

# **IRON AND STEAL: THE POSCO-INDIA STORY**

**Mining Zone Peoples' Solidarity Group**

**<http://miningzone.org/>**

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## ABOUT THE MINING ZONE PEOPLES' SOLIDARITY GROUP

The Mining Zone People's Solidarity Group is an international research group focused on India, with core interests in new economic policy. We have been following the development of several large projects in India, and for the last six months, we have been investigating claims made by the central and state governments about the benefits to the country due to the proposed POSCO integrated steel project and captive port in Orissa.

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# Iron and Steel: The POSCO India Story

## Executive Summary

POSCO-India's project to build a 12 million tonnes per year steel plant in Orissa, with a captive port and iron ore mines, is widely celebrated as the single largest infusion of Foreign Direct Investment (FDI) since the Indian economy liberalized in 1991. Estimated at USD \$12 billion (Rs.52,000 crores), the project was claimed by Orissa government to "bring prosperity and well-being to its people" by embarking on major industrialization based upon exploitation of its natural resources. However, this project has faced strong resistance from a vigorous people's movement on the ground, comprised of villagers apprehensive of losing lands and livelihoods. Consequently, five years after the project was launched, POSCO has yet to acquire a single acre of land, and has been embroiled in legal, logistical and procedural quagmires.

This report presents a comprehensive analysis of the claims advanced by the State and Central governments and the POSCO company itself, of the various benefits that would accrue to "the people", and the total addition to the state economy due to this project. Going beyond the standard narratives of revenues and cash flow, this report investigates the actual impacts of the POSCO project on the residents of Jagatsinghpur, Keonjhar and Sundergerh, where the steel plant, the port, and the mines will be set up—the same "people" in whose name the POSCO project has been so vigorously pushed by the government of Orissa. The report also looks at the pivotal roles played by the various institutions of the government in justifying and implementing this project, many times in an undemocratic, illegal and coercive manner. Finally, this report offers a critical evaluation of the only cost-benefit analysis of the POSCO project done so far, conducted by the National Council for Applied Economic Research (NCAER) in 2007, and highlights the fundamental flaws in its methodology and its conclusions. Conclusions from the three substantive chapters of the report are summarized below:

1. Subversion of State's authority and sovereignty for POSCO's benefits: All three organs of the Indian state—the executive, judiciary and legislature—have been severely compromised in order to facilitate a swift execution of the POSCO project at the least cost to the company. Various laws and procedures been openly flouted, illegal clearances awarded, and deliberate attempts have been made to underplay the costs and overstate the benefits of the project.
  - The Forest Rights Act (FRA) has been openly and deliberately flouted in the 3096 acres of forest land required for the POSCO steel plant. The administration not only refused to recognize the rights of thousands of families in the project area under the Act, it also deliberately withheld information on the palli sabha resolutions passed by the villages opposing the POSCO project. In spite of two committees appointed by the Ministry of Environment and Forests verifying these flagrant violations, the MoEF has yet to withdraw its clearance to the project.

- Local popular and democratic resistance to the POSCO project has faced brutal repression from the state's security apparatus, wherein thousands of resisters have been severely beaten up at protest rallies, several have been severely injured in police shootouts, and one activist even lost his life. Thousands of villagers participating in peaceful and democratic dissent have outstanding warrants and are living in constant fear of imminent arrest, and dozens of activists and leaders have been imprisoned for months on end.
- The government has offered misleading and false projections for tax revenues realized from the POSCO project. Given that the POSCO steel plant and captive port would be in Special Economic Zones and benefit from many tax concessions, the tax revenues projected by the Orissa government (based on the NCAER report) are a gross exaggeration and are patently wrong. For instance, the numbers seem to imply that the corporate tax that POSCO would owe the state would be higher if it has SEZ status, than if it doesn't!
- The Orissa government's decision to allocate 600 million tons of the highest grade iron ore available in India buried in the hills of Khandadhar hills to POSCO, taking precedence over more than 200 domestic and international applicants, is an unprecedented handout to the company. The extraction of iron ore alone allows POSCO to profit to the tune of Rs. 6,500 crores per year (about 1.5 billion U.S. dollars) for 30 years, ensuring that its entire investment of 12 billion U.S. dollars in this project is recouped within the first 8 years.

2. Project affected villages face widespread impoverishment and loss of livelihoods: We conducted fresh preliminary investigation of the current baseline economy at the two project sites – the plant/port and the mining sites. Our data shows that:

- There is a thriving agricultural economy in the three gram panchayats at the plant/port site, centered on but not limited to betel vine cultivation. Betel vine cultivation is feasible on very small plots of land and provides a steady, reasonable income both to the owner-cultivators and to wage labourers. This economy will be completely destroyed by the project, displacing an estimated 22,000 people.
- The Resettlement and Rehabilitation package on offer in the steel plant area is not reasonable compensation for the losses that will be suffered by the people. For instance, the average loss of income for a cultivator is at an average Rs. 40,000 **per year** per decimal (100 decimals = 1 acre) of land under betel vine cultivation (minimum reported income per decimal= Rs.33,000 and maximum reported per decimal= Rs.50,000) under

betel vine cultivation, but the latest compensation on offer is a **one-time** payment of Rs. 11,500 per decimal. The total loss experienced by a betel vine farmer per decimal over a 30 year time period would be in the range of Rs. 12 lakhs thus making the current one time compensation package on offer less than 1% of their cumulative earning potential.

- An additional estimated 20,000 to 25,000 people from approximately 30 neighboring gram panchayats would suffer loss of their livelihood as fishermen because of the proposed POSCO port. These people are not even referred to in any R&R plan.
- In the proposed POSCO mining areas, residents of approximately 32 villages in Keonjhar and 84 villages in Sundergerh, mostly Scheduled Tribes, are dependent on surrounding forests for minor forest produce for consumption and sale. The Forest Rights Act has not been implemented and no R&R has been announced for these areas.
- The employment potential of the project has been grossly exaggerated by POSCO and Orissa government, based on an inaccurate study by NCAER. A careful breakdown of the much-touted “8.7 lakh jobs for 30 years” claimed by NCAER study shows only 7000 direct jobs and a maximum of 17,000 direct and indirect jobs in the next 5-10 years. This represents a maximum of 1.7% reduction in current unemployment levels as against the exaggerated claims by POSCO who have used the figure of 8.7 lakh jobs to suggest that the project will almost entirely wipe out unemployment in Orissa! Further, due to issues of skill mobility and mechanization, most of these jobs will not go to the project-affected population.

3. Environmental Clearances based on flawed processes and incomplete data: The Environmental Impact Assessment (EIA) and Environmental clearance granting processes were inherently flawed and biased towards the project, leading to dangerous oversights of many of the critical threats to the environment:

- Some of the environmental threats completely overlooked by the EIA are the possible adverse impact on the viability of the thriving Paradeep port, an impending water crisis in the Mahanadi delta and Khandadhar mining areas, and severe negative impacts on already threatened wildlife species such as Olive Ridley turtles, dolphins, Royal Bengal tigers and elephants. The impact of a depleted forest cover on the forest dwelling *Adivasis* of the Khandadhar mining area and the disastrous public health effects of mining have also been completely overlooked.
- There have been several major procedural shortcomings in the way the EIA was conducted. The project was treated as a series of

disconnected parts so that its actual cumulative environmental impact has been obscured. Rapid EIAs were performed instead of Comprehensive EIAs in violation of the EIA Notification, 2006, which requires a comprehensive EIA, as does global best practice. The public hearing process was vitiated by holding the hearing in area far from the affected villages as well as by the heavy deployment of police and the presence of POSCO officials on the dais.

- The Coastal Regulation Zone Notification of 1991, which protects fish breeding grounds, has been violated since the area designated for POSCO’s captive port is classified as an “ecologically sensitive area.”

Based on the above findings we are forced to conclude that the POSCO project, as it currently stands, is poorly conceptualized and economically unviable. If allowed to proceed, the project will result in widespread impoverishment of a large number of people and irreversible degradation of the environment, besides setting a dangerous precedent of complete state capitulation for a private company’s profit.

- The project’s benefits have been grossly exaggerated and its costs minimized. The state has sought to justify the project by relying on a completely inaccurate study conducted by the NCAER, where the benefits of employment and tax revenues have been highly overstated. On the other hand, the profitability of the project to the state economy is based on incomplete categorization of project costs. The real costs borne by real people—the loss of livelihoods, homes, forests, rivers – figure nowhere in the cost-benefit analysis. This methodology is in violation of the Asian Development Bank’s guidelines, which the NCAER study purports to follow.
- This project will only lead to a deepening of the gross inequities of wealth distribution in our society. Most of the costs of this project, in terms of resources of land, water, forests and minerals, will be borne by the economically weaker segments of society—the *Adivasis*, the farmers, the fish workers and the small-scale betel leaf traders. On the other hands, the benefits of this project will largely accrue to the multinational corporate houses investing in POSCO, the mineral and metal traders and technically skilled labor force.
- The procedural violations at every stage amount to the clear undermining of democracy. To restore faith in the country’s democratic traditions, it is important that such violations not be allowed to happen in other projects and all aspects of error and violation be corrected in this case.

## Chapter 1 - Peddling POSCO: An Introduction

*...the experience of this country is that governments do not stop doing something merely because it has been demonstrated to be bad. Or even contrary to constitutional directives and goals. They stop only if going along is made difficult to the point of near impossibility. No democratic dispensation should be thus, but Indian democracy is thus (K.Balagopal, human rights activist)*

*Paan kheti [betel vine cultivation] is our lifeline...why does the government want to destroy it and force us into being laborers...the government does not think about our life and dignity...only about the profit for their companies... (Niranjan, a 60-plus-year-old betel vine farmer)*

### 1.1 Introduction

On June 22, 2005, the Biju Janata Dal (BJD) government of the state of Orissa in eastern India signed a memorandum of understanding (MoU) with the world's fourth largest steel company – the South Korean multi-national corporation Pohang Iron and Steel Company (POSCO).<sup>1</sup> The MoU was to build a steel plant with a capacity of 12 million tons per year, along with a captive port and iron ore mines. Estimated at \$12 billion USD (Rs.52,000 crores)<sup>2</sup> and touted to be India's largest ever Foreign Direct Investment (FDI) since its economy liberalized in 1991, the project was claimed by the Orissa government to “bring prosperity and wellbeing to its people” by embarking on major industrialization based upon exploitation of its natural resources.<sup>3</sup> More than five years later, and after the MoU expired in June 2010,<sup>4</sup> the POSCO project is still awaiting legal clearance and has yet to acquire even a single acre of the 4004 acres needed for it (about three-quarters of which is currently designated as “forest land”).<sup>5</sup>

What happened over the last five years that prevented the Orissa government from moving ahead on the POSCO project? In pursuing the above question it became quickly obvious to us (the writers of this report) that the “voice” of the government was not the only one present in the context of the planned POSCO project. Nor was it resonating with the “voices” of the people in whose name the

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<sup>1</sup> POSCO was nurtured as a state-owned enterprise since 1968 for more than three decades by nationalized bank credit, public investment and well-designed protectionist policies (all hallmarks of the South Korean model of state-led development). It became a world-class steel producer in the late-1980s and remained so into the 1990s. Since 1997 there was a systematic privatization of POSCO largely due to the economic crisis affecting all Asian “Tiger” economies and increased foreign investment in POSCO. Only in 2000 when the South Korean state divested its shares from the company as part of its privatization policy did POSCO become a private corporation. As Cambridge economist Ha-Joon Chang has convincingly shown in his book *Bad Samaritans: The Myth of Free Trade and the Secret History of Capitalism*, recently privatized enterprises such as POSCO “try to underplay, if not exactly hide, the fact that [they] became a world-class firm under state ownership” (Chang 2008: 112; see also pp.12-14). This point is worth remembering when seeking to understand the POSCO saga in India today, where one frequently encounters a public discourse about privatization that is not much more than mythmaking.

<sup>2</sup> 1 crore = 10 million. For a fact-sheet on what is the POSCO project in Orissa, see section 1.2

<sup>3</sup> Memorandum of Understanding between the Government of Orissa and M/s POSCO for establishment of an integrated steel plant at Paradeep, available at <http://www.orissa.gov.in/posco/POSCO-MoU.htm>

<sup>4</sup> MoUs usually have a five-year term limit after which they need to be renewed.

<sup>5</sup> The government of Orissa in 2005 and continuing until the present is headed by Mr. Naveen Patnaik of the Biju Janata Dal (BJD) party which was supported by the Bharatiya Janata Party (BJP) for 11 years until 2009 when they parted ways due to differences over seat-sharing. The MoU was signed under the aegis of Mr. Harichandran from the BJP who was then the Minister of Industries in the BJD government. Since 2004, the central government in India is formed by the Congress Party.

government was planning the project. Further, the story of development narrated by the government— about how such a mega-venture with huge private foreign investment would bring prosperity to all— was not the only one available for any listener and observer. There were other stories about development in circulation – stories of how people were already creatively involved in making their lives and livelihood in quiet dignity in precisely those places that were sought for the POSCO project, that the road to realizing the MoU would need to contravene some very enlightened laws put in place by the same Indian state, that there were reasonable grounds to question the tall claims for prosperity made by the state and its MoU, that the actual environmental impacts were far from benign, and many such others. There were, so to speak, many a gap between the warp and weft of the narrative of the MoU.

Even a cursory review of the mainstream media in India and abroad made it amply clear that as early as August 2005 several “people’s groups” made up of residents in the affected areas had formed around the POSCO issue. Some of these groups include the POSCO Pratirodh Sangram Samiti (PPSS, Anti-POSCO Mobilization Committee), the Nav Nirman Samiti (New Development Committee), Rashtriya Yuva Sangathan (National Youth Collective), United Action Committee (UAC), groups of a much older national movement, Sarvodaya, the Orissa Bachao Andolan (Save Orissa Campaign) and some smaller groups. Not all the groups listed above approach the issue in a similar manner; nor are their demands all the same. Many of them demanded attention to creating and sustaining a vibrant economy with guaranteed jobs for everyone, many clearly pointed to the current existence and importance of betel vine cultivation which sustains a large population in this area. Some raised the issue of their land ownership which was not being recognized by the state, and noted that the POSCO project itself was thus an “illegal encroachment” on their land. All of them reminded the public about the poor rehabilitation of previous development project oustees in Orissa, thus bringing up the question of implementation of promises by the state. While for some groups it was an issue of proper compensation for their land, for others it was about their rights to earn their own livelihood and not be displaced from their land, and for yet others, it was a more fundamental problem of the kind of development model pursued feverishly by the state which seemed very “anti-people.” Despite such a spectrum of thinking, all the above groups have come together from time to time on one platform to show opposition to the POSCO project as currently conceived.

One of the earliest actions of the PPSS was to block the entry of any government or POSCO official into three (Dhinkia, Gada Kujanga and Nuagaon) of the nine villages earmarked for the POSCO project, and instead demand that their government enter into discussions with them about their own future. This blockade continued through the ensuing years until May 2010. The major responses from the government of Orissa included the deployment of 12 platoons of paramilitary forces in the weeks leading up to the first public hearing scheduled in April 2007 which had the effect of creating what international observer groups called “atmosphere of intimidation” to the local populations from affected villages desirous of attending the hearing, and again in November 2007 when police, along with allegedly hired goons, attacked and critically injured protestors in Balitutha town near the village of Nuagaon, and most recently again in May 2010 when 40 divisions of the Orissa state police opened fire on a peaceful protest (again in Balitutha), reportedly injuring more than 200 people in the process. The May event was also noted by observers as one in which the state engaged in acts that grossly violated civil liberties such as arresting without charge, engaging in arson of local property, and publicly humiliating defenseless villagers. Such state responses are of course in



addition to the far more frequent and far less dramatic ways in which the state has routinely harassed any citizen who dares to dissent with the POSCO Project.

The POSCO project entered the realm of legal battles when the Forest Rights Act (FRA) – a progressive act that recognizes the rights of people who have lived (and depended upon for their livelihood) for more than three generations (75 years) on “forest land” and empowers the *gram sabha* (“village people’s forum”) to protect and manage forests as a statutory authority – was passed by the Indian Parliament and became law on January 1, 2008. The FRA, combined with the fact that three *gram sabhas* in the steel plant area passed resolutions in April 2008 to *not* divert any forest land to the POSCO project, compelled the central government’s Ministry of Environment and Forests (MoEF) to act in accordance with the law in taking decisions on the POSCO MoU. It is this body, the MoEF that is still deliberating about what has now become the POSCO imbroglio.

It is in facing such stark contradictory narratives from the ground-up that it became imperative for the writers of this report (or for that matter any objective observer) to ask a different set of questions than is allowed by the prevailing orthodoxy of public discourse over development in India: Who are “the people” in whose name and for whose development the POSCO project has been so vigorously pushed by the government of Orissa? What are the impacts that the POSCO project will most likely have on “the people” in the districts of Jagatsinghpur, Keonjhar and Sundergerh, and the *gram panchayats*<sup>6</sup> of Gada Kujanga, Nuagaon and Dinkia, where the steel plant, the port and the mines will be set up? How have “the people” already been affected by the POSCO project over the last five years and what are their demands from their own government? And finally, who will this so-called development benefit, and who will pay its costs (assuming only for the sake of argument that all costs can actually be measured)?

The epigrams to this introductory chapter are signposts that serve as reminders of the kinds of struggles that are demanded of those who attempt to navigate the rugged terrain of Indian “democracy” in an era of growing nexus between national governments, and national and multinational capital, and the responsibilities of concerned people anywhere in the world who are in solidarity with all movements for peace and justice with sustainable, equitable and just development. Thus, the final question that arose in the process of preparing this report was: What does it say about Indian “democracy” when the Indian State routinely embarks on development projects that promise prosperity to an undifferentiated mass called “the people” or “the public” while ensuring the sustained enrichment of an undisclosed number of private actors, national and international?

For, the POSCO saga<sup>7</sup> is only the latest in a long line of deeply problematic and adventurous undertakings by private capital (aided in multiple ways by the Indian state) into the mineral-rich parts of India, especially the central and north-eastern mining belt in the states of Chhattisgarh, Orissa, West-Bengal, Jharkhand and Bihar. With approximately 50% of India’s known bauxite, 98% of chromite, 25% of coal, 35% of iron ore, 27% of manganese and 91% of nickel ore,<sup>8</sup> Orissa provides ample evidence for a troubling pattern of development models that are built upon hubris and laced

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<sup>6</sup> “local village councils”, or the lowest administrative level of decentralized governance in India

<sup>7</sup> In this sense the term “saga” is appropriate – etymologically referencing the hotly contested stories of adventure, conflict and colonization of Iceland.

<sup>8</sup> See list of mineral resources in Orissa, available at [http://india.gov.in/knowindia/mineral\\_orissa.php](http://india.gov.in/knowindia/mineral_orissa.php)

with violence. One does not have to go too far away from the proposed POSCO project to see this dramatically.

Close to where the POSCO drama is unfolding, the town of Kalinganagar in the district of Jajpur has witnessed a long-drawn battle since 2004 between local police and residents that has resulted in several deaths. At the center of this project is the giant Indian private company, Tata Steel, and the displacement and rehabilitation of residents (many of who are Adivasis or indigenous people of India) who stand in the way of its iron-ore mining and steel plants. By May 2010, however, despite the state categorically refusing “land for land” compensation, the foundation stone for the Tata plant was laid amidst much fanfare and the state claimed that the protests of “the people” were no longer needed since their demands for compensation were all met. Currently, more than 40 MoUs have been signed with various companies, and the government of Orissa intends to make this area the “steel hub” of the state. With stakes rising due to delays in acquisition of land, it is not surprising then that there have been various instances of local police firing upon protestors.

In another district in Orissa, this time the southwestern district of Rayagada, the people of Kashipur block have also experienced the weight of the Orissa government’s MoU with the giant materials and alumina company, Alcan (Canada) teaming up with Aditya Birla group’s Hindalco (India) to set up a plan for mining, and an alumina refinery under the new name Utkal Alumina International Limited. This project too is mired in conflicts over human rights and environmental violations. Finally, following a long-drawn fierce resistance by an Adivasi (indigenous) group in the bauxite-rich mountains of Niyamgiri in the Lanjigarh block of Kalahandi district in western Orissa, the MoEF, (based upon the submission of an independent committee headed by N.C.Saxena and the recommendation of the Forest Advisory Cmte.) – much against the wishes of the Orissa state government – recently made a landmark ruling denying the UK-based mining company Vedanta Resource Plc. any rights to mine the bauxite ore, citing systematic violations of specific environmental laws and the human impact of displaced Adivasis.

Can one now expect that the huge hoarding put up by Vedanta which greeted travelers at the Bhubaneswar airport in Orissa, announcing “Mining Happiness” alongside the smiling faces of Adivasi children, will be changed?<sup>9</sup> Perhaps it will be replaced by what one sees on the website of POSCO-India, “Building Better Tomorrow with Steel”<sup>10</sup>

Lest the reader assumes that the case of the state of Orissa, or that of the government of India-mired in confrontations with their own people over the issue of development - is exceptional, it is useful to see how Orissa is better viewed as a textbook case of the global phenomenon known as “neoliberal” globalization.<sup>11</sup> It is now a well-known and widespread fact that “development” is a deeply contested notion, and more so in the context of a global age where the “rights of people” are as globally discoursed as are the “rights of capital”, and the role of national and state governments with regards to whose interests they prioritize. Thus, it is now commonplace for official governmental and transnational institutional meetings (such as those of the IMF and the WTO) that

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<sup>9</sup> Field report by ex-DGP Dr. Subramanian, available at <http://www.boell-india.org/web/52-612.html>

<sup>10</sup> POSCO’s mission, as mentioned on its website <http://posco-india.com/website/mission-&-vision.htm>

<sup>11</sup> Jan Aart Scholte. *The Sources of Neoliberal Globalization*. 2005. UNRISD publication, available at <http://www.unrisd.org/unrisd/website/document.nsf/%28httpPublications%29/9E1C54CEEB19A314C12570B4004D0881?OpenDocument>

decide the fate of millions, to be held in closed spaces cordoned off by riot police whose task is to hold the same “people” at bay in whose names the decisions inside the meetings usually assume to operate. More subtly, but with equal efficacy, the state “shuts out” its own people, as when for example, the Orissa State Pollution Board made a mockery of the government of India’s Environmental Impact Assessment (EIA) mandate that required it to hold a public hearing “in a systematic, time bound and transparent manner ensuring widest public participation at the project site(s) or in its close proximity.” Instead, the Board chose to hold its first public meeting (in April 2007) to discuss the environmental impacts of the POSCO project in a high-school located at Kujanga which is 15-20 kilometers away from the affected area without any consideration that holding a public hearing so far away from the villages which would be affected would require loss of an entire day’s wages and earnings for any villager who wished to attend. Not surprisingly, a very large number of people affected by the POSCO project did not attend this public meeting held in their name.<sup>12</sup> Surely one of the chief victims of such tunnel-visioned development is democracy, a label proudly worn by Indian state representatives when seeking foreign investment, and regularly invoked as a positive asset when used to calculate India’s credit-worthiness.

In this light, this report finds it very unfortunate that the case for POSCO, built up by the government of Orissa, and held onto almost dogmatically despite many reasons that demand major rethinking, was built almost entirely on a single report put out in 2007 by the National Council for Applied Economic Research (NCAER)<sup>13</sup>. As we will show in the following chapters, some of the key questions about “the people” seem to be either completely neglected, or brusquely and at times too simplistically explained away in the NCAER report. As the government of Orissa and the representatives of POSCO feverishly and enthusiastically referred to the NCAER findings, we find that their claims about the purported benefits of the project for “the people” have only become even more exaggerated. Were it not for the uncomfortable fact that development is such a deeply contested reality by people demanding real democracy, projects such as POSCO need not require much “selling” to its purported beneficiaries - “the people.” In other words, if the POSCO MoU were indeed so obviously for the “public good,” would we need the state to be “peddling prosperity” in such a manner?

This report is written with an intention to not only give readers a comprehensive look at the stakes involved in the POSCO project, but to also invite readers (ordinary concerned people, civil and political society organizations, and expert committees expressly charged with good governance) to actively participate in “democratizing development” in India. For, only the full participation of informed and ethical citizens in what is essentially a political process (constituted by forms of power and authority to speak and act on behalf of “the people”) will make any development sustainable, equitable and just.

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<sup>12</sup> An independent Fact Finding reported thus: “On April 15 a public hearing for Environment Clearance was held for the steel plant and the captive port of the project. It has been widely reported in local newspapers, more than 20,000 people from the three affected gram panchayats boycotted the hearing organised at Kujanga dubbing it a “farce”. The fact that the Orissa Government deployed several platoons of armed paramilitary forces in the Jagatsinghpur District on April 9, five days before the hearing, also had an impact.” See <http://www.mainstreamweekly.net/article110.html>. It may also be noted that the loud opposition voiced at the hearing by those people who did manage to attend was disregarded by the organizers.

<sup>13</sup> Some accounts of the POSCO project mention a socio-economic report by the XIM, Bhubaneswar. The report, to the best of our knowledge, is not published or distributed in public through either the XIM website, nor the website of the government of Orissa. Inquiries in the three gram panchayats reveal that some researchers from XIM had once approached the villages to do some work, but no significant survey or interviews had been conducted by this group.

The report is comprised of three key chapters. Chapter 2 focuses on the role played by the government in facilitating the POSCO project. It examines in some detail how all three branches of government - administrative, legislative and judicial - have gone out of their way to promote and protect the POSCO project often breaching the very laws they are sworn to uphold, and in clear defiance of the expressed will of the affected people. Chapter 3 systematically examines the major claims made by the state of purported benefits of the project to the local economy and local communities. It does this by first describing in some detail the existing local economy and kinds of livelihood available to the people, and then critically evaluating and assessing the proposed POSCO-centered economy for its potential for job-generation and livelihood possibilities. Chapter 4 shifts focus from the struggles over land to other equally important but far less visible struggles over availability of water for human consumption and irrigation, depletion of forest cover and its impacts in mining areas, and major environmental impacts on marine and wildlife, and changing riverine topography with the proposed new port.

## 1.2 Factual Contexts of the POSCO Project

### 1.2.1 Land Area Sought to be Acquired by POSCO:

Purpose	Location	Extent/Scope
Steel Plant: 12 Million Tonnes Per Annum (mtpa) “green field”	Erasama Block, Kujang Tehsil, 10 kilometers from Paradeep port, 7 revenue villages, 2 hamlets, 3 Gram Panchayats (Nuagaon, Dhinkia and Gada Kujanga)	4004 acres of which 3000 are classified as “forest land”
Captive Port	Mouth of river Jatadhar	
Mines: 600 million tonnes reserved over 30 years (20 million tonnes per year)	Khandadhar Hills (Keonjhar and Sundergerh districts)	Prospecting Lease (3 applications), Mining Lease (2 applications) submitted by POSCO;  2500 hectares Khandadhar hills; no clear territorial demarcation – only textual claims in government recommendation
Township	At steel plant and at mines	2000 acres (1500 at steel plant, 500 at mines)
Water	Jobra Barrage of the Mahanadi River	3.50 cubic meters per second (cumecs)

1. Proposed investment: USD \$12 billion (Rs. 52,000 crores) over 30 years
2. People estimated to be affected by the POSCO project
  - a. Plant and Port:
    - i. Displacement: 22,000 people (approx. 4000 families)
    - ii. Project-affected (loss of livelihood): No official figures released. Estimated to be above 50,000 people including displaced

b. Mines:

- i. Displacement: No official figures exist as territorial scope is not fully identified. Estimates point to 12 villages in Keonjhar district. Similar estimate for Sundergerh district not available.
- ii. Project-affected (loss of livelihood): No official figures available. Estimates of 32 total villages in Keonjhar district, 84 total villages in Sundergerh district. Total population affected: 10,000 -15,000.

