

# Resettlement Plan

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## Bangladesh: Rupsha 800 MW Combined Cycle Power Plant Project

### Component 3: Power Transmission Interconnection

Prepared by North West Power Generation Company Limited (NWPGL), an enterprise of Bangladesh Power Development Board under the Ministry of Power, Energy and Mineral Resources of the People's Republic of Bangladesh for the Asian Development Bank.

## **CURRENCY EQUIVALENTS**

(as of October 2017)

Currency unit	–	taka (Tk)
Tk1.00	=	\$0.0123
\$1.00	=	Tk81.04

## **WEIGHTS AND MEASURES**

1 ha	–	2.47 acre
1 ha	–	10,000 sq.m
1 acre	–	100 decimal

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## **Abbreviations and Acronyms**

ADB	Asian Development Bank
AH	affected household
AP	affected person
BBS	Bangladesh Bureau of Statistics
CEGIS	Center for Environmental and Geographic Information Services
CMP	Current Market Price
DC	Deputy Commissioner
EA	executing agency
FGD	Focus Group Discussion
GAP	Gender Action Plan
GRC	Grievance Redress Committee
ha	hectare
HIES	Household Income and Expenditure Survey
HH	household
km	kilometer
LGI	Local Government Institution
PMU	Project Management Unit
PWD	Public Works Department
RP	resettlement plan
RoW	right-of-way
Sft	square foot
SPS	Safeguard Policy Statement 2009

## Glossary

**Affected Person (AP)** includes any person, affected households (AHs), firms or private institutions who, on account of losses that result from the project. There are three types: (i) persons with formal legal rights to land lost in its entirety or in part; (ii) persons who lost the land they occupy in its entirety or in part who have no formal legal rights to such land, but who have claims to such lands that are recognized or recognizable under national laws; and (iii) persons who lost the land they occupy in its entirety or in part who have neither formal legal rights nor recognized or recognizable claims to such land. The involuntary resettlement requirements apply to all three types.

**Affected Household (AH)** includes all members residing under one roof and operating as a single economic unit, who are adversely affected by the project. For example, those sharing the same kitchen and cooking food together as a single-family unit.

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

**Compensation** includes payments in cash or kind for assets acquired or affected by a project at replacement cost or current market value.

**Cut-off date** refers to the date after which eligibility for compensation or resettlement assistance will not be considered. Date of service of notice under Section 3 of Land Acquisition Ordinance is considered to be the cut-off date for recognition of legal compensation and the start date of carrying out the census/inventory of losses is considered as the cut-off date for eligibility of resettlement benefits.

**Elderly Headed Household** follows the Department of Social Service of Ministry of Social Welfare that uses 65 years for males and 62 years for females to define elderly people.

**Eminent Domain** refers to 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.

**Entitlements** include 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.

**Inventory of losses** includes assets listed during the survey/census as a preliminary record of affected or lost assets.

**Khas land** refers to state-owned fallow land, where nobody has property rights. The Government is entitled to both lease and give away the land to citizens of the country who do not own land. Khasland is considered an important livelihood source for the extreme poor. The khas land, however, is available for allocation according to government priorities.

**Kutcha** refers to type of temporary housing structure (commonly used in rural areas) made of mud brick, bamboo, sun-grass, wood and occasionally corrugated iron sheets as roofs.

**Nontitled** refers to persons who have no recognisable 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. ADB's policy explicitly states that such people cannot be denied resettlement assistance.

**Parcha** is a record of rights of a land owner.

**Project** means component 3: Power transmission interconnection from the Rupsha Power Plant through 24.61 km transmission line of the 800 MW Combined Cycle Power Plant Project at Khulna, Bangladesh of North-West Power Generation Company Limited.

**Pucca** refers to a type of permanent housing structure (common in urban areas) with brick walls and roofs of concrete. Generally with a life span of over 25 years.

**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** refers to the value of assets to replace the loss at fair 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. The calculation of full replacement cost will consider; (i) transaction costs; (ii) interest accrued, (iii) transitional and restoration costs; and (iv) other applicable payments, if any.

**Replacement land** refers to 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. In this project, there is no provision for replacement land. However, additional project assistance is allowed in the form of current market rate as grant to affected persons to buy land lost to the project.

**Resettlement** refers to 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.

**Semi-pucca** refers to semipermanent housing structure where walls are made partially of bricks, floors are cemented and roofs are made from corrugated iron sheets.

**Structures** include 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.

**Vulnerable Households** include households that are include those that are (i) households that are headed by women; (ii) household headed by persons with disabilities; (iii) households falling under the generally accepted indicator for poverty,<sup>1</sup> (iv) elderly headed households, (v) households who are landless, and (vi) who are without legal title to land.<sup>2</sup>

## NOTE

In this report, "\$" refers to US dollars.

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<sup>1</sup> In lieu of a national poverty line, this is based on the Bangladesh Bureau of Statistics Survey 2010 taking into account inflation has been used to calculate per-capita monthly income for individuals under the poverty line as Tk1,731 and Tk9,176 for households in the Khulna Division. Source: <https://www.bb.org.bd/econdata/inflation.php>.

<sup>2</sup> Vulnerable status for the persons without legal title is determined based on the social impact assessment/survey.



## Executive Summary

### Project Description

i. This draft resettlement plan (RP) is for component 3 of the Rupsha 800 MW Combined Cycle Power Plant Project. The executing agency (EA) for the project is the North-West Power Generation Company Limited (NWPGL), an enterprise of Bangladesh Power Development Board (BPDB). NWPGL plans to enhance the country's power generation by constructing the 800 MW Combined Cycle Power Plant (CCPP) at Khalishpur, Khulna. NWPGL has received approval from the Ministry of Power Energy and Mineral Resources (MoPEMR) to develop the project.

ii. The project has four components, such as: Component 1: the Rupsha 800 MW Combined Cycle Power Plant (CCPP); Component 2: Gas supply to the power plant, a new 10 km gas pipeline from City Gate Station (CGS), Aronghata, Khulna to the receiving and metering station to be located at the proposed Khulna CCPP site, and a new 2.0 km gas pipeline from Fair Clinic Morh, Khalishpur to 225 MW power plant, Goalpara, Khalishpur, Khulna; Component 3: Power transmission interconnection, via a 29 km transmission line; and Component 4, Capacity strengthening of NWPGL.

iii. This resettlement plan relates to activities undertaken under component 3: Power transmission interconnection. The power evacuation facilities include a 24.61 km new long transmission line which covers eight (8) unions and ward no. 13 of City Corporation under four (4) upazilas (Batiaghata, Daulatpur, Khalishpur and Rupsha) of Khulna district, within Khulna Division Bangladesh. In addition, 4.7 km of an existing transmission line, will be re-strung.

### Scope of Land Acquisition and Resettlement

iv. The 24.61 km long and 20 meter-wide 230 kV overhead double circuit transmission line alignment will pass over primarily over agricultural lands. This new transmission line will consist of 75 towers of which 25 are angle point towers and the remaining 50 are suspension (48) and terminal (02) towers. Installation of the new transmission line temporarily requires 49.22 ha of land in the right-of-way (RoW); with an additional 3.36 hectares impacted for the RoW of the additional 4.7km restringing. Construction of 75 towers requires 12.02 ha of land, out of which 1.08 ha of land (0.0144 ha i.e. 144 sqm for each tower) is required for erection of towers. Based on the preliminary assessment, there are up to 7 households (26 persons) whose structures may be affected by transmission lines of Component 3 (see **Table 2.1**). The residential structures of 5 households and commercial structures of 2 households affected by the lines will be shifted if distance between lines and structures is not enough to secure vertical and/or horizontal clearance in the relevant regulations. Of the total 7 households, 2 households are considered as vulnerable being both below the poverty indicator and landless. The NWPGL will try to avoid these structures during implementation. Component three will also have temporary impacts on crops in the RoW.

v. Presently the laws of Bangladesh do not permit acquisition of land under towers or in the RoW; as such temporary crop impacts are considered. It is not possible to make a final estimate of the number of persons affected by the RoW until the final engineering designs are completed. However, an assumption is made to reach a preliminary estimate based on the average land holding size of households in the project impact area. As such, an additional estimated 107 households (approximately 450 persons) are anticipated to experience temporary crop impacts

in the RoW (52.58 ha). As such, the total estimated affected households are 114 and 476 persons from all impacts of component 3.

### **Information Dissemination and Stakeholder Consultation**

vi. Consultation during the preparation of this draft resettlement plan was undertaken via public meetings and focus group discussions in Senhati and Batiaghata unions of Khulna district. The first round of consultation took place on 12 November 2016, with 3 meetings and participation by 54 persons (including 21 women). Followed by a disclosure meeting in October 2017 with 64 attendees (52 men and 12 women). The project interventions and their likely environmental and social impacts were shared with project stakeholders (both direct/indirect and/or primary/secondary) in the meetings. Additional consultation will take place with affected households as the route alignment is finalized. In the event that major changes are made to the alignment, the RP will be updated and disclosed as per disclosure requirements laid out in ADB's Safeguard Policy Statement 2009 (SPS).

### **Legal and Policy Framework**

vii. The legal and policy framework of the resettlement plan is based on national laws and legislations related to the Electricity Act, 1910; the Telegraph Act 1885; Acquisition and Requisition of Immovable Property Ordinance 1982 (ARIPO) and subsequent amendments during 1993–1994 in Bangladesh and ADB's SPS. Based on the analysis of applicable national laws and policies and ADB's safeguard policy requirement, project related resettlement principles have been adopted. The primary legislation under which the transmission line has been regulated is the Electricity Act 1910. Subsection 3 under Section 12 in the Act makes provision for compensation that the District Magistrate shall fix the amount of compensation or of annual rent, or of both, which he thinks fit be paid by the licensee to the owner or occupier. Accordingly, for construction of towers for evacuation of power from the Rupsha 800 MW power plant no land acquisition will be involved as per existing Electricity Act 1910 and the Telegraph Act 1885 in force; however compensation for temporary crop impacts are addressed through this RP, along with compensation for other assets at replacement cost and various allowances.

### **Grievances Redress Mechanisms**

viii. The EA (NWPGL in this case) will establish a project specific Grievance Redress Mechanism (GRM) having suitable grievance redress procedure to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances. Three tiers of grievance redress will be available; the first is via field officers who can respond to immediate issues and work with contractors accordingly; the second level is via NWPGL's Project Management Unit (PMU) involving resettlement specialists and members of the project team; if grievances are still not addressed they can be referred to a local grievance committee established for the project.

ix. The GRM will be continuously disseminated to people during project implementation. The project grievance procedure does not impede access to the court at any time.

### **Resettlement Budget**

x. This RP presents estimated costs for temporarily land requisition and rehabilitation of APs. The estimated cost in this budget is indicative and will be verified prior to finalization. If more than 12 months passes, the asset costs presented herein will be updated to ensure alignment with current rate schedules. The rehabilitation costs and budget covers compensation

for crops in the agricultural land, affected structures in the alignment and brick pile shifting in brickfield lands. Total estimated cost for resettlement is about Tk25.02 million in which Tk (approximately \$0.31 million).

### **Institutional Arrangements**

xi. NWPGL will establish a Project Management Unit (PMU) for the implementation of the project including land requisition and resettlement. NWPGL will be responsible for finalization, updating, implementation and monitoring of this resettlement plan. During implementation of the RP, a temporary social safeguards staff (or consultant) of the PMU in NWPGL will be responsible for ensuring that the draft RP is finalized and updated based on SPS 2009 of ADB, and applicable national laws and regulations. NWPGL environment and social safeguard staff at their headquarters will provide general oversight of field-based staff.

### **Implementation, Monitoring and Reporting**

xii. RP implementation will take place over approximately two (2) years, starting from compensation initiation to payment finalisation, and semiannual monitoring reports will be prepared and submitted. The schedule will be adjusted during final design and implementation.

xiii. Internal monitoring of this resettlement plan is the responsibility of NWPGL through its PMU. NWPGL will submit semiannual internal monitoring reports on safeguards instruments to ADB which will be disclosed to the ADB website.

## 1. Description of the Project

### 1.1 Introduction

1. This draft resettlement plan (RP) applies to component 3 of the Rupsha 800 MW Combined Cycle Power Plant (CCPP) Project (hereafter 'the project'). The executing agency (EA) for the project is the North-West Power Generation Company Limited (NWPGL), an enterprise of Bangladesh Power Development Board (BPDB). NWPGL is planning to develop and operate the 800 megawatt (MW) combined cycle power plant (CCPP). The power plant will be constructed in Khulna city, situated in Khalishpur Upazila, Khulna District in the administrative division of South-Western Bangladesh.

2. NWPGL has received approval from the Ministry of Power Energy and Mineral Resources (MoPEMR) to develop the project. The project has four components as follows:

3. **Component 1, Rupsha 800 MW Combined Cycle Power Plant (CCPP).** The Rupsha power plant will be built in the (now abandoned) Khulna newsprint factory premises. It will be of a nominal capacity of 800 MW. The power plant will use combined cycle gas turbine technology, comprising two identical generating units, each nominally rated at 400 MW. Each combined cycle unit will consist of one gas turbine and one heat recovery steam generator (HRSG), forming a one-on-one configuration. At full capacity of 800 MW, the Rupsha power plant is capable of meeting 5% of the forecast peak demand of Bangladesh in year 2022.

4. **Component 2, Gas Supply to the Power Plant.** Petrobangla, the national gas utility and the single-buyer for the gas industry, will procure liquefied natural gas (LNG) from international sources and deliver regasified LNG to Khulna city gas station (CGS). The regional gas distribution company, the Sundarban Gas Company Limited (SGCL) will deliver gas from the existing Khulna CGS to the Rupsha power plant. A new 24-inch (0.6 m) underground gas pipeline 10 km long will be installed from Khulna CGS to the Rupsha 800 MW power plant.

