



Government of People's Republic of Bangladesh



**Enhancement and Strengthening of Power Transmission Network in Eastern Region
Project Under Power Grid Company of Bangladesh (PGCB) Ltd. (Package No. S -107)**

Draft Resettlement Action plan (RAP)

Prepared by



Knowledge Management Consultants (KMC) Ltd.

House # 09 (Level-2), Road # 1/B, Banani, Dhaka 1213, phone- 9898472,

email- kmconsultants1@gmail.com

Web- www.kmcltd.org

September 2017

EXECUTIVE SUMMARY

A. The project

The Power Grid Company of Bangladesh Ltd.(PGCB), with financial support from the World Bank(WB), has been implementing a project named “Enhancement and Strengthening of Power Transmission Network in Eastern Region” to meet the increasing electricity demand all over the Bangladesh. This will involve grid enhancement and strengthen work. The present assignment includes construction of thirteen GIS substations, one 230KV high capacity four circuit backbone transmission line and replacement of the Haliashahar 132/33KV air substation (AIS) by an advanced GIS and reconductoring of existing Sikalbaha-Cox’s Bazar 132KV line with the higher capacity conductor. For 13 new substations, a total land area of 34.82 ha (86 acres) has been identified which will be acquired from private and government sectors as per provisions under the Acquisition and Requisition of Immovable Property Ordinance 1982 (ARIPO 1982), Ordinance No II (with subsequent amendment until 2017) and World Bank OP 4.12. As per field survey, no physical displacement is involved in any of the 13 proposed substations. The proposed lines will pass mostly through agricultural fields and land will be lost at 4 legs of the tower base (Foundation work), which is estimated to be in the range of 0.2-1 sq. m. per tower. In the instant project, total 884 no. towers will be erected, of which 251 angle & 633 suspension towers including 14 nos. of multi-circuit towers. Accordingly, for the erection of 884 towers total loss of land in the legs is estimated to be about 0.0712 ha that is quite negligible and not adversely affects the land holding. Further, an area estimated to the tune of 325 ha (325km alignment with 10-meter width) including 0.0712 ha for foundation work will also be getting affected temporarily during construction of tower base and stringing of the transmission lines.

B. Methodology

A set of experienced and required professionals were deployed for conducting census and inventory of losses and Socio-economic survey and other activities at the field level.. Resettlement Works, Surveyors, Field Supervisors, and Field Coordinators were trained on data collection tools and techniques, use of Tablet (electronic device) in presence of the representatives from the client (PGCB and Power Cell). The survey team was also provided data collection manuals to ensure uniqueness and minimize discrepancies of field data. The orientation session was facilitated by the Managing Director of KMC (Team Leader of this survey team) and the MIS Specialist of the team. Consultations meetings were held prior to start the census and SES survey to disclose for the purposes of the project and to declare the cut-off date for the non-titled affected persons (APs). As per the environmental and social assessment (ESA) report of this project, no settlement

will be affected rather only agricultural land will be affected by the project at substations. Practically it was found that only agricultural land with crops at substations and trees & crops at transmission lines are affected by the project interventions. Census and SES data were gathered from the land owners at the substations locations who are readily available at the village. Many of the land owners are not available at the ground and therefore information was collected from the neighbors and sharecroppers. That's why necessary information (demographic, socioeconomic, etc) were not fully obtained during the survey. During updating of the RAP before implementation, such information will be collected. To supplement the census data and inventory of losses, recorded owners list including Khatians have been collected from Tahsil office at Union level/AC Land office at Upazila level. As per the instructions by the project authority, alternative locations for the substations were suggested based on field situation where there are structures/settlements in the proposed location or people are reluctant to offer the land for substations. At least three locations have been changed and alternative locations have been suggested by the KMC survey team. For the transmission lines, data were collected from the land owners who were readily available during the survey. Under the transmission lines, trees and crops are affected. As per the decision of project authority, temporary disruption on structures will be avoided following 'scuff folding' method during stringing of transmission lines. However, the structures under transmission line will not require dismantling rather temporary disruption will be experienced by the structure owners. Necessary policy and budget for the temporary disruption has been provisioned in the RAP. Rates for trees have also been collected from knowledgeable persons including tree merchants. Other project experience is also taken into account for assessing tree and crop prices. For assessing compensation for the affected land a survey was conducted with the people from various cross sections i.e. potential Sellers & Buyers, Teacher, Religious Leader, Deed Writer, etc. to ascertain current market prices of land. Recorded price (Mouza rate) was also collected from respective sub-Registrar's offices. During data collection, a tabulation plan to produce tables was prepared and necessary programs were developed using SPSS by the MIS Specialist under the guidance of the Team Leader and other consultants.

C. Impacts identified by the project

The project will require acquisition 75 acres of private land and 11 acres of government land for the twelve substations. Apart from this, 804 acres (325.50 ha) land will be temporarily used for tower base and transmission lines within which only 0.176 acres (0.0712 ha) for tower legs (concrete). The proposed lands for acquisition are arable by category and are being used for agricultural purpose. All the affected lands by the project are private lands. Compensation of the

private and government land has been provisioned in this RAP. The Project will also require removal of trees of various sizes and species. The census and IOL survey found varieties of trees will be affected only on transmission line area. Total numbers of affected trees at transmission lines by category are presented in chapter 3. Total numbers of affected trees in transmission lines are 23,753. It is to be noted that no tree is affected in the substations since the location has been selected in the cropping field. Among the total affected trees, highest number is timber (9,305) category followed by fruit trees (7,503) and bamboo (6,836). Out of the total number of affected trees, 12,055 are large 5,900 are medium 4,641 are small and 1,157 are plant. It is already mentioned earlier that all 86 acre of the affected land to be acquired is agricultural/cropped land. During the stringing of the transmission line, 804 acres (325km X 10m width) (325.50 ha) land will be temporarily affected losing different crops. Crop compensation for the land to be acquired and temporarily used will be considered in the budget of the RAP. The total land area being considered for crop loss is 890 acres including 86 acres for substations and 804 acres for the transmission line. Five CPRs including two Mosques, two Masrasha, and a School are affected by losing only trees in the transmission line.. Therefore, none of the CPRs will be displaced by the project. According to the field level verification, some 119 households (HHs) will experience temporary disruption during construction of transmission line since the transmission line is passing over their housing premises. PGCB will conduct check survey before finalization of the alignment and will adopt techniques such as scuff folding during stringing of the wires so that there will be no impact on the structure. Despite these measures, if the HHs face disruption during construction they will be entitled to have compensation/allowance up to BDT 100,000 to be assessed by Property Assessment and Valuation Committee (PAVC) and confirmed by grievance redress committee (GRC).

Table- Ex-1: Summary of Impact

| Sl. No. | Categories of loss | Unit | Substation | Transmission line | Total |
|---------|---|------|------------|-------------------|-------|
| A | Acquisition of land for the project | Acre | 86 | 0 | 86 |
| A1 | Acquisition of private land for the project | Acre | 75 | 0 | 75 |
| A2 | Acquisition of govt. land for the project | Acre | 11 | 0 | 11 |
| A3 | Temporarily Use of Land | Acre | 0 | 804 | 804 |
| B | Total length of alignment | Km | 0 | 325 | 325 |
| C | Loss of Crop Area due to both Acquisition and Temporary use | Acre | 86 | 804 | 890 |
| C1 | Affected Crop Area (Acquisition) | Acre | 86 | 0 | 86 |
| C2 | Affected Crop Area (Temporary use) | Acre | 0 | 804 | 804 |

| Sl. No. | Categories of loss | Unit | Substation | Transmission line | Total |
|---------|---|------|-----------------|-------------------|--------|
| D | HHs losing trees only | No | 0 | 23753 | 23,753 |
| E | Affected CPR | No | 0 | 5 | 5 |
| F | Temporary disruption of structures during stinging of transmission line | No | 0 | 119 | 119 |
| G | Affected Households (HHs) | No | 52 ¹ | 598 | 650 |
| G1 | Affected Male Headed HH | No | 45 | 557 | 602 |
| G2 | Affected Female Headed HHs | No | 7 | 41 | 48 |
| H | Project Affected Persons (PAPs) | No | 205 | 1822 | 2,027 |
| H1 | Male PAPs | No | 126 | 1183 | 1,309 |
| H2 | Female PAPs | No | 79 | 639 | 718 |
| I | Average HH Size | No | 3.94 | 3.05 | 3.12 |
| J | Vulnerable Households | No | 20 | 168 | 188 |
| J1 | Female headed household | No | 7 | 41 | 48 |
| J2 | Elderly age 60+ Male headed household | No | 13 | 117 | 130 |
| J3 | Male headed under poverty line | No | 0 | 6 | 6 |
| J4 | Male HH with disability | No | 0 | 4 | 4 |

