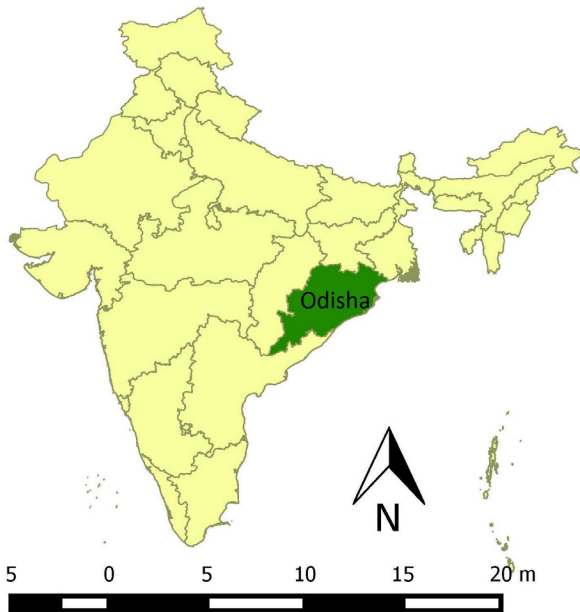


The POSCO steel project and its impact in Odisha, India



Map of India showing the state of Odisha
 Geospatial data source: GADM

Odisha is one of the poorest but most resource-rich states in eastern India. Among the biggest challenges of the government there is overcoming poverty by utilizing the natural resources available in the State. Keeping this in view, the government has invited many national and multi-national companies to invest in the area.

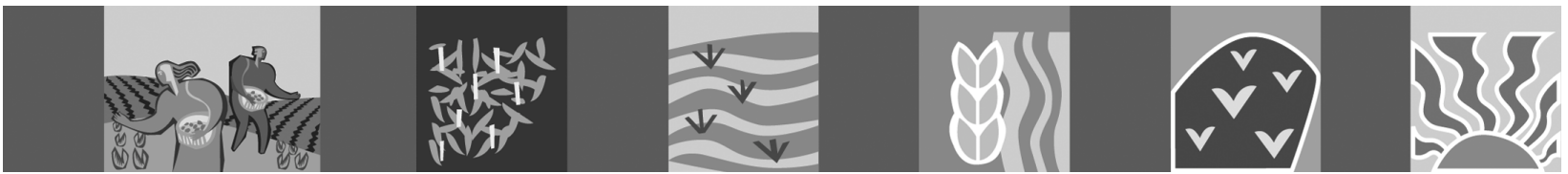
One of them is the South Korean multinational corporation Pohang Iron and Steel Company (POSCO) with whom the government of Odisha signed a Memorandum of Understanding (MoU) in 2005. POSCO, considered to be the world's fourth-largest steel company, plans to build a steel plant with a capacity of 12 million tons per year, along with a captive port and iron ore mines.

The project was originally estimated at \$12 billion (Rs520,000 million) but this was increased to \$ 12.6 billion to cover social services commitments.¹ It is touted to be India's largest ever Foreign Direct Investment (FDI) since its economy liberalized in 1991.

The contract is for a period of 30 years subject to renewal for another 20 years. It extends across two segments – the plant and port area in Jagatsinghpur district, and the mining areas covering the two districts of Keonjhar and Sundergarh.

¹ MoU between POSCO and the Odisha government

Condensed from A Case Study of POSCO-India Integrated Steel Plant at Paradeep, Odisha, India by Association of Voluntary Agencies for Rural Development (AVARD). For more details of the case, contact: avard@bol.net.in.



A total of 125 villages, 9 in Jagatsinghpur, 32 in Keonjhar, and 84 in Sundergarh district, will be affected by the project.

Lack of transparency

The government of Odisha claims that the project will “bring prosperity and well-being to its people.” After all, the company promises quite an elaborate rehabilitation package, which includes 10 decimals of land for each displaced family, a three-room house in the rehabilitation colony, modern civil amenities, a job for one nominated member of the family, assistance for self-employment and compensation to those who will lose their livelihoods, including labor workers and those cultivating government land without title.