5. **Component 3, Power Transmission Interconnection.** Electricity generated in the Rupsha power plant will be stepped-up to the transmission voltage of 230 kilovolt (kV). A new 24.61 km transmission line will be built, with an additional 4.7 km of existing line restrung from the proposed power plant to the existing Khulna South substation. The new transmission line will require 3 main river crossings and several minor river crossings, and would traverse mostly through rice fields. Upon reaching the existing Khulna South substation, the line will be terminated at two new line bays and termination equipment to be installed under the project. Thereafter, electricity produced at Rupsha power plant will flow into the 230 kV transmission network, to serve the electricity demand in Khulna and elsewhere in the country.

6. **Component 4, Capacity Strengthening of NWPGL** includes (i) improving project implementation, management, and construction supervision capabilities; (ii) establishing enterprise resource planning system in NWPGL; and (iii) enhancing operation and maintenance practices through procurement and installation of modern and high technology universal power plant operations training simulator. Project management and construction supervision support will be provided for the development of Rupsha power plant.

## 1.2 Component 3 Power Transmission Line Description

7. The proposed component 3 (applicable to this RP) is the construction of a 29.31 km (24.61 km + 4.70 km re-stringing) long 230 kV overhead double circuit transmission line from the switch yard of the proposed Khalishpur 800MW power plant to Khulna South Substation (SS) for evacuation of generated power of the proposed CCPP. The transmission line will cross three major rivers namely the Bhairab River, the Rupsha River and the Atai River each one time, brick-fields, brick road, earthen road, metal road and canal. About 75 towers with 25 angle towers are to be constructed for the 24.61 km line. There is a double circuit 230 kV TL (existing) with a provisirRon for another double circuit line, from Khulna South Substation (SS) to Mongla.

8. The proposed power evacuation transmission line will join the above-mentioned Khulna-Mongla line at a point (coordinate 22°45'31.10"N, 89°31'39.89"E) 5 km away from Khulna South substation and will pass through the provisioned route. This 4.7 km line will not require any new towers as the infrastructure of this line segment already exists.

## 1.3 Physical Features of the Transmission Line

9. The proposed transmission line will be the overhead type transmission. The major physical features 230 kV overhead TL are given in **Table 1.1**. The line supporting tower will be a steel tower which are of three types – Tension, Terminal and Suspension. Tension towers will be installed in angles (Photograph 1.1) and suspension poles will be installed along the line (Photograph 1.2) as load bearing support. A disc type insulator will be used in the poles to bear the wire (Photograph1.3).

**Table 1.1:Physical Features of the new 230 kV transmission line**

Sl. No.	Physical Features	Attribute
1	Voltage Rating	230 kV
2	Type of Transmission Line	Double circuit
3	Width of T/L Right of Way for environmental impact assessment	100 meters (40 m left + 20m DIA + 40 m right)
4.	Direct Impact Area (DIA) for Resettlement and Compensation	20 meters (10m left + 10m right)
5	Type of Line Support	Steel 230 kV lattice Towers
6	Conductor Material	Aluminum Conductor Steel Reinforced (ACSR) Mallard
7	Line Insulator	Disc type, Porcelain
8	Type of Connection	Substations

Source: PGCB, 2016.



**Photograph 1.1: Tension Tower (230 kV TL)**



**Photograph 1.2: Suspension Tower (230 kV TL)**



**Photograph 1.3: Disc Insulators for transmission line**

#### **1.4 Measures to Minimize Impacts**

10. The proposed component 3, transmission alignment has been designed to minimize resettlement impacts. Criteria for route selection considered distance from connecting roads would need to be no more than 1km, avoidance of urban and settlement areas, rives and water bodies. Three route options were considered, see Table 1.2 and Figure 1.1. The selected option (2) is not within any urban areas, has low settlement, and can join an existing power transmission line (approximately 5 km) thereby further reducing impacts.

11. Local people were consulted with regards to the route selection for component 3. Most people opined in favour of option 2 (see Table 1.2). Option 2 covers mostly agricultural lands. Whilst option 3 covers the shortest length; it passes through the urban area of Khulna City. There are a large number of settlements and high-rise buildings in the RoW area of option 3. The length of option 1 is more or less similar to that of option 2 but has medium density settlements i.e. higher density of settlement compared to that in option 2 alignment. Considering these aspects local people favoured option 2 as the transmission line alignment. Table 1.2 presents a comparative analysis of three alternative options.



12. Furthermore, during the design process additional changes were made to the tower locations, so that these would not be located in any shrimp ponds, thus ensuring fishermen will be kept safe from danger of electrocution.

**Table 1.2: Alternative route analysis**

Factors behind route selection	Units	Option 1	Option 2 (Selected)	Option 3
Route Length	km	23.2	24.61	10.9
Urban area	Y/N	N	N	Y
Density of settlement	Low/Medium/High	Medium	Low	High
Existing power transmission line	Nos.	0	1	1
Existing important infrastructure	Low/Medium/High	Medium	Low	High
River crossing	Nos.	4	6	0
Cost involvement	Low/Medium/High	Medium (OHT)	Low (OHT)	High (underground T/L)
Reserve forest	Y/N	N	N	N
Ecologically Critical Area (ECA)	Y/N	N	N	N
Bird habitat and declared IBA	Y/N	N	N	N

13. The selected route is shown in the following figure (Figure 1.1). During initial site surveys option 2, was found to result in impacts to 110 temporary and semipermanent residential structures. As such, the project team worked with the engineering team to redesign the route to avoid these structures. Minimising impacts, so that only an estimated 7 households may be impacted (residential and nonresidential structures and assets).



**Figure 1.1: Power Evacuation for 800 MW Transmission Line Route Option**

## 2. Scope of Land Acquisition and Resettlement

### 2.1 General

14. Impacts due to project interventions were assessed through field surveys conducted from the 5–11 November 2016. Later to reduce impacts of the project (component 3) the alignment/RoW was redesigned and thus route survey and census of the properties in the alignment were also conducted from 13–15 June 2017. The techniques used for data collection, however, include (i) inventory of losses; and (ii) focus group discussions (FGD). Checklists were used for collecting data. A team of experienced field staff facilitated these activities. After finalisation of the detailed design, if any major changes to the alignment are made, this RP will be updated to finalise information on project related impacts. All entitlements will be paid prior to the commencement of civil works.

15. Based on the preliminary assessment, there are up to 7 households (26 persons) whose structures may be affected by the transmission lines. The residential structures of 5 households and commercial structures of 2 households affected by the lines will be shifted if distance between lines and structures is not enough to secure vertical and/or horizontal clearance in the relevant regulations. Of the total 7 households, 2 households are considered as vulnerable being both below the poverty indicator and landless. The NWGPCL will try to avoid these structures during implementation.

16. Component 3 will also have temporary impacts on crops in the RoW. The area under the RoW for the new transmission line is 49.22 hectares (121.6 acres) of which 31.9 hectares (79 acres) is highland/medium agricultural land. In addition, 3.36 hectares may also be effected in the RoW of the 4.7 km restringing of an existing transmission line. Presently the laws of Bangladesh do not permit acquisition of land under towers or in the RoW; as such temporary crop impacts and tree impacts are captured herein.

17. It is not possible to make a final estimate of the number of persons affected by the RoW until the final engineering designs are completed. However, an assumption is made to reach a preliminary estimate based on the average land holding size of the households in the project impact area. As such, an additional estimated 107 households (approximately 450 persons) are anticipated to experience temporary crop (or brickfield) impacts within the RoW (52.58 ha total RoW of new line and restringing area). As such, the total estimated affected households are 114 and 476 persons from all impacts of component 3.

**Table 2.1: Summary of impacts**

Particulars	Details
Length in kms for new TL (km)	24.61
Existing line re-stringing (km)	4.7
Number of Angle Towers (AT)t	25
Number of Suspension Towers (ST)	48
Number of Terminal Tower (TT)	2
Total towers (AT, ST & TT)	75
Total Area under RoW (ha) for new line & restringing	52.58
Total permanently affected households	7
Total permanently affected persons (RP survey finding)	26



Particulars	Details
Total households with residential structures affected	5
Total persons with residential structures affected (RP survey finding)	19
Total households (businesses) with commercial structures affected	2
Total permanently affected vulnerable households	2
Estimated temporarily affected vulnerable households	27
Estimated temporarily affected households (crop impacts)	107
Estimated temporarily affected persons (crop impacts)	450
Trees in private area (Nos.)	215
Trees in government area (Nos.)	25
Total trees	240

## 2.2 Impact on Land

18. For the construction of the new transmission line (24.61 km) and installation of 75 towers, will be carried out on private agricultural land and government land (river, river embankment, road) see **Table 2.2**. This land will not be subject to permanent acquisition, as per the laws of Bangladesh. However, temporary impacts on crops are considered in this RP.

**Table 2.2: Affected land types in the alignment of new transmission line**

Land type	Area in ha	Area in %
Highland (agricultural land, embankment, road)	1.46	2.96
Medium highland (agricultural land)	30.52	62.01
River	4.27	8.68
Settlement	6.56	13.32
Waterbodies	6.42	13.04
Total	49.22	100.00

19. Most of the angle towers (21) will be installed on agricultural land, with three installed on brick field land. The exact location for suspension towers is yet to be finalized. Resulting losses will be compensated and are included in the entitlement matrix. Impacts on crops and brickfields in detail is presented in sections 2.5, 2.7 and 2.8 below, respectively.

20. Installation of this transmission line (24.61 km x 20 m) temporarily requires 49.22 hectares (ha) of land within RoW and restringing may temporarily affect an addition 4.7 km (3.36 hectares) in the RoW. About 1.08 ha (0.0144 ha = 144m<sup>2</sup> for each tower) is required for erection of 75 towers (25 angle towers + 48 suspension towers) within the RoW. Land under each footing is 0.21 square meter, so each tower with four footings will need 0.84 square meter for its footings.

## 2.3 Affected Residential Structures in the RoW

21. For the overhead transmission line, a total of 5 (five) households with residential structures are anticipated to be affected (see **Table 2.3**). All the affected households use the affected structures for their own purposes. Renters or sharecroppers are not found among the affected structure owners. Three of the households own their land. Whilst, two households are

landless (squatters), who reside in the government/ kash land at the Samanta Sena village of Khulna district.

**Table 2.3: Land ownership status by affected residential structures in ROW**

Sl. No.	Land Ownership Status	Affected Structures & Fixed Assets
1	Owner	Bedroom (semi-pucca), Kitchen (kutcha), Toilet (Semi-pucca) and Tubwell
2	Owner	Kitchen (kutcha)
3	Owner	Bedroom (tin shed), Cow shed (kutcha), Kitchen (kutcha), Tubwell, Toilet (ring slab)
4	Nontitled	Bedroom (tin shed), Kitchen (kutcha)
5	Nontitled	Bedroom (tin shed), Tubwell, Toilet (ring slab)

22. Based on survey data, it is observed that there are five households with residential structures, one store room of a brickfield, and one shallow tube well (STW) with its shed of a household located who are within the current alignment/RoW of the proposed transmission line. These structures are mostly kutcha (tin roof). The affected structures by number and type (based on construction materials) are presented in **Table 2.4** below.

**Table 2.4: All affected residential structures by type in the alignment**

Category of losses	Type of structures (No.)		
	Semi-pucca (Semipermanent)	Kutcha (Temporary)	Total
<b>Primary structures</b>			
Bed room	1	4	5
Kitchen	-	4	4
Cow shed	-	1	1
Total	1	9	10
<b>Secondary structures</b>			
Toilet	2	2 (Ring slab)	4
Hand tube well	4		4
Shallow Tube Well	1		1
Total	-		9

## 2.4 Affected Commercial Structures

23. Within the RoW two commercial structures, belonging to two households (commercial business), with one affected brickfield store room and 01 affected shallow tube well (STW) housed within a shed for irrigation purposes are within the alignment/RoW of the proposed transmission line, see **Table 2.5**

**Table 2.5: Affected Commercial Structures in Alignment**

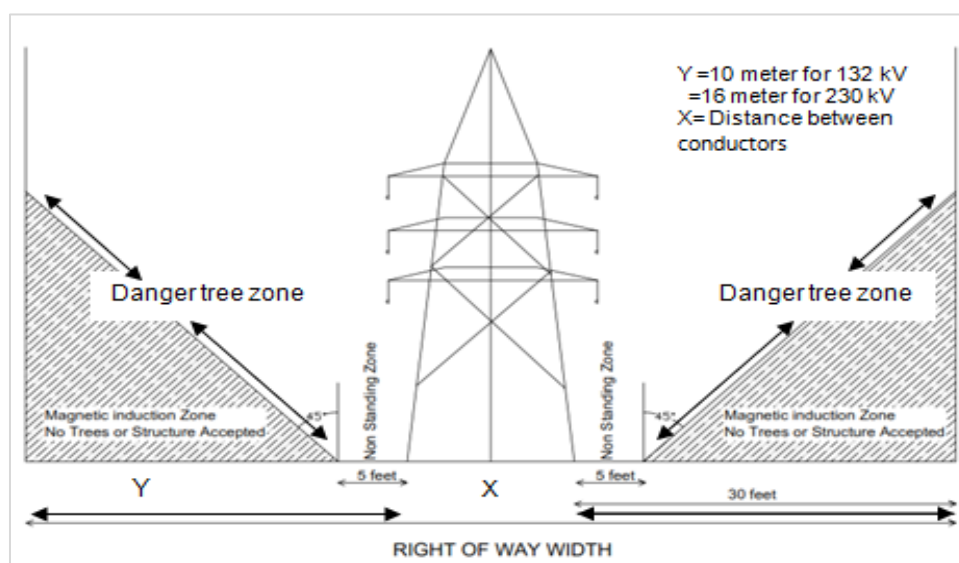
Sl. No.	Legal status of ownership	Commercial Structure
1	Owner	Brickfield store room (semi-pucca)
2	Owner	Irrigation shallow tube well & its shed

## 2.5 Temporary Loss of Crops

24. The affected land is mostly agricultural (>60%), with the predominant crop being rice. Other than rice produced in Kharif-II and Rabi seasons, vegetables, khesari (pulse) and sesame (oil seed) are also produced. Compensation for loss of crops will be paid to the affected persons and is considered in the budget of this RP. The total land area being considered for crop loss is 52.58 ha along the RoW of both the new transmission line and the area for re-stringing; as well as allowing for some additional lay down areas (see Appendix Table A2.3). Farmers will not be able to cultivate for two seasons i.e. one year during construction. The land under the towers (1.08 ha) after construction of the transmission line will no longer be useful for crop cultivation for two years until land fertility is restored. For budget estimate purposes 107 households are anticipated to be affected within the RoW of both the new line and the 4.7 km re-stringing, calculated based on the average land holding size.

