

# Resettlement Plan

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Document stage: Updated  
Project Number: 50161-003  
May 2018

## Bangladesh: Rupsha 800-Megawatt Combined Cycle Power Plant Project

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. This is an updated version of the draft originally posted in March 2018 available on <https://www.adb.org/projects/documents/ban-50161-003-rp>.

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## **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
ARIPO	Acquisition and Requisition of Immovable Property Ordinance
CCL	Cash Compensation under Law
CCPP	Combined Cycle Power Plant
DC	Deputy Commissioner
EA	executing agency
FGD	Focus Group Discussion
GAP	Gender Action Plan
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
ha	hectare
HH	household
IDB	Islamic Development Bank
IEB	Institute of Engineers Bangladesh
IOL	Inventory of Losses
JFPR	Japan Fund for Poverty Reduction
KNM	Khulna Newsprint Mills Limited
km	kilometer
MW	magawatt
NGO	nongovernment organization
NWPGCL	North-West Power Generation Company Limited
PMU	Project Management Unit
RP	resettlement plan
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 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.

**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.

**Project** means the 800 MW Combined Cycle Power Plant project at Khalishpur, Khulna, Bangladesh of North-West Power Generation Company Limited (NWPGL).

**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.

**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 (i) households that are headed by women; (ii) households headed by persons with disabilities; (iii) households falling under the generally accepted indicator for poverty,<sup>1</sup> (iv) households headed by elderly persons, (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.

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## **EXECUTIVE SUMMARY**

### **Project Description**

i. This draft resettlement plan (RP) is for output 1 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 outputs: Output 1: efficient gas-fired power generation increased through the construction of the Rupsha 800 MW CCPP; Output 2: energy transfer systems upgraded with, 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; and a power transmission interconnection, via a 29 km new transmission line; and Output 3: institutional capacity of NWPGL strengthened; and output 4, socially inclusive development of communities neighboring the project pilot tested.

iii. This RP deals with Output 1: The Rupsha 800 MW CCPP. The CCPP site is located in the abandoned compound of Khulna Newsprint Mills Limited (KNM) of Bangladesh Chemical Industries Corporation (BCIC) a (government organization) located on the Western bank of the Bhairab River and on the Eastern side of BIDC Road, in Khalishpur, Khulna.

### **Scope of Land Acquisition and Resettlement**

iv. Based on the preliminary design and in consultation with various government agencies to avoid if not minimize resettlement impacts, output 1, the CCPP will only affect government land, structures and trees, as follows:

v. Land: output 1, requires 20 hectare (ha) of land at the KNM premises for construction of the CCPP. The affected land owned by KNM (government owned) will be transferred to the government owned NWPGL by third quarter (Q3) of 2018. Due diligence undertaken that there are no non-titleholders, and no legacy issues.

vi. Structures: Two (2) schools (one for boys and another for girls) will be affected on the 20 ha and will be relocated. The relocation site will be within KNM's premises (remaining 15 ha) outside the CCPP site at a safe distance as determined between engineers and the school committee. Including these two school buildings there are 156 residential and government owned non-residential structures in the KNM affected premises. All the structures, except a mosque, a guest house, Managing Director's residence, a kitchen and two schools are abandoned. The mosque and a graveyard within the CCPP site will be renovated to enable continued access by the community without any encumbrance by the Rupsha 800 MW CCPP. Compensation, however, for the affected government buildings/structures is provided for in this RP.

vii. Trees: A total of 2,615 trees owned and managed by KNM will be affected.

viii. There are five caretaker employees (5 households/approximately 26 people) working at the site who will need to find new jobs as a result of output 1. Other than this no livelihood

impact has been identified. No indigenous people, as defined by the Asian Development Bank's (ADB) Safeguard Policy Statement (SPS, 2009) will be affected by the project.

### **Measures to Minimise Impacts and Resettlement**

ix. The proposed site has been selected at the abandoned KNM premises to minimize land acquisition and resettlement impacts. The project Preparation Technical Assistance considered options for the plant location within the KNM premises, including access routes (to the schools/Mosque) taking into consideration engineering requirements, safety parameters and selected the option that minimized resettlement impacts.

### **Participation, Consultation and Disclosure**

x. Consultation during the preparation of this draft resettlement plan was undertaken through public meetings and focus group discussions in Khulna city. Initial rounds of consultation took place in November 2016, with participation by 126 persons in attendance (including 43 women). This included entities such as the affected schools and mosque; as well as students, teachers, parents and mosque community members to understand the scope of impacts and agree on assistance measures.

xi. Consultations with all affected governmental organizations, relevant agencies and the public was again undertaken in 2017 with 64 participants (52 men and 12 women) to agree with the principles of land acquisition, compensation and assistance as well as the entitlement matrix. The draft RP and updated RP will be disclosed as per disclosure requirements laid out in ADB's SPS.

### **Policy Framework**

xii. The legal and policy framework of this resettlement plan is based on the national laws and legislations related to Land Acquisition and Resettlement (LAR) in Bangladesh and ADB SPS, 2009. The current legislation governing land acquisition in Bangladesh is the Acquisition and Requisition of Immovable Property Ordinance 1982 (ARIPO) and subsequent amendments during 1993–1994. The 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.

xiii. The compensation and transfer of land will be held with mutual understanding between two government organizations. Two schools will be relocated from the proposed land, a mosque and a memorial graveyard will be renovated. Given that the affected land and assets of output 1 are owned by government organizations, there is no discrepancy between laws and regulations of Bangladesh with ADB policy in terms of compensation principles and entitlements. However, the RP notes a number of gaps with SPS which will be addressed with regards to ongoing consultation, avoiding impacts, providing assistance to caretakers, respecting cultural practices, and ensuring civil works do not commence until the existing facilities have been vacated and relocated or temporary facilities are made available (i.e. classrooms whilst school construction is completed).

xiv. As the affected organizations are governmental organizations, any concerns and grievances related to output 1 will be handled as per the organizational policies of NWPGCL and delivering organization (KNM), as the affected land is owned by KNM, a government organization, and as this affected land is to be transferred to another government organization namely NWPGCL. If there is any grievance the line ministries (in this case Ministry of Power

Energy and Mineral Resources and Ministry of Industries) will redress the grievances in the meeting to be held with their mutual understanding.

### **Resettlement Budget**

xv. The resettlement cost estimate for the project includes eligible compensation, resettlement assistance and support costs for RP implementation and monitoring as per the entitlement matrix. This RP presents estimated costs for land acquisition, which will be sourced from counterpart funds provided for by the EA. The estimated cost in this budget is determined by the ministries concerned. The resettlement costs and budget covers compensation and special assistances. There is 10% contingency over the total budget to meet unforeseen expenditures. The total estimated budget for implementation of the RP is Tk2,826.31 million (approximately \$34.88 million).

### **Institutional Arrangements**

xvi. NWPGCL will establish a project Management Unit (PMU) for the implementation of the project including land requisition and resettlement. NWPGCL will be responsible for finalization, updating, implementation and monitoring of this resettlement plan. During implementation of the RP, a temporary social safeguards staff member (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. NWPGCL environment and social safeguard staff at their headquarters will provide general oversight of field-based staff.

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

xvii. Implementation of the RP for output 1 will take place over 1 year, anticipated to commence in June of 2018. The schedule will be adjusted during final design and implementation. Internal monitoring of this resettlement plan is the responsibility of NWPGCL through its PMU. NWPGCL will submit semi-annual monitoring reports on safeguards instruments to ADB, which will be disclosed on the ADB website.

## 1. PROJECT DESCRIPTION

### 1.1 Project Description

1. This draft Resettlement Plan (RP) is for output 1 of the Rupsha 800 MW Combined Cycle Power Plant 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 an 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 Outputs as follows:

3. **Output 1: Efficient gas-fired power generation increased.** This will be achieved through the design, supply, installation and commissioning of new Rupsha 800 MW 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, 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. Condensate leaving the steam turbine will be cooled using a closed-circuit cooling system. The cooling system will consist of cooling towers with upward forced draft with a circulating water rate of 60,000 m<sup>3</sup>/hour, for which water to make-up for blowdown losses and evaporation will be drawn from the nearby Bhairab River.

4. **Output 2, Energy Transfer System Upgraded.** For gas supply to the Rupsha power plant, the project will construct (i) a 10 kilometer (km) 24-inch, gas distribution pipeline to connect the Khulna City Gas Station to the Rupsha power plant, and (ii) an additional 2 km 20-inch gas pipeline (off-take) from the Rupsha power plant to NWPGL’s existing 225 MW power plant at Khulna, which is currently operating on high-speed diesel (HSD). The project will replace the HSD at the Khulna power plant and provide a stable gas supply for its operation, resulting in significant environmental, economic, and financial benefits. To transfer generated electricity from the Rupsha power plant to the existing Khulna South grid substation, a 230 kilovolt switchyard at the Rupsha power plant site and 29 km of 230 kilovolt high capacity, double circuit transmission line, will be built.

5. **Output 3, Institutional capacity of NWPGL strengthened.** (i) implementation and operation of an enterprise resource planning (ERP) system; (ii) supply and installation of a universal power plant operations training simulator; and (iii) delivery of capacity enhancement through on the job training for NWPGL staff in: (a) project management, implementation, and supervision; (b) monitoring and evaluation; (c) operation and maintenance; (d) environment and social safeguards; (e) gender equity; and (f) effective project communications.

6. **Output 4, Socially inclusive development of communities neighboring the project site pilot tested.** The project will provide grant financing to improve livelihood of the communities in the project area by (i) increasing awareness on safe and efficient use of electricity, (ii) delivering capacity building trainings on livelihood activities and employment

opportunities, and (iii) installing a 10 kilowatt solar system, two information technology laboratories, and two science laboratories in schools near the Rupsha power plant.

7. This RP deals with output 1, the CCPP.

## **1.2 Output 1 CCPP Location**

8. The output 1 CCPP site is located in the compound of the government owned Khulna Newsprint Mills Limited (KNM) an abandoned newsprint mill of the Bangladesh Chemical Industries Corporation (BCIC). KNM owns 35 ha at the site of which 20 ha will be acquired for the CCPP. The site is located at 22°51'11.32"N latitude and 89°32'56.00"E longitude on the Western bank of the Bhairab River and the Eastern side of BDC Road, Khalishpur, Khulna.

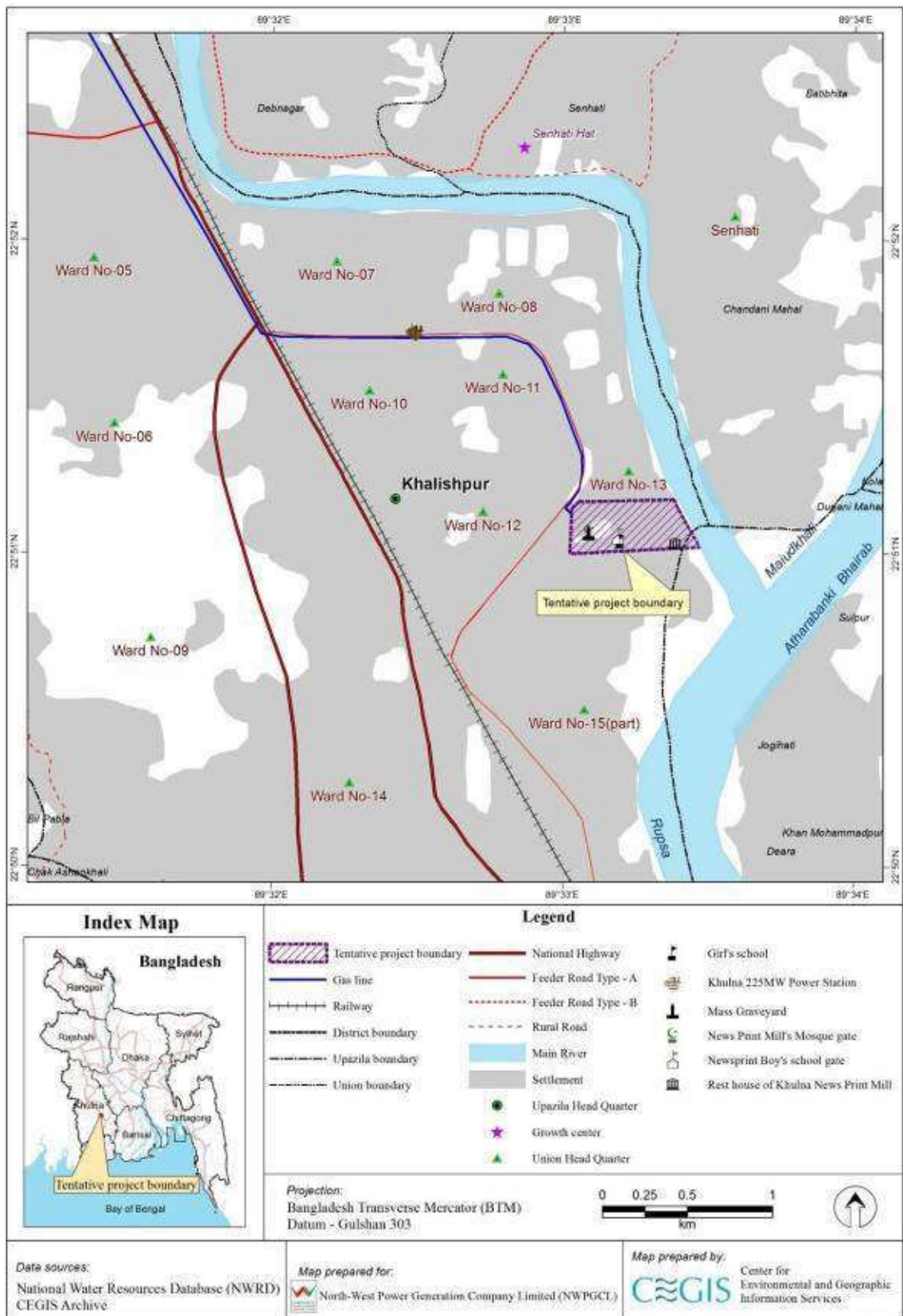
9. The land and buildings at the output 1 site are overgrown with trees, shrubs, and grass, as well as dilapidated structures with KNM caretaker personnel being the only permanent residents at the site. In addition, there are two schools, a mosque and a graveyard within the area that continue to be used and are located within the proposed CCPP area (see Chapter 2 for further details on associated impacts).

10. Administratively, the site is located at Khalishpur Thana of Khulna district. The site is 2.1 km east of Khalishpur Police Station, 2.2 km from Khulna divisional stadium and 3.5 km from Khulna-Jessore road. The site is about 271 km South-West of Dhaka city and 55 km from Mongla.

11. The site is well connected with Dhaka and other cities through railway, road and river (**Map 1.1**). Heavy equipment like turbine rotors, Transformers etc. can be transported by barge through waterways and unloaded at the plant jetty on Bhairab River and finally to the lay down area by skidding. Impacts associated with river transport are addressed in the project Environmental Impact Assessment.

## **1.3 Measures to Minimize Impacts**

12. The proposed site has been selected at the abandoned KNM premises to minimize land acquisition and resettlement impacts. The KNM newsprint mill and associated worker housing/compound closed in 2002; with the compound/assets continued to be secured by a small number of KNM employees. The project preparation technical assistance considered options for the plant location within the KNM premises, including access routes taking into consideration engineering requirements, and selected the option that minimized involuntary resettlement and community impacts. Focus group discussions (women, parents, teachers) and meetings with the school committee and Imam were conducted (November 2016) to incorporate their feedback into the new school location and on how to ensure continued and safe community access to the mosque.



## 2. SCOPE OF LAND ACQUISITION AND RESETTLEMENT

### 2.1 Methodology Used to Determine Impacts

13. A participatory approach was followed for collecting data. The techniques used for data collection include (i) inventory of losses survey (IoL); (ii) property valuation survey (PVS); and (iii) stakeholder consultation meetings and focus group discussions (FGDs). Questionnaires and checklists were used for collecting data. A team of experienced professionals along with a number of field staff facilitated these activities.

14. IoL survey was conducted for all affected structures and trees. The enumerators visited the KNM area and observed the affected structures. IoL survey was conducted for this project from 8<sup>th</sup> November 2016 to 12<sup>th</sup> November 2016.

### 2.2 Impact on Land and Structures

15. A total of 20 ha of land will be needed for construction of the CCPP which will be transferred between the two government entities KNM to NWPGCL for the purpose of national interest. This was decided during a meeting held at the Ministry of Industries on 20.8.2014; where it was decided by KNM to sell the 20 ha of land out of a total 35 ha to NWPGCL. Table 2.1 displays the impacts associated with the CCPP.

**Table 2.1: Summary of Impacts within CCPP site**

Type of Impact	Quantity	Area/ Unit	Owner
Land for CCPP site	01	20 ha	KNM (government owned land)
Residential structures Non-residential structures Total structures	122 residential 29 non-residential 151 total structures	4.97 ha 0.83 ha 5.80 ha	KNM owned structures on KNM land (government owned)
Access impacts on Mosque and graveyard	01 Mosque and 01 graveyard (these are not included in the number of structures 151 mentioned above)	-	KNM land (government owned land)
Fences, gates and posts (secondary structures)	1,575.82 Fences	meter	KNM structures on KNM land
	36.65 Gates	square meter (included in nonresidential structures above)	KNM structures on KNM land
	55 Posts	Nos.	KNM structures on KNM land
Caretakers and pump operators working at CCPP site	5	Nos.	KNM employees (pump operators, and care takers)
Trees	2,615: Fruit: 1,775 Timber/fuel: 788 Medicinal: 52	Nos.	KNM owned and managed



16. The land needed for the CCPP will impact on land, structures, trees, access to a mosque and a memorial graveyard. In the KNM premises 151 government owned residential and non-residential structures and 2,615 trees will be affected. Industrial buildings (i.e. the original newsprint factory) of KNM are outside the proposed 20 ha area for the CCPP. Detailed impacts on structures are presented in Appendix 1. All the structures, except the mosque, a guest house, Managing Director's residence, a kitchen and two schools – one for boys and other one for girls, are abandoned. The schools are functioning, with 400<sup>3</sup> students attending classes. Approximately 15 people (primarily men) use the mosque regularly, except Friday for prayer where between 35–40 people attend the Jumma prayer session. The graveyard was established during the liberation war in Bangladesh in 1971 – freedom fighters were killed and were buried together in a grave at the site. Access to the Mosque and graveyard, could be affected and as such will be mitigated to ensure continued safe use by the community. The schools will be relocated by NWPGL in the KNM premises but outside the CCPP layout at a safe distance.

17. The land needed for the CCPP is government land – KNM is the owner of this land, which will be transferred to the government organization NWPGL as agreed between the relevant ministries.

## 2.3 Loss of Trees

18. The project will require removal of 2,615 trees of various sizes and species. The IoL survey found varieties of trees, see Tables 2.2, 2.3, 2.4, 2.5. There are, 1,775 fruit trees, 788 timber/fuel/fiber trees and 52 medicinal trees. The trees are on KNM land and managed by KNM. The loss of trees will not lead to loss of livelihood, as the affected land is not used as a means of livelihood (including by caretaker personnel). Cash compensation for fruit is not considered, as the trees were planted during the establishment of KNM in 1960 and have already expired their productive age. The existing productivity is sporadic. Hence, no compensation is needed for fruit production; conversely the timber value of the fruit bearing trees has been calculated and included in compensation. The total estimated number of affected trees is 2,615. KNM will be able to remove the timber prior to civil works.

**Table 2.2: Number of Trees in CCPP area**

Category of tree	Number of Trees	Percentage (%)
Fruit	1,775	68
Timber/fuel/fiber	788	30
Medicinal	52	2
<b>Total</b>	<b>2,615</b>	<b>100</b>

Source: Inventory of losses survey, November 2016.

**Table 2.3: Details on Fruit Trees in CCPP Area**

SI no.	Scientific Name	Local Name	No. of Tree	Plant Type	Plant Utilization 1	Plant Utilization 2
1	<i>Aegle marmelos</i>	Bel	23	Tree	Fruit	
2	<i>Annona reticulata</i>	Ata	48	Shrub	Fruit	
3	<i>Areca catechu</i>	Supari	77	Monocot	Fruit	

<sup>3</sup> The number of registered students is 450 in the year of 2016 and 400 in the year of 2017.

SI no.	Scientific Name	Local Name	No. of Tree	Plant Type	Plant Utilization 1	Plant Utilization 2
4	<i>Artocarpusheterophyllus</i>	Khanthal	213	Tree	Fruit	Timber
5	<i>Averrhoa bilimbi</i>	Bilombi	6	Shrub	Fruit	
6	<i>Cocos nucifera</i>	Narikel	613	Monocot	Fruit	Fuel
7	<i>Dilleniaindica</i>	Chalta	8	Tree	Fruit	
8	<i>Ficusracemosa</i>	Jag Dumur	10	Shrub	Fuel	
9	<i>Mangiferaindica</i>	Aam	360	Tree	Fruit	
10	<i>Manilkarazapota</i>	Safoda	11	Tree	Fruit	
11	<i>Moringaoleifera</i>	Sajna	136	Tree	Fruit (Vegetable)	
12	<i>Olea europaea</i>	Jalpai	5	Tree	Fruit	
13	<i>Musa sapientum</i>	Kala	64	Monocot	Fruit	
14	<i>Phoenix sylvestris</i>	Khejur	27	Monocot	Fruit	
15	<i>Psidiumguajava</i>	Peara	34	Shrub	Fruit	
16	<i>Syzygiumcumini</i>	Jaam	18	Tree	Fruit	
17	<i>Syzygiumsamarangense</i>	Jamrul	30	Tree	Fruit	
18	<i>Ziziphusmauritanica</i>	Baroi	36	Tree	Fruit	
19	<i>Citrus grandis</i>	Batabilebu	21	Tree	Fruit	
20	<i>Diospyrosblancoi</i>	Bilati Gab	3	Tree	Fruit	
21	<i>Artocarpuslakoocha</i>	Dewa	4	Tree	Fruit	
22	<i>Carica papaya</i>	Papaya	12	Shrub	Fruit	Vegetable
23	<i>Borassusflabellifer</i>	Tal	6	Monocot	Fruit	Fuel
24	<i>Tamarindusindica</i>	Tentul	6	Tree	Fruit	
25	<i>Litchi chinensis</i>	Lichu	4	Tree	Fruit	
		<b>Total</b>	<b>1,775</b>			

Source: Inventory of losses survey, November 2016.

