The Dark Side of Thermal Power Plants
Case Studies of Thermal Power Projects and Violations of Law
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Author: Priya Kamra

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info@cenfa.org  www.cenfa.org

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## Contents

- Executive Summary ........................................................................................................................................... 2
- Jaypee Nigrie Super Thermal Power Project ................................................................................................. 4
- Udupi Thermal Power Plant ............................................................................................................................ 11
- Lanco Vidarbha Thermal Power Ltd. ................................................................................................................ 18
- Visa Chhattisgarh Thermal Power Plant ......................................................................................................... 25
- Korba West Thermal Power Plant .................................................................................................................. 31
- Tiroda Thermal Power Plant ........................................................................................................................... 36
- Jindal Thermal Power Plant ............................................................................................................................. 44
- Bara Thermal Power Plant ............................................................................................................................... 50
- Lalitpur Thermal Power Plant .......................................................................................................................... 54
- Meja Super Thermal Power Project .................................................................................................................. 58
- Mutiara Thermal Power Plant ........................................................................................................................ 62
- Jhabua Thermal Power Plant ........................................................................................................................... 67
- Adhunik Power Thermal Power Plant ............................................................................................................... 72
- Barmer Power Station ....................................................................................................................................... 78
- Rosa Thermal Power Plant ............................................................................................................................... 82
- Kamalanga Thermal Power Plant ..................................................................................................................... 84
- Jharsuguda Sterlite Power Station .................................................................................................................... 91
- GMR Raikheda Thermal Power Plant ............................................................................................................... 96
- Derang Thermal Power Plant .......................................................................................................................... 100
- Maithan Right Bank Thermal Power Plant ..................................................................................................... 104
- Banka Power Project ......................................................................................................................................... 108
- Malibrahmani Thermal Power Plant ............................................................................................................... 112
Executive Summary

Of India’s installed power generation capacity of 331,118 megawatts (MW), 58%, or around 193,426MW, is fuelled by coal. Gas-based and hydropower projects account for 25,150MW and 44,765MW, respectively.

Coal, one of the key polluters dominates India’s energy mix. Indian economy is greatly dependent on coal, home to one of the largest coal reserves in the world. Surprisingly India is also the country with an outrageous number of power cuts. We consume electricity which is produced in power plants specifically located near forests or coastal areas, responsible for damaging the ecosystems along with innumerable other violations, such as-

i. Agriculture land acquired to be converted into a toxic wasteland,
ii. Alarming pollution levels
iii. Animal corridors disturbed
iv. Water resources wasted in an already water-scarce nation.
v. Inadequate compensation
vi. Destruction of traditional livelihoods
vii. Public health crises
viii. Climate change
ix. Openly dumping of waste like fly ash.

According to World Bank data on air pollution, world’s 14 out of 15 most polluted cities are in India. The issue of climate change requires a shift from the energy produced from the coal power plant towards Green Energy sources keeping in tandem with the Paris Agreement 2015 to limit the greenhouse emissions and control the rising temperature. But the Government keeps increasing the deadline for the thermal power plants to adhere to the pollution standards. The recent notification by the Central Electricity Authority gives 300 thermal plants time between 2020-2024 to adopt clean technologies instead of doing it by the 2017-year end. Evidently, the financial health of thermal power plants is more important than the health of millions of Indians.

Thermal Power Plants are essentially water intensive and polluting, marked with a high rate of Carbon, Sulphur oxide, Nitrogen, particulate matter emissions, that can adversely lead to respiratory reactions. They put high pressure on the resources thereby worsening the air and water pollution. The good news is, that we can limit the environmental and social damage if the companies start taking concrete efforts to follow the Environmental Clearance guidelines without flouting. But even if, they are working in a regulated framework, the impacts are leading towards the destruction of mind, space and livelihoods. There is systematic injustice being inflicted on the people with regards to power production that needs immediate attention to safeguard the interest of affected people.
The purpose of this report is to highlight the irregularities in the power sector by thermal projects, to be particular, and how the livelihoods and rights of the people are minimised in the decision-making process. The report gives a brief on twenty-two coal based thermal power plants operating/in-progress in India with a capacity above 1,000 MW. The power plants are spread across ten states, Maharashtra, Bihar, Rajasthan, Karnataka, Tamil Nadu, Madhya Pradesh, Odisha, Chhattisgarh, Jharkhand, Uttar Pradesh; ranging from Singrauli industrial cluster to lush green Western Ghats in the South, from desert land in Rajasthan to the Gulf of Mannar on the East coast.

All the case studies had one thing in common, land losers. The poor villagers, who had to give away their land to haste the development project, subsequently, beg and protest for adequate compensation, jobs, implementation of CSR funds in order to get a fraction of their lost lives back. The “Development” agenda is forced onto the affected communities to incorporate the interest of the big companies. The plants get constant support from the banks who continue giving them loans without paying much attention to the damage it may cause. Why is no proper caution given while lending loans? Also, are loans in the name of energy creation really benefitting when there are safer options available?

There is a need to bring change in the way coal power plants are operationalized which receive funding from all major national and international banks. Coal financing should be responsible and transparent and not how we see later in the case studies. Banks continue to invest in coal when there is a high possibility of banks exposing to bad loans, as the data on Non-Performing Assets (NPA) shows. The report consists of thirteen such power plants who have been declared as financially ‘stressed’ with Indian banking system dealing from bad loan crises. The major issues with power plant turning stressed can be associated with,

i. Non-availability of coal,
ii. Lack of Power Purchase Agreements,
iii. The inability of the promoter to infuse the equity & working capital, and
iv. Regulatory and contractual issues.

Apart from the rising NPAs/stressed assets, there has to be a sense of accountability when financing loans to support projects involving unsustainable fuel responsible for climate change, workers death, air & water pollution. The case studies expose financial institutions whose funding towards coal-based power plants in India is having negative environmental and social impacts. There is an issue with the power sector which needs to be fixed instead of building more plants. We have to clean this sector to clean pollution.
### Jaypee Nigrie Super Thermal Power Project

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Jaypee Nigrie Super Thermal Power Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>Jaiprakash Power Ventures Ltd.</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Village Nigrie, Tehsil Deosar, Dist. Singrauli, Madhya Pradesh</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>Gopad River</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>Amelia (North) and Dongrital II Coal Block</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>1080 acres</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>2X660 MW (1,320 MW)</td>
</tr>
<tr>
<td><strong>Public Hearing</strong></td>
<td>12-01-2009</td>
</tr>
<tr>
<td><strong>Status of project</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Environment Clearance</strong></td>
<td>25-02-2010</td>
</tr>
<tr>
<td><strong>Cost of project</strong></td>
<td>INR 6015 Crores</td>
</tr>
</tbody>
</table>
| **National Bank Loan (16 Banks + 2 Other NFIs= 18)** | Total NFIs Loans: INR 5667 Crores  
ICICI, IDFC (INR 300 Crores), LIC (INR 250 Crores), SBBJ (INR 150 Crores), SBP (INR 200 Crores), SBH (INR 200 Crores), BOB (INR 200 Crores), Central Bank (INR 500 Crores), Syndicated Bank (INR 200 Crores), Corporate Bank (INR 200 Crores), Bank |

1 The Environment Clearance was given for 2x660 MW thermal power plant and a 2.0 MTPA Cement grinding unit. [http://environmentclearance.nic.in/Auth/openletter.aspx?EC=4736](http://environmentclearance.nic.in/Auth/openletter.aspx?EC=4736)
Outline of Plant and the Nearby Areas


Introduction

Singrauli region, the overburden energy capital spreads across Uttar Pradesh (Sonbhadra district) and Madhya Pradesh (Sidhi and Singrauli districts). Initially, it was home to the public sector but later private companies started setting their operations as well. The Nigrie thermal power plant has two supercritical units which consume a total of 250 million tonnes of coal from its captive blocks. Mercury, a highly poisonous substance is released by the thermal plants, excess of which can cause devastating impacts on humans as well as animals. Down to Earth called Singrauli as ‘India’s Minimata bay’, a mercury time bomb with millions of people at risk. Mercury is released into the air during combustion process or finds its way into soil and water during runoff from coal mines. Dumping of chemical effluents in the Minimata Bay in Japan caused neurological disease in people. The mercury accumulated in the fish, when consumed by humans and animals led thousands to suffer and ultimately die from its impacts. Japan in 1997 warned the other nations of its mistake with the Minimata bay and placed importance on the sustainable growth. In 1998, the Indian Institute of Toxicology Research, Lucknow took the mercury tests of Singrauli region and found shocking results.3

“The study found high levels of mercury everywhere. It also found that people in Singrauli had diseases and showed symptoms that could be directly linked to mercury poisoning. But the study never made it to the news because it was never publicly released. IITR, a government institution, refuses to give the data even today because the study was sponsored by National Thermal Power Corporation (NTPC), also a government-owned company that has many thermal power plants in Singrauli and plans many more.”(DTE)

The Environment Impact Assessment report of the plant mentions the presence of 6 reserved forests namely, Deoban RF, Daria RF, Harboro RF, Kachod RF, Bharsera RF at a radius of 10 km with Tikari RF as near as 0.7 km. The report does not give details on how the gaseous release from the plant would impact the wildlife and local ecology and ways to mitigate it. Singrauli region suffers from Mercury pollution but the EIA fell short of recognising it and commented on the power plant causing ‘insignificant impact on health and safety.’ 4 It is highly important to get a cumulative analysis done for the entire region to understand the actual impacts of industries before giving Environmental Clearance to projects.

3 http://www.downtoearth.org.in/coverage/indias-minamata-39334
4 http://www.mppcb.nic.in/pdf/Exe_Sum_JPVenture_Eng.pdf
Financial Troubles

The power plant ran into financial trouble when the Amelia North block was de-allocated by the Supreme Court, which later was bought at a competitive pricing. Now, Jaiprakash Power Ventures is offering NTPC, India’s largest power producer for the acquisition of the Nigrie thermal power plant. This came after NTPC in 2017 announced to buy operational thermal plants running on domestic coal to provide relief to the troubled and stressed private sector. In 2014, it was also reported that JSW Energy was in talks to buy Jaiprakash group’s Bina and Nigrie Thermal power units for a total enterprise value of Rs 12,500 crores, but the news was later denied by the JSW authorities.

In 2017, a consortium of banks led by the ICICI Bank acquired a stake in Jaiprakash Power ventures by converting debt into equity after the failure of repayment of the loan by the company. This reduced the debt by Rs 3,058 crores. Lenders now have a total of 51 percent stake in the company with ICICI Bank holding 13.7 percent, IDBI holding at 5.3 percent, Punjab National Bank at 4.4 percent, Central Bank of India at 4.1 percent, State Bank of India at 3.5 percent and other lenders including Bank of India, IDFC Bank, Canara Bank and LIC.

Recently, Jaiprakash Power Ventures Ltd name came up in the ICICI Bank- Videocon loan case as well, wherein the Jaypee group have reported having hired the services of Avista Advisory (run by ICICI bank’s CEO Chanda Kochar’s brother in law Rajiv Kochar) to secure loans from ICICI bank. The allegations were refuted by the company administration saying that Avista advisory was hired for the restructuring of Foreign currency convertible bonds (FCCB’s) and was paid according to the market standard, calling the reports of loan syndication as baseless. Presently Jaiprakash’s Nigrie project has an outstanding debt of Rs 6,211 crores and is one of the 34 stressed electricity assets mentioned in the parliamentary report.

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5 http://www.financialexpress.com/industry/ntpc-set-to-go-on-buying-spree-in-big-relief-for-troubled-private-sector-players/953476/
6 https://economictimes.indiatimes.com/industry/energy/power/jsw-energy-eyes-jp-powers-bina-nigrie-power-plants/articleshow/40357373.cms
Singrauli - A Case of Paradox

Singrauli has been identified as one of the most polluted industrial clusters in India. In 2010, MoEF imposed a temporary ban on mining operations after the region was identified as the ‘most polluted’ with critical environment pollution index of 81.73 by Central Pollution Control Board and Indian Institute of Technology in their Comprehensive Assessment of Industrial Cluster.10

Blessed with natural resources but unfortunately, that is the reason for its massive exploitation and development-induced displacement. Singrauli has now become a rough dusty patch which was once sprawling with dense forests. Ashwani Dubey, a Singrauli resident and lawyer by profession, who after seeing the excessive problems related to health due to air & water pollution going unaddressed in Singrauli region, filed a petition in National Green Tribunal. The NGT bench chaired by Justice Swatanter Kumar directed to form a committee to further investigate the matter. The high power committee chaired by A. B. Akolkar (member secretary of the Central Pollution Control Board) identified the various air and water pollution concerns and gave their recommendations.11 In 2017, bench headed by Swatanter Kumar disposing of the plea ordered the two state governments to install online air quality monitoring stations and RO water plants for the residents, of which the entire cost will have to be borne by the industries.12

In Coalition for Epidemic Preparedness Innovations (CEPI) 2013 index, Singrauli was reported to be the fourth most polluted cluster in India and as of today, there is only one Central Pollution Control Board (CPCB) air monitoring station and that too on the Madhya Pradesh side of the region and none on the Uttar Pradesh side. This triggered massive protests by the Pradushan Mukti Vahini (a coalition of Gram Panchayats affected by air & water pollution) followed by setting up of 12 air quality monitors on both the sides by independent researchers, IIT Kanpur and Urban Sciences (a company specialising in air quality monitoring).13

Nigrie Thermal Plant Captive Mines

The two coal blocks - Amelia North and Dongri Tal-II belong to M/s Madhya Pradesh State Mining Corporation Limited (MPSMCL) who formed a joint venture with Jaiprakash Associates Ltd (JAL), namely, Madhya Pradesh Jaypee Minerals Ltd. As per their agreement guidelines, JAL or its associates were required to commission a 2x660 MW thermal power project for the captive use of the Amelia coal block. In 2014, the Supreme Court judgement cancelled the allotment of 204 coal blocks because of which Amelia was cancelled. But Amelia block was continued to mine for supplying coal to the thermal power plant until 2015. The Jaiprakash group participated in the re-auctioning of the mines and successfully secured Amelia through e-auctioning.

According to Greenpeace report ‘How coal mining is trashing Tigerland’, the coal mines providing mine to the Nigrie power plant lie within the 10 km buffer range of Sanjay Dubri tiger reserve. Amelia north spanning over 500 hectares is part of the forest corridor that connects Sanjay Dubri tiger reserve with the Bagdara Sanctuary. The MoEF categorised Amelia north as a ‘no-go’ area but it got the clearance in 2009, subsequently, the nearby Amelia block was rejected on the aforementioned grounds.

Another Greenpeace report titled ‘Singrauli- The coal curse’ reveals the answer they got from filing an RTI to know what was the ‘go, no-go’ list. Astonishingly, 222 blocks were accounted as no-go which had come to 153 a year later.

“Given their biodiversity value, forest clearance must not be granted for the Dongrital, West Dongrital, Dongrital II, Mara-II Mahan, Mahan, Chatrasal, Badamara-XI-R-GSI, Bandha, Amelia and Amelia North coal blocks, or any others in this corridor.”

The picture next page indicates the location of Amelia North and Amelia Coal block and Dongrital coal block to be in between the Bagdara sanctuary and Sanjay Dubri Tiger reserve.

14 http://environmentclearance.nic.in/writereaddata/EIA/110220161L0QK395eia.pdf
Conclusion

India’s push for energy is marked with displacement, unemployment and pollution. The area around the thermal plant is rich in biodiversity, and mining affects the local ecology. Deforestation directly impacts wildlife and communities dependent on forest for sustenance. This is the reality of companies, pressuring and using political links to get the approvals.

The entire Singrauli region is affected and is suffering from the rampant exploitation and diversion of forest land for industrial activity. Locals have been displaced since 1960, their agriculture land, common land and forest all been taken over in exchange for blackness by the big corporations. The problem is known and is well understood, yet the actions taken to control it are not seen. The region continues to deteriorate in terms of pollution, yet the government stance is not strong. Committees are formed, recommendations are made, however, no concrete actions can be seen to control it. This is a case of development sans people.

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18 http://indiatogether.org/sing-environment
# Udipi Thermal Power Plant

<table>
<thead>
<tr>
<th>Project name</th>
<th>Udipi Power Station</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>M/s Udipi Power Corporation Limited (UPCL)</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Phase 1 &amp; 2(Expansion)- Village Yellur, Padubidri, Dist.Udupi, Karnataka</td>
</tr>
</tbody>
</table>
| **Source of water** | Phase 1- 10,000 m³/hr from the Arabian Sea  
Phase 2- 14,381 m³/hr from the Arabian Sea |
| **Sources of coal** | 100 % Imported Coal from Indonesia |
| **Land Requirement** | Phase 1- 589.61 acres  
Phase 2- 728.1 acres |
| **Capacity** | Phase 1- 1,200 MW  
Phase 2 (expansion) – 1,600 MW |
| **Status of project** | Active |
| **Environment Clearance date** | Phase 1: 09- Sept-09  
Phase 2: 01-Aug-17 |
| **Cost of project** | INR 4342 Crores |
| **National Bank Loan (13 Banks + 1 Other NFI= 14)** | Total NFI’s Loans: INR 3474 Crores  
PFC (INR 1463 Crores), IIFCL (INR 480 Crores),  
BOB (NA), Indian Bank (NA), BOI (NA), Dena Bank (NA),  
Syndicated Bank (NA), Allahabad Bank (NA), PNB (NA),  
IDBI (NA), OBC (NA),  
Union Bank (NA) and Canara Bank (NA) |
**Introduction**

Udupi, well known for religious tourism is one of the coastal districts of Karnataka state with agriculture and fisheries being the predominant livelihood activities. The coastal district is part of the towering Western Ghats with farmers being engaged in Coconut, Areca nut, cashews, paddy production.\(^{19}\)

In 1996, Nagarjuna Power Corporation Limited (NPCL) proposed to build a 2x500 MW thermal power plant which, in 2003 was further increased to 2x507.5 MW capacity. This project was stalled due to local protests, meanwhile, Lanco’s Udupi Power Corporation Limited (UPCL) acquired the land and got the Environment Clearance to set up 2x600 MW power plant on the same location. This project was taken over by Adani in 2015 for an enterprise value of Rs 6,300.\(^{20}\) Touted as one of the biggest deals, making Adani the biggest private player in the private sector. The deal helped Lanco pay off its long as well as short-term debts worth Rs4,275 and Rs 2,147.\(^{21}\) Adani proposed to expand the existent project capacity from 1,200 MW to 2,800 MW by adding 2x800 MW units, for which it got its Environment Clearance in 2017. The plant is working on imported coal transported from UPCL’s captive jetty at New Mangalore Port Trust (NMPT) to Nandikur railway station through Konkan Railways and further taken to the plant in a dedicated railway siding from the station.

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There are total of 34 legal cases pending against UPCL, some of which are with National Green Tribunal and Karnataka State Human Rights Commission challenging the environment clearance granted by the Ministry of Environment and Forest thereby violating Human Rights.

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\(^{19}\) https://www.nabard.org/demo/auth/writereaddata/tender/2510161952UDUPI%20PLP%202016-17%20%20FINAL.split-and-merged.pdf

\(^{20}\) Environment Movement and the media in Dakshina Kannada by Shrinidhi Adiga

Public Concerns

A public hearing meeting was conducted on 19th November 2011 at District Collector’s office. Participants complained as to why no Public Hearing meeting was conducted and Environment Monitoring Committee was constituted before setting up the Thermal power plant? The allegations of acquiring agricultural land with inadequate compensation being paid to the displaced were put forth. The chemical effluents from the project site are corroding the tin sheets of the houses and contaminating the water streams and agricultural produce- Coconut, Jasmine flowers, Banana and Cashews leading to a decline in their quality. In 2011, Deccan Chronicle came out with an investigative report covering the areas located in the shadow of the UPCL power plant. They reported that that the yield has decreased from the time the power plant had become operational. Yellur, famous for Jasmine production has seen such a decline that even collecting one kg of Jasmine buds after the end of two seasons is a big thing. Also, no expert committee is required to see that how contaminated the water is and how the fly ash is leading to skin problems among the populace.

Another public hearing meeting was held at Paniyuru Durga Devi Higher Primary School on the 10th November 2016 regarding the expansion project. Few representatives questioned the legalities and asked why the Rs. 7 crores sanctioned as CSR was not spent on the public? Out of 7, only Rs. 3 crores were spent and nothing is implemented on the ground after assurances. The leaks in discharge pipes are affecting the fish community, demanding jobs for the youth employment.

The demands made by the public are valid but we need to see that the damage the power plant would be doing will be permanent. The water, air and land will be exploited and to top it all off, shouldn’t the location be seen from an ecological perspective? Is a location amidst the Western Ghats, a biodiversity hotspot where people depend on land and water for livelihood, a viable option to set up a Thermal Power plant, infamous for deteriorating the environment? It is the attraction of jobs and being employed that makes people support these projects and was evident from the Public Hearing document in which almost all the participants happened to support the project only because of jobs even after citing the adverse impact the project would have on the region.

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22 http://wgbis.ces.iisc.ernet.in/energy/water/paper/TR126/annexure6.PDF
23 http://wgbis.ces.iisc.ernet.in/energy/water/paper/TR126/annexure8.PDF
24 http://www.environmentclearance.nic.in/writereaddata/Public%20Hearing/26122016SYAHANDQAnne xure-documentofPublicHearing.pdf
Grassroot Resistance

The project has seen active resistance from the local population leading to the formation of various activist groups.

Vijay Kumar Hegde, president of Horata Samiti questioned the government’s decision to allow such a plant to operate which has violated the set norms causing health troubles to the people? Adding to it he said, “We have always opposed the plant. But since it was already set up people asked the management to convert into a gas-based plant and also install a desalination unit. They also wanted assurance that it would not be expanded. But none of this has been done.”

Rama Shettigar from Yellur has lost 2.5 acres of his land during the first phase of the project. He has then offered Rs 4.5 lakh per acre. Currently, he has received notice for his five acres of land. He said the notified land at present is a fertile agricultural land comprises 100 coconut trees, besides areca nut trees.

Another farmer Jagannath Moolya from Nandikur village had complained about the loss in Areca nut productivity since the construction of the project in the vicinity. He was able to collect only 1 quintal of areca nut in two years which used be 7 quintals before. The colour of the leaves has changed. Fly ash was found on their clothes, on the plants, water has become salty. All 125 black pepper plants have been destroyed due to salt water humidity. Cows have begun coughing after eating the grass or they have died after eating grass laced with fly ash. Such are the circumstances that the farmers have to live in. The road to his house was cut to construct railway passage for the plant. Konkan Railways promised to build another passage but nothing has been so far. When he questions Lanco authorities, they blamed Konkan Railways for the delay. ‘Our environment was so rich and beautiful until this plant was set up- cattle, plants, water- Everything was good. Now, we cannot get back what has been damaged now’ he exclaimed.

Savithri S Puthran, Milk association leader, Padubidri beach said ‘No one can cultivate from beach till Nandikur village due to salt water. Cattle cannot graze. Wells have been affected; water colour has turned to yellow. Water is not clean even after boiling.

27 https://www.youtube.com/watch?v=sCITQ8AO0f8
28 https://www.youtube.com/watch?v=sCITQ8AO0f8
Karnataka Rajya Raitha Sangha (KKRS) protested against Konkan Railways illegally transporting coal in open conveyors by stopping Mumbai Matsyagandha Express (train no 12620) for Ten minutes. Activists of KKRS raised slogans, slept on the railway tracks saying that ‘MoEF had not given permission to this. Why are regulations not been followed?’

