Majority Report of the Committee Constituted to Investigate into the proposal submitted by POSCO India Pvt. Limited for establishment of an Integrated Steel Plant and Captive Port in Jagatsinghpur District, Orissa

October 18, 2010

By
Dr. Urmila Pingle
Dr. Devendra Pandey
Dr. V. Suresh

Submitted to the MINISTRY OF ENVIRONMENT AND FORESTS

Government of India New Delhi

Majority Report of the POSCO Enquiry Committee (Dr. Urmila Pingle, Dr. Devendra Pandey, Dr. V. Suresh) Executive Summary

- 1. The Government of Orissa and Pohang Steel Company (POSCO), Republic of Korea signed a Memorandum of Understanding (MOU) on June 22, 2005 for setting up an Integrated Steel Plant of a total capacity of 12 million tonnes per annum in Orissa at Paradeep, in Jagatsinghpur district. By establishing an Indian Company as POSCO- India, it would develop and operate the Steel Plant to produce a total of 12 MT starting 4MT in first Phase with a proposed investment of Rs 51,000 crores or 12 billion US\$. The integrated steel plant includes captive power plant and a captive minor port. The plant would be located on the northwestern bank of the Jatadharmohan river creek 12 km south of the Paradeep Port requiring a total of 1620.496 hectares of land of which 1253.225 hectares is forest land and would affect 8 villages of three Gram Panchayats of Erasama block, Kujang Tahsil. The MOU also envisaged that the company would develop and operate, (i) Mining Project in areas allocated by the government of Orissa / Government of India (ii) Transportation Project which includes a dedicated railway line, road and Port (iii) Integrated township and (iv) Water Supply infrastructure or the Water Project
- assessment (REIA) of steel plant (only for 4 MT) along with captive power plant and separately for captive minor port. The studies were completed in two-three months along with survey for demarcating CRZ areas during August to November 2005 and got environment management plan (EMP) prepared through M/s M.N.

 Dastur & Company (P) ltd. The Ministry of Environment and Forests,
 Government of India gave CRZ and Environment Clearance for the Captive Minor Port on 15 may 2007 and that of Integrated Steel Plant with Captive Power Plant on 19 July 2007. The Ministry also granted in-principle (stage I) clearance for diverting 1253.225 ha forest land for the project on 19 September 2008 under Forest Conservation (FC) Act 1980 stipulating a set of conditions for compliance before final clearance
- **3.** In the mean time Forest Rights Act 2006 for the Scheduled Tribes (ST) and other Traditional Forest Dwellers (OTFD) became operational from January 2008. The Ministry of Environment and Forests (MoEF) issued circular on 3 Aug 2009 to all the States/UT mandating compliance with Forest Rights Act (FRA) 2006 where proposals for diverting forest land for non-forestry purpose are processed. State

governments were asked to provide certificates about the completion of the FRA process in the concerned areas along with supporting letter from each Gram Sabha as well as letter of consent or rejection from the Gram Sabha about the proposed project. In the case of POSCO-India, after receiving the letter of compliance of conditions of stage I clearance the MoEF issued final forest clearance under FC Act 1980 on 29 Dec 2009 with a condition that rights of the ST/OTFD should be settled before implementation of the project. Though Orissa government furnished a certificate to the MoEF about the completion of FRA process, there was no certificate from the Gram Sabha.

- 4. From the day the MOU was signed there has been large scale protests against the project by local inhabitants whose livelihood is going to be adversely affected due to displacement. The number of petitions to the Central Government increased after the approval of the project because besides livelihood, the Orissa government reportedly violated the FRA in the project area as mentioned by Mr. D. Raja, Member of Parliament and a large number of NGOs. In July, 2010 some members of the FRA monitoring committee jointly constituted by MoEF and Ministry of Tribal Affairs visited the villages to be affected by the project in Jagatsinghpur district, Orissa. They submitted a report dated 24th July, 2010 highlighting violations of the FRA in the POSCO project area.
- **5.** The MoEF appointed this four member committee on 28 July 2010 to enquire into the status of implementation of FRA in and around forest land of the POSCO project and rehabilitation and resettlement provisions. Subsequently, the committee was asked to review the environment, CRZ and other clearances also given by MOEF and state and local authorities. In the mean time MoEF directed the Orissa government on 5 Aug 2010 to stop all the works undertaken in the project area.
 - **6.** This committee conducted intensive enquiry by consulting a large number of documents, field visits and meeting a large number of people (including officials of Orissa government, local affected inhabitants, NGOs and civil society and experts in concerned fields). The findings of the committee are mentioned in the following paragraphs.

A. Implementation of the Forest Rights Act 2006

- 7. As per the land cover analysis with high resolution satellite imagery of 2006/2007 by Orissa government about 70% area of the forest land is covered with various kinds of forest and trees and the remaining area is sandy, covered with betel vine, agriculture and other miscellaneous activities, as also water bodies. The areas under casuarina plantation which occupies the major portion of forests in the coastal areas were earlier covered with mangroves and were destroyed either during super cyclones or by illegal cutting.
- **8.** A large number of documentary and oral evidences have been found to support the presence of forest dwelling STs and OTFDs in the proposed POSCO project area contrary to the claim made by the district administration and the Orissa government that there are none. The voter list of 2006 mentions 21 names of ST community living in one of the villages Polang, included in the project area. A number of non tribal people living in project affected villages have produced documents of 1920s showing their relationship, dependence on forests/forest land thereby clearly establishing the existence of OTFDs and STs in the project area.
 - **9.** The district administration of Jagatsinghpur has not been fair and democratic in implementing the FRA in the project affected villages perhaps for two reasons (i) a number of villagers, specially of Dhinkia, have been opposing setting of POSCO steel plant from the day (June 2005) when MOU was signed between Orissa government and POSCO and (ii) the district administration wanted the project area to be free from such rights for smooth taking over.
- 10. There has been lack of adequate publicity, awareness campaign, training as required to the people and the Palli Sabha specially, in the project affected villages, about various provisions of the Forest Rights Act and the process which forms the first link of the FRA implementation.
- 11. When the Gram/ Palli Sabhas were called for the first time in these villages on 23 March 2008, the required quorum in many cases was not complete to constitute the Forest Rights Committee (FRC). The district administration also did not fulfill its obligations to assist, support and provide records as a part of the process. The government should have made more serious and genuine efforts to call for the Palli Sabha with proper quorum. This committee searched for panchayat registers, especially of Dhinkia village, to verify the proceedings but the same was not made available. It is therefore not verified if the Palli Sabha called

- for claims after constitution of FRC and waited for claims for three months from date of calling of such claims as provided in Rule 11 of FRA.
- 12. The district administration imposed an artificial and arbitrary deadline in an attempt to prevent the filing of claims. In fact the power to extend the period of filing claims rests with Palli Sabha as per FRA Rule 11. Gram Sabha, if it considers necessary, may extend such period of three months after recording the reasons thereof in writing. This provision has not been followed by the district administration.
- 13. Recognizing the role of Gram Sabha in implementation of FRA as well as in diversion of forest land for non-forestry purpose the MoEF in its circular dated 3 Aug 2009 made it clear that a letter from each of the concerned *Gram Sabha* indicating completion of the process of the FRA and of prior informed consent for any diversion of the forest land is a pre-condition that must be satisfied before final forest clearance is granted. Instead of obtaining certificate from *Gram Sabhas*, Orissa government vide letter dated 16 March 2010 forwarded certificate of the Collector of Jagatsinghpur enclosing proceedings of the Sub-Divisional Level Committee of FRA. This is clearly not in compliance with but actually in violation of the conditions imposed by the MoEF.
 - 14. The takeover of forest land from 96 betel vine cultivators in Gadkujang gram panchayat, amounting to 11.85 acres, in July 2010 by the Orissa government violated the Forest Rights Act, 2006.
 - 15. Recommendation- The committee therefore feels that the final forest clearance dated 29.12.2009 of the MoEF has overlooked serious violations of their own directions and the procedures prescribed by law. Imposing additional conditionalities as in the clarification given by MoEF in January, 2010 while allowing the clearance to stand does not remedy the illegalities. The Committee therefore strongly recommends that the final forest clearance referred above be revoked forthwith.
- 16. Recommendation: Orissa government must initiate implementation of the FRA process afresh in the project area in a transparent and democratic way and ensure settling of individual and community rights as per the provisions of the Forest Right Act and Rules made there in.

B. Status of Rehabilitation and Resettlement Implementation

- **17**. The rehabilitation and resettlement program has yet to take off fully. As on date only 11.85 acres of government / forest land has been taken from 96 betel vine growers. Ex-gratia compensation was paid as per the RPDAC package. The committee feels that mere land compensation however big it may be, will not compensate the loss of sustainable livelihoods and the best way would be to genuinely give equivalent land for land compensation so that they continue eking a sustainable livelihood. Of course this means the whole process should involve all PAFs and their people's representatives in a transparent, inclusive and just negotiation. If the people feel it is a better option than what they already have, they will be willing to give it a chance. There have been more failures than successes in R&R in the past. People are displaced in a hurry even before the resettlement or rehabilitation process is in place. Many times the promises to the people are not kept and displaced people live in greater destitution than before displacement. The whole process of R&R implementation should also look at improving the lives of women and older people and provide them with suitable livelihood options.
- 18. It appears that a large number of fishing communities depend on fishing in the Jatadharmohan creek area in which the project is located. They have old and recognized customary rights of fishing in the area which have been overlooked and left out of the R &R scheme. The State Government needs to examine the rights of such communities and ensure that their livelihood rights are protected while covering them in the R & R scheme.
- 19. Landless agricultural and other labourers have not been included in the list of affected persons and no benefits have been given to them (except for those working in betel vine cultivation and those compensated for their homesteads on government land). Since landless workers constitute economically the most vulnerable social section, they need to be included in R & R scheme and compensated for their loss of livelihood.
- **20.** Finally, as the socio economic survey of XIMB mentions, 'displacement amounts to uprooting them from their soil that belonged to them for generations, which can be psychologically a traumatic event'. This requires a lot of empathy while handling the process of shifting and relocation. We would like the State Government to bear this in mind and engage organizations (reputed NGOs) who

have worked with people, to help in the process of relocation, so as to make the relocation less traumatic.

21. Recommendation - Though the R & R scheme has not yet started fully, the Committee feels that the rehabilitation package should take into account the loss of livelihoods, provide for land for land compensation, account for vulnerable sections including women, labourers and old people and decided upon through a transparent and democratic process.

C. Environmental Clearance of Steel Plant and captive Port

- 22. It is important to stress that the EIA process is governed by the EIA Notification (first issued in 1994 and subsequently revised and issued anew in 2006) which has statutory status under the Environment Protection Act, 1986, the main legislation governing EIAs. Thus any infringement of the prescribed standards amount to a statutory violation. Central to the EIA process is therefore the quality of the data and information collected, presented and analysed in the EIA which are the essential substratum for the decision makers to decide over whether to grant environmental clearance to the project or not.
- 23. Considering the scale of the project (12 MTPY) which is almost equal to combined production capacity of 6 steel plants of India (Bhilai, Bokaro, Durgapur, Rourkela, Burnpur and Salem put together) there was a critical necessity of having a comprehensive environment impact analysis (EIA) for both the steel plant as well as the captive port. The MoEF ought to have insisted on a comprehensive EIA by collecting full year data which was also pointed out by various state agencies and the Regional Office of MoEF.
- 24. The MoEF should not have granted environment clearance on the basis of rapid EIA for port which was based on one season data. Even in case of the port, the data was collected during September to November 2005, which is the monsoon period. It should be noted that data collection during monsoon period is prohibited by EIA Notification.
- **25.** The entire POSCO project is an integrated project encompassing different components like the township, pipeline, road and transportation etc. which have

been left out of the scope of REIA and other baseline data. As a result of partial EIA, the full environmental impact of the entire project has been undermined. On a clarification sought by one of the committee members (Dr Suresh), the Director of POSCO (Mr. Kim) confirmed that comprehensive EIA both for steel plant and captive port was completed by July, 2007. The Regional office of MoEF, Bhubaneswar as well as the Orissa Government informed that copies of the comprehensive EIA were delivered by hand only in October 2010 after the clarification from the member of this committee. Submitting such a basic and critical report three years after the clearances is only an empty formality.

- 26. The committee members are of the strong view that MoEF should not have given environment clearance for part of the project (4 MTPY) when all other components and infrastructure of the project such as land, displacement of people, ecological destruction, port construction etc have aimed for full project, that is, 12 million tons. This is especially so when the expansion plans are not sometime in the distant future but contemplated at the rate of increase of 4 million tonnes every two years. POSCO should have been asked to apply for clearance of total capacity. Otherwise, the logical step would have been to restrict the requirement of land and the size of the port to the requirements of a 4 MTPY capacity plant. It puts a question mark on the scientific and technical prudence of the MoEF.
- 27. In a recent report the MoEF has come out with an environmental pollution index called as Comprehensive Environmental Pollution Index (CEPI) to help in categorising the industrial clusters in terms of priority of planning needs for interventions. Under this report Paradeep has a CEPI score of 69.26 which shows that it is a severely polluted area, just bordering on the CEPI of a critically polluted industrial cluster. The concern that the Paradip area is already polluted from existing industries was also raised during the public hearing but unfortunately it was never addressed by any of the decision making authorities.
 - raised many issues of substantial importance specially related to air pollution which curiously have not been followed up to its logical end. The records supplied to us do not reveal that these issues were ever addressed before the clearances were given. However, even before these queries have been satisfactorily answered by the project proponent, the company has been recommended for clearances and issue of Consent to Establish. This is a serious abdication of statutory responsibility by the Orissa State Pollution Control Board.

- Paradip Port have been repeatedly voiced by the authorities as well as by the public. The Ministry of Shipping, Road Transport and Highways, Government of India appears to have a different view. A question about adverse effect of this captive private port was raised in the Lok Sabha to the Ministry of Shipping, Road Transport and Highways during December 2005. The then Minister in charge had replied "the proposed minor port for POSCO steel plant may lead to severe erosion along the coastline posing a threat to the port facilities at Paradeep". The Minister also stated that the Orissa Government has been urged to undertake a detailed study regarding erosion if they decide to develop a minor port for POSCO and should associate Government of India and Paradeep port with such studies. Unfortunately the EAC and MoEF did not call for the study report before giving clearance in 2007.
 - 30. The Committee is of the firm view that the Public Hearing held on 15.4.2007 was not in compliance with the rules. The authorities failed to provide copies of the EIA to panchayats; all the project affected persons were not given opportunity to be heard. It was held in Kujanga about 15 km away from the affected villages. During the hearing, many people complained that because of the prohibitive distance, many villagers could not travel to participate in the Public Hearing. The committee was informed that there was presence of a strong police force at the venue of the public hearing a day prior to the hearing itself. This served as a deterrent to free participation by local villagers, who were opposing the project. Other project affected people like traditional fishing community and farmers were not covered by the public hearing. The social impact of the project was also not discussed. Project proponent has failed to answer all the objections raised during the public hearing. The EAC has failed to apply its mind to the objections raised by various authorities and the public and have also failed to consider the available material on record. The EAC has also failed to record any reasons in respect of accepting or rejecting the objections raised but instead gave clearance. Such mechanical clearance makes a mockery of rule of law and procedural safeguards.
- The integrated steel plant has a huge water requirement. As per the Rapid EIA, the water requirement will be met from Jobra Barrage over the Mahanadi River by laying an 86 kilometer long pipeline. POSCO has already taken an approval from the Department of Water Resources, Government of Orissa, for

withdrawal of 10 MGD water from the Jobra Barrage. The existing competing use of the water resources from the Jobra Barrage are drinking water for Cuttack and Bhubaneshwar cities, irrigation water for agriculture in four districts (Cuttack, Jagatsinghpur, Khurda and Kendrapada) and several industries, and these have not been taken into account. The public representatives who met the committee members expressed concern about the existing scarcity of water due to use by the already established industries. In fact, the Water Resources Department has allocated additional water from Hansua nalla for construction purposes which has not been disclosed in the EIA amounting to suppression of the information. The REIA has not addressed the widespread impact that will adversely affect a large population spread in a number of big towns as well as districts.

32. Recommendation- The Committee strongly feels that there have been many serious lapses and illegalities in the EIA process. The EIA for such a megaproject is rapid, based on one-season data without taking into account all the components of the project like the township project, water project, railroad and transport facilities etc. Moreover it is limited only to Phase I of the project. There are serious violations in the public hearing process where many communities have been left out. The imposition of additional conditions to the existing ECs will not at all remedy the lapses and illegalities. The Committee therefore strongly recommends that the Environmental Clearance given by the MoEF dated 15.5.2007 for minor port and 19.7.2007 for the steel plant should be immediately revoked.

D. Compliance of Coastal Regulation Zone (CRZ)

- 33. The Coastal Zone Management Plan (CZMP) of Konark -Paradip stretch submitted by the Government of Orissa in 1995 to the MoEF includes the belt of Jatadharmohan creek. Because the area falls under estuary zone and is ecologically sensitive, barrier spits and channel bars occurring near the estuarine mouth has been categorized as CRZ-I. Only the areas studded with agriculture fields and settlements are to be categorized as CRZ-III near the Dhinkia village. The NIO report has not specifically indicated the extent of area/ length along the creek/shore line falling under CRZ I and CRZ III.
- **34.** Further, the limits of the CRZ lines drawn on 1:5,000 scale maps by NIO at 500 m towards the northern portion of POSCO site and at 150 m on the creek side are not very clear. The limits and extent upto which these lines exists should have been well defined by the geo-coordinates in the maps as well as in the text. But it has not been mentioned in either of the documents. In the absence of such geo-

coordinates it would be impossible to draw lines on the ground. The main worry is who is going to verify these lines and distances from the HTL on the ground? No permanent marking has been done on the ground. Orissa state government was not associated in the CRZ survey of the POSCO site and NIO depended on the land use map and geo-coordinates provided by POSCO.

- ass. Except for port, any activity relating to steel plant, be it storage of raw material, cannot be allowed within the CRZ (500 m from HTL) as per CRZ Regulations. On the other hand NIO has recommended for establishing coal/ore and slag yard which are parts of steel plant in the CRZ I (i) & CRZ III areas facing open coast in northern side (page 18 of the NIO-DCRZ Report). This amounts to violation of the CRZ regulations.
- **36.** The State Coastal Management Zone Authority while discussing the port proposal of POSCO-India on 7 Aug 2006 found a mismatch between CRZ maps prepared by ORSAC and NIO. This was to be reconciled by the POSCO-India but no document for such reconciliation has been provided to the committee.
 - 37. Dressing or altering of sand dunes, hills, natural features including landscape changes for beautification, recreational and other such purpose are prohibited, except as permitted under the notification. During the visit of the committee on 21 Sep 2010, the representative of the POSCO-India Mr. S.N. Singh informed the members that the existing mouth of the Jatadharmohan creek will be used as an approach channel for one lane for vessels and will be progressively widened to 500 m. The map provided by POSCO, however, shows that existing mouth will be filled and sandy barrier spit at about 500 m away towards south will be cut to make the approach channel. Such a cutting and filling of sand bars amounts to change of the natural course of the creek and are in contravention of the CRZ notification. In a clarification sought from the POSCO it was replied that the mouth of the Jatadharmohan creek originally existed at the proposed site in 1998 and in last 10 years the Jatadhar Mouth has shifted towards north and has acquired the present form. The site of the old mouth has been therefore chosen for making approach channel. The committee did not find such explanation convincing. Further, in the common clearance/approval dated 15.05.2007 given for CRZ and EIA for the port Condition B(vii) stipulates that the sand dunes and mangroves, if any, on the site should not be disturbed in any way. It is not clear

how it is possible to dredge through the sand pits and reclaim land for the port as well as steel plant without disturbing the sand dunes.

- **38.** As per the REIA report for the steel plant, a common effluent treatment plant (CETP) will be set up to take care of untreated effluents from the production process and treated plant sanitary wastewater. After partial use of the treated water, the rest of the water will be let into the sea by a submarine pipeline at 18-20 meters depth by jet diffusion. POSCO-India has not applied for CRZ clearance for this pipeline which amounts to suppression of facts and is a serious violation.
- 39. Recommendation: In view of the above observations the committee feels that POSCO-India Pvt. Ltd has not been able to address all the issues relating to CRZ notification. There are a number of serious lapses and violations, including suppression of facts. The environment clearance given by the MoEF vide letter dated 15 May 2007 should therefore be revoked forthwith.

Dr. Urmila Pingle

Dr. Devendra Pandey

Dr. V. Suresh

Delhi 18.10.2010

CONTENTS

EXECUTIVE SUMMARY

PREFACE				
		Pages		
Introduction				
Section 1	Land Tenure History, Ecology and Socio Cultural Aspects of the project area	11-18		
Section 2	Potential Impact of the Project	19-30		
Section 3	Forest Rights and Forest Clearance	31-57		
Section 4	Rehabilitation and Resettlement (R & R)	58-67		
Section 5	Environmental Clearance of Steel Plant & Port	68-118		
Section 6	Compliance with Coastal Regulation Zone (CRZ)	119-129		
Conclusions and Recommendations				

References / Annexures

Preface

This Committee has been constituted with the purpose of examining the POSCO-India project, a combined mine – steel plant – port project in Orissa, on certain specific grounds. In particular we have been asked to examine compliance with and implementation of various critical environmental laws, such as the Forest Rights Act, the Environment (Protection) Act and the Coastal Regulation Zone notification. In this report we have thus limited ourselves to the basic question of whether the project and the State and Central authorities have complied with the law in their actions. We have focused on the proposed sites of the steel plant and port, which are the main areas where clearances have been obtained and agitations have occurred.

However, in the context of a large project such as POSCO, with social, environmental and economic implications far beyond the project area, it is inevitable that the debate over our findings will extend beyond narrow interpretations of law. Issues of "balancing" environmental concerns with development concerns are likely to be raised. In this context we wish to make a few observations as to why we feel that legal compliance is vital in such projects, and why such compliance is in fact the only way that any balance can be achieved.

The POSCO-India project will be, if it is completed, the single largest Foreign Direct Investment (FDI) in India till date. It will also be the largest greenfield steel plant in Asia and one of the single biggest mining operations in our country. These figures are often cited as evidence in themselves of the good that will result from this project. But it is important to recognise that industrial projects, and particularly extractive industries such as this one, do not always produce positive social results. Many of the gains may fail to materialise, and many of the losses be magnified, if proper regulation is not in place.

In the words of the World Bank's Extractive Industries Review:

"Extractive industries can cause environmental degradation. Exploration and development of extractive industries can lead to land clearing and habitat loss... And environmental degradation can in turn destroy livelihoods dependent on local resources.... These industries can also lead to social disruption and cause conflict among communities. ... The poor, lacking the necessary skills and education, often fail to benefit from jobs created in the extractive industries; in many cases, employees are brought in from outside of the area. Often these negative impacts from a project occur before it even starts to generate revenues... In a number of countries, extractive industries have been linked to human rights abuses and civil conflict."

The literature on development economics abounds with references to the "resource curse". Valuable natural resources, like iron ore in the case of the POSCO project, offer the possibility of enormous profits purely from extraction and from leveraging international market prices. Such profits in turn generate an incentive to "cut and run", to extract as cheaply as possible, with as little employment and running costs as necessary, and to leave as soon as costs or problems begin to rise. Moreover, there is little incentive to invest in long term infrastructure for the area

¹ Striking a Balance: the Final Report of the Extractive Industries Review, World Bank, 2003, pp.20-21

as a whole (as opposed to for the industry alone), to generate sustainable and high quality employment or to contribute to the local economy in a significant manner. The impact of these tendencies is already visible in the extreme poverty and armed conflict that now marks India's mineral rich areas, which have largely failed to provide either development or welfare to their people. In such a context, there is no question of a "balance", for such industrial activity achieves neither environmental protection nor development.

Indeed, to again draw on the language of the Extractive Industries Review,

"Extractive industries [can only] contribute to poverty alleviation through sustainable development... when the right conditions are in place. The three main enabling conditions are:

- pro-poor public and corporate governance, including proactive planning and management to maximize poverty alleviation through sustainable development;
- much more effective social and environmental policies; and
- respect for human rights."

It is notable that the concept of "pro poor public and corporate governance, including proactive planning" is given pride of place in these recommendations. In our view, the specific environmental and social regulations that are applicable in the POSCO context attempt to approach this ideal. In particular:

- The Environmental Impact Assessment notification seeks to require an impact assessment of any particular project in order to measure the likely social, environmental and ecological impacts of that project. This is then meant to be placed before the people of the area as a check on executive authority, through the public hearing process.
- The Coastal Regulation Zone notification takes into account the sensitive and critical nature of coastal areas and seeks to impose a planning regimen on development in these areas.
- The Forest Rights Act recognises the rights of forest dwelling communities and also, more crucially, provides space for deciding both rights and forest management through the gram sabha. This is a step towards converting environmental governance into a democratic process rather than an executive / bureaucratic one. This in turn makes the consent of the gram sabha a legal requirement prior to any diversion of forest land, forcing the state to take development plans to the people.

To our mind, these regulations thus make a step towards enforcing a system of environmental governance with three crucial elements:

- a *holistic* system of environmental planning,
- a democratic process of decision making, and
- protection for critical ecosystems and vulnerable communities.

In this view, industrial planning, and development planning generally, should not be driven by short term factors and the narrow requirements of particular projects alone. Rather, it should be

² Executive Summary. Striking a Better Balance: The Final Report of the Extractive Industries Review, World Bank, 2003.

integrated with a wider understanding of the social, environmental and economic requirements of the country. It is possible to argue that the current regulatory framework is flawed, or that it does not approach these goals. But it is not permissible to bypass it, for to do so would – aside from the damage caused by any particular project – undermine the entire regulatory framework of our state machinery and reduce the ability of our society to channel its resources for social good.

For these reasons, it is also important that this regulatory framework be understood as a cohesive whole, and compliance with it should be evaluated in such a manner as to achieve that goal. This is the approach we have followed in this report. We have not attempted to artificially read down regulations or the law in order to reduce requirements, or to find loopholes by which requirements can be bypassed. Rather, we seek to fulfill our mandate to review this project in a manner that complies with the overall goals of both environment and development.

Indeed, it is precisely because the scale of the POSCO project is so large that it must be subjected to examination and regulation in a comprehensive, just and impartial manner, for the potential impacts are just as large. Moreover, as a precedent-setting project, the manner in which this case is handled could have a bearing on many future projects as well. It is for this reason that this committee feels that a detailed examination of legal compliance is not merely a requirement of law, nor merely a procedural safeguard, but is crucial to preventing wider damage and to ensuring future compliance as well. This report seeks to undertake such an examination.

INTRODUCTION- Time Line of Events

Part A- General

I. Memorandum of Understanding between POSCO and Government of Orissa

1. The Pohang Steel Company (POSCO), Korea and the Government of Orissa signed a Memorandum of Understanding (MOU) on June 22, 2005

(Annexure A1) for setting up an integrated steel plant of a total capacity of 12 million tones per annum near Paradeep, in Jagatsinghpur district, Orissa. POSCO through establishing an Indian company POSCO- India would develop and operate the steel plant to produce a total of 12 MT in three phases (4MT per phase) with a proposed investment of Rs 51,000 crores or 12 billion US\$. As per the MOU the company would develop and operate,

- 1) "Mining Project" facilities in areas allocated by the government of Orissa / Government of India
- 2) "Transportation Project "which includes a dedicated railway line, road and Port
- 3) Integrated township and
- 4) Water Supply infrastructure or the "Water Project"
- 2. The Government of Orissa and the Company agreed to be "Partners in Development". In this context the MOU provided that the state government would facilitate clearances and approvals of the Central Government as and when required. To ensure that the project proceeded according to the planned schedule a dedicated High Power Committee was constituted jointly by the Government of Orissa and the Company consisting of senior officers of the Departments of Steel and Mines, Industries, Energy, Water, Environment and representatives from the company. This High Power Committee would meet regularly to review the progress and have regular interactions with the Chief Minister and Chief Secretary of the government of Orissa to appraise them of the overall progress of the project and all it's components. A "Single Window" clearance committee was established by the state government to ensure smooth clearances under state laws from the various departments. A senior officer or "Nodal Officer" would be in charge of this Project and all relevant clearances permits, approvals etc would be routed through the Nodal Officer, who would update the Company regularly on the status of these clearances/grants.

II. Location of the Project.

- 3. The location of the integrated steel plant would be on the northwestern bank of the Jatadharmohan river (or the mouth of the river Jatadhar) located 12 km south of the Paradeep Port in Jagatsinghpur district, Orissa. The project lies in the jurisdiction of Kujang Tahsil Jagatsinghpur district within 20 degrees 11' to 20 degrees 13' north latitude and 80 degrees 30' to 86 degrees 35' east latitude. The proposed project requires a total of 1620.496 hectares of land of which 1253 .225 hectares is forest land and non-forest land is 367.271 hectares. (Site 24-7-2007, MOEF, inspection report dated Eastern office, Bhubaneswar- Annexure A2). The proposed project area would affect 8 villages of three Gram Panchayats of Ersama block, Kujang Tahsil, Jagitsinghpur district. It is stated as per official statistics that 471 families would be displaced by the project. The three Gram Panchayats involved are those of Dhinkia and Govindpur villages in Dhinkia GP, Noliasahi Bhuyanpal Polanga and Bayanalakanda in Gadkujang GP, and Nuagaon and Jatadhar villages (the latter is uninhabited) in Nuagaon GP. It is stated as per official statistics that 471 families would be displaced by the project. Two out of eight villages namely Noliasahi and Polang fall fully within the project site and would need to be resettled and rehabilitated in other areas.
- 4. The location of the proposed captive minor port "Jatadhar Port" is approximately 20 degrees 11.85' 20 degrees 12.94' N and 86 degrees 32.66'- 86 degrees 34.84' E and is 12 km south of the Paradeep Port. The port is adjacent to the steel plant.

III. Mining site for sourcing raw materials for the proposed Steel Plant

5. The captive mining site for extraction of iron ore (600 million tonnes) to meet POSCO's annual requirement of 12 million tonnes annually has been selected in Bonei subdivision of Sundargarh and Keonjhar districts of Orissa. This area is a Scheduled V area located in Reserve forests where PTG tribals reside. Orissa government has recommended the grant of prospecting license to POSCO for mining this area. However, Geomin minerals one of 290 parties who had applied for lease of this mine approached the High Court of Orissa against the allotment of the mine to POSCO instead of to them. The High Court in a decision given in July 2010, said that the relative merits in deciding in favour of POSCO India were insufficient and asked the Orissa

government to hear all the applications for mines once again and take a decision within 4 months another.(annexure A4-WP (C) 23/2009).

IV. No progress of project at ground level on account of local opposition.

- 6. Since the signing of the MOU between POSCO-India and the Government of Orissa on June 22, 2005 there has been very little progress of the project on the ground because of huge opposition to the project by a large segment of the residents of several villages but principally of Dhinkia and Govindpur of Dhinkia GP who would stand to lose the maximum forest land to be diverted to POSCO. The protests against the diversion of this forest land to POSCO were supported by people's organizations; the largest of these is POSCO Pratirodhi Sangram Samathi (PPSS). The main form of protest adopted has been the peaceful blockade preventing the entry of Government officials and POSCO officials. The anti-POSCO movement continues to be strong to this day. (Annexure A 5).
- 7. The people in these 8 villages of three Gram Panchayats of Dhinkia, Govindpur and Nuagaon have been cultivating this forest land with Betel vines as well Cashew and other tree species in addition to collecting minor food products, bamboo and fuel wood from this area from the time of their forefathers right from the Bardhaman Estate period . They are however considered as illegal "encroachers" by the government as their rights have not been settled for the area they have been cultivating which were declared as forest land, mostly protected forests, in 1960s.
- 8. The peaceful protests of the people of these three GPs continued without any conciliation between the state government and the project affected communities. A single combined public hearing was held on April 15th, 2007 based on two separate REIA reports of POSCO steel plant (Aug, 2006) and captive minor port. Based on the REIA (Rapid Environment Impact Assessment) reports and minutes of public hearing, the Expert Appraisal Committee (EAC) set up by MOEF recommended clearance for the Port and the MOEF, Government of India gave environment clearance for the captive port on May 15, 2007 to POSCO (Annexure A-5). The REIA for steel plant (4 MTPA) and captive power plant (4x100 MW) was appraised by the EAC (Industry) and sent to the MOEF with recommendation for clearance. The MOEF gave environment

clearance to the steel plant on July 19, 2007 (vide letter no J-11011/285/2007-IA II) (Annexure A-6).

V. Police action and reports of human rights violations.

9. On November 27-28th, 2007 several clashes took place between state administration and the people opposing the POSCO steel plant near Balithuta cross roads where thousands of villagers gathered together to protest peacefully (Nov 27-29). There were violent incidents between those opposing POSCO and those supporting POSCO. Section 144 was declared. A number of people were injured and many were arrested on charges of inciting violence. Several FIRs were filed (based on charges of inciting violence and anti- government activities) against the leaders of the Anti-POSCO movement and police contingents were stationed in public buildings in these different villages, excepting Dhinkia, which continued to remain under blockade. On Dec 5th, 2007 Dr B.D Sharma, former Commissioner for Scheduled Castes and Tribes visited the area but was turned back by armed groups reportedly with the knowledge of police. Dr B.D Sharma and Kuldip Nayyer wrote a letter of protest to Hon'ble Justice Rajender Babu, Chairperson of NHR Commission on 27 Dec, 2007 regarding the violations of human rights in these villages. They lodged complaints against different public servants (named) for abuse of power (Annexure A 7).

Part B

Forest Conservation Act and implementation of Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights)
Act, 2006

I. Application for diversion of forest land for non forest purpose in the project area.

10. Under the Forest Conservation Act of 1980, any use of forest land for non-forest purposes requires clearance from the Ministry of Environment and Forests, Government of India. It was therefore mandatory for POSCO to get a forest clearance for diversion of 1253.255 hectares of forest land which formed part of the area required for the integrated steel plant and captive port. According to the procedure set down in the Forest Conservation Act the proposal was considered by the Forest Advisory Committee under MOEF on Aug 9, 2007 (Annexure A 8). This committee recommended the grant of forest clearance.

II. Recommendations of the Central Empowered Committee (CEC) of the Supreme Court.

- 11. The project simultaneously came under the scrutiny of the Supreme Court as per its April 27, 2007 order (Annexure A 9) according to which all fresh decisions of the FAC would be reviewed by the Supreme Court in the TN Godavarman vs. Thirumulpad case. The Court sought the comments of Central Empowered Committee (CEC) set up as a monitoring body by the Court. The CEC on 14th Nov, 2007 (Annexure A 10) made two important recommendations
 - i) The CEC was of the view that instead of piecemeal diversion of forest land for the project, it would be appropriate that the total forest land required for the project including for mining is assessed after considering the ecological importance of the area, number of trees required to be felled, adequacy and effectiveness of the R&R plan for the project affected persons and benefits accruing to the state. The diversion of forest land for the steel plant, without taking a decision for the linked uses particularly the mining project may not be in order.
 - ii) Due to the large number of trees to be felled (2.8 lakhs) the CEC suggested that an independent expert committee should visit the site in order to assess the impact and suggest mitigation measures.
- 12. Subject to the compliance of the above observations the CEC recommended the diversion of forest land. The Supreme Court through it's order dated 8th Aug, 2008 sent the proposal back to the MOEF to consider granting forest clearance; it remained silent on the issue of piece meal diversion of forest land for different components of POSCO's integrated steel plant. 'In principle' clearance was granted by the Ministry on September 18th, 2008 (Annexure A 11). The project was subsequently granted final clearance on Dec 29, 2009.

III. The enactment of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006

13. In December 2006, Parliament passed the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 which came into operation on 1st January, 2008. After this date any forest clearance should have been given after the action required

under FRA had been completed, i.e. once forest rights, if any, had been settled on eligible forest dwellers. The State administration has since stated that since there were no OTFDs and STs, in the project villages, there were no claims made by the villagers of these three GPs and therefore the formal process of inviting and finalizing of claims for recognition of forest rights was completed and closed. However several of the project affected villagers in the three GPs claimed they had made both individual and community claims which were approved in their Gram Sabha resolutions which they had submitted to the concerned officials of the district administration. On March 23, 2008 the Palli Sabhas in the three GPs of Dhinkia, Nuagaon and Gadkujang formed forest rights committees excepting in villages of Bhuyanpal and Noliasahi, where the said committees were formed later.

IV. Circular making compliance with Forest Rights Act mandatory before processing applications for diversion of forest land under the Forest Conservation Act.

14.On July 30, 2009 and August 3rd, 2009 the Ministry of Environment and Forests (MOEF) issued circulars (Annexure A 12 and A 13) that *inter alia* states, "The State/UT governments, where process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA) is yet to begin are required to enclose evidences supporting that settlement of rights under FRA 2006 will be initiated and completed before the final approval of proposals." It also stated that the proposal should be accompanied by "A letter from each of the concerned Gram Sabhas, indicating that all formalities/processes under the FRA have been carried out, and that they have given their consent to the proposed diversion and the compensatory and ameliorative measures if any, having understood the purposes and details of proposed diversion."

15. In pursuance of the circular of the Ministry, on October 24th, 2009 (Annexure A 14), the Chief Secretary of Orissa wrote a letter to all Collectors forwarding the Ministry circular and requesting them to issue certificates as per its requirements, including letters from all concerned Gram Sabhas certifying completion of the process and grant of consent to the diversion. On December 19th, 2009 (Annexure A 15), the Collector of Jagatsinghpur forwarded the Chief Secretary's letter to the Block Development Officer of Ersama Block, stating the proposed diversion for POSCO is required to be approved in the Palli Sabhas of the area. On this basis, he said, he would be required to give a certificate.

V. Forest clearance given without certificates of compliance under the FRA.

16. However, without any such certificates being provided by the State government or by the concerned Gram Sabha, regarding either the completion of the Forests Rights Act process or the consent of the Palli Sabhas to the diversion the final forest clearance was given to POSCO in Dec 29, 2009 (Annexure A 16). Shortly thereafter, the Ministry issued a clarification on Jan 8th, 2010 that the forest clearance granted was "conditional" to the State government's compliance with the August 3rd, 2009 circular of the Ministry, and to the consent of the forest dwellers therein (Annexure A 17).

VI. Letter of Govt of India warning of action for failure to implement the FRA.

17. The Principal Secretary, ST and SC Development, Government of Orissa, sent a circular dated Feb 1, 2010 to all Collectors, all PA, ITDAs, all District Forest Officers, all Sub Collectors regarding the compliance with the FRA. The Principal Secretary even issued a warning to the respective officials that violations would invite criminal action against members of SDLC and DLC under section of FRA Act, 2006 (Annexure A 18).

18.A circular from Principal Chief Conservator of Forests, Orissa, to all District Forest Officers in the letter dated 25th Feb, 2010 stated that, "Besides. regularization of pre-1980 eligible category of forest encroachments which are dealt with under the Forest (Conservation) Act, 1980 include the cases of people belonging to both tribal and non-tribal groups. These pre- 25-10-80 forest encroachments can be processed for regularization under the procedure laid down under F.C Act. Under this procedure the claims of non-tribals which cannot be settled under the ST and OTFD (RFR) Act, 2006 may be taken up. All such cases which have already been approved under FC Act can be settled in favour of the eligible claimants, subject to compliance of the stipulations made by MOEF, Government of India in their final approval order in this respect. The DFOs and the ACFs are required to play their assigned role in facilitating disposal of claim petitions filed under the Forest Rights Act in respect of all categories of forest lands; and also in taking up appropriately the cases of non-tribal claimants who may be eligible pre-1980 encroachers in terms of the provisions under F.C.Act." (Annexure A 19).

19. It is important to note that the Principal Chief Conservator of Forests categorically gave instructions to his DFOs that claims of non-tribals which cannot be settled under the ST and OTFD (FRA) Act, 2006 may be taken up under pre-25-10-80 forest encroachments for regularizations under the Forest Conservation, Act, 1980.