## 2.6 Loss of Trees

25. The initial survey indicates that there are 240 trees (fruit and timber) on private and government land in the alignment. Out of 240 trees, 215 are on the private land and 25 are on government land. It is mandatory to remove and trim the trees in and adjacent to the RoW, respectively for ensuring safety. **Figure 2.1** shows the safe zone for the 230 kV transmission line, and trees in the clearance width and safe zone have been considered. Compensation for trees is considered in the budget of this RP. Details of the affected trees are presented in the tables (**Table 2.6** and **Table 2.7**) below.



Source: PGCB document

**Figure 2.1: Safe and clear zone for the 230 kV transmission line**

**Table 2.6: Affected trees on private land by species and number**

Name of Tree	Big	Medium	Small	Sapling	Total
Fruit tree					
Betel nut	18	48	7	9	82
Black berry	0	17	0	0	17

Name of Tree	Big	Medium	Small	Sapling	Total
Coconut	0	0	11	6	17
Gaab	0	5	0	0	5
Date ( <i>Khejur</i> )	4	41	0	0	45
Mango	0	3	7	0	10
Palm	0	0	8	2	10
Subtotal	22	114	33	17	186
Timber tree					
Rain tree	0	0	2	0	2
Mehgony	0	6	11	0	17
Babla	2	5	3	0	10
Subtotal	2	11	16	0	29
<b>Total</b>	<b>24</b>	<b>125</b>	<b>49</b>	<b>17</b>	<b>215</b>

Table 2.7: Affected trees on government land by species and number

Name of Timber Tree	Size of tree				
	Big	Medium	Small	Sapling	Total
Rain tree	0	6	4		10
Mehgoni	2	9	4		15
<b>Total</b>	<b>2</b>	<b>15</b>	<b>8</b>	<b>0</b>	<b>25</b>

## 2.7 Impact on Brickfield

26. The RoW of the proposed power transmission line will pass over the edge of 11 brickfields. The transmission line is not anticipated to affect brickfield production activities functioning of chimneys, or any labourer sheds. Three (3) towers will be constructed on brickfield lands, designated as commercial land. The brickfield owners and workers separately stated based on their previous experience during census that construction activities would not affect their regular activities. They did not experience negative impacts previously during construction periods. Given the laws of Bangladesh do not allow for land acquisition for towers or in the RoW, efforts have been made to fully consult with affected brickfield owners (detailed discussion in Appendix 1). During interviews with brickfield owners, they, opined that implementation of this project will not affect their daily activities. This RP includes an allowance for tower construction in the brickfield for shifting brick piles.

27. The field team identified an existing transmission line with a tower over a brickfield adjacent to the RoW of the proposed power transmission line. The existing transmission line passes over the brickfield (see photograph presented below).



**Photograph 2.1: Existing power transmission line over the brickfield adjacent to the proposed RoW**

## **2.8 Vulnerable Households**

28. The number of potentially permanently affected households who are found to be vulnerable two (2) at this time, both households are below the generally accepted indicator for poverty (see glossary) and are also nontitled (residing on government land/landless). No other categories of vulnerability are found in the RoW/alignment area. Additional vulnerable households affected by temporary crop impacts will be confirmed (once detailed design is confirmed), it is estimated that 27 additional households are likely to be vulnerable and as such have been included the budget estimate.

### **3. Socioeconomic Profile**

29. This chapter provides a socioeconomic profile of the population in terms of demography, literacy, employment in Khulna district through which the lines will traverse for the project. The study area covers Batiaghata, Daulatpur, Khalishpur and Rupsha upazilas of Khulna District. The socioeconomic profile data is collected from the Population and Housing Census 2011, Bangladesh Bureau of Statistics, 2012 (BBS, 2012) and Household Income and Expenditure Survey 2010 (HIES 2010), BBS, 2011. Census data of the project is also presented in this chapter.

#### **3.1 Demography**

30. The number of households in the study area is 65,185, equivalent to 274,054 persons, in which there are 140,051 males, accounting for 51% and 134,003 females, accounting for 49%. The male-female ratio is 106 which means there are 106 males per 100 females. The average household size is 4.2 whereas the national average is 4.4 (BBS, 2012).

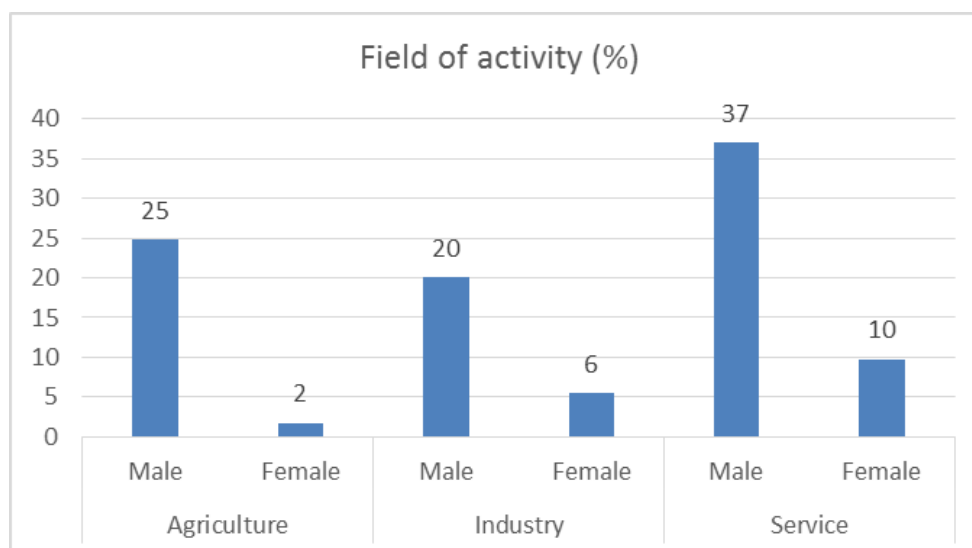
31. There are 167,173 persons of working age (15–59) in the study area. Whilst, 31% of the population are children (0–14 years); 19% in the 15–24 years bracket considered as early working age; 43% between 25–59 years considered as prime working age; and 8% above 60 years. We note that the Department of Social Service of Ministry of Social Welfare defines elderly people as 65 years for males and 62 years for females in Bangladesh.

#### **3.2 Education and Occupation**

32. The literacy rate is 59% (nationally 52%, divisionally 53%), where males account for 61% (nationally 54%, divisionally 56%) and females account for 56% (nationally 49%, divisionally 51%).

33. In the study area about 41% are employed in different sectors of which 34% are male and 7% are female. About 34% of people are engaged in unpaid household work. It has also been found that 25% of total population are not working.

34. The main field of economic activity/occupation of the employed population is in the services sector (48%), where males account for 38% and females account for 10%. About 27% of people are engaged in the agriculture sector and 26% of the total population is engaged in the industrial sector. Figure 3.1 shows the main economic activity in the study area.

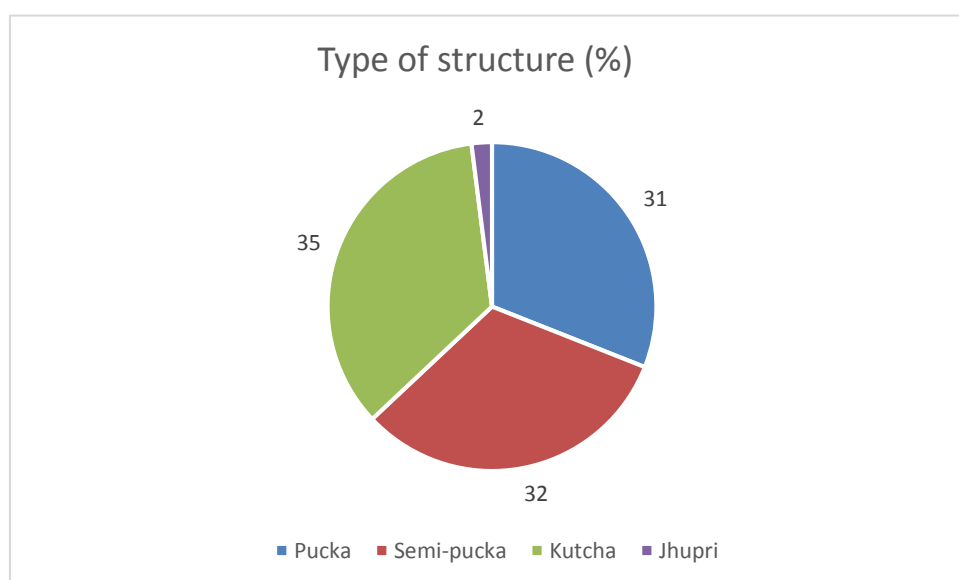


Source: Population and Housing Census 2011, BBS, 2012.

**Figure 3.1: Field of economic activity in the study area**

### 3.3 Housing

35. In the study area, overall housing condition is moderate. The BBS data shows that on average 31% households have pucca, 35% households have kutcha, and 32% have semi-pucca houses. Only 2 houses are found as Jhupri.



Source: Population and Housing Census 2011, BBS, 2012.

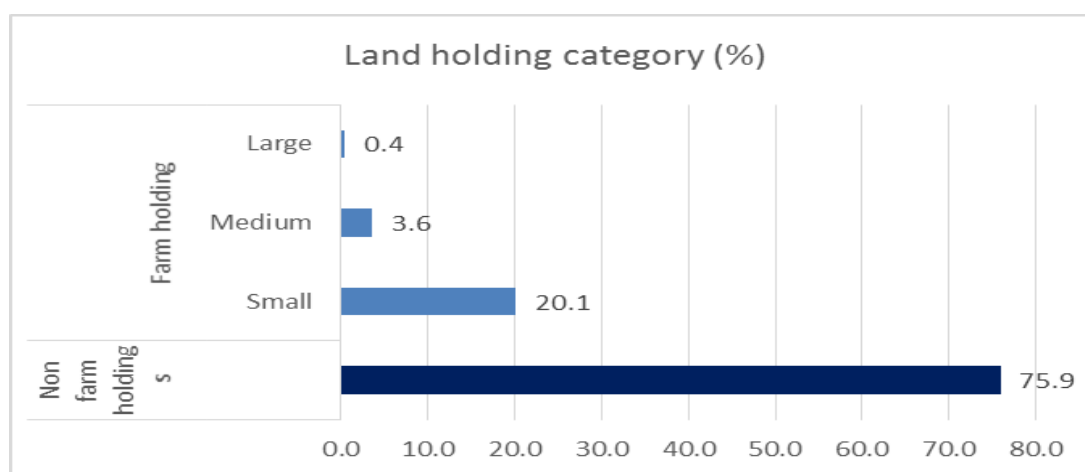
**Figure 3.2: Housing condition in the study area**

### 3.4 Land Ownership

36. Bangladesh is a land scarce country where per capita cultivated land is only 12.5 decimals (0.05 hectare). It is claimed that every year about one per cent of farm land in the

country is being converted to non-agricultural uses.<sup>3</sup> About 60% of farmers, however, are sharecroppers' of land owned by others.<sup>4</sup> Land is the main source of livelihood in rural Bangladesh.

37. It is observed in the study area (**Figure 3.3**) that the percentage of nonfarm holdings (functionally land less) is high (75.9%) and the percentage of farm holding household is 24.1. From among the farm holding categories of households, 20.1% are small farm holding, 3.6% are medium farm holding and 0.4% are large farm holding households. This study area information is more or less similar to the project/RoW area. On the basis of this study area land ownership information it may be concluded that majority of the households have no agricultural land in the project area; and almost all of farm holding households are small farm holding i.e. 20% out of 24% are small farm holding. Small farm holdings in Bangladesh are between a minimum 0.05 acres of cultivated acre up to 2.49 acres; medium is 2.5–7.49 acres and large is 7.5 acres and above (Census of Agriculture 2008, BBS, 2011).



Source: Census of Agriculture, 2008

**Figure 3.3: Distribution of HHs owned agricultural land in the study area**

### 3.5 Occupations of Affected Households

38. The primary occupations of the five households permanently affected vary by with business (handicrafts), sharecropping, non-agricultural day laboring, farming and van/rickshaw pulling. Three of the households have secondary occupations namely day laboring (2 HHs) and non-agricultural farm laboring (1 HH). An anticipated 107 farming households will have their crops temporarily affected. As mentioned, in rural Bangladesh generally 60% of farmers are sharecroppers farming others' land.

### 3.6 Income and Expenditure

39. The household income and expenditure information at divisional level is collected from the Household Income and Expenditure Survey 2010 (HIES 2010), BBS (2011), as there is no such information at district, upazila and union level available. The monthly household nominal

<sup>3</sup> Md. Abul Quasem, 2011. Conversion of Agricultural Land to Non-agricultural uses in Bangladesh: Extent and Determinants. Bangladesh Development Studies Vol. XXXIV, No. 1. Dhaka, Bangladesh.