Source: Census and SE survey, June-July, 2017

D. The rationale for Resettlement Action Plan.

The project triggers the World Bank's OP 4.12 on Involuntary Resettlement that requires that the economic, social, and environmental risks are mitigated and livelihoods of the displaced persons are restored. The unavoidable impacts related to land acquisition and economic displacement were identified through census and socio-economic survey during June 2017 to July 2017. Nobody will be physically displaced by the project. Cut off dates were declared during consultation meetings for non-title holders prior to the survey. These cut-off dates were announced separately in each substation and transmission lines at the public consultation sessions prior to starting the census and socioeconomic survey. This is to protect influx of the outsiders into the selected project sites. For the title holders, date of serving notice under section 3 of the ARIPO by the Deputy Commissioner will be the legal cut-off date (Legal COD).

¹ Household information was not completely obtained since land owners are not available in the project area.

Table- Ex-2 Cut-Off date at Sub-stations (for non-titled)

| Sl. No. | Sub-Station Name | Cut-off date |
|---------|--|--------------|
| 1 | 132/33 kV: Majdee GIS 2x80/120 MVA | 08-07-2017 |
| 2 | 132/33 kV: Laxmipur GIS 2x80/120 MVA | 18-06-2017 |
| 3 | 400/230/132kV : Korerhat GIS, 2x1000 MVA, 2x325 | 05-07-2017 |
| 4 | 132/33 kV: Basurhat/Daganbhuiyan GIS 2x80/120 MVA | 18-06-2017 |
| 5 | 132/33 kV: Lakhsam GIS 2x80/120 MVA | 05-07-2017 |
| 6 | 230/132 kV: Kachua/Haziganj GIS 2x250/350MVA | 05-07-2017 |
| 7 | 132/33 kV: Chandina/Dabidar GIS 2x80/120 MVA | 05-07-2017 |
| 8 | 132/33 kV: Kosba GIS 2x80/120 MVA | 19-06-2017 |
| 9 | 132/33 kV: Muradnagar GIS 2x80/120 MVA | 05-07-2017 |
| 10 | 132/33 kV: Anand Bazaar/ New Mooring GIS 3x80/120 MVA | 15-06-2017 |
| 11 | 132/33 kV: Patiya GIS 2x80/120 MVA | 05-07-2017 |
| 12 | 230/132 kV: Chowmuhoni GIS 3x250/350MVA | 05-07-2017 |
| 13 | Up gradation of 230/33kV SS at Mirsharai to 400/230/33kV GIS, 2x1000 MVA | 05-07-2017 |

Table- Ex 3: Cut-Off date at Transmission lines (for non-titled)

| Sl. No. | Transmission Line | Cut-Off Date |
|---------|------------------------|--------------|
| 1 | Majdee To Chowmohoni | 09-07-2017 |
| 2 | Laxmipur To Chowmohoni | 07-07-2017 |
| 3 | Korerhat | 05-07-2017 |
| 4 | Korerhat To Chowmohoni | 08-07-2017 |
| 5 | Basurhat | 18-06-2017 |
| 6 | Laxsham To Kochua | 05-07-2017 |
| 7 | Chowmohoni To Kochua | 05-07-2017 |
| 8 | Kochua To Gozaria | 05-07-2017 |
| 9 | Muradnagar To Kosba | 05-07-2017 |
| 10 | Chandina | 05-07-2017 |

E. Socioeconomic Profile

The census and socioeconomic survey identified a total of 655 project affected entities in the substations and transmission lines from which 650 households with a total population is 2027 and average household size is 3.12 and five community properties. No one in the substations or in the transmission lines will be physically displaced. Among the total affected households, male headed is 92% and female headed is 08%. Eight percent of the people (7.10% male and 1.23% female) are recorded as being over 60 years old, which is higher than the national figure of 5.74% (BBS 2011). It is found that among the total population (over 18 years of age) 64% are married, 35% are unmarried and only 1% are widow/widower. It is also noticed that marriage also happens

in the below 18 years particularly in case of the female. It is revealed that Islam is the predominant religion in the study area (98%) and remaining 2% are Hindu by faith. No other group of people except these two religions was found in the project area. The education level in the project area is higher than the national average (62.7%, Bangladesh Economic review, 2017). The socioeconomic survey (SES) revealed that literacy rate in the project area is quite high (above 95% literate) and only 4.74% (male 2.27% and female 2.47%) of all PAPs are illiterate. The survey also identified that the education level at and above the basic university (graduate) level is very minimal. Based on Bangladesh Bureau of Statistics (BBS 2011) and yearly inflation (average 6.50% per year) as of 2017, the poverty line² income of the affected HHs has been considered up to BDT 6,840 per month for the HHs size of 3.12 people. It is identified that only six HHs are below the poverty in terms of income. These six HHs will be eligible for special support as per Resettlement Action Plan (RAP) of the project. The census data shows that 188 households are within the vulnerable category. Out of them 20 are from substations and 168 are from the transmission line. In particular, 48 are female headed HHs, 130 are elderly (>60 yrs.) male-headed HHs, six male-headed HHs are under the poverty line, and four are male headed disable HHs. As defined in this RAP, the vulnerable HHs will be eligible for special resettlement benefits in order to help maintain their livelihoods once the project work begins.

F. Consultations and group discussions

A total of 25 consultation meetings were conducted with the project affected people and other stakeholders at different locations in the substation surrounded areas and along the transmission lines. In total, 257 persons participated in the consultation meetings of which 242 are male and 15 are female. Apart from these several group discussions (formal and informal) were also held with various occupational groups along the transmission lines during conducting surveys.

Consultations were held with the different stakeholders such as local leaders, farmers, businessman, service holder, housewives, day laborers, etc. In the consultation meetings, discussions held on the project description, the scope of the project, social safeguard issues, probable impacts and mitigation measures about the project, etc. Professionals of KMC participated in the consultation meeting and responded to the questions of the participants.

²According to Bangladesh Bureau of Statistics (BBS) the upper poverty line for HH size of 4.41 in 2011 was Tk. 6,626 per HH/month. Acknowledging the national inflation rates by BBS based on consumer price for the country (Average 6.5% per year for 6 years up to 2017) and an average HH size for the affected population being 3.12, BDT 6840 income per HH/month has been adopted as the 2017 poverty line for the project. Therefore HHs with average income up to BDT 6840 per month or BDT 82,000 per year is considered to be living under the poverty line

Issues Identified by Stakeholders

By the consultation meetings, the identified positive and negative impacts are pointed out below;

Identified Positive Impacts:

- Electricity service, especially in sub-station surrounded area would enhance
- Different local business would emerge
- Displacement of houses or business premises will not take place
- Livelihood will not be disturbed
- Local employment would increase
- Irrigation system would develop by supplying uninterrupted electricity
- New industries will be established and income opportunities will be created
- Economic activities would be much better
- Income and livelihood opportunities would increase due to project intervention.
- The standard of living will be high.