**Table 2.4: Details on Timber/Fuel/Fiber Trees in CCPP Area**

SI no.	Scientific Name	Local Name	No. of Tree	Plant Type	Plant Utilization 1	Plant Utilization 2
1	<i>Acacia moniliformis</i>	Akashia	10	Tree	Timber	
2	<i>Bombaxceiba</i>	Shimul	16	Tree	Fiber	Fuel
3	<i>Dalbergiasissoo</i>	Sisso	10	Tree	Timber	
4	<i>Ficusbenghalensis</i>	Bot	15	Tree	Aesthetic	Fuel
5	<i>Ficusracemosa</i>	Jag Dumur	10	Shrub	Fuel	
6	<i>Lagerstroemia speciosa</i>	Jarul	21	Tree	Aesthetic	
7	<i>Leucaenaleucocephala</i>	Ipil ipil	10	Tree	Timber	
8	<i>Plumeriarubra</i>	Khatgolap	14	Tree	Aesthetic	
9	<i>Polyalthialongifolia</i>	Debdaru	70	Tree	Aesthetic	Timber
10	<i>Putranjivaroxburghii</i>	Putranjib	2	Tree	Fuel	
11	<i>Roystonearegia</i>	RoyelPlam	35	Monocot	Aesthetic	
12	<i>Samaneasaman</i>	Raindee	53	Tree	Timber	

SI no.	Scientific Name	Local Name	No. of Tree	Plant Type	Plant Utilization 1	Plant Utilization 2
		Kory				
13	<i>Senna siamea</i>	Minjira	20	Tree	Timber	
14	<i>Swieteniamahagoni</i>	Mahogonii	272	Tree	Timber	
15	<i>Tectonagrandis</i>	Sagun	18	Tree	Timber	
16	<i>Terminalia cattapa</i>	Khatbadam	7	Tree	Aesthetic	
17	<i>Tremaorientalis</i>	Jibon	74	Tree	Fuel	
18	<i>Alstoniascholaris</i>	Chatim	6	Tree	Aesthetic	Timber
19	<i>Pithecellobiumdulce</i>	Dakhina Babul	11	Tree	Timber	
20	<i>Eucalyptus sp</i>	Eucalyptus	23	Tree	Timber	
21	<i>Lagerstroemia indica</i>	Furush	4	Tree	Aesthetic	
22	<i>Gmelinaarborea</i>	Gamari	6	Tree	Timber	
23	<i>Cascabelathevetia</i>	HaldeyKaro bi	6	Shrub	Aesthetic	
24	<i>Neolamarckia cada mba</i>	Kadam	17	Tree	Aesthetic	Timber
25	<i>Albizialebeck</i>	Karoi	6	Tree	Timber	
26	<i>Delonixregia</i>	Krishnochur a	14	Tree	Aesthetic	
27	<i>Litseamonopetala</i>	Menda	5	Tree	Fuel	
28	<i>Ficusracemosa</i>	Pakur	11	Tree	Aesthetic	
29	<i>Lanneacorumandeli ca</i>	Ziga	22	Tree	Fencing	
		<b>Total</b>	<b>788</b>			

Source: Inventory of losses survey, November 2016.

**Table 2.5: Details on Timber/Fuel/Fiber Trees in CCPP Area**

SI no.	Scientific Name	Local Name	No. of Tree	Plant Type	Plant Utilization 1	Plant Utilization 2
1	<i>Azadirachta indica</i>	Neem	30	Tree	Medicine	Timber
2	<i>Terminalia arjuna</i>	Arjun	18	Tree	Medicine	Timber
3	<i>Terminalia bellirica</i>	Bohera	2	Tree	Medicine	
4	<i>Abroma augusta</i>	Ulatkambol	2	Shrub	Medicine	
		<b>Total</b>	<b>52</b>			

Source: Inventory of losses survey, November 2016.

## 2.4 Impact on Employment

19. There are five (5) KNM employees whose employment will be affected due to the project. They will lose their employment after transfer of the land by NWPGL and will have to find new jobs. One is potentially to be deployed in another position within KNM. The profile of these affected KNM employees is presented below. Resettlement assistance, however, will be paid to them and is included in the RP budget.

20. There is no scope to absorb the affected employees in the schools, as the schools have no employment vacancy and the project cannot guarantee their employment, as this will depend on whether the individuals have the necessary security clearances to work at a state public utility.

#### 2.4.1 Profile of the affected employees

21. The profile of the affected employees is presented in text and tabular form below.

22. **Identity.** The affected employees are male and working as pump operators (3) and care takers (2). They are on average 51 years old, which ranges from 40 to 56 years. The household size of these employees is 5.2. The population of these affected households is 26. All of these employees will need to find new jobs.

23. **Employment.** The average length of employment of three pump operators and one caretaker is 28.5 years, ranging from 26 to 32 years. While the care taker of the guest house has only worked for three (3) years. Out of the 5 affected employees, a pump operator may be appointed and deployed as a peon in the KNM office. The KNM Authority does not think about the future employment of the affected employees.

24. **Income.** The monthly income of the affected employees themselves ranges from Tk4,500 to Tk6,500. Out of five employees, two have income of other members in their households, which increases their household income above the poverty level. Three employees other than these two are vulnerable due to their poor income, see Table 2.6. The poverty line has been calculated based on the Bangladesh Bureau of Statistics Survey 2010 and inclusive of inflation through to 2017 (<https://www.bb.org.bd/econdata/inflation.php>). Based on this, per-capita *annual* income for individuals under the poverty line is Tk20,776 (Tk1,731 monthly) and *annual* household income below the poverty line is Tk110,110 (Tk9,176 monthly) for the Khulna Division.

**Table 2.6: Profile of employment affected people of KNM**

Particulars	Pump Operator 1	Pump Operator 2	Pump Operator 3	Care taker 1	Care taker 2
Length of employment	26 years (regular staff 1993–2002; pay roll staff 2002–2017)	26 years (regular staff 1993–2002; pay roll staff 2002–2017)	32 years (regular staff 1987–2002; pay roll staff 2002–2017)	30 years (regular staff 1989–2002; pay roll staff 2002–2017)	03 years (pay roll staff 2014–2017)
Gender	Male	Male	Male	Male	Male
Age	55	52	56	50	40
Income/month (Tk) (self)	5,200.00	5,200.00 (from KNM), 5,000.00 (grocery shop)	6,500	5,000	4,500
HH income (Tk) (excluding HH head)	30,000	-	15,000	-	-
HH income (including HH)	35,200.00	10,200.00	21,500.00	5,000.00	4,500.00

Particulars	Pump Operator 1	Pump Operator 2	Pump Operator 3	Care taker 1	Care taker 2
head)					
Per capita income	7,040.00	1,457.14	3,583.33	1,250.00	1,125.00
HH size	5	7	6	4	4
Vulnerability	No	Yes	No	Yes	Yes

## 2.5 Vulnerability and Gender

25. There are three (3) vulnerable households, who will lose their employment and have to relocate as a result of the CCPP. These households income are below the poverty line. Support is included for them in the entitlement matrix and they will be eligible to participate in livelihood training activities under the Japan Fund for poverty Reduction (JFPR) grant. Any impacts on the teachers, students and parents of the Khulna Newsprint Mills Boys' and Girls' Secondary Schools, will be mitigated through the relocation and reconstruction of the school premises. Temporary impacts during the construction period are not anticipated, however, temporary classrooms within the KNM premises can be made available in the instance that the school construction is delayed.

26. The project is considered gender mainstreaming and as such a gender action plan (GAP) has been developed during project preparation. The GAP outlines measures to mitigate gender impacts and enhance the participation of women and girls as well as the development impacts of the project. Particular attention has been paid to the girls' school in this regard through a JFPR grant, to assist in ensuring gender inclusive facilities are available at the new location.

### 3. INFORMATION DISSEMINATION AND STAKEHOLDER CONSULTATION

#### 3.1 Consultations and Participation during Preparation of Resettlement Plan

27. Consultation activities to support preparation of this RP were conducted in November 2016 and in October 2017. A total of 190 persons participated in the consultation activities (refer Table 3.1), this included 135 men and 55 women. During the consultation process of the proposed project, the project interventions and their likely impacts on the environment as well as on the community were shared with project stakeholders (both direct/indirect and/or primary/secondary) in formal/informal meetings and discussion sessions.

28. Consultations were conducted with both the primary and secondary stakeholders and later, affected stakeholders by occupation and gender-based groups through FGDs. One (1) consultation workshop was held with representatives from NWPGCL, Khulna Newsprint Mills, Local Government Institution, some government agencies, and local people and three (3) FGDs were conducted in and around the KNM/CCPP at Khalishpur, Khulna with (i) teachers and parents of the KNM boys' and girls' schools, (ii) fishermen (indirectly affected), and (iii) imam and adherents of the mosque situated in the compound of KNM.

**Table 3.1: Different locations of consultation workshop and FGDs**

City Corporation / Union	Meeting type	M	F	Participant type	Meeting Place	Date
Ward no.13, Khulna City Corporation	Workshop	49	12	Government & NGO officials, journalist, fishermen, farmer, trader, etc	Institution of engineers, Bangladesh (IEB) conference room, Khalishpur	13/11/2016
	FGD	10	9	Students, teachers, parents	IEB conference room, Khalishpur	12/11/2016
	FGD	10	1	Imam and adherents	IEB conference room, Khalishpur	12/11/2016
Senhati union	FGD	14	21	Fishing community	Chandonimahal village	12/11/2016
Ward no.13, Khulna City Corporation	Public disclosure meeting	52	12	Government & NGO officials, journalist, fishermen, farmer, trader, teachers, parents, students, political leaders, etc	IEB conference room, Khalishpur	19/10/2017
Total		135	55			

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

29. Consultation sessions included discussions on the proposed project interventions and the process of peoples' participation in preparing the RP. People in the project area had already learned about the proposed project from the officials of NWPGCL and consultants who

frequently visited the project area. The people of the project area were aware of the probable impacts of the project.

30. The stakeholders identified the prospects as well as problems of the project and recommended solutions as per their perceptions. The recommendations were duly recorded in the meeting, and documented in the RP see Appendix 2. A summary of consultation meetings including participant lists, photos and a summary of stakeholder questions is provided in Appendix 2.

### **3.3 Future Consultation and Participation**

31. The draft RP will be disclosed as per disclosure requirements laid out in ADB's SPS.

32. Consultations with the affected organizations, local communities and local authorities will again be carried out during the detailed engineering design. The exact location of the schools has been confirmed in consultation with the school committee.

33. After the detailed engineering design has been approved by the concerned agencies and officially agreed by the relevant ministries, the design will be posted in strategic public places and shared with the affected organizations. Attention will be called to these posters through the public broadcast systems. Representatives of affected organizations will participate in detail measurement survey (DMS) activities.

34. Representatives of affected organizations, communities and relevant agencies will be consulted during updating of the resettlement plan following the approved detailed engineering design. The opinions, suggestions and concerns of affected organizations will be incorporated in the updated resettlement plan.

35. Before submitting to ADB and after getting acceptance of ADB on the updated resettlement plan – the updated resettlement plan (written in Bengali) will be posted in accessible public areas and sent to the affected organizations and relevant agencies. The updated resettlement plan will also be uploaded to ADB's website.

36. NWPGCL will officially announce the details of impacts on land and assets; and the schedule for land transfer, compensation and assistance to the affected organizations, communities and relevant agencies.

## **4. POLICY AND LEGAL FRAMEWORK**

### **4.1 Overview**

37. The legal and policy framework of the resettlement plan is based on national laws and legislations related to Land Acquisition and Resettlement (LAR) in Bangladesh and ADB's Safeguard Policy Statement 2009 (SPS, 2009). Based on the analysis of applicable national laws and policies and ADB's safeguard policy requirement, project related LAR principles have been adopted.

### **4.2 National Laws and Regulations of Bangladesh**

38. The basic principles for the compensation of property in Bangladesh are founded in Articles 42 and 47 of the constitution. The current legislation governing land acquisition in Bangladesh is the Acquisition and Requisition of Immovable Property Ordinance 1982 (ARIPO) and subsequent amendments during 1993–1994. The 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 Deputy Commissioner (DC) determines the market price of assets based on the approved government procedure. The procedures described (as per Article 75 of the Immovable Property Acquisition Manual 1997) below is followed in the case of land acquisition in favor of an organization (owner of proposed land) to be transferred in favor of other organization (requiring body).

39. The first step in acquiring land is an application to the Ministry of Land (MoL) through the project ministry concerned (in this case Ministry of Power, Energy and Mineral Resources) requesting transfer of land or the movable property. A detailed statement specifying whether the land mentioned in the application is needed for public or private purpose, the area of the land, sketch-map and purpose for which it could be used should be submitted as well. The MoL examines the application and sends it to the DC concerned for necessary action. The DC, after receiving the approval from the MoL, estimates the market price and requests the requiring body (in this case NWPGCL) to deposit necessary amount of money. At the same time, the requiring body takes initiative to materialize the conditions prescribed by the MoL, if there is any. The DC, after receiving the money, pays the amount of money to the owner organization (in this case KNM) equivalent to that amount which was paid by the owner organization (KNM) during land acquisition; the remaining amount of money is deposited to '7 miscellaneous revenue collection' section. The owner organization is eligible to receive the price of structures/buildings on the land estimated by the DC.

### **4.3 Best Practice in Bangladesh**

40. In Bangladesh, two different "standards" with regard to compensation and displacement of project affected persons are practiced. In domestically funded projects affected persons receive only cash compensation (CCL) under the 1982 Ordinance while in the donor-funded projects affected persons receive additional support (including replacement costs for lost assets, relocation assistance for resettlement and restoration of income in post-resettlement period) in addition to CCL.

41. There are some gaps in existing land acquisition law of the country, some of are mentioned below:

- Existing government laws recognize title owners only; informal settlers are not covered;



- Consultation with affected communities are not legally required; and
- No support or program for income and livelihood restoration.

42. In light of addressing these shortcomings, the Government of Bangladesh is working on preparation of a national policy on involuntary resettlement, which is consistent with the general policy of the government that the rights of those displaced by development projects shall be fully respected, and persons being displaced shall be treated with dignity and assisted in such a way that safeguards their welfare and livelihoods irrespective of title, gender, and ethnicity. The government will undertake further work towards legislative changes to safeguard resettlement rights by law once the draft policy is approved in the cabinet.

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

43. 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.

44. 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 non-land 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.

#### **4.5 IDB Safeguard Policy**

45. The Government of Bangladesh has applied for financing of this new power plant from the Asian Development Bank. The Islamic Development Bank (IDB) is expected to cofinance the 800 MW, namely supporting output 1 the CCPP. As such output 1 is subject to the social safeguard requirements of both ADB and IDB since NWPGCL is seeking their financial support. ADB's SPS 2009 sets out the requirements for social safeguards that apply to all ADB-financed projects. IDB is still in the process of preparing its statement on Environmental and Social Safeguards Principles, and commitments to Environmental and Social Responsibility.<sup>4</sup> Given this, ADB and IDB agreed to adopt SPS 2009 as the unified approach to documentation, consultation, and disclosure requirements to be complied by NWPGCL for this project. ADB has/will undertake necessary social due diligence and monitoring as per the SPS 2009.

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

46. 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 document) and does not ensure replacement value of the property acquired. The ARIPO has no provision of resettlement assistance for restoration of livelihoods of affected persons except for the legal compensation. 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.

47. The transfer of land will be held with mutual understanding between two government organizations. This process is to be determined between the two relevant ministries. Two schools will be relocated from the proposed land, a mosque and a memorial graveyard will be renovated.

48. In this regard, given that the affected land and assets of output 1 are owned by government organizations, there is no discrepancy between laws and regulations of Bangladesh with ADB policy in terms of arrangements for government related land, structures and trees. However, the laws of Bangladesh do not include compensation for affected employees (i.e. the caretakers) or vulnerability allowances, therefore these have been incorporated into the entitlement matrix. In addition, the following principles shall be applied on implementing of compensation and support by the project:

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<sup>4</sup> IDB. Statement by Dr. Ahmad Mohamed Ali, President, IDB. United Nations Conference on Sustainable Development (Rio+20), 20–22 June 2012.  
[http://www.isdb.org/irj/go/km/docs/documents/IDBDevelopments/Internet/English/IDB/CM/About%20IDB/President%20IDB%20Group/PS\\_UN\\_ConferenceSustainableDevelopment\\_20June2012.pdf](http://www.isdb.org/irj/go/km/docs/documents/IDBDevelopments/Internet/English/IDB/CM/About%20IDB/President%20IDB%20Group/PS_UN_ConferenceSustainableDevelopment_20June2012.pdf). (Accessed 6 December 2017).

- i. Involuntary resettlement and impacts on land, structures and other fixed assets will be minimized where possible by exploring all alternative options.
- ii. Meaningful consultation will be carried out with the affected government organizations, relevant agencies and ensure participation from planning up to implementation. The comments and suggestions of the affected organizations and relevant agencies will be taken into account.
- iii. Affected Employees who will lose employment and require relocation will be compensated for their job loss, given transfer assistance and allowances provided to those households who are vulnerable.
- iv. Existing cultural and religious practices will be respected and, to the maximum extent practical, preserved.
- v. Budget for payment of compensation and support as well as monitoring will be prepared sufficiently and made available during project implementation.
- vi. NWPGCL will not issue notice of possession to contractors until (i) payment of compensation has been fully disbursed to the affected organizations; (ii) temporary arrangements are in place and the schools (including non-fixed assets) have been vacated; and (iii) the project area is free from any encumbrances as per the updated Resettlement Plan. No land acquisition or site clearing will be done until and after the updated Resettlement Plan has been agreed between NWPGCL and ADB.

#### **4.7 Compensation Payment Procedure**

49. The only compensation payment required for output 1 are for the affected employees. These households were identified during the census. The PMU will prepare each APs file and entitlement record. The entitlement record will be jointly signed by the NWPGCL and the AP with a photograph attached. The PMU will prepare payment debit voucher or cheque and those will be disbursed in public place or office of the City Corporation issuing prior notice to the AP prior to their relocation from the CCPP site.

#### **4.8 Grievances Redress Mechanisms**

50. As the affected organizations are governmental organizations, any concerns and grievances related to any aspect of the project (output 1) will be handled through an administrative process. For output 1 the grievance redress mechanism (GRM) will be established as per the organizational policies of the requiring organization (NWPGCL) and delivering organization (KNM), as the affected land is owned by KNM, a government organization, and this affected land to be transferred to another government organization namely NWPGCL. If there is any grievance the line ministries (in this case Ministry of Power Energy and Mineral Resources and Ministry of Industries) will redress the grievances in the meeting to be held with their mutual understanding.

51. Besides, the EA (NWPGCL in this case) will also 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 work utilising the following three levels:

52. **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.

53. **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.

54. 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.

55. **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.

The GRC will be formed with following representatives:

- Representative of NWPGL, Convener;
- Representative of the Local Government Institution (City Corporation), Member;
- Local women member from City Corporation, Member;
- Representative of the affected people, Member;
- Representative of the DC.

56. The APs, can always take their grievance to a court of law at any time, regardless of the GRM. The project grievance procedure does not impede access to the court at any time. The GRM will be continuously disseminated to people during project implementation. In addition, there is the 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.

## 5. ENTITLEMENTS, ASSISTANCE AND BENEFITS

### 5.1 Entitlement

57. The affected organization is entitled to receive compensation for their losses (land, structures, trees) on final approval from the relevant ministries. The entitlement matrix is given in **Table 5.1** which summarizes various types of losses and the corresponding nature and scope of entitlements in accordance with the government and ADB policies.

58. The proposed CCPP area is in the premises of KNM, which consists of some primary and secondary structures and trees. This land will be transferred between the two government agencies, along with payment for impacts on KNM owned structures, gates, fences and trees.

59. In this context only two schools (for boys and girls separately) and a boundary wall will be reconstructed in the relocation site of KNM premises of 15 ha. Relocation of the school buildings will be constructed by the EA and covered by counterpart funding. The mosque and a memorial graveyard will be renovated. It needs mentioning here that KNM has 35 ha of land in total; NWPGCL will acquire 20 ha of land out of 35 ha. Only 15 ha of land will remain for KNM. NWPGCL will reconstruct these structures in the relocation site in KNM premises.

60. Entitlements for the affected employees in caretaking roles for KNM include allowances for job loss, moving transfer and vulnerability.

Table 5.1: Entitlement Matrix

Type of Impact	Eligibility/ Application	Entitlement	Implementation Issues	Responsible Agency
Schools	Two non-government schools on KNM land	<ul style="list-style-type: none"> <li>Reconstruction of schools at alternative location at KNM premises.</li> <li>Continued school activities will be ensured until the schools are reconstructed (i.e. provision of temporary site if needed).</li> <li>Rights to salvage materials from existing school.</li> <li>Transportation assistance to cover cost of moving materials (i.e. desks, chairs).</li> </ul>	<ul style="list-style-type: none"> <li>Nongovernment schools, however, these receive a monthly allowance as a 'government facility'.</li> </ul>	<ul style="list-style-type: none"> <li>NWPGCL</li> </ul>
Mosque and graveyard	One mosque and graveyard on KNM land	<ul style="list-style-type: none"> <li>Renovation of mosque and memorial graveyard within CCPP site to allow safe access by workers and community during project operation.</li> <li>Continued religious activities will be ensured until the mosque is renovated.</li> </ul>	<ul style="list-style-type: none"> <li>Community will be informed about their free access to the mosque and graveyard.</li> </ul>	<ul style="list-style-type: none"> <li>NWPGCL</li> </ul>
KNM Employees	Five employees (i.e. caretakers, pump operators)	<ul style="list-style-type: none"> <li>One-time cash assistance of Tk18,000 to each of the employees for job loss.</li> <li>One-time cash assistance of Tk3,000 to each of the employees for moving and transportation.</li> <li>Or, compensation in kind, through employment and deployment to another location prior to termination of existing job at KNM site.</li> </ul>	<ul style="list-style-type: none"> <li>Security requirements for state run utilities are very strict.</li> <li>Unskilled project employment will be prioritized where possible.</li> <li>The employees can participate in trainings for livelihood and employee opportunities under the JFPR Grant.</li> </ul>	<ul style="list-style-type: none"> <li>NWPGCL</li> </ul>
Vulnerable Households	All affected vulnerable households (03 AHs)	<ul style="list-style-type: none"> <li>One-time allowance equivalent to Tk10,000/household in addition to other entitlements.</li> <li>Eligibility for each household to participate in JFPR Grant livelihood skill training activities.</li> <li>Preference in project related employment.</li> </ul>		<ul style="list-style-type: none"> <li>NWPGCL</li> </ul>

## **5.2 Resettlement Budget**

61. The resettlement cost estimate for the project includes eligible compensation, resettlement assistance and support cost for RP implementation and monitoring as per the entitlement matrix. This RP presents the estimated costs for land acquisition and resettlement. The costs of affected items were calculated in consultation among the representatives of the Ministry of Environment and Forest, the Ministry of Industries, the Ministry of Land, and the Ministry of Power, Energy and Mineral Resources. As the property of Khulna Newsprint Mills is owned by the People's Republic of Bangladesh and it will also be transferred to NWPGL another government owned organization for installing power plant. Therefore, the prices for assets (i.e. land, structures and trees) were determined as replacement value following the government laws.

62. Total cost is estimated and presented in the budget of RP. The resettlement costs and budget covers compensation and resettlement which includes the replacement cost of land, structures and other assets, and special assistances. The total estimated budget for implementation of the resettlement plan is Tk2,825.31 million (approximately \$34.88 million), which is shown in **Table 5.2**. This budget includes compensation for land, all types of structures and trees along with one-time special cash assistance for the 5 KNM employees who will lose their present jobs, school furniture shifting and renting temporary sites for continuing schools activities.

63. Budget estimates for costs of trees were derived from the Bangladesh Forest Department. Government rates were collected for structures.

64. The bulk of the budget (about 86%) is for the CCPP land including KNM structures and trees. Provision of contingency costs are also calculated and incorporated in this budget. There is 10% contingency over the unfixed cost to meet unforeseen expenditures. The budget for this RP, as outlined in **Table 5.2** below.

65. The resettlement budget will be updated during the resettlement plan updating following the finalisation of design, assessment of the replacement value of the affected schools structures and the consultations with affected government organization and local authorities.