<sup>4</sup> Dr.Mahabub Hossain, Prof. Abdul Bayes and Prof Dr. SM Fakhru Islam,2017. A Diagnostic Study of Bangladesh Agriculture. BRAC.



income is available for the divisions only in the HIES, 2010. Average monthly income per household at current prices was estimated at Tk11,479 at the national level in 2010. Per capita monthly income increased by Tk1,068 (71.92%) in 2010 compared to 2005 and increased by Tk1,723 (207.59%) over the year 1995–1996. It is notable that in 2010, rural income increased at a higher rate than that of urban income. In 2010, rural income increased by 58.29% whereas urban income increased by 57.45% in 2010. This increase of income in both urban and rural areas accelerated the process of poverty reduction in both urban and rural areas.

40. The average monthly household nominal income, however, of Khulna Division was recorded at Tk9,569 which was below the national average of Tk11,479 in 2010 (Table 3.1).

41. The national average monthly household consumption expenditure was recorded at Tk11,003 in 2010. On the other hand, the average monthly household consumption expenditure of Khulna Division fell well below the national average and was estimated at Tk9,304.

42. The information related to income and expenditure of Khulna Division is applicable for Khulna district also, as HIES 2010 presented divisional data only on poverty. The poor income and expenditure per household in the study area are Tk5,150.08 and Tk5,093.09, respectively (**Table 3.1**) according to 2010 data, however this has been adjusted with inflation to determine those affected households below the poverty line, as Tk1,731 per month per person and Tk9,200 (round figure of Tk9,176) per household.

**Table 3.1: Income and expenditure in 2010**

<b>Income (Tk per household per month)</b>	<b>Total</b>	<b>Rural</b>	<b>Urban</b>
Top 5% household	35,695	27,818	39,717
Bottom 5% household	5,149	5,138	5,284
National income	11,479	9,648	16,475
Khulna Division	9569	-	-
<b>Income of the poor (upper poverty line)</b>			
National (per capita)	1,270.93	1,211.57	1,545.96
Khulna Division (per capita)	1,226.21	1,267.15	1,106.41
Study area (per household, calculated on 2010 census)	5,150.08	-	-
<b>Expenditure (Tk per household per month)</b>			
Total expenditure	11,200	9,612	15,531
Consumption expenditure	11,003	9,436	15,276
Consumption expenditure in Khulna Division	9,304	-	-
<b>Expenditure of the poor (upper poverty line)</b>			
National (per capita)	1,245.76	1,200.02	1,457.65
Khulna Division (per capita)	1,212.64	1,169.98	1,337.47
Study area (per household, calculated)	5,093.09	-	-

Source: HIES 2010, BBS, and. Dhaka, Bangladesh.

### 3.7 Income and Expenditure Information of Affected Households

43. RP Census data in **Table 3.2** shows that 28.57% of the households in the RoW earn poor income (less than Tk9,200 per month), i.e. 28.57% are poor as well as vulnerable (landless) as per definition of vulnerability mentioned in the glossary of this RP.

44. These households have few savings, they as they generally spend their entire income. In contrast, people of 19,201–24,200 and above 24,200 income groups can save from their income, as they spend less than what they earn (**Table 3.2**).

**Table 3.2: Affected households in the RoW by income and expenditure**

Income group (in Tk)	Households by Income		Households by Expenditure	
	No. of HH	% of HH	No. of HH	% of HH
<=9200	2	28.57	2	28.57
9201–14,200	1	14.29	2	28.57
14,201–19,200	1	14.29	3	42.86
19,201–24,200	1	14.29	0	0.00
>=24,201	2	28.57	0	0.00
<b>Total</b>	<b>7</b>	<b>100</b>	<b>7</b>	<b>100</b>

Source: Census, CEGIS, 2017.

### 3.8 Vulnerability

45. The vulnerability of the project/RoW area, is analyzed on the basis of census data collected for this RP. There is potential for seven (7) households to be affected and have to shift their structures for safety reasons in the RoW. Of these, two households were found to be both landless and below the poverty line, no other vulnerability categories were found, however for budget estimate purposes it is assumed an additional 27 (25% of 107 temporary affected household) households are likely to be confirmed as vulnerable who may be affected by temporary crop impacts.

### 3.9 Gender Considerations

46. The Population and Housing Census of Bangladesh in 2011 and in 2001 found 15.6% and 13.8% female headed households in the country. As mentioned previously only 7% of the employed population as of 2010 were female in the study area. In addition, the female literacy rate was 56%. There are no female headed households affected by permanent impacts for this project.

47. Infrastructure projects may impact men and women differently. But women are usually more affected in cases where they face difficulties due to the impacts of the project, especially a female headed household with dependents such as poor female workers with a large number of dependents such as children/the elderly/disabled, or families facing serious disadvantage.

48. Women's rights and opportunities have improved in recent years in Bangladesh in a range of key areas. For example, in closing the gender gap in school enrolments at primary and secondary levels. Growth in the garment industry has also led to jobs for women in the formal sector where women sometimes comprise 90 percent of the labour force. Despite these improvements, Bangladesh remains a strong patriarchal society with women often seen as dependent on men. Women, continue to bear the burden of household work in the gendered division of labour. Gendered norms about women's engagement in wage work also persist. A study of rural and urban women in Bangladesh found that of those who want paid

work, 64% were unable to take advantage of it due to household obligations; other reasons cited included the need for childcare and lack of available jobs.<sup>5</sup>

49. A Gender Action Plan (GAP) has been prepared under the project. This GAP will include specific actions and strategies and cost estimates that are gender responsive and culturally appropriate. It is anticipated that the GAP will include skill development programs for women in households affected by the project.

50. In addition, the PMU will pay special attention in conducting any detailed survey (if required due to design changes) and consultations activities such that both women and men participate; and both husband and wife will be invited to receive the compensation and other allowances due to the household for affected assets.

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<sup>5</sup> Khatun, Khan and Pervin (2014) *Estimating Women's Contribution to the Economy: The Case of Bangladesh*, Centre for Policy Dialogue Bangladesh.

## 4. Information, Consultation and Public Disclosure

### 4.1 Consultation during Project Preparation

51. At the early stage of project preparation three consultation meetings were held in November and December 2016 (see Table 4.1) to support preparation of this resettlement plan. Additional consultation was conducted to share the draft RP in October 2017. A total of 118 persons participated in consultation activities, including 85 men and 33 women residing in proximity to the proposed ROW. During the consultation project interventions and their likely impacts on the environment as well as on communities were shared with the project stakeholders (both direct/indirect and/or primary/secondary). Participant lists and photographs are presented in Appendix 1. A fact sheet with key project information was distributed during the meetings.

**Table 4.1: Consultations by locations, techniques and participants**

Municipality/ Union	Techniques	Male	Female	Participant type	Meeting Place	Date
Senhati	FGD	21	21	Fishermen community	Chandonimahahal village	12/11/2016
Batiaghata	Group Discussion	6	-	Different occupational group	Tetultola village	21/12/2016
Batiaghata	Group Discussion	6	-	Different occupational group	Puthimari village	21/12/2016
Ward no.13, Khulna City Corporation	Public disclosure session for project	52	12	Government & nongovernment organization officials, journalist, fishermen, farmer, trader, teachers, parents, students, political leaders, etc	Institution of engineers, Bangladesh (IEB) conference room, Khalishpur	19/10/2017
<b>Total</b>		85	33			

### 4.2 People's perceptions, opinions and suggested measures

52. The proposed project interventions and the process of peoples' participation in preparing the RP were discussed during the consultations. The transmission alignment options and potential RoW of the proposed electricity transmission line and its probable impacts were shared with local people. Generally, they were supportive to the project; however they identified some issues, noting that post-mitigation they believed the project would be very fruitful for the local area.

53. A range of solutions were also suggested by consultation participants, issues together with these solutions are summarized in **Table 4.2** below. In addition, actionable mitigations and arrangement answers by the project are also included.

**Table 4.2: Consultation Suggestions & Project Answers**

<b>Solutions Suggested in Consultations</b>	<b>Project Answers</b>
The construction activities should be initiated after crop harvesting period.	APs will also be given advance notice of 30 days to harvest the crops and trees prior to the commencement of the construction work. Construction work will be scheduled to commence during nonfarming seasons as much as possible to avoid/minimize the impacts on farmers' livelihoods and incomes.
It is a permanent loss for the land owners so the land should be compensated not only for the standing crops but also for the lands, buildings and trees.	The entitlements matrix includes compensation for all affected fixed assets, including residential and nonresidential structures and productive crops and trees.
Crop compensation should be given to the affected land owners within the shortest possible time.	All the compensation will be paid prior to the commencement of civil works.
All the values should be paid not only considering the government rate but also aligned with the market price.	Current rate schedules will be used for determining values of structures (free of depreciation) and crops/trees.
There should be an option for local people to be engaged in the construction employment opportunities.	Local people, especially those from vulnerable households will be prioritized for unskilled labour during project construction.
A meeting would be arranged to identify suitable hours for material transportations so that the chance of accident occurrence can be minimized.	Material transportation will be managed through the Environment Management Plan for the project, including safety measures to ensure materials are transported safely.
Noisy activities should not be conducted at night.	Construction works are done from 7am-6pm (every day); workers may periodically continue to some extent at night to complete unavoidable works. Mitigation measures will to keep noise level within acceptable limits: (i) using advanced equipment, (ii) fund management for ensuring use of those sophisticated equipment, and (iii) ensuring strong monitoring in this regard.
A neutral monitoring agency should be engaged for monitoring over the construction and post construction activities of the project.	Monitoring will be conducted by qualified staff of NWPGCL (see Chapter 8). Monitoring reports will then be submitted to ADB and available publicly on ADB website.

### 4.3 Disclosure of the Resettlement Plan and further Consultations

54. The draft RP and final RPs will be disclosed to the affected households. A summarized translated version of the RP in Bengali will be made available to affected and local people through the respective NWPGCL offices. A one-page leaflet summarizing key impacts, the entitlements, payment processes, grievance redress committee and contact information will be translated into Bengali and distributed to the affected people through the NWPGCL resettlement specialists. The draft RP and final updated RP (post inventory of losses) will be disclosed on the EA's and ADB's websites.

55. Once design is finalised and any updates made to the inventory of losses, then NWPGCL will inform each of the AHs on compensation as per the entitlements matrix.

56. These meetings will support that AHs are enabled to make fully informed decisions that will directly affect their incomes and quality of life, and that they will have the opportunity to participate in activities and decision-making about issues that will have a direct effect upon them. As well as to obtain the maximum level of co-operation and participation of the AHs in activities necessary for resettlement planning and implementation. Efforts will be made to ensure that both male and female household heads are present during these meetings and fully understand their entitlements.

57. Future consultations will include providing individual compensation plans to AHs (male and female household heads), presenting any affected assets and compensation for each household with signatures of the affected people.

58. In order for the implementation of the RP to be effective, several additional rounds of consultative meetings with the APs will be carried out during project implementation. Such consultations will be carried out by the field-based resettlement staff of NWPGL.

## 5. Legal and Policy Framework

### 5.1 Overview

59. The legal and policy framework of the resettlement plan is based on national laws and legislations related to the Electricity Act, 1910; Telegraph Act of 1885 and Acquisition and Requisition of Immovable Property Ordinance 1982 (ARIPO) and subsequent amendments during 1993–1994 in Bangladesh and ADB Safeguard Policy Statement 2009 (SPS, 2009). Based on the analysis of applicable national laws and policies and ADB's safeguard policy requirement, project related resettlement principles have been adopted.

### 5.2 National Laws and Regulations of Bangladesh

60. The basic principles for the compensation of property in Bangladesh are founded in Articles 42 and 47 of the Constitution. The primary legislation under which the transmission line has been regulated is the Electricity Act 1910. Provisions mentioned in Section 12 of the Electricity Act 1910 provide relevant guidance regarding building transmission line are as follows:

61. **Subsection 1** under Section 12 provides following permission to the licensee to lay down or place electric supply lines:

- open and break up the soil and pavement of any street, railway or tramway;
- open and break up any sewer, drain or tunnel in or under any street, railway or tramway;
- lay down and place electric supply lines and other works;
- repair, alter or remove the same; and
- do all other acts necessary for the due supply of energy.

62. **Subsection 2** provides guidelines for the acts that are not mentioned in subsection (1). The licensee is authorized or empowered to lay down or place any electric supply line or other work in, through or against any building or any land (not dedicated to public use) without intimation to the local authority or to the concerned owner/occupier.

63. **Subsection 3** makes provision about compensation that the District Magistrate shall fix the amount of compensation or of annual rent, or of both, which he thinks fit be paid by the licensee to the owner or occupier.

64. **The Electricity Act, 1910, amended in 2012 has not yet been gazetted by the Government.** The amended Act establishes the legal framework for the supply and use of electrical energy in Bangladesh and defines the 'electricity' as electrical energy or electrical power when generated, produced, transmitted, distributed supplied or utilized for any purpose. Should the power project be required land acquisition for carrying on its activities, it is guided that the Acquisition and Requisition of Immovable Property Ordinance, 1982 would be the instrument under which the land shall be acquired. Sections 36A and 36B in the Electricity Act relevant to the acquisition of property for power project include:

65. **Section 36A: Provisions for right of way** (a) to install an electric line on, under or over any land for the purpose of carrying on of the activities, licensee may apply for the necessary right of way to the Deputy Commissioner of the district under whose jurisdiction the

land is located for grant of right of way, in the form and manner prescribed by the Government.

