

BANGLADESH-INDIA FRIENDSHIP POWER COMPANY (PVT) LTD
2X660MW MAITREE SUPER THERMAL POWER PROJECT
RAMPAL, BAGERHAT



REPORT OF THE FACT FINDING MISSION TO RAMPAL, BANGLADESH



REPORT OF THE

FACT FINDING MISSION TO

RAMPAL, BANGLADESH



Published by:

South Asians for Human Rights (SAHR)
345/18 Kuruppu Road (17/7 Kuruppu Lane)
Colombo 08, Sri Lanka

Telephone: +94-11- 2695910

Email: sahr@southasianrights.org

Web: www.southasianrights.org

Published in Sri Lanka 2015

All rights reserved. This material is copyright and not for resale, but may be reproduced by any method for teaching purposes. For copying in other circumstances or for re-use in other publications or for translation, prior written permission must be obtained from the copyright owner.

ISBN-978-955-1489-17-5

Design and pagination: Wits Originals

Cover photos: Sharif Jamil

The cover photos illustrate local people engaged in livelihoods close to the boundary wall of the power plant.

Table of Contents

Acknowledgments	iv
List of Abbreviations	v
Executive Summary	vi
1. The Mission	1
1.1 Objectives of the Mission	1
1.2 Methodology	2
1.3 Key Findings	3
2. Background	5
2.1 The Proposed Coal Fired Power Plant	5
2.2 Location of the Plant	5
2.3 Geographical Significance of the Location	7
3. Key Human Rights Concerns	9
3.1 Land acquisition and compensation process	9
3.2 Mistreatment and harassment of dissenting voices:	12
3.3 Loss of livelihood	13
4. The Environment Impact Assessment	15
4.1 Description of the Assessment	15
4.2 Clearance from the Department of Environment	16
4.3 The EIA: biased and distorted	17
4.4 Environmental impact	20
5. Government Response	23
5.1 The Department of Environment	23
5.2 Dr. Tawfiq-e-Elahi Chowdhury, the Energy Advisor to the Prime Minister	23
5.3 Hon. Talukder Abdul Khaleque, MP of Bagerhat 3 (Rampal- Mongla areas)	24
6. NTPC - A Poor Track Record	27
7. Civil Society Interventions	29
7.1 Concerns by organisations	29
7.2 Legal Action by Bangladeshi Civil Society	30
7.3 Concerns raised by Indian environmental activists	31
8. Conclusion	33
Annexure 1: Meeting Schedule of the Mission	34
Annexure 2: The Press Statement	35
Annexure 3: Sensitive Receptors	38
Annexure 4: List of terrestrial wildlife species in the study area – mammals, reptiles, amphibians and birds on the basis of being endangered	40
Annexure 5: Map showing the location of the coal power plant in relation to the Sundarbans	42
Annexure 6: Map showing the distance between the Sundarbans and the proposed power plant	43

Acknowledgments

South Asians for Human Rights (SAHR) would like to thank, firstly, the Open Society Foundation (OSF) for providing generous funding assistance for the programme that enabled the mission to Rampal, Bangladesh and the ensuing report which forms the entirety of this publication.

Thanks to the mission members Dr Abdullah Harun Chowdhury and Mr. Sharif Jamil from Bangladesh for agreeing to be a part of this assignment; Mr. Nityanand Jayaraman and Mr. Sagar Dhara from India for external expertise provided; and SAHR Bureau Members in Bangladesh Ms. Khushi Kabir, Ms. Sultana Kamal and Dr. Asif Nazrul who were advisors to this programme. SAHR values all the individuals who provided and assisted the mission with invaluable information.

SAHR greatly appreciates the time and opinions given by all those interviewed by the mission.

A special mention of our Chairperson, Ms. Hina Jilani, Co-chairperson, Dr. Nimalka Fernando and the SAHR Bureau for guiding and supporting this endeavour.

And not least, SAHR thanks Nijera Kori, local organisations in Rampal and all other SAHR members of Bangladesh for assisting with logistics of the mission and the secretariat staff for their efforts in facilitating and support in implementing the programme.

List of Abbreviations

BAPA	Bangladesh Poribesh Andolon
BELA	Bangladesh Environmental Lawyers Association
BPDP	Bangladesh Power Development Board
CEGIS	Center for Environmental and Geographic Information Services
DoE	Department of Environment
ECA	Environmentally Critical Area
EIA	Environmental Impact Assessment
GPFG	Government Pension Fund Global
IUCN	International Union for Conservation of Nature
MoU	Memorandum of Understanding
MP	Member of Parliament
NCSS	National Committee for Saving the Sundarbans
NTPC	National Thermal Power Corporation of India
SAHR	South Asians for Human Rights
UNESCO	United Nations Educational, Scientific and Cultural Organisation

Executive Summary

A South Asian fact finding mission was conducted in Rampal, Bangladesh from 5 -11 April 2015 on the establishment of a coal-based power plant by the Bangladesh-India Friendship Power Company (Pvt) Ltd.

The objective of the mission was to evaluate the impact of the power plant on the livelihoods of the people and ecology of the region, examine the legal framework governing its establishment and assess if the proposed power plant violates any laws, policies and guidelines that protect the Sundarbans, an international heritage site surrounding the power plant.

The Mission visited the site of the power plant and the mission members met with key state and non-state stakeholders including affected villagers, environmentalists, lawyers, academics, journalists, human rights defenders and other members of the civil society. Government officials including Dr. Tawfiq-e-Eiahi Chowdhury, Energy Adviser to the Prime Minister, Hon. Talukder Abdul Khaleque, Member of Parliament (MP) of Bagerhat 3, the Rampal-Mongla area, Mohammad Hossain, Director General of Power Cell, the Ministry of Power, Energy and Mineral Resources, Vijay Shanker Tamrakar, Managing Director and U. K. Bhattacharya, Deputy Managing Director of the Bangladesh India Friendship Power Company (Pvt) Ltd and a Director of the Department of Environment (DoE) was interviewed.

The construction of the proposed plant would accrue some significant benefits to the country, including an increase in electricity production, adaptation capacity, infrastructure development and employment. However, the report shows that the multi-faceted costs to the local people and the irreversible damage to the fragile ecosystem and biodiversity have not been adequately prioritized when proposing the project.

The report details the following key findings of the mission:

- Due process was not followed in land acquisition and relocation - the affected population were not made cognizant of the facts of the project nor consulted with regard to the compensation process by the government. Further, compensation to land owners has been inadequate, falling short of the standard market price of equivalent land in the area. A large number of landless families whose livelihoods depend on the land and water bodies have been displaced without any compensation and also been excluded in government statistics. Additionally, the river belt from the Mongla port to Rampal is undergoing rapid industrialization, with land being acquired both legally and illegally. Displaced people have been deprived of their traditional livelihoods along with their cultural way of life causing them numerous economic, social and cultural hardships.
- Local people and activists protesting this development project have been constantly harassed by powerful quarters through threats, intimidation, assaults and filing of false cases.
- The current Environmental Impact Assessment (EIA), is defective on numerous particulars. Without specifying which country the coal will be imported from, the

extent of damage from the coal cannot be assessed by an EIA, thereby making the current assessment flawed. The government of Bangladesh has not conducted an independent EIA on the construction of this coal power project and has also disregarded valid opinions given by local environmental experts and activists on the project.

- As preparatory construction of the plant, approximately 400 acres of land, including a natural canal, has been land-filled by approx. 20ft. Extensive dredging of riverbed and seabed areas as well as constant leakage of toxins will in turn deteriorate the ecosystem health of the aquatic bio diversity of the Passur and Maidara rivers, especially the Dhangmari dolphin sanctuary which is 8km away from the site. In addition, with more than 400 ships transporting coal passing through the river every year, there will be water pollution due to coal and oil spillage, bilge water and ballast discharge; noise pollution; and air pollution generating coal dust to the environment. Such pollution to the environment will create extreme weather conditions which will have a large effect on the area and the country in general.
- The Department of Environment has expressed their concerns about this project but has approved the EIA conditionally with 59 specific points to be addressed. Government authorities have stated that they would comply with all conditions but this would in turn increase production costs.

South Asians for Human Rights (SAHR), as a regional human rights organization, has called upon the Government of Bangladesh to suspend all construction and other project activities until a comprehensive, science-based EIA is conducted by impartial and independent experts. If found damaging to the Sundarbans, the project must be cancelled immediately and relocated to an environmentally sustainable site.

Bilateral agreements must ensure that the environmental standards adopted by both countries are maintained and adhered to. It is the responsibility of the Governments of Bangladesh and India to adhere to national laws and international environmental conventions, protocols and treaties in conducting activities through regional cooperation or under bilateral agreements and further to conduct all activities transparently and in consultation with their citizens.

1. The Mission

The National Thermal Power Corporation of India (NTPC)¹ in collaboration with the Bangladesh Power Development Board (BPDB)² is in the process of setting up a 1,320 MW coal fired power plant in Rampal, Bangladesh which is situated approx 14km from the Sundarbans, the largest remaining mangrove forest in the world. Concerns have been raised regarding the impact of the coal power plant on the Sundarbans with consequences for the ecology and livelihoods of people who live and work in the area. Sundarbans, a UNESCO heritage site, is known for its biological diversity. It is also the largest remaining habitat for the royal Bengal tigers. The mangrove forest is the single largest source of forest produce in Bangladesh, a critical habitat for the biodiversity and replenishing of the local seas and provides livelihoods for several million people.

SAHR conducted a fact finding mission from 5 – 11 April 2015 to examine the impact of the newly emerging coal power plant in Rampal on the lives and livelihoods of the local people in the area and the environment. The mission was led by Dr Abdullah Harun Chowdhury, Professor of Environmental Science of the Khulna University and Sharif Jamil, Council Member, Waterkeeper Alliance from Bangladesh. External expertise from India was provided by Sagar Dhara, an Environment Engineer and Nityanand Jayaraman, a Chennai-based writer and social activist. Deekshya Illangasinghe represented the SAHR secretariat. SAHR Bureau Members in Bangladesh Khushi Kabir, Sultana Kamal and Dr Asif Nazrul were advisors to this programme.

1.1 Objectives of the Mission

Given that the Sundarbans is an international heritage site and the project a product of a bilateral agreement between two South Asian countries, SAHR feels that it is imperative to pay attention to the ways in which such an agreement might impact the people and the environment of both countries.

The objectives of the fact-finding mission were to:

1. Examine the status of the proposed power plant including the legal framework governing its establishment;
2. Examine, if any, environmental and other assessments made regarding the impact of the power plant;

¹ NTPC is India's largest energy conglomerate with roots planted way back in 1975 to accelerate power development in India. Accessed at <http://www.ntpc.co.in/en/about-us/ntpc-overview> (accessed on 10 August 2015)

² BPDB is a statutory body created in May 1, 1972, by presidential Order No. 59 after bifurcation of Bangladesh Water and Power Development Authority. It is under the Power Division of the Ministry of power, Energy and Mineral Resources, Government of Bangladesh. accessed at <http://www.bpdb.gov.bd/bpdb/> (accessed on 10 August 2015)

3. Assess if the proposed power plant violates any laws, policies and guidelines that protect the Sundarbans;
4. Assess the impact of the project on the human rights of the people dependent on the Sundarbans;
5. Examine all other information relevant to the mission.

1.2 Methodology

The mission collected primary data during its field visit to the power plant and surrounding areas by road and river. The members conducted one-on-one interviews and focus group discussions with key stakeholders including affected villagers, environmentalists, activists, lawyers, academics, journalists, human rights defenders and other members of the civil society, government officials and political leadership.³

The mission also assessed secondary data, including published documents, research papers, books, policy briefs, published government decisions, newspapers, documentaries, leaflets and brochures.

KEY CONCERNS

About 13,000 tonnes of coal will be used daily for the power plant, all of which will be imported through ships. The big ships can only come as far as Akram point, after which lighter vessels will carry the coal, for which 10 kilometers of riverways need to be dredged every year.