VII. Resolutions of the palli sabhas in the project affected area.

20. As stated above, the Collector of Jagatsinghpur on 19th December, 2009 wrote to the BDO, Ersama to organize Palli Sabhas and get their consent for forest diversion for POSCO steel plant. In turn the BDO, Ersama wrote to the Sarpanches of Dhinkia, Nuagaon and Govindpur on January 19th, 2010 requiring them to hold Palli Sabhas before Febuary 10th, 2010 to discuss and approve the POSCO diversion proposal. In response the Palli Sabhas of Dhinkia, Govindpur and Nuagaon met on Feb 5, Feb 6 and Feb 4th, 2010 respectively. They all passed similar resolutions rejecting diversion of forest land for establishing the POSCO steel plant, asserting their eligibility as other traditional forest dwellers (OTFDs) under the Forest Rights Act and invoking their powers under section 5 of the Act to protect forests, wildlife, biodiversity and their cultural and natural heritage.

VIII. Letter of Collector, Jagatsinghpur recording that there are no tribals or OTFDs in the project affected areas.

21. Despite these resolutions by the Palli Sabhas, shortly afterwards in Feb 23, 2010 (Annexure A 20) the Collector of Jagatsinghpur wrote a letter no 139 to the state government which mentioned, "It is pertinent to mention here that Palli Sabhas have been conducted in all 3 GPs covering the POSCO project area and no claim for settlement of rights from tribals and traditional forest dwellers have been received. Since no tribals or traditional forest dwellers are residing in the aforesaid area, the question of settlement of rights of tribal people /other traditional forest dwellers under the Forest Rights Act does not arise." He enclosed certain Gram Sabha documents in Oriya. On March 16, 2010 (Annexure A 21) the state government sends this certified information of the Collector, Jagatsinghpur to the MOEF. In reply to this MOEF wrote to the State Government on April 15, 2010 (Annexure A 22) asking for English translations of the Oriya documents that had been sent. The Special Secretary, Government of Orissa sent the English of the proceedings of Palli Sabhas of the three Gram Panchayats of the project affected area on 29-6-2010 (Annexure A 23).

These Palli Sabha proceedings only covered the constitution of Forest Rights Committees and their members. There were no certificates giving consent of the Gram Sabhas/Palli Sabhas to the diversion of forest land in their areas.

IX. Protests against land acquisition and announcement of revised R&R package.

- 22. On 11th May, 2010 there was a conflict between police and the communities blockading land acquisition in the area for the POSCO project. A number of people were injured in these clashes.
- 23. On July 8, 2010 (Annexure A 24) second RPDAC meeting was convened after an interval of 4 years (the first one was in 2006) and a revised R&R package announced which was declared to be better than the R&R package under the Orissa R&R policy, since higher compensation was given to the displaced and the price for agriculture land being acquired substantially increased. The new package also included betel vine growers and those with cashew trees in forest land. In the earlier R&R these people were not compensated. However they continue to be defined as encroachers by the government.

X. Report of the Ashish Kothari sub-committee.

24. On 24th July, 2010 (Annexure A 25) a three member team of an MOEF/ MOTA constituted larger Committee (Chairperson is N.C.Saxena) set up to look into the implementation of the Forest Rights Act visited Jagatsinghpur in connection with the committee's work on FRA process implementation. The team was led by Mr Ashish Kothari. The team reported that FRA process had not been completed and concluded that archival, documentary and oral evidence existed that the people living there were OTFDs and were thus eligible to stake their claims under FRA Act, 2006. The team reported that the State government had not accepted their claims that they had been cultivating for more than 3 generations. In addition the Palli Sabha resolutions rejecting diversion of the forest land for the POSCO project had not been acknowledged by the State government. Hence, the team concluded that the MOEF should ask the Orissa government to stop all such work till the required processes under the FRA are completed, and till and if Palli Sabha consent is obtained. The team further recommended that the forest clearance granted by the MOEF should be withdrawn.

XI. Taking over of forest land by Orissa government.

- 25. On 27 th July, 2010, the Orissa government began the process of taking over the forest land in the Gram Panchayat of Gadkujang. As per the letter of Principal Secretary, Environment and Forests, Government of Orissa to the Ministry of Environment and Forests (Annexure A 26), the lands of 96 persons, amounting to 11.85 acres, were taken at a compensation of Rs11.5 lakhs per acre (as per the recent RPDAC order).
- 26. As a result of the report of the Saxena Committee and the commencement of taking over of forest land in the area, the Ministry vide it's letter dated 5 August, 2010 (Annexure A 27) quoted the report of the Committee and directed the Government of Orissa that no forest land be handed over to the user agency. Based on these complaints of violations of the FRA, 2006, the Ministry felt that there was need to further examine the compliance with the Scheduled Tribes and Other Traditional Forest Dwellers Act, 2006 and Rehabilitation and Resettlement provisions, pending which a final decision would be taken on handing over of the said forest land to the user agency.

Constitution of the present committee.

- 27. This led the MOEF to constitute a four member committee, vide it's order dated 28th July, 2010 (Annexure A 28) whose terms of reference were further amended on Aug 27, 2010 (Annexure A 29). The committee consisted of:
 - i) Ms Meena Gupta IAS (Retd), Former Secretary, Ministry of Environment and forests;
 - ii) Dr Urmila Pingle, an expert on tribal issues, Hyderabad;
 - iii) Dr Devendra Pandey .IFS (Retd), former Director, Forest survey
 - of India, Dehradun
 - iv) Dr V. Suresh, Advocate, Madras High court.
- 28. The Committee was required to investigate into the proposal submitted by POSCO-India Pvt. Ltd. for establishment of an Integrated Steel Plant and Captive Port in Jagatsinghpur District. The terms of reference set out for the Committee were as follows:
 - i) Investigation and ascertainment of the status of the implementation of the Scheduled Tribes and Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 in and around the said forest land;

- ii) Investigation and ascertainment of the status of the implementation of the rehabilitation and resettlement provisions in respect of the said project; and
- iii) Review compliance with Environment (EIA), Coastal Regulation Zone (CRZ) and other clearances/approvals granted by the Ministry of Environment and Forests and other Central, State and local authorities;
- iv)Review compliance with statutory provisions, approvals, clearances and permissions under various statutes, rules, notifications, etc;
- v) Review compliance with *pari passu* conditionalities imposed in item iii) and iv) above;
- vi) Any other matter which in furtherance of the above objectives."

* * *

SECTION 1

Part A

Land Tenure History, Ecology and Socio-Cultural Aspects of the Project area in Jagatsinghpur District, Orissa

I. Land Tenure and Tenancy History going back to the beginning of the 19th century

1. The Project area falls within the three Gram Panchayats of Dhinkia, Govindpur and Nuagaon, Ersama block in Jagatsinghpur District. This district is one of the 30 districts of the state located on the eastern coastal tract adjoining Bay of Bengal. Earlier it was part of undivided Cuttack and was carved out as a new district in 1992. This area belonged to the ex-estate of Kujanga (Bhurdwan ex-estate).

II. History of Kujang Ex-Estate

- 2. This Quilla was permanently settled under Regulation XII of 1805. It covered an area of 369 sq miles (955.673 sq kms) containing the main estuary of the Mahanadi river (Orissa District Gazetteer, Cuttack, 1906, 1933 and 1992). The Sendha family created the Quilla and held it from 1643-1868 after subduing the neighbouring chiefs. On the advent of the British, the Raja executed an agreement for payment of Peshkush of 11, 503 which was reduced to 7,503 in 1883, on the Raja agreeing to keep the embankments in repair and construct new ones wherever necessary. (District Gazeteer, Cuttack, 1996, page 549) (Annexure B1). After the Great Famine in 1866 the Sendha family fell into debts and the estate was then sold for 3.5 lakhs of rupees to the Maharaja of Bhurdman who held it till abolition under the estates Abolition Act, 1952. The estate was under the Court of Wards from 1885-1902. In 1887 the estate was surveyed with rearrangements of village units into 461. These villages were reduced to 408 in the last settlement as a result of amalgamation and division.
- 3. In the 1887 survey, no record writing or rent settlement was made. In Dalziel settlement an amicable settlement was made amounting to Rs 1, 19,595. Rents were high and average rent under occupancy holding was Rs2-5-0 (Rs 2.31) per acre. The rent charged for betel garden of which there were many, varied from 50- 75 per acre. **This is also indicates how far back betel gardens were established in this area.**

The Sairat income of the estate was largely derived from jungles but there were some profits from markets, fisheries and others. There were extensive jungles nearer the coast which were subsequently reclaimed on patta basis but were largely encroached upon and subsequently settled after the abolition of the zamindari under the lease principles of the government. (District Gazetteer, Cuttack, 1996 - first published in 1906, followed by 1933). Kujang estate was a permanently settled estate which differed from temporarily settled estates in both the fixity of rent as well as that permanent settled estates were not cadastrally surveyed and no record of rights were prepared unlike the temporarily settled estates which were surveyed and settled by the time the Orissa Tenancy Act was Therefore though the customary rights of tenants in the temporarily settled estates were well known it was not the case in permanently settled estates which were still regulated by customs. However, these permanently settled estates were later surveyed during 1922-32 and they thus had the opportunity of the main provisions of the Orissa Tenancy Act being applied to these estates also. The passing of the Tenancy Act has improved the status of the tenants especially in the temporarily settled estates whereas in the permanently settled estates as Kujang the relationship between landlord and tenant were strained and the tenants displayed a remarkable ignorance of their rights under law. (page 197, Bihar and Orissa Gazetteers, Cuttack, 1933 (Annexure B2).

III. Geography of Kujang ex-estate (1930)

- 4. The Kujang forest block was situated in two disjointed bits one of which lies in the police –station Ersama and the other in the police station Tirtol and Mahakalpara being separated from the former by villages like Dhinkia, Abya Chandrapur and Kansarpatia. The area of both the patches has been found to be 53,911.07 acres or about 84. 24 sq km after survey. The total population of the forest block is estimated to be 11,715 and the forest block comprises of 32 villages. (Final Report on settlement of Kujang Forest Block 1959- 66, Annexure B3, page 34).
- 5. The Erasama portion lies within 86 degrees 28' to 86 degrees 35' longitude and 20 degrees 6' to 20 degrees 13' latitude (see map of Kujang forest block, Cuttack in Final Report on settlement of Kujang Forest Block 1959-66 by S.N.Hota, IAS). In this portion lie six units of Kankan (forest block 205), Bhuyanpal (207), Dhobei jungle (204), Barakud(206), Jatadar (208) and Jatarthanda (209). It is the Jatadar unit (2373.87 acres) which is the specific project site and is bounded by Nuagaon, Palonga, Govindpur, Dhinkia and Bhuyanpal in the North,

Jatadarthanda on the south and East and Barkud in the West. This area can be viewed on survey of India Topo-sheet No. 73 L/12 and covers two periods 1929 and 1972.

6. The Kujang ex-estate was vested in the government (Revenue department Notification No. 6934- EA -29/52-R) on 27 November, 1952, page 9, Annexure B3). After this the administration of the forest was taken over by Anchal Adhikari, Kujang. Large areas of the estate had been leased out by the ex- intermediary and there was neither map nor systematic record of rights of the lands leased out. The total area of forests of Kujang Anchal prior to vesting with Revenue department was 55, 501 acres (22, 461 hectares) of which some 25, 692 acres (10.397 hectares) were leased to local people and some Midnapur settlers by the Zamindars. Some 7228 acres (2925 hectares) were taken by Paradeep Port as per Political and Services Department Notification No. 192.P dated 6th January, 1958.

IV. Survey of 1958 and Record of Rights

- 7. On June 7, 1958 the Revenue Department's notification was issued to initiate a survey to and record of rights be prepared in respect of Forest blocks of Kujang Tahsils lying within the external boundaries of Ersama, Tirtol and Mahaklapada police stations in the district of Cuttack. Some of the particulars recorded in the survey and settlement are as follows;
 - i) The name of the tenant
 - ii) The class to which the tenant belongs (Tenure holder, bajyaptidar,
 - raiyat, occupancy raiyat, non-occupancy raiyat, tenure holder, permanent or not etc)
 - iii) The situation and quantity and one or more boundaries of the land

held by tenant or occupier)

- iv) The name of the tenant's landlord,
- v) The rent payable at the time of records -of-rights,
- vi) If the rent is gradually increasing and the steps of increase,
- vii) The mode of rent fixation,
- viii)The rights and obligations of each tenant in respect of water for

agricultural use and water source.

V. Rights of 'encroachers' not settled.

8. However, this settlement specifically did not cover "encroachers" i.e, those in cultivation of lands who could not establish that they had either tenancy or lease rights under the zamindar. This was the result of a decision of the government that all encroachments in Kujang Block would be treated as 'objectionable'. Given the uncertainty about which areas had been leased and which had not, the net result is that the settlement would not have covered many of those cultivating forest lands (Annexure B3, page 42).

VI. Ex- Zamindari forests transferred to Forest Department.

9. On 31, October 1957 a resolution No. 18636- EA. XI- 5/57-R (Annexure B3, page 9-10) was passed by the Government of Orissa, Revenue Department to transfer the management of ex-zamindari forests from Revenue Department to the Forest department for the sake of better development, utilization and exploitation of forests. However, Revenue officers will continue to have powers to issue permits for unreserved species in order to meet the requirements of tenants for domestic use. Permits for all forest materials in reserve forests and for reserved species in unreserved ones will be issued by the forest officers.

VII. Forest lands and Waste lands in Kujang Block notified as protected forests.

10. On October 4th, 1961, vide notification No. 33237 of the Development (Forest) Department, the Government of Orissa further declared all wastelands and forest lands in Kujang Block and other forest blocks to be protected forests (Annexure B3, page 11).

VIII. Notification states that there was no prior recording of rights.

11. It is important to note that both of the above notifications were issued under the proviso to section 29 (3) of the Indian Forest Act, which was applicable to the area at the time.

Section 29 reads as follows:

"Protected forests – (1) The State Government may, by notification in the official Gazette, declare the provisions of this chapter applicable to any forest-land or wasteland which, is not included in

a reserve forest but which is the property of Government, or over which Government has proprietary rights or to the whole or any part of the forest produce of which the Government is entitled.

- 2) The forest- land and waste-land comprised in any such notification shall be called a "protected forest".
- 3) No such notifications shall be made unless the nature and extent of the rights of Government and of private persons in or over the forest-land or waste-land comprised therein have been inquired into and recorded at a survey or settlement, or in such other manner as the State Government thinks sufficient. Every such record shall be presumed to be correct until the contrary is proved:

Provided that, if, in the case of any forest-land or waste-land, the State Government thinks that such inquiry and record are necessary, but that they will occupy such length of time as in the meanwhile to endanger the rights of Government may, pending such enquiry and record, declare such land to be a protected forest, but so as not to abridge or affect any existing rights of individuals or communities."

12. In the instant case, the notifications invoked the last proviso- i.e. they were issued despite the lack of any recording of rights. The 1961 notification, for instance stated:

"Whereas the nature and extent of the rights of the Government and private persons in or over the forest lands and waste lands known as Kujang Forests....[specified forest lands] have not been enquired into nor recorded at a survey or settlement

And whereas the State Government think that such enquiry and record are necessary in case of the said forest lands and wastelands but that they will occupy such length of time as in the meantime to endanger the rights of Government;

Now , therefore , in exercise of the powers conferred by section 29 of the Indian Forests Act, 1927 (Act XIV of 1972) and in supersession of all previous orders on the subject the State Government do hereby declare , pending both enquiry and record, the said forest lands and wastelands in the said Kujang ,Kilpal, Daltangarh, Harshipur, Morichipur and Bishnupur forest areas, fully described

in the Schedule annexed hereto which are the property of the Government to be protected forests and that the provisions of Chapter IV of the said Act shall be applicable to such forests lands and wastelands but so as not to abridge or affect any existing rights of individuals or communities."

14. Further, for effective management of the forests, the Indian Forest Act was amended in its application to the merged territories by the Orissa Amendment Act XI of 1954 which inserted section 20- A to that Act. Under this provision of law any forest land or wasteland in the merged territories which had been recognized by the ruler as reserved forest in pursuance of any law, custom, rule, order, working plan or register, etc immediately before the merger shall be deemed as reserve forests under the Indian Forest Act. All other forests which were recognized in the merged territories as Khesra forests or village forest, etc shall be deemed to be protected forest under the Indian Forest Act. The Indian Forest Act 1927 was repealed on enforcement of the Orissa Forest Act, 1972 which came into force w.e.f. 14th July, 1972. This Act follows the Indian Forest Act with minor variations. Under Section 81 of this Act forests recognized in the merged territories as Khesra forests, village forests or protected forests other than reserved forests by whatever name designated or locally known shall be deemed to be protected forest under this Act.

IX. Rights and Concessions in Killa Kujang

15. The resident tenants were allowed to take wood from the jungles on payment of a fee Rs-4-0 (Rs 0.25) per annum for each household (Orissa District Gazetteer, Cuttack, 1992). On payment of a fee of Re.0-4-0 the tenant obtained a permit which entitled him to take 20 maunds of dry fuel and certain amount of wood for agricultural implements, as well as some creepers for thatching. Some classes of Jagirdars were exempted from the fees. The landlord reserved portions of the jungle from time to time. A cess called Bankar at the rate of Re 0-4-0 per family is realized. Villagers paying Bankar were allowed to remove free 30 maunds of firewood and other timber required for agricultural improvements per annum.

Part B.

Forest Ecology and Riverine systems of Kujang Forest Block (1930)

I. Physical Features.

16. A detailed picture of the physical features of this forest block can be found in R.L Derry's (District Forest Officer, Puri Division) inspection report of 2nd January, 1930. (Annexure B3, pages 34-37). He stated in this report that the area was a **typical mangrove swamp formation along the coast**. In the estate it forms a well defined band running the whole length of the eastern or coastal boundary. Derry stated that-

"The forest in this tract is the typical mangrove formation found in estuaries subject to tidal inundation. Having no previous experience of them I imagine they resemble the forests of the Sunderbans region of Bengal. In place, as near the old Garh-Kujang, it is hardly 2-3 miles broad. Higher up around Hookitola and Falsepoint the band widens to a breadth of 8 or 10 miles. The tract is typical of deltaic swamps and consists largely of low marshy saline islands interlaced by a network of creeks and rivers. These islands are formed from accumulation of silt deposits brought down by many rivers of the Mahanadhi delta, and subsequently stabilized by the mangrove tidal forests that spring up. The older and higher group of the inside islands is often free from inundation at High tide and subject to partial inundation only at spring tides. On the Western boundary, on the landward sides, the high ground gradually merges into the cultivated alluvial formations behind."

II. Record of dependency of residents on forests.

17. In the settlement report of 1893 the following are the important revenue yielding forests supplying fuel and wood for building purposes of the residents of the estate:-

1.	Piasal	Ptero carpus marsupium
2.	Sisu	Dalbergia latifolia
3.	Kendu	Diopyros melanoxylon
4.	Kurum	Adina cardiflora
5.	Suam	Soymida febrifuga
6.	Gambhari	Gmelinaar arborea
7.	Tinia	Albizzia lebbeck and
prod	cera	
8.	Asan	Terminalia tomentosa

9.		Karonj	Pongamia glabra
10.		Sanari	Cassia fistula
11.		Mohul	Bassia latifolia
12.	Bel		Aegle mamurelos

The above trees are found in upland un-inundated forest.

18. The type of vegetation found in marshy tidal formation are the following:-

1.	Sundari	Rhizophore mucronata		
2.	Bhuasuni	Avicenia alba		
3.	Bani	Hibiscus tiliaceus		
4.	Sisumar	Carapa ovata		
5.	Rasunia	Bruguiera speciosa		
6.	Bada Chakunda	Caesalpinia nuga		
Digyana				
7.	Chota Khajuri	Phoeniaz paludosa		
8.	Kia	Pandanus tectorius		
9.	Jamu	Syzygium		

- 19. In his report Derry states that there is no sharp line dividing a large number of species of these types for they gradually merge from one to the other. In the marshy localities there is commonly a narrow strip, rarely more than 200 yards in breadth which is regularly inundated by the tides. Along these strips are to be seen the numerous species with their characteristic still like roots and pneumatophores, Rhizophora mucronate, Avicenia, Sonneratia, Bruguiniers, Kandelia and Carapa ovata.
- 20. In the upland areas the dense forests changes to the open parkland type, with extensive and often sandy glades and isolated groves of trees with or without undergrowth. In the open areas Kochila is common and in the sandy a common mixture consists of Ber (Zizyphus), cashew nut and poonang (Callophyllum inophyllum). After 1930, these physical features have changed to the extent that thousands of acres of forest land have been converted to paddy lands.

Traditional system of Agriculture that prevailed among the local Oriya communities in this area.

I. Cultivation in forest land.

21. 'Kandhachas' is a cultivation that needed clearing of big patches of forest for cultivation of paddy on a co-operative basis. The cultivators used to reside there temporarily and carry on agriculture. As soon as the agricultural activity is complete they come back to their villages which are outside the forest leaving one or two people to watch over the crop. This supervision is carried out on a rotation basis. When a particular operation is needed to be done then the entire group moves to the spot to construct temporary structures. However, different people take up different activities such as fishing, repair of implements etc. It is however understood that the crop belongs to the entire group and they share equally. The 'Khanda' is known after the name of the group leader. Some of these 'Khandas' are about hundreds of acres in extent and the membership of the group goes up from 50-60 in some cases. Hence, the land is held un-fragmented in this customary practice. However, during the settlement 'Khandha Chasis' have been recorded as encroachers on government land, as they have entered the forest block. It is an ancient form of cultivation practice and uses the fertility of forest soil to grow paddy. (Final report on settlement of Kujang Forest Block 1959- 66, Annexure B3, page 39).

II. History of Betel Vine Cultivation in Kujang Estate

22. A history of the cultivation of betel vine is quite old, going back to the 19th century and is reported (Bihar and Orissa Gazetteer, Cuttack, 1933, page 89-90, Annexure B2) as follows-

"The cultivation of the climbing vine called betel (piper betel) the leaves of which are used to wrap up supari chewed by Indians of all ranks and classes, is not extensive. It was introduced by some men of Barua caste who came from Bengal and settled down in Cuttack. It is still grown for the most part by men of this caste, but it is no longer confined to them as the profits of the crop have attracted other castes, and now Khandaits, and indeed even Brahmans cultivate it"

The finest betel were reported to have been grown at Barkud in the Kujang estate, where the immigrant Baruas first settled; and the greater portion of the district, especially the markets in the Kendrapara

subdivision is supplied with betel leaf from their plantations. It is interesting to note in this report that betel requires the most careful cultivation; but the crop is extremely valuable and the large profits amply repay the labour and expense which it entails. It is estimated that average life of the garden is 18 years – at the end of that time it grows to a height that it has to be abandoned. Presently after such a cycle of 18-20 years the betel area needs to be relocated to a fresh site and new garden planted. It is still practiced like this today among the project affected villages.

SECTION 2

Potential impact of the Project on Coastal Land use pattern, Ecology of river and sea marine life systems and on Economy and Livelihoods

Part A Forest cover and Land Use Pattern

I. Coastal Land-use Pattern

- 1. The Project affected villages fall in Jagatsinghpur district, an eastern coastal tract adjoining the Bay of Bengal. The district is bordered on the north by the Mahanadi and its riverine delta providing the rich alluvium soil that makes the district fertile for paddy cultivation with an average production greater than the rest of the state. The project site lies on the North western bank of the Jatadharmohan river creek. Villagers of Nolia Sahi hamlet live close to this estuary and depend mostly on fishing for a livelihood.
- 2. The geomorphology of the area (REIA report of the POSCO steel plant, 2005) show gently undulated coastal plains interlaced with tidal creeks. There is a system of sand dunes along the shoreline which act as barriers for flood tides to enter the villages as well as act as recharge zones supporting an elevated water table stopping the ingress of saline water.

II. The land use pattern and forest cover of the Project area

3. This has been analysed from satellite data (Liss IV Mx & Cartosat) with geo-referenced revenue cadastral showing project area and forest land (1253.225 ha). The forest land having forest cover is 868.560 ha and the remaining forest area with non-forest cover is 384.665 ha. (Vegetation analysis of POSCO proposed steel plant, October 2006-2007, by Spatial Planning and Analysis Research Centre Pvt. Ltd. Bhubaneswar, **Annexure B-4**).

Non-	-forest cover/ land use	Area (ha)	%
1.	River and Water bodies	58.27	15.15
2.	Betel vines	30.075	7.82
3.	Burrow pits (for Betel vines	22.61	5.88
4.	Sandy area	139.80	36.35

5.	Aquaculture Ponds		0.79
0.20			
6.	Agricultural activities	42.12	10.95
7.	Other miscellaneous use	91.00	23.66
Total	Forest land with non-forest cover	384.560	100.00

4. The vegetated land (868.56 ha) within the forest land was delineated after further masking non -forest cover areas. The vegetation analyses (based on GPS inputs of typical vegetation class/ signature data) is as follows:

Vegetation Types within forest land Area (ha) % Area

1.	Casurina	285. 99 34	1. 08
2.	Mixed (Predominantly Cashev	v) 190. 87	21.97
3.	Scrub	381.71	43.95
Tota	l area under vegetation	868. 56	100

5. The density class of vegetations within Forest land , using advanced NDVI image method was categorized as Dense, Moderately Dense, Open and Sparse as follows:

	Density Index as per NDVI	Area (ha) % Aı	rea
1.	Dense	3.51	0.41
2	Moderately Dense	73.59	8.47
3.	Open	418.83	48.22
4.	Sparse	372. 62	42.90
	TOTAL	868.56	100.00

Assessment of average canopy density of the forest land

den	Vegetation type sity	Area (Ai)(l	na) Avg.	canopy
1.	Dense Casurina	1.64	0.79	
2.	Moderately Dense Casuri	na 38.67	0.58	
3.	Open Casurina	165.26	0.38	
4.	Sparse Casurina	90.41	0.13	

5.	Dense mixed	1.63	0.31
6.	Moderately dense mixed	31.89	0.21
7.	Open Mixed	94.17	0.12
8.	Sparse Mixed	63.17	0.07
9.	Scrub	381.71	-
10.	Non-Forest cover	384.665	-
	TOTAL	1253.225	

Part B Ecology and hydrological systems

I. Evidence of existence of Mangroves.

6. The area shows a typical ecological succession of non-mangrove vegetation in this area. Earlier there were mangroves but due to the establishment of Paradeep Port a lot of the mangroves were cut in the 1960s and remaining mangroves were uprooted due to the super cyclone of 1999 in this area. The upland area free from tidal influx is covered with sub humid evergreen vegetation dominated by Phoeneix sylvestris, Acacia arabica, Azadirechta indica, Albizzia lebbeck and Ficus bengalensis etc. Species diversity index is medium indicating a diverse type of vegetation with Casuarina equistiflora and Anacardium occidentate dominating in the area of project villages.

II. Jatadharmohan creek.

7. The Jatadharmohan creek lies north-east-south-east between Mahanadi in the north and Devi river in the south and is a tidal creek with its mouth about 3.5 km south west of Abhay Chandrapur village. The course of this tidal channel runs almost parallel to the shoreline for about 10 km from the mouth from where it branches into a number of small distributaries in different directions in their winding pattern. The course of the river is separated from the sea by an elongated sandy barrier split, which has a maximum width of 400m. These sandy ridges

are interpreted as the remnants of beach dune ridges representing the former shoreline position. Based on the existence of the beach ridges even up to 7 km inland it is surmised that the shoreline was up to Trilochanpur village in the geological past. It is noted by satellite images that considerable deposition is going on both sides of the mouth leading to the extension of this elongated sandy features as a result of which the creek mouth is clogged by sediment. (REIA, steel plant, POSCO) On the other hand a considerable erosional activity has been observed in the landward part of the river near the confluence and seasonal erosion along the coastline of the confluence. (REIA report, Captive Port, POSCO, 2005, pg 33-34, **Annexure B-5**).

III. Bio diversity of the Estuary:

- 8. The Jatadhar river mouth forms the northern portion of the Restricted Fishing Zone which the Orissa state government has declared under the Orissa Marine Fisheries Regulation Act, 1982. Due to its critical location lying midway between the stretches of the Mahanadi delta and the Devi river confluence, it serves as a major ecotone for diversified biological systems and is a sporadic nesting site for Olive Ridley sea turtles along the sandy beaches. The main nesting places for mass nesting of turtles is at Gahirmatha Marine sanctuary, the Devi river mouth (7 km from Jatadhar river mouth) and at Rushikulya river mouth. Each of these sites has been given legal status. Due to the close proximity of the port site to the Devi river mouth the nesting habitats and nesting could likely be impacted. Mass nesting is very unique to this coast and occurs in the Ridley turtles. The congregations of sea turtles are not stationary and the turtles select varying nesting sites at beaches. Mechanised fishing has already endangered the turtles and the cumulative effect of different minor ports coming up along the east coast of Orissa is likely to have a significant negative impact on the turtles. Other endangered species are the horse shoe crab (Tachypleus giger and Carcinocorpeus rotundicauda) which live only in Orissa waters. They have a strong preference of beaches having sand particle size in the range of 63-125 mm where they come for nesting. The Olive Ridley turtle also has a preference for the same beaches. Hence, dredging operations are likely to have a negative effect on these endangered animals. Besides these animals, the estuary serves as an important spawning and breeding ground for several species of fish.
- 9. The release of pollutants and wastes from ships as well as oil spills both small and big over time into the estuary would lead to a

modified ecosystem eliminating the eco-sensitive organisms. The handling of iron ore from the proposed steel plant is likely to create a cumulative accumulation of metallic contaminants into the estuary. This will impair the physiological functions on the marine organisms. Besides, some organisms like mussels can accumulate toxic metals in their tissues causing toxicity to people eating them.

10. The impact of illumination because of the port illumination being close to the mouth of Devi River (about 7 Km) may disorient the turtle hatchlings making their way into the sea. Over the years the intensity of illumination from the Paradeep Port has intensified although located at a distance of 50 km from the Gahirmatha nesting site. (letters of Prafulla Samantra, President, Lok Shakti Abiyan, 26-8 –2010 to the Committee and Biswajit Mohanty, Wildlife Society, Orissa, to Chairman, Orissa State Pollution Control Board on 13th April, 2007 and Kartik Shanker, Ashoka Trust for Research in Ecology and the Environment, Bangalore, to Orissa State Pollution Control Board, 14-4-2007, **Annexures B-6, B-7, B-8**)

IV. Impact on fresh water aquifers in the project site.

11. In Ersama block of the project site fresh water aquifers occur between 73 m to 340 m depth below ground level. (EIA report on integrated steel plant, 2005). The villagers of this area told the Committee that the water is sweet and the sand too is sweet. Studies show that saline water aquifers occupy the top strata and fresh water aquifers occupy at the bottom with high artesian/sub-artesian pressure heads. The interface layer or Aquicludes range between 50m and 300m below ground level. So the exploitation of ground water through digging of wells may cause ingress of saline water and loss of agricultural productivity.

V. Impact on coastal dunes

12. The presence of dunes in this area serves for coastal protection and stability. It helps keep the cyclonic tides surges from ingressing inland into agriculture lands and villages. It also provides for supply and recharge of fresh water aquifers. Additionally it forms the habitat for several plants and animals. Development of the steel plant, port and other infrastructure will flatten out the dunes and create negative impact on both fresh water aquifer and biodiversity and increase the vulnerability to tidal surges of sea water inland.

VI. Impact of loss of coastal mangroves and other bio-shields on vulnerability to cyclone damages

- 13. The frequency and intensity of cyclones hitting the Orissa coast in the past century have gone up. Massive deforestation of coastal mangroves for development of ports (such as Paradeep port in the 1960s') and conversion to other commercial activities has made the coast vulnerable to the effect of cyclones and tidal surges. For example the destruction of mangroves in Ersama (in the Project area) was one of the main reasons that this area experienced more damage to crops and people at the time of super cyclone in 1999 as compared to other areas of the coast having extensive mangrove forests. Ersama block reported 8000 deaths and the tidal waves entered 10 km into the land. However, the coastal district of Kendrapara which is just north west of Jagatsinghpur which had a fair mangrove forest suffered less damage. From the 1960s Orissa has lost 45% of it's mangrove forests (Disaster dossier: The impact of climate change in Orissa, Richard Mahapatra, Infochange News and Features, March 2006, Annexure B-9). The economic losses to the state in 30 years have gone up 27 times. Hence the cumulative effect of development of multiple ports on the east coast are likely to have a long term damaging effect on coastal ecosystems as well as a spread effect on inland ecology and way of life.
- 14. Thus, the inclusion of the aquatic area upto 12 nautical miles and water area of tidal influenced water bodies in the draft CRZ amendment notification, 2010 has been done none too soon. Hazard mapping of the coast for monitoring sea level rise of the coast on the basis of degree of coastal erosion has been included in this notification. No projects will be allowed to come up in the high erosion zones while medium erosion prone areas Comprehensive EIA will be required. No new projects will be allowed to come up in CRZ I zones .These are areas that are ecologically sensitive such as National parks/sanctuaries, mangroves, coral reefs as well as areas close to breeding and spawning grounds of fish and other marine life.

Part C. Impact on the livelihood of the people

I. Predominantly rural agricultural community.

15. The communities living in the project site are pre-dominantly rural with a lower percentage of urban population (10 %) as compared to the State average of 15 %. However, the population density of this area is higher (633 per sq km) than in the rest of Orissa (237 per sq km). The agricultural land holding per family in this area is 1.19 ha as compared to 1.3 ha in the state. The landholding pattern here is that 40 % of families have less than one hectare of land, 30 % have 1-2 ha, 8 % have 2-4 ha and 3 % have more than 4 ha land. The number of landless families is 19 %. (REIA, POSCO steel plant report, 2005). However, being part of the rich alluvial Mahanadi riverine delta the productivity of the land in this area is 28 % higher than the state. The average household income is Rs 40,000 per annum according to the REIA report; however, this figure is disputed by others, including a group of American researchers who have made a submission to the Committee. Betel vine income contributes significantly to the cash economy of the area's, and is an important source of employment for agricultural labourers especially women from within the area. Paddy cultivation is also undertaken, predominantly for self-consumption.

II. One third of population is Scheduled Caste.

- 16. The total number of families in the project affected Gram Panchayats of Dhinkia, Nuagaon and Gadkujang are 3350 (Census, 2001) and total population is 22, 000. Almost a third of the population belongs to the Scheduled Castes constituting a higher percentage than in other areas of the state. The Scheduled Tribe population are less than 1 % in this project area. Only the village of Polanga out of the 8 villages has 23 tribals (Census, 2001).
- 17. The literacy figures indicate that 30- 40 % of males/females are illiterate. The Approximately 11 % in the males and 3 % among the females have received intermediate level education. 6% of males and 3% of females have received graduate to professional level education.

III. Sustainable and diversified livelihoods

18. In spite of the frequency of cyclones and tidal surges damaging their crops and plantations the people of this coastal area have been able to recover and continue getting a sustainable production from the diversity of production systems that they put their land under. Though the land holdings are small the value of different crops such as paddy, betel vines, cashew and other tree crops have yielded a sufficient income

to keep them at a middle income class status. The people look healthy with very little malnutrition among the children. The committee saw a number of very old people during our tour of these villages. This is not generally the case of many rural areas where poverty levels are high. Dr B.D. Sharma, former SC/ST Commissioner while visiting this area remarked -

"the people are having the trinity of Paan, Dhan and Maach (betel, paddy and fish), the essence of life".

The contribution of abundance of high protein fish to their diet has definitely provided the people a balanced diet and kept their degree of malnutrition levels low as compared to inland areas.

IV. Presence of sand dunes provides a unique combination of 'sweet' water along coastal zone ideal for betel vines cultivation.

- 19. The combination of "sweet" fresh water, climatic conditions and the presence in a coastal zone has provided a near unique combination of circumstances that are ideal for the cultivation of betel vine crops. This makes the area one of the betel production centres of the country, and it was widely reported by the people of the area that the famous "Banarasi paan" is in fact sourced entirely from this area. A point that was repeatedly raised in the area is that these agro-climatic and soil conditions are not replicable and hence any form of rehabilitation cannot replace the perennial crops and livelihood stability offered by this area.
- 20. The "sweetness" of water and their sand dunes they say is a sign that Gods have favoured them and kept the ingress of salt water coming in. One of the reasons they give is the height of their village sand dunes which are charged with fresh water that is drinkable and also good for irrigation of their crops. The heights of the sand dunes are important for yet another reason that is it keeps the tidal waves from ingressing inland. They also told us that there were extensive mangroves in this area which have been destroyed over time due to repeated cyclones as well large scale removal for developing the port in Paradeep in the 1960s. Now casuarinas have been plan as a protective coastal shield. They also mentioned that these casuarina plantations and other forest stands are protected by the people through forest protection committees, which undertake voluntary patrols on a rotational basis. There is no official support, financial or otherwise, for these committees.

V. Economy

- 21. The local economy is based on paddy cultivation, betel cultivation and income from tree crops such as cashew as well as prawn cultivation in ponds on the banks of the rivers. According to estimates given to us by the villagers there are 5000 betel vines grown in three Panchayats, which are tended by 10, 000 cultivators.
- 22. There are various estimates of betel vine cultivation. A "project research team" of American researchers which made a submission to the Committee has stated on the basis of their investigation, that approximately 85-90% of the population are either cultivators of betel vines or wage labourers (whose primary employment is in betel vine cultivation). They further estimate that the income from betel vine cultivation is on the order of Rs. 37,000 40,000 per decimal. Wage labourers received "Rs. 150 for plucking of betel leaves, Rs.180 to Rs.200 for carrying of sand and re-layering of sand mixed mustard dust in the betel vine slots, and Rs.220 to Rs.240 for the work of untying and reburying the betel vines", in addition to two meals a day. Wage labourers had little difficulty in finding work when required.
- 23. Another estimate mentions that the average annual income from this cultivation is Rs 1 lakh per acre with another Rs 1 lakh for other ancillary employment. (Manshi Asher, Striking while the Iron is Hot, National Centre for advocacy Studies, February 2009, **Annexure B-10**, pages14-15). Many of the landless families depend on basket making for packaging paan or work as daily labourers on the betel vine cultivation for their livelihood. Around 30 lakh paans are transported to Mumbai, Bangladesh, Pakistan and Saudi every year.
- 24. In the summer the cashew cultivation provided the main livelihood. A family earns Rs.20,000 per season on an average as reported. An average cashew tree yields 100 kg of nuts a year worth Rs 4000. About 50 % of the families are engaged in pisciculture chiefly prawns. An acre of farm ponds yields prawns worth Rs 7 lakhs a year. Many other families fish in the estuary –all 108 families of Noliasahi hamlet which lies close to estuary. The average daily catch per person is about 20 kg. The hamlet as a whole sells 1.5 quintals of fish every day, the daily earnings per family ranging from Rs 100 Rs 5000. A significant amount of catch is transported and sold in Cuttack (Manshi Asher, 2009, **Annexure B-10**, page 15). It is estimated that 20,000 30,000 fishermen, many of whom do not themselves reside in the project area, are dependent wholly on estuary fishing for their livelihood.

25. Another source of income is from a succulent plant—called Kewara that is collected mainly wild in their habitat. Perfume is distilled from these leaves on a cottage industry level and sold.

VI. Dependence on Forests and Forest lands

- 26. The vast majority of betel vine, cashew and kewara cultivation takes place on forest land, while most paddy cultivation takes place on private and revenue lands. The land near the shore is particularly important for betel vine cultivation, which requires large quantities of the 'sweet' sand (which is mixed with mustard dust) in this area.
- 27. People also rely on the forest for forest produce such as vegetables and fruits, which are a major part of their diet. Both the POSCO Pratirodh Sangram Samiti and the American researchers contended in their submissions before the Committee that these are a crucial source of food (and nutrition) for the people of the area. The villagers also displayed many such items before the Committee during their visit.
- 28. In addition, forest produce such as casuarina leaves and other materials are used in the construction of the sheds and other items for betel vine cultivation.