- a) The approval may not deem by the Deputy Commissioner if the proposed land is covered by a cluster of dwelling houses.
- b) Where a right-of-way is granted to a licensee, the owner of the land may be entitled to such reasonable compensation in respect of the land occupied by electric poles with the highest size required for construction of 33 kV lines, at a rate as may be determined by the Deputy Commissioner. This compensation is only allowed for the placing of the pole.
- c) The Deputy Commissioner may allow as a lump sum or by periodical payments or partly in one way and partly in the other.
- d) The subsection 10 (under section 36A) provides guideline for the excess size (more than 33kV lines) of pole and tower that it shall be the responsibility of the respective licensee to apply for acquisition of the necessary land as per existing laws after obtaining the necessary right of way from the Deputy Commissioner.

66. **Section 36B - Acquisition of property for power projects:** When any land is required for a power project to be implemented by a company, the whole or majority shares of which are owned by the Government, the land shall be acquired as usual under the Acquisition and Requisition of Immovable Property Ordinance, 1982 (Ordinance No. II of 1982), treating the company as a public sector enterprise, and be transferred to that company proposing to carry out such project, which would serve for the general welfare and benefit of the people.

67. **The Bangladesh Telegraph Act, 1885.** The Telegraph Act, 1885 does not have any provision for permanent land acquisition except for payment of compensation for construction of lines and towers as temporary impacts. The Act, is usually followed which does not have any provision of land acquisition for construction of transmission pillars and lines. The act exercises the power to remove any trees interrupting the transmission lines, however, subsection of section 18 under part-III of the Act provides the opportunity for compensation for cutting the trees if the tree is in existence before the telegraph line was placed. The government shall not acquire any right other than that of user only in the property under, over, along, across, in or upon which the telegraph authority places any telegraph line or posts. The telegraph authority shall not exercise those powers in respect of any property vested in or under the control or management of any local authority, without the permission of that authority. The telegraph authority shall do as little damage as possible, and, when it has exercised those powers in respect of any property other than that referred to, shall pay full compensation to all persons interested for any damage sustained by them by reason of the exercise of those powers. In case of property and dispute other than that of a local authority where the power is to be exercised, the DC may, in his discretion, order that the telegraph authority shall be permitted to exercise them.

68. The district judge has been provided with absolute powers to fix the compensation and even adjudicate during the dispute for compensation in section 16 of the Bangladesh Telegraph Act.

69. Acquisition and Requisition of Immovable Property Ordinance. The Acquisition and Requisition of Immovable Property Ordinance, 1982 (subsequent amendments of it up to



1994) is used as the legal support for land acquisition and requisition in Bangladesh. The 1982 Ordinance requires that compensation be paid for (i) land and assets permanently acquired (including standing crops, trees, houses); and (ii) any other damages caused by such acquisition. The Ordinance provides certain safeguards for the owners and has provision for payment of “fair value” for the property acquired. The Ordinance, however, does not cover project-affected persons without titles or ownership record, such as informal settler/squatters, occupiers, and informal tenants and lease-holders (without document) and does not ensure replacement value of the property acquired. The Act has no provision of resettlement assistance and transitional allowances for restoration of livelihoods of the nontitled affected persons.

70. The Deputy Commissioners (DC) in all cases, determine “market value” of acquired assets on the date of notice of acquisition (notice under Section 3 of the Ordinance). The DCs then add 50% premium of the assessed value for cash compensation under law (CCL) of all acquired assets due to compulsory acquisition. The CCL paid for land is generally less than the “market value” as owners customarily report lower values during registration to avoid and/or pay fewer taxes. If land acquired has standing crops cultivated by tenant (bargadar) under a legally constituted written agreement, the law requires that part of the compensation money be paid in cash to the tenants as per the agreement. Places of worship, graveyard and cremation grounds are not to be acquired for any purpose. The law requires that the salvaged materials upon payment of compensation will be auctioned out by the Government.

### **5.3 ADB Safeguard Policy Statement, 2009 (SPS, 2009)**

71. The objectives of SPS with regard to involuntary resettlement are: (i) to avoid involuntary resettlement wherever possible; (ii) to minimize involuntary resettlement by exploring project and design alternatives; (iii) to enhance, or at least restore, the livelihoods of all displaced persons in real terms relative to pre-project levels; and (iv) to improve the standards of living of the displaced poor and other vulnerable groups. The SPS covers physical displacement (relocation, loss of residential land, or loss of shelter) and economic displacement (loss of land, assets, access to assets, income sources, or means of livelihoods) as a result of (i) involuntary acquisition of land, or (ii) involuntary restrictions on land use or on access to legally designated parks and protected areas. It covers displaced persons whether such losses and involuntary restrictions are full or partial, permanent or temporary.

72. For any ADB operation requiring involuntary resettlement, resettlement planning is an integral part of project design, from the early stages of the project cycle, taking into account the following basic principles:

- i. Involuntary resettlement (IR) will be avoided or minimized as much as possible and where IR is unavoidable, displaced persons (DPs) will be compensated by full replacement cost for their losses;
- ii. Improve, or at least restore, the livelihoods of all DPs and provide physically and economically displaced persons with needed assistance;
- iii. Carry out meaningful consultations with affected persons, host communities, and concerned nongovernment organizations. Inform all displaced persons of their entitlements and resettlement options. Develop procedures in a transparent, consistent, and equitable manner if land acquisition is through negotiated settlement to ensure that those people who enter into negotiated settlements will maintain the same or better income and livelihood status;

- iv. Ensure that displaced persons without titles to land or any recognizable legal rights to land are eligible for resettlement assistance and compensation for loss of nonland assets;
- v. Improve the standards of living of the displaced poor and other vulnerable groups, including women, to at least national minimum standards.
- vi. Prepare and disclosure a resettlement plan elaborating on displaced persons' entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget, and time-bound implementation schedule; and
- vii. Conceive and execute involuntary resettlement as part of a development project or program. Include the full costs of resettlement in the presentation of project's costs and benefits. Pay compensation and provide other resettlement entitlements before physical or economic displacement. Monitor and assess resettlement outcomes, their impacts on the standards of living of displaced persons, and whether the objectives of the resettlement plan have been achieved by taking into account the baseline conditions and the results of resettlement monitoring. Disclose monitoring reports.

#### **5.4 Gaps between Government Laws and ADB SPS, 2009**

73. The government's policy through ARIPO does not cover project-affected persons without titles or ownership record, such as informal settler/squatters, occupiers, and informal tenants and lease-holders (without documents). Provisions for nonland assets and other assistance are described in the entitlement matrix for these groups.

74. The ARIPO provides for compensation which includes compensation at market value, injurious affection and severance. In practice, compensation rates determined by the DC are far below the market rates. To bridge the gap between 'market value' and 'replacement cost', NWPGCL will re-confirm the estimated replacement costs as per this RP (refer Section 7.2.3).

75. The Electricity Act (1910) place emphasis on compensation for damages caused to public property such as streets, railways, tramways, pipe wires, sewers and telegraph lines and not much on the private properties. Also, the Telegraph Act (1885) prevent payment of compensation for land used for erecting transmission line towers and land under RoW. However, compensation will be paid only for the loss for damages to crops.

76. There are no legal provisions for consultation or monitoring of project affected persons and as such ADBs requirements apply. The ARIPO has no provision of resettlement assistance for restoration of livelihoods of affected persons except for legal compensation.

77. The ARIPO and Electricity Act provide a number of mechanisms for grievance redress in respect of individual interests in the property and issues related to compensation which get raised with the DC. But there is no provision to hear other resettlement related grievances arising from loss of livelihoods, loss of access to public infrastructure, damages to property causing from acquisition and construction related impacts. NWPGCL will establish a grievance redress mechanism at the local level which is easily accessible and immediately responsive; which includes a variety of stakeholders including the DC.

78. ADB will not finance the project if it does not comply with its SPS nor will it finance the project if it does not comply with its host country's social and environmental laws. Where

discrepancies between the ADB and government policies exist, ADB's policy will prevail. Moreover, the SPS applies to all ADB-financed and/or ADB-administered sovereign projects, and their components regardless of the source of financing, including investment projects funded by a loan; and/or a grant; and/or other means.

79. The comparative analysis between ARIPO's laws related to land acquisition, compensation, and involuntary resettlement and ADB's requirements as prescribed in the SPS 2009, however, is presented in Table 5.1 as cited in the ADB project 42378-017 in Efficiency Improvement Investment Program - Tranche 3: Resettlement Plan.

**Table 5.1: Comparison between the government's land Acquisition laws and ADB Safeguard Policies on Land Acquisition and Resettlement**

Issue	SPS, 2009	Bangladesh Laws	Gap filling measure in RP
Partial restriction in use of land within the base of the transmission towers	Involuntary resettlement requirements apply to involuntary restrictions on land use.	Electricity Act 1910 recognizes full compensation for damage, detriment or inconvenience caused by project.	While the land under the transmission tower can still be cultivated, a small part of the land will be occupied by four tower footings and land use will be restricted for structures and trees.. Estimating the cost of this restriction as basis for compensation is difficult. Additional assistance is included to offset the cost of restriction..
Permanent loss of structures	Provide adequate replacement structures or cash compensation at full replacement cost, adequate compensation for partially damaged structures, and shifting assistance.	Electricity Act 1910 recognizes full compensation for damage, detriment or inconvenience caused by project. Compensation mode follows Ordinance 1982.	Replacement cost compensation, transfer assistance and option to keep salvage materials will be provided through the entitlement matrix for affected households regardless of legal title.
Permanent and temporary loss of commercial structures and income.	Where acquisition affects commercial structures, affected business owners are entitled to the costs of re- establishing their activities, the net income lost during the transition period; and the costs of transferring and reinstalling.	Electricity Act 1910 recognizes full compensation for damage, detriment or inconvenience caused by project. Compensation mode follows Ordinance 1982 which does not provide for lost income, transfer assistance, rehabilitation and resettlement.	Compensation for affected structures and fixed assets; lost income and transfer assistance will be provided with options to keep salvage materials.

Issue	SPS, 2009	Bangladesh Laws	Gap filling measure in RP
Temporary loss of crops and trees	Promptly compensate for loss of income or livelihood sources at full replacement cost.	Electricity Act 1910 recognizes full compensation for damage, detriment or inconvenience caused by project. Ordinance 1982: Payment based on average market value in the last 12 months' plus 50% premium.	Compensation for lost crops and productive trees will be provided at current market rates.
Assistance for vulnerable groups	For vulnerable persons, the resettlement plan will include measures to provide extra assistance so that they can improve their incomes in comparison with pre-project levels.	Ordinance 1982: No provision for special assistance.	Vulnerable households are entitled to one-time allowance equivalent to Tk10,000/ in addition to other entitlements; as well as being eligible to participate in trust fund livelihood program and will be given priority for project related employment.

## 5.5 Core Principles of the Project

80. NWPGL in compliance with the ADB policy requirements and as well as past experience from project implementation, confirms the following principles for this project:

- The land acquisition and resettlement impacts would be avoided or minimised as much as possible through alternate design options;
- A summary of the RP with the entitlement matrix will be disclosed to the affected persons in the local language (Bangla);
- Compensation for assets affected will be paid prior to the start of civil work in accordance with the provisions described in this document;
- People moving into the project area after the cut-off date will not be entitled to assistance;
- An appropriate grievance redress mechanism will be established to ensure speedy resolution of disputes;
- All activities related to resettlement planning, implementation, and monitoring would ensure the involvement of women and other vulnerable groups;
- Affected households residing, working, doing business and/or cultivating land within the impact area prior to the cut-off date, are entitled to be compensated for their lost assets, incomes and businesses at replacement cost, and will be provided with assistance to improve or at least maintain their pre-project living standards, income-earning capacity and production levels.

- Affected households will be eligible for compensation and rehabilitation assistance, irrespective of tenure status, social or economic standing and any such factors that any discriminate against achievement of the resettlement objectives. Lack of legal rights to lost assets or tenure status and social or economic status will not bar the affected households from entitlements to compensation and assistance.
- In case of any price differential between the prices determined under existing laws and full replacement cost, the requirement of full replacement costs of ADB's SPS 2009 shall prevail meaning that price differential will have to be topped up and paid to affected persons.
- There will be no deductions in compensation payments for structures or other affected assets for salvage value, depreciation, taxes, stamp duties, fees or other payments.
- Temporarily affected land under requisition will be compensated or may be taken on lease for the construction period. Temporarily affected land and structures will be restored to pre-project conditions.
- Existing social, cultural and religious practices will be respected.
- Contract agreements will include a clause that the construction contractor will compensate any loss or damage in connection with collection and transportation of borrow-materials.

81. In accordance with the resettlement principles adopted in this project, all displaced households and persons will be entitled to a combination of compensation packages in cash and resettlement assistance depending on the nature of ownership rights on lost assets, scope of the impacts including socioeconomic vulnerability of the displaced persons and measures to support livelihood restoration if livelihood impacts are envisaged. The displaced persons will be entitled to:

- Compensation for loss of structures (including community property) at their replacement value;
- Compensation for trees to socially recognized owners at current market price;
- Assistance for loss of business/ wage income;
- Assistance for shifting of structures;
- Rebuilding and/ or restoration of community resources/facilities; and
- Special assistance to vulnerable households.

82. In sum, NWPGCL will provide compensation and support the shifting of the affected households to the extent possible to ensure that all affected households are resettled. There will not be any forced eviction without payments of compensation. The affected households will be informed well ahead of shifting schedule. NWPGCL will be involved through its PMU in meaningful consultation and participation of the affected people in project implementation.

## **5.6 Compensation Payment Procedure**

83. The nontitled APs i.e. those have no legal ownership of the affected property but socially recognised and enlisted during census and or joint verification survey on the RoW will be compensated by NWPGCL. The PMU will prepare each APs file and entitlement record.

84. Payment of compensation for affected crops will be undertaken by the EPC contractor, as cash allowances, debit voucher or cheque. The NWPGL PMU will supervise payment and recording of payments.