### 1.2.2. Current Status of POSCO Project

- Steel plant and Port: No land acquired yet. Phase 1 of construction yet to begin. POSCO has opened project office in a town. MoEF investigating implementation of FRA. Special committee appointed by MoEF – Chaired by Ms.Meena Gupta – submitted reports on October 18, 2010. MoEF has referred report to Forest Advisory Committee. Active resistance since 2005 to the project.
- Mines: Government of Orissa has authorized Khandadhar mines for POSCO. Two litigations against such authorization. Orissa high court has stayed government authorization. Legal battles moving to Supreme Court. Emerging resistance over last year.
- SEZ-status: In-principle approval in 2006, renewed in 2007 and 2008. As SEZ status renewal is only allowed twice, POSCO forced to reapply for SEZ status. Form A (application for SEZ status) filed in January 2010.
- Other infrastructure: Township, Railway and Road development - land not yet earmarked.

### 1.2.3 Timeline of POSCO in Orissa<sup>14</sup>

**June 22, 2005:** MoU signed between Orissa government and POSCO-India, subsidiary of the POSCO Corporation of South Korea.

**August / September 2005:** POSCO Pratirodh Sangram Samiti formed to oppose project. A people's blockade declared in three gram panchayat areas affected by plant. The blockade allows all persons entry and exit except government officials and POSCO employees.

**December 18, 2006:** Forest Rights Act passed by India Parliament. Act is applicable in both project plant/port and mining areas.

**November 29, 2007:** Police and hired goondas attack PPSS *dharna* (rally) at one entry point with bombs – more than 50 people injured – *dharna* tent demolished. The protesters are driven back into one gram panchayat (Dhinkia). Police set up camps in the schools of the other two villages, deploy in heavy force.

**January 1, 2008:** Forest Rights Act notified into force.

**August 8, 2008:** Supreme Court upholds “in principle” clearance for use of forest land but directs Environment Ministry to proceed “in accordance with law.” No final clearance granted. The case is

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<sup>14</sup> Excerpted from <http://www.forestrightsact.com/component/content/article/21/87-timeline-of-events-relating-to-forest-rights-in-posco-area>

only between Orissa government, Central government and POSCO; no opponents to the project are represented.

**March 23, 2008:** Gram sabha of Dhinkia passes resolution electing a Forest Rights Committee and starting process of inviting claims under the Forest Rights Act. The State government takes no steps to implement Act in the area. Claims are till this date with the gram sabha.

**August 3, 2009:** Following prolonged protest, Environment Ministry issues circular clearly stating that no application for “diversion” (i.e. clearance for non-forest use) can be made without *inter alia* certificates from gram sabhas of the affected area stating that:

1. The process of implementation of the Forest Rights Act is complete and all rights have been recognised
2. That they consent to the diversion after being informed of the nature and details of the project and rehabilitation project.

**December 29, 2009:** In violation of its own circular and the Forest Rights Act, Ministry grants final clearance for diversion of forest land.

**January 5, 2010:** POSCO Pratirodh Sangram Samiti writes to Ministry against illegal action.

**January 8, 2010:** Environment Ministry “clarifies” that clearance is subject to the August 3<sup>rd</sup>, 2009 circular.

**February 1-7, 2010:** In response to a request from the Collector for the opinion of the gram sabhas, all three in the steel plant area pass resolutions refusing consent for diversion of forest land and demanding recognition of their rights and power to protect forests. As per law, the forest clearance is now clearly illegal and has to be withdrawn.

**February 2010:** PPSS begins a three month dharna at main entry point at Balitutha.

**May 2010:** 25 platoons of police deployed in the area. Forces attack villagers. At least 50 people injured, market areas and protest camps burned.

**June 2010:** Negotiations between PPSS leadership and government of Orissa to allow government survey of land (without police presence) in exchange for chief minister Naveen Patnaik to visit 9 villages for meetings with residents. Survey process incomplete. Chief Minister Patnaik’s visit never materializes.

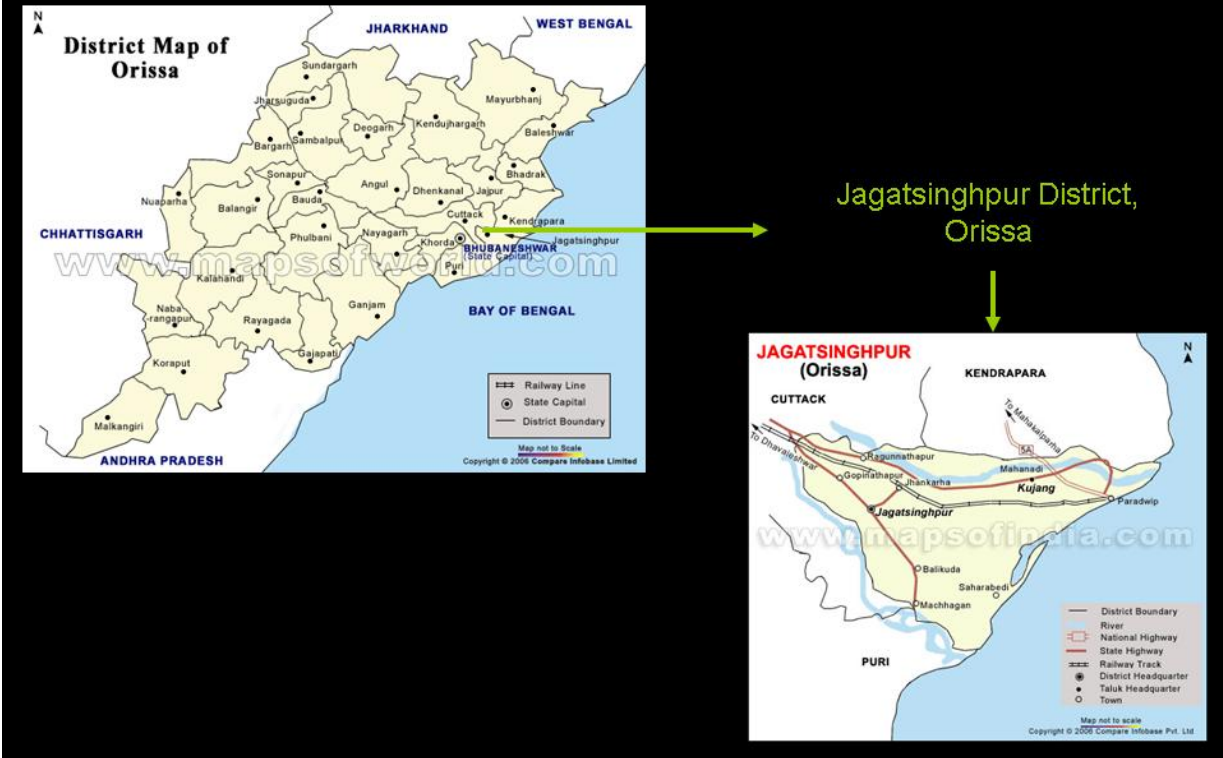
**July 1-12, 2010:** POSCO / Government of Orissa announces new compensation package. PPSS holds public rally and burns copies of new compensation package.

**July / August 2010:** MoEF appoints N.C.Saxena Committee to investigate implementation of FRA in plant/port area. Committee submits report indicating failure of Orissa government to implement FRA and cites government of Orissa for deliberate suppression of data and information sought by MoEF.

**September / October 2010:** MoEF and Ministry of Tribal Affairs appoint Meena Gupta Committee. Scope of new committee expanded to investigation of violation of all laws, government procedures and rules.

### 1.2.4. Maps of Proposed POSCO Project in Orissa

## Proposed Project Area



## Chapter 2 - Commission, Facilitation and Implementation: The State as Company Agent

The role being played by the government as promoter and facilitator of the proposed POSCO project in Orissa typifies the wide chasm between the constitutional mandate that the State act to guard the rights of its citizens, and the reality of the Indian state behaving as an agent of unfettered global capital. While many of the favors extended to POSCO by the government – whether it be the extraordinarily generous terms of the Memorandum of Understanding (MoU),<sup>15</sup> or the low royalty rates for the mined ore, or the use of state police as a private army – have also been extended to other large corporations, examining all these facets in the context of POSCO highlights how the Indian state has transformed itself into an entity whose primary function is to facilitate unregulated extraction and consumption of India’s resources by the global elite.

In this chapter, we examine in some detail the role of all three branches of government – executive, legislative and judicial – in initiating, legitimizing and implementing the POSCO project. Specifically, we look at the government’s actions with regard to the laws it is sworn to uphold and the populace it is supposed to represent – from the inception of the project to the current impasse. We explore the role of the government in the POSCO project through a discussion of the seven discrete issues listed below, issues that we think best highlight how different government agencies have used state power in Orissa in favour of mega corporations and against the people whose lands contain the resources that these corporations want.

- The MoU: What are the roles and responsibilities laid out for the Orissa government and for POSCO in the MoU?
- Role of Executive: How have the Chief Minister of the state, the Prime Minister of the country and ministers of the Union Cabinet responded to the concerns of the people as compared to the concerns of the company?
- Forest Rights Act: A case study to examine how the government has violated the law at the project site.
- Role of the Judiciary: How does the judiciary appear to interpret its role in the current conflict between the rights of the people and the wishes of a private corporation?
- Use of Orissa state security apparatus: Should the state police and paramilitary forces be used for securing the safety of the people, or for the safety of company officials and premises? When does democratic dissent become a “law and order issue”?
- Alleged benefits from the project: Do the government’s claims about tax revenues expected from the project pass muster?
- Sale of Mineral Wealth: Under what terms and conditions should the State allow the exploitation of precious public-owned mineral wealth, and whom should the proceeds benefit?

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<sup>15</sup> Memorandum Of Understanding Between The Government Of Orissa And M/S Posco For Establishment Of An Integrated Steel Plant At Paradeep. At <http://www.orissa.gov.in/posco/POSCO-MoU.htm> (This Memorandum of Understanding was made on the Wednesday day of June 22, 2005, between the Governor of Orissa on the one part and M/s POSCO on the other part.)



As the chapter explores each of these seven issues below, the subversion of the State's authority and sovereignty in favor of POSCO's profits becomes apparent.

## 2.1 The Memorandum of Understanding: The State as Project Promoter

The MoU executed between the Government of Orissa and POSCO on June 22, 2005, places the state and its people in an abjectly subordinate position to POSCO. The MoU requires the Orissa government to use its power and resources to facilitate POSCO's operations but makes no demand of POSCO to undertake any concrete step towards the project-affected people, the residents of Orissa, or even the welfare of its own employees.

Reading the MoU, it is hard to avoid the conclusion that instead of fulfilling its duty as upholder and enforcer of state regulations and laws, the Orissa government is eager to play the very questionable role of "facilitator" for POSCO's project. Whether it is the clearances required from the Ministry of Environment and Forests (MoEF), from the central government for transfer of lands, or from the Ministry of Mining for acquiring mining leases, the MoU mandates that the state government will provide all possible assistance in obtaining them. A few examples (with emphasis added) from the MoU itself are the best illustrations:

"The Government of Orissa **will assist the Company in obtaining all clearances**, including forest and environment clearance and approval of the State Pollution Control Board, and the Ministry of Environment and Forest, Government of India under Forest (Conservation) Act, 1980 and Environmental (Protection) Act, 1986 for opening up the iron ore mines, laying roads, constructing township etc."

"Govt. of Orissa will **make best efforts and provide all possible assistance** to POSCO for expeditious clearance of applications relating to mining lease and related matters such as forest, environment etc. so as to enable POSCO to start its mining operations in time to synchronize with the commissioning of its steel plant. "

"The Government of Orissa **agrees to facilitate and use its best efforts** to enable the Company to obtain a 'No Objection Certificate' (NOC) through the State Pollution Control Board in the minimum possible time for the development and operation of the Project."

What does it mean for the citizens when the State agrees to essentially become an agent for private corporations on large projects? The constitutionally mandated role of the State is to safeguard the interests and rights of the citizens, and to hold the common resources and minerals in trust for current and future generations. But the State's obligations are turned on their head when instead of ensuring that implementation of a project meets all statutory requirements, it assumes the role of project promoter and facilitator. For instance, how does one reconcile the conflict of interest inherent in the role of the Orissa government when it commits to expedite environmental clearances for POSCO through the Orissa State Pollution Control Board, while simultaneously being responsible under law to enforce POSCO's compliance with environmental regulations?

The situation would be bad enough if the Orissa government had agreed to do nothing beyond acting as POSCO's agent and pushing through clearances by going around state and national laws, but the government of Orissa has also placed the state's administrative, legal and law enforcement machinery at POSCO's disposal. Here are more examples of what the MOU says:

“In the event of litigation at any stage, Government of Orissa will diligently defend their recommendations made in favour of the Company in the appropriate judicial, quasi judicial fora.”

And

“[T]he Government of Orissa shall second (at its own cost) to the Company’s Project office in Bhubaneswar, an Officer of the appropriate level to be dedicated to the facilitation of the Project .... All applications made by the Company for all relevant clearances, permits, approvals, licenses, consents and the like or facilitation for the Project shall be routed through the Nodal Officer. The Nodal Officer shall diligently pursue the granting of all such approvals/clearances within the minimum possible time and update the Company at regular intervals on the status of these applications. [And another officer will also be appointed, who will report to this Nodal officer and who will] assist in obtaining necessary approvals from the Central Government as well as its agencies as quickly as possible.”

The MOU further commits the Orissa government to building multiple roads, highways, and railroad lines for the benefit of POSCO. The government is also committed to providing power and water without any effective limits: “During the operation phase, the Government of Orissa will make best efforts to meet the power requirement of all components of the project including each of its components.”<sup>16</sup> Similarly, not only are limits on POSCO’s use of water missing from the MoU, the agreement allows POSCO to set up its own water supply system and draw as much water as it needs – in effect, free water.<sup>17</sup> The MOU even commits Orissa to building special police stations just to provide security for POSCO’s facilities!<sup>18</sup>

The above begs the question as to why a state government would appoint special officers, build infrastructure, and provide dedicated security, among other things, all at the people’s expense, solely for a single private company, however big.

## **2.2 Role of the Executive: Prime Minister, Chief Minister and Ministers -- Serving POSCO Instead of People**

While the MoU itself is only a statement of intention, it is during the implementation of the MoU requirements that the perversion of the State’s role comes to the foreground as the entire machinery of government, starting from the Offices of the Prime Minister and the Chief Minister, reaffirms its commitment to this blatant giveaway of India’s wealth, even as people on the ground steadfastly oppose it.

This preference for POSCO over people was on display in January 2010, when the South Korean President, Lee Myung-Bak, was the invited State Guest of Honor for India’s 60<sup>th</sup> Republic Day celebrations. Concerned over the lack of progress on the plant in the face of stiff resistance by local people, and worried that it would show the host country in a poor light in front of the state guest,

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<sup>16</sup> Ibid., 9.

<sup>17</sup> Ibid., 7

<sup>18</sup> Ibid., 17

the government went into overdrive trying to launch the POSCO project just ahead of the visit.<sup>19</sup> Instead of paying heed to local concerns and working with the concerned populations to find an acceptable resolution, newspapers reported that “[t]he Prime Minister’s Office (PMO), the external affairs ministry and the steel ministry have thrown their might behind the project ...” and that “[g]overnment channels are working overtime to clear hurdles faced by the steel giant and consultations are on with the Orissa government to expedite the process.”<sup>20</sup>

When it was clear that the project could not be launched in time for President Lee’s visit, the Ministry of External Affairs (MEA) held a news conference, where MEA Joint Secretary (East), Mr. Gautam Bimbawale, and a MEA spokesperson, Vishnu Prakash, both reiterated that the state and central governments were trying their best to “pave the way for the initiation of the project.”<sup>21</sup> The fact that environmental clearance had been accorded to the project by the Ministry of Environment and Forests was proffered as evidence of the central government’s intention to “clear all hurdles” for the POSCO project. Union Steel Minister, Virbhadra Singh, who met with the POSCO delegation accompanying President Lee, told reporters that “[e]fforts are being made to ensure that the entire matter is seen [*sic*], signed and delivered in the next 4-5 months. This includes physical transfer of land and all regulatory clearances to POSCO.”<sup>22</sup>

Because the government did not consider conditions in Orissa to be ‘suitable’ for President Lee to visit the POSCO site, the Orissa Chief Minister Naveen Patnaik came to New Delhi to meet and reassure him of progress on the POSCO project. Newspapers reported Mr. Patnaik as saying that he had “assured the South Korean President that Posco project work will be expedited,” and that the state government would speed up land acquisition for the project.<sup>23</sup>

It is remarkable to see such concerted efforts by the PM’s office, the CM’s office and various ministries, including external affairs, environment and forests, and steel, to allay South Korean concerns about the progress of the project. Several questions come to mind: By what authority could the various ministers give reassurances about project implementation, when statutory requirements had not yet been met? Why is it that different central and state officials felt compelled to make promises and issue reassurances to POSCO officials, even as the concerns over livelihood of local residents and their expressed opposition to this project were relegated to the status of an irritating detail to be contended with? How could these officials speak so confidently about expediting the POSCO project when important procedural steps had not been taken for activities such as allocation of mines and land acquisition?

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<sup>19</sup> Government in overdrive to launch Posco plant, 14th Jan 2010, Economic Times, <http://economictimes.indiatimes.com/articleshow/5442474.cms>

<sup>20</sup> Ibid.

<sup>21</sup> See “India committed to Posco project”, The Hindu, Jan 23, 2010, <http://beta.thehindu.com/news/national/article91695.ece> and “Centre clearing hurdles for Posco’s Orissa plant: MEA”, Economic Times, Jan 23, 2010, <http://economictimes.indiatimes.com/news/politics/nation/Centre-clearing-hurdles-for-Poscos-Orissa-plant-MEA/articleshow/5490371.cms>

<sup>22</sup> Efforts to get POSCO project off the ground, The Hindu, Jan 26, 2010, <http://www.hindu.com/2010/01/26/stories/2010012655271600.htm>

<sup>23</sup> Orissa CM assures of speeding up Posco work, The Hindu, Jan 26, 2010, <http://www.thehindu.com/news/national/article95108.ece?service=mobile>

Why is the state so completely identifying itself with the objectives of POSCO, a private corporation?

### 2.3 Forest Rights Act in Tatters – A Case Study in State-Facilitated ‘Development’

The POSCO project consists of three main parts – a steel plant in Jagatsinghpur, a captive port at Paradeep, and mining operations in Keonjhar and Sundergerh districts. Since a project of such scale will have significant environmental and livelihood impacts in its vicinity, the minimum one expects is for the State to engage with all stakeholders and assess the impacts carefully before approving the project. However, true to the intent expressed in its MoU with POSCO, the Orissa government has sought to brush aside all environmental and livelihood concerns, and act in stark violation of existing safeguards. Environmental violations by the state and central governments are discussed in detail in Chapter 4, so we restrict the discussion in this chapter to the refusal of the Orissa government, aided and abetted by the MoEF, to abide by the Forest Rights Act.

Forests cover about 23% of India’s land mass and directly impact the livelihoods of about 200 million people living in or near them.<sup>24</sup> However, a succession of British colonial laws and post-independence Indian laws designated forests as state property without recognizing the livelihood rights of forest dwellers, thereby reducing them to the status of encroachers vulnerable to the whims of forest department officials. The Forest Rights Act,<sup>25</sup> which came into force on December 31, 2007,<sup>26</sup> was the culmination of a long struggle waged by Adivasis and other forest dwellers and acknowledges the “historical injustice” that colonial and independent India’s forest laws have done to them. The Act seeks to “address the long standing insecurity of tenurial and access rights” of these people and acknowledges the rights of all "forest dwelling Scheduled Tribes" (Section 2(c)) as well as "other traditional forest dwellers" (OTFDs) who have for at least seventy-five years prior to December 13, 2005, "primarily resided in" and "depend on the forests or forest land for bona fide livelihood needs" (Section 2(o)).

Application of the FRA is mandatory for the POSCO project because 3,096 of the 4004 acres of land sanctioned for the steel plant in Jagatsinghpur district is officially classified as forest land. Cultivation on this land has been the primary source of livelihood of local forest dwellers, most of whom have lived here for several generations. Forests also provide the local people with a wide range of produce for household consumption. Section 4(5) of the FRA mandates that "no member of a forest dwelling Scheduled Tribe or other traditional forest dweller shall be evicted or removed from forest land under his occupation till the recognition (of rights) and verification procedure is complete," and Section 5 of the Act empowers gram sabhas<sup>27</sup> to protect the forests and to "regulate access to community forest resources."

Within three months after the notification of the FRA, the gram sabha of Dinkia, acting under the provisions of Section 6(1) of the FRA, passed a resolution inviting claims for individual and

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<sup>24</sup> Redressing ‘historical injustice’ through the Indian Forest Rights Act 2006, August 2009, *available at*: <http://www.ippg.org.uk/papers/dp27.pdf>

<sup>25</sup> See text of Forest Rights Act, published by the Gazette of India, <http://tribal.nic.in/writereaddata/mainlinkFile/File1033.pdf>

<sup>26</sup> See notification published by the Gazette of India, <http://tribal.gov.in/writereaddata/mainlinkFile/File1035.jpg>

<sup>27</sup> Each village has a Gram Sabha that comprises every village resident older than 18 years of age. Gram Panchayats are the elected bodies and two or more villages may have a single Gram Panchayat.

community property rights.<sup>28</sup> Section 6(3) of the FRA requires the state government to constitute a sub-divisional level committee to examine gram sabha resolutions and enable a final decision. But the sub-divisional officer, presumably under orders from the state government, refused to accept the claims filed by the Dhinkia gram sabha.

The MoEF initially followed the law and issued a circular in August 2009 to the effect that diversion of forest land for the POSCO project would have to wait until after the rights of the forest dwellers had been recognized, and would then still require approval by the relevant gram sabhas. However, in December 2009, the MoEF granted a conditional final clearance even though the requirements of the law had not been met. The MoEF's about face appears to have been prompted by the (then) upcoming visit of South Korean President Lee Myung-Bak in January 2010 and a consequent need to "send the right message to investors" as well as to avoid "a diplomatic embarrassment."<sup>29</sup> Since the environmental and Forest Conservation Act clearances had already been secured by government fiat, a final clearance by the MoEF not only cleared the project for POSCO, but for all practical purposes green-lighted state repression of local residents opposing the project.

Having ignored the Dhinkia gram sabha resolution and then having refused to accept FRA claims in March 2008, the Orissa state government now invited the opinion of the Dhinkia, Gada Kujanga and Nuagaon gram panchayats,<sup>30</sup> presumably to nominally comply with FRA requirements. Within a month, Nuagaon, Dhinkia and Gada Kujanga gram sabhas<sup>31</sup> passed fresh resolutions re-asserting their rights under FRA and rejecting the proposed diversion of forest land for the POSCO project. But the district administration ignored the gram sabhas and went ahead and certified that the FRA process had been completed and that there were no "other traditional forest dwellers" in the area! The state government officially submitted this false information to the MoEF and launched a fresh round of violent attacks on the villagers who had dared to assert their legal rights. Such blatant violation of due process provoked strong protests, including a detailed letter by CPI leader D. Raja,<sup>32</sup> eventually resulting in a three-member MoEF/MoTA<sup>33</sup> committee visiting the region to probe the (non)implementation of FRA. After perusal of relevant land records and extensive discussions with senior state officials and villagers, the committee found that:<sup>34</sup>

"1. There are Other Traditional Forest Dwellers (OTFDs) in the area, contrary to what the district administration is saying. Both documentary and oral evidence exists to this effect.

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28 Timeline of Events Relating to Forest Rights in POSCO Area, published by the Campaign for Survival and Dignity, <http://www.forestrightsact.com/component/content/article/21/87-timeline-of-events-relating-to-forest-rights-in-posco-area>

29 Government in overdrive to launch Posco plant, Economic Times, January 14, 2010, <http://economictimes.indiatimes.com/articleshow/5442474.cms>

30 These three Gram Panchayats administer the nine affected villages. It bears repeating that Gram Panchayats are the elected bodies and two or more villages may have a single Gram Panchayat, but each village has a Gram Sabha that comprises every village resident older than 18 years of age.

31 The apparent duplication of names between gram sabhas and gram panchayats arises from the fact that a gram panchayat is often named after the largest village comprising the gram panchayat. For instance, Dhinkia and 2 other villages form the Dhinkia gram panchayat. Each village still has its own gram sabha.

32 See letter by CPI Member of Parliament D. Raja to the Prime Minister, May 23, 2010 <http://www.forestrightsact.com/corporate-projects/item/download/40>

33 MoTA is the Ministry of Tribal Affairs

34 See the MoEF/MoTA Committee "Report of visit to Jagatsinghpur (site of proposed POSCO project), Orissa, 23-24 July 2010", August 4, 2010, [www.forestrightsact.com/corporate-projects/item/download/43](http://www.forestrightsact.com/corporate-projects/item/download/43)

“2. The FRA process has not been completed, in fact it has not proceeded beyond the initial stages, for various reasons. It is therefore incorrect and misleading for the district administration to conclude that there are no OTFDs “in cultivating possession of the land since 3 generations” in the area. Firstly, this cannot be concluded without having gone through the process of claims; secondly, the FRA provides for dependence on forest land as a criterion for eligibility as well, not just “cultivation possession of land”.

“3. Some palli sabhas [gram sabhas] have given resolutions refusing to consent to diversion of forest land on which they are dependent. These palli sabhas were convened by the district administration itself ... which indicates that the administration was aware of the possible presence of forest rights claimants in the area. (It is interesting that this was done after the District Collector had given the opinion that there are no STs and OTFDs in the project area). To the best of our knowledge these palli sabha resolutions have not been sent by the state government to the MoEF, which is tantamount to deliberate withholding of relevant information/documents. Only the palli sabha resolutions setting up [Forest Rights Committees] in March 2008 have been sent to MoEF (which MoEF has asked the state government to translate, in April 2010).”

The committee also noted another instance of the state government’s conflicting stance on gram sabhas. Previously, gram sabha consent had been sought and obtained for a patch of forest land close to the land proposed to be diverted for the POSCO project! The Orissa government seems to have adopted a dual track of getting consent where possible and using deception and force where no consent is forthcoming. The committee observed that the state government’s actions as well as the MoEF’s “final clearance” in December 2009 were both in violation of FRA and urged the MoEF to withdraw its clearance: “Not doing the above would [be] tantamount to not only ignoring the key objective of the FRA of redressing historical injustice, but also heaping new injustice on the residents of these villages.”