VII. Impact of the project on extent of displacement from land and livelihoods

29. These findings are based on the Socio-economic study done on project affected villages/families by Xavier Institute of Management, Bhubaneshwar, in January 2008 for POSCO-INDIA. It was done in two phases, the first phase study focused on project displaced households (those losing their homes as well as land) and the second phase study on a broader context of overall project affected families (those not losing homesteads but lands /livelihoods). Due to the tension and blockade within some of the villages against POSCO entering the area the Xavier team could not themselves visit the villages to collect field data. They instead trained some local NGOs to collect the data on these parameters (Socio-Economic report by Xavier Institute of Management, pages 4-8, 2008, Annexure B-11). The consultants supervised them. In their report the consultants state that reliability of data therefore was in question and that critical information on sensitive matters such as

land particulars could not be ascertained properly and hence there were gaps in the data. They also stated that field volunteers had taken a lot of risk to visit these villages and talk to people.

- 30. In light of these caveats it is very difficult to rely on the data in this "socioeconomic study." The findings are reported here for appreciation, but it should be noted that they are at variance with data reported by others, including published works on the area and the submission of a group of American researchers to the Committee. Some of the important findings reported in the first phase of study are:
 - i) The number of displaced families is 7 villages are 718 of which 466 are original families and 252 are separate families as per the definition in the Orissa Resettlement and Rehabilitation Policy (ORRP). Out of 718 displaced families 611 (85 %) are from Dhinkia, Govindpur and Noliasahi villages. Hence the displaced families are predominantly from these three villages. The term "displaced" here is used to refer to those who are losing their homes as well as lands; others are considered "project affected families."
 - ii) The displaced families are generating a net income of Rs 7 million per annum. The same caveat regarding the concept of "displacement" however is noted.
 - iii) Average income per family /annum has been reported to be Rs 14, 100/-. As mentioned earlier, this figure is at sharp variance with other reported studies of the area, including that by the American research team which has made a submission to the Committee. It is also at variance with the figures reported later in the study for project affected families.
 - iv) 42% of families pursue betel vine cultivation as a major occupation, 20.5% families pursue fishing and 11.7% families are wage earners in agriculture sector. Only 13/718 (2 %) families pursue agriculture. (Report on Socio-economic study by XIM part II, volume 1, page 9, Annexure B11). It is surprising that such a small percentage of people are pursuing agriculture and throws doubt over this data.
 - v) The majority of the displaced families said they were residing and cultivating the lands since their forefathers. Only a small number said that they were there recently.

- vi) Status of ownership showed that 10.45 % were landed with 27.44 % being legal heirs and 60.58 % being landless. This very high figure of land less families is at variance with the apparent situation on the ground.
- vii) Some of the important findings during the Second Phase of the study to identify Project Affected Families (PAFs) (Xavier Institute of Management, 2008, Socio-Economic Study of POSCO site)
- viii) The study covered the same 7 villages of three GPs of Dhinkia, Gadkujang and covered 3578 respondents who were considered project affected families or PAFs. On calculation these 3578 PAFS would be the total no of families of the all these 7 villages (as per 2001 Census data the total number of families of these villages are 3578).
- ix) The main occupation is betel vine cultivation with 2362 families (66%), 477 families (13%) being wage earners and only 62 families (2%) dependent on agriculture and 132 PAFs (4%) depend on fishing and prawn cultivation. The villages of Noliasahi and Bhuyanpal are predominantly concentrated on fishing and prawn cultivation.
- x) Women are predominantly employed in betel vine cultivation.
- xi) Average income of betel vine cultivators is nearly 5.6 times more than those cultivating crops.
- xii) 46% of PAFs earn a range of income between Rs 25, 000- Rs 50,000, 36 % earn from Rs 50, 000- Rs 100,000 and 10% of PAFs fall below Rs 25,000 income bracket.
- xiii) Status of land use is reported as the following:-
- xiv) 1562 PAFs (44%) possess legal title (both individual and joint) for agriculture land .
- xv) 552 PAFs (15.4 %) do not have legal titles for the lands.
- xvi) 1037 PAFs (29 %) are encroachers cultivating betel vine in forest lands. They are mostly Scheduled Caste communities. The

extent of such land cultivated could not be ascertained due to the conflict situation.

- xvii) 1980 PAFs (53 %) have mentioned that they are cultivating crops on encroached lands since their forefather's time.
- xviii) 2299 PAFs (65 %) are cultivating betel vines in forest lands since generations.
- xix) 1374 PAFs (38%) are dependent on fishing or prawn culture ponds on forest lands since many generations.
- xx) Betel vine cultivation provides major source of livelihood to 68 % of the PAFs.

Part D Conclusions

I. Findings.

- 31. On the basis of the facts mentioned above the committee has come to the following conclusions
 - i) Total land required for the project from the 8 villages belonging to 3 Grampanchayats
 - ii) All 8 villages are together going to lose a total of 4004 acres of which 3566.32 acres (89%) is government land (forest land included) and 437.68 acres (11%) is private land.
 - iii) In the category of government land being acquired 2958.79 acres (83 %) is forest land and 607. 53 acres (17 %) is non-forest land.
 - iv) 73 % of total land going to be acquired by POSCO belongs to the three villages of Dhinkia, Nuagaon and Govindpur. These three villages together are cultivating forest land which is 58% of the total land to be acquired by POSCO. Hence the maximum protest against POSCO is being waged by these 3 villages as they stand to lose a sustainable and diverse livelihood if these lands are acquired by POSCO-India. There are some proportion of families in these villages who are not opposed to POSCO.

- v) All families in these villages (total number of 3578 families as per census 2001) are going to lose land whether partial or total and have come under the category of PAFs. So 718 (466 + 252) displaced families in these villages of 3 Gram Panchayats are a subset of the total families of 3578 which are going to be affected by the Project. In the opinion of the Committee, loss of one's land or source of livelihood is as devastating as physical displacement from one's homestead land.
- vi) Since most of the land being acquired is Government land (forest) and they do not have titles/forest rights whatever compensation they may get will not give them a level playing field to negotiate as compared to their having legal titles. The betel vine cultivation in forest land is an important source of income to these families.

SECTION 3

Forest Rights and the Forest Clearance

- 1. On June 26th, 2007, the Orissa government applied to the Ministry of Environment and Forests for clearance under section 2 of the Forest Conservation Act to divert 1253.225 hectares of forest land for the proposed steel plant and port. On August 9th, 2007, the Forest Advisory Committee recommended the proposal for in principle clearance. As described in the Introduction of this report, as a result of the April 27, 2007 order of the Supreme Court, this recommendation was automatically placed before the Court, who sent it to the Central Empowered Committee (CEC) for review. The CEC recommended the project for clearance subject to the following conditions:
 - (1) Instead of piecemeal diversion of forest land for the project, it would be appropriate that the total forest land required for the project including for mining is assessed after considering the ecological importance of the area, number of trees required to be felled, adequacy and effectiveness of the R&R plan for the project affected persons and benefits accruing to the state. The diversion of forest land for the steel plant, without taking a decision for the linked uses particularly the mining project may not be in order.
 - (2) Due to the large number of trees to be felled (2.8 lakhs) the CEC suggested that an independent expert committee should visit the site in order to assess the impact and suggest mitigation measures.
- 2. On August 8th, 2008, the Supreme Court approved the FAC recommendation. While appointing a committee to look into the second concern, the Court did not engage with the first issue raised by the CEC.
- 3. On September 18th, 2008, on the basis of the Supreme Court order, the Ministry of Environment and Forests granted in principle forest clearance for the diversion of 1253.225 hectares of forest land for the project. On December 3rd, 2009, the Orissa government submitted a compliance report stipulated in stage clearance, and final forest clearance was then granted on December 29th, 2009.
- 4. In the interim, on January 1st, 2008, the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006

(henceforth Forest Rights Act) was notified into force, recognising and vesting the rights of forest dwelling Scheduled Tribes and other traditional forest dwellers on forests and forest lands.

5. The Forest Rights Act has direct implications for the forest diversion process, a point to which we will return below. First, however, we examine whether there are in fact eligible persons and forest rights in the proposed project area.

Part I. Eligibility of the People of the Area under the Forest Rights Act

- 6. A major point of contestation in this area has been the question of whether any persons are eligible for rights under the Forest Rights Act. In section 2(c) and 2(o), the said Act provides for two categories of eligible forest rights holders: forest dwelling Scheduled Tribes and Other Traditional Forest Dwellers.
- 7. The Orissa Government has at various points sought to contend that the Forest Rights Act has no relevance to this area as no persons in the area are eligible under either category. A statement of this argument was made by Shri U.N. Behera, Principal Secretary, Environment and Forests to the Government of Orissa, in his letter dated August 13th, 2010 to the Ministry of Environment and Forests (**Annexure C-4**). This was as follows:
- (1) The reading of definition of OTFDs show two ingredients, the requirements of residence inside forest lands and second, dependence on forest land for three generations (75 years) as per Forest Rights Act, 2006.
- (2) Originally this area was under the Bardhaman Raj estate and as per the provisions of Orissa Estate Abolition Act, 1951 the said estate was vested in the State Government with abolition of all intermediary interests.
- (3) Section 8 (1) of the OEA Act provided that any person who immediately before the date of vesting of an estate in the state Government was in possession of any holding as a tenant under an intermediary shall be deemed to be a tenant of the State government with same rights and subject to the same restrictions.

- (4) He goes on to say that under sub-section (3) of section 8-A if no claim was filed within the specified period, the right to possess the land, building or structure stood vested in the state government by operation of the Act and therefore the right to make any such claim by the intermediary or any other individual stood extinguished.
- (5) The Burdhaman Raj Estate in November 27, 1952 got vested in the government vide Revenue department and the lands in Touzi No.14 (Kujang estate) passed to the State government. (**Annexure B 3**, pages 9-11).
- (6) The ex- intermediary filed rent roll against all the lands in respect of which he had created tenancy rights in order to allow them to continue as tenants under the state. These tenants got enrolled in the "Tenants Ledger" of the village and they started paying rent to the government as a token of possession of such land. The date of filing has been extended from time to time till 1983.
- (7) He thus claims that since this settlement process was closed and as there was no one left out without his claim be settled these people who are producing records for lands that have not been settled in their favor have faked the documents and are thus subsequent creations.
- (8) None of the villages in Nuagaon and Dhinkia GPs formed a part of 30 forest blocks transferred to DFO, Athagarh in 1957. Only Bhuyanpal and Jatadar villages formed a part of unsurveyed forest blocks, the remaining 6 villages did not form a part of any recognized forest block.
- (9) On 4th October 1961, the government of Orissa in Development (Forest) Department published a notification U/s 29 of the Indian Forest Act 1927 declaring the forest lands and wastelands of Kujang as protected forest. Thus the lands that had not been covered in the 30 forest blocks and became protected forests must have been wastelands. (**C 5**).
- (10) Though the requirement of residence inside the forest land has been dispensed with by the Ministry of Tribal Affairs in their circular No. 17014/02/2007-PC (V0l 111) dated 9 June, 2008, the second ingredient ,i.e. dependence on the forest land for 75 years prior to 13-12-2005 remains mandatory (**C** 6). In sum, as the

land was not forest and there are doubts over whether the persons now claiming rights were present in these lands. On both counts, it is argued, these persons are not eligible as Other Traditional Forest Dwellers under the Act.

- 8. A large number of residents of the area, particularly those opposing the project, dispute all these claims and assert their eligibility as other traditional forest dwellers under the Forest Rights Act. They also assert that there are forests dwelling Scheduled Tribes within the project area.
- 9. In light of this major area of contestation, it is first necessary to more closely examine the language of section 2(o) of the Act. The section reads as follows:

"Other traditional forest dwellers "means any member or community who has for at least three generations prior to the 13th day of December, 2005 primarily resided in and who depends on the forest or forest land for bona fide livelihood needs.

Explanation: For the purpose of this clause, "generation" means a period comprising of twenty five years.

In light of this, the ingredients of this definition are as follows:

- (1) any "member or community", implying that proof for every individual claimant is not required. The word "community" is otherwise used in the Act to refer to the village (for instance, in section 2(a) defining "Community Forest Resource"), and the same meaning can be taken here.
- (2) Has primarily resided. In June 2008, the Ministry of Tribal Affairs (C3) clarified that the words "primarily reside in" in sections 2(c) and 2(o) of the Act should not be taken to mean physical dwelling on forest land. It is sufficient to establish dependence for bona fide livelihood needs on forests or forest lands to establish primary residence. In order to establish residence, then, establishment of dependence on forests or forest land is sufficient.
- (3) In forests or forest lands. The term "forest land" is defined in section 2(d) of the Act to mean "land of any description falling within any forest area". Thus, the land upon which either residence or dependence is established must be within a forest area. Moreover,

one must note that this is not limited to lands under the Forest Department but includes any land under the "jungle kisam" (Letter entitled, "Grant of titles to eligible STs and other traditional forest dwellers under ST & OTFD (RFR) Act, 2006 dated 11-2-2010 by Shri R.K.Sharma Commissioner—cum—Secretary to Government of Orissa an addressed to all Collectors) (**Annexure C-9**).

- (4) Depend on forest or forest lands for bona fide livelihood needs. The language is used in the present sense, it is open to claimants to prove residence as such on forest or forest lands from prior to 1930, or to prove dependence from prior to 1930, which then establishes primary residence as per the Ministry circular. A key point here is that what is required is proof of dependence, which is distinct from occupation of forest land. One can be dependent on forests or forest land through activities such as minor forest produce collection, grazing, use of water bodies, etc; which do not necessarily involve actual cultivation of the land. Overall, dependence in the sense of the Act refers to the exercise of the rights contained in section 3(1) of the Act.
- 9. In sum, a community claiming to be other traditional forest dwellers has to establish either:
 - Residence in the sense of dwelling on lands that are now classified as forests or forest lands from prior to 1930;
 - Dependence, in the sense of the Act, on forests or forest lands from prior to 1930; where in both cases the term "forest land" is understood to mean land of any description within a forest land.
- 10. In light of the above, we examine each of the Orissa government's contentions below.

I. Prior Settlements in the Area

- 11. The Orissa government contends that this area would have been subject to settlement on numerous occasions and all rights recorded.
- 11. First, the Committee notes that the Forest Department notification dated October 4th, 1961 (No. 33237-D), under which the majority of the land in question was declared protected forest, states that:

"The nature and extent of the rights of government and private persons in or over the forest lands and wastelands known as Kujang forests in, Mahabalpara, Ersama and Patkura police stations in Cuttack district, Daltangarh forests in the police station of Tirtol in Cuttack District, Harishpur forests in the police station of Ersama in Cuttack district have not been enquired into nor recorded at a survey or settlement.

And whereas the state government think that such enquiry and record are necessary in case of the said forest lands and wastelands but that they will occupy such length of time as in the meantime to endanger the rights of the government.

Now, therefore, in exercise of the powers conferred by section 29 of the Indian Forest Act, 1927 and in super-session of all previous orders on the subject the state government do hereby declare, pending such enquiry and record, the said forest lands and wastelands in the said Kujang, Kilpal, Daltangarh, Morichipur and Bishnupur forest areas, fully described in the schedule annexed here to which are the property of government to be protected forests and that the provision of chapter IV of the said Act shall be applicable to such forest lands and wastelands but so as not to abridge or affect any existing rights of individuals or communities".

- 12. It should be noted that this notification was issued under the proviso to section 29(3) of the Indian Forest Act. Section 29 of the Act explicitly permits the State government to declare any "forest land or waste land" to be protected forest on the basis of a survey or settlement or indeed any recording of rights "in such other manner as the State Government thinks sufficient." It is only if the State government itself is convinced that no proper manner of recording has been done that the proviso to section 29 (3) can be invoked and a notification of this nature, namely one that declares a protected forest while barring abridgement of existing rights, can be issued. Clearly, therefore, in 1961 the position of the State Government was that no survey or settlement had taken place in these areas.
- 13. As per the working plan of the Athgarh Forest Division, the remaining 30 blocks referred to in the Orissa government's letter (as being transferred to the DFO Athgarh in 1957) had been declared protected forest through Revenue Department Notification No. 1630-IX-52/55 EA dated 6th March 1956, which too had been issued under the

proviso to section 29(3) and therefore also constituted a statement that rights had not been recorded in these forest areas. Thus, the Orissa government itself stated that no record of rights had been prepared for these areas either, and hence no such record existed for the entire area that now is proposed for the project.

- 14. In regard to the Estates Abolition Act, the District Gazetteer of Cuttack of 1996 (Page 587) (Annexure B-1) describes the settlement process under the Estates Abolition Act as far from perfect contrary to what the Principal Secretary, Shri U.N. Behera claimed. A large number of cases were in "Bebandobast" status (i.e. the case had not been decided at the time of settlement) even on revenue lands and cultivated areas. Even at the time of publication of the Gazetteer in 1996, 11,615 cases involving nearly 10,000 acres were still pending for disposal-more than four decades after vesting had been completed. This indicates the manner in which settlement has been done in these areas.
- 15. Further, the Estates Abolition Act settlement was concerned with recognising tenancy rights, whereas the Forest Rights Act makes no distinction between tenants and occupants; even unauthorised occupants of the zamindar's lands, and those dependent on the forests, are dependent in the sense of the Act. The same is true of subsequent deadlines for claims under the Estates Abolition Act.
 - 16. In regard to the Kujang Forest Settlement of 1961, the Committee notes this settlement was aimed at recording those who had received leases from the zamindar. It specifically did not cover "encroachers" i.e, those in cultivation of lands who could not establish that they had either tenancy or lease rights under the zamindar. This was the result of a decision of the government that all encroachments in Kujang Block would be treated as "objectionable". Given the uncertainty about which areas had been leased and which had not, the net result is that the settlement would not have covered many of those cultivating forest lands (Annexure B-3, page 42).
- 17. The Committee finally notes that in principle prior settlements are not relevant to rights recognition under the Forest Rights Act. As mentioned above, the Forest Rights Act was enacted as per its preamble to rectify the failure to record and recognize rights during the declaration of government forest lands. It is in short intended precisely to address the failures in prior settlement operations under various laws, and such

settlement operations cannot be privileged over the Forest Rights Act process unless the latter is to be rendered entirely infructuous. Moreover, Section 4 (1) of the law states that "notwithstanding anything contained in any other law for the time being in force, and subject to the provisions of this Act, the Central Government recognizes and vests the forest rights in the forest dwelling tribes and OTFDs in respect of all forest rights mentioned in section 3." Thus all prior vesting of any rights in the State government is overridden by this law, and the vesting in government under the Estates Abolition Act stands overridden insofar as it concerns community and individual rights recognized by the FRA. Since the FRA is intended to rectify the gaps in other legal mandates, vesting under this law overrides all other mandates.

18. One may mention that the same logic applies to verification/ regularization of pre- 1980 claimants to land rights on forest land. Such verification is done under the 1990 guidelines issued by the Ministry of Environment and Forests under the Forest Conversation Act. One must first note that the implementation of these guidelines has been very poor. The same was admitted by the Ministry in an affidavit before the Supreme Court in July 2004. (Filed in IA 1126 in IA 703 in Writ Petition 202/95, T.N.Godavarman. Thirumalpad and Ors. Vs. Union of India and Ors on 21-7-2004) (C 7). This can be seen, in this context, from the fact that in the entire State of Orissa, only several thousand people have been found eligible under these guidelines, while at least 2,33,000 individual claims have been approved in the State under the Forest Rights Act as of September 2010. The reason for this wide discrepancy is that, as with the Estates Abolition Act, the Central guidelines imposed onerous requirements in the form of requiring a Primary Offence Report from the Forest Department as the only admissible form of evidence for pre-1980 occupation (para 1.5 of circular No.131/90/FP (I) dated 18-9-1990). Naturally such documents are not available with the vast majority of forest dwellers. Further, the process of verification under these orders and guidelines is purely bureaucratic, with no scope for popular participation or accountability. As such, the failure to record any person under these processes cannot be considered evidence of eligibility or otherwise under the Forest Rights Act.

II. The Historical Nature of the Project Affected Areas

19. The State government is seeking to claim that the villages of Dhinkia and Nuagaon fell outside the forest area and therefore their residents cannot be considered OTFDs.

- 20. It must first be noted that whether or not the village fell on technically classified forest land is not of much relevance to the question being sought to be answered. As noted above, physical occupation of forest land is not required to show dependence on forests.
- 21. Second, this argument applies, in any case, to only part of the project area. There is no dispute that the forest areas of Bhuyanpal and Jathadar, both of which are today revenue villages (the former with a number of residents), were forests. There is no dispute that the forest area of Bhuyanpal included land under cultivation at the time of declaration as a protected forest. These blocks fall within the project area and therefore *prima facie* would include other traditional forest dwellers.
- 22. Third, the State government is assuming that since the 6 villages of Dhinkia and Nuagaon GPs were not transferred as part of 30 Kujang forest blocks to DFO Athgarh in 1957 along with Bhuyanpal and Jatadar (all geographically close to each other) they did not form part of any recognized forest block. In itself the mere exclusion of these areas does not establish that there were no forests in these villages, only that such forests were not included in the particular blocks that were transferred.
- 23. Indeed, as per the village settlement maps of 1927-28 for Dhinkia, Govindpur and Nuagaon villages, large areas within these village areas have been classified as Gramya jungle and Jhaun jungles and tree symbols have been depicted in and around these villages (**Annexure D-1**, **D-2 & D-3**). The cultivated plots are scattered among or adjoining these forest areas, clearly establishing primary residence, in the sense of the Forest Rights Act, of the concerned cultivators and villagers on forest land.
- 24. In sum, there is evidence of the presence of forests within the villages of Dhinkia, Nuagaon, Govindpur, Bhuyanpal and Jatadhar. In the case of the former three villages this is conclusively established for a period prior to 1930, along with the presence of cultivation within the forest. As such, the Committee finds no merit in the contention that these were not forested areas and that there were no forest dwellers in these areas.

III. Primary Residence of Persons For Three Generations

- 25. The next contention of the Orissa government is that the current residents were neither resident in nor dependent on forests for a period of 75 years.
- We first note that, as discussed above, that the revenue maps indicate prima facie that there were cultivators in the villages of Dhinkia, Nuagaon and Govindpur who were primarily resident in these forest areas in 1927 - 1928.

- 27. Second, documentary evidence was produced by villagers before the Committee relating to dependence on forests and forest lands. The most important of these types of evidence was receipts for payment of forest cess, or bonkar. Receipts have been submitted to the committee that belonged to people whose current descendants are still residing in Govindpur village. There are lineages of people going back to three or more generations. A person named Bhima Naik is shown on the cess receipts, whose grandsons Babaji Naik, Nanda Naik and Pagali Naik are currently resident in Govindpur. These receipts were numbered 67781, 13179, 2681 and many others (see **Annexures D-6, 7,8**), which were dated1912,1923, 1926, 1933 etc. They are fuelwood, water and forest cess receipts. Two other persons, Hadi Naik and Bhaba Dalei, are shown on a reciept no 34532 dated 12 March, 1926; their descendants are also still living in the village (Annexure D-9). Another lineage goes back to Dhobei Khatua whose forest cess receipt No 30117 dated 23 December, 1938 is with his grandson Nishakar Khatua residing in Govindpur village (Annexure D-10).
- 28. The nature of this Bonkar cess is described in the Cuttack Gazetteer of 1996 in the following terms:

"The resident tenants were allowed to take wood from the jungles on payment of a fee of Re. 0-4-0 (Re 0. 25) per annum for each hearth. On payment of re. 0-4-0 the tenant obtained a permit which entitled him to take 20 maunds of dry fuel and certain amount of wood for agricultural implements, as well as some creepers for thaching. If a tenant wanted more than 20 maunds he was charged for the excess at certain fixed rates. Six pice per maund was charged for dry fuel. Outsiders were charged at double the scheduled rates. Timber for house building was

obtained by the resident tenants at certain fixed rates. The Forest Enquiry Committee have recorded the rights and concessions in Kujang as follows:

- "A cess called Banakar at the rate of Re 0-4-0 per family is realized. Villagers paying Banakar are allowed to remove free 30 maunds of firewood and other timber required for agricultural implements per annum." (pp 42-43)
- 29. The payment of a forest cess was recorded, as such, as evidence of a concession / right as per the Forest Enquiry committee. One might also note that, at page 41, the section of the Cuttack Gazetteer containing the above is headed, "Rights and Concessions" and concerns the issue of forest management. As a further reference, section 3(1) (b) of the Forest Rights Act included nistari rights as forest rights under the Act. The rights exercised in this area were of the same nature as nistari rights, and, indeed, on page 28 of the Cuttack Gazetteer of 1996, these rights are referred to as nistari rights.
- 30. In sum, payment of Banakar constitutes evidence of use of forests for livelihood purposes in the sense in which the same is meant in the Forest Rights Act, and the existence of such receipts with currently resident families is conclusive evidence of the presence of other traditional forest dwellers.
- In addition to these receipts, there are also receipts for cess for 31. growing Betel vines in the forest areas going back to 1927. The amount fixed is for the existence of Betel vine and the current deposit was Rs 7 11 anna, 03 pahi and local cess was Rs 03. A certain Shama Das, caste Bauri of Dhinkia village, is recorded as having 27 decimals of betel vine cultivation in a settlement manual, 1927, form 73 (D 4, page). There are paan baraj cess receipts from Govindpur village too. The Khatiyan (or record of rights) for Pan barrage No 110 dated January 5th, 1931 belonged to Giridhari Bardhan (tenant) of Govindpur village, whose still living. They are Padmacharan Purnachandra Bardhan and Nimaicharan Bardhan, all residing in Govindpur village (Annexure D-5). These latter receipts also constitute evidence of livelihood dependence on forest lands in the sense of the Act, and therefore are evidence of the presence of other traditional forest dwellers in these villages.

- 32. Oral information from local residents regarding forests and migration history give interesting records of the type of forests with mangroves and even man eating tigers like those of the Sundarbans. One woman aged 80 years, Sulaba Swain of Dhinkia village told the Committee that a Britisher had come to her village to kill a tiger. She also related that her grandfather had first come to this village. Another elder, Bhasker Manthe of Dhinkia village (90 years) has old pattas dating back to 1889 and 1930.
- 33. In addition to those residing in the area, the Kujang Forest Settlement report of 1961 records the existence of fishing rights in the creeks of Kujang forest block. These rights were recorded in a **Sanad** issued in 1851 **for "Sarapentha Macchadia"** for exercising their right of fishing permanently. This was a right exercised by 99 villages pertaining to 57 fishing areas (**Annexure B-3**, Page 57, 83 of the settlement Report on Kujang Estate). Presently, as per testimony of villagers, at least 8 areas mentioned in this list of 57 fishing areas fall within the project area. The right of these villages to continue to receive the fishery lease was recognized by the Cuttack High Court in FAO 352/2005.
- 34. It should be noted that fishing is a recognized community right under section 3(1) (d) of the Forest Rights Act. As the said fishing takes place within a forest area and constitutes dependence on forest lands for livelihood needs, and documentary evidence exists to show exercise of this right by these communities since 1851, those exercising these rights are also Other Traditional Forest Dwellers in the meaning of the Forest Rights Act and their rights are also required to be recognized.
- 35. In light of the above evidence, the Committee finds that there are other traditional forest dwellers, in the sense of the Forest Rights Act, residing in the project area and/or dependent on the project area. The Committee sees no merit in the Orissa government's contentions in this regard.

IV. Presence of Scheduled Tribes in the Project Area

36. As per the Census 2001 and the voter list, there are 21 adult Scheduled Tribe persons residing in Polanga village (Gadkujang GP) and the ward member is a female ST (in fact, the seat is reserved for STs). The family names of these tribes are Hembram and Murmu. This village

of Polanga lies within the project affected area and would be displaced entirely due to the project.

37. The Committee thus finds that there are also Scheduled Tribes within the project area.

Part III. Implementation of FRA in the Project Area

37A. The State government has claimed that the Forest Rights Act implementation in the area is complete. As no claims were reportedly received prior to June 23, 2008, the process is now closed. The Committee has considered the implementation of the Act on the basis of the records provided by the Committee below.

I. Election of Forest Rights Committees in Proposed Steel Plant and Port Area

38. Across the State of Orissa, **palli sabha** meetings³ were called on March 16th and March 23rd, 2008, for the purpose of initiating the process of implementation of the Forest Rights Act and electing Forest Rights Committees. Not all *Palli Sabhas* in the State met on those dates, but these were the publicly announced days.

39. The **Palli Sabhas** in the area of the project are as follows:

Dhinkia Gram panchayat	Dhinkia
	Govindpur
Nuagaon Gram panchayat	Nuagaon
	Bhuyanpal
Gadkujang Gram panchayat	Noliasahi
	Polang

40. The State Government has stated before the Committee that all the six *Palli Sabhas* of the project area met on March 23rd, 2008 for the purpose of electing Forest Rights Committees. It has submitted to the Ministry of Environment and Forests, in its letter of March 15th, 2010,

³ The *palli sabha*, or assembly of the revenue village, has the same powers in Orissa as the *gram sabha* has in other States. For the purposes of the Forest Rights Act, all implementation in Orissa has taken place through the *palli sabhas*.

(Annexure A-21) a set of copies of resolutions passed in the various *Palli Sabhas* on that date. The same documents have been provided to the Committee in a more extensive form, along with some signatures, and along with records of meetings subsequently held in the villages of Noliasahi, Bhuyanpal and Nuagaon in January 2009. The government has also provided a chart indicating the dates on which **palli sabha** meetings were held and the decisions taken.

41. Many of these claims were disputed by various parties that appeared before the Committee. We first note the serious problems in the evidence brought before the Committee, then discuss the major dispute relating to Dhinkia village, and finally summarise the events in the other villages.

II. Nature of Evidence Submitted

- 42. The Committee notes that neither the State government nor those disputing its claims have been able to produce the **panchayat** or **palli sabha** registers for this period from any village. Till date the Committee has only seen one panchayat register, namely that of Nuagaon, and that for the period of 2009. The documents produced by the State government are not copies of the register but typed and cyclostyled formats which then appear to bear signatures of government officials, the sarpanch and various others on them. The government has said that these formats were used throughout the State. The Committee also notes that certain scanned versions of the purported panchayat registers were sent to its members by the Campaign for Survival and Dignity, and it was shown photocopies of the register during its visit.
- 43. None of these documents is in fact a legally valid **palli sabha** resolution. A valid resolution of the **palli sabha** is that transcribed in the **palli sabha** register or the panchayat register. Those produced by the State government would acquire validity only if they were transcribed in or otherwise entered in the register, while the scanned versions and photocopies produced by various other parties cannot be accepted as evidence unless the original is made available.
- 44. During the second visit to Orissa in September, 2010, the Committee met the new Principal Secretary of Forests and Environment. The Committee requested him to verify from the Collector, Jagatsinghpur about the existence of Panchayat registers containing **Palli Sabha** resolutions referred above. The Secretary telephonically contacted the District Collector and was informed that there were no such written

resolutions in the registers but only those filled in government formats. The Collector denied the existence of the Palli sabha resolution written in the Panchayat register of Nuagaon village which was shown to the Committee members during their visit to that village.

45. In light of these facts, the Committee has proceeded on the basis of the submissions by various parties, but notes that it cannot verify any of these submissions conclusively.

III. Dispute Regarding Resolution Passed by Palli Sabha of Dhinkia on March $23^{\rm rd}$, 2008

- 46. There is no dispute regarding the fact that a **palli sabha** meeting took place in the village of Dhinkia on March 23rd, 2008. The State government claims that this meeting passed a resolution electing a fifteen member Forest Rights Committee and invited claims to be filed within a three month time period, i.e. that the resolution passed was that recorded in the standard format.
- 47. Sisir Mahapatra, the present sarpanch of the Dhinkia **gram panchayat**, and several other villagers in the village, assert that a completely different resolution was passed. This resolution, they claim, asserted that the people of the area have been residing there for more than 300 years, that they have individual and community forest rights, and that the **palli sabha** decides under section 5 of the Forest Rights Act to protect the forests and lands of the area. It also elected a Forest Rights Committee. They claim that no government officials were present at the meeting. At the time elections had not been held in the **gram panchayat** of Dhinkia as a result of the conflict over the project, and Mr. Mahapatra presided not in the capacity of a sarpanch but merely as president of the **palli sabha**.
- 48. Mr. Mahapatra has submitted an affidavit to the Committee stating that when he attempted to submit this resolution at the panchayat office, the secretary refused to accept it, instead insisting that this resolution had no value as it was not in the State government's format for electing a Forest Rights Committee. He states that he therefore filled out the format with the names and signed it as well. This, however, was not the resolution of the *palli sabha*, he stated.
- 49. It is claimed by the POSCO Pratirodh Sangram Samiti that copies of this resolution were sent by registered post on March 24th, 2008 to the

Collector, Sub-Collector, BDO Ersama and the Chief Secretary. Receipts have been produced to this effect. (**Annexure C-14**). A scanned version of this resolution has also been circulated by the Campaign for Survival and Dignity.

- 50. This resolution referring to other traditional forest dweller status, invoking section-5, etc. has since been referred to by various persons and parties on several occasions. The earliest appears to be a May 16th, 2008, letter by Shri D Raja, Member of Parliament, to the Prime Minister (**Annexure C- 15**) in which he referred to this resolution in these terms. The same reference has also been made by the POSCO Pratirodh Sangram Samiti and groups supporting them at various times, including in the Samiti's representation to this Committee.
- 51. In the absence of the register, however, it is impossible to conclusively verify either the State government's claim or the claim that a different resolution is passed.

IV. Election of Forest Rights Committees in Other Villages

- 52. In **C 13,** the Committee has noted events in each of the villages on the basis of the official record, as well as the disputes that have been raised. In summary, the main findings are as follows:
- (1) The quorum of 66% was not met in any of the villages during March 23rd, 2008 or subsequent *Palli sabha* meetings.
- (2) There are disputes regarding the resolutions passed in Dhinkia and Noliasahi villages.
- (3) In Bhuyanpal and Noliasahi, the record states that the *Palli Sabhas* first resolved not to constitute an FRC as there were no OTFDs in the villages and then constituted one nevertheless a year later. The Committee is unable to understand how this occurred. Moreover, neither of the purported 2008 resolutions in these villages has any signatures attached. Whether such a meeting took place at all in Noliasahi is disputed by the Gadkujang panchayat samiti member, who is a resident of Noliasahi.
- (4) There appear to be two purported resolutions of the meeting that took place in Nuagaon on 23.3. 2008.

53. In light of the above, the Committee finds that the election of Forest Rights Committees – the first step in the forest rights recognition process as per the Forest Rights Rules – cannot be said to have taken place satisfactorily in the project area. The entire process has been vitiated by lack of quorum. Moreover, the facts are disputed and there is no conclusive evidence in favour of any party.

V. Composition of the Sub-Divisional Level and District Level Committees in the Area

- 54. The Forest Rights Act and Forest Rights Rules vest several specific responsibilities and functions in the two higher bodies that function above the village level: the Sub Divisional Level Committee and the District Level Committee.
- 55. Section 6(8) of the Forest Rights Act and the concerned Rules provide a specific composition for both the Sub Divisional Level and District Level Committees. Each is to consist of three government officials, namely representatives of the Tribal Welfare (or equivalent), Revenue and Forest Departments, along with three members of the Panchayat Samiti (in the case of the SDLC) or the Zilla Parishad (in the case of the DLC). The latter are to be nominated by the **Zilla Parishad**. This 'balance' between official and non-official representatives was a subject of debate in Parliament as well, and the result of an assurance given by the Minister of Tribal Affairs to the Rajya Sabha on December 18th, 2006. The Minister informed the House that "We have already taken a view that the Committee should be balanced. There will be six members. Three are to be nominated by the Panchayat, of which two must be from Scheduled Tribes, and one woman; and of the other three representatives, there will be one each from the Revenue, from the Tribal Affairs and from the Forest. Is it all right? I am clear about this."
- 56. In the POSCO project area, the concerned Sub-Divisional Level Committee was constituted on 18.03.2008 with the following members:
 - (1) Sub-Collector, Jagatsinghpur District
 - (2) Three **Panchayat Samiti** members, nominated by the **Zilla Parishad** president on 17.03.2008; there appears to have been no decision of the **Zilla Parishad**

- (3) Two Assistant Conservators of Forest, one for Cuttack and one for Rajnagar
- (4) The District Welfare Officer
- 57. The minutes submitted by the Orissa government to the Committee, however, show an inconsistent pattern of people who have signed as members at SDLC meetings. Such meetings were never confined to the seven members in the original notification, and in all cases others have signed (in the case of the last meeting for which minutes were submitted, that on 05.11.2009, 13 people have signed).
- 58. Additional people who have signed as members include:

Meeting	Additional Persons Signing as Members
26.11.20 08	SDPO of Jagatsinghpur; BDO of Jagatsinghpur, BDO of Biridi, "Tdv" of Ersama, and a "WEO". No panchayat samiti members present.
24.01.20 09	Range Officer of Kujang; Tehsildar Ersama; Tehsildar, Biridi; a revenue officer; a "WEO". Two panchayat samiti members present.
05/11/0 9	Tehsildar, Ersama; Forester, Kujang; Gram panchayat Executive Officer in charge, Ersama block; Executive Officer of Padmapur GP; FRC secretary, Padmapur; BDO, Biridi; Gram panchayat Executive Officer in charge, Biridi; WEO, Ersama

- 59. On March 4th, 2008, the District Level Committee was constituted for Jagatsinghpur District with the following members:
 - (1) District Collector
 - (2) Two Divisional Forest Officers, one for Cuttack and one for Rajnagar
 - (3) "PD DRDA" Jagatsinghpur (presumably project director, District Rural Development Authority)

- (4) District Welfare Officer
- (5) Three members of the **Zilla Parishad**, nominated by the Additional District Magistrate, Jagatsinghpur, in consultation with the **Zilla Parishad** President.
- 60. Only one meeting of the District Level Committee appears to have taken place (on 16.11.2009), at which all members were present except one ZP member.
- 61. On the basis of the above, the Committee finds that neither the Sub Divisional nor the District Level Committee was constituted as per the statutory requirements in the Forest Rights Act and Rules.

VI. Actions of the Sub-Divisional Level Committee

- 62. A brief glance at the Rules and at some concerned Orissa government orders shows that the following tasks are required of the Sub Divisional Level Committee at this stage in the proceedings (i.e. during the period of filing of claims):
- (1) Publicity and awareness raising, including provision of claim forms and training, and specifically training on community rights⁴;
- (2) Provision of records, including forest and revenue maps, electoral rolls, working plans, forest settlement reports, reserved forest notifications, etc. to the *Palli Sabha* and the Forest Rights Committee⁵;
- (3) Collation of resolutions of the Palli Sabha⁶

VI. 1. Publicity and Awareness Raising

63. As per the official records of the 23.3.2008 palli sabha meetings at which Forest Rights Committees were elected, government officials were present at each meeting and explained the Act to those present. This

⁴ Rules 6(k) and 6(l), Para 4 of "Frequently Asked Questions on Community Forest Rights", letter dated 20.2.2009 of ST & SC Development Department.

⁵ Rule 6(b) and Para 7 of "Frequently Asked Questions on Community Forest Rights", letter dated 20.2.2009 of ST & SC Development Department, Government of Orissa.

6 Rule 6(c).

point is disputed by the sarpanch of Dhinkia and the Panchayat Samiti member of Gadkujang, who claim in their affidavits to the Committee that no government officials were present in the concerned meetings of the Dhinkia and Noliasahi *Palli Sabhas* (in the case of Noliasahi, it is claimed that no meeting took place on 23.3.2008 in any case, but such a meeting took place later in that year in the absence of officials). In the case of Dhinkia, the *POSCO Pratirodh Sangram Samiti* has also argued that no government officials could have been present, as no officials were (or are) being permitted to enter this village as a result of the protest blockade.

- 64. From the minutes supplied to the Committee, the Sub-Divisional Level Committee met for the first time on 26.11.2008. At this meeting the sub-Collector appears to have instructed the concerned BDOs to supply Oriya translations of the Act and the Rules, electoral rolls and revenue maps to the **Palli Sabhas**, as well as hold publicity and awareness raising meetings through meetings of the **Palli Sabhas** and **Gram Panchayats**. An action taken report on these points were to be presented to the next Sub Divisional Level Committee meeting, but no such report is referred to or appears in any of the subsequent minutes. It is notable that this meeting took place eight months after the election of the Forest Rights Committees and five months after the expiry of the three month deadline for filing of individual claims.
- 65. In their affidavits to the Committee, the sarpanch of Dhinkia and the Panchayat Samiti member of Gadkujang claim that they have received no information, training, or documents from any government official in connection with the Forest Rights Act till date.(**s C 16, C 17**).