85. For all affected APs, the entitlement record will be jointly signed by the NWPGL and the AP with a photograph attached. For all other impacts (i.e. not crops) the PMU will prepare payment debit voucher or cheque and those will be disbursed in public place or office of the upazila Chairman issuing prior notice to the AP.

## **5.7 Grievances Redress Mechanism**

86. The EA (NWPGL in this case) will establish a project specific Grievance Redress Mechanism (GRM) having suitable grievance redress procedure to receive and facilitate resolution of affected peoples' concerns, complaints, and grievances. The GRM will allow for grievance redressal arising from compensation, loss of livelihoods, loss of access to public infrastructure, damages to property causing from acquisition and construction related impacts (noise, disturbance etc).

87. The GRM will work utilising the following three levels:

88. **First Level – Field officers:** In case of grievances that are immediate and urgent on-site field officers (of the PMU) will provide the most easily accessible first level of contact. The officer will put the complaint in writing and record the date, nature and type of grievance. It is anticipated that field officers will be able to respond and resolve minor grievances, especially by working with on-site contractors etc. The field officer will respond (or resolve where possible) queries within two weeks. Contact phone numbers and names of the concerned PMU field officer will be posted at all construction sites at visible locations.

89. **Second Level - PMU Grievance Committee:** If no resolution or understanding is reached, the field officer files the grievance/complaint to the PMU grievance committee for it to be resolved within 15 days after filing. The PMU Grievance Committee will include: (i) a Representative of NWPGL (i.e. Project Director) - Convener; (ii) Social Safeguard Specialist – Member; and (iii) a representative of the affected people – Member.

90. A meeting can be called, if needed, to give the AP the chance to present the concern in person. During the meeting, the PMU committee will receive, clarify and simplify the issues involved and would try its best efforts to resolve the issues to be acceptable to both the AP and the PMU. If an agreement or resolution is reached, the resolution will be signed summarizing the points of agreements. If there was no such agreement, the matter is presented to the GRC.

91. **Third Level –Grievance Redress Committee.** The GRC will meet at short intervals subject to the number of grievances to resolve. The complainant may present their issue to the GRC in person and will be encouraged to bring along a friend, family member or third party for support. In case of complicated cases, the GRC members can request additional information or carry out field level verifications. Resolutions should be based on consensus among members, failing which the decision may be taken on majority vote. Any decision made by the GRC must be within the purview of RP policy framework and entitlements. The GRC will function throughout the life of the project loan and will not deal with any matters pending in the court of law.

92. The GRC will be formed with following representatives:
- Representative of NWPGL, Convener;
  - Representative of the Local Government Institution (union parishad), Member;
  - Local women member from union parishad, Member;
  - Representative of the affected people, Member;
  - Representative of the DC.
93. The APs, not satisfied from the decision of the GRC, will have their right to take the grievance to a court of law. The GRM will be continuously disseminated to people during project implementation. The project grievance procedure does not impede access to the court at any time. This includes ADB Accountability Mechanism whereby people adversely affected by ADB-financed projects can express their grievances; seek solutions; and report alleged violations of ADB's operational policies and procedures, including safeguard policies.

## **6. Entitlements, Assistance and Benefits**

### **6.1 Entitlement**

94. The affected persons are entitled to receive compensation for their losses. The entitlement matrix is given in **Table 6.1** which summarizes the types of losses in connection with this project and the corresponding nature and scope of entitlements in accordance with the government and ADB policies.

### **6.2 Eligibility**

95. All APs who are identified in the project-impacted areas on the cut-off date<sup>6</sup> will be entitled to compensation for their affected assets, and rehabilitation measures sufficient to assist them to improve or at least maintain their pre-project living standards, income-earning capacity and production levels. APs entitled for compensation or at least rehabilitation provisions under the project are:

- All APs covered by legal title/traditional land rights, or without legal status;
- Tenants and sharecroppers whether registered or not; and
- Owners of structures, crops, plants, or other objects attached to the land.

### **6.3 Cut-off-Date**

96. Eligibility to receive compensation and resettlement assistance will be limited by “cut-off-dates”. There are two cut-off dates considered for determining eligibility of APs. The first cut-off date is for titled owners only to be notified by the Deputy Commissioner (DC) under Section 3 of the 1982 Ordinance informing the land owners of the project right-of-way land. This is done once Land Acquisition Plans (LAPs) are submitted by EA to DC. The second cut-off date is based on the census for identification and eligibility for all “nonland” related entitlements and the nontitleholders. The date(s) are set against start of the census survey dates in the affected villages and communities concerned. The census survey has identified and established the households living in the project area. It has also established a record of all losses at household level, including structures and trees. In this project, the household level census was conducted from 13–15 June 2017 in the project area from Khalishpur (KNM) to Khulna (S) substation. This cut-off date to be used for eligibility of the APs irrespective of titled and nontitled persons such as land owners and squatters or other informal settlers (if, there are any). Any persons moving into the project area after the cut-off dates will not be entitled for compensation or any assistance/benefit.

### **6.4 Shifting and Income Restoration**

97. Shifting of five (5) households is required for stringing the transmission line for the project. These 5 affected households will be compensated with replacement cost for their affected structures and assets. For three households, they have sufficient land holdings within which to shift their residential structures, this was discussed with individual households during site surveys.

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<sup>6</sup> The cut-off date for title holders is based according to the formal government notification, and for nontitleholders the date of the census survey during the detailed design stage. Those who encroach into the project area after the cut-off date will not be entitled to compensation or any other assistance.



98. As per the Ordinance 1982 the government has no program for squatters. The entitlements matrix however includes a leasing allowance for three months to be provided to the two squatter households. They are also entitled to a range of other assistances as vulnerable households in the entitlements matrix.

99. Out of 5 affected households, 2 households are landless; they are involved with farming and rickshaw pulling. The remaining three households own their land, and have enough land available to move their structures within their existing land holding, between 20–35 decimal.

100. The government has launched a range of national level livelihood programs viz. One House One Farm Project, Economic Empowerment of the Poorest in Bangladesh, Combined Village Development Program, Combined Rural Employment Assistance Project for the Poor Women, and Initiative for Development, Empowerment, Awareness and Livelihood Project. The PMU will proactively work towards linking the affected HHs, if the businessmen and the rickshaw puller have an interest, with this national scheme so as to ensure that the affected HHs benefit from the same.

101. Given tower construction and stringing may occur at different times, farmers, may lose one crop seasons income for construction and one crop season income for stringing of the transmission line. In this respect they will be paid cash compensation equivalent to crops produced in two seasons. Those farmers who will be affected for construction of towers will be given compensation for two more seasons, as the affected land needs minimum one year time to revive its fertility as like as it was before commencement of construction work. They, therefore, will receive compensation for two years.

102. Vulnerable households (2 known from permanent impacts) and any others identified affected by temporary crop impacts (estimated at 27 households) will be eligible for one-time allowance equivalent to Tk10,000/ in addition to other entitlements. In addition vulnerable households will be given preference in project related employment, as well as opportunities to participate in further livelihood programs under the Trust Fund.

Table 6.1: Entitlement Matrix

No	Type of Loss	Application	Entitled Person	Entitlement	Details	Responsible Agency
<b>A. Crops</b>						
<b>A-1</b>	Loss of standing crops	Agricultural land	APs with legal title and without legal title, sharecroppers and tenants	<ul style="list-style-type: none"> <li>• Cash compensation equivalent to current market price of standing crops on the affected agricultural land for 2 crop seasons for stringing (i.e. 1 year against stringing of transmission line).</li> <li>• Cash compensation equivalent to current market price of standing crops on the affected agricultural land for 4 crop seasons for tower base (i.e. 2 years against construction of tower).</li> <li>• Owners of crops will be given advanced notice to harvest and remove their crops.</li> </ul>	<ul style="list-style-type: none"> <li>• Affected APs to be identified before implementation of the project.</li> <li>• 30 days advance notice.</li> <li>• Restoration of affected land.</li> <li>• EA will explain to AP tenant/sharecropper/leaseholder that compensation will be provided to the cultivator; and sharing arrangements should be determined among themselves.</li> </ul>	<ul style="list-style-type: none"> <li>• NWPGL/Contractor</li> </ul>
<b>B. Structure</b>						
<b>B-1</b>	Loss of structure	Homestead and commercial structures	APs with legal title and without legal title	<ul style="list-style-type: none"> <li>• Cash compensation equivalent to replacement cost of structures on the affected land of the RoW, inclusive of labour costs.</li> <li>• Transfer/shifting grant (TG) @ 5% and transitional period grant (TPG) @5% of the replacement value of permanent structure.</li> <li>• Transfer/shifting grant (TG) @ 5% of the replacement value of temporary structure.</li> <li>• Site Improvement Grant for shifting of Structure @ 10% of the replacement value of structure.</li> <li>• Leasing allowance for three months for nontitled households at Tk3,000 per month.</li> <li>• Owners to take away all salvage materials</li> </ul>	<ul style="list-style-type: none"> <li>• Affected APs to be identified before implementation of the project.</li> <li>• 30 days advance notice.</li> </ul>	<ul style="list-style-type: none"> <li>• NWPGL/Contractor</li> </ul>

No	Type of Loss	Application	Entitled Person	Entitlement	Details	Responsible Agency
				free of cost.		
<b>B-2</b>	Loss of secondary structures	Loss of Shallow Tube Well (STW) and/or Toilets	Titled and nontitled owner as identified during census or joint verification	<ul style="list-style-type: none"> <li>One-time cash grant of Tk10,000 for each STW.</li> <li>One-time cash grant of Tk6,000 for each Toilet (slab latrine).</li> <li>The displaced person has the right to salvage all materials.</li> </ul>	The entitlement is at replacement cost.	• NWPGL/Contractor
<b>C. Trees</b>						
<b>C-1</b>	Loss of standing trees	Homestead land, agricultural land, government land	APs with legal title and without legal title	<ul style="list-style-type: none"> <li>For <i>timber trees</i>: Cash compensation equivalent to market price of timber trees on the affected land of the RoW based on size and species of trees.</li> <li>For <i>fruit trees</i>: Cash compensation equivalent to market price of fruit trees on the affected land of the RoW based on size and species of trees. In addition, value of fruits for 3 years to be paid, 30% of timber value for each year is considered as value of fruits.</li> <li>Compensation for the affected trees outside the RoW, if there is any, will be given as prescribed for the timber and fruit trees above.</li> <li>Owner of the trees will be allowed to fell and take the trees free of cost without delaying the project works.</li> <li>Tree loser will be encouraged to plant more trees by providing 10 sapling costs, which will be adjusted with the contingency cost.</li> </ul>	<ul style="list-style-type: none"> <li>Affected APs to be identified before implementation of the project.</li> <li>30 days advance notice.</li> </ul>	• NWPGL/Contractor
<b>D. Other</b>						
<b>D-1</b>	Temporary impacts during construction	Land (agricultural) and brickfield temporarily required for project construction activities	Legal title holders and nontitled APs,	<ul style="list-style-type: none"> <li>Provision of rent either in a gross sum of money or by monthly or by other periodical payments for period of occupation based on mutual agreement between the affected household and the contractor.</li> <li>Compensation for any affected assets at replacement value, including crops at</li> </ul>	<ul style="list-style-type: none"> <li>Contractors will be responsible for compensation.</li> <li>EA will include provisions for compensation in the contractual</li> </ul>	• Contractor and NWPGL

No	Type of Loss	Application	Entitled Person	Entitlement	Details	Responsible Agency
				current market rate. • Land is to be restored to previous condition. • One-time cash compensation for brick shifting allowance for brickfields owner.	agreements of the contractors.	
<b>D-2</b>	Vulnerable Households	All affected vulnerable households  (estimated at 29 AHs)	(i) women headed households; (ii) household headed by persons with disabilities; (iii) households falling under the generally accepted indicator for poverty, <sup>7</sup> (iv) elderly headed households, (v) households who are landless and those without legal title to land.	• One-time allowance equivalent of Tk10,000/ for vulnerability in addition to other entitlements. • Eligibility for each household to participate in Trust Fund skill training activities. • Prioritised for project related employment.	• Affected APs to be identified before implementation of the project.	• NWP GCL/ Contractor
<b>D-3</b>	Unanticipated impacts	Affected households, individuals and community	Affected households, individuals and community	• Any unanticipated impacts identified during project implementation will be compensated in full at replacement cost and the entitlement matrix shall be revised if required in case of major unanticipated impacts found during detailed/final design.	• Unforeseen impacts will be documented and mitigated based on the legal and policy framework outlined in this RP.	• NWP GCL

<sup>7</sup> In lieu of a national poverty line, this is based on the Bangladesh Bureau of Statistics Survey 2010 taking into account inflation has been used to calculate per-capita monthly income for individuals under the poverty line as Tk1,731 and Tk9,176 for households in the Khulna Division. Source: <https://www.bb.org.bd/econdata/inflation.php>.

## 6.5 Resettlement Budget

103. The compensation cost estimate for the project includes eligible compensation for RP implementation as per the entitlement matrix. The estimated cost in this budget is indicative which may require further updating after the detailed design is finalised, if there are any changes with the identified impacts. If more than 12 months passes, between this RP and the payment of compensation, costs will be revised based on up to date market rates and benefits will be updated in line with inflation.

104. The budget for the resettlement will be provided by NWPGL. The appointed contractor of NWPGL in presence of local government institution representatives and NWPGL representatives as per their project policy will disburse cash compensation for crops; all other payments will be distributed by NWPGL.

105. The total estimated cost for use/requisition of area is about Tk25.02 million (see Table 6.2). The budget for the resettlement will be provided by NWPGL.