Having been exposed by the committee, the state government went on the offensive. Even as the committee shared its conclusions with the district administration, the latter went ahead with illegal land acquisition and destruction of betel vines.<sup>35</sup> The state government has also claimed that there are no OTFDs in the region and sought to invalidate land records produced by the villagers on the grounds that “the records that are being produced now for the lands that have not been settled in their favour lack credibility for had they had such records, they would have got their rights settled then. These records must have been subsequent creations. Some such documents produced before the Revenue Divisional Commissioner on June 1, 2010, were found to have been forged.”<sup>36</sup> It should come as no surprise that the government’s assertion runs counter to the stated intent of FRA: “An Act to recognize and vest the forest rights of ... [those] **who have been residing in such forests for generations but whose rights could not be recorded.**” (emphasis added.)

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<sup>35</sup> 'Land acquisition for Posco illegal', Business Standard, July 28, 2010. <http://www.business-standard.com/india/news/%5Cland-acquisition-for-posco-illegal/402723/> Also see letter by POSCO Pratirodh Sangram Samiti to MoEF, dated August 23, 2010. At [www.forestrightsact.com/corporate-projects/item/download/48](http://www.forestrightsact.com/corporate-projects/item/download/48)

<sup>36</sup> Orissa pitches for Posco, questions panel’s findings, Economic Times, August 19, 2010, <http://economictimes.indiatimes.com/news/politics/nation/Orissa-pitches-for-Posco-questions-panels-findings/articleshow/6334020.cms>

Meanwhile, in response to the MoEF/MoTA committee recommendations, the MoEF ordered the Orissa government to cease land acquisition.<sup>37</sup> However, rather than withdraw the “final clearance” it had given POSCO in December 2009—a clearance demonstrably based on faulty environmental impact studies and coming out of a process with multiple violations of the required public hearing process,- the MoEF appointed another committee to investigate the POSCO project’s compliance with FRA, Forest Conservation Act, Environmental Protection Act and Coastal Zone Regulatory Norms. This committee, led by Ms. Meena Gupta, gave a divided opinion, with three of the four members recommending revocation of all environmental clearances. The lone dissenter is the Chairperson, Meena Gupta herself, who, it should be noted is the same person who was the MoEF Secretary<sup>38</sup> when the POSCO steel plant was originally given environmental clearance.

## 2.4 The Not-so Honorable Verdict on Forest Conservation

While the central and state governments have made no secret of their commitment to the POSCO project, the August 2008 judgment by the Supreme Court sanctioning diversion of forest land for the steel plant came as a surprise to many.

As mentioned earlier, the POSCO steel plant requires diversion of 3,096 acres of forest land for non-forest use and hence comes under the purview of the Forest Conservation Act.<sup>39</sup> As mandated by the Supreme Court, the forest land diversion issue was examined by a Central Empowered Committee (CEC). The CEC considered the POSCO project in its totality and laid down a clear procedure:<sup>40</sup> a site visit by an independent committee which would assess the impact of deforestation, followed by suggestion of mitigation measures, followed by adherence to these measures after which the forest land could be diverted. However, in August 2008, the environmental bench of the Supreme Court, headed by then Chief Justice K G Balakrishnan, ignored the CEC recommendations and cleared the project “subject to the decision of the MoEF.”<sup>41</sup> Instead of basing its judgment on what the CEC had actually said, the Supreme Court simply concluded that “[t]he C.E.C. has examined the project and has recommended for diversion of 1253.225 ha. (3,096 acres) of forest land.” Not only did the court turn the process upside down by sanctioning diversion of forest land before working out mitigation measures, it gave only perfunctory attention to the development and implementation of mitigation measures. There was no mention of a timeline, leave alone an acknowledgment of the dependence of the local population on forests. Such a lackadaisical attitude towards issues that threaten to destroy the livelihoods of some of the poorest people in India stands in stark contrast to the Court’s attention to and sense of urgency regarding starting profits flowing to POSCO, as when it ordered the Orissa government to decide on some pending mining operations within four weeks. While the Court’s decision was not binding, and was subject to further approval by the MoEF, it was a painful

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<sup>37</sup> See MoEF letter to Orissa government ordering stoppage of work, August 5, 2010, <http://moef.nic.in/downloads/public-information/POSCO.pdf>

<sup>38</sup> The “Secretary” for a ministry is the highest ranking civil servant in that ministry.

<sup>39</sup> Despite the objective implied in its title, the FCA has become more an instrument for clearing forests than conserving them. About 1.14 million hectares of forest land has been cleared for non-forest use under this Act, with about 73% of all diversion of forest land for mining happening in the last ten years (data obtained from MoEF by environmental action group Kalpavriksh using RTI Act).

<sup>40</sup> Kanchi Kohli, 2008. “Divide and conquer, with plant and port.” At <http://www.indiatogether.org/2008/feb/env-poscomp.htm>

<sup>41</sup> See Supreme Court Order dated August 8, 2008, <http://www.forestcaseindia.org/f2/godorders2008/8.8.08.txt>

reminder that the judiciary is not immune to the elite consensus in favor of mega corporations that pervades the higher levels of the legislature and executive.

## **2.5 State Security Apparatus Acting as Enforcers for POSCO**

Ever since the Orissa government inked the MoU with POSCO in June 2005, residents of the 11 affected villages and hamlets where the steel plant is to be located have strenuously opposed the plan. By July 2005, the three gram panchayats which cover this area, Dthinkia, Nuagaon and Gada Kujanga, had already come together to voice their opposition to the plan.

The 4004 acres of land earmarked for the steel plant includes fertile agricultural land on which paddy, betel nut, cashew and other crops are grown, and coastal riverine zones where extensive prawn and fish farming is done. In addition, some of the forest areas that the villagers depend on for forest produce are also slated to be clear cut and the land handed over to POSCO. Not all residents in these villages have formal title to the lands they till, but almost all have been practicing agriculture in these areas for generations. Furthermore, in addition to people who work directly on the land or on the betel vines, many others earn their livelihood from trading, packaging and transporting the produce. The economy of these villages is sustained in large part by betel vine cultivation that is specific to this area, and this economy is a fairly prosperous and inclusive one, providing employment to everyone, men as well as women, the young and the old alike.

Villagers from the three affected panchayats, apprehensive of losing their livelihoods and their entire way of life, have opposed the setting up of the plant in their villages from the very beginning. Residents are actively working in several organizations to oppose the POSCO plant. Of these groups, the POSCO Pratirodh Sangram Samiti (PPSS) is by far the largest. Other groups opposing the POSCO project include Nav Nirman Samiti, Rashtriya Yuva Sangathan and Bhita Mati Surakhya Janmanch.

The local law enforcement and administrative machinery has not supported the residents, as it should have, or even remained neutral, but is openly working as a partisan for POSCO. A standard tactic of these arms of the state has been to treat every attempt by the villagers to preserve their lands and livelihood as a “law and order” problem. Where the government should have consulted with the villagers at every stage and acted with respect for their concerns, it has instead taken an adversarial stance, deploying police forces, intimidating villagers, arresting leaders, and suppressing dissent by violence.

### **2.5.1 Creation of a “Law and Order” Situation: Public Hearing in Police Presence**

In November 2005, soon after the project was announced, the administration sent out notices for acquisition of land to the affected villages. As per the villagers, they were also visited by “henchmen of POSCO who have been paid to support the company.”<sup>42</sup> These “henchmen” harassed villagers, spread misinformation, and generally vitiated the atmosphere of the villages. To protect their villages from these company henchmen and other coercive tactics of the state, the villagers erected barricades around their villages, allowing entry into the villages to everyone except government officials and POSCO employees and agents.

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<sup>42</sup> Report by the Independent Fact Finding Team on Issues Related to the Proposed POSCO Project in Jagatsinghpur (Orissa), 19th to 22nd April 2007 [http://www.ncasindia.org/public/whatnew/sez/fact\\_finding\\_report\\_posco.pdf](http://www.ncasindia.org/public/whatnew/sez/fact_finding_report_posco.pdf)



In the midst of such an atmosphere of distrust, with the villagers blockading themselves against intrusion by the state, the government announced the holding of a mandatory Environmental Clearance Public Hearing for the project on April 15, 2007. A deliberate atmosphere of fear was created by the deployment of 12 platoons of police in the area a week before the hearing.<sup>43</sup> While the police did not unleash overt violence on this occasion, their heavy presence was enough to scare many people opposed to the project from attending the public hearing.<sup>44</sup> Additionally, the police and pro-POSCO forces filed a whole slew of criminal cases against the residents, further reducing their mobility out of the barricaded area due to fear of arrest.<sup>45</sup> Finally, the public hearing was held some 25 kms from the project area, effectively making it impossible for most villagers to attend the meeting. Nonetheless, a number of affected villagers still managed to participate, and the hearing saw a spirited and vocal opposition to the project. Yet, inexplicably, the project was still granted environmental clearance.

A team of academicians, journalists, human rights activists and representatives of various peoples' movements, who visited the area in October 2007, described "[s]everal battalions of Orissa Military Police ... deployed at Kujanga, the Tehsil headquarters. Many rounds of flag-marches have already been staged to intimidate people's dissent." Their report also highlighted the presence of paid henchmen in the area and the slew of cases filed against the activists of POSCO Pratirodh Sangram Samiti and Nav Nirman Samiti.<sup>46</sup>

### **2.5.2 Police Siege of Dhinkia**

To protest the unfair award of environmental clearance, the villagers erected a tent and started a round-the-clock protest at Balitutha, which was manned by at least 500 people at any time. However, this only intensified the violence against them. On November 29, 2007, between 500 and a thousand people stormed the protest site, hurled country-made bombs at the protesting villagers and burned down the tent. Reports indicate that this 'pro-POSCO' mob was hired and transported to the site with support from POSCO, and that their violent actions injured dozens of residents opposing the POSCO project.<sup>47</sup> The administration remained a mute spectator to this mob attack, and the police only managed to reach the site an hour after the tent had been demolished by the mob. Instead of attempting to arrest or even restrain the perpetrators, the police immediately set up a camp at what had been the protest site and also erected barricades around the villages, effectively imprisoning the villagers.<sup>48</sup>

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43 Green Cry Over Posco 'pollution', The Telegraph, April 14, 2007, at [http://www.telegraphindia.com/1070414/asp/frontpage/story\\_7645381.asp](http://www.telegraphindia.com/1070414/asp/frontpage/story_7645381.asp); "Amnesty International Statement on State force build-up in Jagatsinghpur, Orissa, at <http://sanhati.com/news/193/>

44 Report by the Independent Fact Finding Team on Issues Related to the Proposed POSCO Project in Jagatsinghpur (Orissa), 19th to 22nd April 2007 [http://www.ncasindia.org/public/whatnew/sez/fact\\_finding\\_report\\_posco.pdf](http://www.ncasindia.org/public/whatnew/sez/fact_finding_report_posco.pdf)

45 Ibid.

46 Press Note -- Civil Society Team Opposes POSCO Project, October 10, 2007, Prof. Manoranjan Mohanty, Sumit Chakravarty, Thomas Kocherry, Tapan Bose <http://mail.sarai.net/pipermail/test1/2007-October/010800.html>

47 Nandigram-like Situation in Orissa?, by Mamata Dash, Subrat Kumar Sahu, Vijayan MJ and Sridevi Panikkar - Delhi Solidarity Group, December 2, 2007 [http://www.thesouthasian.org/archives/2007/nandigramlike\\_situation\\_in\\_ori.html](http://www.thesouthasian.org/archives/2007/nandigramlike_situation_in_ori.html)

48 Brief Report On The Anti-Posco Movement, by Rajendra Sadangi, Convenor, Loka Pakhya (A Progressive Intellectual Forum), December 4, 2007 [http://petitions.aidindia.org/Posco\\_2008/anti\\_posco\\_movement.php](http://petitions.aidindia.org/Posco_2008/anti_posco_movement.php)

Over the next several months, 16 platoons of Orissa police remained stationed in the area, occupying school buildings and other public places. Dr. BD Sharma, Ex-commissioner for Scheduled Caste and Scheduled Tribes, visited the area in December 2007 and confirmed that the village of Dhinkia was under a virtual siege imposed by an unholy nexus of “police and touts.” Dr. Sharma also reports attacks on the houses of villagers opposed to POSCO, as well as the violent disruption of a peaceful Satyagraha undertaken by Nav Nirman Samiti and Rashtriya Yuva Sangathan, who were finally driven out of the area by the violent outsiders.<sup>49</sup> A similar report appeared in The Hindu in June 2008:

“Dhinkia and Paatana are under siege now, surrounded by the state police and goons employed to harass those who oppose the project. Essential supplies like kerosene and movement of people have been stopped. ... Two villagers sympathetic to the struggle have been suspended from their government jobs. The presence of the police ensures that no one from the village moves out to unite with those who could not hold out against the administration in the neighbouring villages.”<sup>50</sup>

However, the Orissa government maintained that this violence was a “breakthrough” for the project, and Priyabrata Patnaik, the government appointed nodal officer for the POSCO project, told reporters that, “Now [after violence on November 29] the anti-POSCO people will not dare to raise their voice.”<sup>51</sup>

### 2.5.3 The Murder of Dula Mandal

Violent clashes between goons apparently hired by POSCO and the village residents opposing POSCO continued for several months, culminating in the death of a PPSS activist on June 20, 2008, when a group of villagers belonging to the PPSS, returning from dredging the mouth of the River Jatadhar, were attacked by armed goons who hurled bombs at them. The attack resulted in the death of a villager named Dula Mandal and serious injury to several others<sup>52</sup>. Angry villagers chased the attackers who ran and hid in a school building where the pro-POSCO goons had earlier held a meeting. When PPSS entered the school premises later, they discovered a huge cache of arms including six crates of country-made bombs and 75 swords.<sup>53</sup> This discovery appears to indicate that the attack on PPSS was a pre-meditated one, timed to take advantage of the opportunity when most PPSS activists would be away from the village for dredging the river. The obvious question here is: What role did the local police and administration play in the transport of such a large consignment of arms to the area? As one activist says,

*“Many questions arise ... If the pro-POSCO faction are simply locals who endorse the project then why haven't they simply stopped at giving up their land and accepting the compensation*

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49 Dhinkia under Virtual Siege, Dr. BD Sharma, KN Pandit, Chakradhar Haibru Jr, BP Rakshit, Ajay in PUCL Bulletin Vol. XXVIII (1), January 2008 <http://www.pucl.org/bulletins/2008/PUCLjan08.pdf>

50 A State of Seige, Manju Menon and Sanchari Das, The Hindu Magazine, June 8, 2008, <http://www.hindu.com/mag/2008/06/08/stories/2008060850120500.htm>

51 Tension flares over Posco but government upbeat, CNN-IBN, Dec 1 2007, <http://ibnlive.in.com/news/tension-flares-over-posco-but-orissa-govt-upbeat/53373-3.html>

52 Anti-Posco activist dies in attack, The Hindu, June 22, 2008 <http://www.hindu.com/2008/06/22/stories/2008062260311000.htm>

53 POSCO war zone – PPSS claims recovery of arms from school, Sourced from The Statesman, June 27, 2008 [http://www.steelguru.com/indian\\_news/POSCO\\_war\\_zone\\_%2526%25238211%253B\\_PPSS\\_claims\\_recovery\\_of\\_arms\\_from\\_school/52584.html](http://www.steelguru.com/indian_news/POSCO_war_zone_%2526%25238211%253B_PPSS_claims_recovery_of_arms_from_school/52584.html)

*offered? Why are they waging an armed battle against PPSS? Who is providing them with such arms and ammunition? And is it really true that all of them are local supporters of the project and not seasoned criminals who know how to use bombs and swords? Why [have] the police not made any attempt to contain the pro-POSCO faction's violence? There are 70 cases against Abhay Sahu but was anyone arrested for the attack on 29 Nov at Balitutha? ... Who is sponsoring the criminals then [if not the POSCO management]? What is the role of local politicians and contractors who will get plum jobs if the project happens?"<sup>54</sup>*

#### **2.5.4 The Arrest of Abhay Sahu, Dr. Biswajit Ray and Others**

In 2008, state repression of the democratic movement opposed to POSCO continued with arrests of anti-POSCO movement leaders. First, Abhay Sahu, leader of PPSS, was arrested on October 12, 2008, when he was returning from a visit to a medical doctor. He was kept in detention for over ten months, charged with 32 cases including murder and kidnapping, and kept in the most humiliating positions, including being handcuffed to the hospital bed during the administration of saline, and was not allowed to meet with his family members.<sup>55</sup> Several other leaders of PPSS were also arrested under similar charges and kept in detention, including Prakash Jena, a prominent leader from Gobindpur who went on to win the panchayat elections despite being behind bars for seven months.<sup>56</sup> Dr. Biswajit Ray, leader of the Nav Nirman Samiti, was also arrested by the police in July 2009.<sup>57</sup>

PPSS says that as of mid-May, 2010, the police have filed 152 cases against PPSS activists, over 642 people have outstanding warrants against them, and over 40 activists have been imprisoned.<sup>58</sup> The large number of outstanding warrants essentially means that the police can pick up any activist at will. Curiously, the state police and prosecutors have not yet managed to produce any credible evidence against any of the people they have charged or arrested. As such, it seems a reasonable conclusion that the actions of the police are designed to force people into giving up their rights by burying them under legal costs, as well as to kill the resistance movement by instilling the fear of arrest and torture into activists, forcing them to stay confined to their barricaded villages.

#### **2.5.5 Police Firing at Balitutha in May 2010**

Even as the Indian government invited the President of South Korea to be the Chief Guest at the nation's Republic Day celebrations, and issued public statements to reassure him of India's full commitment to the POSCO steel plant, villagers in Jagatsinghpur decided to launch an indefinite sit-in at Balitutha until the project plan was called off. In February, the gram sabhas of Nuagaon, Dinkia and Gada Kujanga passed resolutions opposing the POSCO plant in their villages.

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<sup>54</sup> POSCO's R&R offer to villagers - 6 crates of bombs and 75 swords? By Surya Dash, June 27, 2008 <http://www.mail-archive.com/jharkhand@yahoogroups.co.in/msg01266.html>

<sup>55</sup> Anti-Posco movement leader's son moves SHRC, Dec 24, 2008, [http://news.fullorissa.com/Detail\\_News.aspx?NewsID=1160](http://news.fullorissa.com/Detail_News.aspx?NewsID=1160)

<sup>56</sup> Anti-POSCO leaders win local body polls in Orissa, IANS, May 6, 2009, <http://www.worldlatestnews.com/nation-india/politics/anti-posco-leaders-win-local-body-polls-in-orissa-22601>

<sup>57</sup> Anti-Posco Activists Protest Leader's Arrest, Statesman News Service, July 27, 2009 as quoted in Mining And Industrialization Update, Orissa, July 2009, <http://www.epgorissa.org/M%20I%20Update/Mining%20Update,%20%20July,%202009%5B1%5D.pdf>

<sup>58</sup> Based on conversations with Prashant Paikray, spokesperson for PPSS

Instead of negotiating with the affected residents, the Orissa government's response was to send in 40 platoons of police to the area, who proceeded to conduct a flag-march just outside the protest site on May 14. PPSS, apprehending police violence, made appeals for support to the outside world.

On May 15, CPI MP, Bibhu Prasad Tarai, Congress ex-MLA, Umesh Swain, and Congress leader, Jayant Biswal, were all arrested as they were on their way to Balitutha to lend their support to the movement. On the same day, as almost 4,000 villagers collected at the protest site in a show of defiance against the police presence, the police attacked the villagers by firing rubber bullets and tear gas shells at them. This was done in full view of the district collector and the superintendent of police.<sup>59</sup> When the villagers refused to retreat, the police attacked them with batons, injuring over 100 villagers, five of them seriously<sup>60</sup>. Women protestors were manhandled by male police. The police did not stop at plastic and rubber bullets, but also used shotguns to fire metal pellets directly into the crowds.<sup>61</sup>

In the melee that ensued, the police first burned down the tents at the protest site, and then went on a rampage and burned shops and houses belonging to people in Balitutha who were not even at the protest. A fact finding team reports that at least 15 shops and 6 houses in Balitutha were burned by the police.<sup>62</sup> The report also notes that, "[a] number of villagers testified that the police set on fire the protest site and the shops and houses but ironically police has filed cases against anti-POSCO movement leader Abhay Sahu and others for arson and looting. Similarly, police has filed false cases against about 800 people who were protesting against the project in a democratic and peaceful manner."

With police manning all entry and exit gates of the village and threatening to arrest anyone who ventured out of the houses, medical help was also denied to the injured villagers who had to make do with home remedies.<sup>63</sup> An activist who visited the villages shortly afterwards reports:

"And because since 15th May, all the exit points from the villages, through Balitutha and Trilochanpur have been sealed by the police, and with the threat of arrest looming large on anyone from the villages who step out, nearly no one has received medical treatment for their wounds. With festering wounds and fractured limbs, many people, including the elderly, are suffering their ordeal silently in the confines of their homes."<sup>64</sup>

The police attack on May 15 against a peaceful demonstration, the inhumane beating of villagers, the attempted murder by firing metal pellets, and the subsequent criminalization of protestors by

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<sup>59</sup> Police Attack On Anti-POSCO People's Movement - Chronology Of Incidents, by POSCO Pratirodh Sangram Samiti, May 15, 2010, <http://www.countercurrents.org/ppss150510.htm>

<sup>60</sup> 100 injured in police action at Posco-India project site, The Hindu, May 16, 2010, <http://www.hindu.com/2010/05/16/stories/2010051657321200.htm>

<sup>61</sup> Orissa - Brief Report from Anti-POSCO villages - story of the injured people, by Partho Sarathi Ray, May 19, 2010 <http://sanhati.com/articles/2372/>

<sup>62</sup> Scrap POSCO, by Fact Finding Team (led by Bombay High Court Justice Suresh Hosbet), May 27, 2010, <http://www.countercurrents.org/fft270510.htm>

<sup>63</sup> Quacks treating injured Posco villagers, Zee News, May 17, 2010, <http://www.zeenews.com/news627450.html>

<sup>64</sup> Orissa - Brief Report from Anti-POSCO villages - story of the injured people, by Partho Sarathi Ray, May 19, 2010 <http://sanhati.com/articles/2372/>

arresting and charging them with crimes, shows how far the Orissa government is willing to go to clear the way for a giant private company.

## 2.6 SEZ Approval: Exaggerating Benefits, Hiding Lost Revenues

The Orissa government recommended the POSCO steel plant and port for a “Special Economic Zone” (SEZ) status to the central government, as it had promised to do in the MoU, and the central government gave it the in-principle approval in October 2006<sup>65</sup>, pending land acquisition to give it the final approval. The in-principle approval was extended twice in 2007 and 2008, since POSCO failed to acquire land. In 2009, as there was no process in place for giving it a third extension, POSCO had to submit a *de novo* (fresh) application for SEZ status, which has also been approved<sup>66</sup>.

“Special Economic Zone” is a specifically delineated duty free enclave, which is deemed to be foreign territory for the purposes of trade operations and duties and tariffs<sup>67</sup>. The SEZ Act, 2005, allows setting up of these zones within the territory of India in an effort to attract foreign investment in India which would generate additional economic activity, boost exports, increase investment, create employment opportunities and develop infrastructure facilities, while maintaining the sovereignty and integrity of India. In order to attract investment for SEZ, the government offers many fiscal incentives to the investors including exemption from a wide variety of taxes and levies, both local and central.<sup>68</sup>

In the following chapters, we discuss how the government claims of the POSCO project’s impact on economic activity and employment generation are hugely exaggerated. Here, we restrict ourselves to the government’s claims about tax revenues that the POSCO project would generate, even with the SEZ status.

When the MoU was initially signed in 2005, the Orissa government forecast that the project would bring Rs. 89,000 crores in tax revenues to the central government, and Rs 22,500 crores in taxes to the Orissa government over a period of 30 years.<sup>69</sup> Even though the MoU obliged the government to seek an SEZ status for the project, these tax projections did not take the SEZ status into account and include levies such as sales tax, excise tax, service tax and local taxes, from which SEZ developers and units are normally exempt. This contradiction was pointed out by financial analysts within weeks

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65 “In principle approval to POSCO SEZ in Orissa with an investment of over Rs 53,000 crore...” Press Release by Department of Commerce, 28 Sept 2006, [http://commerce.nic.in/PressRelease/pressrelease\\_detail.asp?id=1791](http://commerce.nic.in/PressRelease/pressrelease_detail.asp?id=1791)

66 Minutes of the 37th meeting of the SEZ Board of Approval held on 15th December 2009 to consider proposals for setting up of Special Economic Zones, <http://www.sezindia.nic.in/writereaddata/BOA/Minutes%20of%2037th%20BoA%20on%2015th%20Dec%202009.pdf> POSCO project is listed as having obtained the in-principle approval here: <http://www.sezindia.nic.in/writereaddata/pdf/Listofin-principleapprovals.pdf>

67 The Special Economic Zones Act, 2005 published in The Gazette of India, June 23, 2005 <http://sezindia.nic.in/writereaddata/pdf/SEZ%20Act,%202005.pdf>

68 For some good information on the relevant taxation issues, see the articles compiled at: <http://www.india-seminar.com/2008/582.htm>

69 See the Press Note issue by the Government of Orissa at the execution of the MoU with POSCO, “Government of Orissa signs MoU with POSCO of South Korea for establishment of an integrated steel plant at Paradeep,” 22nd June, 2005 <http://www.orissa.gov.in/posco/pressnote.htm>

following the execution of the MoU.<sup>70</sup> However, the government did not offer any revised tax projections for the next year and a half.

New figures for projected tax revenues were offered by the state government only after the National Council of Applied Economic Research (NCAER) completed its study on the POSCO project in January 2007. Blindly quoting the new figures from this study<sup>71</sup>, the government has offered no explanation as to why these figures project a whopping **increase** in tax revenues from the project, after the SEZ status has been taken into consideration, over the government's own calculations of 2005 when tax exemptions due to SEZ had not been factored in. According to NCAER, the POSCO project would contribute Rs 174,970 crores as total tax revenue over a period of 35 years (of which the Government of Orissa would be entitled to Rs. 77,870 crores).<sup>72</sup>

The NCAER report itself relies on a study conducted by a private firm, Das & Associates, to come up with the projected tax revenues for the POSCO project<sup>73</sup>. While the report offers no explanation as to how these figures are arrived at, and what assumptions have been considered, glaring inconsistencies and sloppiness in these numbers are evident even to a casual observer. For instance:

Corporate Tax: The NCAER report claims that if the project is accorded SEZ status, the corporate tax is calculated at 33.6% of the profits accrued from **domestic sales only**, whereas if the entire project is in the Domestic Tariff Area (DTA), the corporate tax will be calculated at 33.6% of the entire profits of the company, from **exports as well as domestic sales**<sup>74</sup>. The report further clarifies that calculations assume that 53-67% of total sales are export sales<sup>75</sup>, thereby setting the expectation that corporate tax in the SEZ case (calculated on export sales only) will be substantially lower than in the DTA case (calculated on all sales). However, the actual figures for corporate tax calculations in the NCAER report show that the projected corporate tax is actually **higher** in the case where the POSCO project is accorded SEZ status, than when the entire project is situated in the Domestic Tariff Area (DTA)<sup>76</sup>. So, unless NCAER is claiming that the project will result in zero exports, and even domestic sales will be lower if the project is not situated in a SEZ, these figures are nonsense. But NCAER has gone ahead and used these figures to calculate the total tax due from the project. Considering that corporate tax accounts for 40% of the total tax in the SEZ case, an overestimation of this number is likely to cause a significant distortion in the entire calculation.