This project has felled almost 4 lakh trees to lay underground pipes. UPCL has not taken any measures to curb the pollution even after the Karnataka State Board Control Board mentioned the problems in the report. KRRS had also protested by observing a ‘bandh’ in nine villages on December 26, 2011, because of thermal pollution destroying horticulture and agricultural crops.

Details of Field Investigation

A committee consisting of 6 experts was set up on 31st March 2011 after substantial complaints of pollution being made to the district authorities. The report submitted by the panel was rejected by the public on the account of the absence of realities being reflected in the document. The pontiff of Pejavar Mutt, Sri Sri Vishwesh Tirtha Swamiji intervened and recommended the Government of Karnataka to include two environmentalists, Dr. T.V.Ramachandra (Energy & Wetlands Research Group, Centre for Ecological Sciences, Indian Institute of Science, Bangalore and member of Western Ghats Task Force, Government of Karnataka) and Y.B. Ramakrishna (Executive chairman, Karnataka State Biofuel Development Board, Government of Karnataka) into the expert committee. The newly inducted members actively worked and insisted on holding public consultation meetings and surprise visits to the plant along with requesting for the provision of safe drinking water, repair of roads, compensation for the loss. The Deputy Commissioner sent an office communication letter for the expulsion of the 2 newly inducted experts on insignificant grounds after the second meeting of the newly constituted panel.

Sri Vishweshateertha Swamiji of Pejawar Mutt protested against Udupi Power Corporation Limited by going on a three day fast. The protest was planned to oppose the government order of dropping two experts from the Committee. Two environmentalists, Y B Ramakrishna and TV Ramachandra were re-appointed into the committee on Swamiji’s behest to study the environmental pollution and were asked to submit their independent report. Their report along with the report from the truncated committee would then be considered before giving sanction to operate the second unit of the first phase. (However,
Environmental Clearance was given to complete the 1,200 MW along with the expansion clearance in 2017).\[32\]

Following socioeconomic factors came to light from the detailed field investigation report submitted by the environmentalists from Indian Institute of Science: \[33\]

Open defecation and contamination of nearby streams have led to mosquito breeding resulting in higher instances of malaria and chikungunya among the residents in and nearby labour colony.
Direct discharge of coal mix water to nearby streams.
Illegal use of natural drains/streams for disposing of TPP effluents. As the stream passes through agriculture fields there is a contamination of land and biotic elements (humans, livestock, fishes, poultry, pets, etc.)
Skin rashes, lesions, nail deformation in humans (children as well as adults)
Higher instances of coughing among local people (respiratory ailments such as asthma and bronchitis, the impact of minute fly ash dust in mucous membrane in superior and inferior concha)
Sacred grove in a dilapidated state due to the negligence of the TPP management, hence hurting the local sentiment.
Reduced fish yield in the ocean, higher instances of sea shore erosion where TPP effluents are discharged (liability to the district exchequer for TPPs misdeeds)
Inadequate and inappropriate compensation to affected families.
Collection of drinking water from faraway places (as groundwater and surface water sources are contaminated)
Higher instances of miscarriage (livestock)
Poultry death due to consumption of effluent mixed stream water
Abandoned agriculture and horticulture fields
The implication of local people in false criminal cases by local police as well as district administration
Deliberate weakening of local institutions (Gram Panchayats) and Civil Society Organizations

**Conclusion**

In 2016, National Environment Engineering Research Institute (NEERI) did an impact assessment study for the proposed 2x800 MW expansion and concluded by saying:

\[32\] http://wgbis.ces.iisc.ernet.in/energy/water/paper/TR126/index.htm
\[33\] http://wgbis.ces.iisc.ernet.in/energy/water/paper/TR126/section6.htm
“The proposed power plant may have a certain level of marginal impacts on the local environment. However, with the implementation of the proposed pollution control and environment management measures, even the minor impacts anticipated due to construction and operation of the proposed power plant will be mitigated. Further, development of this project will have certain beneficial impact/effects in terms of bridging the electrical power demand and supply gap. This will also provide employment opportunities during construction as well as operation phase of the project. Thus, in view of considerable benefits from the project without any adverse environmental impact, the proposed project is most advantageous to the region as well as to the nation” 34

This is after people complaining about the environmental contamination, media coverage of the negligent administrative authorities not complying with the measures stated to protect the environment. Air, water, land have been contaminated which is a direct breach of ‘Right to Environment’. Article 21 of the constitution guarantees the fundamental Right to life, right to the environment, free of the danger of disease and infection is inherent in it. Right to a healthy environment is important to attribute of the right to live with human dignity. 35 Forest dwellers have been displaced, forced emigration due to bad yield, unavailability of water, marine ecosystem disturbed due to thermal pollution. The question here is ‘Should a business be allowed to work if it is hazardous to the society? If it is allowed, then why isn’t Sustainable Development practised by the authorities? The social implications of the plant mentioned in the IISC report directly point towards the insensitive administration who has taken the local community for granted and unleashed a state of vulnerability upon them for their convenience. Poor monitoring of the project along with scientific mismanagement had made the poor suffer so much that they don’t even have adequate water to drink; negatively impacting the overall health of the region. Flouting norms, flourishing green lands becoming barren wastelands, fishes dying because of hot water being discharged into the sea, beach sand turning black, the public doesn’t know what chemicals get mixed with water, the administration has never shown them any reports. Trees are cut to set up underground pipelines forcing people to leave their homes. The manner in which the project was constructed has not just affected the environment but the people on a deeply personal level.

34 http://environmentclearance.nic.in/writereaddata/EIA/06022017KW9G9LRSAnnexuredocofEIAEMP1.pdf
35 http://pib.nic.in/website/PrintRelease.aspx?relid=105411
## Lanco Vidarbha Thermal Power Ltd.

<table>
<thead>
<tr>
<th>Company Name</th>
<th>Lanco Vidarbha Thermal Power Ltd.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location of project</td>
<td>Village Mandva, Dist.Wardha, Maharashtra</td>
</tr>
<tr>
<td>Source of water</td>
<td>3858m³/hr from Lower Wardha Reservoir</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>7.5 MTPA from South Eastern Coal Fields (SECL)</td>
</tr>
<tr>
<td>Land Requirement</td>
<td>1,195 Acres</td>
</tr>
<tr>
<td>Capacity</td>
<td>2x660 MW (1,320 MW)</td>
</tr>
<tr>
<td>Public Hearing</td>
<td>17.09.2010</td>
</tr>
<tr>
<td>Status of project</td>
<td>Work in progress</td>
</tr>
<tr>
<td>Environment Clearance date</td>
<td>24-Feb-11</td>
</tr>
<tr>
<td>Cost of project</td>
<td>INR 6936 Crores</td>
</tr>
<tr>
<td>National Bank Loan (16-2 Known NFIs and 14 Unknown NFIs)</td>
<td>Total NFIs Loans: INR 5549 Crores REC (INR 750 Crores) and PNB (INR 4799 Crores)</td>
</tr>
<tr>
<td>International Bank Loan</td>
<td>China Development Bank</td>
</tr>
</tbody>
</table>

## Introduction

Vidarbha, marked by development backlog and linked to a high number of farmer suicides faces great agrarian distress. From 2003 to 2011, water for industrial use got importance over irrigation and in that duration 400 MCM of water was diverted to thermal power plants consumption by the Minister of Water Resources. The water
policy was later modified and irrigation was ranked above industrial use. Wardha, a tributary of Pranbha river originating from the Godavari basin is one of the lifeline rivers of Vidarbha region. A study focussing on the hydrology of the Wardha and Wainganga sub-basin conducted by the Indian Institute of Technology Delhi sponsored by the Greenpeace in 2012 found out that an additional demand of 552.52 MCM of water is to be made on the Wardha basin by the various thermal power plants at different construction phases in Maharashtra, intensifying the water needs and leading to water deficiency putting future water needs of the population at risk. The study also analysed the various irrigation projects which were supposed to bring in 1.2 million hectares under irrigation but have stagnated at 6, 00,000 hectares. The researchers from the Department of Civil Engineering, IIT Delhi had appropriated the observations available from the time period of 1991 to 2004 to a larger time frame from 1969 to 2005 and carried the simulations for the following three scenarios- Virgin (no man-made constraints on the river), Present (present constructions on the basin) and Future (projects under construction).

The table next page clearly shows the negative human impact on the environment by reducing the water availability for the future generations. There is a reduction from 3679.10 MCM to 1857.01 MCM, which will further aggravate 1419.42 MCM. Out of this, only 866.9 MCM of water will be available for human consumption. The researcher team also found out that the surplus water is available for only three months during monsoon and the first six months of the year see water shortage. In addition, the coal-based power plants require continuous water supply for smooth operations thereby reducing the water supply to other purposes- irrigation, household, urban uses.

The whole situation requires prioritisation of water allocation so as to avoid the water conflicts by threatening the needs of the farmers. In another view, even construction of thermal power plants is a risk in this region which is marked with scanty rains.

36 https://www.thehindubusinessline.com/economy/proposed-power-plants-may-reduce-water-availability-in-wardha-wainganga-rivers/article20535650.ece
Water availability in Wardha

<table>
<thead>
<tr>
<th>Name of sub-basin</th>
<th>Water available under natural condition (in MCM)</th>
<th>Water available at present condition (in MCM)</th>
<th>Future condition (in MCM)</th>
<th>Remaining water after requirements for thermal power plants (in MCM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wardha</td>
<td>3679.19</td>
<td>857.01 (including 10 dams, with 3 under construction)</td>
<td>1419.42</td>
<td>866.9(30 TMCft)</td>
</tr>
</tbody>
</table>


Question on Environment Clearance?

Farmers have been continuously challenging the Environment Clearance given to the 1320 MW Lanco Vidarbha plant. The first public hearing held on the 17.09.2010 was challenged by the petitioners in the Bombay High Court, Nagpur Bench for not being conducted as per the norms and participants calling it a farce. Public hearings had become a space for stage shows where the farmers are attacked and their voices are muted by the authorities.39 A second public hearing was conducted as per High Court orders in June 2012, which again, as families claimed was ‘stage managed’ and employees or to be employed were in favour of the plant while others were totally against the construction of the plant. The major problem that people had was why the construction of the plant was still going on till further orders from Supreme Court were awaited on this matter? Few of the participants who partook in the meeting raised the following objections;40

Timing and venue of the meeting was an issue with the participants as the location of the venue was far, with 15 km being the minimum distance from the affected site and 50 km being the maximum and many farmers couldn’t attend it because of sowing operations.


Bhaskar Ithape, a social worker from Wardha alleged that the officials from Maharashtra Pollution Control Board (MPCB) and Lanco had wrongfully got the farmers to support the project by submitting written replies.

Dr Vibha Gupta, Chairperson of Megan Sangrahalaya Samiti (MSS) spoke about the increase in the temperature of the Wardha region and rise in air and water pollution due to the project.

Farmers criticised the company’s claim of planting 1.75 lakh trees when in reality they have planted not more than 1000 trees.

Power sector expert and Vidarbha Environment Action Group (VEAG) leader, Sudhir Paliwal raised questions on the claims of the welfare of the surrounding villages being made by the company and pointlessness of the public hearing since the construction of the project was in full swing.

Vitthal Lokhande, an orange farmer from Belgaon pointed out the misdeeds of the Lanco administration by forcefully acquiring the farmers land at a lower market price of Rs 2 lakh per acre.

Another farmer, Subhash Shinde threw light on the increase in man-animal conflicts since its commencement. Wild animals like Boars and Nilgais now enter the farmland destroying crops and endangering the lives, which goes against the Environment Impact Assessment (EIA) that claims of no presence of wild animals within 10 km radius of the project.

Vijay Muley, Ex-Member of Parliament, Wardha, also spoke on the misinformation provided in the EIA. There is Narsamai temple frequently visited by pilgrims and about 15 places within 10 km radius reserved for the forest which is likely to get polluted once the project starts.41

A PIL was filed by a resident of Mahadula Village in Vidarbha, Ratnadeep Rangari, against flouting of MoEF norms by the thermal power plants whose operations are turning Vidarbha into a gas chamber and putting the lives of its population at risk.42

41http://environmentclearance.nic.in/writereaddata/Public%20Hearing/9MinutesofPublicHearing_17092010.pdf
42http://www.freepressjournal.in/mumbai/ngt-seeks-response-over-pollution/297861
Sensing the miserable condition of Vidarbha farmers, the High Court- Nagpur bench has been requesting to open a National Green Tribunal (NGT) office in Nagpur due to increasing environment-related issues in the city that has huge green cover in the surrounding areas. The High Court Bench further added that ‘Justice should come to the poor and a tribunal should go to the people for hearing their grievances.’

Above map highlights the numerous projects operating in Vidarbha including thermal power plants, dams etc and the rivers flowing through the region.

Financial Crises- A case of loan default!

In 2017, lenders for the Lanco Vidarbha Thermal Power Project led by IDBI Bank, filed a bankruptcy code worth Rs 44,364 crore against the company in the National Company Law Tribunal. Dena Bank, one of the lenders exposed that the Lanco Vidarbha Thermal Power has an unpaid interest amounting to Rs. 1.48 billion as of March 31, 2017, and the loan to the Lanco Infratech was expected to slip into the category of a Non-Performing Asset, which it did according to the Standing

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44 http://www.freepressjournal.in/business/lanco-infra-project-loans-may-turn-npa/1129177
Committee of Energy report, March 2018 on Stressed/ Non Performing Assets in Electricity.45

Lanco is one of the few companies whose name has come under the defaulter list of the Reserve Bank of India and according to the NPA report Lanco Vidarbha (Rs4762 crores) along with Lanco Anpara (Rs 3071 crores), Babandh (Rs6976 crores) and Amarkantak (Rs 8782 crores) has a total outstanding debt amounting to Rs 23, 591 crores.46 Apparently, Comptroller and Auditor General (CAG) observed Rural Electrification Corporation Limited (REC) and Power Finance Limited (PFC) to have been involved in financial negligence and not fulfilling the RBI guidelines on loans and Advances- Statutory and other restrictions. REC was held accountable for illegally adjusting the funds towards the Interest During Construction (IDC), clearly violating the company’s guidelines while giving out loans to various Lanco projects, Lanco Vidarbha being one of them.

The CAG observed, “With these adjustments, the loan account remained ‘standard’ though no repayment was made by the borrower as per the loan servicing schedule. Had the interest not been adjusted in this manner, these loan accounts would have become NPA in 2013 itself.”47

Lanco Infratech is witnessing great losses with no profits and is unable to pay salaries to its employees. If the Insolvency Resolution professionals under the Insolvency and Bankruptcy Code are unable to conceptualise a strategy then the company will go into liquidation after 15 months.48 Meanwhile, firms linked with Lanco (such as subsidiaries) are registering claims with the Resolutonal Professional of the company, a strategy to revive Lanco. It is being estimated that Lanco Vidarbha has admitted a claim of amount Rs 975 crore.49

45 http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf
49 http://www.financialexpress.com/industry/insolvency-claims-on-debt-lanco-keeps-it-in-the-family/1037215/
Conclusion

Priorities need to be set. Year after year, Vidarbha faces serious rain deficit and in such circumstances neglecting the irrigation needs of the farmers whose livelihood depend on agriculture by diverting the water to coal-based thermal power plants may not be helpful for their sustainable future. In addition, there is a devastating impact on the environment by an increase in pollution due to fly ash, mercury, sulphur dioxide and carbon dioxide. Former expert member of the Vidarbha Statutory Development Board, Late Madhukar Kimmatkar said “Generation of more power in Vidarbha does not mean it will create more employment opportunities. Power generated from these projects will be sold and transmitted outside the state or partly used in the state grid. It will be made available for industries outside Vidarbha.”\(^5\)\(^0\) Needless to say, Power is one of those sectors in India involved in loan defaults of the state-owned banks along with dispossessing the community of its rights.

\(^{50}\) https://timesofindia.indiatimes.com/india/Thermal-power-plants-threaten-Vidarbh/articleshow/16856720.cms
## Visa Chhattisgarh Thermal Power Plant

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Visa Chhattisgarh Thermal Power Plant (also known as Raigarh Thermal Power Project or Deveri Thermal Power Plant)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>Visa Power Limited</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Villages Dumarpali and Deveri, Block Raigarh, Dist. Raigarh, Chhattisgarh</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>30 MCM from Mahanadi River (Saradih Barrage)</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>99.12 million MT Domestic coal from Fatehpur East Coal Block and 5.60 MTPA Imported Coal from Indonesia</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>780 Acres&lt;sup&gt;51&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>1,200 MW</td>
</tr>
<tr>
<td><strong>Public hearing</strong></td>
<td>27-08-2010</td>
</tr>
<tr>
<td><strong>Status of project</strong></td>
<td>Uncertain&lt;sup&gt;52&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>51</sup> 438 acres agriculture land + 342 acres waste land

<sup>52</sup> The Project appears with an Uncertain status in the Broad status report of February 2018 brought out by the Thermal Project Monitoring Divisions, Central Electricity Authority. It appears cancelled.

<table>
<thead>
<tr>
<th>Environment Clearance date</th>
<th>23-Aug-11</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost of project</td>
<td>INR 6190 Crores</td>
</tr>
</tbody>
</table>
| National Bank Loan (13)    | Total NFI Loans: INR 3229 Crores  
                             | REC (INR 610 Crores), HUDCO (INR 195 Crores), SBBJ (INR 95 Crores), SBP (INR 95 Crores), State Bank of Travancore (INR 95 Crores), SBM (INR 95 Crores), BOB (INR 145 Crores), BoI (INR 190 Crores), Central Bank (INR 90 Crores), Bank of Maharashtra (INR 95 Crores), PNB (INR 395 Crores), Oriental Bank of Commerce (INR 95 Crores), UCO (INR 190 Crores), Union Bank (INR 140 Crores), UBI (INR 140 Crores) and Andhra Bank (INR 95 Crores). |
| International Bank Loan    | No International Bank Loan or Not Available |

**Introduction**

The Visa power project was planned with the configuration of 4x300 MW spread over 1300 acres of land which was later changed to 2x 600 MW and land cover reduced to 780 acres. Raigarh, the cultural capital of Chhattisgarh state, also has the largest Iron ore and Steel industry. Rich in coal reserves, this district is high in demand for mining and power sector businesses. Raigarh district accounts for half of Chhattisgarh’s coal reserves and unfortunately, that is one more reason for the increase in the pollution levels. The sponge iron units are causing enough pollution further aggravated which would be further aggravated by the constructions of power plants. Officials of Chhattisgarh Environment Conservation Board (CECB) and Directorate of Geology and Mining are worried about the state’s future which seems to be covered in fly ash considering the rate at which coal mining, iron industry and thermal power plants are flourishing. Surprisingly, the Raigarh industrial cluster is not mentioned in the critically polluted areas in India. It has just two air quality monitoring stations, enough to underestimate the actual pollution levels.

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53 [http://environmentclearance.nic.in/writereaddata/Form-1A/TOR/10032016XZL1A6TOR.pdf](http://environmentclearance.nic.in/writereaddata/Form-1A/TOR/10032016XZL1A6TOR.pdf)

54 [http://www.downtoearth.org.in/coverage/the-top-two-1864](http://www.downtoearth.org.in/coverage/the-top-two-1864)

55 [http://cpcbenvis.nic.in/industrial_pollution.html#](http://cpcbenvis.nic.in/industrial_pollution.html#)
**Controversies**

The outrageous amount of fly ash being produced in the district and its impacts on the productivity of the land along with the disbelief in the public hearing meetings had made people proactive when Visa Power came to the district. In 2009, villagers as a mark of protest burnt the tents a day before the public hearing was scheduled.\(^{56}\) The land troubles came to rest when the Chhattisgarh High Court in land acquisition case of thousands of acres of agricultural land in Raigarh district and Champa-Janjgir districts to be given to four power companies including Visa Power Limited, favoured the distressed farmers over industrialisation. Justice Prashant Mishra said-

> “Acquisition of farmers’ fertile land by the state government for private sector power companies is by no means an act in favour of public welfare. Besides, land acquisition rules have also not been followed during the acquisition process, the court observed.”

The land acquisition was annulled as a result of forcibly procuring land from the farmers depriving them of the means of their livelihood and uncertainty of whether the power plant industry would employ them or not? Fearing this, 56 farmers of various villages- Siladehi, Birra, Vikjot, Dumarpali, Devri, Latvia had filed cases in the High Court, for they believed that the government meant to protect their social welfare acted as an agent of the private companies by illegally acquired land.\(^{57}\) In 2014, the joint allotters of the Fatehpur East block (coal source for Visa power plant) were even given show notices for unsatisfactory progress, demanding a status report from the Coal Ministry.\(^{58}\)

**Coal Linkage troubles!**

Visa Power Limited turned into a stressed asset with an outstanding debt of Rs 1481.15 crores according to the Standing Committee on Energy Report March 2018.\(^{59}\)

One of the most crucial aspects of operating a thermal power plant is coal, without which the project becomes impracticable. The Visa power thermal plant ran into trouble when their coal linkage with Fatehpur East coal block was cancelled. According to Forest Rights Acts 2006, it is mandatory to take the consent of the tribal

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\(^{56}\) [http://www.downtoearth.org.in/coverage/the-top-two-1864](http://www.downtoearth.org.in/coverage/the-top-two-1864)


\(^{58}\) [https://timesofindia.indiatimes.com/india/Coal-ministry-slaps-notices-on-five-power-companies/articleshow/28609191.cms](https://timesofindia.indiatimes.com/india/Coal-ministry-slaps-notices-on-five-power-companies/articleshow/28609191.cms)

\(^{59}\) [http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf](http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf)
village council on whose permission MoEF gives clearance for mining. In this case, twenty tribal villages under the banner *Chhattisgarh Bachao Andolan (CBA)* came together to oppose the opening of mines and cutting of trees and to communicate their grievances for this development-induced displacement. Alok Shukla of CBA informed that most of the allotted coal blocks found in Chhattisgarh come under the Fifth Schedule which makes it mandatory to have the consent from the Gram Sabha head for carrying out mining activity, but has been deliberately being abused for the interests of the big corporations. He even clarified by saying that villages are not anti-development only if, proper environment law procedures and the inclusion of the local indigenous people and key stakeholders are taken into consideration.60

The Supreme Court cancelled the allotment of twenty coal blocks including the Fatehpur East captive block. The inability to get overseas coal linkages for the 1200 MW Raigarh project along with the cancellation of the domestic coal source pushed Visa power in financial distress which subsequently led to the failure to get strategic investors. A consortium of eleven lenders including Punjab National Bank, State Bank of India, Andhra Bank, UCO Bank, United Bank of India and Union Bank of India among others have involved the National Company Law Tribunal (NCLT) for the insolvency proceedings.61

**EIA Analysis**

The EIA report for this project was prepared by GIS enabled Environment and Geographic Centre (GreenC) and the analysis of the EIA report was done by the Centre for Science and Environment (CSE). The noted the below-mentioned discrepancies in the report.62

No mention of the per cent of coal to be transported by road and the required mitigation measures. The road requirement for the transportation of the coal has not been explained well as well as how many new roads would be constructed or required. What would be the suitable planning? How would be the vehicular traffic dealt with?

Doubtful on Mahanadi’s ability to be a constant water source for the plant, particularly in summers, considering the demands of almost industries, irrigation canals and population are met from this river.