**Table 5.2: Budget for RP Implementation**

<b>Category of Loss</b>	<b>Estimated amount in Tk</b>	<b>In million Tk</b>	<b>In million \$</b>
20 ha of Land at CCPP site	2,402,510,683.00	2,402.51	29.65
Structures within the CCPP site	130,271,318.00	130.27	1.61
Trees within the CCPP site	11,399,805.00	11.40	0.14
Fixed Cost		2,544.18	31.40
One-time assistance @ Tk18000 for loss of income of 5 KNM employees	90,000	0.09	0.00
One-time cash assistance of Tk3,000 to each of the employees for transportation.	15,000	0.015	0.00
One-time cash assistance of Tk10,000 to each of the vulnerable households	30,000	0.03	0.00
School furniture shifting cost (lump sum)	300,000	0.3	0.00
Provision of temporary site of schools @ 1.2 lakh in each month for a year (if needed)	1,440,000	1.44	0.02
Un-fixed Cost		1.88	0.02
<b>Sub-total</b>	<b>2,546,056,806</b>	<b>2,546.06</b>	<b>31.42</b>
RP Monitoring and Implementation cost @11% of total cost	280,066,249	280.07	3.46
Contingency @10% of un-fixed cost	187,500	0.19	0.00
<b>Total</b>	<b>2,826,310,554.66</b>	<b>2,826.31</b>	<b>34.88</b>

Exchange Rate \$1 = Tk81.03.



## **6. INSTITUTIONAL ARRANGEMENTS**

### **6.1 Overview**

66. NWPGCL, an enterprise of Bangladesh Power Development Board is the EA responsible for implementation of the project. The Bangladesh Power Development Board will guide NWPGCL in this regard and monitor as well as review progress and results time to time. In order to undertake day-to-day activities a dedicated Project Management unit (PMU) will be set up in NWPGCL for this project. A full-time Project Director (PD) will supervise the project outputs. The PMU staffed with experienced personnel will conduct and oversee procurement, accounting, reporting, quality assurance, and social and environmental issues.

### **6.2 Institutional Framework for RP Implementation**

67. NWPGCL will establish the necessary institutional setup for implementation of resettlement activities of the project. NWPGCL will be responsible for finalization, updating, implementation and monitoring of the resettlement plans. Core institutions responsible for land acquisition and resettlement activities are described in the following section.

68. NWPGCL will establish a PMU for the implementation of the project including land requisition and resettlement. The PMU will consist of technical, financial, procurement and safeguard staff. NWPGCL will hire an Environment, Health and Safety (EHS) specialist to work in the field as well as one temporary social safeguards officer (or consultant) to be engaged during the implementation of this (and the other) RPs. The PMU will be headed by the Project Director, whose office will be set up within the NWPGCL headquarters (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 this RP in terms of compensation disbursement. 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 RP activities and handover land with construction schedule;
- Supervise, manage and record all AP entitlement payments;
- 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; and
- Be responsible for addressing the grievance in a timely manner.

69. 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 the PD, PMU in dealing with social issues related to the project outputs. The social staff will coordinate with relevant government agencies on social matters, will prepare the internal monitoring reports (refer Section 7.2) to be submitted to ADB.

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

### 6.3 Other Agencies in Land Acquisition and Resettlement Process

71. In addition to the NWPGCL's PMU, there would be other line agencies that will be responsible for resettlement activities in the project, to clarify roles Table 6.2 is provided below.

**Table 6.2: Institutional Roles and Responsibilities for Project Land Acquisition 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	NWPGCL
<b>RP Finalization and Updating Stage</b>	
Finalization of sites for project	NWPGCL and PMU
Updating Resettlement Plan based on final design	NWPGCL and PMU
Joint Verification Survey of all affected land and assets	NWPGCL, PMU
Conducting consultation/FGDs/meetings as and where necessary	NWPGCL and PMU
Finalizing compensation packages and entitlements	NWPGCL, PMU and other government agencies concerned if needed
Disclosure of final entitlements	NWPGCL, PMU
Approval and disclosure of RP	NWPGCL and ADB
<b>RP Implementation Stage</b>	
Disbursement of Compensation and Assistance	NWPGCL, PMU
Taking possession of land	NWPGCL
Implementation of project rehabilitation measures	NWPGCL, PMU
Consultations with APs during rehabilitation activities	NWPGCL, PMU
Grievances redress	NWPGCL, PMU, ministries concerned
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.

## 7. IMPLEMENTATION SCHEDULE

### 7.1 Introduction

72. All activities related to resettlement/relocation for construction of CCPP must be planned to ensure that reconstruction/renovation of community-use entities (boys' and girls' schools, mosque and memorial graveyard) is completed or made temporarily available (i.e. for the schools) prior to commencement of civil works for the power plant. Public consultation and monitoring will be undertaken throughout the project. The land transfer (including the new school area) agreement is expected to be signed by the two concerned agencies (NWPGCL and Khulna Newsprint Mills Ltd) by 3Q 2018. Construction of the new school is anticipated to be completed prior to the old school closing. The new school location has been identified and it will be located within the remaining 15 ha land of Khulna Newsprint Mills Ltd, far apart from the power block of the power plant. Necessary measures will be taken to make sure that the school area is not affected by noise and other pollution created by the power plant itself.

73. The draft RP will be finalized and updated, if necessary. The implementation of the RP will include: (i) transfer of ownership of land between the relevant ministries, (ii) consultations with affected communities to finalise the arrangements for relocation/renovation of mosque and memorial graveyard, and (iii) reconstruction/renovation of community facilities/ making available temporary facilities whilst schools are constructed (iv) payments of compensation entitlements to affected employees by NWPGCL.

74. The following is a tentative schedule for RP implementation of the project. The schedule may be adjusted during final design and implementation. The tentative Implementation Schedule is provided in **Table 7.1**

**Table 7.1 Schedule of Resettlement Activities of Output 1**

Activities	Timeline
Draft resettlement plan preparation	Jan 2018
ADB review and concurrence	Jan 2018
Resettlement plan revisions (consultation, disclosure, etc.)	May 2018
ADB review and concurrence on the updated resettlement plan	May 2018
Uploading of updated resettlement plan	May 2018
Payment of compensation and start construction/renovation work	June 2018
Internal monitoring report preparation	Semiannual

### 7.2 Monitoring and Reporting

75. NWPGCL will monitor and measure the progress of implementation of the RP. Implementation of the RP will take place over one year, anticipated to commence in June of 2018. The schedule will be adjusted during final design and implementation. The extent of monitoring activities will be commensurate with the project's risks and impacts. In addition to recording the progress in compensation payment and other resettlement activities, NWPGCL will prepare semi-annual monitoring reports to ensure that the implementation of the RP has produced the desired outcomes.

76. The temporary social safeguard specialist will carry out regular internal monitoring for the NWPGL within the PMU.

77. NWPGL through its PMU will (i) monitor the progress of implementation of safeguard plans, (ii) verify the 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 semi-annual monitoring reports on safeguard measures as agreed with ADB.

78. The monitoring reports will be posted to the ADB website. The report of internal monitoring will contain: (i) accomplishment to-date, (ii) objectives attained and not attained during the period, (iii) problems encountered, and (iv) suggested options for corrective measures. The internal monitoring report will primarily be prepared by the PMU and will combine monitoring for the three project RPs.

79. Indicative monitoring indicators are presented in **Table 7.2**.

**Table 7.2: Monitoring and Evaluation Indicators**

Type	Indicators
First / Second Monitoring Report	<ul style="list-style-type: none"> <li>PMU established, EHS Specialist and temporary social specialist engaged;</li> <li>Staff orientation activities undertaken;</li> <li>Final entitlements for each household recorded (table) for employees;</li> <li>GRM established and functioning;</li> <li>Status of land transfer and finalisation.</li> </ul>
Semiannual monitoring indicators	<ul style="list-style-type: none"> <li>Number of consultations held with various stakeholders on entitlement;</li> <li># of Grievances received in period;</li> <li>Changes in school attendance;</li> <li>Changes in facilities provided to students;</li> <li>Changes in performing religious activities in the mosque;</li> <li># of total AHs received compensation payments;</li> <li>Amount of compensation dispersed (total);</li> <li>Number of affected households (by output) participating in JFPR Grant livelihood training programs (men, women, vulnerable participants).</li> <li>% average income increase for affected households (employees).</li> </ul>

### 7.3 Reporting Arrangements

80. Monitoring report<sup>5</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.

<sup>5</sup> A combined monitoring report for two outputs - CCPP, gas pipeline and power transmission line - can be prepared.

# APPENDIX 1: DESCRIPTION OF STRUCTURES IN KHULNA NEWSPRINT MILLS

SL	Name of Building	No. of Structure	Type of Bldg.	Type of Structure	Category	Storeyed of Building	Area per structure (square meter)	Total Area (square meter)	Total Area (square feet)	Construction Year
	<b>Residential Structures (primary)</b>									
1	MD's residence	1	P	RCC	R	2	192.57	192.57	2,071.75	1960
2	Junior Colony	1	P	LBWS	R	1	195.17	195.17	2,099.72	1960
3	Junior Colony Building	10	SP	LBWS	R	1	279.75	2,797.50	30,096.62	1960
4	Junior Colony Building	14	TS	LBWS	R	1	17.74	248.33	2,671.63	1960
5	Junior Colony Building	1	P	LBWS	R	1	1,354.18	1,354.18	14,568.81	1960
6	Junior Colony Building	1	P	LBWS	R	1	306.70	306.7	3,299.60	1960
7	New Colony Bachelor Quarter	2	P	LBWS	R	1	1,962.83	3,925.65	42,233.71	1960
8	New Colony Building	4	P	LBWS	R	1	1,177.70	4,710.78	50,680.46	1960
9	New Colony Building	4	P	LBWS	R	1	1,491.64	5,966.54	64,190.42	1960
10	New Colony Building	5	P	LBWS	R	1	1,318.22	6,591.08	70,909.48	1960
11	New Colony Building	2	P	LBWS	R	1	223.05	446.1	4,799.32	1960
12	Senior Colony Apartment	7	P	RCC	R	2	541.26	3,788.85	40,761.96	1960
13	Senior Colony residence	24	P	LBWS	R	1	172.76	4,146.28	44,607.34	1960
14	Senior Colony Building	2	P	RCC	R	3	1,246.83	2,493.66	26,827.79	1960
15	Senior Colony Building	1	P	RCC	R	2	831.23	831.23	8,942.70	1960
16	Senior R House	19	P	LBWS	R	1	196.63	3,736.06	40,194.03	1960
17	Senior R House	1	P	LBWS	R	1	466.54	466.54	5,019.22	1960
18	Senior R House	3	P	LBWS	R	1	263.94	791.82	8,518.72	1960
19	Senior Officers Dormitory	1	P	LBWS	R	1	110.59	110.59	1,189.77	1960
20	Senior Officers Hostel	1	P	LBWS	R	1	790.00	790	8,499.14	1960
21	Officers Rest House	1	P	RCC	R	3	1,207.81	1,207.81	12,994.10	1960
22	Guest House	1	P	RCC	R	3	1,100.00	1,100.00	11,834.24	1990
23	Mess No 10	1	SP	LBWS	R	1	211.89	211.89	2,279.60	1960
24	Rest House Dinning	1	P	LBWS	R	1	98.14	98.14	1,055.83	1960

SL	Name of Building	No. of Structure	Type of Bldg.	Type of Structure	Category	Storeyed of Building	Area per structure (square meter)	Total Area (square meter)	Total Area (square feet)	Construction Year
25	Kitchen	1	SP	LBWS	R	1	21.47	21.47	230.98	1960
26	Ansar Camp x2	2	SP	LBWS	R	1	70.59	141.17	1,518.76	1960
27	Foreman Quarter	10	P	LBWS	R	1	269.52	2,695.17	28,995.72	1960
28	Sweper Colony	1	P	LBWS	R	1	348.51	348.51	3,749.41	1960
	<b>Subtotal</b>	<b>122</b>					<b>16,467.24</b>	<b>49,713.79</b>	<b>534,840.84</b>	
	<b>Non-Residential Structures (primary)</b>									
1	Office Club	1	SP	RCC	NR	1	563.94	563.94	6,067.09	1960
2	Office Club-2	1	SP	RCC	NR	2	458.09	458.09	4,928.32	1960
3	Colony Electric office	2	SP	LBWS	NR	1	32.02	64.03	688.86	1960
4	Colony Office	1	SP	LBWS	NR	1	100.80	100.8	1,084.45	1960
5	Senior Colony Office	1	P	LBWS	NR	1	79.00	79	849.91	1960
6	Sewing Centre	1	SP	LBWS	NR	1	74.35	74.35	799.89	1960
7	Senior colony Mosque	1	p	LBWS	NR	1	7.60	6.1	499.01	1960
8	Secondary School (Boys')	1	P	LBWS	NR	4	334.45	1337.8	14,399.95	1960
9	Secondary School (Boys')	1	P	LBWS	NR	1	334.45	334.45	3,599.99	1960
10	Secondary School (Girls')	1	P	LBWS	NR	2	334.45	668.9	7,199.97	1960
11	Secondary School (Girls')	1	P	LBWS	NR	3	334.45	1,003.35	10,799.96	1960
12	Madrasa	1	p	LBWS	NR	2	18.29	4.57	900.46	1960
13	Madrasa	1	p	LBWS	NR	1	24.39	6.10	1,600.82	1993
14	Auditorium/ Cinema hall	1	SP	LBWS	NR	2	54.9	18.3	10,805.52	1960
15	Auditorium/ Cinema hall	1	P	LBWS	NR	1	15.2	7.6	1,250.64	1960
16	Intake Channel	1	P	LBWS	NR	1	258.75	258.75	2,783.74	1960
17	Plyers Room x3	3	SP	LBWS	NR	1	38.10	114.31	1,229.79	1960
18	Water Pump House	2	SP	LBWS	NR	1	18.22	36.44	392.24	1960
19	Overhead Water Tank (pillar)	1	P	RCC	NR	4			14,400	1960
20	Fire Pump House	1	TS	LBWS	NR	1	9.15	4.57	449.92	1960

SL	Name of Building	No. of Structure	Type of Bldg.	Type of Structure	Category	Storeyed of Building	Area per structure (square meter)	Total Area (square meter)	Total Area (square feet)	Construction Year
21	Electric office Garage	1	TS	LBWS	NR	1	4.57	4.57	224.80	1960
22	Swimming Pool RCC	1	P	RCC	NR	1	267.94	267.94	2,882.61	1960
23	Swimming Pool Rest Room	1	SP	LBWS	NR	1	28.25	28.25	303.92	1960
24	Swimming Pool Rest Room	1	P	LBWS	NR	1	24.54	24.54	264.01	1960
25	Toilet	1	P	LBWS	NR	1	12.64	12.64	135.99	1960
	<b>Subtotal</b>	<b>29</b>					<b>3,428.56</b>	<b>5,479.41</b>	<b>88,541.85</b>	
	<b>All Structures</b>	<b>151</b>					<b>19,895.8</b>	<b>55,193.2</b>	<b>623,382.68</b>	
	<b>Secondary structures</b>									
	<b>Gate in square meter (m<sup>2</sup>)</b>								<b>Area (sqm)</b>	
1	Gate	1	IS		-		6.10	2.4	14.64	1960
2	Gate	1	IS		-		4.57	2.1	9.60	1960
3	Gate	2	IS		-		2.13	1.1	2.34	1960
4	Gate	4	M		-		3.05	1.8	5.49	1960
5	Gate in MD's residence	1	M		-		3.05	1.5	4.58	1960
	<b>Subtotal</b>	<b>09</b>					<b>18.90</b>	<b>8.99</b>	<b>36.65</b>	
	<b>Wall in meter (m)</b>								<b>Area (m)</b>	
1	Wall	1	-	BW	-	-	-	-	182.88	1960
2	Wall (0.13 m)	-	P						1,392.94	1960
	<b>Post in number</b>								<b>Number</b>	
3	Lamp post	15	S	S					15	1960
4	Lamp post	40	P	RCC					40	1960
	<b>Water Tank in cubic meter (m<sup>3</sup>)</b>								<b>Area (m<sup>3</sup>)</b>	
5	Overhead Water Tank (container)	1	P	RCC	-	-	-	-	297.33	1960

Note: NR = nonresidential; R = residential; SP = semi-pacca; P = pacca; TS = tin shade; LBWS = load bearing wall structure; BW = barbed wire; S = steel; IS = iron sheet; M = metal.

## APPENDIX 2: CONSULTATION MEETINGS, PARTICIPANT LISTS AND PHOTOS

### Summary Findings from the Consultation Meetings

Key Question or Issue Raised	Suggested Measures/ Responses
They welcome the power plant. They want to know whether there is any power plant of this type in Bangladesh. People do not understand the technical issues of this type of plant. But they feel that the project will reduce the load shedding during irrigation period at village level.	There are similar types of power plants in Bangladesh, but not of this capacity. The project communications plan is developing materials and methods to assist in explaining the technical aspects of the project.
<p>The existing two schools (one for boys and the other one for girls) will be relocated and it may impacts on the regular study routine of the students and teachers.</p> <p>The location for the school relocation is not finalized. What is the time line for finalizing the school location and by when will it be built?</p> <p>The school should have a good location near to the road and it should not be too noisy.</p> <p>They are content with the plans for the school, but concerned about the implementation, if it will go according to the plan.</p>	<p>At present the school is on 0.73 ha of land. So it is very important to allocate at least 0.73 ha of land for the establishment of new school campus. The school management committee prefers the land in the KNM campus which is being operated by Bangladesh Chemical Industries Corporation (BCIC) for the establishment of new school campus.</p> <p>NWPGCL will work with the school committee, engineers and environmental specialists to finalize the most appropriate school location.</p> <p>New school campus should be constructed with allied facilities such as: playground, science laboratory, computer lab, library, canteen, sanitation facility, drinking water, waiting room for the guardians etc.</p> <p>The current plan is for the new school to be handed over to the school authority before beginning of the construction activities of CCPP.</p> <p>NWPGCL is working to ensure that the school is open prior to construction of the plant.</p>
<p>Will all newsprint security guards (5 people who maintain the current site) get jobs? Jobs for unskilled labor should be made available. Skilled labor from the newsprint should be employed, they are currently unemployed and should get job opportunities.</p> <p>Around 100 fishermen households are residing on the opposite side of the Bhairab River as well as the proposed CCPP; they are dependent on Bhairab river, as a result they may be indirectly affected due to the continuous water traffic and nets broken.</p>	<p>NWPGCL cannot commit to employment for the security guards, given the clearance requirements for employment in public utilities, but if there is scope to engage unskilled labor they will give priority to local people during construction and operation of the project.</p> <p>Local people may be engaged in the construction activities (land development, removal of the disposals and other nontechnical activities) during the pre-construction and construction phase;</p> <p>The impact on the fishermen group does not require resettlement of them; they may be affected due to transportation of water vehicle in connection with the power plant. So, these are considered by ADB as social impacts on livelihoods through environmental media and are</p>



Key Question or Issue Raised	Suggested Measures/ Responses
	<p>captured under the Environmental Impact Assessment and EMP. Grant funding has also been made available for livelihood training which the fishermen's village can participate in.</p> <p>A contingency budget against damage of fishermen's net should be kept in the safeguards document. And during operations shipping activities will be told to fishermen so they can be advised of the schedule in advance so that they know when to avoid fishing in the area. In different nontechnical activities they may be employed as carrying equipment, clearing the project area, sewing uniforms, helping to prepare food etc.</p>
<p>Demolishing the abandoned buildings is a major activity to make the land apposite for power plant installation and thus the area may be polluted by the wastage;</p> <p>According to the power plant design, the Regulating Metering Station (RMS) (it may create loud noise) part is going to be installed at the end corner of the proposed power plant boundary and that is very adjacent to the nearby settlements; and</p> <p>Excessive noise of the power plant may disturb the activities of mosque, school and adjacent residential area.</p>	<p>The installation point of RMS should be kept at a safer place from the settlement area as well as school and mosque considering the sound pollution;</p> <p>Use of modern technology to avoid sound pollution;</p>
<p>The mosque should be renovated.</p>	<p>The mosque will be renovated and access for the community ensured as part of the project.</p> <p>There should be a provision for keeping prayer space/partition for the women in the mosque;</p> <p>Keeping extra care for the proper maintenance of the mosque and the mass graveyard.</p>
<p>A huge amount of tree would need to be cleared for implementation of the project. It may affect negatively the natural environment and habitat loss of the existing wild animals such as: snake, frog, fox etc.</p> <p>The water going into river seems like a lot and there should be good technology to manage any issues.</p> <p>Attention should be paid to security, health and safety issues during construction.</p>	<p>Limit vegetation loss during clearing sites for construction;</p> <p>Try to keep the aged trees alive; and</p> <p>Keeping a facility for afforestation in the project area.</p> <p>An environmental assessment and management plans have been prepared to manage these issues during construction and make sure standards are maintained.</p>

## List of Public Consultation Meeting participants

Public Consultation Meeting for 800 MW LNG Based Combined Cycle Power Plant  
Project at Khalishpur, Khulna, Bangladesh

### Attendance Sheet

Date: 13.11.2016

Venue: IEB, Khalishpur

SL No.	Name	Designation/Address	Mobile no./e mail	Signature
1	Raja Harnis	Team leader Feasibility Study	"	R
2.	Somasundaram	ELECT ENGINEER Khulna feasibility Study	"	N. Somasundaram
3.	MD. ARZUL KALAM	Khalishpur	"	A. Kalam
4.	Dr. Feroz	Khalishpur	"	Feroz
5.	Ziaul Alam Khan	Khalishpur	"	Ziaul Alam Khan
6	Md. Nuruzzaman	...	"	Nuruzzaman
7	Md. Abdur Razzak	Asst Teacher Khulna newspaper	"	A. Razzak
8.	Kazi delilul Hossain	Business	"	Kazi delilul Hossain
9	Hossain EIKBAR	Khalishpur	"	Hossain EIKBAR
10	Toufiqul Hossain	AE (NWPCL)	"	Toufiqul Hossain
11.	Gammi Akhter	AE (NWPCL)	"	Gammi Akhter
12.	Md. Wahid Ahmed	PM (CSR of KPCL) Khalishpur	"	Md. Wahid Ahmed
13	SK. Masum ul Hasan	Welfare officer CSR Programme of KPCL	"	SK. Masum ul Hasan
14	Shirin Perin	Programme officer CSR Prog of KPCL	"	Shirin Perin
15	Fariha Rahman	student	"	Fariha Rahman
16.	Abirah Islam	student	"	Abirah Islam
17	NAZMUSSAKIB	Teacher K.N.M school	"	NAZMUSSAKIB
18	JAFOTI	XGr. R K.N.M school	"	JAFOTI



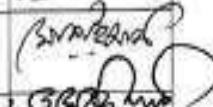
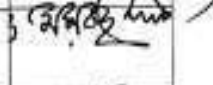
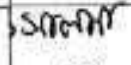
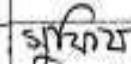

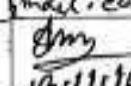
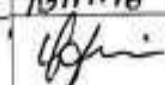
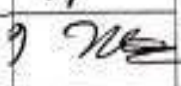


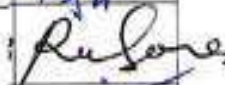

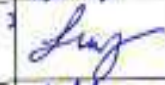

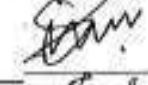
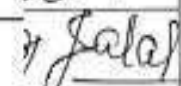
**Public Consultation Meeting for 800 MW LNG Based Combined Cycle Power Plant  
Project at Khalishpur, Khulna, Bangladesh**