However, there are reasonable grounds to question the tall claims for prosperity because of the lack of transparency in the details surrounding the investment. The negotiation process seemed obscure and transpired only between POSCO and the governments of Odisha and India. Except for being told the amount of the investment, the affected people were not consulted on the project. A month after the signing of the MoU in July 2005, several people’s groups, comprising residents in the affected area, raised salient concerns about the project, such as the guarantee of jobs for the community, the importance of betel vine cultivation which sustains a large population in the area, land ownership rights, and the poor track record of the State when it comes to rehabilitation, particularly proper compensation and relocation of displaced communities. Other groups describe the kind of development being promoted by the government as “anti-people.”

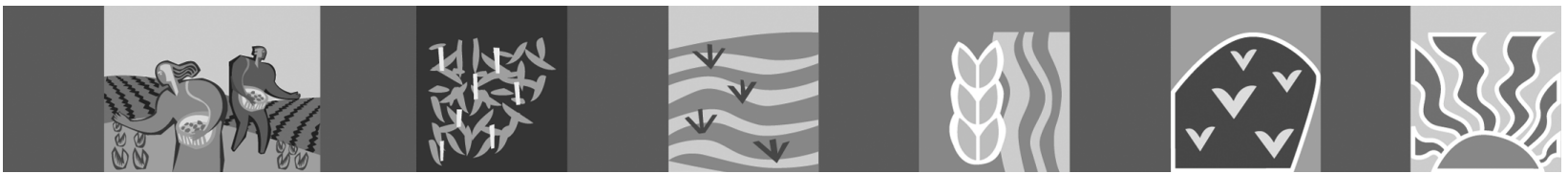
In 2007, one of the earliest actions by the POSCO Pratirodh Sangram Samiti, an anti-POSCO

“It seems that the State is in the process of gifting the investor with natural resources worth billions of dollars under the old discredited excuse of attracting foreign capital, and not making any effort to obtain reasonable and market-related value for the area’s iron ore.”

mobilization committee, was to blockade entry of any government or POSCO officials into the nine villages earmarked for the project. This continued until May 2010. As a response, the Odisha government deployed 12 platoons of paramilitary forces to create an ‘atmosphere of intimidation.’ In November 2007, police along with hired goons, attacked and critically injured protesters in Balitutha town; and again in May 2010 when 40 divisions of Odisha State Police opened fire on a peaceful protest, injuring more than 200 people.

In effect, the State engaged in acts that grossly violated civil liberties – arrests without charge, arson of local property, publicly humiliating defenseless villagers, etc. It also violated the Forest Rights Act (FRA) 2006, which became a law in 2008, by forcing the forest dwellers out of their lands.

The role of the Odisha government as promoter and facilitator of the POSCO project typifies the wide chasm between the constitutional mandate of the Indian State to guard the rights of its citizens, and the reality of its acting as an agent of the company. It seems that the State is



in the process of gifting the investor with natural resources worth billions of dollars under the old discredited excuse of attracting foreign capital, and not making any effort to obtain reasonable and market-related value for the area's iron ore.

The MoU stipulates that the Odisha government agrees to grant prospecting licenses and captive mining leases, free of any encumbrances, for 600 million tons of iron ore to the company after following and completing prescribed procedures – when, in fact, the amount of investment brought in by the investor is but a mere fraction of the real value of the mines and minerals being handed over to them at a token royalty.

The price of iron ore has shot up from Rs300 per ton to over Rs5000 per ton in the last four to five years. The State is duty bound to negotiate terms that maximize the benefits of the natural resources for its people.

Risks

Franciscans International, Geneva, a voice of the United Nations, mentioned in an appeal to POSCO in 2011 some risks that the project poses. Among others, they cited that Jagatsinghpur is not a suitable site for the project since the region has been the epicenter of many intense cyclones that might compromise the safety of the operations and cause further pollution. No measures have also been proposed for containing the massive quantities of ash and sludge coming from the steel plant which will be dumped in an area with extremely high wind energies.

In addition, building a massive private port in the Jatadhar creek will destroy the rich marine life there. The area is known to be the nesting habitat of critically endangered Olive Ridley Turtles and Horse Shoe Crabs, as well as the spawning ground

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of fishes. The port will have a deep channel into the sea to make way for large commercial ships which can be an additional source of pollution.

