

Draft

**Peoples' Republic of Bangladesh
Ministry of Power, Energy and Mineral Resources**

Land Acquisition and Resettlement Action Plan

Matarbari 2x600 MW Coal Fired Power Plant Project

**(for Power Plant, Port Facility and Transmission
Line and Township Development)**

October 2013

Reviewed and Prepared by

**Bartika Beacon Consultancy Services Ltd. (BBCS)
Avenue-2/2, Block-G, Section-2, Mirpur, Dhaka-1216.**

Table of Contents

Section no	Page No.
1 Rationale	
1.1 Objectives	1-1
1.2 Project Description	1-1
1.3 Project Components.	1-1
1.4 Location of the proposed site	1-1
1.5 Methodology for preparing LARAP	1-6
1.6 Brief Description of Social Impacts.	1-7
1.6.1 Brief Description.	1-7
1.6.2 Anticipated Impact by Power Plant and Port Facility Construction	1-8
1.6.3 Anticipated Impact caused by the Extension of Transmission Line	1-8
1.6.4 Anticipated Impact Caused by the Development of Township Site.	1-9
1.7 Specific Measures Taken to Minimize Adverse Impacts	1-10
1.7.1 Examination of Alternatives	1-10
1.7.2 Application of International Standards to Land Acquisition and Resettlement	1-10
1.7.3 Entitlements of Affected People without Legal Claims to Land	1-11
1.7.4 Measures for Avoidance and Further Influx of Illegal Occupation	1-11
1.7.5 Methods of Valuing Affected Assets	1-11
1.7.6 Livelihood Restoration and Rehabilitation	1-11
2 Legislations in Bangladesh and GAPs From JICA's Policy	
2.1 Key Legislations	2-1
2.2 JICA's Policy on Land Acquisition and Resettlement	2-2
2.3 Procedures for Land Acquisition	2-3
3 Social Impact	
3.1 Socioeconomic Survey and Focus Group Discussions at Power Plant and Port Facility Site	3-1
3.1.1 Survey Outline	3-1
3.1.2 Findings	3-3
3.2 Socioeconomic Survey and Focus Group Discussions at Transmission Line Site	3-14
3.2.1 Survey Outline	3-14
3.2.2 Findings	3-16
3.3 Socioeconomic Survey at Township Site	3-18
3.3.1 Survey Outline	3-18
3.3.2 Findings	3-19
3.4 Local Consultation	3-25
3.4.1 First Public Consultation Meeting	3-25
3.4.2 Second Public Consultation Meeting	3-28
3.4.3 Third Public Consultation Meeting	3-32
4 Detailed Description of Impact and Category of Project Affected Persons (PAPs)	
4.1 Power Plant	4-1
4.1.1 Pre-construction Phase and Construction Phase	4-1
4.1.2 Operation Phase	4-4
4.2 Port Facility	4-6
4.2.1 Pre-construction Phase and Construction Phase	4-6
4.2.2 Operation phase	4-6
4.3 Transmission Line	4-7
4.3.1 Pre-construction Phase and Construction Phase	4-7
4.3.2 Operation Phase	4-8
4.4 Township Development	4-9
4.4.1 Pre-construction Phase and Construction Phase	4-9
4.5 Entitlement for Different Types of Losses.	4-11
5 Livelihood Restoration and Improvement Plan	5-1
6 Implementation Arrangement and Organizational Responsibilities	
6.1 Coal Power Generation Company of Bangladesh Ltd.	6-1
6.2 Other Agencies Involved in the Process	6-4
6.2.1 Deputy Commissioners	6-4
6.2.2 Project Supervision Consultant	6-4
6.2.3 LARAP Implementing Agency	6-4
6.2.4 Ministry of Power, Energy and Mineral Resources (MOPEMR)	6-5

6.2.5	Joint Verification Team	6-5
6.2.6	Property Valuation Advisory Team	6-5
6.2.7	Resettlement Advisory Committees (RACs)	6-6
6.2.8	Women Groups in Resettlement Process	6-7
6.3	Institutional Capacity Building	6-7
7	Grievance Redress Mechanisms	
7.1	Entitlement for Different Types of Losses	7-1
8	Specific Measures provided to Vulnerable Groups and Income Rehabilitation Assistance	8-1
9	Estimated Land Acquisition and Resettlement Cost	
9.1	Power plant and port facility site	9-1
9.2	Transmission line route	9-4
9.3	Township Area	9-6
9.4	Compensation and Resettlement Budget	9-8
9.4.1	Finalization and Approval of the Compensation and Resettlement Budget	9-8
9.4.2	Management of Budget	9-8
10	Local Consultation, Participation and Disclosure	
10.1	Project Stakeholders	10-1
10.2	Disclosure and Public Consultation	10-1
10.3	Stakeholder's Participation Process	10-1
11	Implementation Schedule	11-1
12	Monitoring and Evaluation	
12.1	Monitoring and Evaluation	12-1
12.2	Internal Monitoring	12-1
12.3	Overall Implementation Mechanism	12-2
12.4	External Monitoring & Evaluation	12-3
12.5	Post Evaluation by JICA	12-14

List of Table and Figure

Table/ Figure No.		Page No.
Table 1-1	Area covered by the proposed transmission line	1-4
Table 1-2	Anticipated Land Acquisition	1-7
Table 1-3	Anticipated Impact (Power Plant and Port Facility)	1-8
Table 1-4	Breakdown of Land Acquisition (Transmission Line)	1-9
Table 1-5	Anticipated Impact on the Owners of Angle Tower Locations	1-9
Table 1-6	Anticipated Impact of Township Development	1-9
Table 2-1	Gap Analysis between Bangladeshi Laws and JICA Guidelines	2-3
Table 3-1	Interviewed Households	3-1
Table 3-2	Structure of Socioeconomic Survey	3-2
Table 3-3	Interviewed Population in Focus Group Discussion	3-3
Table 3-4	Total Surveyed Population	3-4
Table 3-5	Education Level of Heads and Household Size	3-5
Table 3-6	Literate Population	3-5
Table 3-7	Educational Levels and Literacy (FGD)	3-5
Table 3-8	Occupations of the Household Heads	3-6
Table 3-9	Incidence of Poverty (Head Count Ratio) by CBN Method in 2010	3-9
Table 3-10	Incidence of Poverty (by per capita monthly income) in 2010	3-9
Table 3-11	Incidence of Poverty (by per capita monthly expenditure) in 2010	3-9
Table 3-12	Household Head's Per Capita Monthly Income and Expenditure	3-9
Table 3-13	Animals and Poultry owned by Households	3-10
Table 3-14	Energy Source by Purpose	3-11
Table 3-15	Availability of Medical Facilities	3-12
Table 3-16	Skill Development Requests	3-14
Table 3-17	Profile of Interviewed Households	3-14
Table 3-18	Interviewed Population in Focus Group Discussion	3-15
Table 3-19	Total Surveyed Population	3-19
Table 3-20	Education Level of Heads and Household Size	3-20
Table 3-21	Literate Population	3-20
Table 3-22	Occupations of the Household Heads	3-20
Table 3-23	Household Per Capita Monthly Income and Expenditure	3-22
Table 3-24	Animals and Poultry owned by Households	3-23
Table 3-25	Energy Source by Purpose	3-23
Table 3-26	Availability of Medical Facilities	3-24

Table/ Figure No.		Page No.
Table 3-27	Skill Development Requests	3-25
Table 3-28	Outcomes of First PCM	3-26
Table 3-29	Major Comments from Participants and Responses by the Project Owner	3-26
Table 3-30	Outcomes of Second PCM	3-28
Table 3-31	Major Comments from Participants and Responses by the Project Owner	3-29
Table 3-32	Outcomes of Third PCM	3-33
Table 3-33	Major Comments from Participants and Responses by the Representative of Project Owner	3-33
Table 4-1	Anticipated Social Impact to 343 Households (Power Plant)	4-1
Table 4-2	Affected people and land owners at angle tower points	4-7
Table 4-3	Anticipated Social Impact to 41 Households (Township Site)	4-9
Table 4-4	Entitlement matrix for PAPs (power plant, port facility, transmission line and Township Sites)	4-11
Table 5-1	Livelihood restoration measures	5-1
Table 6-1	Institutional Roles and Responsibilities	6-3
Table 9-1	Acquisition of private land from legal owners	9-1
Table 9-2	Acquisition of private land from tenants and lessee	9-1
Table 9-3	Acquisition of government land from legal tenants and lessee	9-2
Table 9-4	Acquisition of government land from occupants without legal tenure	9-2
Table 9-5	Assistance for transition in recovering loss of income source of land owners	9-2
Table 9-6	Assistance for transition in recovering loss of income from livelihood activities	9-2
Table 9-7	Assistance for transition in recovering loss of income from own business or self- employment	9-3
Table 9-8	Assistance for transition in recovering loss of income from residential / commercial structure	9-3
Table 9-9	Assistance for transition in recovering loss of income from livelihood means	9-3
Table 9-10	Assistance for transition in recovering loss of trees	9-4
Table 9-11	Compensation for PAPs at power plant site	9-4
Table 9-12	Anticipated Land Acquisition and Assistance	9-5
Table 9-13	Compensation for PAPs at power plant site	9-5
Table 9-14	Compensation for PAPs at power plant site	9-6
Table 9-15	Acquisition of private land from legal owners	9-6
Table 9-16	Assistance for restoration in recovering loss of income from livelihood activities	9-7
Table 9-17	Assistance for transition in recovering loss of income from livelihood means	9-7
Table 9-18	Compensation for PAPs at Township Site	9-8
Table 12-1	Potential Monitoring Indicators	12-2
Table 12-2	Contents of environmental management plan and monitoring plan	12-4
Table 12-3	Monitoring Form 1(for Performance Monitoring of Resettlement Action Plan)	12-6
Table 12-4	Monitoring Form 2 (for Impact Monitoring during Project Implementation)	12-9
Table 12-5	Monitoring Form 3 (for Impact Monitoring at Post-project Stage)	12-12
Figure 1-1	Location of the Power Plant	1-3
Figure 1-2	Route of the proposed transmission line	1-4
Figure 1-3	The Location of access roads	1-5
Figure 1-4	Location Map of Township Area	1-6
Figure 3-1	Length of Time Residing at the Site	3-4
Figure 3-2	Household Size	3-4
Figure 3-3	Types of Illness	3-6
Figure 3-4	Household Monthly Income	3-8
Figure 3-5	Household Monthly Expenditure	3-8
Figure 3-6	Average Expenditure Patterns	3-8
Figure 3-7	Ratio of Household Head's Per Capita Monthly Income and Expenditure	3-10
Figure 3-8	Household Assets	3-10
Figure 3-9	Water Sources	3-11
Figure 3-10	Type of Toilet	3-12
Figure 3-11	Source of Information	3-13
Figure 3-12	Examples of Pollution Experienced in the Past	3-13
Figure 3-13	Household Size	3-19
Figure 3-14	Household Monthly Income	3-21
Figure 3-15	Household Monthly Expenditure	3-21
Figure 3-16	Line graph of household Per Capita Monthly Income and Expenditure	3-22
Figure 3-17	Household Assets	3-22
Figure 3-18	Water Sources	3-23
Figure 3-19	Type of Toilet	3-24

Table/ Figure No.		Page No.
Figure 3-20	Source of Information	3-24
Figure 3-21	Examples of Pollution Experienced in the Past	3-25
Figure 6-1	LARAP Implementation Organogram	6-2
Figure 6-2	Procedure for Determining Valuation of Property.	6-6
Figure7-1	Flow of Grievance Redress	7-2
Figure 11-1	Tentative Schedule for Land Acquisition and Resettlement	11-2
Figure 12-1	Implementation Mechanism of Land Acquisition and Resettlement	12-3

Abbreviation

AB	Acquiring Body
AC land	Assistant Commissioner Land
ADC (Rev)	Additional Deputy Commissioner (Revenue)
AH	Affected Household
AG	Additional Grant
AP	Affected Person
BBS	Bangladesh Bureau of Statistics
BBCS	Bartika Beacon Consultancy Services Limited
CACFPDP	Chittagong Area Coal Fired Power Plant Development Project
CBE	Commercial and Business Enterprise
CCL	Cash Compensation Under Law
CUL	Compensation Under Law
CPR	Common Property Resource
CPGCBL	Coal Power Generation Company Bangladesh Ltd.
DAE	Department of Agriculture Extension
DAM	Department of Agriculture Marketing
DC	Deputy Commissioner
DOF	Department of Forest/ Department of Fisheries
DP	Displaced Person
DOE	Department of Environment
DSC	Designed and Supervision Consultant
EA	Executing Agency
EMA	External Monitoring Agency
EC	Entitlement Card
EP	Entitled Person
FGD	Focus Group Discussion
GOB	Government of Bangladesh
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
ha	Hectare
HH	Household
IA	Implementing Agency
ID Card	Identity Card
IGP	Income Generating Program
IGA	Income Generating Activities
LIRP	Livelihood and Income Restoration Program
IOL	Inventory of losses
IR	Involuntary Resettlement
JICA	Japan International Cooperation Agency
JVS	Joint Verification Survey
JVT	Joint Verification Team
km	Kilometer
LA	Land Acquisition
LAO	Land Acquisition Officer
LA&R	Land Acquisition and Resettlement
LARAP	Land Acquisition and Resettlement Action Plan
LGI	Local Government Institution
LGED	Local Government Engineering Department
LMS	Land Market Survey
M&E	Monitoring & Evaluation
MARV	Maximum Allowable Replacement Value
MIS	Management Information System
MOL	Ministry of Land
MOPERMR	Ministry of Power, Energy & Mineral Resources
NGO	Non-government Organization

NRS	National Resettlement Specialist
PAH	Project Affected Household
PGCB	Power Grid Company of Bangladesh Limited
PAU	Project Affected Unit
PCM	Public Consultation Meeting
PIU	Project Implementation Unit
PD	Project Director
PIB	Public Information Brochure
PMO	Project Management Office
PMU	Project Management Unit
PWD	Public Works Department
PRA	Participatory Rapid Appraisal
PPR	Project Progress Report
PVAT	Property Valuation Advisory Team
R&R	Resettlement and Rehabilitation
RAC	Resettlement Advisory Committee/Regional Accounting Centre
RB	Requiring Body/ Resettlement Benefits
RHD	Roads & Highways Department
RPC	Resettlement Policy Framework
RP	Resettlement Plan
RF	Resettlement Framework
RO	Resettlement Officer
ROW	Right-of-Way
RU	Resettlement Unit
RV	Replacement Value
RRP	Revised Resettlement Plan
SES	Socio-economic Survey
TA	Technical Assistance
TOR	Terms of Reference
VH	Vulnerable Household
VPAPs	Vulnerable Project Affected Persons
WB	World Bank
XEN	Executive Engineer

Glossary of Terms

Affected Person (AP): includes any person, affected households (AHs), firms or private institutions who, on account of changes that result from the project will have their (i) standard of living adversely affected; (ii) right, title, or interest in any house, land (including residential, commercial, agricultural, forest, and/or grazing land), water resources, or any other moveable or fixed assets acquired, possessed, restricted, or otherwise adversely affected, in full or in part, permanently or temporarily; and/or (iii) business, occupation, place of work or residence, or habitat adversely affected, with or without displacement.

Assistance: means support, rehabilitation and restoration measures extended in cash and/or kind over and above the compensation for lost assets.

Awardee: means the person with interests in land to be acquired by the project after their ownership of said land has been confirmed by the respective Deputy Commissioner's office as well as persons with interests in other assets to be acquired by the project. Compensation for acquired assets is provided to 'awardees' through notification under Section 7 of the Land Acquisition Ordinance.

Asset Inventory: A complete count and description of all property that will be acquired.

Compensation: means payment in cash or kind for an asset to be acquired or affected by a project at replacement cost at current market value.

Cut-off Date: This is the date on and beyond which any persons who encroach on the area are not entitled to compensation or any other form of resettlement assistance. It is often established on the commencement date or last date of the census of APs.

Encroachers: mean those people who move into the project area after the cut-off date and are therefore not eligible for compensation or other rehabilitation measures provided by the project. The term also refers to those extending attached private land into public land or constructed structure on public land only for renting out.

Entitlement: means the range of measures comprising cash or kind compensation, relocation cost, income restoration assistance, transfer assistance, income substitution, and business restoration which are due to AHs, depending on the type and degree /nature of their losses, to restore their social and economic base.

Eminent Domain: means the regulatory authority of the Government to obtain land for public purpose/interest or use as described in the 1982 Ordinance and Land Acquisition Law.

Eligibility: The criteria for qualification to receive benefits under a resettlement program.

Grievance Procedures: The processes established under law, local regulations, or administrative decision to enable property owners and other displaced persons to redress issues related to acquisition, compensation, or other aspects of resettlement.

Household: A household includes all persons living and eating together (sharing the same kitchen and cooking food together as a single-family unit).

Household Survey: A complete and accurate survey of the project-affected population. The survey focuses on income-earning activities and other socioeconomic indicators.

Inventory of losses: means the pre-appraisal inventory of assets as a preliminary record of affected or lost assets.

Non-titled: means those who have no recognizable rights or claims to the land that they are occupying and includes people using private or public land without permission, permit or grant i.e. those people without legal title to land and/or structures occupied or used by them. JICA's policy explicitly states that such people cannot be denied resettlement assistance.

Project Affected Unit: combines residential households (HHs), commercial and business

enterprises (CBEs), common property resources (CPRs) and other affected entities as a whole.

Project Affected Family: includes residential households and commercial & business enterprises except CPRs.

Project Affected Person (PAP): Any person (household) that loses their home, land, or business interests because of land acquisition.

Population Census: A complete and accurate count of the population that will be affected by land acquisition and related impacts. When properly conducted, the population census provides the basic information necessary for determining eligibility for compensation.

Relocation: means displacement or physical moving of the APs from the affected area to a new area/site and rebuilding homes, infrastructure, provision of assets, including productive land/employment and re-establishing income, livelihoods, living and social systems

Replacement cost: means the value of assets to replace the loss at current market price, or its nearest equivalent, and is the amount of cash or kind needed to replace an asset in its existing condition, without deduction of transaction costs or for any material salvaged.

Replacement Land: means the land affected by the project that is compensated through provision of alternative land, rather than cash, of the same size and/or productive capacity as the land lost and is acceptable to the AP.

Resettlement: means mitigation of all the impacts associated with land acquisition including restriction of access to, or use of land, acquisition of assets, or impacts on income generation as a result of land acquisition.

Resettlement Plan (RP) or Resettlement Action Plan (RAP): A resettlement plan (or resettlement action plan) is the planning document that describes what will be done to address the direct social and economic impacts associated with the involuntary taking of land.

Resettlement Entitlements: Resettlement entitlements with respect to a particular eligibility category are the sum total of compensation and other forms of assistance provided to displaced persons in the respective eligibility category.

Significant impact: means where 200 or more APs suffer a loss of 10% or more of productive assets (income generating) or physical displacement.

Squatters: means the same as non-titled and includes households, business and common establishments on land owned by the State. Under the project this includes land on part of the crest and slopes of canal dykes, flood control embankments, and similar areas of the drainage channels.

Structures: mean all buildings including primary and secondary structures including houses and ancillary buildings, commercial enterprises, living quarters, community facilities and infrastructures, shops, businesses, fences, and walls.

Socioeconomic Survey: The population census, asset inventory, and household survey together constitute the socioeconomic survey of the affected population.

Vulnerable Households: means households that are (i) headed by single woman or woman with dependents and low incomes; (ii) headed by elderly/ disabled people without means of support; (iii) households that fall on or below the poverty line (iv) losing last parcel of land (v) households of indigenous population or ethnic minority; and (vi) households of low social group or caste.

Executive Summary

A. Project Description

1. The proposed Chittagong Area Coal Fired Power Plant Development Project is an initiative to cope with a rapid increase in power demand in Bangladesh and supply power in a stable manner through the construction of a coal-fired power plant (2 x 600MW) in Chittagong Division in the southeast of Bangladesh.

2. To achieve the above objectives, the project components will be as follows:

- construction of a coal-fired power plant (2 x 600MW) with ultra super critical technology (Cox's Bazar District)
- construction of an excavated port including a fuel berth and a fuel transportation facility to the power plant (Cox's Bazar District)
- construction of an access road (Cox's Bazar District)
- extension of a 400kV transmission line between Matarbari and Anowara (Cox's Bazar District and Chittagong District)
- Construction of Township at Matarbari and Dhalghata union of Maheshkhali Upazila in Cox's Bazar District.

3. Power plant and Port facility

The proposed coal-fired power plant (CPCG Matarbari Coal-Fired Power Plant, 2 x 600MW) is located in Matarbari Union and Dhalghata Union in Maheshkhali Upazila in Cox's Bazar District, Chittagong Division .

4. Transmission line

The power plant will be connected to the substation facility in Anowara power plant, which will be constructed in the south of Chittagong, with a 400kV transmission line of approximately 60km. The transmission line will take a route along the local road . As land for construction of the transmission towers are subject to compensation, the final route will be determined so as to avoid any residential areas, taking into account the firmness of the land foundation.

5. Access Road

The location and route of access road is in the area from the national highway running between Chittagong and Cox's Bazar to the power plant site. Basically, existing road facilities will be utilized wherever possible. It is envisioned that the route segments to join the national highway in the north and the route from Maheshkhali Island to the power plant site will involve new road and bridge construction.

6. Township

The proposed Township for building residential quarters and other facilities for staff is located at Matarbari and Dhalghata Union in Maheshkhali Upazila, Cox's Bazar District, Chittagong Division

B. Objective

7. The Land Actuation and Resettlement Action Plan (LARAP) is prepared for large scale land acquisition and to address involuntary resettlement impacts with a time bound action plan and appropriate budget provisions that would be incorporated as an integral part of project design.

The LARAP is based on the principle of *the JICA Guidelines for Environmental and Social Considerations* that development projects must serve the needs of the society and ensure that PAPs are not made worse off by the proposed intervention. It aims to clarifying resettlement principles, organizational arrangements, and design criteria to be applied to the Project. It also addresses and fills the gap between the existing legislations of Bangladesh and the JICA Guidelines. In response to the above principle, involuntary resettlement should

be an important consideration in project identification. Three important elements of involuntary resettlement are: 1) compensation for loss of assets, loss of income sources and livelihood means; 2) assistance for relocation including provision of relocation sites with appropriate facilities and services, and; 3) assistance for rehabilitation to achieve at least the same level of well-being. As warranted by policy requirement of JICA for involuntary resettlement the extent of losses has been identified and depending on estimation of losses LARAP is prepared. The LARAP will be translated into Bengali Language and disclosed for the reference of PAPs as well as other interested groups.

C. Methodology

8. Both the primary and secondary sources of information are used to prepare the Land Acquisition Resettlement Action Plan (LARAP) document. Primary data has been collected through holding 3 stakeholders meeting first one at Puran Bazar Government Primary School, Matarbari, Second meeting at Chakaria Upzila Parishad Auditorium and the third one at Matarbari Union Parishad Hall Room. Census and Socio Economic Survey, asset inventory, households survey and market survey of land, trees and structure have been conducted and focus group discussion held to gather primary information and develop a comprehensive socio-economic profile of AHs which contributed to provide primary data for preparation of the LARAP. In collecting secondary data the following legislation and policies have been overviewed and harmonized through gap analysis amongst them and made identification of gap – filling measures:

- i. Relevant GOB legislation on land acquisition.
- ii. World Bank Operational Policies.
- iii. The Asian Development Bank (ADB) Safeguard Policies.
- iv. Japan International Agency (JICA) guideline for Environmental and Social Considerations.

9. The study of “Best Practices” in resettlement of affected persons in Jamuna Multi Purpose Bridge Project and Padma Multi Purpose Bridge Project and related reports, documents, Resettlement Frame Works, Land Acquisition, Resettlement Action Plans, Social Action Plans for Involuntary Resettlement of Affected Persons and Environmental and Social Impact Assessment Report have also contributed to the preparation of this document. Moreover, LARAP/RAPs implemented by BWDB, RHD, LGED and Bridge Division have also been consulted and policy guidelines, institutional arrangements and entitlements for different kinds of losses stipulated in those LARAP/RAPs have been given due consideration. In order to enrich the socio- economic profile of the affected household Income and Expenditure Survey (HIES) 2010 report of Bangladesh Bureau of Statistics has been utilized.

D. Legal Frame work, Policy Commitments and Entitlements

10. As the Bangladesh legal system on mitigation of the loss of land and other assets remains focused on compensation payment of loss of assets to title holders and provides no compensation to APs without title, gaps between national laws and JICA Safeguard policies are identified and bridging measures and lessons learned from best practices in involuntary resettlement issues have been outlined in policy commitments.

11. The project policy commitments have been orchestrated to compensate lost assets and restore or improve livelihood of all categories of APS affected directly or indirectly with titles and without titles. The affected people will be entitled to cash compensation for land and other assets at replacement value if land assets cannot be replaced. Additional assistance also will be paid as resettlement benefits that include shifting/ reconstruction allowance, assistance for small business reestablishment, livelihood restoration and special assistance to female headed households and vulnerable groups.

E. Entitlement Matrix

12. Based on the findings and analyses in the field surveys, the entitlement matrix for the PAPs at the construction site of power plant and port facility, and transmission line route and township site has been prepared. The Entitlement Matrix lists 10 types of losses and category of entitled persons and corresponding proposed entitlements to cover all possible losses to achieve at least the same level of livelihood of the affected households. Entitlement Matrix are as in the table below:

Table 1: Entitlement matrix for PAPs (power plant, port facility , transmission line and Township Sites)

No	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation and Assistance Package)	Responsible Organizations
1.	Loss of private land	Legal owners of land	<ul style="list-style-type: none"> ✓ Cash compensation under the law (CUL) for all the private land stipulated by the Ordinance 1982 is the average of last 12 months' sales values of same kind of land X 1.5 (50% premium). Cash grant that covers the difference between CUL and the replacement value (RV) ✓ Provision of stamp duty, land registration fee incurred for replacement land (15%) ✓ value added tax ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) 	DC PVAT, JVT CPGCBL
		Tenants and leaseholders	<ul style="list-style-type: none"> ✓ Provision of another land including 50% premium ✓ Provision of stamp duty, land registration fee (15%) If land is purchase by the compensation money ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) 	
2.	Loss of government land including khas land	Tenants and lessee	<ul style="list-style-type: none"> ✓ Provision of another khas land (assuming tenants and lessee will seek private land, 50% premium is added) ✓ Provision of stamp duty, land registration fee (15%) If land is purchase by the compensation money ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) 	DC PVAT, JVT CPGCBL
		Occupants without legal tenure	<ul style="list-style-type: none"> ✓ Provision of another khas land (assuming tenants and lessee will seek private land, 50% premium is added) ✓ Provision of stamp duty, land registration fee (15%) If land is purchase by the compensation money 	

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

No	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation and Assistance Package)	Responsible Organizations
			✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates)	
3.	Permanent loss of means of livelihoods/ source of income	✓ Lessor (land owners who rent their land will lose income from land lease contract)	✓ One-time assistance for opportunity loss (based on the lease amount) (assuming the inflation rate stays 10%)	DC, DOF PVAT, JVT CPGCBL
		✓ Permanent laborers ✓ Temporary laborers ✓ Sharecroppers	✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) ✓ Enrollment in vocational training courses based on assessment of skills (@300 taka / day for 120 days)	
		Businessmen, employers of salt farms, shrimp farms and fishing sites, self-employed people	✓ One-time assistance for opportunity loss (based on the lease amount) (assuming the inflation rate stays 10%) ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates)	
4.	Loss of residential/ commercial structures	Legal title holders Owners of structures	✓ Cash compensation for affected portion of the structure and other fixed assets at replacement cost (plus 50% premium) ✓ Option to be compensated for entire structure if remaining structure is no longer viable ✓ Provision of all taxes, registration costs and other fees incurred for replacement structure (15%) ✓ Reconstruction grant for reconstruction / repair of the remaining structure (@15 taka / sft) ✓ Shifting allowance based on actual costs of moving (@10 taka / sft) ✓ Owners to take away all salvage materials	DC PVAT, JVT, PWD CPGCBL
		Legal tenants/ lease holders of the structure	✓ Cash compensation equivalent to replacement cost of structure (or part of structure) for the portions of the structure constructed by the tenant/ leaseholder (plus 50% premium) ✓ Reconstruction grant for reconstruction / repair of the remaining structure (@15 taka / sft)	

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

No	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation and Assistance Package)	Responsible Organizations
			<ul style="list-style-type: none"> ✓ Shifting allowance based on actual cost of moving (@10 taka / sft) ✓ Owners to take away all salvage materials 	
		Socially recognized owners/ unauthorized occupants	<ul style="list-style-type: none"> ✓ Cash compensation equivalent to replacement cost of structure (or part of structure) erected by the displaced person (plus 50% premium) ✓ Reconstruction grant for reconstruction / repair of the remaining structure (@15 taka / sft) ✓ Shifting allowance based on actual cost of moving (@10 taka / sft) ✓ Owners to take away all salvage materials 	
5.	Loss of access to Residential/ Commercial Structures	Tenants of rented leased properties (but not constructed the whole part of the structure	<ul style="list-style-type: none"> ✓ One time cash grant for facilitating alternative housing/ CBEs TK. 15000/= per household ✓ Shifting allowance per household based on family members @ 3000/= per member minimum Tk. 9000/= maximum 12000/= 	PVAT CPGCBL
6.	Loss of standing crops at home gardens, shrimp, and fish	Land owners, <i>Bargadar</i> , Lessee and Unauthorized occupant of land	<ul style="list-style-type: none"> ✓ One time assistance for opportunity loss (based on the lease amount) (assuming the inflation rate stays 10%) 	DC PVAT, DOF,DAM CPGCBL
7.	Loss of timber and fruit bearing trees	Legal owner of land/Socially recognised owner Non-titled user of land	<ul style="list-style-type: none"> ✓ Market value of trees ✓ Owner will be allowed to fell and take away their trees 	DC PVAT, BFD,DAM CPGCBL
8.	Temporary loss of land during construction	Owners with legal title, tenants, leaseholders	<ul style="list-style-type: none"> ✓ Rental assistance for the period for which the land is temporarily requisitioned ✓ Temporarily requisitioned land will be returned to owners rehabilitated to original or preferably better condition 	DC PVAT CPGCBL
9.	Temporary loss of access to land, structure, utilities, common property resource during	Owners with legal title, tenants, leaseholders	<ul style="list-style-type: none"> ✓ Provision of temporary access and relocation where possible ✓ Restoration of access to the land, structure, utilities 	DC PVAT CPGCBL

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

No	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation and Assistance Package)	Responsible Organizations
	construction			
10.	Temporary loss of livelihood/ source of income during construction	Business owners, tenants, leaseholders, employees, vendors	✓ One-time assistance for lost income based on monthly income for three years from products, minimum wage rates or based on actual income, verified through incomes of comparable businesses in the area	DC, DOF, DAM CPGCBL

(Source: JICA Study Team)

E. Consultation, Participation & Disclosure

13. The project recognizes the importance of consultation. It has arranged consultation with agriculture farmers, shrimp and salt cultivators agriculture land losers, fisherman, service holders, local traders, employees of commercial and business enterprise, vulnerable groups, women headed households and other stakeholders like teachers, imam, local community leaders, retired govt. officials, UP chairman/ members, EA, policy makers, donor and other government agencies concerned. Consultation should include disclosure of projects components, adverse impacts, compensation, resettlement, relocation issues and safeguard policies contained in LARAP.

12. This process will be continuing from the initial stage through the detailed design, land acquisition process and up to the end of implementation and monitoring of the LARAP. This participatory approach can ensure transparency and accountability and bring in positive outcome.

F. Grievance Redress Mechanism

14. The project will establish a grievance redress mechanism to resolve discontentment of the APs. Grievance will be settled with their full representation in the Grievance Redress Committee constituted by the Administrative Ministry (MOPEMR) with representative from EA, district administration, upzila administration, IA, local elected representative and representative of APs and legal advisers. The committee will meet regularly and keep record of the decisions taken. Grievances regarding titled land will be referred to the appropriate court of law for resolution.

G. Income Restoration Strategy

15. Vulnerable Project Affected Households (PAHs) including poor and female headed, elderly headed, the landless, the poor as well as PAHs losing productive assets will be given additional support for livelihood and income restoration. Long-term income restoration and livelihood reconstruction program will be designed in the form of Livelihood and Income Restoration Program (LIRP) for rehabilitation of the vulnerable PAHs by the Implementing Agency.

H. Implementation Arrangement

16. Coal Power Generation Company of Bangladesh Limited will establish, for the Project, a Project Management Unit (PMU) headed by a Project Director (PD) that will be responsible for the overall execution of the project including land acquisition, relocation, resettlement and other related matters. The PD will recruit and appoint an experienced Implementing Agency (NGO/Social Consulting Firm) as required for implementation of resettlement activities. The Executive Engineer, under the overall responsibility of the Project

Director, will undertake day-to-day activities with the appointed Implementing Agency. Resettlement Advisory Committee (RACs) will be chaired by Assistant Engineer or equivalent officers and seek local inputs from the APs, communities in the implementation process of LARAP. Grievance redress committee will work for resolution of disputes. Grievance Redress Mechanism is detailed in Section 7 Joint Verification Team (JVT) and Property Valuation Advisory Team (PVAT) will be chaired by the Executive Engineer. JVT will compare and review the physical verification data conducted by the implementing Agency with DC's assessment of loss of physical assets and quantity of the loss assets corresponding to their owners and prepare final list of affected owners. PVAT will review the assessment of the market price of land and other properties by IA and determine their replacement cost.

I. RP Implementation Schedule

17. A time bound implementation Schedule for the LARAP is prepared synchronized with project construction schedule. The LARAP implementation will be complete within 4 years. The overall schedule of implementation is based on the principle that resettlement benefits are paid to AHs before they are displaced and civil engineering works takes off.

J. Budget

18. All Resettlement funds will be provided by the EA based on the financing plan agreed by the Government and JICA. The budget included the following heads of expenditure:

- i. Detailed costs of land acquisition, structure, trees, relocation and livelihood and income restoration and improvement.
- ii. All training costs for the APs.

19. All costs associated with land acquisition & rehabilitation will be funded by GOB. At this initial stage it is not practicable to accurately estimate land acquisition and costs of resettlement benefits for the project. However, a provisional estimate of LARAP implementation costs for the project is provided based on Census and SES of Project Affected Persons and Market Survey of land, trees and structure (likely to be affected). However an indicative budget of land acquisition and compensation along with resettlement assistance (including restoration of livelihood and income sources) for the affected people of the project with breakup of each component are place below:-

Component	Estimated Budget BDT (million)
1. Power Plant and Port Facility	3864
2. Transmission Line/ Angle Tower Location	3.1
3. Township Development	130.35
Total Budget	3997.45

J. Monitoring and Evaluation

20. The Project Management Unit will establish a monitoring system involving the Resettlement Unit, Project Supervision Consultant (PSC), and LARAP Implementing Agency for collection, analysis of and reporting on information about the progress of resettlement activities. Monitoring will also be done externally by an external monitoring agency/ resettlement specialist appointed by EA. The External Monitor will monitor and evaluate project activities intermittently over the project period and submit quarterly reports and a final evaluation report to EA and JICA after completion of the LARAP implementation.

Section-1

Rationale

1.1 Objectives

Out of the project components of Chittagong Area Coal Fired Power Plant Development Project, this Land Acquisition and Resettlement Action Plan (LARAP) is being prepared for a large-scale land acquisition and resettlement under the construction of power plant and port facility and Township for accommodation of staff in Matarbari and Dhalghata Union of Maheshkhali Upazila in Cox's Bazar District, and extension of transmission line from Maheshkhali Upazila to Anowara Upazila of Chittagong District.

The LARAP is based on the principle of the JICA Guidelines for Environmental and Social Considerations that development projects must serve the needs of the society and ensure that PAPs are not made worse off by the proposed intervention. It aims to clarifying resettlement principles, organizational arrangements, and design criteria to be applied to the Project. It also addresses and fills the gap between the existing legislations of Bangladesh and the JICA Guidelines. In response to the above principle, involuntary resettlement should be an important consideration in project identification. Three important elements of involuntary resettlement are: 1) compensation for loss of assets, loss of income sources and livelihood means; 2) assistance for relocation including provision of relocation sites with appropriate facilities and services, and; 3) assistance for rehabilitation to achieve at least the same level of well-being. As warranted by policy requirement of JICA for involuntary resettlement the extent of losses has been identified and depending on estimation of losses LARAP is prepared.

The LARAP will be translated into Bengali language and disclosed for the reference of PAPs as well as other interested groups.

1.2 Project Description

The proposed Chittagong Area Coal Fired Power Plant Development Project is an initiative to cope with a rapid increase in power demand in Bangladesh and supply power in a stable manner through the construction of a coal-fired power plant (2 x 600MW) in Chittagong Division in the southeast of Bangladesh.

1.3 Project Components.

To achieve the above objectives, the project components will be as follows:

- construction of a coal-fired power plant (2 x 600MW) with ultra super critical technology (Cox's Bazar District)
- construction of an excavated port including a fuel berth and a fuel transportation facility to the power plant (Cox's Bazar District)
- construction of an access road (Cox's Bazar District)
- extension of a 400kV transmission line between Matarbari and Anowara (Cox's Bazar District and Chittagong District)
- Construction Township at Matarbari and Dhalghata union of Maheshkhali Upazila in Cox's Bazar District.

1.4 Location of the proposed site

(1) Power plant and Port facility

The proposed coal-fired power plant (CPCG Matarbari Coal-Fired Power Plant, 2 x 600MW) is located in Matarbari Union and Dhalghata Union in Maheshkhali Upazila in Cox's Bazar District, Chittagong Division (Figure 1-1).

**Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar**





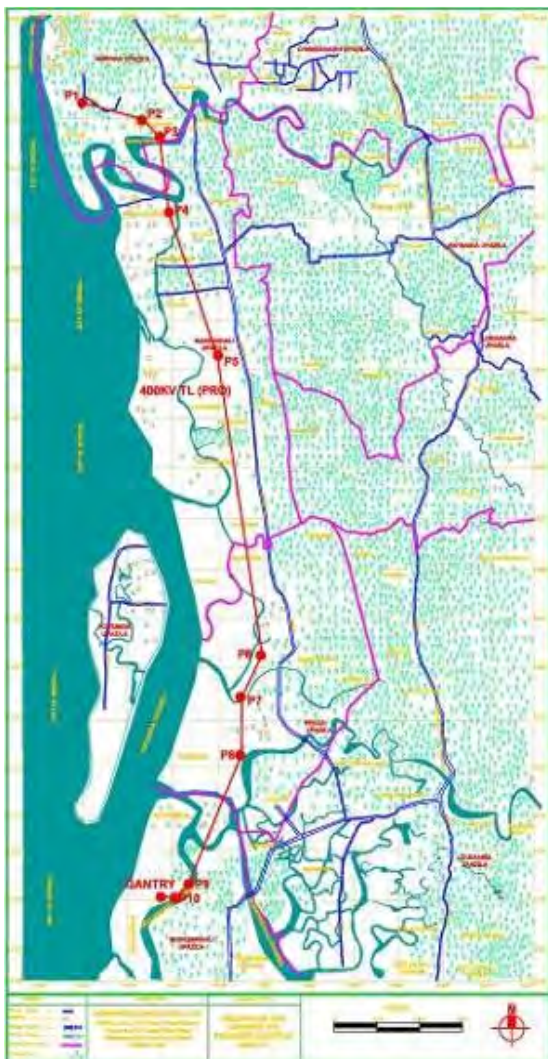
Source: <http://www.in2bangla.com/upazilaMap.php?id=293> (accessed in March 2013)

Note: The location is 21°42'15" N, 91°53'16" E

Figure 1-1 Location of the Power Plant

(2) Transmission line

The power plant will be connected to the substation facility in Anowara power plant, which will be constructed in the south of Chittagong, with a 400kV transmission line of approximately 60km. The transmission line will take a route along the local road (R-170) as shown in Figure 1-2. As land for construction of the transmission towers are subject to compensation, the final route will be determined so as to avoid any residential areas, taking into account the firmness of the land foundation.



(Source: JICA Study Team)

Figure 1-2 Route of the proposed transmission line

Table 1-1: Area covered by the proposed transmission line

District	Upazila	Union
Chittagong	Anowara	Barasat
		Burumchhara
	Banshkhali	Khankhanabad
		Baharchhara
		Kalikapur
		Boilchori
		Banshkhali
		Sheakerkhil
		Fulchari
Cox's Bazar	Pekua	Bara Bakia
		Pekua
		Ujantia
	Maheshkhali	Matarbari

(Source: JICA Study Team)

(3) Access Road

The location and route of access road is shown in Figure 1-3. The route of access road is in the area from the national highway running between Chittagong and Cox's Bazar to the power plant site. Basically, existing road facilities will be utilized wherever possible. It is envisioned that the route segments to join the national highway in the north and the route from Maheshkhali Island to the power plant site will involve new road and bridge construction.

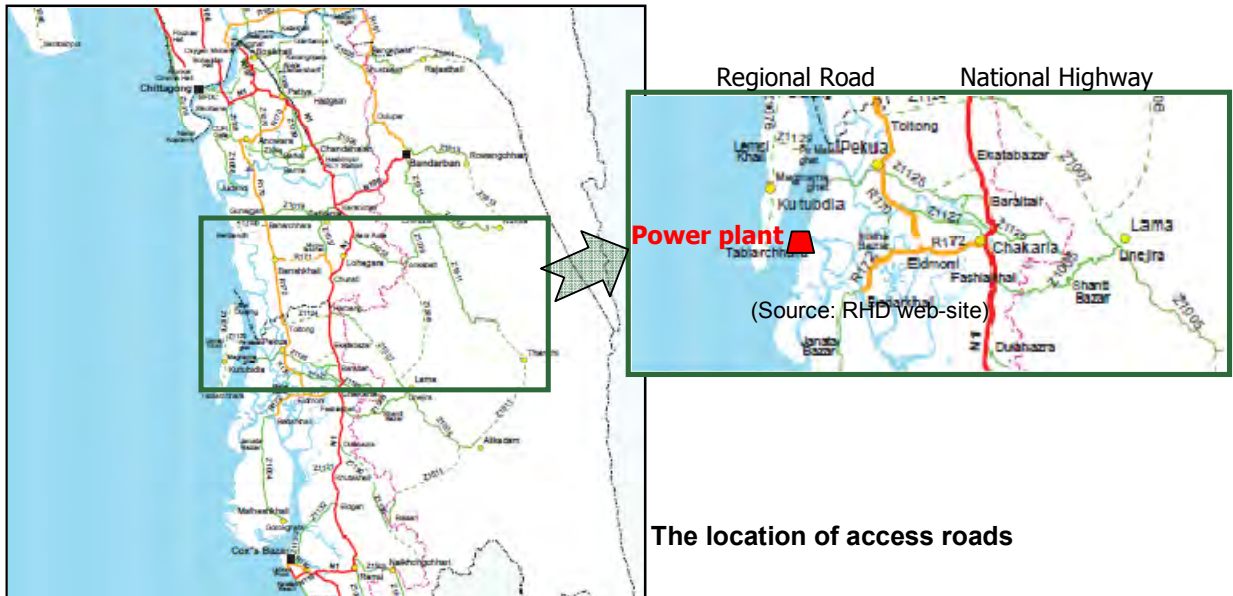


Figure 1-3 The Location of access roads

(4) Location of Township

The proposed area of around 20 hectares is designated for a township consisting of residential quarters for staff, medical facilities, school & college, shopping center, staff club and recreational park. The 132/11 KV substation for electrification of Matarbari area as well as to provide power to the township will be located within this land (20hectars) adjacent to the township.



Figure: 1-4 Location Map Township Area

(Source: Socio-economic Survey Team)

1.5 Methodology for preparing LARAP

Both the primary and secondary sources of information are used to prepare the Land Acquisition Resettlement Action Plan (LARAP) document. Primary data has been collected through holding 3 stakeholders meeting first one at Puran Bazar Government Primary

School, Matarbari, Second meeting at Chakaria Upzila Parishad Auditorium and the third one at Matarbari Union Parishad Hall Room. Census and Socio Economic Survey, asset inventory, households survey and market survey of land, trees and structure have been conducted and focus group discussion held to gather primary information and develop a comprehensive socio-economic profile of AHs which contributed to provide primary data for preparation of the LARAP. In collecting secondary data the following legislation and policies have been overviewed and harmonized through gap analysis amongst them and made identification of gap – filling measures:

- i. Relevant GOB legislation on land acquisition.
- ii. World Bank Operational Policies.
- iii. The Asian Development Bank (ADB) Safeguard Policies.
- iv. Japan International Agency (JICA) guideline for Environmental and Social Considerations.

The study of “Best Practices” in resettlement of affected persons in Jamuna Multi Purpose Bridge Project and Padma Multi Purpose Bridge Project and related reports, documents, Resettlement Frame Works, Land Acquisition, Resettlement Action Plans, Social Action Plans for Involuntary Resettlement of Affected Persons and Environmental and Social Impact Assessment Report have also contributed to the preparation of this document. Moreover, LARAP/RAPs implemented by BWDB, RHD, LGED and Bridge Division have also been consulted and policy guidelines, institutional arrangements and entitlements for different kinds of losses stipulated in those LARAP/RAPs have been given due consideration. In order to enrich the socio- economic profile of the affected household of the project is developed largely based on information drawn from Census Report 2011 and Household Income and Expenditure Survey (HIES) 2010 prepared by Bangladesh Bureau of Statistics has been utilized.

1.6 Brief Description of Social Impacts.

1.6.1 Brief Description.

Among the above project components, the CPGCBL will acquire 455 ha of land for the construction of a coal-fired power plant and 20ha of land for development of Township. PGCB will acquire 157 locations for tower erection, and RHD will acquire 3.1 ha of land for bridge and road construction as shown in the following table:

Table 1-2: Anticipated Land Acquisition

Project Component	Implementing Agency	Acquired Land	
		Location	Area (Ha)
(1) Power Plant and Port Facility	CPGCBL	Matarbari Union and Dhalghata Union of Maheshkhali Upazila (Cox's Bazar District)	455
(2) Transmission Line	PGCB	157 locations for tower erection from Anowara Upazila (Chittagong District) to Maheshkhali Upazila (Cox's Bazar District)	0.13
(3) Access Road	RHD	Matarbari Union, Dhalghata Union and Kalarmarchara Union of Maheshkhali Upazila (Cox's Bazar District)	3.1
(4) Township Development	CPGCBL	Matarbari and Dhalghata Union, Maheshkhali Upazila, Cox's Bazar District.	20.00
Total			478.23

(Source: JICA Study Team)

1.6.2 Anticipated Impact by Power Plant and Port Facility Construction

At the site where the power plant and port facility are to be constructed, there are 343 households (2,031 members in total) who will be directly affected by the project implementation. These households own, rent or use private land within the site. There are certain households who rent or occupy government land for salt and shrimp cultivation. In addition, there are squatters living on government land without legal tenure, most of whom live along with the dyke road. About 70% of these 343 households' heads that will be directly or indirectly affected are working in salt or shrimp farms as laborers, mazi, businessmen or cultivators. They conduct salt, shrimp and fish cultivation by employing laborers. They run salt and shrimp business. Some of them are involved in agriculture, boat business, tea selling and construction as carpenters.

Apart from such land owners and users, there are also permanent and temporary laborers employed by them. Including laborers from outside, there are 165 permanent and 892 temporary employees involved in shrimp cultivation, salt farming, fishing activities and others. There are also twelve sharecroppers.

Table 1-3: Anticipated Impact (Power Plant and Port Facility)

No of household	No of household members	Anticipated impact
343	2,031	<ul style="list-style-type: none"> - Lose land ownership to private land: 237 HHs - Lose shelters on their private land and will be physically displaced: 4 HHs - Lose tenant rights to private land: 77 HHs - Lose tenant rights to government land: 10 HHs - Lose occupancy of land to government land: 156 HHs - Lose occupancy of government land for living place: 16 HHs - Permanent loss of means of livelihood / sources of income: 34 HHs+ - Loss of standing crops at home gardens, shrimp and fish: 499 HHs - Loss of timber and fruit bearing trees: 274 HHs <p>(Note) Numbers of HHs are all cumulative.</p>
-	165	Permanent employees involved in shrimp cultivation, salt farming, fishing activities and others
-	892	Temporary employees involved in shrimp cultivation, salt farming, fishing activities and others
-	12	Sharecroppers of agriculture

(Source: JICA Study Team)

Total amount required for land acquisition, resettlement, and assistance for transition that includes the restoration of livelihood and income sources are 3.86 billion taka.

1.6.3 Anticipated Impact caused by the Extension of Transmission Line

There will be 1,256 m² of land required for the installation of tower bases as shown in the following table. Each tower will require 8 m² for its base. There will be 157 towers for both angle towers and suspension towers from Anowara Upazila to Maheshkhali Upazila.

Table 1-4: Breakdown of Land Acquisition (Transmission Line)

Tower Area (Per Tower)	Tower Base Area (Per Tower)	Acquired Land		
		Per Tower	No. of Towers	Total Area
11.1m x 11.1m	2m ² x 4	8 m ²	157	1,256 m ²

(Source: JICA Study Team)

The anticipated impact on the land owners will not last permanently or be critical, as the land area for tower bases are relatively small, and land owners' livelihood activities will be hindered only during the construction period. The table below shows the anticipated impact on the owners of the angle tower locations from P1 to P10. There are no people living or using the P10 location (government land).

Table 1-5: Anticipated Impact on the Owners of Angle Tower Locations

Category	Impact	No. of HH	No. of HH Members
Owners of private land (P1 to P8)	- Temporarily affected during construction period	8	83
Users of Government land with official agreement (P9)	- Temporarily affected during construction period	1	9
Total		9	92

(Note) There are no people living or using the P10 location (government land).

(Source: JICA Study Team)

Total amount required for land acquisition of tower locations and compensation for the affected people is 3 million taka.

1.6.4 Anticipated Impact Caused by the Development of Township Site.

At the designated area for township development, there are 41 HHs having 207 members in all who will be directly affected by the project. Of 41 HHs, 14 (34.15%) HHs are salt and shrimp cultivators. They are the owners and or lessees of salt/shrimp fields who invest money in salt/shrimp cultivation. 8 among 14 cultivators belong to Matarbari Union and rest 6 cultivators are from Dhalghata union. There are also 14 businessman and among them 10 hail from Dhalgata and 4 from Matarbari. 3 HH heads from Dhalgata and 2 HH heads from Matarbari are engaged in farming. Of the 41 total HH heads 5 are self-employed in household activities and 3 are doing service.

Apart from such land owners and users, there are also permanent and temporary laborers employed by them. Including laborers from outside, there are 12 permanent and 52 temporary employees involved in shrimp cultivation, salt farming, fishing activities and others.

Table 1-6: Anticipated Impact of Township Development

No of household	No of household members	Anticipated impact
41	207	- Lose land ownership to private land: 41 HHs - Permanent loss of means of livelihood / sources of income: 19 HHs+ -
-	12	Permanent employees involved in shrimp cultivation, salt farming, fishing activities and others
-	52	Temporary employees involved in shrimp cultivation, salt farming, fishing activities and others

(Source: Socio-economic Survey, 2013)

Total amount required for land acquisition resettlement and assistance for rehabilitation livelihood restoration and income sources is BDT 130.35 million.

1.7 Specific Measures Taken to Minimize Adverse Impacts

1.7.1 Examination of Alternatives

For the construction of power plant and port facility, there had been two alternative locations for the CPGCBL to consider. One was the located 2 km south from the present one on Matarbari Island, and another on Maheshkhali Island.

Large settlements with thousands of people on private lands were found on the first location (administrative location was Dhalghata Union), which required large-scale land acquisition and resettlement. In order to minimize such issues, the present site was discovered, which is located right on the north next to it. Although resettlement was indeed minimized (around 20 households), construction at the present site will cause losses of private land, livelihood and income sources such as salt and shrimp farming were still anticipated.

Another alternative site on Maheshkhali Island (administrative location was Hoanak Union) was also considered. However, while no resettlement was anticipated, this was projected to lead to similar losses, i.e., losses of private land, livelihood and income sources such as salt and shrimp farming, and agriculture. The degree and scale of such adverse impacts remained same as the present one.

After thorough analyses from numerous aspects, not only from social aspect but from environmental, financial, technical aspects, the present location was finally prioritized and accepted.

As per transmission line route between the expected Anowara substation site and the planned coal-fired power plant site in Matarbari, there were two candidates: one along the National Highway No. 1 ("N1") and the other along Regional Road No. 170 ("R170"). As a result of route selection, the route in the western side of the "R170" running parallel to the "R170" was selected for this project. This route can avoid crossing with the planned transmission line between Maheshkhali power station and Anowara substation in the future and secure space for the transmission line route. There is no reserve forest and existing extra high voltage transmission line to be crossed over in this area and the "R170" allows for relatively easy construction and maintenance work. The terrain surrounding the route is mostly flat area and covered with bushes, farmlands and salt fields. A route in parallel with the "N1" was found unsuitable because there are reserve forests and an existing 132 kV transmission line along the "N1" and the total route length increases up to approximately 80 km.

Regarding selection of site for Township development the rationale is that the township will be built for residential accommodation of the officials and staff of the power plant on an area of 20 ha land at Matarbari and Dhalgata Union of Maheshkhali Upazila. It was selected after thorough analyses of various aspects. The proposed township needs to house residential and other facilities of schooling and medical treatment and related civic amenities for a huge number of officials, staff and employees of the power plant (and port facility) and to be constructed on the land adjacent to power plant. Most importantly social and environmental aspect and easy and quick travelling of the officials and staff from residence to work place and back were given due weightage. And also financial and other technical aspects were given due consideration and finally the present site of township was accepted.

1.7.2 Application of International Standards to Land Acquisition and Resettlement

As stipulated in *the Acquisition and Requisition of Immovable Property Ordinance 1982*, the CPGCBL will submit an application of land acquisition to the Government of Bangladesh (GOB), with sufficient data and information about the project design and cost, through the Deputy Commissioner (DC) of Cox's Bazar. As this project will be financed by the Government of Japan, the CPGCBL will allocate its budget to fill the gap between the

Ordinance 1982 and *JICA Guidelines for Environmental and Social Considerations* in order to compensate not only titleholders but also non-titleholders for their loss of land ownership, relocation, and loss of their livelihood means in an internationally accepted manner.

The DC Office will follow all the official procedures to acquire land and provide compensation as stipulated in the Ordinance 1982. It will take over eight months to complete all the procedures from the CPGCBL's application to the payment of compensation through the DC Office to the project affected persons (PAPs).

1.7.3 Entitlements of Affected People without Legal Claims to Land

Lack of ownership does not imply ineligibility for compensation, if the JICA Guidelines and other internationally accepted practices are to be followed. CPGCBL will endeavor to provide suitable alternatives to resettle the squatters or to provide cash compensation on a replacement cost basis. PAPs that lose only a part of their physical assets will not be left with a portion that is inadequate to sustain their current standards of living. The minimum size of the remaining land and structures will be agreed to during the resettlement planning process. People temporarily affected will also be considered PAPs and resettlement plans shall address the issue of temporary acquisitions.

1.7.4 Measures for Avoidance and Further Influx of Illegal Occupation

All PAPs residing, working, doing business and/or cultivating land within the project impacted areas upon the cut-off date, will be entitled to compensation for their lost assets (land and/or non-land assets), at replacement cost, if known, and the restoration of incomes and businesses. Compensation will be provided with rehabilitation measures sufficient to assist the PAPs to improve or at least maintain their pre-project living standards, income-earning capacity and production levels.

In the Project, the cut-off date for titleholders will be the date of notification under Section 3 of the Ordinance of 1982. For non-titled holders, CPGCBL declared a cut-off date on the last day of the population census (December 28, 2012) and on the occasion of organizing 2nd public consultation meeting (February 13, 2013). For Township cut off date would be October 1, 2013. CPGCBL intended to fix the number of households and their members who occupy the government land without permission so as to limit encroachment for the purpose of qualifying for entitlement. CPGCBL will also take appropriate measures to ensure that all land cleared for the project remains clear of squatters.

1.7.5 Methods of Valuing Affected Assets

All compensation for land and non-land assets owned by any households/shop owners who met the cut-off-date will be based on the principle of replacement costs. Replacement costs are the amounts calculated before displacement which are needed to replace any affected assets without depreciation and without deductions for taxes and/or costs of transaction. The Deputy Commissioner (DC) follows the rules laid down in the 1982 Ordinance to determine market prices for assets like land, structures trees and crops, with assistance from other relevant departments such as Public Works Department (PWD) for structures, Divisional Forest Office for trees, and Departments of Agricultural Extension for yields and Department of Agriculture Marketing for crop prices. The assessed value is typically lower than the replacement costs. To ensure that the project-affected persons can replace the lost property, replacement value will be determined by the Property Valuation Advisory Team (PVAT) constituted by Ministry of Power, Energy and Mineral Resources with representatives from CPGCBL, DC office concerned, and representative of implementing agency and finally approved by the CPGCBL.

1.7.6 Livelihood Restoration and Rehabilitation

The livelihood restoration and improvement program are based on consultation with PAPs and their socio-economic profile, living environment, level of education. Vulnerable project Affected household including poor and female headed, elderly household, the landless, the

poor as well as PAHs losing productive assets will be given additional support for livelihood and income restoration like vocational training, microfinance, and provision of job opportunities at the construction sites and new facilities. Long term income restoration and livelihood reconstruction program will need to be designed in the form of livelihood and income restoration program (LIRP) for rehabilitation of vulnerable and poor households by the implementing agency.

Section-2 Legislations in Bangladesh and GAPS From JICA's Policy

2.1 Key Legislations

The Acquisition and Requisition of Immovable Property Ordinance of 1982 and its subsequent amendments in 1993 and 1994 provide the key legal instrument for the acquisition of private land for development activities in Bangladesh.

Salient provisions of the Ordinance which show tangible gaps with the JICA Guidelines for Environmental and Social Considerations are as follows:

Avoiding/ minimizing land acquisition: The Ordinance only implicitly discourages unnecessary acquisition as land acquired for one purpose cannot be used for a different purpose. There are, however, no mechanisms to monitor if this condition is actually adhered to.

Eligibility for compensation: The Ordinance stipulates compensation only for the persons who appear in the land administration records as the owners (i.e., titleholders). It does not recognize the rights of those without legal title to the land, who live in or make a living from it.

Compensation paid for: The Ordinance provides for compensation of land and other objects built and grown on it (structures, trees and orchards, crops and any other developments on the land like ponds, built amenities, etc.). There are no provisions to assess and restore lost income streams or income sources caused by the land acquisition to the PAPs.

Compensation standards: Landowners receive compensation under the law (CUL) as per the market value of the property at the publication date of the notice¹ with a premium of 50% on the assessed price. Any damage to standing crops or trees on the property, expenses incidental to compelled changes to the residence or place of business, and reduction of profits of the property in the acquisition period are also entitled to a sum of 50% on top of such market value². The 1994 amendment made provisions for payment of crop compensation to tenant cultivators ("bargadar").

Although the Ordinance stipulates 'market prices' of the acquired land as just compensation, the legal assessment method almost always results in prices far below the actual market prices. Certain pricing standards, which are regarded as unrealistic, are used to assess other losses like structures and various built amenities, trees, and crops, etc.

Relocation of homestead losers: There is no legal obligation to relocate, or assist with the relocation of, those whose homesteads have been acquired.

Ensuring payment/ receipt of compensation: Even with the given legal provision, the compensation process is time-consuming. There is, moreover, no certainty as to when an affected landowner will obtain the stipulated compensation or whether he will obtain it at all. Land is legally acquired and handed over to the project proponent as soon as the acquisition authority identifies the owners ('awardees') by examining the records, and sends a legal notice advising them to claim compensation ('awards'). And it also turns out that it is an obligation of the PAPs to prove that the acquired land legally belongs to them.

Socio-economic rehabilitation: The provisions are so restricted that the Ordinance shows no concern about the long-term socio-economic changes the PAPs might undergo in the post-acquisition period. Except for the compensation at the legal 'market price', there are no other provisions in the acquisition or other-laws that require the government to mitigate the resultant adverse impacts caused by the acquisition. Socio-economic rehabilitation of the involuntarily displaced persons is absent in the legal regime of Bangladesh.

¹ The average value of the properties of similar description and with similar advantages in the vicinity during the last twelve months prior to the publication date of the notice. (Section 8 (1) of the *Acquisition and Requisition of Immovable Property Ordinance 1982*.)

² The market value thus determined does not always reflect the actual market value.

2.2 JICA's Policy on Land Acquisition and Resettlement

The key principle of JICA policies on involuntary resettlement is summarized below.

- (1) Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives.
- (2) When, population displacement is unavoidable, effective measures to minimize the impact and to compensate for losses should be taken.
- (3) People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels.
- (4) Compensation must be based on the full replacement cost as much as possible.
- (5) Compensation and other kinds of assistance must be provided prior to displacement.
- (6) For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. It is desirable that the resettlement action plan include elements laid out in the World Bank Safeguard Policy, OP 4.12, Annex A.
- (7) In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.
- (8) Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans.
- (9) Appropriate and accessible grievance mechanisms must be established for the affected people and their communities.

Above principles are complemented by World Bank OP 4.12, since it is stated in JICA Guideline that "JICA confirms that projects do not deviate significantly from the World Bank's Safeguard Policies". Additional key principle based on World Bank OP 4.12 is as follows.

- (10) Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advance of such benefits.
- (11) Eligibility of Benefits include, the PAPs who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying.
- (12) Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.
- (13) Provide support for the transition period (between displacement and livelihood restoration).
- (14) Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc.
- (15) For projects that entail land acquisition or involuntary resettlement of fewer than 200 people, abbreviated resettlement plan is to be prepared.

In addition to the above core principles on the JICA policy, it also laid emphasis on a detailed resettlement policy inclusive of all the above points; project specific resettlement plan; institutional framework for implementation; monitoring and evaluation mechanism; time schedule for implementation; and, detailed Financial Plan etc.

In terms of categories of PAPs and types of lost assets, the gaps in the existing legal framework of Bangladesh and requirements of the JICA Guidelines are identified as presented in the table below.

Table 2-1: Gap Analysis between Bangladeshi Laws and JICA Guidelines

No	Category of PAPs / Types of Lost Assets	Bangladesh Laws	JICA Guidelines
1	For all types of land and other assets for legal land	Acquired by DC as per legal requirements/ procedures	Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based
2	Land tenants	Compensation for standing crops if harvesting of crops is not possible	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported.
3	Land Users	Squatters, encroachers and unauthorized users/ occupiers are not recognized	Ditto
4	Owners of temporary structures	Only cash compensation under law (CUL)	Compensation must be based on the full replacement cost as much as possible.
5	Owners of permanent structure buildings	Ditto	Ditto
6	Perennial crops	Market prices of the standing crops with value of plants	Compensation must be based on the full replacement cost as much as possible.
7	Timing for payment of entitled compensation to the PAPs	No concern on the part of the project proponent. Land is handed over to the project proponent as soon as the compensation funds are placed with the DC.	On the completion of payment of compensation to the PAPs, the land is to be vacated and handed over to the project proponent.
8	The issue of relocation and income generation activities	No concern about relocation and income generation activities.	People who must be resettled involuntarily and whose livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standards of living, income opportunities and production levels to pre-project levels.
9	Vulnerability of PAPs	No distinction between the PAPs	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, the landless, elderly, women and children, ethnic minorities, etc.
10	Role of DC, project proponent and PAPs	DC to acquire land, the project proponent to use the land, and PAPs to seek compensation from the DC.	DC and project proponent to assist the PAPs in getting the compensation, assist to collect the legal and required documents, and provide support for the transition period between displacement and livelihood restoration.

(Source: JICA Study Team)

2.3 Procedures for Land Acquisition

Under the Ordinance of 1982 and its subsequent amendments 1989, 1993, and 1994, the DC at District level is entrusted to acquire land for agencies requiring land for any public or private infrastructure projects. The procedures of land acquisition will follow the following steps:

Step 1: After identifying and selecting the exact ground locations of the required land, the project proponent will carry out detailed engineering surveys and design the construction work and lay them out on mauza maps. The project proponent will prepare the land acquisition proposals to obtain administrative approval by the line ministry.

Step 2: The project proponent, after obtaining the approval of the administrative ministry, will make a request to the DC, with sufficient information including the amount of land to be acquisitioned from each plot, and the ownership status such as private and public lands, for the acquisition of the land as per the proposal.

Step 3: Within 90 days, the DC will appraise the application through a) site observation, b) consultation with local politicians and residents, c) develop project profiles, and d) cost estimates. The DC will then develop and submit a proposal on land acquisition to the Ministry of Land for an appraisal by the central government within 90 days.

- The DC will publish a notice as stipulated in Section 3 of the Ordinance of 1982 stating that there is a proposal for the property to be acquired. The persons to be displaced may submit an objection to the land acquisition to the DC within 15 days after the notice is served. All the legal titleholders will be advised to show their ID cards and other documents that verify their rights. For those with no registrations, the DC Office will call for circumstantial evidence from community leaders, local elite people, and religious leaders, etc., to add these people to the list.
- The DC will consult with the Public Works Department (PWD), Forest Department (BFD), Department of Agricultural Marketing (DAM) and Department of Fisheries (DOF) to assess the value of structures, trees, crops and aqua products for their existing rates.
- Under Section 6, a second public notice will be served stating the GOB's decision on the land acquisition and taking possession thereof. The DC Office will confirm the PAPs, exact land area and size for acquisition, number of relocated houses, agriculture land, forestry and fishing areas that will be lost. The persons to be displaced will be requested to submit their statements of property, amounts and particulars of the claims to compensation after 15 days of the second notice being served. The DC Office will respond to any grievances made by the PAPs in order to agree to the assistance package.
- The project proponent shall deposit the estimated amount of the award of compensation with the DC within 60 days from the receipt of the estimate given by the DC.
- Upon serving the last notice (Section 7), the DC shall pay the amount to the owners of the acquired property within another 60 days from the date of deposit by the project proponent. The DC will take possession of the property after completion of the compensation payment to the PAPs and immediately declare this in the official gazette, and hand the property over to the project proponent.

Social Impact

Section-3

3.1 Socioeconomic Survey and Focus Group Discussions at Power Plant and Port Facility Site

3.1.1 Survey Outline

(1) Socioeconomic Survey

a) Objective

The survey aim was to collect the typical characteristics of the affected households, basic data of their livelihoods and living standards, and to gain a comprehensive idea of the socioeconomic conditions at the project site.

b) Main use of the results

Analyze the socioeconomic conditions of the project site to draw the needs of the affected people for the livelihood restoration/ improvement program and the area development

- Estimate the cost required for land acquisition, resettlement, compensation and the implementation of the livelihood restoration program

c) Selection of interviewees

The interviewees were the directly affected people who own/ lease/ use their private land (or lease government land) and who work within the site. Squatters were also surveyed as well as the indirectly affected people living around the project site.

There were 343 household heads interviewed under the survey, and their major characteristics are as described below. Out of 343 household heads, 274 were from Matarbari Union, and the majority of these households lived in Shirar Dail village. The remaining 69 households were from Dhalghata Union, which is in southern part of the project site, and most of these households lived in Mohiraghona village.

Table 3-1: Interviewed Households

Union		No. of Households	No. of Household Members
	Village		
Matarbari		274	1,666
	Matarbari	3	
	Maiz Para	1	
	Shirer Dail* ¹	270	
Dhalghata		69	365
	Mohiraghona* ²	59	
	Sutaria Para	1	
	Nasir Mohammaddhil	9	
TOTAL		343	2,031

Note 1) Shirer Dail includes "Shirer Dail" (149 HHs), "East Shirer Dail" (19 HHs), "Middle Shirer Dail" (21 HHs), "West Shirer Dail" (4 HHs), "Dakshin Shirer Dail" (74 HHs) and "Uttar Shirer Dail" (3 HHs).

2) Mohiraghona includes "Mohiraghona" (7 HHs) and "Uttar Mohiraghona" (52 HHs).
(Source: JICA Study Team)

d) Survey Method

The three pillars of the socioeconomic survey, i.e., population census, asset inventory, and household survey, were compiled into one set of questionnaires and targeted all the potential PAPs regardless of their entitlement of land ownership or whether they were affected/ displaced PAPs.

Table 3-2: Structure of Socioeconomic Survey

Survey	Achievements
Population Census	<p>A complete and accurate count of the population was made in the population census to confirm who and how many of the people would be affected by land acquisition and related impacts.</p> <p>The population census provided the basic information necessary for determining eligibility for compensation. A cut-off date was fixed as December 28, 2012, including the accurate/ exact number of PAPs, names, photos for identification, and assets. It was also declared on February 13, 2013 in the presence of such PAP.</p>
Asset Inventory	<p>In the asset inventory survey, a complete count and description of all property was undertaken for the property to be acquired.</p> <p>An asset inventory of losses (IOL) involved a mapping of all households affected by land acquisition, agricultural, homestead and business, trees, crops, fish, structures of residential and business and other kinds of losses, i.e., wages and income. A list of the losses was remunerated into a database.</p> <p>The IOL for each PAP recorded the following:</p> <ul style="list-style-type: none"> - amount and type of land to be acquired (residential, commercial, agricultural) - type of trees and/ or crops to be acquired - residential houses to be acquired - commercial structures to be acquired - loss of livelihood (type and income loss) - other types of losses - types of community infrastructure or common property resources to be acquired <p>The IOL also recorded the legal status of the land, residential houses, shops and other structures to be acquired.</p> <p>In conjunction with the population census and IOL of the PAPs, household data was collected on the following items:</p> <ul style="list-style-type: none"> - size, sex and age composition of each affected household - types of occupation/ livelihood for each economically active household member - assessment of income levels for each economically active household member - number of school age children attending school - ethnic, language, and religious identity of each affected household <p>PAPs attitudes (intentions/ opinions) towards the project, land acquisition and resettlement were also recorded.</p>
Household Survey	<p>The household survey focused on income-earning activities and other socioeconomic indicators to observe the social and economic conditions of PAPs, such as income, expenditure, employment, education, skills, livelihood, utilities, health services facilities, social services, and other socio-economic and cultural aspects that prevailed in the targeted areas.</p> <p>The household survey also included an inventory of formal and informal community level organizations that represented the PAPs, which can be engaged in information dissemination and consultation related to the implementation of the resettlement plan.</p>

e) Interviewers

CPGCBL/ BPDB officials and researchers representing the Engineers Associates Ltd., who were commissioned by the JICA Study Team, conducted the survey.

f) Survey period

December 17 - 28, 2012.

g) Limitations of the survey:

The severe time constraints during the survey period and geographical remoteness of the site made it unable for the surveyors to return to the interviewed households to reconfirm their answers before they left the site. Incoherency of answers done by a person therefore is

admitted in the data, which made it unable to implement a complete set of scientific analysis. The number of people for each occupation were as of December 2012. Land tenure, they insisted, could not be double-checked as they were reluctant to disclose their official registration including land registration certificate. Likewise, their household income and expenditure, land lease and lease amount stated by them were not certified.

(2) Focus Group Discussions

a) Objective

The focus group discussions aimed to collect specific information from particular groups, such as women and children who were regarded as vulnerable, and laborers who were mostly found at the project site in order to evaluate their specific characteristics.

b) Main use of the results

Analyze the specific conditions of particular clusters of populations, who were placed in such groups with or without their wishes

- Draw specific needs of the vulnerable groups
- Obtain local needs for the livelihood restoration/ improvement program and the area development

c) Selection of interviewees

Each population cluster had three groups in which 86 people were randomly sampled at the project site.

Table 3-3: Interviewed Population in Focus Group Discussion

Cluster	No. of Groups	No. of People in Total	Age Range (as of Dec. 2012)
Children	3	21	6 to 11
Women	3	25	20 to 45
Salt laborers	3	19	13 to 50
Shrimp laborers	3	21	18 to 70
Total		86	

(Source: JICA Study Team)

d) Survey Method

Focus Group Discussions

e) Interviewers

CPGCBL/ BPDB officials and researchers representing the Engineers Associates Ltd., who were commissioned by the JICA Study Team, conducted the FGDs.

f) Survey period

December 18 - 25, 2012.

g) Limitation of the survey:

Not applicable.

3.1.2. Findings

The followings are the major findings from socioeconomic survey and FGDs.

(1) Profile of Interviewees and their family members

a) Surveyed Population

Out of 2,031 people comprising 343 interviewed households, 1,663 were from Matarbari union, of whom males shared 54.6%, and adults did 50.3%. In Dhalghata Union, on the other hand, males comprised of 57.3% and adults shared 56.0%.

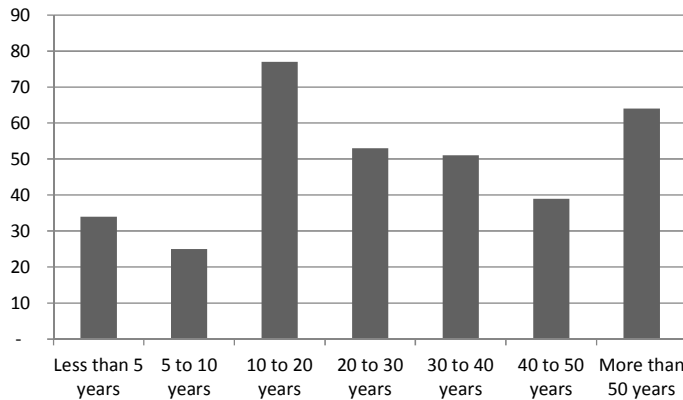
Table 3-4: Total Surveyed Population

	Total Surveyed Population			Matarbari Union			Dhalghata Union		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Adult	599	444	1,043	474	363	837	125	81	206
Child	520	468	988	434	392	826	86	76	162
Total	1,119	912	2,031	908	755	1,663	211	157	368

(Source: JICA Study Team)

b) Length of Residing at the Site

The length of time of households residing at the site varied. Those residing for over 50 years were 64 households, and the maximum length of time reached 300 years. This means that there are households residing at the site over generations.

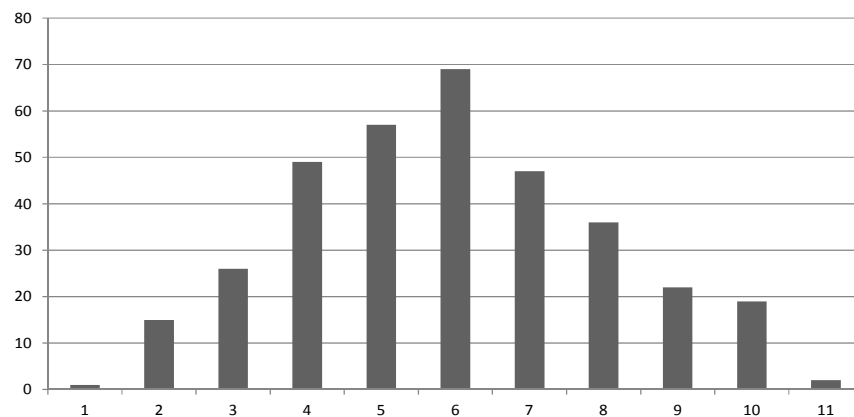


Note: The median is amount of time is 25 years, and the mode is 15 years.
 (Source: JICA Study Team)

Figure 3-1 Length of Time Residing at the Site

c) Size of Household

Average household size was 5.92 people, which is close to the median (6.0) and the mode (6.0). The minimum number of household member was 1, and the maximum number was 11.