**Attendance Sheet**

Date: 13.11.2016

Venue: IEB, Khalishpur

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
1	Raja Harris	Team leader Feasibility Study	"	R
2.	Somasundaram	ELECT ENGINEER Khulna Feasibility Study	"	N. Somasundaram
3.	MD. ABU KHAN	Khalishpur	"	A. Khan
4.	Dr. Feroz	Khalishpur	"	Feroz
5.	Ziaul Akbar Khan	Khalishpur	"	Ziaul Akbar Khan
6	MD. Nuruzzaman	..	"	Nuruzzaman
7	MD. Abdul Gani	ASST Teacher Khulna newspaper	"	A. Gani
8.	Kazi Selim Akbar	Business	"	Selim Akbar
9	Hossain Sikdar	Khalishpur	"	Sikdar
10	Toufiq Akbar	AE (NWPCL)	"	Toufiq Akbar
11.	Gamni Akhtar	AE (NWPCL)	"	Gamni Akhtar
12.	MD. Wahid Ahmed	PM (CSR of KPC) Khalishpur	"	Wahid Ahmed
13	SK. Masum ul Hasan	Welfare officer CSR Programme of KPC	"	SK. Masum ul Hasan
14	Shirin Perin	Programme officer CSR of KPC	"	Shirin Perin
15	Fariha Rahman	student	"	Fariha
16.	Abir Islam	student	"	Abir
17	NAZMUSSAKIB	Teacher K.N.M school	"	Sakib
18	JAFOR	XGR K.N.M school	"	JAFOR

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
19.	MITHUN MONDAL	ASS. TEACHER K.N.M. SCHOOL KHAR	"	
20	MAHBUBUL HAQUE	ASS. TEACHER K.N.M. SCHOOL	"	
21	MD. SHAHIDUL ISLAM	HEAD TEACHER KHALISH PURS. SCHOOL	"	
22.	MURSHI MUJIBUR RAHMAN	ASST TEACHER MADRASHA	"	
23	Salma	Guardian Representative K.N.M. School	"	
24	SADAT/SUFIYA BEGUM	Guardian Representative K.N.M. School, Khul	"	
25	GURTA RANI DAS	ASST TEACHER K.N.M. School, Khul	"	
26.	Shahina Khatun	K.N.M. school Head master,	"	
27.	Habur Rahman.	management committee.	"	
28	Dr. Kazi Nurul Nuzar	Environment Advisor	"	
29	Preonab K. Halder	Environmental Expert	"	
30	Yun Zhou	ADB	"	
31	Reish Jones	ADB CONSULTANT	"	
32	Rubi Dorcas ARICI	ADB CONSULTANT (ENVIRONMENT)	"	
33	Yoojung Jung	ADB	"	
34	Md. Sazzad Ahmed	ADB	"	
35	Md. Sharifuzzaman	Chairman, Bongo Bazar	"	
36.	Eng. Jalal Ahmed Choudy	CEGIS	"	



SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
37	S.M Khurshid Ahmad	Comptroller	"	[Signature]
38	Zahid ur Rashid	CE, NWPGCL	"	[Signature]
39	Md. Mashkur Rahman	PD, NWPGCL	"	[Signature]
40	A.N.M. Wasim Faraz	Sr ASP Dist Police, Khulna	"	[Signature] 13.11.16
41	PAVEY JIM PAVEY JIM AKD ECL	Comptroller K.C.C	"	[Signature] 13-11-16
42	Sajida Akter	Khalishpur	"	[Signature]
43	Monira Begum	"		[Signature]
44	MD IBRAHIM KHADEL	"	3	[Signature]
45	ABU Fatah	"	1	[Signature]
46	SK. TIPU Sultan	KHALISHPUR		[Signature]
47	MD. HABIBUR	"	1	[Signature]
48	MD. JAMEL	"		[Signature]
49	MD. BAZAL	"	1	[Signature]
50	MD. KALISH	"		[Signature]
51	M.L.H.A. Zano	"		[Signature]
52	MD. MANJUR	"		[Signature]
53	MD. TOUFIK	[Signature]		[Signature]
54	Selwa Begum Hossen	Khalishpur	38	[Signature]



**List of Focus Group Discussion Participants**  
**Teacher, Student and School Management Committee**

12 NOVEMBER 2016  
 168 CONFERENCE  
 KUALA

805 MW KUALA POWER PROJECT  
 STAKEHOLDERS' CONSULTATION MEETING  
 FGD (BOYS & GIRLS SCHOOL)  
 TEACHERS & PARENTS

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
1	RUBY SORRO ARIG	ENVIRONMENT SPEC. VANCOUVER, BC	+6396714637	
2	REISHA JONES	SOCIAL SPECIALIST MAYILAH	"	
3	MAHBUBUL HAQUE	K.N.M SCHOOL ASS. teacher	"	
4	NAZMUSSAKIB	K.N.M SCHOOL ASS. teacher	"	
5	MITHUN MONDAL	ASS. teacher K.N.M school	"	
6	Aliah Islam	student	"	
7	SALMA BEDUM	guardian. K.N.M school.	"	3 Salma
8	SUFIA BEDUM	guardian. K.N.M school.	"	516 30/11/20
10	Choudhury Habibur Rahman.	SME	"	
11	Shahina Khatun	Head teacher K.N.M school	"	
12	Fariha Rahman	student	"	Fariha
13	Yoojung Jang	ADB	"	
14	Yun Zibu	ADB	"	
15	Dr. Kazi Noor Naz	CEGIS	"	
16	Jalal Ahmad Choudhury.	CEGIS	"	
17	Pronab K. Helli	Environmental Expert CEGIS	"	
18	SM Khurshid Ahmad	Councilor	"	
19	Engn. Rafiqul Islam	Electrical Engn.	"	

## FGD with Imam and Adherents

Mosque

FGD with Imam and adherent for 800 MW LNG Based Combined Cycle Power Plant  
Project at Khalishpur, Khulna, Bangladesh

## Attendance Sheet

Date: 12.11.2016

Venue: IEB, Khulna

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
01.	NAZMUSSAKIB	K.N.M teacher		akib
02.	MD.MAMUN			
03.	MD.SHALIM (Ape)			
04.	MD.GAMAL			
05.	MD.MOKLAS			
06.	MD. Farid, Ali			
07.	MD. Zaboo			
08.	HARUNOR ROSID			
09.	HABIBURRAHMAN			
10.	ASAD HOSSEN			
11.	JAFOR IQBAL			
12.	Ismail gazi			Jaw
13.	ZIAUL ALAM			Ziaul Alam
14.	Shasrifuzzaman			Shir
15.	M.D Shadate			Shadate
16.	Mohammed Hossain			Mohammed
17.	MR. Mghur			Mghur



## MOSQUE

Date: 12.11.2016

Venue: IEB, Kholna

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
18/	M.D. Faruk Hossain			
19/	S.M. Morsad Morri			
	Yusuf			
20	Zakir Hossain			
21	Dr. Karimun Nade	Env. Advisor CEGIS		
22	YUN ZHOU	ADB		
23	Yoonjung Jung	ADB		
24	M.D. HASMAT ALI	NATPGCL		
25.	Engg. Rafiqul Islam	CEGIS		
26.	M. Aizun Rhan	Professionl. CEGIS		
27	REISHA JONES	ADB		

## FGD with 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, Chondinal

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
01.	Atay Biswas	Malapara Chandra Mahal	"	অজয়
02.	Dipak Biswas	"	"	দীপক বসু
03.	Sumon Bhowmik	"	"	সুমন
04.	Constan Biswas	"	"	বকল
05.	Kishor Biswas	"	"	কিশোর
06.	Bikas Biswas	"	"	বিকাস
07.	Constan Ray	"	"	চন্দনা রায়
08.	Lilima Biswas	"	"	লিলীমা
09.	Shakti Biswas	"	"	শক্তি
10.	Nomig Biswas	Horsewife	"	নমিগ বসু
11.	Santi Sarker	"	"	সান্তি সর্কার
12.	Panbaba Biswas	"	"	পান্ভা বসু
13.	Komika Biswas	"	"	কমিকা
14.	Quinn	"	"	কোয়িন
15.	Jeera	"	"	জেরা
16.	Kakoli Biswas	"	"	কাকলী বসু
17.	Eti Rani	"	"	এতি রানী

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
18	Anjona	Malapara Chandni Mahal	"	ଅନଜନା
19	Mita	"	"	ମିତା
20	Youna	"	"	ସୁନା
21	Maryna	"	"	ସାମରା
22	Biswajit	"	"	ବିଷ୍ଣୁସିଂହ
23	chandi	"	"	ଚନ୍ଦ୍ରୀ
24	Jagannath	"	"	ସତ୍ୟନାଥ
25	Polok			ପଲକ
26	Anup			ଅନୁପ
27	Nikhi			ନିଖିତା
28	Biswa			ବିଷ୍ଣୁ
29	Eti Biswas			ଇତି ବିଷ୍ଣୁ
30	Kolpona			କଲ୍ପନା
31	Anoti			ଅନୁତି
32	Robin Biswas			ରବିବିଷ୍ଣୁ
33	Pappu			ପାପୁ
34	Mithun			ମିଥୁନ
35	Ghanshyam			ଗାନ୍ଧୀ

খুলনা ৮০০ মেগাওয়াট কয়লাইন্ড সাইকেল বিদ্যুৎ কেন্দ্র প্রকল্পের পরিবেশগত ও আর্থ-সামাজিক প্রভাব  
নিরূপণ বিষয়ক মতবিনিময় সভা উপস্থিতির তালিকা

স্থানঃ সম্মেলন কক্ষ, ইঞ্জিনিয়ার্স ইনস্টিটিউট ইন্সটিটিউট, খালিশপুর, খুলনা।

তারিখঃ ২১ অক্টোবর, ২০১৭ খ্রিঃ

সময়ঃ সকাল ১১:০০

ক্রমিক নং	নাম	পদবী/ঠিকানা	ইমেইল ও মোবাইল নং	স্বাক্ষর
১.	শ্রীযুক্ত মানিকজামান মনি	মিঃ, প্রকল্প উপ-প্রকল্প	udayan21@yahoo.com	
২.	মসজুম সুরঞ্জি	কন্সাল্টেন্ট-২০ কোচিং/মিলিটারি	০১৭১১-৩০৯০২২	
৩.	মিঃ মোহাম্মদ হোসেন সহকারী -	প্রকল্প প্রকল্প টিউব	০১৭১১-৪২২ ৪৭০	
৪.	আবদুল হক	প্রকল্প প্রকল্প ২৩পাওয়ে	০১৭১১-৬৩০০২৫	
৫.	মিঃ মোহাম্মদ হোসেন	উপ-প্রকল্প প্রকল্প প্রকল্প ৮০০মেগাওয়াট নতুন প্রকল্প	০১৭৩০-০৬৬৭৪৭	
৬.	Shanitul Islam	Consultant/ADB	01778580786	
৭.	Ruby Soorro Arico	ADB - ENVIRONMENT CONSULTANT	—	
৮.	Shamouddin Ahmed	ADB - Consultant (Gas Sector Specialist)	shamofah@gmail.com	
৯.	Nazmun Nahar	ADB BRM	nnahar@adb.org	
১০.	মহম্মদ মনির	মহম্মদ মনির উপ-প্রকল্প প্রকল্প	০১৭১১-১৩৭০০৭	
১১.	মিঃ মোহাম্মদ হোসেন	২০১৭ প্রকল্প	০১৩৩৪৭৪৭২	
১২.	মিঃ মোহাম্মদ হোসেন	০৬৭৫ ওয়াশিংটন	০১৬৩৫-২৫০২৪৮	
১৩.				
১৪.	Aziz Yusupov	Saleha Yusupov gmail.com Energy Spec. ADB	ayusupov@adb.org	
১৫.	Md Shahidul Moradian Joarder	প্রকল্প প্রকল্প (মহম্মদ হোসেন)	felng.nutgel@gmail.com ০১৭৩০০৬৬৭৪৫	



খুলনা ৮০০ মেগাওয়াট কয়লাইন্ড সাইকেল বিদ্যুৎ কেন্দ্র প্রকল্পের পরিবেশগত ও আর্থ-সামাজিক প্রভাব  
নিরূপণ বিষয়ক মতবিনিময় সভা উপস্থিতির তালিকা

স্থানঃ সম্মেলন কক্ষ, ইঞ্জিনিয়ার্স ইনস্টিটিউট ইসটিটিউট, খালিশপুর, খুলনা।

তারিখঃ ২১ অক্টোবর, ২০১৭ খ্রিঃ

সময়ঃ সকাল ১১:০০

ক্রমিক নং	নাম	পদবী/ঠিকানা	ইমেইল ও মোবাইল নং	স্বাক্ষর
১৬.	Syed Imdad Hossain	Manager, GTCL Arongghata, KGI	Gossain.unimelb @gmail.com 01709639723	
১৭.	Engr. Nizam Uddin	Manager, SCL 01711043978	uddinengr@gmail.com	
১৮.	Abdullah-Al-Mamun	Asst. Teacher 01710027985	eva.mamun @yahoo.com	
১৯.		Asst. Press	01718444611	
২০.	Mashuda Parcelin	Manager (EHS) (Indo) NWP&CL	Parvin@nwp&cl- org.bd 01777736469	 21.10.17
২১.	Mr. Jamal Uddin	AM (EHS) NWP&CL	jamalenv466@ gmail.com	 21.10.17.
২২.	MD. HASMAT ALI	SEA NWP&CL	hasmat@nwp&cl- org.bd	 21.10.17
২৩.	Ziaul Alam Khan	General Secre- tary AL-13		 21.10.17
২৪.	Mr. Zekir Hossain	13, No. Ward Office	01712179692	
২৫.	শ্রীঃ শ্রীমান	১৬ নং ওয়ার্ড	০২৩০৫-২৫০২৫৪	
২৬.	শ্রীঃ শ্রীমান	১৬ নং ওয়ার্ড	০১৩৩৩৪৪৪৪২	
২৭.	শ্রীঃ শ্রীমান	১৩ নং ওয়ার্ড	০২৩০৫০১৬০৫	
২৮.	শ্রীঃ শ্রীমান	১৬ নং ওয়ার্ড	০১৬৬২২৭৭৭২	
২৯.	আমির আল রাজা	১০ নং ওয়ার্ড	০১৩১৬০৬০৪৭	
৩০.	আমির আল রাজা	১০ নং ওয়ার্ড	০১৩১৬০৬০৪৭	

খুলনা ৮০০ মেগাওয়াট কন্ডাইড সাইকেল বিদ্যুৎ কেন্দ্র প্রকল্পের পরিবেশগত ও আর্থ-সামাজিক প্রভাব  
নিরূপণ বিষয়ক মতবিনিময় সভা উপস্থিতির তালিকা

স্থানঃ সান্বেলন কক্ষ, ইঞ্জিনিয়ার্স ইনস্টিটিউট ইন্সটিটিউট, খালিশপুর, খুলনা।

তারিখঃ ২১ অক্টোবর, ২০১৭ খ্রিঃ

সময়ঃ সকাল ১১:০০

ক্রমিক নং	নাম	পদবী/ঠিকানা	ইমেইল ও মোবাইল নং	স্বাক্ষর
৩১.	মুহুম্মদ দাস	চন্দ্রনগর, ৬ নং ওয়ার্ড		মুহুম্মদ
৩২.	মিত্র দাস	চন্দ্রনগর, ৬ নং ওয়ার্ড		মিত্র
৩৩.	জাটান বিক্রম	চন্দ্রনগর, ৬ নং ওয়ার্ড		জাটান বিক্রম
৩৪.	রাফিক	১৬৩২৮৫		রাফিক
৩৫.	মোঃ হিউ মুন্সতর	২০২ জোয়ার, চন্দ্রনগর		
৩৬.	মোঃ বেদ্য কান্ত-কান্ত	৩৬৩৩৩৩, ধাকড়া		বি.কান্ত
৩৭.	জ্যোতির্ময় রায়	১০৫৫৫৫ খালিশপুর		
৩৮.	মোঃ হুমায়ুন কবীর			
৩৯.	মোঃ হুমায়ুন কবীর	কে.এন.এম ০১৭১১৭১০৭৭		
৪০.	গাহিনা আতুল	স্বামী মিত্র কে.এন.এম খুলনা	০১৭১৪৪১১০০৪	gahina 21.10.2017
৪১.	অপর্ণা রায়	অফিসার্স মিত্র কে.এন.এম খালিশপুর	০১৭২৭৭০৬৪৪১	aparna 21.10.17
৪২.	মুক্তা	জি.এম.এম মিত্র কে.এন.এম খালিশপুর	০১৭৪২৫৫০৩৫৩	Mukta
৪৩.	সকিনুর	জি.এম.এম মিত্র কে.এন.এম খালিশপুর	০১৭১৬৬৬১৭৫১	Sakinur
৪৪.	নুসরাত জাহান পুতুল	জি.এম.এম মিত্র কে.এন.এম খালিশপুর	০১৭৭৪৭৪৭৩১২	Putul
৪৫.	নুপুর	জি.এম.এম মিত্র কে.এন.এম খালিশপুর	০১৭৩৫২৭৬৪৬	NUPUR

খুলনা ৮০০ মেগাওয়াট কয়লাইভ সাইকেল বিদ্যুৎ কেন্দ্র প্রকল্পের পরিবেশগত ও আর্থ-সামাজিক প্রভাব  
নিরূপণ বিষয়ক মতবিনিময় সভা উপস্থিতির তালিকা

স্থানঃ সম্মেলন কক্ষ, ইঞ্জিনিয়ার্স ইনস্টিটিউট ইন্সটিটিউট, খালিশপুর, খুলনা।

তারিখঃ ২১ অক্টোবর, ২০১৭ খ্রিঃ

সময়ঃ সকাল ১১:০০

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৪৬.	শ্রী. এ. এ. হোসেন	কম্পিউটার	০১৭৩০-৮৮২২ ৪৯	[Signature]
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৪৮.	শ্রী. মাহমুদ	কম্পিউটার	০১৭১২-০৮৮৭৬	[Signature]
৪৯.	শ্রী. মাহমুদ (হোম)	কম্পিউটার	০১৭১১৩ ৭৩৭ ৬৬	[Signature]
৫০.	কলীজানতুল্লাহ	কম্পিউটার	০১৭২০০৩৭৩৭	[Signature]
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৬০.	শ্রী. মাহমুদ হোসেন	কম্পিউটার	০১৭১৬-১৫৩৬৩৩	[Signature]


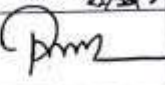
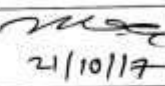



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তারিখঃ ২১ অক্টোবর, ২০১৭ খ্রিঃ

সময়ঃ সকাল

ক্রমিক নং	নাম	পদবী/ঠিকানা	ইমেইল ও মোবাইল নং	স্বাক্ষর
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### Photographs of the Sessions



### Consultation Workshop at IEB, Khulna





**FGD with KNM school teacher, student, managing committee**



**FGD with Imam and adherents of the KNM mosque**







**FGD with Fishermen**

# Resettlement Plan

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Document stage: Updated  
Project Number: 50161-003  
May 2018

## Bangladesh: Rupsha 800-Megawatt Combined Cycle Power Plant Project

### Output 2: Energy Transfer Systems Upgraded (Gas Supply)

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
BR	Bangladesh Railway
CCL	Cash Compensation under Law
CEGIS	Center for Environmental and Geographic Information Services
cft	cubic foot
CGS	City Gas Station
CMP	Current Market Price
CCPP	Combined Cycle Power Plant
DC	Deputy Commissioner
EA	executing agency
GAP	Gender Action Plan
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
ha	hectare
HH	household
IEB	Institute of Engineers Bangladesh
IOL	Inventory of Losses
JFPR	Japan Fund for Poverty Reduction
KDA	Khulna Development Authority
KII	Key Informant Interview
km	kilometer
LGI	Local Government Institution
MW	megawatt
NWPGCL	North-West Power Generation Company Limited
PMU	Project Management Unit
PWD	Public Works Department
RHD	Roads and Highways Department
rft	running foot
RP	Resettlement Plan
RoW	right-of-way
sqft	square foot
SPS	Safeguard Policy Statement 2009
SGCL	Sundarban Gas Company Limited

## 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.

**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.

**Non-titled** 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.

**Project** means output 2: for the gas transmission line component, its installation for gas supply to the Rupsha 800 MW 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 semi-permanent 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 (i) households headed by women; (ii) households headed by persons with disabilities; (iii) households falling under the generally accepted indicator for poverty;<sup>1</sup> (iv) elderly headed households; and (v) households who are landless and (vi) those 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, 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**

### **Component 2 Description**

i. This draft resettlement plan (RP) is for output 2 (gas supply component) 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. 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 to develop the project.

ii. The project has four outputs: Output 1: efficient gas-fired power generation increased through the construction of the Rupsha 800 MW CCPP; Output 2: energy transfer systems upgraded with, 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; and a power transmission interconnection, via a 29 km new transmission line; Output 3: institutional capacity of NWPGL strengthened; and Output 4, socially inclusive development of communities neighboring the project pilot tested.

iii. This resettlement plan relates to activities undertaken under Output 2: Energy supply systems upgraded, specifically the gas supply to the power plant component. A separate RP has been prepared for the transmission component of Output 2. The gas transmission line of 10 km long covers different administrative units wards of Khulna City Corporation under two (2) thanas (Daulatpur (Aronghata) & Khalishpur) of Khulna district. The gas transmission line of 2.0 km long covers only ward No. 10 of Khulna City Corporation under Khalishpur thana.

### **Scope of Land Acquisition and Resettlement**

iv. The 10 km and 2.0 km long and 8-meter-wide gas line alignments under component 2 will be on 8 ha and 1.6 ha of government land, respectively. The land will be used based on mutual agreement between NWPGL and the land owner organizations: the Roads and Highways Department (RHD), the Khulna Development Authority (KDA) and the Bangladesh Railway (BR).

v. Based on the inventory of losses survey (IOL) survey, 20 households (106 persons), running small businesses in the Right of Way (RoW) of the proposed 10 km gas transmission line will be affected. These businesses and a cobbler will have to shift their shops (24 made from temporary kutcha materials) and a tool box (belonging to the cobbler) for installation of the gas line, to another location close by (there is sufficient space for shifting). Common property assets belonging to local mosques and a polytechnic institute within the existing ROW will also be affected (i.e. ablution structure, walls, gate, donation box, sitting place). The project will also affect 326 trees in the land of the RHD (256) and KDA (70). The income of the shops will be temporarily affected during shifting of their business (tin/kutcha) structures. Thirteen vulnerable households have been identified. No residential structures or agricultural land will be affected for this component.

vi. The 2.0 km gas transmission line will affect 6 households (32 persons) running small business which have to be shifted (9 shops made from temporary kutcha materials) for installation of the gas line, to another location close by (there is also sufficient space for

shifting). A sitting place constructed by KDA for common use will also be affected. This alignment will also affect 44 trees in the land of the KDA.

vii. The total impacts of the gas supply component include 26 affected households (138 affected persons) whose businesses will be affected temporarily during construction of the pipelines.

### **Socioeconomic Profile of Affected Households**

viii. Of the total households identified (26 AHs, 138 APs), the census results found 92 males, accounting for 67% and 46 females, accounting for 33%. Of the affected households, 24 households are headed by men and 2 by women. The affected household size is 5.3 persons. In the households of the study area, 55% of the household heads are literate. Almost all of the children in the households go to school. School attendance in primary and high school level has increased due to free-schooling. The average income and expenditure of households per month is Tk14,350 and Tk12,422, respectively. About 25% of the affected households are below the poverty line, as established in this RP.

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

ix. Consultation respondents were mainly people who are going to be affected during the implementation of this component. Among the 31 respondents, 28 were male and 3 were female. The people of the project area have already learned about the proposed project from the visiting consultants. Mainly they suggested to work on the road and rail crossing quickly and reconstruct it fast to lessen impacts on people and to engage local people in the construction activities (land development, removal of the disposals and other nontechnical activities) during project activities. In addition, a disclosure meeting was held in October 2017 with 64 attendees (52 men and 12 women). The draft RP and updated RP will be disclosed as per disclosure requirements laid out in ADB's SPS.