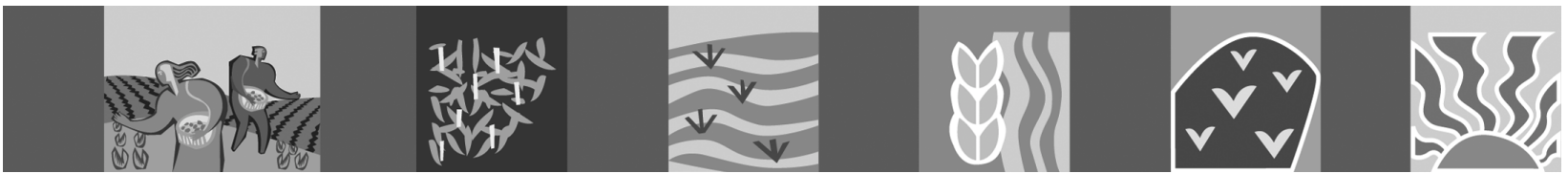
Franciscans International also cited violations against the rights to health, housing, land, and cultural identity of the indigenous peoples of Jagat Singhpur district.

To address these risks, Franciscans International recommended the setup of an independent and genuine inquiry committee to ascertain the legality of diverting 3,000 acres of government forest land, assess the project's impact on the environment, ensure that it abides by national and international laws, and investigate human rights violations.

Impact on the community

The POSCO-India Steel Project will have a widespread impact on various sectors particularly on land tenure, livelihood, food security, and the environment.

Land Tenure. 90% of the total land (1,440 ha) acquired for the POSCO-India steel project is



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contested government forest land. The POSCO project will adversely affect the community rights to land and forest of the residents of Jagatsinghpur, Keonjhar, and Sundergarh where the steel plant, port, and mines will be set up. The forest dwellers who cultivate forest land will be denied access to such land due to this project.

Under the Land Acquisition Act, the government is empowered to acquire land in case of urgency without allowing the land owners the opportunity to contest the acquisition or to be heard. However, the Comptroller and Auditor General (CAG) reprimanded the State government for not maintaining comprehensive and centralized data on acquisition and allotment of land.

The report observed that the Odisha government had neither any land use policy nor any prescribed scale for arriving at the actual requirement of land for different industries of different capacities. The provision for acquiring land for public purposes in the Land Acquisition Act was misinterpreted to benefit companies, and emergency provisions in the Act were misused.

Livelihoods. There is no official figure on how many people will be displaced in the plant and port sites, but the estimate is above 50,000. Similarly, the mines are expected to result in the displacement of 12 villages in Keonjhar

district and about the same number of villages in Sundargarh district. The loss of livelihoods in 32 villages of Keonjhar district and 84 villages in Sundargarh district will affect a population of 10,000 to 15,000.

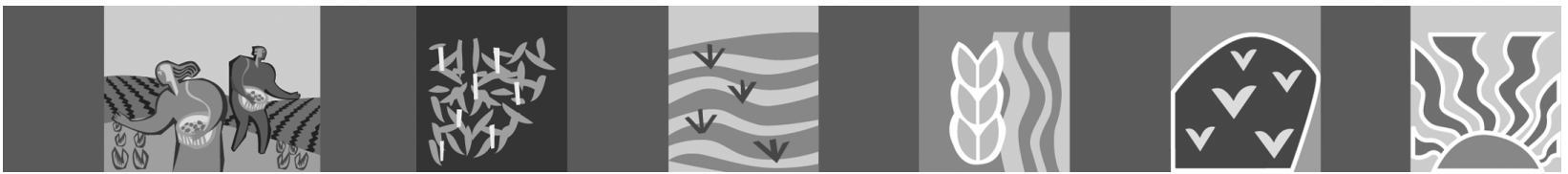
The 4,004 acres (1,620.36 ha) of land earmarked for the steel plant includes fertile agricultural land on which rice, betel nut, cashew, and other crops are grown, as well as coastal riverine zones where extensive prawn and fish farming is done. The economy of these villages is sustained in large part by betel vine cultivation that is specific to this area. It is a fairly prosperous and inclusive industry, providing employment to everyone, men as well as women, the young and the old alike. The estimated net income from a 5-decimal plot is about Rs192,000 (approximately \$3,150) per annum.

The farmers also grow cashew as a hedge plant, for which they get about Rs10,000 to Rs12,000 per year. Besides, they take land for rice cultivation on rent and produce enough for household consumption. They grow vegetables and collect fruits like squash, guava, mango, and jackfruit from the nearby forest. Thus, the cultivators are self-reliant and food secure in their own way.