Identified Negative Impacts:

- A large amount of private land will be acquired for sub-stations
- Sharecroppers will be affected by losing employment due to acquisition of agricultural land
- Owners of Laximpur GIS area were reluctant to give up their land due to the installation of a new brick chimney.
- Owners of Korerhat area opposed providing proposed land for GIS substation due to losing fertile land of the village
- Owners of Patiya area were also disagreed to give up the proposed land for GIS substation and even opposed providing any SES data
- Cultivation will not be possible with a tractor which will be under electric towers.
- Land will be used for tower permanently but compensation will be provided for only crops
- Construction of multi-storied building under the transmission lines will be restricted to the transmission lines
- Land value would decrease
- Temporary compensation for permanent loss in case of tower location
- Electric sub-station reaction may be harmful to the residents
- Orchard will be affected and some of the trees will be felled down/tuning due to the project
- High risk for living, business, and even agricultural activities under high voltage transmission line

- Local people are not fully aware of the project interventions, potential impact and mitigation measures

G. Legal and Policy Framework.

The Acquisition and Requisition of the Immovable Property Ordinance (ARIPO) 1982 and the subsequent amendments made during 1993 and 1994 constitute the legal framework that governs all cases of land acquisition in Bangladesh. The ARIPO has again been amended in 2017 with a provision of 100% premium instead of 50% premium (amendment 1994) on average transacted deeds in a particular Mouza/vicinity of the proposed alignment/site. The PGCB will undertake land acquisition process through the Deputy Commissioner's office before the start of civil works construction. The private land acquisition has been largely avoided or minimized to the extent feasible and displacement of people has been fully avoided in the substations. The project didn't acquire any land for transmission line rather only for sub-stations. The project also didn't acquire land owned by the indigenous peoples or affect their livelihood and cultural resources. Along the transmission lines some 119 residential HHs will experience temporary disruption during construction period. If any of these 119 HHs require displacement due to the project interventions that would be incorporated in the RAP and compensation for the affected structures along with other resettlement benefits would be paid as per RAP policy. In compliance with World Bank OP 4.12 specifications, all displaced households will be assisted with their relocation and livelihood restoration assistance/compensation.

H. Eligibility Criteria and Policy

PAPs, eligible to receive compensation and assistance to restore livelihood under the PGCB nominated census and survey, are individuals, households, communities, and private and public entities, regardless of the possession of legal title, who are residing, working or cultivating lands and other assets that are acquired for the project as of the cut-off date. Furthermore, those who will be affected due to temporary land use and resettlement are also eligible for compensation for disruptions in their livelihood activities.

The PAPs will receive compensation for loss of assets and income, and assistance for livelihood restoration. Entitlement options for eligible PAPs (EP) in relation to each of losses are as follows:

Table Ex-4: Entitlement Matrices

Matrix I : Loss of Agricultural Lands

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> |
|---|--|
| <ol style="list-style-type: none"> 1. Legal owner(s) as determined by DC during CUL payment, or by the court in cases of legal disputes. 2. Co-sharers to be determined by title deeds/records and mortgage documents by DCs. | <ol style="list-style-type: none"> 1 CUL, which includes 50% premium on current market price, or RC, whichever is higher. 2 Transition Allowance (TA) for income loss from productive lands. |

Matrix II: Loss of Timber and Fruit Trees (including Bamboo and Banana Groves) in Substations and Transmission Lines

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> |
|---|---|
| <ol style="list-style-type: none"> 1. Legal owners as determined by DC during CUL assessment process on acquired land. 2. Legally and Socially recognized owners of trees in the Transmission Lines 3. People with a valid lease from GoB agencies. 4. Groups sponsored by public agencies/ NGOs.³ | <ol style="list-style-type: none"> 1. Compensation will be based on the following criteria <ol style="list-style-type: none"> a. Net Present Value or b. Current age, lifespan, productivity, current market price 2. Trees owners at Substations and Transmission lines will be paid compensation for fell-down trees 3. Fruit compensation will be assessed based on age and productivity of the trees @ 30% of timber value. |

Matrix III: Loss of Standing Crops

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> |
|--|---|
| <ol style="list-style-type: none"> 1. Cultivator (the person who planted the crop) whether the owner, lease holder, tenant, sharecropper, etc. (formal or | <ol style="list-style-type: none"> 1. Compensation for standing crops affected at the time of dispossession of land of use |

³NGOs or public agencies enter into contracts with groups of community peoples under the Social Forestry Rules 2004 (revised March 2010) for social forestation on slopes of flood embankments, roads, railway embankment, riversides or any other public spaces. These groups are not owner of the land but get a share of the revenues from the planted trees (sale of logs and residues) as they are also responsible to nurse the trees under the contract.

| | |
|---|---|
| informal arrangements) identified by Census or joint verification. | of the land during installation of towers or stringing of wire. 2. Cultivator will retain the crops and plants. |
|---|---|

Matrix IV: Temporary disruption and Loss of Income (Wage Earners in Agriculture)

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> |
|--|--|
| <ol style="list-style-type: none"> 1. HHS experience temporary disruption of structure during construction 2. Adult persons employed continuously for at least six months in agriculture by the land owners and his employment will be terminated due to loss of land 3. Women heading the HH without the elderly support and vulnerable people having income below the poverty line, elderly headed, and landless. | <ol style="list-style-type: none"> 1. Compensation up to BDT 100,000 to be assessed by PAVC and confirmed by GRC. 2. In case of physical displacement during construction phase, replacement cost along with transfer and reconstruction grants would be paid for the affected structure 2. Grant to cover temporary loss of income (GTL) from wage employment 1. Women headed households will be entitled for BDT 15000 as one time cash assistance while male-headed HHs under poverty line, elderly and HHs with disable members will get additional cash grant of BDT 10,000 on top of compensation and other benefits |

Matrix II: Loss of Usufruct Rights in Mortgaged-in, Leased-in and Khai-Khalashi Lands

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> |
|--|--|
| <ol style="list-style-type: none"> 1. Persons with legal agreements. 2. Persons with customary rights. | <ol style="list-style-type: none"> 1. Compensation as per Loss Categories I & II above, to be shared as per usufruct/ mortgage contracts. |

I. Resettlement and Relocation options

The census and SES indicate that 86 acres land will be acquired for twelve substations. On the other hand, 804 acres lands will be temporarily used for tower erection and stringing of transmission lines. Due to land acquisition, tower erection and stringing of the transmission line, different crops and trees for keeping minimum clearance will be affected. Some of the households will experience temporary disruption since the transmission lines will overtop their housing premises. They will be entitled to have allowances for temporary disruption. As per the survey, 69% of the affected HHs require cash for land lost while 31% require land for land lost. Due to the scarcity of land in Bangladesh land for the land option is not entertained in any of the development projects. In this project, only cash compensation has been provisioned for loss of land and other assets. The survey identified that 53% PAPs require employment followed by assistant/loan (18%), vocational training (17%) and other (12%).