## 6.6 Calculation of Estimated Costs

106. **Crops and Trees.** The unit cost and the valuation for the crops and fish stock is calculated based on the cost estimation for the resettlement plan for construction of Chittagong-Bakhrabad gas transmission pipeline, BAN: Natural Gas Infrastructure and Efficiency Improvement Project, project number: 45203-006 (BAN), 2016. Tk800/decimal is estimated for crop compensation of the requisitioned land within the RoW, excluding tower construction area. On the other hand, Tk1,600/decimal for crop loss is estimated for tower construction area. After each tower erection, the affected people can continue cultivation, however, a small part of land (0.84 m<sup>2</sup> for each tower) will be occupied by four tower footings and land use will be restricted for structures and trees. As such two more seasons (one year) compensation for tower area is incorporated as land considering the impacts. Cash compensation amounts equivalent to market price of standing crops will be confirmed by NWPGL.

107. Compensation for trees is estimated as per types and sizes of trees. Compensation will be equivalent to the market price for timber of fruit trees and timber trees. Irrespective of sizes, timber value of date trees and small size of palm trees are considered equivalent to fuel wood of those species. The RP budget does not consider fruit value of dates, as the native species of dates have no or very minimal market value. Fruit value of palm trees is also not considered as the palm trees are not fruit bearing. In addition, value of fruits for 3 years to be paid for other fruit trees than date and palm, 30% of timber value for each year is considered as value of fruits. Some timber values, however, are adopted from the RP of project number: 45203-006 (mentioned above). The market value of trees will be re-confirmed by NWPGL.

108. **Structures:** Replacement cost compensation for structures/houses situated on the RoW is estimated as Tk1,955 per sft for semi-pucca structures; and Tk1,725 per sft for kutcha structures/houses. This is adopted from RP of project number: 45203-006 (BAN), 2016 GTCL Gas Transmission Line Project for budget estimate purposes. The final replacement cost of structures will be confirmed by NWPGL using the most up to date rate schedule available.

109. **Livelihood and Income Restoration Measures:** Some resettlement benefits i.e. cash compensation for shifting brick pile, structure transfer/shifting grant (STG) for

shiftable/nonshiftable structures, improvement grant for shifting of structure, cash assistance for land restoration, allowance for vulnerable households, leasing allowance are included in the RP budget.

110. RP implementing and monitoring cost as well as contingency are added in the budget for smoothing the RP implementation process.

**Table 6.2: Budget for requisition of land**

Sl. No.	Head of budget	Total (Tk)	Total (Tk in millions)	Total (\$ in millions)
A	Compensation for primary and secondary structures	4,672,050	4.67	0.06
B	Compensation for trees	1,187,346	1.19	0.01
C	Compensation for crop production (temporary for tower construction)	4,755,200	4.76	0.06
D	Compensation for crop production (temporary for RoW area)	8,020,000	8.02	0.10
E	Other resettlement benefits	1,790,307	1.79	0.02
F	Operation cost for RP implementing agency	1,176,764	1.18	0.01
G	RP monitoring cost	941,411	0.94	0.01
H	Contingency @ 10% of the total	2,473,444	2.47	0.03
<b>Total Estimated Budget in Tk</b>		<b>25,016,522</b>	<b>25.02</b>	<b>0.31</b>

Source: Route Survey, CEGIS, 2016.

Note: F is considered as 5% and G is considered as 4% of total cost from A to E. Currency conversion is considered as \$1 = Tk81.03 as per the rate of Bangladesh Bank on October, 2017.

Cost of contingency will be used to mitigate any unavoidable circumstances (i.e. adjustment of increasing cost of materials/products, clearance of site by replacing brick piles, cost for providing saplings & others etc.) which will be raised during RP implementation.

111. Segment-wise detailed cost estimate is presented in Appendix 2.

## **7. Institutional Arrangements**

112. NWPGL, an enterprise of Bangladesh Power Development Board (BPDB) is the EA responsible for implementation of the project. NWPGL will evacuate power from the 800 MW Power Plant (CCPP) through the power transmission infrastructures of Power Grid Company of Bangladesh Ltd. (PGCB). Therefore, PGCB will be the implementation support agency for the project. BPDB will be the coordinating agency in implementing the project.

113. A steering committee, chaired by the Secretary of the Power Division, under the Ministry of Power, Energy and Mineral Resources (MoPEMR), comprised of representatives from Economic Relation Division (ERD), Planning Commission, and others (detailed list is presented in Appendix 3). BPDB will guide NWPGL in this regard and monitor as well as review progress and results time to time.

114. In order to undertake day-to-day activities a dedicated Project Management unit (PMU) will be set up in NWPGL for this project. A full-time project director will supervise the project components. The PMU staffed with experienced personnel will conduct and oversee procurement, accounting, reporting, quality assurance, and social and environmental issues.

### **7.1 Institutional Framework for RP Implementation**

115. NWPGL will establish necessary institutional setup for land requisition and implementation of resettlement/rehabilitation activities of the project. NWPGL will be responsible for finalization, updating, implementation and monitoring of the resettlement plan. There should be coordination between NWPGL and PGCB as these two organizations are the implementation support agencies for component 3. Core institutions responsible for land requisition and resettlement activities are described in the following section.

#### **7.1.1 Project Management Unit in NWPGL**

116. The NWPGL will establish a Project Management Unit for the implementation of the project including land requisition and resettlement. The PMU will consist of technical, financial, procurement and safeguard staff. NWPGL will hire an Environment, Health and Safety specialist to work in the field as well as 1 temporary social safeguards officer (or consultant) to be engaged during the implementation of the RP. The PMU will be headed by a project director, whose office will be set up within the NWPGL head quarter (HQ) for execution of the project, HQ also includes one environment and social safeguards specialist who will provide oversight and support to field-based staff. The PMU will be responsible for implementation of the RP in terms of compensation disbursement and resettlement of the project affected persons. The PMU will carry out the following broad tasks relating to RP implementation:

- Discharge overall responsibility of planning, management, monitoring and implementation of resettlement and rehabilitation program;
- Ensure availability of budget for all activities;
- Synchronise resettlement activity and engage contractor with construction schedule;
- Supervise, manage and record all AP entitlement payments.
- Coordinate the grievance redress mechanism;
- Monitor the effectiveness of entitlement packages and payment modality.
- Coordinate monitoring of RP implementation including reporting.
- Make necessary budgetary arrangements available in advance for the preparation, updating and implementation of RP.

- Designating/providing on-site support (temporary field officer/ consultant) to be on the ground prior to construction of component 3 to oversee RP implementation.

117. During implementation of the RP, the social staff (or consultant) of the PMU in NWPGCL will be responsible for ensuring that the draft RP is finalized and updated based on SPS 2009 of ADB, and applicable national laws and regulations. The social staff will also ensure that the RP and monitoring plan are followed and will provide technical support to PD, PMU in dealing with social issues related to the project components. The social staff will coordinate with relevant government agencies on social matters, will prepare the internal monitoring reports (refer Section 8.1) to be submitted to ADB.

118. NWPGCL will also be responsible for re-confirming, as needed, through additional field investigations, the replacement values assessed by type will be submitted to Power Division for approval.

119. Additional capacity building or training is not anticipated for the EA, given their experience with other ADB funded projects, implementing category-A resettlement plans.

## 7.2 Other Agencies in Land Requisition and Resettlement Process

120. In addition to the NWPGCL's PMU, there would be several other committees that will be involved in resettlement activities in the project.

121. Details on roles and responsibilities of various agencies for RP activities for Component 3 of NWPGCL are given below in **Table 7.1**.

**Table 7.1: Institutional Roles and Responsibilities for Land Requisition and Resettlement Activities**

Activity	Responsible Agency
<b>Project Initiation Stage and Institutional Setup</b>	
Establishing PMU	NWPGCL
Designating Safeguard Specialist in PMU	NWPGCL
Setting up of GRC	Power Division through NWPGCL
<b>RP Finalization and Updating Stage</b>	
Finalization of sites for project	NWPGCL(PMU)
Conducting consultation/FGDs as and where necessary	NWPGCL(PMU)
Updating of RP in case of change in design	NWPGCL(PMU)
Confirming replacement values of structures & Market price of crops	NWPGCL(PMU)
Finalizing compensation and entitlements	NWPGCL(PMU)
Disclosure of final entitlements & rehabilitation packages	NWPGCL(PMU)
Approval and disclosure of RP	NWPGCL and ADB
<b>RP Implementation Stage</b>	
Disbursement of Compensation	NWPGCL(PMU)
Implementation of rehabilitation measures	NWPGCL(PMU)
Consultations with APs during rehabilitation activities	NWPGCL(PMU)



<b>Activity</b>	<b>Responsible Agency</b>
Grievances redress	NWPGCL, (PMU)
Internal monitoring	NWPGCL, (PMU)

Note: ADB = Asian Development Bank, AP = Affected Persons, DC = Deputy Commissioner, FGD = Focus Group Discussion, GRC = Grievance Redress Committee, PMU = Project Management Unit, and NWPGCL = North-West Power Generation Company Limited.

## 8. Implementation Schedule

122. RP implementation will take place over approximately two (2) years, starting with compensation process initiation through compensation payment finalisation, and semiannual monitoring reports will be prepared. The schedule will be adjusted during final design and implementation.

123. All activities related to the land requisition and resettlement for construction of tower and stringing of transmission line will ensure that all compensation payments for land and assets are completed prior to commencement of civil works for component 3.

124. The draft RP will be finalized and updated after finalization of design and/or major change of design, see Table 8.1 below. The implementation of RP will include: (i) verification of losses and extent of impacts due to the project by conducting census, (ii) consultations with APs to finalise the arrangements for utilization of land, and (iii) compensation payments to the AHs. Public consultation and grievance redress (if any from the APs) will be undertaken throughout the project but before commencement of utilization of land for the project. Monitoring will also be undertaken throughout the project.

125. The following is a tentative schedule for RP implementation of the project (**Table 8.1**). The schedule may be adjusted during final design and implementation.

**Table 8.1: Schedule of Resettlement Activities of Component 3**

Activities	Timeline
Draft Resettlement Plan preparation	Jan 2018
ADB review and concurrence on draft RP	Jan 2018
Resettlement Plan updating (consultation, disclosure, census, etc.)	Mar 2018
ADB review and concurrence on the updated Resettlement Plan	Mar 2018
Uploading of updated Resettlement Plan	Mar 2018
Determination of entitlements & preparation of AP comp record	Dec 2017–Jan 2018
Fund placement with Contractor/IA	Mar 2018
Payment of compensation to APs	Jul 2018–Sep 2020
Payment of all eligible assistance	Oct 2018–Sep 2020
Consultation and grievance redress	Oct 2018–Sep 2020
Site clearance for construction/installation work commencement	Oct 2018–Sep 2020
Internal monitoring report preparation and submission (Semiannual)	Semiannual
Outcome monitoring survey and reporting through semiannual reports	Periodically

### 8.1 Monitoring and Reporting

126. NWPGL through its PMU will undertake internal monitoring and measure the progress of implementation of the RP. No external monitoring will be conducted for this project's RPs.

127. NWPGL through its PMU will (i) monitor the progress of implementation of safeguard plans, (ii) verify compliance with safeguard measures and their progress toward intended outcomes, (iii) document and disclose monitoring results and identify necessary corrective and preventive actions in the periodic monitoring reports, (iv) follow up on these actions to ensure progress toward the desired outcomes, and (v) submit semiannual monitoring reports on safeguard measures as agreed with ADB (see indicators in Table 8.2). NWPGL through its PMU will be responsible for managing and maintaining affected unit databases.

128. Monitoring reports documenting progress on resettlement implementation and resettlement plan completion reports will be provided by NWPGL through its PMU to ADB for review. Semiannual monitoring reports will be posted to ADB website.

129. Long term outcome monitoring: Affected households should be able to maintain/improve their livelihoods after being impacted. Primarily this is assessed through income, but other proxy indicators are included (see Table 8.2 below) which can tell us about changes in livelihoods for the affected households. The PMU will refer to baseline date in the census for verification of livelihood changes and undertake a post resettlement survey based on the provided indicators. Data should be collected periodically and reported through monitoring reports on or after the end of project construction.

## 8.2 Monitoring Indicators

130. Fulfilment of the RP policy and targets in the implementation process will be monitored through setting up indicators. Indicators for achievement of the objectives under the resettlement program are shown in **Table 8.2**.

**Table 8.2: Monitoring Indicators**

Type	Indicators	Indicator Explanation
First Monitoring Report	<ul style="list-style-type: none"> <li>PMU established and temporary social specialist engaged;</li> <li>Staff Training or capacity building activities undertaken;</li> <li>Completion of inventory of losses verification survey for all affected households (component 3) completed;</li> <li>Final entitlements for each household recorded (table);</li> <li>GRM established and functioning;</li> </ul>	Reporting on these indicators should be included in the very first monitoring report together with reporting on the semiannual indicators.
Semiannual Monitoring Indicators for Reporting	<ul style="list-style-type: none"> <li># households (of total affected HHs) met with to discuss final entitlements</li> <li># of entitlement discussions with both male and female household head met with during meeting (out of total HH).</li> <li>Number of consultation/disclosure activities undertaken this period (6 months)</li> <li>Number of male participants in consultation activities.</li> <li>Number of female participants in consultation activities.</li> </ul>	During discussion of final entitlements, both male and female household heads should be present to ensure both understand the compensation package. This should be reported on during the period of entitlement disbursement.
	<ul style="list-style-type: none"> <li>Total number of grievances this period (6 months)</li> <li>Total number of grievances closed (this period)</li> <li>Total number of grievances remaining open (at time of report)</li> </ul>	Grievances can be large or small, if grievances are outstanding include a short explanation in the monitoring report. Grievances should be

Type	Indicators	Indicator Explanation
		distinguished by project component.
	<ul style="list-style-type: none"> <li>• Total number of affected households (final number).</li> <li>• % of total AHs received compensation payments (crops, trees, other assets).</li> <li>• Amount of compensation dispersed (total).</li> <li>• # of lease agreements established with contractors for any temporary impacts during construction.</li> <li>• Number of 'affected households' (by component) participating in Trust Fund training programs (men, women, vulnerable participants).</li> <li>• Number of AHs with affected residential structures shifted to new location and rebuilt structure.</li> </ul>	<p>All payments are made prior to any civil works starting. Please include an update on the % of HHs paid each period until finalized.</p> <p>For affected structures, please include an update, did they rebuild/or not</p>
Long-term outcome indicators	<ul style="list-style-type: none"> <li>• % of affected households whose income has increased.</li> <li>• % average income increase for affected households.</li> <li>• % of AHs who changed their primary occupation.</li> <li>• % of total vulnerable HHs above the poverty line.</li> <li>• % affected female headed households who are above poverty line.</li> <li>• % affected female headed households who changed their occupation (record type of change).</li> <li>• % of affected households (HH head &amp; spouse) out of total affected households agree their livelihoods are restored or improved after project impacts.</li> <li>• Changes for nontitled households with affected structures (i.e. changes in formal/informal living arrangements, changes in occupation, changes in income).</li> </ul>	<p>Affected households should be able to maintain/improve their livelihoods after being impacted. Primarily this is assessed through income, but other proxy indicators are included which can tell us about changes in livelihoods for the affected households</p> <p>Refer to baseline date in the census for verification of livelihood changes.</p>

### 8.3 Reporting Arrangements

131. Monitoring reports<sup>8</sup> will be prepared and submitted by NWPGL to ADB on a semiannual basis. The monitoring report will be disclosed at NWPGL and ADB website. The monitoring report will reflect the indicators listed in the above table using both quantitative and qualitative data collected by the PMU. Photos will be included wherever possible.

