Delhi in January 2015 to meet the Minister of the Environment who asked him if he had children and hinted that if he had brought his son with him, the boy would have agreed with the Minister's point of view. I reproduce his comments from an NDTV interview (Das, 2015):

"When we met the Environment Minister, he told me that I am speaking like an activist and asked me to call my son. I told him that by the time he grows up and coal mining starts, we all will be dead and what will he discuss with you? Is development at the cost of destruction?"

According to Sahara villagers, the young people of the village who went to the local school and then to the nearest college or university (in an urban centre) returned in the

holidays to farm and were also opposed to the mine. Certainly at the no one at the village meeting I attended spoke in favour of the mine. In fact, some of the women were suspicious of us as city people who might be abusing their trust. They were used to various officials, journalists and bureaucrats descending on their villages and hoping to convince them of the 'development' benefits of mining. They were not sure whether our conversations might not be used to support the 'development' arguments.

The interviews and participant observation in Sahara village and with other people in the area demonstrate that there is considerable opposition to coal mining, some of it due to bitter experience. Many villagers recounted the experiences of the inhabitants of neighbouring Kete and Parsa who had lost their farmlands and forest land when these were acquired by Adani Mining. The various forms of compensation promised, monetary and in the form of employment and infrastructure for their villages, were slow in coming and the villagers were forced to protest and compel Adani Mining to stop work (Adani to resume mining, 2014). Arjun (2015) said:

We have raised our voices for what has happened in the previous ones that are running now. We demanded that they be closed if not operated as promised. They must operate as per the consent given. The employees from here must get increased salary. We have organized ourselves and demanding Rs 10-15000 per month salary ... none of the 20 villages in our organization want to take favours from the mining companies. We are firm on our protest and won't accept even their tea. They had promised to give Rs 10-15000 at least so as agreed they must take us in that grade. Instead they have given us peon jobs.

Alok Shukla, a charismatic and tireless worker with two NGOs, Chhattisgarh Bachao Andolan (Save Chhattisgarh Movement) and Jana-Abhivyakti (People's Voice), commented "They were to be rehabilitated in the first phase according to the Ministry of Environment and Forest rules and individual and community forest rights were to be implemented before diverting land but it has not yet happened".

3.2 Non-compliance with PESA and FRA

The villagers and other interviewees were particularly concerned that the Acts that were supposed to protect their rights, such as PESA and FRA, were being flouted in the name of development. The PESA Act mandates that village assemblies (Gram Sabhas)

should be consulted before land is acquired. In practice, either the Gram Sabhas are seldom informed, people are often terrorized into silent acquiescence, or "No Objection Certificates" are forged. Sudha Bharadwaj, an activist and lawyer with the organisation Janhit (People's Welfare) recounted one of her cases to me. The Gram Sabha of Premnagar, a village in the same district as Sahara in North Chhattisgarh, passed resolutions refusing land for a power plant on fourteen occasions. There was vociferous opposition in the environmental public hearing and, when the village leaders were arrested, there was a massive *gherao* (blockade) of the police station forcing the police to release them. The administration then decided that the village was not a village (or '*gram*') but a town (or '*nagar*') and set up a "Nagar Panchayat" (Town Council), thus abolishing the Village Council and the rights of the *adivasis*. This case was reported in the newspaper *The Hindu* (Sethi, 2011)

There were also concerns voiced in a general meeting at Sahara village about the violations of the FRA. Under this Act, villagers whose lands are acquired have a right to an equal area of land for resettlement. The Sahara village had filed a community collective application for resettlement and formally received much less land than what they were losing. As well, the compulsory public hearing before the acquisition of land which was held in 2009, should have been organized in the village Panchayat (Council) area but was held in Udaipur, twenty-two kilometres away, and the villagers were not informed. The environmental clearance letter for the Kete Basan mine was in English and had to be sent away for translation. Ram (2015), one of the villagers, said that their objections were not only about the loss of their land but also of livelihood, citing the impact on local flora & fauna, lack of clean air and pollution of water as the water table would drop severely when the mine began full operations. Ram claimed, in fact, that already the water sources where their animals drank had been polluted so they had to draw water by hand pumps for them.