(Source: JICA Study Team)

Figure 3-2 Household Size

(2) Education Level and Literacy

Taking a look at the education level of the household heads, 33.5% were illiterate, and 38.8% could only write their own names (signature). This implies that 72.3% of household heads live without reading or writing as part of their day-to-day activities. The household

heads under these two clusters had a slightly larger number of household members than the other categories that had graduated from University.

Table 3-5: Education Level of Heads and Household Size

Education Degree/ Level	No. of HH Heads	%	Average of HH Size
Illiterate	115	33.5%	6.17
Write name	133	38.8%	6.14
Class I-V	25	7.3%	5.20
Class VI-X	40	11.7%	5.35
SSC	9	2.6%	5.33
HSC	9	2.6%	4.44
BA	5	1.5%	5.80
BA (Hons)	1	0.3%	7.00
MA	2	0.6%	6.00
Other 1	3	0.9%	7.33
Other 2	1	0.3%	3.00
TOTAL	343	100.0%	5.92

(Source: JICA Study Team)

Among the literate population, who comprised of 40.9% of the total surveyed population, males were 52.3%, and adults 34.1%. In Matarbari, 69.4% of the literate population were children under 18 years old, and more female than male children were literate. In Dhalghata, on the contrary, more males than females were literate (for both adults and children), and the literate population children shared half (50.9%). Although literacy rates of Matarbari and Dhalghata were similar in total (40.3% and 43.2% respectively), 56.4e% of children in Matarbari were literate, whereas 50.0% were in Dhalghata.

Table 3-6: Literate Population

	Total Surveyed Population			Matarbari Union			Dhalghata Union		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Adult	170	113	283	118	87	205	52	26	78
Child	264	283	547	222	244	466	42	39	81
Total	434	396	830	340	331	671	94	65	159

(Source: JICA Study Team)

According to the FGD, females, salt laborers and shrimp laborers did not have sufficient opportunities for education. The number of government primary schools around the site was reported to be not sufficient, although there were Islamic schools. Due to households being poor, many people dropped out of school when they were children, even before they completed primary education.

There was no major difference found in education levels between male and female children.

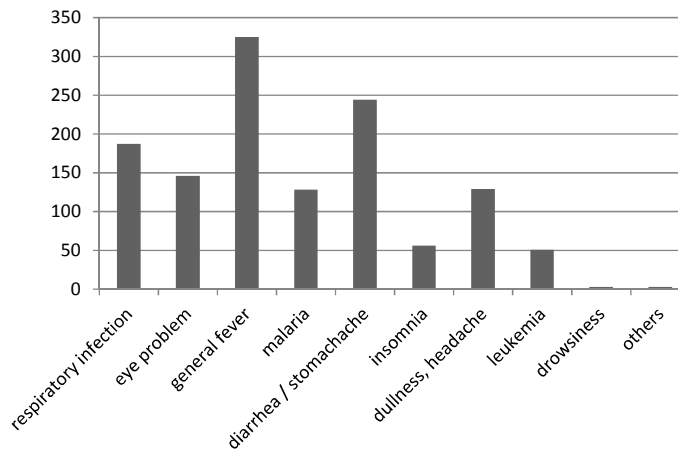
Table 3-7: Educational Levels and Literacy (FGD)

Clusters	Educational Qualifications			Literacy Levels		
	Primary	Secondary ≤	Unknown	Read & Write	Signature Only	Illiterate & N/A
Children	15	1	5	19	0	2
Women	4	3	18	9	12	4
Salt laborers	3	4	12	6	11	2
Shrimp laborers	9	3	9	13	7	1
Total	31	11	44	47	30	9

(Source: JICA Study Team)

(3) Health Conditions of Affected People

From the total households, 325 households (94.8%) answered that they suffered from general fevers. They also suffered from diarrhea/ stomachaches (244 households, 71.1%) and respiratory infections such as colds (187 households, 54.5%).



Note: Household heads were asked to select as many illnesses as they experienced.

(Source: JICA Study Team)

Figure 3-3 Types of Illness

(4) Occupations of Household Heads

Among the interviewed household heads, over 30% (108 household heads) were salt cultivators. These household heads are the owners and/or lessees of salt fields who invest money in salt cultivation. Sixty out of the 62 salt laborers (18%) were from Matarbari Union, being laborers who prepared the salt beds. These laborers always work under the guidance of salt cultivators, receiving wages. There was a lower number of shrimp cultivators, businessmen, mazi and laborers as the survey was conducted in December 2012 when salt cultivation was taking place. However, the majority of most types of laborers were from Matarbari, not Dhalghata.

Table 3-8: Occupations of the Household Heads

Occupations		Matarbari	Dhalghata	Total	
Cultivators				113	32.9%
	Salt Cultivators	66	42	108	
	Shrimp cultivators	5	0	5	
Businessman				36	10.5%
	Salt Businessmen	12	2	14	
	Fish Businessman	11	0	11	
	Businessmen (other)	10	1	11	
Mazi				35	10.2%
	Mazi (Salt)	18	10	28	
	Mazi (Shrimp)	5	2	7	
Laborers				94	27.4%
	Salt Laborers	63	2	65	
	Shrimp Laborers	15	0	15	
	Day Laborers	12	2	14	
Fishing				28	8.2%
	Fishermen	18	1	19	

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Occupations		Matarbari	Dhalghata	Total	
	Boatmen	5	3	8	
	Crab Catchers	1	0	1	
Agriculture				1	0.3%
	Orchardists/ gardeners	1	0	1	
Others				36	10.5%
	Teachers	4	1	5	
	Grocery Shop Owners	4	0	4	
	Masons	4	0	4	
	Service Industry Workers	2	2	4	
	Housewives	4	0	4	
	Master Tailors	3	0	3	
	Quack Doctors	2	1	3	
	Carpenters	2	0	2	
	Beggars	2	0	2	
	Security Guards	1	0	1	
	Singers	1	0	1	
	Students	1	0	1	
	Home Makers	1	0	1	
TOTAL		274	69	343	100.0%

Note: Cultivators are the owners or lessees of the salt, shrimp or fish fields who invest their own money for cultivation. Businessmen in salt, shrimp and fish are those who purchase the products from the fields and local markets, and sell them at different markets and other places. Laborers are those who sell their labor and prepare the fields. They work under the guidance of cultivators and receives wages from them. "Mazi" refers to middleman in Bengalese who recruit day laborers to introduce to businessmen, land owners and employers who need laborers.

(Source: JICA Study Team)

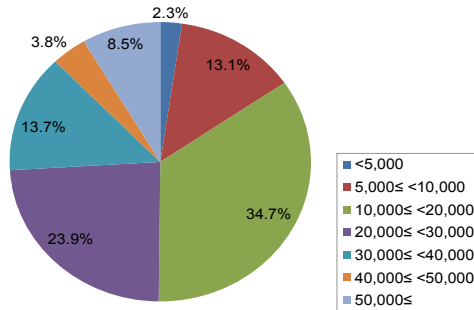
According to the FGD, salt laborers and shrimp laborers mentioned that they had fewer job opportunities because of their low education and literacy levels. They responded in the group interviews that discontinuation of education and school drop-out rates continued to increase due to the involvement of their children into these income generation activities. Women, on the contrary, gave up looking for jobs because of their low literacy levels and social barriers.

Fishing occurs throughout the year at the site, and the fish selected are of bigger size, good quality, or large quantity although smaller sized fish are sold at the fish markets in Cox's Bazar and Chittagong from vehicles and engine boats. Fish of lower quality and smaller sizes are retailed by local businessmen at local markets.

(5) Household Incomes and Expenditure

a) Household Incomes

For monthly income, 119 households (34.7%) had 10,000 to 20,000 taka, and 82 (23.9%) had 20,000 to 30,000 taka. The average household monthly income was approximately 26,500 taka, but the median was 19,000 taka. There were 29 households receiving more than 50,000 taka per month, among whom the largest income was 842,000 taka.

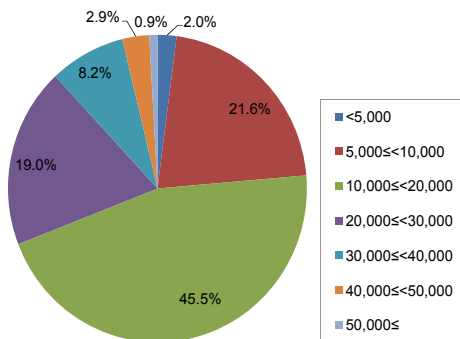


(Source: JICA Study Team)

Figure 3-4 Household Monthly Income

b) Household Expenditure

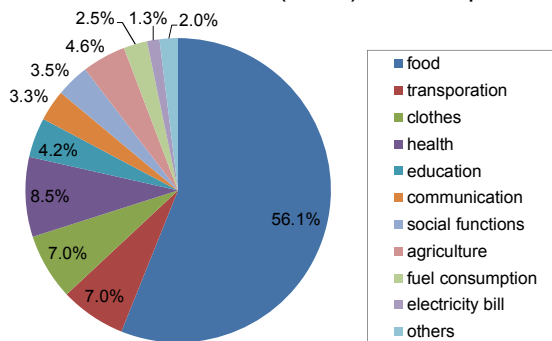
For household expenditure, 156 households (45.5%) spent 10,000 to 20,000 taka per month, 74 (21.6%) spent between 5,000 to 10,000 taka, and 65 (19.0%) spent from 20,000 to 30,000 taka. The average household monthly expenditure was approximately 18,000 taka, but the median was as much as 15,000 taka. There were three households which spent more than 50,000 taka per month, among whom the largest expenditure was 104,200 taka.



(Source: JICA Study Team)

Figure 3-5 Household Monthly Expenditure

A glance at the breakdown of average expenditure shows that approximately 10,000 taka (56.1%) was spent for food consumption, 1,522 taka (8.5%) on health, around 1,261 taka for clothes and 1,249 taka (7.0%) for transportation.



(Source: JICA Study Team)

Figure 3-6 Average Expenditure Patterns

c) Per Capita Monthly Income and Expenditure

According to the Household Income & Expenditure Survey 2010 issued by the Bangladesh Bureau of Statistics (BBS)¹, the population below the upper poverty line was 31.5%

¹ BBS has conducted the HIES since the 1970s, and it has collected 12,240 households from the entire nation as samples for the HIES 2010. They have received technical and financial support from the World Bank for conducting the survey. They estimate the upper and lower poverty line taking into consideration the cost of basic needs (CBN) that include both food and non-food items.

nationwide and 26.2% in Chittagong Division that includes Chittagong District and Cox's Bazar District. The population below the lower poverty line, on the other hand, was 17.5% nationwide and 13.1% in the Chittagong Division.

Table 3-9: Incidence of Poverty (Head Count Ratio) by CBN Method in 2010

	Nationwide			Chittagong		
	Average	Urban	Rural	Average	Urban	Rural
Upper line poverty	31.5	21.3	35.2	26.2	11.8	31.0
Lower line poverty	17.5	7.7	21.1	13.1	4.0	16.2

(Source: Bangladesh Bureau of Statistics (2011) Household Income & Expenditure Survey 2010)

In both cases, the incidence of poverty occurred more in rural areas, and 35.2% of the population were below the upper poverty line nationwide and 31.0% in Chittagong Division respectively.

Those who received 1,270.93 taka nationwide was 31.5% and 1,307.27 taka (26.2%) in Chittagong Division, and the population below the lower poverty line was estimated to receive as much as 1,102.84 taka nationwide, 17.5% of the population, and 1,051.67 taka in Chittagong Division (13.1%).

Table 3-10: Incidence of Poverty (by per capita monthly income) in 2010

	Nationwide			Chittagong		
	Average	Urban	Rural	Average	Urban	Rural
Upper line poverty	1,270.93	1,545.96	1,211.57	1,307.27	1,328.03	1,304.64
Lower line poverty	1,102.84	1,240.18	1,083.72	1,051.67	1,259.46	1,034.62

(Source: Bangladesh Bureau of Statistics (2011) Household Income & Expenditure Survey 2010)

Table 3-11: Incidence of Poverty (by per capita monthly expenditure) in 2010

	Nationwide			Chittagong		
	Average	Urban	Rural	Average	Urban	Rural
Upper line poverty	1,245.76	1,457.65	1,200.02	1,381.76	1,540.60	1,361.68
Lower line poverty	1,064.92	1,133.41	1,056.03	1,174.50	1,231.87	1,169.79

(Source: Bangladesh Bureau of Statistics (2011) Household Income & Expenditure Survey 2010)

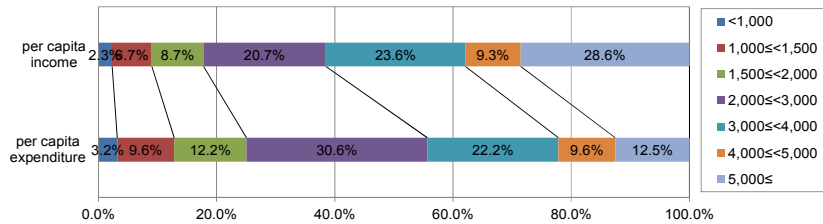
Taking the geographical location of the project site and the inflation rates of FY 2010 and FY 2011 into consideration², the surveyed population whose per capita income and expenditure were below 1,500 taka were assumed as the poor in this report. Therefore, 31 surveyed households (9.0%) were categorized as poor households on monthly income basis, and 44 households (12.8%) on monthly expenditure basis.

Table 3-12: Household Head's Per Capita Monthly Income and Expenditure

	<1,000	1,000≤<1,500	1,500≤<2,000	2,000≤<3,000	3,000≤<4,000	4,000≤<5,000	5,000≤	Total
Per capita income	8	23	30	71	81	32	98	343
Per capita expenditure	11	33	42	105	76	33	43	343

(Source: JICA Study Team)

² The inflation rate of FY 2010 in rural areas was 11.73% and for FY 2011 it was 8.69% on the year 2005 basis.

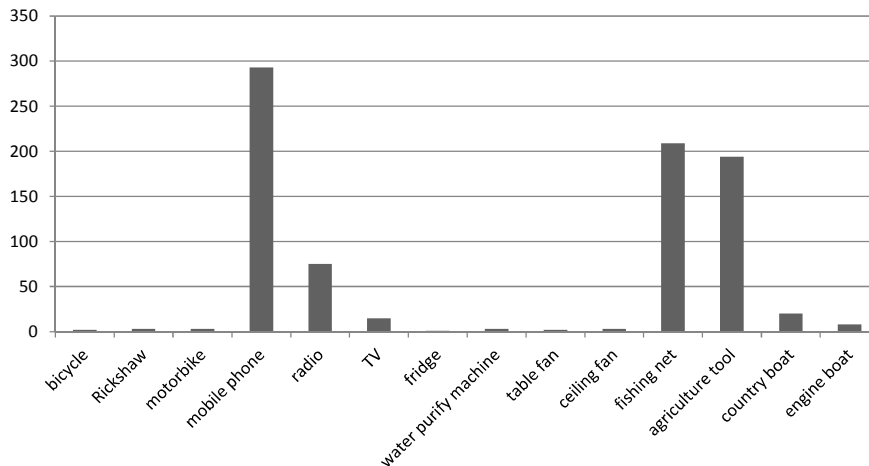


(Source: JICA Study Team)

Figure 3-7 Ratio of Household Head's Per Capita Monthly Income and Expenditure

(6) Assets

Out of 343 households, 295 (86.0%) had at least one mobile phone. There was one household head who said he had six phones at home, and the average number of mobile phones among 295 households was 1.23 phones. In addition, 212 households had fishing nets (1.91 on average) and 195 households had more than one kind of agriculture tool (average was 3.92 tools). Only 76 household had radios, and 15 had TV sets.



Note: Household heads were asked to choose as many assets as they had.

(Source: JICA Study Team)

Figure 3-8 Household Assets

In regards to animals and poultry, 149 interviewed households (37.3%) kept chickens at home, followed by ducks (95 households) and goats (81 households).

Table 3-13: Animals and Poultry owned by Households

Livestock	Household Ownership		Total Number	Average No. Per Household
	No. of Households	%		
Cows	74	18.5%	118	1.6
Pigs	1	0.3%	5	5.0
Ducks	95	23.8%	604	6.4
Chickens	149	37.3%	1,707	11.5
Goats	81	20.3%	389	4.8

Note: Household heads were asked to choose as many livestock as they owned.

(Source: JICA Study Team)

(7) Basic Infrastructure for Living

a) Energy Source

There were 332 household heads that responded that they did not have electricity yet. In fact, no single electric wire has been extended to Dhalghata Union as of March 2013, so that

all interviewed households in Dhalghata Union had no choice but to depend on energy sources other than electricity.

Some 341 households (99.4%) used firewood for cooking, and 301 (87.8%) exclusively depended on kerosene lamps for lighting. There were 22 households who owned solar panels on their roofs.

Table 3-14: Energy Source by Purpose

Energy Source	Cooking	Lighting	Irrigation	Other
Electricity	0	7	1	1
Gas	0	0	0	0
Kerosene	1	301	19	0
Firewood	341	0	0	0
Solar	0	0	0	22
Diesel	0	0	3	0
None	1	2	320	320
Electricity + Kerosene	0	1	0	0
Kerosene + Solar	0	32	0	0
Total	343	343	343	343

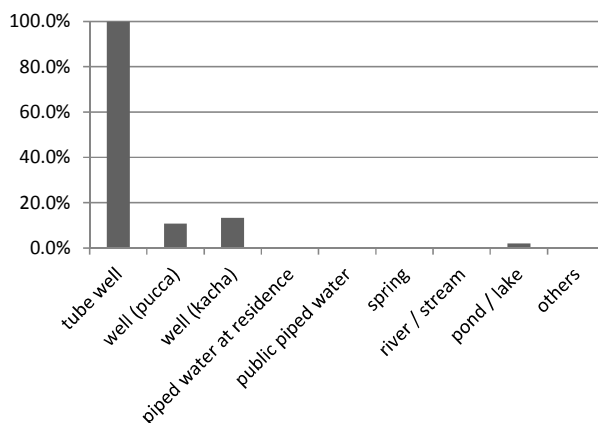
Note: Household heads were asked to choose as many sources as they had.

(Source: JICA Study Team)

Deteriorating living environments were commonly observed in the FGD as well. Sixty six out of 86 interviewees did not have electricity at home, whereas the remaining 20 had solar panels installed with the assistance of Rahimafrooz (Bangladesh) Ltd. Since there was no REB or BPDB distribution network available at the project site, solar systems were introduced for lighting. Rahimafrooz works all over Bangladesh installing solar systems without charging the initial cost. However, households are supposed to make monthly repayments of the installment costs ranging from 200 to 800 taka depending on the actual costs until the full costs are recovered.

b) Water and Sanitation

All affected households depended on tube wells for water. Along with tube well water, some of them also used *pucca* wells and *kacha* wells of which water quality was not secured. Seven households used pond water and one used public piped water.



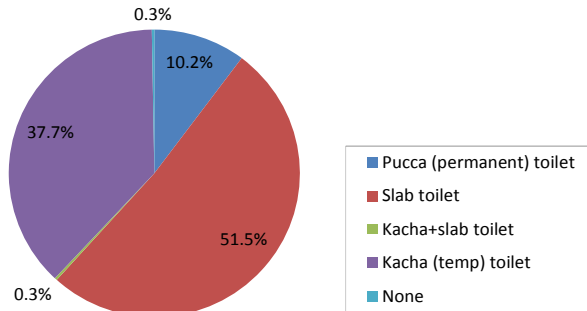
Note: Household heads were asked to choose as many facilities as they used.

(Source: JICA Study Team)

Figure 3-9 Water Sources

No household heads said they had the habit of boiling water before drinking³. And 13 household heads said that they had experienced arsenic contamination.

Out of 343 households, 35 (10.2%) used *pucca* toilets. In addition, 176 (51.5%) used slab toilets, and the remaining 129 used temporary facilities and one household did not use toilet facilities at all.



(Source: JICA Study Team)

Figure 3-10 Type of Toilet

c) **Medical Facilities**

Asked where they consult with doctors, quack doctors and other sources of medical and health treatment, over 80% of household heads responded that they had medical consultations at the local markets. Nearly 50% of households also went to town for medical consultations.

Table 3-15: Availability of Medical Facilities

Availability of Medical Facilities	Village		Market		Town	
	Number	%	Number	%	Number	%
Yes	13	3.8%	275	80.2%	169	49.3%
No	330	96.2%	68	19.8%	174	50.7%
TOTAL	343	100.0%	343	100.0%	343	100.0%

Note: Household heads were asked to choose as many facilities as they used.

(Source: JICA Study Team)

According to the FGD, local people usually saw quack doctors for normal cases such as general fevers, and they went to Chakaria Upazila to consult private doctors for more complicated symptoms. They faced difficulty in traveling to Chakaria due to the deteriorated road access and transportation. Although men had more mobility in terms of access to private clinics and doctors, women and children had less such mobility.

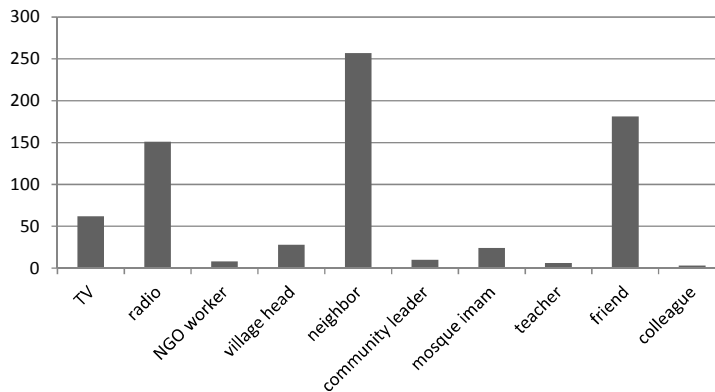
d) **Tidal Waves**

There were 304 household heads (88.6%) that said they had experienced tidal waves. Of these households, 303 said they experienced such tidal waves once or twice a year. And 263 people mentioned the floods of 1991 and 1997 as the biggest ones which they remembered.

(8) Others

a) **Source of Information**

There were 257 households that responded that they collected information through neighbors, and another 181 collected information from their friends. Not many of the households collected information from TV or radio as they did not have these items at home (see **Assets** above), but they often listened to radio or watched TV at tea stands or in the local markets.



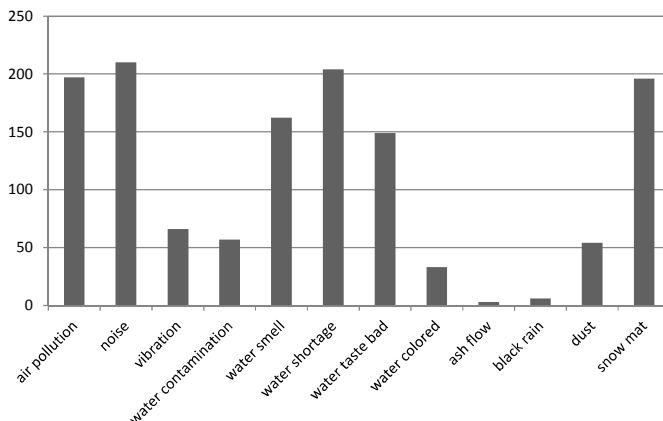
Note: Household heads were asked to choose as many sources as they used.

(Source: JICA Study Team)

Figure 3-11 Source of Information

b) Type of Pollution

As types of pollution, 210 household heads (61.2%) recognized noise, water shortages (204 households, 59.5%), air pollution (197 households, 57.4%) and snow mats (196 households, 57.1%). Complaints regarding water related issues were raised most among households. Not only water shortages, but also bad smells, bad tastes of water, colored water and contaminated water were mentioned.



Note: Household heads were asked to choose as many sources as they had liked.

(Source: JICA Study Team)

Figure 3-12 Examples of Pollution Experienced in the Past

(9) Available Job Opportunities

Responding to whether there were any job opportunities available around the project site, 19 household heads said fishing cultivation, 16 domestic animal husbandries, six said poultry and two stated tailoring work. As stated in the FGD, people living or working at the site had fewer job opportunities because of their low education and low literacy levels.

(10) Skill Development Needs

In response to the needs for skill development, household heads answered that they would like a wider variety of training skills. The skills demanded by the household heads were in fishing cultivation, followed by domestic animal husbandry, poultry, tailor, and technical work.

Table 3-16: Skill Development Requests

Rank	Skill Development Requests	No. of HH Heads who Show their Interests
1	Fishing cultivation	100
2	Domestic animal husbandry	79
3	Poultry	64
4	Tailor	53
5	Technical work	50
6	Social development	38
7	Vehicle licenses	20
8	Salt cultivation	15
9	Computer	14
10	Education (coaching)	5
11	Training for going abroad	3
12	Shrimp cultivation	2
13	Agriculture farming	1
14	Music	1
15	Hatchery	1

Note: Household heads were asked to select as many needs as they liked.

(Source: JICA Study Team)

In the FGD, women were interested in receiving training for tailoring, making puppets and Nakashi Katha (hand-stitched bed covers) although they were not given any job opportunities.

3.2. Socioeconomic Survey and Focus Group Discussions at Transmission Line Site

3.2.1 Survey Outline

(1) Socioeconomic Survey

a) Objective

The survey aim was to collect the typical characteristics of the households who owned the potential locations of angle towers from Anowara Upazila to Maheshkhali Upazila, basic data of their livelihoods and living standards, and to gain a comprehensive idea of the socioeconomic conditions there.

b) Main use of the results

- Analyze the socioeconomic conditions of the angle tower locations
- Estimate the cost required for involuntary land acquisition for the base area of each tower and compensation.

c) Selection of interviewees

The interviewees were the land owners of angle tower locations:

Table 3-17: Profile of Interviewed Households

Angle Tower No.	HouseholdNo.	Location				Main Occupation
		Village	Union	Mauza	Upazila	
Chittagong District						
P1	No.1	Boalia	Borashat	Boalia	Anowara	Agriculture
P2	No.2	Barumchara	Barumchara	West Barumchoda	Anowara	Agriculture
P3	No.3	Barumchara	Barumchara	Barumchara	Banshkhali	Agriculture
P4	No.4	Raichatta	khankhana bad	Raichatta	Banshkhali	Agriculture

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Angle Tower No.	Household No.	Location				Main Occupation
		Village	Union	Mauza	Upazila	
P5	No.5	Chechuria	6 No. Ka, Katharia	Purbo Katharia	Banshkhali	Businessman
Cox's Bazar District						
P6	No.6	Barabakia	Barabakia	Fasiakhali Rahatali para	Pekua	Agriculture
P7	No.7	Barabakia	Barabakia	Fasiakhali	Pekua	Service provider
P8	No.8	Uzantia	Uzantia	Sutachuda	Pekua	Shrimp cultivator
P9	No.9	Matarbari	Matarbari	Maiz Para	Maheshkhali	Businessman
P10	-	Matarbari	Matarbari	Maiz Para	Maheshkhali	-

Note: Land area of P9 and P10 belong to government, and there was nobody renting the land on P10.

(Source: JICA Study Team)

d) Survey Method

A questionnaire-based survey was conducted at household. The survey focused on income-earning activities and other socioeconomic indicators to observe the social and economic conditions of land owners / lessees, such as income, expenditure, employment, education, skills, livelihood, utilities, health services facilities, social services, and other socio-economic and cultural aspects that prevailed in the locations of angle towers.

e) Interviewers

Researchers representing the Engineers Associates Ltd., who were commissioned by the JICA Study Team, conducted the survey on behalf of PGCB.

f) Survey period

December 2012.

g) Limitation of the survey:

Locations of suspension towers were not surveyed as the locations were not identified yet at this stage. Findings at the angle tower locations through household interviews and focus group discussions therefore do not represent the local context throughout the transmission line route.

(2) Focus Group Discussions

a) Objective

The focus group discussions aimed to collect specific information from particular groups, such as women and children who were regarded as vulnerable, and agricultural farmers, who were mostly found at the transmission line route, in order to evaluate their specific characteristics.

b) Main use of the results

- Analyze the specific conditions of particular clusters of populations, who were placed in such groups with or without their wishes
- Draw specific needs of the vulnerable groups

c) Selection of interviewees

Eighteen people were randomly sampled (five children, five women and eight farmers) at either of angle tower locations.

Table 3-18: Interviewed Population in Focus Group Discussion

Cluster	Location	Number of People	Age Range (as of Dec. 2012)
Children	P8	5	7 to 10
Female	P7	5	29 to 40
Farmers	P3	8	28 to 65
Total		18	

Source: JICA Study Team

d) Survey Method
Focus Group Discussions

e) Interviewers
Researchers representing the Engineers Associates Ltd., who were commissioned by the JICA Study Team, conducted the FGDs on behalf of PGCB.

f) Survey period
December 2012.

g) Limitation of the survey:
Not applicable.

3.2.2 Findings

(1) Profile of Interviewees

a) Length of Time Residing at the Site

The length of time of households residing at the site varied from 20 to 100 years from one generation to the next.

b) Size of Household

The number of household members varied from five to eighteen, and the average size was 10.2.

c) Education Level and Literacy

Three out of nine respondents were illiterate or could write their own signature only. Others varied from Class VI-X to MA. Out of total members of nine families, 92 people, 61 were literate. 67.4% of adults and 65.3% of children were literate. Compared between male and female, 72.9% of male population were literate, whereas literate female remained 59.1% of total female population. Gender gap in literacy was caused by the low literacy of female adult (55.0%).

This tendency was also found among female respondents in the FGDs. Among three different groups (female at P7, children at P8 and male farmers at P3), no women of five members were literate, whereas all five children and eight farmers were literate.

d) Health Conditions of Affected People

Of nine respondents, all of them said they suffered from general fever, seven suffered from respiratory infection such as cold, six suffered from diarrhea and stomachache, and five from eye problem.

In the FGDs, four women had suffered from malaria. Respiratory problems, general fevers were commonly seen. Among children, respiratory problems and general fevers were commonly admitted. Three of them suffered from diarrhea and stomachache. Farmers' group members also showed similar tendency: six of them suffered from general fevers, diarrhea/stomachache, and respiratory diseases.

(2) Occupations of Household Heads

Among the interviewed household heads, five were involved in agriculture. Two were businessmen (P5 and P9). One was involved in service industry (P7), and the other (P8) was a shrimp cultivator. Their secondary livelihood means varied from Imam, UP member, travel agent, and construction worker.

According to the ad-hoc interviews at P3, P4, P5, P7 and P8 locations, most of the population in the villages depended on agriculture as farmers and agricultural laborers.

People working abroad, business and services industry were also found. At P8, however, shrimp and salt cultivation were found as their secondary occupations.

The husbands' occupations of female group of FGD at P7 were: two salt laborers, two daily laborers, and one agriculture laborer. The fathers' occupations of children group at P8 were: two involved in fishing industry, two daily laborers, and one rickshaw puller.

(3) Household Incomes and Expenditure

a) Household Incomes

For monthly income, five households involved in agriculture of socioeconomic survey had 20,000 to 60,000 taka per month. Two involved in business had 40,000 taka and 43,000 taka. One involved in service industry only had 12,000 taka. The biggest income was found at a household whose occupation was shrimp cultivator: 80,000 taka per month.

Female group of FGD (P7) said that their husbands' income varied from 4,500 to 6,000 taka per month who were all laborers. Among fathers of children group (P8), laborers and rickshaw puller received 5,000 to 7,000 taka, while two involved in fishing industry earned either 10,000 or 20,000 taka per month.

b) Household Expenditure

Household expenditure ranged from 11,750 to 57,250 taka. The average household expenditure was approximately 32,000 taka. Of all items, respondents spent most for food (average: 17,000 taka, max: 30,000 taka and min: 6,000 taka), followed by expenditure for agriculture activities (average: 5,000 taka, max: 13,000), health (average: 2,700 taka, max: 8,500 taka, min: 300 taka) and education (average: 2,000 taka, max: 5,000 taka, min: 350 taka).

c) Per Capita Income and Expenditure

Taking the geographical location of the project site and the inflation rates of FY 2010 and FY 2011 into consideration, the surveyed population whose per capita income and expenditure were below 1,500 taka were assumed as the poor in this report. The owners and a lessee, and their family members of the angle tower locations from P1 to P9 are not assumed as poor both on income and expenditure basis. Their per capita income ranged from 3,000 to 8,000 taka, and their per capita expenditure ranged from 1,958 to 4,250 taka.

(4) Assets

Out of nine interviewed households, all of them had at least one mobile phone and agriculture tools. Six of them had fishing nets and five of them had either table fan or ceiling fan. In regards to animals and poultry, six kept chickens at home, followed by cow (five households), ducks and goats (four).

(5) Basic Infrastructure for Living

a) Housing condition

Among participants of FGDs, houses of women were made of clay and thesis. Children's houses were made of clay: two had tin as their roof material, and three had thesis. Among farmers, two lived in bamboo-made houses, three lived in permanent houses, two lived in clay-walled house, and the last one lived in a house made of thesis and tin.

b) Energy Source

Five of nine land owners and a lessee of the angle towers had electricity at home. All of them use firewoods for cooking. They use electricity or kerosene for lighting. They use diesel for irrigation purpose.

Among female group members at P7 location, three had no electricity yet and two had lighting only by solar panels. Children group at P8, three had no electricity yet, and two had lighting only by solar panels. One of farmers of P3 location had solar panels at home, but others had no lights at home.

c) Water and Sanitation

All land owners and a lessee used tube wells for water. They had no habit of boiling water before drinking. No respondent said their water was contaminated with arsenic. Six of them had pucca latrine, and three had ring-slab latrines.

Among members of FGDs, all women, children and farmers in the groups took water from tube wells for cooking and drinking purposes. All women and children had ring-slab latrine (hygienic latrine).

d) Medical Facilities

People under the socioeconomic survey went to either markets or towns for medical treatment. Women and children of FGDs went to Upazila Health Complex for medical treatment. All farmers saw quack doctors for general diseases. They went to private doctors in Bottoli and Chittagong for more complex diseases.

e) Tidal Waves

All nine interviewed household heads said they had experienced tidal waves once to three times a year. They mentioned the floods of 1991 and 1997 as the biggest ones which they remembered.

(6) Others

a) Source of Information

As source of information, all respondents said they collected from their neighbors. Seven of them collected information from TV as they watched TV at tea stands or in the local markets, followed by mosque imam (five people), community leader (four people) and friends (three). Among FGD participants, women collect information through NGO workers and neighbors, but not from TV or radio. Children collected information through TV, neighbors and their teachers.

b) Type of Pollution

No major pollutions were recognized among nine respondents in the socioeconomic survey, except snow mat.

c) Available Job Opportunities

Responding to whether there were any job opportunities available around the project site, the land owners from P1 to P7 stated that there was no job opportunity available. The land owner of P8 said that there would be job opportunities in shrimp farming.

d) Skill Development Needs

In response to the needs for skill development, household heads answered that they would like to learn tailoring, salt farming technique, shrimp farming technique, training for working abroad, computer skill, and agriculture farming technique.

3.3 Socioeconomic Survey at Township Site

3.3.1 Survey Outline

(1) Socio-economic Survey

a) Objective

The survey aim was to collect the typical characteristics of the households who owned the potential locations of Township at Materbari and Dhalghata union of Maheshkhali Upazila, basic data of their livelihoods and living standards, and to gain a comprehensive idea of the socioeconomic conditions there.

b) Main use of the results

- Analyze the socioeconomic conditions of the Township site
- Estimate the cost required for involuntary land acquisition for the base area of each tower and compensation.

c) Selection of interviewees

The interviewees were the land owners of Township site

d) Survey Method

A questionnaire-based survey was conducted at household. The survey focused on income-earning activities and other socioeconomic indicators to observe the social and economic conditions of land owners / lessees, such as income, expenditure, employment, education, skills, livelihood, utilities, health services facilities, social services, and other socio-economic and cultural aspects that prevailed in the locations of Township Site.

e) Interviewers

Researchers representing the Bartika Beacon Consultancy Services Ltd. were engaged by CPGCBL, conducted the survey on behalf of CPGCBL.

f) Survey period

September-October 2013.

3.3.2 Findings

The followings are the major findings from socioeconomic survey

(1) Profile of Interviewees and their family members

a) Surveyed Population

Of 207 people comprising 41 interviewed households, 87 (42.03%) were from Matarbari union, of whom males constitute 56.32%, and adults are 69.38% and 120 (57.97%) from Dhalghata Union, where males comprise 56.66% and adults shared 73.29%.

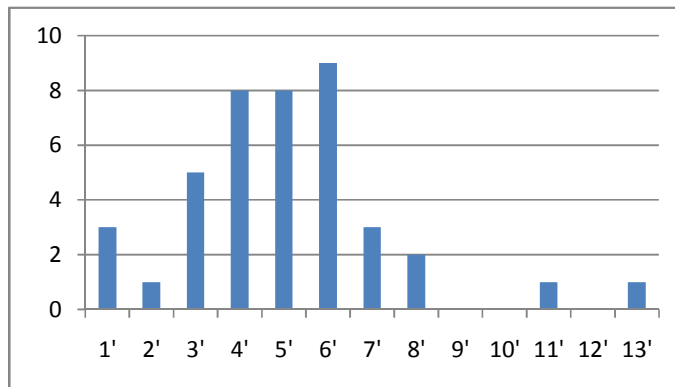
Table 3-19: Total Surveyed Population

	Total Surveyed Population			Matarbari Union			Dhalghata Union		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Adult	84	63	147	34	27	61	50	36	86
Adolescent	11	4	15	5	1	6	6	3	9
Child	22	23	45	10	10	20	12	13	25
Total	117	90	207	49	38	87	68	52	120

(Source: Socioeconomic Survey,2013)

b) Size of Household

Average household size was 5.05 people, which is close to the median (6.0) and the mode (6.0). The minimum number of household member was 1, and the maximum number was 13.