A thermal power plant of 1320 MW capacity is expected to annually produce the following pollutants :

- 7.9 million tonnes of Carbon Dioxide, equivalent to chopping off 340 million trees.
- 52,000 tonnes of Sulphur Dioxide, one of the main reasons behind acid rain, and lung and heart diseases.
- 31,000 tonnes of Nitrogen Oxide, which affects lung tissues and causes pulmonary diseases.
- 1900 tonnes of small particles, that cause bronchitis and other lung diseases.
- 1900 tonnes of poisonous Carbon Monoxide.
- 440 pounds of mercury, a highly poisonous water-soluble metal that, even in very small quantities, can be lethal to wildlife and humans.
- 590 pounds of poisonous arsenic.
- 300 pounds of lead, 10 pounds of cadmium and other heavy metals.
- 750,000 tonnes of Fly Ash and 200,000 tonnes of Bottom Ash, which is usually dumped in ash ponds. But this ash can blow in the wind, seep through the ground with rainwater and mix with water bodies, causing severe pollution. This ash will be dumped into 1414 acres of land vulnerable to flood to increase land height for the second phase of the power plant.



Source: National Committee to Protect Oil Gas Mineral Resources Power and Ports

³ Details of individuals and groups interviewed can be found in Annexure 1.

1.3 Key Findings

The key findings of the mission are under four chapters: Key Human Rights Concerns; the Environmental Impact Assessment; Government Response; and the National Thermal Power Corporation of India.

The chapter on key human rights concerns highlights the irregularities in the land acquisition and compensation process, which were conducted without proper consultation with affected communities and ignoring ground realities; numerous incidents of harassment and ill treatment of the local people as well as activists who have spoken against the project; and the loss of livelihood of many local people which has not been realistically captured by the EIA.

In the chapter on the EIA the mission has commented on the flawed procedures pursued by the government in launching the project even before the EIA was approved and especially the biased and distorted nature of the EIA. The section notes the mission's reflections of the environmental impact observed during a field visit to the vicinity of the coal power plant.

The chapter on government response focuses on the meetings the mission held with key government officials and their response to questions raised by the mission elaborating the process of implementation of the project, issues of compensation, and the government's strategy in addressing identified issues and gaps in the project.

The chapter on the NTPC examines the track record of the NTPC on similar projects especially in India, its failure to implement energy efficient projects in a transparent manner and critiques the decision of the government in its selection of such a company.

2. Background

2.1 The Proposed Coal Fired Power Plant

A Memorandum of Understanding (MoU) was signed between the governments of Bangladesh and India on 1 November 2010 to “enhance the traditional ties of friendship between the two countries through the development of cooperation for mutual benefit of both the countries.”⁴ The 1,320MW coal fired power plant project in Rampal is implemented by the Bangladesh-India Friendship Power Company (Pvt.) Ltd which is a joint venture of NTPC and BPDP.

A total of 1,834 acres of land has been acquired by the government for the construction of two adjoining power plants, of which one will be established in the first phase.⁵ The design of the first will leave provisions for another power plant of the same capacity to be established.

While the government promises a large boost to the power production of the country with this plant, there are concerns that it will have numerous irrecoverable adverse effects on the Sundarbans and that the project itself will benefit India much more than Bangladesh. Despite various reports and recommendations, strong public movements, including a Long March to Sundarbans from Dhaka, and an oil spill accident that raised severe concerns, the government has proceeded with the project as planned.

2.2 Location of the Plant

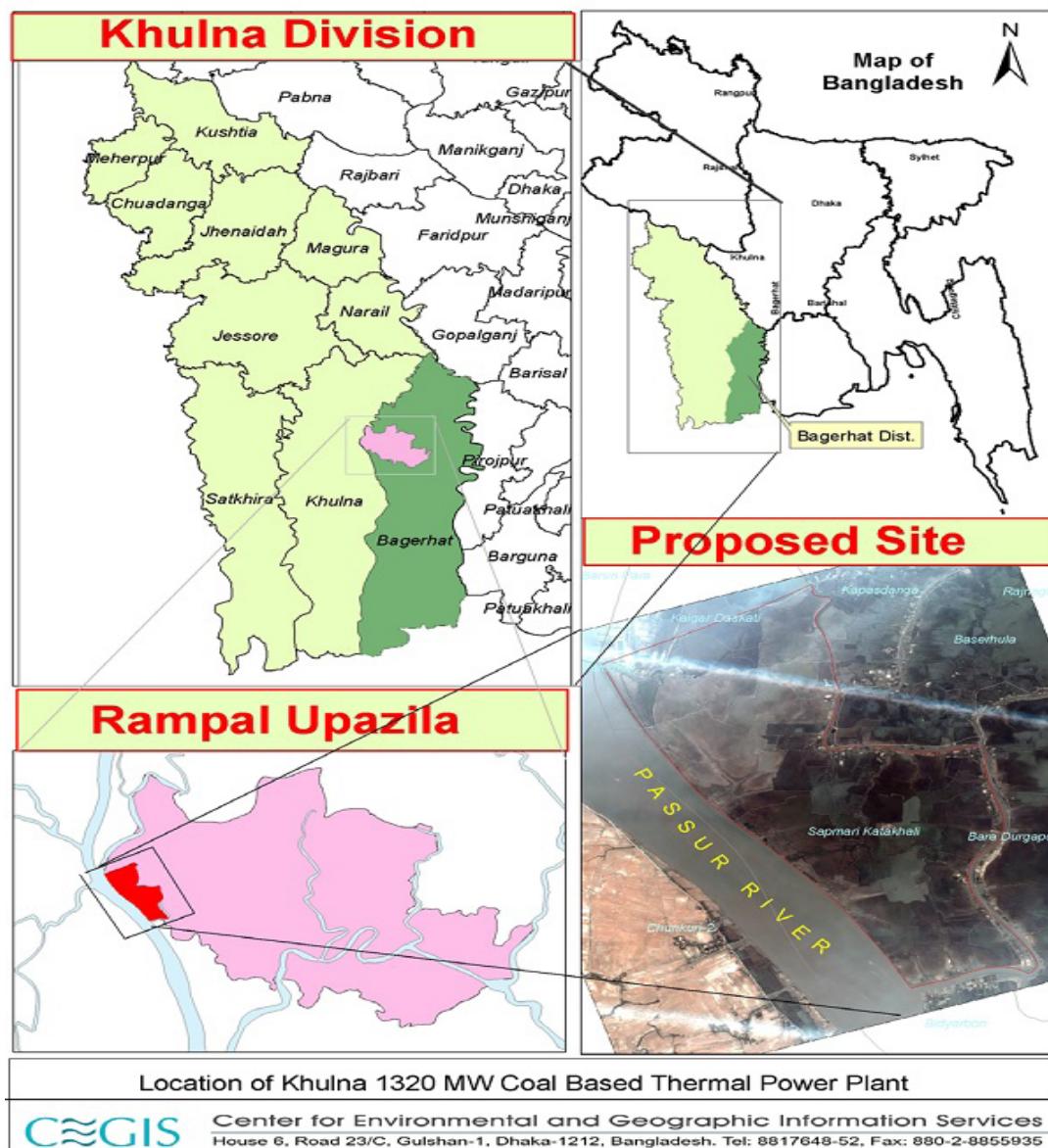
The power plant is being built in the Rampal Upazila of Bagerhat District.⁶ The sea is 115km away from Rampal Upazila and the proposed project area is 5km away from the Mongla Sea Port and 4km away from the buffer zone of the Sundarbans.

⁴ Brochure, Bangladesh-India Friendship Power Company (Pvt.) Limited (A joint venture for NTPC Ltd and BPDB), “Mautree Super Thermal Power Prokect 1320 (2 x 660) MW, Rampal, Bagerhat

⁵ The Rampal coal-fired power plant will produce a total of 1320 (2x660) Megawatts of electricity in the first phase, which is by far the largest-capacity power plant in the country. According to agreement, the Rampal power plant is a 50:50 ownership joint venture between NTPC and BPDB. The financing is divided as follows: 70% from loans, 15% from Bangladesh, and 15% from India. However, Bangladesh will have to pay back the loan and its interests, meaning that Bangladesh has 85% financial liability of the plant, while only 50% ownership. In case of halt of power production for any reason, Bangladesh will have to bear the entire loss. As per the agreement between BPDB and NTPC, if the coal is imported at \$105/tonnes, Bangladesh will buy per unit electricity at BDT 5.90 and if it is imported at \$145/tonne, the price will be BDT 8.85 per unit. NTPC and BPDB have already finalized import of coal at \$145/tonne, meaning the price will be BDT 8.85/unit, Rampal Electricity Power Plant and Our Environmental Consciousness, <http://alalodulal.org/2013/08/29/rampal/> (accessed on 10 August 2015)

⁶ Rampal Upazila is situated in the interior coast of the Bagerhat district and is 30km away from Khulna Metropolitan City and 320km southeast from the capital city, Dhaka. It is one of the largest Upazilas of Bagerhat and occupies 335.46-sq kilometre including 14.89-sq kilometre of river area.

With regard to geospatial reference, the project site lies between 22°37'0''N to 22°34'30''N and 89°32'0''E to 89°34'5''E. The administrative boundary comprises of Sapmari Katakhali and Kaigar Daskati Mauzas areas of Rajnagar Union under Rampal Upazila. The proposed coal power plant site is geographically located at 14km northwest of Mongla port and 14km north of the Sundarbans.



Source: Location of the site of the coal power plant in Rampal (EIA Report, p82)

The site for the coal power plant is said to be 14km away from the edge of the Sundarbans.⁷ Any changed soil and water conditions due to this construction, would have severe effects on

⁷ 4.4 Concluding Remarks on the Selected Site, Environmental Impact Assessment (EIA), p77, Final report on Environmental Impact Assessment of 2x[500-660] MW Coal Based Thermal Power Plant to be Constructed at the Location of Khulna, Government of the People's Republic of Bangladesh. July 2013 [http://www.bpdb.gov.bd/download/coal_EIA_report_rampal_khulna/EIA%20of%202x%20\(500-660\)%20MW%20Coal%20Based%20Thermal%20Power%20Plant%20at%20Rampal%20in%20Bagerhat%20District,%20Khulna.pdf](http://www.bpdb.gov.bd/download/coal_EIA_report_rampal_khulna/EIA%20of%202x%20(500-660)%20MW%20Coal%20Based%20Thermal%20Power%20Plant%20at%20Rampal%20in%20Bagerhat%20District,%20Khulna.pdf) (accessed on 10 August 2015)

these mangrove flora and fauna. The EIA Guide Manual, prepared by the Indian Ministry of Environment and Forests, states that there can be no preserved forest, animal sanctuary or bio-diverse forest within 25km of such a plant.⁸

2.3 Geographical Significance of the Location

Livelihood generation: Traditionally, agriculture was the main source of livelihood before shrimp cultivation became popular in the region and for which currently as many as 75% of the total cultivable land is used.⁹ There are nine major rivers - Passur, Mongla, Daudkhali, Kumarkhali, Poydahar, Darahona, Sela, Maidara and Bhola - which are the main sources of saline water for shrimp cultivation, which for the last two decades has become the key means of income generation in the area. There are some khals (small rivers), which also carry brackish water. In addition, there are countless small rivers surrounding the area.¹⁰

Proximity to Sundarbans: Sundarbans – a Ramsar and World Heritage Site – is the largest mangrove area in the world (3956 sq. km), the largest habitat of the Bengal tiger, and according to the International Union for the Conservation of Nature (IUCN) it is the only mangrove forest where tigers are found.¹¹ Mangroves have highly specialized vegetation, complex interdependence between species, and a wide range of biodiversity. Environmentalists believe that they are more dynamic and vulnerable to external influences than rainforests, and are thought to be shrinking rapidly.¹² The fauna and flora composition of the Sundarbans is very rich and diverse compared to other mangroves of the world.¹³ It has 66 species of vegetation, 200 species of fishes, 42 species of mammals, 234 species of birds, 51 species of reptiles, 8 species of amphibians and countless invertebrates.¹⁴

⁸ Objectives of EIA, p2-10, Technical EIA Guidance Manual for Thermal Power Plants by Ministry of Environment and Forests, Government of India http://envfor.nic.in/sites/default/files/TGM_Thermal%20Power%20Plants_010910_NK.pdf (accessed on 10 August 2015)

⁹ Three decades ago farmers were dependent mainly on cereal crops like paddy and wheat etc. or in the cultivation of pulses, chilli, onion, turmeric, zinger, potato, jute etc. - Karim, M. R. 2000. Shrimp culture and changing land use-pattern in Rampal (Upazila), Bagerhat upzila: a spatial analysis. Dept. of Geography and Environmental Studies, Ph.D. thesis (Unpub.), Rajshahi University, p294.