If they extract water from the river for coal mining, the level will go down and they did not inform us ... This time of the year for three months we let our cattle free to roam and graze around and we tie them in the evening. Now the water is not fit to drink and is all black. Though they are mute animals still they understand that the water is not fit to drink. We also go near the river to farm. Earlier we used to bathe there and now we bathe at home. The water is so polluted, who will bathe in coal water? The birds and animals have no water to drink. (Ram, 2015)

3.3 Alienation of land and threats to livelihood

The villagers were acutely conscious of the alienation of their traditional lands and livelihoods because of developmental projects. They described to me their three forms of traditional livelihood; subsistence agriculture, grazing animals and access to forest produce which they use themselves and sell in local markets. These livelihoods are intricately linked to the forests and water sources, the despoliation of which threatens their way of life. The forests are interspersed with paddy fields – the primary source of food security– as well as grazing commons, critical for their livestock. Forest produce, such as *mahua* (a plant that is ferment to produce alcohol), *amjem* oil seeds, *tendu* leaf and *khunkdi* (mushrooms) is a source of year-round food and income for local residents. Other daily essentials from the forests include firewood and grass. Villagers fashion a range of products from more than 30 different species of grass, including brooms, ropes and mats. The forests also contain holy sites or *deyurs* marked by a collection of trees and such sacred groves are essential to their religious and cultural practices.

3.4 Compensation for loss of land and livelihood

Many *adivasis* claim that due compensation has not been paid for the land previously acquired by the government for mining in the district. Ram Pravesh, an *adivasi* who gave up two acres of his ancestral land told NDTV that he was paid only one hundred thousand rupees as compensation, while the land rate at that time was six to seven hundred thousand rupees per acre. The collector "promised us jobs, houses but it's been six years and ... promises have not been fulfilled," said the villager who works as a daily wage laborer in the city to earn his livelihood (Das, 2015).

According to the villagers, the jobs promised in the mines by the mining companies were to include both women and men. However, the jobs that were eventually offered were unskilled ones at low pay, cutting trees, running errands (peons) or other 'menial' jobs. There was no training available for sophisticated equipment even for the few villagers who were educated:

They have not trained anyone on the machines, just hired us like shepherds or peons. Those who have come from outside have good jobs as people in our village are not educated. Even if some are educated, then also we have not got dignified jobs. The people from outside earn twenty-five to thirty

thousand Rupees while we get five or six thousand rupees. Now this development is for us or for outsiders? (Laksman, Sahara, 2015)

The *sarpanch* (head of the Panchayat or village council) pointed out that all the skilled jobs including those in the 'officer' category were migrants from the neighbouring states of Jharkhand & Bihar. As well, up to sixty villages could be displaced by the mines in the area and the villagers were unconvinced that the administration was capable of such large-scale rehabilitation and resettlement.

The administration cannot resettle one village, how will they resettle innocent tribals from sixty villages? These people cannot survive outside of this region as they do not know anything besides farming. (Arjun, 2014)

There was general agreement that compensation money was not adequate to remediate the loss of land and livelihood. In fact, many villagers pointed out that several of those who had sold their land had ended up losing all their money to outsiders.

There is a saying here that if you sell your land you will be reborn as a jackal and we don't want that for us. (General Village Meeting, 2014)

The previous UPA government had, at the time of the interviews, mooted a substantial increase in compensation for land acquired. The villagers, however, were adamant that cash money was not acceptable.

No the people here won't take money, even if in *crores* (ten million) ... See, if they give us money we can't eat that. We eat grains, rice, which we grow here. For how long will we purchase and eat? We can diversify our crops by growing tomatoes, potatoes, cauliflower, etc. We can add anything to it with our hands. (Narad, 2015)

3.5 Protest and legal remedies

The Sahara villagers have discussed filing a case in court with the help of Janhit. They organized a rally on the 3rd March 2014 in Raipur, the capital of Chhattisgarh. In addition, twenty people from Surguja and Korba went to Delhi on 3rd of March to protest. In Raipur, they submitted a memorandum to the Governor's personal assistant protesting against the Adani mines in Surguja but had received no reply.

Later all those who had gone to Raipur and Delhi got together to share what happened in both places with other village residents. It is important to share to keep the motivation high of the organization and to discuss what more needs to be done to make the movement stronger. My uncle had gone to Delhi who informed a national level consultation was organized. He learnt from there and shared with us that it's not only us rather many regions across the country are affected (Bhim, Surguja, 2015).