61 https://economictimes.indiatimes.com/industry/energy/visa-power-set-to-invite-bids/articleshow/62638984.cms

Most of the agriculture land was converted into industrial land for this project, to be precise, agricultural land (80.71%), forest land (12.78%) and wasteland (2.95%). The EIA remained silent on anticipating impacts of converting a huge chunk of agricultural land into an industrial land over the people and the environment. At one-point EIA mentions that no ecologically sensitive area is present and in another instance states that the study area is home to endangered species without divulging details on the kind of species found. A similar thing has been done for providing information on any protected forest within the 10 km radius of the plant. At one point they say that the reserve forest is beyond the 10 km limit and in another occurrence, the report mentions the two reserve forests- Urdana and Rabo located well within 3-5 km from the site.


No mention of the kind of compensation to be provided to the people who would be losing land in the whole development scheme.

The coal sector is one of the highest pollution contributors and it is important to keep a check on industrial pollution to keep a healthy air quality. The project site is close to pollution-producing industries, hence the question arises that how will the problem of excessive pollution be tackled by the project proponent who claims to keep the air quality in check by keeping it in the permissible limit (less than 50 mg/Nm3) or
without having to mention the negative impacts of CO2 emissions on the environment?

It is clear from the analysis that the EIA report is a farce providing misleading information to get the Environment Clearance. Lack of accurate information does not give an actual representation of how the project would function and its significant impacts on the lives of the people displaced and the environment. The cumulative impact is very important in the case of Visa Power project since it is located in an ecologically rich environment, hence clarity on various aspects of the plant is required which have been missed in the EIA report. As per CSE, there have been many substantial details which have not been mentioned in the EIA report which should have been included for a comprehensive understanding of the project like- sewage treatment, water resources other than Mahanadi, R&R plan for the displaced population, dry ash and slurry disposal, contamination of soil and water. The ecologically rich area is facing the brunt of the development putting the future at risk.
### Korba West Thermal Power Plant

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Korba West Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>Avantha Power &amp; Infrastructure Limited (Now Adani Power)</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Villages Bada Bhandar, Chote Bhandar, Sarvani &amp; Amali Bhona, Dist. Raigarh, Chhattisgarh</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>20 MCM from Mahanadi River</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>3.15 MTPA from Mand-Raigarh (SECL)</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>487 Acres</td>
</tr>
</tbody>
</table>
| **Capacity** | Phase 1- 600 MW\(^{63}\)  
Phase 2: 2x800 MW (Planned)\(^{64}\) |
| **Status of project** | Active |
| **Public Hearing** | 03-10-2009 |
| **Environment Clearance date** | 20-May-10 |
| **Cost of project** | INR 2872 Crores |

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\(^{63}\) Initial proposal was for 2x300 MW but later changed to 1x600 MW  
\(^{64}\) [http://environmentclearance.nic.in/writereaddata/Form-1A/TOR/7303182016102-2016letter.PDF](http://environmentclearance.nic.in/writereaddata/Form-1A/TOR/7303182016102-2016letter.PDF)
The Dark Side of Thermal Power Plants

Introduction

The construction work for Korba West power plant, a subsidiary of the Avantha group was started before the land acquisition process began so as to save time in the initial phase. The safety of workers had also been compromised; in separate instances, seven labourers died during the construction of this plant.65 These two examples in itself speak a lot about the company’s ethics, first and foremost, not following the MoEF guidelines of obtaining the Environmental Clearance before constructing the plant and secondly, compromising with the worker's safety.

A total of 487 acres of land was acquired with the project affected families comprising of 224 SC population, 1144 ST population and 1259 Others population.66 The power plant has the permission to take 20 MCM of water from Mahanadi during lean season as well, and if the expansion project gets the Environmental Clearance then the water demand will increase by 35 MCM. Almost all the industries in Chhattisgarh depend on Mahanadi for support hence it is important for the Environment Impact Assessment to take into consideration the cumulative impact of industries on Mahanadi, essentially during summers (lean flow) and also when the river is the point of contestation between two states, i.e., Chhattisgarh and Odisha.

Adani Takes Over!

In 2014, Adani struck a 100 percent acquisition deal with the Avantha power for the Korba west power company limited for an estimated project value of Rs 4200 crores thereby making Adani the largest power utility in India with an installed capacity of 11,080 MW (including 40 MW Bitta solar power plant, Gujarat) and a target of

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66 http://environmentclearance.nic.in/writereaddata/monitoring/59_4-12-2010.pdf
achieving 20,000 MW by 2020. Business Standard reported that the acquisition was a result of Avantha group’s efforts to reduce debt incurred from the power projects due to project delays. Presently, Adani’s Korba West plant has an outstanding debt of Rs 3,099 crores and is one of the 34 stressed electricity projects reported by the Parliamentary panel on Stressed/Non-performing assets. Another example of a bad loan in power sector.

**Land Grab Mafia**

The eight farmers living in poverty but have bought land worth crores. According to the Chhattisgarh Land Revenue Code, a non-tribal cannot buy or lease tribal land without the permission of the District Collector who in turn has to furnish proper reasons for allowing the said acquisition while the company has to provide compensation, jobs and alternate land to the displaced. Avantha Group being a non-tribal unethically purchased 43.7 acres of tribal land by getting the eight Gond tribals to forge thumb impressions on documents after making them buy the land from hundreds of tribal people belonging to Sarwani, Amlibhouna, Bade Bhandar and Chhote Bhandar villages in Pusaur.

<table>
<thead>
<tr>
<th>Name</th>
<th>BPL card no</th>
<th>Land bought (ha)</th>
<th>Payment made (₹)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ram Singh</td>
<td>1,487</td>
<td>6.281</td>
<td>1,47,53,880</td>
</tr>
<tr>
<td>Badkuram</td>
<td>1,539</td>
<td>3.887</td>
<td>91,30,446</td>
</tr>
<tr>
<td>Bhanwar Singh</td>
<td>1,645</td>
<td>7.309</td>
<td>1,71,68,621</td>
</tr>
<tr>
<td>Vyas Narayan</td>
<td>1,600</td>
<td>6.564</td>
<td>1,54,18,638</td>
</tr>
<tr>
<td>Budharu Ram</td>
<td>1,558</td>
<td>5.422</td>
<td>1,27,36,115</td>
</tr>
<tr>
<td>Derha Ram</td>
<td>1,534</td>
<td>4.989</td>
<td>1,17,19,011</td>
</tr>
<tr>
<td>Salik Ram</td>
<td>1,628</td>
<td>3.184</td>
<td>74,79,120</td>
</tr>
<tr>
<td>Igul Singh</td>
<td>BPL card was cancelled after a member of his family got government job</td>
<td>6.071</td>
<td>1,42,60,596</td>
</tr>
</tbody>
</table>

Source: Office of the Sub-Registrar, Raigarh, Chhattisgarh

Source: [http://www.downtoearth.org.in/coverage/bpl-millionaires-38430](http://www.downtoearth.org.in/coverage/bpl-millionaires-38430)

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This was done to reduce the company’s liability and hasten the implementation of the project. The company had to technically compensate only eight people instead of hundreds of tribals. This way the 43.7 acres of land was transferred from the naive farmers to the Avantha authority who were lured by the village landlord, Dauji, and taken to Pusaur to sign the blank papers in exchange of two days remuneration. The land bought was strategically important due to it close proximity to Raigarh and Korba, from where the company would procure coal for the power plant.\textsuperscript{70}

These illicit land transfer cases are common in the mineral-rich state of Chhattisgarh wherein industries try to illegally procure land from the tribals. A government official stated that ‘Almost all mining and power generation companies in Chhattisgarh’s Raigarh, Dharamjaigarh, Sarguja and Korba districts acquire land through fraudulent means. For instance, tribals of Konkani village in Raigarh district alleged that more than 300 acres of land were transferred to Saptarishi Infra Tech by forgery from 2009 to 2015. National Commission for Scheduled Tribes intervened and demanded the land to be transferred back to the tribals. The company was subsequently booked, but no arrests were made in this case. A similar situation was faced by the villagers of Gharghoda, in Raigarh district. People’s Union for Civil Liberties had filed more than 140 illegal land transfer cases in Gharghoda.\textsuperscript{71} In the same way, Jindal Power and its subsidiaries used tribals as pawns to acquire approximately 108 acres of land in Tamnar area of Raigarh.\textsuperscript{72}

"Jindal buys land in the name of his poor tribal employees. Some are not even local tribals! They are parachuted from Odisha or other states, which is also against the law. It's primarily a case of Section 420 of IPC," says Rajesh Tripathi, a local RTI activist running Jan Chetna’’

Suffice to say the stringent laws give tribals a platform to address their grievances and sought a legal way out thereby protecting them from the miscreants. But with the passing of Chhattisgarh Land Revenue Code (Amendment) Bill, 2017, now non-tribals can directly purchase land from tribals with mutual consent. This has been done to promote faster and smoother development operations but has met with massive protests by Sarva Adivasi Samaj who believes that this is government’s way of diverting their land to the industries.\textsuperscript{73}

\textsuperscript{70} http://www.downtoearth.org.in/coverage/bpl-millionaires-38430

\textsuperscript{71} https://scroll.in/article/843427/illegal-transfers-adiwasis-in-chhattisgarh-plan-to-criminally-prosecute-firms-that-hold-their-land


\textsuperscript{73} https://timesofindia.indiatimes.com/city/raipur/chhattisgarh-tribal-land-row-sarva-adiwasi-samaj-boycott-govt-meeting/articleshow/62432482.cms
Conclusion

Raigarh, home to several iron industries, power plant and mines is reeling under severe pollution. People have lost their agriculture land to mining and industries. The traditional livelihoods of people involved growing of Mahua flowers and Tendupatta (leaves) useful in making medicines, Bidis and alcohol. The growth of both Mahua and tendupatta were radically hit by the deforestation and people lost out on their primary livelihood activities. Cadmium level is 169 times higher than the safety limits set by the ‘Canadian Standards’ in Chhattisgarh soil and water. Cadmium, a Carcinogen (capable of causing Cancer) is been found in areas surrounded by power plants and mines. The landscape has changed from being a forest area to now being smothered with fly ash. The Environment Impact Assessment done by Centre for Science and Environment mentioned that the EIA report overlooked the mercury and Carbon dioxide emissions which are highly toxic and have severe impacts on agriculture, health and environment. There is a clear health hazard underlying the power production processes in highly industrialised and coal belt regions like Raigarh that needs immediate attention but unfortunately is side-lined while getting a ‘go-ahead’ as part of the Development Agenda.

74 https://scroll.in/latest/846331/cadmium-level-169-times-higher-than-is-safe-found-in-chhattisgarhs-raigarh-district-says-study
75 http://www.cseindia.org/eia-analysis-of-thermal-power-plant-at-raigarh-461
## Tiroda Thermal Power Plant

<table>
<thead>
<tr>
<th>Project name</th>
<th>Tiroda Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>Adani Power Maharashtra Ltd (APML)</td>
</tr>
<tr>
<td>Location of project</td>
<td>Maharashtra Industrial Development Corporation (MIDC), Tiroda village, Gondia District, Maharashtra</td>
</tr>
<tr>
<td>Source of water</td>
<td>Phase 1 - 36 mcm/annum from Wainganga river. Phase 2 (Expansion) - 90 mcm/annum from Wainganga river</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>Phase 1 - 6.53 Million TPA from Coal India Ltd. Phase 2 - 8.36 Million TPA from subsidiary companies of Coal India Ltd.</td>
</tr>
<tr>
<td>Land Requirement</td>
<td>Phase 1 &amp; 2 - 565.84 ha</td>
</tr>
<tr>
<td>Capacity</td>
<td>Phase 1 - 1,320 MW (2x660 MW) Phase 2 (Expansion) - 1,980 MW (3x660 MW)</td>
</tr>
<tr>
<td>Public Hearing</td>
<td>Exempt from Public Hearing Notified Industrial Area[^76]</td>
</tr>
<tr>
<td>Status of project</td>
<td>Active</td>
</tr>
<tr>
<td>Environment Clearance date</td>
<td>Phase 1: 29-May-08 Phase 2 (Expansion): 22-April-10</td>
</tr>
<tr>
<td>Cost of project</td>
<td>Phase 1 - INR 4750 Crores Phase 2 (Expansion) - INR 9696 Crores</td>
</tr>
<tr>
<td>National Bank Loan (14 NFIs)</td>
<td>Total NFIs Loans: INR 9715 Crores REC (INR 1000 Crores), PFC (INR 875 Crores), LIC (INR 225 Crores), SBBJ (INR 100 Crores), SBP (INR 765 Crores)</td>
</tr>
</tbody>
</table>

Introduction

Vidarbha is the eastern region of Maharashtra comprising of 11 districts, one of them being the Gondia district. Vidarbha is the most neglected region in Maharashtra with high rates of suicide linked to lack of irrigation facilities. According to a Greenpeace report titled “Endangered waters- Impacts of coal-fired power plants on water supply”, at least 398.87 million cubic metres of water per year was directed to be diverted from irrigation to thermal power plants in Vidarbha between 2003 and 2011. This water could have irrigated approximately 79,774 hectares of farmland. Greenpeace through RTI found out the minutes of 20 of the 28 meetings of the High-Power Committee. It revealed that 90 MCM water diverted from Dhapewada stage 2 dam can irrigate equivalent to 18,000 ha of land. Tiroda power plant gets its water from the Dhapewada dam. The push for industrial intensive activities is particularly deteriorating the condition of the farmers where a huge gap between the state and public can be seen while comprehending the ground level problems of the farmers. Availability of water is being compromised and human intervention is adding to the apparent agrarian crises in Vidarbha.

Presently, the Adani Power Maharashtra Limited has turned into a stressed asset with an outstanding debt of Rs 11765 crores, as per the report by the Standing Committee on Energy March 2018.

Concerns

Tiroda power plant has been surrounded by controversies since its establishment; coal block problem, 3 labourers injured in a blast and in another mishap, one died two

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80 http://164.100.47.193/lscomittee/Energy/16_Energy_37.pdf
injured while installing air handling units.\textsuperscript{82} Residents of the adjoining village, Ramtola\textsuperscript{83}, have been grappling with terror caused by the plant administration. Forced evictions, harassment of the poor villagers, roads being dug up, inadequate compensation, inflicting violence; the construction of the plant has engulfed the entire region in dust in the name of development.

\section*{Water distress}

North Maharashtra has the highest allocation for non-irrigation use with 35 per cent followed by Western Maharashtra and Vidarbha with 26 per cent each, Konkan 13 per cent and Marathwada two per cent. In Northern and Western Maharashtra, municipal corporations and councils benefit most apart from industry and Maharashtra Industrial Development Corporation areas. In Western Maharashtra, water has been diverted for special economic zones (SEZs) and thermal power projects and in Vidarbha too, it is mainly for power plants and drinking water in cities.\textsuperscript{84}

Above stated date specifically, point towards priorities of the Maharashtra Government. This was due to the Water Policy of Maharashtra (2003) which gave industrial use precedence over agriculture, but it was revised in 2011, ranking water use as-  

1. Drinking,  
2. Irrigation &  
3. Industrial purposes

Later, National Water Policy updated in 2012 called out to all the state policies to be revised according to it, it states-

Water after meeting needs for safe drinking water and sanitation, achieving food security, supporting poor people dependent on agriculture for their livelihood and high

\textsuperscript{81} https://www.outlookindia.com/newswire/story/three-injured-in-accident-at-adani-powers-tiroda-plant/860139  
\textsuperscript{82} https://timesofindia.indiatimes.com/city/nagpur/Worker-killed-in-mishap-at-Adani-plant/articleshow/45695444.cms  
\textsuperscript{83} http://www.downtoearth.org.in/news/residents-protesting-adanis-tiroda-power-plant-fear-eviction-violence---34514  
\textsuperscript{84} http://www.thehindu.com/news/national/other-states/irrigation-water-diverted-for-industries-and-domestic-use-in-maharashtra/article4609969.ece
priority allocation for minimum eco-system needs, be treated as economic good so as to promote its conservation and efficient use.\textsuperscript{85}

\section*{Wildlife Encroachment}

Nagzira wildlife sanctuary is located at a distance of 8.5 km from the plant. 163.83 ha of land was diverted to the power plant in Gardi village for the expansion.\textsuperscript{86} This wildlife sanctuary is an important habitat for the tigers and a link between Pench, Kanha, Tadoba and Indravti. The construction of this plant meant an increase in vehicular traffic, fly ash affecting the villagers and the wildlife thereby increasing man-tiger conflicts in search of the lost corridors.\textsuperscript{87} 148.59 ha of forest land was cleared in Tiora tehsil with parcels in Gorda, Mendipur, Kachewani and khairbadi villages were provided to the plant. The district officials claimed that no alternate non-forest area was available after exploring all the options while ensuring necessary afforestation measures.\textsuperscript{88} 141.99 equivalent to 8 football fields and hardly 8 kms away from Navegaon-Nagzira tiger Reserve (NNTR) was diverted to APML in 2017. This land had been demanded for setting up of ash utilization, promotion and Research Park. The land recommended by Forest Advisory Committee (FAC), a topmost body under MoEF considering forest divisions met with opposition by wildlife conservationists considering it is an eco-sensitive area, but all their pleas fell on deaf ears.\textsuperscript{89} The whole situation is quite ironic as the government seems to be taking a lot of initiatives in the name of ‘Save the tiger’ and yet is not able to align its development policies with the environment and wildlife protection.

\section*{Misuse of Forest Land}

APML was allotted 164 hectares of forest land for the expansion just 10 km away from the Nagzira Wildlife sanctuary. Out of the 164 ha, 15 ha of land was used to construct railway sliding which was against the rules. APML has also constructed a hi-tech ash dyke without the mandatory clearance. APML procured 110 ha of land from the

\textsuperscript{85} http://www.thehindu.com/news/national/other-states/maharashtra-to-have-new-water-policy/article4820066.ece
\textsuperscript{87} http://www.sanctuaryasia.com/component/content/article/579-conservation/2963-trauma-in-central-india.html
\textsuperscript{88} https://timesofindia.indiatimes.com/india/Centre-clears-370-acre-forest-land-for-Adanis-power-project-in-Maharashtra/articleshow/44925053.cms
\textsuperscript{89} https://timesofindia.indiatimes.com/city/nagpur/142ha-forest-land-near-nagzira-for-adani-plant/articleshow/57741829.cms
MIDC in 2010 for the construction of 6 MTPA cement plant. The land was given specifically to build the cement plant and not to be used for any other purpose but APML has been using the land for the dumping of ash ever since its procurement. Its been 8 years yet no sign of cement plant but 20,000 tonnes of poisonous ash is being dumped every day at both spots- MIDC land and the APML ash dyke site. The cement plant was supposed to utilise the fly ash generated in the thermal plant but now it poses a huge health threat for the nearby villages since it’s been dumped openly on the land.

In 2017, 142 hectares of forest land was allotted to Adani power for building an ash park by the MoEFCC at two villages adjoining the plant site.

Environmentalist Pushp Jain says developing an ash park is a non-site-specific activity. “The thumb rule is that forest land should not be diverted for non-site-specific activity,” he said.

Forest land was given and cleared even when 400 acres of private land was available in the Mehdipur village. The then site inspection officer recommended the proposal since the land was outside the buffer zone of Nawegoan- Nagzira Tiger reserve and was difficult to manage.

Evidently, Adani power has violated the environment guidelines and put the environment at risk by blatantly misusing the forest land for their private gain.90

- **Coal Mining Destroying Tiger Habitat**

Coal mining is rampant in the nearby Tadoba Andhari Tiger Reserve (hereafter referred as TATR) and poses a serious threat to the Tigers. In 2010, Adani was declined the clearance for the captive coal mining in the Lohara blocks on these grounds. Chandrapur district, home to TATR is one of the most polluted clusters in India with the presence of cement factories.91 Coal mining is not new to Chandrapur area, for example- the chinchpalli mining block, the Bander mining block. So far, 2558 ha of the Tigerland has been grazed for the purpose of coal mining. The TATR corridors are of prominent importance for the tiger landscape but it is being sacrificed for the socio-economic transformation.

The Adani authorities were adamant and went ahead with the operations without being assigned any captive coal block seeking coal linkages from the government (Coal India

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Tiroda power plant in-charge, Mr OP Bhardwaj exclaimed that they have coal linkages with Mahanadi Coal Ltd in Odisha for the units. But they faced hurdles since the local communities opposed the transportation of coal from the Ramtek railway station (nearest railway station from the plant) citing environment pollution. But the authorities assured the community for undertaking environment protection measures along with constructing their own personal railway yard near the plant.92

**Lohara West and Lohara Extension Blocks**

It covers a total of 1750 ha, with reserves of 14-170 million tons of coal. The Lohara West block is at a distance of about 12 km from the TATR boundary. This is a good habitat with frequent tiger sightings. These blocks were allotted to the Adani group in 2007. Due to the huge public opposition, the MoEF decided to deny approval. The block’s proximity to the existing Chandrapur-Gondia rail line is one of the main reasons why it has been targeted for coal mining repeatedly over the last decade. This area has not been de-allocated by the Coal Ministry and there are reports that Adani is still lobbying for access to this area in order to secure coal for its plant at Tiroda.93

The coal mine block witnessed widespread agitation from villagers, NGO’s and members of civil society who came together in Chandrapur to oppose the allocation of Lohara mines for the project, demanding Adani to go back. A total of 40 organisations came together to form *Lohara Jungle Bachao Kruti Samiti* for the struggle. The following measure were took by the organisations:94

Opposition in public hearing meetings of the coal mine.

Jungle Bachao Satyagraha organised with people marching on foot to the state assembly session at Nagpur

Writing ‘GO BACK ADANI’ messages in rallies

People tying love tags and rakhi on trees.

Agitator Bandu Dhotre fasted twice, once in front of State Assembly, Nagpur and second in Chandrapur, along, with filing a case against the coal mine block in Bombay High Court, Nagpur bench with another agitator.

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92 [https://www.hindustantimes.com/india/three-units-of-adani-power-plant-in-maharashtra-operational/story-K2mSQn9VF84xHva0Ma47l.html](https://www.hindustantimes.com/india/three-units-of-adani-power-plant-in-maharashtra-operational/story-K2mSQn9VF84xHva0Ma47l.html)


Public conferences, street theatre, distribution of pamphlets, guest lectures, conducting Gram sabhas, observing a ‘bandh’, media coverage were done for mass awareness.

The project was successfully rejected by the Expert Appraisal Committee (EAC) of the MoEF in 2009 for the clearance of 1750 hectares of dense forests in Lohara for coal mining. But there was news of coal mine case reopening and minister Jairam Ramesh being under pressure by the lobbyists to clear the case. 

### Power Station in Crises

A source in MSEDCL said that Tiroda plant only had water to last until May 8. "It takes a day for the Bawanthadi officials to release water from the dam. This water reaches Dhapewada dam downstream, which is the source for Tiroda plant, in seven days. So, if instructions are issued on May 2, the water will reach Dhapewada on May 10," he said.

"We will take two units offline on May 5 or 6 if water is not released from Bawanthadi on May 3. This will reduce generation by 1,200MW. By closing down two units we can run the remaining three units until May 15. After that, the entire plant would shut down. The state has already been deprived of 200MW due to the closure of GMR’s Warora plant," he said.