On the other hand, the resettlement and rehabilitation package on offer in the steel plant is a onetime payment of Rs11,500 per decimal.² The total loss experienced by a betel vine farmer per decimal over a 30-year period would be in the range of Rs1.2 million. Thus the compensation package on offer is less than 1% of their cumulative earning potential.

Besides being cultivators, many others are engaged as labor. Their daily wage ranges from Rs200 to Rs250 plus two meals depending upon

² 100 decimal = 1 acre



the nature of work. Others earn their livelihood from trading, packaging, and transportation of the produce.

There is also a small but significant community of fishers in the area. Some of them have invested heavily in pisciculture, with such farms estimated to be around 2,500 involving 150 families. The net income from one pond is estimated at around Rs1 million per annum. In addition, about 20,000 to 25,000 small fishers operate in the Jatadhar and the Bay area – the area that would be lost to POSCO’s captive port. They come from 30-35 surrounding *gram panchayats*.³

The employment potential of the project has also been grossly exaggerated by POSCO and the Odisha government. Scrutiny of the much touted 870,000 jobs for 30 years claimed by the National Council of Applied Economics Research (NCAER) study shows only 7,000 direct jobs and a maximum of 17,000 direct and indirect jobs in 5 to 10 years.

Food Security: The people living in the plant/port region have thriving agriculture (rice cultivation), betel vine farming, fishing, and other allied activities which make them food secure. Once these are taken over by POSCO, the people will be left with no option but to work as labor, which will degrade them socially and economically.

On the other hand, the mines earmarked for POSCO located in the Khandadhar region will affect residents who collect non-timber forest products (NTFP) for their livelihood. Besides, many types of food items for consumption are also obtained from the forests. These include 14 types of roots, 60 varieties of greens, 19 varieties of mushroom, and 52 types of nuts. Although it

³ A local self-governing institution at the village or small town level

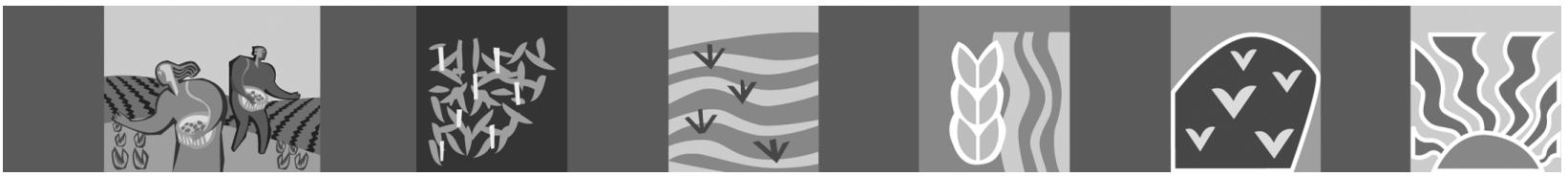
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is difficult to value such products in monetary terms, the communities make a happy living from the locally available resources.

Another important concern that may undermine and jeopardize the local traditional food security systems is the availability of quality water. According to POSCO’s estimate, the project will require 7,000 *crore*⁴ liters of water annually, which will come from the Jobra Barrage fed by the upstream Hirakund Dam. This dam is primarily meant for irrigation. Thus, its use by POSCO will lead to a water crisis downstream in the rural areas including Jagatsingpur. This will adversely affect food production, along with waterlogging and water salinity from dredging for the construction of the port.

Environment. The POSCO project will negatively affect not only the physical environment, but much more. It has failed to recognize the integral relationship that the people have with the environment as a whole. The Indian State, by favoring the POSCO project, has denied

⁴ 1 *crore* = 10 million



the people of Jagatsinghpur and the Keonjhar-Sundargarh area their rights over the land, forests, and water – a significant component of their composite right to live.

The main issue of concern is the pollution of bodies of water from the release of industrial effluents, and from the proposed mining of iron ore in the districts of Keonjhar and Sundergarh in Khandadhar region. The Khandadhar mountain range is the source of the Baitarani and Brahmani rivers which flow through this area. The Centre for Science and Environment (CSE), in its State of India's Environment report, claims that watersheds and rivers in Orissa are "under threat" because of the impact of mining and industry. In fact, it lists the Brahmani River in Orissa as one of the ten worst polluted rivers of India (2008).