Alok Shukla from Jana-Abhivyakti was adamant that the protests organized against land and livelihood alienation should be legal. He himself has borne the brunt of police and intelligence bureau surveillance which is endemic in the area. In fact, the local police or authorities often dub protesters as Maoist if they are seen to be 'anti-development'. Shukla's strategies have involved protest demonstrations, legal remedies pursued in court and putting up candidates for Panchayat elections (Shukla, 2014).

Sudha Bharadwaj whose organization assists *adivasis* with legal cases described one such case in Surguja, the same district as Sahara village. The inhabitants of Choura village, had protested the compulsory acquisition of their lands by the South Eastern Coalfields Limited – a Public Sector Mining Enterprise. The plaintiffs allege that not only was the PESA Act violated in that the Gram Sabha was not consulted before such acquisition, but a forged Gram Sabha resolution was submitted to obtain clearances. About five thousand *adivasis* of nearby villages decided to march to the Mines Offices to protest on 26th December 2009 (Gram Ganrajya Divas or Village Democracy Day – the day the PESA Act was first notified.). South Eastern Coalfields Limited, which had begun its mining operations, filed a civil suit for the loss of production on that day against six villagers for the recovery of 3,600,000 Rupees with 9% interest (Bharadwaj, 2014).

4. RESULTS AND DISCUSSION

Though it is not possible to surmise the extent to which the opposition to coal mines in Surguja district can be extrapolated to the rest of Chhattisgarh, it is certainly true the level of hostility to mining in this area is robust. There are protests and demonstrations on a regular basis, legal remedies sought in court (Alok Shukla (2015) put it poignantly when he said to me: "For *adivasis*, the law is that moment between birth and death which allows us to take a breath") and candidates contest local Panchayat elections. In fact in such elections held earlier this year, several candidates put up by the Chhattisgarh Bachao Andolan (Save Chhattisgarh Movement) were successful.

For adivasis, it is hard to overstate the importance of the PESA which mandates that in the Scheduled Areas (where the adivasis live) the Gram Sabha or Village Council must be consulted prior to commencing any project in the village and particularly in the case of any activity involving acquisition/alienation of land. In its 2009 report, 'Development Challenges in Extremist Affected Areas', the Planning Commission noted that "Schedule V and PESA are powerful legislation...but implementation of this law is weak and ineffective." In 2008, the Union government asked the Institute of Rural Management, Anand, to include a chapter on the PESA in the Panchayati Raj Report 2008-09. Titled, 'PESA, Left-wing Extremism and Governance: Concerns and Challenges in India's tribal districts,' the chapter noted that "legal and administrative subterfuge has kept the provisions of the PESA as a set of aspirations and the agenda of self-governance remains postponed ... In several cases, the practice of the State government is to sign high profile MoUs with corporate houses ... deploy the Acquisition Act to ostensibly acquire the land for the State industrial corporation ... [which] leases the land to the private corporation — a complete travesty of the term 'acquisition for a public purpose,' as sanctioned by the act." However, the chapter was dropped from the final report without any explanation (Sethi, 2011). Similarly, the Individual (IFR) and Community Forest Rights (CFR) conferred by the FRA are seminal for adivasis. Any person belonging to a scheduled tribe can claim IFR to live in and cultivate up to four hectares provided s/he occupied it and was dependent on it as of December 13, 2005. In case of a non-adivasi, in addition to this requirement, s/he would have to prove her/his family's residence in the vicinity of the forest land for seventy-five years prior to December 2005. CFR transfers rights from the forest department back to the inhabitants of the forest. Such rights can be claimed on reserved, protected or unclassified forests and protected areas, which include national parks and wildlife sanctuaries.

According to Bharadwaj (n.d.), however, around fifty percent of all claims filed under this Act in Chhattisgarh were rejected and no community rights applications were accepted or processed or even provided. Worse still, the provisions in the Forest Rights Act that explicitly mandate the determination of rights prior to any displacement is being violated with impunity. She points to the cases of *adivasis* displaced from various Reserve Forests such as Achanakmar (district Bilaspur), Udanti (district Dhamtari) or Badalkhol (district Jashpur). Additionally, since CFR allows *adivasis* to manage their forests independently, forest departments have opposed it forcefully. "It means loss of control: no bribes ... to the DFO [divisional forest officer]" (Seetharaman, 2015).