VI. 2. Provision of Records

- 66. As noted above, the minutes of the 26.11.2008 SDLC meeting contain the only reference in any of the minutes on record to the provision of government records to the **Palli Sabhas**. The action taken report in this regard is not referred to in any subsequent meeting.
- 67. On this point as well, the sarpanch of Dhinkia and the Panchayat Samiti member of Gadkujang have stated in affidavits that they have received no documents or records from any government official till date.

VI. 3. Collation of Palli Sabha Resolutions

- 68. It is not clear if the resolutions passed on March 23rd, 2008 were collated by the Sub Divisional Level Committee. No reference is made in any of the minutes to any of the villages of the project area.
- 69. Two other sets of *Palli Sabhas* resolutions do not appear to have been collated. The *Palli Sabhas* held in January 2009 as a result of the letter of the Department of Panchayati Raj were held specifically to consider, *inter alia*, any decisions of the Sub Divisional Level Committee. The SDLC meeting minutes of 24.01.2009 (Annexure C-18) refer to these meetings and state that their resolutions have not yet been received by the Committee. However, the subsequent meeting on 05.11.2009 makes no reference to these resolutions (Annexure C-19).
- 70. On December 19th, 2009 (**Annexure A-15**), as noted earlier, the Collector asked the BDO Ersama to request the *Palli Sabhas* of the area for their approval for diversion of forest land for the POSCO project; on January 19th, 2010 (**Annexure C-20**), this was forwarded by the BDO Ersama to the three concerned sarpanches. According to submissions made by the *POSCO Pratirodh Sangram Samiti* and the concerned sarpanches, Dhinkia, Govindpur and Nuagaon met and passed *Palli Sabha* resolutions rejecting the proposed diversion. However, no SDLC meeting has been held after November 2009. Therefore, there appears to have been no collection or collation of the resolutions that the Collector had requested.
- 71. In light of the above, the Committee finds that the Sub Divisional Level Committee has comprehensively failed to perform several key functions required of it under the Forest Rights Rules. In the absence of performance of these functions, it is difficult to expect that the people of the area would be able to claim their rights under the Forest Rights Act.

VII. Actions of the District Level Committee

- 72. As with the Sub Divisional Level Committee, the District Level Committee has certain responsibilities under the Rules and other orders which are relevant:
 - Ensuring that records have been provided by the Sub Divisional Level Committee (Rule 8(a));
 - Provision of relevant documents for community forest rights to the *Palli Sabhas* and SDLCs (Para 7 of "Frequently Asked Questions")

- on Community Forest Rights", letter dated 20.2.2009 of ST & SC Development Department, Government of Orissa).
- 73. The only meeting of the District Level Committee does not appear to have considered the issue of records at all, being only concerned with deciding on claims received from the village of Padmapur (outside the project area). There also appears to have been no discussion about awareness raising.
- 74. As in the case of the SDLC, the District Level Committee does not appear to have met again after the request to **Palli Sabhas** to pass resolutions on the proposed diversion.
- 75. In light of the above, the Committee finds that the District Level Committee too has comprehensively failed to fulfill its obligations under the Forest Rights Act and Rules.

VIII. Implications of the Failure to File Claims Prior to Expiry of Three Months after the Date of Invitation of Claims

- 76. The government has sought to make a general argument that no claims were filed prior to June 23, 2008, when the three month deadline (referred to in Rule 11(1)(a)) following the election of Forest Rights Committees and the invitation of claims by the **Palli Sabha** concluded. The government therefore contends that further filing of claims is time barred and no rights can be recognised now, and therefore no further question of implementation arises.
- 77. The Committee does not see merit in this contention. The following may be taken note of.
- 78. Rule 11(1)(a) which refers to the said deadline is concerned with the filing of individual claims before the Forest Rights Committee. The said deadline does not apply to community claims, which are prepared by the Forest Rights Committee.
- 79. The filing of claims is dependent not only on the people of the area, but on the fulfillment by the government of its obligations.
- 80. The position adopted by the Orissa government in this regard is inconsistent with its practice in other areas. Since **Palli Sabhas** were held in most of the State on the same dates as in this area, this stand would appear to imply that no claims should have been accepted

anywhere in the State after June 2008. The last publicly available data published by the Orissa government on the Internet, which is dated November 2009, shows that more than 21,000 claims were filed and processed between March 2009 and November 2009. Indeed, to the knowledge of the Committee, claims are still being accepted in other areas.

- 81. This position is also inconsistent with the practice being adopted in other parts of the country. Most states held initial **Gram Sabha** meetings and Forest Rights Committee elections in the first half of 2008. Yet claims are still being accepted in other States.
- 82. Unlike comparable statutes such as the Indian Forest Act, the Forest Rights Act does not extinguish rights in the case of a claim not being made. As such, in law, it would not be correct to disregard such rights merely because claims have not been made.
- 83. The heavy presence of police and security forces in the area was repeatedly cited by villagers as a deterrent to filing of claims. Such persons said they feared arrest due to omnibus FIRs being filed in the area, and hence could not be expected to procure evidence or obtain information in order to file claims.
- 83. Rule 11(1)(a) also grants the **Gram Sabha**(**Palli Sabha** in this case) the power to extend the three month deadline. The government has sought to contend that this should be done within the initial three month period. The Rules do not require this as such, and given the fact that no deadline is specified for community claims, it would not seem a reasonable interpretation.
- 84. As such, the Committee does not regard the failure to file claims within the three month deadline as particularly material to the validity of future claims. In any case the Committee notes that claims have now been filed in July and August 2010.

IX. Recognition of Rights under Other Procedures

85. The Committee notes that the Orissa government has also taken the stand that those ineligible under the Forest Rights Act should receive rights as part of the regularisation of pre-1980 occupations of forest land.

86. Thus, a letter from Shri S C Mohanty, Principal Chief Conservator of Forests, Orissa dated 25th February, 2010 (Memo No. 2779/9F (Misc) 75/09 (Vol –II) (**Annexure C-10**) to all Divisional Forest Officers, clearly states, "Besides, regularization of pre- 1980 eligible category of forest encroachments which are dealt with under the Forest Conservation Act, 1980 includes the cases of people belonging to both tribal and non-tribal groups. These pre-25.10.80 forest encroachments can be processed for regularization under the procedure laid down under FC Act. Under this procedure, the claims of non-tribals which cannot be settled under the ST and OTFD (RFR) Act, 2006 may be taken up. All such cases which have already been approved under the F.C.Act can be settled in favour of the eligible claimants, subject to compliance of the stipulations made by MOEF, Government of India in their final approval order in this respect".

Part IV. Clearance for Diversion of Forest Land Under the Forest (Conservation) Act

- I. Implications of the Forest Rights Act for diversion of forest land under the Forest (Conservation) Act
- 86. The Committee first notes that the Forest Rights Act has specific implications for the process of diversion of forest land. As the Forest Rights Act vests community and individual rights on forest land (s. 4(1)), empowers the **Gram Sabha** to function as a statutory authority with ownership rights, protection rights and management powers (s. 3(1) and 5), and finally explicitly bars removal of any forest dweller prior to completion of the recognition process (s. 4(5)), the forest clearance process can no longer proceed without taking into account the rights and powers of forest dwellers and the **Gram Sabha** under the Act. As the Ministry has stated in its decision on the Niyamgiri mining case:

"In sum , the MOEF cannot grant clearance of rights under the Forest Rights Act for non-forest purposes unless :

- The process of recognition of rights under the Forest Rights Act is complete and satisfactory;
- The consent of the concerned community has been granted; and

- Both points have certified by the **Gram Sabha** of the area concerned (which must be that of the hamlet being a Scheduled area).

All these conditions, not any one, must be satisfied. This is irrespective of the fact whether people have filed claims or not."

- 87. These requirements were spelled out in the August 3rd, 2009 circular of the Ministry, (**Annexure C-1**) which required that all State governments must submit the following documents when applying for a final Stage II forest clearance:
 - (1) A letter from the state Government certifying that the complete process for identification and settlement of rights under the FRA, has been carried out for the entire forest area proposed for diversion, with a record of all consultations and meetings held;
 - (2) A letter from the State Government certifying that proposals for such diversion (with full details of the project and its implications, in vernacular/ local languages) have been placed before each concerned *Gram Sabha* of forest dwellers , who are eligible under the FRA;
 - (3) A letter from each of the concerned *Gram Sabha*, indicating that all formalities/processes under the FRA have been carried out, and that they have given their consent to the proposed diversion and the compensatory and ameliorative measures if any, having understood the purposes of the proposed diversion;
 - (4) A letter from the State Government certifying that the diversion of forest land for facilities managed by the Government as required under section 3(2) of the FRA have been completed and that the **Gram Sabhas** have consented to it;
 - (5) A letter from the State Government certifying that discussions and decisions on such proposals had taken place only when there was a quorum of minimum 50% of members of the *Gram Sabha* present;
 - (6) Obtaining the written consent or rejection of the *Gram Sabha* to the proposal;

- (7) A letter from the State Government certifying that the rights of Primitive Tribal Groups and Pre-Agricultural communities, where applicable, have been specifically safeguarded as per section 3 (1) (e) of the FRA;
- (8) Any other aspect having bearing on operationalisation of the FRA.."
- 88. The Committee notes that certain specific requirements that are stated in this circular are of particular importance. These are:
 - 1) Certification of completion of the process under the Forest Rights Act must be made by the Gram Sabha. This is due to the fact that the *Gram Sabha* is the initiating authority under section 6(1) of the Act. As a result, as described above, the *Gram Sabha* decides both when claims can be invited and until when they can be filed. As such, only the *Gram Sabha* can declare the process complete, and this is required also by basic transparency and accountability.
 - 2) This requirement applies regardless of whether there are eligible people or not in the area. The Act provides no separate procedure for determining eligibility eligibility is decided under the same process as the claims for rights. As such, it is only the *Gram Sabha* that can make the initial determination of eligibility, particularly where there is contestation on this issue. As the Chief Secretary of Orissa stated in a circular to all District Collectors on 04-02-2010 (Annexure C- 2).

"The decision – making authorities under the Act are clearly spelt out. They are the *Gram Sabha/Palli Sabha*, Sub-divisional Level Committee and the District level committee. It must be noted that the role of the officials is to render proper and timely assistance to these communities and to ensure custody of the records. No individual officer has been given the powers under the Act to overrule or object to the decisions of the appropriate authority, other than filing appeal to the next higher authority as prescribed."

- Finally, the certification of completion of the process and of 3) consent of the Gram Sabha must take place prior to the grant of final forest clearance. Some have sought to argue that the implementation of the Forest Rights Act is not the responsibility of the Ministry of Environment and Forests. However, forest clearance is not concerned with implementation of the Act; it is a situation in which a decision of the Ministry will directly militate against the provisions of the Act. Like any government agency, the Environment Ministry cannot act in a manner that would result in destruction of legal rights. Further, grant of final forest clearance without these approvals also creates a situation of legal and administrative uncertainty - can the land be taken or not? This in turn has a major effect on the recognition of people's rights and their ability to freely exercise their rights and powers under the Forest Rights Act. The Committee finds that this is what has occurred in the proposed POSCO project area.
- 4) Mere completion of recognition of rights is not sufficient the consent of the palli sabha must also be taken. This is now therefore also a requirement under the Forest Conservation Act, as this circular was issued under the latter.

II. Grant of Final Forest Clearance for the Project

- 89. As said earlier, on December 29th, 2009 the Ministry of Environment and Forests granted final stage II clearance for diversion of forest land for the project. However, at the time and subsequently, the Ministry had not and has not received any certificate from any *Palli Sabha* in the area regarding either completion of implementation of the Forest Rights Act or consent to the proposed diversion. Thus the clearance was issued in the absence of the legally required materials and approvals, mandated both by law and by the Ministry's own order.
- 90. When this issue was raised by eminent persons, the **POSCO Pratirodh Sangram Samithi** and political leaders in January, 2010, the Ministry on January 8th issued a "clarification" stating that without compliance (**Annexure A-17**) with its August 3rd, 2009 order (**Annexure A-13**), including the consent of the people of the area, the "project cannot go ahead".

- 91. The clearance itself was not withdrawn, however. This legally and administratively ambiguous position has continued till date, with the project having received final forest clearance, but simultaneously this being "conditional" on compliance. The basis of granting the original clearance itself remains unclear.
- 92. The Committee finds that the grant of forest clearance in this manner was grossly illegal and in direct violation of both the Forest Rights Act and the Forest (Conservation) Act. The subsequent "clarification" has not remedied this illegality, instead producing a situation of ambiguity. The said final clearance, being illegal, should be withdrawn.

IV. Process of Consent in the Project Area

- 93. On October 24th, 2009, the Chief Secretary of Orissa forwarded the August 3rd 2009 order of the Ministry to all District Collectors and asked them to furnish the certificates required therein for all proposed diversions. Gram sabha resolutions were to be attached in Oriya with an English translation.
- 94. This letter was forwarded by the District Collector of Jagatsinghpur District to the BDO Erasama on December 19th, 2009, with respect to the POSCO India project, and specifically stating that he would furnish a certificate based on the decision of the palli sabhas.
- 95. On January 19th, 2010, the said letter was forwarded by the BDO Erasama to the sarpanches of the three concerned gram panchayats (Annexure C-20).
- 96. It was reported in the villages that on February 3rd, 5th and 6th of 2010, the palli sabhas of Nuagaon, Dhinkia and Govindpur respectively passed resolutions rejecting the proposed diversion, asserting their power to protect forests under section 5 of the Act and asserting their eligibility and exercise of forest rights. Documents purporting to be copies of these resolutions were also given to the Committee separately. However, the concerned panchayat registers were not shown to the Committee during its visit.
- 97. The State government contests the claim that these resolutions were passed.

98. The Committee finds that, even if the State government contests the passage of these resolutions, it cannot deny the letters of the Collector and the BDO Erasama requesting the convening of palli sabhas. If so, it was the duty of the State government to ascertain as to whether these palli sabhas were ever convened, and if so what their decision was. To ignore the entire process appears to be a suppression of evidence.

V. Land Takeover in July 2010

- 99. On July 27th, 2010 the Orissa government began the process of land takeover in the project area based on the Stage 2 forest clearance. A total of 11 acres of forest land cultivated by 96 people was taken by the state administration (**Annexure A-26**) before the Ministry sent an order to stop acquisition based on the report of violations of FRA by the Ashish Kothari committee.
- 101. The Orissa government has subsequently sought to claim that what took place was a "voluntary surrender" of land during the socio-economic survey of the area. However, press reports (Hindu, July 28, 2010) indicate that the socio-economic survey of the Gadkujang *Gram Panchayat* (where the lands were taken) had been completed on July 1st, 2010. Other press reports from these dates repeatedly quote government officials talking of "land acquisition" in the area.
- 102. Given that compensation was paid to landholders as per the project's R&R package and that the crops on the land were demolished, it is quite clear that this was a diversion of forest land.
- 103. The Committee therefore finds that this diversion was illegal. The final clearance was conditional on compliance with the FRA and the August 3rd, 2009 order. Neither had implementation been completed nor had any palli sabha resolutions to this effect, or stating consent, been sent to the Ministry of Environment and Forests. Therefore, the land takeover was clearly a violation of section 2 of the Forest Conservation Act, 1980 and of sections 4(1), 4(5) and 5 of the FRA Act, 2006.

Part V. Conclusions

104. Based on the above facts the following are the Committee's findings.

- 105. Numerous forms of evidence point to the presence of forest dwelling STs and OTFDs, as per the definitions provided in the FRA Act, 2006 within the project area beyond any dispute.
- 106. The Orissa government appears to be misinterpreting the law and attempting to find pretexts for denying the existence of forest dwellers in the area.
- 107. The Forest Rights Act process in the area has been vitiated by the failure of any **Palli Sabha** meeting to achieve the required quorum and the failure of the administration to fulfill its obligations to assist, support and provide records as part of the process.
- 108. The Orissa government and district administration have violated the provisions of the Forest Rights Act in the following ways:
 - (1) Failing to provide information, awareness, training or documents as required to the people and the *Palli Sabhas*;
 - (2) Usurping the statutory authority of the **Palli Sabha** to determine eligibility;
 - (3) Ignoring the powers of the *Palli Sabha* under section 5;
 - (4) Seeking to impose an artificial and arbitrary deadline in an attempt to prevent the filing of claims;
 - (5) Taking over land prior to completion of recognition of rights.
- 109. As such, process of FRA has not been implemented as per the Act in a transparent and democratic manner authorizing/ empowering the **Palli Sabhas** of the project affected villages to stake their claims both individual as well as community forest rights as per the letter and spirit of the Act.
- 110. The final clearance by the Ministry of December 29, 2009 contradicts and violates the letter and spirit of Forest Rights Act and should be withdrawn.
- 111. The process of FRA should be re-initiated in a genuine and transparent manner. Those ineligible under the Act should also have their claims considered under the pre-1980 regularization process.

112. The Orissa government's takeover of land in July 2010 was illegal and in violation of the Forest Rights Act and the Forest (Conservation) Act.

SECTION 4 Rehabilitation and Resettlement (R & R) Part A General

I. Introduction:

- 1. Most large development projects in India, whether they are established on private, government or forest land, cause some displacement of people. Such displacement seriously affects the lives of those displaced, usually adversely. Even where people are not physically displaced from their homes, but lands owned by them, or the lands and resources on which they depend for their livelihood, are acquired or given away for a project, there is considerable hardship caused. Two important aspects, that therefore need to be ensured, whenever any development project is taken up are, first, that the number of people to be displaced or adversely affected by the project is the very minimum; second, that for that absolute minimum number, measures are taken to reduce the adverse impacts as much as possible and resettle them in a manner that leaves them better rather than worse off.
- 2. Because the impacts of involuntary displacement due to development projects are often severe, the Government of India as well as some State Governments have rehabilitation and resettlement policies in place for several years now. These policies spell out the entitlements of the persons who will be displaced, how they are to be resettled and rehabilitated, what are the minimum facilities and benefits that they should get, and other such details. These policies have been improved and refined over the years. The Govt of India's latest R & R policy is of the year 2007 (replacing the earlier policy, Rehabilitation and Resettlement of Project Affected Families, 2003). The Govt of Orissa's R & R policy (ORRP) is of the year 2006.
- 3. One of the tasks entrusted to the POSCO Enquiry Committee was to investigate and ascertain the status of implementation of the rehabilitation and resettlement provisions in respect of the POSCO project. The environment clearance granted to the POSCO project by the Ministry of Environment and Forests, on 19 July 2007 (Annexure A-6) states as one of its conditions (clause (xv) of the specific conditions), Rehabilitation and resettlement plan shall be implemented as per the policy of the State Govt of Orissa as per the revised R & R policy in a time bound manner and report submitted to the Ministry, its Regional Office at Bhubaneshwar, and OPCB.
- 4. During its visit to Orissa, the POSCO Enquiry Committee learnt, from discussions with the State Government officials as well as with the affected people, that between July-August, 2010, 11.85 acres of forest land containing 96 betel vine units (each unit 10-15 decimals of land) has been surrendered by PAFs who accepted 1.36 crore rupees towards ex-gratia compensation. Land acquisition has since been stopped because of a 'stop' order from MOEF as a result of FRA violations reported by the Saxena Committee. Hence assessing the implementation of the R & R package was therefore not possible. The Committee limited itself to examining aspects such as the

extent to which the Orissa R & R Policy had been adopted for the POSCO project, the procedure in place to identify the displaced and project affected people; whether such a procedure had managed to capture all those who were affected and displaced; the adequacy of the R & R package for the people displaced or affected; their satisfaction with it; the procedure laid down to finalise the rehabilitation package, etc.

Part B

The Resettlement and Rehabilitation Policy I. Limited definition of 'displaced family'.

5. The Orissa Resettlement and Rehabilitation Policy (ORRP), 2006 focuses almost entirely on families 'displaced' by acquisition of land and very little on families 'affected' by acquisition of land. It is important to point out that under the ORRP, a family is classified as a 'displaced family' only if its homestead land (i.e. the land on which its dwelling unit is located), is acquired and the family relocated. The loss of agricultural land, either partly or fully, does not entitle a family to be classified as a 'displaced family', unless its homestead is also acquired. Almost all the benefits and entitlements spelt out in the ORRP are meant for displaced families. There is also no mention of agricultural or other labourers who may get affected by the land acquisition. The Policy does in some cases provide benefits for families other than 'displaced families', that is for those who lose part, or all, of their agricultural land, or families who are defined as long term 'encroachers' on government land, but these benefits are fairly minimal, and the families are given a lower order of preference. (ORRP, para 9, Rehabilitation Assistance, sub paras I and II; para 10: Benefit to landless and homesteadless encroachers) (Annexure C-25).

II. Families displaced -discrepancy in numbers.

- 6. The number of families to be displaced due to the POSCO project is available from several sources. The Rapid Environment Impact Assessment (REIA) report for the POSCO integrated steel plant, on the basis of which Environment Clearance (EC) was granted, mentions the number of families as being 471. Subsequently, as required under the ORRP, a socio-economic survey was undertaken by the Xavier Institute of Management, Bhubaneshwar (XIMB) (January 2008) (Annexure B-11) to enumerate all the families who face displacement due to the project, ascertain of their demographic profile, occupational status, income, ownership of assets, and other details.
- 7. The survey covered six villages in three Gram Panchayats, i.e. all the villages where families are to be displaced because of the POSCO project. These are Dhinkia and Govindpur villages in Dhinkia GP, Noliasahi, Bhuyanpal and Polanga villages in Gadakujanga GP, and Nuagaon village in Nuagaon GP. A seventh village is also to be affected by the project, viz. Bayanala in Gadakujang GP, but in this village, as reported, no families are being displaced.
- 8. According to the socio economic survey, the number of 'original families' to be displaced from all the six villages is 466 ('original family' has been defined under the Orissa R & R Policy as a unit in which all members live together in a single household with a common kitchen.) The Policy requires certain other categories of persons also to be treated as separate families (even if such persons live together in the same household

- as others). These categories are: all major sons irrespective of their marital status, unmarried daughters or sisters above the age of 30 years, widows and divorced women, handicapped persons and orphans who are minors. These families are called 'extended families' in the socio economic survey report, and 'separate families' in some other reports. The number of these families is another 252 bringing the total number of families to be displaced in the project area to 718 (466 +252).
- 9. The R & R package prepared for the POSCO project covers all of these families. In addition it covers 100% agricultural land losers, partial agricultural land losers, families who had homes on government lands, and people who undertook cultivation on government lands (encroachers). Figures given by POSCO indicate that the number of 100% land losers is 418 and that of partial land losers is 582 (1000), but since several of these persons also fall under the displaced persons category, the total figures actually add up to 2476 from the socio-economic report by Xavier Institute of Management consultants hired by POSCO . In the same reports the total numbers of Project affected families are given as 3578 families. Looking at the 2001 Census for population figures for the same villages the total number of families according to this source of data also adds up to 3578 families. In other words there were two different figures of 1000 families and that of 2476 families who will either partially or totally lose their land was arrived at from the same Xavier study. As seen these two figures are in great variance from each other. Definitely, the Xavier study had a number of methodological problems as they themselves admit. Due to the people's resistance they were unable to go themselves but had to send local NGO youth at their risk to collect the data under distant supervision. They were unable to collect specific data on landholdings of the project affected families as the PAFs were non-cooperative. No person or family has been recognised by the government as a 'forest rights holder' in this area so far and instead have been categorised as "Encroachers". (This matter has been separately dealt with by the Committee in a separate chapter.)

III. Rehabilitation and Periphery Development Advisory Committee (RPDAC).

10. While the benefits to be given to displaced and project affected persons (PAFs) are expected to follow what is laid down in the ORRP, the details are meant to be worked out and approved by the Rehabilitation and Periphery Development Advisory Committee (RPDAC), a body mandated under the ORRP to oversee the rehabilitation process.

11. The ORRP states as follows:

"In order to encourage participation of displaced persons and their elected representatives in implementation and monitoring of the R & R package, to oversee and monitor periphery development, the government may constitute Rehabilitation cum Periphery Development Committee (RPDAC) for each or a group of projects falling in one district. The detailed composition of the Committee shall be notified by the government and it may include people's representatives, one or two leading NGOs of the affected area, and select government officers, and any other persons to be notified by the Government. Adequate representation will be given to women and indigenous communities

(wherever applicable) in the Committee. The Chairman of the Committee will be at liberty to co-opt members for efficient discharge of its functions."

12. An RPDAC has been set up for the POSCO project with the Revenue Divisional Commissioner (RDC), Cuttack, as its head and with representation from the affected villages and other representatives. The RPDAC has so far met twice, the first time in 2006 (as reported to us) and the second time in 2010. The Committee was informed that the first meeting of the RPDAC was primarily meant to make people aware about the POSCO project. The second meeting held in August 2010, however took several substantive decisions on a number of important matters, as is apparent from the minutes. However, the Sarpanches of Dhinkia and Nuagaon who are members of the RPDAC committee did not attend showing that they had boycotted this meeting. (as reported by those villagers to the committee on their first visit). The list of members who had attended was not sent to the committee even after repeated requests to revenue development commissioner. The maximum government land (majority being protected forests) to be diverted for POSCO is being cultivated by the villagers of these two GPs alone which amounts to 87 % of the total government land cultivated by all Project affected villagers. Hence there is strong resistance to diversion from these two GPs of Dhinkia and Nuagaon who have much to lose. This shows that the government is unwilling to face up to the fact that even this new R&R package has not convinced or appealed to the majority of PAFs that the compensation package is a better deal than retaining their lands. Only a small proportion of PAFs mostly those being displaced have been induced to opt for this new R&R package.

IV. POSCO R & R package – Is it more of the same?

13. The POSCO package for resettlement and rehabilitation follows the ORRP more or less faithfully, improving the rates of land compensation all around and additionally including the betel vine growers or so called 'Encroachers'. A statement indicating the rehabilitation package as per State Government norms, the package initially declared by POSCO, and the package finally approved in the RPDAC is at Annexure C-26. In some cases, as is apparent, e.g. the rates to be given per acre to encroachers of agricultural land, to cultivators of betel vines, payments to labourers engaged in the cultivation of betel vines, to owners of private agricultural land, the benefits have been significantly enhanced by the RPDAC. However, the R&R package as it is called is more a land acquisition and one time compensation for diverting the land for POSCO especially in the case of PAFs who are literally all families belonging to these three project affected GPs. These are a total of 3578 families. All these families are losing either all or partially, government land that they are cultivating since their forefathers (Socio-economic report of POSCO project site by Xavier Institute of Management, January 2008, Annexure B11). Each of these families are on an average earning Rs 1,00,000 to Rs 1,50,000 per betel vine unit (each unit = 10-15 decimals of land, 100 decimals= one acre). During the Committee's visit to the villages we were told that each family on an average can earn Rs. 1 lakh annually from one unit of betel vines and add to their total earnings in a substantial way as compared to one point compensation offered by R&R which amounts to one years annual income per betel vine

unit. (Rs 1 lakh per 10 decimals of betel vine as compensation for acquisition of this land in the enhanced R&R package).

V. Identification of displaced people.

- 14. As mentioned earlier, displaced families have been identified through the socio-economic survey conducted by the Xavier Institute of Management. In order to verify the accuracy of the list as well as to invite claims and objections from families who might have been left out, the RPDAC at its 2nd meeting resolved to publish the list of displaced families in the project affected villages for a period of one month, and thereafter to finally prepare and approve the list.
- 15. A similar approach has been adopted for betel vine growers. The list of betel vine growers, prepared by the Tahsildars of Kujang and Ersama would also be approved after publication in the villages concerned, and verification of further claims. No mention of such verification of names of prawn cultivators, land losers, affected fishermen, those who have houses on government land, etc. has been mentioned, but it is presumed that the RPDAC would adopt a similar procedure. However, unless the majority of PAFs and their palli sabhas are involved in a democratic and all inclusive manner in the R&R process and their views taken the whole exercise of mere acquisition of land will become another battleground in these areas.

VI. Landless Agricultural Labour and fishermen not included.

- 16. As mentioned earlier, one category of project affected person which does not figure in this list at all, is the landless agricultural and/or other labourer. This is perhaps the reason why some fishermen's groups have approached the committee stating that their rights of fishing (in the estuary where the captive port is to be constructed and along the adjacent coast) have been overlooked. According to the State Government, the only fishermen who are affected are the displaced fishermen families. A representation from the Kaibarta fishing community indicates that traditional fishing rights along the coastline in question has been given to some fishing communities by the Raja of Bardhaman (owner of most of what is now the project land), prior to the abolition of estates under the Orissa Estate Abolition Act, 1952 (Annexure B 3). It is not clear whether this right has been subsequently recognised by the State Govt. In fact, there is a suit pending before the District Court where in a n injunction restraining the authorities not to interfere with the rights of the fishermen has been obtained and is still in force. The State Government needs to look at how these fishing communities are entitled to compensation and rehabilitation benefits, and take action on this basis. There are at least 8 fishing areas involved in this project site with approximately 20,000 families dependent on fishing from this port site. The Committee was unable to meet/talk with these fisher folk to get their point of view.
- 17. POSCO has proposed to construct a fishing jetty to the south of Jatadharmohan, (the mouth of the creek), to facilitate the fishermen community to ply their trade, since Jatadharmohan itself where they currently carry out their fishing would be closed to them, when the captive port is constructed. The fishermen of Noliasahi seem satisfied with this. Whether other fishermen who have might have rights in the area would be satisfied as well needs to be ascertained.

18. Approximately 32 villages, mostly STs, dependent on surrounding forests where the mining for iron ore will be done to supply POSCO steel plant will also be either displaced or projected affected. The fate of these people has still to be decided.

VII. Is this a genuine Rehabilitation package meant to address the loss of sustainable livelihoods?

19. Often R&R does not address the loss of sustainable livelihoods that people face when their lands they have been cultivating are either acquired or diverted away from their use for development /industrial use. In addition to losing their lands those who are PAFs and continue to live near polluting industries also suffer from health related problems. The women and children and older people are the worst affected as R&R does not address their problems. They are the most vulnerable group especially since they are not mobile and have very little chance of getting alternate livelihoods. The women in these project affected villages are mostly labourers on agricultural land or betel vine cultivation. They are not land owners and due to the poor educational and other skills they are unemployable in highly mechanised companies such as POSCO steel plant. The youth too are poorly educated and only 2-5 % are graduates or professionals in this area. Hence a guarantee of both a temporary or permanent job is not there. Since the hiring is outsourced by POSCO to contractors they will not overlook or intervene in hiring of personnel from among the displaced or project affected people. The contractor chooses the people and most of the time the best qualified will get the jobs.

Comprehensive Rehabilitation Plan.

- 20. Para 5 of the explanatory note stipulates that the project proponents should provide the requisite information required for site clearance/project clearance listed out in the said para. (vii) Comprehensive rehabilitation plan, if more than 1000 people are likely to be displaced, otherwise a summary plan would be adequate.
- 21. Even according to the project proponents 471 families have been estimated to be displaced because of the project. This is apart from several thousands more being affected. The 471 families will amount to more than 1,000 persons. Hence there is a requirement on the part of the project proponent to submit a Comprehensive Rehabilitation Plan.
- 22. The Minutes of the 67th EAC Meeting discloses that it was suggested that a Comprehensive R&R Plan should prepared covering particularly the following:
 - (i) nature and extent of compensation to displaced persons category wise, i.e. those to whom alternative lands are to be given, those to whom employment is to be given and those to be compensated monetarily.
 - (ii) Specific training programmes for those to be given employment to be indicated:
 - (iii) Housing projects, if any, to be furnished.
- 23. The 68th Meeting it is recorded that a tentative R & R Plan has been submitted. However a copy of this plan is not available in the file sent by MoEF as on the date of writing this report (10.10.2010).

VIII. Conclusions

- 24. Rehabilitation and resettlement has not yet started. However details and rates of the different components of the package are being discussed at the RPDAC meetings by the project affected. The committee recommends—that mere one point land compensation however big it may be will not compensate the loss of sustainable livelihoods and the only just thing would be to genuinely give equivalent land for land compensation so that they continue eking a sustainable livelihood. Of course this means the whole process should involve all PAFs and their people's representatives in a transparent, inclusive and just negotiation. If the people feel it is a better option than their present livelihoods, they may be open to considering the options. There have been more failures than successes in R&R. People are displaced in a hurry even before the resettlement or rehabilitation process is in place. Many times the promises to the people are not kept and displaced people live in greater destitution than before displacement. The whole process of R&R implementation should also look at improving the lives of women and older people and provide them with suitable livelihood options.
- 25. It appears that a large number of fishermen who may have rights in the area have got left out. The State Govt needs to verify whether such rights exist or not and compensate them if they do.
- 26. Landless agricultural and other labourers have not been included in the list of affected persons and no benefits have been given to them (except for those working in beetle vine cultivation and those compensated for their homesteads on government land). Since landless workers are people at the bottom of the heap, it is not enough to relocate them. They need to be compensated for their loss of livelihood.
- 27. Finally, as the socio economic survey of XIMB mentions, "displacement amounts to uprooting them from their soil that belonged to them for generations, which can be psychologically a traumatic event. This requires lot of empathy while handling the process of shifting and relocation". We would like the State Govt to bear this in mind and engage organisations who have worked with people, to help in the process of relocation, so as to make the relocation less traumatic if the project is found suitable to proceed with on other environmental aspects.

Section 5

Environmental Clearance of Steel Plant and Port

"Every anthropogenic activity has some impact on the environment. More often it is harmful to the environment than benign. However, mankind as it is developed today cannot live without taking up these activities for his food, security and other needs. Consequently, there is need to harmonise developmental activities with environmental concerns. Environment Impact Assessment (EIA) is one of the tools available with the planners to achieve the above goal".

.. Manual on Environmental Impact Assessment, Ministry of Environment and Forest, Jan., 2001.

Part I - EIA - General

I Context for examining Environmental Clearances.

- 1. In the year 2007 itself, POSCO obtained all necessary clearances to set up the steel plant and the minor port. By order dated 12.6.2007, the State Pollution Control Board, Orissa under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and s. 21 of the Air (Prevention and Control of Pollution) Act, 1981 issued the Consent to Establish (Annexure E 11) for the integrated steel plant. Subsequently, the IA Division of the MOEF, New Delhi by order dated 19.7.2007 gave Environmental Clearance (Annexure A-6) for setting up the integrated Iron and Steel plant (4 MTPA) with Captive power Plant (4x100 MW) at Kujang, near Paradeep, Jagatsinghpur, Orissa.
- 2. The captive minor port received Consent to Establish (**Annexure F-10**) by order dated 9.11.2006 from the State Pollution Control Board, Orissa under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 and s. 21 of the Air (Prevention and Control of Pollution) Act, 1981. Subsequently by common order dated 15.5.2007 (**Annexure A-5**), the MoEF granted Environmental Clearance for construction of a Captive Minor Port at Jatadharmohan Creek confluence near Paradeep. The same order granted clearance under the Coastal Regulation Zone (CRZ) Notification, 1991.
- 3. However at the time of constitution of the Committee in Aug-Sep, 2010, no construction work had started with regard to the steel plant or

the minor port. It is against this fact situation that we need to examine the scope of clause (iii), (iv) and (v) of the amended TOR.

II. Scope of Terms of Reference.

- 4. Clause (iii) of the amended TOR of the Committee (**Annexure A-29**) mandates the Committee to review the compliance with Environmental (EIA), Coastal Regulation Zone (CRZ) and other clearances and permissions under various statutes, rules, notifications and so on. Clause (iv) permits review of compliance with *pari passu* conditionalities imposed in items (iii) and (iv).
- 5. The fact that POSCO had received the different environmental clearances was never in dispute. Hence the purpose of amending the TOR to include the mandate to review compliance with different clearances and permissions as stipulated in statutes, rules and notifications could not be merely to ascertain if the clearances had actually been obtained and if the post-clearance conditions stipulated therein complied with. Such a limited reading makes the TOR not just superfluous but also irrelevant and redundant.
- 6. In actuality, the law relating to environmental clearances (EC) encompasses the operation of numerous laws, procedures and notifications including the Environment Protection Act, 1986, Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, and numerous government policies as for example the National Water Policy, 1986, the National Forest Policy, National Mineral Policy and so on. The procedure contemplated in law for grant of ECs requires the project proponent intending to set up the industry, to comply with a variety of procedures and norms and provide full and complete details of the project, including the risk assessment of the project, social impact and so on based on a realistic assessment of the fact situation. Thus any proponent who fails to satisfy the requirements in law for complete and comprehensive disclosure of the environmental impacts and risks of their projects, the type of remedial measures in case of accidents occurring both due to operational as also due to natural disasters, mitigation strategies, rehabilitation and resettlement plans will thereby be violating the laws.
- 7. It is therefore logical to interpret that the TOR mandates the Committee to review if there has been both substantial and procedural compliance with statutes, rules and notifications governing Environmental Clearance and CRZ clearance by the project proponent and the various state and central authorities in obtaining/issuing the above mentioned clearances.

III. Framework for Review of Clearances: Importance of EIA.

- 8.The Manual on Environmental Impact Assessment of the MoEF (**Annexure E- 1**) dated January, 2001 describes EIAs as "a planning tool" and an integral component of 'sound decision making' leading to acceptance, modification or rejection of applications to set up new industries or expand existing ones (Preface, pg. 1).
- 9. As a planning tool EIAs are now generally accepted as an integral component of sound decision making. The objective of EIA is to foresee and address potential environmental problems / concerns at an early stage of project planning and design. EIA / EMP are meant to assist planners and government authorities in the decision making process by identifying the key impacts / issues and formulating mitigation measures. An implicit part of the EIA process therefore is ensuring full and comprehensive disclosure of all aspects of the industry, including environmental impacts, dangers, risks and mitigation measures to the following key groups:
 - (i) the Project Proponent;
 - (ii) regulatory agencies, charged (a) with the task of examining proposals and granting approvals or ordering modification or rejection of proposals; and (b) with the responsibility to monitor the functioning of the industry in the post-clearance stage;
 - (iii) all stake holders and interest groups.

IV. Phases of the EIA and Critical Importance of presenting clear, complete and comprehensive Information about project.

- 10. It is important to stress that the EIA process is governed by the EIA Notification (first issued in 1994 and subsequently revised and issued anew in 2006) which has statutory status under the Environment Protection Act, 1986, the main legislation governing EIAs. Thus any infringement of the prescribed standards will amount to a statutory violation.
- 11. Central to the EIA process is therefore the quality of the data and information collected, presented and analysed in the EIA which are the essential substratum for the decision makers to decide over whether to grant environmental clearance to the project or not. Equally important, full disclosure of all aspects of an industry is critical for communities who will be affected because of the project in order to register their views during the public hearing.

12. The tests for evaluating adequacy or sufficiency of the information disclosed in EIA is to firstly judge it by standards of accuracy, comprehensiveness, clarity, relevancy, completeness, frankness in disclosing information especially negative information about the particular industry, suppressing vital information, providing misleading and false information; secondly, it has to be evaluated if the decision making process is compromised or affected on account of any lapses at any stage whatsoever including the proceedings of the EAC. Either of the two will render the clearances invalid.

V. Structure of this Report.

- 13. This Report is structured around an analysis of the EIAs in the manner outlined below:
 - 1. Adequacy, Accuracy and Completeness of EIA
 - 2. Public Hearing
 - 3. Role of EAC and competent authorities.

VI. Sources of Information.

- 14. There were three broad information sources relating to the EIAs:
 - (i) Ministry of Environment, both the Regional Office and the main National

Office, New Delhi;

- (ii) Different agencies of the Government of Orissa;
- (iii) Project affected persons, NGOs and others.

The full list of documents collected and relied upon in this report is furnished in the Annexures attached to this report.