### **Legal and Policy Framework**

x. The legal and policy framework of the resettlement plan is based on Acquisition and Requisition of Immovable Property Ordinance, 1982 (subsequent amendments of it up to 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 principles have been adopted. Generally, the 1982 Ordinance does not recognize unauthorized occupants on Government land; there is no clear indication about avoiding or minimizing displacement and resettlement of the displaced population. ADB policies require not only resettlement and support but to uphold and at least restore pre-project standard of living of all affected people regardless of title. ADB policies cover physical displacement (relocation) and economic displacement (loss of income sources or means of livelihoods) as a result of involuntary restrictions on land use. It covers displaced persons whether such losses and involuntary restrictions are full or partial, permanent or temporary and regardless of legal status.

### **Grievances Redress Mechanism**

xi. The EA (NWPGCL 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 work utilizing field officers (at first level), PMU Grievance Committee (at second level) and Grievance

Redress Committee (at third level). It is anticipated that field officers will be able to respond and resolve minor grievances, especially by working with on-site contractors etc. 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. If there was no such agreement or resolution, the matter is presented to the GRC. 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 restrict access of APs to use of a court of law at any time.

### **Resettlement Budget**

xii. This RP presents estimated costs for temporarily land requisition and rehabilitation of APs. The estimated cost in this budget is indicative which needs further updating after finalization of the RoW design and during finalization of the RP, if necessary. The rehabilitation costs and budget covers compensation for the affected structures in the alignment, loss of trees and assistance/benefits and for vulnerability of the APs. The total estimated cost is Tk4,319,101 (Tk4.3 million) and (approximately \$53,594) in which Tk1.5 million (about 40% of total cost) is for compensation of trees.

### **Institutional Arrangements**

xiii. NWPGCL will establish a Project Management Unit (PMU) for the implementation of the project including land requisition and resettlement. NWPGCL will be responsible for finalization, updating, implementation and monitoring of this resettlement plan. During implementation of the RP, a temporary social safeguards staff member (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, applicable national laws and regulations and that all entitlements are paid according to the entitlement matrix. NWPGCL environment and social safeguard staff at their headquarters will provide general oversight of field-based staff.

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

xiv. RP implementation will take place over approximately one and a half (1.5) years, starting from the compensation process initiation to payment finalization, and semiannual monitoring reports will be prepared. The schedule will be adjusted during final design and implementation.

xv. Internal monitoring of this resettlement plan is the responsibility of NWPGCL through its PMU. NWPGCL 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) is for output 2 of the Rupsha 800 MW Combined Cycle Power Plant Project (hereafter 'the project'). The executing agency (EA) for the project is the North-West Power Generation Company Limited (NWPGCL), an enterprise of Bangladesh Power Development Board. NWPGCL is planning to develop and operate an 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. In the face of an impending power shortage impacting on the continued growth of Bangladesh's power requirements. The the Government of Bangladesh has requested ADB to finance the project to improve the infrastructure needed to implement its updated poverty reduction strategy.<sup>3</sup> NWPGCL has received approval from the Ministry of Power Energy and Mineral Resources to develop the project. The project has four components as follows:

3. **Output 1: Efficient gas-fired power generation increased.** This will be achieved through the design, supply, installation and commissioning of new Rupsha 800 MW CCPP. 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. **Output 2, Energy Transfer System Upgraded.** For gas supply to the Rupsha power plant, the project will construct (i) a 10 kilometer (km) 24-inch, gas distribution pipeline to connect the Khulna City Gas Station to the Rupsha power plant, and (ii) an additional 2 km 20-inch gas pipeline (off-take) from the Rupsha power plant to NWPGCL's existing 225 MW power plant at Khulna, which is currently operating on high-speed diesel (HSD). The project will replace the HSD at the Khulna power plant and provide a stable gas supply for its operation, resulting in significant environmental, economic, and financial benefits. To transfer generated electricity from the Rupsha power plant to the existing Khulna South grid substation, a 230-kilovolt switchyard at the Rupsha power plant site and 29 km of 230 kilovolt high capacity, double circuit transmission line, will be built.

5. **Output 3, Institutional capacity of NWPGCL strengthened.** (i) implementation and operation of an ERP system; (ii) supply and installation of a universal power plant operations training simulator; and (iii) delivery of capacity enhancement through on the job training for NWPGCL staff in: (a) project management, implementation, and supervision; (b) monitoring and evaluation; (c) operation and maintenance; (d) environment and socials safeguards; (e) gender equity; and (f) effective project communications.

6. **Output 4, Socially inclusive development of communities neighboring the project site pilot tested.** The project will provide grant financing to improve livelihood of the

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<sup>3</sup> Government of Bangladesh. 2010. Steps Towards Change: National Strategy for Accelerated Poverty Reduction. Dhaka.

communities in the project area by (i) increasing awareness on safe and efficient use of electricity, (ii) delivering capacity building trainings on livelihood activities and employment opportunities, and (iii) installing a 10 kilowatt solar system, two information technology laboratories, and two science laboratories in schools near the Rupsha power plant.

7. This resettlement plan is for output 2, energy transfer system upgraded, specially the gas supply to the power plant component. This includes gas line installation for supply to the Rupsha 800 MW CCPP (component 1) and to the existing 225 MW power plant at Goalpara. A brief description of output 2 (gas supply component) is presented below.

## **1.2 Output 2 - Gas Transmission Line Component Description**

8. The length of the pipe line between the city gas station and the project site would be about 10 km i.e. up to the gas regulatory and metering station of the proposed power project including an off-take gas line of about 2 km (20 inches diameter) from this 10 km (24 inches diameter) at the point of Fair Clinic/Modern Morh to the existing 225 MW power plant at Goalpara.

9. The diameter of the 10 km pipe line would be 24" (twenty-four inches) and the 2 km off take would be 20" (twenty inches). It would be laid in a trench. The width of the trench would be about two (02) meters. The over burden from the top of the pipe would be about 1.5 meter. A typical layout of gas transmission line is shown in Photograph 1.1 and Photograph 1.2.



**Photograph 1.1: General View of Gas Pipeline Laying**

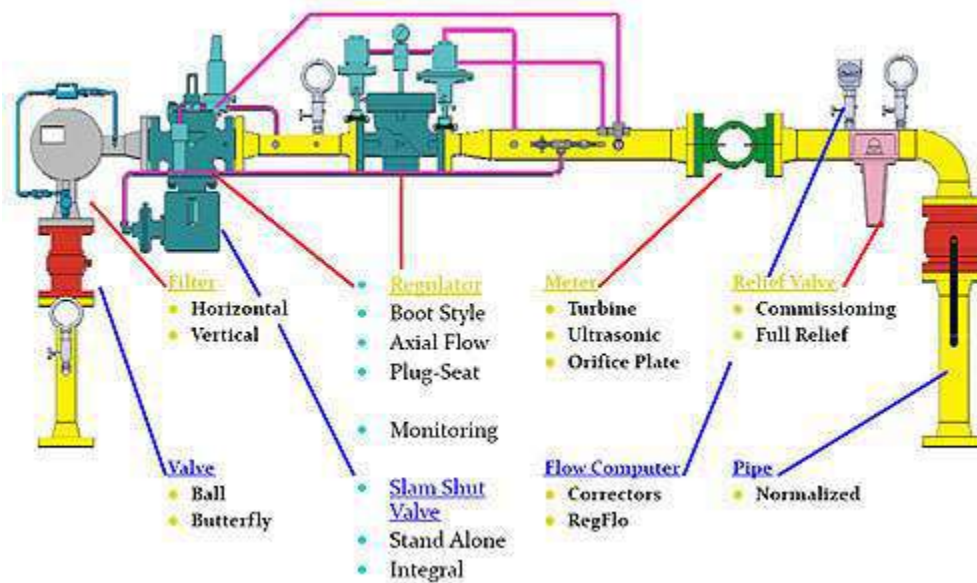
10. In total three (3) places, the pipe line will cross major roads. It will be placed by horizontal drilling. To comply with the safety regulation before passing gas pipe through the hole a casing pipe will be placed and sealed from the outside. Then the pipe will be passed through the casing across the road.





**Photograph 1.2: General View of Horizontal Drilling for Road/River Crossing**

11. The pipe line will connect the entry point of the gas metering station (Figure 1.1). Before flowing gas through this pipe line it would be pressure tested as per national standard.



**Figure 1.1: General View of Gas Regulating and Metering Station**

12. The gas pipe line will be constructed following the health, safety and environment (HSE) guide line and Explosive Rules of Bangladesh. As the gas distribution line would be laid and operated following HSE and Explosive rules of Bangladesh, therefore, no major environmental impact is envisaged for this gas distribution line.

### 1.3 Measures to Minimize Impacts

13. The proposed output 2, gas transmission alignment has been designed to minimize resettlement impacts. Criteria for route selection considered: (i) length of route, (ii) number of bends, (iii) number of structures to be affected, and (iv) number of major road crossings. The three route options considered are presented in Table 1.1 and Map 1.1. The selected route

option (2) has shortest length of route, least number of bends, affected structures and number of major road crossing. There is no difference between route option 2 and route option 3 in the cases of length of route and number of major road crossing, while the route option 3 has a higher number of bends and affected structures compared to those in route option 2. Route option 1 does not in favour of all cases of the selected criteria compared to those of route option 2. Besides, the selected route option (2) avoids urban and settlement areas also. There are no permanent structures in the route option-2 alignment but option 1 includes 1,500 out of 2,500 and option 3 includes 150 out of 180 permanent structures (Table 1.1), and markets including major ones which are the earning source/livelihood options of a lot of people.

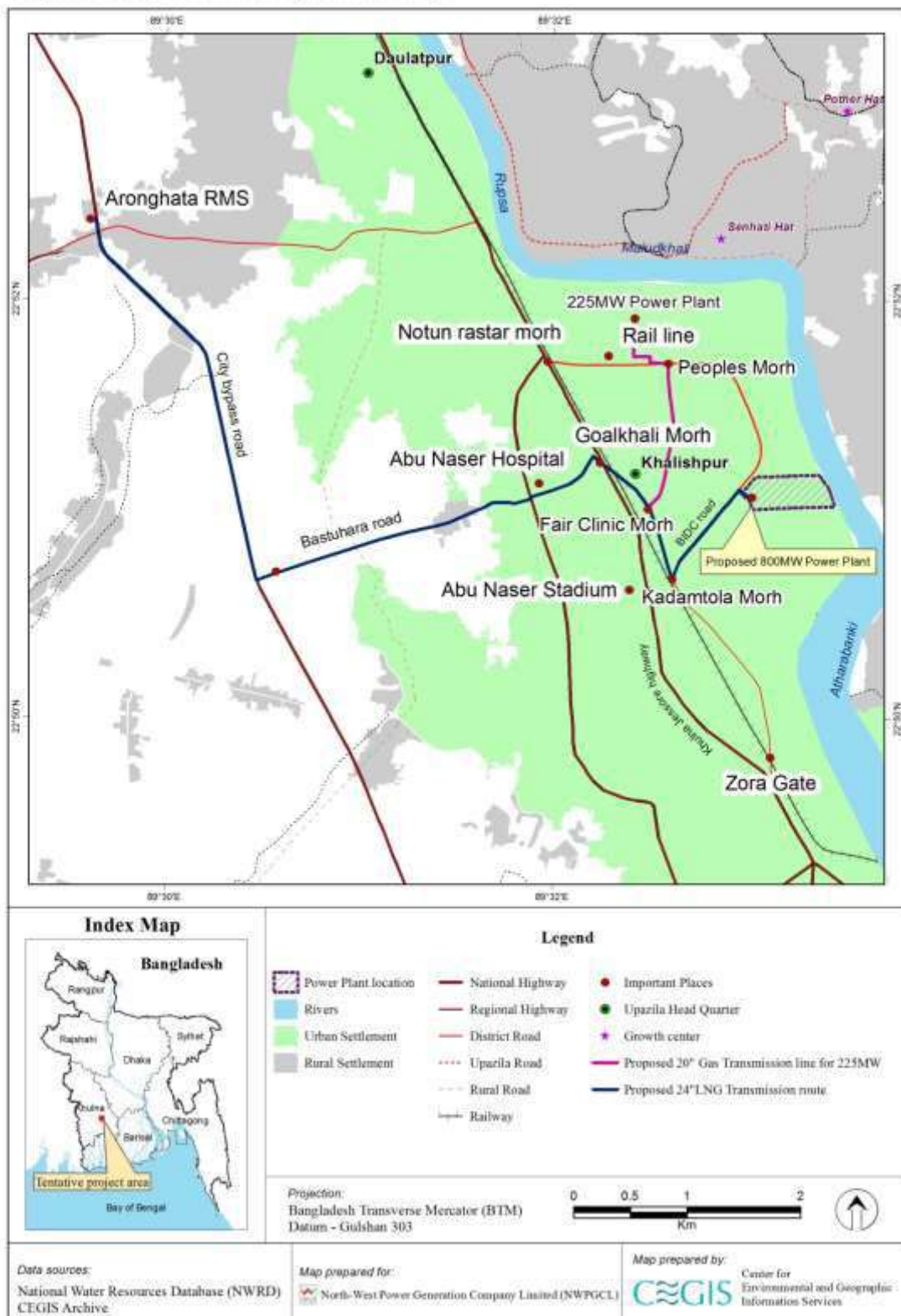
14. Local people were consulted with regards to the route selection for the gas pipeline. Most people opined in favour of route option 2. There are a large number of settlements and high-rise buildings in the RoW area of route option 1. Considering all the aspects mentioned above local people favoured route option 2.

15. Analyzing the elements of alternative routes, route option 2 was more suitable than other alternatives. It offers less permanent and temporary structures, includes less markets, and road networks. This route is designed through less population dense area. It, therefore, minimizes the effects and the project implementation costs as well. Route option 2 was found to be the most suitable gas transmission route alignment.

**Table 1.1: Alternate analysis of route**

<b>Issues</b>	<b>Route 1</b>	<b>Route 2 (selected as final route)</b>	<b>Route 3</b>
Length (km)	19.3	10	10.5
Nos. of bends	17	14	19
Nos. of structures to be affected	2,500	25	180
Nos. of major road crossing	5	3	3

Proposed LNG Gas Transmission Pipe Line Route Map



Map 1.1: Proposed RoW of gas transmission alignments

## 2. Scope of Land Acquisition and Resettlement

### 2.1 General

16. Impacts due to project interventions were assessed through field surveys conducted from 12–15 June and 16–19 August of 2017 for 10 km and 2.0 km RoWs, respectively. The techniques used for data collection included: (i) inventory of losses survey (IoL); (ii) interviews with the affected person; and (ii) informal discussions with the affected and non-affected persons. Questionnaires and checklists were used for collecting data. A team of experienced field staff facilitated these activities. The impacts mentioned herein are based on the preliminary design, whilst not anticipated, any significant changes in the alignment will require a verification survey of IR impacts and an updated RP to be prepared.

17. The field survey findings have identified land of Roads and Highways Department (RHD), Khulna Development Authority (KDA) and Bangladesh Railway (BR), burrow pits of RHD and KDA, small business and other structures, trees on RHD and KDA land as being affected by the project interventions. A summary of affected households, structures and census information such as income is presented in Appendix 1 and photos in Appendix 5.

18. Based on the IOL survey, 20 households (106 persons), running small businesses in the RoW of the proposed 10 km gas transmission line will be affected. These businesses and a cobbler will have to shift their shops (24 made from temporary kutcha materials) and a tool box (belonging to the cobbler) for installation of the gas line, to another location close by (there is sufficient space for shifting). Common property assets belonging to local mosques and a polytechnic institute within the existing ROW will also be affected (i.e. ablution structure, walls, gate, donation box, sitting place).

19. The RoW of the proposed 2.0 km gas transmission line will affect 06 households (32 persons) also running small businesses (9 shops made from temporary kutcha materials), a sitting place belonging to a college, a staircase, and a decorative platform in KDA land. The RoW will also affect 44 trees in KDA land. Based on the preliminary assessment, a summary of output 2 (gas supply component) impacts are given in Table 2.1 below.

20. The total impacts of output 2 (gas supply component) include 26 affected households (138 affected persons) whose businesses will be affected temporarily during construction of the pipeline.

**Table 2.1: Summary of impacts**

Particulars	Details of 10 km RoW	Details of 2.0 km RoW
Length in km	10	2.0
Area under RoW (ha)	8	1.60
(i) RHD	2.8	0
(ii) KDA	5.0	1.56
(iii) BR	0.2	0.04
Total AHs (Nos.)	20	6
Male headed HH	18	6
Female headed HH	2	0
On RHD land	2	0

Particulars	Details of 10 km RoW	Details of 2.0 km RoW
On KDA land	18	6
On BR land	0	0
Population	106	32
Total vulnerable households (Nos.)	13	0
(i) households headed by women	2	0
(ii) households headed by persons with disabilities	0	0
(iii) households falling under the generally accepted indicator for poverty <sup>4</sup>	4	0
(iv) elderly headed households	4 <sup>5</sup>	0
(v) Households who are landless	3 <sup>6</sup>	0
Affected structures (Nos.)		
(i) On RHD land (squatting)	2	0
(ii) On KDA land (squatting)	34	12
(iii) On BR land (squatting)	0	0
Total trees in Govt. area (Nos.)	326	44
(i) On RHD land	256	0
(ii) On KDA land	70	44
(iii) On BR land	0	0

## 2.2 Impact on Land

21. **RoW of 10 km:** The installation of the gas transmission line (10 km) will be done on existing government land (RHD, KDA, and BR). This land, including burrow pit/s will not be subject to permanent acquisition. However, the land will be used on mutual agreement between the government organizations (RHD, KDA & BR) and NWPGL. Out of a total 8 ha of land in the 10 km RoW of gas transmission line, RHD, KDA and BR have 2.8, 5.3 and 0.15 ha of land, respectively.

22. **RoW of 2.0 km:** The installation of the gas transmission line (2.0 km) will be done on government land (KDA and BR). This land will not be subject to permanent acquisition. However, the land will be used on mutual agreement between the government organizations (KDA & BR) and NWPGL. Out of total 1.6 ha of land in 2.0 km RoW of gas transmission line, KDA and BR have 1.56 and 0.04 ha of land, respectively.

## 2.3 Impact on Structures

23. **RoW of 10km:** Based on the survey there are 25 primary structures, made from primarily kutchha (temporary) materials. Out of the 25 structures, 24 are small shops and 1 is *wudukhana* of a mosque (ablution room) (see Table 2.2). The shop stalls sell tea, chocolate,

<sup>4</sup> In lieu of a national poverty line, 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>5</sup> All of heads (elderly) still earn from their shops; live above poverty line; have land and have means of support (other earning member in the households).

<sup>6</sup> Out of 3 landless HHs, 1 HH is headed by female and below poverty line. The remaining two live above the poverty line; one is headed by female and the other by male. All other affected HHs own land elsewhere.

candy, cookies, paan (betel leaf), bidi, cigarette, etc. There are 11 more affected structures (secondary), those are a donation box (1), entrance gate (1) with a boundary wall (1) and seats (6) for ablution in an open space at two mosques, a bench (1) made of concrete material, and a tool box (1) of a cobbler (Table 2.3). Details of the structures are presented in Appendix 1 (Table A1.2).

24. **RoW of 2.0 km:** Based on survey data, there are 09 primary structures, made from primarily kutcha (temporary) materials. All primary structures are small shops (see Table 2.2). Out of 09 shops, 08 shops sell tea, chocolate, candy, cookies, paan (betel leaf), bidi, cigarette, etc. The remaining shop (01) makes and sells wooden furniture. There are 03 more affected structures (secondary), those are a staircase (1) made of iron, sitting place (1), and a decorative platform (6) made of concrete material (Table 2.3). Details of the structures are presented in Appendix 1 (Table A1.5).

**Table 2.2: Affected primary structures by type in the RoW**

Affected/ loss items	Type of structures		
	Semi-pucca	Kutcha	Total
RoW of 10 km			
Small shop	0	24	24
Wudukhana (of Mosque)	1	0	1
Total	1	24	25
RoW of 2.0 km			
Small shop	0	9	9
Total	0	9	9

**Table 2.3: Affected secondary structures by type in the RoW**

Categories of loss	Type of structures			
	Pucca	Kutcha	Steel/Iron	Total
RoW of 10 km				
Donation Box	1	-	-	1
Entrancegate	-	-	1	1
Wudukhana (No.)	6	-	-	6
Bench (sitting place)	1	-	-	1
Boundary wall (5")	1	-	-	1
Cobbler's tool box	-	1	-	1
<b>Total</b>	<b>9</b>	<b>1</b>	<b>1</b>	<b>11</b>
RoW of 2.0 km				
Staircase	0	0	1	1
Bench (sitting place)	1	0	0	1
Extended platform	1	0	0	1
<b>Total</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>3</b>

## 2.4 Loss of Trees

25. **RoW of 10 km:** The initial survey indicates that there are 326 trees on existing government land in the alignment. Out of 326 trees, 256 are on the land of the RHD and 70 are on the land of KDA. The trees on the RoW will be removed for installation of the gas transmission line. Compensation for trees is considered in the budget of this RP for the

cultivator. Details of the affected trees are presented in the tables (Table 2.4 and Table 2.5) below.

26. The trees in the RoW in government (RHD) land are planted under the strip plantation program of social forestry of the Forest Department. In this context, the compensation of trees will be distributed among the parties of the strip plantation program. The parties are: (i) the Forest Department (10%); (ii) RHD (20%); (iii) beneficiaries/local people (55%); (iv) local union parishad (5%); and plantation fund (10%), according to Sub-section 2 (Ga/C), Section 20 of Social Forestry Rules of 2004, amended in 2011. In the case of trees in KDA land under the RoW, all trees are planted by the KDA itself. As such the trees compensation will be paid to KDA alone.

**Table 2.4: Affected trees on the RHD land by species and number in RoW of 10 km**

Name of trees	Size of tree				
	Big	Medium	Small	Sapling	Total
<b>Fruit trees</b>					
Date (Khejur)	5	2	12	0	19
Palm	0	0	12	0	12
<b>Subtotal</b>	<b>5</b>	<b>2</b>	<b>24</b>	<b>0</b>	<b>31</b>
<b>Timber</b>					
Mehgoni	0	8	43	0	51
Akashmoni	0	0	17	120	137
Babla	0	0	37	0	37
<b>Subtotal</b>	<b>0</b>	<b>8</b>	<b>97</b>	<b>120</b>	<b>225</b>
<b>Grand total</b>	<b>5</b>	<b>10</b>	<b>125</b>	<b>120</b>	<b>256</b>

**Table 2.5: Affected trees on KDA land by species and number in RoW of 10 km**

Name of trees	Size of tree				
	Big	Medium	Small	Sapling	Total
<b>Timber</b>					
Banyan	0	1	0	0	1
Raintree	1	6	1	0	8
Mehgoni	20	9	32	0	61
<b>Total</b>	<b>21</b>	<b>16</b>	<b>33</b>	<b>0</b>	<b>70</b>

27. **RoW of 2.0 km:** There are 44 trees on the government land in the alignment. All trees are on the land of KDA. The trees on the RoW will be removed for installation of the gas transmission line. Compensation for trees is considered in the budget of this RP for the cultivator. Details of the affected trees are presented in the tables (Table 2.6) below.

**Table 2.6: Affected trees on KDA land by species and number in RoW of 2.0 km**

Name of trees	Size of tree				
	Big	Medium	Small	Sapling	Total
<b>Timber trees</b>					
Bakul	0	1	2	0	3
Raintree	2	2	1	0	5
Mahagoni	10	7	12	0	29
Shishu	0	4	2	1	7
<b>Total</b>	<b>12</b>	<b>14</b>	<b>17</b>	<b>1</b>	<b>44</b>



## 2.5 Impacts on Fish Gher

28. **RoW of 10 km:** There is one fishing pond encroaching within the existing ROW, however no loss of fish stock is anticipated. The gas transmission line installation will not affect the fish of gher ponds, as fish will be kept in the main body of the ghers by constructing a demarcation fence on the border line of the land/burrow pits in the RoW and fish ghers. The budget of this RP, therefore, does not consider fish loss. Photograph 2.1 shows an example of the encroached area of fish gher. During laying of the line, measures will be included to allow the farmer access to maintain his farming activities.