(Source: Socioeconomic Survey,2013)

Figure 3-13 Household Size

(2) Education Level and Literacy

About the education level of the household heads, survey reveals that 14.63% were illiterate, and 85.37% literate among the literate of the total surveyed household heads (56.10%) 7.32% can write name, 9.75% falls within class i to v and 24.39% within VI-SSC, 4.87% are HSC passed and graduates 7.32% and only 2.44% got post graduation degree.

Table 3-20: Education Level of Heads and Household Size

Education Degree/ Level	No. of HH Heads	%	Average of HH Size
Illiterate	18	43.90	5.83
Write name	3	7.32	4.00
Class I-V	4	9.75	6.13
Class VI-SSC	10	24.39	5.00
HSC	2	4.87	4.25
Graduation	3	7.32	3.5
Post Graduation	1	2.44	5.00
TOTAL	41	100	5.04

(Source: Socioeconomic Survey,2013)

Of total survey population (207) 103 (49.75%) people are Literate. Among the literate adult 27 (26.21%) are male, 20 (19.42%) are female, adolescent 13(12.62%) are male , 12(11.65%) are female and 15(14.56%), 16(15.53%) are male and female child respectively

Table 3-21: Literate Population

	Total Surveyed Population			Matarbari Union			Dhalghata Union		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Adult	27	20	47	12	8	20	17	10	27
Adolescent	13	12	25	9	2	11	11	3	14
Child	15	16	31	7	7	14	8	9	17
Total	55	48	103	28	17	45	36	22	58

(Source: Socioeconomic Survey,2013)

(3) Occupations of Household Heads

Survey found that 34.15% (14) household heads are salt and shrimp cultivators. These household heads are the owners and/or lessees of salt/shrimp fields who invest money in salt/shrimp cultivation. Eight out of the 14 cultivators are from Matarbari Union and the rest 6 cultivators belong to Dhalghata Union. Out of 14 businessmen 10 are from Dhalghata the rest 4 persons belong to Matarbari, 3 household heads from Dhalghata and 2 from Matarbari are engaged in farming. Two are from Matarbari and 3 from Dhalghata are self-employed in household activities. Only one person from Matarbari and 2 from Dhalghata are doing service.

Table 3-22: Occupations of the Household Heads

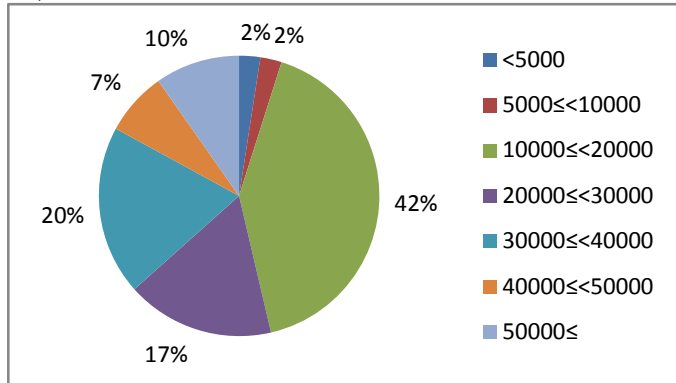
Occupations	Matarbari	Dhalghata	Total	
Cultivators			14	34.15%
Salt Cultivators	3	5	8	
Shrimp cultivators	5	1	6	
Businessman			14	34.15%
Salt Businessmen	2	6	8	
Businessmen (other)	2	4	6	
Agriculture			5	12.20%
Farming	2	3	5	
Others			8	19.50%
Households Work	2	3	5	

Occupations	Matarbari	Dhalghata	Total	
Service	1	2	3	
TOTAL	17	24	41	100.0%

(4) Household Income and Expenditure

a) Household Income

Regarding monthly income, 17 households (41.46%) had 10,000 to 20,000 taka, and 7 (17.07%) had 20,000 to 30,000 taka, 8 (19%) 30000 to 40000 taka, 3 (71%) 40000 to 50000 taka. The average household monthly income was approximately 24634 taka. There were 4 households earning more than 50,000 taka per month, among whom the largest income was 70,000 taka.

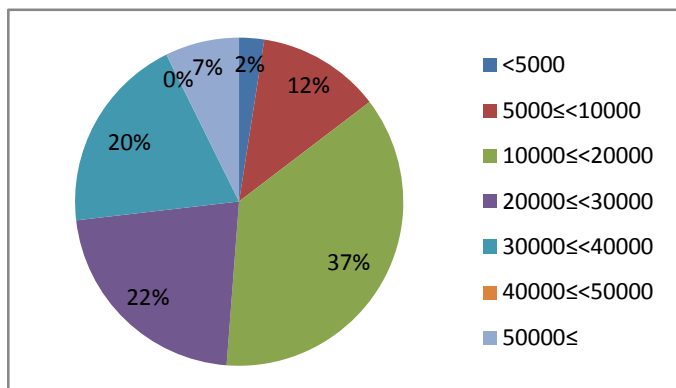


(Source: Socioeconomic Survey, 2013)

Figure 3-14 Household Monthly Income

b) Household Expenditure

About household expenditure one household (2%) spent less than 5000 taka, 15 households (36.58%) spent 10,000 to 20,000 taka per month, 5 (12.20%) spent between 5,000 to 10,000 taka, and 9 (21.95%) spent from 20,000 to 30,000 taka, 8 (19%) spent from 30000 to 40000 taka. The average household monthly expenditure was approximately 20219 taka. There are three households whose monthly expenditure is more than 50,000 and taka among whom the largest expenditure was more than 50,000 taka.



(Source: Socioeconomic Survey-2013)

Figure 3-15 Household Monthly Expenditure

c) Household per Capita Monthly Income and Expenditure

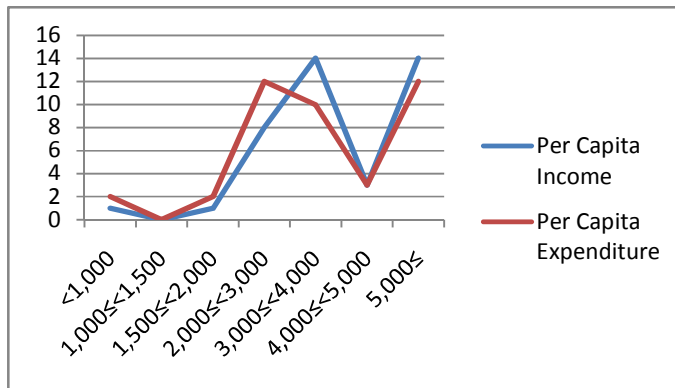
Of 41 HHs, 14 have per capita monthly income ranging from 3000-4000 and 1 has less than taka 1000/- and 8 have between taka 2000 and taka 3000. About per capita expenditure 12 HHs have monthly per capita expenditure between taka 2000 and taka 3000 and another 12

HH spent more than taka 5000/- and 2 HHs expenditure comes below taka1000. Details are shown in table and figure below:

Table 3-23: Household Per Capita Monthly Income and Expenditure

	<1,000	1,000≤<1,500	1,500≤<2,000	2,000≤<3,000	3,000≤<4,000	4,000≤<5,000	5,000≤	Total
Per capita income	1	0	1	8	14	3	14	41
Per capita expenditure	2	0	2	12	10	3	12	41

(Source: Socioeconomic Survey, 2013)



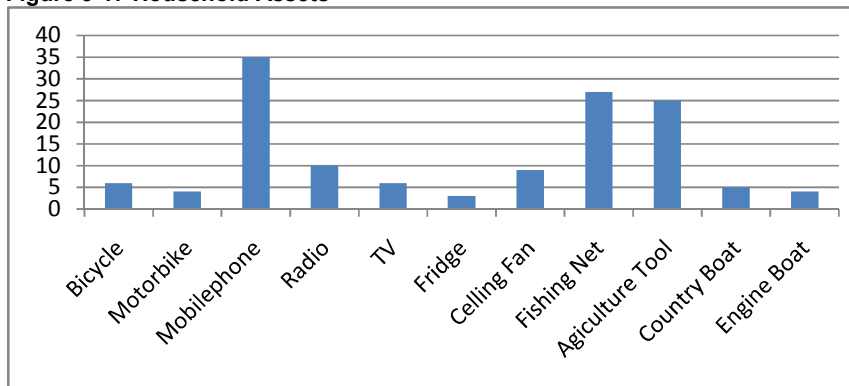
(Source: Socioeconomic Survey, 2013)

Figure 3-16 Line graph of household Per Capita Monthly Income and Expenditure

(5) Assets

Of affected 41 households, 35 (82.92%) had at least one mobile phone. There was one household head who said he had 3 phones at home, and the average number of mobile phones among 35 households was 1.09 phones. In addition, 20 households had fishing nets (1.35 on average) and 18 households had more than one kind of agriculture tool (average was 1.39 tools). Only 10 household had radios, and 6 had TV sets. However, there are households amongst them who have more than one type of assets.

Figure 3-17 Household Assets



(Source: Socioeconomic Survey, 2013)

Animals and Poultry owned by Households

In respect of animals and poultry, 25 HHs households (42.37%) kept chickens at home, followed by ducks (15 households), goats (9 households) and cows (10 HHs)

Table 3-24: Animals and Poultry owned by Households

Livestock	Household Ownership		Total Number	Average No. Per Household
	No. of Households	%		
Cows	10	16.94	18	1.8
Ducks	15	25.42	101	6.7
Chickens	25	42.37	271	10.84
Goats	9	15.27	37	4.11

(Source: Socioeconomic Survey, 2013)

(6) Basic Infrastructure for Living

a) Energy Source

9 household heads that responded that they did not have electricity yet. In fact, no single electric wire has been extended to Dhalghata Union as of October 2013, so that all interviewed households in Dhalghata Union had no choice but to depend on energy sources other than electricity.

All the 41 households 100% used firewood for cooking, and 28 (68.29%) exclusively depended on kerosene lamps for lighting. There were 4 households who owned solar panels on their roofs.

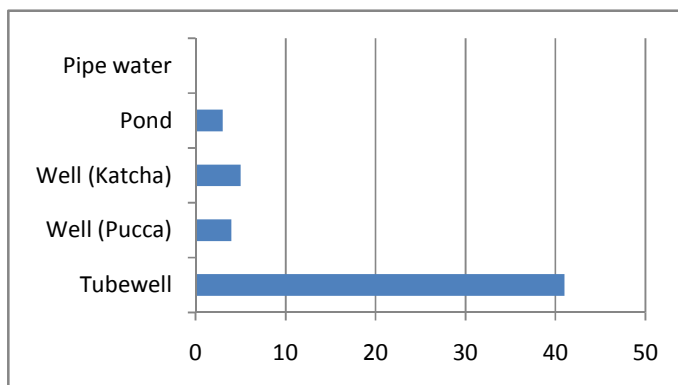
Table 3-25: Energy Source by Purpose

Energy Source	Cooking	Lighting	Irrigation	Other
Electricity		9		
Kerosene		28	4	
Firewood	41			
Solar				8
Diesel			1	
None			36	33
Kerosene + Solar		4		
Total	41	41	41	41

(Source: Socioeconomic Survey, 2013)

b) Water and Sanitation

All affected households depended on tube wells for water. Along with tube well water, some of them also used *pucca* wells and *kacha* wells of which water quality was not secured. Three households used pond water.

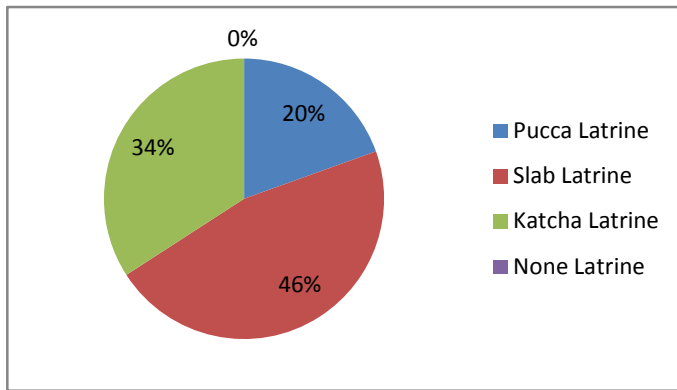


(Source: Socioeconomic Survey, 2013)

Figure 3-18 Water Sources

No household heads said they had the habit of boiling water before drinking⁴. And 13 household heads said that they had experienced arsenic contamination.

Out of 41 households, 4 (19.51%) used pucca toilets. In addition, 19 (46.34%) used slab toilets, and the remaining 14 used temporary facilities.



(Source: Socioeconomic Survey, 2013)

Figure 3-19 Type of Toilet

c) Medical Facilities

On query, over 85.36% households heads responded that they can consult physicians at the local markets. Nearly 50.09% of households also go to town for medical treatments.

Table 3-26: Availability of Medical Facilities

Availability of Medical Facilities	Village		Market		Town	
	Number	%	Number	%	Number	%
Yes	3	7.32	35	85.36	23	56.09
No	38	92.62	6	14.64	18	43.91
TOTAL	41	100.00	41	100.00	41	100.00

(Source: Socioeconomic Survey, 2013)

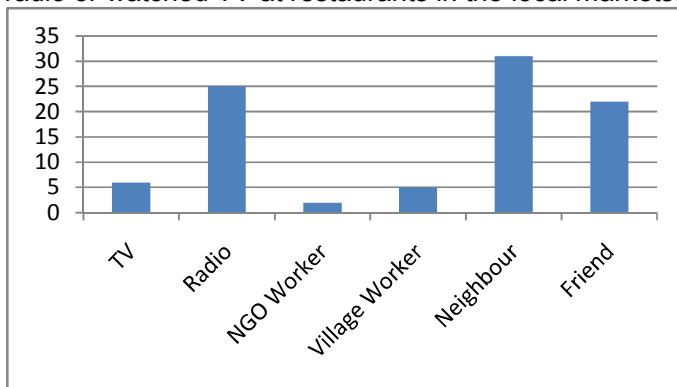
d) Tidal Waves

30 household heads (73.17%) responded that they had experienced tidal waves. Of them 27 said they experienced such tidal waves once or twice a year. And 22 people mentioned that they have the memory of biggest floods of 1991 and 1997.

(7) Others

a) Source of Information

15 households responded that they collected information through neighbors, and another 20 collected information from their friends. Of them 16 households collected information from TV or radio as they did have these items at home. But they at times of necessity listened to radio or watched TV at restaurants in the local markets.

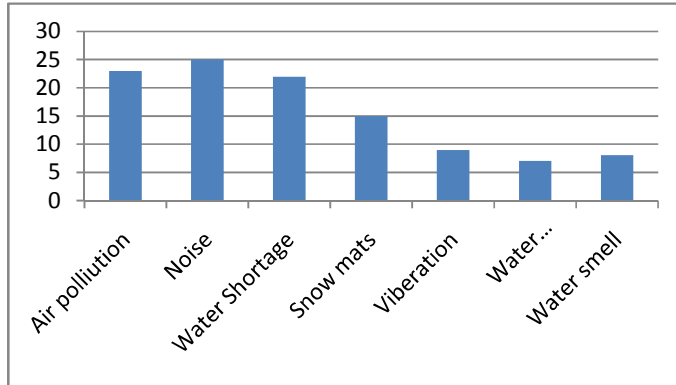


(Source: Socioeconomic Survey, 2013)

Figure 3-20 Source of Information

b) Type of Pollution

As types of pollution, 25 household heads (60.97%) recognized noise, water shortages (22 households, 53.66%), air pollution (23 households, 56.09%) and snow mats (15 households, 36.58%). Complaints regarding water related issues were raised most among households. Not only water shortages, but also bad smells, bad tastes of water, colored water and contaminated water were mentioned.



(Source: Socioeconomic Survey, 2013)

Figure 3-21 Examples of Pollution Experienced in the Past

(8) Availability of Job Opportunities

10 HH heads told that there were job opportunities in fish and salt cultivation, 12 said about domestic animal husbandry, 7 said about poultry and 2 reported tailoring.

(9) Skill Development Needs

In response to the needs for skill development, household heads answered that they would like a wider variety of training skills. The skills demanded by the household heads were in fishing cultivation, followed by domestic animal husbandry, poultry, tailoring, and technical work.

Table 3-27: Skill Development Requests

Rank	Skill Development Requests	No. of HH Heads who Show their Interests
1	Fishing cultivation	15
2	Domestic animal husbandry	10
3	Poultry	9
4	Tailoring	4
5	Technical work	16
6	Salt cultivation	5
7	Computer	4
8	Shrimp cultivation	5
9	Agriculture farming	1

(Source: Socioeconomic Survey, 2013)

3.4 Local Consultation

CPGCBL has so far conducted three public consultation meetings (PCM), two with the support of the JICA Study Team and EAL. Another PCM was conducted in October 01, 2013 with the assistance of BBCS Ltd. Summaries of the meetings are given below:

3.4.1 First Public Consultation Meeting

(1) Objectives

- Disclose information about the project
- Collect opinions and comments from individuals and organizations regarding the project
- Appropriately reflect such opinions, etc., into the LARAP

(2) Consultation Results

The first PCM was held at the scoping stage of the Feasibility Study of the Coal-fired Power Plant Development Project. CPGCBL hosted the meeting assisted by the JICA Study Team. Notification letters were distributed to all key stakeholders prior to the meeting. Outcomes of the meeting were shown below.

Table 3-28: Outcomes of First PCM

Date & Time	From 10am to 2pm, November 14, 2012
Venue	Puran Bazar Government Primary School, Matarbari, Maheshkhali Upazila, Cox's Bazar District
Host and Chair	Mr. Aloke Kimar Sarker, Managing Director of CPGCBL
Participants	Local affected residents, community leaders, local elite people, local government officers, local NGOs, etc., a total of 115
Agenda	<ul style="list-style-type: none"> - Registration - Recitation of Quran - Welcome Speech by MD, CPGC - Background of the project by CPGC - Presentation on Project Description by CPGC - Question & Answer Session - Closing Speech by CPGC - Lunch

(Source: JICA Study Team)

At the meeting, a power-point presentation with a full explanation of the project was given to the participants in their local language, to allow the audience to fully understand the project and to contribute valuable comments. Major comments raised by the participants and the responses made by CPGCBL are shown in the table below, as per the meeting minutes and list of participants attached in the Annex..

Table 3-29: Major Comments from Participants and Responses by the Project Owner

Comments	Response	Reflection to LARAP (or EIA)
Mr. Nazrul Islam, teacher, local school, wanted to know the exact location of the proposed power plant. He suggested selecting a site towards the Bay of Bengal.	The project owner replied that the site for the power plant had been primarily selected between Matarbari and Dhalghata Union. The site will be finalized after the social and environmental survey.	[Water pollution] (EIA) <ul style="list-style-type: none"> - Cover installation on conveyor for coal transportation to coal yard. - Unloading of coal will be minimized (e.g., reduce the frequency of activity, etc.) during times of high speed winds. - Watering coal yard to keep the surface wet and prevent wind blowing coal and dust. - Installation of a dust control fence - Re-greening especially along boundary of project, surrounding coal yard with domestic
Mr. Saiful islam, job holder, LGED, Matarbari, commented that the main profession of local people of Matarbari is sea fishing. If hot water from the power plant is discharged into the sea, it will harm the fish. Therefore, the fishing profession will be affected.	The project owner replied that hot water will be cooled down to almost normal temperatures and then it will be released submerged into the sea without any harm to fish or other aquatic animals.	
Mr. Nurul Islam, Ex-Chairman Matarbari Union Council, wanted to know whether priority will be given to the affected people who will lose	The project owner assured the audience that local people will be given high priority for employment in the project and related industries as well.	

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Comments	Response	Reflection to LARAP (or EIA)
their livelihoods due to the power plant in Matarbari.		plants - Water quality of tube wells and others will be checked periodically for the safety of local residents.
Mr. Kamrul Hassan Hanif, student, Matarbari, pointed out that agricultural land is normally affected by fly ash or dust produced from the coal-based power plants. As a result, agriculture is also affected. He also pointed out that people may suffer from respiratory problems.	The project owner replied that this power plant will be constructed using Ultra Super Critical (USC) technology and only negligible dust will be produced. As a result, agricultural land, agriculture and public health will not be affected.	[Employment] - Employ local residents as much as possible. - Developing an appropriate “land acquisition and resettlement action plan”, including “livelihood restoration program”
Mr. G.M. Somi Uddin, Chairman of Matarbari Union Awami league, requested to hold the next meeting in the project area to motivate more people of the area to participate in the meeting. He also demanded the following points: a. Local residents should be given high priority for employment in the project. b. Local competent people should be employed in the project. c. Roads, schools, colleges, fishery jetties, and health centers shall be developed. Roads along the east side and west side of Matarbari island should be made of <i>pucca</i> . d. The protective structure along the west coast of Matarbari island should be made very strong and permanent to protect the people of Matarbari from cyclones, tidal waves and erosion. e. Compensation for acquisition of land should be paid at least three times the present rate. f. No households should be	The project owner gave assurances that the next stakeholder meeting will be held at the project site. He also confirmed that local people will be given priority for employment in the project based on their skills. The affected salt farmers and fishermen will be compensated and rehabilitated. Regarding social facilities, he was told that the plant authority will establish a school, college and hospitals, etc., for the staff of the plant. Local people will also be able to use the above facilities. Apart from this, other infrastructure shall be developed in the Matarbari area to attract tourists as well. The compensation of the land shall be paid as per prevailing rules of the Government of Bangladesh.	- Enrollment in vocational training courses based on assessment of skills [Air pollution] (EIA) - To reduce PM emissions, Electrostatic Precipitator (EP; around 99.8% efficiency) will be installed. - Duct will be provided with CEMS (Continuous Emission Monitoring System) with the supported infrastructure as required under the gas emission standards and IFC guideline [Protective structure] -Coordination will be continuously made with local authorities to improve the local infrastructure.

Comments	Response	Reflection to LARAP (or EIA)
<p>damaged.</p> <p>g. All affected fishermen and salt farmers should be compensated and rehabilitated.</p> <p>h. The road from Matarbari to Chittagong should be improved.</p> <p>i. Electricity should be supplied to the people of Matarbari at a subsidized rate.</p> <p>j. The plant should be constructed in such a way that it does not cause any damage to the environment and location.</p>		<p>[Compensation]</p> <ul style="list-style-type: none"> - Compensation under the Law (CUL) for all the private land as stipulated by the Ordinance 1982: average of last 12 months' sales values of same kind of land X 1.5 (50% premium) - Cash grant that covers the difference between CUL and the replacement value (RV) - Provision of stamp duty, land registration fee, capital gains tax and value added tax incurred for replacement land <p>[Electrification]</p> <p>Electrification of surrounding area will be examined.</p>

(Source: JICA Study Team)

3.4.2. Second Public Consultation Meeting

(1) Objectives

- To update information on study progress (location of Power plant and anticipated social impact)
- To discuss possible actions and measures for the local residents
- To discuss implementation mechanisms

(2) Consultation Results

The meeting was presided over by Mr. ATM Zahirul Islam, Managing Director, CPGCBL, assisted by the JICA Study Team. Notification letters were distributed to selected representatives of the affected people prior to the meeting. Chairmen of Matarbari Union and Dhalghata Union, UNO of Maheshkhali Upazila, DOE of Cox's Bazar District, and a local NGO were consulted prior to the PCM. Results of the meeting are shown below.

Table 3- 30: Outcomes of Second PCM

Date & Time	From 11:30 a.m. to 2:00 p.m., February 13, 2013
Venue:	Chakaria Upazila Parishad Auditorium
Host and Chair	Mr. Aloke Kimar Sarker, Managing Director of CPGCBL
Participants	Local affected residents, Union Chairmen, local elites, local government officers, local NGOs, etc., a total of approximately 50

Agenda	<ul style="list-style-type: none"> - Registration - Recitation of Quran - Welcome Speech by MD, CPGCBL - Opening Remarks by Team Leader of JICA Study Team - Presentation on Project Description by EAL - Question & Answer Session - Closing Speech by CPGCBL - Lunch
--------	--

(Source: JICA Study Team)

Table 3-31: Major Comments from Participants and Responses by the Project Owner

Comments	Response	Reflection to LARAP (or EIA)
Md. Aminul Haque Choudhury, teacher, Dhalghata Ideal High School, worried that there were rumors about the negative impacts on ecological balance, air quality, water quality, biodiversity, fish cultivation, livelihood, etc., in the project area if the power plant was constructed. He said that the affected people must be relocated as well. He wanted to know the extent of impacts if the power plant was constructed.	CPGCBL responded that the JICA Study Team was conducting a social and environmental survey in the project area to assess the impacts of the power plant. He also mentioned that the power plant would be environmentally friendly and the quality of the environment would be ensured by the department of environment. He mentioned the access road to be constructed for the power plant which would ease travel in the area. He clearly stated that local people would have employment opportunities in the power plant depending on their skills.	<p>[Water pollution] (EIA)</p> <ul style="list-style-type: none"> - Cover installation on conveyor for coal transportation to coal yard. - Unloading of coal will be minimized (e.g., reduce the frequency of activity, etc.) during times of high speed winds. - Watering coal yard to keep the surface wet and prevent wind blowing coal and dust.
Mr. Faridul Alam, an NGO worker, pointed out that Matarbari was famous for shrimp cultivation. If the land was to be acquired, shrimp cultivation would be affected. Also, private land owners would lose their land. On the other hand, there was lot of government land unused in Chokoria Upazila and he suggested acquiring the government land in Chokoria Upazila to construct the power plant instead of Matarbari.	CPGCBL responded that there were several selection criteria to select the location of the power plant. Availability of land was one of the selection criteria. But the availability of fuel was also another criterion. In the proposed power plant the primary fuel would be imported coal which would require transportation and unloading facilities. In Matarbari, coal might be imported from foreign counties by large vessels and an unloading jetty facility would be created there. But Chokoria was far away from the Bay of Bengal, so the JICA Study Team selected the Matarbari site for the power plant.	<ul style="list-style-type: none"> - Installation of a dust control fence - Re-greening especially along boundary of project, surrounding coal yard with domestic plants - Water quality of tube wells and others will be checked periodically for the safety of local residents. <p>[Employment]</p> <ul style="list-style-type: none"> - Employ local residents as much as possible.

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Comments	Response	Reflection to LARAP (or EIA)
Mr. Faizul Karim, salt businessman, Sairer Dail, Matarbari, wanted to know whether any embankment would be constructed in Matarbari and Dhalghata if the power plant was to be constructed. The people who were passing the government land with their livelihood from cultivating those lands would be affected if the power plant would be constructed. He asked whether these affected people would get compensation or not. He also wanted to know whether those who would lose their houses in the project area would be resettled or not.	CPGCBL responded that the affected people would be compensated as per Bangladesh Laws (Ordinance 1982) through the district administration. There was no provision for compensating illegal residents or occupants of government land. But as per JICA guidelines, illegal residents or occupiers should also be compensated. The JICA Study Team was working on this issue and the illegal residents/occupants would also be compensated in accordance with JICA's guidelines and Bangladesh government laws through the district administration. Regarding the embankment, he was unable to comment, but gave assurances that an access road would be constructed along with the power plant.	<ul style="list-style-type: none"> - Developing an appropriate "land acquisition and resettlement action plan", including "livelihood restoration program" - Enrollment in vocational training courses based on assessment of skills <p>[Air pollution] (EIA)</p> <ul style="list-style-type: none"> - To reduce PM emissions, Electrostatic Precipitator (EP; around 99.8% efficiency) will be installed. - Duct will be provided with CEMS (Continuous Emission Monitoring System) with the supported infrastructure as required under the gas emission standards and IFC guideline <p>[Protective structure]</p> <ul style="list-style-type: none"> -Coordination will be continuously made with local authorities to improve the local infrastructure. <p>[Compensation]</p> <ul style="list-style-type: none"> - Compensation under the Law (CUL) for all the private land as stipulated by the Ordinance 1982: average of last 12 months' sales values of same kind of land X 1.5 (50% premium) - Cash grant that covers the difference between CUL and the replacement value (RV) - Provision of stamp duty, land registration fee,
Mr. Nazrul Islam, a resident of Sairer Dail, Matarbari, wanted to know whether residents would receive free electricity. He also wanted to know whether they would get employment opportunities at the power plant.	<p>CPGCBL responded that the surrounding area of the power plant would certainly get electricity extended there, and the electricity would be as per standard rates fixed by the government.</p> <p>Regarding employment opportunities, assurances were given that priority would be placed on hiring local people in the power plant depending on their skills.</p>	
Mr. Shariful Islam, Assistant Director, DoE, Cox's Bazar, said that coal-based power plants had negative impacts on the environment. But, the negative impacts could be mitigated by using the latest technology.		
He, however, raised the point that some birds were observed flying in the power plant area. He was worried about the negative impacts on the birds by the high stack/ chimney of the power plant. He then requested the JICA Study Team to design the height of the stack/chimney properly to avoid any negative impacts on the birds. He also suggested adopting		

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Comments	Response	Reflection to LARAP (or EIA)
adequate mitigation measures to keep SOx and NOx of ambient air quality within standard limits. Warm water of the power plant should be discharged into the sea in such a way that aquatic plants/animals were not affected. He assured the local people not to worry about the implementation of this power plant as the DoE is the enforcing agency of the GOB to ensure a pollution free environment.		capital gains tax and value added tax incurred for replacement land [Electrification] Electrification of surrounding area will be examined. [Education] School facilities at power plant will be shared with the local residents. [Health] Health facilities at power plant will be shared with the local residents.
Mr. Aminul Haque learnt that forestation for 20 years was needed if a coal-based power plant was to be constructed. In order to meet the present power crisis in Bangladesh, he said that nobody could wait 20 years to construct a coal-based power plant.	CPGCBL responded that the latest coal-based power plant would be environment friendly. Forestation and other necessary mitigation measures might be undertaken during the construction/ operation period.	
Mr. Ahsanullah Bacchu, Chairman, Dhalghata Union Council, welcomed the initiative to construct a coal-based power plant in Matarbari. He expected that an embankment, roads, schools/ colleges, and hospitals would be developed at Matarbari island. He learned that an access road would be constructed up to the power plant site, and requested the concerned authority to extend this access road up to Dhalghata via Mutila for about 5-6 km. He also requested the construction of hospitals and schools/ colleges around the power plant area for area development. He urged that project affected people be properly compensated.	CPGCBL responded that another JICA Study Team was conducting a feasibility study of the access road for the power plant. A similar public consultation meeting would be held for the access road also. He requested Mr. Bacchu to raise this issue in that PCM to include an additional 5-6 km road up to Dhalghata via Mutila. Regarding the construction of schools/colleges and hospitals outside the power plant, he said that sincere cooperation would be extended with other development agencies to construct the above facilities. However, schools/colleges, hospitals. etc., would be constructed in the power plant area for the power plant employees. He gave assurance that the above facilities would be accessible to the public residing around the power plant.	
Mr. Enamul Haque Choudhury Ruhul, Chairman, Matarbari Union Council, told the meeting that there were both positive and negative perceptions for	CPGCBL responded that the project would be implemented after motivating the local people and satisfying all criteria set by the Government of Bangladesh and	

Comments	Response	Reflection to LARAP (or EIA)
construction of a coal-based power plant in Matarbari. The local residents were very concerned about the negative impacts of the power plant. They must be motivated before the construction of this power plant so that they would not raise any objections against the construction of this plant.	JICA as well.	
Md. Anwarul Naser, UNO, Maheshkhali Upazila, told the meeting that electricity was a very essential commodity for modern civilization. In order to meet the power crisis, he said that it would be essential to construct a big power plant. Some rental and quick rental power plants had been installed in Bangladesh to overcome the immediate power crisis, but the cost of energy of these power plants was very high. On the other hand, the cost of energy of this coal-based power plant would be very low. He therefore urged everybody to come forward with GOB to implement this big power plant. He gave assurances that the project affected people would be properly compensated and resettled as per the government and international rules.		

(Source: JICA Study Team)

3.4.3 Third Public Consultation Meeting

(1) Objectives

- To update information on study progress (location of Power plant and anticipated social impact)
- To discuss possible actions and measures for the local residents
- To discuss implementation mechanisms

(2) Consultation Results

The meeting was presided over by Mr. Enamul Haque Chowdhury, Chairman, No-1, Matarbari Union Parisad, organized by BBCS Ltd a social consulting organization engaged by CPGCBL. MD, CPGCBL, Project Manager, Local School Teacher, NGO officials, Local Leaders, Selected Representatives of the affected people UP male and female members and other stakeholders were invited to attend the meeting prior to holding the meeting. Results of the meeting are shown below.

Table 3-32: Outcomes of Third PCM

Date & Time	From 4:30 p.m. to 7:00 p.m., October 01, 2013
Venue:	Matarbari Union Parisad Hall Room
Chair	Mr. Enamul Haque Chowdhury, Chairman, Matarbari Union Parisad
Participants	Local affected residents, Union Parisad Male and Female members, Chairman, Ex-Chairman, local elites, Teachers, local NGOs, etc., a total of approximately 60.
Agenda	<ul style="list-style-type: none"> - Registration - Recitation of Quran - Welcome Speech & Opening Remarks by Team Leader of BBCS Ltd. - Presentation on Project Description & Entitlement Policy by MIS Specialist BBCS Ltd. - Question & Answer Session - Closing Speech by Chairman, Matarbari Union Parisad - Thanks given by Team Leader BBCS Ltd.

(Source: Socio-economic Survey Team)

Table 3-33: Major Comments from Participants and Responses by the Representative of Project Owner

Comments	Response	Reflection to LARAP (or EIA)
Mr. Kabir Ahmad, Ex-Chairman, Matarbari Union Parisad expressed his anxiety that establishment of power plant, transmission line and township would have negative impacts on ecological balance, air quality, bio-diversity, fresh cultivation, livelihood etc. He wanted to know how these negative impacts and dislocation of affected people would be addressed. He opined that displaced person must be relocated.	Socio-economic Survey Team responded that a social as well as environmental survey were being conducted in the project area to assess the adverse impacts of the implementation of power plant project. Respondent also emphasized that the power plant would be environmentally friendly and quality of environment will be ensured by the department of environment. He also told that construction of access road and development of township would benefit the local people in easy transportation and travelling and getting developed service sector and thus they would have better windfall employment opportunities in the power plant and construction of township and also business opportunities.	[Water pollution] (EIA) <ul style="list-style-type: none"> - Cover installation on conveyor for coal transportation to coal yard. - Unloading of coal will be minimized (e.g., reduce the frequency of activity, etc.) during times of high speed winds. - Watering coal yard to keep the surface wet and prevent wind blowing coal and dust. - Installation of a dust control fence - Re-greening especially along boundary of project, surrounding coal yard with domestic plants - Water quality of tube wells and others will be checked periodically for the safety of local residents.
Mr. Rafiqul Islam, Local Leader Matarbari Union expressed his concern about the construction of power plant and township in Matarbari and Dhalgata Union. He wanted to know whether any embankment would be built in the affected area. He enquired about the policy of the project authority for compensating the people losing business and houses due to the project.	Socio-economic Survey Team replied that directly affected people losing land and structure would be compensated by DC. In addition to that non-titled or illegal residents or squatters and affected businessmen, employees, lease holders would get proper compensation as per JICA guidelines for Environmental and Social Considerations.	[Employment] <ul style="list-style-type: none"> - Employ local residents as much as possible. - Developing an appropriate "land acquisition and resettlement action plan", including "livelihood restoration program"

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Comments	Response	Reflection to LARAP (or EIA)
<p>Master Mahamudullah, Teacher, Matarbari High School, expressed his concern about the acquisition of land for construction of power plant & township at Matarbari and Dhalgata Union and requested the project authority to address the following issues:</p> <p>i) Roads, School, Health Center should be established/developed.</p> <p>ii) Compensation for land should be paid at replacement value and also registration fee for purchasing land with compensation money should be given to the APs</p> <p>iii) All affected fisherman and salt farmers should be compensated and rehabilitated.</p> <p>iv) Local people should be given priority for employment in the construction work for power plant and township.</p>	<p>Team Leader Socio-economic Survey Team, replied that harmonization of LA Ordinance of Bangladesh and JICA's Guidelines for Environmental and Social Considerations would be done by the project and be applied to mitigate the adverse impacts of the implementation of the project. Accordingly affected land owners will get replacement value of land. Business losers and employment losers will get adequate compensation and get opportunity for rehabilitation. Access roads will be constructed, schools and health center will be established where local people will have access to these facilities. Local people will be given priority for employment in the civil works of the project.</p>	<p>- Enrollment in vocational training courses based on assessment of skills</p> <p>[Air pollution] (EIA)</p> <p>- To reduce PM emissions, Electrostatic Precipitator (EP; around 99.8% efficiency) will be installed.</p> <p>- Duct will be provided with CEMS (Continuous Emission Monitoring System) with the supported infrastructure as required under the gas emission standards and IFC guideline</p> <p>[Protective structure]</p> <p>-Coordination will be continuously made with local authorities to improve the local infrastructure.</p>
<p>Mr. Enamul Haque Chowdhury, Chairman, Matarbari Union Parisad told that there were both positive and negative perceptions for the construction of coal based power plant. People of Matarbari Union is very concerned about the adverse impact of the coal fired power plant. Matarbari Union is densely populated and commercially important area. Because of construction of power plant a large number of people of Matarbari Union will be directly and indirectly affected and many will lose their business, wages and income for livelihood. He suggested that as Dhalgata Union is less populated and commercially less important Union than that of Matarbari the proposed site for power plant and township can be shifted towards south namely Hasherchar, Khaserdia and Bharatagona villages along with Dhalgata Union.</p>	<p>Socio-economic Survey Team replied that there were several selection criteria for selection of location of power plant. Availability of land was one of the selection criterion. Availability of fuel was also another criterion in proposed power plant the primary fuel would be imported coal which would require transportation and unloading facilities. In Matarbari, coal might be imported from foreign countries by large vessels and unloading jetty facility would be created there proposed site mentioned by Mr. Enamul Haque Chowdhury would not be suitable for that consideration. Moreover, after thorough analyses from numerous aspects, not only from social aspect but from environmental, financial, technical aspect, the present location was finally prioritized and accepted.</p>	<p>[Compensation]</p> <p>- Compensation under the Law (CUL) for all the private land as stipulated by the Ordinance 1982: average of last 12 months' sales values of same kind of land X 1.5 (50% premium)</p> <p>- Cash grant that covers the difference between CUL and the replacement value (RV)</p> <p>- Provision of stamp duty, land registration fee, capital gains tax and value added tax incurred for replacement land</p> <p>[Electrification]</p> <p>Electrification of surrounding area will be examined.</p> <p>[Education]</p> <p>School facilities at power plant will be shared with the local residents.</p> <p>[Health]</p> <p>Health facilities at power plant will be shared with the local residents.</p>

Section-4	Detailed Description of Impact and Category of Project Affected Persons (PAPs)
------------------	---

4.1 Power Plant

4.1.1 Pre-construction Phase and Construction Phase

(1) Land Acquisition

Findings: It is anticipated that 16 households currently living on the site without permission and four households who purchased the land will have to vacate their domiciles due to the land acquisition for the construction of the power plant. Apart from resettlement, land owners of the project site area will lose their land. Employers/ employees of salt farms and shrimp farms will lose their means of livelihood. Those people who run business, employers or employees at salt farms and shrimp farms in the site will lose their livelihood means. Note that the site selection was reconsidered to the present site from the previous one (2 km south), where large settlements were found on private land, in order to avoid a large-scale resettlement.