5. CONCLUSION AND POLICY IMPLICATIONS

As mentioned in the Introduction, coal mining and the appropriation and depletion of forests have been linked in India since colonial times and inextricably connected with economic growth and progress. However, the Centre for Science and Environment's Sixth State of India's Environment report, *Rich Lands, Poor People – Is Sustainable Mining Possible?*, points out that mining can never be truly sustainable. All ore bodies are finite and non-renewable and even the best-managed mines leave "environmental footprints". However, it also concedes that mining and minerals are necessary for development (Bhushan et al, 2008). The Human Development Index displays a strong correlation between electricity use and development and indicators such as child mortality, female life expectancy or the proportion of undernourished people. An increase in GDP and productive employment, implying increased income and consumption, will require increased energy use (Sant and Gambhir 2015, 289 - 90).

Monali Zeya Hazra, coordinator, Industry and Environment unit, CSE, says "The issue is not whether mining should be undertaken or not. Rather, it is about how it should be undertaken. It is about ensuring that mining is conducted in an environmentally and socially acceptable manner." The report recommends a range of policy initiatives, including recognising people's right to say 'no' (mining should not take place without the consent of the people); independent, impartial preparation of Environment Impact Assessment reports; disallowing mining in forests; framing stronger mine closure regulations; and "doing more with less – a key to sustainable development" (Bhushan et al, 2008). Similarly, Sant and Gambhir (2015, 295), who claim that India will probably double its coal based capacity in a decade as other energy options are limited in potential, recommend that energy efficiency and renewable energy should be adopted for the development benefits of rapid reduction in shortages and social inclusion (299).

5.2 Along with these sensible recommendations for mitigating the energy deficit without massively increasing fossil fuel consumption, the government of India should discard the current amendments to the Land Acquisition Act that have not been passed with good reason by the Rajya Sabha. Rather it should seek to strengthen the provisions that safeguard for *adivasis* whose land is to be acquired under the Act. At present, a hand-picked "state level committee" consisting almost entirely of bureaucrats makes all decisions and it is unclear how the "social impact assessment" is to be done, and who

will do it. Community representatives should be on the state level committee and involved in the decision making.

5.3 The high court judge interviewed (Krishna, 2014) commented despairingly that though the Indian legal systems had delivered landmark judgments, the implementation of these legal remedies were highly flawed, nor were there any audits as to whether there was compliance with judgments especially those in favour of the poor and underprivileged. This is particularly true of compensation for land acquisition. It seems clear from numerous interviews and published literature that lands for large-scale resource or infrastructure projects are acquired through unsafe processes and compensation, rehabilitation and resettlement are implemented partially, if at all. Measures should be put into place for an unbiased body with representatives from the affected areas to ensure that those displaced by genuine public interest projects have been consulted and are compensated, rehabilitated and resettled appropriately.

5.4 According to Bharadwaj (n.d.), in the 2011 Bill, the definition of public purpose has been widened even further so that even real estate is exempt from 80% consent by the phrase "any site in the urban area". Projects that are in "public interest" (which is not defined) or that "produce goods or services for the public" become public purpose. Thus land acquisition for practically any project, private or public, is possible, only subject sometimes to the "80% consent" requirement. "Public interest" needs to be defined as genuine public projects as opposed to private or corporate interests.

5.5 In 2012, the government amended the FRA to make it more unambiguous and give more powers to the Gram Sabha. The Supreme Court in 2013, in a landmark judgement, ruled that the Gram Sabhas of twelve affected villages in Niyamgiri in Odisha would decide the fate of a bauxite mining project of the company Vedanta Resources. All the Gram Sabhas unanimously voted against the project. The implementation of the FRA needs to be consolidated and strengthened. Community Forest Rights, in particular, need to be speedily implemented so that the iniquities experienced by forest-inhabiting are remediated.