¹⁰ The river Passur is connected with the Bay of Bengal and passes through the Gaurambha and Rajnagar unions, while the river Mongla and Poydahar and other sources of saline water pass through the Perikhali, Rampal, Bhojpatia, Mallikerber and Dema unions. Sela, Bhola, Daudkhali and Kumarkhali are also the sources of saline water for Ujalkur, Baintala and Banshtali unions. Besides these, each large river is connected with many small rivers/ khals, which are spread out throughout different parts of Rampal upazila.

¹¹ Bangladesh Enlarges Sundarbans Ramsar Site http://archive.ramsar.org/cda/en/ramsar-media-sites-bangladesh-enlarges/main/ramsar/1-25-34%5E18490_4000_0 (accessed on 10 August 2015)

¹² Rapidly Shrinking Sundarbans threat to the Bengal tiger: Study, The Hindu, Business Line, 11 January 2013. <http://www.thehindubusinessline.com/news/science/rapidly-shrinking-sundarbans-threat-to-the-bengal-tiger-study/article4298485.ece>

¹³ Choudhury, S.I., 2001 the Sundarbans at a Glance. In: G.I Chudhury (eds.) State of the Sundarbans. FEJB, MoEF and UNDP. p135-137

¹⁴ *Ibid*, p 06

The Sundarbans is an important natural resource that provides a large number of products such as timber, pulpwood, fish, thatching materials, honey, bees wax shells etc.¹⁵ Approximately 4 million people live in and around Sundarbans, and another 2 million of the country's southern parts are directly or indirectly dependent on it. The mangrove forest acts as a natural barrier to cyclones, tidal bores and salinity ingressions and protects the densely populated agricultural areas to its north.¹⁶ With time, the physiognomic features of the Sundarbans have been substantially altered by human activities and the mangrove forests are being destroyed due to commercial activities and human-induced climate change.¹⁷

¹⁵ Sundarban's Description , Sundarbon <http://sundarbonarea.blogspot.com/> (accessed on 10 August 2015)

¹⁶ Although mangrove ecosystems have tremendous value for coastal communities and associated species, they are being destroyed at alarming rates. Human threats to mangroves include the overexploitation of forest resources by local communities, conversion into large scale development such as agriculture, fishery, salt extraction, urban development and infrastructure, and diversion of fresh water for irrigation (UNEP, 1994). Mangrove flora is very specific for their salt tolerance habitats, tidal inundation, and salt elimination nature. Any changed soil and water condition has severe effects on these mangrove flora and fauna. But unfortunately, the physiognomic features of the Sundarbans are very much interfered by human activities, and mangrove forests are gradually getting eliminated from these areas (UNEP 1996). Also see Sundarbon <http://sundarbonarea.blogspot.com/> (accessed on 10 August 2015)

¹⁷ Naskar, K.R. 1996. Status of the Mangroves in Indian Sundarbans- In the perspectives of India and the World Mangal. Status Paper. William Roxburgh Memorial Seminar on Sudarbans Mangal. CWS. Culcutta. Nov. 8-10.

3. Key Human Rights Concerns

3.1 Land acquisition and compensation process

Land acquisition

A total of 350.80 acres of land has been acquired by the government in Koigordasmouja and 1,483.20 acres in Shapmari and Katakhalmouja for the construction of the coal power plant. The total acquired 1,834 acres of land was handed over to the BPDB on 2 January 2012¹⁸ and initial construction has begun on 400 acres of land. The mission recognised several irregularities in the land acquisition process.

According to the Acquisition and Requisition of Immovable Property Ordinance, 1982 the district administration must initially issue a 3 dhara notice, upon the decision of the government to acquire the land. Following the issuance of this notice, the affected local people have an opportunity to submit their objections to the Deputy Commissioner of the relevant district (6 dhara notice). If the objections are resolved, the district administration issues another dhara notice to relevant authorities to provide compensation to the affected (7 dhara notice) and mentions that the land acquisition has been completed.¹⁹

The Mission discovered that the land acquisition process began even before the site clearance and environmental clearance was obtained. Though the 3 dhara notice was served on 23 August 2010 the site clearance was not obtained till 23 May 2011. Further, the EIA was published on 17 January 2013 and was approved as late as 5 August 2013. However, the final agreement between Bangladesh and India regarding the power plant was signed on 20 April 2013, almost three months before the EIA was approved.

It is evident that the land acquisition was completed and the land was handed over to BPDB without following due process. The affected land owners claimed that they first heard about the project when the 3 dhara notice for land acquisition was issued. They have expressed their resistance to the project from the inception. When some land owners refused to move from their inherited paternal land in protest, they were driven off the land with the help of thugs and law enforcement members through violence and intimidation tactics. It was claimed that before issuing the 6 and 7 dhara notices they were warned never to set foot on the land again.

¹⁸ Transparency International Bangladesh (TIB), "Rampal and Matarbari Power Projects: Governance Challenges in Environmental Impact Assessment and Land Acquisition," April 2015 accessed at http://www.ti-bangladesh.org/beta3/images/2015/fr_ffs_coal_15.bn.pdf (in Bengali Language)

¹⁹ Government of Bangladesh, Acquisition and Requisition of Immovable Property Ordinance, 1982 accessed at http://bdlaws.minlaw.gov.bd/pdf_part.php?id=619 (accessed on 10 August 2015)

Moreover, the Mission learnt that the affected families submitted their formal objections to the land acquisition to relevant authorities after the issuance of the 3 dhara notice within the stipulated timeframe. These objections, however, were not taken into consideration by the government.

The informants mentioned that they were not given the 6 and 7 dhara notices on time. It was also discovered that as many affected land owners protesting the project were reluctant in accepting the notices, their land was acquired without issuing the notices. Even though all have not received compensation yet, construction has already begun on the acquired land. Yet, the district administration and elected officials informed that the compensation process has been completed and that some owners refused to take the compensation.

The final EIA report states that 150 families (based on the census of 2011) would be displaced by the land acquisition process. However, according to the local people of the area, the number of affected people is significantly higher. 3,500 land owning families submitted a written application to the District Commissioner of the District of Bagerhat in November 2011 detailing their objection to the land acquisition process and alleging that they had been directly affected by the acquisition. Locals also claim that another 400 landless families, constituting at least 1000 people, depended on this land directly for their lives and livelihoods, but have now been forced to move. Furthermore, there were many people who did not live on the acquired land but depended on it for employment; they too have now been dispossessed as a result of the land acquisition process. It is evident that no socioeconomic survey was conducted as part of the EIA and especially on the exact number of people that would be displaced.²⁰

According to the villagers, an unwritten embargo has been placed on buying and selling of all land within a 1-3 km radius of the acquired site. Under the circumstances, they fear that those living in nearby areas would be displaced once – or even before – the power plant is operational and more land is acquired.

With 400 acres filled up, locals claim that the remaining acquired land is now under the control of members of the ruling party in the area. Owners are not allowed access to these lands which is now being used for shrimp cultivation by other parties. The mission observed shrimp cultivation metres away from the newly constructed boundary wall.

According to the “Report on the Land Requirement of Thermal Power Stations” 1800 acres is too much land for a coal-fired thermal power plant. A 2 x 660MW plant should not require more than 1,367 acres, including land for township, ash pond and other facilities that lie outside the plant.²¹

²⁰ 3.19 Resettlement and compensation, Environmental Impact assessment (EIA), p 70. Also see Table 3.4, Location of the Sample Mauzas, p66, Final report on Environmental Impact Assessment of 2x 500-660 MW Coal Based Thermal Power Plant to be Constructed at the Location of Khulna, Government of the People's Republic of Bangladesh (EIA report).

²¹ Report on the Land Requirement of Thermal Power Stations, December 2007, p 18-43. Central Electricity Authority, Govt of India, http://www.cea.nic.in/reports/articles/thermal/land_requirement.pdf (accessed on 10 August 2015)

Compensation process

A total of BDT 625,000,000 has been allocated as compensation for the displaced, and according to the District Administration of Bagerhat, BDT 564,900,000 has been disbursed till 30 March 2014, which constitutes 92% of the total compensation amount.²² The compensation amounts were decided without consulting land owners.

The buying rate of the land is determined as per government policy and is significantly lower than the actual selling price of the land in the area according to local informants. Legally, the assessment for compensation is made based on the market value of the property on the date of the acquisition and is based on the registered value of similar property bought and/or sold in the area in the past 12 months.²³ However, as people often devalue their land price to pay lower registration fees and taxes, the registered value of the land is considerably lower than the market value. Hence, the compensation provided is insufficient when compared to the replacement value of the property.

For each acre of land, owners were given BDT 270,000, even though the market price of equivalent land in nearby areas is BDT 500,000 – 700,000. Locals claim that no committee was formed to determine or review the amount of compensation. According to the Acquisition and Requisition of Immovable Property Ordinance, 1982, the owner of the property is entitled to compensation, which includes compensation for all structures, buildings, corridors, huts, trees or standing crops thereon.²⁴ However, the compensation package provided to the victims did not take into account these additional aspects. Further, the existing law does not provide assistance for relocation, even for those who lose a homestead.²⁵

According to those affected, their families depended on the land for their livelihoods. Many had shrimp farms, on which the workers' families were also employed. In addition, there were vast areas of agricultural land for paddy and other kinds of produce as well as fields for cattle grazing. The victims stated that the amount of compensation provided to them in lieu of this land was not enough to start a new life elsewhere. The lump sum given as compensation was spent within a very short period of time, and the affected families were left with no direct source of income. Now, many are struggling to even provide education to their children.

²² Transparency International Bangladesh (TIB), "Rampal and Matarbari Power Projects: Governance Challenges in Environmental Impact Assessment and Land Acquisition," April 2015 accessed at http://www.ti-bangladesh.org/beta3/images/2015/fr_ffs_coal_15_bn.pdf (in Bengali Language)

²³ Al Atahar, Syed. "Development Project, Land Acquisition and Resettlement in Bangladesh; A Quest for Well Formulated National Resettlement and Rehabilitation Policy." International Journal of Humanities and Social Science 3, no. 7 (2013): p306-19. http://www.ijhssnet.com/journals/Vol_3_No_7_April_2013/33.pdf. (accessed on 10 August 2015)

²⁴ Acquisition and Requisition of Immovable Property Ordinance, 1982

²⁵ Al Atahar, "Development Project, Land Acquisition and Resettlement in Bangladesh; A Quest for Well Formulated National Resettlement and Rehabilitation Policy." International Journal of Humanities and Social Science 3, no. 7 (2013)

At least 400 landless families lived and worked on the acquired land have also been displaced due to the acquisition. They received no compensation as the law does not recognize the right of the landless. As such, an already impoverished community, with no resources of its own, are now in a precarious position with limited or no prospects.

It is alleged that the compensation process was fraught with irregularities and corruption. According to the affected, for every BDT 100,000 they received as compensation, they had to pay as much as BDT 20,000 on average as a bribe.

Although affected local people sought solutions to the problems through available mechanisms they have been denied justice by the government.

3.2 Mistreatment and harassment of dissenting voices:

The affected locals have met with elected local representatives and relevant government officials to state their demands but instead of action, they have received false assurances, hostility and harassment. Activists claimed that they were mistreated when meetings were held with government representatives. In one instance, the signed petition which was presented to an elected official was torn up.

Affected local people and activists protesting against this 'development project' have been constantly harassed by powerful quarters through threats, intimidation, assaults and filing of false cases. Protests organised by different groups over the last three years have been met with resistance from official quarters, and those attending the protests have been attacked by local gangsters as well as law enforcement officials. Activists were assaulted when they came to Rampal during a long march in protest of the power plant in 2013. The property of one of the most prominent leaders of the protest movement in the area was set on fire and some others were attacked physically. The government has declared Section 144 of Code of Criminal Procedure on unlawful assembly and curfew multiple times prohibiting the assembly of five or more persons or holding of public meetings in order to dissuade protestors and has used law enforcement members and tactics of violence and intimidation to deter people from exercising their freedoms of assembly, mobility and expressions.