**Photograph 2.1: Encroached area of fish gher in the RoW (KDA) land**

29. **RoW of 2.0 km:** There is no impact of this alignment on fish gher.

## 2.6 Loss of Income and Livelihoods

30. **RoW of 10 km:** The field findings identified 19 small businessmen and a (1) cobbler who are all squatters (not encroachers) in the RoW of the gas transmission line. These persons will have to shift their shops and tool box for installation of the gas transmission line, respectively from the affected area in the RoW to a proximal location (there is enough space for shifting). This activity will temporarily affect income and livelihoods of the individual shop owners. All shops are run by the owner, there are no employees. The shifting of shops will take up to a day, however consideration has been given for one week to set up in the new location. Shops will *not* be able to return to the original location for safety reasons. The budget of this RP, therefore, considers assistance (cash compensation) for income loss of the businessmen and the cobbler for one week.

31. **RoW of 2.0 km:** There are 06 small businessmen who are all squatters (not encroachers) in the RoW of the gas transmission line. These persons will have to shift their shops for installation of the gas transmission line from the affected area in the RoW to a proximal location (there is enough space for shifting). This activity will temporarily affect income and livelihoods of the individual shop owners. All shops are run by the owner, there are 06 employees in 03 shops (02 employees in each shop). The shifting of shops will take up to a day, however consideration has been given for one week to set up in the new location. The budget of this RP, therefore, considers assistance (cash compensation) for income loss of the businessmen and their employees for one week.



## 2.7 Vulnerable Households

32. **RoW of 10 km:** There are 13 affected households identified as vulnerable in this RP. The entitlement matrix and the budget of this RP also recognize their vulnerability and considers special support from the project. The field investigation found no indigenous people/ethnic minorities within the definition from ADB's SPS 2009.

33. Whilst all the affected business are squatting informally in the ROW, the majority of these have titled land elsewhere. Only those households who are completely landless or without any title whatsoever are accounted for in the Table 2.7 below. None of the effected business are encroachers, they are all squatters.

**Table 2.7: Vulnerable Households 10km ROW**

Total vulnerable households (Nos.)	13
(i) households headed by women	2
(ii) households headed by persons with disabilities	0
(iii) households falling under the generally accepted indicator for poverty <sup>7</sup>	4
iv) elderly headed households	4 <sup>8</sup>
v) Households who are landless	3 <sup>9</sup>

34. **RoW of 2.0 km:** Survey data revealed that there are no vulnerable households in this alignment, as per the definition provided for in this RP.

<sup>7</sup> In lieu of a national poverty line, 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>8</sup> All of heads (elderly) still earn from their shops; live above poverty line; have land and have means of support (other earning member in the households).

<sup>9</sup> Out of three landless HHs, one HH is headed by female and earning poor income (below poverty line). The remaining two live above poverty line; one is headed by female and the other by male. All other affected HHs have titled land elsewhere.

### **3. Socioeconomic Profile**

#### **3.1 Preamble**

35. This chapter provides a socioeconomic profile in terms of demography, literacy, employment, income and expenditure of the study area<sup>10</sup> in Khulna district through which the line will traverse for the project. The study area for this socioeconomic profile includes both 10 km and 2.0 km RoWs in Daulatpur (Aronghata) and Khalishpur thanas of Khulna District. Thana wise 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. Primary data is also presented as complimentary to the secondary information.

#### **3.2 Demography**

36. Of the study area population, there are 51% male and 49% females in the project area. The male-female ratio is 103 which means there are 103 males per 100 females. The average household size in the study area is 4.2 whereas the national average is 4.4 (BBS, 2012). Among the affected households, the average household size is 5.3 persons.

37. In the study area, the highest number of population (about 27%) belongs to the age group of 30 to 49 years while the lowest number (about 3%) belongs to 60 to 64 years age group. Age groups of 0–14 years is defined as children (28%), 15–24 years as early working age group (21%), 25–59 years as prime working age group (43%), 60 and over as elderly people (8%).

38. The census survey conducted for the resettlement plan preparation identified 26 affected households with 138 persons, in which there are 92 males, accounting for 67% and 46 females, accounting for 33%. Of the affected households, 24 households are headed by men and 2 by women.

#### **3.3 Education and Occupation**

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

40. Of the affected households, 55% of the household heads are literate, of which 35% (the highest percentage of household heads) have primary level education, whereas only 5% of household heads have education up to bachelor degree level.

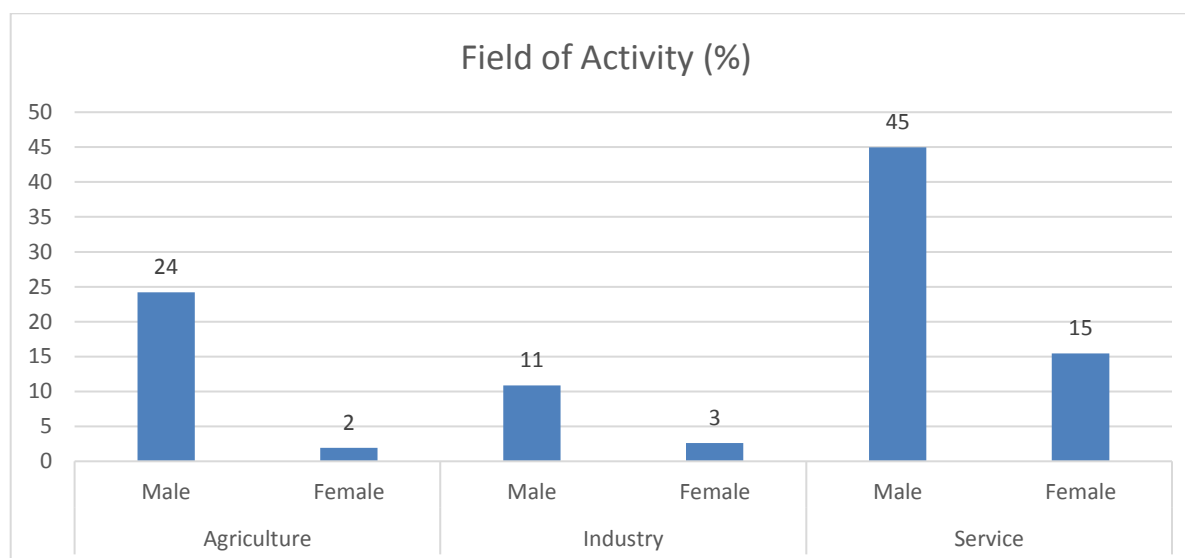
41. However, it was found in the study area during field visits that almost every child in a household goes to school, meaning that admittance to primary or pre-primary school is nearly one hundred percent. The rate of drop-out in high schools is low. School attendance in primary and high school has increased due to free-schooling and free educational book programs.

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<sup>10</sup> Study area refers to the area that may be affected directly or indirectly by the project intervention, which is considered for environmental impact assessment (a different study).

42. In the study area about 39% are employed in different sectors. About 35% of people are engaged in household work. It has also been found that 25% of the total population are not working.

43. The main field of economic activity/occupation of the employed population is service (60%), where male accounts for 45% and females account for 15%. About 26% of people are engaged in the agriculture sector and 14% of the total population is engaged in the industrial sector. Figure 3.1 shows the main economic activity in the study area. The primary census data supplements this secondary data. The census data shows that all affected households (100%) are involved with small business. Almost all (96.16%) have business selling tea, chocolate, candy, cookies, paan (betel leaf), bidi, cigarette; and 3.84% have business of wooden furniture.



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

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

### 3.4 Income and Expenditure of Affected Households

44. Result of the census executed by local consultants shows that, household's lowest income per month is Tk7,000 and the highest income per month is Tk29,000. The lowest expenditure of households is Tk5,740 per month and highest expenditure of household is Tk23,780 per month. The average income of households is Tk14,350 per month and the average expenditure of households is Tk12,422 per month. Details with regards to all affected households income is contained in Appendix 1.

45. Household with income under Tk9,176.00 per month are considered as below the poverty line which includes approximately 25% of the affected households. The poverty line has been calculated based on the Bangladesh Bureau of Statistics Survey 2010 and inclusive of inflation through to 2017 (<https://www.bb.org.bd/econdata/inflation.php>). Based on this, per-capita *annual* income for individuals under the poverty line is Tk20,776 (Tk1,731 monthly) and *annual* household income below the poverty line is Tk110,110 (Tk9,176 monthly) for the Khulna Division.

**Table 3.1: Income and Expenditure of the affected households**

Income group (Tk)	Income		Expenditure	
	No of HH	% of HH	No of HH	% of HH
<=9,200	5	19.2	9	34.6
9,201–14,200	7	26.9	6	23.1
14,201–19,200	8	30.8	7	26.9
19,201–24,200	3	11.5	3	11.5
>=24,201	3	11.5	1	3.8
Total	26	100	26	100

Source: Census survey, CEGIS, 2017.

### 3.5 Gender Issues

46. 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% 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>11</sup>

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. The project has found 2 female headed households having a total of nine (9) dependents among the 26 affected households. These 2 female headed households are also considered as vulnerable households and eligible for livelihood training activities under the Japan Fund for Poverty Reduction (JFPR) Grant initiative, see project output 4.

49. Furthermore, a Gender Action Plan (GAP) has been prepared under the project. This Gender Action Plan includes specific actions and strategies and cost estimates that are gender responsive and culturally appropriate. The GAP includes skill development programs for women in households affected by the project.

50. In addition, the PMU will pay special attention in conducting any additional surveys required, during consultations such that both women and men participate; and attempt to ensure that both husband and wife are present when compensation entitlements are discussed and ensure both husband and wife are invited to receive the compensation and other allowances due to the household for affected assets.

<sup>11</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 Introduction**

51. Stakeholder consultation is a part of the RP process aimed at involving the project stakeholders into the project development and implementation process. During the consultation process of the proposed project, the project interventions and their likely impacts on the environment as well as on households were shared with project stakeholders in meetings and discussions.

52. In this RP, key informant interviews (KIIs) with project affected people and different officials and informal discussions with local people were undertaken. In the consultation process, the stakeholders were involved with the RP consultants and project proponent, to share their problems, needs and aspirations in a participatory way. In this process NWPGCL as the project proponent could obtain stakeholders' views and feedback on the proposed interventions and perceptions on the probable changes likely to be happened in future within the project area. In addition, a disclosure meeting was held in October 2017 with 64 attendees (52 men and 12 women).

### **4.2 Objectives of Stakeholder Consultation and Information Dissemination**

53. The main objective of the stakeholder consultations is to involve the stakeholders in the project cycle and explore stakeholders' perception and attitude regarding the proposed project. The specific objectives were to:

- Ensure peoples' participation in the proposed project;
- Make the affected people aware about "cut-off date";
- Share experiences of the participants regarding such project over the years;
- Explore problems related to the project in the project area;
- Understand probable solution of the problems;
- Unfold stakeholder's attitudes towards the project;
- Discuss concerns of vulnerable affected households/groups.

### **4.3 Locations of Stakeholder Consultations**

54. The locations were selected at different places in or around the proposed gas pipe line alignment/RoW. The respondents were primarily those going to be affected during the implementation of this project output. A total of 31 respondents (28 were male and 3 were female) participated. This included (i) KII with the stakeholders of the project (SGCL officials) and (ii) informal discussion with the local people who reside adjacent to the project site. Details of the meetings/discussions including locations, date, meeting type are presented in the table below:

**Table 4.1: Different location of consultations**

Division	District	Thana	Municipality/ Union	Meeting type	Meeting Place	Date
Khulna	Khulna	Daulatpur	Aronghata	Informal discussion	Aronghata Bypass	12/6/2017
		Sonadanga	-	KII	SGCL Office, Khulna	12/6/2017
		Khalishpur	9 no. ward	Informal discussion	Beside Abu Naser Hospital	12/6/2017
		Khalishpur		Informal discussion	Refugee colony road	13/6/2017
		Khalishpur	12 no. ward	Informal discussion	BL college road	13/6/2017
		Khalishpur	12 no. ward	Informal discussion	Lebutola point	14/6/2017
		Khalishpur	10 no. ward	Informal discussion	In front of Mohsin College	17/8/2017
		Khalishpur	8 no. ward	Informal discussion	Peoples' Morh	18/8/2017
		Khalishpur	13 no. Ward Khulna City Corporation	Public disclosure session for project	Institution of engineers, Bangladesh (IEB) conference room	19/10/2017

#### 4.4 People's Perceptions on the Project

55. Project affected people were consulted and informed about the proposed project interventions and the process of peoples' participation in preparing the RP. The people of the Project area had already learned about the proposed project from visiting consultants. Generally those consulted had a positive outlook towards this project component as the land required is owned by the government.

56. Local people identified some potential issues in the consultation meetings and suggested some measures to mitigate impacts. **Table 4.2** summarises findings of the consultation meetings/discussions for Output 2 (gas supply component) and the measures NWPGCL will use to address these potential issues.

**Table 4.2: Summary findings from the consultation meeting/discussion**

Problems & Suggestions	Measures to Address Issues
The people will be in trouble if the construction activities would begin without any notice.	All affected businesses will be given one-month advanced notice as per the entitlement matrix.
The process for getting compensation is very complex. The process of compensation payment should be easy and maintaining all guidelines.	Compensation process will be announced. Non-titled persons are entitled to get compensation and assistance for their losses incurred. NWPGCL will facilitate the process whereby APs will receive a cheque/debit voucher for their entire compensation payment. The Account Payee Cheque will be disbursed in a public place/local government

Problems & Suggestions	Measures to Address Issues
	institution (LGI) office (Upazilas /Ward).
Religious structures should be avoided, or if unavoidable, then reconstruction should be done in shortest possible timeframe.	The project will only impact secondary structures of religious buildings that are within the ROW (such as donation box, bench, boundary wall). The entitlements matrix and budget ensures structures will be paid at current market rates or reconstructed based on preference.
<p>There are some major roads and rail crossing points in the RoW, problems may arise in transportation and communication sector during construction period and should be done quickly and within the dry season.</p> <p>Construction activities during wet season may cause a great obstacle for the project affected people and the road users.</p> <p>Weak spoil (to be originated from excavating soil for the placement of gas pipeline) management may cause problems for the local people during construction period and a robust management system is needed.</p>	It will take six months to complete the entire construction activities, it will be preferably during the dry season. The gas pipe installation and earth refilling will be done simultaneously. Water will be sprayed to protect spoil dust. Construction activities in different important places would be completed very quickly.



Discussion with structure owner



Discussion with GM, SGCL

**Photograph 4.1: Discussions with the stakeholders**

## **5. Legal and Policy Framework**

### **5.1 National Laws and Regulations**

57. 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 non-titled affected persons.

58. The Deputy Commissioners (DC) in all cases, determines “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 not considering resettlement assistance for restoration of livelihoods of affected persons except for the legal compensation. If land acquired has standing crops cultivated by the 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.

### **5.2 ADB’s Safeguards Policies and Guidelines**

59. The project financier ADB has specific resettlement safeguards that recognises and addresses the resettlement and rehabilitation (R&R) impacts of the affected persons irrespective of their titles and requires preparation of an RP in every instance where involuntary resettlement occurs. In brief, the policy requirements are:

- avoid or at least minimise impacts where possible i.e. explore viable alternative project designs to avoid and/or minimise involuntary resettlement;
- carry out meaningful consultations with affected persons, avoid and/or prevent forced eviction and provide effective remedy to minimise negative impacts;
- provide resettlement support and/or sites to communities impacted by the project, including host communities;
- pay compensation for acquired assets at the replacement value;
- enhance, or at least restore, the livelihoods of all affected persons in real terms relative to pre-project levels; and to improve the standards of living of the displaced poor and other vulnerable groups;
- planning through a survey and/or census of displaced persons, including gender analysis, specifically related to resettlement impacts and risks;
- inform all displaced persons of their entitlements and resettlement options. Ensure their participation in planning, implementation and monitoring and evaluation of resettlement programs;



- pay particular attention to the needs of the vulnerable groups, especially those below poverty line, the landless, the elderly, women and children and indigenous people, and those without title to land, and ensure their participation in consultations;
- establish a grievance redress mechanism for dispute resolution;
- support the social and cultural institutions of displaced persons and their host population;
- provide resettlement assistance to displaced persons, including non-titled persons;
- socioeconomic surveys and a census are to be conducted, with appropriate socioeconomic baseline data to identify all persons who will be displaced by the project and to assess the project's socioeconomic impacts on them;
- the social impact assessment will identify individuals and groups who may be differentially or disproportionately affected by the project because of their disadvantaged or vulnerable status;
- resettlement plans will elaborate displaced persons entitlements, the income and livelihood restoration strategy, institutional arrangements, monitoring and reporting framework, budget and a time-bound implementation schedule.

### **5.3 Gaps between Government Laws and ADB Policies**

60. There are evident gaps in the government's 1982 Ordinance for land acquisition and ADB policies and guidelines related to land acquisition, compensation and involuntary resettlement. A Gap analysis describes gaps between the government and ADB policies and project-specific measures to bridge the gaps (see Table 5.1). A brief summary of the gaps between the government and ADB is in order:

61. Generally, the 1982 Ordinance does not recognise unauthorised occupants on government land and there is no clear indication about avoiding or minimising displacement. ADB policies strongly require avoidance or at least minimization of adverse impacts through alternative design options.

62. The adverse social impacts are not entirely recognised by the 1982 Ordinance – for instance, there are no provisions for resettlement of the displaced population, whereas ADB policies require not only resettlement and support but uphold and at least restore pre-project standard of living of the affected people.

63. The 1982 ordinance pays very little attention to public consultation and stakeholders engagements in project planning and execution. ADB policies require meaningful consultation with the affected people and other stakeholders to disseminate project goals and objectives to obtain stakeholder's views and inputs in project planning and implementation.

64. Finally, ADB policies pay special attention to gender issues and vulnerable groups in the resettlement processes, particularly the non-titled and the affected poor households. The policy gaps have been bridged by additional project-specific measures adopted in the RP. The project has minimised displacement of people as much as possible by exploring all viable design alternatives. Extensive community consultations were held during project preparation and will continue during implementation of the project. Adequate compensation; replacement cost (for lost assets and income); and rehabilitation and livelihood assistance will be provided so that APs can improve or at least restore their standard of living at pre-project level. Special attention

will be given to vulnerable APs including elderly and women headed households. In sum, the added measures in this project meet gaps with ADBs SPS. Table 5.1 provides a summary of the key measures taken to comply with ADB Policy requirements.

**Table 5.1: Summary of Gaps and Additional Gap-filling Measures Adopted in the Project**

Sl. No.	Gaps between ADB Policies and the government's 1982 Ordinance II	Gap-filling measures/actions taken in this project
1	Gaps with regard to avoidance and minimized project impacts	The project design adopted aimed to minimize impacts.
2	Existing Government laws recognize title owners only; informal settlers are not covered.	Displaced persons without titles to land or any recognizable legal rights are eligible for assistance and compensation for loss of non-land assets in this RP. Under the project all affected persons irrespective of titles have been identified for compensation and assistance.
3	Existing laws prescribe the manner in which market value is to be calculated. However, there is no requirement for compensation at replacement value for land when loss of land does not undermine livelihoods.	As all affected in this RP are non-titled, there is no titled landholders affected. All non-titled will be compensated for non-land assets, based on current market value (see <b>section 5.5</b> and <b>Appendix 3</b> for valuation).
4	While there is opportunity for any person interested in any property which has been notified as being needed or likely to be needed for a public purpose or in the public interest, to object to the acquisition and for a hearing thereon there are no provisions to consult host communities and concerned under 1982 Ordinance II.	Consultations were carried out during the preparatory phase of this RP; similar consultations will continue during project implementation as outlined in <b>Chapter 4</b> .
5	No relocation assistance or support under 1982 Ordinance II	Affected households and businesses will receive shifting assistance and support from the project.
6	No support or program for income and livelihood restoration to ensure livelihoods are restored to pre-project levels.	The project benefits include allowances for temporary income loss, vulnerability allowances and compensation for structures at market rates to ensure pre-project livelihoods are maintained.
7	No provision for reconstruction of common property resources	The project will reconstruct or provide cash compensation at replacement cost for all common property resources affected by the project.

#### 5.4 Eligibility and Cut-Off Date

65. Eligibility to receive compensation and resettlement assistance will be limited by a “cut-off” date. The census has identified and established the households living in the project area, including the squatters/informal settlers on the proposed land of NWPGL who will be affected by the project.

66. The cut-off date to be used in the project for eligibility of non-titled persons such as squatters or other informal settlers and additional benefits under the project entitlement matrix is 12–15 June and 16–19 August 2017. These dates were clearly mentioned during the local

consultation meetings in right-of-way of Khulna City Gas Station, Aronghata to Khalishpur Khulna Newsprint Mills. Any persons moving into the project area after the cut-off dates will not be entitled for compensation or any assistance from NWPGL. In this project there is no titled owners of land in the project right-of-way land and as such there is no cut-off date for titled owners.

## **5.5 Valuation Methods for Affected Assets**

67. The project has provision for payments of replacement value for assets affected in compliance of current market price (CMP). To do that for this project, property valuation surveys for structures and trees have been conducted and secondary data (government rates) collected from Public Works Department and Forest Department. The CMP for various structures by types and trees have been determined (see **Appendix 3** for rates and activities undertaken to determine valuation). There is no scope of DC's payments to the affected persons, as affected persons are all non-titled. NWPGL will pay compensation to all affected persons. In the case of government land use mutual understanding between NWPGL and the government organization concerned (RHD & KDA) to be held.

## **5.6 Core Project Principles**

68. 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 (Bengali);
- 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 as determined in this RP, 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.

69. 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 losses, 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 i.e. mosque) 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 with support to livelihood and income restoration.

70. In sum, NWPGL will provide cash compensation and support the affected households to the extent possible to ensure that all affected households are compensated. The affected households will be informed well ahead of relocation schedule.

## **5.7 Compensation Payment Procedure**

71. The non-titled APs i.e. those having 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 NWPGL. The PMU will prepare each APs file and entitlement record.

72. Wage labourers will collect certificate from the employer which will be attested by the concerned upazilas Chairman/Ward Councilor/Mayor. The entitlement record will be jointly signed by the NWPGL and the AP with a photograph attached.

73. For all APs identified in this RP, the PMU will prepare payment debit voucher or cheque and those will be disbursed in public place or office of the upazilas Chairman issuing prior notice to the AP.

## **5.8 Grievances Redress Mechanism**

74. 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 redress all 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).

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

76. **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.

77. **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.

78. 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.

79. **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.

80. 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.

81. 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**

82. The affected persons are entitled to receive compensation for their losses. Entitlement provisions include provisions for loss of trees and temporary income losses. The entitlement matrix is given in **Table 6.1** which summarizes the types of losses in connection with this output (gas supply component) and the corresponding nature and scope of entitlements in accordance with the government and ADB policies.

### **6.2 Relocation and Income Restoration**

83. The gas transmission line will pass under the land and borrow pit of RHD, roads and footpaths of KDA, land and rail line of Bangladesh Railway and a river. Rural settlements, however, will neither be affected nor relocated for construction of the gas transmission line. Some small portable shops/stall of tea, chocolate/candy, cookies, paan (betel leaf), bidi, cigarette, etc have to move due to the project, however there is enough space within the RoW and a close proximity to move as the shops need marginal space. Once the pipeline is placed, safety signage will be installed to discourage rebuilding on top of the pipeline, and the affected people will be able to continue their economic activities.