343 households and 2,031 people will be affected by the construction of the power plant and the port facility. They had complex land use patterns: some of them had lands of their own, rented additional private land and government land; some others had no land but rented private land and had domicile without permission. The following table shows the anticipated impact to the 343 households. The number of household for each category is cumulative as most of households have several kinds of statuses to the land they use.

Table 4-1: Anticipated Social Impact to 343 Households (Power Plant)

Category		Impact	No. of HH (cumulative)	No. of HH Members (cumulative)
Owners of private land				
	Own & live	Lose land ownership Lose shelters and be physically displaced	4	25
	Own but do not live	Lose land ownership	237	1,429
Users of private land (lease)		Lose tenant rights	77	460
Users of government land with official agreement		Lose tenant rights	10	70
Users of government land without official agreement		Lose occupancy of land	140	844
Squatters living on government land		Lose occupancy of land for living place	16	86
		Lose shelters and be physically displaced		

Note: HH means household.
(Source: JICA Study Team)

Mitigation Measures: Not only a compensation plan but also a livelihood restoration program for affected people shall be established.

(2) Disturbance to Poor People

Findings: There are poor households among those to be resettled and/or will lose their livelihood. The household monthly income of 343 households (2,031 people) directly and indirectly affected by this project is from zero taka to 842,000 taka, and the income of nearly 60% of the households is within the range of 10,000 taka to 30,000 taka. For individual monthly incomes, 44% of the all family members fall into the range of 2,000 taka to 4,000 taka.

According to the national household revenue and expenditure survey conducted in 2010, the poverty line of agricultural area of Bangladesh is 1,211.57 taka per person/ month, and Chittagong District is 1,304.64 taka per person/ month. Setting the poverty line at 1,500 taka per person/ month for the proposed power plant site at the end of 2012, less than 10% of the local population falls below the poverty line on income basis. This rate is far better than the poverty rate of rural areas for the whole of Bangladesh (35.2%), and of the Chittagong District (31.0%).

Mitigation Measures: Their living conditions will not deteriorate compared to their current conditions, and they will have job opportunities at the construction site.

The employment of local people should be promoted to increase employment opportunities for various subcontract work resulting from the power plant construction activity. However, approximately 70% of heads of household are illiterate or can only write their signatures, so these people can only be engaged in very simple tasks due to their lack of skills. Livelihood restoration measures shall be established, including job training for those who want it.

(3) Deterioration of Local Economy such as Losses of Employment and Livelihood Means/ Land Use and Utilization of Local Resources

Findings: It is expected that employers and employees of salt farms, shrimp farms, and fishermen will lose their means of livelihood. Fishing activities around the site will also be affected due to a rise of water temperature and restriction of fishing. The implementation of this project will change the traditional land use patterns and utilization of local resources, which may have a large impact on the existing local economy.

About 70% of the heads of 343 households that will be directly or indirectly affected are working in salt or shrimp farms as laborers, mazi, businessmen or cultivators. Including laborers from outside, there are 165 permanent and 892 temporary employees involved in shrimp cultivation, salt farming, fishing activities and others. There are also twelve sharecroppers. Twenty two businessmen stated they received cash income from the salt business and three stated they received income from agriculture. There was also one boatman, six carpenters, and one tea seller.

Approximately 70% of heads of household are illiterate or can only write their signatures, so they can only be engaged in very simple tasks due to their lack of skills.

The sandy beach is 7km long at the west coast of Matarbari Island, according to the Maheshkhali Upazila Officer. The width of the navigation channel to be altered is 400m and the length of discharge outlet is 100m, resulting in less than 10% of the sandy beach becoming disappeared. Then fishing ground for push net will be loss.

Fishermen around the project site fish offshore (3-50km from the coast), and as all dredged material will be land filled into land sites, not disposed into the ocean, therefore, there is no expected impact on fishery by the power plant construction.

The catches of shrimp fly in the coastal area may be affected by the change of the sand beach due to the construction of the navigation channel and water outlet.

Mitigation Measures: Although the number of salt and shrimp farms will decrease due to the construction of the power plant, employment opportunities will increase for various subcontract work of the construction. Local people will be given priority in employment. Livelihood restoration measures shall be established, including job training for those who want it. Decreased income from shrimp-fly fishing of the fishermen may be easily supplemented by increased job opportunities and job switching. Job training shall be provided for those who want it in order to assist in livelihood restoration.

(4) Disturbance to Water Usage, Water Rights, etc.

Findings: All water to be used for the construction work will be transported by vessels and stored in a tank. Ground water and river water will not be used.

The local economy may be affected by turbid water discharged from the construction site. Outflows of street dust and oil during rainy periods may also have certain effects. The turbid water discharged from the construction site and any oil spills may affect the water quality of the marine area, rivers and ground water, and adequate mitigation measures shall be taken.

Mitigation Measures: Water quality of well water, which is the main supply of drinking water, shall be monitored in order to monitor any adverse effects on ground water.

(5) Disturbance to Existing Social Infrastructure and Services

Findings: As material and equipment transportation will be mainly conducted by vessels, increased marine traffic may disturb existing marine traffic including fishing boats. Additionally, vehicles transporting commuting workers may cause increased traffic and traffic jams around the project area.

Mitigation Measures: In regard to vessels, water routes shall be determined after consultation with the related authorities. And in regard to vehicles, bus use will be promoted to reduce increasing the number of vehicles on the roads. The bus schedules shall be managed in consultation with related organizations.

(6) Social Institutions such as Social Infrastructure and Local Decision-making Institutions

Findings: Laws of Bangladesh stipulate the need to conduct public consultations in land acquisition processes. The Deputy Commissioner's Office of Cox's Bazar District will officially take responsibility for initiatives to conduct local consultations concerning compensation.

Mitigation Measures: A number of consultations with local residents have been conducted in preparing the draft LARAP. In consideration of changing emotions of local residents over the course of negotiations with office staff, personnel responsible for responding to complaints or suggestions from local residents will work at the power plant office in the resettlement process.

(7) Misdistribution of Benefits and Compensation -

Findings: There is a possibility of unequal compensation among local residents.

Mitigation Measures: Equality of compensation shall be assured in the resettlement process.

(8) Local Conflicts of Interest

Findings: Local conflicts may occur between local residents who may feel that they receive unfair compensation and other local residents or conflict with staff of the Deputy Commissioner's Office. Conflict may occur between local residents and external workers because of any changes to local customs if external workers cannot understand local customs.

Mitigation Measures: A number of consultations with local residents have been conducted in preparing the draft LARAP. In the resettlement process, personnel responsible for responding to complaints or suggestions from local residents will work at the power plant office.

Local people should be employed at the power plant to the maximum extent possible, and any workers from other countries should be taught to respect local customs in order to facilitate good relationships with local people. The lodgings of the project workers should be equipped with sufficient living facilities to keep workers at the project site as much as possible.

(9) Gender

Findings: There are women among those to be resettled and/or lose their livelihood means. They currently have low living standards, living without proper facilities, will have better access to social services throughout the year. However, wives of those men who lose their land or jobs may suffer from adverse effects on their household economy.

(10) Children's Rights

Findings: Children are often forced to work and cannot attend school, and this may occur in the construction stage of the power plant as well. There will be children among those to be resettled and/or lose their livelihood means. Children from those households losing their land or jobs may suffer from adverse impact on their household economy such as drop-out of school.

Mitigation Measures: Labor contracts between the construction industry and children shall be prohibited. Regular patrols to check for child workers shall be conducted.

(11) Infectious Diseases such as HIV/AIDS

Findings: A temporary influx of migrant labor during the construction period may increase the risk of sexual transmitted diseases, etc.

Mitigation Measures: Local people should be recruited for simple work as much as possible so to minimize the risk of infectious diseases being transmitted from external workers. Pre-employment and periodic medical check-ups should be conducted for external workers (technical workers, etc.).

(12) Work Environment (Including Work Safety)

Findings: A high risk rate of accidents is predicted for the construction work.

Mitigation Measures: Construction companies should establish work safety plans and submit them to CPGCBL to obtain approval. Work safety plans should stipulate mitigation measures on soft aspects (safety training, etc.) and hard aspects (provide workers with appropriate protective equipment, etc.).

(13) Accidents

Findings: Land traffic and marine traffic accidents during construction work may occur.

Mitigation Measures: As prevention measures for land traffic accidents, observation of traffic regulations, and training and education on safe driving will be implemented. The bus schedules shall be communicated to people in the surrounding villages. For vessel operation, marking buoys will be set around the construction area for marine safety. Vessel schedules shall be announced to fishermen, etc.

4.1.2 Operation Phase

(1) Disturbance to Poor People

Findings: Resettled people may experience a deterioration of their household economies and livelihood losses due to their relocation if appropriate measures are not taken. The road around the project site is especially in a bad condition (not possible to travel in the rainy season), preventing local access to social services.

Mitigation Measures: Poor people, who currently have low living standards, living without proper facilities, will have better access to social services throughout the year if roads are improved along with the construction of the power plant, especially improved access during the rainy season. An access road, a community road that will replace the existing road and a road around the power plant boundary shall be built. These roads will be built with sufficient height so that they can be used even in the rainy season.

Local people should be employed to work at the power plant and related facilities to the maximum extent possible according to their skills.

(2) Deterioration of Local Economy such as Losses of Employment and Livelihood Means/
Land Use and Utilization of Local Resources

Findings: There will be permanent losses or reduction of livelihood means in salt farming, shrimp farming and fishing activities. Employment opportunities will be offered at the power plant for local people.

The implementation of this project will change the traditional land use patterns and utilization of local resources, which may have a large impact on the existing local economy. Both fishermen around the project site who operate in the marine area (3-50km from the coast) outside of the adverse effects of thermal effluents and other wastewater discharge of the power plant, and fish catches, will not be affected.

Mitigation Measures: Local people should be employed to work at the power plant and related facilities to the maximum extent possible according to their skills. Livelihood restoration means shall be conducted including job training for those who want it. Services (e.g., laundry, catering services, etc.) and products offered by the local community should be used by the power plant as much as possible. Efforts for area development will be promoted, including the establishment of a local development plan in cooperation with the local government.

(3) Disturbance to Water Usage, Water Rights, etc.

Findings: In the operation phase, all water used for the project will be supplied not from ground water or river water, but from sea water desalinated by reverse osmosis. The local economy may be affected by discharged water from the power plant into the sea.

Mitigation Measures: Wastewater generated from the power plant will be appropriately treated before discharge. Waste will also be appropriately treated and disposed of, with necessary countermeasures to prevent any seepage of oil and chemicals.

(4) Disturbance to the Existing Social Infrastructure and Service

Findings: Traffic volume and traffic jams will increase in the surrounding roads during the operation phase.

Mitigation Measures: Mitigation measures to decrease traffic volume shall be conducted, such as the promotion of bus use. Additionally, an access road, community road and road around the power plant boundary shall be built. These roads will be built with sufficient height so that they can be used even in the rainy season, in order to enable public access to markets and social services.

In addition, a school and medical facility constructed within the power plant site shall be open to all local people for the improvement of their lives.

(5) Misdistribution of Benefits and Compensation

Findings: People who live in other areas have limited access or have been prevented from accessing the school and medical facility within the power plant site and the access road, which may cause grievances.

Mitigation Measures: The access road, school and medical facility constructed within the power plant site shall be open to all local people to the maximum extent possible in order to improve peoples' lives.

(6) Local Conflicts of Interest

Findings: Local conflicts of interest may occur between employers and employees of salt farms, shrimp farms and the fishing industry, and between local administration bodies and local political leaders. Conflicts among local residents may occur if such benefits were misdistributed.

Mitigation Measures: Local people should be employed at the power plant to the maximum extent possible, and workers from other countries should be taught to respect local customs in order to facilitate good relationships with the local people. The lodgings of project workers should be equipped with sufficient living facilities in order to keep workers at the project site as much as possible.

The access road, school and medical facility constructed within the power plant site shall be open to all local people to the maximum extent possible for the improvement of peoples' lives.

(7) Gender

Mitigation Measures: Residents will have better access to social services throughout the year if roads are improved along with the construction of the power plant, especially access during the rainy season.

(8) Children's Rights

Findings: There is a possibility that children may be forced to work and not attend school. Further, children's rights to go to school may further deteriorate if the access way to their school is physically blocked by the construction site.

Mitigation Measures: Labor contracts between the subcontractors and children shall be prohibited. Regular patrols to check for child workers shall be conducted. The access road,

community road and road around the power plant boundary shall be built with sufficient height so that it can be used even in the rainy season, so that access to markets and social services shall be improved, including access by children.

(9) Work Environment (Including Work Safety)

Findings: Work accidents involving workers may occur at the power plant site.

Mitigation Measures: CPGCBL shall establish a work safety plan. The work safety plan shall stipulate mitigation measures on soft aspects (safety training, etc.) and on hard aspects (provide workers with appropriate protective equipment, etc.).

(10) Accidents

Findings: Marine traffic and land traffic accidents may occur during plant operation. Fires caused by spontaneous ignition of stored coal may also occur.

Mitigation Measures: Observation of traffic regulations, installation of traffic signs, and training and education on safe driving shall be conducted for land traffic vehicles. For ocean navigation, determining water routes after consultation with related authorities, and setting course buoys around navigation channel for marine safety will be undertaken as prevention measures for accidents. Fire prevention measures shall be conducted including regular watering of the coal storage site, installation of fire protection equipment in the power plant and organization of fire-fighting team and fire-fighting training.

4.2 Port Facility

4.2.1 Pre-construction Phase and Construction Phase

(1) Disturbance to Existing Social Infrastructure and Social Services

Findings: Pump dredgers will be used in dredging work in the marine area, and increased marine traffic may slightly disturb the existing marine traffic including fishing boats.

Mitigation measures: The construction area shall be determined after consultation with related authorities.

(2) Work Environment (Including Work Safety)

Findings: A high risk rate of accidents is predicted during the construction work.

Mitigation measures: Construction companies shall establish work safety plans and submit them to CPGCBL to obtain approval. Work safety plans shall stipulate mitigation measures on soft aspects (safety training, etc.) and on hard aspects (provide workers with appropriate protective equipment, etc.).

(3) Accidents

Findings: Marine traffic accidents may occur during the construction work.

Mitigation measures: The navigation route of vessels shall be determined after consultation with related authorities. Marking buoys will be set around the construction area for marine safety.

4.2.2 Operation phase

(1) Disturbance to the Existing Social Infrastructure and Services

Findings: Navigation of large coal transport vessels and tankers will cause increased marine traffic, and may disturb the existing marine traffic including fishing boats.

Mitigation measures: Navigation routes shall be determined after consultation with related authorities.

(2) Work Environment (Including Work Safety)

Findings: Accidents may be caused by the entry and departure of vessels and the loading-unloading of coal.

Mitigation measures: Work safety plans shall be established that stipulate mitigation measures on soft aspects (safety training, etc.) and on hard aspects (provide workers with appropriate protective equipment, etc.).

(3) Accidents

Findings: Marine traffic accidents may occur.

Mitigation measures: Navigation routes shall be determined after consultation with related authorities. Course buoys will also be set around navigation channel for marine safety.

4.3 Transmission Line

4.3.1 Pre-construction Phase and Construction Phase

Findings: It is anticipated that 16 households currently living on the site without permission and four households who purchased the land will have to vacate their domiciles due to the land acquisition for the construction of the power plant. Apart from resettlement, land owners of the project site area will lose their land. Employers/ employees of salt farms and shrimp farms will lose their means of livelihood. Those people who run business, employers or employees at salt farms and shrimp farms in the site will lose their livelihood means. Note that the site selection was reconsidered to the present site from the previous one (2 km south), where large settlements were found on private land, in order to avoid a large-scale resettlement.

343 households and 2,031 people will be affected by the construction of the power plant and the port facility. They had complex land use patterns: some of them had lands of their own, rented additional private land and government land; some others had no land but rented private land and had domicile without permission. The following table shows the anticipated impact to the 343 households. The number of household for each category is cumulative as most of households have several kinds of statuses to the land they use.

(1) Land Acquisition and Compensation

The construction of one tower base requires $2m^2 \times 4 = 8m^2$ of land. The construction of 157 transmission towers, including angle towers and suspension towers, is planned requiring a total amount of $1,256m^2$ of land acquisition. Voluntary offers of land do not require compensation, but it is assumed here that all land necessary for tower construction will be acquired.

The table below shows the details of the assumed affected people. Land acquisition will be conducted on the basis of compensation at replacement cost. As the land to be acquired for each transmission tower is small, it is not expected that there will be any semi-permanent loss of livelihood means. However, there is a possibility of temporary impact on livelihood means during the construction period.

Table 4-2: Affected people and land owners at angle tower points

Category	Impact	No. of HH	No. of HH Members
Owners of private land	- Temporarily affected during construction period	8	83
Users of government land with official agreement	- Temporarily affected during construction period	1	9
Total		9	92

In the case of acquisition of farm land, entry into such land will be temporarily halted during the construction period and hence farming will be impossible. Also, all trees within clearance distance from cables will be removed. All standing crops and trees lost by the land owners will be compensated with a market price.

(2) Deterioration of Local Economy such as Losses of Employment and Livelihood Means/ Land Use and Utilization of Local Resources

Farm land located at the base of the towers will be lost, although the total area will be small. Land owners and users of tower locations will be tentatively affected during construction period resulting in a loss of means of livelihood. In addition, land located under the transmission line will decline in value. Tall trees will be cut down. However local people will be employed for construction work.

In the case of acquisition of farm land, entry into such land will be prohibited temporarily during the construction period and hence farming will be impossible. The construction work aims to employ as many local residents as possible, and to use the services and products of the local community as much as possible.

The transmission line construction areas can be reused for farming after the completion of each transmission tower construction, except for the $2\text{m}^2 \times 4 = 8\text{m}^2$ of land used for tower bases. Therefore, adverse effects on income will be very limited.

(3) Disturbance to Water Usage, Water Rights, etc.

There may be soil runoff from the exposed soil of the embankments and cut slopes, resulting in water pollution of the downstream area of the surrounding rivers and consequently alteration of water use. The transmission line route shall avoid using steep sloping land, and any slopes used shall be reinforced with concrete, plantation or other means to minimize soil runoff and turbid water generation.

(4) Social Institutions such as Social Infrastructure and Local Decision-making Institutions
The Deputy Commissioner's Office of Cox's Bazar District will be responsible for taking the initiative to conduct local consultations concerning compensation. In consideration of the possible changing emotions of local residents over the course of negotiations with office staff, Compensation should be carried out in consultation with the local people.

(5) Cultural Heritage

There is a possibility that some historical, cultural and/or archaeological property and heritage may be found in the course of the construction work. In this case, construction work will be interrupted and experts will be consulted.

(6) Infectious Diseases such as HIV/AIDS

A temporary influx of migrant labor during the construction period may increase the risk of transmitted diseases. Local people will be recruited for simple work as much as possible and there is low risk of infectious diseases transmitted from external workers. Pre-employment and periodic medical check-ups shall be carried out for external workers (technical workers, etc).

(7) Work Conditions (Including Work safety)

A high risk rate of accidents is predicted during the construction work. The construction company shall establish a work safety plan and submit it to PGCB to obtain approval. The work safety plan shall stipulate mitigation measures on soft aspects (safety training, etc) and on hard aspects (provide workers with appropriate protective equipment, etc).

(8) Accidents

There may be land traffic accidents during the construction work. Also, other accidents may occur, including soil runoffs and tower breakages caused by cyclones, etc. As prevention measures for land traffic accidents, observation of traffic regulations, installation of traffic signs and training and education on safe driving will be implemented.

In addition, the transmission line route shall avoid using steep sloping land, and any slopes used shall be reinforced with concrete, plantation or other means to minimize soil runoff and turbid water generation.

4.3.2 Operation Phase

(1) Deterioration of Local Economy such as Losses of Employment and Livelihood Means
Farm land located at the base of towers will be lost, although the total area will be small. The transmission line construction area can be reused for farming after the completion of the construction, except for the $2\text{m}^2 \times 4 = 8\text{m}^2$ of land for tower bases, and any adverse effects on income will be very limited.

(2) Disturbance to Water Usage, Water Rights, etc.

Soil runoff may occur from the exposed soil of the embankments and cut slopes, resulting in water pollution of the downstream area of the surrounding rivers and possible alteration of water use. The transmission line route shall avoid using steep sloping land, and any slopes used shall be reinforced with concrete, plantation or other means to minimize soil runoff and turbid water generation.

(3) Work Conditions (Including Work Safety)

There is a risk that accidents, such as electrification and workers falling, may occur during maintenance work. A work safety plan shall be established including mitigation measures on soft aspects (safety training, etc) and on hard aspects (provide workers with appropriate protective equipment, etc).

(4) Accidents

Accidents may occur from such factors as soil runoffs and tower breakages caused by cyclones, etc. The transmission line route shall avoid using steep sloping land, and any slopes used shall be reinforced with concrete, plantation or other means to minimize soil runoff and turbid water generation.

4.4 Township Development

4.4.1 Pre-construction Phase and Construction Phase

(1) Land Acquisition

Findings: It is anticipated that land owners of the project site area will lose their land. Employers/ employees of salt farms and shrimp farms will lose their means of livelihood. Those people who run business, employers or employees at salt farms and shrimp farms in the site will lose their livelihood means.

207 people belonging to 41 households will be directly affected by the construction of the Township development. They had complex land use patterns: some of them had lands of their own, rented additional private land and government land. The table below shows the anticipated impact to the 41 households. The list of affected persons for loss of land is placed at Annexure-1.

Table 4-3: Anticipated Social Impact to 41 Households (Township Site)

Category	Impact	No. of HH (cumulative)	No. of HH Members (cumulative)
Owners of private land			
Own but do not live	Lose land ownership	41	207

Note: HH means household.

Mitigation Measures: Not only a compensation plan but also a livelihood restoration program for affected people shall be established.

(2) Disturbance to Poor People

Findings: There are poor households among those to be resettled and/or will lose their livelihood. The household monthly income of 41 households (207 people) directly affected by this project ranges from below 1000 taka to 70000 taka, and the income of nearly 41.46% of the households is within the range of 10,000 taka to 30,000 taka. For individual monthly incomes, 19.51% of the family members fall into the range of 2,000 taka to 3,000 taka.

According to the national household revenue and expenditure survey conducted in 2010, the poverty line of agricultural area of Bangladesh is 1,211.57 taka per person/ month, and Chittagong District is 1,304.64 taka per person/ month. Setting the poverty line at 1,500 taka per person/ month for the proposed power plant site at the end of 2012, less than 10% of the local population falls below the poverty line on income basis. This rate is far better than the poverty rate of rural areas for the whole of Bangladesh (35.2%), and of the Chittagong District (31.0%).

Mitigation Measures: Their living conditions will not deteriorate compared to their current conditions, and they will have job opportunities at the construction site.

The employment of local people should be promoted to increase employment opportunities for various subcontract work resulting from the construction of township activity. However,

approximately 51.22% of heads of household are illiterate or can only write their signatures, so these people can only be engaged in very simple tasks due to their lack of skills. Livelihood restoration measures shall be established, including job training for those who want it.

(3) Deterioration of Local Economy such as Losses of Employment and Livelihood Means/ Land Use and Utilization of Local Resources

Findings: It is expected that employers and employees of salt farms, shrimp farms, and fishermen will lose their means of livelihood. Fishing activities around the site will also be affected because of restriction of fishing. The implementation of this project will change the traditional utilization of local resources, which may have a large impact on the existing local economy.

Apart from such land owners and users, there are also permanent and temporary laborers employed by them. Including laborers from outside, there are 12 permanent and 52 temporary employees involved in shrimp cultivation, salt farming, fishing activities and others.

Mitigation Measures: Although the number of salt and shrimp farms will decrease due to the construction of the township, employment opportunities will increase for various subcontract work of the construction. Local people will be given priority in employment. Livelihood restoration measures shall be established, including job training for those who want it. Increase of job opportunities and imparting of job training will help largely restoration of livelihood and income of the affected families.

(4) Social Institutions such as Social Infrastructure and Local Decision-making Institutions

Findings: Laws of Bangladesh stipulate the need to conduct public consultations in land acquisition processes. The Deputy Commissioner's Office of Cox's Bazar District will officially take responsibility for initiatives to conduct local consultations concerning compensation.

Mitigation Measures: A number of consultations with local residents have been conducted in preparing the draft LARAP. In consideration of changing emotions of local residents over the course of negotiations with office staff, personnel responsible for responding to complaints or suggestions from local residents will get facility to get employment in civil work of township site and involve in other generated new service activities in the resettlement process.

(5) Misdistribution of Benefits and Compensation

Findings: There is a possibility of unequal compensation among local residents.

Mitigation Measures: Equality of compensation shall be assured in the resettlement process.

(6) Local Conflicts of Interest

Findings: Local conflicts may occur between local residents who may feel that they receive unfair compensation and other local residents or conflict with staff of the Deputy Commissioner's Office. Conflict may occur between local residents and external workers because of any changes to local customs if external workers cannot understand local customs.

Mitigation Measures: A number of consultations with local residents have been conducted in preparing the draft LARAP. In the resettlement process, personnel responsible for responding to complaints or suggestions from local residents will get facility to work in the civil construction of the township site and involve in other newly generated service activities. Local people should be employed at the power plant to the maximum extent possible, and any workers from other countries should be taught to respect local customs in order to facilitate good relationships with local people. The lodgings of the project workers should be equipped with sufficient living facilities to keep workers at the project site as much as possible.

(7) Gender

Findings: There are women among those to be resettled and/or lose their livelihood means. They currently have low living standards, living without proper facilities, will have better access to social services throughout the year. However, wives of those men who lose their land or jobs may suffer from adverse effects on their household economy.

(8) Children's Rights

Findings: Children are often forced to work and cannot attend school, and this may occur in the construction stage of the township. There will be children among those to be resettled and/or lose their livelihood means. Children from those households losing their land or jobs may suffer from adverse impact on their household economy such as drop-out of school.

Mitigation Measures: Labor contracts between the construction industry and children shall be prohibited. Regular patrols to check for child workers shall be conducted.

(9) Infectious Diseases such as HIV/AIDS

Findings: A temporary influx of migrant labor during the construction period may increase the risk of sexual transmitted diseases, etc.

Mitigation Measures: Local people should be recruited for simple work as much as possible so to minimize the risk of infectious diseases being transmitted from external workers. Pre-employment and periodic medical check-ups should be conducted for external workers (technical workers, etc.).

(10) Work Environment (Including Work Safety)

Findings: A risk rate of accidents is predicted for the construction work.

Mitigation Measures: Construction companies should establish work safety plans and submit them to CPGCBL to obtain approval. Work safety plans should stipulate mitigation measures on soft aspects (safety training, etc.) and hard aspects (provide workers with appropriate protective equipment, etc.).

4.5. Entitlement for Different Types of Losses.

Based on the findings and analyses in the field surveys, the entitlement matrix for the PAPs at the construction site of power plant and port facility, and transmission line route and township site has been prepared. The Entitlement Matrix lists 10 types of losses and category of entitled persons and corresponding proposed entitlements to cover all possible losses to achieve at least the same level of livelihood of the affected households. Entitlement Matrix are as in the table below:

Table 4-4: Entitlement matrix for PAPs (power plant, port facility , transmission line and Township Sites)

No	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation and Assistance Package)	Responsible Organizations
1.	Loss of private land	Legal owners of land	<ul style="list-style-type: none"> ✓ Cash compensation under the law (CUL) for all the private land stipulated by the Ordinance 1982 is the average of last 12 months' sales values of same kind of land X 1.5 (50% premium). Cash grant that covers the difference between CUL and the replacement value (RV) ✓ Provision of stamp duty, land registration fee incurred for replacement land (15%) ✓ value added tax ✓ One-time assistance for lost income (based on monthly 	DC PVAT, JVT CPGCBL

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

No	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation and Assistance Package)	Responsible Organizations
			income for three years at minimum wage rates)	
		Tenants and leaseholders	<ul style="list-style-type: none"> ✓ Provision of another land including 50% premium ✓ Provision of stamp duty, land registration fee (15%) If land is purchase by the compensation money ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) 	
2.	Loss of government land including khas land	Tenants and lessee	<ul style="list-style-type: none"> ✓ Provision of another khas land (assuming tenants and lessee will seek private land, 50% premium is added) ✓ Provision of stamp duty, land registration fee (15%) If land is purchase by the compensation money ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) 	DC PVAT, JVT CPGCBL
		Occupants without legal tenure	<ul style="list-style-type: none"> ✓ Provision of another khas land (assuming tenants and lessee will seek private land, 50% premium is added) ✓ Provision of stamp duty, land registration fee (15%) If land is purchase by the compensation money ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) 	
3.	Permanent loss of means of livelihoods/ source of income	✓ Lessor (land owners who rent their land will lose income from land lease contract)	✓ One-time assistance for opportunity loss (based on the lease amount) (assuming the inflation rate stays 10%)	DC, DOF PVAT, JVT CPGCBL

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

No	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation and Assistance Package)	Responsible Organizations
		<ul style="list-style-type: none"> ✓ Permanent laborers ✓ Temporary laborers ✓ Sharecroppers 	<ul style="list-style-type: none"> ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) ✓ Enrollment in vocational training courses based on assessment of skills (@300 taka / day for 120 days) 	
		Businessmen, employers of salt farms, shrimp farms and fishing sites, self-employed people	<ul style="list-style-type: none"> ✓ One-time assistance for opportunity loss (based on the lease amount) (assuming the inflation rate stays 10%) ✓ One-time assistance for lost income (based on monthly income for three years at minimum wage rates) 	
4.	Loss of residential/ commercial structures	<p>Legal title holders Owners of structures</p> <p>Legal tenants/ lease holders of the structure</p> <p>Socially recognized owners/ unauthorized occupants</p>	<ul style="list-style-type: none"> ✓ Cash compensation for affected portion of the structure and other fixed assets at replacement cost (plus 50% premium) ✓ Option to be compensated for entire structure if remaining structure is no longer viable ✓ Provision of all taxes, registration costs and other fees incurred for replacement structure (15%) ✓ Reconstruction grant for reconstruction / repair of the remaining structure (@15 taka / sft) ✓ Shifting allowance based on actual costs of moving (@10 taka / sft) ✓ Owners to take away all salvage materials <ul style="list-style-type: none"> ✓ Cash compensation equivalent to replacement cost of structure (or part of structure) for the portions of the structure constructed by the tenant/ leaseholder (plus 50% premium) ✓ Reconstruction grant for reconstruction / repair of the remaining structure (@15 taka / sft) ✓ Shifting allowance based on actual cost of moving (@10 taka / sft) ✓ Owners to take away all salvage materials <ul style="list-style-type: none"> ✓ Cash compensation equivalent to replacement cost of structure (or part of structure) erected by the displaced person (plus 50% premium) ✓ Reconstruction grant for reconstruction / repair of the remaining structure (@15 taka / 	DC PVAT, JVT, PWD CPGCBL

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

No	Type of Loss	Entitled Persons (Beneficiaries)	Entitlement (Compensation and Assistance Package)	Responsible Organizations
			sft) ✓ Shifting allowance based on actual cost of moving (@10 taka / sft) ✓ Owners to take away all salvage materials	
5.	Loss of access to Residential/ Commercial Structures	Tenants of rented leased properties (but not constructed the whole part of the structure	✓ One time cash grant for facilitating alternative housing/ CBEs Tk. 15000/= per household ✓ Shifting allowance per household based on family members @ 3000/= per member minimum Tk. 9000/= maximum 12000/=	PVAT CPGCBL
6.	Loss of standing crops at home gardens, shrimp, and fish	Land owners, <i>Bargadar</i> , Lessee and Unauthorized occupant of land	✓ One time assistance for opportunity loss (based on the lease amount) (assuming the inflation rate stays 10%)	DC PVAT, DOF,DAM CPGCBL
7.	Loss of timber and fruit bearing trees	Legal owner of land/Socially recognised owner Non-titled user of land	✓ Market value of trees ✓ Owner will be allowed to fell and take away their trees	DC PVAT, BFD,DAM CPGCBL
8.	Temporary loss of land during construction	Owners with legal title, tenants, leaseholders	✓ Rental assistance for the period for which the land is temporarily requisitioned ✓ Temporarily requisitioned land will be returned to owners rehabilitated to original or preferably better condition	DC PVAT CPGCBL
9.	Temporary loss of access to land, structure, utilities, common property resource during construction	Owners with legal title, tenants, leaseholders	✓ Provision of temporary access and relocation where possible ✓ Restoration of access to the land, structure, utilities	DC PVAT CPGCBL
10.	Temporary loss of livelihood/ source of income during construction	Business owners, tenants, leaseholders, employees, vendors	✓ One-time assistance for lost income based on monthly income for three years from products, minimum wage rates or based on actual income, verified through incomes of comparable businesses in the area	DC, DOF, DAM CPGCBL

(Source: JICA Study Team)

Section-5

Livelihood Restoration and Improvement Plan

5.1 The livelihood restoration and improvement plan will be implemented based on consultation with PAPs and their socio-economic profile, living environment, level of education, etc. which were identified in the socioeconomic survey. CPGCBL have agreed to incorporate the following measures into livelihood restoration program.

Table 5-1: Livelihood restoration measures

Current situation	Negative impact	Program
<ul style="list-style-type: none"> - Nearly 80 % of Household heads are illiterate or only write their names. - Only 43 % of the affected people are literate 	<ul style="list-style-type: none"> - Hard to find job - Access to information is limited 	<ul style="list-style-type: none"> - Power plant offers literacy classes to local children
<ul style="list-style-type: none"> - Skills remain undeveloped - Women stay home 	<ul style="list-style-type: none"> - Hard to find good jobs - Salary stays low 	<ul style="list-style-type: none"> - PS arranges skill training classes
<ul style="list-style-type: none"> - Job opportunity: limited 	<ul style="list-style-type: none"> - High unemployed rates - Daily labor - Children drop out of school 	<ul style="list-style-type: none"> - PS offers jobs at PS and associated facilities

(Source: JICA Study Team)

Section-6

Implementation Arrangement and Organizational Responsibilities

6.1 Coal Power Generation Company of Bangladesh Ltd.

The Coal Power Generation Company of Bangladesh Ltd. (CPGCBL) under the Ministry of Power Energy and Mineral Resources (MOPEMR) is the Executing Agency (EA) responsible for implementing the LARAP. CPGCBL shall establish a Project Management Unit (PMU) for the Project, headed by a Project Director (PD) that will be responsible for the overall execution of the project including land acquisition, relocation, resettlement and other related matters. The PMU will prepare a land acquisition (LA) plan for the land required to be acquired with the assistance from consultants and shall submit to the DC, Cox's Bazar. An experienced implementing NGO / Consultancy Firm shall be hired by CPGCBL to assist them in implementation of resettlement program. To expedite the process, the LARAP implementing NGO/Consultancy Firm will assist the DC office and EA in the process of land acquisition. CPGCBL will allocate the required budget for additional grant on top of DC's payment for land and resettlement benefits which are to be approved by GOB.