The Mission was informed that Parvez Ahmed was tortured by police, Hemayetul Islam was arrested without any warrant, Nazir Ahmed Munshi and Amjad Hossain Munshi were threatened and evicted forcefully from their land and property. False cases were filed against activists Sushanta Das, Sanjoy Das, Jiban Das, Jahid Munshi, Wahed Munshi and Musharraf Shekh.²⁶ The Mission was informed that many others have been threatened to refrain from protesting and some being warned that should they continue, cases will be filed against them as well.²⁷

²⁶ Interview with the local activists Sushanta Das and Noor Alam

²⁷ Interviews with the members of *Krishi Jomi Rokkha Shongram* Committee (The Committee for the Protection of Agricultural Land) in Khulna and Mongla,

3.3 Loss of livelihood

As per the EIA, the 1834 acres of land acquired “is dominated by shrimp aquaculture cum rice cultivation. In general, agricultural land covers 75% of the study area, and 95% of the project area”.²⁸ The EIA states that this land produces 62,353 tons of rice in the entire study area (10 km radius from plant location) and 1285 tons in the project area and 140,461 tons of non-rice crops²⁹. An estimated 5218.66 M. ton is produced in the study area, and 569.41 M. ton in the total project area³⁰. Meanwhile, the livestock and poultry production per household in the project area and study area has been estimated at 4 and 3 cattle, 3 and 2 buffaloes, 4 and 4 goats, 1 and 1 sheep, 5 and 5 duck and 7 and 6 chicken respectively.³¹

The EIA notes that the area has a rich and diverse fresh water habitat, and that the network of river systems in the region maintains the biological balance of the major fish groups.³² It acknowledges that the acquisition of these lands and subsequent construction “might lead to a loss of these habitats” and that “[o]pen water fisheries habitats like rivers (Passur, Maidara etc), *khals* and inter-tidal area may be affected due to dredging, traffic movements, and oil and chemical spilling.”³³ However, the report states that the benefits of the proposed project outweigh the costs, without evidence for such.

If agricultural land and habitats for fish are destroyed, it has a disastrous impact not only on the environment but also on the population that depend on them for their lives and livelihoods. According to locals, the loss of land has pushed them towards a vulnerable future; for many, the agricultural produce from their homestead land was enough for them to sustain their families, but now they have lost their direct source of income. The same is true for families which depended on fish cultivation and earnings from cattle rearing.

According to the members of *Krishi Jomi Rokkha Shongram* Committee (The Committee for the Protection of Agricultural Land), the project area consists of agricultural land, fish farms, shrimp farms, vegetable farms, milk-producing farms, mosques, temples, graveyards and other business ventures. Every season, this area produces fish, paddy, meat etc worth millions of taka.

Workers who toiled on these lands have also lost livelihood opportunities, and are struggling to find work in other areas. In particular, the older generation of affected people, state that as they do not have any marketable skills and therefore employers in nearby areas are not

²⁸ Final report on Environmental Impact Assessment of 2x (500-660) MW Coal Based Thermal Power Plant to be Constructed at the Location of Khulna, Government of the People's Republic of Bangladesh. July 2013. p135 (accessed on 10 August 2015)

²⁹ Kallol Mustafa, How The Rampal Coal Power Plant Will Destroy The Sundarbans, accessed at <http://ncbd.org/?p=794>

³⁰ *ibid*

³¹ Final report on Environmental Impact Assessment of 2x (500-660) MW Coal Based Thermal Power Plant to be Constructed at the Location of Khulna, Government of the People's Republic of Bangladesh. July 2013, p197 (accessed on 10 August 2015)

³² *ibid* p 198,

³³ *ibid* p. 226

willing to employ them. Small businesses in the area are also losing out, as they do not have the required capital to set up shops in other areas.

The government has promised that the construction of the power plant would create jobs for people in the area and, as such, would benefit them in the long run. The 1320MW coal based power plant is supposed to hire 4000 people for construction purposes and 600 people once the plant is operational.³⁴ This project would require skilled workers for construction. But people in the area are mostly farmers, fishermen or manual labourers who do not have the skills to apply for such jobs. As a result people from other areas are more likely to be hired. Locals fear that they would be displaced even further when outsiders move into the area.

Also according to locals, however, although construction work has begun, not many locals have been employed for the project. The workers being hired are either from the hometowns of the powerful (pro-project) people in the area and ruling party members, or associated with them in some capacity.

³⁴ National Committee to Protect Oil Gas Mineral Resources Power and Ports. *There are Many Alternatives to Producing Electricity, but there is no Alternative to the Sundarbans*, National Committee to Protect Oil Gas Mineral Resources Power and Ports. 2013, p 4. Also see Sundarbans under threat, Daily Star, 25 July 2015. <http://www.thedailystar.net/in-focus/sundarbans-under-threat-116224> (accessed on 10 August 2015)

4. The Environment Impact Assessment

4.1 Description of the Assessment

The purpose of any EIA is to evaluate the anticipated effects on the environment of a proposed development or project prior to the decision to move forward with the proposed action. However, for the Rampal coal power plant, the joint venture between NTPC and BPDB was signed on 29 January 2012, and land acquisition process for the project began on 23 August 2011, two years before the EIA was actually approved by the DoE on 5 August 2013. The decision to sign the deal and acquire the land before an assessment on the environmental viability of the site was made is a clear violation of environmental rules and regulations. This questions the very legitimacy of the EIA.

The “Final Report on Environmental Impact Assessment of 2x (500-660) MW Coal Based Thermal Power Plant to be constructed at the Location of Khulna” was prepared by the Center for Environmental and Geographic Information Services (CEGIS), and was approved by the Bangladeshi environmental authorities.

Notably, CEGIS is a government-owned organization (not a non-partisan organisation) which raises questions on the objectivity of the report. In fact, its acknowledgement section blatantly states that the institution received ‘instructions’ and ‘guidance’ from government stakeholders,³⁵ compounding concerns regarding the legitimacy of the EIA.

As the EIA Guidelines for Industries, 1997 do not specifically state the requirements of the institution conducting the EIA, no existing law or rule was violated in delegating the task to CEGIS.³⁶ However, environmental groups and activists believe that there was considerable pressure on CEGIS to give a positive EIA, which explains the contradictions, limitations and gaps in the EIA.

³⁵ The report quotes “The Center for Environmental and Geographic Information Services (CEGIS), a Public Trust under the Ministry of Water Resources, is grateful to Bangladesh Power Development Board (BPDB) for awarding the contract for rendering consultancy services under the caption of “Initial Environmental Examination (IEE) and Environmental Impact Assessment (EIA) of 2 × (500-660) MW Coal Based Power Plant to be constructed at the location of Khulna” to CEGIS. CEGIS greatly acknowledges the visionary thinking provided by Dr. Towfiq-e-Elahi Chowdhury, BB, Honorable Advisor to the Honorable Prime Minister, People’s Republic of Bangladesh and Mr. Muhammad Enamul Huq, MP, Honorable State Minister, Ministry of Power, Energy and Mineral Resources for their valuable guidance and constructive comments on the study plan and approach. CEGIS is also grateful to Mr. MdAbul Kalam Azad, Former Secretary, Power Division, the Ministry of Power, Energy and Mineral Resources (MoPEMR) and Dr. Moowar Islam, Secretary, Power Division, MoPEMR for their continuous guidance. CEGIS is also grateful to Mr. A S M Alamgir Kabir, Former Chairman, BPDB, and Md. Abdul Wahab Khan Chairman, BPDB for their informative instructions in different stages of the study.

³⁶ Department of Environment, EIA Guideline for Industries 1997, Ministry of Environment and Forest, Government of the Peoples Republic of Bangladesh, http://www.doe.gov.bd/publication_images/34_19_a_sectorwise_industrial_guidelines_final_report_main_re.pdf (accessed on 10 August 2015)

EIA has not made any reference to the impact of the project on human health, crop yields, water bodies, forests, avian, terrestrial and aquatic ecology and structures, livelihoods, migration, reverse ghettoization; all of which are affected by a plant this size.

The report, written in English, is 676 pages long and was not disseminated among any citizens' groups. It was available only online and the time for sending people's views on the report was limited to two weeks, that too, during the Eid holidays when all the offices were closed for 3-5 days. It appears that people's access to the report was deliberately restricted by the government.

According to the EIA Guidelines for Industries, 1997, public hearing and public participation must be ensured during the environmental assessment. The EIA states that different groups of people, including farmers, fishermen, development workers, activists etc, were consulted. Locals claim however, that opinions reflected in the EIA were misleading, partisan and unrepresentative of people's true sentiments. Informants alleged that most of the people who were invited to discussions for the EIA were affiliated with the ruling party, and as such, they did not represent the people's concerns about the environment, loss of livelihoods etc.

Further, the activist groups that attended the consultation opined that although the public hearing was conducted as a legal necessity, their opinions and recommendations were not accepted. Within a week from the event, the EIA was finalized, without incorporating any of the changes suggested by the stakeholders.

4.2 Clearance from the Department of Environment

Timeline for obtaining the DoE clearance for EIA was executed as follows:

11 October 2010	BPDB applied for a site clearance certificate for the proposed coal power plant in Rampal.
16 March 2011	The DoE informed BPDB that since the site was so close to the Sundarbans, the UNESCO World Heritage site, it could not issue a site clearance without an EIA and a stakeholder consultation at the national level.
02 May 2011	A meeting was held with members of DoE, BPDB and Ministry of Power, Energy and Mineral Resources, where the DoE was "requested" to issue the certificate.
15 May 2011	DoE issued the clearance based on some conditions, including the necessity to conduct an EIA entailing primary data/baseline information by a multi-disciplinary expert team. It also stated that no Letter of Commencement could be opened before the EIA was approved and that if the High Court gives a directive to stop these activities, the clearance would be considered null and void.

27 October 2011	Draft EIA submitted and sent to Forest Ministry, Ministry of Fisheries, Water Development Board and IUCN for their written feedback.
26 February 2012	Feedback of the above bodies were discussed at a special meeting. Based on the feedback and the ToR of DoE, it was decided that the EIA needed to be revised due to the sensitive location of the site.
29 April 2012	Project authorities submitted a revised copy, but it was found that the revisions were not reflected in the EIA.
20 May 2012	The DoE again asked CEGIS to make the required urgent revisions. It was also decided that once it was revised, it should be uploaded to the website for public access and feedback. DoE also requested that a national workshop be organized with relevant stakeholders.
	Several subsequent meetings took place over the next 6 months with the project authorities and the consultancy firm, and the DoE requested further modifications.
17 January – 17 February 2013	The draft was uploaded on DoE's website for public opinion
15 January 2013	Stakeholders and interested individuals were asked to submit their specific opinions through email by this date.
12 April 2013	A review meeting was held where opinion of the stakeholders and public was discussed and based on the suggestions the EIA was further reviewed.
	Another meeting was held with project authorities, CEGIS and DoE, in which DoE requested more changes.
10 July 2013	Final revised EIA was submitted to the DoE.
5 August 2013	The report was approved by the DoE with 59 conditions to be fulfilled by the project.

If the conditions of the DoE are met properly, it will impact the economic viability of the project. The Mission could, however, find no evidence of the company complying with these conditions, even though the government guarantees that the conditions of the DoE would be met.

4.3 The EIA: biased and distorted

The EIA prepared by CEGIS has been rejected by various concerned national and international bodies. They have called upon the government for a comprehensive EIA with a scientific

base. The Mission noted the concerns highlighted by different stakeholders and conducted an independent assessment of the EIA.