J. Grievance Redress Mechanism (GRM).

Through public consultations, PAPs will have to be informed that they have a right to resolve any grievance/complaints they may have regarding resettlement issues. Grievances will be settled with full representation in GRCs constituted by representatives from the PGCB, RAP implementing agency, local government institutions (LGI) and the PAPs. The PAPs will call upon the support of the IA to assist them in presenting their grievances to the GRCs. The GRCs will review grievances involving compensation and resettlement assistances, livelihood restoration. Grievances will be redressed within four weeks from the date of lodging the complaints.

| Level | Members of the GRC at different levels |
|---|--|
| Level 1 Local (Upazila) level GRC | 1. Executive Engineer/Deputy Project Director – Convener 2. Field Coordinator of IA– Member Secretary 3. Upazila Chairman or his representative- Member 4. Agriculture Extension Officer at Upazila level - Member 5. One representative from PAPs male or female (female in case of female aggrieved person) – Member |
| Level 2 Project Level (PMO) | 1. Project Director – Convener 2. Team Leader RAP implementing Agency- Member Secretary 3. Executive Engineer of the project, PGCB-Member |
| Level 3 ED Level | 1. Executive Director (P&D) PGCB, Dhaka - Convener 2. Chief Engineer, PGCB- Member Secretary |

K. Monitoring and Evaluation

To ensure the effective and efficient implementation of land acquisition and other resettlement by the PGCB, a two-fold monitoring system has been planned i.e. internal monitoring and external monitoring. The IA/INGO, PGCB, and the CSC will internally monitor the RAP implementation while the external monitoring agency (EMA) will conduct compliance monitoring of the RAP implementation. A monitoring tracking system will be developed through Computerised Management Information System (CMIS) by the IA/INGO for collecting and analyzing information on the RAP implementation in a systematic and continuous manner. Internal and external monitoring will provide feedback to PGCB as well as to assess the effectiveness of the RAP and its implementation.

An External Monitor will be recruited to verify the monitoring information generated by the PMO and INGO, by carrying out semi-annual, and post RAP implementation evaluations. The scope of external monitoring will cover compliance monitoring and RAP implementation. During its assessment, the external monitor will, if needed, recommend actions to ensure the implementation of the RAP is in compliance with the entitlement matrix and World Bank Safeguard Policy requirements. The external monitor will cover compliance issues such as compensation and entitlements policies, adequacy of the organizational mechanism for implementing the RAP, restoration of income, resolution of grievances and provisions for adequate budgetary support by PGCB and its PMO for the RAP implementation.

L. Implementation Arrangement

PGCB is the executing agency of the project. Project Director (PD) will establish a Project Management Office in Dhaka for overall project execution, including monitoring of the project activities. An Implementing agency (Consulting Firm/NGO) will be recruited by PGCB for implementation of the Resettlement Action Plan. For the overall implementation of the RAP, the Project Management Office (PMO) headed by Project Director will be established within PGCB head office. The PGCB will recruit the Construction Supervision Consultant (CSC) who, inter alia will develop a land acquisition plan, coordinate and monitor implementation of the RAP. Specialists within the PMO or CSC will guide the IA/INGO as required, especially when compliance issues arise.

The monitoring reports on the progress of land acquisition and involuntary resettlement activities will need to be prepared by the PMO and/ or CSC specialist, working with the INGO. These reports will be submitted to World Bank. The PMO will collect relevant information as needed and assess the progress of RAP implementation. A representative of the PMO at the rank of Superintending Engineer will act as convener of the local level grievance redress committee (GRC). Property

Assessment and Valuation Committee (PAVC) appointed by PGCB will establish the final compensation prices and packages and verify that compensation packages respectively were delivered as agreed and according to a specific timetable. The RAP will be implemented over approximately three years.

L. Cost Estimate and Budget

At this stage, a provisional total for RAP implementation and other related costs has been estimated. The total estimated RAP implementation budget is **BDT 3,399,022,038** (*In word Three Billion Three Hundred Ninety Nine Million Twenty Two Thousand Thirty Eight*) only equivalent to USD \$= 42,487,775 (1 USD=80 BDT). Out of the total budget land compensation alone occupies more than 75%.

Table-Summary Budget

| Sl. No. | Particulars | Estimated budget in BDT | Percentage |
|---------|--|-------------------------|------------|
| A. | Compensation for land at Substations | 2,560,128,200 | 75.32 |
| B | Compensation for Trees | 102,919,150 | 3.03 |
| C | Compensation for Crops | 126,620,000 | 3.73 |
| D | Compensation for structures under transmission line | 11,900,000 | 0.35 |
| E | Resettlement Benefits | 306,088,760 | 9.01 |
| F | RAP Implementation and Monitorig | 69,000,000 | 2.03 |
| G | Administrative cost for LA process @ 2% of the total budget | 63,533,122 | 1.87 |
| H | Contingency @ 5% of the total budget | 158,832,806 | 4.67 |
| | Grand Total inclduing compensation, benefits, operation and administrative costs | 3,399,022,038 | 100 |

Table of Contents

| | |
|--|-----------|
| EXECUTIVE SUMMARY | i |
| LIST OF TABLES..... | xviii |
| LIST OF FIGURES..... | xix |
| CURRENCY EQUIVALENTS..... | xxii |
| GLOSSARY..... | xxiii |
| 1. INTRODUCTION | 1 |
| 1.1 Project Background..... | 1 |
| 1.1.2 Location of the Project..... | 2 |
| 1.1.2 Rationale for RAP..... | 11 |
| 1.2 Survey Methods | 11 |
| 1.2.1 Socio-economic Profile..... | 13 |
| 1.2.2 Inventory of Losses..... | 14 |
| 1.2.3 Market Price Survey..... | 14 |
| 1.2.4 Stakeholders Consultation..... | 16 |
| 1.2.5 Project Cut-off Date: Title and Non-title Holder | 16 |
| 2. SOCIO-ECONOMIC PROFILE | 17 |
| 2.1 Overview | 17 |
| 2.2 Socio-Economic Profile of the Affected Households | 18 |
| 2.2.1 Demographic Characteristics in Project Affected Area | 18 |
| 2.2.2 Distribution of Household Head | 18 |
| 2.2.3 Age Composition | 19 |
| 2.3.4 Marital Status | 19 |
| 2.2.5 Household by Religion..... | 20 |
| 2.2.6 Education..... | 20 |
| 2.2.7 Income and Expenditure of HHs..... | 21 |
| 2.2.8 Occupation Pattern | 22 |
| 2.2.9 Economic Activities of PAPs..... | 23 |
| 2.2.9 Dependence..... | 23 |
| 2.3 Poverty and Gender | 24 |
| 2.3.1 Overview..... | 24 |
| 2.3.2 Vulnerable Groups | 24 |

| | |
|---|----|
| 3. LAND ACQUISITION AND OTHER IMPACTS | 24 |
| 3.1 Overview | 25 |
| 3.1 Scope of Land Acquisition..... | 25 |
| 3.1.1 Affected People Title and Non-Title Holders Loosing Land..... | 26 |
| 3.1.2 Impact on Employee/Labor in Connection with Land | 27 |
| 3.1.3 Impact on Sharecroppers in connection with land | 27 |
| 3.1.4 Lose of Trees | 28 |
| 3.1.5 Lose of Crops..... | 29 |
| 3.1.6. Affected Common Property Resource | 29 |
| 3.5 Temporary Disruption of Structures during Stinging of Transmission Line | 30 |
| 3.6 Summary of Impact | 31 |
| 4. CONSULTATION, DISCLOSURE AND PARTICIPATION | 33 |
| 4.1 Overview | 33 |
| 4.2 Venue and Nature of Participants of the Consultation Meetings | 33 |
| 4.3 Issues Identified by Stakeholders | 35 |
| 4.3.1 Change of sub-station Locations | 36 |
| 4.4 Description of Consultations | 38 |
| 4.5. Consultation Outcomes | 48 |
| 5. LEGAL AND POLICY FRAMEWORK | 49 |
| 5.1 Legal framework | 49 |
| 5.2 World Bank OP 4.12 on Involuntary Resettlement..... | 50 |
| 5.3 Social Safeguards Policy Compliance | 51 |
| 5.4 Project's Social Management and Resettlement Policy | 52 |
| 5.4.1 Policy Principles..... | 53 |
| 5.4.2 Impact Mitigation Principles | 53 |
| 5.4.3 Eligibility for Compensation and Assistance | 54 |
| 5.4.4 Compensation Principles and Standards | 55 |
| 5.4.5 Eligibility of Cut-Off Dates | 56 |
| 6.1 Introduction..... | 57 |
| 6.2 Eligibility Policies and the Entitlement Matrix (EM) | 57 |
| 6.3 Categories of PAPs and Types of Losses | 57 |
| 6.4 Entitlement Matrix..... | 57 |
| 6.5 Compensation Payment | 66 |