<sup>8</sup> A combined monitoring report for all three components - CCPP, gas pipeline and power transmission line - can be prepared.

## Appendix 1: List of Stakeholder Consultation Participants

### Opinion of Brickfield Owners and Laborers

The discussion meetings with the brickfield owners and laborers were held different times in different places of Rupsha upazila. The meetings were facilitated by field study team. The participants were informed about the project. The main focus of discussion was to know participants' perception about the project and its temporary & permanent impacts on brickfield. The participants were happy as they were informed about the project and had been given opportunity to express their opinion and desire. They, therefore, spontaneously expressed their opinion. The discussions are summarized below.

#### 1. Placement of tower

In the case of placement of tower, it should not be in the middle of brickfield; it should be at the edge of the brickfield to minimize the impact of the project. The owners had no objection in construction of tower, but they would be happy if the project pay compensation for their land. The participants were informed that as per the Electricity Act of the country there is no provision of compensation payment on land. But they would be compensated for any disturbance to their regular activities to be occurred during construction of tower.

#### 2. Production period of brick

The brick production period starts from the Bengali calendar month of Agrahayan to middle of Boishakh (the English calendar month of October to April). There is no activity in the remaining months of the calendar year. The participants opined to avoid implementation of the project activities in the production period; it would minimize project impact on brickfield. The project would schedule its activities synchronizing with the activities of the affected brickfield.

#### 3. Stringing of transmission line

Stringing of transmission line over the chimney of brickfield might create problem, although they had no experience on it. The field team facilitators, however, informed the participants that the project itself would avoid stringing line over chimney, if they would find any problem. In this case the project might bring changes in their final design.

The list of brickfield owners and laborers participated in the discussion meetings are presented below.

#### Consultation participants

Name	Occupation	Address
Md. Sumon Sheikh	Brick field owner, NBM Bricks	Sadar, Khulna
Md. Mojid Sheikh	Brick field owner, Akhtar Bricks	Rupsha, Khulna
Abul Kashem Sheikh	Brick field laborer	Satkhirā (came from)
Alomgir Hossain	Brick field laborer	Satkhirā (came from)
Abu Musa	Brick field laborer	Satkhirā (came from)
Shofikul Islam	Brick field laborer	Satkhirā (came from)
Md. Hamid Sardar	Brick field laborer	Satkhirā (came from)

## Photographs of brickfield verification and discussion



**Table A1.1: Group Discussion and KII Participant List**

Name	Occupation	Address
MotalebSarker	Farmer	ChandoniMahal
Arun	Fisherman	ChandoniMahal
Sk. Md. Ripon	Fisherman	ChandoniMahal
Sahabuddin	Fisherman	ChandoniMahal
KanchanBishwas	Fisherman	ChandoniMahal
Hassan	Fisherman	ChandoniMahal
Faizullah	Trader	ChandoniMahal
Makbul Hossain	Farmer	Tetultola, Batiaghata
ModserMalik	Farmer	Tetultola, Batiaghata
Delower Hossain	SAAO	Tetultola, Batiaghata
Abul Basher	Farmer	Tetultola, Batiaghata
A Kader	Business	Tetultola, Batiaghata
Moniruzaman	Fisherman	Tetultola, Batiaghata
Bipul Biswas	Fisherman	Puthimari, Jalma
Abdur Rahim	Trader	Puthimari, Jalma
Ali Hossain	Fisherman	Puthimari, Jalma
Shadhon Roy	Fisherman	Puthimari, Jalma
BaburamMollik	Trader	Puthimari, Jalma
AlaminKobiraz	Fisherman	Puthimari, Jalma

Table A1.2: List of Focus Group Discussion Participants: Fishermen

**FGD with Fishermen for 800 MW LNG Based Combined Cycle Power Plant Project at  
Khalishpur, Khulna, Bangladesh**

**Attendance Sheet**

Date: 12.11.2016 Venue: Malapara, Chondamal

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
01.	Atay Biswas	Malapara Charan Mohal	"	অজয়
02.	Dipak Biswas	"	"	দীপক বসু
03.	Suman Vekher	"	"	সুমন বেকের
04.	Condan Biswas	"	"	কন্দন
05.	Kishor Biswas	"	"	কিশোর
06.	Bikas Biswas	"	"	বিকাস
07.	Condana Ray	"	"	কন্দনা রায়
08.	Lilima Biswas	"	"	লিলিমা
09.	Shakti Biswas	"	"	শক্তি
10.	Monir Biswas	Harecuifo	"	নসির হাশিম
11.	Santi Sarker	"	"	সান্তি সর্কার
12.	Pankaj Biswas	"	"	পঙ্কজ বিশ্বাস
13.	Komika Biswas	"	"	কমিকা
14.	Quinn	"	"	কুইন
15.	Jasno	"	"	জ্যোতসনা
16.	Kakoli Biswas	"	"	কাকলী বিশ্বাস
17.	Eti Rani	"	"	ইতি রানী



SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
18	Anjona	Malapara, Chandoni Mahal	"	ଅନନ୍ଦା
19	Mita	"	"	ମିତା
20	Gouna	"	"	ଗୁନା
21	Maryna	"	"	ମାର୍ଯ୍ୟନା
22	Biswajit	"	"	ବିଷ୍ଠୁବିଜି
23	Chandl	"	"	ଚନ୍ଦ୍ରୀ
24	Jagannath	"		ଜଗନ୍ନାଥ
25	Polok			ପଲକ
26	Anup			ଅନୁପ
27	Nikhi			ନିଖିଲ
28	Biswa			ବିଷ୍ଠୁ
29	Etí Biswas			ଇତି ବିଷ୍ଠୁ
30	Korpona			କୋରପନା
31	Anoti			ଅନୋତି
32	Robin Biswas			ରବିନ ବିଷ୍ଠୁ
33	Pappu			ପାପୁ
34	Mithun			ମିଥୁନ
35	Shamsh			ଶାମ୍‌ସ



## Photographs of Consultations



Group discussion with the local people



Group discussion with the local people



FGD with Fishermen

## Appendix 2: Detailed Cost Estimate

**Table A2.1: Replacement Cost for Primary and Secondary Structures**

Items	Quantity in sft/nos	Rate in Tk per sft/nos	Estimated amount of compensation in Tk
<b>Primary Structures</b>			
Semi puccahouses(sft)	730	1,955	1,427,150
Kutch house ( <i>dochala</i> ) sft	1,844	1,725	3,180,900
<b>Secondary Structures</b>			
Toilet	4	6,000	24,000
Tube-well	3	10,000	30,000
Irrigation pump	1	10,000	10,000
<b>Subtotal (primary&amp; secondary structure)</b>			<b>4,608,050</b>

Note on Structure Cost Determination: A Property Valuation Survey was conducted for collecting current market prices (CMP) of structures from the local shopkeepers of CI sheet, rod, cement, wood, etc. and knowledgeable persons (such as teacher, businessmen, etc.). Labor costs and other associated cost for construction of structures were also included in determining the replacement cost of structures. Government/Public Works Department (PWD) rate and the rate determined in a recent development project (Bangladesh: Natural Gas Infrastructure and Efficiency Improvement Project, RP, BAN 45203-006, 2016) were also considered. The higher rate between the two rates of PWD and CMP was considered for calculating the replacement cost of structures.

**Table A2.2: Compensation for Trees on Private and Government Land**

Types of trees	Quantity in nos.	Rate in Tk	Estimated amount in Tk
<b>Fruit bearing</b>			
Big	18	9,664	173,952
Medium	73	5,527	403,449
Small	14	2,232	31,247
Plant	9	66	594
<b>Subtotal</b>	<b>114</b>		<b>609,241</b>
<b>Timber</b>			
Big	4	18,090	72,359
Medium	26	11,073	287,896
Small	24	4,600	110,409
Plant	0	32	-
<b>Subtotal</b>	<b>54</b>		<b>470,665</b>
<b>Fuel (Date, Coconut and Plum)</b>			
Big	4	2,500	10,000
Medium	41	2,000	82,000
Small	19	800	15,200
Plant	8	30	240
<b>Subtotal</b>	<b>72</b>		<b>107,440</b>
<b>Subtotal of trees</b>	<b>240</b>		<b>1,187,346</b>

CMP of trees was collected from field. In some cases rates from Bangladesh: Natural Gas Infrastructure and Efficiency Improvement Project, RP, BAN 45203-006, 2016 were also considered.

**Table A2.3: Cost for Crops Compensation**

Types	Quantity in decimal.	Rate in Tk	Estimated amount in Tk
Compensation for crops production @ Tk800/decimal in RoW area	10,025 (40.56 ha)	800	68,020,000
Compensation for crops production @ Tk1,600/decimal in tower area	2972 (12.02 ha)	1600	4,755,200

Note: 100 decimal = 0.405 hectares.

**Table A2.4: Cost for other Resettlement Benefits**

Types	Quantity in nos/acre	Rate in Tk per nos/acre	Estimated amount in Tk
Cash compensation @ Tk5,000 for shifting brick pile	3	5,000	15,000
Structure Transfer Grant (TG) for shiftable structures @ 5% of replacement cost of structures	1,844	86	158,584
Structure Transfer Grant (TG) and transitional period grant (TPG) for nonshiftable structures @ 10% of replacement cost of structures	730	196	143,080
Improvement Grant for Shifting of Structure @ 10% of the replacement value of structure	2,574	184	473,616
Cash compensation for trees @ 30% timber value of fruit trees	91	5,711*	519,701
	14	2,009**	28,126
One-time cash assistance of Tk7,000/acre for land reformation at access road and storage area	20.6	7,000	144,200
One-time allowance equivalent to Tk10,000 per affected vulnerable household	29	10,000***	290,000
Leasing allowance, three months for nontitled households with affected residential structures	2	9,000*****	18,000
<b>Subtotal of resettlement benefits</b>			<b>1,790,307</b>

Note: Fruit value is calculated considering 30% of timber value on average for big and medium fruit trees\* and small trees\*\* separately.

\*\*\*Allowance for affected vulnerable households is considered on the basis of average wage rate of Tk3,000 per month for each household; for three months it is Tk9,000 plus additional Tk1,000 for meal.

\*\*\*\*\*Leasing allowance is calculated considering house rent as Tk3,000 per household for each month. Therefore, for three months it is Tk9,000 for each affected household.



### Appendix 3: Steering Committee

সংযোজনী-দ

#### Composition of Project Steering Committee (PSC)

01	Secretary, Concerned Ministry/Division	Chairperson
02	Joint Chief (Planning Wing) of the Concerned Ministry/ Division	Member
03	Joint Secretary (Development) of the Concerned Ministry/Division	Member
04	Head of the Concerned Implementing Agency/Agencies	Member
05	Deputy Chief, Concerned Ministry/Division	Member
06	Representative of NEC-ECNEC & Coordination Wing of the Planning Division	Member
07	Representative of the Concerned Wing/Sector-Division of the Planning Commission	Member
08	Representative of Concerned Sector of IMED	Member
09	Representative of the Programming Division, Planning Commission	Member
10	Representative of Finance Division	Member
11	Representative of Economic Relation Division ( <i>For Foreign Aided Project</i> )	Member
12	Representative from the Planning Branch of Concerned Implementing Agency	Member
13	Project Director	Member
14	Concerned Senior Assistant Chief/Assistant Chief of the Ministry/Division	Member Secretary

#### Terms of Reference:

- ☐ To review the recommendation of the project implementation committee for addressing problems that arise during project implementation and to take decision accordingly.
- ☐ To give guideline or to formulate policies which required for implementing project activities
- ☐ Any other matter related to project implementation.
- ☐ The committee will meet at least once in every three months.
- ☐ The committee may co opt members, if necessary.



#### Appendix 4: Photographs of the Identified Affected Entities in the Project RoW



**Shed including a shallow tube well**



**Kitchen and bamboo**



**Tin roof dwelling house**



**Store room of a brickfield and trees**



**Tin roof dwelling house and trees**



**Tin roof dwelling house and trees**





**Tin roof dwelling house and trees**



**Toilet and trees**



**Brickfields with existing power transmission line**



**Road crossing at different places**





**Agricultural land**



**The Rupsha and the Atharobanki River**



**Affected people in discussion meetings**