The following limitations question the EIA's legitimacy:

- The EIA states that all gaseous pollutants will be discharged after treatment, but there is no treatment plant in the design of the project.
- The EIA did not use the proper methodology for primary data collection of air, water, soil, biodiversity etc. It uses secondary data, collected before 2010, for most of the parameters. Although the study was carried out from August 2010 to August 2011, the data was actually collected from different organizations before that time period. There is no information about the present condition of the flora and fauna, both terrestrial and aquatic, of the surrounding areas of the project site.
- Only isolated air samples were assessed at three places (8 to 10 km distance from project site), Sarankhola Upazila (43 km south east), Khulna City (23 km North West). There is no information on the project site, the Sundarbans, Mongla port area.
- According to the EIA report, the project will be in operation for 25 years. This will have a huge damaging effect on the mangrove forest. Equipment for construction will be transported through the river route. The resultant emission of oil, disposal of waste and pollution of sound and air will perilously affect the wildlife and overall ecosystem of the forest. However the report itself provides an escape clause and states, "If all these can be carried out under the environmental laws, no damage will be done" (p 268).
- Air Pollution: The EIA report says that 142 tonnes of SO_2 and 85 tonnes of NO_2 will be emitted daily from the plant. Due to this extra emission, the air of the Sundarbans "from November to February" will see an increase of SO_2 from 08 micrograms to 53.8 per cubic metre and of NO_2 from 16 micrograms to 51.3 per cubic metre. This will negatively affect the ecology of the whole region. For Environmentally Critical Areas (ECAs), the highest limit of these gases is 30 micrograms per cubic metre as per the ECR 1997. To circumvent this fact and to show that the emission does not go beyond the allowable limit, the report considered the Sundarbans as a "residential area" instead of an ECA.
- There is a possibility of the concentrations of SO_2 , NO_2 and O_3 impacting on human health and the forest area. The EIA does not seem to have mentioned O_3 generation as a secondary pollution and its impacts on vegetation and human health [p 271 – 283].
- Water Pollution: Discharged water from coal-based power plants contains pollutants. The internationally accepted practice therefore, is 'zero discharge policy' which means the used water, whether refined or not, should not be discharged into the river. The 5,150 cubic meters of discharged water will also change the temperature and velocity of the water system in the Sundarbans.

- The report says 9,150 cubic metres of water will be withdrawn every hour from the Passur river and 5,150 will be discharged after cooling the plant (Page 285). Therefore the river will lose 4,000 cubic metres of refined water per hour, but the report ignores how this loss will affect its navigability, salinity, silt flow and tide, the fish species, dolphin habitats in Passur river and plants dependent on it. The report merely states the amount of water withdrawn is less than 1% of the river's wintertime flow of water, a claim which is based on a Water Development Board report done in 2005.
- Noise Pollution: The plant's turbine, compressor, generator, cooling tower etc will generate huge noise, which may exceed the DoE limit. The report proposes developing a 'green belt' around the plant to mitigate this problem (p 284). However, the pollution occurring in the intervening period of time until the growth of the 'green belt' is not mentioned. Further, the report also mentions the noise pollution generated outside the plant by dredging activities, transportation of coal and heavy equipment through the rivers. Although acknowledged, these issues (p 284) solution to these issues are not given.
- The plant will generate 0.94 million tonnes of ash, 80% of which is fly ash and the rest bottom ash. This ash contains various toxic metals including arsenic, lead, mercury, nickel, vanadium, beryllium, barium, cadmium, chromium, selenium and radium which may cause serious damage to the environment.
- The ash ponds and the discharge of cooling water will also have impacts. There seems to be inadequate assessment of these impacts.
- The EIA report admits that "Despite efficient ash management system, some excess ash might be produced and dispersed to the surrounding area ..." (p271) and that "failure of waste management and ash management may cause release of these hazardous wastes to the environment that might also contaminate the food chain." (Page 287-288). However, it is also mentioned in the report that 1,414 acres of the plant's total acquired land will be filled with this ash, which will ensure its maximum utilization (p 263). But the report largely neglects the harmful effects that this toxic ash may have on the underlying water layers or when carried to the nearby river with rain water or mixed with the air.
- Dust particles, fly ash, discharge of solid and liquid waste, and emission of SO_2 , NO_2 and CO_2 will pose serious health hazards to workers at the plant and also to people around the area. The EIA report admits that the "contamination of the cooling tower" will expose people to "pneumonia in the surrounding" (p 291). But it is unclear how these effects would be mitigated.
- Nothing yet has been decided about the source of the coal supply to the plant. Without specifying which country the coal will be imported from, the extent of damage from the coal cannot be assessed by an EIA. However, the company is yet to decide from which country it would import coal. Also, the quality of the coal is unknown, making it impossible for the EIA to state harm that will be caused.

It is mentioned in the EIA that the proposed coal power plant will create some pollution but this pollution will be mitigated as the project area is cyclone prone and as the effect of precipitation on reduction of air pollutants is temporary. However, the precipitation will dissolve SO₂ and NO₂, both being acidic gases, and which would come down as acid rain leading to soil erosion. The combination of acid rain and dry emission of NO₂ and SO₂ would corrode soil without sufficient buffering capacity to neutralize these gases, and soil will slowly turn acidic which will have lasting damage on the terrestrial and aquatic ecology. The EIA does not deal adequately with this issue [p 271 – 283].

4.4 Environmental impact

The severe damages to the ecosystem during the four and a half year construction of the plant due to excessive carriers on the rivers, clearing of forests, leaked oil, sound and light pollution, disposal of waste and for dredging of the rivers (required for the navigability of carriers carrying supplies) are a cause for concern.

Another concern is that the coal fuel for the power plant will be transported through waterways in the Sundarbans, which will cause heavy waterway traffic through this ecologically-sensitive river (Passur river is a sanctuary of Ganges river with dolphins, especially Irrawaddy dolphins and river turtles) where the wastes, sounds, waves due to the movements and light pollution will destroy the habitats, and any accident or spillage will cause an ecological disaster. The narrowness of the waterway compels the coal to be transported from the larger vessels to smaller ones which would then be transported to the site. Akram point which is located in close proximity to the Sundarbans will be the anchorage point of that operation. External vessels are to be used for transportation, with five vessels continuously travelling through the route. The shuttle service of coal is supposed to make 400-500 trips a year. In order to merely establish the anchorage, dredging of 30 million cubic meters of fill (corresponding to a volume of 200 football fields, 30 meters deep) needs to be carried out.³⁷

Extensive dredging of riverbed and seabed areas would harm the aquatic biodiversity, endangering the freshwater dolphins and other species living in the Passur river. Dredging can cause acidification and change the chemistry of the water that can severely affect mangrove vegetation.³⁸ Even though the EIA stipulated that separate EIAs be conducted for coal transportation through the Sundarbans and for dredging, this has not been conducted to date.

Acid rains and inhabitants' lung diseases will be caused by the sulphur and nitrogen gases produced during the operation of the plant. Solid and liquid wastes from the plants will also infiltrate the river and canals, and spread further into the Sundarbans.

With the complex bio-diverse interdependence, any pollutant that infiltrates one part of it will continue to afflict others. Further, the natural food chain will all be affected. For instance,

³⁷ The Council of Ethics, Government Pension Fund Global, Recommendation to exclude National Thermal Power Company Ltd. from the investment universe of Government Pension Fund Global, p 227. <http://etikkraadet.no/files/2015/01/Council-on-Ethics-2014-Annual-Report.pdf> (accessed on 10 August 2015)

³⁸ *ibid*

if the leaves of Keora trees are affected by sulphur, the sulphur will affect the deer too which eat the Keora leaves. Since food chains are typically in the shape of pyramids in terms of biomass, and the higher a component is, the smaller it is, the pollutant will only become concentrated as it goes higher into the food chain.

If the government plans to transport coal by rail in the instance it decides to purchase a coal mine in India, it is essential to conduct an EIA on transporting coal on rail prior to its operation.

The Oil Spill

On 9 December 9 2014 an oil tanker named South Star VII carrying 350,000 litres of furnace oil sank in the Shela River in the Sundarbans. Over the next week, the oil spread over 500 square kilometers through the network of canals in the Sundarbans, blackening the shoreline and jeopardizing the flora and fauna of the area. The spill took place at a protected mangrove area, which is home to the Irrawaddy and Ganges dolphins. Despite repeated appeals from different quarters to contain the spill urgently, the only step taken by the government was asking the local communities to collect the furnace oil using fishing nets, sponges and any other "manual" means. Locals had no training, experience and most importantly, no protective gear or other appropriate equipment to carry out this task. As a result, many suffered from immediate health problems.

*Source: Bangladesh Oil Spill Disaster threatens Wild Life in Sundarbans Forest, Current Affairs 13th -14th December 2014,
<http://placement.freshersworld.com/power-preparation/Current-Affairs-December-2014>*

The lack of a formal oil spill contingency plan, coordination among different ministries and political will caused the oil to spread over such a large area. This failure of the Bangladeshi government to handle the oil spill has highlighted just how ill equipped it is to monitor cargo through the Sundarbans, prevent accidents from happening and contain the damage if an accident does occur. The risk to the Sundarbans would increase exponentially if the Rampal power plant is allowed to be built, with large amounts of coal transported through the rivers in the forest on a daily basis. The government's apathetic attitude and refusal to acknowledge the damage the oil spill has caused is also a major cause for concern and it shows the lack of commitment by the government in protecting the Sundarbans. The government has allowed vessels to ply through the same route again, even after the accident, in spite of strong protests.

5. Government Response

5.1 The Department of Environment

The DoE expressed serious concern about this project from its inception. The officials formally placed objections in an inter-ministerial meeting organized by the Ministry of Power on Rampal power plant at the earlier stage of the government initiative.

Discussions with government officials suggest that the decision to declare the Sundarbans as an ECA has been based on the government's long term plans of industrialization of the region. For instance, although the government first included the Sundarbans in the list of ECAs, it withdrew it shortly after, realizing that declaring the Sundarbans as ECA would impose legal barriers on the ongoing industrialization of the region. A few years later, the government formed a new legal framework, relaxing some legal barriers, and declared a core and buffer zone for the reserve forests, and included Sundarbans as an ECA.³⁹

The DoE did not issue a site clearance without the EIA for the construction of the coal power plant and the approval process took nearly three years to complete. At one point, the DoE had to approve the EIA as the decision was taken from a higher government authority. However, the DoE passed the EIA conditionally and stipulated 59 conditions to be met.

5.2 Dr. Tawfiq-e-Elahi Chowdhury, the Energy Advisor to the Prime Minister

Despite protests from various quarters, the government has consistently maintained that the coal power plant would not cause any damage to the Sundarbans. The Energy Advisor Dr. Tawfiq- e- Elahi Chowdhury informed the Mission that the Rampal project was part of a comprehensive plan of the government to make the country energy efficient. Insisting that coal-based power plants are the most feasible option for the country currently, the Advisor stated that Rampal was picked as a suitable site based on a few considerations: it was easily accessible for transport of coal; it was a "safe" distance away from the Sundarbans; and that it would displace very few people.

He assured the Mission that latest state of the art technology will be used to design, construct and operate the power plant. He mentioned that a 'super critical technology' will be used, although when asked what that entailed, he said "there is no definition of a super critical

³⁹ Laskar Muqsudar Rahman, March 2005. Policy, Law and Administration for Protected Area Management in Bangladesh, p4, http://www.nishorgo.org/tbltd/upload/pdf/0.77383100%201354819309_Policy%20Law%20and%20Administration%20for%20PA%20Management%20in%20Bangladesh.pdf

technology, but we want to convey that we will use the best efficient engine with the best coal in the world."

The fly ash and bottom ash will be collected and sold and kept in a pond to prevent its diffusion. The chimney would be 275m high, so the pollutants will be released high in the air and not reach the flora and fauna of the area. Because the wind at Rampal blows away from the Sundarbans, any potential pollutant will be carried in the opposite direction.

There will also be a fuel treatment plant, and air and water monitoring stations in different places in and around the Sundarbans. The government also had plans of setting up an external body to monitor the activities of the company.

The Mission was further assured that the coal will be carried in 'covered' containers in ships and then small barrages which will be covered. As such, there would be no possibility, of any damage to the rivers connected to the Sundarbans.

The government representatives insisted that the government would ensure that the 59 conditions of the DoE are met, even if it meant that it cost the company 50 paisa more per unit of electricity. The Advisor claimed, "It's not about profit. It would have been true if it was a private sector company with a profit motive, but this is NTPC and BPDB; they are not looking to make profit. The project started because the two Prime Ministers agreed. It is an iconic project of friendship."

When asked his opinion about Indian laws that prohibit plants to be set up within 25 km of a preserved forest, animal sanctuary or bio-diverse forest, he said that he had "no interest" in Indian laws and reminded the Mission that the company is only obligated to follow Bangladeshi laws. Furthermore, he stated that the Bangladesh-India Friendship Power Company is not an Indian company, but rather a "100% Bangladeshi company", just like Chevron Bangladesh is a Bangladeshi company.