In May 2016, four units of Tiroda plant were shut down due to the prevalent drought condition in Maharashtra drying up the wells. How feasible it is for banks to lend loans to thermal power producing companies which are running at risk to close down operations due to unavailability of either coal or water? APML was reported to have been closed down for a weak for the lack of enough water. Requests were made to the government of Madhya Pradesh to open gates of the Bawanthadi dam to provide 7 Million cubic metres water to the plant. Tiroda thermal power plant went into deep water crises and was on the verge to stop their operations in 2016. Then there was also news of the company stopping all its operations due to non-payments of dues from the Maharashtra State Electricity Distribution Company (MSEDCL). Adani’s Tiroda thermal power plant provides 2400 MW power supply to Maharashtra state electricity distribution company limited.

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96 Maharashtra State Electricity Distribution Company Limited


Fuel Shortage
Fuel linkage is available for only 1180 MW out of 3,300 MW. E-auction and imported coal are being used to meet the shortage. Adani Power had been asking for compensatory claims for Tiroda power plant due to a shortage of domestic coal supply. Maharashtra state regulator allowed the company to claim 1,300 crores till March 2017 for the Tiroda plant. The compensatory claims is the difference between the price the company had got during the domestic coal linkage and the actual price the company had to pay under the MOU/E-auction/import.

Financial Fraud
Adani power limited was also accused of illegal operation of over-invoicing imported power plant equipment. In 2014, Directorate of Revenue Intelligence (DRI) issued notices to several companies in the Adani group. “The notices alleged that the Adani group had overvalued capital goods imported by Adani Power Maharashtra Limited, Adani Power Rajasthan Limited and Maharashtra Power Eastern Grid Power Transmission Company Limited. These companies were alleged to have indulged in a “trade-based money laundering scheme” Over-invoicing the power plant equipment leads to an increase in the electricity tariff. Adani is duping the population to pay for their wrongdoings. This scam affecting millions of Indians is getting continued support from the bank for their operation.

99 https://thewire.in/energy/despite-sc-ruling-adani-pushes-compensatory-tariff-tiroda-kawai-plants
101 http://www.epw.in/journal/2016/20/web-exclusives/power-tariff-scam-gets-bigger-rs-50000-crore.html
<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Jindal Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>M/s JSW Energy (Ratnagiri) Limited.</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Village Nandivade Jaigad. Dist. Ratnagiri, Maharashtra</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>Sea Water</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>50% imported and 50% domestic ¹⁰²</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>350 Hectares</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>1,200 MW (4x300 MW) 3,200 MW expansion- Cancelled</td>
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<td><strong>Public hearing</strong></td>
<td>12.09.2006</td>
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<td><strong>Status of project</strong></td>
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<td><strong>Environment Clearance date</strong></td>
<td>17 May 07</td>
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<td><strong>Cost of project</strong></td>
<td>INR 4500 crores</td>
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<tr>
<td><strong>National Bank Loan (16 Banks + 4 Other NFIIs= 20)</strong></td>
<td>Total NFIIs Loans: INR 3375 Crores IIFCL (INR 475 Crores), L&amp;T Infrastructure Development Project (INR 150 Crores), LIC (INR 150 Crores), SIDBI (INR 75 Crores), SBP (INR 100 Crores), SBH (INR 100 Crores), State</td>
</tr>
</tbody>
</table>

¹⁰² In 2017, EC granted for change in coal source from 4.015 MTPA of imported coal to 5.0 MTPA (50% imported and 50% domestic)

Introduction
Konkan or Konkan coast is the western coastline of India covering the coastal districts of Maharashtra, Goa and Karnataka. It is bounded by the beautiful Western Ghats, also known as Sahyadri mountain range in the East and the Arabian Sea in the west. Ratnagiri district on the Konkan coast in Maharashtra is one of the agro-export zones but with the increase in the industrial activities, people have started to feel that the agriculture zone is being converted into a special economic zone\textsuperscript{103}.

The first ever citizen manifesto on the ecological importance of the Western Ghats by the Save Western Ghats campaign clearly states issues ranging from dams, thermal power construction, tribal livelihoods, shrinking water table, mining and infrastructure along with other aspects which are threatening the versatile Western Ghats. Through this manifesto, the activists are making a thought-provoking case to protect one of the major biodiversity areas.\textsuperscript{104} Now declared as the UNESCO world heritage site, the 2009 manifesto had foreseen the dangers of the political economy of the region and made attempts to communicate it with the public and the government officials to conserve the 1700 km vital stretch spanning five states-Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu.

Background
Ratnagiri, the mango hotspot of the country faces danger due to the setup of industries that let out harmful emissions affecting the microclimate of the area, which is very important for the production of special Ratnagiri Hapoos Mangoes. To name a few, chemical industries in Chiplun, Lote Parshuram Industrial area, Jaitapur Nuclear Power park are a sign of the great ecological crisis looming in the Konkan region. The cost-benefit analysis of the industrial projects should be done to understand the overall

\textsuperscript{103} \url{https://www.outlookindia.com/website/story/a-manifesto-for-the-alphonso/240391}
\textsuperscript{104} \url{http://www.sacw.net/article837.html}
impact these projects would have on the animals and marine life, livelihoods and the west coast. A 4,000 MW Ultra Mega Power project was shelved at Girye in Sindhudurg district (close to Ratnagiri) because of strong mango and cashew farmers lobby who feared that the power project would lead to land and livelihood loss by deteriorating the quality of their produce.\(^{105}\) But a 1,200 MW thermal power plant was allowed to function amidst massive mango orchards putting export and livelihoods at risk.

About 200 farmers of Ratnagiri and Sindhudurg districts were given Global Good Agricultural Practices (GAP) to export mangoes and in the same year, policy amendments were made sanctioning the setups of various thermal power projects. The GAP certification clearly mentioned ‘no polluting industries in the area’ else, it would be revoked. These special mangoes comes with their unique Geographical Indication tag (GI tag) similar to the GI tag conferred to the champagnes. The farmers were crying out seeing the alarming situation that the JSW Thermal power plant would have on the quality of the mangoes, their livelihoods at large which are at stake in the little strip, soon to be home to incessant pollution. Dr Vivek Yeshwanth Bhide, an Ayurvedic physician and President of the Ratnagiri Jagruk Manch, rightly said that the EIA’s should be seen in a cumulative manner and the overall impact the projects would have on the area instead of particular EIA.\(^{106}\)

**Concerns**

The project location, Jaigad, faces extreme danger being a fishing village. JSW withdraws water from Damankul Bay and disposes of the Thermal waste openly at various points on the rock back on the coast of Jaigad with temperature **exceeding the allowed 7 degrees ranging from 28 to 36-degree Celsius**.\(^{107}\) The plant is creating heatwave and destroying the aquatic ecosystem. Thermal loads can cause negative processes in local areas of aquatic environment, such as overgrowth of blue-green algae deteriorating the water quality, changes in the composition of plankton and dynamics of its numbers, disruptions of the structure of fish communities and microclimatic changes.\(^{108}\) The fishes are dying and so is the livelihood option of the fishing communities due to thermal pollution, along with the worst affected mango orchards, which would be contaminated by the ponds of fly ash, produced as a by-product of burning coal.

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\(^{106}\) [https://www.outlookindia.com/website/story/a-manifesto-for-the-alphonso/240391](https://www.outlookindia.com/website/story/a-manifesto-for-the-alphonso/240391)

\(^{107}\) [http://www.researchjournal.co.in/upload/assignments/12_15-21_9999.pdf](http://www.researchjournal.co.in/upload/assignments/12_15-21_9999.pdf)

\(^{108}\) [http://www.researchjournal.co.in/upload/assignments/12_15-21_9999.pdf](http://www.researchjournal.co.in/upload/assignments/12_15-21_9999.pdf)
Villagers claim that the land for the power plant was acquired by the company to set up an Iron and Steel plant. An agreement was signed between the company and the villagers giving latter the opportunity to buy back the land at Rs 17,000 per acre if the steel plant doesn’t come up in the five years’ time period. To which the then CEO and Joint Managing Director, JSW Energy Limited, Mr Raaj Kumar said that 'land was partly acquired for an integrated steel plant in 1993 but there were objections then and the industry was shifted to Karnataka. The plant and the port are expected to cost around Rs 4,800 crores. He said the company was prepared to adhere to all pollution control norms and even help in local development'109.

### Public resistance

Land taken by fraudulent means, air and thermal pollution, impact on marine and agriculture- The 1,200 MW JSW power plant had seen active opposition from the farmers, some of them went on to form Ratnagiri Zila Jagruk Manch after the two public hearings against the construction of the plant. They even filed a case against the faulty Environment Impact Assessment (EIA) of this thermal before the Bombay High Court.110 The EIA of this power plant was passed without conducting an impact study on the mango and marine life. Environment Clearance mentions that the study would be undertaken, then, on what basis was the clearance given?111

### Environment Impact Assessment Analysis

Ritwick Dutta leads the Environment Impact Assessment Response Centre (ERC) critiques and challenges projects based on faulty EIA’s. The did the EIA study of JSW Ratnagiri Thermal power plant and the found the following loopholes.112

The EIA Report is completely silent on the issue that the area is rich in coastal biodiversity and it falls within the proposed coastal biosphere reserve. Again, the proposed project site is a tableland of laterite layer and is a crucial water catchment area critical for ensuring the fresh water.

Sensitive ecosystems such as mangroves would be affected; EIA has not quantified such impacts on fisheries, mangroves and coral reefs.

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The area is ecologically sensitive and it is evident from the fact that the area falls within one of the proposed coastal biosphere reserves. The project poses serious threats to local agriculture, especially to the mango orchards and paddy fields.

No alternative site was considered by the proponent.

The EIA lists endemic wildlife species as ‘cow, dog, goat and buffaloes’!

Only a rapid EIA comprising three months data has been collected instead of a comprehensive EIA.

Kalpavriksh Environment Action Group also did an analysis of the project plant and found several discrepancies in the EIA. They found it to be filled with glaring omissions, factual errors, and deliberately misleading statements. For instance, the Rapid EIA report\textsuperscript{113} does not include source of fresh water and how much water would be drawn. The EIA wrongfully mentions the geographical location, High Tide Line (HTL) is overstated as 2 km away but in reality, is less than 500 metres well within the Coastal Regulation Zone among other concerns related to the plant.

**Name of the EIA Consultant:** EQMS India Pvt. Ltd.

**Project Title:** Thermal Power Plant of 1200 MW at Jaigad, District Ratnagiri, Maharashtra.

**Project Proponent:** JSW Energy Ltd. Mumbai

**Year of EIA:** 2006

**Key issues:**

- The location of the thermal plant shown in the map is far north of actual location
- Location of ash pond is not discussed, project layout map absent.
- Distance from the HTL is grossly over-stated (as 2 km while it actually is only less than 500 m and is well within CRZ).
- The source of fresh water for the project has only partly been identified
- Wrong wind direction and miscalculations of plume dispersion and GLC of SOx and NOx

\textsuperscript{113} 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.

http://envfor.nic.in/divisions/iass/eia/Chapter1.htm
• Impacts on Ratnagiri Alphonso mangoes, fishing community, and local water security not adequately addressed

(Source: http://www.kalpavriksh.org/images/EnvironmentandDevelopment/supportlettersandfaxes/qci%20moef%20letter%2020details%20of%20shoddy%20eias%20final%2019.4.07.doc

**Conclusion**

The Environment Clearance of this plant was challenged before the National Environment Appellate Authority (NEAA) citing ‘inadequate impact studies’ by local farmer Balchandra Bhikaji Nalwade, a resident of project affected area in Ganpatipule Taluka, Dist Ratnagiri whose livelihood was endangered by the power plant (through pro-bono lawyers Ritwick Dutta and Rahul Chaudhary of Legal Initiatives for Forests and Environment). He alleged that then the Environment Clearance was based on wrong assumptions and would have an irreversible adverse impact on the environment. The case was dismissed by the NEAA which ordered Konkan Krishi Vidyapeeth, Dabol to conduct the impact of the thermal power plant on Alphonse rich area whilst ongoing construction. The NEAA decision was taken up before the Delhi High Court which sent the project back to Expert Appraisal Committee (EAC) at the Ministry of Environment, Forest and Climate Change, Government of India (MOEF) for reconsideration. The MOEF stood by its earlier decision but this time the case fell on Nation Green Tribunal, the newly appointed expert body to litigate matters pertaining to Environment. The NEAA ceased to exist during the transitional phase so the entire burden of cases fell on NGT when it came into operation in 2010 with a first hearing date in 2011. Finally, NGT gave the final judgement specifying that the Ministry and the Expert Committee had taken all the precautionary measures to safeguard the environment and further states that the plant would be shut down if they notice any impact on the Mangoes. Needless to say, the project was completed without proper assessment and is causing irreplaceable damage to the environment and the livelihood, clearly violating the Environment Clearance.

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114 http://www.indiatogther.org/jswrel-environment


## Bara Thermal Power Plant

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Bara Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>Prayagraj Power Generation Company Limited (PPGCL)</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Village Jodh Khansemra, Tehsil Bara Dist. Allahabad, Uttar Pradesh</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>5125 m³/hr from river Yamuna</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>24000 TPD from NCL</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>1486 Acres</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>3x660 MW (1,980 MW)</td>
</tr>
<tr>
<td><strong>Public hearing</strong></td>
<td>30 May 2008</td>
</tr>
<tr>
<td><strong>Status of project</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Environment Clearance date</strong></td>
<td>08 Sept 09</td>
</tr>
<tr>
<td><strong>Cost of project</strong></td>
<td>INR 10,000 Crores</td>
</tr>
<tr>
<td><strong>National Bank Loan (17 Banks)</strong></td>
<td>Total NFIs Loans: INR 8085 Crores L &amp; T Finance Ltd (INR 55 Crores), L &amp; T Infrastructure Development Program (INR 245 Crores), LIC (INR 500 Crores), SBI (INR 2735 Crores), SBBJ (INR 200 Crores), SBH (INR 200 Crores), BOB (INR 300 Crores), Indian Bank (INR 200 Crores), BoI (INR 500 Crores), Corporation Bank (INR 300 Crores), PNB (INR 600 Crores), IDBI (INR 400 Crores), Oriental Bank of Commerce (INR 250 Crores), IOB (INR 500 Crores), UCO Bank (INR 300 Crores), UBI (INR 200 Crores), Canara Bank (INR 300 Crores) and Andhra Bank (INR 300 Crores), IIFCL (USD 115 million)</td>
</tr>
<tr>
<td><strong>International Bank Loan</strong></td>
<td>No International Bank Loan or Not Available</td>
</tr>
</tbody>
</table>
**Introduction**
Prayagraj Power Generation Company Limited (PPGCL) is a power generation subsidiary of the Jaypee Group. PPGCL was created as a special purpose vehicle by the Uttar Pradesh Government to build and operate Bara project but later bought by the Jaiprakash Power Ventures (JPV) promoted by the Jaypee Group. The lenders own 89.47 per cent in PPGCL and JPV holds the balance. In December 2017, SBI led a consortium of lenders invited bids to sell their majority of stake in debt-ridden PPGCL. The company reported losses worth Rs 546 crores in FY17. The Bara power station turned into a stressed asset with an outstanding debt of Rs 11,493.5 crores as per the Standing Committee on Energy report March 2018. The plant has reported losses due to increase in debt and interest rate along with unavailability of coal.

The commissioning of the project saw delays due to slow progress, financial problems, land acquisition, hence Environment Clearance (EC) was requested to be extended. Expert Appraisal Committee accepted the request and extended the EC for a period of two years up till 7th December 2016 to start the plant operations. But the third unit of the plant was commissioned on the 26 May 2017, though the first two units were commissioned well within the time frame.

**Concerns & Objections**
The project resulted in the displacement of 68 families with 902 Project Affected Persons. Farmers have been actively protesting against this thermal power plant for years which is mired with serious irregularities in the land acquisition process. The project management is accused of falsely taking the consent of the farmers and

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117 https://www.sourcewatch.org/index.php/Bara_Thermal_Power_Project
119 http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf
120 https://economictimes.indiatimes.com/industry/energy/power/jaiprakash-power-offers-to-sell-nigrie-project-to-ntpc/articleshow/62761902.cms
122 http://environmentclearance.nic.in/writereaddata/Amendent_EC/0_0_24_Mar_2015_1241344401FastB&W_1.PDF
refusing to implement the Land Act 2013, which makes it mandatory to take the consent from the farmers for the project.\textsuperscript{123}

There were also reports of labour exploitation by the Bara power plant authorities. Apparently, the contractors hired by the Jaypee group failed to pay proper wages to the landless labourers that led to the farmer agitation. Labourers were paid barely Rs 100 per day and some did not receive it even after sanctioning the amount to the contractors.\textsuperscript{124}

In 2011, a group of villagers vandalised the Bara project property inflicting damage worth Rs 1 crore. The villagers wanted jobs in the project and rehabilitation allowance of Rs 62,500 as promised for the displaced labourers.\textsuperscript{125}

In 2012, the writ petitions of the farmers challenging the state government notification of the Land Acquisition Act accusing the Jaypee group of 777 hectares of land acquisition in the Bara tehsil was quashed by the High Court. The High Court bench said the work has considerably been undertaken and dismissal of the writ petitions does not mean that the farmers cannot seek compensation from the Jaypee Group. \textsuperscript{126}

“Just look at the thick pipes, a total of 17 km and 6 feet in diameter worries us about the amount of water they will take,” said RTI activist and president of the Bhartiya Kisan Vikaas Samiti, Uttar Pradesh, Rajiv Chandel.”\textsuperscript{127}

The water for the plant is sourced from river Yamuna at a distance of 17 km through pipelines.\textsuperscript{128} There is a water crisis in the Bara tehsil which is an indicator of the overall water shortage in the region. The water in the Yamuna river is continuously receding. Wells have dried up in Bara with little water left, which is too polluted to drink. Villagers have to walk long distances to fetch water. This is the condition of a place where a water-intensive 1,980 MW power project has been commissioned with a possible project expansion. The project proponent has set up their heavy water

\textsuperscript{125} http://archive.indianexpress.com/news/setback-to-up-power-project/747370/0
\textsuperscript{126} https://timesofindia.indiatimes.com/india/Allahabad-high-court-quashes-land-acquisition-for-UP-plant/articleshow/12656414.cms
\textsuperscript{127} https://www.thehindu.com/todays-paper/tp-national/power-plants-near-yamuna-robbing-villagers-of-their-water/article4635439.ece
\textsuperscript{128} http://environmentclearance.nic.in/Auth/openletter.aspx?EC=6613
drawing foundation in Paduwa village of Bara tehsil, just 200 yards away from the state set up irrigation pump, which cultivates 1 lakh hectares of land supporting 1 lakh families.

**Conclusion**

“As per RTI information available with *The Hindu*, accessed through the Uttar Pradesh Pollution Control Board, the Bara project will burn 24,840 metric tonnes of coal and 90 tonnes of heavy oil per day, and produce 8,000 tonnes of ash per day. The project, however, has received Environmental Clearance.”

Farmers want better compensation for their land. Landless farmers not given jobs. Government favouring the project proponent in the land acquisition case. The power plant is a sign of depletion in the water levels of the river hindering their traditional livelihood activities of fishing and sand mining. The plant extracts large quantities of water from the Yamuna river draining the smaller streams thereby affecting their cultivation and source of irrigation. The plant is bad news in all sense.

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### Lalitpur Thermal Power Plant

<table>
<thead>
<tr>
<th>Project name</th>
<th>Lalitpur Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>M/s Lalitpur Power Generation Company Ltd. (LPGCL)</td>
</tr>
<tr>
<td>Location of project</td>
<td>Villages Mirchwara and Buraugaon, Taluk Mahroni, Dist, Lalitpur, Uttar Pradesh</td>
</tr>
<tr>
<td>Source of water</td>
<td>48.67 MCM from Raighat Dam reservoir</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>8.51 MTPA domestic and 6.70 MTPA imported from Indonesia&lt;sup&gt;131&lt;/sup&gt;</td>
</tr>
<tr>
<td>Land Requirement</td>
<td>1,038 Acres</td>
</tr>
<tr>
<td>Capacity</td>
<td>3 x 660 MW (1,980 MW)</td>
</tr>
<tr>
<td>Public hearing</td>
<td>06.09.2010</td>
</tr>
<tr>
<td>Status of project</td>
<td>Active</td>
</tr>
</tbody>
</table>

<sup>131</sup> Coal source for two units was changed from imported to domestic.

http://environmentclearance.nic.in/writereaddata/Amendent_EC/0_0_20_May_2014_1437058571Lalitpur.pdf
## Environment Clearance date
31-Mar-11

## Cost of project
INR 12295.8 Crores

### National Bank Loan (21 Banks)\(^{132}\)
- IIFCL, PTC (INR 250 Crores), SBI (INR 2000 Crores), SBBJ (INR 200 Crores), SBP (INR 236 Crores), SBH (INR 200 Crores), SBI Capital Market (INR 600 Crores), BOB (INR 500 Crores), BoI (INR 750 Crores), Central Bank (INR 200 Crores), Allahabad Bank (INR 200 Crores), P & SB (INR 250 Crores), IDBI (INR 600 Crores), Oriental Bank of Commerce (INR 300 Crores), IOB (INR 500 Crores), UBI (INR 150 Crores), Union Bank (INR 200 Crores), Canara Bank (INR 1000 Crores) and Federal Bank (INR 100 Crores)

### International Bank Loan
No International Bank Loan or Not Available

## Introduction
Lalitpur Power Generation Company Limited is owned by the Bajaj Hindusthan Group. It is a 1,980 MW coal plant located at Lalitpur district of Bundelkhand region with an additional 1,980 MW proposed for expansion. Uttar Pradesh Power Corporation Limited (UPPCL) signed an MoU with Bajaj Hindustan to set up the 1,980 MW of power project for 90 per cent of power supply to UPPCL.\(^{133}\) The MoU was signed during the Mayawati led BSP government to bridge the power deficit in the state. Along with signing the MoU, the state government also accepted Bajaj group’s proposal to generate 90 MW from Bagasse-based cogeneration plants installed in five sugar mills owned by the group in UP.\(^{134}\) Land acquired for the project is single crop agriculture land\(^{135}\). A pre-feasibility report was submitted by the project proponent for the expansion of the power station by adding another 1,980 MW. It would be at the same location with additional coal linkages and water sources. A Terms of Reference was issued in December 2016.\(^{136}\)

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NTPC has plans to acquire stressed assets and 1,980 MW Lalitpur Power Generation Company, though not a stressed asset was offered to NTPC for takeover by its lenders led by SBI.137

**Water crises in Bundelkhand**

The Lalitpur thermal plant situated between the banks of the river Sajnam and Utari had come under the scanner of the National Green Tribunal corresponding to a petition filed by Mohar Singh Yadav. He challenged the Environmental Clearance granted to the plant on the basis of a violation of the provisions of the water (Prevention and Control of Pollution) Act of 1974 asking EC to be considered as invalid. The petitioner appealed to the tribunal citing a violation of the Environmental Clearance condition that “no water bodies (including natural drainage system in the area shall be disturbed due to the activities associated with the setting up/operation of the power plant”. He further stated in his plea,

"In the year 2013, the residents and the farmers of the area noticed some type of construction activity in the river. However, they believed that these construction activities were being done for some irrigation purpose by the UP government. But, to the utter surprise of the local inhabitants, more particularly the agriculturists, somewhere in the month of April and June of 2014, the power plant demolished the government made check dam, constructed over the said rivers with the illegal and malafide motives for diverting the flow of water towards its own power plant”

A bench headed by the then NGT chairperson Swatanter Kumar directed the panel to inspect and report into the impact of excessive water extracted by Lalitpur Power Company on farming and agriculture productivity in the area but refused to cancel the Environmental Clearance granted to the plant. According to the petitioner the project proponent extracted water from check dams meant for the agricultural purpose. The tribunal directed the project proponent to fasten pipeline work from Rajghat minor canal to the project site and once it is done, not to draw water from any check dams on the river Sajnam.138

(The applicant Mohar Singh Yadav is the President of the Bundelkhand Majdoor and Kisan Kalyan Samiti, Jhansi (UP) and works to safeguard the rights and interests of the labourers and farmers.)