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70 See, for instance, "Orissa seeks SEZ status for Posco plant", Dillip Satapathy, Business Standard, June 28, 2005, <http://business-standard.com/india/news/orissa-seeks-sez-status-for-posco-plant/214096/>

71 'Orissa to gain Rs 77,870 crore from POSCO project' The Economic Times, 7 Dec 2007, <http://economictimes.indiatimes.com/news/news-by-industry/indl-goods/-svs/steel/Orissa-to-gain-Rs-77870-crore-from-POSCO-project-/articleshow/2605425.cms>

72 Social Cost Benefit Analysis of the POSCO Steel Project in Orissa, Mr. R. Venkatesan & Dr. Wilima Wadhwa, January 2007 available for download at <http://www.ncaer.org/popuppages/PublicationDetails.aspx?ReferenceID=SE070001>

73 Opportunity Cost Incurred in Granting SEZ Status to POSCO – India and Tax Revenue Inflows to Government from POSCO – India Located in SEZ Area, Annex V, p 51, Ibid.

74 Ibid., p 52

75 Ibid, p 53

76 See Table "Comparison of Tax Revenue between SEZ and DTA", row 4, p 52, Ibid.

Corporate tax calculations for two scenarios showing inconsistencies in NCAER calculations.

	<u>Scenario 1: SEZ</u>	<u>Scenario 2: DTA</u>
	<i>POSCO project is accorded SEZ status. All incentives applicable to SEZ developers and units apply.</i>	<i>POSCO project is NOT accorded SEZ status. No special incentives apply. Will have to pay all taxes applicable to other commercial establishments in the DTA.</i>
Corporate Tax Rate (according to the NCAER report)	33.6% of profits due to domestic sales ONLY	33.6% of profits due to <u>all</u> sales (exports + domestic sales)
Total Corporate Tax over 35 years (calculated by NCAER)	<b>Rs. 69,647 crore</b>	<b>Rs. 68,418 crore</b>

- Other inconsistencies: Errors abound in the NCAER report. For instance, the report claims that indirect taxes on domestic sales should be only 5% higher for the SEZ case than the DTA case due to additional customs duties, but while calculating the indirect taxes, it takes the rate to be 6% higher for the SEZ case than the DTA case. Besides, the differences in Excise Duty and the Minimum Alternate Tax between DTA and SEZ cases have apparently not been taken into account.<sup>77</sup>

All these errors contribute to an exaggerated tax forecast for the case where SEZ status is granted to the project, and an underestimation of the tax revenue if the entire project is in the Domestic Tariff Area; hence underplaying the loss of tax revenues to the government due to the SEZ status of POSCO.

In spite of these obvious errors, the Orissa government has been using these inflated tax projections to advocate the POSCO project. For instance, when it recommended to the central government that POSCO be awarded the prospecting license for the Khandadhar mines, it used these tax projections to justify the “special reasons” for superseding more than 200 prior applicants for these mines:

*“Elaborating on the ‘special reasons’, it [the Orissa Government] said Posco would invest \$12 billion in the project, the largest foreign direct investment in the country. Quoting a National Council for Applied Economic Research report, it stated **the central and the state governments are likely to get tax revenue of Rs 92,100 crore and Rs 77,870 crore, respectively, over a period of 35 years.**”<sup>78</sup>*

Even more recently, as late as June 2010, the Orissa government used the flawed NCAER study to reject the demand from opposition parties to scrap the POSCO project, and to justify its SEZ status.

<sup>77</sup> Facilities and incentives for SEZ Developers and SEZ Units are listed at <http://www.sezindia.nic.in/about-fi.asp>

<sup>78</sup> Centre’s spanner in Orissa’s captive ore policy, The Financial Express, Jan 15, 2007, <http://www.financialexpress.com/news/centres-spanner-in-orissas-captive-ore-policy/190460/0>

*“Asked if SEZ status to the project could eat into the state's expected revenue generation, he [Raghunath Mohanty, Orissa's steel and mines minister] said that **Posco would contribute Rs 77,870 crore (Rs 778.70 billion) to the state in 35 years from the date of commissioning.**”<sup>79</sup>*

Why has the government completely abandoned its earlier tax calculations without any explanation, and why is it repeatedly using the NCAER numbers to advocate the POSCO project, without checking their reliability? It is important to note that POSCO is one of the sponsors of NCAER<sup>80</sup>, which puts the claim of “independence” of this study in doubt. Neither the NCAER nor the government of Orissa have revealed the underlying assumptions that have gone into generating these tax forecasts, and the obvious internal inconsistencies of these numbers make them completely unreliable for decision-making.

## **2.7 The Profits of Plunder: Why the Government Goes Out on a Limb to Allocate Captive Mines to POSCO**

Mining in India is an exceedingly profitable venture. The state sells leases on the cheap, and royalties owed by the mining industry are set low despite global mineral prices being very high. <sup>81</sup> The MoU between POSCO and the Orissa government requires the latter to grant prospecting licenses and mining leases for the next 30 years for POSCO to extract a total of 600 million tons of iron ore for use in its proposed steel plant in the area, and further obliges it to assist POSCO in acquiring another 400 million tons of iron ore for its steel plants in South Korea. In this section, we examine the lucrative nature of mining in India, and find that the profits made from mining alone may explain the uncommon tolerance with which POSCO is awaiting the clearance for their plant in Orissa. Indeed, POSCO seems to consider having unfettered access to iron ore so critical that it is willing to scrap the entire project unless it is granted captive iron ore mines. <sup>82</sup>

To understand what makes these mines of such critical importance to POSCO, one has to understand the economics of iron ore mining in India. As a lawsuit filed in Karnataka by Mr. Arun Agrawal, a public spirited petitioner points out, <sup>83</sup>

“[t]he State is in the process of gifting natural resources worth billions of dollars under the old and discredited excuse of attracting foreign capital and not making any effort to obtain reasonable and market related value for the iron ore. The amount of investment brought in by these so called investors is a fraction of the value of the mines and minerals being handed to them at a token royalty of 10%. The investment that they are making to exploit the mineral wealth is for their personal profits. The earlier economics of allotting captive iron

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<sup>79</sup> Posco project to contribute 11.5% to Orissa GDP, The Hindu, June 22, 2010, <http://beta.thehindu.com/news/states/other-states/article478880.ece>

<sup>80</sup> Sponsors and partners of NCAER are listed at <http://www.ncaer.org/sponsors.html>

<sup>81</sup> Centre for Science and Environment, 2008. Rich Lands Poor People. (“The global mining industry is having a dream run. Between 2002 and 2005, the index of world prices of minerals, ores and metals has more than doubled. The real prices of most metals are at 10-15 year highs. This has ushered in an era of frenzied mining and profiteering in countries like India, disregarding all environmental and social implications.” p. 24).

<sup>82</sup> Without mining lease, Posco may shut shop, Financial Express, <http://www.financialexpress.com/news/Without-mining-lease--Posco-may-shut-shop/268804>

<sup>83</sup> A.K. Agrawal vs. State of Karnataka & Ors., 2010



ore mines to private steel producers is no more valid as the price of iron ore has shot up from Rs. 300 per tonne to over Rs. 5000 per tonne in [three to four years]. The State is duty bound to negotiate terms that maximizes the benefit of the natural mineral resources for the benefit of the people of the State.”

The critical thing to note in the above is the price of iron ore which skyrocketed from Rs. 300 per ton in 2002-2003 to between Rs. 5000-7000 in 2005-2006 – a nearly twenty-fold increase. BHP Billiton, one of the largest mining conglomerates in the world, estimates that the price will reach Rs. 10,000 per ton in 2011 due to global shortage and demand. Multiple studies have shown, and as Mr. Agrawal demonstrates in his legal complaint, the benefit of higher price in the past has gone to the private profiteers and not to the people of the state whose resources were extracted by the private company.

For the case of POSCO in Orissa, it is best to look at some specific numbers to understand the amount of profits involved. Let us assume that POSCO’s costs for extraction, processing and transport for the iron ore would be double those in Karnataka,<sup>84</sup> that it will pay an *ad valorem* royalty (royalty based on value), currently fixed at an absurdly low rate of 10% of the pre-shipping price, and that the market price it gets will be the historically low price of Rs. 4,500 per ton<sup>85</sup> and not the Rs. 7,250 per ton<sup>86</sup> projected by UNCTAD or the BHT Billiton estimate of Rs. 10,000 for 2011. Based on this, POSCO stands to make a profit of Rs. 3,330 per ton.<sup>87</sup> For 20 million tons per annum that comes to profits of just over Rs. 6,500 crores per year (about 1.5 billion USD).

So, as one can see from the calculations above, POSCO will recoup the entire USD 12 billion ‘investment’ that it is projected to make over the next 30 years within the first 8 years of operation. After that, even if it has to pay taxes, everything it makes will be pure profit, which can be conservatively estimated (based on the discussion above) to be at least Rs. 6,500 crore per year, and is likely to be much higher, year after year for the next 20-plus years, and potentially for the next 40-plus years if POSCO exercises its option to extend the project for another 20 years. And all this from the mining operations alone.

Even this is not the entire story -- in POSCO’s case the giveaway is even more egregious because not only is the state dedicating 600 million tons of iron ore for POSCO’s exclusive use for 30 years at the steel plant it plans to build in Jagatsinghpur district, but the agreement in the MoU also allows POSCO to extract and export 400 million tons for use at its steel plants in South Korea. That much ore will produce enough steel to build an entire city larger than Delhi and Bombay put together, or replace Indian Railways’ entire rolling stock – about a quarter million railroad cars and 8,000 engines – more than 25 times over.

In this scenario, where the allocation of a captive mine is an unrivalled bonanza for the company, the Orissa government is jumping through hoops to ensure that POSCO gets access to the Khandadhar

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84 Which costs were Rs. 400 per ton as per the data contained in Agrawal vs. Karnataka (Id.)

85 The low point for worldwide mineral prices was immediately after the financial crash of 2008 as per the historical commodities pricing database maintained by the International Monetary Fund. Available at: <http://www.imf.org/external/np/res/commod/ExternalData-080410.csv>

86 UNCTAD Trust Fund Project on iron Ore Information, 2010. The Iron Ore Market 2009-2011.

87 Rs 3,330 (Profit) = Rs 4,500 (Sale Price) – Rs 800 (extraction costs) – Rs 370 (ad valorem royalty on net proceeds, where net proceeds are the sale price minus the extraction costs).

mines, which have some of the best quality iron ore in India and are much sought after by both Indian and foreign mining firms. In December 2006, the state government recommended to the central government that POSCO be allocated prospecting license for 6204.352 hectares of Khandadhar mines – even though 225 other applicants had put in applications for these mines, many of them before POSCO had even appeared on the scene. Amongst these was the public sector corporation, Kudremukh Iron Ore Corporation (KIOCL), which had done prospecting of the mines.

Claiming that it had first right over the mines, and that POSCO had been given an unfair advantage by the government, KIOCL mounted a legal challenge. The Centre directed the state government to make a recommendation for the mines only after reviewing the submittals of all 226 applicants. However, in January 2009, the state government again recommended that the leases for these mines be granted to POSCO India, while reducing the grant area to 3000 hectares to exclude the mines claimed by KIOCL. This time, Geomin India, one of the other applicants, challenged this recommendation in the Orissa High Court, and on July 14, 2010, the High Court set aside the state government's recommendation to hand over the Khandadhar iron mines to POSCO.<sup>88</sup> However, instead of abiding by the Court's decision, the Orissa government has announced that it will appeal this decision to the Supreme Court.<sup>89</sup>

It is also important to note that it is not just the Orissa government that appears to be in uncommon haste to allocate precious iron ore mines to POSCO over hundreds of other applicants, including public sector companies, and do this in defiance of the ruling of the state's highest court. Even the Union Ministry of Steel strongly supports the hand over of the subject mines to POSCO, as evidenced by the interview given earlier this year by the Minister of Steel, Virbhadra Singh, where he told newsmen that "the government would request the High Court to dispose of the case expeditiously," adding that "the litigant PSU (KIOCL) would also be persuaded to withdraw the case."<sup>90</sup>

One has to question whose benefit the government is thinking of when it is not only ready to jump into litigation on the side of a foreign corporation over domestic claimants, but makes pronouncements that it will 'persuade' a public sector corporation to withdraw its claims in favor of the foreign company.

For all the government's protestations that the project will "bring prosperity and wellbeing to its people,"<sup>91</sup> the people affected by the project evidently disagree. Could it be that the state is indeed acting in their best interests, and that the POSCO project could change their lives for the better? Is the opposition to the project driven by the peoples' irrational fear of change, or is it based on a rational analysis of their current livelihoods and the expected loss of the same in a post-POSCO world? We attempt an answer to these questions by looking at the social and economic structures prevailing in the villages affected by the POSCO project.

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<sup>88</sup> Posco plans hit hurdle in Orissa High Court, Indian Express, July 15, 2010 <http://in.biz.yahoo.com/100714/50/bavyb5.html>

<sup>89</sup> Orissa to move SC over POSCO project, Hindustan Times, August 31, 2010 <http://www.hindustantimes.com/Orissa-to-move-SC-over-POSCO-project/Article1-589756.aspx>

<sup>90</sup> Efforts to get POSCO project off the ground, The Hindu, Jan 26, 2010, <http://www.hindu.com/2010/01/26/stories/2010012655271600.htm>

<sup>91</sup> Memorandum Of Understanding Between The Government Of Orissa And M/S Posco For Establishment Of An Integrated Steel Plant At Paradeep. At <http://www.orissa.gov.in/posco/POSCO-MoU.htm>

## Chapter 3 - Livelihoods in Coastal Jagatsinghpur, Keonjhar and Sundergerh: A Case of Missing Data and Statistical Lies

### 3.1 Introduction

*"I have 12 cases on my name... what can I do? I see it as part of my wealth... what else can I do... when you own land and your land has a blemish (a fault)... you don't complain about it... you accept it as part of your wealth... because that's how it came to you.... These cases are like that... I had to fight for my land and as part of that fight I have 12 cases... what else can I do but think of it as part of my wealth..."*

– Surrender, owner of 3 decimals of betel vine, resident of Gobindpur

The controversy surrounding the POSCO project has clearly emerged as a struggle around material issues of livelihood and the economic future of local communities in coastal Jagatsinghpur and the Khandadhar hills of Keonjhar and Sundergerh. The local community in the three gram panchayats of Dhinkia, Nuagaon and Gada Kujanga clearly see the agrarian economy, based primarily around betel vine, as one that assures them a future. However, the Government of Orissa claims that the POSCO project, among others, is a crucial part of the economic advancement of the State. Large industrial projects such as POSCO are often seen as valuable to a local economy because of the employment they generate. Both sides – those opposed to the POSCO project and those promoting it - argue their positions based on claims centered around the local economy. Therefore, there is an inherent comparison that is already in place. When those promoting the project argue for it, the underlying message is always that this will benefit the local community and its economy, and therefore the fears that are being expressed are faulty. On the other hand, those opposing the project express the fear that the new economy that will be imposed on them is bound to make their lives worse. The task of this chapter is to make this implicit comparison, already in place, explicit, and as measurable as possible. There are two primary axes along which the comparison can be setup:

1. Current Livelihood vs. Promised Livelihood: The current local economy yields incomes to different classes of people differentially – those who own land vs. those who don't, those involved in betel vine vs. those involved in pisciculture, etc. This differentiated local economy is to be replaced by a local economy in which the POSCO steel plant, port and mines are central. Our first task will be to build a comparison between these two economies in terms of the livelihoods the two economies will afford the local population.
2. Long Term Economic Success: Beyond the question of immediate livelihoods is the question of a longer term future. Economic betterment in the future is dependent on the capacity to build both savings and assets. Again it is important to compare the scope for such long term success under both conditions – the continuation of the status quo, and with the POSCO project in place.

When we began our investigation of the project in February 2010, we were alarmed at the outset by one simple realization. In spite of the five years that had elapsed since the conceptualization of the project, and in spite of very strict guidelines set out in the National Rehabilitation and Resettlement Policy, 2007 (NPRR)<sup>92</sup> and the Orissa Resettlement and Rehabilitation Policy (2006),<sup>93</sup> no responsible

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92 Full text of the National Rehabilitation and Resettlement Policy, 2007, is available at <http://www.dolr.nic.in/NRRP2007.pdf>

party – whether it is the Government of Orissa, the Government of India, or POSCO – has released any data on the current local economy. In other words, all the justifications for the POSCO project had been undertaken without baseline data on the nature and scope of the current local economy. The only organization of any repute that has put out a report on the POSCO project – the National Council for Applied Economic Research (NCAER) – has surprisingly not bothered to assess the current baseline economy even though this would be a minimum requirement for a reasonable cost-benefit analysis of any project. This failure has severe implications. For one, it does not allow a neutral observer to assess the project. When the government, or POSCO, announces a compensation package, for instance, there is no basis of comparison as to whether the said package is adequate and/or fair. In short, the controversy acquires a degree of opaqueness, and unsubstantiated assertions from all parties become possible.

In response, MZPSG commissioned a short independent research project to assess the nature and scope of the local economy so as to make comparisons possible. Two research teams of two members each visited the three affected gram panchayats and the Khandadhar Hills over the months of July and August 2010. As a detailed survey of the local economies was not possible in this time frame, MZPSG limited itself to developing a rigorous but preliminary data set through a series of focus groups. Accordingly, this chapter outlines the following:

1. A brief description of the local economies in the three gram panchayats of Dhinkia, Nuagaon and Gada Kujanga and a preliminary survey of livelihoods in the Khandadhar mining area of Keonjhar and Sundergerh districts.
2. Based on the data outlined in Section 1 above, we undertake a comparison of the current local economy vs. the proposed POSCO centered economy. This is done in three parts: (a) a critical evaluation of the employment projections offered by POSCO/NCAER/GoO. We assessed this as a requirement because of many anecdotal challenges posed to the projected employment figures. Our effort in this section is to evaluate the projected employment figures from both best case and realistic scenarios. (b) a comparison of the current economy livelihoods vs. a POSCO centered economy livelihood possibilities. In this section we bring into focus a comparison between the data collected in our research on the local economy against the projected employment and compensation figures announced by POSCO/GoO and (c) Potential for Long term economic success under conditions of the currently prevalent economy vs. the POSCO centered economy.
3. Based on the above comparative framework the final section will draw conclusions, offer recommendations and discuss the future research needs for any further evaluations required.

### **3.2. Current Livelihoods**

Researchers from the Mining Zone Peoples Solidarity Group (MZPSG) visited the nine villages (seven revenue villages and two hamlets) included in the 4004 acres of POSCO plant and port area in coastal Jagatsinghpur district and the mining area in Keonjhar and Sudergarh districts in July/August 2010. The primary purpose of the research team was to acquire preliminary data about local

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93 See text of the Orissa Resettlement and Rehabilitation Policy 2006, <http://orissarandr.org/policy.aspx>

livelihoods – the data that is entirely missing in all published documentation on the POSCO project from NCAER, the GoO, the GoI and POSCO.

Methodologically, we used a combination of preliminary open-ended interviews to establish the basic contours of the current economy, followed by focus group discussions and case-based data collection.

### **3.2.1 Livelihoods in Jagatsinghpur**

An initial survey of existing literature on coastal Jagatsinghpur and consultations with academics and journalists in Orissa and Delhi familiar with the area yielded some clear points of departure:

1. Betel vine is the central crop of the local economy in the 9 villages earmarked for displacement by the POSCO project.
2. Beyond betel vine, other crops in the area included cashew, coconut, kewra and rice.
3. Further, a large part of the community also used fishing as part of their subsistence economy.
4. There is also a small but significant community of fisher folk local to the area. A part of this population is involved in fishing as a livelihood and a second segment has invested heavily in pisciculture.
5. Finally, the Jatadhar river and the mouth of the Jatadhar are the preferred site for small boat fishermen from over a 15 km radius. Estimates of the number of fishermen supported by the Jatadhar and the segment of the bay earmarked for the port ranged from 20,000 to 25,000.

These observations yielded the need for four focus groups: (a) those whose primary source of income is betel vine, (b) those with significant source of income being from wage labor, (c) those involved in pisciculture, and (d) those whose primary source of income was fishing in the Jatadhar/Bay. Of these the research team was able to complete only two focus groups, namely the betel vine cultivators and wage labor.

In the case of the pisciculture sub economy, the research team conducted only two interviews with Pisciculturists. The last mentioned category, fishermen who depend on the Jatadhar/Bay for a livelihood also remained incomplete. However in both the latter cases some preliminary data was collected.

#### **(a) FOCUS GROUP 1: The Betel vine Growers**

Betel vine cultivation tends to be restricted to relatively small plots of land because it is labor-intensive. Among those interviewed in the first round, size of betel vine plots ranged from 2 – 30 decimals. We interviewed 6 betel vine cultivators from 3 of the 9 affected villages – Dhinkia, Patna and Gobindpur. The cultivators exhibited significant diversity in size of operations, with a minimum area of 3 decimals and a maximum of 17 decimals (100 decimals = 1 acre) allocated to betel vine production.

Two of the 6 respondents were also betel leaf traders. One of them operates locally – he consolidates leaves from several plots and runs a small processing room. His reported profits from trading were Rs. 36,000, Rs. 19,000 and Rs. 26,000 in the years 2007, 2008 and 2009 respectively. He attributed the decline in profits in 2008 to fluctuations in betel leaf prices.

Another respondent was a medium-sized trader who owned a registered trading company. He not only cultivated betel vine himself, but also procured betel leaves at farm door from other cultivators in the area, processed and transported it to Bhubaneshwar and sold it to traders who then distributed it other markets in Delhi and Mumbai. He estimated his profits at Rs. 180,000 in 2006 and Rs. 140,000 in 2007. Over the past two years, however, he had to incur losses because of his participation in the “*andolan*” (struggle); there are currently 16 cases registered against him due to which he is unable to travel to Bhubaneshwar to manage his business himself, and has to rely on hired help instead. A summary of the focus group characteristics is presented in the table below.

**Table 1: Some Economic Characteristics of Respondents Engaged in *Paan Kheti***

Focus Group Subject #	Betel Leaf Plot	Rice Cultivation	Cashew Crop	Other
Subject 1	3 decimal	.5 acre	No	Family Fished in Mangha river two to three times a week
Subject 2	5 decimal	.5 acre	Yes	Small betel trading + subsistence fishing
Subject 3	5 decimal	1 acre	Yes	Subsistence fishing
Subject 4	6 decimal	.5 acre	Yes	Betel Trade in Bhubaneshwar
Subject 5	10 decimal	1 acre	No	None reported
Subject 6	17 decimal	none	Yes	None reported

Betel vine cultivation is housed in a shed constructed of bamboo and/or casurina frame with other forest produce used to create cover against direct sunlight. The bamboo used for the external shed frame is procured in the market, while the sun-filtering cover is procured locally in the forest, and consists of dry fiber, twigs, and leaves derived especially from the significant spread of casurina trees in the area. Within the shed, rows of scaffolding, each about one foot from the next, extend across the length of the shed. These scaffoldings, again constructed of thinner bamboo/casurina reeds stand to a height of about seven feet on which each individual betel vine grows vertically upward. Each vertical reed frame supports one vine. Thus a betel vine shed contains many rows of vines, each row having several reeds supporting vines. The exact number of vines in a shed is of course dependant on the size of the shed/plot.

We reproduce below details about the market income of subject 3 who has a family of 5 and grows betel vine on a 5 decimal plot. The subject has the crop planted in 40 rows each of which carry approximately 100-150 inter linked vines. Each bamboo reed segment of each row produces between 25-30 betel leaves every three months. As the vine grows upward, leaves sprout along its length and it takes three months for the vine to advance to the ceiling of the shed.

### Yield in leaves<sup>94</sup>

Total Yield of shed per year 490,000 leaves

### Revenue in Rupees

Total revenue @ Rs 0.60 per leaf 294,000  
(current price, recorded July 12-19 2010)

Total revenue @ Rs 0.57 per leaf 279,300  
(average price for past 6 months, Jan to June 2010))

### Costs in Rupees<sup>95</sup>

Replacement costs<sup>96</sup> + 15,000  
(cost of rebuilding shed, pond etc.)

Input costs @ Rs. 3,000 per month + 36,000  
(costs of mustard husk)

Labor costs for replanting + 18,480

22 persons for one day per 3 months @ Rs 210/day<sup>97</sup>)

Labor costs for relaying sand and mixing  
mustard dust (10 persons per month + 20,400

@Rs. 170 per day)

**Total annual cost Rs. 89,880**

### Net Income in Rupees

Net Annual Income **Rs. 204,120**

(assuming price = Rs. 0.60/leaf:

Rs 294,000 - Rs 91,080)

Monthly Income Rs. 17,010

Net Annual Income **Rs. 189,420**

(assuming price = Rs. 0.57/leaf:

Rs 279,300 – Rs 89,880)

Monthly Income Rs. 15,785

While betel vine is the primary source of market income, the respondents produce cashew for the market earning profits ranging between Rs. 7,000 to Rs. 20,000, and engage in subsistence production of rice, sometimes leasing land from other villagers to do so and paying compensation of Rs. 2,000 per 0.5 acres per crop. They also extract forest produce and fish from nearby natural resources for household consumption.

As an example, subject 3 grows cashew as a hedge plant for which he has received between Rs. 10,000-12,000 per year in the recent past. He pays rent of Rs. 3,500 for one acre of land for the second crop and produces approximately 1.5 quintal of rice for household consumption. He secures fish at least 2-3 times a week (except during the monsoons) from the local saline river. He also

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94 The estimates of net income developed below are based on physical verification of number of leaves/vine, number of vines, average wages paid/3 month production cycle, and other average expenses.

95 Respondents reported the use of family labor in the production process. For instance, plucking of betel leaf is almost always carried out by family labor. Similarly, subject 3 reported that for the operation of mixing mustard seed husk and sand (which is carried out once a month), in addition to the 22 persons employed as wage labor, 3 family members also participated in the operation.

96 Replacement costs vary from Rs. 10,000 to Rs 25,000. We have taken the approximate midpoint as the standard cost.

97 Hired workers are paid Rs. 150-240 per day depending on the task plus two meals.

extracts or harvests a wide variety of fruits and vegetables such as bitter gourd, drum stick, drum stick leaves, potato, *desi* potato (a local variant that is much larger), squash, guava, mango and jackfruit from the nearby forest. Except for labor time, his household does not incur any other cost to harvest these products. Studies have shown that wild fruits and vegetables are an important component of the diet of rural households, especially due to their nutritional content. If we were to factor in the monetary value of these products into Subject 3's monthly income it would mean a substantial increase in his income.