The Mission was informed that the company would be planting thousands of trees all over the area and thus, in effect, would contribute to improving the environment. The Mission was given a comprehensive list of plants that would be planted.

Regarding the people who were displaced, the Advisor stated that if in any other area of Bangladesh was chosen for this project 20 to 50 times more families would be affected. He noted that many people complaining of displacement were illegal inhabitants.

5.3 Hon. Talukder Abdul Khaleque, MP of Bagerhat 3 (Rampal- Mongla areas)

The MP stated that the Rampal power plant would be a big step towards developing the region, and creating jobs for thousands of people. According to him, as agricultural produce and fisheries is declining in the region, industrialization is the only way that the region can prosper and its people can lead dignified lives. He assured the mission that the most "modern" technology would be used for building the plant, and that there had been multiple

studies to show that no damage would be done to the Sundarbans. He cited the anti-Indian sentiments of a certain segment of the Bangladeshi population to explain why there was so much resentment against the plant.

The MP also stated that there were no households in the acquired land and there have not been any displacements due to the construction of the coal power plant. According to him, the shrimp farmers who are functioning illegally on the land, which they have grabbed during the previous government's tenure, conspire against the plant spreading false information. He also argued that there had been no negative reaction when he had taken journalists to the proposed site 3 or 4 times. He commented that as a result of illegal shrimp farming, many *khals* have been destroyed and salinity levels have risen in the area.

6. NTPC - A Poor Track Record

The Center for Science and Environment in India in its report titled 'Heat on Power' provided an objective performance rating for 47 Indian coal-fired power plants. Notably, NTPC received a very low ranking. In addition, the NTPC Badapur coal plant was rated the poorest of all NTPC plants in energy efficiency and pollution.⁴⁰ The report also states that in comparison to coal plants in the world, Indian plants were found to be substantially below global performance benchmarks for efficiency and pollution controls.

The report says, of the 47 power plants rated, four plants – CESC Ltd, Budge Budge, West Bengal; JSW Energy Ltd, Toranagallu, Karnataka; The Tata Power Company Ltd, Trombay, Mumbai; and JSW Energy Ltd, Ratnagiri, Maharashtra – made it to the Three Leaves category, scoring between 40 and 60 per cent. Seven companies got Two Leaves (30-40 per cent), and 16 One Leaf (20-30 per cent). Twenty plants got less than 20 per cent score. The performance of NTPC Ltd., which refused to disclose data was found to be below par (16-28 per cent).

This refusal of NTPC to disclose data demonstrates a notable lack of transparency in their operations. During interviews with Mission members, representatives of NTPC claimed that they would take every precaution to protect the Sundarbans and surrounding environment, and that they would employ the "best of the best" technology. When asked if the 57 conditions stipulated by the DoE would be financially feasible, they said that they were willing to cut down on profits if it meant that the ecological site of Bangladesh could be protected.

However, NTPC's poor track record in India implies that there is no guarantee their performance would be significantly better and more environment-friendly in Bangladesh. With poor environmental governance infrastructures in Bangladesh, it is likely that their performance could be even worse.

⁴⁰ Efficiency of India's coal-based power plants way below global standards: Study, The Economic Times, Feb 21, 2015 http://articles.economictimes.indiatimes.com/2015-02-21/news/59363102_1_plants-cse-national-thermal-power-corporation

7. Civil Society Interventions

7.1 Concerns by organisations

Since the conception of the project, various civil society groups have highlighted the potential risks of the project and raised concerns such as the grave environmental hazard, lack of evidence of preparation, role and responsibility of NTPC in the instance of an accident, deterioration of land due to harmful development practices, lack of accountability from the government of Bangladesh in constructing the plant, and the necessity to conduct more scientific surveys in order formulate a comprehensive EIA. The National Committee for Saving the Sundarbans (NCSS) and National Committee to preserve the country's oil, gas, minerals, power and ports have strongly campaigned against this project and in detail shown the impact it will have on the Sundarbans, and Bangladesh at large. Most national environmental organizations have raised concerns on the selection of this site and have suggested alternatives.

The Council of Ethics of the Government Pension Fund Global (GPFG), one of the two parts of the Norwegian government-owned wealth funds under Government Pension Fund of Norway, has also recommended its Ministry of Finance to exclude NTPC from its investment umbrella in a detailed publication outlining the risks of the coal power plant and their correspondence with NTPC, which they found unsatisfactory, similar to many other findings of their investigation.⁴¹ GPFG found that the EIA evaded important issues with vague terminology, and presented no contingency plan in case of an accident or a plan to mitigate environmental damage.⁴²

UNESCO has also expressed concerns over the risks associated with the project in its 2014 review of World Heritage Sites.⁴³ The report states that the dredging of the Passur river and subsequent construction of the plant would have a significant adverse impact on the property's Outstanding Universal Value, and expressed its regret that the State Party (Government of Bangladesh) did not submit a report on the state of conservation of the property. The response from the government to UNESCO, if given, has not been made public, despite requests from the media and concerned bodies.

⁴¹ The Council of Ethics, Government Pension Fund Global, Recommendation to exclude National Thermal Power Company Ltd. from the investment universe of Government Pension Fund Global, p 227,

⁴² Most of its findings were based on two reports by CEGIS. "Final Report on Environmental Assessment of 2x (500-660) MW Coal-Based Thermal Power Plant to be Constructed at the Location of Khulna" (commissioned by BPDB under the Ministry of Power, Energy and Mineral Resources of the Government of Bangladesh) and "Final Report on Consulting Services on Coal Sourcing, Transportation and Handling of 2x (500-660) MW Coal-Based Thermal Power Plant to Constructed at the Location of Khulna, and 832 MW LNG and Coal-Based in Maheshkhali".

⁴³ Sundarbans (Bangladesh) <http://whc.unesco.org/en/soc/2868>

The IUCN has recommended that a scientific survey should be conducted incorporating international experts in the team to determine the actual impact of the Rampal project on the Sundarbans. The IUCN has guaranteed the government of their support towards this survey.⁴⁴

Local environmental organisations have complained that the EIA is partial and vague in many important sections. Scientists and environmentalists have conducted studies, research and published scholarly articles outlining their findings but the government has not responded or acknowledged such findings. A public hearing on the EIA, held at the BPDP Bidyut Bhaban in April 2013 saw the report being rejected by experts and representatives of various organisations, who demanded a revision of the EIA and halting of all work on the plant till then. Much earlier, the DoE (on 21 July 2011) and Forestry (on 29 September 2011) issued letters, expressing their concerns over the project, followed by the Ministry of Shipping, which raised the points of transportation of coal through the Sundarbans, and loading and unloading of coal at Akram point.

7.2 Legal Action by Bangladeshi Civil Society

Writ No - 1211/2011: On 6 February 2011, the Secretary General of the Centre for Human Rights as petitioner filed a writ with the High Court challenging the legality of the coal-based thermal power plant at Rampal. The secretary of Ministry of Environment and Forest, Secretary to the Electricity and Energy, Planning Secretary, Director General of DoE, Department and Chairman of BPDP were made respondents of the writ. On 1 March 2011, the court issued a rule questioning why the 1230 MW coal-based thermal power plant should not be directed to shut down. The respondents were asked to submit their response within the two weeks. The court in the meantime issued a stay order on all activities at the site. Later, the Attorney General, citing the event of the visit of Mr. Manmohan Singh, the then Indian Prime Minister, requested the court to withhold the stay order, stating that the stay would jeopardize all bilateral agreements about to be signed that week. As such, the dual bench of Mr. Justice A.H.M. Shamsuddin Choudhury and Mr. Justice Gonbindra Chandra Thakur withdrew the order.

In 2012, upon receiving application from the petitioner, the dual bench of Justice Naima Haider and Khurshid Alam accepted that a hearing on the case would take place. However, no such hearing took place, and on 15 April 2014, the lawyers of the petitioner filed a request for the court to issue a stay order on all activities of the power plant. The bench of Justice Naima Haider and Justice Zafar Ahmed accepted the case, and two hearings have taken place since.

Writ No - 408/2012: On January, Sheikh Siddique Ahmed, Organizing Secretary of Save the Sundarbans Foundation, filed a writ with the High Court enquiring why the building of a coal-based thermal power plant should not be found contradictory to the basic principles of the Constitution and thus why it should not be declared illegal by the court. In the writ, Article 18 (A) of the Constitution was cited as a basis for the legal argument. Article 18A states: "The State shall endeavor to protect and improve the environment and to preserve

⁴⁴ Interview with IUCN Bangladesh Country Representative Ishtiaq Uddin Ahmed

and safeguard the natural resources, bio-diversity, wetlands, forests and wild life for the present and future citizens." The secretaries of Environment and Forest, Power and Energy, Planning and Director General of DoE and Chairman of BPDP were made respondents. After preliminary hearing on 22 March 2012 a ruling was issued as to why the construction of the power plant should not be declared as contradictory to a basic constitutional principle. Two weeks were given to the respondents to respond, but to date this has not been done.

Writ No – 11054 (2012): Another writ was filed with the High Court in August 2012 by Mozahedul Islam, Secretary, Save the Sundarbans Foundation, challenging why the construction of coal-based power plant by filling river beds should not be declared illegal. It was stated in the writ that a total of 1834 acres of land has been acquired by the government at Shapmari-Katakhali which include a part of the Maidara river and its canals. On 12 August after an initial hearing, the court provided the respondents with two weeks for a response, but no response has been made to date.

Writ No – 14625/2012: Another writ was filed by Sheikh Tahsan Ali, Organizing Secretary, Bagerhat Development Society, challenging the legality of the construction of a 282.67MW coal-based power plant in Shalbania-Buridanga of Bagerhat by the Orion group. The respondent included Obaidul Karim, chairman, Orion Group, secretaries of Environment and Forest, Power and Energy, Planning, and Director General of DoE.

It was stated in the writ application that, as per Section 12 of the Environment Protection Act 1995, all red category plants/industries required prior clearance from the DoE before starting construction. However, Orion group started construction without any clearance. As per the Bangladesh Environment Conservation Act-1995 that amended in 2010 and National Environment Policy of Bangladesh, the coal based thermal power plant is a red category industrial unit and thus it is illegal to start any such establishment without prior clearance. Besides, it was stated that Article 18 (A) of the fifteenth amendment of the Constitution also was clearly violated.

On 12 December after an initial hearing, a rule was issued inquiring why the construction of 282.67 MW coal-based power plant should not be halted, and why a stay order should not be passed to protect the rare species of Irrawaddy dolphins (*Orcaella brevirostris*). Two weeks were given to the respondents, but as yet, no response has been made by the Orion group or relevant government parties.

7.3 Concerns raised by Indian environmental activists

Apart from the activists in Bangladesh, activists in India have also been concerned about the construction of the coal power plant in Rampal. Nityanand Jayaram,⁴⁵ an environmental activist and journalist has expressed concern at the choice of partner (NTPC), the chosen energy source (coal-based power plant), and the choice of location of this project.

⁴⁵ He is working collaboratively with BAPA

According to Jayaram, NTPC Ltd is not a name that inspires confidence amongst Indian environmental groups and activists. The Singrauli region in Madhya Pradesh, which is home to several NTPC and other plants, is a pollution hotspot, where blood mercury levels of local residents are at or above levels that are known to cause harm.

He further observes that the project proposal suffers from a series of crippling problems: One of them is the 'No Options Analysis' with regard to the choice of the energy generation. Even though increased access to energy, including electricity, improves quality of life, the decision to set up the Rampal project is not based on any evaluations of different methods in which the need for energy, including electricity, can be met. At the same time while the need for electricity is decentralised, the proposed project is centralised. The proposal does not evaluate or report how coal fired electricity generation would be the best option to meet Bangladesh's electricity as compared to other modes of generation or energy conservation efforts.