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 86-km-long water pipeline, among others, all in the same vicinity – and all threatening cumulative negative impacts on the local environment. Activities such as dredging, construction work, landfills, discharges from ship and waterfront industries, cargo operations, etc. will have 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 (Rodriguez and Sridhar, 2010).

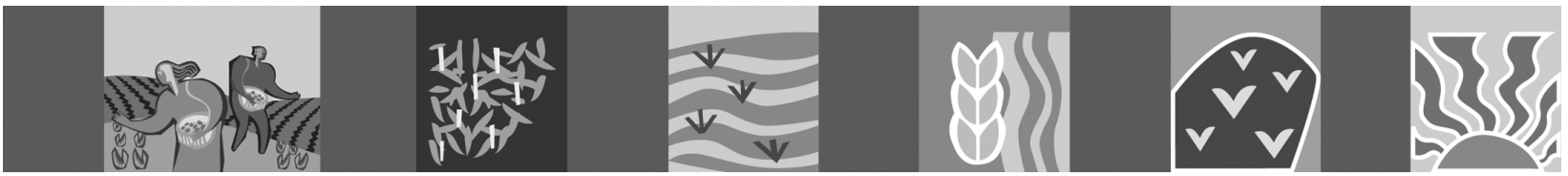
The POSCO plant will divert 1,253.26 ha of forest land for non-forest use, fell about 280,000 trees, and violate the rights of forest dwellers as enshrined in the FRA. The forests in the Sundergarh area also have medicinal plants such as bhui nimbai (*Andrographis paniculata*), patal

garuda (*Rauvolfia serpentina*), and wild tulsi (*Occimum canum*) which will be put at risk by mining activities.

The estuaries of the 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 blocking of Jatadhar River would impoverish the ecosystem of the estuary, and, in turn, affect the fishing economy. The construction of the port will ravage sand dunes almost 6 meters high which are the breeding, spawning, and foraging grounds of several fish species, including the endangered Olive Ridley marine turtles and other marine mammals such as dolphins. Similarly, the Khandadhar forest is the habitat of a wide range of wild animals such as tigers, leopards, sloth bears, elephants, gaur, and rare reptiles like the double-nosed snake. The mining and consequent destruction of forests and water bodies will not only impact the natural habitat of the animals and marine life, it will also impact their relationship with the people living around them and the ecosystem as a whole.

Pollution of the water and air will lead to waterborne and airborne diseases, while blasting in the mines close to the habitat will affect the people and domestic animals living in the area by choking up their respiratory systems. Diseases like tuberculosis and malaria are already very common in the area, and will be made worse by red water and black dust in the mining area spread over 6,204 ha (Das & Pratap, 2008). It will also affect the environment of adjoining areas, as the fly ash emerging out of coal burning will badly affect agriculture and forest cover.

Unfortunately, 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. Such a huge project as POSCO's strains the less than coherent institutional framework for protection of public interest and provides particular insights into the weaknesses and internal contradictions of India's democratic processes.

Recommendations

A number of remedial measures are required to address violations of existing laws.

Community. Many community members contend that the proceedings of the public hearing omitted testimonies against the project or took them out of context to make them appear in favor of the investment. POSCO also falsified its field report by claiming that their surveyors went from house to house in 63 affected villages. The Executive Summary of the report was not made available to the people in the affected area despite the law requiring that it be openly circulated before the public hearing. Nevertheless, the affected communities are left with no other option but to find an amicable solution where compromises can be made for the larger national interest, but to a reasonable limit.

Government. A democratically-elected government should behave in a responsible and transparent manner. It should be responsive to the people's demands and on no occasion should it use armed forces to terrorize them. Rather it should mediate an amicable agreement between the people and POSCO, and ensure that the compensation packages being offered are commensurate with what the community is sacrificing from giving up their lands and livelihood. Moreover, the assessment of the environmental impacts of the project may be handed over to a neutral third party for the satisfaction of both sides.

POSCO. The company should comply with existing laws and refrain from unfair practices as has been alleged. POSCO needs the support of the community to resolve disputes that hamper the implementation of the project. Therefore, it should find ways and means of promoting mutual confidence-building measures, such as offering judicious and fair rehabilitation packages, and, for transparency's sake, making available all public documents relating to the project. ■

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