| | |
|--|----|
| 7. INCOME RESTORATION, REHABILITATION, AND GENDER..... | 67 |
| 7.1 Introduction..... | 67 |
| 7.2 Livelihood Impact and Risks | 67 |
| 7.3 Income and Livelihood Restoration | 67 |
| 7.4 Compensation options for losing land | 68 |
| 7.5 Preferred options for spending the compensation money..... | 68 |
| 7.5.1 Substations Areas | 68 |
| 7.5.2 Transmission line | 69 |
| 7.6 Sources/Opportunities for employment in locality | 70 |
| 7.6.1 Substations..... | 70 |
| 7.6.2 Transmission Line | 71 |
| 7.7. Preferred Training to Develop Skills for Taking up a New Occupation | 72 |
| 7.7.1 Substations Areas | 72 |
| 7.7.2 Transmission Line | 72 |
| 7.7.3 Sharecroppers | 73 |
| 7.8 Income Restoration Assistance..... | 74 |
| 7.8.1 Substations Areas | 74 |
| 7.8.3 Sharecroppers | 75 |
| 7.9 Rehabilitation Measures | 76 |
| 7.9.1 Assistance to Vulnerable Groups..... | 76 |
| 7.9.2 Employment in Construction Work | 76 |
| 7.9.3 Future Plans for Income and Livelihood Restoration..... | 76 |
| 7.10 Gender Considerations..... | 76 |
| 8. GRIEVANCE REDRESS MECHANISMS..... | 77 |
| 8.1 Introduction..... | 77 |
| 8.2 Grievance Redress Process | 77 |
| 8.3 Grievance Redress Committees (GRCs)..... | 81 |
| 8.4 GRC's Scope of Operations and Decision Requirements..... | 82 |
| 8.5 Filing a Grievance/Complaint with GRC | 83 |
| 8.6 Documentation of Grievance | 83 |
| 9. INSTITUTIONAL ARRANGEMENTS FOR RAP IMPLEMENTATION | 85 |
| 9.1 Introduction..... | 85 |
| 9.2 RAP Implementation Roles and Responsibilities | 85 |

| | |
|---|-------------------------------------|
| 9.2.1 The PGCB Project Director | 85 |
| 9.2.2 The RAP Implementing Agency (IA)/NGO..... | 86 |
| 9.2.3 Deputy Commissioner's Office (Land Acquisition) | 87 |
| 9.2.4 Construction Supervision Consultant (CSC)..... | 87 |
| 9.3 RAP Implementation Committees and Organizations | 87 |
| 9.3.1 Property Assessment and Valuation Committee | 87 |
| 9.3.2 Grievance Redress Committee | 89 |
| 9.4 Implementation Timetable | 89 |
| 10. MONITORING AND REPORTING..... | 93 |
| 10.1 Monitoring System..... | 93 |
| 11. RESETTLEMENT COSTS AND BUDGET | 96 |
| 11.1 Budget and Financial Plan | 96 |
| 11.2 Calculation of Estimated Costs | 96 |
| 11.3 Summary Land Acquisition and Resettlement Budget | 97 |
| 11.4 Assessment of Market Price for Land | 97 |
| 11.5 Estimated budget for land | 99 |
| 11.6 Compensation for Trees..... | 100 |
| 11.7 Value of Crops | 101 |
| 11.8 Compensation for temporary Disruption of Structures under transmission line: | 102 |
| 11.9 Resettlement Benefit and cost | 103 |
| 11.10 Payments for Livelihood Restoration Programs and RAP Implementation..... | 103 |
| ANNEX 1: LIST OF AFFECTED TREES ALONG TRANSMISSION LINES | Error! Bookmark not defined. |
| ANNEX 2: DETAIL BUDGET FOR LAND ACQUISITION AND RESETTLEMENT | Error! Bookmark not defined. |
| ANNEX-3: DETAIL BUDGET FOR TRANSMISSION LINE WITH REGARD TO TEMPORARY LAND USE | Error! Bookmark not defined. |
| ANNEX-4: DETAIL BUDGET FOR INDIVIDUAL SUBSTATION..... | Error! Bookmark not defined. |
| ANNEX-6: SOCIOECONOMIC SURVEY QUESTIONNAIRES..... | Error! Bookmark not defined. |
| ANNEX-7: MARKET SURVEY QUESTIONNAIRE (IN BANGLA)..... | Error! Bookmark not defined. |
| ANNEX-8: ATTENDENCE OF CONSULTATION MEETINGS | Error! Bookmark not defined. |
| ANNEX 9: PICTURES OF CONSULTATION MEETINGS..... | Error! Bookmark not defined. |
| ANNEX-10: LIST OF THE HH AT SUBSTATION AREA | Error! Bookmark not defined. |
| ANNEX-11: LIST OF THE HH AT TRANSMISSION LINE | Error! Bookmark not defined. |

ANNEX 12: LIST OF THE VULNERABLE PAPS OF SUBSTATIONS **Error! Bookmark not defined.**

ANNEX 13: LIST OF THE VULNERABLE PAPS OF TL **Error! Bookmark not defined.**

ANNEX 12: TOR FOR RAP IMPLEMENTING AGENCY **Error! Bookmark not defined.**

ANNEX 13: TOR FOR EXTERNAL MONITORING AGENCY **Error! Bookmark not defined.**

ANNEX: 14 MOUZA RATE OF THE AFFECTED SUBSTATIONS LANDS **Error! Bookmark not defined.**

LIST OF TABLES

| | |
|--|-----|
| Table 1: GIS Substation and interconnection of the project | 2 |
| Table 2 Location of the 13 substations | 5 |
| Table 3 Cut-Off date at Sub-stations(for non-titled) | 16 |
| Table 4: Cut-Off date at Transmission line(for non-titled) | 17 |
| Table 5: Distribution of households and Population | 18 |
| Table 6: PAPS age composition by sex | 19 |
| Table 7: Education level of the PAPS..... | 20 |
| Table 8: Income and expenditure ration of HHs..... | 21 |
| Table 9: Principal occupation of the affected population in the Project area | 22 |
| Table 10: Type of VulnerabilityType of Vulnerable household..... | 24 |
| Table 11: Land by GIS Locations; permanently acquired (in Acre)..... | 25 |
| Table 12: Affected Title and Non-Title Holders..... | 27 |
| Table 13 Affected number of the Sharecroppers | 28 |
| Table 14: Lose of trees by category | 28 |
| Table 15: Details of affected crop area | 29 |
| Table 16 Name of the CPR and Affected entities: | 30 |
| Table 17 No. of structures within right of way | 30 |
| Table 18: Summary of Impact | 31 |
| Table 19: Venue and Nature of the participants..... | 33 |
| Table 20: Summary of Issue Raised and Minimization | 39 |
| Table 21: Entitlement Matrices..... | 59 |
| Table 22: Steps in Grievance Resolution Process | 79 |
| Table 23. Composition of GRC..... | 82 |
| Table 24: Monitoring Indicators | 94 |
| Table 25 Summary of the budget | 97 |
| Table 26: Average CMP of land..... | 98 |
| Table 27: Land Acquisition Budget | 99 |
| Table 28. Total budget for affected trees..... | 101 |
| Table 29: Total Budget for Crops Production | 102 |
| Table 30: Budget for temporary affected structures | 102 |
| Table 31. Resettlement Benefits and Costs | 103 |

| | |
|--|-------------------------------------|
| Table 32: Budget for RAP Implementation and Monitoring | 103 |
| Table 33: GIS Substation and interconnection of the project..... | Error! Bookmark not defined. |