8. Conclusion

During the six day mission the experts involved had the opportunity to evaluate the construction of the coal power plant on numerous aspects. This report highlights the concerns of the mission and its key findings. It has been evident that the government has failed to follow procedural regulations in the pre-construction process such as obtaining an EIA with a scientific base prior to deciding the suitable location, following stipulated government procedures in land acquisition, informing the local public and consulting the affected population in determining compensation. To date the government has not been able to design sustainable comprehensive solutions to many of the issues that have arisen mainly as it has not followed proper procedure in launching this 'development initiative'. There is also concern with regard to the government's ability and political will to fulfil its promises in rectifying many of these issues. It is evident that the best intentions towards the citizens of Bangladesh in terms of environmental, social, economic and cultural aspects are misplaced in this bilateral agreement despite claims of benefits by way of increased units of electricity to the grid and employment generation etc. It can be concluded that this project poses a global threat if the Sundarbans is negatively affected due to this project.

SAHR, as a regional human rights organization, would like to reiterate its concern that such projects of regional cooperation should not violate the fundamental rights of the people and must adhere to the laws and standards of all countries involved. SAHR recommends that all construction and other project activities be suspended until a comprehensive science-based EIA is conducted by impartial and independent experts. If found damaging to the Sundarbans, the project must be cancelled immediately and relocated at an environmentally sustainable site. Further, all remedial measures must be taken to revive the natural ecology and environment of Rampal.

Bilateral agreements must ensure that the environmental standards adopted by both countries are maintained and adhered to. It is the responsibility of the Governments of Bangladesh and India to adhere to national laws and international environmental conventions, protocols and treaties in conducting activities through regional cooperation or under bilateral agreements and further to conduct all activities transparently and in consultation with their citizens.

Annexure 1

Meeting Schedule of the Mission

Date	Meeting Schedule
5 April 2015	SAHR Bureau Members
6 April 2015	Mr. Noor Alam Shekh (Ex Vice Chairman, Mongla), Affected Villagers of Gouromva and elected local government and other representatives from the area Affected people who have been relocated in Khulna District level chapter of the National Committee for the protection of Oil, Gas, Natural & other Resources Local committee of BAPA and local staff and members of BELA Krishi Jomi Rokkha (Protection of Agricultural Land) committee and Save the Sundarbans Foundation and others.
7 April 2015	Hon. Talukder Abdul Khaleque, MP Bagerhat-3 (Rampal) Journalists of different print and electronic news media Representatives of different local NGOs working on the Sundarbans
8 – 11 April 2015	Dr. Tawfiq- e- Elahi Chowdhury, Adviser to the Prime Minister of Power, Energy and Mineral Resources Affairs Syed Nazmul Ahsan Director (Environmental Clearance), Department of Environment Ishtiaq Uddin Ahmed Country Representative, IUCN Bangladesh Country Office Professor Ainun Nishat Water and Environment Specialist, Former Vice Chancellor of BRAC University, Former Country Representative of IUCN Bangladesh Office Syeda Rizwana Hasan Executive Director, BELA Dr. M. A. Matin General Secretary and several Executive Members of BAPA Professor Anu Mohammad Member Secretary and other Executive members of the National Committee to Protect Oil, Gas, Mineral Resources, Power and Ports Dr. Mohammad Tanzimuddin Khan, Professor of the Department of International Relations, Dhaka University Moshahida Sultana, Associate Professor of the Department of Economics, Accounting, Dhaka University Kallol Mostafa, Engineer and Environmentalist

Annexure 2

The Press Statement



South Asians for Human Rights (SAHR)

12 April 2015

Founding Chair

Mr. I.K. Gujral

Members Emeritus

Dr. Kamal Hossain
Kulidip Nayar
Dr. Devendra Raj Panday
Asma Jahangir

Chairperson

Hina Jilani
(Pakistan)

Co-Chairperson

Dr. Nimalka Fernando
(Sri Lanka)

Bureau Members:

Afghanistan

Prof. Sarwar Mamound

Bangladesh

Sultana Kamal
Khushi Kabir
Dr. Asif Nazrul

India

Vrinda Grover
Jatin Desai
D.J. Ravindran

Maldives

Mohamed Laheef

Nepal

Dinesh Tripathi

Pakistan

Zohra Yusuf
Mohammad Tahseen
Kamran Arif

Sri Lanka

Dr. Deepika Udagama
Tahirih Qurratulayn
Lakshan Dias

Press Release

Fact Finding Mission to Rampal, Bangladesh, 5-11 April 2015,
conducted by South Asians for Human Rights

South Asians for Human Rights (SAHR), a regional network of human rights defenders across South Asia, conducted a fact finding mission in Rampal, Bangladesh on the establishment of a coal-based power plant by the Bangladesh-India Friendship Power Company (Pvt) Ltd from 5 – 11 April 2015. The mission was conducted by Dr. Abdullah Harun Chowdhury, Professor of Environmental Science of Khulna University and Sharif Jamil, Council Member, Waterkeeper Alliance from Bangladesh. External expertise from India was provided by Nityanad Jayraman, an Environmental activist. Deekshya Illangasinghe from the SAHR Secretariat in Sri Lanka was part of the delegation.

The objective of the mission was to evaluate the impact of the power plant on the livelihoods of the people and ecology of the region, examine the legal framework governing its establishment and assess if the proposed power plant will violate any laws, policies and guidelines that protect the Sundarbans surrounding the power plant.

The mission visited the site of the power plant by road and river. The mission members met with key stakeholders including affected villagers, environmentalists, lawyers, academics, journalists, human rights defenders and other members of the civil society. The Mission also interviewed government officials including Hon. Tawfiq-e-Elahi Chowdhury, Energy Adviser to the Prime Minister, Hon. Talukder Abdul Khaleque, MP of the Rampal-Mongla area, Mohammad Hossain, Director General of Power Cell, MoPEMR, Vijay Shanker Tamrakar, Managing Director and U. K. Bhattacharya, Deputy Managing Director of the Bangladesh-India Friendship Power Company (Pvt) Ltd, and a Director of the Department of Environment.

This mission by SAHR is significant because it has been conducted by a South Asian organization, whose terms have included interviews with both state and non-state actors. The findings of SAHR's Mission are important as they assess the likely adverse effects of a bilateral project on an international heritage site.

The mission understands that the construction of the proposed plant would accrue some significant benefits to the country, including an increase in electricity production, adaptation capacity, infrastructure development and employment. However, the multi-faceted costs to the local people and the irreversible damage to the fragile ecosystem and biodiversity must be prioritized when proposing such projects.

The key findings of the mission are as follows:

- Due process was not followed in land acquisition and relocation. Compensation to land owners has been inadequate, falling short of the standard market price of equivalent land in the area. A large number of landless families who depended on the land and water bodies for their livelihoods have been displaced without any compensation. Additionally, the river belt from the Mongla port to Rampal is undergoing rapid industrialization, with land being acquired both legally and illegally. Displaced people have lost their traditional livelihoods and thereby face hardships of life.

- The current Environmental Impact Assessment (EIA), conducted by a government-owned organization, is faulty on many counts, including its use of secondary data collected before 2010 for most of the parameters; failure to use proper location and methodology for primary data collection of air, water, soil, biodiversity, etc; comparison of SO_x and NO_x levels in the Sundarbans with that of urban areas, discounting the major differences between the two environments; only one-time air samples assessed at three places (8 to 10 km distance from project site), Sarankhola Upazila (43 km south east), Khulna City (23 km north west), but no information on project site, Sundarbans and Mongla port area. Furthermore, without specifying which country the coal will be imported from, the extent of damage from the coal cannot be assessed by an EIA, making the current assessment flawed.
- Approximately, 400 acres of land, including a natural canal, has been filled by about 20 feet. This will in turn deteriorate the ecosystem health of the Pashur and Maidara rivers.
- The mission highlights that the power plant, by the bank of the Pashur River and surrounded by the Maidara River, is only 8 km away from the Dhangmari dolphin sanctuary. No dolphins were seen by the mission during a six-hour boat ride on the Pashur river, even in the Dhangmari dolphin sanctuary, which is alarming.
- Local people and activists protesting this development have been constantly harassed by powerful quarters through threats, intimidation, assaults and filing of false cases.
- The mission was informed by the government that this project was part of a massive power production plan. Department of Environment expressed their concerns about this project and approved the EIA conditionally by giving 59 specific points to be addressed. Concerned authorities stated that it would comply with all conditions, which would in turn increase the production costs.

The Mission is concerned that the proposed power plant would lead to considerable loss of livelihoods, scarcity of food and drinking water, loss of habitat for plants and animals, and health hazards. Further a large project in the middle of a vital drainage area will severely alter hydrology, increase vulnerability of surrounding areas to flooding and will have the potential to heighten damage due to extreme weather. Extensive dredging of riverbed and seabed areas and constant leaching of poisons into the water would harm the aquatic biodiversity, endangering the freshwater dolphins and other species living in the Pashur river. We are further concerned that an independent EIA on dredging has not been undertaken. It is disappointing to note that the government of Bangladesh has not considered the opinions given by various environmental experts.

Coal and other materials needed for the plant, as well as wastes generated, will be transported through 75 km of the Sundarbans. With more than 400 ships passing through the river every year, there will be water pollution due to coal and oil spillage, bilge water and ballast discharge; noise pollution; air pollution generating coal dust to the environment. Again, no independent EIA has been conducted on the impact of the transportation of coal through the Sundarbans, even though it is a requirement of the Department of Environment.

SAHR, as a regional human rights organization, would like to reiterate its concern that such projects of regional cooperation should not violate the fundamental rights of the people and must adhere to the laws and standards of all countries involved. Therefore, we collectively call upon:

The Government of Bangladesh

- To suspend all construction and other project activities until a comprehensive science-based EIA is conducted by impartial and independent experts. If found damaging to the Sundarbans, the project must be cancelled immediately and relocated at an environmentally sustainable site.
- To respect the right of the affected population and civil society groups to monitor every aspect of the activity under this project and to voice their concerns regarding negative human rights implications and environmental depletion.
- To ensure that harassment of local people and activists is stopped forthwith, immediate measures are adopted to withdraw false cases that have been filed as a tactic of harassment and to relocate the people already displaced.
- Take all remedial measures to revive the natural ecology and environment of Rampal

The Government of India:

- To ensure that the environmental standards adopted by India are maintained in this project, and that all economic, social and cultural rights as well as the civil and political rights of the people are fully respected.

SAHR further calls upon both governments:

- To adhere to national laws and international environmental conventions, protocols and treaties in conducting activities through regional cooperation or under bilateral agreements.
- To conduct all activities transparently and in consultation with their citizens.

On behalf of the mission members and South Asians for Human Rights,



Hina Jilani
Chairperson, SAHR



Sultana Kamal
Bureau Member, Bangladesh

Annexure 3

Sensitive Receptors

Major Crops in the project area and study area (EIA Report, p.194)

In the project area and study area⁴⁶, the main agricultural production is rice. The total annual paddy production in the project area is approx. 1285 tons after a loss of approx. 467 tons. Transplanted Local Aman is the only crop grown in this area. In the study area the total annual paddy production is approximately 62,353 tons after a loss of approx. 9,455 tons. Among rice varieties, Boro is contributing about 8%, T. Aman (Local) about 83%, and B. Aus about 9% of the total paddy production. A significant agriculture production is also coming from non-rice crops especially in the Polder areas of Dacope Upazila. The non-paddy crops are Summer Vegetables (about 18,972 tons), Winter Vegetables (22,134 tons), Water Melon/Bangi (about 97,005 tons), Pulses (about 505 tons) and Jute (about 1844 tons).

Livestock and Poultry in the study area (EIA Report, p.197)

Livestock and poultry, being an essential sector of the integrated farming system, play an important role in the economy of the study area. Livestock provide significant draft power for cultivation, threshing and crushing of oil seeds. Cow dung is used as a source of manure and fuel. Meat, milk and eggs are used for human consumption and a ready source of funds.

Most of the households raise poultry and livestock, a practice that significantly reduce the poverty by generating employment and income.

Ecosystem in the study area (EIA Report, p.208)

The study area is a tidal delta and geologically described as Paludal deposits that developed over swamp or marshland. The area is about 14 km northeastwards from the Nalian Range of Sundarbans. Once it was a part of the Sundarbans but had been evacuated by the settlers. Tidal flushing is dominant within the entire study area with a varied depth due to connectivity of the internal canals with the Passur River through several tidal inlets. Three types of ecosystems exist in the project site and adjacent area. These are terrestrial, aquatic and mangrove ecosystem.