84. One-time cash compensation for shifting shops and income loss for one week will be given to the shops owners. One week is estimated based on technical information and unexpected impacts will be covered by contingency. Without any official statistics on the income status of these shops, necessary data was collected through survey. The basic objective behind the income measures is to restore the economic status of the affected persons to at least the level they were enjoying prior to the project.

85. Each vulnerable household will be eligible to participate in the JFPR Grant livelihood skill training activities to further assist in restoring incomes. Where possible, opportunities to participate in project related employment, namely unskilled work opportunities during construction of the gas transmission line will be prioritised for the participation of vulnerable households.

Table 6.1: Entitlement Matrix

No	Type of Loss	Application	Entitled Person	Entitlement	Implementation Issues	Responsible Agency
<b>A. Structure</b>						
<b>A-1</b>	Loss of structure	Business, Kiosks	APs without legal title  (26 APs owning 33 shops)	<ul style="list-style-type: none"> <li>• Cash compensation equivalent to replacement cost of structure (or part of structure) constructed by the AP in the RoW. Compensation will not take in to account depreciation value.</li> <li>• APs have rights to salvage materials from structure.</li> <li>• Provision of all taxes, registration costs and other fees incurred for replacement structure.</li> <li>• One-time cash compensation for shifting shops, per shop.</li> <li>• One-time cash compensation (equivalent to one-week minimum salary) for income loss due to shifting.</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 to be served.</li> </ul>	• NWPGCL
<b>A-2</b>	Temporary loss of employment	Business, Kiosks	Employees of Affected businesses (6 APs)	<ul style="list-style-type: none"> <li>• Compensation for lost income for one week during shifting transition.</li> </ul>		• NWPGCL
<b>A-3</b>	Loss of common property resources	Encroached Structures related to religious buildings	Community	<ul style="list-style-type: none"> <li>• Reconstruction/ Cash Compensation at replacement cost.</li> <li>• Ensure continued religious activities.</li> </ul>	<ul style="list-style-type: none"> <li>• Consultation to be undertaken on management of affected structure.</li> </ul>	• NWPGCL
<b>B. Trees</b>						
<b>B-1</b>	Loss of tree	Road side land of RHD and KDA	Cultivator	<ul style="list-style-type: none"> <li>• For timber trees: Cash compensation equivalent at current market price of timber trees on the affected land of the RoW.</li> <li>• For fruit trees: Cash compensation equivalent at current market price of fruit (date and palm) trees on the affected land of the RoW.</li> </ul>	<ul style="list-style-type: none"> <li>• Mutual understanding between RHD/ KDA and NWPGCL</li> <li>• 30 days advance notice to be served.</li> </ul>	• NWPGCL

No	Type of Loss	Application	Entitled Person	Entitlement	Implementation Issues	Responsible Agency
				<ul style="list-style-type: none"> <li>Owner of the trees will be allowed to fell and take the trees free of cost.</li> </ul>		
<b>C-1</b>	Vulnerable Households	All affected vulnerable households (13 AHs)	(i) women headed households; (ii) household headed by persons with disabilities; (iii) households falling under the generally accepted indicator for poverty, <sup>12</sup> (iv) elderly headed households, (v) households who are landless, and (vi) households who are without legal title to land. <sup>13</sup>	<ul style="list-style-type: none"> <li>One-time allowance equivalent to Tk10,000/ in addition to other entitlements.</li> <li>Eligibility for each household to participate in JFPR grant livelihood skill training activities.</li> <li>Preference in project related employment.</li> </ul>	<ul style="list-style-type: none"> <li>Affected APs to be identified before implementation of the project.</li> </ul>	<ul style="list-style-type: none"> <li>NWPGCL</li> </ul>
<b>D-2</b>	Unanticipated impacts	Affected households and individuals	Affected households and individuals	<ul style="list-style-type: none"> <li>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.</li> </ul>	Unforeseen impacts will be documented and mitigated based on the legal and policy framework outlined in this RP.	<ul style="list-style-type: none"> <li>NWPGCL</li> </ul>

<sup>12</sup> See Glossary for definition of vulnerability.

<sup>13</sup> Not all household without legal title are vulnerable. Vulnerable status for the persons without legal title is determined based on the social impact assessment/survey which is presented in the section 2.7 of this RP.



### 6.3 Resettlement Budget

86. The compensation cost estimate for the project includes eligible compensation for RP implementation as per the entitlement matrix. This RP presents estimated costs for temporarily land requisition and rehabilitation of APs. 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 the latest rate schedule and allowances will be updated in line with inflation.

87. The budget for the resettlement will be provided by NWPGL. The appointed contractor of NWPGL in the presence of LGI representatives, local elite and NWPGL representatives as per their project policy will disburse cash compensation.

88. If the contractor needs temporary land for laydown purposes, these will be negotiated directly with households and mutually acceptable lease agreements established. Temporary leased land will be returned to owner rehabilitated to original or preferably better condition.

### 6.4 Calculation of Estimated Costs

89. The unit cost estimate and the valuation of the affected structures and trees is done based on the market price, collected at the time of census (June and August 2017). The detailed structure and asset budget in **Appendix 3**, outlines the process undertaken for identifying current market prices.

90. Compensation for primary structures situated in the RoW is estimated as Tk2,185 per square foot for semi-pucca wudukhana. For secondary structure compensation is estimated as Tk768 per cubic foot for sitting place, shop's extended platform and donation box, Tk2,000 per square foot for concrete frame of entrance gate made of iron, and Tk1,190 per foot for boundary wall.

91. Compensation for trees is estimated as per types, sizes and species of 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.

92. Resettlement benefits i.e. shifting assistance, cash compensation for income loss and vulnerability are also included in the budget of this RP (see **Table A3.2.4 in Appendix 3**). RP implementation, and monitoring costs are added in separate lines (budget item D, E in Table 6.2) whereas cost for grievance redress is added to contingency of the budget for smoothing the RP implementation process (budget item F in Table 6.2).

93. Total estimated cost is about Tk4,319,101 (Tk4.3 million, approximately \$53,594) in which Tk1.5 million (about 40% of total cost) is for compensation of trees (Table 6.2).

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

SI No.	Head of budget	Total (Tk)	Total (Tk in million)	Total (\$)
A	Compensation for primary and secondary structures	1,502,872	1.5	18,547
B	Compensation for trees	1,733,581	1.7	21,394
C	Other resettlement allowances	365,800	0.4	4,514
D	RP implementation costs for PMU	180,113	0.2	2,223
E	RP monitoring costs	144,090	0.1	1,778
F	Contingency @ 10% of the total	392,646	0.4	4,846
	<b>Total Estimated Budget</b>	<b>4,319,101</b>	<b>4.3</b>	<b>53,303</b>

Source: Census and Property Valuation Survey, CEGIS, 2017.

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 for cost increment, if necessary) which might be raised during RP implementation.

94. Segment-wise detail cost is attached in Appendix 3.

## **7. Institutional Arrangements**

### **7.1 Introduction**

95. This chapter describes institutional arrangements for implementing output 2: gas transmission line installation for gas supply to the Rupsha 800 MW Power Plant and 225 MW power plant of NWPGL.

96. A steering committee, chaired by the Secretary of the Power Division, under the Ministry of Power, Energy and Mineral Resources (MPEMR), comprised representatives from Economic Relation Division (ERD), Planning Commission, and others (detailed list is presented in **Appendix 4**). Bangladesh Power Development Board will guide NWPGL in this regard and monitor as well as review progress and results time to time. In order to undertake day-to-day activities a dedicated Project Management unit (PMU) will be set up in NWPGL for this project. Full-time Project Director (PD) will supervise the project output. The PMU staffed with experienced personnel will conduct and oversee procurement, accounting, reporting, quality assurance, and social and environmental issues.

### **7.2 Institutional Framework for RP Implementation**

97. NWPGL will establish the 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. Core institutions responsible for land requisition and resettlement activities are described in the following sections.

#### **7.2.1 Project Management Unit in NWPGL**

98. The NWPGL will establish a Project Management Unit (PMU) 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 the Project Director whose office will be set up within the NWPGL headquarters (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. 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; and
- Make necessary budgetary arrangements available in advance for the preparation, updating and implementation of RP.

99. 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 (if finalisation of the design results in significant changes) 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 outputs. The social staff will coordinate with relevant government agencies on social matters, will prepare the internal monitoring reports (refer Section 8.2) to be submitted to ADB.

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

## 7.2.2 Other Agencies in Land Requisition and Resettlement Process

101. In addition to the NWPGCL's PMU, there would be several other line agencies that will be responsible for land requisition, resettlement activities in the project.

102. Details on roles and responsibilities for RP activities for Output 2 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/meetings as and where necessary	NWPGCL(PMU)
Updating of RP in case of change in design	NWPGCL(PMU)
Finalizing compensation and entitlements per household	NWPGCL(PMU)
Disclosure of final entitlements and 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)
Grievances redress	NWPGCL (PMU)
Internal monitoring (semiannual)	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

### 8.1 Introduction

103. RP implementation will take place over approximately one and a half (1.5) year, starting from compensation process initiation to compensation payments finalization, and semiannual monitoring reports will be prepared. The schedule will be adjusted during final design and implementation.

104. All activities related to resettlement for the project will ensure that all compensation payments for assets are completed prior to commencement of civil works for output 2.

105. After finalization of the design and/or change of design, if there are any significant changes the RP will be updated, and associated census verification undertaken, see **Table 8.1** below. 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.

106. 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 Output 2 (Gas Supply)**

Activities	Timeline
Draft Resettlement Plan preparation	Dec 2017
ADB review and concurrence on draft RP	Jan 2018
Resettlement Plan updating (if necessary: consultation, disclosure, census verification, etc.)	May 2018
ADB review and concurrence on the updated Resettlement Plan	May 2018
Uploading of updated Resettlement Plan	May 2018
Determination of entitlements & preparation of AP compensation record	Dec 2017–May 2018
Payment of compensation to APs	Jul–Dec 2018
Consultation and grievance redress	Jul 2018–Mar 2020
Site clearance for construction/installation work commencement	Jul 2018–Mar 2020
Internal monitoring report preparation and submission (Semiannual)	semiannual
Outcome monitoring survey and reporting through semiannual reports	periodically

### 8.2 Monitoring and Reporting

107. NWPGCL through its PMU (the temporary social safeguard specialist) will undertake internal monitoring and measure the progress of implementation of the RP. No external monitoring will be conducted for this project's RPs.

108. NWPGCL 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**) during implementation of

the RP. NWPGL through its PMU will be responsible for managing and maintaining affected unit databases.

109. Monitoring reports documenting progress on resettlement plan 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 the ADB website.

110. 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 data 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.

111. The indicators to be monitored will include the contents of the activities and entitlement matrix. The RP contains indicators for achievement of the objectives under the resettlement program. These indicators shall be assessed for the implementation process, outcomes and impacts. Monitoring indicators are presented in **Table 8.2**.

**Table 8.2: Monitoring and Evaluation Indicators**

Type	Indicators	Indicator Explanation
First / Second Monitoring Report	<ul style="list-style-type: none"> <li>PMU established, EHS officer and temporary social specialist engaged;</li> <li>Staff Training activities undertaken;</li> <li>IoL verification survey for all affected households (Output 2) completed if needed;</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 first and second monitoring reports 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.</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 (this period)</li> </ul>	Grievances can be large or small, if grievances are outstanding include a short explanation in the monitoring report.
	<ul style="list-style-type: none"> <li>Total number of affected households (final number).</li> <li>% of total AHs received compensation payments.</li> <li>Amount of compensation dispersed (total).</li> <li>Number of affected households (by component) participating in JFPR Grant training programs (men, women, vulnerable participants).</li> </ul>	All payments are made prior to any civil works starting. Please include an update on the % of HHs paid each period until finalized.

Type	Indicators	Indicator Explanation
Long-term outcome indicators (periodically)	<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>• # of informal vendors who established legitimate business (i.e. renting on titled land, received business license).</li> <li>• # of affected informal vendors who have access to electricity and water.</li> </ul>	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. Refer to baseline date in the census for verification of livelihood changes. Data should be included in semiannual monitoring at end of construction period.

### 8.3 Reporting Arrangements

112. Monitoring reports<sup>14</sup> will be prepared and submitted by NWPGL to ADB on a semiannual basis. The monitoring report will be disclosed at NWPGL and ADB websites.

<sup>14</sup> A combined monitoring report for all three RPs - CCPP, gas pipeline and power transmission line - can be prepared.

## Appendix 1: List of Affected Assets

**Table A1.1: Affected Asset in the 10 km RoW**

SI No.	Affected asset	Quantity (No.)	Address	HH income (Tk/year)	HH expenditure (Tk/year)
1	Kiosk/stall	1	Aronghata, Bypass Road, Word-4, KCC, Khulna	300,000	230,000
2	Kiosk/stall	1	Aronghata, Bypass Road, Word-4, KCC, Khulna	84,000	84,000
3	Kiosk/stall	1	Lebutola More, Navy Colony Road, Word-9, KCC, Khulna	120,000	12,000
4	Kiosk/stall	1	Lebutola More, Navy Colony Road, Word-9, KCC, Khulna	96,000	96,000
5	Kiosk/stall	1	Lebutola More, Navy Colony Road, Word-9, KCC, Khulna	120,000	200,000
6	Kiosk/stall	1	Lebutola More, Navy Colony Road, Word-9, KCC, Khulna	108,000	180,000
7	Kiosk/stall	2	Goalkhali, Graveyard Road, Word-9, KCC, Khulna	144,000	96,000
8	Kiosk/stall	2	Goalkhali, Graveyard Road, Word-9, KCC, Khulna	204,000	200,000
9	Kiosk/stall	2	Goalkhali, Graveyard Road, Word-9, KCC, Khulna	180,000	180,000
10	Kiosk/stall	1	Khalishpur, Road-11, Word-9, KCC, Khulna	180,000	180,000
11	Kiosk/stall	2	Khalishpur, Road-11, Word-9, KCC, Khulna	264,000	200,000
12	Kiosk/stall	1	Khalishpur, Road-11, Word-9, KCC, Khulna	120,000	120,000
13	Kiosk/stall	1	Khalishpur, Road-11, Word-9, KCC, Khulna	348,000	280,000
14	Kiosk/stall	2	Khalishpur (Kodomtola), BIDC road, Word-12, KCC, Khulna	120,000	120,000
15	Sitting Place	1	Khalishpur (Kodomtola), BIDC Road, Word-12, KCC, Khulna	0	0
16	Kiosk/stall	1	Khalishpur (Kodomtola), BIDC Road, Word-12, KCC, Khulna	276,000	250,000
17	Kiosk/stall	1	Khalishpur (Kodomtola), BIDC Road, Word-12, KCC, Khulna	96,000	96,000
18	Kiosk/stall	1	Khalishpur (Kodomtola), BIDC Road, Word-12, KCC, Khulna	180,000	180,000
19	Cobbler's toolbox	1	Khalishpur (Kodomtola), BIDC Road, Word-12, KCC, Khulna	84,000	84,000
20	Wudukhana and donation box	2	Alomnagor, BIDC Road, Word-12, KCC, Khulna	0	0
21	Kiosk/stall	1	Alomnagor, BIDC Road, Word-12, KCC, Khulna	228,000	220,000
22	Boundary wall, sitting	8	Khalishpur (Kodomtola), BIDC Road, Word-12, KCC, Khulna	0	0



SI No.	Affected asset	Quantity (No.)	Address	HH income (Tk/year)	HH expenditure (Tk/year)
	place for wudu and entrance gate				
23	Kiosk/stall	1	Lebutola More, Navy Colony Road, Word-9, KCC, Khulna	192,000	180,000

Note: HH = household, KCC = Khulna City Corporation.

**Table A1.2: Details of Affected Structures in the RoW of 10 km**

Type of structures	Affected structure	Roof/main material of structure	Measurement	
			Unit	Size/No
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	144
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	56
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	28
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	80
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	96
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	48
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	40
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	108
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	35
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	160
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	48
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	80
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	48
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	48
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	120
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	96
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	200
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	70
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	105
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	48
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	48
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	120
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	200
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	48
Commercial	Cobbler's tool box	Wooden	sqft	8
Commonproperty resource (Khulna City Polytechnic, encroached into KDA area)	Sitting place (encroached)	Pucca	cft	1125
Commonproperty resource (BaitulMamurJame Mosque), encroached into KDA area	Wudukhana (encroached)	Semi pucca	sqft	120
	Donation box (encroached)	Pucca	cft	14

Type of structures	Affected structure	Roof/main material of structure	Measurement	
			Unit	Size/No
Common property resource (Newsprint SromikBhabonJameMosque), encroached into KDA area	Sitting place for wudu (encroached)	Pucca	No.	6
	Boundary wall (encroached)	Pucca (5")	rft	40
	Gate (encroached)	Steel	sqft	150

Table A1.3: Affected Trees in the 10 km RoW

SI No.	Affected asset	Address
1	Tree	Aronghata, Bypass Road, Word-4, KCC, Khulna
2	Tree	Goalkhali, Graveyard Road, Word-9, KCC, Khulna

Table A1.4: Affected Asset in the 2.0 km RoW

Sl. No	Affected asset	Quantity (No.)	Address	Income of HH in Taka (Per year)	Expenditure of HH in Taka (Per year)
1	Kiosk/stall	1	Mohsin College Gate, Mohsin College Road, Word No. 10, Khalishpur, Khulna	180,000	144,000
2	Kiosk/stall	3	KhalishpurMeghaMorh, Mohsin College Road, Word No 10, Khalishpur, Khulna	216,000	150,000
3	Kiosk/stall	3	KhalishpurMeghaMorh, Mohsin College Road, Word No 10, Khalishpur, Khulna	350,000	342,000
4	Kiosk/stall	1	Wonderland Park ,18 Park Road,Word No 10, Khalishpur, Khulna	144,000	120,000
5	Furniture shop	1	KhalishpurMeghaMorh, Mohsin College Road, Word No 10, Khalishpur, Khulna	144,000	144,000
6	Staircase & decorative platform	2	KhalishpurMeghaMorh, Mohsin College Road, Word No 10, Khalishpur, Khulna	264,000	240,000
7	Sitting place	1	Mohsin College Gate, Mohsin College Road, Word No. 10, Khalishpur, Khulna	0	0

**Table A1.5: Details of Affected Structures in the RoW of 2.0 km**

Type of structures	Affected structure	Roof/main material of structure	Measurement	
			Unit	Size/No
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	96
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	135
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	270
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	96
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	120
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	64
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	225
Commercial	Kiosk/stall/shop	Tin (kutcha)	sqft	80
Commercial	Furniture shop	Tin (kutcha)	sqft	240
Commercial	Staircase	Iron	sqft	49
Commercial	Decorative platform	Pucca	cft	120
Common property resource in KDA area	Sitting place	Pucca	cft	120

**Table A1.6: Affected Trees in the 2.0 km RoW**

SI No.	Affected asset	Address
1	Tree	KhalishpurMeghaMorh, Mohsin College Road, Word No 10, Khalishpur, Khulna

## Appendix 2: List of Participants of Consultation Meetings

**Table A2.1: List of the Participants**

Name	Male	Female	Occupation	Address
Engr. AhsanulHaquePatoary	1		GM, SGCL	Sonadanga, Khulna
Engr. Moshiur Rahman	1		NWPGCL official	Khalishpur, Khulna
Md. RoniMorol	1		Agriculture	Aronghata
Md. Matiur Rahman	1		Business	Aronghata
Md. Azad Hossain	1		Business	LebutolaMorh
Ojifa Begum		1	Business	LebutolaMorh
Md. Jaber Ali	1		Business	LebutolaMorh
Monirul Islam	1		Business	LebutolaMorh
Rubel Hossain	1		Business	Goalkhali
Md. Kamal Sheikh	1		Business	Goalkhali
Hasina Begum	1	1	Business	Goalkhali
Md. Abdul Mannan	1		Business	Khalishpur
Md. Mujibur Rahman	1		Business	Khalishpur
Md. ShamsulAlom	1		Business	Khalishpur
Md. Abdur Rashid	1		Business	Khalishpur
Md. AnowarMunshi	1		Business	Khalishpur, (Kodomtola)
Md. Sattar Islam	1		Business	Khalishpur, (Kodomtola)
Md. Rajon	1		Business	Khalishpur, (Kodomtola)
Md. AbdurRahim	1		Business	Khalishpur, (Kodomtola)
Nironjon	1		Business	Khalishpur, (Kodomtola)

### Appendix 3: Detailed Cost Estimate

#### A3.1 Gas Transmission Line of 10 km

**Table A3.1.1: Summary Budget for 10 km Gas Transmission Line**

SI No.	Head of budget	Total (Tk)	Total (\$)	Total (Tk in million)	Total (\$ in million)
A	Compensation for primary and secondary structures	1,318,552	16,361	1.3	0.016
B	Compensation for trees	1,283,243	15,923	1.3	0.016
C	Other resettlement benefits	290,400	3,603	0.3	0.004
D	Operation cost for RP	144,610	1,794	0.1	0.002
E	RP monitoring costs	115,688	1,436	0.1	0.001
F	Contingency @ 10% of the total	315,249	3,912	0.3	0.004
	<b>Total Estimate cost in Tk</b>	<b>3,467,741</b>	<b>43,029</b>	<b>3.5</b>	<b>0.04</b>

**Table A3.1.2: Replacement Cost of Primary and Secondary Structures**

A	Types	Quantity in sqft/cft/rft	Rate in Tk per sqft/cft/rft	Estimated amount of compensation in Tk
<i>Primary structure</i>				
1	Semi-pucca wudukhana (sqft)	120	2,185	262,200
<i>Secondary structure</i>				
2	Sitting place and donation box (pucca in cft)	1,139	768	874,752
3	Wudukhana (6 nos) (cft)	20	700	14,000
4	Gate (concrete frame) (sqft)	60	2,000	120,000
5	Boundary wall 5" pucca (rft)	40	1,190	47,600
	<b>Subtotal of A</b>			<b>1,318,552</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 A3.1.3: Compensation for Trees on Government Land**

B	Types	Quantity in nos.	Rate in Tk	Estimated amount in Tk
<b>B.1</b>	<i>Timber trees</i>			
1	Big	21	18,090	379,887
2	Medium	24	11,073	265,750
3	Small	130	4,600	598,051
4	Plant	120	32	3,854
	<b>Subtotal</b>	<b>295</b>		<b>1,247,543</b>
<b>B.2</b>	<i>Fuel wood (fruit trees are considered as fuel wood)*</i>			
1	Big	5	2,500	12,500

B	Types	Quantity in nos.	Rate in Tk	Estimated amount in Tk
2	Medium	2	2,000	4,000
3	Small	24	800	19,200
4	Plant	0	30	-
	<b>Subtotal</b>	<b>31</b>		<b>35,700</b>
	<b>Subtotal of C</b>	<b>326</b>		<b>1,283,243</b>

\* Date and Palm trees are considered as fuel wood trees as fruit value of those trees are not considered in RP budget. 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 A3.1.4: Other Costs including Resettlement Benefits**

C	Types	Quantity in nos.	Rate in Tk per nos.	Estimated amount in Tk
1	Shifting cost @Tk1,000 for portable shops and a gate	26	1,000	26,000
2	Cash compensation for shop income loss (one week at Tk5,600)	24	5,600	134,400
3	Compensation for vulnerability (women headed, elderly headed, poor & landless HHs) @ Tk10,000	13	10,000	130,000
	<b>Subtotal of C</b>			<b>290,400</b>
	<b>Total of A to C</b>			<b>2,892,195</b>
D	Operation cost for RP			144,610
E	RP monitoring cost			115,688