LIST OF FIGURES

| | |
|--|----|
| Figure 1: Map of the project area | 4 |
| Figure 2: Sex-wise distribution of household heads | 19 |
| Figure 3 Affected households and population by religion | 20 |
| Figure 4 Economic Activities of Eligible PAPs..... | 23 |
| Figure 5 Previous and newly Proposed Location for Laximipur GIS..... | 36 |
| Figure 6 Previous and newly Proposed Location for Patiya GIS..... | 37 |
| Figure 7 Figure-Previous and newly Proposed Location for Korerhat GIS | 38 |
| Figure 8 Compensation option of losing land | 68 |
| Figure 9 people's opinion about investment of their compensation money for Substations. | 69 |
| Figure 10 Opinion of the People in Invensting Compensation for TL | 70 |
| Figure 11 Sources/opportunities for Employment in Local area for Substations | 71 |
| Figure 12 Sources/opportunities for Employment in Local Area for TL..... | 71 |
| Figure 13 Options to Develop Skills for Taking up new Occupations for Substations | 72 |
| Figure 14 Options to Develop Skills for Taking up new Occupations for TL..... | 73 |
| Figure 15 Options to Develop Skills for Taking up new Occupations for Sharecroppers | 74 |
| Figure 16 Options for Income Restoration Assistance for Substations | 74 |
| Figure 17 Options for Income Restoration Assistance for TL | 75 |
| Figure 18 Options for Income Restoration Assistance for Sharecroppers..... | 75 |
| Figure 19 Grievance Redress Process Flow Chart | 81 |
| Figure 20 Organogram of the PGCB..... | 86 |
| Figure 21 Procedures of Land Acquisition under the GOB | 90 |
| Figure 22 RAP Implementation Schedule and Construction Mobilization | 92 |

ABBREVIATIONS

| | | |
|-----------|---|---|
| AB | - | Acquiring Body (Deputy Commissioner) |
| AC Land | - | Assistant Commissioner Land |
| ADC (Rev) | - | Additional Deputy Commissioner (Revenue) |
| AH | - | Affected household |
| AIS | - | Air Substation |
| AP | - | Affected Person |
| ARIPO | - | Acquisition and Requisition of Immovable Property Ordinance |
| BBS | - | Bangladesh Bureau of Statistics |
| CUL | - | Cash Compensation Under Law |
| CMP | - | Current Market Price |
| CPR | - | Common/Community Property Resources |
| CSC | - | Construction Supervision Consultant |
| DAE | - | Department of Agriculture Extension |
| DC | - | Deputy Commissioner |
| DLAC | - | District Land Allocation Committee |
| DMS | - | Detailed Measurement Survey |
| DOF | - | Department of Forest |
| EA | - | Executing Agency |
| EC | - | Entitlement Card |
| EMA | - | External Monitoring Agency |
| EP | - | Entitled Person |
| FGD | - | Focused Group Discussion |
| GOB | - | Government of Bangladesh |

| | | |
|---------|---|--|
| GRC | - | Grievance Redress Committee |
| ha | - | hectare |
| HH | - | Household |
| ID Card | - | Identity Card |
| IGA | - | Income Generating Activities |
| IOL | - | Inventory of losses |
| INGO | - | Implementing Non-Government Organization |
| ILRP | - | Income and Livelihood Restoration Program |
| IR | - | Involuntary Resettlement |
| JVS | - | Joint Verification Survey |
| km | - | kilometer |
| KMC | - | Knowledge Management Consultants |
| KV | - | Kilovolt |
| LA | - | Land Acquisition |
| LA&R | - | Land Acquisition and Resettlement |
| LAO | - | Land Acquisition Officer |
| LAP | - | Land Acquisition Plan |
| LGI | - | Local Government Institution |
| LMS | - | Land Market Survey |
| MARV | - | Maximum Allowable Replacement Value |
| M&E | - | Monitoring and Evaluation |
| MIS | - | Management Information System |
| MOL | - | Ministry of Land |
| MoPEMR | - | Ministry of Power Energy and Mineral Resources |
| NGO | - | Non-government Organization |
| OP | - | Operation Policy |

| | | |
|------|---|---|
| PAH | - | Project Affected Household |
| PAVC | - | Property Assessment and Valuation Committee |
| PAU | - | Project Affected Unit |
| PGCB | - | Power Grid Company of Bangladesh |
| PMO | - | Project Management Office |
| PD | - | Project Director |
| PIB | - | Public Information Brochure |
| RAP | - | Resettlement Action Plan |
| RB | - | Requiring Body |
| RF | - | Resettlement Framework |
| RoR | - | Record of Rights |
| ROW | - | Right-of-Way |
| RU | - | Resettlement Unit |
| RV | - | Replacement Value |
| SCM | - | Stakeholder Consultation Meeting |
| SES | - | Socioeconomic Survey |
| TOR | - | Terms of Reference |
| VH | - | Vulnerable Household |
| WB | - | World Bank |

CURRENCY EQUIVALENTS
(as of September 14, 2017)

| | | |
|---------------|---|-----------------------|
| Currency unit | – | Bangladesh Taka (BDT) |
| BDT1.00 | = | US\$ 0.012 |
| \$1.00 | = | BDT 81.92 |

WEIGHTS AND MEASURES

| | | |
|-----------|---|---------------------|
| 1 ha | – | 2.47 acre |
| 1 ha | – | 10,000 sq.m |
| 1 decimal | – | 40.5 m ² |

GLOSSARY

Affected Person (AP)- includes any person, affected households (AHs), firms or private institutions who, on account of changes that result from the project will have their (i) standard of living adversely affected; (ii) right, title, or interest in any house, land (including residential, commercial, agricultural, forest, and/or grazing land), water resources, or any other moveable or fixed assets acquired, possessed, restricted, or otherwise adversely affected, in full or in part, permanently or temporarily; and/or (iii) business, occupation, place of work or residence, or habitat adversely affected, with physical or economic displacement.

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

Awardee- refers to person with interests in land to be acquired by the project after their ownership of said land has been confirmed by the respective Deputy Commissioner's office as well as persons with interests in other assets to be acquired by the project. Compensation for acquired assets is provided to 'awardees' through notification under Section 7 of the Land Acquisition Ordinance 1982.

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

Cut-off date- refers to the date after which eligibility for compensation or resettlement assistance will not be considered is the cut-off date. 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 commencement date of carrying out the census/inventory of losses is considered as the cut of date for eligibility of resettlement benefits.

Dependency Ratio- a measure showing the number of dependents, aged zero to 15 and over the age of 60, to the total population, aged 15 to 60. It is also referred to as the "total **dependency ratio**."

Displaced Person (DP)- As per World Bank Policy OP 4.12 - displaced persons are those who are physically displaced (relocation, loss of residential land, or loss of shelter) and or economically displaced (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.

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

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.

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.

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

Inventory of losses- includes the inventory of the affected properties during census survey for record of affected or lost assets for preparation of the resettlement plan.

Kutcha: Structure built of mud, straw, bamboo and leaves and other non-durable materials

Mouza: Mouza is composed of several villages. It is officially called as Revenue Village with specific boundary at ground and Maps with plots and benchmarks.

Non-titled- means those who have no recognizable rights or claims to the land that they are occupying and includes people using private or public land without permission, permit or grant i.e. those people without legal title to land and/or structures occupied or used by them.

Project- refers to Enhancement and Strengthening of Power Transmission Network in Eastern Region Project of PGCB

Project Affected Business (PAB)-any shop, store or commercial establishment negatively affected by the project

Project Affected Entity (PAEs) - collectively indicate residential households (HHs), commercial and business enterprises (CBEs), common property resources (CPRs) and other affected entities as a whole.

Project Affected Household (PAH)- includes residential households and commercial and business enterprises except CPRs.

Project Affected Person (PAP)-all people enumerated during the census conducted in the project's impact corridor and identified as negatively affected by the project.