VII. Field Trips

15. The Committee undertook its first field visit to the project area from 27th to 30th August, 2010. During the first visit the Committee confined its enquiry to the Forest Rights Act. The entire team visited the villages of Dhinkia, Govindpur, Nuagaon and Noliasahi to get a first hand understanding of the physical features and the local economy. The Committee extensively met with the project affected persons and other concerned citizens. The Committee also met the Principal Secretary, Environment and Forest, CMD, IDCO, Secretary, SC & ST Department, the Revenue Divisional Commissioner, Cuttack, District Collector,

Jagatsinghpur, Principal Chief Conservator of Forests, and other officials of the State Government. (See **Annexure E - 17**, for list of names). Representatives of different political parties formally met the Committee and submitted representations. (**Annexure –I** series). Towards the end of the visit, the amended TOR was announced expanding the scope of the Committee's enquiry.

16. The second field visit of the Committee was during the period 19th to 24th September, 2010. During this visit the emphasis was on ascertaining the facts regarding the various environmental clearances. The team visited the port site along with senior officials of POSCO and government officials both from RO-MoEF, Bhubaneshwar, the State Pollution Control Board (OSCB) and the District Administration. The site visit was followed with a meeting with delegation of senior officials of POSCO who made a detailed presentation on both the proposed port and the steel plant. The Committee also sought more information about the project particularly the plan to expand operations from the initially approved production capacity of 4 MTPY to 12 MTPY, about the sourcing of raw materials for the plant in view of the recent high court order rejecting the grant of prospecting licence over the Khandadhar iron ore mine in Sundargarh district to POSCO, R & R plans and other related issues.

17. The Committee also met the Principal Secretary, Environment and Forest, and held discussions on EC issues as also about the proposal to supply water for the project from Jobra barrage on the river Mahanadi. The Committee requested the Secretary to ensure that all documents related to the Project be made available. The office of the Member-Secretary, Orissa State Pollution Control Board thereafter arranged to reach connected papers to the Committee.

Part II Preliminary Issues

I. Understanding the scale of the project

18. A detailed and thorough analysis of the compliance of POSCO to the requirements stipulated in the EIA Notification is necessitated by two considerations: (i) the scale of the project, which stands out in comparison with other steel projects in India; and (ii) the problems associated with the location of the plant along harbour in an area (a) prone to cyclones and natural disasters, (b) which has been described as an "area having ecological significance for the productivity of the estuarine system" (page 48) and (iii) located just about 12 km south of

Paradeep port area in a region described in the Orissa Coastal Zone Management Plan for Orissa prepared in October, 1995 by the Department of Forest and Environment, Government of Orissa, as "fast deteriorating coastal environment" The fact to be noted is that in the 12 years since the above report and upto the time of the EC and CRZ Clearance in 2007, the environmental degradation of the coast had only worsened.

II. Present environmental status of Paradeep region:

19. The EIA notification, 1994 makes special mention of the necessity for an EIA from the Central government for industries located in critically polluted and ecologically sensitive areas. In the note to Schedule I of the notification it is provided as follows:

"Every project proposed to be located in -

- a) a critically polluted area; or
- b) within a radius of fifteen kilometers of the boundary of (i) reserved forests, (ii) ecologically sensitive areas which include national parks, sanctuaries, biosphere reserves; and (iii) the boundary of any state,

shall require environmental clearance from the Central Government" (Sch. I)

III. Paradeep region Highly Sensitive Zone:

20. In the Industrial Suitability map (**Annexure E-**) prepared by the Orissa State Pollution Board in the year 2003, the proposed project site and its surrounding areas have been identified as highly sensitive zone for Air Polluting industries and for surface water polluting industries.

IV. Comprehensive Environmental Pollution Index (CEPI) of Paradip:

21. Ministry of Environment and Forests has come out with environmental pollution index that can help in categorising the industrial clusters in terms of priority of planning needs for interventions. The new report, *Comprehensive Environmental Assessment of Industrial Clusters*, (Annexure E- 16) highlights the need for enhanced and urgent action. A Comprehensive Environmental Pollution Index (CEPI), which is a rational number to characterize the environmental quality at a given location following the algorithm of

source, pathway and receptor have been developed. The index captures the various health dimensions of environment including air, water and land. The present CEPI is intended to act as an early warning tool, which is handy to use. It can help in categorizing the industrial clusters/areas in terms of priority of planning needs for interventions. Application of CEPI in 88 selected industrial clusters/areas has been an exercise involving Central Pollution Control Board, State Pollution Control Board, Pollution Control Committees, and IIT Delhi.

- 22. This report for the first time calculated a Comprehensive Environmental Pollution Index (CEPI) for 88 key industrial clusters in of objective India, using а series criteria. Areas having aggregated CEPI scores of 70 and above should be considered as critically polluted industrial clusters/ areas, whereas the areas having CEPI between 60-70 should be considered as severely polluted areas and shall be kept under surveillance and pollution control measures should be efficiently implemented, whereas, the critically polluted industrial clusters/ areas need further detailed investigations in terms of the extent of damage and an formulation of appropriate remedial action plan.
- 23. Paradeep, Orissa has a CEPI score of 69.26 which shows that it is a severely polluted area, just bordering on the CEPI of a critically polluted industrial cluster.
- 24. The EIA Manual, January 2001 (**Annexure E 1**) inter alia provides that the proposed project location should be reviewed in relation to the following salient issues:
 - i) Ambient air, water and noise quality standards
 - ii) Critically polluted areas
 - iii) Natural disaster prone areas
 - iv) Ecologically sensitive areas

This concern that the Paradip area is already polluted from existing industries was also raised during the public hearing but unfortunately it was never addressed by any of the reviewing /decision making authorities.

25. The project proponents as well as the other authorities including the EAC and the MoEF ought to review the location of the whole project in the light of the current pollution status of the region, the context of its proneness to natural disasters and ecological sensitivity of the area.

V. Scale of Production Facilities in POSCO

- 26. The proposed project is to set up a steel production facility of 12 MTPY. The combined capacity of the 6 steel plants of SAIL at Bhilai, Bokaro, Durgapur, Rourkela, Burnpur and Salem put together is 13.5 MTPY. Thus for a comparative understanding of the scale and magnitude of the proposed steel plant at Jagatsinghpur it is clear that the capacity of this one plant is almost equivalent to the combined capacity of the six major steel plants of SAIL in India. The captive minor port is also being built to handle the cargo handling requirement for the 12 MTPY steel plant. The proposed Dead Weight Tonnage (DWT) of the ships to be berthed at the port is 30, 000 DWT to 1,70,000 DWT. The ships in the 1,50,000 1,70,000 qualify to be the Very Large Cargo Carriers (VLCC) which are generally anchored in the deep seas from where the cargo is offloaded by use of smaller vessels.
- 27. Further the project is sited in an area which is admittedly cyclone prone and where the super cyclone in 1999 produced a storm surge of 5.5. m. above CD which inundated land up to about 30 km inland. (pg. 50 of the REIA of the Port, (**Annexure F- 2**) It has also been described as an ecologically sensitive and fragile area by the Coastal Zone Management Authorities in the CZMP for Orissa
- 28. Considering the scale of the project and the ecologically sensitivity of the proposed site it would have been more appropriate to locate the project elsewhere. There was a critical necessity of having a comprehensive EIA and the necessity of the Decision making / Reviewing authorities under taking a site visit for assessing the project.

VI. Applications of POSCO for Environmental Clearance processed under EIA Notification of 1994 and not EIA Notification of 2006.

- 29. As stated above the MOU between POSCO and the Government of Orissa was signed on 22.6.2005. The EIA Report in respect of the captive minor port and steel plant were completed in March, 2006 (Annexure F 2) and August, 2006 (Annexure E- 3) respectively. As on the date of preparation of the EIA Reports, the 1994 EIA Notification was in force. It should be noted that under the 1994 Notification minor ports were excluded from the Notification. On 14.9.2006, a new EIA Notification was issued superseding the 1994 Notification. Minor ports were not exempted in the new, 2006 Notification.
- 30. The Applications for the EIA and CRZ clearance for the minor port was given to the MoEF in end September, 2006 and for the steel plant on 3.4.2007. By this time the 2006 Notification came into force.

The question therefore arises whether the applications for POSCO should be considered under the 1994 Notification or the 2006 Notification.

- 31. As per the 1994 Notification any person who desires to undertake any new project in any part of India or the expansion or modernization of any existing industry or project listed in the Schedule-I shall submit an application to the Secretary, Ministry of Environment and Forests, New Delhi. Schedule-I to the notification provides the list of projects requiring Environmental Clearance from the Central Government. Serial number 13 (a) of the list is "Primary metallurgical industries (such as production of Iron and Steel, Aluminium, Copper, Zinc, Lead and Ferro Alloys). As per Item 3 of Schedule-I EIA clearance is required for ports, harbours, airports except minor ports and harbours.
- 32. The 1994 notification was superseded by notification dated 14.09.2006. Para 12 of the new notification specified as to how the cases in the intermediary stage falling between the two notifications would be dealt with. As per this para - " From the date of final publication of this notification the Environment Impact Assessment (EIA) notification number S.O.60 (E) dated 27th January, 1994 is hereby superseded, except in suppression of the things done or omitted to be done before such supercession (sic suppression) to the extent that in case of all or some types of applications made for prior environmental clearance and pending on the date of final publication of this notification, the Central Government may relax any one or all provisions of this notification except the list of the projects or activities requiring prior environmental clearance in Schedule I, or continue operation of some or all provisions of the said notification, for a period not exceeding one year from the date of issue of this notification. A circular dated 13.10.2006 was issued pursuant to para 12 of the 14.09.2006 notification laying down the interim operational guidelines till 13th September 2007. The circular inter alia provided that Applications pending for EIA appraisal where the EIA has already been done but the public hearing has not been done the EIA would be evaluated by the Expert appraisal Committee (EAC) without insistence on the submission of Form I/ IA required under EIA 2006. In case the EIA document is considered complete and accurate, and if public hearing is required under EIA, 2006 the same would be conducted as per the provisions of EIA, 2006. In case the EIA document is considered incomplete and /or inaccurate, the EAC would specify all the additional terms of reference to be undertaken by the project sponsor. If required under EIA 2006, the public hearing would be conducted as per the provisions of EIA, 2006. When an accurate and complete EIA document is available, together with the public hearing proceedings the EAC would consider the same and furnish its recommendations.

- 33. The Schedule to the 2006 Notification provides the list of projects or activities requiring prior environmental clearance. Item 3(a) lists metallurgical industries (ferrous and non-ferrous) and 7(e) lists ports and harbours.
- 34. Thus though minor ports were exempted under the 1994 Notification, the 2006 Notification makes no such exemption. Under para 12 of the 2006 Notification the Central Government may relax any one or all the provisions of the Notification except the list in Schedule 1. Thus the applications for the captive minor port was dealt with under the 2006 Notification whereas the steel plant was considered as per the procedure prescribed under the 1994 notification. A combined public hearing was held on 15.4.2007 at Banabihari High School, Kujanga for both the steel plant and the minor port.

Part III

Analysis of the Rapid EIA of Steel plant

- I. Rapid vs. Comprehensive Environment Impact Assessment Acceptable only if there is no compromise on Quality of Decision Making
- 35. The EIA Manual of Jan 2001 (**Annexure E 1**) describes the difference between Rapid and Comprehensive EIAs as follows:
 - "The difference between Comprehensive EIA and Rapid EIA is in the time-scale of the data supplied. Rapid EIA is for speedier appraisal process. While both types of EIA require inclusion/ coverage of all significant environmental impacts and their mitigation, Rapid EIA achieves this through the collection of 'one season' (other than monsoon) data only to reduce the time required. This is acceptable if it does not compromise on the quality of decision-making. The review of Rapid EIA submissions will show whether a comprehensive EIA is warranted or not. It is, therefore, clear that the submission of a professionally prepared **Comprehensive EIA** in the first instance would generally be the more efficient approach." (pg.7-8).
- 36. An explanatory note dated 27th January, 1994 was issued to the EIA Notification, 1994. As a Comprehensive EIA report will normally take at least one year for its preparation, project proponents may furnish Rapid EIA report to the IAA based on one season data (other than monsoon), for examination of the project. Comprehensive EIA report may

be submitted later, if so asked for by the IAA. In other words whenever an REIA is resorted to by the project proponents since field investigations are carried out only for one season the same cannot be carried out during monsoon period. It is pertinent to point out that POSCO has prepared an REIA and not a comprehensive EIA for both the steel plant and the captive port.

- 37. As the discussion below reveals, it is evident that considering the scale of the project, the ecologically sensitive area in which it is sited, the disaster prone nature of the location all warranted a comprehensive EIA. Apart from this, the various agencies at different points in time have also pointed out to the inadequacies of data and studies on which the REIA relies in many aspects. In this context it is also pertinent to point out that in the proceedings of the OSCZMA dated 7.8.2006 (Annexure F 7) there was an assurance by the Company representative that the comprehensive EIA was under preparation which would cover many of the issues raised by the authorities at the meeting in respect of the minor port.
- 38. The Committee members pointed out to this reference and sought clarification from POSCO representatives through email. In an email reply dated 1st October, 2010, Mr. Yong-Kwan Kim, Director of POSCO stated (**Annexure E-18**) that the Comprehensive EIA for both steel plant and minor port were prepared in July, 2007 and handed over to the authorities, including the Regional Office of MoEF in Bhubaneshwar. Hard copies were promised to be sent to the Committee members.
- 39. The Regional Office of MoEF through a written email message dated 6.10.2010 (**Annexure E 20**) informed that they had not been received any copies of the Comprehensive EIA. The National Office of MoEF also denied having received the same. However the Regional Office subsequently informed the Committee that the Comprehensive EIA Reports had been handed over to them by POSCO officials after the recent email correspondence. Hard copies of the Comprehensive EIA were received by the committee members on 11.10.2010.
- 40. At any rate the Comprehensive EIA is the primary basis on which the EAC and the Government adjudges the desirability of granting environmental clearance. Hence submitting it long after the clearances have been given is an empty formality.

II. Inadequacy of REIA.

41. The Rapid Environmental Impact Assessment (REIA) for 4 Million Ton per Year (MTPY) Integrated Steel Project was submitted in

August 2006 (**Annexure E - 3**) as per the Environmental Impact Assessment Notification, 1994. Paragraph 2.I.(a) of the EIA Notification, 1994 ("Requirements and procedure for seeking environmental clearance of projects") states:

"The application shall be made in the proforma specified in Schedule II of this notification and shall be accompanied by a project report which shall, inter alia, include an Environmental Impact Assessment Report/Environment Management Plan and details of public hearing as specified in Schedule IV prepared in accordance with the guidelines issued by the Central Government in the Ministry of Environment and Forests from time to time."

- 42. Further a guideline "Environmental Impact Assessment: A Manual" was issued by the MoEF in January 2001.according to which "All project proposals requiring Environmental Assessment (see Chapter 3 of this Manual) may be examined according to the following review process. The Review Checklist comprises two sections: (A) Pre-Appraisal and (B) Appraisal." The Review Checklist for project appraisal contains specific criteria for reviewing the adequacy of "Baseline Environmental Information." These criteria are stated as follows:
 - "3.7 Have the components of the environment likely to be affected by the project been identified and described sufficiently for the prediction of impacts?
 - "3.8 Does baseline information account for seasonal variation?"
- 43. Volume II of the REIA for steel plant (**Annexure E 3**) contains a "Report on Ecological Aspects of Paradip Area in Jagatsinghpur District, Orissa". Page 1 of this report states:

"As per terms of assignment, the field investigation was carried out in the months of January/February 2006. This report presents the prevailing terrestrial and aquatic ecological status of the study area covering up to about 10 km aerial land coverage from the project site. Marine ecological status is not covered in this Report."

The above referred passage reveals that the field investigations were carried out only for 2 months and not even for an entire season. Further in view of the fact that the plant site is located adjacent to the coast with effluents being discharged into the sea and large scale dredging and dumping of sand in the sea, increased ship traffic etc, failure to have a

⁷ http://envfor.nic.in/divisions/iass/eia/Checklist3.htm

marine ecological status is a serious deficiency affecting the completeness of the report. Considered against these measures, the methodology used by the agency which prepared the REIA for POSCO is woefully deficient.

III. The REIA fails to delineate the location of wetlands or assess impacts

- 44. The REIA for steel plant describes the topographic features of the area as including an intricate network of "tortuously meandering channels" (page 4-2, 3) some of which are the distributaries of the Mahanadi river which drains into the Jatadharmohan creek. The geomorphology of the area is said to be "variable with low levee on banks of the distributaries **inter distributory marshes** in between the distributaries, stranded beach ridges amidst **flood plains**, wide mudflats, **lagoons**, creeks, sand bars, barrier beach / sandpit and active dune berm beach face complex".
- 45. It is further stated that the study area is drained by the Mahanadhi river and its distributory channels Chandpur river and Santra nadhi.
- Although pages 4-5 to 4-6 of the REIA of the steel plant (**Annexure E 3**) discuss drainage patterns of the study area, this discussion does not include any information about the extent of wetlands in the study area, nor any discussion of the significance the loss of the these wetlands.
- 46. In February 2007, the Government of India published the following "Conservation of Wetlands in India: A Profile (Approach and Guidelines)" which state:
 - "Wetlands offer several substantive benefits. Unfortunately, they are often not fully understood. Some of the most obvious advantages are listed below.
 - Life support systems.
 - Winter resorts for a variety of birds for shelter and feeding.
 - Suitable habitats for fish and other flora and fauna.
 - Effective in flood control, waste water treatment, reducing sediment loads and recharging of aquifers."
- 47. The "Environmental Impact Assessment: A Manual" (**Annexure E 1**) issued by the Impact Assessment Division of the MoEF in January 2001 states: "To make the Manual comprehensive and self-contained, information pertaining to legislative regime, base line data generation and monitoring, thumb rules for pollution control measures etc. have

been annexed to the main text." One of the Annexures is Annex VII ("Good Practices of Prediction"). Under the heading of "Habitat Diversity" one of the "Relevant Good Practices of Prediction" is use of the "Wetlands Evaluation Technique (WET)" a methodology for identifying the location, extent and functions of wetlands within a specified area.

48. As stated above, the REIA does not include any information about the extent of wetlands in the study area. There are likely to be dozens of additional wetlands in the study area, comprising a substantial amount of hectares, which would be impacted. Contrary to the Good Practices of Prediction cited in the Environmental Impact Assessment: A Manual, the REIA fails to identify wetlands in the study area or assess the significance of the loss of the substantive benefits wetlands provide, as identified by the MoEF in 2007

IV. Mismatch between ultimate capacity and the application for EIA clearance.

- 49. The MOU (Annexure A-1) contemplates a 12 million tonnes per annum (MTPY) capacity integrated steel plant. The area of approximately 4004 acres required for the project is for the complete 12 MTPY capacity integrated steel plant. The proposed captive minor Port at the Jatadharmohan creek is to handle cargo for a 12 MTPY capacity integrated steel plant. The estimated additional requirement of 2000 acres of land for an integrated township (one Korean township and one Indian township as per the SEZ project application submitted in July, 2006, (Annexure E - 2) is to cater to the employee strength for a 12 MTPY capacity integrated steel plant. In all the applications, correspondence and clearance letters by the Project proponent and the various authorities it is stated that the ultimate capacity of the plant is intended to be 12 MTPY capacity integrated steel plant to be built in three phases with an additional 4 million capacity to be added every two But however the project proponent chose to apply for EIA clearance in respect of a 4 MTPY capacity steel plant alone.
- 50. Along with the increase in the capacity of the steel plant, the capacity of the support infrastructures will also have to increase. For example the captive power plant will have to be expanded from 400 MW to 1300 MW by the end of the third phase to meet the requirements of a plant with 12 MTPY capacities. Similarly there will be corresponding increase in al other support infrastructure.
- 51. Presumably since the plan contemplates implementation of the project in 3 phases and the construction of only a 4 MTPY capacity steel

plant is envisaged in the first phase the project proponent applied for EIA clearance and consent to establish only in respect of a 4 MTPY capacity steel plant. However, as the law stand today, extension of production capacities is not automatic and each expansion proposal will have to get prior EC requiring the project proponent to go through the EIA process again.

- 52. When the committee members pointed out this fact to the company during their discussion on from the POSCO 22.9.2010, they seemed to be under the impression that once clearances for the first phase was obtained the clearances for the next two phases automatically follow. The committee members pointed out that at every phase of expansion the project proponent will have to go through the process of preparing fresh EIA reports, public hearing and obtain clearances and there is every possibility that the clearance could be rejected for any given phase if the authorities decide that the `carrying capacity of the area' has been saturated or for any other reason. The officials representing the project proponent categorically stated to the Committee during their presentation on 22.9.2010 that the project is profitable only for 12 million tonnes capacity integrated steel plant the project will not be profitable for them and if they were restricted only to 4 MTPY capacity plant then they would have to reconsider their options. The senior officials also categorically pointed out that the project would be economically unviable, would seriously affect their profitability especially in the global market context and unattractive as an economic activity. They also stressed that in such an eventuality, the company would have to consider alternative options including to set up plant in other locations closer to the source of iron ore.
- 53. The committee is of the opinion that since the land and other infrastructure has been planned for a 12 MTPY capacity integrated steel plant, the project proponent ought to have applied for clearance in respect of the total capacity and not for part of the capacity. This is especially so when the expansion plans are not sometime in the distant future. Expansion is contemplated at the rate of increase of 4 million tonnes every two years. Other wise, the logical step would have been to restrict the requirement of land and the size of the port to the requirements of a 4 MTPY capacity plant. This would reduce the land requirement substantially and thereby reduce the number of persons to be displaced, number of persons whose livelihoods would be lost. It would also significantly reduce the pollution load in numerous ways. The corresponding alterations to the landscape of the area would also be reduced thereby reducing the adverse impact it may have on flow of flood waters into the creek etc.

54. The committee members are of the strong view that MoEF should not have given EC for part of the project when all other components /infrastructure of the project such as land, displacement of people, ecological destruction, port construction etc have aimed for full project, that is, 12 million tons. It puts a question mark on the scientific prudence of the MoEF.

V. Fragmented EIA: Non-consideration of combined environmental impact of other project components

- 55. The MOU contemplates apart from 12 MTPY steel plant and port, railways, transportation by road, township for 18,000 people, coal mining, manganese mining and pipeline for water for 86 km from Jobra barrage. The MOU dated 22.06.2005 describes these as `related infrastructure based on the needs of the steel project. In the REIA report dated August, 2006 the Project aim is stated to set up a 12 MTPY integrated steel complex with a captive minor port. Under the caption other infrastructure requirement it is stated as follows `captive minor port integrated with the steel plant, road network connecting the State highway, rail linkage from Paradeep and steel township and laying of water pipeline from the Jobra barrage.
- i) Setting up of rail infrastructure: In the Project Report dated July 2006 (Annexure E 2) submitted before the Board of Approval Special Economic Zone, Ministry of Commerce and Industry, Government of India, the project proponent, POSCO, describes the requirement of rail infrastructure. According to this report the railway will serve not only as a route for procuring iron ore, coal and auxiliary materials from various sources but also as a distribution channel for finished products and slag. The existing railway route could handle the transport of materials during the first phase alone. They had already submitted an application in this regard to the Rail Vikas Nigam Ltd (RVNL) and the feasibility study for selecting optimal routes has been undertaken by Rail India Technical and Economic Services (RITES). The target date for completion was to be 6 months before the scheduled operation date of the I Phase of the Steel Works.
- i) Construction of coastal road: The Report also states that there is a proposal for the construction of 6.7 km coastal road from Paradeep to POSCO India. The road will serve for the transportation of construction equipment and materials through Paradeep port. It will provide easy access to the site in the I Phase of construction and during construction of the dedicated port. Feasibility and alignment of the

coastal road was reported to have been finalized. This road was to be constructed together with 2 other companies.

- **iii)** Access Roads to NH-5 A / SH 12: Apart from the road on the coastline, POSCO India also plans to construct 11 km access roads from the site to NH 5-A and SH 12.
- **iv)** Construction of 86 kms long water pipeline: The Report states that POSCO India will draw and use water from Jobra barrage on Mahanadhi river and supply to the site by a pipeline of diameter 1350 mm over a 90 km route. (It may be noted that the diameter of the pipeline in Sch. II format of Application for Environmental Clearance at col. V-C is specified as a 86 km pipeline of diameter 1400 mm). This pipeline will supply the total volume of water for the steel works and domestic water for townships.
- v. Township As part of the social infrastructure, the same document discloses that POSCO India will build an Indian township and a Korean township with modern amenities and facilities to provide residential facility to each and every employee of POSCO India. The townships are to be located in an area of '200' acres at some distance from the steel works. In the Application dated 14.9.2006 (Annexure E- 5) for Consent to Establish the steel plant under the Water and Air Acts, in the data sheet at item A - 11.14, to the query about proposal to build a township, the Company had answered "Yes" and has stated that the planned area allocated for the same is 2000 acres to accommodate a population of 18,000 (5,000 families) within 4-5 km of the plant site. The application states that the Master Plan for the township is under preparation. In the Application dated 23.8.2006 (Annexure F -6) for Consent to Establish the port under the Water and Air Acts it is stated that the employees of the port would be accommodated in the steel township.
- 56. From the above, it is amply clear that the integrated steel project encompasses several components which are considered basic and related infrastructure for the construction and functioning of the steel plant. While so, curiously, the Rapid EIA has been done for 4 MTPY steel plant and minor port alone. Even here, the REIA's have been prepared separately. Applications for clearances have been submitted separately on different dates resulting in the applications being considered by two separate Expert Appraisal Committees (EACs). Such compartmentalized applications have prevented a comprehensive appraisal of the combined environmental impact of the entire project. This fragmented EIA application process and appraisal may have serious implication in view of the fact that the project is proposed to be set up in an environmentally

fragile coastal area which has repeatedly been subject to severe cyclonic storms and is a well known disaster prone area.

- 57. The committee is of the opinion that the entire Environmental Clearance process is seriously flawed and hence the clearance itself stands vitiated. The failure to conduct a comprehensive EIA, the failure to assess the environmental impact on the basis of the ultimate capacity of the steel plant of 12 MTPY and of the various other attendant infrastructural needs which are basic to the steel plant, the fragmented EIA which has failed to incorporate the environmental impacts of the various components of the plant, the failure to obtain baseline data of seasonal variations renders the EIA seriously compromised in terms the Adequacy, Accuracy and Completeness of the EIA.
- 58. The committee members are of the strong view that MoEF should not have given EC for part of the project when the environmental impact assessment for all other components /infrastructure of the project has not been assessed. It once again puts a question mark on the scientific prudence of the MoEF.

VI. Objections raised by Technical Committee, Iron And Steel Sector, State Pollution Control Board, Orissa with respect to REIA of Steel Plant

59. The report dated December 01, 2006 of the Technical Committee, Iron and Steel Sector, State Pollution Control Board, Orissa (**Annexure E - 6**) considered the REIA for the proposed integrated steel plant. The minutes of the meeting recorded that the infrastructural support for the plant is reported as:

Captive minor port at Jatadharmohan creek with berthing facility of 20,000 DWT to 1,00,000 DWT ships.

About 86 kms of pipeline from Jobra barrage on the river Mahanadi to bring water for the plant and the township.

- 6.7 kms of foreshore road and connecting road of about 10.5 kms.
- 6 kms of railway lie to the plant from Paradeep Railhead.
- 60. The Technical committee also pointed out to the following issues
 - i) FINEX process is relatively a recent process being practiced by only M/s POSCO. Detailed technical information is also not found in literature. However the specific raw material consumption of this process as submitted by the Consultants was found to be comparable to COREX process.
 - **ii)** However, adequate literatures on the performance on FINEX process are not available the basis of the claims made by the

project proponent are difficult to verify. It is therefore recommended that a team should visit the existing FINEX plant to conduct further assessment of in situ performance of this process.

- **iii)** The project proponent should submit the method of grinding and screening of raw material as well as of solid waste such as BOF slag and the size analyses of fines. The details of pollution control equipments in grinding and screening plants should be submitted by the proponent. The proponent has to submit a gas balance diagram for future reference.
- **iv**) Besides this, once the sea water cooling system shall be adopted in the power plant it will discharge about 92960 m3/hr of hot (cooling) water in to the sea. The effect of thermal discharge of once through cooling system has not been discussed in the report and may be taken in to consideration while designing the system, so that the impact is minimized.
- The emission from various processes takes place either through the stack or fugitive. The stacks can be broadly grouped into two categories. One is cool stack and mostly used in a dust extraction system and the other category is combustion stack. There could be many dust extraction stacks, but for the purpose of environmental evaluation dust extraction stacks with discharge rate of 5,000 Nm3/hr are taken as the major ones. The proposed industry will have 21 major dust extraction stacks and 13 combustion stacks. The estimated quantity of emission load at 4 MTPY production level is given in the Table 7. These estimates however, require further verification from an operating plant.
- **vi)** The project does not visualize a township of its own. However, an industrial activity of this size will need substantial civic facilities. Thus, a master plan for Paradeep and adjoining area should be drawn up taking into consideration the industrial development.
- **vii)** The effect of thermal discharge of once through cooling system has not been discussed in the report and may be taken into consideration while designing the system, so that the impact is minimized.
- **viii)** The details of the fluidized bed reactor, temperature and pressure is not given in the report. The state Pollution Control Board may ask the proponent to furnish these details. If the reactor pressure is around one bar then it is not a matter of serious concern. However, reactor pressure of more than one bar may cause fugitive emissions and therefore State Pollution Control

Board should stipulate appropriate conditions for installing additional air pollution control equipments to contain the emission.

- ix) The project proposal is very vague about the relative amounts of various domestic vs imported raw materials (Table 3-2 of the report) and ore fines to ore lumps. Obviously generation of fines and their transportation & storage have a significant impact on the environment.
- 61. The Technical Committee of the PCB has raised many issues of substantial importance which curiously have not been followed up to its logical end. The records supplied to us do not reveal that these issues were ever addressed before the clearances were given.
- 62. However even before these queries have been satisfactorily answered by the project proponent, the company has been recommended for clearances and issue of Consent to Establish. **This is a serious abdication of statutory responsibility by the Orissa State Pollution Control Board.**

VII. Water Requirement and Water Balance for the Steel plant and the Port:

- 63. The application format of the EIA notification requires the project proponent to give the application in 'Form A'. Water Requirement and Water balance is one of the categories of information that has to be provided. The following details are called for in the format -
 - (a) Water balance at site:
 - (b) Lean season water availability;
 - (c) Source to be tapped with competing users (River, Lake, Ground, Public supply).
- 64. POSCO in its application for EIA clearance stated that water will be taken from the Jobra barrage over the Mahanadi River by laying an 86 km long pipeline. It is also reported that the Department of Water Resources, Government of Orissa vide Deptt. Letter No.19668 dated 19.06.2006 granted 'in principle' approval for withdrawal of 10 MGD water from the Jobra barrage. As per the EIA for steel plant the Company will have in its premises reservoir for storing water requirement for a period of three days (pg. No. 3-10).
- 65. It is to be noted that Clause No. 7 of the MOU (**Annexure A-1**) dated 22.6.2005 permits drawal of water from the Mahanadhi barrage at Jobra, or any other suitable source subject to availability. By letter dated 28.7.2005, POSCO sought allocation of water @ 75000 m3 water

per day for each of the 3 phases of the POSCO project. Subsequently by application dated 22.10.2005, the company asked for temporary allocation of 3400 m3 / day for construction purposes. Subsequently the DoWR by letter dated 19.6.2006 accorded `in principle' permission for drawal of water as follows:

- (i) from Hansua Nallah @ 3,4000 cu.m per day (or 0.04 cumec), from Feb. 2006- 2009 for construction purpose;
- (ii) industrial water from Mahanadi Barrage at Jobra @ 75,000 cu.m per day (or 3.47 cumec) from June, 2008 onwards.

It is to be highlighted that there was no complete disclosure in EIA or in Applications for Consent to Establish that permission was granted for drawal of water from Hansua Nallah alone and not from the Jobra Barrage during the construction phase. This raises two issues:

firstly, if permission was granted only to draw water from Hansua Nallah during construction phase, which according to the project proponent was unacceptable as the water did not meet its requirements, then what is the source of water for construction work needed to be disclosed

Secondly if water is to be drawn from Hansua Nallah or any other source (other than Jobra Barrage) the Environmental impact has to be assessed and incorporated into the EIA and an opportunity to be heard given to the affected parties ought to have been given to the affected parties. The effect of non-disclosure of this vital information has deprived opportunity for people who are likely to be impacted due to the water drawal.

This failure affects the completeness of the EIA process.

VIII. Post Clearance - Uncertainty over Water Sourcing.

66. There appears to be further exchange of correspondence between the DoWR, GoO and POSCO India subsequent to the grant of EC. In a letter dated 29.9.2007, POSCO India stated that the alternative proposal for sourcing water from Hansua Nalla was not acceptable as (a) the water was saline due to tidal effect; (b) was contaminated with pesticide due to surface run off from agricultural land; (c) no sufficient quantity of water available in lean period to meet their requirement and (d) wide range of construction work such a lining of Taldanda canal, control sluice, desiltation was required which could not be carried out by them as a private company.

- 67. In the Letter No. WP-IWS-135/07 17177 dated 1.11.2008 (**Annexure G 2**), the Chief Engineer, Water Resources, taking into account the objections of POSCO for the use of water from Hansua Nallah recommended the sourcing of water from Mahanadi Barrage. The letter also discloses that the recommendation for the pipeline route alignment was already made and was pending with the government for approval.
- 68. However vide letter No.1695/WR., Lrr-ll-170/2009 dated 25.01.10 (Annexure G - 3) Special Secretary, Department of Water Resources, Government of Orissa has informed the Deputy Managing Director, POSCO - India that the 'in principle' allocation of water made earlier was now subject to some additional conditions including that the water for the steel plant was subject to availability of water during nonmonsoon and lean period in Mahanadi and Hansua Nallah. The letter dated 25.01.10 grants permission to draw water to the tune of 0.04 cumecs from Hansua Nallah at Nagari sluice for construction purposes and 3.47 cumecs of water from Jobra barrage for operational purposes. The permission was subject inter alia to the condition that Department of Water Resources (DOWR) will not be responsible for non -availability of water due to dry season, disruption, repair & maintenance of River/Canal/Reservoir and POSCO-India will have to make their own arrangement for storage of water to meet its requirement during nonmonsoon and lean period or scaling down of water drawal as per availability and as per direction of the Basin Manager.
- 69. In view of this modified permission it is not clear from where the company will meet its water requirements and what are its alternative water resources and the consequent environmental impact of drawing such huge quantities of water from the alternate water source if any.
- 70. Apart from the fact that the lean season availability of water has not been indicated the EIA does not provide information on competing users for the water from the Jobra barrage and Hansua Nallah. The water from the Jobra barrage is provided to farmers for irrigation in the Cuttack district. It also caters to the drinking water requirement of Cuttack. These issues have been raised during the public hearing but there is no factual assessment of the competing users and the adverse impact if any the drawal of water will have on the competing users. There is already shortage of water for meeting peoples demand during lean season.

IX. Failure to apply for CRZ Clearance for CETP pipeline of the steel plant into the sea.

- 71. The issue of CRZ violations is being elaborated in the latter part of the report. However for the sake of completion of facts on the steel plant this issue is being dealt with here. As per the REIA report for the Steel plant (Annexure E 3) a Common Effluent Treatment Plant (CETP) will be set up to take care of the untreated process effluents and treated plant sanitary wastewater. As per the report the treated water of CETP after partial use in green belt and plant landscape maintenance will be let into the sea by a submarine pipeline at 18 to 20 metre depth by jet diffusion. The pipe line will definitely have to pass through the CRZ area.
- 72. Laying a pipeline for the purpose of waste disposal is a permissible activity under the CRZ notification. However the company has to obtain the necessary clearance under the notification from Mo EF. From the records it is clear that no such application was even made to the MoEF by the Company. In the note dated 30.05.2007 prepared by the Additional Director, MoEF it is recorded that the issues to be discussed in the EA (I) meeting is regarding a) the CRZ clearance for the discharge of effluent into the sea; b) study report regarding impact of effluent discharged on marine ecology . However the minutes of the 67th meeting held on 5th June , 2007 (**Annexure E 10**) does not disclose that any of these issues were discussed. This issue is not discussed any further and clearances have been given.

Part IV

Analysis of the Rapid EIA of Captive Port

I. TOR not in accordance with procedure prescribed under EIA 2006.

73. The files of the MoEF reveal that the REIA prepared by POSCO as per the interim guidelines of the ministry was be discussed at the EAC meeting on 16.11.2006 for scoping the project and see the adequacy of REIA prepared. The minutes of the 46th meeting of the EAC on infrastructure records that that they directed POSCO to incorporate several studies in their TOR. The committee advised POSCO to incorporate the following TOR in the Environmental Impact assessment and submit to the ministry along with the public hearing proceedings, for further consideration of the committee

i) Feasibility report to be provided

- ii) Coastal Regulation Zone map indicating the various facilities along the high tide line demarcated by the authorized agencies to be provided.
- iii) Bathymetry survey details of the approach channel to be provided.
- iv) Cross section of the approach channel to be provided.
- v) Dimension of the fore shore facilities
- vi) Details of the various cargo handling facilities
- vii) Tranquility condition inside the basin
- viii) Littoral drift of the area along the shore and its impact due to the project.
- ix) The dumping site if it effects the Paradip navigation channel.
- x) Impact of the project on the olive ridley turtle migraton and the horse shoe crab eco system.
- xi) Dredging of the estuary could lead to erosion of the inner creak affecting the shore vegetation and precautionary measures taken to reduce the impact.
- xii) Details of the break water and its impact on the hydro dynamic of the area including siltation, by passing of the sediment etc.
- xiii) Shore evaluation study to be done upto 15 years and shore protection works to be elaborated.
- xiv) Measures to be taken to prevent flooding due to the rise in the creek water.
- xv) Disposal of domestic waste water and sewage.
- xvi) Details of fire fighting equipment an disaster management.
- xvii) Details of green belt development
- xiii) Raw material and mode of transport for transporting the raw material for construction of the project including break waters.
- xix) Wave plume studies

The committee was also of the opinion that a sub committee should visit the site for purposes of scoping so that the environmental impact assessment takes into account all the issues and place before the public for the public hearing.

74. But the records do not disclose that such an exercise of carrying an EIA on the basis of the revised TOR was ever done by POSCO. From the records it is evident that the public hearing was held on the basis of the REIA which was prepared as per the interim guidelines and which was found to be inadequate by the EAC.

- 75. The next meeting of the EAC was held on 20.04.2007 in which the POSCO port project was again discussed. At this EAC meeting POSCO was directed to provide the following additional studies
 - i) The numerical wave modelling for Wave agitation and down time analysis.
- ii) Numerical Wave modelling for Harbour Oscillation and Resonance
 - iii) Storm surge Assessment
 - iv) Changes in Ocean environment
 - v) Littoral Drift study
 - vi)Water circulation and capacity analysis
 - vii) Ship maneuvering simulation study.
- 76. Strangely though the EAC called for a number of studies to be done as part of the TOR for preparing an EIA on the basis of which the public hearing was to be conducted, the committee without even waiting for all the reports to be furnished went ahead and recommended the grant of EIA clearance for the port. Curiously they also waived the site by a sub –committee which was considered necessary in the earlier meeting.
- 77. The committee was provided a copy of the comprehensive EIA of the port and the steel plant by the company prepared in 2007 at the fag end. It has already been pointed out elsewhere in the report that the comprehensive EIA reports were never submitted to any of the State or Central agencies until the committee raised the specific issue after which alone it was submitted. A quick check of comprehensive EIA report of the Port reveals that even in this report, the studies called for in the EAC meetings were not complied with. For instance the following studies are not reflected even in the comprehensive EIA report.
 - i) Dredging of the estuary could lead to erosion of the inner creak affecting the shore vegetation and precautionary measures taken to reduce the impact.
- ii) Measures to be taken to prevent flooding due to the rise in the creek

water.

- iii) The numerical wave modelling for Wave agitation and down time analysis.
- iv) Numerical Wave modelling for Harbour Oscillation and Resonance
 - v) Storm Surge Assessment
 - vi) Water circulation and capacity analysis
 - vii) Ship maneuvering simulation study.