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137 https://www.financialexpress.com/industry/ntpc-fy18-profit-slips-2-to-rs-10502-cr/1184676/
Financial Troubles

UPPCL has been failing to pay dues to the power generation companies and has an outstanding debt of Rs 10,000 crores with the Bajaj group being one of the major power suppliers. Bajaj group supplies electricity from the Lalitpur plant and other sources with Rs 2,000 crores outstanding against UPPCL. Bajaj Energy Limited(BEL) in their letter to UPPCL management on 12 January 2018 wrote, “We are facing liquidity crunch due to insufficient payments from the UPPCL against the monthly bills, as a result of which the BEL is handicapped in procuring sufficient coal to run the plant at its full capacity and is also unable to pay back the legitimate dues to the lenders.”139

UPPCL for the longest time has been facing huge money deficit, hampering it to make regular payments to the suppliers which in turn have to deal with financial troubles related to coal procurement.

Conclusion

The rivers Sajnam and Utari are a major source of water with villagers depended on it for the agricultural activities in the area. The company tried to interfere with the check dam systems and illegally diverted the water for their use by obstructing the natural flow of the river. This was all done without the necessary permissions adversely affecting the agriculturalists.140 Now, the company plans to expand by adding another three units at the same location. Water scarcity is a big challenge for the Bundelkhand region with Lalitpur being one of the backward districts of the region. The impacts of drought can be seen with people migrating to towns and cities due to restrictive livelihood options, deaths by starvation, farmer suicides.

Yet, a water-guzzling power plant is allowed to commission in the parched Bundelkhand with people suffering from water shortage.

139 https://www.hindustantimes.com/lucknow/uppcl-struggles-to-pay-dues-to-power-generating-companies/story-uh3z2q8EPwYvUplaHV0ztL.html
140 http://environmentportal.in/files/Lalitpur%20Power%20Generation%20Mirchwara%20Burogaon%20NT.pdf
Meja Super Thermal Power Project

<table>
<thead>
<tr>
<th>Project name</th>
<th>Meja Super Thermal Power Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>M/s Meja Urja Nigam Private Limited (MUNPL)</td>
</tr>
<tr>
<td>Location of project</td>
<td>Near Kohdar, Bhagdeva &amp; Mai Kalam Villages in Meja Taluk, Dist. Allahabad, Uttar Pradesh</td>
</tr>
<tr>
<td>Source of water</td>
<td>4000 cum/hr from Ganga River</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>7.34 MTPA from South Eastern Coal Fields</td>
</tr>
<tr>
<td>Land Requirement</td>
<td>1100 acres</td>
</tr>
<tr>
<td>Capacity</td>
<td>2 x660 MW (1,320 MW)</td>
</tr>
<tr>
<td>Public hearing</td>
<td>04.02.2009</td>
</tr>
<tr>
<td>Status of project</td>
<td>Active</td>
</tr>
<tr>
<td>Environment Clearance date</td>
<td>10 Jan 2011</td>
</tr>
<tr>
<td>Cost of project</td>
<td>INR 9276.90 Crores</td>
</tr>
<tr>
<td>National Bank Loan (16 banks)</td>
<td>Total NFIIs Loans: INR 7575 Crores, IIFCL (INR 645 Crores) and SBI (INR 6930 Crores)</td>
</tr>
</tbody>
</table>
| International Bank Loan | Japan Bank for International Cooperation (JBIC) USD 90 Million

Introduction

Meja Urja Nigam Private Limited (MUNPL) is a 50:50 joint venture between NTPC and Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL). The project

proponent got an extension on the Environment Clearance which was valid till 09.01.2016 to start the production as per the EIA notification. EC was later amended and was valid for seven years up to 9.01.2018. The project faced delays with reasons related to land acquisition, hence EC was requested to be extended for two years that is up to 09.01.2020.¹⁴² The first unit was commissioned on the 31st March 2018 and second unit was expected to commission by end of 2018 as opposed to August 2016. The reason for the delay has been the delay in supply of boiler equipment and the slow progress in the plant civil works as per the Broad status on Thermal Power projects report February 2018.¹⁴³ Power Finance Corporate refinanced loans worth Rs 3,700 crore for stressed NTPC’s Meja Thermal power plant replacing the 16 lenders.¹⁴⁴

Project Overview

The power plant affected villages located at a distance of 50 km from the district headquarters, include Patai, Mai Khurd, Laltara, Salaiya Khurd, Salaiya Kalan and Jhadiyahi Sirhir who opposed the commissioning of the power project.¹⁴⁵ The project site is located at a distance of about 45 km from Allahabad city, close to Tamsa river (Tons river), a tributary of river Ganga. The water from Ganga river will be obtained through the pipeline over a distance of 22 km which is a matter of grave concern since it might leave water shortage for the locals and the wildlife in the drought-prone region and impact the riverine ecology.

A condition was laid to in the EC document for the management to prepare a wildlife conservation plan especially with regards to Blackbuck with the office of the Chief Wildlife Conservator and submit within 6 months. The implementation of the activities mentioned in the report was supposed to be undertaken before the commissioning of the project.¹⁴⁶

¹⁴⁴ https://www.livemint.com/Companies/zdYVr4Yysb76Z4Lg53O/Power-Finance-CMD-sees-turnaround-in-stressed-power-assets-i.html
¹⁴⁶ http://environmentclearance.nic.in/writereaddata/Form1A/EC/08042016CJBHDN4MAAnnexurePreviousEC.pdf
Concerns & Objections

- **Community Protests**

In 2013, farmers from seven villages gathered to hold a public meeting at Kohdar Ghat to protest against the upcoming NTPC power plant in Meja demanding the land acquired to be returned. The land was acquired at below market price and the farmers fear that the upcoming plant would have serious environmental implications with millions of litres of water being drawn from Ganga river affecting the ecology of the area. Around 650 hectares of land belonging to 620 families had been acquired with more than 100 families accepting the below market rate compensation.147

“As asked why the villagers did not protest when the land was being acquired, Manoj Tyagi of Azadi Bachao Andolan said that they were kept in dark. “Many were not even aware that their land was being acquired. It was only when they were called to sign the agreement that they came to know that the land had already been acquired,” he added.

In 2014, the Kodhar Villagers in Meja Tehsil staged a massive protest against the upcoming Meja thermal power plant of MUNPL. The displaced and the affected farmers protested at the main gate of the plant alleging that the plant was constructed forcibly by deploying police personnel. The land losers were paid below the market price, Rs 90,000 per bigha whereas farmers demanded compensation at the rate of Rs 25 to Rs 30 lakh per bigha.148

In 2014, a group of protesters from Salaiya Kalan village gathered to oppose the construction of ash dyke on the 200 acres of undisputed land acquired from the government. Around 400 agitated villagers surrounded the authorities and threw stones at them to disrupt the commencement of ash dyke. The district administration had to deploy force to bring the situation under control, injuring many. Affected villagers under the banner "Visthapit Virodhi Sangharsh Samiti" protested at the main gate of the plant. Villagers were demanding enhancement of compensation, construction of houses for the displaced, giving them jobs, etc.149

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147 https://indianexpress.com/article/cities/lucknow/four-farmers-die-after-inhaling-poisonous-gas/
In 2015, farmers raised slogans to protest and one farmer allegedly set his house on fire to oppose the setting up of ash dyke plant in Salaiya Kalan village. Farmers were not ready to vacate the land already acquired by the MUNPL authorities.\textsuperscript{150}

\section*{Black Buck Conservation}

The Blackbuck Conservation project launched in 2010 only managed to acquire 35 hectares of land till 2015. The project failed to take off.\textsuperscript{151}

A Blackbuck Conservation plan was approved by the Meja forest division by the State cabinet in the trans-Yamuna region of Allahabad, Uttar Pradesh. Meja and Bundelkhand region of trans-Yamuna is home to 350 blackbucks who have often been spotted grazing. NTPC authorities sanctioned Rs 1.20 crores under CSR for the support of blackbuck habitat conservation.\textsuperscript{152} Blackbuck population is naturally available in Meja tehsil but is facing threat due to the scarcity of food, water holes, poaching, habitation loss & fragmentation. MUNPL along with Social Forestry Department, Allahabad initiated a blackbuck conservation project at Chand Kamaria area, 10 km from the plant site. A Memorandum of Understanding (MoU) was signed between the two with MUNPL providing funds for the project covering 300 hectares of land.\textsuperscript{153}

\section*{Conclusion - Story of discontentment}

The Meja Super Thermal Power Plant is marked with serious allegations from the farmers who don’t seem to be happy at how the land acquisition took place with the use of force. The right land acquisition procedures were not followed which is evident from the mass protests accusing the project management of inadequate compensation, problems with livelihood recovery plan and social welfare yet to be guaranteed. Animal conservation project failed.

\begin{footnotesize}
\begin{enumerate}
\item\textsuperscript{150} https://timesofindia.indiatimes.com/city/allahabad/Farmers-stage-protest-against-vacating-land-for-power-plant/articleshow/48897185.cms
\item\textsuperscript{151} https://timesofindia.indiatimes.com/city/allahabad/Blackbucks-home-hit-by-red-tape/articleshow/48068534.cms
\item\textsuperscript{152} https://www.thehindu.com/todays-paper/tp-national/blackbuck-conservation-reserve-to-come-up-in-up/article19972031.ece
\item\textsuperscript{153} shodhganga.inflibnet.ac.in/bitstream/10603/38763/11/11\_chapter\%204.pdf
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Mutiara Thermal Power Plant

<table>
<thead>
<tr>
<th>Project name</th>
<th>Mutiara Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>Coastal Energen Private Limited</td>
</tr>
<tr>
<td>Location of project</td>
<td>Melamaruthur village, Ottapidaram Taluk, Tuticorin, Tamil Nadu</td>
</tr>
<tr>
<td>Source of water</td>
<td>40 MGD for cooling from Sea + 2 MGD for boiler from Tamil Nadu Water Supply and Drainage Board (TWAD)</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>4.2 MMTPA of Imported coal from Coal and Oil Company</td>
</tr>
<tr>
<td>Land Requirement</td>
<td>800 acres + 75 acres for Railway Siding</td>
</tr>
<tr>
<td>Capacity</td>
<td>2x600 MW(^{154})</td>
</tr>
<tr>
<td>Public hearing</td>
<td>05.04.2008</td>
</tr>
<tr>
<td>Status of project</td>
<td>Active</td>
</tr>
<tr>
<td>Environment Clearance date</td>
<td>10 Dec 2008</td>
</tr>
</tbody>
</table>

\(^{154}\) Note: The Environment Clearance was initially given for 3x350 Mw, which was later modified to 2x600 Mw.

http://environmentclearance.nic.in/writereaddata/Monitoring/4_789MsCoastal.pdf
### Cost of project

<table>
<thead>
<tr>
<th>Description</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>INR 4297 crores out of which INR 331 crores is for environmental protection measures.</td>
<td></td>
</tr>
</tbody>
</table>

| National Bank Loan (14 Banks + 2 Other NFIs= 16) (4 Known NFIs) | Total NFIs Loans: INR 4053.2 Crores REC (INR 490 Crores), HUDCO (INR 250 Crores), SBI (NA) and Indian Bank (NA) |

| International Bank Loan | Information not available |

### Introduction

Mutiara Thermal Power Plant, previously referred to as Melamaruthar Power Station is a project by Coastal Energen Private Limited, the power generation unit of the Coal and Oil Group. This company is promoted by the Coal & Oil group through Mutiara holdings Limited, Mauritius, and Precious Energy Holdings Limited, Dubai based Energy group.\(^{155}\)

It is one of the few mega projects commissioned in South India with the Power Purchase Agreement (PPA) with Tamil Nadu Generation and Distribution Corporation (TANGEDCO) for the duration of 15 years.\(^{156}\) The company plans to expand the current 1200 MW project to 5000 MW in the next 10 years with the neighbouring states showing keen interest to procure power in the future. The purpose of establishing this plant has been to curb the power crises of south India. It is claimed that this project had come up at a time when the power deficit was around 9,254 MW or -22 per cent in the southern region.\(^{157}\) The company planned to expand the project by adding 2 x 800 MW at the existing plant site for which they were granted TOR on 03 May 2010. But the proposed phase II seems to have been abandoned since there has been no progress afterwards.\(^{158}\)

Being a coastal area, the industrial waste is disposed of in the sea owing to poor waste management practices, thereby increasing the marine temperature affecting the rich flora and fauna of the area. The thermal emissions have proven harmful as the

156 https://coalandoil.com/major-projects/mutiara-thermal-power-plant/
158 https://www.sourcewatch.org/index.php/Mutiara_Coastal_Energen_Thermal_Power_Plant
seawater temperature has surpassed 8 degrees above normal.\textsuperscript{159} It’s a disaster waiting to happen considering that it is geographically located in the Gulf of Mannar.

\begin{quote}
\textit{Gulf of Mannar is a repository of over 3,600 species of plants and animals and the first biosphere reserve in the South East Asian region. It is one of the most biologically diverse coastal regions on the planet Earth. The Gulf of Mannar region supports a variety of habitats within the main ecosystems of coastal lagoons, seagrass beds and coral reefs.}\textsuperscript{160}
\end{quote}

\section*{Questioning Environment Clearance}

According to the Environment Clearance website, the ecologically sensitive areas of Gulf of Mannar biosphere reserve and Gulf of Mannar marine national park is at a distance of 2.314 km and 7.3 km respectively from the plant boundary.\textsuperscript{161}

In 2016, the Environment Ministry Panel rejected three sites for power plant projects citing that their locations were within the range of 5.5 km-11km from biologically rich coral reef island ecosystems of the Marine National Park of Gulf of Mannar Biosphere Reserve.\textsuperscript{162} Then why was the Mutiar plant given Environment Clearance? considering its coastal susceptibility to environment degradation- air, water, the decline in coastal water quality and impact on the marine biodiversity. Isn’t it of paramount importance for the Indian Government to safeguard this eco-sensitive zone supporting a variety of habitats? To top it all, IT raids were conducted at two premises of the Coastal Energen Private Limited, due to large-scale tax evasions.\textsuperscript{163} A company which is part of illegal practices, destroying poor man’s livelihood & environment is given the support while the local communities and habitats are being destroyed for producing electricity and to develop the area as the potential Industrial hub.

\textsuperscript{159}http://www.thehindu.com/news/national/tamil-nadu/tuticorin-most-polluted-city-in-state/article7291177.ece
\textsuperscript{161}http://environmentclearance.nic.in/writereaddata/Form-1A/EC/0_0_24_Apr_2014_1516568771789MsCoastalEnergenPvtLtd.pdf
\textsuperscript{162}http://www.livemint.com/Politics/waR9F4dUb9xKWbDkBG5ixL/Green-panel-rejects-proposal-for-power-plant-in-Tamil-Nadu.html
\textsuperscript{163}http://www.newindianexpress.com/cities/chennai/2017/jan/05/i-t-raids-on-74-premises-of-buhari-and-eta-star-groups-across-country-1556268.html
Concerns

The vast industrial set up near the ecologically sensitive area of Gulf of Mannar maritime national park and biosphere reserve has made coastal communities extremely vulnerable. The public hearing document encapsulated the worries of the affected people who are opposing the construction due to the adverse impacts on their lives and the environment. Though the public hearing was held for the proposed 2x800 MW at the plant site but includes genuine concerns of the people who spoke against the construction of the thermal plant in the first place. 164

Few participants were unhappy with the way the public hearing was conducted citing less seating issues with cramped spaces and the meeting being an eyewash as the government refuses to accept the public grievances.

The absence of officials from the salt, fisheries department for public consultation.

Participants questioned the air quality status considering the coal loss while transporting thousands of tonnes of coal through the rail.

One participant was unclear on the damages that may happen with the commissioning of the 2x600 MW then how to give go-ahead to the expansion whose public hearing was being held before the installation of the first two units?

Impact on the marine ecosystem and the native occupation of salt pan and agriculture workers getting affected due to coal transportation, fly ash and discharge of cooling water in the sea.

Salt pan activities already face threat from vehicular movements along the transport way.

Why company acquired more than enough land, also encroached on the cremation ground of the nearby village for the project by paying little compensation for the poor man’s land?

The unscientific disposal of food wastes had caused cattle deaths in the nearby villages.

People anxious over increased industrial activity in the region.

Land settlements not yet completed.

Fisherman’s association questioned the government’s decision to allow the plant to withdraw water and discharge effluents into the sea but not allowed fishermen to carry out fishing activity?

Financial troubles

The Mutiara TPP turned into a stressed asset as per the Standing Committee on Energy report, March 2018 with an outstanding debt of Rs 6132 crore. The Company was unable to service debt even after generating revenue of Rs 1,880 crore in FY17 which prompted the SBI led a consortium of lenders to sell the project. “The company has been facing challenges due to non-availability of power purchase agreements at remunerative tariffs and consequently has not been able to service its obligations under the credit facilities provided by the lenders,” SBI said while inviting expressions of interest from bidders.”

Earlier, Coastal Energen Private Limited went through a strategic restructuring of debt to change the management which is when the lenders acquired the majority of 51 per cent stake in the company by converting the loan into equity shares.

Conclusion

Tuticorin or historically known as Thoothukudi, has always been a centre for maritime trade-related activities due to its close proximity to neighbouring countries Sri Lanka, Maldives. In old times, Tuticorin port was exploited for pearl fishery and now the exploitation is being done in the name of industrial development. With about 8,000 MW of power projects in various stages and INR 43,000 crore being invested in several electricity generation projects, Tuticorin, along with being one of the major ports of India has also become an emerging power hub. The state marked with exceeding industrial activity has led to Tuticorin becoming the most polluted city in the southern state. On the whole Tuticorin coast is being treated as a dumping ground putting the marine life in an extreme danger. It is highly essential to think about the damages that industrial development has on coastal biodiversity and communities while planning development project.

165 http://164.100.47.193/isscommittee/Energy/16_Energy_37.pdf

The Dark Side of Thermal Power Plants 66
**Jhabua Thermal Power Plant**

<table>
<thead>
<tr>
<th>Project name</th>
<th>Jhabua Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>M/s Jhabua Power Limited</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Villages Barela &amp; Gorakhpur, Tehsil Ghansor, Dist. Seoni, Madhya Pradesh</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>2362 m³/hr from Bargi Reservoir</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>3.20 MTPA, Coal India (SECL)</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>406 Acres</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>Phase 1- 1x600 MW</td>
</tr>
<tr>
<td></td>
<td>Phase 2- 1x660 MW (under construction)&lt;sup&gt;170&lt;/sup&gt;</td>
</tr>
<tr>
<td><strong>Public Hearing</strong></td>
<td>22.08.2009</td>
</tr>
<tr>
<td><strong>Status of project</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Environment Clearance date</strong></td>
<td>17-Feb-2010</td>
</tr>
<tr>
<td><strong>Cost of project</strong></td>
<td>INR 2900 Crores&lt;sup&gt;171&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>170</sup> As of February 2018, Monthly report on Broad status of Thermal Power projects in the country, there is no mention of Phase 2 of the Jhabua power plant.

<table>
<thead>
<tr>
<th>National Bank Loan</th>
<th>LIC (NA), SBBJ (NA), SBP (NA), SBH (NA), State Bank of Travancore (NA), SBM (NA), SB Indore (NA), BoI (NA), Corporation Bank (NA), PNB (NA), Oriental Bank of Commerce (NA), UCO Bank (NA), Union Bank (NA) and Axis Bank (NA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Bank Loan</td>
<td>No International Bank Loan or Not Available</td>
</tr>
</tbody>
</table>

**Introduction**

Jhabua power limited is a subsidiary of Avantha Power & Infrastructure Limited with BHEL as its EPC contractor. It is in a long-term PPA agreement with the Madhya Pradesh state buying 35 per cent and Kerala state buying 36 per cent of the electricity produced. Recently, Kerala went into blackouts because of coal shortage at the Jhabua thermal station along with others. Kerala State Electricity Board have revealed a shortage of 300 MW of power through long-term PPA’s.172

Bargi reservoir, the water source of the power plant has its own share of people’s struggle. Bargi dam was the first dam to be constructed on the Narmada river. 82 villages out of 162 affected villages in districts Mandla, Seoni and Jabalpur got submerged, displacing 7000 families.173 Houses were submerged, people were forced to live as oustees with shoddy compensations. Till date, people are dealing with the aftermath of the displacement.174 The same goes for the power plant wherein time and again plant workers and villagers safety had been compromised for personal gain by ignoring the Environmental Clearance guidelines. For instance, the monitoring report mentioned that a total of 187 acres of land had been purchased from 31 tribal families and 140 other villagers in return for compensation. Initially, Environment Clearance stated that ’No tribal land shall be acquired for a power plant’ which was later deleted by the Ministry’s corrigendum dated 22.12.2010.175 Just a convenient way to support industries over people.


175 [http://environmentclearance.nic.in/writereaddata/Monitoring/34_4-8-2010(MR).pdf](http://environmentclearance.nic.in/writereaddata/Monitoring/34_4-8-2010(MR).pdf)
Financial Roadblocks

The standing committee on power identified 34 stressed assets, one of them being Avantha Power’s subsidiary, Jhabua Power limited. Burdened with debt, Gautham Thapar led Avantha group is trying to sell its unit with a debt of Rs 4300 crores to enhance their financial position. In 2017, Adani power was interested in acquiring the Jhabua power project since they even acquired Avantha’s Korba West power project in Chhattisgarh. Avantha was also in talks with Resurgent Power (a joint venture between Tata Power Ltd and ICICI Ventures) for the acquisition. Now, Edelweiss Asset Reconstruction Co. And Kotak group are the contenders with a possibility of a third one.

In 2017, Aam Aadmi Party made allegations against the Madhya Pradesh Government of illegally signing the Power purchase agreements with private players. According to the documents procured under RTI, AAP found out that the bureaucrats who signed the power purchase agreements were not even holding the authorised posts eligible to sign official papers on behalf of the government. Along with this, AAP reported that the government have signed a PPA for 25 years wherein the government would pay Rs 2163 crore for 1575 MW regardless of the power purchase or not. Jhabua Power is one of the alleged private players who had signed the PPA with the Madhya Pradesh government. Rajendra Agarwal, the former additional chief engineer of the Madhya Pradesh State Electricity Board and present power consultant of AAP in MP, had been calling these PPA’s illegal and the reason behind inflated power prices in the state.

Power plant Issues

The plant had been embroiled in controversies since the beginning. In 2012, one of the workers fell during construction from a height of 85 metres and died. The administration without informing anybody took the body to Jabalpur. This resulted in workers abandoning the work to go on a strike. A similar incident of negligence happened earlier in 2012 when workers went on a strike demanding better working conditions.