Pucca; Structure build with bricks concrete and solid tile roof

Relocation- means displacement or physical moving of the DPs 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 current market price, or its nearest equivalent, and is the amount of cash or kind needed to replace an asset in existing condition, without deduction of transaction costs or for any material salvaged.

Resettlement- means mitigation of all the impacts associated with land acquisition including relocation and reconstruction of physical assets such as housing and restoration of income and livelihoods in post-relocation period.

Semi Pucca; structure build with a combination of durable walls of brick or concrete and roof of thatch and leaves

Significant impact- refers to severity of impact (HHs losing more than 10% of productive assets, income below poverty line) with regard to loss of housing and productive assets of affected persons/families.

Squatters- refers to non-titled and includes households, business and common establishments on public land (including those acquired earlier). Under the project this includes land on part of the crest and slopes of flood control embankments, and similar areas of the drainage channels.

Structures- refers to 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, tube wells latrines etc.

Tin-made-structure made of corrugated metal sheets, considered flimsy and unstable.

Vita Land: It is comparatively highland and suitable for house/building construction but not yet used as homestead. Vita land is used for multi-cropped, orchard, housing, or any other purposes since it is not usually inundated.

Vulnerable Households- include households that are (i) headed by single woman (due to divorce, widow) or woman with dependents and low incomes (below poverty line); (ii) headed by elderly/disabled people without means of support; (iii) households that fall on or below the poverty line⁴ (iv) households of Tribal population or ethnic minority; (v) persons without titled to land (Landless); and (v) households of low social group or caste.

⁴ The poverty line (updated for 2017)

1. INTRODUCTION

1.1 Project Background

1. Power Grid Company of Bangladesh (PGCB) Ltd., with support from the World Bank, has been implementing a project named "Enhancement and Strengthening of Power Transmission Network in Eastern Region". With regard to the grid enhancement and strengthening works, the project scope includes thirteen (13) GIS substations, one 230kV high capacity four circuit backbone transmission line, and replacement of the Haliashahar 132/33kV air insulated substation (AIS) by an advanced GIS conductor.
2. The proposed improvements will cause displacement of titled landholders, squatters, tenants, and encroachers from selected location/right of way (ROW) and impose adverse impacts on their assets and livelihoods. Also, the land will have to be acquired for constructing new sub-stations. All of these will trigger the World Bank's Policy on Involuntary Resettlement (OP4.12). The World Bank policy OP 4.12, Acquisition and Requisition of Immovable Property Ordinance (ARIPO) 1982 and Electricity Act-1910 (Act No. IX) will be closely followed for mitigation of adverse impacts on people affected by the sub-stations and the transmission lines.
3. The project includes construction of thirteen GIS substations, one 230KV high capacity four circuit backbone transmission line and replacement of the Haliashahar 132/33KV air substation (AIS) by an advanced GIS and reconductoring of existing Sikalbaha-Cox's Bazar 132KV line with the higher capacity conductor. For 12 (excluding Upgradation of 230/33kV SS at Mirsharai substation) to new substations, a total land area of 34.80 ha has been identified which will be acquired as per provisions under the Acquisition and Requisition of Immovable Property Ordinance 1982 (amendment until 2017). As per field survey, no physical displacement is involved in any of these proposed substations.
4. The proposed lines will pass mostly through agricultural fields and land will be lost at 4 legs of the tower base, which is estimated to be in the range of 0.2-1 sq. m. per average farm holding (refer fig.4). In the instant project, total 884 no. towers⁵ will be erected, of which 251 angle & 633 suspension towers including 14 nos. of multi-circuit towers. Accordingly, for the erection of 884 towers total loss of land is estimated to be about 0.0712 ha that is quite negligible and will not adversely affect the land holding. Further, an area estimated at 325.50 ha will also be getting affected temporarily during construction under tower base and transmission lines.

⁵ As per ESA report of this project

1.1.2 Location of the Project

5. The Interconnection of the sub-stations will cross five Districts (Comilla, Feni, Chittagong, Chandpur, and Noakhali) via different Upazila. Total alignment is about 325 km and a total of about 86 acres(34.80 ha) of land will be acquired for 12 substations and 804 acres including tower base and transmission line will also be getting affected temporarily during construction under tower base (Figure-1). These lands will be used thrice for installation of tower and stringing of the wire. Locations of the substations have been presented in the table-2.

Table 1: GIS Substation and interconnection of the project

| New Substation Name | Associated Transmission Line | Bay Extension/Renovation Substation/ Renovation Line |
|---|--|---|
| 400/230/132kV : Korerhat GIS, 2x1000 MVA, 2x325 | LILO of Modunaghat – Meghnaghat 400kV (LL Quad ACSR Finch) D/c line at Korerhat – 0.78km | Renovation Substation 132/33 kV GIS Substation: Halishahar, 3x80/120 MVA replacing existing SS Renovation Line Reconductoring of Korerhat – Baroirhat – Feni 132kV D/c line (formed after above LILO) with high capacity conductor –32.00 km |
| | LILO of Comilla(N) /Feni – BSRM / Hathazari 230kV (ACSR Finch) D/c line at Korerhat – 6.0 km | Renovation Line Reconductoring of Shikalbaha – Patiya – Dohazari – Cox's Bazar 132kV D/c line (formed after above LILO) with high capacity onductor - 125km |
| | LILO of Feni / Baroirhat – Hathazari 132kV (ACSR Grosbeak) D/c line at Korerhat – including 3km stretch at Korerhat end on M/c tower :3.0 km | - |
| Upgradation of 230/33kV SS at Mirsharai to 400/230/33kV GIS, 2x1000 MVA | Disconnection of Mirsharai ⁶ – BSRM 400kV (Twin ACSR Finch) (to be initially charged at 230kV*) D/c line from BSRM and Extension of the same to Korerhat – including 3km stretch at Korerhat end on M/c tower# and 400kV operation of Korerhat – Mirsharai line –11.85 km | - |
| 230/132 kV: Chowmuhoni GIS 3x250/350MVA | Korerhat – Chowmuhoni 230kV 2xD/c (Twin ACSR Finch) line on M/c tower – 53.02km | - |
| 230/132 kV: Kachua GIS 2x250/350MVA | Chowmuhoni – Kachua 230kV 2xD/c (Twin ACSR Finch) line on M/c tower – 50.92km | - |
| | Kachua – Gazaria 230kV 2xD/c (Twin ACSR Finch) line on M/c tower – 45.62km | Bay Extension 230 kV Bay Extension at Gazaia: 4 No's |



⁶LILO of 400 KV DC Korerhat to BSRM TL (8KM, located 15 towers) was unreachable due to forest area



| New Substation Name | Associated Transmission Line | Bay Extension/Renovation Substation/ Renovation Line |
|---|--|--|
| 132/33 kV: Muradnagar GIS 2x80/120 MVA | LILO of Comilla(N) – Daudkandi line 132kV (ACSR Grosbeak) D/c line at Muradnagar – 0.85km | - |
| 132/33 kV: Lakhsam GIS 2x80/120 MVA | Kachua – Laksham 132kV (ACSR Grosbeak) D/c line – 31.08km | - |
| 132/33 kV: Majdee GIS 2x80/120 MVA | Chowmuhoni – Majdee 230kV D/c (Twin ACSR Mallard) (Initially charged at 132kV) line – 20.35km | - |
| 132/33 kV: Patiya GIS 2x80/120 MVA | LILO of Dohazari – Shikalbaha 132kV (ACSR Grosbeak) D/c line at Patiya - 1.50km | - |
| 132/33 kV: Chandina GIS 2x80/120 MVA | Comilla(N) – Chandina 132kV (ACSR Grosbeak) D/c line – 9.83km | Bay Extension 132 kV Bay Extention at Comilla(N): 2 No's |
| 132/33 kV: Anand Bazaar/ New Mooring GIS 3x80/120 MVA | LILO of Haliashahar – Khulsi 132kV (ACSR Grosbeak) D/c (ckt-2 & 3) line at New Mooring / Anand Bazaar – 1.05km | - |
| | LILO from Haliashahar Khulsi 132kV single circuit line: 1km | - |
| 132/33 kV: Basurhat/Daganbhuiyan GIS 2x80/120 MVA | LILO of Feni – Chowmuhoni 132kV (ACSR Grosbeak) D/c line at Bashurhat/Daganbhuiyan – 3.0 km | - |
| 132/33 kV: Laxmipur GIS 2x80/120 MVA | Chowmuhoni – Laxmipur 132kV (ACSR Grosbeak) D/c line – 27.08km | - |
| 132/33 kV: Kosba GIS 2x80/120 MVA | Muradnagar – Kosba 132kV (ACSR Grosbeak) D/c line – 21.91km | - |