78. As far as the impact on the Pradip port is concerned apart from merely asserting that it will not be affected (Pg. 139 of the CEIA) no studies have been provided to substantiate their statement. Even in respect of storm surge assessment the report merely gives historical data of storm surges in the area but there is no impact assessment of the surges on the project or neighbouring areas . It is evident that even the comprehensive EIA is not as per the TOR given by the EAC. The fact that it was never placed before any of the government agencies is another aspect of the matter.

II. REIA of Port done during monsoon period and hence not valid.

79. According to the REIA of the port (**Annexure F - 2**) at para 1.3 it is stated that the investigations were done during the period from September to November 2005. At para 3.2.2 of the report in the section labeled 'Rainfall' it is stated that generally, the wet season was during southwest monsoon, from June to October. In Table 3.3 the monthly average rainfall is given.

Table 3.3 Monthly variation of air temperature, rainfall and relative humidity (Ref: IMD Climatological Tables)

Month	Average tempera (°C)		Average rainfall	Average relative Humidity (%)	
	Daily	Daily	(mm)		
No.	Max.	Min.		Morning	Evening
January	27.7	15.3	17.6	77	71
February	29.1	18.3	6.5	78	75
March	31.2	22.0	26.7	79	80
April	32.0	24.6	23.5	82	.84
May	33.1	25.8	54.3	82	83
June	.32.7	26.2	225.7	83	84
July	31.5	25.3	329.3	86	86
August	31.3	25.5	345.9	86	85
September	32.0	25.6	242.9	83	83
October	31.7	24.3	206.3	81	79
November	30.2	20.5	108.7	79 75	
December	28.0	15.3	21.7	76	70

From the table given above it is clear that the rainfall for the months beginning June to October is very high averaging between 206.3 to 345 mm. Even in the month of November the average rainfall is still high at

an average of 108 mm. Data of the field survey collected during this period cannot be scientifically extrapolated for the entire season and therefore not valid. Further it is precisely for this reason made legally impermissible and hence not valid.

III. Objections raised by the State Pollution Control Board, Orissa on Captive Minor Port of M/s POSCO India Ltd, Jatadharmohan Creek, Kujanga, Jagatsinghpur

- 80. As mentioned in the minutes of the meeting in reference No.27330/IND-II-NOC-4447 dated 08.11.2006 the project proponent made a presentation on 20.09.2006. At that meeting the PCB pointed out to certain gaps/limitation in the REIA and requested that these aspects should be covered in the final EIA. The following are some of the more significant issues which were pointed out in the proceedings.
 - i) "As mentioned, the dredged material will be used for land reclamation which will be developed as "Steel Plant Site". But schematic presentation on 'dredging sites' vis-à-vis 'reclamation site' along with path of transportation of material is required to be discussed clearly in EIA report. This is essential to get an idea on impact of dewatering process of reclaimed area upon the immediate vicinity."
 - ii) "There has been a special mention on "horse shoe crab" which has
 - adapted itself to changing climate for more than 400 million years. But
 - impact of the project upon this species has not been commented."
 - iii) It has been made clear that the core area of Gahirmatha Sanctuary (where total restriction on fishing imposed) is 35 KM away from port site. But the most important point is that any criss-crossing of turtles migration route with navigation route shall have serious impact upon this species. A Map showing the migration path of turtles and navigation route of ships may be required to ensure that a safe distance is mentioned between the two routes.
 - iv) As mentioned, mangrove vegetation is totally absent in the study area. But from the maps available of that locality, it appears that mangrove spp are existing at 6 to 7 K.M. away

from the site. Since mangrove vegetation plays a vital role on marine ecosystem of coastal Orissa its impact needs to be thoroughly studied.

- v) About 12.2 million m3 of dredged material will be disposed of in sea. The clay particles, if disposed of during March-May will get deposited in navigational channel of Paradeep Port under the effect of sea current. A quantitative estimate of such siltation within Paradeep Port area may be made.
- vi) Deepening of creek and providing new opening will increase current and volume of water entering into these inlets during flood tides. This will result is increase in erosion of inner creek segments destabilizing the near-shore vegetarian. The measurable impact if assessed may be presented.
- vii) During construction phase, dredging will cause destruction of habitats in creek and near-shore region. The bottom communities in an area of 5.6Km2 inside the creek and 2.25 Km2 in near-shore region will be permanently lost. Basis of arriving these figures not furnished. A list of bottom communities apprehended to be lost needs to be furnished.
- viii) Handling of iron ore & coal only are envisaged. But looking at the ultimate capacity of the Steel Plant, the Port may handle various other materials, chemicals, in future depending upon the product spectrum.
- ix) Water pollution from various sources especially ballast water, bilge water etc. have been mentioned. But the quantity of effluent generation, specific treatment facility & capacity of such facilities have not been furnished. All such sources shall have effluents contaminated with oil.
- x) Chronic release of such wastes in confined water of Jatadhar Muhan Creek would lead to damage of ecosystem with elimination of sensitive organisms. List of such vulnerable species have not been enumerated. Nowhere in the report, handling of petroleum products or fuel (HSD,LDO,FO,LPG etc) has been mentioned. Even, storage of fuel for ships also have not been envisaged at port site. This needs to be clarified.

- xi) Location of release of treated waste water has not been mentioned. This has to be defined clearly so as to ensure required dilution with respect to the parameter of "oil & grease".
- xii) The ultimate change in shore line (which will take place over a span of 7 years) vis-à-vis CRZ regulations (if at all it attracts) needs to be examined.
- xiii) There may be restriction on fishing within a certain region. The region needs to be demarcated in a map and loss of fish harvest during such restriction may be estimated for socio-economic reasons.
- xiv) Though it's a rapid marine EIA where marine parameters are of utmost importance, still a fairly strong socio-economic impact is likely to be caused due to restriction of fishing and loss of potential (due to project activities) which needs to be studied since fishing has been the main source of livelihood in this region.

Hazard potential:

Facilities of oil handling and storage at port site needs to be prepared. The impact of fire hazard as "stand alone" case as well as the threat from IOCL's refinery needs to be examined since IOCL will also be handling its raw material through pipelines in vicinity of this port site.

- ii) The main bulk of material to be handled and stored at port site will be coal. Fire hazard potential arising out of it needs to be studied.
- iii) Disaster Management Plan to be prepared keeping the following in view (in addition to the issues enumerated at 7.2.1)
- a) Fire caused at oil storage facility.
- b) Fire caused at IOCL or its allied installations.
- c) Oil spill caused at port area due to its own activities.
- d) Oil spill caused at IOCL (or its Pipelines) affecting the creek.
- e) Fire hazard caused in coal handling, storage and movement route.
- f) Earthquake (if risk exists according to seismic zone map)
 - g) A region oil spill contingency plan in coordination with all

potential hazardous units in this regard.

Other details

- a) The socio-economic study especially related to fishing, infrastructure development etc. needs to be studied. Certainly a large scale infrastructure like road network, railways, power lines etc. will develop in the vicinity of Paradeep due to this project township and steel plant.
- b) Comprehensive structure of "pollution control cell" and the infrastructure facilities to be developed etc are to be detailed.
- c) Area to be acquired for the project and its present 'land use, is not furnished.
- d) A comprehensive green belt plan has to be prepared.
- e) Details of air pollution control devices to be installed at coal storage area at Port site & transport to plant site.
- f) Through it is marine EIA, but ambient air quality and noise level of project site should have been incorporated to record it as back ground concentration which shall be used for reference during post-project period.
- g) Though it has been prescribed that layout of various schemes meets the requirements of CRZ Notification, but a map showing the "Project layout" super imposed on "CRZ map" would make it more clear.
- h) It is mentioned that the surplus dredged materials will be disposed at a pre-identified location which has not been revealed in the report. However, the average water depth of such disposal site would be 22 meters indicating that the site will not be too far from the shore. A map indicating the disposal site vis-à-vis project site and predominant sea current path shall better clarify the position.

The proponent has to incorporate the above in the final EIA."

81. On a reading of the issues raised it is evident that the State PCB raised crucial issues of serious concern, but from the records made available to the Committee it appears that many of these issues were never seriously pursued. Unfortunately neither

the PCB, Orissa nor the EAC / MoEF insisted on answers for these issues before the clearances were given.

III. Comments of Orissa CZMA on REIA of the Captive Port.

- 82. A meeting of Orissa State Coastal Zone Management Authority was held under the chairmanship of Principal Secretary Forest and Environment Department on 7th August, 2006 (Annexure F 5) to consider the environmental impact of the captive minor port. Dr.V.Sanil Kumar, Scientist of National Institute of Oceanography, Goa presented the Rapid Environmental Impact Assessment study conducted for the area. The following issues were raised by the members:
 - i) The duration of study for biological analysis has not been mentioned. The phytoplankton study did not have any details such as date of collection of samples, centre of deposit, voucher number and photographs of each organism. There has not been any mention of sea weed and sea grass in the report.
 - ii) As the Regional Research Laboratory (RRL) is monitoring the coastal water of Orissa since last few years, data are available and these data could be taken advantage of in the preparation of comprehensive Environmental Impact Assessment (EIA) report as reference.
 - iii) It was pointed out that the CRZ maps which have been supplied by ORSAC and the maps enclosed in the report do not match.
 - iv) Steps proposed for protection of beach erosion need to be mentioned.
 - iv) Issues like socio-economic aspect, horseshoe crab, impact of handling materials other than coal and iron ore in the port, water pollution problem including treatment facility and location of discharge have not been addressed in the impact assessment report.
 - vi) Mr. S.P.Nanda, Principal Secretary and Chairman of the Authority wanted to know the truth in the apprehension and concern of general public about threat to the Paradeep Port.
 - . In response to the issues raised above the following clarification were given by the consultant.
 - (a) Sea weed and sea grass studies are to be included in the comprehensive EIA. Details of sample, i.e., date of collection,

photographs and voucher would be provided in the comprehensive report.

- (b) Comprehensive environmental impact assessment report is under preparation which would cover all seasonal data pertaining to environmental parameters. N I O is currently carrying out seasonal observation for water quality and biological parameters. Data available from other sources would also be referred to.
- c) The issue regarding mismatch between CRZ map prepared by Government of Orissa and the map submitted by the project proponent would be sorted out immediately.
- d) The Consultant also indicated that during construction of Paradeep port counter measures for shoreline erosion had not been visualized properly whereas in the present case countermeasure such as sand bypassing with additional engineering measures for beach nourishment would be adopted which would maintain the shoreline. Annual natural sediment transportation would not affect the Paradeep port because the effect can be felt upto a maximum distance of about 5 kms towards Paradeep port. But Paradeep port is located at a distance of 12kms. Hence, the apprehension is not correct.
- e) Socio economic aspect would be dealt with in detail in the **comprehensive report**. The points raised such as water treatment facility and location of disposal of waste water would be immediately furnished. The representative of POSCO clarified that no other material other than iron ore and coal would be imported through the port. The air quality measurements would be mentioned in the **comprehensive report**. In connection with a query regarding dust control measures, the consultant clarified that dry fog arrangements with vacuum cleaners would be adopted which would require less water and there would be no generation of waste water from such treatment.
- f) **Some members desired to go on a site visit.** After detailed deliberation, the Authority in principle agreed to recommend the proposal of M/s. POSCO for establishment of captive minor port at Jatadharmohan creek, to Ministry of Environment & Forest, Government of India for considering grant of CRZ clearance.
- 83. The above referred minutes disclose that apart from the PCB the OSCZMA has also raised several pertinent issues which were promised to be studied by the project proponent in the

comprehensive EIA which was under preparation. But the clearances were rushed through without waiting for the comprehensive EIA reports..

IV. Objections raised by the MoEF, Regional Office, Bhubaneshwar.

84. The Regional Office (RO) of MoEF at Bhubaneshwar sent their detailed comments to the IA Division, MoEF on the Rapid EIA of port through proceedings Ref. No. 106-90/EPE dated 7.8.2006 (**Annexure F-4**). The following are the comments sent to MoEF.

- Port projects are highly significant and mostly are built in sensitive areas i.e CRZ I and create a sizable impact on marine as well as terrestrial eco systems.
- The present project is located 12 km south of Paradeep port and the impact of developing this project on the functioning of existing port needs to investigated mainly on the angles of dredging and dumping of spoils, nutrient loading on the coastal shore of Paradeep due to increased activity (cumulative impact) and availability of urban infrastructure to absorb the increase in influx particularly transport, population and land requirement.
- The Indian oil Corporation Refinery is also coming up between Paradeep port and the present proposed site.
- As per the EIA report the project involves capital as well as maintenance dredging. The dredge material is proposed to be dumped on the shore and the sand beach. As per the approved CZMP of Orissa, para A (xiv), the dredge material should not be disposed within the CRZ area.
- While according approval of CZMP of Orissa, the ministry has not approved the categorization of Paradip port area... thus, the categorization of CRZ areas by the project authorities may not be agreed by the ministry.
- In light of the above points, it is requested that clearance under CRZ regulation may be considered with the following points and views:

- a) The project is highly significant as far as impact on ecology of Paradeep area is concerned...necessary clarification on "Minor" and "Major" terms may be given by the ministry.
- b) Rapid EIA exercise may not be considered by the ministry as appraisal may not be easy due to lack of 3 seasons data i.e from December to August. The marine biology is very complex and different from terrestrial habitats with many biotic groups completing their whole life cycles with a season. The physical and hydro-geological parameters of ocean and current behavior differ much from season to season and so the impact of these changes on environmental settings. **Thus, omitting a season means incomplete assessment of total bio diversity** (emphasis ours).
- c) A special report is needed on the impact of the project on Olive Ridley turtles. These organisms remain in this area between Ganjam Coast and Bhittarkanika for at least 6 months for mating and laying eggs. The hatchlings also emerge from the sandbars of some of the areas of Orissa coast in late winter to finally reach to the marine water. Any activity during these periods may harm the existence of Olive Ridley turtles.
- d) It has also been felt that there is a difference in the maps of the project and the forest department and the Topo sheet regarding the type of land being proposed (114.8 acres) there was a discussion that some portion of the proposed area is in fact, forest lands attracting the provisions of Forest (Conservation) Act, 1980.
- e) Since the port is a captive project of the steel plant, the impact of steel plant activities on the functioning of port also needs to be assessed. Project may be advised to make a comprehensive EIA for clearance under EIA Notification. The activities linking the port and steel plant has not been considered in Rapid EIA report.

- f) The steel plant portion of the project site will require large area of forest land for which clearance under F© act is required. Once a single proposal is made, the present disagreement about the involvement of forest land in port project will be completely taken care of.
- g) We may consider taking opinion of Paradeep Port Trust on likely environmental impact of proposed activities on the existing Paradeep port.
- 85. In addition to the above the RO, MoEF, Bhubaneshwar in its letter dated 9.4.2007 (**Annexure F 11**) brought to the notice of the MoEF, New Delhi that the Paradeep area is being considered for establishment of several industries which will have environmental implications on aquatic and terrestrial eco systems. The Ministry may consider:
 - (a) initiating studies on ecological implications of development;
 - (b) Long term study on the impacts due to erosion of creeks / banks, deepening of the creek and widening of the river mouth;
 - (c) on the population and community ecology of phytoplanktons and zoo planktons and impact of increase of oil and grease concentration in the sea water on these organisms.
 - (d) Changes in primary productivity near the project discharge areas and areas inside the sea not affected by the development to document the species behaviour and survival.
 - (e) Impact of regular dredging by port authorities.
 - (f) continuous monitoring on ecology of Olive Ridley turtles.

Though these comments were sent much prior to the clearances, none of them seem to have been seriously considered by the EAC.

86. It is evident that at least three committees - Technical Committee, Iron And Steel Sector (**Annexure E - 6**), State Pollution Control Board, Orissa with respect to REIA of Steel Plant, and the Orissa State Coastal Zone Management Authority on Captive Minor Port (**Annexure F -5**) have raised important queries calling for further information and a comprehensive EIA from the Project proponents both on the steel plant and the port. However on a perusal of the minutes of the EAC in respect of the port and the steel plant reveals that these queries have been completely ignored. Many of the issues raised by them

have not been followed through by the authorities themselves. For instance the members of the Orissa State Coastal Zone Management Authority desired to go on a site visit. However the records do not reveal if such a site visit was ever undertaken. Similarly the Technical Committee, Iron And Steel Sector, State Pollution Control Board, pointed out that the FINEX technology is unknown with no literature available and hence it would be necessary to observe an actual operational plant to verify the claims of the company. However the records once again do not disclose that such an exercise was undertaken.

87. The EAC minutes for the port reveal that at its meeting on 16.10.2006 (**Annexure F - 8**) the EAC wanted to undertake a site trip. The same was again abandoned as recorded in the minutes dated Nov, 2006 (**Annexure F - 9**) where a decision to grant the CRZ and EIA clearance was taken.

V. Impact on Paradeep Port.

- 88. Concerns regarding the impact of the POSCO port on the existing Paradeep Port have been repeatedly voiced by the authorities as well as by the public. The project proponent has merely asserted that there will be no adverse impact on the Paradeep Port. From the records made available to the committee members it appears that these assertions are not based on studies/ reports which were made available to the various authorities / public. A close scrutiny of such studies if any, by independent authorities as well as by members of the public who may have expertise in the area can alone satisfy the concerns. A mere assertion by the project proponent and a meek acceptance of the same by the EAC is not at all a satisfactory approach.
- 89. Further contrary to the claims of the project proponent Ministry of Shipping, Road Transport and Highways, Government of India appears to have a different view. An Unstarred Question No 4005 was raised in the Lok Sabha to the Ministry of Shipping, Road Transport And Highways, Government Of India as to
 - (a) Whether the private port being set up near Paradip Port will have any adverse effect on the existing Paradip Port;
 - (b) If so, the steps taken to examine the proposal to set up the port in the private sector; and
 - (c) The reaction of the Government thereon?
- 90. The query was answered on 20.12.2005 by Minister of Shipping, Road Transport and Highways (Shri T.R. Baalu) (**Annexure F 1**). The reply was as follows:

"The proposed minor port for POSCO steel plant may lead to severe erosion along the coastline posing a threat to the port facilities at Paradip. Government of India as well as Paradip Port Trust have impressed upon the State Government of Orissa that Paradip Port after deepening of its channels will be in a position to develop its deep draft dock system and the facility can be made available on captive basis to POSCO. The State Government of Orissa has been urged to undertake intensive and detailed study regarding erosion if they decide to develop minor port for POSCO plant and associate Government of India and Paradip Port with such studies."

91. The committee members met the chairperson of the Paradeep Port and pointed out the facts mentioned above. But apart from a cursory statement that nothing will happen he did not provide any satisfactory explanation to us. It is most unfortunate that despite the fact that this issue was raised as early as December 2005 in the Parliament and the concerned Minister has categorically stated that this will adversely effect the Paradeep Port, the EAC and the MoEF have not chosen to call for reports from the Ministry of Shipping, Road Transport And Highways, Government of India before clearances were given.

VI. Requirement of Comprehensive EIA not pursued by State authorities.

- 92. It is has already been pointed out that the State PCB has already raised doubts about the sufficiency of data with regard to FINEX technology. It has also raised several queries on other issues. They called for comprehensive / further studies in some area. However the EAC did not go into the issue of sufficiency of REIA and EMP and the requirement of a comprehensive EIA even though it is one of the largest projects ever considered and it was being set up in an environmentally fragile area which is at the receiving end of severe cyclonic storms.
- 93. In *Baldev Singh and Ors. Vs. State of H.P. and Ors.* (2006(3)ShimLC135) a Division Bench of the Himachal Pradesh High Court in its order dated 27.07.2006 interpreted the scope of the Explanatory Note regarding the Impact Assessment Notification dated 27th January, 1994. The Court held that the notification envisages that a comprehensive EIA report must be submitted based on one year's data. It is only in case the project is unlikely to cause significant impact on the environment that this requirement may be dispensed with. A project proponent must satisfy the IAA that a comprehensive EIA can be

dispensed with in the peculiar facts and circumstances of the case. Since there is no comprehensive EIA or a properly conducted Rapid EIA and no report of the Impact Assessment Authority, whether a comprehensive EIA is required or not we are of the opinion that there has been no compliance with the provisions of the EIA notification.

Part V Public Hearing

- 94. A combined public hearing for both the steel plant and minor port was organized on 15.4.2007 at Banabehari High School, Kujanga by the Orissa State Pollution Control Board. As per the Interim Operational Guidelines dated 13.10.2006, in respect of projects where EIA document has been submitted prior to the 2006 EIA Notification and where the Public Hearing has not been conducted, it would be conducted as per the procedure of EIA 2006.
- 95. Before embarking on an examination of the manner in which the Public Hearing was conducted in the POSCO case, we need to understand the importance accorded to 'Public Hearing' or 'public consultation' process in law. It should be stressed that in law, public consultation is much broader than public hearing.

I. Public Hearing as part of Public Consultation

- 96. The 2006 EIA Notification placed a lot of emphasis on public consultation process. Clause 7 outlines 4 stages in Prior Environmental Clearance (EC) Process for new projects which include the stages of (1) Screening, (2) Scoping, (3) Public Consultation and (4) Appraisal.
- 97. "Public Consultation" was described to be the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. (emphasis ours).
 - 98. Public consultation was conceived to have 2 components:
 - (i) a public hearing at the site or in its close proximity- district wise, to be carried out in the manner prescribed in Appendix IV, for ascertaining concerns of local affected persons;
 - (b) obtain responses in writing from other concerned persons having a plausible stake in the environmental aspects of the project or activity. (Stage III, 2006 EIA Notification).

Appendix 4 of the EIA Notification, 2006 sets out the procedure for conduct of Public Hearing.

99. It should be stressed that the emphasis on public consultation was not a mere procedural requirement. The law conceived of the wider public as having a direct and vital stake in the decision regarding the siting and establishment of any industry. Thus it was imperative that there was full and complete disclosure about the environmental implications of a project to citizens who would be vitally affected by the project as also others who have a wider environmental stake about the project. The issue of consultation therefore encompassed issues of availability and access to full information about the proposed project, the environmental risks, mitigation measures and other such critical information. Apart from provision and availability of information, was the element of free and unhindered participation in the public hearing itself with the opportunity of expressing views each persons concerns about the environmental implications of the project. The broader perspective underlying public hearings is outlined in the EIA Manual of Jan 2001.

II. The Role of the Public

100. According to the EIA Manual, 2001 the public has an important role to play in EIA. The concerned persons will be invited through press advertisement to review information and provide their views on the proposed development requiring environmental clearance.

101. Law requires that the public must be informed and consulted on a proposed development after the completion of EIA report. Any one likely to be affected by the proposed project is entitled to have access to the Executive Summary of the EIA. The affected persons may include:

bonafide local residents;

local associations;

environmental groups active in the area, and

any other person located at the project site / sites of displacement They are to be given an opportunity to make oral/written suggestions to the State Pollution Control Board.

III. Manner of holding Public Hearing - Framework for analysing

102. There should be dissemination and availability of Summary of EIA and Draft EIA Report to Public. The procedure for arrangement and

conduct of public hearings is elaborated in Appendix IV of the EIA Notification, 2006. Clause 1 provides that the concerned State / Union Territory Pollution Control Board arranges for the Public Hearing which "shall be arranged in a systematic, time bound and transparent manner ensuring widest possible public participation at the project site(s) or in its close proximity district wise" (emphasis ours).

- 103. Clause 2.3 requires the project proponent (termed Applicant in the Notification) to supply 10 hard copies and equivalent number of soft copies of the draft EIA Report including the Summary EIA Report in English and local language, prepared strictly in accordance with the terms of Reference communicated after scoping. This was to be sent to MOEF, New Delhi as also to the following state level authorities or offices, within whose jurisdiction the project will be located:
 - (a) District Magistrate/s
 - (b) Zila Parishad or Municipal Corporation
 - (c) District Industries Office
 - (d) Concerned Regional Office of the Ministry of Environment and Forests.
- 104. Clause 2.3 provided that on receiving the draft Environmental Impact Assessment report, the above-mentioned authorities (except the MoEF), shall arrange to widely publicize it within their respective jurisdictions requesting the interested persons to send their comments to the concerned regulatory authorities. They shall also make available the draft EIA Report for inspection electronically or otherwise to the public during normal office hours till the Public Hearing is over.
- 105. Similarly, clause 2.4 stipulated that the State / UT PCB or UTPCC concerned shall also make similar arrangements for giving publicity about the project within the State/Union Territory and make available the Summary of the draft Environmental Impact Assessment report (Appendix III A) for inspection in select offices or public libraries or panchayats etc. They shall also additionally make available a copy of the draft Environmental Impact Assessment report to the above five authorities/offices viz, Ministry of Environment and Forests, District Magistrate etc
- 106. The date, venue and time of the Public Hearing itself was to be widely publicized in one major national and one Regional Vernacular

Daily newspaper and 30 days minimum notice period shall be provided. (Cl. 3.1)

107. The Public Hearing itself shall be supervised and presided over by the District magistrate or his/her representative not below the rank of an Additional District magistrate. A summary of the proceedings accurately reflecting all the views and concerns expressed shall be prepared by the representative of the State PCB, read over to the audience at the end of the proceedings and explained in the local language and agreed upon Minutes had to be signed by the District Magistrate or their representative on the same day itself (cl. 6.1). Similarly, a statement of issues raised by the public and comments of the Applicant shall also be prepared in local language and English and annexed to Proceedings. The Proceedings of public hearing shall be conspicuously displayed at the office of the Panchayats within whose jurisdiction the project is located, and in the offices of the Zilla Parishad, District Magistrate (Collector), and the State PCB. (Cl. 6.6).

IV. Reviewing the Adequacy of Consultation Process

108. Clause 3.1.3 of the EIA Manual, 2001 explains the process of reviewing the conduct of public consultation process and provides that in reviewing the adequacy of the consultation process, together with the incorporation of its results into the detailed EIA, the Impact Assessment Agency should examine whether the procedure has been followed as per MoEF notification and

- a) An overview of the issues discussed
- b) How the concerns raised were responded to by the project proponent
- c) How these responses were conveyed back to those consulted
- d) What are the public hearing panel's observations.

109. To assist the review in appraising the adequacy of the consultation process, a checklist of programme objectives and issues for verification was presented.

Objective	Issues to verify
Stakeholder	Is the Project Proponent aware of all those groups
s	and individuals who will be directly affected by the
Identificatio	social or environmental impacts of the project?

n	
Impact	Has project proponent addressed to mitigation
Identificatio	options. Have all social and environmental impacts
n	of significance to the local population and other
	stakeholders been assessed in the EIA (including the
	indirect social impacts)
Mitigation	Has the project proponent addressed the issues of
Options	project compensation and rehabilitation as per the
	procedure
Monitoring	Have project-affected groups been proposed to be
	involved in monitoring the effectiveness of social and
	environmental impact mitigation and is a plan for
	the same presented?
Community	Is proponent working to promote local development
Developmen	within the wider community?
t	

Having considered the framework for analysing the adequacy of the public consultation and public hearing process, we shall now examine the specific situation of the Public Hearing conducted in the POSCO project on 15.4.2007.

V. Review of Adequacy of Public Hearing conducted on 15.4.2007.

- 110. The Committee went through the copies of the report of Proceedings of the public hearing (**Annexure E 7**), the list of issues raised in the hearing and the reply of the POSCO officials. The MoEF, New Delhi also provided the Committee with copies of objections received by them from various individuals, groups and organizations about the public hearing sent in both Oriya and English. Additionally, during the field visits when the Committee met with villagers, some of the objections given earlier was handed to the Committee and in the course of discussions with different persons, there was reference to the conduct of the public hearing.
- 111. The following analysis is based on the variety of material gathered from different sources. We are however taking care to refer to contemporaneous documents about the public hearing wherever possible.

VI. Objections raised during the Public Hearing

112. A number of objections were raised during the public hearing itself. This is evident from the record of proceedings (**Annexure E - 7**).

i) EIA Reports not available at the Panchayat office.

Though the Notification stipulates that the EIA Report should be made available at the office of the 8 panchayats, according to some of the participants in the Public Hearing, the EIA reports were not available at the Panchayats of the 8 project affected villages. There was also a complaint that the soft copy of the REIA vol. 2 containing the Field Survey was not available. (See representation titled "Objections: Ten Reasons as to why I object to the EIA Reports for POSCO" dated 15.5.2007 given by Premasi Nayak of Erasama. Jagatsinghpur, found in the MoEF Files).

ii). Place of Public Hearing inconvenient.

The public hearing was held in Kujanga, about 15 kms away from the affected villages. During the hearing, many people complained that because of the prohibitive distance, many villagers could not travel to participate in the Public Hearing. They also demanded a rehearing in a more accessible place closer to the project affected villages. (representations submitted to authorities as found in MoEF files).

iii) Other project affected people like traditional fishing community and farmers not covered by the public hearing.

- a) Another demand was that a separate public hearing should be held for farmers who are going to be affected by the diversion of water from the Jobra Barrage 86 kms or so away from the POSCO plant site. Similarly there was representation by the traditional fishing community who fish along the Jatadharmohan coast, of being
- b) A representation dated 15.04.2007 was sent by the Kalinga Karnadhar Kaibarta Solabhai Sabha, Kujang, Kalinga Kaibarta Bhaban, Atharbanki, Paradip 754142 to the OPCB pursuant to advertisement dated 14/15 March 2007 in 'The Dhatri' newspaper spelling their objections to the setting up of the POSCO plant at the site proposed. Copy of this was sent to the MoEF,New Delhi (thisletetr was found in the MoEF file). In a clear manner they also expressed their fear that if allowed to be set up, the hazardous waste materials emanating from the steel plant, both air and liquid, would seriously damage and threaten the local environment, marine life, seasonal crops, water, thereby causing serious health

hazards and affect their livelihoods. (Present in the files sent by MoEF with regard to Steel plant EC)

- c) According to this representation, villager of 99 villages especially the Kaibartha community of erstwhile Kujanga Estate have enjoyed fishing rights upon 57 tidal rivers and creeks for several generations known as "Saharapentha Machhaaida". These rights were conferred upon them by Sendha Raj in 1860 by way of permanent lease known as 'sananda'. The State government has recognized these rights even after vesting of the Estate. It includes the area in in Mouza Jatadhar in Khata No. 2.
- d) A representative suit was filed by the Association in C.S. No. 93 of 93 before the Court of Civil Judge (Sr. Division) Jagatsinghpur for occupancy rights and injunction restraining the Collector Jagatsinghpur, Kendrapara in the matter of exercising fishing rights in respect 57 rivers and creeks.
- e) An order dated 09.11.93 was passed in I.A No. 235 of 1993 in C.S. No. 93 of 93. A Civil Revision Petition No. 155 of 2001 was filed before the Orissa High Court as against the order in the I.A 235 of 1993 in C.S. No. 93 of 93. The High Court passed an order dated 02.07.2002 in Civil Revision Petition No. 155 of 2001 restraining the authorities from disturbing the rights of the Petitioners to catch fish so long as they pay lease amount determined by Tahsildar.
- f) Due to subsequent events, the Petitioners sought permission in the Revision petition to withdraw CS/ T.S. 93 of 93 and file fresh suit. They were directed to approach civil court. C.S. No. 43 of 2001 was filed before the Court of Civil Judge (Sr. Division). By order dated 26.03.2003, I.A. No. 68 of 2003 for injunction restraining the collectors of Jagatsinghpur and Kendrapur from interfering with their rights was dismissed. As against this FAO No. 352 of 2005 was filed before the Orissa High court. The High Court by its order dated 19.05.2006 directed that lease shall be granted to the Petitioners on payment of lease amount until disposal of the suit.
- g) According to the representation, the POSCO site falls in the area under Lease Case No. 36 of 2005. There is also a reference to order of Supreme Court in W.P. Civil No. 561 of 94 where in the context of CRZ the Court held that rights of traditional fishing communities will be protected. According to the Association the location of POSCO plant in the proposed site was in violation of their rights protected by the court order.

There is no discussion or consideration of these claims and objections by any of the authorities including the EAC.

iv). Large scale Police presence inhibiting local participation

Some of the participants pointed out that a strong police force of over 1,000 personnel were present at the venue of the public hearing a day prior to the hearing itself. This served as a deterrent to free participation by local villagers, who were opposing the project. Some also stated that there was large scale presence of ruling party (BJD) cadres and hence they apprehended violence. This also served as another factor for non-participation of many residents from villages like Dhinkia from participating in the public hearing (as told orally to the Committee by local villagers).

VII. Some of the main environmental concerns raised in Public Hearing regarding steel plant and the response of POSCO India.

S1.	Environmental Concerns	Reply of POSCO
No	raised in Public Hearing	
1	Drawal of water from the Mahanadi river will affect supply of drinking water, irrigation and cultivation and the impact of drawal of 10 MGD/16.5 MGD water not studied as in summer the Mahanadi dries up and withdrawal of water during that time will	Not addressed
	effect the present users.	
2	The environmental impact of 87 km pipeline from Jobra Barrage to plant site which is in integral part of the plant not included in the EIA.	Not addressed
3	There is no precise identification of the 900 acres of land which will be used for solid waste dumping.	Not addressed
4	The chemical characteristics and leachability of toxic heavy materials in solid waste not assessed.	Not addressed
5	Dumping site is located close to the Jatadharmohan creek.	Not addressed.
6	Paradeep area is already polluted severely	Not addressed

	because of other industries in the area.	
7	Waste water from the Central Effluent Treatment Plant is to be released into the sea through a pipeline. There has not been any assessment of impact on marine environment and ecology	Not addressed
8	Finex technology is unknown and a query was raised as to whether this technology had been certified and validated by any international technical accreditation agency.	Not addressed
9	There should be no industrialization within 150 m of the tidal zone of the Jatadharmohan creek.	Not addressed
10	The project would adversely affect the health of persons living in that area	The reply states that they plan to have extensive air pollution control measures and the present air ambient quality will be preserved.
11	Rapid EIA is not sufficient and a comprehensive EIA should be done.	Report is complete on one season baseline data. Note: The reply is evasive and does not address the importance of a Comprehensive EIA covering seasonal variations across a full year.
12	The figure of 471 displaced families as given in the EIA is incorrect and the actual figure could be as high as 2843 families.	The figure of 471 families is said to be based on first hand information.

13	CRZ notification has to be followed in respect	Steel plant does
	of location of steel plant.	not come under
		CRZ regulation
		and CRZ
		clearance of
		proposed site
		has been
		evaluated by the
		OCZMA and
		report of the
		National
		Institute of
		Oceanography
		(NIO) is available
		with the OCZMA

VIII. Environmental concerns raised in Public Hearing regarding port

S1. No	Environmental Concerns raised in Public Hearing	Reply of POSCO
1	It will affect fishing activities in the creek.	POSCO India will invest in fishery culture development with active participation of local people. Note: This reply does not address the issue raised of traditional fishing rights of Kalinga Karnadhar Kaibarta Solabhai Sabha, Kujang, Kalinga Kaibarta Bhaban, Atharbanki,

		Paradip
2	Dredging would affect Atharbanki creek	Not addressed
3	Dredging for the port would result in soil	
	erosion beyond north break water and sand	_
	filling near southern break water.	studied by the
		Danish
		Hydrology
		Institute,
		Consulting
		Engineering
		Services, New
		Delhi and the
		NIO, Goa with
		mathematical
		simulation
		modelling, the
		quantum of
		dredged sand
		has been
		calculated and
		its disposal for
		site reclamation and at far off
		shore has been
		considered.
4	There would be adverse effect on discharge of	
-	flood water during rainy season.	Jatadarmohan
	nood water during rainy season.	creek will be
		kept open and
		the creek
		widened and
		dredged to
		deepen it for
		accessibility of
		ships to
		harbour. This
		will facilitate
		quick discharge
		of storm water.
		Note: This reply
		does not address
		the issue of the

	T	
		drainage of flood
		waters currently
		emptying into
		the JMcreek
		which will be
		obstructed on
		account of the
		raised elevation
		of the steel plant
		site by more
		than 6+ m or 25
		feet.
5	Paradeep port would be adversely affected	The feasibility
		study of port has
		considered the
		effect on
		Paradeep port.
		Simulated model
		studies has been
		done by the
		Danish
		Hydrological
		Institute and the
		Consulting
		Engg. Services
		which confirms
		that there will be
		no adverse effect
		on the Paradeep
		port.
		Note: None of
		the above
		reports have
		been
		incorporated
		into the EIA or
		annexed thereto.
		Barring the bald
		assertion of the
		company there
		is no material to
		ascertain the

		statement.
6	Dredging of sand dumping it in the sea would destroy the habitat and migratory route of Olive Ridley turtles.	turbid waters
7	Port illumination would also have an adverse effect on Olive Ridley turtles, and endangered species	Not addressed
8	Indo-pacific hump back dolphin, common dolphin, porpoise and spinner dolphins would be adversely impacted as the river mouth is the breeding and foraging ground for marine mammals.	Not addressed
9	The Jatadari river mouth is an important migratory route for hilsa and other marine fishes of high market value.	Not addressed
10	The current measurement and the off shore water were recorded between 5.9.2005 and 8.10.2005 (ref. para 1.3.2.2 of REIA Report of Port). Hence the reading has been done only for 34 days and not even an entire season. Hence the REIA is flawed.	Not addressed
11	The specific area at which the dredged sand would be dumped not identified and no study of the effect of this dumping on food chain and habitat of sea turtles was done.	Not addressed
12	No comprehensive risk analysis, especially of worse case oil spill scenario.	Not addressed
13	No assessment of cumulative impact of various port projects along the coast on Olive Ridley turtles which is a protected species under Schedule I of the Indian Wildlife Protection Act, 1911.	Not addressed
14	HAZOP study not done.	Not addressed

IX. Failure to address all the material environmental concerns raised in the public hearing by the project proponent.

- 113. As per the EIA notification, 2006 after completion of the public consultation, the applicant shall address all the material environmental concerns expressed during this process, and make appropriate changes in the draft EIA and EMP. The final EIA report, so prepared, shall be submitted by the applicant to the concerned regulatory authority for appraisal. The applicant may alternatively submit a supplementary report to draft EIA and EMP addressing all the concerns expressed during the public consultation.
- 114. In response to the objections raised in the public hearing the project proponent gave a response which was submitted as Annexure 1 to the public hearing proceedings submitted to MoEF. These responses do not cover many significant issues raised in the public hearing as shown in the tables above.

Part VI Expert Appraisal Committee

I. Role of Expert Appraisal Committee:

- 115. The EAC is the highest recommendatory body of the MoEF. While technically the recommendations of the EAC can be accepted or rejected by the Ministry, in practice the recommendation of the EAC is normally acted upon. So functionally, the EAC is the last word on the matter. Hence the role of the EAC is very crucial and a complacent and complaint EAC would render the entire EIA procedure meaningless and toothless. Considering the fact that damage to environment is irreversible and its impact felt over generations often well beyond the geographical boundaries of project sites the responsibilities of the EAC is that much more onerous. Any mechanical or ritualistic approach to its duties will spell the death knell for our environment and people.
- 116. A Division Bench of the Delhi High Court in its order dated 26.11.2009 in **`Utkarsh Mandal .Vs. Union Of India'** (Writ Petition (Civil) No. 9340/2009)has spelt out the role of the Expert Appraisal committees constituted by the MoEF to assist it in the decision making process of granting or refusing clearances and approvals under the EIA and CRZ notifications. It lays down the following important principles:
 - (i) EAC as a delegatee of Ministry of Environment and Forests performing a public law function;
 - (ii) Providing reasons for its decisions as an essential concomitant of acting fairly;
 - (iii) EAC has to apply its collective mind to the objections raised in public hearing and give reasons why any or all of such objections

were accepted or negatived. Failure to give reasons will vitiate the decision.

(iv) EAC should not consider more than 5 applications at a single meeting.