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176 http://164.100.47.193/Isscommittee/Energy/16_Energy_37.pdf
177 https://www.livemint.com/Industry/6roxYZprl7X29A0PtHK2IP/Edelweiss-Kotak-may-buy-Avanthas-Rs4300-crore-debt.html
and safety conditions for themselves.\(^{180}\) Approximately 1000 workers went on a strike and submitted a memorandum to the Ghansor town inspector. The project was set to commission by 2013 according to the memorandum but was actually commissioned in 2016. The fifth point of the EC states that ‘The Environmental Clearance accorded shall be valid for a period of 5 years to start operations by the power plant.’\(^{181}\) But its actual commencement date is 22.03.16 which goes past 5 years. The memorandum consists of complaints from the residents for faulty land acquisition process and inadequate compensation been given, the second unit of 660 MW not being set up and objections by the farmers of Bagdari village to the passing of water pipe from the water source through their land.\(^{182}\)

### Social and Environment Impacts

The roads in Ghansor village are in terrible condition especially the one linking Jabalpur to Ghansor; this is the same route used for carrying ash to the plant. This has caused discontent amongst the people who face trouble with the transportation causing massive jams, mishaps and delays.\(^{183}\) The company had agreed to the 100 per cent tarpaulin covered during road transportation and road maintenance, but none of it has happened and till date, people are struggling with bad roads. Coal is transported from Binaki Railway Station to the power plant through road causing extreme air pollution affecting the residents and the surroundings. There is a constant layer of dust on the roads and in the air. The farms and the water pond are getting polluted from the coal dust affecting the crop produce, fodder for animals, leaving water impotable for humans as well as animals. Negligent authorities and non-adherence to the safety guidelines are causing the villagers to suffer from the adverse impacts of the coal dust. No official steps were taken even after repeatedly complaining to the power plant and district authorities by the villagers.\(^{184}\)

The High Court seriously considered the PIL filed by grieved Ghansor residents and social workers Mahendra Solanki & Vikrant Shrivastava, who were disappointed with

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\(^{181}\) http://environmentclearance.nic.in/Auth/openletter.aspx?EC=4720

\(^{182}\) https://timesofindia.indiatimes.com/city/bhopal/Fresh-trouble-at-Jhabua-Power-Plant/articleshow/16564655.cms


the lack of interest shown by the authorities in addressing their concerns of adequate compensations and proper arrangements. Jabalpur High court directed the General Manager of the Jhabua Power Plant and the District Collector, Seoni to present their side as to why no action was taken to curb the increase in vehicular movement causing pollution along with damaging the roads. People have protested several times seeing the indifferent attitude of the authorities, once blocking the coal supply road and further threatening to cut the railway transportation line to the plant if their demands are not met. 

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## Adhunik Power Thermal Power Plant

<table>
<thead>
<tr>
<th>Project name</th>
<th>Mahadev Prasad Super Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>Adhunik Power and Natural Resources Ltd. (APNRL)</td>
</tr>
<tr>
<td>Location of project</td>
<td>Villages Padampura, Srirampur, Kendudih and Birbans, District Seraikela-Kharsawan, Jharkhand</td>
</tr>
<tr>
<td>Source of water</td>
<td>1059 m³/hr, Chandil Dam on river Subarnarekha + 3510 cum/hr</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>Phase 1: 1.41 MTPA from Ganeshpur coal block, district Latehar</td>
</tr>
</tbody>
</table>
| Land Requirement | Phase 1: 294.05 acres  
Phase 2: 800.62 acres |
| Capacity | Phase 1: 1 x 270 MW  
Phase 2: 3x270 MW (Expansion) |
| Public Hearing | Phase 1: 07.03.2009  
Phase 2: 28.01.2011 |
| Status of project | Active |
| Environment Clearance date | Phase 1: 31 Aug 2009  
Phase 2: 09 May 2011 |
| Cost of project | Phase 1: Rs 1226.182 crores  
Phase 2: 5936.27 crores |

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187 The Environmental Clearance for the expansion of 3x270 is only applicable for one unit, that is, 1x270, until coal linkages for the other units are not obtained.


Introduction

Adhunik Power and Natural Resource Limited (APNRL) is a power subsidiary of Adhunik Metals Ltd. It had signed a Memorandum of Understanding (MoU) with the Jharkhand government in order to meet the rising energy demands of the state. The coal sourced from Ganeshpur coal block, Jharkhand was 50-50 allocated between APNRL and Tata Steel. The company had signed Purchasing Power Agreements with Jharkhand State Electricity Board, Power Trading Corporation, Tata Power Trading Company and West Bengal State Electricity Distribution Company Ltd. 190

The Government of Jharkhand has earmarked an ecologically sensitive zone around of Dalma Wild Life Sanctuary located at a distance of 8.5 Km with two elephant corridors, Dalma- Chandil and Dalma- Rugai being within a 10 km distance of the plant site. Surprisingly, there is no mention of conducting an Environment Impact Assessment, seeing that a prominent wildlife sanctuary is close by and the possible impacts of the emissions from the plant site and the construction could have on the flora and fauna of the Dalma Sanctuary. Though, Adhunik group prepared a Wildlife Management plan191 and obtained the approval from the Principal Chief Conservator of forests (PCCF) for the first unit, subsequently, acquiring an NOC for the expansion unit from the concerned Chief Wildlife Warden as per the ‘conditions to be implemented’ laid out by the MoEF in Environment Clearance document.192

Families were initially happy with the power plant coming up in their neighbourhood as they believed it would generate job opportunities but sooner it became a major water and air polluter. Villagers from 23 villages claimed that the power plant released waste in the river, ultimately destroying the aqua flora and fauna of the Subarnarekha river. They had to take the help of Akhil Bharatiya Adivasi Mahasabha, a tribal outfit working for the rights of tribal people in Jharkhand to pressurise the authorities to take active steps in mitigating the problem.193

190 https://www.thehindubusinessline.com/companies/Adhunik%E2%80%99s-270-MW-unit-goes-on-stream-in-Padampur/article20516601.ece
191 http://environmentclearance.nic.in/Auth/openletter.aspx?EC=3016
192 http://environmentclearance.nic.in/Auth/openletter.aspx?EC=2997
The Issue of Historical Fragility

The water source- Chandil dam was a World Bank-funded project on Subarnarekha river in Bihar (now Jharkhand) who later withdrew after widespread displacement of the inhabitants. The construction of Chandil dam led to the dispossession of 20,000 families from 116 villages with the fight for rehabilitation continuing till date. In 2017, Ichagarh (a Village in Seraikela Kharsawan district) MLA Sadhucharan Mahato sent a memorandum consisting of eight demands to the Jharkhand Chief Minister Raghubar Das insisting on providing compensation and rehabilitation to the Chandil Dam displaced victims. The Jharkhand Government did provide a new alternative livelihood option of ‘Cage fishing Farming Project’ to the displaced farmers. But this initiative helped only 2000 out of the 20000 struggling families who did not find Aquaculture as a sustainable livelihood option since, in the absence of regulations, the river pollution affects the fish varieties, and hampers the economic stability in the long run.

The coal source-Ganeshpur coal block predominantly falls under the Jala village in Latehar District. The tribals namely ‘Oraon tribe’ refused to give their land for the proposed mining rights to Tata Steel and APNRL until their forest rights claims were settled. This was handled with threats from the company middlemen and by the Triiya Sammelan Prastuti Committee for showing opposition. Though companies indicated to have settled their claims in Gram Sabhas, the villagers called it a farce. From 2009 to 2013, both the companies were unable to settle their claims due to widespread resistance. Villagers from the Jala hamlet filed six resolutions against the project complaining to the Sub Divisional Level Committee (SDLC) to notify them about their Community Forest Rights (2011) while the companies erected boundaries in the village.

Following timeline explains how the companies got the EC for the proposed mining:

15th January 2014- Show cause notice sent to APNRL and Tata Steel asking for the delay by the Inter-Ministerial group.

24th January 2014- MoEF gave Environment Clearance to the coal block, public hearing held on 2nd June 2012.

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195 https://www.avenuemail.in/jamshedpur/special-package-demanded-chandil-dam-displacement-victims/108495/
197 http://www.downtoearth.org.in/coverage/jumbo-conflict-43530
26th January 2014- Adhoc Deputy Commissioner of Latehar rejected the claim of community forest rights of the Jala villagers over 456 hectares pending since 2011.

28th January 2014- SDLC visits the village and find villagers consenting to coal mining. Additionally, in 2013 villagers claimed that a false video of a gram sabha held on October 1, 2011, was submitted as evidence by the two companies to obtain Forest Clearance. Villagers retaliated by showing a letter informing the Latehar district officials of a false evidence being submitted by the companies dated February 25, 2013.

“We had refused to hold gram sabha in October 2011. We wrote to three circle and district officials asking them not to hold a gram sabha that month as 65 individual FRA claims were pending,” said Shivratri Oraon, secretary, village forest rights committee (FRC) who is shown as among the 74 villagers who consented to the coal-block in the October 1, 2011, gram sabha demanding Rs 30 lakh per acre for land in the documents submitted for FC clearance.198

The power plant itself was accused of leaking fly ash in a stream at Pindrabera village close to the project site. The stream provides water to the twenty-three villages of the Seraikela Kharsawan district before joining the Subarnarekha river. The leakage caused the stream to pollute, with the alarmed residents soon rushing to the Jharkhand state pollution control board who issued show cause notice to the plant, forcing them to take action by properly disposing of the fly ash.199

“Since ages, we had been bathing, washing clothes, cleaning utensils and even watering our farms with the water from the rivulet. This apart, our cattle used to drink water from the rivulet. But, ever since the power plant started functioning, the water has turned whitish,” said Karma Mahto of Dhatkidih village.

Villager Madan Mahto of adjoining Rapcha claimed many villagers stopped growing crops after instances of crop failure increased.

“We were very happy to see a power plant coming in our area, but our joy was misplaced. When the plant started functioning, our cattle died and people in this area turned to other alternatives for water as the rivulet turned toxic,” Madan Mahto said.200

199 https://www.telegraphindia.com/1140207/jsp/jharkhand/story_17908992.jsp#.U0XgN6iSzsQ
200 https://www.telegraphindia.com/1140117/jsp/frontpage/story_17832156.jsp#.U0Xl6qiSzsQ
Development-Conservationist Conflict

Along with this, people had already been suffering from the man-animal conflict arising out of Subarnarekha project which damaged the traditional elephant routes forcing the giant animals of the Dalma Sanctuary to find alternative routes thereby trespassing through villages raiding the fields. Instances of elephants coming in contact with villagers can be directed to the increase in the construction work, starting with Subarnarekha project and slowly aggravating around the eco-sensitive zone causing destruction to the natural habitats prompting them to migrate to the nearby state, West Bengal and putting these large mammals in direct contact with the villagers at the same time.201

Financial Distress

{One of the Adhunik Group’s companies, Adhunik Corporation Limited (ACL) faced charges of cheating, forgery and criminal conspiracy. The directors, Nirmal Kumar Agarwal and Mahesh Kumar Agarwal were accused of cheating the Ministry of Steel and Ministry of Coal to procure the allocation of Patrapada coal block in Odisha. The accused were given bail in 2016 due to insufficient evidence.202 But in February 2017, the specials CBI judge ordered to start trial against the company and its directors based on prima facia evidence.203} Adhunik group was reeling under extreme financial stress. In 2013-14, the plant gathered a net loss of Rs 151.08 crore. They lost out on their allocated Ganeshpura coal block due to coal scam. Their expenditure rose heavily because of imported coal from Australia and Indonesia as the coal linkage with Central Coalfields Limited (through e-auction) was insufficient to meet the demands for their commercial operations. Their requests to the state government to get another coal linkage with Sikni coalfield did not meet with a positive response. The plant management tried to sell 250 MW of power to the government under the PPA but was of no use. Suffice to say, the project was under heavy losses and bankers started to push for its sale.204

201 http://www.downtoearth.org.in/coverage/jumbo-conflict-43530
Adhunik Metals, the parent company of APNRL decided to go for debt restructuring in 2014 because of incurring huge losses in power, closure of iron and manganese.205

In March 2016 SBI capital market was mandated by the SBI led consortium of banks to find the prospective bidder to acquire at least 51 per cent stake in Adhunik Power.206 In 2017, APNRL was sold to Edelweiss Asset Reconstruction Company (ARC) for a majority stake of 51 per cent for cash upfront in the distressed asset sale. As per the deal, the lenders sold their Rs 3,200 crore loans to Edelweiss Group along with a part of their equity stake being sold to Edelweiss Group’s offshore fund207.

In March 2018, the Standing committee on Energy declared the Mahadev Prasad Super Thermal Power Plant 540 MW as a stressed asset with total outstanding debts of Rs 2473.63 crores.208

205 https://www.thehindubusinessline.com/companies/adhunik-metaliks-to-go-in-for-debt-restructuring/article20921989.ece


208 http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf
# Barmer Power Station

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th><strong>Barmer Power Station</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>M/s Raj West Power Private Limited (RWPL)</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Village- Bhadresh, Dist. Barmer, Rajasthan</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>35.5 cusecs from Indira Gandhi Canal</td>
</tr>
<tr>
<td><strong>Sources of Lignite</strong></td>
<td>7.00 million TPA from Jalipa &amp; Kapurdi mines</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>468 Hectares</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>8x135(1080 MW)(^\text{209})</td>
</tr>
<tr>
<td><strong>Public hearing</strong></td>
<td>16.10 2006</td>
</tr>
<tr>
<td><strong>Status of project</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Environment Clearance date</strong></td>
<td>20 July 06</td>
</tr>
<tr>
<td><strong>Cost of project</strong></td>
<td>INR 4804 Crores</td>
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<tr>
<td><strong>National Bank Loan (12) (1 known)</strong></td>
<td>Total NFI Loans: INR 3750 Crores ICICI (3750 Crores)</td>
</tr>
<tr>
<td><strong>International Bank Loan</strong></td>
<td>No International Bank Loan or Not Available</td>
</tr>
</tbody>
</table>

\(^{209}\) Capacity was enhanced from 8x125 MW to 8X135 MW

**Introduction**

The Government of Rajasthan (GOR) and Raj West Power Limited (RWPL) entered into an implementation agreement (IA) for the implementation, operation and maintenance of lignite mining and thermal power plants.\(^\text{210}\) Raj West Power Limited (RWPL), a wholly owned subsidiary of JSW is running a 1080 MW lignite-based power project in Barmer with Purchasing Power Agreement (PPA) with Rajasthan government to sell the entire output. The low-grade form of coal—Lignite is sourced from the joint venture company Barmer Lignite Mining Company Limited (BLMCL) of RWPL and Rajasthan State Mines and Mineral Ltd. (RSSML) having two of its captive mines at Kapurdi and Jalipa villages in Barmer. Water for the power station will be sourced from Indira Gandhi canal at Mohangarh at a distance of 184 km through a pipeline. The company wanted to expand the power generation by adding unit 9 of 1x660 MW to the existent units.\(^\text{211}\) The proposal received TOR for the expansion in 2015 but there seem to be no developments.

In 2014, the whole Barmer plant was shut for a month due to non-availability of fuel.\(^\text{212}\) A similar instance happened in October 2017, when two units of the plant shut down during power crisis in Rajasthan state.\(^\text{213}\)

**Concerns**

- **The Brown Coal—Lignite**

The high cost of low-grade coal can be calculated as large quantities of it is required for electricity generation hence making it one of the worst ways of energy production. Though burning a tonne of lignite produces a tonne of Carbon Dioxide but then large quantities of lignite are required to produce electricity.\(^\text{214}\) This climate killer fossil fuel is found in abundance in Rajasthan with 5,720 million tonnes of reserves of lignite.\(^\text{215}\)

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\(^{211}\) [http://environmentclearance.nic.in/writereaddata/Form-1A/TOR/684022520151Raj_West_Power_Ltd_.pdf](http://environmentclearance.nic.in/writereaddata/Form-1A/TOR/684022520151Raj_West_Power_Ltd_.pdf)


\(^{214}\) [http://www.airclim.org/acidnews/lignite-power-provides-bargain-priced-pollution](http://www.airclim.org/acidnews/lignite-power-provides-bargain-priced-pollution)

- **Loss of land & Livelihoods**

  Approximately 7300 ha\(^{216}\) of nearby land had been acquired for the construction of captive mines since transporting high water content lignite can be uneconomical, so to sum up, a total of 7768 ha (including the mining and project area) of land had been taken up for the project.

  Along with the involuntary displacement, the water is procured through the Indira Gandhi Canal. It was previously known as the Rajasthan Canal designed to bring Himalayan waters from Punjab to the water deficit districts of Rajasthan up till Jaisalmer. The aim of the project was to bring the drought-prone land under irrigation along with ensuring access to water for drinking and domestic chores.\(^{217}\) Presently, this greening the desert project is being used to fulfil the demands of the industries. The water which is meant for the people is being directed to the water-guzzling thermal plants. The government blessed project has taken away the land and livelihoods of the people along with the water meant for their consumption and diverted for industrial usage.

  “Farmers in Rohili ki Dhani, Lakhitali, Ishwarpura and Botiya villages say the government is offering them a Rs 1,42,000 per ha when the market value is four times this. Asked about the right price, Bhire Ram of Bhadresh village said, "There is no question of the right price. We cannot contemplate selling our land. What use is a farmer without his land?" He sold some land in 2006. "The government railroaded us into selling land. Most of us are illiterate. What can we do?" he asks.

  Around 40,000 families of 30 villages had been affected with compensation given below market rates.\(^{218}\) The project met with a lot of ground-level activism with farmers forming groups to protest against the project citing that the company doesn’t need so much of land, hinting at a land grab. Farmers formed an anti-acquisition group and filed a petition against the Raj West Power in Jodhpur Bench of the Rajasthan High Court in December 2007 exclaiming lack of measures to prevent social and environmental impacts. A group of villagers took to the streets by going on a Dharna to protest the upcoming of the plant in the Thar Desert. The affected demanded suitable compensation and proper rehabilitation.\(^{219}\)

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“President of the Gram Sewa Sahakari Samiti and coordinator of the Sangarsh Samiti, Akedhan Barhat said villagers affected by the project have started an indefinite dharna in the village and stopped workers of the company from construction works. The demand of the villagers includes Rs 20,000 per bigha of land, apart from Rs 4,200 DLC rate from the state government, rehabilitation of the displaced families, compensation for houses and trees and employment to local youth.”

A lawyer representing the farmers Mr Kuswinder pinpointed towards the negligence of the Rajwest authorities as the affected people who sold their land were compensated monetarily but were not provided with alternative land which is required according to the R&R policy 2007.220

How can forced eviction explain a development project wherein people affected are facing more risks than gaining opportunities? Polluted air, diversion of water, farmers rendered landless; all this is creating more inequalities in the larger context of the provision of electricity.

## Rosa Thermal Power Plant

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Rosa Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>Rosa Power Supply Company Limited (RPSCL)</td>
</tr>
<tr>
<td><strong>Location of project,</strong></td>
<td>Village Chaudhera, Dist. Shahjahanpur, Uttar Pradesh</td>
</tr>
</tbody>
</table>
| **Source of water** | Phase 1: 43638 m³/day from river Garrah  
Phase 2: 20.40 cusecs from river Garrah |
| **Sources of coal** | Phase 1- 3.0 MTPA from Ashoka Block of North Karanpura Coalmines of CCA, Jharkhand  
Phase 2- 2.7 MTPA from Ashoka Block of North Karanpur Coalmines of CCA, Jharkhand |
| **Land Requirement** | Phase 1: 400 hectares  
Phase 2: 210 hectares |
| **Capacity** | Phase 1: 600 MW (2 x 300 MW)  
Phase 2: 600 MW (2 x 300 MW) |
| **Public hearing** | Phase 1: 26.09.2005  
Phase 2: 14.09.2007 |
| **Status of project** | Active |
Rosa Power Supply Company Limited (RPSCL), initially an Aditya Birla group subsidiary was acquired by the Reliance Energy (REL) in 2006. Rosa power company started off as a 51:49 joint venture between Aditya Birla Group and PowerGen of the UK in the early 1990s.  

RPSCL signed Power purchase agreements with Uttar Pradesh Power Corporation Limited (UPPCL). Power supply from phase 1 is entirely sold to UPPCL. Phase 2 will supply 300 MW to UPPCL and the rest is sold on merchant basis. Coal for the project will be transported by rail from Central Coalfield Limited (CCL) from Jharkhand under a long-term contract of 25 years. Fly ash produced at the power project would be utilised in the cement unit run by the Ambani group. Garrah river is one of the significant rivers flowing through the Shahjahanpura district will be used as the water source for the plant. Financially, UPPCL owes around Rs 144 crores to Rosa power plant. People affected by this project includes, Project affected families (PAFs) 1529, and Project affected persons (PAPs) 10232.

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221 https://economictimes.indiatimes.com/industry/energy/power/reliance-energy-buys-rosa-power/articleshow/322754.cms


224 http://www.greenclearancewatch.org/node/6965
### Kamalanga Thermal Power Plant

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Kamalanga Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>GMR Kamalanga Energy Ltd. (GKEL)</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Village Kamalanga, Taluk Odapada, Dist.Dhenkanal, Odisha</td>
</tr>
</tbody>
</table>
| **Source of water**    | Phase 1: 37 cusecs from Brahmani River  
Phase 2: 32,000 m³/day from Brahmani River |
| **Sources of coal**    | Phase 1: 15,840 TPD from Mahanadi Coalfields Limited, Talcher  
Phase 2: 1.75 MTPA Imported coal |
| **Land Requirement**   | 1050 acres |
| **Capacity**           | Phase 1: 3X 350 MW (1050 MW)  
Phase 2: 1 X 350 MW |
| **Public hearing**     | Phase 1: Not Available  
Phase 2: 30.08.2011 |
| **Status of project**  | Active |
| **Environment Clearance date** | Phase 1: 5 Feb 2008  
Phase 2: 5 Dec 2011 |
| **Cost of project**    | Phase 1: INR 4,100 Crores  
Phase 2: INR 1,192 Crores |
| **National Bank Loan (13 banks)** | Total NFIs Loans: INR 3405 Crores  
REC (INR 650 Crores), IDFC (NA) and SBI (INR 2755 Crores) |
| **International Bank Loan** | International Finance Corporation (IFC) |
Introduction

Angul- Talcher bounded by Dhenkanal region on the east is one of the most polluted industrial clusters in India with Comprehensive Environment Pollution Index (CEPI) score 82.09. Presence of mining and power projects have aggravated the pollution levels of the region. The coal for the project is sourced from the Mahanadi coalfields located in Talcher division of Angul district, also known as the coal city of Odisha. The source of water, Brahmani river is reeling under the industrial waste. The river is the lifeline of the state and the district it flows through. The community living near the banks of the river are directly affected along with people and livestock who are depended on water from this river. The project site located in the Dhenkanal district is surrounded by Nine communities. GMR will use imported coal from Indonesia for phase 2 until indigenous coal linkages are obtained. Environment Clearance for phase 1 mentions an estimation of 812 lands outsees and 3 houses to be relocated, but the project proponent in the monitoring report states that there are no oustees or houses to be relocated. They haven’t filed any R&R plan.

Background

India Infrastructure Fund (IIF) managed by the Infrastructure Development and Finance Company Limited (IDFC) and supported by the IFC invested in GKEL, a subsidiary of GMR Energy Limited. A complaint against the project was filed with the Compliance Advisor Ombudsman (CAO, the accountability mechanism of World Bank’s IFC) highlighting the conflicting interests of the management and the affected communities.