During the last six decades of development, forest-dwelling people have been marginalized by the loss of rights over their sources of livelihood. The burden of resource extraction for the benefit of elite minorities has been borne by the

marginalized and immiserated majority. As Parajuli puts it, for the poor in India, the issue is no less than the "right to life," while for the privileged few, the issue is the "right to property" (Parajuli, 2010). The last word therefore, should go to an elder of the Sahara village who put the case of his villagers poignantly:

This land is our mother and we cannot go to another land by selling her. We will not flourish, rather we will face troubles and violence elsewhere. We have grown here just as our ancestors and this land has given us everything from food, shelter, clean air, water, home so considering all that this land is equivalent to our parents and God, and we cannot sell them. We are willing to face arrows and weapons with our children instead of being ashamed of having to sell our land and live like beggars or wanderers. (Narad, 2014)

• All names, including that of the village, have been changed.

ACKNOWLEDGEMENTS

I would like to thank all the members of Sahara village, Alok Shukla, Sudha Bharadwaj and various others who did not wish to be identified for their assistance. Kanchi Kohli and Manju Menon provided valuable data for the background and Lola Sharon Davidson assisted with the research.

REFERENCES

Adani to resume mining after pact with Chhattisgarh villagers. 2014. Indian Express. September 3. Accessed 13 November 2015.

http://indianexpress.com/article/india/india-others/adani-to-resume-mining-after-pact-with-chhattisgarh-villagers/

Ahmad, N. 2014. Colonial Legislation in Postcolonial Times in The Coal Nation: Histories, Ecologies and Politics of Coal in India. Edited by Kuntala Lahiri-Dutt. Ashgate, Surrey & Burlington.

Akbar, M. J. 2011. I wrote my will across the sky in stars. Accessed 30th April 2016. http://indiatoday.in/story/india-today-newsmaker-of-1950s-jawaharlal-nehru/1/164435.html

Allard, T. 2014. Indian Prime Minister Narendra Modi to back coal, renewables in address to Parliament. Accessed 30th April 2016. http://www.smh.com.au/federal-politics/political-news/indian-prime-minister-narendra-modi-to-back-coal-renewables-in-address-to-parliament-20141117-11og0o.html

Bajaj, V. 2012. *Report Faults Indian Government's Handling of Coal Concessions*, The New York Times, 17th August.

Bedi, H. 2013. Environmental Mis-Assessment, Development and Mining in Orissa, India. Development and Change. 44(1), 101-123.

Bharadwaj, S. n.d. The legal face of corporate land grab in Chhattisgarh. Janhit Peoples' Legal Resource Centre. Bilaspur. Chhattisgarh.

Bhushan, C., Zeya Hazra, M., Banerjee, S. 2008. Sixth Citizens' Report [SOE-6]: Rich Lands Poor People: Is 'Sustainable' Mining Possible? Centre for Science and Environment. New Delhi

Coal is king and extremely important element in developing India: SC. 2014. The Deccan Chronicle. Accessed 30th April 2016. http://www.deccanchronicle.com/140826/nation-current-affairs/article/coal-king-and-extremely-important-element-developing-india-sc Chikkatur, A.P., Sagar, A.D., Sankar, T.L. 2009. Sustainable development of the Indian coal sector. Energy 34, 942–953.

Chilkoti, A., Crabtree, J. 2014. October 3. India eyes end to state coal monopoly. Financial Times. Accessed 13 November 2015. http://www.ft.com/cms/s/0/d3d0a262-5a7f-11e4-8625-00144feab7de.html#axzz3vl5i2cOF

Choudhury, C. 2015. Not Just A Coal Block. January 2. Accessed 13 November 2015. https://ruralindiaonline.org/articles/not-just-a-coal-block-hasdeo-arand/ Desai, M. 2010. Equality or Inclusion: The Dilemma of India's Democracy in Democracy, Development and Decentralisation in India (eds.) Edited by C. Sengupta & S. Corbridge. Routledge. London, New York and New Delhi.

Elinor Ostrom's 8 Principles for Managing A Commons. 2011. On the Commons. Accessed 13 November 2015. http://www.onthecommons.org/magazine/elinor-ostroms-8-principles-managing-commmons

Hayden, M. E. 2015. India seeks to balance development with need for clean energy. Accessed 30th April 2016. http://www.latimes.com/world/asia/la-fg-india-modi-climate-20151202-story.html

Harriss, J. & Corbridge, S. 2010. The Continued Reinvention of India in Democracy, Development and Decentralisation in India. Edited by C. Sengupta & S. Corbridge. Routledge. London, New York and New Delhi.