117. The High Court elaborated as follows -

"In the first place it needs to be noted that the MoEF has constituted the EAC (Mines) as a twelve member body for evaluating the Project proposal as well as the EIA Report and advise the government on whether environmental clearance should be granted. It is in essence a delegate of the MoEF performing an "outsourced" task of evaluation. The decision of the EAC may not necessarily be binding on the MoEF but is certainly an input into the decision making process. Considering that it constitutes the view of the expert body, its advice would be a valuable input. In terms of the procedure evolved by the MoEF to deal with applications for EIA clearance, the objections at the public hearing and the response thereto of the project proponent are placed before the EAC (Mines) for evaluation and for taking a decision which will constitute the advice to the MoEF on such project proposal. The EAC is therefore performing a public law function and is expected to adhere to those very standards which law requires the MoEF to adhere to.

The requirement of an administrative decision making body to give reasons has been viewed as an essential concomitant of acting fairly. Given that such a decision is in any event amenable to judicial review, the failure to make known the reasons for the decision makes it difficult for the judicial body entrusted with the power of reviewing such decision as to its reasonableness and fairness. The decision must reflect the consideration of the materials available before the decision maker and the opinion formed on such material."

The court further observed that "para 4 of the EIA notification defines Appraisal as: "Appraisal means the detailed scrutiny by the Expert Appraisal Committee or State Level Expert Appraisal Committee of the application and other documents like the EIA report, outcome of the public consultations including public hearing proceedings, submitted by the applicant to the regulatory authority concerned for grant of environmental clearance......" (emphasis supplied) Consequently, the exercise expected to be

performed by the EAC (Mines) is a serious one and has to include a consideration on merits of the objections raised at the public hearing. Its decision must reflect this. We do not accept the contention of the learned ASG that as long as the MoEF while taking the ultimate decision has applied its mind to the objections raised at the public hearing, the requirement in law would be satisfied. The whole purpose of "outsourcing" the task to an EAC comprised of experts was to have a proper evaluation of such objectives on the basis of some objective criteria. It is that body that has to apply its collective mind to the objections and not merely the MoEF which has to consider such objections at the second stage. We therefore hold that in the context of the EIA Notification dated 14th September 2006 and the mandatory requirement of holding public hearings to invite objections it is the duty of the EAC, to whom the task of evaluating such objections has been delegated, to indicate in its decision the fact that such objections, and the response thereto of the project proponent, were considered and the reasons why any or all of such objections were accepted or negatived. The failure to give such reasons would render the decision vulnerable to attack on the ground of being vitiated due to non-application of mind to relevant materials and therefore arbitrary."

As regards the functioning of the EAC, from the response of the MoEF to the RTI application referred to hereinbefore, it appears that the EAC granted as many as 410 mining approvals in the first six months of 2009. This is indeed a very large number of approvals in a fairly short time. We were informed that the EAC usually takes up the applications seeking environmental clearance in bulk and several projects are given clearance in one day. This comes across as an unsatisfactory state of affairs. The unseemly rush to grant environmental clearances for several mining projects in a single day should not be at the cost of environment itself. The spirit of the EAC has to be respected. We do not see how more than five applications for EIA clearance can be taken up for consideration at a single meeting of the EAC. This is another matter which deserves serious consideration at the hands of MoEF".

II. Failure of EAC to consider adequacy of REIA and requirement for additional TOR.

- 118. As per the Interim Operational Guidelines dated 13th October 2006, in cases where EIA has already been prepared, and PH conducted as per EIA 1994: The EIA would be evaluated by the Expert Appraisal Committee (EAC), without insistence on the submission of FORM I/IA required under EIA 2006. In case the EIA document is considered complete and accurate, the EC would consider the same, together with the PH proceedings, even if PH is not required under EIA 2006, and furnish its recommendations. In case the EIA document is considered incomplete and/or inaccurate, the EAC would specify ALL the additional Terms of Reference (TORs) to be undertaken by the project sponsor. In case PH is required under EIA 2006, the proceedings of the PH conducted as per EIA 1994 would be considered along with the EIA by the EAC, which would provide its recommendations.
- 119. In the note dated 30.05.2007 (Annexure E 14) prepared by the Additional Director it is recorded that one other issue to be discussed in the EA (I) meeting is regarding adequacy of REIA and the EMP and awarding of additional TOR if any. In the case of POSCO the REAI for the port was conducted in the monsoon period which is prohibited. The REIA for the steel plant does not collect data for the whole season but for just a few days in a three month period. The OSPCB and OSCZPA have called for a comprehensive EIA and the MoEF Regional office also pointed that that the REIA is inadequate. From the minutes of the meeting of the EAC it appears that this issue was never considered by the EAC. It thus appears that the EAC never applied its mind to the issue of adequacy or other wise of the REIA and the requirement of a Comprehensive EIA.

III. Manipulation of minutes of the EAC minutes.

- 120. On a perusal of the files of the MoEF the Committee found that there were two sets of Minutes in respect of the 67th Meeting of the EAC (**Annexure E 10**) dealing with POSCO steel plant project. The first set of Minutes was prepared by the Additional Director, who was also the official representatives of the MoEF in the EAC. It appears from the records that these minutes on circulation to the Chairperson of the EAC were altered in some significant aspects dealing with environmental impact. An email correspondence dated 10.6.2007 from the Chairperson of the EAC (I) asserts that the revised Minutes "represent the actual content of discussions".
- 121. While the Chairperson of the EAC may have the prerogative to correct and finalize the Minutes of the Meeting what is of great consternation is the nature of revision carried out which seemed to

unduly favour the project proponent. The revision appears to have been done in order to facilitate the EC without delay and to get over the requirement of further studies and investigations on the environmental impact as recommended by various expert bodies as also during the Public Hearing.

122. Given below is the comparative Table of the first and second Minutes wherein the implications of the revision made are self-explanatory.

Comparative Statement of Minutes of 67th Meeting of EAC.

Para	First Minutes	Second Minutes
Para 2.0	Ultimate capacity will be 12 MTPA in 3 phases, however present application is for 4.0 MTPA only.	The words, "however present application is for 4.0 MTPA only" were deleted.
Para 4.0	In house and VAI - Austria technology known as FINEX process will be used.	"State of art technology" words introduced.
Para 12.0	Public hearing meeting was held and point wise clarification to the issues raised have been submitted.	Public hearing held- issues raised <u>clarified "as beseems"</u>
Para 13.0	Public hearing held by OPCB on this basis (integrated steel cum port).	Public heldon this components and is in order. Committee was largely satisfied with the process, environment
	Committee was in broad measure satisfied with the production process from the environment point of view. However, certain critical aspects require to be further gone into and even recast.	& parameter of the project. However, <u>certain aspects</u> <u>require attention & re-cast.</u>

Para	Area earmarked for Solid	Within the area reserved for
14.0	Waste is about 1000	Solid Waste Management it
11.0	acres. This area would	would take 15 years to develop
	also be utilized for the	a full plantation & this would
	greenery and tree	have to be done in stages. Plantation would have to be
	planting. It was admitted	raised in one section while
	by the company that no	
	plantation can be raised	sludge is dumped in another.
	on this area within 15	Thus the dump will graduate in
	years. <u>How any</u>	stages to a forest in 15 years.
	plantation can at all be	Thereafter one needs to know
	raised in this area where	where and how the sludge will
	sludge is to be disposed	be dumped.
	off is not clear.	
Para	Alternative arrangements	Better management of sludge
15.0	for sludge / solid waste	including perhaps the
	disposal shall be made	possibility of its conveyance
	and plans and	outside the plant. The company
	modification to ensure	needs to work on these
	this arrangement be	alternatives.
	furnished.	
Par	Committee decided that	The Committee felt that
a	conforming to the South	conforming to the South
15.	Korean model, a	Korean model, 25% of green
0	minimum of 25% of	area can be provided within the
	green belt should be	plant by more meticulous
	provided within the	planning' acquisition of
	plant.	marginally more land.
Para	Committee noted that	Committee was convinced that
18.0	numerous issues had	a sunrise industry of great
	been raised at the public	importance is proposed
	hearing which would	presenting a leap forward in
	<u>have</u> a bearing on	steel production and needs
	human settlements,	expeditious, prompt clearance
	habitations, agricultural	by the Government. Certain
	occupation in the village	issues have been raised at the
	nearby and the	public hearing that <u>may</u> have a
	farmlands.	bearing on human settlements,
		habitations, agricultural
	Members desired to	occupation in the villages and
	go into each significant	farmlands nearby. <u>These must</u>
	0 300 3-8	

in detail to satisfy
themselves that the
project poses no threat
or insurmountable
problem whatsoever from
an environmental point
of view to the
neighboring areas. The
members will study the
issues, objections and
concerns raised and offer
their specific views on
these at the next
meeting.

be looked into and resolved......It was decided to look into these matters at the next meeting of the committee.

123. It is to be noted that in the 68th Meeting of the EAC held on 20th June, 2007 cleared the POSCO project subject. The Minutes of the 68th Meeting (**Annexure E - 12**) state that the project authorities submitted additional information relating to (i) green belt development plan, (ii) Consent to Establish by the PCB, Orissa, (III) tentative R & R Plan, (iv) CD of Public Hearing. The required layout plan of the plant providing for 25% green cover was also provided. With this the Committee was satisfied and the EC was recommended subject to certain special and general conditions.

124. It is evident from the Minutes that despite the Committee Members expressing the desire to examine each and every objection raised regarding environmental concerns of the project, without much ado the EC was recommended. As already noted the various authorities, including the public, had raised many significant issues of great import. None of these seem to have been even discussed or considered by the EAC. The Minutes do not disclose any deliberations on this point, much less any reasons accepting or rejecting the various objections raised about the project. It is in this background, that the alterations of the Minutes of the 67th meeting become suspect.

IV. Interference by the Ministry of Finance?

125. A perusal of the files of the MoEF reveals that there is file noting on 8.5.2007 that an update on POSCO was sought by the Ministry of Finance. There was a letter dated 09.05.2007 from the

Director, Department of Disinvestment, Ministry of Finance requesting that the status of the POSCO proposal on the integrated steel plant be provided to the Ministry by 18.05.2007 as the Finance Minister was meeting the members of the Investment Commission on 24.05.2007. The clearance for the port was granted on 15.05.2007.

126. Similarly, there was another letter dated 4.06.2007 once again from the Ministry of Finance seeking the status of the Application for the clearance by 11.06.2007 as a high level review meeting regarding progress of POSCO was slated for 15 .6.2007. The EAC hastily cleared the steel plant at its meeting on 20.06.2007.

127. The committee is constrained to comment that the proximity of dates between the letters from the Finance Ministry and the hasty processing of the approvals by the MoEF and the EAC despite the serious shortcomings and illegalities is more than a mere coincidence. It is very clear that not all is well with the functioning of the MoEF. We are also constrained to observe that the brazen interference by the Ministry of Finance into functioning of another Ministry is most unfortunate, highly improper and against public interest.

Part VII Miscellaneous

I. Failure to provide all documents to the Committee

- 128. At the time of preparing this draft on 10.10.2010, the following documents were still not made available to the Committee despite repeated requests and assurances that they had been dispatched. These include:
 - 1. Detailed Project Report (DPR) of both steel plant and port;
- 2. Technical feasibility Report; (It was reported by the MoEF that these documents were misplaced and not available with the Ministry.)
- 3. The project proponent POSCO India engaged Dastur and Co. Kolkota to prepare the EIA. From the records it appears that the said Dastur and Co. has in turn sub-contracted sections of the EIA to 3 different agencies, viz., Danish Hydraulic Institute (DHI), National Institute of Oceanography (NIO), Goa and Consulting Engineering Services (CES), New Delhi. Each of these agencies—seem to have submitted separate reports with regard to the tasks assigned to them. However it is not clear if copies of the reports were submitted to the various authorities including MoEF at the time of application for EIA and CRZ Clearance. These Reports do not form part of the records given to the Committee Members.. However it needs to be mentioned that POSCO

India furnished to the committee a copy of the NIO Report in respect of HTL demarcation along with the maps.

129. As pointed out earlier, the Report and the Maps disclose that portions of the steel plant fall within CRZ 1 and III area. However this fact has not been disclosed in the EIA Report of the steel plant. The incorporation of the contents of the NIO Report in the EIA by Dastur and Co. is not only selective but also calculated to mislead that the steel plant is located outside the CRZ area. Such misrepresentation is not only unprofessional and unethical but also a cause of great concern. It appears that all the authorities went by the word of the consultants and took the statement about the steel plant being located outside CRZ 1 area at its face value. The veracity of the statement was never counterchecked with the actual maps and report.

II. Lapse of MOU

130. The MOU between POSCO and the Government of Orissa lapsed in June, 2010. At the time of writing this Report on 10.10.2010 even though 4 months had passed, it is reliably learnt that the MoU has not been renewed. Though this by itself does not render the period of validity of the clearances already granted invalid, it is a factor to be borne in mind in the event of the project being reviewed by the Ministry.

III. Cancellation of mining license to POSCO by Orissa High Court.

- 131. Further an integral component of the MOU was the assurance of assignment of captive iron ore, coal and manganese mines in Sundargarh and Keonjhar districts to POSCO India. On 9.1.2009, the Government of Orissa made recommendation to Government of India to grant mineral prospecting license in respect of iron ore mines in Sundargarh in favour of POSCO. The recommendation was made even when several applications were pending regarding grant of licences by other companies who had made application almost 14 years previously.
- 132. The Division Bench of Orissa High Court at Cuttack by judgement dated 14th July, 2010 in WP (C) No. 23 of 2009 not only set aside the recommendations made by state government dated 9.1.2009 in favour of POSCO but also expressed "grave dissatisfaction in the manner in which the mineral resources of the State have been dealt with". The High Court commented that such action of the State Government was a "conscious decision" not in one case but in 15 cases and no Government

Officials has committed any mistake as pleaded". The Court directed the Government of Orissa to decide afresh the petition of M/s Geomin Minerals and Marketing 9P) Ltd for preferential right over the mining areas in Sundargarh district.

133. The entire issue is the subject matter of further litigation. In the light of this it is not clear from where POSCO India is going to source its iron ore. This source and quality of this vital raw material will have a significant influence on the environment impact assessment.

Part VIII

Grounds for revocation of clearances.

I. Provision in the EIA notification.

- 134. Concealing factual data or submission of false, misleading data/reports, decisions or recommendations would lead to the project being rejected. Approval, if granted earlier on the basis of false data, would also be revoked. Misleading and wrong information will cover the following:
 - i) False information
 - ii) False data
 - iii) Engineered reports
 - iv) Concealing of factual data
 - v) False recommendations or decisions

The Committee is of the opinion that POSCO, India is guilty on all the counts mentioned above. Preparing the REIA during monsoon period knowing fully well that it is not valid, concealing the fact that the steel plant is located in CRZ area despite the clear report of NIO, preparing a fragmented EIA for only some components of the project leading to misleading conclusions on the pollution load and environmental impact, failing to incorporate all the studies recommended by the EAC for the port and the other facts delineated above in this section would all amount to providing false information, false data, concealing data, engineering reports and giving false recommendations or decisions on the basis of such data.

Findings and Conclusions

- 1. MoEF ought to have insisted on a Comprehensive EIA as pointed out various state agencies and the Regional Office of MoEF and should not have granted ECs on the basis of REIA.
- 2. The REIAs of steel plant and minor port submitted is also insufficient and incomplete in as much as it has not assessed the full environmental impact of the plant with its total capacity of 12MTPY and the total capacity of the various integral components of the project.
- 3. The POSCO project is an integrated project. However many important components of the project like the township, pipeline, road and transportation etc have been left out of the scope of REIA.
- 4. Other data provided in the REIA like baseline data is insufficient and incomplete.
- 5. The field survey of the REIA for the port was done during monsoon period which is impermissible and unscientific.
- 6. The steel plant is located in area designated as CRZ- I and III. It is prohibited under the CRZ Notification.
- 7. No CRZ Clearance has been obtained for laying the pipeline from the CETP to the sea for the discharge of effluents.
- 8. Public Hearing is defective and not in compliance with the rules as it failed to provide copies of the EIA to panchayats and all the project affected persons were not given opportunity to be heard and for other reasons stated in detail in an earlier portion of this report.
- 9. Project proponent has failed to answer all the objections raised during the Public hearing.
- 10. The EAC has failed to apply its mind to the objections raised by various authorities and the public and have also failed to consider the available material on record. The EAC has also failed to record any reasons in respect of accepting or rejecting the objections raised. All these infirmities vitiate the recommendation made for grant of clearance.
- 11. The Project proponent had failed to disclose the source of water during the construction phase.
- 12. All communities who would be affected by the project including fishing community of the coast in which Jatadharmohan creek lies, farmers at Hansua Nallah and Jobra Barrage and others were not given an opportunity to participate in the public hearing. Nor were copies of the EIA made available to them..

For these amongst other reasons, the Environmental Clearance dated 15.5.2007 for the minor port and 21.7.2007 for the steel plant should be immediately revoked.

Section 6

Compliance of Coastal Regulation Zone (CRZ)

Introduction

- 1. POSCO-India submitted a proposal to Orissa Coastal Zone Management Authority in June 2006 seeking CRZ clearance for establishment of a captive port on Jatadharmohan Creek located at about 12 km south of Paradeep port which will be integral part of the proposed steel plant. Jatadharmohan creek is a tidal creek separated from the sea by an elongated sandy barrier spit having an average width of 400m and runs almost parallel to the shoreline of the sea having length of about 9km from the mouth. The proposed port will be used for importing raw material and exporting steel products. The total capacity of the port will be about 11 million tons per year in the first phase when the steel production is 4 million tons per year and will reach about 28 million tons by third /final phase when steel production reaches to 12 million tons. The planned bed levels at the berthing basin of the raw material berth and product berth will be 20 m and 12 m below the chart datum (CD) respectively where as water depth of the approach channel is designed to be 21 m below CD. The width of the approach channel will be initially 250 m for one lane and will be progressively widened to 500 m. The size of vessels would vary from 30,000 DWT to 1, 70,000 DWT. Two breakwaters are planned to provide tranquil condition inside the port, one of 1600 m length in the south side and other of 1070 m in the north side.
- 2. Two study reports commissioned by POSCO through its consultant National Institute Oceanography (NIO) entitled 'Rapid Marine Environmental Impact Assessment of March 2006' and 'Delineation of Coastal Regulation Zone (DCRZ) Boundaries of February 2006' formed the main supporting documents for the proposal. The proposal was discussed by the State Coastal Management Zone Authority (SCZMA) on 7 Aug 2006 and consented by the State Pollution Control Board Orissa vide letter No. 27466/Ind-II-NOC-4447 dated 9 Nov 2006 (Annexure F-10) (The Ministry of Environment and Forests, Government of India finally accorded the environment clearance to the project vide letter No. 10-9/2006-IA-III dated 15 May 2007 (Annexure A-5) as required under CRZ

Regulations. All the committee members made field visit and could see part of the Jatadharmohan creek including the mouth. The constructional activity of the port at Jatadharmohan creek has not yet started so as to make assessment about the compliance.

CRZ Rule position in brief

Under the Environment Protection Act 1986, the Union Ministry of Environment and Forests vide notification in 1991 and in subsequent modifications declared the coastal stretches of sea, bays, estuaries, creeks, rivers and back waters in India which are influenced by tidal action (in the land ward side), upto 500 meters from the High Tide Lines (HTL) and the land between HTL and Low Tide Lines (LTL) as Coastal Regulation Zone. The HTL as defined is the line on the land up to which the highest water line reaches during the spring tide. The distance from the high tide line applies to both sides in case of rivers, creeks and backwaters and may be modified on a case by case basis for reasons to be recorded in writing while preparing the Coastal Zone Management Plan. However, this distance shall not be less than 100 m or the width of the river, creek and backwaters whichever is less. The distance upto which development along rivers, creeks and back-waters is to be regulated shall be governed by the distance upto which the tidal effect of sea is experienced in rivers, creeks or back-waters, as the case may be, and should be clearly identified in the Coastal Zone Management Plans.

A number of activities within the Coastal Regulation Zone **are declared as prohibited** and include setting up of new industries and expansion of existing ones, discharge of untreated wastes and effluents from industries etc, dumping of ash and other waste from thermal power plants, land reclamation, bunding or disturbing the natural course of sea water except those required for port etc, dressing and altering of sand dunes, hills, natural features including landscape changes, harvesting or drawal of ground water and construction of mechanisms thereof within 200 m of HTL except where permitted, any construction activity between the Low Tide Line and High Tide Line except facilities for carrying treated effluents and waste water discharges into the sea.

Some **activities are permissible** within the Coastal Regulation Zone only if they require water front and foreshore facilities subject to environmental clearance from the Ministry of Environment and Forests, Government of India. Such activities include;

- Construction activities related to projects of Department of Atomic Energy or Defence requirements for which foreshore facilities are essential such as slipways, jetties, wharves, quays; except for classified operational component of defence projects for which a separate procedure shall be followed. (Residential buildings, office buildings, hospital complexes, workshops shall not come within the definition of operational requirements except in very special cases and hence shall not normally be permitted in the CRZ);
 - Operational constructions for ports and harbours and light houses and constructions activities of jetties, wharves, quays and slipways, pipelines, conveying systems including transmission lines;
- Exploration and extraction of oil and natural gas and all associated activities and facilities thereto;

For regulating development activities, the coastal stretches within 500 metres of High Tide Line on the landward side have been classified into four categories, namely:

CRZ -I (i) Areas that are ecologically sensitive and important such as national parks/ marine parks, sanctuaries, mangroves, coral reefs, areas close to breeding and spawning ground of fish and marine life, etc.

(ii) Areas between LTL and HTL

CRZ -II -The areas that have already been developed upto or close to the shoreline

CRZ –III- The areas that are relatively undisturbed and do not belong to CRZ-I or CRZ-II. These include coastal zone in the rural areas (developed or undeveloped) and also areas within municipal limits or other legally designated urban areas which are not substantially built up.

CRZ –IV- Coastal stretches in the Andaman & Nicobar, Lakshadweep and small islands, except those designated as CRZ-I, CRZ-II or CRZ-III.

The Coastal States and Union Territory Administrations were required to prepare Coastal Zone Management Plans (CZMP), within a period of one year from the date of Notification of these regulations, identifying and classifying the CRZ areas within their respective territories and obtain approval of the Ministry of Environment & Forests.

Coastal Zone Management Plan of Orissa

The Government of Orissa prepared the CZMP and obtained approval of the Ministry of Environment and Forests vide letter no. J-17011/11/92-IA dated 27-09- 1996. Though the Ministry did not approve the categorization of areas into CRZ I/ II/ III/IV as proposed by the state Government vide letter No 20750/E&F/EE-11/96 dated 11-09-1996, the following slab system was approved for demarcating Coastal Regulation Zone along the banks of rivers, creeks and back waters, except in case of the riverine stretches of Mahanadi and Bhiterkanika areas where the CRZ shall be 500 m.

- 150 m in case the width of the river, creek and backwater is more than 350 m
- 100 m in case the width is between 100 m to 350 m
- 100 m or the width of the river, creek and backwater, whichever is less, in case the width is less than 100 m

Delineation of the CRZ boundaries for POSCO's Captive minor port and steel plant

The National Institute of Oceanography (NIO), Goa undertook the exercise through M/S M.N. Dastur and Company Pvt Ltd for demarcation and delineation of Coastal Regulation Zone (CRZ) boundaries for the captive minor port at Jatadharmohan and Steel Plant of POSCO. Besides demarcation of relevant HTL and LTL as per prescribed norms and procedure of MoEF, delineation of setback lines of 500 m and 200 m for open sea and 150 m for the Jatadharmohan creek and width of the creek for Balituta creek from the HTL boundary to determine the jurisdiction of CRZ and the consequences has been done. *The geo-coordinates of the proposed port area were*

provided by POSCO-India Pvt Ltd and Vishakhapatnam center of NIO carried out all the technical and ground work. It is to be noted that NIO is one of the authorized agencies by the Ministry of Environment and Forests for undertaking demarcation of HTL and LTL across the coastal States in India.

Indian Tide Table published by Survey of India was used to design tide levels with reference to Chart Datum (CD). The highest range of spring tide and its horizontal run up on the land was identified by way of morphological features, permanent vegetation line and flotsam and delineation of HTL was carried out using Differential Global Positioning System (DGPS). However, *for demarcating LTL land-use map provided by POSCO was used* and LTL was measured with reference to CD. Finally the positions of HTL and LTL and CRZ boundary lines were marked on the local CZM maps on 1: 25,000 and 1:5,000 scales.

Setting up of Steel Plant in CRZ is a prohibited activity:

As stated earlier according to the CRZ notification setting up of new industries and expansion of existing industries, *except* (a) those directly related to water front or directly needing foreshore facilities; (b) Projects of Department of Atomic Energy; and (c) Non-polluting industries in the field of information technology and other service industries in the Coastal Regulation Zone of Special Economic Zones (SEZ).

A steel manufacturing plant is not an industry directly related to waterfront or directly needing foreshore facilities. It is true that POSCO is proposing a port facility that would supply raw materials to the proposed steel manufacturing plant. However, there is no need to locate a steel manufacturing plant in such close proximity to a port facility so that the steel manufacturing plant is also within the CRZ. The fact that the REIA (Annexure E-3) (at pages 2-1 to 2-4) considered alternative sites at Dhamra and at Duburi for the steel manufacturing plant that are entirely outside the CRZ seems to prove the point that the proposed steel manufacturing plant is not directly related to waterfront or directly needing foreshore facilities.

POSCO, India engaged the National Institute of Oceanography, (NIO) Goa through its consultants Dastur and co. to demarcate the high tide line, low tide line and delineation of the coastal regulation zone (CRZ) boundaries for a captive minor port and steel plant . The NIO gave its report dated February 2006, (Annexure -----). It consists of the salient observations from the CRZ map and four maps of the CRZ boundaries with the sketch of the steel plant super imposed on it.

According to the report the whole study area falls within CRZ I and CRZ III. Since most of the proposed port area is adjacent to the northern part of the Jatadharmohan creek and also since the width of the creek is more than 350 m. the set back line of 150 m from HTL of the creek is considered and drawn on the maps. However, towards the north near the village Dhinkia, the set backs (200m, 500m) with reference to the open coast are more relevant, as width of the creek narrows down in this part. (para 6.1 of the report).

At para 6.2 of the said report it is stated that much of the plant area comprises of protected forests and agricultural lands. On the northern side of the confluence point, sand dunes of significant relief are existing along the coast line in the proposed plant area. Sharp escarpments are noticed sea ward of the dunes. The proposed plant area does not fall under **environmentally sensitive areas** like natural parks, sanctuaries, mangroves, coral reefs or areas rich in genetic diversity **except sand dunes, sand bars and protected forest.**

In chapter 7.0 the conclusions are given. The last para of the section states that "in the northern zone where the CRZ refers to the open coast, having a 500m. set back line, part of the steel plant falls under the CRZ I(i) and CRZ III. Only coal/ore and slag yard are planned in the zone. In the remaining part all the facilities of the proposed steel plant are beyond the set back line of 150m. However this zone has patches of protected forest."

Though the report states that only coal/ore yard and slag yard are in the CRZ area, a perusal of the maps annexed to the report it is evident that the following units of the steel plant are located within 500 mts. of sea coast or 150 m. of Jatadharmohan creek which is categorized as CRZ (I) and CRZ III areas.

- 1. Coal/ore yard (CRZ I area according to NIO as there are sand dunes.)
- 2. Central store yard (CRZ III)
- 3. Slag yard (CRZ III)
- 4. Treated effluent guard pond (CRZ III)
- 5. Scrap yard. (CRZ III)

Generation and disposal of process dusts from steel Production prohibited in CRZ:

Manufacture or handling or storage or disposal of hazardous substances as specified in the Notifications of the Government of India in the Ministry of Environment & Forests. No. S.O. 594(E) dated 28th July, 1989, S.O. 966(E) dated 27th November, 1989 and GSR 1037(E) dated

5th December, 1989; except transfer of hazardous substances from ships to ports, terminals and refineries and vice versa, in the port areas: Provided that, facilities for receipt and storage of petroleum products and Liquefied Natural Gas as specified in Annexure III appended to the notification and facilities for regasification of Liquefied Natural Gas, may be permitted within the said Zone in areas not classified as CRZ-I (I), subject to the implementation of safety regulations including guidelines issued by the Oil Industry Safety Directorate in the Government of India, Ministry of Petroleum and Natural Gas and guidelines issued by the Ministry

Environment and Forests and subject to further terms and conditions for implementation of ameliorative and restorative measures in relation to the environment as may be stipulated by the Government of India in the Ministry of Environment and Forests].

S.O. 594(E) dated 28th July1989 is the Hazardous Wastes (Management and Handling) Rules, 1989. In 2006, the year that POSCO applied for Environmental Clearance, these Rules had been amended by the Hazardous Wastes (Management and Handling) Amendment Rules 2000 and 2003. Under these amended Rules, hazardous wastes are specified in Schedules to the rules. Items from two of these schedules apply to POSCO's proposed steel manufacturing plant.

The first item is from Schedule I "List of processes generating hazardous wastes" Process13: Production of iron and steel including other ferrous alloys (electric furnaces; steel rolling and finishing mills; Coke oven and by product plant), Hazardous Waste 13.1: Process dust.

Page 5-9 of the REIA for the proposed project contains a Table 5-5, inventory of solid wastes generation at 4 MTPY production level. Item 4 of this list indicates that the proposed project would generate 600-700 tons per day of dusts from dust extraction systems. Furthermore, page 6-25 of the REIA for the proposed project contains a Table 6-3, proposed management scheme for solid wastes disposal. This table indicates that 65-70% of these dusts would be dumped. A plain reading of the CRZ notification as extracted above indicates that both the generation and disposal of these dusts within the CRZ would be prohibited under paragraph 2(ii) of the Coastal Regulation Zone Notification.

Location of waste treatment processes in CRZ prohibited.

The second item from Schedule I is "List of processes generating hazardous wastes" Process 36: Waste treatment processes, e.g. incineration, distillation, separation and concentration techniques; 36.2

Ash from incineration of hazardous waste, flue gas cleaning residues. Pages 6-26 to 6-28 of the REIA for the proposed project describes an incinerator that the project proponent would use to dispose of an 10 to 20 tons per day of hazardous waste production facilities would generate. Page 6-27 of the REIA states: "The non-toxic ash collected will be dumped in the containment area." Regardless of whether the REIA characterizes this ash as "non-toxic," it is still a hazardous waste under the Hazardous Wastes (Management and Handling) Rules applicable at the time. Both the generation and disposal of this ash from the hazardous incineration of wastes within the CRZ would prohibited under paragraph 2(ii) of the Coastal Regulation Zone Notification.

Storage of Liquid Oxygen a hazardous chemical in CRZ area prohibited.

S.O. 966(E) dated 27th November1989 is the Manufacture, Storage and Import of Hazardous Chemical Rules, 1989. In 2006, the year that POSCO applied for Environmental Clearance, these Rules had been by amended by the Manufacture, Storage and Import of Hazardous Chemical (Amendment) Rules, 2000. See: http://envfor.nic.in/legis/hsm/msihcar.html Under these amended Rules, a list of Hazardous Chemicals is given Schedule I, Part II. This list includes oxygen (liquid).

Page 3-10 of the REIA indicates, under the heading of "Other Facilities" that POSCO's proposed 4 million metric ton per year steel project would include a facility for separation of oxygen from air. According to page 3-12 of the REIA, in Table 3-3 - List of proposed principal production facilities - this facility would produce 3100 tons per day of oxygen. Although it is not stated explicitly in the REIA, it is likely that this facility would include a cryogenic facility for the storage of liquid oxygen. If it does, then, establishing this facility within the CRZ would be prohibited under paragraph 2(ii) of the Coastal Regulation Zone Notification.

Page 6-5 of the REIA states: "The layout of the present production facilities will not encroach the CRZ area. The proposed production facilities of 4 MTPY will be set up at a distance of 150 m away from the HTL of Jatadharmohan River Creek and 500 m away from the HTL of sea." It is unclear whether this is true or not, and, if so, whether the term "production facilities" referred to by this page of the REIA includes the generation or disposal of process dust, the generation or disposal of incineration ash, or the generation or storage of liquid oxygen - all of which cannot take place in the CRZ.

Location of slag yard in CRZ area prohibited.

Setting up and expansion of units / mechanisms for disposal of wastes and effluents, except facilities required for – (a) discharging treated effluents into water course with the approval under the Water (Prevention and Control of Pollution) Act, 1974; (b) storm water drains; (c) treatment of wastes and effluents arising from hotels and beach resorts located in Coastal Regulation Zone areas other than Coastal Regulation Zone –I and disposal of the treated wastes and effluents;

. . .

Slag is a waste by-product of smelting iron ore to separate the metal fraction from the unwanted fraction. It is not usually a hazardous waste, but it is waste. Page 5-9 of the REIA for the proposed project contains a Table 5-5, inventory of solid wastes generation at 4 MTPY production level. Item 4 of this list indicates that the proposed project would generate 3600-2700 per day of FINEX slag and 1100-1200 of BOF (Basic Oxygen Furnace) slag, necessitating disposal. Page 6-6 of the REIA states: "The land to be acquired will be broadly divided into six zones as shown in Fig. 3-4 in Chapter 3. The Disposal Area will be earmarked for slag dump, waste recycling, effluent treatment plant, incineration etc for non-production use." As per the report of the NIO the slag yard is located in CRZ area. Any disposal area for slag within the CRZ would be prohibited under paragraph 2(ii) of the Notification. Coastal Regulation Zone

Reclamation of land in CRZ area for the Steel Plant is prohibited.

Land reclamation, bunding or disturbing the natural course of sea water except those required for conservation or modernisation or expansion of ports, harbours, jetties, wharves, quays, slipways, bridges and sea-links and for other facilities that are essential for activities permissible under the notification or for control of coastal erosion and maintenance or clearing of waterways, channels and ports or for prevention of sandbars or for tidal regulators, storm water drains or for structures for prevention of salinity ingress and sweet water recharge; provided that reclamation for commercial purposes such as shopping and housing complexes, hotels and entertainment activities shall not be permissible.

Page 6-5 of the REIA states: "The land is low lying of elevation around 4.7 m from chart datum (CD) of the sea. Considering tidal range, wave height, storm surge, it has been planned to raise the site level to +6.5 m above CD; one metre reserved height for storm surge due to cyclone as shown in Fig. 6-1. In order to raise the elevation of the site,

the fill material will be dredged sand from the navigation channel and turning basins of the dedicated port."

This proposed reclamation is certainly NOT for conservation or modernisation or expansion of ports, harbours, jetties, wharves, quays, slipways, bridges and sea-links. This proposed reclamation is also NOT for control of coastal erosion and maintenance or clearing of waterways, channels and ports or for prevention of sandbars or for tidal regulators, storm water drains or for structures for prevention of salinity ingress and sweet water recharge. So, if this proposed reclamation is also NOT for other facilities that are essential for activities permissible under the notification, then, this reclamation would be prohibited under paragraph 2(viii) of the Coastal Regulation Zone Notification.

Any construction activity for Steel plant in CRZ prohibited.

Construction activities in [CRZ-I] is prohibited except as specified in Annexure I of the notification. None of the activities specified in Annexure I of the CRZ Notification, 2006 would allow construction of any components of a steel manufacturing plant within areas designated as CRZ Category I. However it is noticed that the construction of a coal /ore yard is contemplated by POSCO in CRZ I area.

No CRZ Application for CETP pipeline of the Steel Plant into the sea

As per the REIA report for the Steel plant a common Effluent Treatment Plant will be set up to take care of the untreated process effluents and treated plant sanitary wastewater. As per the report the treated water of CETP after partial use in green belt and plant landscape maintenance will be let into the sea by a submarine pipeline at 18 to 20 metre depth by jet diffusion. The pipe line will definitely have to pass through the CRZ area.

Laying a pipeline for the purpose of waste disposal is a permissible activity under the CRZ notification. However the company has to obtain the necessary clearance under the notification from MoEF. From the records it is clear that no such application was even made to the MoEF by the Company, leave alone obtain a clearance for the same. In the note dated 30.05.2007 prepared by the Additional Director it is recorded that the issues to be discussed in the EAC (I) meeting is regarding a) the CRZ clearance for the discharge of effluent into the sea; b) study report regarding impact of effluent discharged on marine ecology . However the minutes of the 67th meeting held on 5th June , 2007 does not disclose

that any of these issues were discussed. This issue was not discussed any further but all the clearances have been given .

Observations of the committee

The committee scrutinized NIO report on delineation of Coastal Regulation Zone, maps (1: 5,000 scale) delineating HTL, LTL and 150 m lines provided by the POSCO, CZMP submitted by Orissa government to the Ministry of Environment and Forests in 1995 as well as related correspondence. Theoretically the NIO has followed the correct procedure for demarcation of the CRZ, HTL and LTL lines. DGPS used for marking the locations on ground and on map to draw the HTL are quite precise. However, the satellite imagery used for the identifying the course of the creek is quite old, that is of 1996. Since no action has been taken by the POSCO-India on the site relating to establishment of the port and the steel plant so far, it was not required to assess compliance of the approved conditions. The committee however observed the following ambiguities;

The CZM Plan of Konark -Paradip stretch submitted by the Government of Orissa in 1995 to the Ministry of Environment of Forests includes the belt of Jatadharmohan creek. Because the area falls under estuary zone and is ecologically sensitive, barrier spits mouth and channel bars occurring nearby the estuarine mouth has been categorized as CRZ-I. Only the areas studded with agriculture fields and settlements are to be categorized as CRZ-III near the Dhinkia village. The NIO report has not specifically indicated the extent of area/ length along the creek/shore line falling under CRZ I and CRZ III.

Further, the limits of the CRZ lines drawn on 1:5,000 scale maps by NIO at 500 m towards the northern portion of POSCO site and at 150 m on the creek side are not very clear. The limits and extent upto which these lines exists should have been well defined by the geo-coordinates in the maps as well as in the text. But it has not been mentioned in either of the documents. In the absence of such geo-coordinates it would be impossible to draw lines on the ground. The main worry is who is going to verify these lines and distances from the HTL on the ground? No permanent marking has been done on the ground. Orissa state government was not associated in the CRZ survey of the POSCO site and NIO depended on the land use map and geo-coordinates provided by POSCO.

Except for port, any activity relating to steel plant, be it storage of raw material, cannot be allowed within the CRZ (500 m from HTL) as per CRZ Regulations. On the other hand NIO has recommended for establishing coal/ore and slag yard which are parts of steel plant in the CRZ I (i) & CRZ III areas facing open coast in northern side (page 18 of the NIO-DCRZ Report). This amounts to violation of the CRZ regulations.

The State Coastal Management Zone Authority while discussing the port proposal of POSCO - India on 7 Aug 2006 found a mismatch between CRZ maps prepared by ORSAC and NIO. This was to be reconciled by the POSCO-India but no document for such reconciliation has been provided to the committee.

Dressing or altering of sand dunes, hills, natural features including landscape changes for beautification, recreational and other such purpose are prohibited, except as permitted under the notification. During the visit of the committee on 21 Sep 2010, the representative of the POSCO-India Mr. S.N. Singh informed the members that the existing mouth of the Jatadharmohan creek will be used as a approach channel for one lane for vessels and will be progressively widened to 500 m. The map provided by POSCO, however, shows that existing mouth will be filled and sandy barrier spit at about 500 m away towards south will be cut to make the approach channel. Such a cutting and filling of sand bars amounts to change of the natural course of the creek and are in contravention of the CRZ notification. In a clarification sought from the POSCO it was replied that the mouth of the Jatadharmohan creek originally existed at the proposed site in 1998 and in last 10 years the Jatadhar Mouth has shifted towards north and has acquired the present form. The site of the old mouth has been therefore chosen for making approach channel. The committee did not find such explanation convincing. Further in the common clearance/approval dated 15.05.2007 given for CRZ and EIA for the port one of the conditions imposed is that sand dunes will not be disturbed. It is not clear how it is possible to dredge through the sand pits and reclaim land for the port as well as steel plant without disturbing the sand dunes.

Conclusion

In view of the above observations the committee feels that POSCO-India Pvt Ltd has not been able to address all the issues relating to CRZ notification. The proposal in its present form is not fit for approval as there are a number of serious lapses and violations. The environment clearance given by the Ministry of Environment and Forests vide letter dated 15 May 2007 should be therefore suspended till the company makes the necessary modifications as per the provisions of the CRZ Regulations.