In general, the brackish water ecosystem is dominant in the study area. However, the villages having high elevation, low tidal flushing and low salinity show brackish to fresh water ecosystem. The floristic composition also supports the facts. The transect-walks following the high-low land elevation and low-high tidal flushing brought out the ecological differences within the study area. The villages with high elevation, minimum tidal flushing and low salinity (only during dry season for 4 months) Chitra, Kalikaprashad and Rajnagar resemble the fresh water ecosystem where aquatic plants - red and white Water Lily (*Nymphaea*

⁴⁶ 10km radius from plant location

nouchali), Water Hyacinth (*Eichhornia crassipes*), *Pistia stratiotes*, *Lemna minor* are indicative of the occurrence of fresh water.

Bio-ecological zonewithin a 10km radius (EIA Report, p211)

The study area consists of 4 different bio-ecological zones (Nishat *et al.*, 2002):

- A. The Sundarbans
- B. Saline tidal floodplain
- C. Ganges Flood plain
- D. Gopalganj/Khulna Peat Land

Annexure 4

List of terrestrial wildlife species in the study area – mammals, reptiles, amphibians and birds on the basis of being endangered

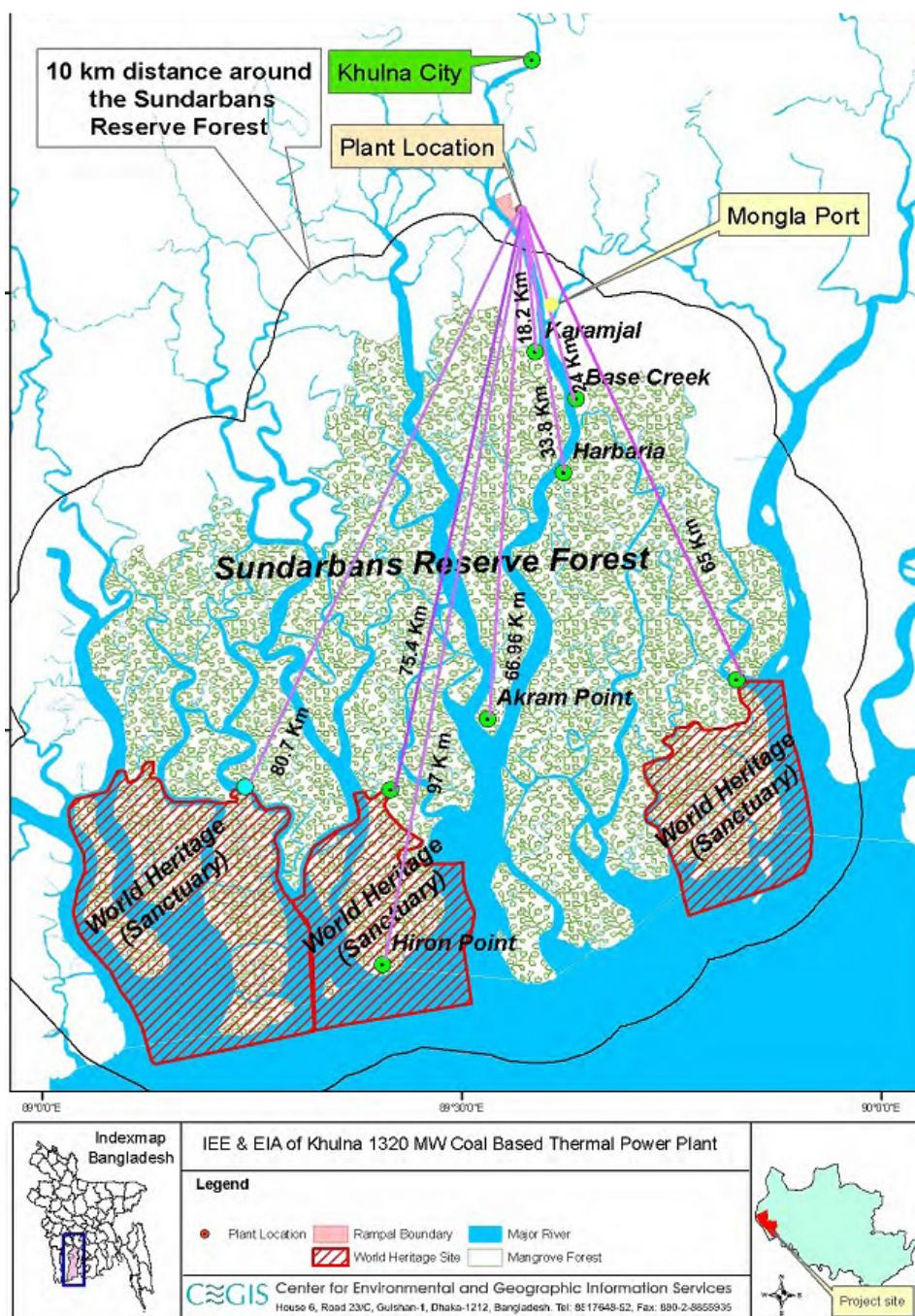
English Name	LOCAL status	IUCN Global Status
Mammels		
Irrawaddy Dolphin	Vulnerable	Critically Endangered
Bengal Tiger	Endangered	Critically Endangered
Indian crested Porcupine	Least Concern	Endangered
Large- Indian Civet	Near Threatened	Endangered
Eurasian Otter	Near Threatened	Endangered
Ganges River Dolphin	Endangered	Endangered
Fishing Cat	Endangered	Endangered
Finless Porpoise	Vulnerable	Endangered
Oriental Small- Clawed Otter	Vulnerable	Endangered
Jungle Cat	Least Concern	Endangered
Asiatic Brush-tailed Porcupine	Least Concern	Endangered
Barking Deer	Least Concern	Endangered
Golden Jackal	Least Concern	Endangered
Rhesus Macaque	Least Concern	Vulnerable
Small- Indian Civet	Least Concern	Vulnerable
Indian Hare	Least Concern	Vulnerable
Reptiles		
Estuarine Crocodile	Lower Risk/least concern	Critically Endangered
Gharial	Critically Endangered	Critically Endangered
Narrow-headed Softshell Turtle	Endangered	Critically Endangered
Common River Terrapin	Critically Endangered	Critically Endangered
Critically Endangered	Critically Endangered	Critically Endangered
Crowned River Turtle	Lower Risk/least concern	Critically Endangered
Brown Roofed Turtle	Near threatened	Endangered
Median Roofed Turtle	Least Concern	Endangered
Olive Ridley Turtle	Vulnerable	Endangered

Spectacled Cobra	--	Endangered
Yellow Monitor	Least Concern	Endangered
Ring Lizard	Least Concern	Endangered
Common Vine Snake	--	Vulnerable
Bengal Monitor	Least Concern	Least Concern
Indian Rat Snake	Least Concern	Vulnerable
Spotted Flapshell Turtle	Least Concern	Vulnerable
Tokay Gecko	Least Concern	Vulnerable
Paintet Bronzedback tree Snake	--	Vulnerable
Amphibians		
Two-striped Grass Frog	Least Concern	Endangered
Green Frog	Least Concern	Vulnerable
Asian Brown Painted Frog	Least Concern	Vulnerable
Large Tree Frog	Least Concern	Vulnerable
Pointed-headed Frog	Least Concern	Vulnerable
Ornate Microhylid	Least Concern	Vulnerable
Birds		
Indian Skimmer	Rare Resident	Vulnerable

(Extracted from annexure XI, EIA Report)

Annexure 5

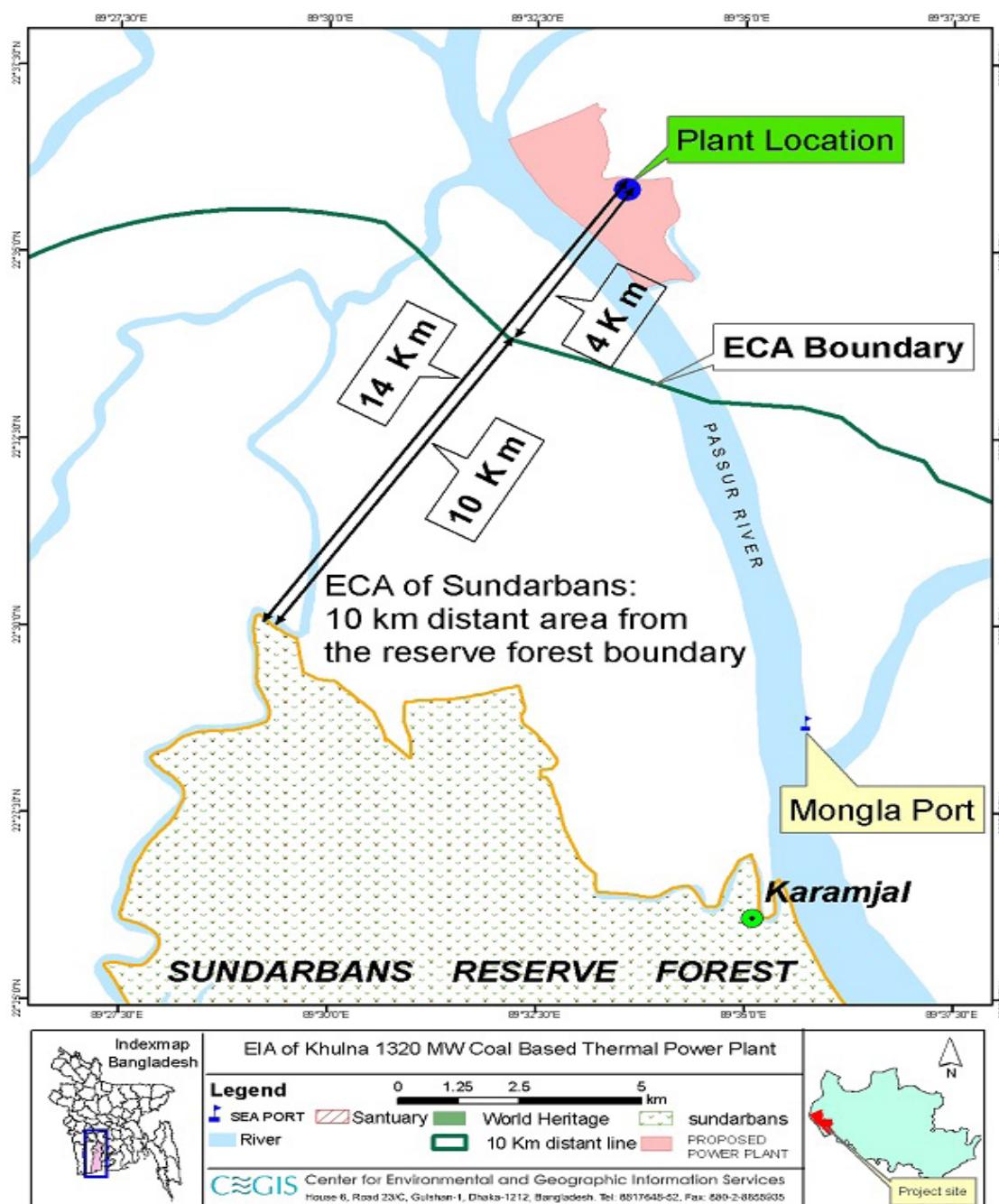
Map showing the location of the coal power plant in relation to the Sundarbans



Source: EIA Report, p234

Annexure 6

Map showing the distance between the Sundarbans and the proposed power plant



Source: (EIA Report, p213)

SAHR is a democratic regional network with a large membership base of people committed to addressing human rights issues at both national and regional levels. SAHR seeks to contribute to the realization of South Asian peoples' right to participatory democracy, good governance and justice by strengthening regional response, including regional instruments, monitoring human rights violations, reviewing laws, policies and practices that have an adverse impact on human rights and conducting campaigns and programmes on issues of major concern in the region.

SAHR comprises both institutional and individual members. An elected bureau works as the organisation's executive body while the membership committee oversees enrolment of members. The SAHR Chairperson and Co-Chairperson are Ms. Hina Jilani of Pakistan and Dr. Nimalka Fernando of Sri Lanka respectively. The Secretariat is located in Colombo, Sri Lanka.



South Asians for Human Rights (SAHR)

345/18 Kuruppu Road, (17/7 Kuruppu Lane), Colombo 08, Sri Lanka

Tel/Fax: +94 11 2695910

Email: sahr@slt.net.lk Website: www.southasianrights.org