IEA 2008. Energy balances of non-OECD countries 2005–2006. International Energy Agency.

India says Paris climate deal won't affect plans to double coal output. 2015. The Guardian. Accessed 30th April 2016.

http://www.theguardian.com/environment/2015/dec/14/india-says-paris-climate-deal-wont-affect-plans-to-double-coal-output

Indigenous Reserves and Community Forests. 2015. Global Forest Atlas. Accessed 13 November 2015. http://globalforestatlas.yale.edu/amazon/land-use/indigenous-reserves-community-forests

Integrated Energy Policy Report of the Expert Committee; Government of India, 2006. Available at http://planningcommission.nic.in/sectors/index.php?sectors=energy

Jevons, W. S. 1865. The Coal Question: An Inquiry Concerning the Progress of the Nation, and the Probable Exhaustion of Our Coal-Mines. Macmillan & Co. London.

Kohli, A. 2007. State, Business, and Economic Growth in India. Studies in Comparative International Development. Vol.42, no.1 January.

Lahiri-Dutt, K. 2014. Introduction to Coal in India: Energising the Nation. The Coal Nation: Histories, Ecologies and Politics of Coal in India. Edited by Kuntala Lahiri-Dutt. Ashgate, Surrey & Burlington.

Lugard, F. 1922. The Dual Mandate in British Tropical Africa. William Blackwood and Sons, Edinburgh and London.

Madhavan, V. 2015. Controversy Over Land Acquisition Bill: All You Need to Know March 7th. The Indian Express. Accessed 13 November 2015.

http://www.newindian express.com/nation/Controversy-Over-Land-Acquisition-Bill-All-You-Need-to-Know/2015/03/07/article2701536.ece

Mallah, S. Bansal, N.K. 2010. Nuclear and clean coal technology options for sustainable development in India. Energy 35, 3031-3039

Ministry of Power. 2005–06. Annual report, Ministry of Power, editor. Government of India. Available from: http://powermin.nic.in/reports/pdf/ar05_06.pdf; 2006.

NDA government reduced green nod period to 190 days: Prakash Javadekar, 2016. The Economic Times. Accessed 30th April 2016.

http://articles.economictimes.indiatimes.com/2016-03-13/news/71475346_1_union-minister-prakash-javadekar-nda-government-clearance

Oskarsson, P. 2013. Dispossession by Confusion from Mineral-Rich Lands in Central India. South Asia: Journal of South Asian Studies. 36:2, 199-212.

Oskarsson, P. 2010. Marginalising People on Marginal Commons: The Political Ecology of Coal in Andhra Pradesh. The Coal Nation: Histories, Ecologies and Politics of Coal in India. Edited by Kuntala Lahiri-Dutt. Ashgate, Surrey & Burlington.

Parajuli, P. 1996. Ecological ethnicity in the making: Developmentalist hegemonies and emergent identities in India. Identities. 3:1-2, 14-59.

Parikh, K. 2012. Sustainable development and low carbon growth strategy for India. Energy 40,31-38.

Phukan, S. 2015. Bills to Auction Mines, Cancelled Coal Blocks Passed in Rajya Sabha.

March 20. NDTV. Accessed 13 November 2015. http://www.ndtv.com/india-news/bill-to-auction-mines-passed-in-rajya-sabha-748223

Roy, Avik 2015. No renewables without coal, says Indian energy minister. Accessed 30th April 2016. http://www.climatechangenews.com/2015/11/30/no-renewables-without-coal-says-indian-energy-minister/

Saikia, S. 2012. CIL foresees coal demand-supply gap till 13th Plan. The Hindu Business Online. Accessed 13 November 2015.

http://www.thehindubusinessline.com/economy/cil-foresees-coal-demandsupply-gap-till-13th-plan/article4110865.ece

Sant G., Gambhir, A. 2015. Energy Development and Climate Change in Handbook of Climate Change and India: Development, Politics and Governance. Edited by N. K. Dubash. Routledge, New York.

Sengupta, C. 2010. Burden of Exception? Deficits and Deepening of Democratic Development in India. Development and Decentralisation in India. Edited by C. Sengupta & S. Corbridge. Routledge. London, New York and New Delhi.