Conclusions and Recommendations

Part I – Project Specific

In summary, the Committee has therefore reached the following conclusions:

I. Preliminary issues.

- 1. The MOU between the Government of Orissa and the POSCO lapsed as June 2010 and has not been renewed till date. While this by itself may not automatically render the clearances invalid it is a significant factor to be taken into consideration while reviewing the project as the MOU is the starting point of the process and failure to renew undermines the very basis of the project
- 2. The prospecting license for mining in Sundergarh district granted to POSCO has been set aside by the Orissa High Court in its order in W.P. No. (C) 23/2009 of July, 2010 and remanded for fresh consideration to the government. It is learnt that the order is likely to be appealed against. This litigation again raises very fundamental issues as to sourcing of raw materials for the project by POSCO. This crucial issue remains un resolved till date and may continue to be so in view of the pending litigation. It is difficult to assess the environmental impact of the project in the absence of this vital information about the sourcing of the iron ore, the quality of the ore, the attendant transportation, storage requirement etc.
- 3. The approval for withdrawal of water for the construction phase has been granted by the Orissa Government only from Hansua Nalla and not from the Mahanadi at the Jobra barrage. This arrangement is not suitable for POSCO as the water from Hansua Nalla does not meet its requirement. Further all clearances have been granted on the basis of the initial approval to with draw water from the Mahanadi at Jobra barrage and this fact situation has been fundamentally altered. Thus the sourcing of water for the construction phase remains un resolved.
- 4. No work has commenced at the site. The project proponent has not even taken possession of the site.

The above mentioned preliminary issues may be borne in mind while appreciating the rest of the findings and recommendations.

II. Conclusions on the Implementation of the Scheduled Tribes and Other Traditional Forest Dwellers Recognition of Rights Act, 2006 (FRA)

1. The Committee finds that the government's own records such as census reports and voters list confirm that there are both other traditional forest dwellers (OTFD) and forest

dwelling Scheduled Tribes in the project area and the statement of the District Collector of Jagatsinghpur to the contrary is false.

- 2. There is ample documentary and archival proof in the form of village maps and District gazetteers to establish the existence of forests of some nature or the other in and around the area. The contentions of the State government in this regard have no merit.
- 3. There is substantial documentary and archival evidence in the form of nistar receipts and district gazetteers to establish that the OTFD have been residing in the area for the requisite period of 75 years stipulated under the Act and there is prima facie material to establish their dependency on the forests for their livelihood needs for generations.
- 4. The State government has failed abysmally in assisting the Gram Sabha and has failed to provide the requisite maps, and other assistance contemplated under the rules to initiate the process of recognition of rights. The process of implementation has been vitiated from the start and no valid palli sabha meetings have taken place in this area; the quorum has never been met, and in some cases "resolutions" are being cited that have barely 30 signatures.
- 5. There are serious doubts regarding the authenticity of the palli sabha resolutions in forwarded by the District Collector which supposedly record that there are no eligible persons (in the case of Bhuyanpal and Noliasahi). The balance of evidence indicates that these are fabricated
- 6. Since the committee is completely satisfied that the FR Act is applicable to the project area, the statutory power of determining and recording the recognition of forest rights vests solely with the palli sabhas/gram sabhas and the District Administration has no powers to intervene except in its capacity as the appellate authority.
- 7. The in principle forest clearance and the subsequent final forest clearance granted by the Ministry of Environment and Forests was a hasty and premature act in violation of law. The subsequent letter making the clearance subject to implementation of the FRA appears more a face saving act and does not remedy the illegality of the final clearance itself.
- 8. Since the Forest Rights Act recognises individual and community forest rights and moreover empowers the palli sabha with specific forest protection powers, there can be no diversion of the forest land for non forest purposes without the express consent of the palli sabhas/gram sabhas. Further the circular of the MoEF dated August 3rd, 2009, also provides for the same, and such executive instructions have the force of law and are binding.

- 9. Though the MoEF is not the nodal agency for the implementation of the FRA Act, since any approvals given for diversion of forest land for non forest purposes under the Forest Conservation Act will have the effect of destroying rights and violating the powers of the palli sabhas as statutory authorities, the Ministry cannot proceed with clearance until the FRA process is complete in all respects and consent has been granted. Like any other government agency, the Ministry cannot proceed in a manner that would directly violate a law. As stated above this is also now required by the August 3rd, 2009 order.
- 10. The Committee hence in no uncertain terms comes to the definite conclusion that the FRA Act has not been implemented in the project area and in fact the process had hardly begun before it was sought to be scuttled by the District and State Administration.
- 11. The takeover of land in Gadkujang gram panchayat in July 2010 was in direct violation of the Forest Rights Act and the Forest Conservation Act.

III. Recommendations on the implementation of the FRA.

- 1. The final clearance dated December 29, 2009 under the Forest Conservation Act, 1980 for diversion of forest land for non forest purposes granted by the MoEF should be forthwith revoked.
- 2. There should be no evictions whatsoever or attempts to acquire the lands from the people residing in the project affected villages.
- 3. The process under the FRA for the recognition of forest rights should immediately be re-initiated in the villages under issue.
- 4. The District and State Administration should render complete and whole hearted assistance by readily making available all materials and assistance of surveyors etc to assist the FRC and the palli sabhas/ gram sabhas to effectively fulfill their statutory responsibilities under the FRA.
- 5. Police presence and police surveillance should be forth with withdrawn from the project area to restore the confidence of the people and to facilitate full and free participation in the entire process of recognition of rights under the FRA.
- 6. All documents relating to the proposed diversion and project should be placed before the gram sabha before it decides on its consent and the same should be duly explained. Evidence to this effect should be required prior to consideration of final clearance.

IV. Conclusions on the compliance with the provisions of EIA and CRZ notifications.

- 1. There is a flagrant violation of all substantial and procedural rules and regulations in granting the EIA and CRZ clearances to POSCO. The entire clearance process has been reduced to a farcical and empty formality by all concerned. The environmental clearance process has been severely compromised by a complete lack of application of mind by the concerned authorities, and a deliberate failure to assess the project in accordance with law. From the stage of preparation of the REIA, conduct of public hearing, to the assessment process by the Expert Appraisal Committee at every stage there are illegalities which render all the clearances given both under the EIA notification and the CRZ notification invalid and illegal.
- 2. The environmental impact assessment for the port and steel plant has been severely compromised on account of the following
 - i) Preparation of an REIA (that too in the monsoon period for the port which is prohibited) instead of a comprehensive EIA, for both the port and steel plant;
 - ii) Failure to incorporate both in the REIA and the Comprehensive EIA of the port all the Terms of Reference stipulated by the Expert Appraisal Committee.
 - ii) Preparing an REIA for the steel plant for only a partial capacity of 4 MTPY of the steel plant (I Phase) instead of the ultimate capacity of 12 MTPY;
 - iii) not including all components of the integrated project such as rail and road transportation, water pipe line, town ship etc in the REIA for the steel plant;
- 3. The Committee is of the opinion that the project affected people and the other stake holders have not been given adequate opportunity during the public hearing thereby violating principles of natural justice for the following reasons
 - i) Public hearing was conducted on the basis of an REIA for the port which was found to be inadequate by the EAC;
 - ii) The contents of the reports of the NIO that the steel plant is located in CRZ area was not disclosed to the public.
 - iii) The EIA reports were not made available with the Panchayats.
 - iv) The venue for public hearing was not convenient and not close to the project site
 - v) Public hearing was not conducted in all the areas where the impact of the project is likely to affect communities such as fishing communities, farmers at Jobra barrage etc. despite stipulation to that effect in the EIA notification ,2006.
- 4. The Committee is deeply concerned that as a result of the above failings, potentially very serious impacts such as flooding, increased vulnerability to cyclones, damage to fisheries and wildlife, pollution and a severe decline in water availability have not even been assessed, leave alone planned for. Such impacts could harm the entire district and beyond and could even lead to loss of lives. The cavalier and reckless attitude of the

concerned authorities to such potentially disastrous impacts is horrendous and shocks the collective conscience of the Committee.

- 5. The CRZ clearance for the port has been given mechanically and as a matter of routine merely because building of the port in the CRZ area is a permissible activity. The MoEF has failed to even make an attempt to assess the environmental impact on the fragile coastal ecology before the CRZ clearance for the port was recommended.
- 6. The EAC in its 48th and 52nd meeting recommended several studies to be incorporated into the TOR for the port for preparing an EIA on the basis of which the public hearing was to be held. A site visit by a sub committee for the purpose of scoping so that the EIA could take into account all the issues was recorded in the minutes of the 48th meeting of the EAC. Further studies were recommended in the 52nd meeting as well. But without awaiting the studies the project was recommended for clearance at the 52nd meeting itself. The site visit was waived. The public hearing was conducted only on the basis of the REIA which was found wanting by the EAC, thereby depriving the local people a fair opportunity of being heard on all issues. No reasons were given by the EAC for back tracking on its own earlier recommendations.
- 7. The Comprehensive EIA reports prepared by the company in July 2007 were never submitted to any agency- Central or State. It was disclosed only when a specific query was raised by this Committee. Even this so called Comprehensive EIA report of the port severely and substantially falls short of the studies directed to be incorporated into the TOR by the EAC in its 48th and 52nd meeting.
- 8. POSCO has suppressed material fact that parts of the steel plant are located in the CRZ I and III areas which is clearly impermissible and hence illegal. Both the REAI and CEIA are misleading in stating ambiguously that the production facilities of the steel plant are not located in the CRZ area. What they conveniently failed to disclose is that the storage yard, the slag yard and the effluent pond are located inside the CRZ area.
- 9. All the State and Central agencies have chosen to completely turn a blind eye to the fact that the steel plant is located in CRZ I and CRZ III area which is clearly a prohibited activity. Since the report of the NIO, Goa and the maps of the report clearly spell this out, the EAC and the MoEF have either not bothered to even read the material before them before recommending and granting clearances or have colluded with the company to brush this gross illegality under the carpet.
- 10. A CRZ clearance was not even sought for by POSCO for laying the pipeline into the sea from the Common Effluent Treatment Plant of the Steel Plant. This illegality though noted by the MoEF was subsequently overlooked.

- 11. There appears to be a pre dominant belief that conditionalities in the EIA/ CRZ clearances are a substitute for comprehensive evaluation and assessment of the environmental impact by the authorities. Imposing vague conditionalities seems to be a way out for the various agencies from taking hard decisions on crucial issues. It also appears to be the popular mechanism to evade responsibility for clearances given by falling back on the conditionalities no matter that it was impossible to have the project with those conditionalities in the first place. The conditionalities are often so broad and generalized that they are rendered meaningless. For instance conditionalities in the clearance for the port states that sand dunes will not be disturbed. This is an absurd condition because the port is to be constructed after dredging the sand pit and the entire area between the port and the steel plant is to be raised by at least six feet. This obviously cannot be done without disturbing the sand dunes. One cannot but draw a parallel to Portia's condition of permitting Shylock to cut the pound of flesh but without spilling a drop of blood!
- 12. The resettlement and rehabilitation package on offer is focused on payment of one time compensation. This compensation too is very small as compared to the incomes people derive in this area, particularly in the case of betel vine cultivators. There is no comprehensive 'resettlement' or 'rehabilitation' package even proposed despite a specific request for the same.

V. Recommendations regarding the EIA and CRZ notifications.

- 1. The Committee recommends that in view of the glaring illegalities which render the clearances granted illegal, the EIA and CRZ clearances dated 15.05.2007 for the port and the EIA clearance dated 19.7.2007 for the steel plant should be revoked after following the due process of law.
- 2. The project proponent if it so desires may prepare a comprehensive EIA for both the port and the steel plant in accordance with the notifications now in force including all the various components of the project such as rail and road transportation, pipe line, township, mining etc for the full capacity of the plant and its components.
- 3. If the project proponent applies, a fresh public hearing may be conducted on the basis of the new comprehensive EIA to be prepared by the company.
- 4. In the meantime no body should be dispossessed of their land and since all clearances are to prior to the commencement of construction no alterations of any nature should be permitted on the ground.

Part II – General Recommendations

I. Lessons from the POSCO Project

As this report has demonstrated, when considering large projects, both State and Central governments are prone to abdicate their statutory responsibilities. The state machinery functions as if it is meant to facilitate a project rather than to regulate it. This certainly seems to have occurred in this case.

In order to avoid such outcomes in future, the Committee believes that certain key lessons can be drawn from the POSCO project. We seek to outline these lessons here.

First, aside from the process-specific safeguards that are required (for which see below), there is a fundamental need to ensure respect for democratic processes. The strongest check on the machinery is not internal procedural safeguards but the active involvement of the people, and particularly of those who will lose the most. In this sense, the two spaces for public involvement in the existing processes – the public hearings under the EIA and the requirement for gram sabha consent for forest land diversion – should be respected and expanded. Rather than being treated as mere formalities, these should be central to the decision making process and a failure to comply with them in letter and spirit should be treated as sufficient cause for rejection of clearance.

In the case of the POSCO project, the area has witnessed agitations for more than five years and repeated violence. Lives have been lost and the security forces deployed in the area for years on end. Such a situation indicates a total failure on the part of the state to engage with those who are opposing the project and to seek a democratic consensus on development plans in the area. In such a climate, it is not surprising that few environmental norms appear to have been properly implemented and that forest rights laws have been ignored.

Second, decision making bodies such as the State Pollution Control Boards, the Expert Appraisal Committee and the Forest Advisory Committee need to be strengthened and given the time, capacity and resources required to perform their duties in a meaningful manner. The responsibilities placed on these bodies are onerous and require in depth application of mind. The Delhi High Court has pointed out that the EAC is often required to decide on 25 to 45 projects in a single session. In the case of centralised decision making such as grant of environmental and forest clearance, the resulting hasty and mindless actions by these bodies nullify the entire process and render the statutory safeguards meaningless.

Third, there is a need to enforce accountability for violations of statutory, legal and environmental norms. Where officials have colluded with project applicants or been negligent of their duties, prosecution under the respective statutes should be automatically initiated. At present numerous such violations are brought to light on a regular basis, but no one is held to account for them. In the absence of such accountability, violations will simply continue.

Fourth, there is a need to shift from project-specific clearances to development planning at the village and district level. The current model of clearances gives an incentive to applicants to break up projects and apply for piecemeal clearances, as POSCO has done. Even where this does not occur, it is not possible to assess the overall impact or the real situation of an area by examining each project individually. Steps such as the zonal environmental atlases and pollution indices are therefore steps in the right direction, but are insufficient in themselves; rather, there is a need for the clearance process itself to be integrated in a larger system of development planning, which in turn should be democratic in nature.

Fifth, rather than seeing these processes as hindrances to investment and development, there is a need to shift to an overall industrial planning approach in which these concerns and requirements are integrated into project planning from the start. For this a clear rules-based regime is required, with transparency, clear procedures and effective enforcement. Closed door bodies making arbitrary decisions only encourage attempts at escaping regulation.

II. Process-Specific Changes: Environmental Clearance Process

In the course of preparing this report the committee members both jointly and individually had informal but extensive discussions with several experts who were involved in one way or the other with the EIA process. This experience has given valuable about the entire EIA process and the gaping gaps through which genuine environmental issues often slip through. It was disconcerting to note that an issue which repeatedly came up was the off the record statements that most EIAs were manipulated and often a copy paste job. We were reportedly told about the compulsions under which the consultants function. The private consultants have to necessarily please their clients for their continued survival and negative EIA reports recommending that the project is not environmentally sustainable would spell their death knell. Even the government organizations facing cuts in government funding are have to fend for themselves financially by procuring projects which fetch money. Hence for most consultants giving EIA reports to suit the client needs rather than reporting the truth is a financial compulsion and a survival issue. The more obvious issues which cannot be hidden are couched in appropriate language which meets the project needs but often overlooks the environmental needs. In this whole business enterprise of consultancies and project proponents a genuine and unbiased environmental impact assessment is the first casualty. Thus the process is derailed even before it has started. Since the EIA is the back bone of the entire clearance process the Committee is of the strong view that unless radical changes are introduced to the process, environmental clearances will be a sham and an eye wash. The Committee gives the following general recommendations which are lessons learnt from the POSCO experience but which go beyond it.

A. Preparation of EIA.

- 1. EIA should be prepared by accredited agencies. It is learnt that in an effort to streamline the system, procedure, mechanism and to involve competent environment professionals in the whole process of preparing and implementing EIA/EMP as per Environment Impact Assessment (EIA) Notification, 2006, the MoEF has taken initiative to accredit qualified and experienced Consultants including those working in public sector undertakings/laboratories through Quality Council of India (QCI) / National Accreditation Board of Education &Training (NABET). While this is a welcome first step it is abysmally inadequate
- 2. As part of the accreditation conditions the consultants should be made responsible and accountable for every aspect of the EIA prepared by them. The Office Memo dated 28th June, 2010 of the MoEF states that the EIA/EMP document is the responsibility of the Project Proponent, who would be accountable for any misinformation/errors, if any irrespective of who prepared it. While project proponents should definitely made accountable for the EIA and other reports, it has to be borne in mind that their liability is more vicarious in nature as being the Principal player. But however the consultants should be made equally responsible as often the project proponents themselves may have no knowledge of the technical aspects of a project and tend to go by the advice of the consultants.
- 3. It is suggested in order to ensure objectivity and to ensure that consultants are free to give an unbiased and true statement of impacts in the EIA reports without being financially obliged to the project proponent who is their pay master, the EIA should be done by accredited agencies to be engaged directly by MoEF and not by the project proponent.
- 4. The Project Proponent can be required to deposit the necessary/ estimated consultation fee along with the application seeking EIA with the MoEF. Additional fees can be charged for additional studies/ investigations recommended by the EAC or other agencies.
- 5. The allotment /assignment of the EIA studies to the various accredited agencies should be done in a transparent manner in order to ensure maximum objectivity. A list of consultants can be drawn on the basis of subject expertise and capacity. The contracts can be awarded in strict rotation basis from among the list of accredited agencies unless there are situations where the available expertise in an area is limited. This will eliminate the fear of the consultant that they may not get the next consultancy.
- 6. Quarantine period for consultants who are engaged for preparing the EIA of a particular project should be stipulated If a particular consultant/agency has done EIA for a particular industry they should not be permitted to do any other consultation for that

group of companies for a stipulated period in order to avoid conflict of interest. It can be made one of the conditions of accreditation.

- 7. There must be total accountability of consultants to the reports given by them. Consultants whose EIAs are inaccurate, misleading, deliberately ambiguous, not based on first hand field survey etc should be blacklisted and put up in the MoEF website.
- 8. It is noticed that often consultants engaged by the project proponent sub -contract portions of EIA to other agencies. Ideally no sub- contracting should be permitted. If the components of an EIA has to be apportioned to different agencies on account of requirement of different expertise such assignment/apportionment must be done by the MoEF itself and not by the lead consultant. In the alternative if such sub- contracting is permitted it should be only from among the accredited consultants who are equally bound by the conditions of transparency and accountability.
- 9. It is noticed that when a lead consultant engages several consultants for various aspects of a project the separate reports of such sub- contracted agencies is not fully disclosed either to the government authorities or to the public for the purpose of the public hearing. Portions of the reports are merely incorporated into the EIA by the lead or main consultant. The inclusion is often selective to suit the project proponent as is noticed in the POSCO report where the NIO report on delineation of the CRZ areas was selectively and misleadingly incorporated. If the full report with maps were made available to the public they would have been in a better position to effectively participate in the public hearing. Hence when sub contracted the full report of the sub contracted agency along with annexures if any must be annexed to the EIA report. Soft copies of these reports should also be made available along with the soft copy of the EIA.
- 10.. Compliance with the guidelines/instructions made in the sector wise manual of the industry should be made mandatory. The EAC can add to the mandatory list.
- 11. Treating integral elements of a project in a disaggregated manner for purposes of EIA, public hearing, clearances etc should be prohibited.
- 12. Making fraudulent statements, failure to follow TOR, plagiarism etc should be made prosecutable offences under EIA Notification.
- 13. The EIAs must be required to contain a Social Impact Assessment as well. The World Bank/IMF guidelines for preparation of EIAs require consultations to form a basis for preparation of these documents. Relegating consultations to the public hearing alone is a severe limitation.
- 14. Entire EIA reports along with the Detailed Project Report and Feasibility report must

be available to members of public electronically, on payment of a fee (for above poverty level) and free of cost to BPL.

15. All EIAs should be comprehensive and REIA should not be permitted.

B. Public Hearing

Another issue which the committee felt should be flagged is the issues concerning the public hearing process. There are reports of the project proponents packing the meetings with their supporters and intimidating the genuine project affected persons from participating. If the project is supported by the ruling party of a State the situation becomes worse with private intimidation being backed by police force. Public hearings are increasingly held in tense atmosphere under a cloud of fear of violence. There are also reports that often the District Administration does not report all objections and often communicates misleading and even false reports. Above all an issue which doggedly pursued us is the question what is the weightage given to public opinion at the end of the hearing. If the projects are to be cleared no matter what the public opinion then is the hearing an empty formality?

- 1. Combining Public hearings of several projects should be prohibited.
- 2. The number of security forces deployed at the time of the public hearing should be included as part of the report of the hearing and the administration required to explain their presence, if any, in writing.
- 3. The signatures of a minimum number of local residents should be required on any public hearing report.
- 4. Public hearings in the current fashion should be replaced with gram sabha meetings with a minimum quorum (such as 50%).
- 5. Considerable weightage should be given to the public opinion for deciding the grant of clearance

C. Expert Appraisal Committees.

Expert Appraisal Committees play a pivotal role in the EIA process. The following are our recommendations in this regard.

1. Delhi High Court has already pointed out that EACs are processing an unrealistically high number of proposals per sitting. (25 to 45 proposals) Court has recommended that only about 5 proposals per sitting should be considered. So the MoEF must ensure that not more than 5 projects are entrusted to each EAC member per sitting. There must be ceiling on the total number of projects that one EAC member can handle at any given

point in time since records are voluminous and the members must be given enough time to read. .

- 2. It is noticed that EIA reports and documents are sent only a few days in advance to all the EAC members. It is humanly impossible for members to get acquainted with the facts and effectively participate in the evaluation process. Hence a time period should be prescribed before which EIA reports should be supplied to all members of EAC.
- 3. EAC members should have no conflict of interest. If there is a conflict the same has to be disclosed openly and the member has to recuse himself or herself. (for instance the Delhi HC pointed out in its order that the EAC Mining chairperson was himself a Director in several mining companies).
- 4. Every project has a very huge social component to it. But the MoEF appears to view the evaluation process as purely an issue of science forgetting the large scale social impact. The current composition of EAC does not including social scientists . The MoEF should remedy this by including at least two social scientists into the EAC

III. Process-Specific Changes: Forest Clearance Process

- The Forest (Conservation) Rules should be amended to include the requirements of the August 3rd, 2009 order.
- The Rules should also clearly state that n o application for final clearance should be allowed to proceed in the absence of fulfillment of the requirements of the Forest Rights Act, as spelled out in that order.
- The system of "in principle" clearances, which encourages arbitrariness and corruption, should be abolished. Despite repeated statements that this will be done, the system continues to operate.
- As has been done with the EIA notification, the Forest (Conservation) Rules should also be amended to bar piecemeal applications.

In the absence of these changes we fear that projects such as this one will continue to be cleared without adequate scrutiny, resulting in increasing displacement, environmental destruction, impoverishment and conflict. The POSCO project is an example of how a mirage of "development" can be used in an attempt to bypass the law. Such attempts, if allowed to succeed, will result in neither development nor environmental protection, but merely in profiteering. This will cause immeasurable harm to the nation and to the rule of law and justice in our society.

REFERENCES / ANNEXURES

Annexure No.	Date	Description	Page No./Letter No.
Annexure – A		ound to Committee	
A-1	June 22 nd 2005	MOU with POSCO	
A-2	July 24 th 2007	Site Inspection Report, MOEF, Eastern Regional Office, Bhubaneshwar.	No. 5-ORA054/2007- BAU
A-3	July 16 th , 2010	Orissa High Court Order on Mining Licence to POSCO.	WP (C) 23/2009
A-4	2005	POSCO Pratirodh Sangram Samiti.	
A-5	May 15 th , 2007	E.C. for captive port, POSCO.	No. 10-9/2006-IA-III
A-6	July 19 th , 2007	E.C. for steel plant.	F.No. J- 11011/285/2007 –IA II (I)
A-7	Dec 27 th , 2007	Letter to Hon'ble Justice Shri Rajendra Babu, Chairperson of N.H.R. Commission.	
A-8	Aug 9 th , 2007	E.A.C. MOEF proposal for clearance of Forest Land.	F.No-8-63/2007-FC
A-9	April 27 th , 2007	Supreme Court order T.N Godavaraman Thirumulpad case.	WP No.(CIVIL) 202/ 1995
A-10	Nov 14 th , 2007	CEC recommends Forest Clearance.	F.No.8-63/2007-FC
A-11	Sept 18 th , 2008	In-principle final clearance by MOEF.	F.No.8-63/2007-FC
A-12	July 30 th , 2009	MOEF Circular	F.No. 11-9/1998- FC/PF

A-13		MOEF Circular	F.No.11-9/1998- FC(PT)
A-14	Oct 24 th , 2009	Orissa Govt. to all Collectors.	
A-15	Dec 19 th , 2009	Collector of Jagatsinghpur writes to BDO, Ersama.	
A-16	Dec 29 th , 2009	Final clearance by MOEF.	F.No. 8-63/2007-FC
A-17	Jan 8 th , 2010	MOEF clarification letter of Court "conditional clearance" to compliance with Aug 3 rd 2009 order.	F.No. 8-63/2007-FC
A-18	Feb 1 st , 2010	Principal Secretary - ST/SC Circular for compliance with FRA.	
A-19	Feb 25 th , 2010	PCCF Orissa Shri Mohanty's Circular to all DFOs concerning regularization of Pre-1980 eligible category of forest encroachments.	Mem. No. 2779/9F (Misc) 75/09(Vol-II).
A-20	Feb 20 th , 2010	Collector, Jagatsinghpur's letter to State Govt.	139
A-21	March 16 th , 2010	Orissa State Govt. letter to MOEF	No.10F(cons)- 54/2007- 5318/FNE
A-22	April 15 th , 2010	Reply of MOEF to Orissa State Govt.	
A-23	June 29 th , 2010	Special Secretary, Orissa Govt. sent English translations of Resolutions to MOEF.	N 10F (cons)- 54/2007-11733 F & E
A-24	July 8 th , 210	2 nd RPDAC Minutes of the Meeting.	
A-25	July 24 th ,	Saxena Committee	

	2010	Report.	
A-26	July 27^{th} ,	U.N. Behera,	No. 10 F(Cons) -
	2010	Special Secretary,	54/2007-18564/F&E.
		letter to MOEF.	
A-27	Aug 5 th , 2010	MOEF "stop	F.No.8-63/2007-FC
		orders" to Orissa	
		Govt.	
A-28	July 20 th ,	TOR of Committee	F.No. 8-63/2007-FC
	2010	by MOEF	
A-29	Aug 27 th ,	TOR of Committee	F.No. 8-63/2007-FC
	2010	amended	

Annexure - B: Archival Gazetteers and Reports on Coastal Land Use Ecology and Socio-Economic Studies.

B-1	1996		Pages 28, 58, 197,
		year, Cuttack	549
B-2	1933	Bihar & Orissa	Pages 89-90
		Gazetteer Year,	
		Cuttack.	
B-3	1970	1 -	Pages 9-11, 34-39, 42
		Settlement of	
		Kujang Forest	
		block 1959-66, by	
		Sri N. R. Hota.	
B-4	Feb 2006-07	Vegetation analysis	XX111
		of POSCO area. By	
		spatial planning	
		and analysis	
		research center,	
		Bhubaneshwar,	
	200	Orissa.	
B-5	2005	_	Pages 33-34
_	th	port, POSCO	
B-6	Aug 28 th ,	Letter of Prafulla	
	2010	Samanthra,	
		President, Lok	
		Shakthi Abiyan,	
	to the	Orissa.	
B-7	April 13 th	Letter by Prafulla	
	2007	Samanthra,	
		President, Lok	
		Shakthi Abhiyan,	
		Orissa, wild life	
		society to Orissa	

		State Pollution Control Board.	
B-8	April 14 th 2007	Letter of Dr. Karthik Shankar, Ashoka Trust to Orissa State Pollution Control Board.	
B-9	March 2006	Disaster Dossier by Richard Mahapatra, Info Change News and Features.	
B-10	February 2009	Striking while the iron is hot by Manshi Asher	Pages 14-15
B-11	January 2008	Report on Socio- Economic Survey of village in POSCO Project site by Xavier Institute Management, Part- I, Vol.2	Pages 4-6

Annexure - C: FRA Circulars, Notifications, Clearances and letters

C-1	Aug 3 rd , 2009	MOEF Circular to Orissa State Govt.	
C-2	Feb 4 th , 2009	Chief Secretary, Orissa to all Collectors on implementation of FRA	· '
C-3	June 2010	Ministry of Tribal Affairs	D.O No.23011/24/2009-7 RD
C-4	Aug 13 th , 2010	Principal Secretary, Environment and Forest to MOED.	
C-5	Oct 4 th , 1961	Govt. of Orissa in Development (Forest) Dept.	Notification U/S 29 of Indian Forest Act, 1927
C-6	June 9 th , 2008	Ministry of Tribal Affairs, implementation of	Circular No. 17014/02/ 2007. PC/Vol. III.

П	T	[
		FRA and	
		compliance.	
C-7	July, 2004		IA 1126 in IA 703 in
		before Supreme	W.P. 7 of 2004.
		Court.	
C-8	March 6 th ,	Revised working	Page 110
	1956	plans for Reserve	
		Forest, Athagarh	
		Forest Division.	
C-9	Feb 25 th ,	Commissioner-	GE(GL) S-22/2007/
	2008	cum-Secretary,	9775/R&DM
		Revenue and	3 67 - 100 - 1
		Disaster	
		Management, Govt.	
		of Orissa to all	
		Collectors.	
C-10	Feb 25 th ,	PCCF, Orissa to all	Memo No. 2779/9F
	2010	DFOs.	(Misc) 75/2009
	2010	DI Os.	` ,
C-11	Dec 26^{th} ,	Charles Comptons	(Vol.II)
C-11	1	Special Secretary,	
	2009	Govt. of Orissa to	32/08
C-12	T 00rd	all Collectors.	
C-12	Jan 23 rd ,	Collector,	
	2010	Jagatsinghpur to	
		Special Secretary,	
	1. 1. 2000	Govt. of Orissa.	
C-13	March 2008-	Table of village	Pages 1-13
	2009	wise events of palli	
	th	sabha meetings.	
C-14	March 24 th ,	Receipt of palli	
	2008	sabha resolutions	
		to Collector, Sub-	
	+6	Collectors & BDO.	
C-15	May 16 th ,	Letter of Sri D.	
	2008	Raja, M.P. to Prime	
		Minister of India.	
C-16	Sept 2010	Affidavit of	
		Sarpanch, Dhinkia	
C-17	Sept 2010	Affidavit of	
		Panchayath	
		Samithi Member of	
		Gadkujang	
C-18	Jan 4 th , 2009	STLC Sub-District	
		level Committee	
		Minutes of Meeting	
	•		

C-19	Nov 5 th , 2009	STLC Sub-District level Committee Minutes of Meeting	
C-20	Jan 19 th , 2010	BDO Ersama forwarded letter to concerned sarpanch	
C-21	Nov 16 th , 2009	Minutes of District level Committee Meetings.	
C-22	Oct 24 th , 2009	Chief Secretary to Orissa to all Collectors.	
C-23	Feb 11 th , 2010	Commissioner- cum-Secretary, Govt. of Orissa to all Collectors to grant title to eligible STs and OTFDs	No. GE(GL)-S-23/09 (PT-1)-5309.
C-24	Nov 21 st , 2008	Under Secretary to Govt. of India, subject of the letter frequently asked questions on implementation of FRA.	
C-25	2006	Orissa Resettlement and Rehabilitation Policy.	Para 9 benefit to landless and homestead less encroachers, subpara 1 & 2; para 10.
C-26	July 2010	RP DAC (R&R Package)	

Annexure - D: Archival documents, receipts of Nistar Rights, Forest Cess, Sabak Village maps (1927-28)

D-1	1927-28	Sabak map of Dhinkiya Village, Gramya Jungle, Plot Nos. 2254, 2255, 921
D-2	1927-28	Sabak map of Govindpur Village,

П	I	T	
		Ghauj Jungle, Plot Nos. 1293 & 1294.	
D-3	1927-28	Sabak map of Naugaon Village, Gramya Jungle, Plot Nos. 2515 & 2552.	
D-4	1927-28	Sham Das betel wine cess	
D-5	1931	Katiyan Receipt of Giridhar for Pan Barag.	
D-6	March 10 th , 1912	Forest Cess of Bheema Naik, Govindpur Village.	66781
D-7	March 13 th , 1912	of Hadi Naik.	13179
D-8	Dec 22 nd 1938	for fuel wood of Hadi Naik.	
D-9	March 12 th , 1926	Receipt Land Rent (0.13 decimal) of Hadi Naik and Bhaba Dalei.	34532
D-10	Dec 23 rd , 1938	Dhobei Khatua, Khatiyan Receipt from Bardhman Raja.	30117
D-11	Jan 5 th 1931	Name of the Tenant: Giridhari Bardhan, Govindpur Village, Katiyan Receipt for Panabaraja (betel vine).	Receipt No. 110
D-12	Dec 10 th , 1954	Dhanu Khatua, Collection of fee towards betel vine in 1360/61.	17208
D-13	Nov 13 th 1929	Betel vine cess	Baje Chalan 6328, Bharadwan Raja.
D-14	1930-31	Shama Das Kast Baurie panabaraja (betel vine), 20 decimal land,	Khasada No. 325

		Dinkiya Village.	
	•		•
Annexure – l	E: Rapid EIA of	Steel Plant	
E-1	Jan, 2001	Manual on EIA of MoEF	
E-2	July, 2006	Application by POSCO for SEZ Status	
E-3	August, 2006	Summary of Rapid EIA for Steel Plant	
E- 4	/06	Proceedings of OCZMA	
E- 5	14/9/06	Consent to Establish- Application	
E- 6	01.12.06	Report of Technical Committee on Iron & Steel Sector	
E- 7	14.04.07	Public Hearing - Proceedings	
E - 8	17.04.07	Comments of RO- MoEF	No. 252/EPE
E - 9	02.05.07	Extract of Proceedings of Consent to Establish Committee	
E - 10	05/06/07	67 th Meeting of EAC	
E - 11	12.6.07	Consent to Establish	
E - 12	21.06.07	68 th Meeting of EAC	
E - 13	19.07.07	EC-Steel Plant	
E -14	30.05.07	Reply by Addl Director.	
E -15	2009	Industrial Clusters	
E -16	Dec 2009	Comprehensive Environmental Assessment of Industrial Clusters	
E -17	29.8.10	List of Officials who met Committee	

		Members in
		Bhubaneshwar
E - 18	4.10.20	Email Reply of
		POSCO Director
E – 19	4.10.2010	Email reply by PCB
		Official, Orissa
E- 20	6.10.10	E-mail reply from
		RO, MoEF,
		Bhubaneshwar

Annexure - F: Rapid EIA of Captive Minor Port

F- 1	00 10 05	Minister of	
F- 1	20.12.05	Minister of	
		Shipping gives	
		reply in Parliament	
		to query on impact	
		of Posco port	
F - 2	2006	Summary of REIA	
		Port	
F - 3	11.7.06	Letter asking for	
		Comments	
F - 4	07/08/06	Comments of RO-	
	, ,	MoEF	
F -5	07/08/06	Minutes of Meeting	
	, ,	of OSCZMA	
F – 6	23/08/06	Application for	
	, ,	Consent to	
		Establish	
F - 7	01-09-2006	Proceedings of	
		OCZMA	
F – 8	16.10.06	EAC meeting on	
		port / CRZ raises	
		queries	
F –9	.11.06	EAC Meeting	
		recommends EC	
F-10	09/11/06	Consent to	No. 27466/Ind-11-
	, ,	Establish	NOC-4447
	25/09/06	Proceedings of CE	
		Meeting for Port	
F – 11	9.4.07	Letter from RO,	N. 101-256/EPE
		MoEF about	·
		industrial pollution	
		in Paradeep area	
F - 12	.05.2007	Proceedings of EAC	
		Meeting which	
		1 Miccurs Willell	

	recommended EC and CRZ Clearance		
F- 13	15.5.07	EC for Port	N. 10-9/2006-IA-III
F-14	15/12/08	ATR Report	
F - 15	02.04.10	POCO –	
		Compliance Report	

Annexure G – On Water Allocations and Resources

G – 1	11.02.2008	Letter from Posco	
		to Chairman,	
		Water Allocation Committee	
		Committee	
		regarding	
		suitability of water	
		from Jobra Barrage	
		on Mahanadi	
G- 2	1.11.2008	Letter from	
		Engineer-in-Chief	
		to Principal	
		Secretary, Dept. of	
		Water Resources	
		recommending	
		sourcing of water	
		from Mahanadi	
		Barrage by Posco	
G - 3	25.1.2010	Letter from Special	
		Secretary,	
		Department of	
		Water Resources to	
		Posco regarding	
		allocation of water	
		for steel plant from	
		Hansua Nallah for	
		construction	
		purposes and	
		Jobra Barrage for	
		operational	
		purposes	
G-4	15-09-2010	Letter of Sripad	
		Dharma Adikari,	
		Manthan, Adhyan	
		Kendra, MH	
		written to POSCO	
		Committee voicing	

			serious conce	arns of		
			water require			
			by POSCO Pr			
1			by 1 0500 11	oject.		
Anne	Annexure – H : CRZ					
•	H - 1	Oct 1995	CZMP for			
			Orissa –			
			Government of			
			Orissa			
	H - 2	14.8.2006	CRZ Clearance			
			for Captive			
			Minor Port –			
			Clarifications			
			on queries in			
			Expert			
			Committee			
			Meeting given			
			by POSCO			
•	Н - 3	27.9.1996	Letter from			
			MoEF to Chief			
			Secretary, GoO			
			about approval			
			for Coastal			
			Zone			
			Management			
		1.0000	Plan (CZMP)			
	H - 4	14.9.2006	Recommendati			
			on of OSCZMA			
			to MoEF for			
			establishing			
			minor port and			
			to accord CRZ / EC.			
	H - 5	2.11.2006	MoEF Letter to			
	11-0	2.11.2000	POSCO to			
			appear before			
			Expert			
			Committee on			
			Infrastructure			
			Development			
			on			
			16.11.2006.			
	Н - 6	16.11.200	NIO - Terms of			
		6	Reference for			

		1	OD7	<u> </u>
			CRZ	
			Demarcation	
Anne	xure I: F	Representati	ons received by	Committee
•	I- 1	25.8.2010	Posco Pratoridh	
			Sangharsh Samiti (PPSS)	
•	I - 2	29.8.2010	Utkal State Council-	
			Communist Party of India	
	I -3	29.8.2010	Communist	
•	1-3	29.0.2010	Party of India	
			(Marxist)	
			Odisha State	
			Committee	
•	I - 4	29.8.2010	Samajwadi	259/S-P
			Party, Odisha	,
•	I - 5	9.9.2010	Submissions	
			by Kanchi	
			Kohli and 27	
			others.	
	I - 6	17.9.2010	Open Letter	
			from civil	
			groups of	
	T /7	17.0.0010	South Korea	
	I - 7	17.9.2010	US Based Academics –	
			representation received by	
			email	
	I - 8	21.9.2010	Sankhanad	
			Behera,	
			Bhumiputra	
			Multipurpose	
			Co-operative	
			Ltd	
	I - 9	22.9.2010	Wildlife	
			Society of	
			Orissa	
	I - 10	22.9.2010	Shri.	
			Kanungo,	
			former	

_		 	
		Finance	
		Minister, GoO.	

Note: The committee has referred to all these annexures/references. Only those annexures which are ticked are included in the hard copy. The rest of the annexures were not included to avoid making the hard copy bulky.