The complaint filed by the Odisha Chas Parivesh Surekhsa Parishad and Delhi Forum to the CAO mentions that 1,200 acres of fully irrigated agricultural land had been acquired by GMR to construct a power project funded by the IFC. The land acquired was irrigated from the Rengali Canal System displacing families from their private lands. The complaint document mentions that GMR forcibly acquired private land from 150 families without proper procedures and compensation. In 2010, nine families took the company to the local court demanding proper compensation but the district

225 http://www.foundryinfo-india.org/Critically_polluted_43_industrial_clusters_in.aspx
227 http://environmentclearance.nic.in/Auth/openletter.aspx?EC=5118
court favoured the company. The families appealed in the High Court where the case still remains.229

**Local Movement Explained**

The land acquired for the construction of the project was entirely agricultural land, irrigated by the World Bank-funded Rengali Project through sub-canals. World Bank funded a project which would bring prosperity to farmers through an irrigation project and then funded another project that led to the displacement of people, loss of land and livelihoods.

The thermal power plant was constructed after mobilising funds from one of the IFC intermediaries, hence was expected that it would meet the minimum standard guidelines for any world bank funded project, but it did not. Odisha Chas Parivesh Suraksha Parishad, a grassroots organisation and Delhi Forum, a Delhi based advocacy and research organisation filed a complaint against GKEL on April 15, 2011, with concerns related to land acquisition, police misconduct, transparency, community engagement, human rights protection and environmental sustainability. CAO, an independent audit arm of the World Bank gave consent to investigate the various social and environmental issues related to the project.

Amulya Nayak, Conveyor Odisha Chas Parivesh Surekhsha Parishad made allegations against the company for intimidating the locals and said 230 -

“The company never shows any regards for community health. It ignores villager’s requests to not dump its garbage to adjacent agricultural lands. GKEL employs dynamite blasting at the project site which causes cracks in nearby houses and primary school building.’

He further added ‘the project also extracts huge water volume and we witness in our borewells the depleting water level, which is the main source of drinking, cooking and washing for thousands of families.’

**Land Misuse**

*The GMR management is misusing the nearby land as a dumping ground putting the community at a health risk and ignoring their wellbeing. Bank Information Centre (BIC) reported that the private land acquired for the project had affected approximately 1300 families in 4 villages. Most*


importantly, the project disrupted their day to day life. Villagers had to use the project area to access the connecting road in the absence of an alternative road. Guards and dogs were used as security for the project area. The heavy use of patrolling was intimidating for the villagers and children who had stopped going to the school in the absence of an alternate route. This project caused the poor villagers to suffer for no fault making their lives miserable for the corporate gain. For instance, 100 acres of grazing land was part of the land acquired for the project. To compensate for the loss, GMR management provided an alternative grazing land to the villagers 50 kilometres away from the site.

Though adequate compensation was not provided to the affected and even if it did was provided as per market rates, would the lives of the people whose land, livelihood had been taken away and environment seriously impacted, would get any better? 231

**Issues raised by the Complainants**

The complaint letter raised important issues associated with the GMR Kamalanga project funded by IFC. 232 To summarise-

It was found out that the project financed by the International Finance Corporation (Private sector arm of World Bank) is the cause of water pollution in Odisha. This was reported by a Delhi based NGO, Research Collective who found out that the water for the plant was extensively drawn from the borewells completely neglecting the EC guidelines which mention that water can only be drawn from the river. The villagers made allegations against the company for impacting the ‘groundwater aquifers’ in the area.

Additionally, the company did not give employment to locals as promised, putting the status of women at risk due to no alternate work, loss of livelihoods, inadequate compensation and grazing land.233

Acquisition of fully irrigated agricultural land for the construction of the project.

The project site has been identified as a critically polluted area by the Government of India.

No reports on grievance redressal for the affected communities including the indigenous 'Kharia Tribe' since no mandatory public hearing meeting was held.

Social and Environment assessment of the project has not been made public.

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Excessive use of security interfering with the daily activities of the villagers.

Agricultural lands and farms being used as dumping grounds completely ignoring the community health.

The company authorities used groundwater for the project in the already water-scarce region without furnishing any official information that permits them to use it.

The proliferation of brick kilns near the banks of Brahmani river. Agriculture land is either bought or taken-up on lease for project construction supported by the company.

Harassment of affected people including women done by the authorities.

GMR management giving special privileges to the influential people in the communities.

Land belonging to Kamalang High School was acquired for building a pump house.

Families were paid Rs 5,00,00 per acre which is below the market rate.

A large number of trees were felled after acquiring private land- 3000 Palm trees, 1000 babool trees, mango, lemon and teak trees were uprooted without the owner's knowledge and no compensation.

**Conclusion Report handled by CAO**

Compliance Advisor Ombudsman (Accountability mechanism of IFC) was investigating before transferring it to CAO’s Compliance function. The problem with the loan arrangement was that it was done in an unregulated manner and there were no guidelines or prerequisites in case of Financial Intermediaries subprojects which are there in case of IFC’s direct investment. The complainants argued that had this project been a direct investment of the IFC, then proper check and safeguard measures would have been undertaken.234

“The compliance investigation focused on whether IFC's investment in the Fund (in the context of the Fund's investment in GMR Kamalanga Energy Limited) was appraised, structured, and supervised in accordance with applicable IFC policies, procedures and standards. It also considered whether IFC’s Policy and Performance Standards on Environmental and Social Sustainability (2006) and Policy on Disclosure of Information (2006) provide adequate levels of protection in relation to the issues raised in the complaint.”

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CAO in its report did identify faults in the IFC’s supervision of the funds and non-compliance with the disclosure requirement under the Performance Standards, either for its own functioning or for GKEL project.235

Financial Trouble
The GMR Kamalanga with a total investment of Rs 6,519 crore has turned into a Non-Performing Asset with an outstanding debt of Rs 4,100 crores. 236 Its three units have gone bad. Only one unit is functional as per the broad status of thermal power projects in the country, Feb 2018.237

GMR Kamalanga project was reeling under losses since Central Electricity Regulatory Commission denied them the permission to increase power tariff. In 2015, GMR infrastructure went for the refinancing of the Rs 4,500 crore loan of GMR Kamalanga power project by following the 5/25 refinancing scheme offered by the RBI in 2014. The scheme would help to put a moratorium for two years and extend the repayment years from 12 to 19 years. Hence the urgency to go for the flexible refinancing option.238

Conclusion
Dhenkanal with close proximity to the Angul- Talcher belt, one of the most polluted industrial clusters is the hotspot of industrial development with habitation suffering from its impacts. The water pollution due to coal mines, power plants and various other industries is affecting both surface and groundwater to an extent that members of civil society are demanding piped water supply from Bhabhini and Mahanadi river. Industries are converting the land into disposal facilities, rendering them barren. Water scarcity is on the rise since the groundwater is taken up for the purpose of mining.239

In these cases, the cumulative impact of all the operational industries along with the project becomes absolutely essential to comprehend the social and environmental damage. Industries such as- Talcher thermal power plant, National Aluminium Company Limited, Fertilizer Corporation of India etc are creating havoc on the region and for the people who live in the nearby areas. For instance, the industrial waste is

236 http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf
238 https://www.livemint.com/Companies/zqrJJCEC1xoZPHsor7PQLi/GMR-to-revamp-Rs4500-crore-Odisha-plant-loan.html
being dumped in the water sources leading to rise in the Fluorine content in the water, with people commonly suffering from Fluorosis and joint pains. Additionally, the health of livestock is at risk because of consumption of such toxic water which makes them incapable of walking. Fly emissions from the industries perforate into the soil making the crops inedible.\textsuperscript{240}

In spite of the above-mentioned issues, the project was financed by the IFC through its financial intermediaries. GMR Kamalanga is marked with serious environmental and social implications. Diversion of agriculture land for industrial purpose is against the law, yet it was done. Being a World Bank funded project, no proper checks and safeguard measures were taken clearly indicating lack of planning for the subprojects.

\textsuperscript{240} http://www.cao-ombudsman.org/cases/document-links/documents/IndiaIFcomplaint_April152011_web.pdf
### Jharsuguda Sterlite Power Station

<table>
<thead>
<tr>
<th>Project name</th>
<th>Jharsuguda Sterlite Power Station</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>M/s Sterlite Energy Limited (SEL)</td>
</tr>
<tr>
<td>Location of project</td>
<td>Village Brundamal (Bhurkhamunda/Banjari), Dist. Jharsuguda, Odisha</td>
</tr>
<tr>
<td>Source of water</td>
<td>5235 m³/hr from Hirakud Reservoir</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>32250 TPD from Mahanadi Coalfields</td>
</tr>
<tr>
<td>Land Requirement</td>
<td>839.50 acres</td>
</tr>
<tr>
<td>Capacity</td>
<td>2,400 MW (4X600 MW)</td>
</tr>
<tr>
<td>Public hearing</td>
<td>Not Available</td>
</tr>
<tr>
<td>Status of project</td>
<td>Active</td>
</tr>
<tr>
<td>Environment Clearance date</td>
<td>7th December 2007</td>
</tr>
<tr>
<td>Cost of project</td>
<td>INR 7481.50 crores</td>
</tr>
</tbody>
</table>
**National Bank Loan (17 Banks + 1 Other NFI = 18)**

- LIC (INR 350 Crores)
- SBI (INR 1540 Crores)
- Central Bank (INR 500 Crores)
- BoI (INR 100 Crores)
- Syndicated Bank (INR 200 Crores)
- Allahabad Bank (INR 350 Crores)
- Corporation Bank (INR 200 Crores)
- PNB (INR 405 Crores)
- IDBI (INR 569 Crores)
- Oriental Bank of Commerce (INR 150 Crores)
- UCO (INR 405 Crores)
- UBI (INR 200 Crores)
- Union Bank (INR 300 Crores)
- Canara Bank (INR 200 Crores)
- Andhra Bank (INR 100 Crores)
- J & K Bank (INR 200 Crores)
- ICICI (INR 100 Crores)
- TMP (INR 100 Crores)

**International Bank Loan**

- No International Bank Loan or Not Available

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**Introduction**

*For quite some time, Vedanta's name had been embroiled in Environment Clearance controversies with regards to mining in Niyamgiri hills in Odisha or the very recent, Sterlite Copper Smelter plant in Tamil Nadu. Vedanta has been accused for ecological degradation and a disregard towards the legal rights of the community.*

Sterlite Energy’s Limited (SEL) 2,400 MW Power project in Jharsuguda is one of the country’s largest single location power station. Jharsuguda district is well connected with roads & railways along with abundant coal reserves and water resources, making this district an attractive zone for setting up of power plants. Chief Minister Naveen Patnaik launched the Mega Power Project with the commissioning of the first unit in 2010.\(^{241}\) SEL is a subsidiary company of London Stock Exchange-listed group, Vedanta Resources. The total number of families affected by this project are 671 with displaced families being 71 which the management claim to have been rehabilitated. The Rehabilitation Colony is common for both, SEL and Vedanta Alumina Ltd with a total of 148 constructed houses for the displaced.\(^{242}\)

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\(^{242}\) [http://environmentclearance.nic.in/writereaddata/Monitoring/25_2400%20MW%20CPP%20of%20Sterlite.pdf](http://environmentclearance.nic.in/writereaddata/Monitoring/25_2400%20MW%20CPP%20of%20Sterlite.pdf)
Interestingly, Vedanta tried to seek the conversion of two units of Sterlite power station 2x600 MW from Independent Power Producer to Captive Plant but the request was denied by the government since the conversion would cut the power supply to the state grid by 50 per cent.\textsuperscript{243}

**Concerns**

- **Industrial Pollution**

Jharsuguda district is rich in mineral reserves—Coal, Bauxite, Quartz, Iron ore among many others which makes it a ‘Hot-spot’ for industrial development, also, making it one of the 43 most polluted industrial clusters in India with Comprehensive Environment Pollution Index (CEPI score) more than 70.\textsuperscript{244} IB Valley, another polluted industrial cluster with CEPI score above 70 is adjacent to Jharsuguda cluster. The rapid industrialisation needs to be checked as the close proximity of these two clusters makes the region more susceptible to the impacts of alarming pollution levels. Mahanadi is the major river with its tributaries flowing through the district, carrying the effluent load from these clusters to ultimately join the Hirakud reservoir whose water also caters to the domestic and irrigation demands of the population.

In 2017, Vedanta Limited was slapped with a show cause notice for an alleged ash pond breach by the Odisha State Pollution Control Board (OSPCB). Five power plant units comprising of three units of 135 MW (1215 captive power plant) and two units of 600 MW (Sterlite’s 2400 MW power station) were closed due to the notice.\textsuperscript{245} It was found that about 42,24,000 metric tonne of Ash slurry was released into the Bheden river and the nearby paddy fields of Katikela village causing irreparable damage to the local environment. The negligence caused havoc to the 90 acres of paddy fields thereby destroying the farmland with toxic effluents and breaching pollution norms.\textsuperscript{246} Still, Odisha SPCB allowed the five units to resume operations by revoking the notice.\textsuperscript{247}

Secondly, locals believed that industrial pollution is the cause

\textsuperscript{243} http://www.business-standard.com/article/companies/odisha-may-reject-vedanta-s-plea-to-use-ipp-power-for-smelter-114042100643_1.html

\textsuperscript{244} http://www.foundryinfo-india.org/Critically_polluted_43_industrial_clusters_in.aspx

\textsuperscript{245} https://economictimes.indiatimes.com/industry/indl-goods/svs/metals-mining/after-breach-in-ash-pond-five-power-units-of-vedanta-ordered-shut/articleshow/60517305.cms

\textsuperscript{246} http://www.newindianexpress.com/states/odisha/2017/sep/07/odisha-pollution-board-slaps-show-cause-notice-on-vedanta-for-ash-pond-breach-1653785.html

\textsuperscript{247} https://www.financialexpress.com/industry/pollution-board-lifts-ban-on-5-power-units-till-january-12-says-vedanta/934255/
for the death of fishes spotted floating in the Bheden river, but SPCB attributed the death to winters and further determining the reason by scientifically testing the water sample.248

\section*{Man-Animal Conflict}

The boundary of Sambalpur Elephant Reserve is 35 km east of the power station. The project proponent, SEL was directed by the MoEF to undertake a wildlife study to get a sense of the impact, if any, on the Elephant corridor and ways to minimise the impacts. The report titled ‘Feasibility of Establishing elephant corridors in the Jharsuguda-Sambalpur region of Orissa & site-specific mitigation and management plan’ was prepared by the Centre for Ecological Sciences, Indian Institute of Science (IISC). The report developed by the IISC mentioned that though the project does not involve any forest area, there have been reports of elephant movement for crop raiding during Kharif season in the past. Also, the plant wall might have possibly diverted the crops raiding elephants to nearby areas (Pg 19).249

IISC gave the project a go-ahead since it is non-viable to develop elephant corridors in non-existent habitats, also providing the proponent with a suitable action plan. But the report also suggested that Terms of Reference (TOR) given by the MoEF might be too restrictive. It mentioned:

"The desirability and viability of the movement of elephants from Orissa to these neighbouring states have to be taken into consideration when recommending the development of elephant corridors. In our case, however, the terms of reference are restricted to the feasibility of developing elephant corridors in the light of the establishment of Independent Power Plant of Sterlite Energy Ltd., and mitigation of elephant-human conflicts that may arise due to their restricted movements, if any." (Pg. 11)

This industrial development is the root cause of man-animal conflict and is affecting the elephant routes. Indian Institute of Science in their report suggested that industries should take up mitigation measures to ensure safe wildlife habitats. The report further suggested that it should be a collective responsibility of the industries which have sprung up in the 'hot-spot' Jharsuguda district to contribute towards the conservation of the elephant population.


Financial trouble
In 2013, SEL faced liquidity crunch due to non-recovery of power dues from the Grid Corporation of Odisha Ltd (GRIDCO) with the likely possibility of the shutdown of one of its unit which was wholly supplying power to GRIDCO. GRIDCO agreed to clear the power dues by paying Rs 169.5 crores out of the total Rs 610 crore bill demanded by the Sterlite Energy Limited, saying the rest of the bill is ‘disputed and is based on unsettled tariff’.  

Conclusion
The leakage of ash in the fields was a threat to the livelihood of farmers with a long-term effect on the productivity of the farmland, besides, affecting the marine life of the Bheden river and the people who are dependent on the river. Jharsuguda is the most polluted zone of Odisha state with people suffering from various health issues. Thermal power plants and mining activity by the Mahanadi Coalfields have led to increases in toxic effluents being released into air and water, thus degrading the agricultural lands and creating a disastrous situation. The open cast mining in the state has reduced the groundwater levels paramount to acute shortage of water especially in summers pushing the inhabitants to consume contaminated water, as a result, endangering their health and the flora and fauna. 

They say coal is the cheapest source of energy but is it? Looking at the magnitude of damage caused to people, communities and the environment.


251 http://www.dailypioneer.com/state-editions/bhubaneswar/power-hub-jharsuguda-turns-pollution-zone.html
## GMR Raikheda Thermal Power Plant

<table>
<thead>
<tr>
<th>Information</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project name</strong></td>
<td>GMR Raikheda Thermal Power Plant</td>
</tr>
<tr>
<td><strong>Company Name</strong></td>
<td>GMR Chhattisgarh Energy Limited (GCEL)</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Raikheda, Gaitara &amp; Chicholi Villages, Block Tilda, Dist. Raipur, Chhattisgarh</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>36 MCM from Mahanadi River</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>4.2 MTPA imported coal from South Africa and Indonesia until domestic coal is available (6.3 MTPA) from Talibira-I and Ganeshpur Captive Coal Block</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>850 Acres</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>(2 x 685) 1,370 MW</td>
</tr>
<tr>
<td><strong>Public hearing</strong></td>
<td>15.01.2009</td>
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<td><strong>Status of project</strong></td>
<td>Active</td>
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<td><strong>Environment Clearance date</strong></td>
<td>9-May-11</td>
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<tr>
<td><strong>Cost of project</strong></td>
<td>INR 8290 Crores (originally planned) INR 11016 Crores (Revised Estimate)</td>
</tr>
<tr>
<td><strong>National Bank Loan (18 Banks+)</strong></td>
<td>Total NFIs Loans: INR 6217 Crores</td>
</tr>
</tbody>
</table>


253 [http://environmentclearance.nic.in/writereaddata/Monitoring/46_GMR-MR.pdf](http://environmentclearance.nic.in/writereaddata/Monitoring/46_GMR-MR.pdf)
Introduction

Granted a provisional status of a Mega Power Project by the Chhattisgarh Power Project, this project ran into legal issues since its onset. The construction of the plant started without the sanction of the Environment Clearance, which is a mandatory requirement from the MoEF, hence a legal notice was issued by the Chhattisgarh Environment Conservation Board (CECB) Raipur. Workers on site informed the Down To Earth correspondent about the company indulging in illegal activities like land levelling and digging six tube wells to extract groundwater, indicating flouting of norms even before the EC had been granted. Vidhan Mishra, former Chhattisgarh state Industry Minister, on whose request the action was taken by the CECB extended his concern towards people of the nearby villages- Gaitara, Chicholi, Bhatapara and Murra who will face water scarcity with little to no drinking water available in summers.\(^\text{254}\) The project had even got a Rail Transport Clearance for transporting coal by road for a period of three years starting 2014 since there were delays in construction of railway siding for the plant. The coal source was later amended by the Expert Appraisal Committee in 2014 by adding imported coal from Indonesia along with South Africa and a maximum of 50% domestic e-auction coal.\(^\text{255}\) If this is how they operated initially, one can very well imagine GMR’s stand on Business ethics!

Concerns and Objections

The community people have been anti-GMR power plant construction from the beginning so much so that the first Public Hearing meeting was disrupted by the angry villagers in Raikheda Village. The villagers were dissatisfied by the GMR authorities who wouldn’t allow the villagers to express their grievances and favoured those who spoke in favour of the company. The protest went to such an extent that the villages called for a Tilda bandh on 2nd February 2009. People have been complaining about

\(^{254}\) http://www.downtoearth.org.in/news/gmr-jumps-the-gun-1524

\(^{255}\) http://environmentclearance.nic.in/writereaddata/Amendent_EC/0_0_25_May_2015_1422105701LetterGMR.PDF
how little they were compensated for their lands, tribals even less, as compared to the market rates, duping the innocent farmers of land and water. Out of the 850 acres, 422 acres is the government land and 428 acres has been acquired from private landowners including ST, SC and others. According to the Environment Clearance Monitoring report, families losing agriculture land accounts for SC-39, ST-8 and Others- 241.

**Government Support to the Corporate!**

There were even allegations on the Chhattisgarh State Industrial Development Corporation (CSIDC) for favouring GMR by providing land through acquisition for setting up of railway line between Tilda and Raikheda, to which the Chhattisgarh state government refuted by saying that the acquisition of land is part of a mega industrial area in Raikheda and railway line is a part of it. The allegation was serious since no government agency can acquire land for a private entity signally corruption as the industrial area is just a facade to hand over the land to GMR.  

Senior BJP leader Devji Bhai Patel representing the Dharsiwa constituency got into a heated debate over this issue and claimed villagers of 8 villages getting displaced over this land acquisition. Ajit Jogi, former chief minister of Chhattisgarh proposed to look into the matter with the centre in process of formulating a new law wherein, no land could be acquired without the consent from the 80 per cent of affected farmers.

Another instance of state government favouring GMR came when the state revenue department deposited Rs 27 crores on behalf of GMR to the Mahasamund district authorities as part of paying compensation to the farmers for taking away their land for the construction of Samoda barrage on the Mahanadi river. The four villages between Raipur and Mahasamund districts were coming under submergence after the acquisition of land, hence company was supposed to deposit Rs 30 Crores towards compensation, instead, they deposited only Rs 3 crores. After failed repeated reminders from the revenue department to submit the rest of the amount, the government paid its dues. Brijmohan Agrawal, the Water Resources Minister defended this act by claiming to have helped farmers who were waiting for their compensation and asserting that they would retrieve the money with interest from GMR.

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Financial Downturn

The GMR Chhattisgarh project is one of those coal powers plants that got stranded because state-owned coal suppliers refused to sign long-term supply agreements until the project had a long-term power purchase agreement (PPA) and the company could only manage to secure short term PPA. 259 GMR Chhattisgarh Energy Limited turned into a stressed asset with an outstanding debt of Rs 8173.9 crores as per the Standing Committee on Energy report March 2018. 260

In 2017, the GMR ran into major debts propelling the consortium of GCEL lenders to convert the company's debt to equity under the strategic debt restructuring (SDR) plan, an initiative by RBI to tackle NPAs of Public sector banks. Following the SDR scheme, out of the total outstanding debt including the accrued interest, of Rs 8,800 crore, debt totalling Rs 2,992 crore was converted into equity. The banks now own a 52.4 per cent stake in the company with GMR left with 47.6 per cent. 261 Recently, The Union Bank of India was planning to put a sale on 26 large stressed accounts, one of them being GMR Chhattisgarh Energy Limited as the bank thinks it is better to sell them and be out of it. 262

Conclusion

The GMR coal-based power plant is the representative of the larger power sector struggling under debt risk, with this one stranded over coal supplies issue and later going for debt restructuring. Agriculture land is acquired in the name of boosting the local economy which runs into loses and again people lose their livelihood. The bottom line associated with power projects is to give poor a new hope and them leave them to suffer over basics- land, water, environment, livelihood.