The researchers also cross-verified the data by visiting several other betel vine plots of others who were not part of the focus group. With minor variations caused by the size (scale) of the plots, the data was substantiated. Thus the average net income yield per decimal of betel vine ranged between Rs. 37,000/ decimal (at Rs. 0.57/leaf) and Rs. 40,000 (at Rs. 0.60/leaf). The minimum recorded per decimal yield was Rs. 32,000, and the maximum per decimal yield recorded was Rs. 50,000. The centrality and the strength of the betel leaf as crop was best expressed by one of the focus group respondents;

*Sometime ago some government officials came and asked for betel vine seeds from us. We laughed at them. Betel vine was sent to us from god, and only god knows that it is a source of all our wealth. It is a plant with no seeds, no fruits and nobody but god can tell you how it came to earth. And now look at the betel vine... it is always trying to escape. It grows upwards towards heaven and wants to leave the earth. But for us it is gold, and so we hold it down on the ground. We keep reburying it and making it stay on earth. And now Navin Patnaik wants to destroy this and keep only seeds. That's how much he knows about betel vine...*

#### **(b) FOCUS GROUP 2: Daily Wage Labor**

This focus group comprised five respondents drawn from four villages. While the initial idea was to build a focus group of those who had no land and thus are dependent on available wage labor, once we began the initial interview process it became clear that most of the identified respondents did indeed have access to some land. The reasons they self-identified as landless were: (a) the land they owned was often very small patches - one decimal or two decimal under betel vine or cashew, (b) they did not own *pattas* (legal title) to the land they were cultivating. Of the five respondents, three had either one or two decimals under betel vine, and one had "about an acre" ("takreeban ek acre") of land on which he grew cashew. The last of the five respondents did not clarify if he had access to land except that he grew rice of his own ("apna dhan ka kheti tho hai"). However, all five did seek regular employment within the local economy and thus were qualified respondents of this focus group. While the focus group conversation developed and each subject contributed at different times, all five were asked four questions during the process to ascertain their participation in the wage labor market. The interviews indicated that all five respondents found work whenever they were willing and able to work, and their daily wages depended on the nature of work ranging from Rs. 150-160 for plucking, watering plots or even for processing related work of betel leaves, Rs.170 to Rs.200 for carrying of sand and re-layering of sand mixed mustard dust in the betel vine plots, to Rs.220 to Rs.240 for the work of untying and reburying the betel vines after harvest to initiate the next cycle. In addition to the money wages, all daily wage laborers were also provided with two meals per day of work.



The team also asked all respondents whether, in the case that they were assured employment in the POSCO plant, they would prefer that over this form of paan kheti employment. After responding with questions such as what kind of work would they do in the plant, and how many days a week they would most likely have to work, a consensus emerged quickly and with considerable sharpness. One of the respondents put it succinctly:

*Aare... I will take 10 rupees less and still work on paan kheti.... If we work for POSCO what will we get, hundred rupees, hundred and twenty rupees? We anyway get more than that... but more than that, look at the condition of those who work for IOC in Gada Kujanga... their situation is terrible.... They have to work when they are asked to work and stop when they are asked to stop... in paan kheti we can always negotiate.... If one paan kheti does not employ us we can go to another... can we do that with POSCO? And who wants to work in a factory for less money when we can work outside in the open with people you know and live your life with. Here I can depend on Sain bhai for any problems. Will POSCO help me like that?*

All of them seemed to have a clear image of the kinds of jobs that will be available to them. “We will get *jhadu safaye* (cleaning) jobs ... or *chaprasi* (peon or security personnel)... what else can we get? We don’t know how to operate the machines...” One of the respondents pointed to an old man who was arranging the paan leaves in bundles of 50 before they were boiled and made ready for transportation. “Will he get a job in POSCO? At least in paan kheti he can do this and make a little money for himself.”

It also became clear during the course of the interviews that several workers from outside of the immediate three panchayats came to work on the betel vines. Several references were made by all the participants in response to questions about how easy or difficult it was to find employment that indicated that the betel vine area is a site for employment for others outside the betel vine area in neighboring inland panchayats. Though it would take further research, it is possible to prima facie hypothesize that the betel vine areas had net surplus employment available, and the further inland we went, the more deficits in employment we would find.

Thus it’s possible to conclude that for those local to the three gram panchayats *paan kheti* employment was preferable to industrial employment, and that they were able to find work regularly and at wage rates far higher than the Orissa minimum wage. Further, the preliminary findings suggest that paan kheti is a source of employment to labor from panchayats further inland though the extent of this phenomenon remains unmeasured.

### **(c) FOCUS GROUP 3: The Pisciculturists**

The two respondents interviewed on Pisciculture were both active pisciculturists. They were interviewed separately and not as a focus group. Overall, the following salient aspects of pisciculture in the project affected area were identified:

- a. Pisciculture farms extend across the entire project-affected area except the village of Nuagaon. The maximum spread of pisciculture farms is in the Gada Kujanga gram panchayat. The farms are on both sides of the Mahanga river that flows through the three gram panchayats before emptying into the Jatadhar near Dinkia.

- b. Both respondents reported that all pisciculture farms in the three gram panchayats were on private patta land, and not on government or forest land.
- c. Respondent 1 estimated the total number of pisciculture farms to be in the range of 2500-3000. Respondent 2 estimated it to be approximately 2500.
- d. Respondent 1 owned two pisciculture ponds just south of Gobindpur. Respondent 2 owned 14 pisciculture ponds, mostly in Gada Kujanga, but also in Gobindpur.
- e. From the data reported by both respondents it is impossible to assess the total income derived from per acre of pisciculture, especially given the significant disparity between the total coverage area under pisciculture between the two respondents. However, it is clear that pisciculture is a high investment/high revenue operation. For instance, one of the two ponds owned by respondent 1 was over an approximately 0.5 acre plot on the western bank of Mahanga river. Respondent 1 was anticipating a yield of approximately 60,000 to 70,000 shrimp, each weighing about 70 to 80 grams from this pond. When the research team visited the pond, the shrimps were at approximately 40 grams and had six more weeks of rearing remaining. Shrimp of such quality sells at about Rs. 340/kg and hence Respondent 1's total revenue from over one season from one pond would be well above Rs. 15 lakhs. He estimated his total cost for the season to be about Rs. 5 lakhs including cost of labor (2 workers), seedlings, feed, cleaning and aerating. So while it is difficult to estimate the per acre yield based on just two respondents, it is amply clear that pisciculture is a high-yield, high-investment operation. It is not surprising that only a very small number of pisciculturists exist. In the project-affected area the estimate was that between all the nine villages there were 150 families in pisciculture.

**(d) FOCUS GROUP 4: Fishermen**

Information obtained from this focus group was scattered and incomplete. Though several initial interviews were conducted it was difficult, given the fishing schedules, to gather an adequate number of fishermen for a focus group. However, some preliminary data has been identified:

- a. It is estimated that about 20,000 – 25,000 small fishermen operate in the Jatadhar and the Bay area immediately adjoining the Jatadhar. This is the area that would be lost to POSCO'S captive port. This range was reported in 11 of the 14 preliminary interviews.
- b. Overall, these 20,000-25,000 fishermen are estimated to be from 30-35 surrounding gram panchayats. While we were unable to collect the names of all the gram panchayats from where fishermen came to this area, some of the most crucial panchayats were identified as follows: Fatehpur, Gandikpur, Kaliapata, Khurusia, Badabisnupuru, Balitut, Bogodia and Ambiki.
- c. It was also gathered from the preliminary interviews that fisher folk tended to depend almost exclusively on fishing and rarely entered any other labor market.
- d. While Solobhaya, the local fishermen's organization, has extended support to the anti-POSCO stir, the extent and scope of the support remains the subject of further research.

Thus, while no clear estimate of income levels derived from fishing were developed, it is clear that the Jatadhar and the Bay serve as the livelihood source for a large number of residents both from within the three project-affected gram panchayats, but also far beyond it.

## **Non-Monetized Aspects of Livelihood: Dependence on Forest/Forest Land**

As outlined in the previous sections, betel vine is the backbone of the local economy and cashew and kewra are other crops of some significance. However, despite its centrality to the local economy, a measurement of betel vine output alone does not give us a comprehensive view of the nature of livelihoods in the area. There are several aspects of the betel vine economy that are dependent on the specific characteristics of the forest land on which it is grown, and remain non-monetized and thus unaccounted for. Our research team identified four such aspects, one which is a significant part of the health and well-being of the community, and three which are directly connected to *paan kheti*:

**a. Food in the community:** The research teams sampled seven meals at random in different households of both betel vine growers and wage laborers to record its contents and locate the origin of the contents. The carbohydrate in all the meals, with one exception, was rice. In all the six meals that involved rice, the rice was locally grown by the family in plots of land that they had rented for one crop season. The rice, however, was not grown on forest land. The non-carbohydrate segments of all the seven meals sampled were almost entirely based in forest produce. Three of the seven meals served at least one portion of fish. In two of the three fish portions, the fish consumed was a local variety of silver fish (a variety similar to anchovy fish). In the last case, the meal served included dry fish also caught locally and dried over the summer months. This is a traditional breakfast food in the area. Apart from the fish, two of the seven meals had a significant portion of vegetables. These included drum sticks, tindora, bitter gourd, unripe jack fruit, drum stick leaves, potato and *desi aalu*. All of these vegetables were procured from the forest as and when required. Finally, on one occasion, the meal included a dal (lentil), and for an older man in one family bread (*chappati*) was served. In sum, barring the *chappatis* and the dal on one occasion, all of the food consumed was locally produced and extracted from forest land. Our team was told that apart from oil, salt, sugar and dal (used on occasion) nothing else that was consumed on a daily basis by the local communities was procured from the market. Thus, it would not be incorrect to surmise that over 80% or more of the local food intake is based on local forest produce or rice grown by families for self consumption.

**b. Forest Land Sand/Baloo:** As explained in the Wage Labor section above, a crucial part of betel vine production involves the transfer of sand, locally called *baloo*, into the betel vine plot, and mixing the same with mustard husk dust and re-layering the plot. The sand involved is of a very unusual kind that extends to about three kilometers from the coastline. Thus, every betel vine plot is dependent on an adjacent plot of forest land for the sand that is required to re-layer the plot. This process happens once a month on all betel vine plots and is a central part of the production process.

**c. Forest Land Water:** The second crucial aspect of *paan kheti* is the availability of sweet water to irrigate the plot. In almost all plots we observed, the water source was within 20 meters of the plot and was accessed through a simple *kaccha* (unsecured) well dug adjacent to the plot. Some important aspects of this water that bear mentioning: (i) In as much as it is adjacent to the plots, the water is also located on forest land (ii) The water table is very high; most wells we observed were less than 20 to 30 feet deep (iii) The water

available is sweet. This is a unique aspect of this area, and we need to understand the complex ecological formation that allows for the water table less than a kilometer or two from the coast line to have no trace of brackishness.

**d. Paan Kheti Sheds:** The paan kheti sheds create the controlled micro environment in which the betel vine is grown and protect the vine from direct sunlight (filtered sunlight is required) and wind. The sheds are constructed with commercially available bamboo for the frame of the shed and the fibers used as sunlight filters are procured from the forest. While several dry forest plant fibers are involved in the construction of a shed, the most important of these is the branches, twigs and leaves of the casurina tree. In some sheds, we observed that the casurina tree branches were used instead of the commercially procured bamboo even for the frame of the shed.

It is critical to note that all of the last three mentioned aspects of betel vine cultivation- the baloo, the sweet water, and the casurina and other forest produce used in the sheds are specific to the local ecology, and therefore not replicable in other areas of Orissa or India. It is clear that the core betel vine economy is specific to this area and depends on forests and forest land – a sub-ecology that is specific to this narrow stretch off the coast line.

### 3.2.2. Livelihoods in Khandadhar – Mining Area

The mines earmarked for POSCO would be located in the Khandadhar region, straddling two districts– Keonjhar (also called Kendujhar) and Sundergerh. While the specific coordinates of the POSCO mines are unclear, data drawn from government notices and two lawsuits filed against the allotment of mines to POSCO indicate that 32 villages will be impacted in Keonjhar district, residents of 12 of which will face displacement, and residents of the remaining 20 villages will lose their sources of livelihood and access to water. According to the 2001 census, of the total population of 5886 persons, 171 of those impacted fall under the SC category, 4,830 in the ST and 885 in the ‘Other’ category. In Sundergerh district, 84 villages are expected to be impacted. Details about how many of these villages will be displaced is yet unclear, but residents in these villages are largely STs. The affected villages are spread between the higher reaches of the hill range as well as the foothills.

Affected villages are inhabited mostly by the Bhuiyan Adivasis, though other groups such as the Juang and Munda also reside here. The residents practice a mix of shifting and settled agriculture; those in the higher reaches of the hills are more likely to practice shifting agriculture than those in the foothills. In addition to agriculture, residents are highly dependent on surrounding forests. Minor forest produce is extracted both for household consumption but also for the market economy, some of which have a considerably high market value. While we were unable to gather details about the agrarian economy, the table below presents information about forest products extracted by residents and their market value.

**Table 5: Local Market Prices for Non-Timber Forest Produce Collected Locally**

Name of NTFP	Local Price (per kg) during Harvest Season	Local Produce (per kg) during Off-Season
Mahua Flower	Rs. 10	Rs. 25
Mahua Seed	Rs. 12	Rs. 18
Char Seed (with cover)	Rs. 30	NA

Name of NTFP	Local Price (per kg) during Harvest Season	Local Produce (per kg) during Off-Season
Sal Seed	Rs. 18	--
Bana Tulsi	Rs. 60	Rs. 60
Dry Log Mushroom (5-7 varieties available)		
Shiny mushroom	Rs. 30	--
Other mushroom	Rs. 15	--
Gum (Bahada)	Rs. 40	Rs. 40
Gum (Nahada)	Rs. 14	Rs. 14
Amla	Rs. 6	Rs. 7
Bahada	Rs. 5	Rs. 5
Harida	Rs. 6	Rs. 6
Jhuna	Rs. 60-80	Rs. 60-80
Kusum Seed	Rs. 15-20	Rs. 15-17
Golden Mushroom	Rs. 50	NA
Bhalia	Rs. 2-3	--
Honey	Rs. 100	Rs. 100

We interviewed one family who provided us details with the total harvest of the most commonly extracted forest produce. The revenue generated from these products provides the family with enough income and employment for 1-2 months per year.

**Table 6: Revenue generated by Sale of Selected Forest Products**

Name of NTFP	Quantities gathered by the family each year	Revenue generated (using the lower price during harvest season)
Mahua Flower	0.40 – 2.00 Quintals	Rs 400 – Rs 2000
Mahua Seed	0.50 – 1.00 Quintal	Rs 600 – Rs 1,200
Char Seed	0.5 – 5.00 Kg	Rs 15 – Rs 150
Sal Seed	0.50 – 2.00 quintal	Rs. 900 – Rs. 3600

In addition to these products, which are sold commercially, many types of food products for consumption are also obtained from the forests. These include 14 types of roots, 60 varieties of greens, 19 varieties of mushrooms and 52 types of nuts. During the monsoon months of June, July, August and September, these foods are the primary types of foods consumed by the locals.

Finally, in order to compensate for the fact that data collection is impossible when the specifics of a mining site are not available, the research team visited some adjoining areas where iron ore mines are operational. While the observations presented here are preliminary, and based only on visual examination of the area and anecdotal narratives, there is, in our opinion, much cause for concern. In the block adjoining Keonjhar– Joda – where several mining operations are currently under full production, we witnessed several Adivasi villages that had been completely abandoned. Anecdotal narratives from local residents suggest that these villages were all cases of “self-eviction” as life and livelihood in these villages had become entirely unsustainable because of the mining operations.

Large scale ecological degradation, leading to loss of control over forest produce and water made it imperative that these communities “self-evict” themselves. These communities, local respondents insist, have not received any compensation, nor has there been any implementation of Forest Rights Act (FRA) in the area. We record these observations here, solely to suggest that the current economic and political trends suggest that expansion of mining into the Khandadhar would most likely have similar impacts.

### 3.3 Evaluating Employment Claims of the POSCO Project and Comparing with Current Livelihoods

As recently as June 2010, the Orissa government underscored its determination to go forward with the POSCO project in Jagatsinghpur and Khandadhar, and quoted extensively from a report issued by the National Council for Applied Economic Research (NCAER)<sup>98</sup> to justify its continued commitment to the project. Based on the data published in the NCAER report, Raghunath Mohanty, the Orissa Steel and Mines minister claimed that the POSCO project “will create about 8.7 lakh of direct and indirect employment, of which 18,000 will be direct employment.”<sup>99</sup>

The two main stakeholders in the POSCO project – POSCO and the Government of Orissa, have consistently used the NCAER report as a basis to justify the project for the last three years since the study was published. As such, the figures and statistics in support of the project come from three sources: NCAER, POSCO and the GoO. In this section we do the following:

- a. Critically examine the data related to the POSCO project released by POSCO, NCAER and the GoO.
- b. Introduce these figures from POSCO/NCAER/GoO into a comparative framework with baseline data produced through our research study in coastal Jagatsinghpur and Khandadhar areas reported in the preceding section.

NCAER conducted a social cost-benefit analysis of the POSCO project comparing two scenarios: (a) POSCO only mines iron ore, and (b) POSCO produces steel in addition to mining.

#### 3.3.1 Evaluating Employment Claims

The claim behind the high employment figures is that those affected by the POSCO project could be gainfully employed, and that the GoO and POSCO have given substantial thought to the predicament of those displaced by the project. For instance, POSCO circulated a poster advertising the following employment claim:

*The labour force in Orissa amounts to 153 lakhs. Among them **9.9 lakh are unemployed.** Newly created **8.7 lakh jobs by POSCO-India** project will **drastically reduce unemployment rate.**<sup>100</sup> (emphasis ours)*

Again, quoting the NCAER report, a POSCO power point presentation brings the two figures of 8.7 lakhs new jobs and the 9.9 lakhs unemployed (2005-2006 figures) in Orissa together to advance a

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98 The report, “Social Cost Benefit Analysis of the POSCO Steel Project in Orissa: A Report”, was published by NCAER in January 2007. See <http://www.ncaer.org/Downloads/Reports/Posco.pdf>

99 <http://bsl.co.in/india/news/posco-project-to-contribute-115-to-orissa-gdp/98770/on>

100 <http://posco-india.com/File/NCAER-Brochure-eng.pdf>

specific claim that the POSCO project would bring unemployment down to 1.2 lakhs (9.9 - 8.7 = 1.2 lakhs):

*Employment Opportunities generated by POSCO-India would consume almost the entire backlog of current unemployment. **Decrease in backlog of employment: 9.9 lakh → 1.2 lakh**<sup>101</sup> (emphasis ours)*

Apart from touting the “8.7 lakh jobs” claim, POSCO asserts that the project will produce 48,000 jobs per year, of which 18,000 will be direct employment and the remaining 30,000 will be indirect employment.<sup>102</sup> However, even these lower employment figures are for the steel plant running at its full capacity of 12 mtpa. According to a POSCO press release dated June 21, 2006, “[d]uring the first phase itself, POSCO-India is expected to offer direct employment to over 7,000 people.”<sup>103</sup>

Clearly there are some wild claims being made here. The figures of 8.7 lakhs of direct and indirect employment, the 18,000 jobs of direct employment, 48,000 jobs of direct and indirect employment, the 7000 jobs in phase 1 and the reduction of 9.9 lakhs unemployment to 1.2 lakhs as a result of the POSCO project, do not all add up. Not all of these figures could be true at the same time. To be sure, we need to go back to the NCAER report to verify the origin of these claims. Arguing for steel production rather than only iron-ore mining, NCAER sets up the high employment claims as follows:

*On the other hand, if POSCO puts up the steel project to utilise the entire iron ore mined in the State, the impact on the economy would be much greater— **8,70,000 person years of additional employment each year over the next 30 years.**<sup>104</sup> (emphasis ours)*

NCAER derives its employment multiplier<sup>105</sup> assuming certain linkages between different sectors of the economy. For instance, it estimates that the POSCO steel plant operating at its maximum capacity would generate 159,734 additional jobs in the "trade" sector, 5,809 additional jobs in the "animal husbandry" sector, 10,912 jobs in the "food crops" sector, 63,984 jobs in the "cotton + wool + art silk + textile products" sector and so on. However, there is no clarity in the report on the quality of data used to derive these linkages.

NCAER also assumes that these sectoral linkages would remain unchanged for the duration of the project. In other words, a forecast based on a point estimate of 2003-2004 figures is assumed to hold until 2040 (assuming the POSCO project will start in 2010). No justification is proffered for this highly questionable assumption. In fact, it is very reasonable to expect significant changes not only in the inter-sectoral linkages and the number of jobs produced in various other sectors, but also in the core sector of iron and steel production. There are two fundamental problems with this method of predicting increases in employment.

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<sup>101</sup> <http://posco-india.com/File/Economic%20Effect%20of%20POSCO-India%20project.pdf>

<sup>102</sup> <http://posco-india.com/File/Advt-english-Final.pdf>

<sup>103</sup> <http://posco-india.com/website/press-room/posco-reaffirms-commitment-to-india.htm>

<sup>104</sup> <http://www.ncaer.org/Downloads/Reports/Posco.pdf>

<sup>105</sup> NCAER defines employment multiplier as the total number of jobs created per Rs. 100,000 output in a sector. The jobs include those created in other sectors of the economy due to backward linkages of the given sector with the rest of the economy. Thus, a multiplier of 0.69 for steel production implies that for each lakh rupees of steel output, a total of 0.69 jobs are created in various sectors such as trading, finance, other minerals, and iron and steel.

- a. The prediction of potential employment is based on unrealistic assumptions about technology and prices. Historically, technological changes in iron and steel production, manufacturing (to which iron and steel is an input), and mining (which are inputs into iron and steel production) are labor displacing (see Table 8, for instance). Therefore, the potential for direct jobs created in the iron and steel sector and the indirect jobs created in manufacturing and mining is likely to decrease with technological innovations. Further, the NCAER report admits to considerable price fluctuations after March 2004 (pg. 25), but still arbitrarily assumes "constancy of prices" and takes as its reference the average price in 2006. While it may be true that price volatility is a recent phenomenon, nevertheless, it is an important factor to consider given the tremendous economic and social costs associated with this project. If the price of steel decreases, the value of POSCO's output would decrease thereby creating fewer direct and indirect jobs; this would induce economic uncertainties compared with the current situation where there is relative economic stability. The omission of a prediction interval that takes into account technological, market and price changes (at the very least), in view of the length of the period of analysis, does not conform with best forecasting practices and casts doubts on the reliability of the figures.
  
- b. The potential for the predicted number of jobs to materialize in each of the sectors that the NCAER report claims will experience increases in employment is also dependent on the competitive strength of each sector and therefore its capacity to scale upwards in a timely and responsive fashion. For instance, the Economic Survey of Orissa, 2010, characterizes the textile sector in Orissa as comprising 7,842 micro, small and medium sized units.<sup>106</sup> The NCAER report predicts an increase of 63,984 jobs in the cotton, wool, art silk and textile sector. However, there is no automatic transmission of benefits from the iron and steel sector to others within the Orissa economy. The prediction of increased jobs is conditional on the competitiveness of the textile sector in the state vis-à-vis other stronger production centers in India or abroad; this is significant in today's competitive globalized economy. The NCAER report notes that "POSCO-India assumes that imported procurement is 65 per cent of total input materials." (page 53). This implies that POSCO has determined that only 35 percent of its requirements will be sourced from India; Orissa will likely have an even smaller share of this. Therefore, not only does the employment multiplier touted by NCAER not account for market dynamism, it also relies on the demonstrably false assumption that POSCO-India will create strong backward linkages with other sectors, and that all of these linkages will be within the state of Orissa itself.

Further, the disingenuity of NCAER's use of the employment multiplier is visible in its actual calculation of total employment. The 8.7 lakh jobs number is derived by using the employment multiplier in conjunction with the annual production at factor cost – the cost of goods sold (COGS) including depreciation and interest expenses. The estimation of COGS, however, is made based on the Blast Furnace process rather than the Finex process that POSCO proposes to adopt despite acknowledging that the latter is the least cost option and preferable to the former. This sleight of hand can be explained by the fact that the considerably higher COGS figure for the Blast Furnace

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<sup>106</sup> Government of Orissa (2010). Economic Survey 2009-1010. Bhubhaneshwar: Directorate of Economics and Statistics, Government of Orissa.



process inflates the estimate of total employment generated thereby making the POSCO project more desirable than it actually intends to be.

Beyond the highly questionable 8.7 lakh figure, there are other problems which essentially make these figure meaningless. Our concern in this section is specific to the employment scenario that will emerge in the local area of the three gram panchayats of Dhinkia, Nuagoan and Gadkujang and in the Khandadhar mining area. An employment multiplier applied in the “positive” direction to predict the number of additional jobs it will create is equally applicable in the reverse direction to predict the number of jobs that will be eliminated because of the destruction of an existing economy. The previous sections have outlined the current baseline economy in coastal Jagatsinghpur and Khandadhar. Any reasonable prediction of additional jobs created by the POSCO project needs to also account for the total output of the current baseline economy and, based on the relevant coefficients, calculate the total number of jobs in different sectors across the state that would be eliminated and thereby arrive at a net gain or loss in employment figure. The NCAER report fails to do this entirely because it has refused to acknowledge the very existence of a strong local agrarian economy in spite of Asian Development Bank guidelines that insist that the current baseline economy must be included in any analysis. If we take into account the conservative estimate of over 50,000 people who will be affected by the project, and calculate the loss of employment across Orissa in different sectors, based on the inter-sectoral coefficients for betel vine, pisciculture, fishing and other agrarian outputs, it appears likely that any gain in employment due to the POSCO project will be marginal, or even non-existent. This failure, along with the methodological ones outlined above, together make the 8.7 lakh figure entirely unreliable and useless. We are therefore forced to abandon the 8.7 lakh claim, and instead focus on a more concrete claim made by POSCO of 48,000 direct and indirect jobs at a 12 million mtpa capacity.

By POSCO’s own admission, phase 1 of the project will employ about 7000 workers directly but full capacity will be achieved only in the ninth or tenth year after the start of production. In other words, if we look at the current unemployment figures for Orissa, about 9.9 lakhs, and the maximum potential for direct employment available through POSCO for the next five to ten years, it is clear that POSCO’s direct contribution to decrease in unemployment in Orissa is less than 1 percent of total unemployment in 2005-2006 (7,000 out of 10,00,000). If we include indirect employment through Phase 1, and use the ‘official’ indirect employment claim of 30,000 for all three phases, we have a maximum of 17,000 ( $7,000 + 30,000/3$ ) jobs created over the next five to ten years – a figure that is still less than a 2 percent reduction in Orissa’s unemployment. Neither the NCAER nor POSCO documents outline a clear timeline for the three phases of the project. If the first phase employment of 7,000 direct and 17,000 total employment is to be realized in the first 5-10 years, we can only assume that the 48,000 jobs at full capacity will be realized only in the 10-30 year time frame, and will still be less than 5% of current unemployment. Additionally, these figures leave out other important real factors such as population growth, and therefore the projected unemployment figures ten years from today. But even assuming a magical cessation in population growth, a mere 5% reduction in unemployment in Orissa cannot be considered “drastic” by any means, and will certainly not “consume almost all of the backlog of current unemployment” – both being claims made by POSCO and the government of Orissa.