## **A3.2 Gas Transmission Line of 2.0 km**

**Table A3.2.1: Summary Budget for 2.0 km Gas Transmission Line**

SI No.	Head of budget	Total (Tk)	Total (\$)	Total (Tk in million)	Total (\$ in million)
A	Compensation for secondary structures	184,320	2,287	0.2	0.002
B	Compensation for trees	450,338	5,588	0.5	0.006
C	Other resettlement benefits	75,400	936	0.1	0.001
D	Operation cost for RP	35,503	441	0.0	0.000
E	RP monitoring cost	28,402	352	0.0	0.000
F	Contingency @ 10% of the total	77,396	960	0.1	0.001
	<b>Total Estimate cast in Tk</b>	<b>851,360</b>	<b>10,564</b>	<b>0.9</b>	<b>0.01</b>

**Table A3.2.2: Replacement Cost of Secondary Structures**

A	Types	Quantity in cft	Rate in Tk Per cft.	Estimated amount of Compensation in Tk
1	Sitting place and decorative platform (pucca in cft)	240	768	184,320
	<b>Subtotal of secondary structure</b>	<b>240</b>		<b>184,320</b>

**Table A3.2.3: Compensation for Trees on Government Land**

<b>B</b>	<b>Types</b>	<b>Quantity in nos.</b>	<b>Rate in Tk</b>	<b>Estimated amount in Tk</b>
<i>Timber trees</i>				
<b>1</b>	Big	12	18,090	217,078
<b>2</b>	Medium	14	11,073	155,021
<b>3</b>	Small	17	4,600	78,207
<b>4</b>	Plant	1	32	32
	<b>Subtotal of trees</b>	<b>44</b>		<b>450,338</b>

**Table A3.2.4: Other Costs including Resettlement Benefits**

<b>C</b>	<b>Types</b>	<b>Quantity in nos.</b>	<b>Rate in Tk Per nos.</b>	<b>Estimated amount in Tk</b>
1	Shifting cost @Tk1,000 for portable shops and one (1) iron staircase	10	1,000	10,000
2	Cash compensation for shop income loss (one week at Tk5,600)	9	5,600	50,400
3	Compensation for loss of income (salary) of employees	6	2,500	15,000
	<b>Subtotal of C</b>			<b>75,400</b>
	<b>Total of A to C</b>			<b>710,058</b>
D	Operation cost for RP			35,503
E	RP monitoring cost			28,402

## Appendix 4: 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 5: Photographs of Identified Affected Entities in the Project RoW

### Photograph 5.1: Entities in the RoW of 10 km



**RHD borrow pit partially earth filled**



**Affected trees in city bypass highway (RHD)**



**Tea stall at Khulna city bypass (RHD)**



**kiosk/shop at Khulna city bypass (RHD)**



**Tea stalls beside Navy Colony**



Small kiosks/shops in front of the Goalkhali Graveyard



Small kiosks/shops at the beginning of BADC road



A kiosk/shop and a Cobbler's tool box (red circled)



Sitting place of Khulna City polytechnic





**Affected trees in KDA road**



**KDA road side land (left side of red line is affected area)**



**Donation box and wudukhana (partially) in BaitulMamurJame Mosque**



**Boundary wall and entrance gate of Newsprint SromikBhabanJameMonque**



**Road crossing at different places**



**Photograph 5.2: Entities in the RoW of 2.0 km**



**Alternative route selection and finalization by SGCL, NWPGL and CEGIS representatives**



**Affected trees**



**Road crossing**



**Affected kiosks/shops**



**Affected kiosks/shops**





**Affected kiosks/shops**



**Affected furniture shop**



**Affected staircase along with the extended entrance platform of a shop**



**Consultation with the stakeholders at Khalishpur**

# Resettlement Plan

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Document stage: Updated  
Project Number: 50161-003  
May 2018

## Bangladesh: Rupsha 800-Megawatt Combined Cycle Power Plant Project

Output 2: Energy Transfer System (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
BPDP	Bangladesh Power Development Board
CCPP	Combined Cycle Power Plant
CEGIS	Center for Environmental and Geographic Information Services
CMP	Current Market Price
DC	Deputy Commissioner
EA	executing agency
GAP	Gender Action Plan
FGD	Focus Group Discussion
GAP	Gender Action Plan
GRC	Grievance Redress Committee
ha	hectare
HIES	Household Income and Expenditure Survey
HH	household
IEB	Institute of Engineers Bangladesh
IOL	Inventory of Losses
JFPR	Japan Fund for Poverty Reduction
KII	Key Informant Interview
km	kilometer
LGI	Local Government Institution
MW	magawatt
NWPGCL	North-West Power Generation Company Limited
PGCB	Power Grid Company of Bangladesh
PMU	Project Management Unit
PWD	Public Works Department
RP	resettlement plan
RoW	right-of-way
sqft	square foot
SPS	Safeguard Policy Statement 2009
STW	Shallow Tube Well

## 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 output 2: specifically the power transmission interconnection component 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 output 2 (power transmission component) 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 to develop the project.

ii. The project has four outputs: Output 1: efficient gas-fired power generation increased through the construction of the Rupsha 800 MW CCPP; Output 2: energy transfer systems upgraded with, a new 10 km gas pipeline from City Gate Station, 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; and a power transmission interconnection, via a 29 km new transmission line; Output 3: institutional capacity of NWPGL strengthened; and Output 4: socially inclusive development of communities neighboring the project pilot tested.

iii. This resettlement plan relates to activities undertaken under component 2: Energy Supply Systems upgraded, specifically the transmission interconnection component. A separate RP has been prepared for the gas supply component. The power evacuation facilities, covered herein, 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 the transmission lines of Output 2 (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 by the relevant regulations. Of the total 7 households, 2 households are considered as vulnerable being both below the poverty indicator and landless. NWPGL will try to avoid these structures during implementation. Output two (transmission component) 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 Output 2 (Transmission component).

### **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 (NWPGCL 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 NWPGCL'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 temporary 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. NWPGCL will establish a PMU for the implementation of the project including land requisition and resettlement. NWPGCL 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 NWPGCL will be responsible for ensuring that the draft RP is finalized if necessary and updated based on SPS 2009 of ADB, and applicable national laws and regulations. NWPGCL 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 NWPGCL through its PMU. NWPGCL 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 output 2 (power transmission component) 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. 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 to develop the project. The project has four components as follows:

3. **Output 1: Efficient gas-fired power generation increased.** This will be achieved through the design, supply, installation and commissioning of new Rupsha 800 MW CCPP. 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. **Output 2, Energy Transfer System Upgraded.** For gas supply to the Rupsha power plant, the project will construct (i) a 10 kilometer (km) 24-inch, gas distribution pipeline to connect the Khulna City Gas Station to the Rupsha power plant, and (ii) an additional 2 km 20-inch gas pipeline (off-take) from the Rupsha power plant to NWPGL’s existing 225 MW power plant at Khulna, which is currently operating on high-speed diesel (HSD). The project will replace the HSD at the Khulna power plant and provide a stable gas supply for its operation, resulting in significant environmental, economic, and financial benefits. To transfer generated electricity from the Rupsha power plant to the existing Khulna South grid substation, a 230 kilovolt switchyard at the Rupsha power plant site and 29 km of 230 kilovolt high capacity, double circuit transmission line, will be built.

5. **Output 3 , Institutional capacity of NWPGL strengthened.** (i) implementation and operation of an ERP system; (ii) supply and installation of a universal power plant operations training simulator; and (iii) delivery of capacity enhancement through on the job training for NWPGL staff in: (a) project management, implementation, and supervision; (b) monitoring and evaluation; (c) operation and maintenance; (d) environment and socials safeguards; (e) gender equity; and (f) effective project communications.

6. **Output 4, Socially inclusive development of communities neighboring the project site pilot tested.** The project will provide grant financing to improve livelihood of the communities in the project area by (i) increasing awareness on safe and efficient use of electricity, (ii) delivering capacity building trainings on livelihood activities and employment opportunities, and (iii) installing a 10 kilowatt solar system, two information technology laboratories, and two science laboratories in schools near the Rupsha power plant.

## 1.2 Output 2 Power Transmission Line Component Description

7. The proposed output 2, power transmission component (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 provision 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 (Photograph 1.3).

**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 output 2, 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 output 2, the transmission line component. 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 semi-permanent 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 non-residential 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 (output 2) the alignment/RoW was redesigned and thus a 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, included: (i) an inventory of losses; and (ii) focus group discussions (FGDs). 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. NWGPCL will try to avoid these structures during implementation.

16. Output 2 (transmission component) will also have temporary impacts on crops in the RoW. The area under the RoW for the new transmission line is 49.22 hectares of which 31.9 hectares 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 output 2 (transmission component).

**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, this 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 (kutchra), Toilet (Semi-pucca) and Tubwell
2	Owner	Kitchen (kutchra)
3	Owner	Bedroom (tin shed), Cow shed (kutchra), Kitchen (kutchra), Tubwell, Toilet (ring slab)
4	Non-titled	Bedroom (tin shed), Kitchen (kutchra)
5	Non-titled	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 kutchra (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)	Kutchra (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 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

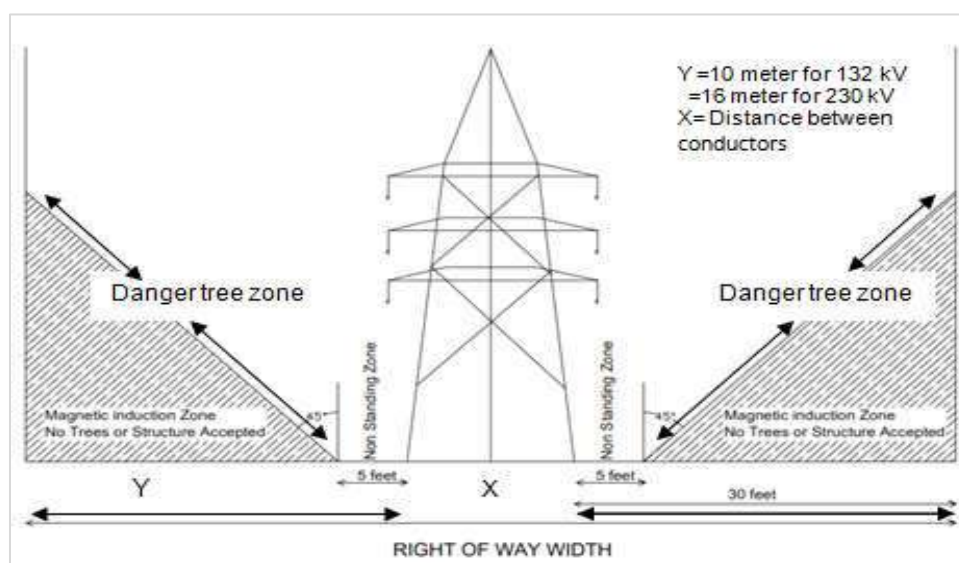


## 2.5 Temporary Loss of Crops

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
<i>Total</i>	24	125	49	17	215

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 Brickfields

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 non-titled (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).

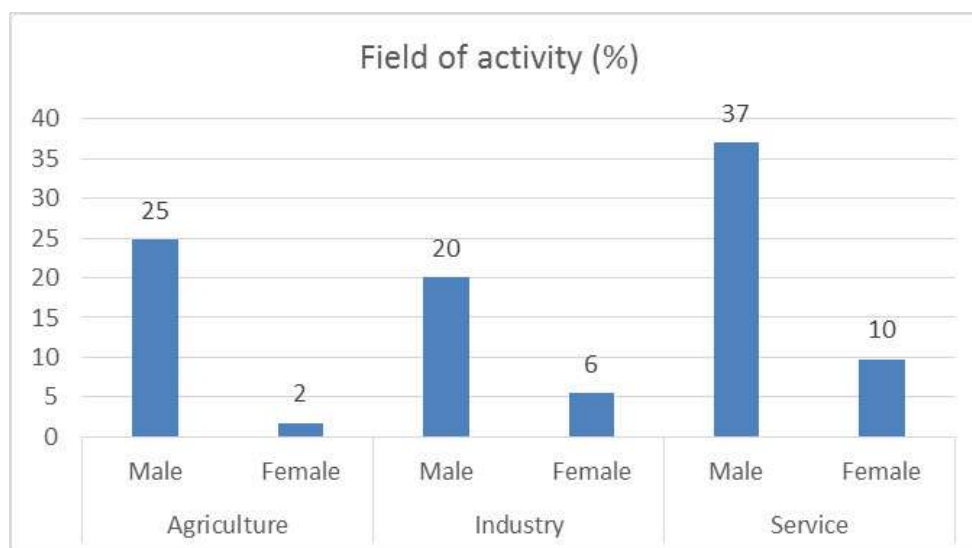
31. There are 167,173 persons of working age (15–59) in the study area. Whilst, 31% of the population are children (0–14 years); 19% in the 15–24 years bracket considered as early working age; 43% between 25–59 years considered as prime working age; and 8% above 60 years. We note that the Department 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.

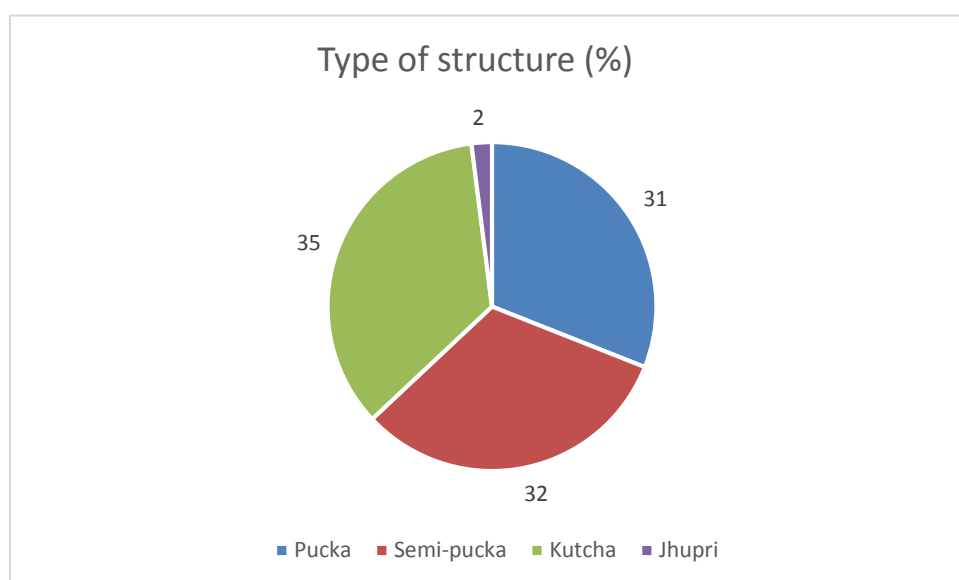


Source: Population and Housing Census 2011, BBS, 2012.

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

### 3.3 Housing

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



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

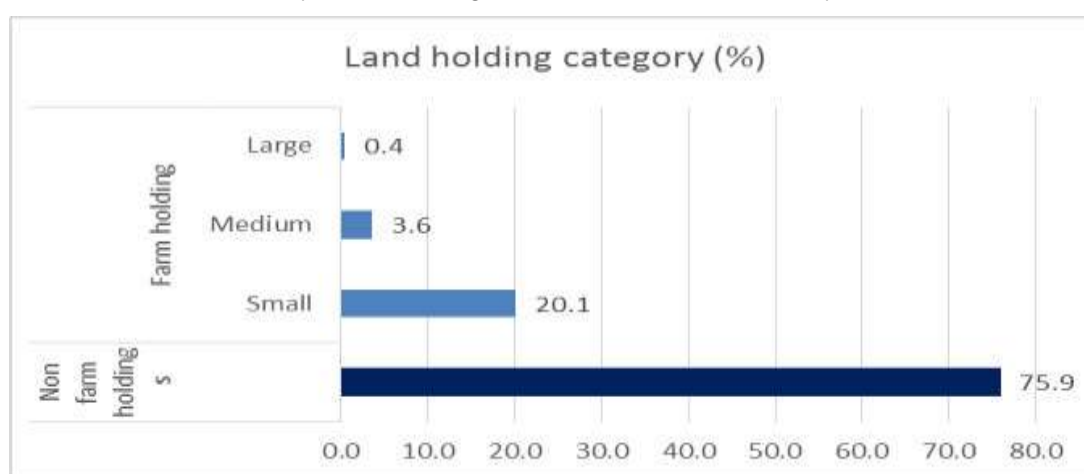
**Figure 3.2: Housing condition in the study area**

### 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 non-farm holdings (functionally land less) is high (75.9%) and the percentage of farm holding households is 24.1. From among the farm holding categories of households, 20.1% are small farm holdings, 3.6% are medium farm holdings 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 the majority of households have no agricultural land in the project area; and almost all of farm holding households are small farm holdings i.e. 20% out of 24% are small farm holding. Small farm holdings in Bangladesh are between a minimum 0.02 ha of cultivated area up to 1 ha; medium is 1.01-3.03 ha and large is 3.06 ha 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 potentially permanently affected vary with business (handicrafts), sharecropping, non-agricultural day laboring, farming and van/rickshaw pulling undertaken. 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 Fakhurul 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 includes specific actions and strategies and cost estimates that are gender responsive and culturally appropriate. The GAP includes 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 consultations, 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 non-farming 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 non-residential 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 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 RP 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 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 non-land 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 non-land 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) places 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) prevents 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 salvaged 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 JFPR Grant 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 non-titled 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 NWPGCL PMU will supervise payment and recording of payments.

85. For all affected APs, the entitlement record will be jointly signed by the NWPGCL 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 (NWPGCL 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 NWPGCL (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. The second cut-off date is based on the census for identification and eligibility for all “non-land” related entitlements and the non-titleholders. 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 non-titled 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 potentially 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 non-titleholders 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 season 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 a minimum of 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 a JFPR Grant.

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>NWPGCL/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 non-titled 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>NWPGCL/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 non-titled 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 non-titled 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 JFPR Grant livelihood skill training activities. • Prioritised for project related employment.	• Affected APs to be identified before implementation of the project.	• NWPGL/ 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.	• NWPGL

<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 NWPGCL. The appointed contractor of NWPGCL in the presence of local government institution representatives and NWPGCL representatives as per their project policy will disburse compensation (as cash allowances, debit voucher or cheque) for crops; all other payments will be distributed by NWPGCL.

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 NWPGCL.

## 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 NWPGCL.

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 NWPGCL.

108. **Structures:** Replacement cost compensation for structures/houses situated on the RoW is estimated as Tk1,955 per square foot for semi-pucca structures; and Tk1,725 per square foot 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 NWPGCL 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/non-shiftable 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 consider 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. NWPGCL, an enterprise of Bangladesh Power Development Board is the EA responsible for implementation of the project. NWPGCL will evacuate power from the 800 MW 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 comprised of representatives from Economic Relation Division, Planning Commission, and others (detailed list is presented in Appendix 3). BPDB will guide NWPGCL 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 NWPGCL for this project. A full-time project director will supervise the project outputs. 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. NWPGCL will establish necessary institutional setup for land requisition and implementation of resettlement/rehabilitation activities of the project. NWPGCL will be responsible for finalization, updating, implementation and monitoring of the resettlement plan. There should be coordination between NWPGCL and PGCB as these two organizations are the implementation support agencies for output 2 (transmission component). Core institutions responsible for land requisition and resettlement activities are described in the following section.

#### **7.1.1 Project Management Unit in NWPGCL**

116. The NWPGCL 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. NWPGCL 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 the project director, whose office will be set up within the NWPGCL headquarters (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 output 2 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 Output 2 (transmission component) 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)

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Activity	Responsible Agency
Implementation of rehabilitation measures	NWPGCL(PMU)
Consultations with APs during rehabilitation activities	NWPGCL(PMU)
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 output 2.

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 Output 2 (Transmission Component)**

Activities	Timeline
Draft Resettlement Plan preparation	Jan 2018
ADB review and concurrence on draft RP	Jan 2018
Resettlement Plan updating (consultation, disclosure, census, etc.)	May 2018
ADB review and concurrence on the updated Resettlement Plan	May 2018
Uploading of updated Resettlement Plan	May 2018
Determination of entitlements & preparation of AP compensation record	Dec 2017–May2018
Payment of compensation to APs	Jul 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. NWPGCL through its PMU (the temporary social safeguard specialist) 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. NWPGCL 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 plan 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 (transmission component) 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 distinguished by project component.



Type	Indicators	Indicator Explanation
	<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 JFPR Grant 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 non-titled 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 RPs - 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**

<b>Name</b>	<b>Occupation</b>	<b>Address</b>
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	Satkhira (came from)
Alomgir Hossain	Brick field laborer	Satkhira (came from)
Abu Musa	Brick field laborer	Satkhira (came from)
Shofikul Islam	Brick field laborer	Satkhira (came from)
Md. Hamid Sardar	Brick field laborer	Satkhira (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 Chandra Mohal	"	অজয়
02.	Dipak Biswas	"	"	দীপক বসু
03.	Suman Vekher	"	"	সুমন বসু
04.	Gondan Biswas	"	"	গন্ডান
05.	Kishore Biswas	"	"	কিশোর
06.	Bikas Biswas	"	"	বিকাস
07.	Gundana Ray	"	"	গুন্ডানা রায়
08.	Lilima Biswas	"	"	লিলীমা
09.	Shakti Biswas	"	"	শক্তি
10.	Monir Biswas	Harecuifo	"	নকিলাবিস্বাস
11.	Santi Sarker	"	"	সান্তি সর্কার
12.	Pankaj Biswas	"	"	পঙ্কজ বিস্বাস
13.	Komika Biswas	"	"	কমিকা
14.	Quinn	"	"	কোয়িন
15.	Jaro	"	"	জ্যোতসনা
16.	Kakoli Biswas	"	"	কাকলী বিস্বাস
17.	Eti Rani	"	"	ইতি রানী

SL No.	Name	Designation/Address	Mobile no./ e mail	Signature
18	Anjona	Malapara, Chandani Mahal	"	ଅନଜନା
19	Mita	"	"	ମିତା
20	Gouna	"	"	ଗୁନା
21	Maryna	"	"	ମାର୍ଯ୍ୟନା
22	Biswajit	"	"	ବିଷ୍ଠୁବୀର୍ଯ୍ୟ
23	Chandani	"	"	ଚନ୍ଦନୀ
24	Jagannath	"	"	ଜଗନ୍ନାଥ
25	Polok			ପୋଲକ
26	Anup			ଅନୁପ
27	Nikhi			ନିକିତା
28	Biswa			ବିଷ୍ଠୁ
29	Eti Biswas			ଇତି ବିଷ୍ଠୁ
30	Korpona			କୋରପନା
31	Anoti			ଅନୋତି
32	Robin Biswas			ରବିନ ବିଷ୍ଠୁ
33	Pappu			ପାପୁ
34	Mithun			ମିଥୁନ
35	Shanti			ଶାନ୍ତି



## 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 sqft/nos	Rate in Tk per sqft/nos	Estimated amount of compensation in Tk
<b>Primary Structures</b>			
Semi puccahouses(sqft)	730 (67.82 m <sup>2</sup> )	1,955	1,427,150
Kutcha house ( <i>dochala</i> ) (sqft)	1,844 (171.31 m <sup>2</sup> )	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. 1sqft = 0.0929 m<sup>2</sup>

**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	2,972 (12.02 ha)	1,600	4,755,200

Note: 100 decimal = 0.405 hectares.

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

Types	Quantity in nos/acre/sqft	Rate in Tk per nos/acre/sqft	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 non-shiftable 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 non-titled 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

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#### 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**