259 https://www.thehindubusinessline.com/companies/nlc-eyes-stake-in-gmr-chhattisgarh/article9672330.ece


261 https://www.thehindubusinessline.com/companies/gmr-chhattisgarh-energy-lenders-to-divest-stake-in-project-as-per-sdr/article10006974.ece

## Derang Thermal Power Plant

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Derang Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>Jindal India Thermal Power Ltd. (JITPL)</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Village Derang, Block Kaniha, Dist. Angul, Odisha</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>36 cusecs from Samal Barrage on Brahmani river</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>5.64 million TPA from Mahanadi Coalfields and Mandakini Coal Block in Talcher Coalfields[^263]</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>950 Acres</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>2 X600 MW (1,200 MW)</td>
</tr>
<tr>
<td><strong>Public hearing</strong></td>
<td>14.05.2008</td>
</tr>
<tr>
<td><strong>Status of project</strong></td>
<td>Active</td>
</tr>
<tr>
<td><strong>Environment Clearance date</strong></td>
<td>29 Sept 2008</td>
</tr>
<tr>
<td><strong>Cost of project</strong></td>
<td>INR 5400 Crores</td>
</tr>
</tbody>
</table>

Introduction

The Derang Thermal Power Project has a planned capacity of 2 x 600 MW (1200 MW). The water is sourced from Samal Barrage on Brahmani river, approx. 14 km from the site and the coal is sourced from the captive coal block Mandakini-A located at a distance of 5 km from the project site and Mahanadi Coalfields. There will 434 land oustees and 15 forest blocks in the study area as per the Environment Clearance document but there was no mention of land oustees in the Half Yearly Compliance Report. The land acquired for the project comprises 25 per cent of government land and 75 per cent of the private land.264 Jindal India Thermal Power Limited had got power purchase agreements (PPA’s) with Odisha’s Gridco Ltd, Kerala State Electricity Board and Tata Power Trading Corporation. The power plant in its operations had run into several disruptions due to the coal shortage.265

Background

Mining operations exploit the wildlife-rich habitat, directly displacing the forest depended on communities from their land and livelihoods causing large-scale deforestation and increase in man-animal conflict266. Talcher Coalfields is covered with dense forests which serves as a crucial link between Satkosia Tiger Reserve and Similipal Tiger Reserve, home to the endangered species of tigers, elephants and leopards. Jindal Group has a stake in various coal blocks operating in the Talcher coalfields including Mahanadi coalfields and a captive coal block called Mandakini which serves as the source of coal for the Derang thermal power plant. The company is directly responsible for destroying the ecosystems and the wildlife corridors essential for the protection of the forest landscape and the communities.

Financial Troubles

*Mandakini coal block jointly owned by JITPL, Tata Power and Monnet Power was slapped with a show cause for delay in its development by the Ministry of Coal*267

In 2017, Jindal India Thermal Power Limited (JITPL), a special purpose vehicle for the development of a coal-based thermal plant in Angul, Odisha suffered losses. This triggered SBI led a consortium of lenders to invite bidders for their 51 percent stake in the company. The consortium of 17 lenders had a total loan exposure of Rs 5,902.43 crore in JITPL. The company registered a net loss of Rs 310.21 crore in 2016-2017, Rs 262.60 crores in 2015-16 and Rs 23.83 crores worth of net loss in 2014-15.268

The Angul plant started facing problems when the Supreme Court in 2014 cancelled their allocated coal block. They experienced troubles getting new fuel source and getting into PPA’s269. In 2017, one of its units shut down and the second unit ran partially due to coal crises. The project was getting 7,000 to 8,000 tonnes of coal every day against the demand of 20,000 tonnes to run at full capacity. The plant suffered because of constant strikes in Talcher coalmines and inability to source coal from MCL without essential PPA’s even after having the long-term agreement with Mahanadi Coal Fields. Afterwards, coal was procured through e-auction thereby increasing the operational costs of the project which alongside low power tariff and less efficiency created financial difficulties for the company.270

Derang thermal power plant is one of the thirty-four stressed coal-based thermal power plants as per the Report presented by the Ministry of Power on Stressed/ Non-Performing Assets in the Electricity Sector. It has an outstanding debt of Rs 5381 crores with a total investment of Rs 6875 crores.271 Currently, NTPC is planning to acquire 1,200 MW Derang Thermal Power Plant on a slump sale basis as the project is

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271 http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf
before the National Company Law Tribunal (NCLT) for suffering losses and unable to service debt.\textsuperscript{272}

**Conclusion**

Odisha state is marked with massive industrial expansion with manifold social and environmental issues emerging with the so-called Industrial Development. Angul district is no different with a cluster of thermal power plants operating in the region, causing displacement and intense protests from the community. No doubt Angul-Talcher belt is one the most polluted industrial cluster in India. The environment has become poisonous, Brahmani river has become the dumping ground for the industries operating in Angul and is bearing the brunt of the modern-day development. The industries release the effluents in the river rendering it unfit for the human consumption, thus, turning them into sewage systems.\textsuperscript{273}

\textsuperscript{272} https://www.financialexpress.com/industry/ntpc-to-acquire-three-stressed-power-plants/1200220/

\textsuperscript{273} http://www.dailypioneer.com/state-editions/bhubaneswar/urbanisation-pollution-big-threat-to-brahmani.html
Maithan Right Bank Thermal Power Plant

<table>
<thead>
<tr>
<th>Project name</th>
<th>Maithan Right Bank Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>M/s Maithan Power Limited (MPL)</td>
</tr>
<tr>
<td>Location of project</td>
<td>Village Danbhum &amp; Chirkunda, Dist. Dhanbad, Jharkhand</td>
</tr>
<tr>
<td>Source of water</td>
<td>4688 m³/hr Maithan reservoir, Barakar river\textsuperscript{274}</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>4.864 Million Tonnes from BCCL, CCL and Tata Steel Ltd.</td>
</tr>
<tr>
<td>Land Requirement</td>
<td>1112.18 acres</td>
</tr>
<tr>
<td>Capacity</td>
<td>1,050 MW\textsuperscript{275}</td>
</tr>
<tr>
<td>Status of project</td>
<td>Active</td>
</tr>
<tr>
<td>Public Hearing</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
| Environment Clearance date        | Phase1: 1000 MW, 22-06-2004
Expansion: 1050 MW, 18-Sept-07   |
| Cost of project                   | INR 4450 Crores                        |

\textsuperscript{274} [http://environmentclearance.nic.in/Auth/openletter.aspx?EC=3000](http://environmentclearance.nic.in/Auth/openletter.aspx?EC=3000)

\textsuperscript{275} The project was expanded from 4x250 MW (1000 MW) to 2x525 MW (1050 MW)
Introduction

Maithan Power is a joint venture between Tata Power and Damodar Valley Corporation (DVC) to develop the Maithan Right Bank Thermal Power station, supplying power to Jharkhand, Delhi, West Bengal and Kerala\(^{276}\). The land requirement includes 436.42 acres of forest land for which forest clearance was granted in 2007, 114.95 acres of Gairmajrua land (GM) and 546.97 acres of Rayati land. Barakar river (water source of the plant) is the main tributary of the Damodar river, which is one of the dirtiest and polluted rivers in the country. This is due to the proliferation of coal and mining industries on the river banks which is slowly poisoning the people and animals dependent on these rivers.\(^{277}\) The condition hasn't changed much, heavy pollution and degradation of Damodar valley was prevalent in the 1990s and still is, with no concrete action taken to conserve them. The river resembles a large drain meant for carrying toxic effluents.\(^{278}\)

Uncertain Industrialisation

Jharkhand State-Pollution Control Board (JS-PCB) chairman, Mani Shankar during inspections found severe violations and served notices to the plant with a subsequent hearing in Ranchi on May 23, 2013, following which four specific instructions were given to the plant.\(^{279}\) “The instructions were initiate steps to check emission from coal handling plant, to make pucca all the roads inside the unit, construct an approach link to the ash pond and complete the latter,” Shankar said.

JS-PCB Dhanbad Regional Officer, Dinesh Prasad Singh further stated the continuous violation of EC guidelines by the MPL authorities who denied the accusations right away.


\(^{278}\) http://www.downtoearth.org.in/coverage/choking-slowly-to-death-30582

\(^{279}\) https://www.telegraphindia.com/1130819/jsp/jharkhand/story_17244732.jsp
Below mentioned discrepancies were noted during JS-PCB inspection:\textsuperscript{280}

Transporting coal in uncovered coal dumpers putting the environment safety at risk, Fly ash leaking into Barakar river.

Plants discharge flowing into the Maithon dam, as a result, polluting the drinking source of the Dhanbad population, and

Transporting uncovered fly ash for dumping in coal mines

No surprise Dhanbad is one of the 43 most polluted industrial clusters in India according to the Comprehensive environmental pollution index developed by Central Pollution Control Board (CPCB)\textsuperscript{281}

\section*{Failed Promises}

In 2016, MPL authorities promised to give jobs to the displaced in the order of 30 people by October, then 50 by November and subsequently 30 every month. But by December only 22 were given employment forcing people to go on an indefinite strike to gain employment in exchange for their acquired land. Irrespective of six agitators being admitted to the hospital after seven days of fasting, no action was taken by the MPL management nor from the Dhanbad district administration.\textsuperscript{282} The unions again went on a strike in February 2017 in the hope of getting employed by the company who took away their land but Nirsa Legislator Arup Chatterjee led protest met with a bleak response from the MPL authorities.\textsuperscript{283} Recently, MPL authorities have promised employment to the displaced after they went on strike and encroached on the main gate of the power plant.\textsuperscript{284}

\section*{Power Plant Assessment}

Centre for Science and Environment published a Green Rating Project report in 2015 which consisted of analysis of the coal sector spread across 16 states. One of them was

\begin{itemize}
\item \textsuperscript{280} https://economictimes.indiatimes.com/industry/indl-goods/svs/metals-mining/pollution-choking-dhanbad-as-coal-companies-flout-pollution-control-board-rules/articleshow/21909947.cms
\item \textsuperscript{281} http://www.foundryinfo-india.org/Critically_polluted_43_industrial_clusters_in.aspx
\item \textsuperscript{282} https://www.hindustantimes.com/ranchi/health-of-agitators-triggers-tension-at-jharkhand-power-plant/story-KwvOko3JpAlKx5HhbCDJ9N.html
\item \textsuperscript{283} https://www.jagran.com/jharkhand/dhanbad-15523692.html
\item \textsuperscript{284} Translated from Hindi
\item https://www.jagran.com/jharkhand/dhanbad-visthapit-warns-mpl-management-17791131.html
\end{itemize}
Maithon Right Bank Power plant which was one and half year old then. They observed the following:

“(i) The plant was supposed to be a Zero Liquid Discharge (ZLD). Despite the fact that the plant is new, water pollution issues are serious here. JSPCB inspection report notices and community complaints indicate that the plant has been discharging untreated wastewater and ash water into the Maithon Dam and agricultural fields.

“(ii) The plant failed to meet ash utilisation norm of MoEF & CC and was able to use only 28 per cent of more than 8 lakh tonnes of ash generated.

(iii) The plant has been non-compliant to many of the Environment Clearance conditions: to make effluent collection tank impervious, to use 33 per cent ash containing coal, to submit groundwater analysis report, to install water flow meter, do rainwater harvesting etc.

(iv) High fugitive dust emission from ash pond, coal handling area and during ash transportation by uncovered trucks was noted. Social issues of the plant were mainly related to the impact of pollution caused by it and poor CSR measures. According to the community, 4 out of 5 lakes in the area were acquired by the plant during land acquisitions which were filled up for plant construction.”

It is evident that industries are unable to manage the pollution crises arising from the power plants and blatantly flouting norms with little to less interference from the state.

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# Banka Power Project

<table>
<thead>
<tr>
<th>Project name</th>
<th>Banka Power Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company Name</td>
<td>M/s Jas Infrastructure and Power Limited, subsidiary of Abhijeet Group</td>
</tr>
<tr>
<td>Location of project</td>
<td>Village Siriya, Dist. Banka, Bihar</td>
</tr>
<tr>
<td>Source of water</td>
<td>85 MCM from Chandan Dam</td>
</tr>
<tr>
<td>Sources of coal</td>
<td>10.06 MTPA</td>
</tr>
<tr>
<td>Land Requirement</td>
<td>1,573 Acres</td>
</tr>
<tr>
<td>Capacity</td>
<td>4x660 MW (2,640)</td>
</tr>
<tr>
<td></td>
<td>I stage – 2x660 MW</td>
</tr>
<tr>
<td></td>
<td>II stage – 2x660 MW</td>
</tr>
<tr>
<td>Public hearing</td>
<td>12.08.2009</td>
</tr>
<tr>
<td>Status of project</td>
<td>Uncertain</td>
</tr>
<tr>
<td>Environment Clearance date</td>
<td>29-June-11</td>
</tr>
<tr>
<td>Cost of project</td>
<td>INR 11,120.0 Crores</td>
</tr>
<tr>
<td>National Bank Loan (6 Banks+ 5 Other NFI=11)</td>
<td>Total NFI Loans: INR 7235.8 Crores</td>
</tr>
<tr>
<td></td>
<td>REC (NA), PFC (INR 1150 Crores), IIFCL (INR 525 Crores), LIC (NA), HUDCO (INR 500 Crores), SBBJ (NA),</td>
</tr>
</tbody>
</table>

[286](http://www.cea.nic.in/reports/monthly/broadstatus/2018/broad_status-02.pdf)
Introduction

Banka Power project also known as Siriya Power project was a proposed 2,640 MW coal-based power project of the Abhijeet Group, the parent company of Jas Infrastructure and Power Limited. They even signed a Memorandum of understanding with the Bihar State Electricity Board (BSEB) for purchasing of 25 per cent of the electricity from the plant, which soon expired leaving the power plant with an uncertain status. The Environmental Clearance document mentioned that the ultimate coal requirement of 10.06 MTPA would be met from the Mahuagarhi Coal Block in Jharkhand at a distance of 85km. Until then, the project would run on imported coal from South Africa marked at 8.40 MTPA. The Mahuagarhi Coal Company Private Limited (MCCPL) jointly owned by the Jas Infrastructure and Calcutta Electric Supply Corporation (CESC), the RP Sanjiv Goenka Group firm has the mining and development rights of the Mahuagarhi coal block.

People’s Concerns and Objections

The project was heavily opposed by the farmers who organised themselves under the banner ‘Chandan Dam Bachao Sangharsh Samiti’. The project was sought to acquire water from the nearby Chandan dam and farmers feared that the diversion of water from the dam would badly affect the irrigation of seven blocks in Banka district. The protest saw the support of Magsaysay Award winner, social activist, Sandeep Pandey who remarked that the company officials had threatened the farmers to sell their lands at a below market price. He added, that according to the rules the host state is eligible for 50 per cent of the produced electricity which the company is violating by being in a maximum of 25 per cent purchasing agreement with the right to sell the remaining power outside Bihar.

“The company acquired the land by wrongful means”, said Prasad Kumar of Kalyanpur Village. His family was one of the 250 families who was duped into giving their land totalling

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785 acres to the authorities in an exchange of a promise of training the youth of the village by setting up an Industrial Training Institute (ITI). The project affected were depended on the proposed plant for livelihood which seems to be in darkness.290

**Coalgate Scam and Money trail of Jas Infrastructure**

How did Jas Infrastructure without any physical assets get crores of worth stake in it?

Congress MP Vijay Darda and his son owned 2% stake in Abhijeet Group and was reported to have misused its political linkages to protect the alleged malpractice. Subsequently, Darda formed another company Asera Banka in 2010. Jas Infra transferred almost 6 crores worth of shares at Rs 10 per share. Now Asera Banka with 7 percent equity in Jas Infra, sold 10 percent of its own shares to a number of mystery investors at a premium of Rs 8885 per share thereby earning a profit of Rs 113 crores; this is a company which has just been formed and without any economic activity managed to sell its shares at an absurdly high premium. Interestingly, the companies which bought shares from Asera Banka were all Kolkata based with no trace of activity at the place of address. Asera Banka was set up to acquire a stake in Jas Infra and for that, they had to raise money from the market. 291

**What Was the Scam?**

Jas infrastructure and power were involved in the infamous Coalgate scam. Jas Infra along with other firms presented false information about their companies in terms of net worth, existing coal blocks while applying for new coal blocks. For this, they forged MOUs with new players to enhance their reputation, in this case, Jas Infra signed an MOU with the Bihar state electricity board.292 In 2012, CBI filed an FIR against Manoj Kumar Jayaswal, Abhishek Jayaswal and Anand Jayaswal of Abhijeet group, the parent company of Jas Infra for the alleged irregularities in the coal block allocation and non-disclosure of existent ownership of coal blocks. Jas Infra was slapped with a show-cause notice from Coal Ministry for ‘no activity’ on the coal block. The company refuted the allegations of not starting the mining by saying that since it was an unexplored block, they got the prospecting licence in 2010 after being

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assigned the coal block in 2010. In 2014, CBI filed the closure report which was refused by the Supreme Court deeming the probe incomplete and demanding a detailed investigation. CBI again filed the revised closure report being unable to find any ‘Prosecutable evidence’ against the companies.

In 2017, CBI arrested Manoj Jayaswal and his son Abhishek Jayaswal for allegedly defrauding two Public sector banks, Canara Bank and Vijaya Bank for Rs 290.77 crores during fiscal years of 2011-2013. CBI found that Abhijeet group syphoned off money from the bank through its 132 shell companies. It was reported that Jas Infrastructure was just a ‘special purpose vehicle’ with a credit limit of Rs 5,700 crores for setting up the power plant after getting the coal block allocations. Jas Infra gave one part of the work to Abhijeet projects for erection, procurement and construction worth Rs 790 crores out of which Rs 290 crores were loaned from Canara and Vijaya Banks. The work was further sublet to Simplex Infrastructure Pvt Limited. The work was never completed leading both the banks to file complaints with CBI.

**Conclusion**

One of country’s biggest bank default case with loans taken by Abhijeet Group turned into a non-performing asset with an outstanding debt of Rs 11,000 crores. In hindsight, it was a national level scam which involved duping banks and poor people of their money and land. A case of coal blocks allotted wrongfully with companies chasing to monetise it knowing that the misuse of coal mines can cause loss of public revenue. In other words, the power sector is a playground for financial mismanagement where the public faces the irregularities stemming from each step of the power value chain unless the procedures become transparent and non-negotiable.

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295 http://indianexpress.com/article/india/cbi-arrests-industrialist-son-for-fraud-4702966/

### Malibrahmani Thermal Power Plant

<table>
<thead>
<tr>
<th><strong>Project name</strong></th>
<th>Malibrahmani Thermal Power Plant</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Company Name</strong></td>
<td>M/s Monnet Power Company Ltd. (MPCL)</td>
</tr>
<tr>
<td><strong>Location of project</strong></td>
<td>Village Malibrahmani, Block Chandipada, Angul District, Odisha</td>
</tr>
<tr>
<td><strong>Source of water</strong></td>
<td>4140 m³/hour from River Brahmani near Samal Barrage</td>
</tr>
<tr>
<td><strong>Sources of coal</strong></td>
<td>5.45 MMPTA from Utkal B2 and Mandakini Coal Block</td>
</tr>
<tr>
<td><strong>Land Requirement</strong></td>
<td>400 Hectares</td>
</tr>
<tr>
<td><strong>Capacity</strong></td>
<td>2 X 525 MW (1,050 MW)</td>
</tr>
<tr>
<td><strong>Public hearing</strong></td>
<td>23.10.2007</td>
</tr>
<tr>
<td><strong>Status of project</strong></td>
<td>Under Construction</td>
</tr>
<tr>
<td><strong>Environment Clearance date</strong></td>
<td>29 June 2010</td>
</tr>
<tr>
<td><strong>Cost of project</strong></td>
<td>INR 4975 Crores</td>
</tr>
<tr>
<td><strong>National Bank Loan (14 Banks + 1 Other NFI = 15)</strong></td>
<td>Total NFIs Loans: INR 3819 Crores</td>
</tr>
<tr>
<td><strong>International Bank Loan</strong></td>
<td>No International Bank Loan or Not Available</td>
</tr>
</tbody>
</table>
Introduction

The 2x525 MW power project was supposed to be commissioned by 2015 but is still facing delays. MPCL had signed Power Purchasing Agreements with Odisha GRIDCO for 117 MW and with West Bengal for 400 MW through PTC. 18.281 hectares of forest land was diverted for the setting up of the plant for which the required permissions were obtained according to the Forest (Cons) Act 1980. Monnet Power even planned on setting up a 660 MW thermal power plant at the same site for which it required an investment of Rs 4,000 crore but was later cancelled.

Bankrupt Monnet Power currently owes Rs 5,892 crore to the banks and Rs359 crore to the operational creditors. By 2015, the company had faced cost overruns amounting to Rs 1,900 crores and the revised cost of the project stood at Rs 7,000 crore. The company also suffered losses due to the coal block deallocation by the orders of Supreme Court in 2014. “There were reports that MPCL faced challenges such as "delayed disbursals, late approvals and issues with respect to land acquisition, in the beginning, resulting in time and cost overrun of the project". Additionally, the inability to extend further credit to the company by lenders of the consortium of 27 banks also enhanced their financial troubles.

In 2015, MPCL adopted the strategic debt restructuring scheme under which MPCL allocated equity shares to the lenders thereby giving up 51 per cent stake in the company. Monnet power had debt of Rs 5,000 crore at that time. JSW Energy Ltd signed a non-binding MOU (memorandum of Understanding) with MPCL and Monnet Ispat & Energy Limited (MIEL) for acquiring a majority stake in MPCL which was later declined by the Monnet Power lenders, hereafter JSW decided to back out from the acquisition of MPCL.

According to the ‘Monthly Report on Broad Status Of Thermal Power Projects in the Country’, February 2018, work on Malibrahmani power plant continues to be held up due to the ‘paucity of funds’. Evidently, Monnet Power Company Limited was one of the thirty-four Stressed/Non-Performing assets as per the Standing Committee
on Energy’s report, March 2018. Now again, JSW Energy and Adani group have shown interest in the acquisition of MPCL by submitting Expression of Interest (EoIs). Interestingly in April 2018, the resolution plan submitted by the consortium of JSW Steel- AION Investment Pvt Ltd. was approved by the RBI to buy out Monnet Ispat and Energy Limited.

The Malibrahamani thermal power plant is one such case of power sector reeling under distress. The two units of the power plants were expected to start commissioning by March 2015 but got delayed due to financial constraints. Loans to both the companies, the subsidiary (MPCL) and the parent company (MIEL) have turned into stressed assets. The power sector is struggling and for a variety of reasons; shortage of funds, coal and buyers, loans at risk, cost over-runs, trying to win coal blocks, and long-term PPA’s.

303 http://164.100.47.193/lsscommittee/Energy/16_Energy_37.pdf
Centre for Financial Accountability (CFA) engages and supports efforts to advance transparency and accountability in financial institutions. We use research, campaigns and trainings to help movements, organisations, activists, students and youth to engage in this fight, and we partake in campaigns that can shift policies and change public discourse on banking and economy.

We monitor the investments of national and international financial institutions, engages on policies that impact the banking sector and economy of the country, demystify the world of finance through workshops and short-term courses and help citizens make banks and government more transparent and accountable, for they use public money.