The Executive Engineer concerned under the direct supervision of the Project Director, will undertake day-to-day activities with the appointed IA. The Executive Engineer concerned will be the convener of the Joint Verification Team (JVT) and Property Valuation Advisory Team (PVAT). There will be a Grievance Redress Committee for resolution of disputes. Grievance Redress Mechanism is detailed in Section 7. The Executive Engineer concerned will coordinate and manage resettlement and rehabilitation of the APs, disburse resettlement benefits, and ensure AP's access to development programs. The PMU, with assistance from the NRS of PSC & IA will carry out the following specific tasks relating to LARAP implementation:

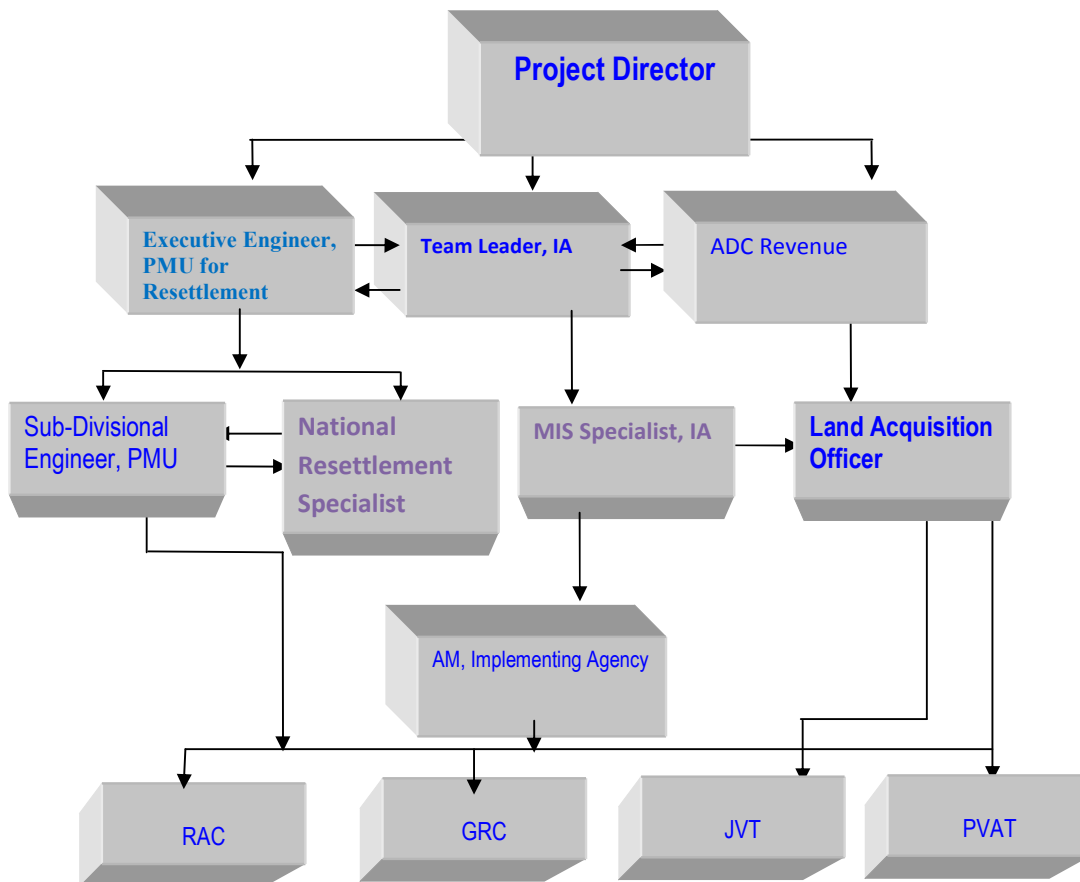
- (i) Liaise with district administration to support LARAP implementation activities i.e. appointment of JVT, PVAT, GRC and RAC members, etc;
- (ii) Discharge overall responsibility of planning, management, monitoring and implementation of the resettlement and rehabilitation program;
- (iii) Ensure availability of budget for all activities;
- (iv) Synchronize resettlement activities and handover the encumbrance free land to the contractor within the construction schedule;
- (v) Develop LARAP implementation tools and form necessary committees;
- (vi) Monitor the effectiveness of entitlement packages and the payment modality.

The appointed LARAP Implementing Agency will carry out an information campaign and involve affected persons including women in the implementation process. The IA will collect, computerize and process data for identification of eligible persons correctly for resettlement benefits and assess their entitlements as per LARAP policy. However, the PMU will make necessary scrutiny of indents of compensation and resettlement benefits submitted by the Implementing Agency and make payments after the indents are approved by the PD. The Executive Engineer of the PMU in charge of the resettlement management will report progress to the Project Director. He will work in close coordination with the respective field-based offices and IA on the day-to-day activities of the resettlement implementation.

The PMU, LA Office and the IA will execute joint verification of the property on the ROW by JVT, valuation of the affected property by PVAT and monitor the progress of the LARAP implementation work. The PMU will ensure coordination between the relevant departments, IA, GRC, RAC, PVAT and the Project affected people. Joint Verification Team (JVT) for quantification of affected properties, and a Property Valuation Advisory Team (PVAT) will be formed by the Ministry of Power, Energy and Mineral Resources (MOPEMR) for valuation of affected property, together with a GRC for resolution or redress of disputes. A proposed

LARAP implementation organogram is given below in Figure 6-1

Figure 6-1 : LARAP Implementation Organogram



Affected Communities/ Project Affected Persons

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Institutional responsibilities for LARAP preparation and implementation activities are summarized in Table.

Table 6-1: Institutional Roles and Responsibilities

Activity	Responsible Agency
A. Project Initiation Stage and Institutional Setup	
Formation of PMU	EA
Recruitment of DSC,PSC & IA	EA
Selection & finalization of sites for projects	CPGCBL
Disclosure of proposed land acquisition and project details by issuing Public Notice	PMU
Meetings at community/household level with APs	PMU
Capacity Building training	PMU/PSC
B. LARAP Preparation and Updating Stage	
Census of APs and socioeconomic survey	PMU/PSC
Survey on unit prices for computing replacement costs	JVT/PAVT/IA
Screening of vulnerable APs	PMU/PSC/IA
Calculation of compensation and entitlements	PMU/PSC/IA
Prepare/update of project LARAPs	PMU/PSC/IA
Consultations on LARAPs and entitlements with APs	PMU/PSC/IA
Incorporate comments and suggestions to LARAPs	PMU/PSC/IA
Finalize LARAPs and submit to JICA. All draft LARAPs must be submitted to JICA for clearance prior to award of contracts.	PMU/PSC/IA
JICA website disclosure	JICA
C. LARAP Implementation Stage	
Issuance of ID Cards to APs	PMU/IA
Detailed Schedule for compensation action plan	PMU/IA
Distribution of Relocation Notices to APs	PMU/IA
Award of Checks for Land Compensation	PMU/IA
Award of Checks for other Compensation & Assistance/ Rehabilitation	PMU/IA
Confirm with JICA in writing when payment to APs has been completed.	PMU
Income Rehabilitation Assistance and Training	PMU/IA
Demolishing/ Relocation of Affected Structures/Assets	PMU/IA
Grievances redress	PMU/IA
Internal monitoring	PMU/PSC
Review of LARAP Implementation by external monitoring Agency and final outcome	External Monitoring Agency
If LARAP Implementation found satisfactory, Notice to proceed for Civil Works is issued	PMU

Upon approval of the project by JICA & Government and finalization of the detailed design and the LARAP, an experienced LARAP implementing NGO/Consultancy Firm shall be engaged as a consultant by the PMU.

6.2 Other Agencies Involved in the Process

6.2.1 Deputy Commissioner

The DC has the power to acquire land and to assess compensation of property thus acquired. The 1982 Ordinance provides the power to the DC, who conducts the acquisition through the Land Acquisition Officer (LAO) of concerned districts. The LAO (or his officers) along with PMU, CPGCBL and IA staff will conduct joint physical verification of property on the land in accordance with the Land Acquisition Proposal (LAP) to be submitted by PMU as soon as the detailed design and alignments for the project interventions will be available.

The DC office is responsible for the entire acquisition process from “notification to affected households” to “award of compensation to owners of property and payments of compensation”. Upon fulfillment of criteria of the LA office (i.e. necessary documents to make payment) the LA officials will prepare cheque and disburse to the EPs. PMU/IA shall liaise with concerned DC offices to complete the land acquisition process in a timely fashion. However, the LAO will prepare estimates of LA and request placement of fund from the PMU. Executive Engineer, PMU will be responsible to keep all kinds of liaison with DC office on behalf of PMU related to land acquisition procedures for implementation of LARAP. The LAO will also share the award and payment data with the Executive Engineer, PMU through IA to facilitate processing of resettlement data.

6.2.2 Project Supervision Consultant

EA will engage a Project Supervision Consultant (PSC) to assist PMU to carry out quite a good range of activities including monitoring the safeguard requirements of the project. PSC will be responsible for updating Land Acquisition and Resettlement Action Plan (LARAP) and Coordinate and monitor its subsequent implementation.

The project supervision consultant is required to:

Assist in reviewing/revising LARAP based on the information and data made available by the implementing agency.

The PSC will participate in the monthly co-ordination meeting and monitor the work of the IA
The PSC will submit monthly progress activities report on LARAP implementation to EA.

6.2.3 LARAP Implementing Agency

CPGCBL will engage an Implementing Agency (NGO/Social Consulting Firm) through the PMU for implementation of the LARAP at the field level. The CPGCBL through PMU will contract out clearly defined tasks of the LARAP Implementing Agency in detailed Terms of Reference such as consultation /public information campaign for rapport building, issuance of ID cards, payment of eligible benefits to affected households/ individuals, institutional development, skill training/management training, community awareness and empowerment, etc. The IA will initially create ID numbers for each entitled person (EP) as identified during the Joint Verification survey by the JVT and prepare an ID card for each EP with photograph. Photograph of the EPs will be attested by the concerned UP Chairman and pasted on the ID card. The ID card will comprise information on name, father's/husband's name, mother's name, age, education, identifiable marks, detailed address, details of quantity of losses etc. The ID card will be issued by CPGCBL with the joint signature of the representatives of CPGCBL and IA and distributed among the EPs by the IA.

The Implementing Agency will assist the EPs in preparing documents and opening bank accounts in their names to receive cheque from CPGCBL. They will form focus groups with the affected people based on homogeneity and/or nearness and hold meetings on a regular basis to let them know their rights and entitlements as prescribed in the LARAP. The Executing Agency will form a Ward/Union based Resettlement Advisory Committee (RAC) to involve the local communities and DPs in the implementation process.

The Implementing Agency will establish an MIS section in their central office for record keeping of the DPs, recording individual ID numbers of the entitled persons, preparing entitled person's (EP) files based on quantity of losses and entitlement cards (EC) based on loss type and entitlement. The IA will submit monthly progress reports to the PMU mentioning progress of activities to be carried out by them.

Upon fulfillment of criteria i.e. necessary documents to make payment/benefits to the EPs, the IA will prepare payment debit vouchers & other documents for payment and CPGCBL will disburse account payee cheques to the EPs in a public place or Union Parishad (UP) office in presence of the UP Chairman/member, issuing prior notice to the concerned EPs. The CPGCBL will prepare a detailed Terms of Reference for the LARAP Implementing Agency.

6.2.4 Ministry of Power, Energy and Mineral Resources (MOPEMR)

The MOPEMR will constitute three committees/teams i.e. Joint Verification Team (JVT), Property Valuation Advisory Team (PVAT) and Grievance Redress Committee (GRC). A sample gazette notification is placed at Annexure-2. Among these committees/teams, JVT and PVAT will be constituted with representatives from CPGCBL, LARAP implementing NGO and Deputy Commissioner (DC). The DC office will appoint representatives as member(s) of the teams for quantifying losses and determining valuation of the affected properties. CPGCBL and IA shall liaise with DC office to complete the tasks following the notification of the Ministry.

6.2.5 Joint Verification Team

The MOPEMR will form a Joint Verification Team (JVT), for the project through a gazette notification to compare and review the physical verification data collected by the Implementing Agency with the DCs' assessment of loss of physical assets and their owners. The scope and responsibility of the JVT will be clearly defined in the gazette. The Implementing Agency will process the entitlements of the project-affected persons using the JVT data as one of the determinants. The JVT will be a three-member body and be comprised as follows:

- Executive Engineer, PMU, CPGCBL - Convener
- Representative of Deputy Commissioner – Member
- Area Manager, LARAP Implementing Agency – Member Secretary.

Terms of Reference:

i) The Joint Verification Team (JVT) will compare and review the physical verification data conducted by the Implementing Agency (IA) with DC's assessment of loss of physical assets and quantify the lost assets corresponding to their owners and prepare the final list of affected owners and members of the team will put their signatures on the related document /records and submit to the Project Director.

ii) JVT will identify the occupants/squatters on the Government land or land khas land owned by any Government Agency on the Right of Way of the project and prepare their lists and submit to the Project Director.

iii) In pursuance of the Resettlement Implementation Schedule JVT will complete the above mentioned assignments and submit the necessary documents /reports authenticated by the members of the team to the Project Director.

6.2.6 Property Valuation Advisory Team

A Property Valuation Advisory Team (PVAT) will be formed by the MOPEMR through a gazette notification for the project. The PVAT will review the assessment of the Implementing Agency on the market price of the property affected by the project at their replacement cost. The scope and responsibility of the PVAT will clearly be defined in the gazette. The Implementing Agency will process the entitlements of the project-affected persons using the PVAT data as one of the determinants. The PVAT will be comprised as follows:

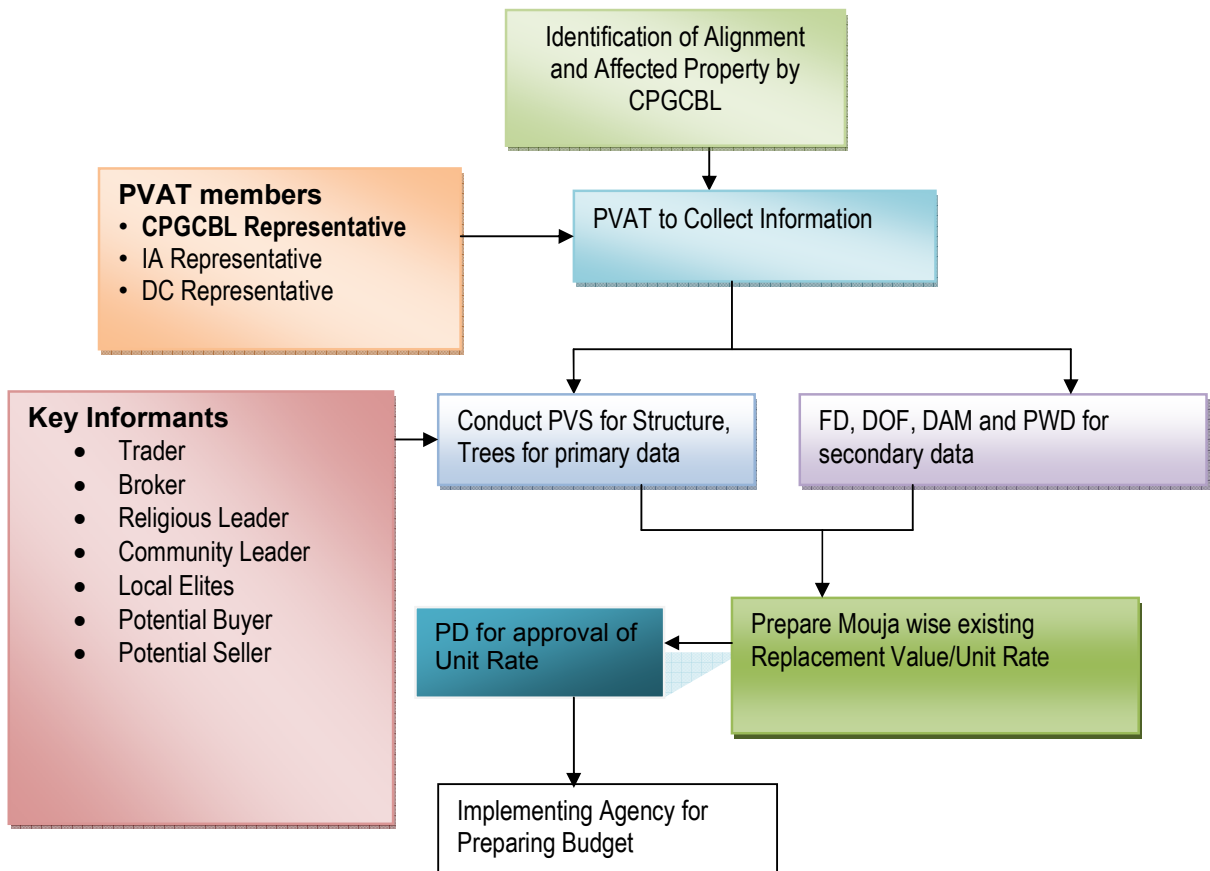
- Executive Engineer, PMU, CPGCBL – Convener
- Representative of Deputy Commissioner – Member
- Area Manager, LARAP Implementing Agency – Member Secretary.

Terms of Reference (TOR):

- i) The Property Valuation Advisory Team (PVAT) will review the assessment of the Implementing Agency on the market price of land and other properties affected by the project and determine their replacement cost.
- ii) PVAT will assess and determine the replacement cost of affected projects of the occupants /Squatters on the land owned by Government/ or any Government Agency
- iii) PVAT will assist the EA in determining the replacement cost of residential /commercial and other structures, trees, crops, fish stock etc.
- iv) PVAT will assist the EA in defining and determining socio-economic criteria of the Vulnerable Households affected by the project.
- v) In pursuance of the Resettlement Implementation Schedule PVAT will square up the above mentioned assignments and submit necessary document/records authenticated by its members to the Project Director.

The procedure for determining replacement value is described in Figure 3 below.

Figure 6-2 : Procedure for Determining Valuation of Property.



6.2.7 Resettlement Advisory Committees (RACs)

The Implementing Agency will assist the CPGCBL to form Union based RACs at project level to involve the local communities and DPs in the implementation process. The RACs will be comprised of a CPGCBL representative (Assistant Engineer or equivalent) as the chair, the representative of Implementing Agency as member secretary, two local key informants (Male-1 and Female-1 to be selected by CPGCBL) and representatives of various stakeholders and DPs including at least one female DP in the respective area as selected by PMU in consultation with the LGI representative. The committees will seek local inputs from the affected people and communities in the implementation process and assist the Executing

Agency in all matters related to resettlement. The RACs will ensure local participation in the implementation of the Land Acquisition and Resettlement Action Plan.

6.2.8 Women Groups in Resettlement Process

The LARAP implementation will ensure a gender sensitive approach in planning, management and operations of resettlement. Separate groups of affected women persons will be formed and operated by the Implementing Agency. Feedback from the female DPs and female headed AHs will be obtained through these female focused groups for planning relocation and resettlement. The female staff engaged by Implementing Agency will identify needs of female DPs for income restoration approaches and implementation of the income restoration component of the LARAP. Women will be consulted during social appraisal and will be further consulted during the process of LARAP implementation.

6.3 Institutional Capacity Building

There is no established resettlement unit within CPGCBL with appropriate staffing. The PMU of CPGCBL will, therefore, need technical support in preparing and implementing the LARAP. As part of the institutional development program, the CPGCBL as the Executing Agency (EA) for the project implementation will need to establish its own resettlement unit (RU) at the PMU to assist the PMU in assigning the existing staff with additional responsibility of managing resettlement. A Project Supervision Consultant (PSC) will be engaged by the EA to assist RU to carry out a range of activities including implementing and monitoring the safeguards aspects of the project. The National Resettlement Specialist (NRS) of the PSC will be responsible for arranging or carrying out the activities of updating/finalizing the LARAP for the project with IR impacts based on information from the detailed engineering design documentation prepared by the Design & Supervision Consultant (DSC). The NRS will also oversee and monitor LARAP Implementation in close liaison with the PMU and IA.

To strengthen the expertise of CPGCBL and ensuring effective execution of all resettlement related tasks, further capacity development at both the PMU and field level is needed. The training will specifically focus on the differences between the provisions of the JICA policy and the relevant country laws. The designated Training Specialist and Resettlement Specialist within the PSC will arrange such training to PMU & field officers for capacity enhancement related to the resettlement planning and implementation. Training will cover major issues such as (i) Principles and procedures of land acquisition; (ii) Public consultation and participation; (iii) Entitlements and compensation & assistance disbursement mechanisms (iv) Planning and implementing income generating schemes for livelihood restoration (v) Management of relocation of displaced persons (iv) Grievance redress; (v) Implementation of Land Acquisition and Resettlement Action Plan and (vi) Monitoring of resettlement operations and its reporting etc.

Section-7

Grievance Redress Mechanisms

Grievance Redress Mechanisms

Other than the grievance redress mechanism stipulated by the Ordinance 1982, CPGCBL will make efforts at project level to resolve grievances through negotiations involving representatives of PAPs, village heads and Union Parishad Chairmen. The Project Director will allocate a resettlement officer at the project office, who deals with such negotiations up front. The resettlement officer will be the entry point and receive all the inquiries, concerns and complaints directly from PAPs. A notebook will also be installed at the project office entrance for anybody to write suggestions anonymously.

A grievance redress committee at project site will convene meetings monthly. Non-regular meetings will also be held ad-hoc basis as necessary at such places as it is considered appropriate (such as village, union, etc.) for dealing with urgent matters. The proceedings (or minutes of meetings) will be made with the object to promptly address the concerns and complaints using an accessible and transparent process to the PAPs, and to bring an amicable settlement between the parties. All reports will be recorded in Bengali language and provided to all parties concerned.

The committee at project level will include the following people:

- Resettlement Officer
- Representative from local NGO/CBOs
- Representatives of Displaced Persons
- Representative from local government
- Local intellectuals or religious figures, who would represent the residents of the project area and be publicly known to be persons of integrity, good judgment and commands respect.

7.1 Entitlement for Different Types of Losses

In case dispute is not resolved at local level, the matter will be placed before a grievance resolution committee at the Upazila level. The Upazila Nirbahi Officer will chair the committee comprised of the project level GRC members, Project Engineers and legal advisors.

In case dispute still continues, the UNO will make a decision regarding entitlement and compensation, and the decision taken during negotiations and the meetings will be formally recorded for future reference and presentation in the court, if necessary.

If the matter cannot be resolved at the Upazila level, complaints will be referred to the Project Director, who will head a committee jointly with the Deputy Commissioner. Members of GRC at the Upazila level (including those at the project level) are summoned at any time for inquiry from PD and DC.

Steps for grievance are shown in the diagram below for easy reference. There will be no cost required when residents appeal to the authorities at each level. Each committee is responsible to solve the issues raised by the residents within 45 days.

Matarbari 2x600 MW Coal Fired Power Plant Project Matarbari, Cox's Bazar

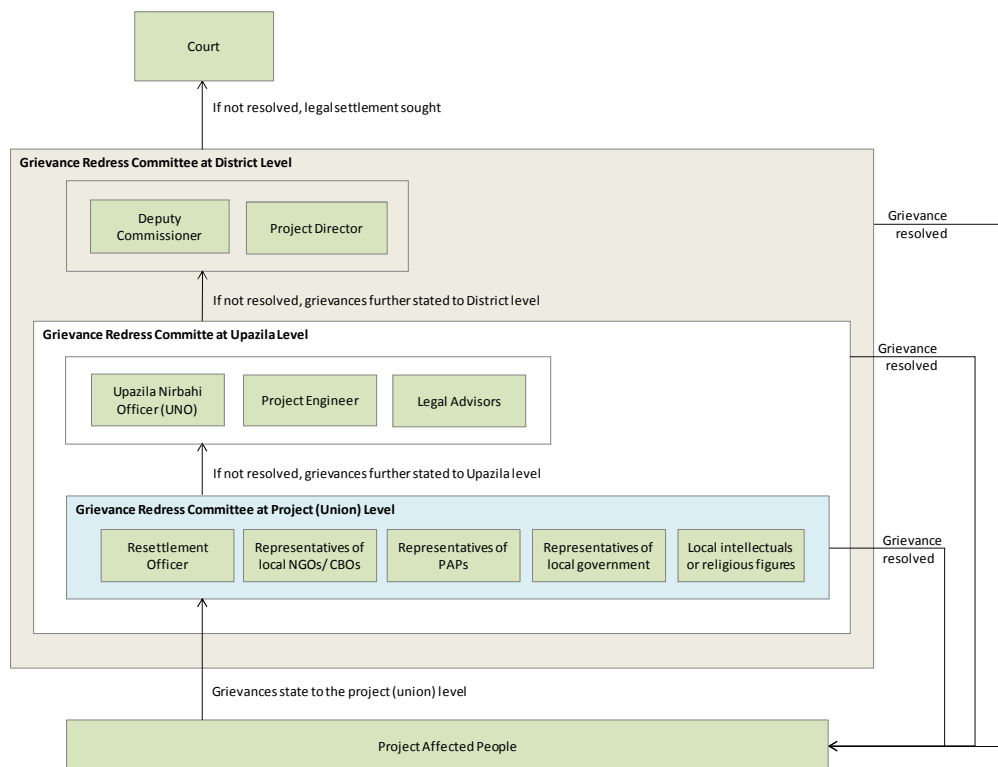


Figure7-1 Flow of Grievance Redress

Section-8

**Specific Measures provided to Vulnerable Groups and
Income Rehabilitation Assistance**

There are socially vulnerable people among those to be resettled and/or lose their livelihood means: poor households, women, children, elders.

Their living conditions however will not deteriorate compared to their current ones, and poor people who currently have deteriorated living standards without proper facilities will have better access to social services throughout the year if roads are improved along with the construction of the power plant, especially access during the rainy season. Deterioration of household economies and livelihood losses may occur, on the other hand, to the resettled people due to the relocation or losses of their livelihood means. Not all adult populations at the project site are literate, which often makes them stay unskilled. Wives of those men who lose their land or jobs and their children may suffer from adverse effects on their household economy. Number of male children who drop out of school may increase because of a huge demand of unskilled workers at the construction site if there is no age restriction of unskilled workers at the power plant site. Specific measures to the vulnerable groups taken in LARAP are as follows:

(1) Employment

When employing local residents at the construction site as well as power plant and associated facilities when the power plant operates,

- local residents will be more prioritized according to their skills
- no child will be allowed to work in order to prevent their drop-out from schooling and child labor. Periodic and regular patrol will be made to make sure there is no child.
- local women will be more prioritized if they require skilled meet local women's.
- Enrollment in vocational training courses based on assessment of skills

(2) Education

School facilities at power plant will be shared with the local residents.

(3) Health

Health facilities at power plant will be shared with the local residents.

(4) Water and sanitation

Water quality of tube wells and others will be checked periodically for the safety of local residents.

(5) Electrification

Electrification of surrounding area will be examined.

Section-9

Estimated Land Acquisition and Resettlement Cost

9.1 Power plant and port facility site

Budget allocation will be fully committed by CPGCBL and made available to cover the costs of land acquisition (including compensation and income restoration measures) within the agreed implementation period. CPGCBL will finance the resettlement compensation as they will be impacting on the local people's livelihoods.

In addition to the compensation stipulated by the Ordinance 1982, CPGCBL will be required to finance those non-titleholders. All the compensation will be done according to the principle of the replacement cost, which will require CPGCBL to pay the gap between CUL and the replacement value (top up).

Based on the entitlement matrix for the PAPs shown in Table-4.4, the compensation package for the PAPs at the construction site of power plant has been drafted as in the tables below. Values appearing in the tables, such as land, income, standing crops etc., were the figures collected from the local residents through socioeconomic survey.

(1) Loss of private land

Table 9-1: Acquisition of private land from legal owners

Entitled Persons	No of HHs	Area (ha)	Land value (taka)	(a) cash compensation under law (taka)	(b) Replacement value of land except VAT and contingency (taka)	(c) One time assistance for lost income	(d) Total (a+b+c)
Legal owners of land	237	455.00	1,124,329,603	1,686,494,405	252,974,160.68	259,147,152	2,198,615,717

Note: Unit price (decimal) 10,000 taka (identified in land price survey)

Unit price (m2) 247 taka

Unit price (ha) 2,471,054 taka

Remarks: (a) CUL adds 50% premium to the current market price, not the average of last 12 months' sales values of same kind of land.

(b) Replacement value covers stamp duty and land registration fees incurred for replacement of land @0.15

VAT and contingency will be added for the total project cost.

(c) Lost income includes monthly household income for 3 years.

(d) Although 237 households identified in the household survey had 106.78 ha in total as of Dec 2012, land acquisition costs is estimated here assuming all 455 ha is privately owned.

(Source: JICA Study Team)

Table 9-2: Acquisition of private land from tenants and lessee

Entitled Persons	No of HHs	Area (ha)	Land value (taka)	Compensation package (taka)		
				(a) Amount for provision of another land	(b) One time assistance for lost income	(c) Total (a+b)
Tenants and lessee (private land)	77	155.86	385,150,000	664,383,750.00	83,300,400	747,684,150

Note:

Unit price (decimal) 10,000 taka (identified in land price survey)

Unit price (m2) 247 taka

Unit price (ha) 2,471,054 taka

Remarks: (a) Amount for provision of another land includes 50% premium, stamp duty and land registration fees @0.15

(b) Lost income includes monthly household income for 3 years.

(Source: JICA Study Team)

(2) Loss of government land

Table 9-3: Acquisition of government land from legal tenants and lessee

Entitled Persons	No of HHs	Area (ha)	Land value (taka)	Compensation package (taka)		
				(a) Amount for provision of another land	(b) One time assistance for lost income	(c) Total (a+b)
Tenants and lessee (gov land)	10	1.15	2,840,000	4,899,000.00	12,155,976	17,054,976

Note: Unit price (decimal) 10,000 taka (identified in land price survey)

Unit price (m2) 247 taka

Unit price (ha) 2,471,054 taka

Remarks: (a) Amount for provision of another land includes 50% premium, stamp duty and land registration fees @0.15

(b) Lost income includes monthly household income for 3 years.

It is assumed that tenants and lessee will seek private land.

(Source: JICA Study Team)

Table 9-4: Acquisition of government land from occupants without legal tenure

Entitled Persons	No of HHs	Area (ha)	Land value (taka)	Compensation package (taka)		
				(a) Amount for provision of another land	(b) One time assistance for lost income	(c) Total (a+b)
Occupants without legal tenure	156.00	19.41	47,973,161	82,753,703.00	129,902,400	212,656,103

Note1: Compensation amount is based on the land value stated by the interviewees for the sake of estimation.

Note2: Unit price (decimal) 10,000 taka (identified in land price survey)

Unit price (m2) 247 taka

Unit price (ha) 2,471,054 taka

Remarks: (a) Amount for provision of another land includes 50% premium, stamp duty and land registration fees @0.15

(b) Lost income includes monthly household income for 3 years.

Number of households include both occupants for cultivation (140 HHs) and occupants for domicile (16 HHs).

(Source: JICA Study Team)

(3) Permanent loss of means of livelihood / sources of income

Table 9-5: Assistance for transition in recovering loss of income source of land owners

Entitled Persons	Type of loss	Area (ha)	Annual value (taka)	Rate for opportunity loss	Compensation package (taka)
lessor (land owners who rent their land)	Income from land lease contract	155.86	8,748,665	10	87,486,650.00

Note: Compensation amount is based on the land value stated by the interviewees for the sake of estimation.

Remarks: It was not possible to identify the number of lessor who lends land to the tenants and lessee identified in the household survey.

(Source: JICA Study Team)

Table 9-6: Assistance for transition in recovering loss of income from livelihood activities

Entitled Persons	Type of Loss	Type of labor	No of employed persons	Total annual wage (taka)	Compensation package		
					(a) One time assistance for lost income	(b) Enrollment in vocational training courses	(c) Total (a+b)
Laborers	income from shrimp cultivation	Permanent	44	5,211,000	15,633,000	36,000	15,669,000
		Temporary	597	1,428,800	4,286,400	36,000	4,322,400
	income from salt farming	Permanent	117	6,943,000	20,829,000	36,000	20,865,000
		Temporary	256	2,844,550	8,533,650	36,000	8,569,650
	income from fishing activities	Permanent	4	0	0	36,000	36,000
		Temporary	22	2,400,000	7,200,000	36,000	7,236,000
Sharecroppers	income from other activities	Permanent	0	0	0	36,000	36,000
		Temporary	17	30,800	92,400	36,000	128,400
Sharecroppers	income from crop	Sharecroppers	12	2,478,961	7,436,884	36,000	7,472,884

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Note: Compensation amount is based on the actual wages stated by the interviewees for the sake of estimation.

Remarks: (a) Lost income includes monthly household income for 3 years.

(b) Vocational training is estimated @Tk.300/day for 120 days (6 months).

(Source: JICA Study Team)

Table 9-7: Assistance for transition in recovering loss of income from own business or self-employment

Entitled Persons	Type of Loss	No of people involved	Amount of capital (taka)	Rate for opportunity loss	Compensation for opportunity loss
Businessmen	Income from salt business	22	1,455,000	10	14,550,000
	Agriculture	3	0	10	-
Boat men	Boat	1	200,000	10	2,000,000
Teacher	Teaching	1	30,000	10	300,000
Carpenter	Construction	6	105,000	10	1,050,000
Tea staller	Shop	1	250,000	10	2,500,000
Others (unknown)	Unknown	Unknown	2,240,000	10	22,400,000

Note: Compensation amount is based on the actual wages stated by the interviewees for the sake of estimation.

Remarks: (a) Opportunity loss is fixed based on recent annual inflation rates in Bangladesh. It is assumed as 10% here.

(b) Lost income includes monthly household income for 3 years.

(Source: JICA Study Team)

(4) Loss of residential / commercial structure

Table 9-8: Assistance for transition in recovering loss of income from residential / commercial structure

Entitled Persons	No of HHs	House size	Compensation package (taka)				(c) Total (a+b)
			Replacement of structure value with 50 % premium (taka)	Stamp duty and registration fees (taka)	Reconstruction grant (taka)	shifting allowance (taka)	
Legal title holders / owners of structure	4	1,130 sft	420,000	42,000	16,950	11,300	490,250
		105 m ²					
Legal tenants / lease holders of the structure	-	-	-	-	-	-	-
		-					
Socially recognized owners / unauthorized occupants	16	4,712 sft	855,000	85,500	70,673	47,115	1,058,288
		438 m ²					

Note1: Compensation amount is based on the house size stated by the interviewees for the sake of estimation.

Note2: 1m² is approximately equivalent to 10.7639 sft.

Remarks: (a) Amount for provision of another land includes 50% premium, stamp duty and land registration fees @0.15

(b) Reconstruction grant will be provided to the affected households at the rate of 15 taka per square feet.

(c') Shifting allowance will be provided at the rate of 10 taka per square feet.

(Source: JICA Study Team)

(5) Loss of standing crops at home gardens, shrimp and fish

Table 9-9: Assistance for transition in recovering loss of income from livelihood means

Entitled Persons	Source of income from activities	No of HHs	Production amount	Annual income from productive activities (taka)	Rate for opportunity loss	Compensation package (taka)
Land owners, bargadar, lesse and unauthorized occupants	income from shrimp cultivation	65	-	4,553,831	10	45,538,310
	income from salt bed	139	-	4,907,881	10	49,078,810
	income from fishing	23	-	50,010	10	500,100
	income from other activities	8	-	52,000	10	520,000
	income from pisciculture	109	-	3,398,303	10	33,983,030
	income from crop	155	6,669,715 kg	30,506,536	10	305,065,364

Note: Compensation amount is based on the actual wages stated by the interviewees for the sake of estimation.

Remarks: Opportunity loss is fixed based on recent annual inflation rates in Bangladesh. It is assumed as 10% here.

(Source: JICA Study Team)

(6) Loss of timber and fruit bearing trees

Table 9-10: Assistance for transition in recovering loss of trees

Entitled Persons	No of HHs	No of trees in total	Market value of tree (taka)	Compensation package (taka)
Owner of trees	274	28,589	2,000	57,178,000

Remarks: to be recalculated.

(Source: JICA Study Team)

(7) Temporary loss of land during construction

Not applicable.

(8) Temporary loss of access to land, structure, utilities, common property resource during construction

Not applicable.

(9) Temporary loss of livelihood/source of income during construction

Not applicable.

Total amount required for land acquisition, resettlement, and assistance for transition in restoring livelihood means and income sources are 3.86 billion taka.

Table 9-11: Compensation for PAPs at power plant site

	Compensation Item	Amount (taka)	Remarks
1	Permanent loss of private land caused by land acquisition	2,946,299,867	Table 9-1, Table 9-2
2	Permanent loss of government land caused by land acquisition	229,711,079	Table 9-3, Table 9-4
3	Permanent loss of means of livelihood	194,621,984	Table 9-5, Table 9-6, Table 9-7
4	Permanent loss of residential / commercial structure caused by resettlement	1,548,538	Table 9-8
5	Loss of standing crops at home gardens, shrimp and fish	434,685,614	Table 9-9
6	Loss of timber and fruit bearing trees	57,178,000	Table 9-10
7	Temporary loss of land during construction	0	-
8	Temporary loss of access to land, structure, utilities, common property resource during construction	0	-
9	Temporary loss of livelihood/source of income during construction	0	-
	Total	3,864,045,082	

(Source: JICA Study Team)

9.2 Transmission line route

It is PGCB who will allocate budget to cover the costs of temporary land acquisition and compensation for standing crops within the agreed implementation period. All the compensation will be done according to the principle of the replacement cost, and PGCB will pay the gap between CUL and the replacement value (top up).

Based on the entitlement matrix for the PAPs shown in Table 4.4, the compensation package for the PAPs has been drafted as in the tables below. Values appearing in the tables, such as land, income, standing crops etc., were the figures collected from the local residents through socioeconomic survey.

(1) Permanent loss of private land

There will be 157 towers for both angle towers and suspension towers from Anowara Upazila to Maheshkhali Upazila, which will require 1,256 m² of land for the installation of tower bases. When PGCB acquire land involuntarily from the land owners at the tower locations, PGCB will pay for the land. It is estimated as shown in the following table:

Table 9-12: Anticipated Land Acquisition and Assistance

Entitled Persons	No of HHs	Total area for towers (m ²)	Land value* (taka)	Cash compensation under law (taka)	Replacement value of land except VAT and contingency**	Total
land owners	157	1,256 (8 m ² X 157)	932,279	1,398,419	0	1,398,419

Remarks: (a) Land value was estimated based on the current market prices of land varied from 247 m² to 1,236 m² from Maheshkhali Upazila to Anowara Upazila.

(b) Replacement value is estimated as zero as the landowners will not have to be shifted.

(Source: JICA Study Team)

(2) Permanent loss of government land

Not applicable.

(3) Permanent loss of means of livelihood / sources of income

Not applicable.

(4) Permanent loss of residential / commercial structure

(5) Permanent loss of standing crops at home gardens, shrimp and fish

Not applicable.

(6) Permanent loss of timber and fruit bearing trees

Not applicable.

(7) Temporary loss of land during construction

The anticipated impact on the land owners will not last permanently or be critical, as the land area for tower bases are relatively small, and land owners' livelihood activities will be hindered only during the construction period. Landowners with legal title, tenants and lease holders will receive rental assistance for the construction period for which the land is temporarily requisitioned. Temporarily requisitioned land will be returned to owners rehabilitated to original or preferably better condition.