The employment scenario gets even more depressing when we consider that none of the official projections account for the number of people whose livelihoods will be destroyed by the POSCO

project – a number that exceeds the rosy scenario of 48,000 direct and indirect jobs being touted by POSCO and the government.

Ignoring for the moment the dubious nature of the employment claims presented by POSCO/GoO/NCAER, let us assume the best-case scenario of 7,000 direct jobs and 10,000 indirect jobs created in Phase 1 over the next five to ten years. Even then, the likelihood of the project-affected families getting or benefiting from these jobs is minimal because of the following factors:

- a. **Lack of labor mobility across sectors:** The best case scenario presented above presumes labor mobility across sectors, i.e., that those engaged in agriculture thus far can easily and quickly transition into producing iron ore, steel, and constructing the POSCO plant. This is unrealistic and not borne out by past experience. It is very likely that the skilled jobs will be given to labor with appropriate technical knowledge and the locals will end up with low-paying, unskilled jobs with no real prospect for advancement. This is borne out by the fact that while POSCO claims to have hired more than 4,000 people already,<sup>107</sup> very few of them are locals. Furthermore, when Orissa Chief Minister Naveen Patnaik proposed reserving 90% of unskilled jobs, 60% of semi-skilled jobs and 30% of managerial jobs for the local people, POSCO questioned this move on constitutional grounds and threatened to fight in court.<sup>108</sup>
- b. **Employment generation in the iron and steel sector:** The trend of increasing mechanization in the mining sector suggests lower than projected employment generation (see Table 7). Data from the Government of Orissa itself shows that for iron ore production in Orissa, primarily carried out in the districts of Jajpur, Keonjhar, Mayurbhanj and Sundergarh, the number of workers employed to produce one million ton of iron decreased from 374.45 workers in 2005-2006 to 253.85 workers in 2008-2009 (see Table 8), a 32.35% drop in employment over just a three year period.<sup>109</sup> From the national as well as state figures on the value of mining output and quantity of output extracted, it is clear that the labor content of production is decreasing at a precipitous rate. Further, according to the Ministry of Labour,<sup>110</sup> jobs created in the mining and quarrying sector per lakh rupees of output has fallen from 0.03 percent in 1999-2000 to 0.01 percent in 2004-2005 to 0.009 percent in 2005-2006 (see Table 7)<sup>111</sup>.

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<sup>107</sup> See POSCO press release dated June 21, 2006, mentioning the hiring of 60% of its employee strength (estimated at 7,000 people in the first phase), <http://posco-india.com/website/press-room/posco-reaffirms-commitment-to-india.htm>

<sup>108</sup> Orissa's job policy delays renewal of MoU with Posco-India, Deccan Herald, August 14, 2010. <http://www.deccanherald.com/content/88644/orissas-job-policy-delays-renewal.html>

<sup>109</sup> Government of Orissa (2010). Economic Survey 2009-1010. Bhubaneshwar: Directorate of Economics and Statistics, Government of Orissa.

<sup>110</sup> Ministry of Labour & Employment, Director General of Employment and Training in Orissa government, 2010; MoSPI, Gol, 2008, available at: [http://mospi.nic.in/rept%20%20pubn/ftest.asp?rept\\_id=nad13\\_2007\\_mining\\_brochure&type=NSSO](http://mospi.nic.in/rept%20%20pubn/ftest.asp?rept_id=nad13_2007_mining_brochure&type=NSSO)

<sup>111</sup> The decrease in labor content may also be explained by an increase in the value of output generated, in addition to increased mechanization and further research may be required to locate the relative impact of the two factors. Nevertheless it underscores the fact that higher value of output does not necessarily generate higher employment. The total value of output likely to be generated by POSCO therefore may not generate adequate jobs to compensate the loss in agrarian livelihoods.

**Table 7: All India Employment and Value of Output in the Mining sector**

	Total employment in mining and quarrying sector (Lakh persons)	Estimates of Value of Output from Mining and Quarrying (at 1999-00 prices) (crore rupees)	Direct employment per Rs. 100 crore of output
1999-00	10.05	290	3
2000-01	9.54	355	3
2001-02	9.29	407	2
2002-03	9.13	541	2
2003-04	10.95	776	1
2004-05	10.93	1047	1
2005-06	12.41	1306	< 1

Source: Ministry of Labour & Employment, Director General of Employment and Training in Government of Orissa, 2010; MoSPI, GoI, 2008<sup>112</sup>; Authors' calculations.

**Table 8: Employment and Output in iron ore mining in Orissa**

	Number of workers directly employed in iron ore production	Extraction of iron ore in the state (in million tons)	Ratio of workers to iron ore production
2005-06	20782	55.5	374.45
2006-07	16677	65.88	253.14
2008-09	18912	74.5	253.85

Source: Directorate of Mines, Orissa in GoO, 2010

- c. **Increase in informal versus formal jobs:** The mining sector in India is known for hiring informal and subcontracted workers rather than putting employees on a permanent payroll. According to a government mining policy study, the ratio of formal to informal workers in the mining sector is 1:10.<sup>113</sup> This is consistent with the nationwide trend of increasing levels of flexible or informal workers hired even in the formal sector. In Orissa, marginal workers have risen in numbers from 13.84 percent in 1981 to 32.83 percent of the total workforce in 2001; this is higher than the India-wide rate of 22% in 2001.<sup>114</sup> This is of particular concern to the well-being of workers and the local economy since informal work is characterized by little or no job security, low wages, gender inequities in pay, and sexual harassment<sup>115</sup>. Given this accelerating trend of expansion of informal work in the industrial sector in the place of permanent employment, the crucial question is whether the POSCO project in the three gram panchayats would take a workforce that has steady agrarian employment because of betel vine cultivation and force them into conditions of informal work in the industrial sector.
- d. **Environmental impacts on health, productivity and livelihoods:** Iron ore mining and smelting operations are known to be highly toxic and destructive. The plan of building a high

<sup>112</sup> [http://mospi.nic.in/rept%20%20pubn/ftest.asp?rept\\_id=nad13\\_2007\\_mining\\_brochure&type=NSSO](http://mospi.nic.in/rept%20%20pubn/ftest.asp?rept_id=nad13_2007_mining_brochure&type=NSSO)

<sup>113</sup> Otto, J. M. (2009). Global trends in mine reclamation and closure regulation. In J.P. Richards (Ed.). Mining, Society, and a Sustainable World. New York: Springer

<sup>114</sup> Government of Orissa (2010). Economic Survey 2009-1010. Bhubaneswar: Directorate of Economics and Statistics, Government of Orissa.

<sup>115</sup> National Commission for Enterprises in the Unorganized Sector (NCEUS), August 2007, available at [http://nceuis.nic.in/The\\_Challenge\\_of\\_Employment\\_in\\_India.pdf](http://nceuis.nic.in/The_Challenge_of_Employment_in_India.pdf) (the numbers and analysis in the NCEUS report are based on data from the National Sample Survey).

capacity road through the forest to carry the minerals out, operating a purifying/processing factors spewing toxic waste into the atmosphere during the smelting process and dumping tons of slag onto the watershed would have an incredibly destructive impact on the delicate ecological balance that has been maintained for millennia by the local farmers. Additionally, it is likely to have a substantial impact on the health and productivity, and thereby negatively impact livelihoods and well-being of the local population, including those not directly affected by the project (see chapter 4 for a more detailed analysis on the impact of the project on the environment).

In summary, the NCAER report compares the employment multipliers for iron ore mining and steel production and concludes that the scenario in which POSCO produces iron and steel rather than restricting itself merely to iron ore mining is more desirable. Based on employment multipliers calculated by NCAER, a claim is advanced that at its maximum output of 12 mtpa, the POSCO steel plant will create 8.7 lakh jobs. This figure has become central to the justification of the POSCO project. We have already demonstrated above that in reality, the total number of direct and indirect jobs that the POSCO project will generate in the next 5-10 years is at the maximum of 17,000, and over the following 10-30 year frame at 48,000. These would only reduce the current unemployment rate of Orissa by 1.7% and 4.8% respectively. In other words, the employment gains from the project are meager compared to POSCO's claims of drastic reductions in unemployment. It is also important to note that despite providing the value of employment multipliers for agriculture and allied sectors which are higher than that of mining and iron and steel production (10.86 for food crops and 2.75 for cash crops, 2.52 for plantation crops, 0.68 for other crops, 4.15 for animal husbandry, 1.22 for forestry, and 0.71 for fishing activities— against 0.35 for mining and 0.69 for steel production), NCAER is silent on the impact of iron and steel and mining activities on the former.

**Table 9: Comparison of Employment Multipliers Across Relevant Sectors**

<b>Sector Name</b>	<b>Employment Multiplier</b>
Food crops	10.86
Cash crops	2.75
Plantation crops	3.52
Other crops	0.68
Animal husbandry	4.15
Forestry and logging	1.22
Fishing	0.71
Iron ore mining	0.35
Iron and steel production	0.69

Source: NCAER, 2007

While it is clear that the gain in employment and output from the POSCO project will come at a loss to current local livelihoods in the agriculture and allied sectors, the state's failure to do a study of the current baseline economy inhibits the calculation of the total man years expected to be lost with the destruction of the latter. Our field work further indicates that the loss in output from agriculture and allied activities at both the mining and iron and steel plant/port sites will not only destroy livelihoods of those families the project will displace, but also those dependent on the ecology/economy of the project area. The conservative estimate we have argued is either a partial or complete destruction of livelihoods for over 50,000 people (calculations are shown below). The net jobs generated would therefore be calculated as the expected number of jobs created by the

POSCO project (17,000 in 5-10 years or 48,000 in 10-30 years of direct and indirect jobs) minus direct and indirect employment lost due to destruction of the current baseline economies or degradation of the environment on which local livelihoods are dependent. The State, POSCO and NCAER have refused to consider the possibility that the net employment could well be negative, a possibility that is strongly suggested by our research. Until this net job loss/gain issue is properly resolved through a baseline study— a procedural responsibility of the state of Orissa which it has not fulfilled so far— no resolution of this matter is possible.

### **3.3.2 Comparing Livelihoods: Betel Vine vs. POSCO**

Thus far we have looked at the data presented by POSCO/NCAER/GoO critically. It is amply clear that the bright picture presented by the above stakeholders is at best dubious and worse an outright lie. This alone should be enough to discredit the project. However, a comparison of the proposed POSCO-led economy with the baseline paan kheti-led economy yields further clarity on the flaws of the POSCO project.

The total number of individuals from the three gram panchayats that will be directly displaced because of the plant and port is estimated to be 22,000. The mining sector projections of the total project-affected individuals is as yet unclear as estimates are currently available only for the Keonjhar district project-affected population. The number of villages that are projected to be affected by the POSCO mines in the Sundergerh district far exceeds those in Keonjhar. The Keonjhar estimate is above 5000 project-affected individuals. Thus a safe and conservative estimate of the total mining affected individuals in Keonjhar and Sundergerh together would be in excess of 10,000. Finally to this we need to add the number of individuals in the fishing and pisciculture sub-economies that will be affected by the project. The fourth focus group yielded an estimate of 20,000 to 25,000 project affected individuals in this segment of the economy. Thus the total project-affected individuals will be in excess of 50,000 if we are to deploy the most conservative estimates. Thus the Phase 1 maximum employment figures of 17,000 direct and indirect jobs, when adjusted for the two significant issues of lack of labor mobility across skill levels and trends of mechanization offers a bleak picture wherein the best case scenario is one where a small handful of the local population may be absorbed into wage labor created by the POSCO project and that too at terms that are entirely unfavorable to them.

This needs to be contrasted with the stable paan kheti-led economy that is currently in place, an economy which absorbs a much larger segment of the local population than the POSCO project could ever absorb, and at wage levels that are much higher than either the Orissa minimum wage or the national average wage for unskilled labor. In contrast, most unskilled industrial workers, especially those hired as informal basis, are paid lower than the minimum wage.<sup>116</sup> The potential loss suffered by the project-affected due to the replacement of the existing paan-kheti baseline economy with the POSCO economy will be exacerbated by the shockingly inadequate compensation packages being offered by POSCO/GoO for land.

As we point out in section 3.1.0 above, the highest compensation package offered by the government/POSCO is a one-time payment of Rs. 11,500 per decimal of land under betel vine

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<sup>116</sup> Ibid. (“Wages in the unorganized sector are arbitrarily fixed, often without regard to the minimum wage legislations, which adversely affect the income of the wage workers in general, and women workers in particular.”)

cultivation. The current average annual income for betel vine growers is about Rs. 40,000 per decimal. Assuming no inflation, the loss of income per decimal of land for a betel vine cultivator over the 30 year lifetime of the POSCO project is therefore Rs. 12 lakhs. The comparison now falls into place— over a 30-year period the cultivator would lose approximately Rs. 12 lakhs per decimal and would gain a paltry Rs. 11, 500, less than one percent of the crop value! This is appalling even from a purely market-driven perspective, but the idea that a government can uproot historically stable communities and throw them into abject penury for no tangible benefits to the state or the nation defies all logic. These figures would of course be far worse if we take larger land holdings under betel vine cultivation into account (10-30 decimal) where the per decimal average annual income rises to close to Rs. 50,000/decimal.

Finally, a brief word about long-term asset creation and the possibilities for a population such as the one in the three gram panchayats in terms of their longer term future. In the course of our focus group interviews as well as in preliminary interviews, the PRT research team also tried to collect basic family histories. Four of the six respondents in the betel vine focus group traced their history in the region to at least four generations, one subject to three generations, and one subject left early, so we do not have either his family history or annual yield from betel vine. All six subject-families participated in the forest renewal efforts of the 1960s, and all of them have played a significant role in the post super cyclone reforestation efforts, including in the case of three subject-families taking on an active role in the rotational task of guarding the forest each month. These aspects suggest a community that has historically invested in safeguarding the local ecology and should naturally be entitled to leveraging their creation of a long term asset – in this case, the land. With the levels of net income generated from the land, the communities have also already exhibited their own capacity to marshal local resources towards their well being. Though the data from our research is preliminary, there is enough indication that the agrarian surplus has already resulted in significant improvements in their living conditions. In contrast, reducing this population to wage labor, and that too at the lowest levels of informal wage labor in the industrial sector is almost a certainty if the POSCO project is implemented. Thus, even on grounds of long-term stability and prosperity of the local community, the POSCO project, it appears, will certainly do more harm than good.

### **3.4. Discussion and Conclusions**

In this context, implementation of the Forest Rights Act (FRA) (aspects of which have already been covered in the previous chapter), in the three gram panchayats is crucial, as the history of the current peasant community and its role in the development of a highly productive local economy, conservation of a delicate ecological space, and the development of a high wage labor market points to a brighter future than that promised by the POSCO-led economy. In as much as forest and land rights were not settled in this region in the 1800s when the British first nationalized forests in the country, nor under India's post-Independence Forest Policy of 1952, the FRA, passed in 2006, was intended to remedy this historic injustice and few other communities could present a more legitimate basis for recognition of rights than the ones under consideration in this report. They have not only historically settled in this area but also have been excellent stewards of forest land in spite of minimal support from the State and its agencies.

In summary, the above three sections of new research data on the local economy, a critical evaluation of the POSCO/NCAER/GoO employment claims and a comparison between the yield of

the current local economy and the POSCO compensation packages allows for the following conclusions:

1. The GoO's complete failure at developing baseline figures of current livelihoods in the three gram panchayats is a fundamental flaw in the very conceptualization of the POSCO project. This flaw is made much worse because both the GoO and the Gol were obliged under law to develop these baseline figures before approving the project. How a government could have put into motion a project without a detailed understanding of the economy it wishes to undermine is difficult to fathom.
2. The POSCO-NCAER combine has produced a set of employment numbers to justify the project in livelihood terms. The GoO, having abandoned its legal requirement to conduct a baseline study has also taken to quoting figures provided by NCAER/POSCO. At the outset, the NCAER's complete wiping out of the current local economy in its social cost-benefit analysis makes the report almost worthless.
3. Further, the POSCO-NCAER combine have, in our evaluation, deliberately juxtaposed figures and made claims that are meant to mislead. The claim that the total 30 year man-year projection on employment will wipe out the current deficit in employment (unemployment) amounts to a blatant lie with a deliberate intent to mislead the public.
4. The betel vine led economy of the plant/port region is a unique ecology-economy combine that has been developed into a very high productivity economy by the local peasant community. It affords a relatively high standard of living to both the local peasantry as well as to wage labor in the area.
5. In the mining area of Khandadhar that is spread across two districts – Keonjhar and Sundergerh – the GoO, Gol and POSCO again have made little or no effort at investigating the local economy and high social costs of mining in the area both on livelihood and ecological grounds. With regards to livelihood, the local Adivasi community has a richly diverse subsistence economy that is only partially monetized. The levels of destitution caused by mining in the adjoining Joda block of Keonjhar indicate that unless checked, the State/POSCO plan of mining in the area is going to cause gross deprivation of an already marginalized community.
6. The Jatadhar basin along the coast – the site of the proposed port, is currently the area on which a vast fishing community of over 20,000 (a conservative figure) from over 30 gram panchayats depend. The devastation to this economy by the POSCO project has not been accounted for by the State or POSCO, especially given that a fully functional port exists a mere 9 kms. north of the proposed site.
7. The Gol and GoO's disdainful attitude towards the FRA is indicative of its inexplicable attachment to the corporate sector - in this case POSCO. Implantation of FRA is central to long term sustainability of communities, especially around livelihood. There is adequate evidence to suggest that the communities in the three gram panchayats of Jagatsinghpur depend significantly on forest/forest land for their livelihood. In addition, there is documented evidence that these communities have been central to the effective

stewardship of this ecologically sensitive coastal zone. The allocation of mines to POSCO, while also irregular for other reasons, fundamentally violates the rights of the local Bhuiyan and other Adivasi communities. The project cannot and should not be set into motion without the full implementation of FRA in Jagatsinghpur, Keonjhar and Sundergerh.



## Chapter 4 - *Jal, Jangal, Zameen*:<sup>117</sup> People's Struggle for a Clean Environment and Their Place in it

### 4.1 Introduction

The resistance to POSCO's projects in Orissa has been centered mostly against the forcible acquisition of land by the government of Orissa for POSCO-India. The focus has been on the impact of the project on the homes, farms and livelihoods of the people- in short, on their very survival as individuals, families and communities. This has meant that several important issues, pertaining to the impacts on

- communities outside of the immediate geographical area of the project (such as the impact on the availability of water for human consumption and irrigation),
- marine and wild life (such as the impacts on endangered species such as Olive Ridley Turtles, Elephants, Tigers, Limbless Lizards, etc.)
- riverine and coastal topography (such as the impact on Paradeep port of the silting and erosion that will be caused by POSCO's port)
- forests, including the depletion of forest cover in mining areas
- impact on water bodies

have received lesser attention. However, many activists, environmentalists, independent groups,<sup>118</sup> and members of the affected communities have investigated these larger environmental impacts, and have attempted to generate public discussion around their findings. While there exists substantial information about the potential impacts of POSCO's projects on the coast, rivers and forest cover in the area, this report does not aim to compile an exhaustive list of such impacts. Rather, in the next two sections, we will (a) draw attention to some key environmental impacts and issues in the Jagatsinghpur and Keonjhar-Sundergarh areas, and (b) highlight problems in the environmental approval process which has failed to safeguard public interest. Overall, we point to the ways in which the POSCO project will not only adversely affect the physical environment, but also how it has failed to recognize the integral relationship that people have to the environment as a whole. By favoring the POSCO project, the Indian state has participated in denying the people of Jagatsinghpur and the Keonjhar-Sundergarh areas their basic human right- a right over their land, forests, and water- a significant component of their composite right to live.

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117 *Jal, Jangal, Zameen* translates as "water, forest, land". It refers to people's demands for control over local resources and is a popular rallying cry of people's movements in India.

118 These include New Delhi-based Centre for Science and Environment (<http://www.cseindia.org>), Sudarshan Rodriguez, Aarti Sridhar and others from the environmental advocacy group Dakshin (<http://www.dakshin.org>), Ashish Kothari, Kanchi Kohli, Manju Menon and others from the Kalpavriksh Environmental Action Group (<http://www.kalpavriksh.org>), Biswajit Mohanty from the Wildlife Society of Orissa who is the coordinator of "Operation Kachhapa", an ambitious sea turtle conservation program, (<http://www.wildlifeorissa.org>), independent researcher and activist Manshi Asher, etc.

## 4.2. Environmental Impacts

### 4.2.1. Impact on Availability and Quality of Water

According to the Memorandum of Understanding signed by POSCO-India and the Govt. of Orissa, water supply for the projects will be routed from the Jobra Barrage that is fed by the upstream Hirakud Dam on the Mahanadi River. POSCO estimates that it will require 3.5 cubic meters of water per second for the steel plant, which works out to a total usage of approximately 7,000 crore litres per year for the plant alone (assuming that it functions for 18 hours per day, six days a week)<sup>119 120</sup>. POSCO also plans to build a captive 1300-megawatt captive power plant although no data is currently available regarding how much water will be consumed by the same.

The 122.63 cusecs of water promised to POSCO is the highest volume of water ever allotted to any project in Orissa<sup>121</sup>. This provision of water ignores popular struggles on the ground against any further reservation of water from the Hirakud dam for industrial uses. For example, the leaders of the Mahanadi Banchao Andolan (MBA),<sup>122</sup> a popular movement, are demanding that the state government revoke its approval of water to POSCO. They cite growing pressure on the Hirakud dam, which is primarily meant for irrigation, and claim that further industrial use would lead to a water crisis downstream in the rural areas of Cuttack, Jajpur, Kendrapada and Jagatsinghpur districts. Farmers from the villages in the command area of the Hirakud dam are already facing an acute shortage of water,<sup>123</sup> and will be further affected by this diversion of water from agricultural to industrial use. The MBA is raising questions about the indirect economic costs of water usage by POSCO, including agricultural losses caused by i) shortage of water, ii) impact of water logging upstream (caused by the blocking of the Jatadhar river for port construction), iii) impact of increased salinity of the water (caused by dredging for the construction of the port).

The situation is likely to worsen given that the Government of Orissa has signed MoUs with 86 companies, of which 45 projects have been granted permission to draw water from rivers. This adds up to a total allotment of 1,214.26 cusecs of water from different river systems (namely, the Mahanadi, Brahmani and Baitarani rivers) for the setting up of steel, power, cement and aluminum projects<sup>124</sup>. Certainly, the disproportionate diversion of water to industries has been exacerbated by the fact that currently there are no benchmarks limiting industrial water consumption<sup>125</sup>. For example, the Special Economic Zone<sup>126</sup> Act of 2005 does not address the issue of access to water for

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119 Data compiled by Shankar Gopalakrishnan. <http://stoposco.wordpress.com/posco-project-in-orissa/>

120 Prof. Kundan Kumar estimates that if the steel plant were to run for 24 hours a day (instead of 18 hours a day), then the usage of water would amount to 12,000 crore litres.

121 "State allots 1,214.26 cusecs of water to industries"  
<http://www.hindu.com/2010/06/29/stories/2010062960170300.htm>

122 "Mahanadi Banchao Andolan" can be translated as "Save the Mahanadi Struggle"

123 "Orissa: Miners' Paradise" By Nachiketa Desai. <http://www.countercurrents.org/desai160510A.htm>

124 "State allots 1,214.26 cusecs of water to industries"  
<http://www.hindu.com/2010/06/29/stories/2010062960170300.htm>

125 "The SEZ threat to water and food security" A publication of South Asia Network on Dams, Rivers, and People (SANDRP), April 2007.  
[http://www.sandrp.in/otherissues/SEZ\\_threat\\_water\\_food\\_security\\_April2007.pdf/view?searchterm=sezthreattowater](http://www.sandrp.in/otherissues/SEZ_threat_water_food_security_April2007.pdf/view?searchterm=sezthreattowater)

126 See earlier discussion in chapter 2 about the preeminent place occupied by SEZs in the government's development schemes.

SEZ projects. In practice, such a complete absence of guidelines and/or restrictions regarding the use of water unfortunately translates to a *carte blanche* being given to the developer, often with no subsequent oversight or regulation either.

Residents of the city of Cuttack who are wholly dependent on the Mahanadi for drinking water are also organizing as the “Cuttack Banchao Committee” (CBC)<sup>127</sup>, and claim that the river already suffers drastic reduction in carrying capacity from 630 feet to 617 feet due to heavy siltation<sup>128</sup> over the years. The construction of nearly 30 dams and barrages over the Mahanadi, upstream in the state of Chhattisgarh, has also contributed to the lower storage capacity of the Hirakud dam. As a result, hydro-power generated from the dam has decreased from 240 MW to 90 MW<sup>129</sup>. On July 1, 2010, members of CBC staged a protest opposing the deal with POSCO, and Subash Singh, the convener of CBC pointed out that in addition to Cuttack, the cities of Paradeep and Bhubaneswar would also be affected by the water shortage<sup>130</sup>.

Following widespread protests, the govt. of Orissa asked POSCO in September 2010 to consider an alternative source of water, the Hansua River in Jagatsinghpur district. However, farmers from the area are claiming that the Hansua is not a river but a drainage channel which hundreds of farmers already rely upon for irrigation. Local organizations such as the Nab Nirman Krushak Sangthan and Ersama Ba Simiti (including elected officials such as Zilla Parishad member Sarada Jena) are organizing protest rallies against the allocation of water from the Hansua<sup>131</sup>.

Investigating Orissa’s “superflood” of 2008 (during which 19 of Orissa’s 30 districts were affected), researcher Ranjan Panda claims<sup>132</sup> that while the Hirakud dam was originally conceived as a flood control measure on the Mahanadi, current priorities of providing irrigation, generating electricity, facilitating industrialization<sup>133</sup>, etc. have led to changes in water management practices<sup>134</sup> that have resulted in increased incidence of floods on the river. Further, Bimal Pandia of Water Initiatives Orissa, a civil society group that works on water and climate change issues, argues that the goal of saving lives and property by preventing floods has become a lesser priority for the Orissa government than earning profits through the dam.

A second issue of concern is the pollution of water bodies from the release of industrial effluents, and from the proposed mining of iron ore in the districts of Sundergerh and Keonjhar in the

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<sup>127</sup> “Cuttack Banchao Committee” translates as “Save Cuttack Committee”.

<sup>128</sup> “Mahanadi crusaders seek panel” [http://www.telegraphindia.com/1100719/jsp/orissa/story\\_12698874.jsp](http://www.telegraphindia.com/1100719/jsp/orissa/story_12698874.jsp)

<sup>129</sup> “Pressure mounts on Naveen to stop water supply to industries from Mahanadi” by Nageshwar Patnaik 18 July, 2010. <http://economictimes.indiatimes.com/Politics/Nation/articleshow/6184834.cms>

<sup>130</sup> “No signs of Maoists in the POSCO agitation yet” June 03, 2010. <http://news.rediff.com/interview/2010/jun/03/justice-hosbet-suresh-on-the-anti-posco-agitation.htm>

<sup>131</sup> “Farmers oppose plan to supply Hansua river water to Posco” <http://www.business-standard.com/india/news/farmers-oppose-plan-to-supply-hansua-river-water-to-posco/409080/>

<sup>132</sup> “Hirakud dam causing rather than preventing Orissa floods”? By Ranjan K Panda. October 2008. <http://infochangeindia.org/200810077423/Water-Resources/Features/Hirakud-dam-causing-rather-than-preventing-Orissa-floods.html>

<sup>133</sup> Panda (ibid) quotes the original project report for the dam which read: “The aim of the Hirakud dam is primarily flood control; irrigation and power-generation are incidental.”