Sethi, A. 2011. If villagers won't go to town, town will come to villagers. The Hindu.

January 17. Accessed 19 November 2015. http://www.thehindu.com/todays-paper/tp-national/if-villagers-wont-go-to-town-town-will-come-to-villagers/article1096339.ece Shahi, R.V. 2003. Mission 2012: Power For All. Accessed 15 November 2015.

http://pib.nic.in/feature/feyr2003/fjun2003/f190620031.html

Singh, S. 2015. Modi government to seek Cabinet nod to allow commercial mining of coal by state utilities, The Economic Times. Accessed 2 May, 2016.

http://economic times. indiatimes. com/news/economy/policy/modi-government-to-seek-cabinet-nod-to-allow-commercial-mining-of-coal-by-state-

utilities/articleshow/50165517.cms

Thorsheim, P. 2006. Inventing Pollution: Coal, Smoke, and Culture in Britain since 1800. Ohio University Press, Ohio.

Washbrook, D. 1997. From Comparative Sociology to Global History: Britain and India in the Pre-History of Modernity. Journal of the Economic and Social History of the Orient. 40, 4, 410-443

World Bank. 2010. Indicators. Data.worldbank.org/indicator/NY.GDP.PCAP.PP.CD. Accessed 15 November 2015.

World Bank. 2010a. Empowering Rural India - Expanding Electricity Access by

Mobilizing Local Resources. Accessed 15 November 2015. https://openknowledge.worldbank.org/handle/10986/12532

WEBSITES

Census of India. 2011. Population Enumeration Data. Accessed 12 November 2015.

http://www.censusindia.gov.in/2011census/population_enumeration.html

Coal Deposits in Chhattisgarh. Government of Chhattisgarh Mineral Resources

Department, Accessed 12 November 2015. http://chhattisgarhmines.gov.in/coal.htm

Coal Mining in India: The Past. Government of India, Ministry of Coal. Accessed 15

November 2015. http://coal.nic.in/content/coal-mining-india

Coal Reserves. Government of India, Ministry of Coal. Accessed 15 November 2015.

http://coal.nic.in/content/coal-mining-india

Coal - Indian Energy Choice. Government of India, Ministry of Coal. Accessed 15 November 2015.

http://coal.nic.in/content/coal-indian-energy-choice

Dalhousie, Lord. 1850. Minute on Introduction of Railways in India, as Submitted to the Court of Directors. Accessed 15 November 2015.

http://universitypublishingonline.org/foundation/ebook.jsf?bid=CBO9788175968264

Das, S.R. 2015. As India Faces Energy Shortage, Tribal Protests Pose Threat to Fresh Coal Allocations in Chhattisgarh. January 28. NDTV. Accessed 15 November 2015.

http://www.ndtv.com/india-news/as-india-faces-energy-shortage-tribal-protests-pose-threat-to-fresh-coal-allocations-in-chhattisgarh-734917

Generation, Overview. Ministry of Power. Accessed 15 November 2015.

http://powermin.nic.in/Generation-Capacity

Ministry of Tribal Affairs. 2006, 2012. Accessed 15 November 2015.

http://www.forestrights.nic.in/.

Planning Commission of India. Archived website. Accessed 15 November 2015.

http://planningcommissionarchive.nic.in/

Seetharaman, G. 2015. How community rights under the Forest Rights Act could transform the lives of millions of forest dwellers. Accessed 15 November 2015. http://articles.economictimes.indiatimes.com/2015-08-09/news/65379774_1_forest-

rights-act-traditional-forest-dwellers-minor-forest/4

State Investment Promotion Board. Government of Chhattisgarh. List of MOUS. Accessed 12 November 2015. http://industries.cg.gov.in/sipb/pdf/MOU_List_English%20-%202015.pdf

INTERVIEWS

March 14 - 17 2014 Sahara village

General village meeting

Ram

Laksman

Bhim

Arjun

Narad

Sarpanch

March 15, 2014 Bilaspur

Sudha Bharadwaj, Janhit

February 2015 Raipur

Alok Shukla, Jana-Abhivyakti, Chhattisgarh Bachao Andolan

February 2015 Delhi

Krishna, High Court Judge