(8) Temporary loss of access to land, structure, utilities, common property resource during construction

Landowners with legal title, tenants and leaseholders will be provided temporary access and relocation where possible. Restoration of access to the land, structure and utilities will be confirmed.

(9) Temporary loss of livelihood/source of income during construction

One-time assistance for lost income based on monthly income for three years from products, minimum wage rates or based on actual income, verified through incomes of comparable businesses in the area.

Table 9-13: Compensation for PAPs at power plant site

Entitled Persons	No of HHs	One-time assistance for lost income*	Total
land owners	157	1,720,800	1,720,800

Remarks: Lost income includes monthly household income for 3 years. It was based on the annual crop price as of Dec 2012 (30 taka / m²).

(Source: JICA Study Team)

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Total amount required for land acquisition, resettlement, and assistance for transition in restoring livelihood means and income sources are 3.86 billion taka.

Table 9-14: Compensation for PAPs at power plant site

	Compensation Item	Amount (taka)	Remarks
1	Permanent loss of private land caused by land acquisition	1,398,419	Table
2	Permanent loss of government land caused by land acquisition	0	
3	Permanent loss of means of livelihood	0	
4	Permanent loss of residential / commercial structure caused by resettlement	0	
5	Loss of standing crops at home gardens, shrimp and fish	0	
6	Loss of timber and fruit bearing trees	0	
7	Temporary loss of land during construction	0	-
8	Temporary loss of access to land, structure, utilities, common property resource during construction	0	-
9	Temporary loss of livelihood/source of income during construction	1,720,800	Table 9-13
	Total	3,119,219	

(Source: JICA Study Team)

9.3 Township Area

Compensation Cost and budget for affected privately owned land (total 20 hector) has been estimated basing on unit price(ha) (Tk. 2,471,054 determined by JICA Study Team. In conformity with entitlement matrix cost of compensation and resettlement benefits for the following types of losses and resettlement benefits have been estimated i) Loss of land by legal owners ii) Income from shrimp cultivation iii) Income for salt farming iv) Loss of wages v) Loss of crop vi) Permanent loss of means of livelihood and vii) Vocational Training Cost

Table 9-15 Acquisition of private land from legal owners

Entitled Person	No of HHs	Area (ha)	Land Value (Taka)	(a) Cash Compensation Under Law (Taka)	(b) Replacement Value of Land except VAT and Contingency (Taka)	© One time assistance for lost income	(d) Total (a+b+c)
Legal Owners of land	41	20	9,421,080	74,131,620	7,413,162	36,360,000	117,904,782

Note: Unit price (decimal) 10,000 taka (identified in land price survey)

Unit price (m2) 247 taka

Unit price (ha) 2,471,054 taka

Remarks: (a) CUL adds 50% premium to the current market price, not the average of last 12 months' sales values of same kind of land.

(b) Replacement value covers stamp duty and land registration fees incurred for replacement of land @15%

VAT and contingency will be added for the total project cost.

(c) Lost income includes monthly household income for 3 years.

9-16 Assistance for restoration in recovering loss of income from livelihood activities

Entitled Person	Type of loss	Type of Labour	(a)No of Employed Persons	Total Annual Wage (Taka)	Compensation Package		
					(b) One time assistance for lost income	(c) Enrollment in Vocational Training Courses	(d) Total (aXc+b)
Labours	Income from shrimp cultivation	Permanent	5	360000	1,080,000	36000	1,260,000
		Temporary	31	1116000	3,348,000	36000	4,464,000
	Income from salt farming	Permanent	7	504000	1,512,000	36000	1,764,000
		Temporary	21	756000	2,268,000	36000	3,024,000
Total							10,512,000

Note: Compensation amount is based on the actual wages stated by the interviewees for estimation.

Remarks: (a) Lost income includes monthly household income for 3 years. For permanent labour full 3 years @ monthly household income Tk.6000. For temporary labour six months per year is calculated, for 3 years it comes to 18 months.

(b) Vocational training is estimated @Tk.300/day for 120 days (4 months).

(Source: JICA Study Team)

(10) Loss of standing crops at home gardens, shrimp and fish

Table 9-17: Assistance for transition in recovering loss of income from livelihood means

Entitled Persons	Sources of Income from activities	No of HHs	Production Amount	Annual Income From Productive activities (Taka)	10% inflation (Taka)	Compensation Package (Taka)
Land owners	Income from shrimp cultivation	8		200,168	20,017	220,185
	Income from salt cultivation	6		215,713	21,571	237,284
	Income from crop	5	293174 Kg	1,340,945	134,095	1,475,040
Total						1,932,509

Note: Compensation amount is based on the actual wages stated by the interviewees for the sake of estimation.

Remarks: Opportunity loss is fixed based on recent annual inflation rates in Bangladesh. It is assumed as 10% here.

(Source: JICA Study Team)

(10) Permanent loss of government land

Not applicable.

(11) Permanent loss of residential / commercial structure

(12) Not applicable.

(13) Permanent loss of timber and fruit bearing trees

Not applicable.

(14) Temporary loss of land during construction

Not applicable.

(15) Temporary loss of access to land, structure, utilities, common property resource during construction

Not applicable

(16) Temporary loss of livelihood/source of income during construction

Not applicable

Table 9-18: Compensation for PAPs at Township Site

	Compensation Item	Amount (taka)	Remarks
1	Permanent loss of private land caused by land acquisition	117,904,782	Table 9-15
2	Permanent loss of government land caused by land acquisition		
3	Permanent loss of means of livelihood	10,512,000	Table 9-16
4	Permanent loss of residential / commercial structure caused by resettlement		
5	Loss of standing crops at home gardens, shrimp and fish	1,932,509	Table 9-17
6	Loss of timber and fruit bearing trees		-
7	Temporary loss of land during construction	0	-
8	Temporary loss of access to land, structure, utilities, common property resource during construction	0	-
9	Temporary loss of livelihood/source of income during construction	0	-
	Total	130,349,291	

(Source: JICA Study Team)

9.4 Compensation and Resettlement Budget

9.4.1 Finalization and Approval of the Compensation and Resettlement Budget

Land acquisition and resettlement budget contained in the LARAP will be revised as per findings Census for inventory and assessment of losses and market survey for replacement price of land and property conducted by the Implementing Agency. The revised budget will need to be approved by the Ministry of Power, Energy and Mineral Resources along with revised LARAP. Upon approval of land acquisition by Ministry of Land, the DC will prepare estimates for compensation including service charge and produce that to CPGCBL for placement of fund within 60 days.

The LARAP implementing agency will assist PMU, CPGCBL to prepare resettlement budget. Covering all eligible loss and entitlements confirmed through joint verification and determination of replacement price of land and property by PVAT. PMU will get this budget approved by the Ministry of Power, Energy and Mineral Resources through CPGCBL will make placement of fund with resettlement account of the PMU for disbursement.

9.4.2 Management of Budget

The CPGCBL does not have any set codified rules for payment of compensation to APs for resettlement of affected persons. Under the circumstances, a detailed administrative guideline (payment modality) will be required to implement the LARAP at the field level as well as for PMU and EA. Administrative guideline (payment modality) for payment of

compensation and resettlement benefits. PMU, CPGCBL and Implementing Agency and other stakeholders will follow administrative guideline after its approval from the appropriate authority. A draft Administrative guideline (payment modality) is placed at Annexure-3.

The PMU, with requisition from IA for payments of compensation and resettlement assistance in all other forms will authorize Executive Engineer concerned to prepare cheques for disbursement of individual APs based on approved indent. The IA will assist the PMU for disbursement of cheques to EP following the administrative guideline (payment modality).

Section-10

Local Consultation, Participation and Disclosure

10.1 Project Stakeholders

The primary stakeholders of the project include the agriculture farmers, salt cultivators, shrimp cultivators, fisher man, and service holder, laboures, mazi, boat businessman, share croppers, carpenters local business community , squatters the AHs as well as beneficiaries of the project and host population. Other stakeholders include CPGCBL, Ministry of Power, Energy and Mineral Resources JICA as donor, policy makers, elected officials and other government agencies.

10.2 Disclosure and Public Consultation

Goals and objectives of the project is being disclosed with the affected people and other stakeholders through focus group discussion and public consultation meetings.

1. Information gathering:

- a. Review of JICA guidelines on disclosure and public consultations
- b. Review of other Donors' guidelines on disclosure and public consultations
- c. Review of available literature on disclosure and consultation method followed in other donor funded infrastructure projects and good practice

2. Information Disclosure:

- a. Dialogue with local people through public meetings
- b. Information and consultation meetings (ICM) in the locality
- c. Disclosure of the project components and other related issues among stakeholders of all levels through conducting public meeting organized by prior notice
- d. Focus group discussion with local stakeholders with primary focus with the project affected people (directly or indirectly affected people irrespective of gender and social status)
- e. Disclosure of the Land Acquisition and Resettlement Issues among the potential affected persons

3. Consultation:

- a. Consultation of resettlement and rehabilitation issues with all level stakeholders and gather feedback on potential risks and probable mitigation measures
- b. Encourage all level stakeholders to participate in the consultation by receiving views from representatives from different groups including directly and indirectly affected households, structure owners, agriculture land losers, owners and employees of CBEs, salt cultivators, farmers, fishermen, local traders, women and vulnerable groups etc.

10.3 Stakeholder's Participation Process

53. Consultation and communication with APs and other stakeholders during design stage of the project is considered an integral part of the process of gathering additional data. During the preparation of LARAP, PAPs and their communities have been informed, consulted and three stakeholders meetings were held and views of primary and secondary stakeholders were documented.

At time of the implementation of LARAP the PAPs and their communities will also be consulted about the project, the rights and options available to them, and the proposed mitigation measures for adverse effects, and to all extents possible they will be involved in the decision-making process concerning their resettlement. The PAPs will receive prior notification of the compensation, relocation and other assistance available to them.

CPGCBL will be responsible to hold and conduct a number of consultations with primary and secondary stakeholders and information dissemination on the following issues:

- The relevant details of the project
- The RP and various degrees of project impact
- Details of entitlements under the RP and what is required of PAPs in order to claim their entitlements
- Compensation process and compensation rates
- Relocation and resettlement site development operation in order to obtain agreement and support of affected people in participating in these operations
- Implementation schedule and timetable for the delivery of entitlements

Local participation should be spontaneously encouraged and information be made available during the preparation and implementations of the LARAP and at the minimum include community meetings and focus groups discussions. Information dissemination can be done not only for the project affected people but non-affected people out of the project site for sharing proper knowledge on the project with broader channels.

Where a host community is affected by the development of resettlement sites in that community, the host community shall be involved in any resettlement planning and decision-making. All attempts shall be made to minimize adverse impacts of resettlement upon host communities.

As planned 3rd public Consultation meeting was held on 1st October, 2013 in Matarbari, Union Parishad Hall Room. Details are described in Section 3.

Section-11

Implementation Schedule

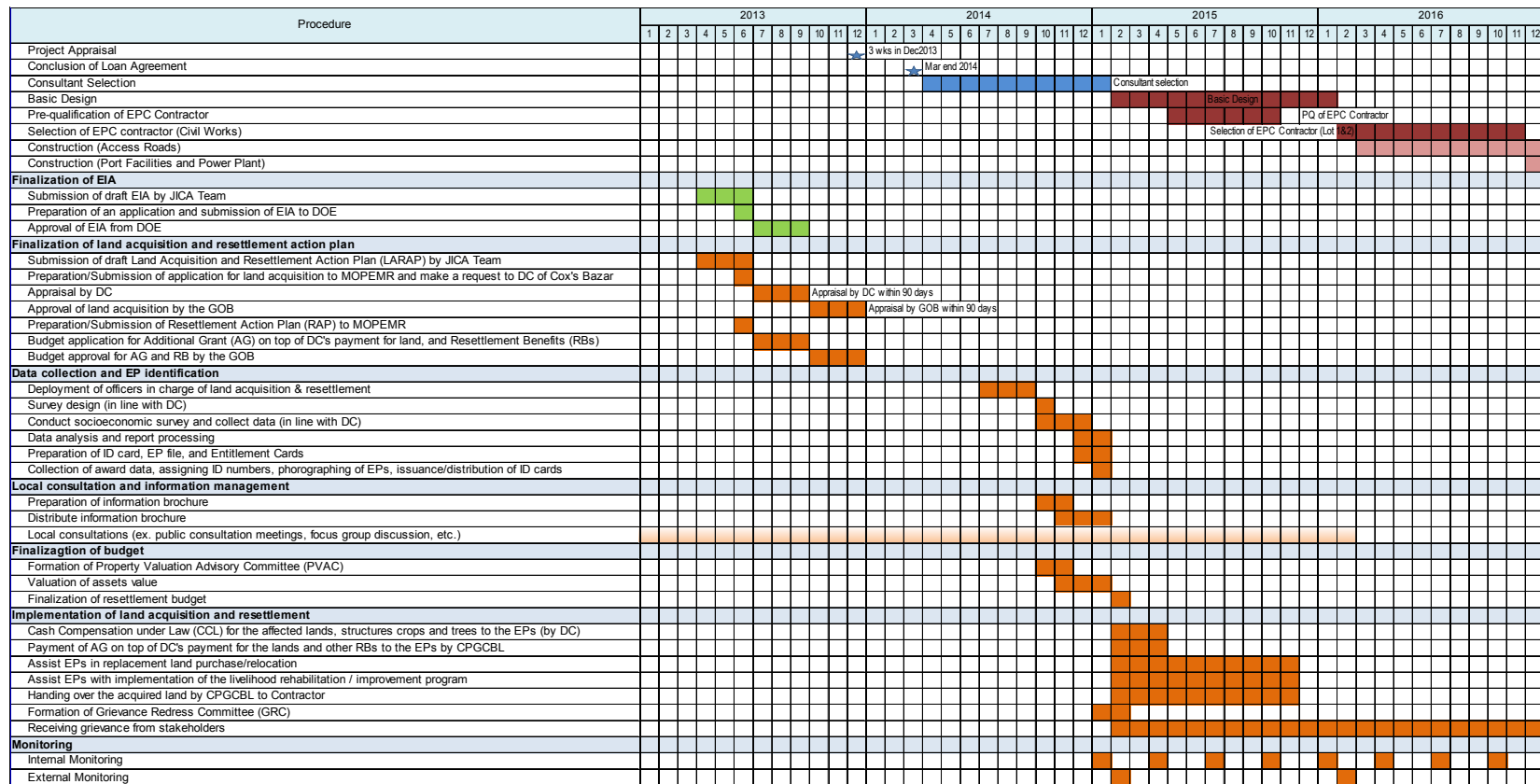
LARAP Implementation Schedule

A time bound implementation schedule for the LARAP is prepared synchronized with project construction schedule. The overall schedule of implementation is based on the principle that resettlement benefits are paid to AHs before they are displaced. The implementation of each LARAP will include –

- I. Identification of cut -off date and notification,
- II. Verification of losses and extent of impacts,
- III. Finalization of entitlements and distribution of ID cards,
- IV. Consultations with PAPs on their needs and priorities and,
- V. Resettlement, provision of compensation and assistance and income restoration of PAPs.

The LARAP will be finalized after submission of land acquisition plan and approval of budgets by EA. The IA will be appointed during detailed design phase for updating and implementation of LARAP. This will shorten time for tendering and other processing of award of IA. Implementation of LARAP will commence before starting of the construction works and will continue up to four years time. A tentative RP implementation schedule is placed below:

**Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar**



Note: EP implies eligible person.

(Source: JICA Study Team)

Figure 11-1 Tentative Schedule for Land Acquisition and Resettlement

Section-12

Monitoring and Evaluation

12.1 Monitoring and Evaluation

Monitoring and follow up provides periodic checks to ascertain whether resettlement activities are working as planned. The project management will need this feedback to be able to ensure the planned activities to be on the right track. Monitoring provides both working system for the project management and channel for the resettlers to make aware of their needs and reaction to the way the resettlement being carried out. Evaluation on the other hand, is an exercise usually undertaken towards the end of the projects to assess whether the plan achieved its goals and objectives.

The EA, through the PMU, will establish a monitoring system involving the Project Supervision Consultant (PSC) and the LARAP Implementing Agency for collection, analysis, reporting and use of information about the progress of resettlement, based on the LARAP. These stakeholders will be made responsible to monitor the progress of all aspects of land acquisition/ resettlement and income generation. The EA will report to the JICA on land acquisition, resettlement and income generation by APs in the quarterly reports, including identification of significant issues. Besides, an annual report stipulating all efforts and outcome will be sought by the JICA from the CPGCBL.

12.2 Internal Monitoring

Internal monitoring will be undertaken by the PMU through Executive Engineer concerned with assistance from the IA. The IA will gather information on LARAP implementation covering relevant activities as per schedule. All activities listed will be illustrated in Gantt Charts showing the target dates for completing resettlement activities. Internal monitoring reports on LARAP implementation will be included in the quarterly Project Progress Report (PPR). It will be then submitted to JICA. The report of PMU will contain: (i) accomplishment to-date, (ii) objectives attained and not attained during the period, (iii) challenges encountered, and (iv) targets for the next quarter. The EA will make bi-annual reporting to JICA on monitoring. However, the NRS will monitor the activities of IA and report to PD on a monthly basis. Table11-1 below shows the potential monitoring indicators that will be followed for reporting.

Table 12-1: Potential Monitoring Indicators

Monitoring Issues	Monitoring Indicators
1. Budget and Timeframe	<ul style="list-style-type: none"> • Have all resettlement staff been appointed and mobilized for field and office work on schedule? • Have capacity building and training activities been completed on schedule? • Are resettlement implementation activities being done as per agreed implementation plan? • Are funds for resettlement being allocated to resettlement agencies on time? • Have resettlement offices received the allocated funds? • Have funds been disbursed according to Entitlement Matrix of LARAP. • Has all the land made encumbrance free and handed over to the contractor in time for project implementation?
2. Delivery of DP Entitlements	<ul style="list-style-type: none"> • Have all DPs received entitlements according to quantity and categories of loss set out in the entitlement matrix? • How many affected households have land titles? • How many affected households are relocated and built their new structures at new location? • Are income and livelihood restoration program activities being implemented as planned? • Have affected businesses received entitled benefits? • Have the APs losing their eroded land received proper compensation? • Have the squatters, encroachers been displaced due to the project, been compensated? • Have the community structures been compensated and rebuilt at new site?
3. Consultation, Grievances and Special Issues	<ul style="list-style-type: none"> • Have resettlement information brochures/leaflets been prepared and distributed? • Have consultations taken place as scheduled including meetings, groups, community activities? • Have any DP used the grievance redress procedures? • What grievances were raised • What were the outcomes? • Have grievances and resolutions been documented? • Have any cases been taken to court? • Have conflicts been resolved?
4. Benefit Monitoring	<ul style="list-style-type: none"> • What changes have occurred in patterns of occupation compared to the pre-project situation? • What changes have occurred in income and expenditure patterns compared to pre-project situation? • Have APs income kept pace with these changes? • What changes have occurred for vulnerable groups?

12.3 Implementation Mechanism of Land Acquisition and Resettlement

For overall Implementation Management and Monitoring of land acquisition and resettlement and civil work etc. the diagram is appended below: (figure)

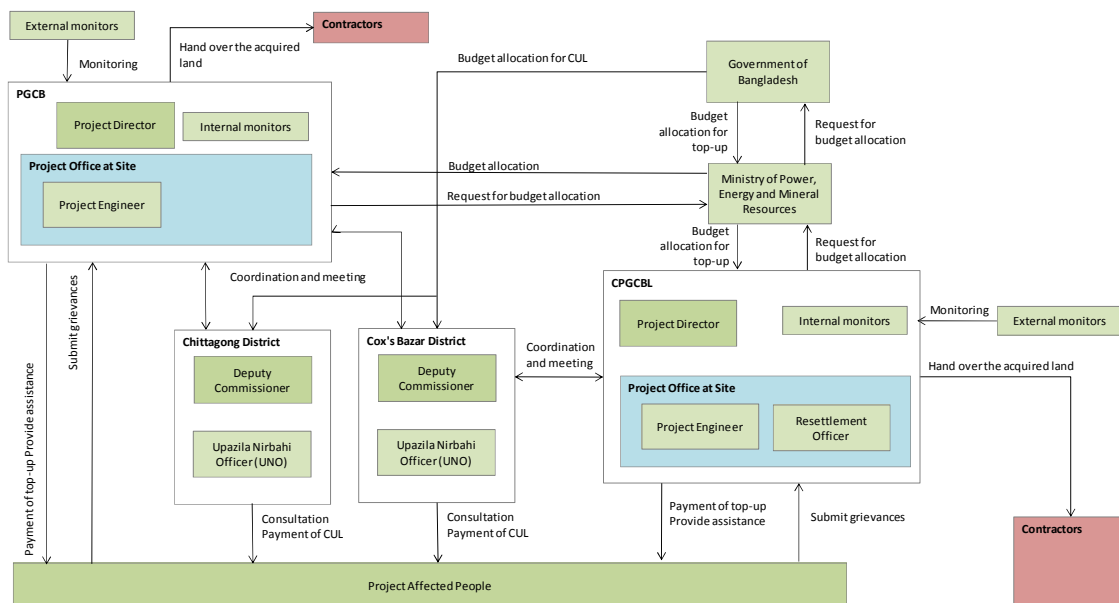


Figure 12-1 Implementation Mechanism of Land Acquisition and Resettlement

12.4 External Monitoring & Evaluation

Appropriate reporting (including auditing and redress functions), monitoring and evaluation mechanisms, will be identified and set in place as part of the resettlement management system.

The EA will recruit an Independent External Monitor (IEM) acceptable to JICA for monitoring the performance of LARAP implementation and evaluation of resettlement process and final outcome. A sample TOR for Independent External Monitor is placed at Annexure-4. Besides that IEM will also monitor and evaluate environmental impacts as per environmental plan.

An Environmental Monitoring Plan will be prepared to provide guidelines for the construction activities of the power plant. The environmental components to be monitored are those that will be positively or negatively affected, or expected to be affected, by the construction activities. The purposes of creating an Environmental Monitoring Plan for the construction of the power plant are to:

- Confirm that mitigation measures shall reduce any negative impacts on the environment to allowable levels during the construction and operation phases.
- Set up an organization that is responsible for the implementation of monitoring the plan.
- Perform appropriate monitoring during the construction and operation phases.

Table 12-2: Contents of environmental management plan and monitoring plan

Item	Impact	Targeted Range	Contents of Environmental Management Plan	Contents of Monitoring Plan
Resettlement	- Land Acquisition and Resettlement	- Around the power plant site	-Preparation of LARAP (livelihood restoration plan)	- Monitoring the progress of land acquisition and resettlement - Monitoring the conditions of local residents' employment - Grievances from residents
Disturbance to Poor People	- Land Acquisition and Resettlement	- Around the power plant site	- Preparation of LARAP (livelihood restoration plan)	- Monitoring the livelihood conditions of the targeted households - Grievances from residents
Deterioration of Local Economy such as Losses of Employment and Means of Livelihood	- Loss or damage to the salt/shrimp cultivation ponds by land acquisition	- Around the power plant site	- Preparation of LARAP (livelihood restoration plan)	- Monitoring the livelihood conditions of the households engaged in salt cultivation/ shrimp aquaculture - Grievances from residents
Land Use and Utilization of Local Resources	- Change of land use	- Around the power plant site	- Employment of local residents - Procurement of materials from the local area	- Grievances from residents
Disturbance to Existing Social Infrastructure and Services	- Change of land use	- Around the power plant site	- Construction of roads that can be used by local residents - Permit usage of certain facilities in the power plant to local residents	- Grievance from residents
	- Increase of traffic during construction phase	- Around the power plant site	- Reschedule construction schedule	- Grievances from residents

**Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar**

Item	Impact	Targeted Range	Contents of Environmental Management Plan	Contents of Monitoring Plan
Misdistribution of Benefits and Damages	- Loss or damages to the salt/shrimp cultivation ponds by land acquisition	- Around the power plant site	- Preparation of livelihood restoration plan to the targeted households, in case the households engaged in salt/shrimp cultivation are included in the relocated households	- Monitoring the livelihood conditions of the targeted households - Grievances from residents
Local Conflicts of Interest	- Loss or damages to the salt/shrimp cultivation ponds by land acquisition	- Around the power plant site	- Preparation of livelihood restoration plan to the targeted households, in case the households engaged in salt/shrimp cultivation are included in the relocated households	- Monitoring the livelihood conditions of the targeted households - Grievances from residents
Gender	- Change of land use	- Around the power plant site	- Construction of roads that can be used by local residents - Permit usage of certain facilities in the power plant to local residents	- Grievances from residents
Children's Rights	- Change of land use	- Around the power plant site	- Construction of roads that can be used by local residents - Permit usage of certain facilities in the power plant to local residents	- Grievances from residents

(Source: JICA Study Team)

The following tables shows the performance monitoring form for land acquisition, resettlement and assistance for transition of the project affected people, impact monitoring during implementation and post-project stage.

Table 12-3: Monitoring Form 1 (for Performance Monitoring of Resettlement Action Plan)

Table 12: Continued Monitoring of Resettlement Action Plan												
Procedure	Indicator (specific step/action)		Unit	Year 1				Year 2				Comments
				1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	
Staffing and Management												
Recruitment, training and deployment of staff / expert in charge	1.	Deployment of (an) officer(s) / expert(s) in charge of land acquisition	Man-months									
	2.	Deployment of resettlement officer(s) / expert(s)	Man-months									
	3.	Training and mobilization of officers-in-charge (if required)	No. of trained personnel									
Supervision and Management	1.	Supply of manpower and logistics	No. of persons									
	2.	Liaison with other agencies (ex. DC Office, Upazila Nirbahi Office, Union Parishads etc.)	No. of meetings									
	3.	Administrative management	Month									
Finalization of land acquisition and resettlement action plan												
Finalization of land acquisition	1.	Preparation of an application for land acquisition	%									
	2.	Submission of application to MOPEMR and make a request to the Deputy Commissioner of Cox's Bazar	Date of submission									
	3.	Approval of land acquisition by the GOB	Date of approval									
Adoption of the Resettlement Action Plan	1.	Review of the draft Resettlement Action Plan (RAP)	%									
	2.	Submission of application to MOPEMR and make a request to the Deputy Commissioner of Cox's	Date of submission									

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Procedure	Indicator (specific step/action)		Unit	Year 1				Year 2				Comments
				1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	
		Bazar District for implementation of RAP in line with land acquisition										
	3.	Approval of RAP	Date of approval									
Identification of eligible persons												
Socioeconomic Survey (in liaison with DC office)	1.	Survey design	Time									
	2.	Field Survey and collection of data	%									
	3.	Computerization of field data	%									
	4.	Data analysis and report processing	%									
	5.	Preparation of ID card, EP file, and Entitlement Cards	%									
Identification of Eligible Persons (in liaison with DC office)	1.	Collection of award data	No. of EPs									
	2.	Assigning ID numbers	No. of EPs									
	3.	Photographing of EPs	No. of EPs									
	4.	Issuance of ID cards	No. of EPs									
	5.	Distribution of ID cards	No. of EPs									
Local consultation and information management												
Information Management (in liaison with DC office)	1.	Preparation of information brochure	%									
	2.	Distribute information brochure	No. distributed									
	3.	Personal contacts	No. contacted									
	4.	Local consultations (ex. public consultation meetings, focus group discussions (FGD) s, etc.)	No of consultations									
Budgeting												
Valuation of affected property (in liaison with DC office)	1.	Formation of Property Valuation Advisory Committee (PVAC)	%									
	2.	Planning for valuation	%									
	3.	Communication and collection of data	%									

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Procedure	Indicator (specific step/action)		Unit	Year 1				Year 2				Comments
				1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	
	4.	Valuation	%									
	5.	Finalization of resettlement budget	%									
Implementation of land acquisition and resettlement												
Payment of compensation for land acquisition (in liaison with DC office)	1	Motivate Eligible Persons (EP)	No. of EPs									
	2	Assist EPs to collect Cash Compensation under Law (CCL)	No. of EPs									
	3	Organize top-up payment to fill the gap between CUL and RV	No. of EPs									
Relocation of Project Affected Persons (in liaison with DC office)	1.	Motivate Eligible Persons (EP)	No. of EPs									
	2.	Payment of Transfer Grant	No. of EPs									
	3	Assist EPs in replacement land purchase/Relocation	No. of cases									
Resettlement of Project Affected Persons (in liaison with DC office)	1.	Assist EPs to collect Cash Compensation under Law (CCL)	No. of EPs									
	2.	Organize top-up payment to fill the gap between CUL and RV	No. of EPs									
	3.	Assist vulnerable EPs in resettlement	No. of EPs									
Assistance in transition (in liaison with DC office)	1.	Motivate EPs to join the livelihood rehabilitation / improvement program	No of EPs									
	2.	Literacy class	No of class									
			No of attendance									
	3.	Skill trainings	No o trainings offered									
			No of trained personnel									
	4.	Job opportunities at power	No of posts									

Procedure	Indicator (specific step/action)		Unit	Year 1				Year 2				Comments
				1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	
		station and associated facilities	offered to EPs									
			No. of employed EPs									
Grievance Redress (in liaison with DC office)	1.	Formation of Grievance Redress Committee (GRC)	No. of members									
	2.	Publicizing/notifying of GRC	%									
	3.	Receiving grievance from stakeholders	No. of cases									
	4.	Resolving grievances	No. of cases (%)									
	5.	Other claim/criticism	No. of cases									
Report processing												
Performance Reporting	1.	Inception report	Date of submission									
	2.	Monthly progress report	Date of submission									
	3.	Draft final report	Date of submission									
	4.	Final report	Date of submission									

Table 12-4: Monitoring Form 2 (for Impact Monitoring during Project Implementation)

Indicator	Unit (Standard value)	Year 1				Year 2				Comments
		1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	
Grievance redress mechanism										
Grievance submitted by the stakeholders	Number of cases									
Grievance resolved	No. of cases (%)									
Conflict with host community	No. of cases									
Other claim/criticism	No. of cases									
Land acquisition and compensation										
Households losing their own	No of HHs									

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Indicator	Unit (Standard value)	Year 1				Year 2				Comments
		1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	
land	(%)									
Households losing their domicile on their own land	No of HHs (%)									
Households losing their renting land (private land)	No of HHs (%)									
Households losing their renting land (government land)	No of HHs (%)									
Households losing their occupancy on khas land	No of HHs (%)									
Households losing their illegal domicile on government land	No of HHs (%)									
Households losing income from own land	No of HHs (%)									
Households losing income from own livelihood activities	No of HHs (%)									
Households losing income from own business	No of HHs (%)									
Households losing income from standing crops	No of HHs (%)									
Compensation completed	No. of cases (%)									
Relocation and compensation										
Relocated households	No of HHs (%)									
Relocated households owning land	No of HHs (%)									
Relocated households owning domicile	No of HHs (%)									
Relocated households renting land	No of HHs (%)									
Relocated households renting domicile	No of HHs (%)									
Compensation completed	No. of cases (%)									
Household economy										
Project affected household that lacks the source of income	No of HHs (%)									

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Indicator	Unit (Standard value)	Year 1				Year 2				Comments
		1st qtr	2nd qtr	3rd qtr	4th qtr	1st qtr	2nd qtr	3rd qtr	4th qtr	
Project affected household with reduced monthly income	No. of HHs (%)									
Livelihood restoration										
Literacy class	Number (%)									
Job training conducted	No. of courses									
PAPs (age over 16) that received job training	Number (%)									
Compensated/relocated structure for business (e.g. shop, garage, etc)	Number (%)									
Allocation of substitute farmland	Area (%)									
Substitute farmland being utilized	Area (%)									
Employment of project affected people (age over 16) by the project	No. of PAPs (%)									
Employment of female PAPs (age over 16) by the project	No. of PAPs (%)									
Child labour	No. of children									
Provision of personal protective equipment (PPE)	PAPs provided with PPE (100%)									
Labour accident	No. of cases									
Area infrastructure development										
Water and sanitation facility	Number (%)									
Electricity distribution	Number of HHs (%)									
Clinics or health facilities	Number (%)									
Primary schools	Number (%)									

Table 12-5: Monitoring Form 3 (for Impact Monitoring at Post-project Stage)

Category	Source of information	Baseline data (at the commencement of Year 1)	Actual					End-line data	Comments
			Month 24	Month 48	Month 72	Month 96	Month XX		
Social									
Registers crimes/disputes (per 1,000 pop.)	Statistics obtained at local police								
Crimes/disputes involving women (per 1,000 pop.)	do								
Crimes/disputes involving vulnerable group (per 1,000 pop.)	do								
Primary school attendance (male)	Statistics obtained at local education department								
Primary school attendance (female)	do								
Number of community-based organizations	Upazila Office								
Household Economy									
Average land holding per household (hectares)	Household survey								
Percentage households owning land	do								
Percentage households owning domicile	do								
Percentage households renting land	do								
Percentage households renting domicile	do								
Agricultural production: Rice	do								
Fish catch (ton per household/per annum)	do								
Shrimp catch (ton per household/per annum)	do								
Salt cultivation (ton per household/per annum)	do								
Employment: Number of male wage earners	do								
Employment: Number of female wage earners	do								
Average household income (Taka per annum)	do								
Average household expenditure (Taka per annum)	do								
Energy Consumption: Fuel wood (tons per annum)	do								
Energy Consumption: Kerosene (tons per annum)	do								
Energy Consumption: Electricity (kWh per annum)	do								

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

Health									
Water source	Household survey								
Incidence of diarrhea	do								
Incidence of upper respiratory infection	do								
HIV infection	do								
Other epidemics	do								
Others									
Traffic accidents in resettlement site	do								

12.5 Post Evaluation by JICA

Review Missions, JICA will undertake a comprehensive mid-term review of the LARAP implementation. A post-evaluation of LARAP activities will be carried out by JICA to assess the resettlement impact in terms of adequacy and deficiency in planning and R&R operations.

**Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar**

Annexure-1

List of anticipated affected Land owning households based on Socio-economic Survey of Designated Township Area

SES No.	Name of Household	Father's Name	Village	Union	Age	Sex	Religion	Educational Qualification	Occupation	Total Family Member	Monthly Income (BDT)	Affected Land (Decimal)	Monthly Expenditure (BDT)	Category of Loss
1	Nurul Abshar	L/. Nur Mohammad	South Mohirgona	Dhalghata	45	Male	Muslim	Degree	Business	1	70000	61.5	50000	Land owner
2	Dosta Mohammad	L/. Shale Ahmed	South Mohirgona	Dhalghata	70	Male	Muslim	SSC	Business	2	60000	61.5	50000	Land owner
3	Abu Syed	L/. Kajol Mia	North Mohirgona	Dhalghata	53	Male	Muslim	Illiterate	Salt Cultivator	6	12000	18	10000	Land owner
4	Upazilla, Un0		South Mohirgona	Dhalghata	45	Male	Muslim	Master Degree	Service	1	0	300	0	Land owner
5	Abdul Kalam	Tajlok Mia	North Mohirgona	Dhalghata	46	Male	Muslim	Illiterate	Agriculture	8	30000	18	30000	Land owner
6	Kabir Hossain	L/. Kajol Mia	North Mohirgona	Dhalghata	55	Male	Muslim	Illiterate	Salt Busin	7	25000	18	20000	Land owner
7	Jaker Hossain	L/. Kajol Mia	North Mohirgona	Dhalghata	42	Male	Muslim	Illiterate	Salt Cultivator	5	15000	18	15000	Land owner
8	Ali Hossain	L/. Kajol Mia	South Mohirgona	Dhalghata	32	Male	Muslim	SSC	Service	1	50000	18	20000	Land owner
9	Md. Osman	L/. Kajol Mia	South Mohirgona	Dhalghata	46	Male	Muslim	Master Degree	Salt Busin	5	18000	18	18000	Land owner
10	Amir Hossain	L/. Kajol Mia	North Mohirgona	Dhalghata	40	Male	Muslim	Illiterate	Salt Cultivator	5	10000	19	8000	Land owner
11	Jafor Alam	L/. Ejlas Mia	North Mohirgona	Dhalghata	45	Male	Muslim	Illiterate	Business	5	20000	9	20000	Land owner
12	Jahir Alam	L/. Ejlas Mia	North Mohirgona	Dhalghata	37	Male	Muslim	SSC	Service	6	12000	9	12000	Land owner
13	Saber Alam	L/. Ejlas Mia	North Mohirgona	Dhalghata	40	Male	Muslim	Illiterate	Agriculture	3	8000	9	8000	Land owner
14	Abdul Mannan	L/. Ejlas Mia	North Mohirgona	Dhalghata	30	Male	Muslim	Signature	Salt Cultivator	4	10000	9	9000	Land owner
15	Md. Hossain	L/. Ejlas Mia	North Mohirgona	Dhalghata	65	Male	Muslim	Illiterate	Household	11	20000	9	10000	Land owner
16	Safiul Alam	Hazi Abul Hossain	North Mohirgona	Dhalghata	55	Male	Muslim	Illiterate	Cultivator	13	60000	50	50000	Land owner
17	Hazi Nur Kader	L/. Ali Mia	Nasir Moha. Dail	Dhalghata	60	Male	Muslim	Illiterate	Salt Business	6	40000	80	30000	Land owner
18	Syed Ahamad	L/. Hazi Abdul Mia	North Mohirgona	Dhalghata	65	Male	Muslim	HSC	Salt Business	3	30000	8	27000	Land owner
19	Mir Kashem	L/. Mokhesur Rahman	Nasir Moha. Dail	Dhalghata	42	Male	Muslim	Signature	Salt Business	6	30000	80	30000	Land owner
20	Jamal Uddin	L/. Hazi Abdul Mia	North Mohirgona	Dhalghata	76	Male	Muslim	Illiterate	Salt Business	5	33000	20	25000	Land owner

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

SES No.	Name of Household	Father's Name	Village	Union	Age	Sex	Religion	Educational Qualification	Occupation	Total Family Member	Monthly Income (BDT)	Affected Land (Decimal)	Monthly Expenditure (BDT)	Category of Loss
21	Badsha Alam	L/. Kala Mia	North Mohirgona	Dhalghata	55	Male	Muslim	Illiterate	Business	7	35000	20	35000	Land owner
22	Barkot Ullah	L/. Kajal Mia	North Mohirgona	Dhalghata	57	Male	Muslim	Signature	Agriculture	3	10000	20	8000	Land owner
23	Kabir Ahmed	L/. Elaha Dad	Nasir Moha. Dail	Dhalghata	55	Male	Muslim	Illiterate	Salt Cultivator	4	15000	15	15000	Land owner
24	Emdad Mia Gong	L/ Abdul Ali	Matarbari	Matabari	45	Male	Muslim	SSC	Cultivator	8	22000	77	20000	Land owner
25	Yakub Ali Gong	Abdul Motlab	Matarbari	Matabari	40	Male	Muslim	Illiterate	Salt Cultivator	7	25000	647	20000	Land owner
26	Mohammad Ibrahim Gong	Hari Mia	Matarbari	Matabari	36	Male	Muslim	Degree	Service	5	45000	386	30000	Land owner
27	Ismail Gong	Parman Ali	Matarbari	Matabari	47	Male	Muslim	HSC	Salt Business	5	20000	247	18000	Land owner
28	Abul Kalam Gong	Dhola Mia	Matarbari	Matabari	48	Male	Muslim	SSC	Salt Cultivator	4	12000	339	10000	Land owner
29	Sadar Ali	Abdul Hakim	Matarbari	Matabari	49	Male	Muslim	Five	Cultivator	5	25000	9	20000	Land owner
30	Sayful Khabir	Abdur Rahsid	Matarbari	Matabari	50	Male	Muslim	Nine	Salt Business	6	13000	220	12000	Land owner
31	Omar Ali	Alhaj Bashrat Ali	Matarbari	Matabari	37	Male	Muslim	Illiterate	Agriculture	3	10000	43	8000	Land owner
32	Akbar Ahmed	Safi Ullah	Matarbari	Matabari	39	Male	Muslim	Five	Salt Cultivator	4	12000	15	10000	Land owner
33	Asad Ali	Ear Mohammad	Shaplapur	Matabari	65	Male	Muslim	Nine	Shrimp Cultivator	4	45000	600	35000	Land owner
34	Haji Mofij Ullah	Haji Naju Miah	Matarbari	Matabari	60	Male	Muslim	Illiterate	Cultivator	6	35000	89	30000	Land owner
35	Karim Baksu	Ayin Uddin	Matarbari	Matabari	56	Male	Muslim	SSC	Cultivator	6	30000	158	25000	Land owner
36	Ekram Ullah	L/. Kala Mia	Matarbari	Matabari	48	Male	Muslim	SSC	Business	6	15000	40	12000	Land owner
37	Badiuzzaman	Haji Hakim Ali	Matarbari	Matabari	47	Male	Muslim	Illiterate	Agriculture	4	15000	300	15000	Land owner
38	Yousuf Hossain	Najir Mia	Matarbari	Matabari	52	Male	Muslim	Five	Business	6	35000	130	30000	Land owner
39	Rahela Khatun	L/. Ejlas Mia	Matarbari	Dhalghata	45	Femal	Muslim	Illiterate	Household	3	10000	9	10000	Land owner
40	Sanabor Khatun	H/. Mofjal Mia	Matarbari	Matabari	55	Femal	Muslim	Five	Household	4	15000	18	12000	Land owner
41	Jainat Khatun	H/. Kasim Ali	Matarbari	Matabari	50	Femal	Muslim	Nine	Household	4	13000	9	12000	Land owner

গণপ্রজাতন্ত্রী বাংলাদেশ সরকার
পানি সম্পদ মন্ত্রণালয়
উন্নয়ন -০২ শাখা
বাংলাদেশ সচিবালয়, ঢাকা

নং-পাসম-উঃ২/১/এডিবি-২(২)/২০০৮/৪১৫

২৯-০২-১৪১৫ বঃ

তারিখ : -----

১২-০৬-২০০৮খ্রীঃ

প্রজ্ঞাপন

এশীয় উন্নয়ন ব্যাংক (ADB) এর আর্থিক সহায়তায় বাংলাদেশ পানি উন্নয়ন বোর্ড (বাপাউবো) কর্তৃক 'দক্ষিণপশ্চিমাঞ্চলীয় সমন্বিত পানি সম্পদ পরিকল্পনা ও ব্যবস্থাপনা প্রকল্প' (SWAIWRPMP) এর আওতায় ২টি উপ-প্রকল্প যথাক্রমে (১) নড়াইল উপ-প্রকল্প ও (২) চেনচুরী বিল উপ-প্রকল্প বাস্তবায়নের নিমিত্ত ভূমি অধিগ্রহণের ফলে ক্ষতিগ্রস্ত ব্যক্তিবর্গকে প্রচলিত আইনের অধীনে এবং উন্নয়ন সহযোগীর সাথে সম্মত পুনর্বাসন পরিকল্পনা (Resettlement Plan) অনুযায়ী পুনর্বাসন বিষয়ে প্রত্যাশী সংস্থা বাংলাদেশ পানি উন্নয়ন বোর্ডকে সহায়তা প্রদানের জন্য নিম্নোক্ত সদস্যগণের সমন্বয়ে উপ-প্রকল্প ২টির জন্য ৩টি করে মোট ৬ (ছয়)টি কমিটি নিম্নরূপভাবে গঠন করা হ'লঃ

(1) Joint Verification Team (JVT)

Joint Verification Team (JVT) for Narail Sub-project; and

Joint Verification Team (JVT) for Chenchuri Beel Sub-project

গঠনঃ

- | | | |
|-----|--|--------------|
| (ক) | বাংলাদেশ পানি উন্নয়ন বোর্ডের প্রতিনিধি
(উপ-বিভাগীয় প্রকৌশলী/সহকারী প্রকৌশলী/সমপর্যায়ের কর্মকর্তা) | - আহ্বায়ক |
| (খ) | সংশ্লিষ্ট জেলা প্রশাসক এর মনোনীত প্রতিনিধি | - সদস্য |
| (গ) | ইউনিয়ন পরিষদের চেয়ারম্যান
(ক্ষতিগ্রস্ত ব্যক্তি যে ইউনিয়নে নালিশ লিপিবদ্ধ করবেন) | - সদস্য |
| (ঘ) | পাউবো-কে সহায়তা প্রদানকারী এনজিও এর প্রতিনিধি
(ডেপুটি টীম লিডার, এরিয়া ম্যানেজার অথবা সমপর্যায়ের কর্মকর্তা/বিশেষজ্ঞ) | - সদস্য সচিব |

কার্য পরিধিঃ

- | | |
|-----|---|
| (ক) | পুনর্বাসন কর্মসূচী প্রণয়নকালে বাপাউবো তার পরামর্শকের সহায়তায় আর্থ-সামাজিক জরিপের মাধ্যমে প্রকৃত ক্ষতিগ্রস্ত ব্যক্তিবর্গের তালিকা ও ক্ষতিগ্রস্ত সম্পদের পরিমাণ এবং অধিগ্রহণের আওতায় যৌথ জরিপের মাধ্যমে প্রস্তুতকৃত ক্ষতিগ্রস্তদের তালিকা ও ক্ষতির পরিমাণ যাচাইপূর্বক সমন্বয় করে পুনর্বাসনের জন্য চূড়ান্ত তালিকা প্রণয়ন, সংশ্লিষ্ট রেকর্ডপত্র স্বাক্ষর করে তা প্রকল্প পরিচালকের নিকট পেশ করবে। |
| (খ) | বাংলাদেশ পানি উন্নয়ন বোর্ড কর্তৃক প্রস্তাবিত প্রকল্প সীমানায় অবস্থিত বাপাউবো'র নিজস্ব বা সরকারের জমিতে দীর্ঘদিন যাবত বসবাসকারীদের সনাক্ত করে প্রকল্প পরিচালকের নিকট তালিকা পেশ করবে। |
| (গ) | প্রকল্পের বয়সসীমা (বাস্তবায়নকাল) অনুসরণে উপরোক্ত কার্যাদি সম্পাদন করে প্রয়োজনীয় কাগজপত্র/প্রতিবেদন সংশ্লিষ্ট কর্মকর্তাগণের নিকট পেশ করবে। |

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

(২) Property Valuation Advisory Team (PVAT)

Property Valuation Advisory Team (PVAT) for Narail Sub-project; and
Property Valuation Advisory Team (PVAT) for Chenchuri Beel Sub-project

গঠনঃ

(ঙ)	বাংলাদেশ পানি উন্নয়ন বোর্ডের প্রতিনিধি (উপ-বিভাগীয় প্রকৌশলী/সহকারী প্রকৌশলী/সমপর্ষায়ের কর্মকর্তা)	-	আহবায়ক
(চ)	সংশ্লিষ্ট জেলা প্রশাসক এর মনোনীত প্রতিনিধি	-	সদস্য
(ছ)	ইউনিয়ন পরিষদের চেয়ারম্যান (ক্ষতিগ্রস্ত ব্যক্তি যে ইউনিয়নে নাগিশ লিপিবদ্ধ করবেন)	-	সদস্য
(জ)	পাউবো-কে সহায়তা প্রদানকারী এনজিও এর প্রতিনিধি (ডেপুটি টীম লিডার, এরিয়া ম্যানেজার অথবা সমপর্ষায়ের কর্মকর্তা/বিশেষজ্ঞ)	-	সদস্য সচিব

কার্য পরিধিঃ

- (ক) অধিগ্রহণের ফলে ক্ষতিগ্রস্ত ভূমি ও অন্যান্য সম্পদের মূল্য বাজার দর অনুযায়ী ভূমি ও অন্যান্য সম্পদের বদলী মূল্য নিরূপনে আইনানুগভাবে নির্ধারিত কর্তৃপক্ষকে সহায়তাকরণ।
- (খ) বাংলাদেশ পানি উন্নয়ন বোর্ড ও অন্যান্য সরকারী জমিতে অবস্থানরত ব্যক্তিদের ক্ষতিগ্রস্ত সম্পদের মূল্য বাজার দর অনুযায়ী সম্পদের বদলী মূল্য নিরূপনে আইনানুগভাবে নির্ধারিত কর্তৃপক্ষকে সহায়তাকরণ।
- (গ) ক্ষতিগ্রস্তদের চেক বিতরণে সঠিকতা নিরূপনে সহায়তাকরণ।
- (ঘ) ঘরবাড়ী/অবকাঠামো/গাছপালা/ফসল ইত্যাদির ক্ষতিপূরণ মূল্য নিরূপনে সংশ্লিষ্ট বিভাগকে সহায়তাকরণ।
- (ঙ) প্রকল্পের সময়সীমা (বাড়বায়নকাল) অনুসরণে উপরোক্ত কার্যাদি সম্পাদন-করে প্রয়োজনীয় কাগজপত্র/প্রতিবেদন বাংলাদেশ পানি উন্নয়ন বোর্ডের সংশ্লিষ্ট প্রকল্প পরিচালক ও জেলা প্রশাসকের কাছে পেশকরণ।

(৩) Grievance Redress Committee (GRC)

Grievance Redress Committee (GRC) for Narail Sub-project, and
Grievance Redress Committee (GRC) for Chenchuri Beel Sub-project

গঠনঃ

(ক)	বাংলাদেশ পানি উন্নয়ন বোর্ডের প্রতিনিধি (উপ-বিভাগীয় প্রকৌশলী/সহকারী প্রকৌশলী/সমপর্ষায়ের কর্মকর্তা)	-	আহবায়ক
(খ)	ইউনিয়ন পরিষদের চেয়ারম্যান (ক্ষতিগ্রস্ত ব্যক্তি যে ইউনিয়নে নাগিশ লিপিবদ্ধ করবেন)	-	সদস্য
(গ)	ক্ষতিগ্রস্ত ব্যক্তিদের প্রতিনিধি	-	সদস্য
(ঘ)	পাউবো-কে সহায়তা প্রদানকারী এনজিও এর প্রতিনিধি (ডেপুটি টীম লিডার, এরিয়া ম্যানেজার অথবা সমপর্ষায়ের কর্মকর্তা/বিশেষজ্ঞ)	-	সদস্য সচিব

কার্য পরিধিঃ

- (ক) প্রকল্প গ্রহণের কারণে ক্ষতিগ্রস্ত ব্যক্তিদের নাগিশ এবং তনানী গ্রহণ।
- (খ) ক্ষতিগ্রস্ত ব্যক্তিদের নাগিশ যদি ভূমি অধিগ্রহণ এর নাগিশ (Arbitration) পদ্ধতি অথবা প্রচলিত আইনের আওতাভুক্ত কোন বিষয় হয়, তবে এ কমিটি উক্ত নাগিশ সংশ্লিষ্ট জেলা প্রশাসক/কর্তৃপক্ষের নিকট পেশ করার পরামর্শ দিবে। নাগিশ যদি প্রচলিত আইনের আওতাভুক্ত না হয় সেক্ষেত্রে প্রকল্পের পুনর্বাসন পরিকল্পনা (Resettlement Plan) এর নীতিমালার আলোকে বিষয়সমূহ নিষ্পত্তির ব্যাপারে কমিটি কর্তৃক সিদ্ধান্ত গ্রহণ।
- (গ) ভূমিহীন ক্ষতিগ্রস্ত ব্যক্তিদের নাগিশকার্যে এই কমিটি কর্তৃক সলিত পদ্ধতি অবলম্বনপূর্বক সিদ্ধান্ত প্রদান।

নাগিশ গ্রহণ ও নিষ্পত্তি করার পদ্ধতিঃ

- (ক) ক্ষতিগ্রস্ত ব্যক্তি পরিচয়পত্র প্রাপ্তির ১ মাসের মধ্যে অথবা প্রাপ্য ক্ষতিপূরণ সম্বন্ধে তাকে অবহিত করার ১ মাসের মধ্যে লিখিতভাবে আহবায়কের কার্যালয়ে আবেদন করতে পারবেন।
- (খ) বাংলাদেশ পানি উন্নয়ন বোর্ডের প্রতিনিধি ও সংশ্লিষ্ট এনজিওর প্রতিনিধি যৌথ স্বাক্ষরে ক্ষতিগ্রস্ত ব্যক্তিকে পরিচয়পত্র প্রদান করা হবে।

Matarbari 2x600 MW Coal Fired Power Plant Project
Matarbari, Cox's Bazar

- (খ) এই কমিটি নালিশ প্রাপ্তির ১০ মাসের মধ্যে বিষয়টি নিষ্পত্তির জন্য বসবেন এবং এসকল যাবতীয় রেকর্ড ও সত্যকার্যবিবরণী সংরক্ষণ করবেন।
- (গ) আহ্বায়কের কার্যালয়ে এই কমিটির যাবতীয় কাজ অনুষ্ঠিত হবে।
- (ঘ) কমিটি সিদ্ধান্ত গ্রহণের ভিত্তি অবশ্যই উল্লেখ করবে।
- (ঙ) কমিটি নালিশ প্রতিকার সংশ্লিষ্ট নিয়মাবলী এবং এ সংক্রান্ত ক্ষতিগ্রস্তদের অধিকার স্থানীয়ভাবে কমিউনিটি সভায় এবং ক্ষুদ্র পত্রিকা বিধির মাধ্যমে সাধারণ জনসমক্ষে প্রচার করবে।

স্বাক্ষর:
২৭/০৫/১৫
(কানিজ মওলা)
সিনিয়র সহকারী সচিব

নং- পাসম-উঃ২/১/এডিবি-২(২)/২০০৮/৪১৫

২৯-০২-১৪১৫ বঃ
তারিখ : -----
১২-০৬-২০০৮খ্রীঃ

বিতরণ (জ্যেষ্ঠতার ভিত্তিতে নহে) :

- ১। মন্ত্রিপরিষদ সচিব, মন্ত্রিপরিষদ বিভাগ, বাংলাদেশ সচিবালয়, ঢাকা।
 - ২। সচিব, সংস্থাপন মন্ত্রণালয়, বাংলাদেশ সচিবালয়, ঢাকা।
 - ৩। সচিব, স্বরাষ্ট্র মন্ত্রণালয়, বাংলাদেশ সচিবালয়, ঢাকা।
 - ৪। আইন, বিচার ও সংসদ বিষয়ক মন্ত্রণালয়, বাংলাদেশ সচিবালয়, ঢাকা।
 - ৫। সচিব, জমি মন্ত্রণালয়, বাংলাদেশ সচিবালয়, ঢাকা।
 - ৬। সচিব, অর্থনৈতিক সম্পর্ক বিভাগ, শেরে বাংলা নগর, ঢাকা।
 - ৭। সচিব, পরিবেশ ও বন-মন্ত্রণালয়, বাংলাদেশ সচিবালয়, ঢাকা।
 - ৮। সচিব, গৃহায়ন ও গনপূর্ত মন্ত্রণালয়, বাংলাদেশ সচিবালয়, ঢাকা।
 - ৯। সচিব, কৃষি মন্ত্রণালয়, বাংলাদেশ সচিবালয়, ঢাকা।
 - ১০। সচিব, পরিকল্পনা বিভাগ, শেরে বাংলা নগর, ঢাকা।
 - ১১। সচিব, আই, এম, ই, ডি, শেরে বাংলা নগর, ঢাকা।
 - ১২। মহা-পরিচালক, এন, জি ও, বিদ্যাক প্যারো, মৎস্য ভবন, রমনা, ঢাকা।
 - ১৩। মহা-পরিচালক, বাংলাদেশ পানি উন্নয়ন বোর্ড, ওয়াশিংটন ভবন, মতিঝিল, ঢাকা।
 - ১৪। বিভাগীয় কমিশনার, রাজশাহী বিভাগ, রাজশাহী।
 - ১৫। বিভাগীয় কমিশনার, চট্টগ্রাম বিভাগ, চট্টগ্রাম।
 - ১৬। উপ-নিয়ন্ত্রক, বাংলাদেশ সরকারী মন্ত্রণালয়, তেজগাঁও, ঢাকা।
- (উক্ত উক্ত প্রজ্ঞাপন বাংলাদেশ গেজেট এর পরবর্তী সংখ্যায় প্রকাশের প্রয়োজনীয় ব্যবস্থা গ্রহণের জন্য নির্দেশক্রমে অনুরোধ করা হ'ল।
- ১৭। জেলা প্রশাসক, নড়াইল/যশোর।
 - ১৮। প্রকল্প পরিচালক/প্রকল্প সমন্বয়ক, 'দক্ষিণপশ্চিমাঞ্চলীয় সমন্বিত পানি সম্পদ পরিকল্পনা ও ব্যবস্থাপনা প্রকল্প', গোয়ালচামট, ফরিদপুর।

স্বাক্ষর:
২৭/০৫/১৫
(কানিজ মওলা)
সিনিয়র সহকারী সচিব

**Coal Power Generation Company of Bangladesh Ltd. (CPGCBL)
Administrative Guidelines For Payments Of Compensation & Resettlement Benefits
(AGPCRB)**

1. Identification of Eligible Persons For Compensation & Resettlement Benefits.

A. Through the operation of LA ordinance, 1982 and its subsequent amendments D.C. makes acquisition of land for public purposes as required by the Requiring Body (RB) for implementation of the project. Under the law, the Legal owners of land affected by the acquisition will be identified by D.C and will be eligible to compensation for (i) land permanently acquired (including standing crops, trees, houses) and (ii) any other impact and damages caused by such acquisition. DC, under section 7 of the L.A. ordinance makes an award to the person entitled to compensation who is indentified as an awardee.

B. The joint verification survey (JVS) of affected land, trees, and other properties conducted by joint verification Team in consultation with Census & SES data of APs will identify entitled persons without legal title and assess the quantity of losses for both titled and non-titled affected persons. The implementing Agency will prepare an ID Card for each EP with photograph as identified during the joint verification survey. ID Cards to all EPs will be issued with due verification from Union Parisad Chairman/Member.

2. Assessment of the replacement Cost of affected properties

A Property Valuation Advisory Team (PVAT) formed by the Ministry of Power, Energy and Mineral Resource by a gazette notification will review the assessment of the market prices of the affected carried out by Implementing Agency and determine the replacement cost of those properties affected by the project.

3. Entitled person's (EP) files and Entitled card (EC)

The implementing Agency will establish menu-driven MIS at its central office for record keeping of APs and ID numbers of the entitled persons. IA will collect and computerize data on individual losses and compensation thereof as determined by DC and JVT of the title holders and socially recognized non-titled EPs. The IA will prepare Entitled persons (EP) files based on quantity of losses assessed by JVT and Entitlement Cards (EC) for each EP based on loss type using replacement value determined by PVAT. The EC will contain quantity of losses by type and replacement value of loss of properties and other resettlement benefits as per Entitlement Matrix.

4. Preparation of Compensation and Resettlement Benefits by IA.

The IA based on both JVT & PVAT data regarding quantity of losses, replacement value of loss of properties and other resettlement benefits prescribed by entitlement policy and estimation of deferential between Compensation Under Law (CUL) and replacement value of affected land, properties, structures, trees will prepare budget for payment of compensation and resettlement benefits and add 2.5% contingency to the estimated budget to meet up statistical uncertainties, valuation and GRC cases. Then the IA will place the estimated budget to the PMU for verification and scrutiny. After the estimated budget is verified and scrutinized will be placed to the EA for onward transmission to the Administrative Ministry for approval within 30 days from the date of submission of budget by IA.

5. Approval of Resettlement Budget

On receipt of the resettlement budget from the EA, the administrative Ministry (Ministry of Power, Energy and Mineral Resource) will give approval to the budget within 15 working

days. If there is any queries or need for clarification the ministry will send it back to the EA with specific observation or note for clarification within 7 days. In that case EA will send back the estimated budget with explanation and clarification to meet the queries to the Ministry. And the ministry will accord their approval to the estimated budget within 7 working days.

6. Payment by project authority

6A. Placement of budgetary fund for resettlement

Upon approval of resettlement budget Administrative Ministry will forthwith place budgetary fund to CPGCBL for disbursement to the PMU as per their budgetary allocation of fund.

6B. Preparation of Documents and Process of Payment

Based on EP file & EC IA will prepare indents by installments for payment of compensation and resettlement benefits to the EPs and submit the indents to the PMU along with EP files & EC authenticated by Team Leader & MIS specialist. Accordingly PMU will approve the indent after thorough scrutiny and authorize the Executive Engineer concerned of PMU to prepare cheques for individual EPs based on indent/ demand note of PMU.

The IA will prepare payment debit vouchers in quadruplicate, one for XEN concerned, one for PMU records, one for IA and one for the CPGCBL.

The Sub-divisional Engineer authorized by PD will make payment by disbursing account payee cheques to the EPs in a public place or Union Parishad office in presence of UP Chairman/Member with prior notice to the EPs concerned. The debit vouchers will be signed by Sub-divisional Engineer designated by PD.

While receiving the cheque EPs will show their ID Card to the CPGCBL officials and UP Chairman/Member who will identify the individual EP. Sub-divisional Engineer will submit monthly report on progress of disbursement of compensation and resettlement benefits to the PMU.

7. Payment by Deputy Commissioner

7A. Placement of Fund to DC for Payment of Compensation Under Law (CUL)

Following the process of acquisition, DC will make an award to the person interested for payment of compensation and send the estimate of the award of compensation to the Requiring Body (RB) under section 7 of the Acquisition and Requisition of Immoveable Property Ordinance 1982 and its amendments. As stipulated in this section 7 of the Ordinance the Executing Agency herein referred as a Requiring Body will place fund against estimated budget for compensation to the Deputy Commissioner directly within 60 days from the date of sending the request for placement of fund to EA by DC.

7B. Payment of Compensation Under Law By DC

The compensation payment under Law (L.A Ordinance) will be paid to entitled persons by the office of the Deputy Commissioner following the existing government rules and procedures.

8. Audit and Verification of Financial Documents

Bill/Vouchers and documents relating to payment of compensation & resettlement benefits shall be subject to half yearly audit and verification by the auditor of EA. And Audit report should be submitted to the C.E.O of the EA with a copy to P.D.

**TOR for Independent External Monitor
Chittagong Area Coal Fired Power Plant Development Project
Land Acquisition and Resettlement Action Plan
Independent Monitoring of Resettlement Activities**

Terms of Reference

1. Project Description

1. The proposed Chittagong Area Coal Fired Power Plant Development Project is an initiative to cope with a rapid increase in power demand in Bangladesh and supply power in a stable manner through the construction of a coal-fired power plant (2 x 600MW) in Chittagong Division in the southeast of Bangladesh.

2. To achieve the above objectives, the project components will be as follows:

- construction of a coal-fired power plant (2 x 600MW) with ultra super critical technology (Cox's Bazar District)
- construction of an excavated port including a fuel berth and a fuel transportation facility to the power plant (Cox's Bazar District)
- construction of an access road (Cox's Bazar District)
- extension of a 400kV transmission line between Matarbari and Anowara (Cox's Bazar District and Chittagong District)
- Construction of Township at Matarbari and Dhalghata union of Maheshkhali Upazila in Cox's Bazar District.

3. Power plant and Port facility

The proposed coal-fired power plant (CPCG Matarbari Coal-Fired Power Plant, 2 x 600MW) is located in Matarbari Union and Dhalghata Union in Maheshkhali Upazila in Cox's Bazar District, Chittagong Division .

4. Transmission line

The power plant will be connected to the substation facility in Anowara power plant, which will be constructed in the south of Chittagong, with a 400kV transmission line of approximately 60km. The transmission line will take a route along the local road . As land for construction of the transmission towers are subject to compensation, the final route will be determined so as to avoid any residential areas, taking into account the firmness of the land foundation.

5. Access Road

The location and route of access road is in the area from the national highway running between Chittagong and Cox's Bazar to the power plant site. Basically, existing road facilities will be utilized wherever possible. It is envisioned that the route segments to join the national highway in the north and the route from Maheshkhali Island to the power plant site will involve new road and bridge construction.

6. Township

The proposed Township for building residential quarters and other facilities for staff is located at Matarbari and Dhalghata Union in Maheshkhali Upazila, Cox's Bazar District, Chittagong Division.

B. Objective

7. The Land Actuation and Resettlement Action Plan (LARAP) is prepared for large scale land acquisition and to address involuntary resettlement impacts with a time bound action plan and appropriate budget provisions that would be incorporated as an integral part of project design.

The LARAP is based on the principle of the JICA Guidelines for Environmental and Social

Considerations that development projects must serve the needs of the society and ensure that PAPs are not made worse off by the proposed intervention. It aims to clarifying resettlement principles, organizational arrangements, and design criteria to be applied to the Project. It also addresses and fills the gap between the existing legislations of Bangladesh and the JICA Guidelines. In response to the above principle, involuntary resettlement should be an important consideration in project identification. Three important elements of involuntary resettlement are: 1) compensation for loss of assets, loss of income sources and livelihood means; 2) assistance for relocation including provision of relocation sites with appropriate facilities and services, and; 3) assistance for rehabilitation to achieve at least the same level of well-being. As warranted by policy requirement of JICA for involuntary resettlement the extent of losses has been identified and depending on estimation of losses LARAP is prepared. The LARAP will be translated into Bengali Language and disclosed for the reference of PAPs as well as other interested groups.

8. The Coal Power Generation Company of Bangladesh Ltd (CPGCBL) will implement the LARAP of Chittagong Area Coal Fired Power Plant Development Project engaging an experienced non-governmental implementing agency (IA) for the Project. The LARAP implementation will be over period of 4 years. The IA will implement the LARAP as per the resettlement policy, ensure stakeholders participation as per the Project need, and provide technical assistance for compensating the APs as per LARAP policy and packages.

9. The project supervision consultant through its national resettlement specialists will supervise and monitor the resettlement activities for the Project. CPGCBL is intending to engage an independent external monitor to ensure complete and objective information on monitoring and evaluation of the resettlement interventions.

II. Objectives of Independent Monitoring and Evaluation

10. In order to implement the LARAP properly, independent monitoring by third party of the executing agency, the supervision consultant and the implementing agency, preferably by an external monitoring consultant has been considered effective. Through independent monitoring, the executing agency can help ensure LARAP implementation activity efficient. It will be possible to identify bottlenecks and amend/improve the LARAP implementation procedure or payment modality through executive order, if found necessary. The major objectives of engaging the independent monitor are to:

- Assess the overall approach of resettlement activities along the alignment of the project
- Verify results of internal monitoring;
- Assess whether resettlement objectives have been met; specifically, whether livelihoods and living standards have been restored or enhanced;
- Assess resettlement efficiency, effectiveness, impact and sustainability drawing lessons as a guide to future resettlement policy making and planning; and
- Ascertain whether the resettlement entitlements were appropriate in meeting the objectives, and whether the objectives were suited to AP conditions.

III. Scope of Work - Specific Tasks

11. The independent monitoring consultant will set up a set of baseline indicators reviewing available data and or collecting primary data for monitoring and evaluation, building upon the Projects' own record keeping system. It may also include maps, charts, photographs of affected property, copies of contracts and land titles, payments, and valuation documents relating to resettlement. Specific tasks of the monitor are to

- Establish system of internal monitoring to assess progress in meeting key targets in the Resettlement Plan: budget and time frame, delivery of AP entitlements, consultation, grievance and special issues and benefits.

- Conduct regular reviews, based on internal monitoring and evaluation reports, involving key stakeholders including AP representatives. Reach consensus on actions required to improve resettlement performance and implement them.
- Establish a system for external monitoring and evaluation to assess achievement and suitability of resettlement objectives.
- Establish monitoring and evaluation reporting methods and reporting requirements.
- Involve APs, hosts, IA and community in Project monitoring and evaluation using appropriate methods.
- Include an ex-post evaluation of resettlement to be conducted by the independent monitor after completion of the Project.
- Review lessons learned for resettlement policy making and planning.

12. In specific to the Project the independent monitor should perform the following activities

- Monitor the authenticity of the data and the approach for generation of those.
- Review justification for changes in LARAP policy and budget.
- Verify progress and achievement of implementing agency and devise formats for estimating various indicators responsible for achievement of progress.

IV. Monitoring indicators and Information Needed

13. The information needed for independent monitoring are as follows:

A. Basic information on AP households

- Location
- Composition and structure, ages, educational and skill levels
- Gender of household head
- Access to health, education, utilities and other social services
- Housing type
- Land and other resource owning and using patterns
- Occupations and employment patterns
- Income sources and levels
- Agricultural production data
- Participation in neighbourhood or community groups
- Value of all assets forming entitlements and resettlement entitlements

B. Restoration of living standards

- Cost of compensation and entitlements
- Adoption of housing options developed
- Restoration of perceptions of "community"
- Replacement of key social and cultural elements

C. Restoration of livelihoods

- Cost of compensation and entitlements
- Degree of sufficiency of the compensation and entitlements
- Availability of replacement land
- Degree of sufficiency of transfer and relocation grants to cover the costs incurred
- Degree of sufficiency of income substitution allowances
- Degree of sufficiency of assistance for re-establishment of business enterprises
- Degree of sufficiency of assistance for re-establishment of CPRs
- Income earning opportunities provided to the vulnerable APs and their adequacy
- Degree of sufficiency of the jobs provided to the APs to restore pre-Project income level

D. Levels of AP satisfaction

- Level of the knowledge about resettlement procedures and the entitlements

- Knowledge base on fulfillment of these provisions
- AP assessment on restoration of living standards and livelihoods
- Knowledge on GRC mechanism and conflict resolution procedure

E. Effectiveness of Resettlement Planning

- Assistance provided to land speculators
- Sufficiency of time and budget to meet objectives of the LARAP
- Degree of generosity of the entitlements
- Identification of vulnerable groups
- Dealing with unforeseen problems by LARAP implementers

Other Impacts

Unintended environmental impacts

Unintended impacts on employment or incomes

V. Approach and Methodology

(i) General Approach

14. Appropriate methods will be followed to collect field level information in order to review and compare the socioeconomic condition of APs "before" and "after" resettlement program. Collected information on the key indicators of resettlement progress, efficiency, effectiveness, impact and sustainability will be analyzed. The monitoring and evaluation consultant will also conduct at least one ex-post evaluation Surveys to assess the achievement of resettlement objectives, the changes in living standards and livelihoods and the restoration of the economic and social base of the APs.

(ii) Detailed Methodology

15. The independent monitor will use existing baseline census and Survey data with their periodic updates. In specific the independent monitor perform its activity in the following methods:

- Review pre-Project baseline data on income and expenditure, occupational and livelihood patterns, leadership, community organizations and cultural parameters.
- Identify an appropriate set of indicators for gathering and analyzing information on resettlement/rehabilitation impacts; the indicators shall include but not limited to issues like relocation of affected people, delivery of entitlement, and level of satisfaction by the beneficiaries of the programs.
- Review result of internal monitoring and verify claims through random checking at the field level to assess whether resettlement/ rehabilitation objectives have been generally met. Involve the APs and community groups in assessing the impact of resettlement programs for monitoring and evaluation purposes.
- Conduct both individuals and community level impact analysis through the use of formal and informal Surveys, key informant interviewers, focus group discussions, community public meetings, and in-depth case studies of APs/women from the various social classes to assess the impact of LARAP implementation.

(iii) Methodology for Participatory Rapid Appraisal

16. The affected and host people should be involved in the monitoring and evaluation process to solve day-to-day problems arising during resettlement operations. APs, local CBOs, and/or local NGOs should be involved in the process. The key players should be involved in the evaluation design and implementation. Participatory Rapid Appraisal (PRA) techniques should be undertaken to foster the involvement of APs and other key stakeholders in resettlement monitoring and implementation. The methodology of the PRA should be as follows:

- Key informant interviews: select local leaders, community workers or persons with special knowledge or experience about resettlement activities and implementation.
- Focus group discussion: specific topics (e.g. land compensation payments, services at resettlement sites, income restoration, and gender issues)
- Field observations on status of resettlement implementation, plus individual or groups interviews for cross-checking purposes.
- Informal Surveys/interviews: informal Surveys of APs, hosts, community workers, resettlement staff, and implementing agency personnel using non-sampled methods.

VI. Required Resources

17. The tasks require a consultant experienced in the field of resettlement planning, implementation and monitoring. The consultant should have sufficient technical and professional skill in dealing with involuntary resettlement as per JICA guidelines.

Criteria for selection of Consultant

18. The Consultant must be able to present appropriate evidence to verify his/her satisfactory performance in resettlement planning, implementation, monitoring and evaluation and preparation of analytical/evaluation reports meeting the standards of the external financiers.

VII. Staffing for the Tasks

19. The consultant must be able to present evidence of his/her skill and sufficiently qualified, experienced and trained manpower to mobilize to the field to collect data according to the requirements. In order to carry out the tasks stipulated in this Terms of Reference, the field level input should be limited as shown in Table 1 below. The consultant should show the duration of their services and limit as per requirement in consultation with the civil works contact. However, the mobilization is based on field requirement only.

Table 1: Staffing for Independent Monitoring

Position	Nos. Unit	Estimated no. of man months
Resettlement Monitor	1	16
Data Collector/Data Processor	4	60
Total	5	76

X. Stakeholders and their Responsibility

a. Responsibility of Executing Agency

20. Responsibility of the Executing agency will be as follows-

i. CPGCBL through its Project Management Unit (PMU) and the Resettlement Unit (RU) will ensure timely supply of background references, data to the independent monitor. It will ensure uninterrupted access to work sites, relevant offices of the GOB and CPGCBL in particular. The independent monitor will sit in quarterly coordination meetings with the CPGCBL in presence of the PSC and CPGCBL should organize that at PMU or RU level as appropriate.

ii. Recommendation based on the result of the monitoring should be offered to CPGCBL to cover up the deficiencies identified by the independent monitor. The CPGCBL will accept the recommendations of the independent monitor if it is within the scope of work and there is nothing incorrect in the report.

b. Responsibility of Project Supervision Consultant

21. The project supervision consultant (PSC) will provide appropriate protocol at site or at its Project Office for the mission of the independent monitor. It will, on behalf of the EA, ensure free access to work sites, impact areas and the database on resettlement and civil

works. The PSC will ensure timely intimation of its civil works planning as and when made or updated during the construction period and Keep the Independent Monitor informed.

c. Responsibility of LARAP Implementing Agency (IA)

22. The LARAP Implementing Agency will assist and cooperate with the independent monitor through providing free access to its database and the automated management information system (MIS). It will provide copies of the progress reports and other reports as requested by the independent monitor. The IA may have to carry out surveys as well for fulfillment of the requirements of the independent monitoring.

d. Japan International Cooperation Agency (JICA)

23. The Japan International Cooperation Agency (JICA) will review the activities of the independent monitor in light of the social safeguard strategy and the involuntary resettlement guideline of JICA. JICA will ensure timely response from the EA on queries and recommendations from the independent monitor.

XI. Time Frame

24. The independent monitor will be employed from starting of the project and runs down to the end of project intermittent inputs of total 16 months over the project period.

XII. Reporting Requirement

25. Half yearly monitoring report should be submitted to the CPGCBL and simultaneously to the JBIC. An evaluation report at the end of the Project should be submitted to the CPGCBL and concerned parties with critical analysis of the achievement of the program and performance of the EA and IA. The independent monitor will report to CPGCBL and JICA based on some agreed upon formats developed in consultation with the CPGCBL.

XIII. Budget and Logistics

26. The budget will includes all expenses such as staff salary, training, computer/software, transport, field expenses and other logistics necessary for resettlement monitoring. The budget contains a workshop to be conducted together with the project supervision consultant to disseminate and discuss the Project experience of implementation of resettlement action plan of the project. Additional expense claims whatsoever outside the proposed and negotiated budget will not be entertained. VAT, Income Tax and other charges admissible will be deducted at source as per GOB rule.