<sup>134</sup> Panda’s article (ibid) contains a detailed discussion of the changes in the “rule curve” (which dictates water storage levels) that has led to maintaining higher levels of water in the dam resulting in greater risks of flooding downstream of the dam.

Khandadhar region.<sup>135</sup> The Khandadhar mountain range is the source of the river Baitarani as well as many streams, and another major river, the Brahmani, also flows through the area. The Center for Science and Environment (CSE), in its *State of India's Environment* report, claims that “watersheds and rivers in Orissa” are “under threat”<sup>136</sup> because of the impact of mining and industry, and in fact lists River Brahmani in Orissa as one of the 10 worst polluted rivers of India.

Previous mining in the Keonjhar area has already led to a decline of four meters in the underground water level in that area (as reported by the Central Underground Water Board)<sup>137</sup>. About forty percent of the region's 8,000 tube wells do not work, and most of the irrigation in the area can no longer depend on water from the Khandadhar waterfalls<sup>138</sup>. In fact, a report by Duskar Barik, a local activist in the Keonjhar region claims that almost all perennial streams in the mining area of Keonjhar district are dead<sup>139</sup>. This is because the mining companies consider the origins of natural and perennial streams as perfect for extracting good quality iron ore, and that, in turn, has led to the death of these streams. According to Barik, “In the Gandhamardan Hill range eight perennial streams have been killed by the Orissa Mining Corporation (OMC) and its sub-contractor Jyoti Construction Ltd. by mining on their origins”, and this has affected at least 9 villages in the Keonjhar area<sup>140</sup>.

The origin of Brahmani river, which is a sacred place for the local Adivasis, has also been affected by the mining by Jyoti construction Ltd. Since the people in the area primarily survive on agriculture that is dependent on the rivers and streams for irrigation, the destruction of these water bodies has substantial destructive impact on the livelihood of the people. In short, further mining in the area would lead to the complete drying up of the main water bodies.

Civil society groups, along with political parties and environmentalists are now demanding that the govt. set up a water commission for a hydrological study of the rivers Mahanadi, Birupa, and its tributaries, which will investigate the impact of high rates of water withdrawal, and are insisting that the government withhold any further allocation of water to industries.

#### **4.2.2. Impact on Coastal Topography and Continued Viability of the Paradeep Port**

The construction of POSCO's captive port will be accompanied by the construction of a steel plant, a power plant, two townships, railway lines, highways, an 86km-long water pipeline, etc., all in the same vicinity, and which will have cumulative negative impacts on the local environment. Researchers Rodriguez and Sridhar<sup>141</sup> claim that port-related activities such as dredging, construction work, landfills, discharges from ships and waterfront industries, cargo operations, etc. will have

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<sup>135</sup> The High Court of Orissa has recently struck down the mining clearance given by the Orissa government to POSCO on the basis of the GoO's giving preference to POSCO against other companies. Regardless of the outcome of the litigation, it is important to point to the possible environmental impacts of the proposed mining on the area and the people of this region.

<sup>136</sup> Centre for Science and Environment, 2008. Rich Lands, Poor People- Is Sustainable Mining Possible? Page 247.

<sup>137</sup> Quoted in “POSCO: Tribal Dispossession, Environmental Destruction and Imperialism”, Analytical Monthly Review, February 2, 2010. <http://mrzine.monthlyreview.org/2010/amr250210.html>

<sup>138</sup> Ibid.

<sup>139</sup> Duskar Barik. Study on Mining Operation in Keonjhar District, Orissa. By Keonjhar Integrated Rural Development & Training Institute, (KIRDTI), 2008. p.10.

<sup>140</sup> Ibid, p. 10.

<sup>141</sup> Rodriguez. S. and A. Sridhar. 2010. Harboursing Trouble: The social and environmental upshot of Port Growth in India. Dakshin Foundation, Bangalore.

potential adverse effects including “...water pollution, contamination of bottom sediments, loss of bottom habitat, current pattern changes, waste disposal, oil leakage and spillage, hazardous material emissions, air pollution, noise, vibration, light and visual pollution<sup>142</sup>”.

One of the most alarming effects, it appears, is that the publicly-owned Paradeep port will become untenable directly as a result of the construction of POSCO’s captive port. This is a consequence of shifts that will take place in the coastal topography owing to interferences to littoral drift, a geological process by which sediments move along a beach shore. The large littoral drift in the east coast of India is said to be one of the highest amongst the world’s coastlines,<sup>143</sup> and the construction of coastal engineering structures such as port berths, terminals, breakwaters, etc. would obstruct littoral drift<sup>144</sup>. The effect of the obstruction of littoral drift is multiplied when a port is situated, as in the case of the POSCO port, on the shoreline or a river mouth, such that the movement of river sediment is also blocked. This blockage would cause areas north of the river mouth to become sediment-starved, and those areas would eventually recede through erosion. Thus, the construction of the POSCO port would directly impact the stability of the shoreline, and given the proximity of the Paradeep port (12 kms. north of the POSCO port site), it is likely that the northward erosion would cause a gradual submergence of Paradeep port into the Bay of Bengal.

A study by the National Institute of Ocean Technology (NIOT) has attributed the progressive loss of nesting beach areas in the Gahirmatha Sanctuary over the last three decades to the establishment of Paradeep port in 1966. Activist Biswajit Mohanty cites this study to argue against POSCO’s port- the construction of this new port will not only lead to faster erosion of the Gahirmatha beaches, but, “...in addition, Paradeep port could also be completely eaten away by sea currents”.<sup>145</sup> The vice-chairman of the Paradeep Port Trust, Subrata Tripathy, also wrote to the central government objecting to the project on the grounds that POSCO’s port at Jatadhar would cause erosion and affect the navigability of Paradeep Port<sup>146</sup>. It is also important to note that Mr. T. R. Baalu, who was the Union Shipping Minister when the POSCO MoU was signed in 2005, had also expressed apprehensions, during Lok Sabha Proceedings, that the new port is likely to affect the Paradeep port and that it would be preferable to upgrade the Paradeep port instead of constructing a second port in such close proximity<sup>147 148</sup>.

The Rapid Environmental Impact Assessment (REIA) for the Port suggests periodic “beach nourishment”<sup>149</sup> to ameliorate the problem of erosion, but it is not clear whose responsibility these

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<sup>142</sup> Ibid, page 23

<sup>143</sup> Ibid, page 25

<sup>144</sup> Ibid, page 26

<sup>145</sup> POSCO's port project 'will affect turtle nesting'  
<http://www.thehindubusinessline.com/2005/12/25/stories/2005122502390300.htm>

<sup>146</sup> Posco wants to build captive port in Orissa <http://www.indianjungles.com/060206d.htm> Feb. 1, 2006

<sup>147</sup> POSCO's port project 'will affect turtle nesting'  
<http://www.thehindubusinessline.com/2005/12/25/stories/2005122502390300.htm>

<sup>148</sup> 'Posco insists on captive port, Centre unhappy' <http://bsl.co.in/india/news/posco-insistscaptive-port-centre-unhappy/228847>

<sup>149</sup> “Beach nourishment”, also referred to as beach replenishment is typically part of a larger coastal defense scheme, and refers to a process by which sediment (usually sand) lost through longshore drift or erosion is replaced from sources outside of the eroding beach. It involves transporting and depositing sand from elsewhere to the depleted area. Nourishment is

mitigation measures would be<sup>150</sup>. The REIA proposes neither a budget nor a timeline for the same, and it also does not clarify which agency would enforce or monitor the performance of such mitigation measures.

That there has been little public discussion of the effect on Paradeep port is an unfortunate testament to the failures of existing regulatory bodies in safeguarding public interest. Not only is there an absence of public debate, it also appears that there is no communication or coordination amongst various arms of the government on this issue. For example, a study in 2009 by the Integrated Coastal and Marine Area Management (ICMAM) of the Ministry of Earth Sciences (MoES) claims that coastal structures constructed for port operation are a major cause of anthropogenic coastal erosion. One of the main recommendations of this study (which was in fact commissioned by the Ministry of Environment and Forests [MoEF]) was that location of ports should be avoided for 10 kms. on either side of ecologically sensitive areas. However, the MoEF's subsequent report directly contradicts the MoES's recommendations. Such is the disconnect that Rodriguez and Sridhar describe the MoES and the MoEF as inhabiting "independent universes"<sup>151</sup>.

Further, the MoEF's policy of port development is centered only on one environmental concern (amongst many possible others), namely, shoreline erosion, and it also ignores the fact that impacts on shoreline subsequently translate to impacts on livelihoods. As a result, the MoEF's policy fails to address social factors such as problems faced by local communities including restrictions on fisher folks' access to fishing grounds around a port, lack of access to the beach, the sea, and finally, displacement of communities from the project site.

While various environmental concerns recommend against the construction of POSCO's captive port, it is also not clear that a new port is in fact needed, given that the existing Paradeep Port can meet the needs of the POSCO project. Currently, Paradeep port has the capacity to handle 76 million tonnes of cargo, and the Port Record Traffic for 2009-2010 is at 57.01 million tonnes, an increase over the 46.41 tonnes handled in 2008-09<sup>152</sup>. Expansion plans are also being aggressively pursued to increase the capacity of the port to more than 135 million tonnes by 2013-14<sup>153</sup>. Therefore, it appears that it is well within the capacity of the Paradeep port's infrastructure to handle the additional traffic of 13 million tones that will potentially result from POSCO. Specifically on the issue of competition between ports, some experts<sup>154</sup> consider ports "natural monopolies", and believe that competition will lead to a stabilization of the market such that some ports will "die" naturally. But "dead" ports will still have permanent and irreversible negative social and environmental costs.

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typically a repetitive process, since nourished beaches tend to erode faster than natural beaches unless nourishment is complemented by measures to reduce erosion rates.

<sup>150</sup> The REIA was a common practice under the EIA notification of 1994 which has now been superseded by the EIA Notification of 2006.

<sup>151</sup> Rodriguez. S. and A. Sridhar. 2010. Harbours Trouble: The social and environmental upshot of Port Growth in India. Dakshin Foundation, Bangalore. page 46

<sup>152</sup> "Paradeep port handled record traffic in 2009-10" [http://www.thaindian.com/newsportal/business/-port-handled-record-traffic-in-2009-10\\_100344761.html](http://www.thaindian.com/newsportal/business/-port-handled-record-traffic-in-2009-10_100344761.html)

<sup>153</sup> "Paradeep Port Multi-purpose berth construction to be completed by 2012" <http://www.dredgingtoday.com/2010/07/05/Paradip-port-multi-purpose-berth-construction-to-be-completed-by-2012-india/>

<sup>154</sup> Consultant S.N.Srikanth of Hauer Associates, as quoted in Rodriguez. S. and A. Sridhar. 2010. Harbours Trouble: The social and environmental upshot of Port Growth in India. Dakshin Foundation, Bangalore.

Given the economic and environmental costs, it seems inadvisable to build a second port at just 12 kms. distance from an existing one (apart from the fact that the new port will cause a loss of revenue for the Paradeep Port Trust)<sup>155</sup>. It must be noted that in the neighboring state of Andhra Pradesh, following a decision that no two ports should be located within a vicinity of 50 Kms., the government shelved the construction of a private port at Mutyalammappalem, in favor of expansion of the currently existing Gangavaram Port.<sup>156</sup>

#### 4.2.3. Impact on Forest Cover and Resulting Effects on the Lives of Local Adivasis

The setting up of POSCO's steel plant and captive port require a diversion of 1253.255 ha of forest land for non-forest use, and the felling of about 280,000 trees. As discussed in chapter 2, the process of granting forest clearances to POSCO was highly problematic and violated the rights of forest dwellers as enshrined in the Forest Rights Act, 2006. The proposed mining site is located in the forest-rich Khandadhar Hills that sustains the *Paudi Bhuiyan* tribal communities, and which also has spiritual and religious significance for them<sup>157</sup>.

In 2003, Orissa had a recorded forest area of 4.84 million hectares, which amounts to a decrease of about a million hectares since 1999<sup>158</sup>. This decrease can be attributed to the performance of mining activities in close proximity to the forest areas. The Keonjhar area, particularly the Joda-Badabil belt has been the focus of mining since the 1950s, and a study of two blocks in the area indicates that there has been a decline in the vegetative cover, such that between 1989 and 2004, 13.4 square kilometers of its vegetative cover have been taken over by mining activity<sup>159</sup>. In addition, Sahu notes that almost 33,000 hectares of forest cover have disappeared from the Keonjhar (or Kendujhar as Sahu calls it) district thanks to the decades of mining activities<sup>160</sup>. Since studies show that about 25 to 60% of the sustenance of the inhabitants (including *Paudi Bhuiyans* and *Juang*) comes from the forest, the reduction of the vegetative and forest cover has disastrous consequences for the people<sup>161</sup>. However, despite such clear evidence and examples of the deterioration of the local environment and its subsequent effect on local residents, no comprehensive study has thus far been

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<sup>155</sup> The Paradeep port is one of several other public utilities that will incur losses along with the Kudremukh Iron Ore Company Limited (KIOCL), a public sector undertaking, which was earlier given the mines that have now been promised to POSCO. Following a legal challenge by KIOCL, the high court of Orissa has struck down the mining license given to POSCO.

<sup>156</sup> "SAIL's captive port plan is a matter for debate" by Santosh Patnaik  
<http://www.hindu.com/2010/07/23/stories/2010072361410500.htm>

<sup>157</sup> the name Khandadhar in popular lore emerges from a story from Mahabharat where Arjun is said to have created a stream by striking a large tree with an arrow when Draupadi was thirsty. (dhar-stream created by khandadhar or rupture of a stone). Due to its spiritual significance, the forest had been protected from mining right upto 1966 when Orissa Mining Corporation got its first lease and initiated this spurt of mining. Das and Pratap, 2008.

<sup>158</sup> 600 households (2 blocks) in twenty villages of the Joda-Badabil mining area of the Keonjhar district were studied. Erin Sills, Subhrendu K. Pattanayak, Shubhayu Saha, Jui-Chen Yang, Pravash Sahu and Ashok Singha. "The Mine over matter? Health, wealth, and forests in a mining area of Orissa", henceforth, Sills et al. Paper presented at the International Conference on Comparative Development, Delhi, 2007.

<sup>159</sup> Ibid.

<sup>160</sup> Subrat Kumar Sahu. "Treasure hunt in the Kendujhar forests." Infochange, August, 2010.  
<http://infochangeindia.org/201008288483/Environment/Features/Treasure-hunt-in-the-Kendujhar-forests.html>

<sup>161</sup> Vasundhara, a research and advocacy group that works on issues of environmental conservation and sustainable development reports that 30 to 40% of annual income of marginal sections comes from forest. quoted in Kumar Abhishek Pratap and Tanushree Das, Khandadhar, Life-line of Northern Orissa (Mining and Related Policies/ Programs as the Underlying Cause of Deforestation and Forest Degradation) in Nought without Cause, National Workshop on Underlying Causes of Deforestation and Forest Degradation in India (26 to 28 January 2008). See more on Vasundhara [www.vasundharaorissa.org](http://www.vasundharaorissa.org)

conducted of the environmental, social and economic effects of mining in the Khandadhar region as a whole.

In addition, when the forest department does take up compensatory afforestation, they have planted trees that are completely out of line with the traditional trees of these forests. Compensatory afforestation is being taken up in lands ravaged by mining, but also to increase forest cover in the form of “plantations” that would attract international carbon traders. For the latter, the forest department is deliberately replacing the indigenous varieties by commercially desirable ones by identifying certain forest areas as degraded.<sup>162</sup> As Padu Juang from Nadam village in Keonjhar district puts it: “Why is the forest department cutting down trees such as sal, piasal, mohua, asan, etc., which are precious to the livelihoods of the natives and their livestock, and planting useless trees like acasia, eucalyptus, teak, simbarua, chakunda, etc.? If such plantation continues, we will soon be pushed into great hardship. The soil will degrade, and our food security will be at risk.”<sup>163</sup> The forests in the Sundergerh area also have medicinal plants such as bhui nimbai (*Andrographis paniculata*), patal garuda (*Rauwolfia serpentina*) and wild tulsi (*Occimum canum*) that are also adversely affected by the mining activities. Thus mining not only affects the traditional forest cover but also allows the state to decide the nature of trees to be planted in the compensatory afforestation program. Such tree planting efforts are often incompatible with the interests of the people living in the forest, and are in fact detrimental to the ecological balance of the area.

#### 4.2.4. Impacts on Marine Life and Wildlife

As noted in the discussion about livelihoods, the estuaries of Rivers Devi and Jatadhar and the coastal areas of this region are extremely productive and yield a comfortable livelihood for the local farming and fishing communities. The fertility of the land and the abundance of marine life in this region are the direct results of the alluvial sediment and nutrients brought in by the rivers, and one of the main harmful impacts is that the blocking the Jatadhar River would impoverish the ecosystem of the estuary. This damage to marine ecology would in turn affect the local fishing economy by depleting fish stock in the area.

Secondly, construction of the new port will ravage sand dunes almost six meters high which are the breeding, spawning and foraging grounds of several fish species, including the endangered Olive Ridley marine turtles (a protected species under Schedule I of the Indian Wildlife (Protection) Act, 1991) and other marine mammals such as dolphins. The mouth of the Devi River is one of a handful of sites around the world where mass-nesting by Olive Ridley turtles has been observed.

Similarly, the Khandadhar forest is a habitat for a range of animals such as tigers (including the Royal Bengal Tiger), leopards, sloth bears, elephants, gaur, etc.<sup>164</sup>. Recently, researchers from Vasundhara, an environmental advocacy group, have also found evidence of limbless lizards- a keystone species<sup>165</sup> that prefers dark forests- in this area that is already inhabited by other rare reptiles such

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<sup>162</sup> Sahu, 2010.

<sup>163</sup> Ibid.

<sup>164</sup> According to researchers Pratap and Das, “the presence of the Royal Bengal Tiger is mentioned in the working plan of Bonai Forest Division of Sundergerh district. Das and Pratap, 2008.

<sup>165</sup> A keystone species is a species that plays a critical role in maintaining the structure of an ecological community and whose impact on the community is greater than would be expected based on its relative abundance or total biomass.



as the double-nosed snake<sup>166</sup>. The Hadgad forest and Hill range in Keonjhar are also a part of a Wild Life Sanctuary and are connected with Similipal National Park that is famous for its elephants. The forest area is also the route for elephants that migrate from the adjoining Saranda forests of Bihar. However, since the forest cover has been affected by the mining in that area, the elephants have been coming out of their natural habitat and damaging crops, destroying houses, and injuring people. Barik writes that about 25 people, mostly Adivasis, were killed during the 2000-2003 period in the Keonjhar area<sup>167</sup>. Thus the mining and consequent destruction of the forests and water bodies is not only impacting the natural habitat of the animals and marine life, it is also impacting their relationship with the people living around them, and the ecosystem as a whole.

#### **4.2.5. Impacts on Public Health Due to Mining**

Since mines often affect water bodies by creating standing pools of water or by altering the course of the streams, diseases such as Malaria have been observed in areas close to mining areas in the Keonjhar area<sup>168</sup>. In addition, long-term mining and industries have led to the air becoming extremely polluted such that local Adivasis are being affected by air-borne diseases. According to Duskar Barik, a local activist in the Keonjhar area, the laborers claim that their life expectancy has declined by about 50%, many dying before the age of 40<sup>169</sup>. In addition, the blasts in the mines are very close to the habitat (sometimes half a kilometer) affecting domestic animals and people living in the area and choking up their respiratory systems. Diseases such as Tuberculosis and Malaria are very common in the area, and have been made worse by the proximity to red water and black dust. Even though POSCO's mining is supposed to be restricted to an area of 6204 hectares, Das and Pratap point out that a large part of the adjoining areas will be affected by the environmental pollution<sup>170</sup>. In fact, Das and Pratap in their study of the Khandadhar falls region note that the air is already polluted due to the particulate matter and oxides of sulphur and nitrate emerging from the existing mining in the upper Khandadhar region, and from the sponge iron plants.<sup>171</sup> Residents in the vicinity of the sponge iron plants are also reporting irritation and itching in the eyes. There is also fly ash (particles that emerge when coal is burnt) on the agricultural products and the forest cover. OMC has also dumped its mining overburden (undesirable upper layers) into the Uskala stream at Kukurpeta village which has turned the water red, and rendered it unfit for irrigation and human consumption. The mining overburden is affecting other streams as well<sup>172</sup>. Since the POSCO mining area is supposed to be right above the falls, which is the source of the main river, there is legitimate fear that the mining would pollute the water bodies in that entire region.

### **4.3 Description and Critique of the Environmental Clearance Process**

The approval of industrial and infrastructural projects in India proceeds through layers of clearances designed to ensure that the project meets existing laws and guidelines regarding the protection of human and environmental welfare. One of the key documents in this process is the Environmental

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<sup>166</sup> Vasundhara Report quoted in *ibid*.

<sup>167</sup> Barik, 2008, p. 10.

<sup>168</sup> Sills et al.

<sup>169</sup> Barik, 2008.

<sup>170</sup> Das and Pratap, 2008.

<sup>171</sup> *Ibid*.

<sup>172</sup> *Ibid*.

Impact Assessment (EIA) Notification<sup>173</sup>. After the EIA document is made available to the public, a Public Hearing must be held so that the local community can provide feedback regarding the project.

Summaries of the EIA report and the proceedings of the public hearing are then to be presented to a central committee, based upon which a decision is made about granting the final clearance to the project. Unfortunately, in the case of the POSCO project, all three crucial stages of the approval process, through which the public exercises its rights to consultation and informed consent, were compromised in various ways. So vast a project as POSCO strains the less-than-coherent institutional framework for protection of public interest, and provides particular insight into the breakdowns and internal contradictions of India's democratic processes.

#### **4.3.1. Environmental Impact Assessment Notification**

The POSCO project is the largest instance of foreign direct investment in India to date. However, when it came to the environmental clearance process, the project was disarticulated into several smaller parts (such as the steel plant, the port, the mines, etc.). This kind of piecemeal treatment has the effect of obscuring the overall impact of the project, resulting in a lack of understanding on the part of the public as to the cumulative effects of the totality of the project. Two separate EIAs were produced for the port and the steel plant, by the National Institute of Oceanography (NIO)<sup>174</sup> and M.N. Dastur and Co. (a private consulting company),<sup>175</sup> respectively. Both of these were Rapid EIAs (REIAs), although the legal requirement under the EIA Notification, 2006, and the global best practice is the performance of a comprehensive EIA.

Various groups, including the CSE<sup>176</sup> and Environmental Law Alliance Worldwide<sup>177</sup> have evaluated these REIAs and have identified a series of gaps and lapses. In an illustrative example, the REIA for the steel plant merely mentions the subject of waste disposal from the plant, and does not provide information about the nature of the waste materials, the location where they will be dumped, the operation standards by which the wastes will be disposed, or the impact of the wastes on ground and ambient air pollution. Further, the REIA for the steel plant does not include a description of the 87 km. pipeline that will bring water from the Jobra barrage to the steel plant, and fails to account for the impact of the same.

The REIA for the Port also does not discuss socio-economic impacts of the construction of the port, but limits itself strictly to a discussion of technical data about ocean currents, mortality rates of phytoplankton, etc. Further, the data that is presented is not situated in any comparative context or framework such that members of the public are able to either understand the impact of the project,

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<sup>173</sup> Currently, the conducting of the EIA is contracted to a third-party agency. In some instances, the same agency is also entrusted with the job of helping the project proponent to acquire the clearance, which clearly creates a conflict of interest in that the agency conducting the EIA has a vested interest in underreporting potential problems with the project. Environmental activists in India have long campaigned for the establishment of an independent fund that would administer the EIA, but unfortunately this was not provided when the EIA Notification process was overhauled in 2006.

<sup>174</sup> National Institute of Oceanography, Goa. Rapid Marine environmental Impact Assessment for setting up of a captive minor port at Jatadharmohan Creek Near Paradeep in Orissa. March 2006.

<sup>175</sup> M.N. Dastur & Co. (P) Limited, Kolkata. Rapid Environmental Impact Assessment of 4 MTPY Integrated Steel Project to be set up near Paradeep in Orissa. August 2006.

<sup>176</sup> EIA analysis of POSCO captive port in Orissa. <http://www.cseindia.org/node/460>

<sup>177</sup> Mark Chernaik, Environmental Law Alliance Worldwide. April 2007. ELAW is a U.S.-based non profit network of public interest attorneys, scientists and activists.

or evaluate the desirability of it. Such abstracted presentations of technical data, when unaccompanied by explanations and/or benchmarking of information, work to delimit the audience of the report to other experts, and work against public participation in the project approval process.

In objections filed before the Orissa State Pollution Control Board (OSPCB), urging it to reject the REIA for the port, Biswajit Mohanty, secretary of the Wildlife Society of Orissa, notes that the REIA does not contain any data on the abundance of Olive Ridley Turtle populations and their dynamics, or of the likely impacts of shipping traffic, oil spillages and other marine pollution on the turtles and their nesting and feeding activities.

The clearance granted to POSCO's captive Port also violates the CRZ Notification of 1991 which protects fish breeding grounds by classifying them as CRZ-1, i.e. "ecologically sensitive areas". But given that stakeholders in coastal areas, including fishing communities, do not enjoy any formal recognition of their rights in the management and protection of the coasts as well as the right to coastal spaces<sup>178</sup>, their views and interests are often neglected in the clearance process. The weak enforcement of the CRZ is also a result of the fact that there are no clear ownership or land rights of fishing communities.

Being "Rapid"-EIAs, the two REIAs are also based on data from just one season as opposed to a comprehensive EIA that needs to include data from three seasons. The REIAs are thus incomplete and have poor ecological data. According to researcher Aarti Sridhar<sup>179</sup>, the reason for the absence of benchmarking data in EIAs is that, often, no such baseline data exists as yet for Indian environmental contexts. This is troubling because it suggests that historically, recommendations that have been made in various EIAs for different projects, and clearances issued by the Ministry of Environment and Forests (MoEF), etc. are often executed in the absence of any real ability to determine the actual potential for harm. Such an approach violates the precautionary principle<sup>180</sup> laid down by the Supreme Court of India, which states "where there are threats of serious and irreversible damage, lack of scientific certainty should not be used as a reason for postponing measures to prevent environmental degradation"<sup>181</sup>. The court also held that it might be appropriate to place the burden of proof on the person proposing the potentially harmful activity in question. The POSCO project should be denied environmental clearance, given that it has thus far been unable to provide evidence that invalidates this precautionary principle.

The granting of forest clearance to the steel plant was also problematic in that it was approved based on an aerial survey. The government had to resort to an aerial survey owing to the local residents' fierce opposition to the project, to the extent where the villagers had barricaded entire villages and refused entry to survey officials. According to Biswajit Mohanty of Wildlife Society of

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<sup>178</sup> Editorial, Economic and Political Weekly, June 26, 2010 vol. xlv, nos. 26 & 27, page 8.

<sup>179</sup> Aarti Sridhar, personal communication via telephone, August 5, 2010.

<sup>180</sup> The precautionary principle is reflected in the 1992 Rio Declaration on Environment and Development to which India is a signatory.

<sup>181</sup> The Supreme court's explication of the precautionary principle was made in the case Vellore Citizens Welfare Forum v. Union of India (1996) 5 SCC 647 on the untreated effluents from industries and tanneries going into the water bodies and land. Biswajit Mohanty invoked this case in his discussion of the harmful effects of port construction on marine life <http://infochangeindia.org/200512234729/Environment/News/Environment-ministry-okays-drilling-near-Olive-Ridley-turtle-nesting-sites.html>

Orissa, who learnt about the aerial survey in response to a Right to Information application, "The POSCO forest clearance must be the first case in the history of MoEF where the proposal was cleared without verification of the forest cover on the ground. The Regional CCF of MoEF clearly mentions in his note that he could only verify the forest land from the helicopter since the law and order situation did not allow him to carry out ground verification<sup>182</sup>."

The CSE claims, more broadly, that there are several instances where EIAs have been found to have "glaring and intentional omissions, and where the authenticity of the report is in doubt"<sup>183</sup>. Certainly, the mines in Keonjhar have not been discussed in any of the EIAs or other statements about the project, although they were such an important part of the overall project that POSCO had made its own participation in it conditional to being awarded a mining contract in Keonjhar.

The CSE concludes, as have many activists on the ground, that "poor EIA reports" are "one of the biggest drawbacks of the current environmental clearance process"<sup>184</sup>. Rodriguez and Sridhar also note the poor quality of past EIAs for Port projects, and ascribe this to the fact that no sector-specific guidelines exist for EIAs for ports. Further, they add that even at the state level, planning and due diligence is inadequate and ad-hoc<sup>185</sup>. It is therefore not surprising to see the CSE conclude that "EIA reports of some of the major projects in Orissa leave a lot to be desired"<sup>186</sup>.

It appears that EIAs such as the above issue from a mechanistic understanding of the environment as an accretion of discrete physical elements like air, water, etc. although the MoEF's manual about EIAs requires in fact that descriptions of socio-economic impacts on people should also be included. It unfortunately appears that most EIAs today are perceived to be lists of data rather than being documents that put human beings at the center of the environment, and which understand man-made environmental degradation through the language of human rights, including a broader understanding on human rights that includes social, economic and cultural rights of the project-affected people.

#### **4.3.2. Public Hearing Process**

The Government of Orissa's promise in the MoU to "facilitate" POSCO's projects dispenses with even an appearance of public consultation, and simply presumes public consent to the project. Although public participation in the environmental clearance process is confined only to the period that immediately precedes the granting of the final clearance to the project, Public Hearings are a crucial mechanism through which the public can address socio-economic and other concerns. However, given the larger political and media environment, and a socio-economic context where the apparent beneficiaries of the project are excluded from participation in public deliberation either due to lack of access to the fora of such deliberations, or owing to the barriers of language, as well as the deliberate disregard of such input (when offered), the public hearing provision is one of the weakest

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<sup>182</sup> "Holding their ground against POSCO" by Kanchi Kohli. July 11, 2010. Available at: <http://www.indiatogether.org/2010/jul/env-posco.htm>

<sup>183</sup> Centre for Science and Environment, 2008. Rich Lands, Poor People- Is Sustainable Mining Possible? Page 255.

<sup>184</sup> Ibid, Page 255.

<sup>185</sup> Rodriguez. S. and A. Sridhar. 2010. Harboursing Trouble: The social and environmental upshot of Port Growth in India. Dakshin Foundation, Bangalore. page 22.

<sup>186</sup> Centre for Science and Environment, 2008. Rich Lands, Poor People- Is Sustainable Mining Possible? Page 256.

elements of the EIA process. In fact, it is extremely rare that a project is rejected based upon the findings of public hearings.

A joint public hearing for the captive port and the steel plant projects was held on April 15, 2007, at a high school in Kujanga Block which is nearly 20 kms. away from the project-affected Panchayats of Gada Kujanga, Dhinkia and Nuagaon. In the weeks leading up to the public hearing, the government deployed 12 platoons of paramilitary forces<sup>187</sup> which staged a flag-march in the area on 9 April. Local<sup>188</sup>, national<sup>189</sup> and international<sup>190</sup> groups filed written objections about the atmosphere of intimidation caused by the state's use of paramilitary forces, and also pointed out that placing the public hearing outside of the project site discouraged participation by affected villagers in multiple ways. For one, the distance would impose costs of commuting on the villagers and deter participation. Secondly, the time required for the commute to the venue would also dampen participation as it would necessitate a whole day's absence from work, and cause loss of revenue to them.

Environmental activist Prafulla Samantra also noted in his submission that Kujanga was known to be a stronghold of the ruling BJD party (which is actively supporting the project)<sup>191</sup>, and that the presence of BJD supporters at the hearing would create a hostile environment for the villagers that wished to offer testimony opposing the project. Observers at the Public Hearing<sup>192</sup> note that POSCO company officials were seated on the stage along with government officials that were conducting the hearing. Not only is such an arrangement a direct violation of EIA guidelines regarding Public Hearings, it also offers us a symbolic as well as a literal representation of a state of affairs where the state has abandoned its role as a champion of public interest, but is instead actively promoting particular corporate interests. It is also evident that such an arrangement would have demonstrated to the local community their own position relative to that of POSCO officials, and that it would have had a chilling effect on testimonials that opposed the project.

Following the public hearing on April 15, 2007, and the publication of draft proceedings of the hearing three days later on April 18th, the villagers of three Panchayats- Dhinkia, Gada Kujanga and

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<sup>187</sup> Green cry over POSCO 'pollution' April 13, 2007. Available at: Available at: [http://www.telegraphindia.com/1070414/asp/frontpage/story\\_7645381.asp](http://www.telegraphindia.com/1070414/asp/frontpage/story_7645381.asp)

<sup>188</sup> In a letter addressed to the Orissa State Pollution Control Board (OSPCB), dated April 13th (i.e. prior to the public hearing), Prafulla Samantra from Lok Shakti Abhiyan raised a series of questions about lapses in the EIA, and in the public hearing process. Environmentalist and secretary of Wildlife Society of Orissa Biswajit Mohanty also filed a written objection to the REIA with the OSPCB alleging that the POSCO port at Jatadharmuhan creek would severely affect the Gahirmatha marine sanctuary, world's largest rookery of Olive Ridley turtles, only 30 km away from the proposed site for POSCO's captive port.

<sup>189</sup> Report of an Independent Fact Finding Team on Orissa's POSCO Project. Bijulal M V, Manshi Asher, Sridevi Panikkar, Sumit Chakravartty <http://www.mainstreamweekly.net/article110.html>

<sup>190</sup> "Tension builds over POSCO public hearing – Action Aid urges government to intervene." Available at: [http://www.actionaidindia.org/POSCO\\_public\\_hearing.htm](http://www.actionaidindia.org/POSCO_public_hearing.htm) "A public hearing should be conducted in a systematic and transparent manner, ensuring widest public participation. Such disregard of due process at best points to ignorance of official procedure and at worst, connivance between the state and POSCO to manufacture consensus without the consent of those affected," said Madhumita Ray of Action Aid-India.

<sup>191</sup> The stakes for the POSCO project being granted environmental clearance also seem to be raised by the fact that the Chief Minister of Orissa, Mr. Naveen Patnaik from the BJD party, holds the forest and environment ministry.

<sup>192</sup> Observation by local activist Chitha Behera, via personal communication.

Nuagaon -wrote a letter<sup>193</sup> on April 25<sup>th</sup>, 2007, to the Ministry of Environment and Forests documenting numerous violations of the requirements of a public hearing (as required by the EIA Notification, 2006) by the Orissa State Pollution Control Board (OSPCB). Summaries of all the violations listed in their letter are reproduced below because of the gravity of the violations which include falsification of data in the EIAs, multiple breaches of the law by the authorities, willful misrepresentation of the proceedings, etc.

1. The OSPCB had commissioned a Rapid EIA while the law clearly states that a Comprehensive EIA is needed.
2. POSCO had falsified its field reports by claiming that groups of surveyors had gone from house to house in 63 affected villages for conducting a sample survey, and that they had held Focus Group Discussions in each such village in the presence of village heads, Panchayat functionaries, Anganwadi workers and voluntary workers. However, this survey data was entirely concocted, and neither surveys nor focus groups discussions were held in *any* of the 63 villages.
3. the proceedings of Public Hearing circulated by OSPCB contains several gross omissions and commissions, such that individual testimonies that objected to the project are misrepresented as having consented to the project, while other testimonials that were critical of the project are missing entirely from the proceedings.
4. the OSPCB withheld the Executive Summary of the REIA Report, despite repeated requests, from the three Gram Panchayats of the affected area, although the law requires that the document be openly circulated before a public hearing.
5. the OSPCB did not include any of the written comments it had received during the public hearing process in the Proceedings, although it is required by law to do the same.
6. the POSCO REIA Report about the steel plant doesn't follow the prescribed format in that it fails to identify the personnel involved. This includes missing information about the names or qualifications of the surveyors that are supposed to have visited the 63 villages. Had POSCO listed the personnel, then its claims that surveys were conducted could have been verified for accuracy.
7. OSPCB's choice of venue for the public hearing is unacceptable in that it is situated about 15-20 kms. away from the project site, while the law requires that the public hearing be held *on* the project site or *in its close proximity*.
8. Women activists were not allowed to speak and their written submissions were not recorded in the proceedings.
9. The EIA Notification, 2006, clearly requires that a Public Hearing must include a discussion of the environmental as well as the social impacts of a project. Despite this, villagers that attempted to describe the social costs of displacement to their family and

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<sup>193</sup> Letter translated from Oriya into English by Chitha Behera. Available at:  
<http://chittabehera.com/Rehabilitation/ResponsetoProceedingsofPublicHearingbyPOSCOaffectedpeople.pdf>

their communities were cut short by the Chair, Mr. Dillip Kumar Mohanty, and were admonished to limit their testimonies to discussions of impacts on the natural environment. Further, Dr.Rout, a scientist who represented the OSPCB, and was present at the hearing in his capacity as an expert on what constituted environmental impacts, chose to remain silent and quiescent while Mr.Mohanty offered inaccurate and distorted definitions of the same.

10. As per the law, two separate Public Hearings must be held for separate projects, but only one joint hearing was held for the construction of the captive port and the steel plant.
11. The law requires that the EIA Report include the Terms of Reference in the report itself. Without such benchmarking data, it is not possible for citizens to evaluate the data or understand the assessment in any meaningful way. The REIA for the POSCO project does not include such benchmarking data.
12. The law requires that the original application by POSCO for environmental clearance should be disclosed. However, the OSPCB has not disclosed the application. Moreover, the MoEF also has not noted this crucial omission on the part of the OSPCB.

The villagers are demanding separate, comprehensive EIAs for each of the proposed projects by POSCO (such as the Steel Plant, the Port, Mines, the Railway line, the Highway, and the 86km-long water pipeline from Cuttack to the steel plant), and that these EIAs should be openly discussed at separate public hearings for each of the projects. As clarified by the MoEF's own circular<sup>194</sup>, every project must have a separate Public Hearing. The High Court of Delhi in fact states categorically<sup>195</sup> "...there is no question of scheduling several hearings relating to different projects at the same date, time and venue. This can possibly result in avoidable chaos at such hearings. It also reduces the whole exercise to empty formality".

Despite the detailed critiques of the REIAs and the Public Hearing process that were presented by the members of the community both at the hearings and after it, the MoEF granted final clearance to the port and the steel plant in May and June 2007, respectively. Thus, the environmental clearance process failed to capture and respond to public concerns about the project.

Apart from the procedural irregularities in the EIA process, and the intimidation and exclusions visible in the public hearing process, the very conceptualization of the project is of enormous environmental concern. All the different activities associated with the project- the construction and operation of the steel plant, mining for iron ore, building the port- will adversely affect various water bodies, result in massive deforestation, and threaten the existence of the rich flora and fauna in the area. Indigenous trees such as *sal*, *piasal*, *mohu*, etc. and rare species such as limbless lizards, double-nosed snakes, elephants, etc. (in forest areas), and the Olive Ridley marine turtles (in the port area) are in serious danger. The construction of a new port close to the Paradeep port may

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<sup>194</sup> Per MoEF's circular #J 15012/29/2010 dated 19th April 2010 which describes procedure for conduct of public hearings.

<sup>195</sup> In Writ petition (civil) no.9340/2009 and CM appeals no.s 7127/2009, 12496/2009 filed by Utkarsh Mandal and others in its order dated 26th November 2009.

make the current functional port untenable, and will also affect the fertility of the land and the productivity of the fishing communities. In sum, the proposed project by POSCO has a basic flaw: it denies the people of Jagatsinghpur and Khandadhar regions the right to determine their own relationship to their land, forests, and water bodies.



## Chapter 5 - Conclusion: Profit, Lies and Poverty

### 5.1 Introduction

The chapters presented so far are structured around data – data that we gathered through our research teams or data that was already published in one form or the other but has been ignored this far. The conclusions we have drawn in each chapter are closely linked to the data. We have made every attempt not to stray too far from the data. There is a truth that bare facts can tell. There is a story that mere data can itself make visible. This far our effort has been to stick to such data driven conclusions.

But there are stories that cannot be conveyed through data. There are emotions and understandings that the data ends up hiding. And these understandings are important because they point to the future – the ways forward or the way out of the crisis. For, unless we are able to understand the complex nature of the struggle and its importance to the people, we can never reach out to them in solidarity.

When two of us from the research team had finished our work in Keonjhar, we asked some of the local people - who had helped us during the research—for help with bus tickets to Cuttack. “There is one last lesson you will learn when you go by bus” one of them said, as they took us to the bus station to get our tickets. We boarded the bus at 10 PM. We reached Cuttack, just a mere 182 kms away, next morning at 10 AM, twelve hours later. It took us more than eight hours to negotiate the first 40 kms. out of Keonjhar town. Our bus was packed in between an endless queue of trucks, loaded and weighed down with iron ore. Most of it was being carried to Paradeep for export. On the other side of the road, all through the night, was an endless, unbroken queue of empty trucks lined up and waiting to get in and load up and leave. As the first strands of daylight broke through the denuded forest cover, we reached the end of the queue on the other side of the road – nearly 40 kms of trucks queued up, bumper to bumper. It was the starkest measure of the rate of extraction that Keonjhar was facing. And nothing we saw suggested anything but a dirt poor district.

When we reached Cuttack we called the person who had put us on the bus.

“Thank you,” we said.

“What you saw is nothing,” he said, his voice grave and measured. “I was once stuck just ten kms. outside town for a day and a half.”

We wondered how many sick people have died on that highway, unable to reach medical help in time. How many children can never make it to a school just a few kms away? What must be the life of the truckers who spend twelve hours getting in and twelve hours getting out, day in and day out? And of course, the simplest question of them all: Who was ripping the land off and profiting from it? Certainly not the impoverished Adivasis.

If the ride from Keonjhar was about the expansion of time because of the extraction of ore with no profit for the local Adivasis, then a ride from a railway station barely six kms from the village of Dinkia was about the expansion of time because of fear. In July, one of our researchers had travelled from Cuttack by a passenger train to Badabandha station just a few kilometers from the project site. None of the villagers with a motorcycle or a scooter dared go out of the village to pick

her up from the station because of fear of being arrested. Almost everyone who was young and capable of riding a bike had more than one case registered against him or her. There are over 800 people with cases registered against them. More than 300 of these are women.

The village as bounded by a wall of fear extends to almost every aspect of life in coastal Jagatsinghpur. Yet, life does go on with quiet fortitude. One evening, after a day of counting betel leaves on vines, and measuring paan kheti plots, one of our researchers ended up in the middle of a marriage negotiation. It took several hours for the date could not be exactly figured out because of various things related to the struggle – all of which had to be accommodated. As someone put it wistfully, “Everything had to slow down [due to the struggle]; even making arrangements for a wedding takes more time now.”

We narrate these stories of life out of order and ordinariness because it was part of the fabric of the research we did. There was anger and frustration, pain and occasionally joy that was all expressed to us. These were conversations about big things – about democracy, about research, about truth and lies, about wealth and poverty and sometimes about the future. And out of these conversations we have isolated three themes that we feel the residents of coastal Jagatsinghpur and Khandadhar were struggling to make sense of -- themes that reflect the core crisis of the age in India.

## **5.2 Crisis of Reality: What are the actual costs and benefits of the POSCO project?**

One thing that stood out starkly for us while researching the POSCO project is the pathetically small effort made by the government to justify its decision to go ahead with the POSCO project. It boggles our mind that more than five years after the MoU was first signed, the government has offered no systematic justification, nor conducted any public study, nor shared any insight into why a gigantic project of this size, with massive social and environmental repercussions, is actually in the “greater common good” of the nation and society. While the Orissa government certainly made some claims of prospective increases in employment over a number of years, and prospective tax revenues due to the project (claims, we note, for which it offered absolutely no substantiation); it has uttered *not a word* as to the costs involved--social, economic and environmental--to help us compute how these costs compare against the projected benefits. In the absence of any public scrutiny or informed debate about the claims of the state, the project itself appears to be simply offered to us, as an article of faith.

It was left to the National Council for Advanced Economic Research (NCAER) to offer a public justification for this colossal project through its study, “Socio-economic Cost-Benefit Analysis of the POSCO project,” published two years after the MoU had been signed. Claiming to take all costs and benefits into account, this study comes to the conclusion that the project is highly desirable to the state of Orissa, since it has a high Economic Internal Rate of Return (EIRR is a measure of the profitability of a project from the perspective of the whole economy rather than the project itself), and it will eventually contribute 11.9% of the state’s domestic product.

At the outset we wish to once again reiterate that the NCAER study cannot be seen as “independent” or “non-partisan” because of the direct financial relation to POSCO as one of NCAER’s sponsors. Beyond this, and maybe because of this, there are some fundamental problems with the methodology used to arrive at the positive conclusions. One methodological sleight of hand that NCAER performs that immediately makes visible their motivations is, although the EIRR calculation

takes into account the *maximum* possible revenue from the annual sale of 12 million metric tons of steel, inexplicably it considers the *minimum* costs of the project by including only the steel plant and mine-works, leaving out the associated costs of the port, the township, the railway and the road links that service the steel plant. While this observation alone is enough to invalidate the conclusions of the study, it is the complete disregard of equally important social and economic costs of the project that is even more damaging to the credibility of this “social cost benefit analysis.” Some of the most startling omissions include: the flourishing local paan-kheti economy of the area (which is completely overlooked in spite of the ADB standards that they liberally borrow from which clearly state that the baseline current economy needs to be studied); the loss of livelihoods of tens of thousands of people (which does not find a single mention in the report); the costs of forest land diversion, utilization of enormous water resources, degradation of upstream farmlands and coastal fisheries, the potential loss of viability of Paradeep port, irreparable damage to habitats of protected species like the Royal Bengal tiger, Olive Ridley Turtles, elephants and the local flora and fauna, none of which have been taken into account in any manner whatsoever. It is these real costs which will be borne by real people that we have tried to enumerate in the preceding chapters.

While the NCAER report renders invisible project-associated costs on the one hand, it shamelessly exaggerates benefits on the other. As we have seen in Chapter 3, the maximum direct employment in POSCO in the next 5-10 years will be 7000 (0.7% of current unemployment) and total direct and indirect jobs in the same time period will be 17,000 (1.7% of unemployment) as against a claim pushed by the NCAER that 8.7 lakh jobs will be created. Also, NCAER’s calculation of projected tax revenues from the project is wildly off-the-mark if we take into account the generous tax incentives offered to SEZ developers and units (Chapter 2). In short the positive conclusion in favor of the POSCO project from NCAER is a fabrication based on convenient assumptions, errors of both omission and commission, and sleight of hand.

Having failed to come up with its own justification for the POSCO project, the Government of Orissa has chosen to flaunt this deeply flawed NCAER study to retroactively validate its decision to sign the MoU. POSCO itself has not been far behind as it has shamelessly used the NCAER’s dubious figures in slick presentations and publicity blitzes to position itself as the savior of Orissa. When a set of well-qualified technocrats, company executives and government bureaucrats make false claims and put down numbers that are misleading, and when elected representatives unquestioningly parrot them, one cannot but conclude that these are purposeful actions with the intent to deceive the public. In the absence of even a single reasonably rigorous and transparent evaluation of the potential costs and benefits of the POSCO project, we are forced to conclude that the Government of Orissa, POSCO and NCAER are deliberately misleading the public about the proposed benefits of the project.

### **5.3 Crisis of Equity: Who reaps the profits and who bears the costs?**

Even more relevant than the question of overall gains from the POSCO project is the question of how this profit gets redistributed amongst different segments of society. Mere generation of wealth may be a valid aim for a corporation, but not for a state, unless this wealth enriches, stabilizes or at least does not further impoverish the most economically vulnerable segments of society.

From the evidence presented in this report, it is amply clear that a disproportionate burden of the costs of the POSCO project will indeed be borne by the weakest segments of the Oriya society today. These are the thousands of small farmers of Erasama block who will be alienated from their lands,

the hundreds of petty traders and small-scale transporters who live off the betel leaf economy, the thousands of wage laborers who currently make almost double or more than the minimum wage in Orissa, the tens of thousands of fisher folk who fish at the mouth of the Jatadhar, the numerous farmers along Hansua river who will see a depleting water table, the Adivasis in the Khandadhar region whose forest villages will be razed to the ground and converted into open cast mines, who will inherit only the debilitating ill-health that comes with environmental degradation, and the multitudes of Paradeep port workers who may have no viable port in the years to come.

And do these folks get any of the purported benefits of the POSCO plant? Even if all jobs that came up at the POSCO plant were offered to the project-affected people, they would only be a small percentage of the total livelihoods destroyed. But realistically, a large number of the jobs that will open up at POSCO will *not* be filled by the locals, now de-skilled and hence viewed as “unskilled” workers who stand no chance in an industry that is turning less labor-intensive by the year, and where a large part of the jobs which will be generated will be technical and managerial in nature, benefitting the elite classes who have not borne the brunt of displacement and dislocation. During our visit to Govindpur, when one of us went inside a betel vine shed, a worker who was sitting and replanting the betel vine said, “From an 8-year-old to an 80-year-old, everyone has a role in this work. Young and old, men and women, everyone in this village can find work. Can the company give us that?”

Who really stands to gain from the POSCO project? The profits from this megaproject will primarily enrich POSCO shareholders, the largest of which are big U.S. banks such as Citibank and JP Morgan Chase<sup>196</sup>, each of which own 5-10% of POSCO’s equity, and one of the richest individuals in the world, Warren Buffett, who owns approximately 4 million shares of POSCO’s stock<sup>197</sup>.

While POSCO and Citibank, Chase and Buffet will indeed laugh all the way to the bank, there will of course be a significant group of the Indian elite and middle classes who aspire to their cut in the spoils. The largest source of wealth in the POSCO project is simply the gargantuan profits due to the mining of iron ore. If current experience is anything to go by, traders, transporters and middlemen in the mining value chain, the contractors and the suppliers who will build sub-standard roads and bridges, the real estate sharks and the township building contractors, the mobile phone franchises and the gas station chains, all stand to make immense gains; but the displaced marginal farmers and the Adivasi villagers who are uprooted for the sake of mining and steel production and whose forests and farmlands are destroyed will find their meager existence becoming even more miserable as the ore extraction and pollution from steel production ravage the immediate environments on which they depend. Certainly there will be a small handful of local rich farmers or prosperous pisciculturists who may make their entry into this class. Maybe one of them will even get a franchise for the first McDonalds in Kujang town to serve POSCO executives the paneer burger.

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<sup>196</sup> As of June 30, 2010 Citigroup owned almost 9.8 million shares and JP Morgan Chase owned about 632,000 shares of POSCO stock. Ownership details are taken from Yahoo Finance, <http://finance.yahoo.com/q/mh?s=PKX+Major+Holders>

<sup>197</sup> “Buffett wants to Raise Posco Holdings, Company Says” January 19, 2010, Bloomberg. Available at: <http://www.bloomberg.com/apps/news?pid=newsarchive&sid=a.ueBzbdba2E>

#### 5.4 Crisis of Legitimacy: Are we a Constitutional Democracy?

Maybe it was just the dissonance we were feeling as researchers as the country's 63<sup>rd</sup> Independence Day came closer. But we did feel that the number of questions about India and its democracy only increased in the villages of Jagatsinghpur. "How can we say we are a democracy?" one of the respondents in a focus group asked. "If we are a democracy why would they [the state representatives] not listen to 20,000 people talking..." The people in the nine villages are proud of the fact that they have built a movement and an organization. And they see it as a way to push for their democratic rights. "When we started we thought in a few weeks or a few months they would listen to us. We knew that they were not going to listen to us only when we saw that they had produced false gram sabha resolutions that we had never actually passed." The scale at which formally laid out processes and requirements such as public hearings and gram sabha resolutions have been violated is indicative of how willing the government and POSCO is to subvert democracy.

Almost all applicable laws, whether it is the FRA, FCA, CRZ, or EPA, have been ignored and consequently violated. "If they didn't want to shut us up and get a public hearing done just for the paper [resolution], why would they have so much police? ...And why was there a POSCO official in front, as if he was conducting the meeting?" And while it was the administration which willingly pushed through fake gram sabha resolutions, the company, POSCO, was not far behind. It claimed to have conducted a survey in 63 project affected<sup>198</sup> villages when, in reality, not a single one was surveyed.

One of the women who has a handful of cases registered against her said it the best, "The government thinks we are puppets. They sit in Bhubaneswar and Delhi, and maybe even outside, and they make decisions and they think we will say okay." On one occasion after a heated discussion about how the public hearing was conducted, one of the villagers who had been silent until then asked "Can somebody go to jail for breaking democracy?" There was much merriment at this question but surely it underscored the core question – What methods exist to bring those who violate rudimentary democratic norms and procedures to justice?

As researchers, we were struck again and again by the feeling that if the democratic spirit was alive in Jagatsinghpur and Khandadhar it was entirely embodied in the farmers and the Adivasis, the workers and the fishermen who came of their own volition to embrace the struggle. As we left Dinkia one evening to return to Cuttack and from there back to the U.S., one of the women from the militant women's wing of the PPSS waved us goodbye and said "aame bheeta maati dobu nahin." We will not give up our land!

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<sup>198</sup> Claim by villagers, noted in their letter addressed to the MoEF after the Public Hearings were conducted. Letter translated from Oriya into English by Chitha Behera. Available at: <http://chittabehera.com/Rehabilitation/ResponsetoProceedingsofPublicHearingbyPOSCOaffectedpeople.pdf>