Figure 1: Map of the project area

Table 2 Location of the 13 substations

| New Substation Name | Image of the Location from Google (Area demarcated not-to scale) |
|--|---|
| <p>400/230/132kV : Korerhat GIS, 2x1000 MVA, 2x325</p> <p>GPS Location: Latitude: 22°56'33.45"N Longitude: 91°33'11.11"E</p> <p>Quantity of land to be acquired = 25.00acre</p> |  |
| <p>Upgradation of 230/33kV SS at Mirsharai to 400/230/33kV GIS, 2x1000 MVA</p> <p>GPS Location: Latitude: 22°45'13.37"N Longitude: 91°27'25.81"E</p> <p>Fully Government land (Forest zone)</p> |  |


| New Substation Name | Image of the Location from Google (Area demarcated not-to scale) |
|---|---|
| <p>230/132 kV: Chowmuhoni GIS 3x250/350MVA</p> <p>GPS Location:</p> <p>Latitude: 22°56'47.88"N Longitude: 91° 6'10.99"E</p> <p>Quantity of land to be acquired = 5.00 Acre</p> |  |
| <p>230/132 kV: Kachua/HaziganjGIS 2x250/350MVA</p> <p>GPS Location:</p> <p>Latitude: 23°15'59.38"N Longitude: 90°51'52.77"E</p> <p>Quantity of land to be acquired = 5.00 Acre</p> |  |

| New Substation Name | Image of the Location from Google (Area demarcated not-to scale) |
|---|---|
| <p>132/33 kV: Muradnagar GIS 2x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 23°39'13.68"N Longitude: 90°56'2.77"E</p> <p>Quantity of land to be acquired = 5.00 Acre</p> |  |
| <p>132/33 kV: Lakhsam GIS 2x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 23°13'22.98"N Longitude: 91° 7'26.88"E</p> <p>Quantity of land to be acquired = 2.00 Acre</p> |  |

| New Substation Name | Image of the Location from Google (Area demarcated not-to scale) |
|---|---|
| <p>132/33 kV: Maijdee GIS 2x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 22°47'59.51"N Longitude: 91° 4'57.36"E</p> <p>Quantity of land to be acquired = 5.00 Acre</p> |  |
| <p>132/33 kV: Patiya GIS 2x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 22°17'43.52"N Longitude: 91°58'0.01"E</p> <p>Quantity of land to be acquired = 5.00 Acre</p> |  |

| New Substation Name | Image of the Location from Google (Area demarcated not-to scale) |
|---|---|
| <p>132/33 kV: Chandina/Dabidar GIS 2x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 23°29'14.59"N Longitude: 91° 1'9.63"E</p> <p>Quantity of land to be acquired = 2.00 Acre</p> |  |
| <p>132/33 kV: Anand Bazaar/ New Mooring GIS 3x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 22°18'57.87"N Longitude: 91°46'21.35"E</p> <p>Quantity of land to be acquired =20.00 Acre</p> |  |

| New Substation Name | Image of the Location from Google (Area demarcated not-to scale) |
|---|---|
| <p>132/33 kV: Basurhat/Daganbhuiyan GIS 2x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 22°56'33.15"N Longitude: 91°16'22.02"E</p> <p>Quantity of land to be acquired = 2.00 Acre</p> |  |
| <p>132/33 kV: Laxmipur GIS 2x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 22°56'3.79"N Longitude: 90°52'32.28"E</p> <p>Quantity of land to be acquired = 5.00 Acre</p> |  |

| New Substation Name | Image of the Location from Google (Area demarcated not-to scale) |
|---|--|
| <p>132/33 kV: Kosba GIS 2x80/120 MVA</p> <p>GPS Location:</p> <p>Latitude: 23°45'26.23"N Longitude: 91° 5'57.44"E</p> <p>Quantity of land to be acquired = 5.00 Acre</p> |  |

1.1.2 Rationale for RAP

6. The project triggers the World Bank's OP 4.12 on Involuntary Resettlement that requires that the economic, social, and environmental risks are mitigated and livelihoods of the displaced persons are restored. It also triggers ARIPO 1982 and Electricity Act 1910 (Act No. IX). The unavoidable impacts related to land acquisition and economic displacement had been identified through census and socio-economic survey during June 2017 to July 2017. Nobody will be displaced physically by the project. Cut-off date was announced in the consultation meeting to the local community before the commencement of census survey to avoid fraudulent claims in future. Based on nature of impacts a full resettlement plan is prepared.

1.2 Survey Methods

7. A complete (100%) Census & Socioeconomic Survey (CSS) and IOL survey were conducted among the affected HHs (land and tree owners) readily available in the project area with a structured questionnaire by using electronic devices (to assess impacts of the project). A set of experienced and required professionals were deployed for conducting census and inventory of losses and Socio-economic survey and other activities at the field level. Resettlement Works, Surveyors, Field Supervisors, and Field Coordinators were trained on data collection tools and techniques, use of Tablet (electronic device) in presence of the

representatives from the client (PGCB and Power Cell). The survey team was also provided data collection manuals to ensure uniqueness and minimize discrepancies of field data. The orientation session was facilitated by the Managing Director of KMC (Team Leader of this survey team) and the MIS Specialist of the team. Consultations meetings were held prior to start the census and SES survey to disclose for the purposes of the project and to declare the cut-off date for the non-titled affected persons (APs). As per the environmental and social assessment (ESA) report of this project, no settlement will be affected rather only agricultural land will be affected by the project at substations. Practically it was found that only agricultural land with crops at substations and trees & crops at transmission lines are affected by the project interventions. Census and SES data were gathered from the land owners at the substations locations who are readily available at the village. Many of the land owners are not available at the ground and therefore information was collected from the neighbors and sharecroppers. That's why necessary information (demographic, socioeconomic, etc.) were not fully obtained during the survey. During updating of the RAP before implementation, such information will be collected. To supplement the census data and inventory of losses, recorded owners list including Khatians have been collected from Tahsil office at Union level/AC Land office at Upazila level. As per the instructions by the project authority, alternative locations for the substations were suggested based on field situation where there are structures/settlements in the proposed location or people are reluctant to offer the land for substations. At least three locations have been changed and alternative locations have been suggested by the KMC survey team.

8. For the transmission lines, data were collected from the land owners who were readily available during the survey. Under the transmission lines, trees and crops are affected. As per the decision of project authority, temporary disruption on structures will be avoided following 'scuff folding' method during stringing of transmission lines. However, the structures under transmission line will not require dismantling rather temporary disruption will be experienced by the structure owners. Necessary policy and budget for the temporary disruption has been provisioned in the RAP. Rates for trees have also been collected from knowledgeable persons including tree merchants. Other project experience is also taken into account for assessing tree and crop prices. For assessing compensation for the affected land a survey was conducted with the people from various cross sections i.e. potential Sellers & Buyers, Teacher, Religious Leader, Deed Writer, etc. to ascertain current market prices of land. Recorded price (Mouza rate) was also collected from respective Sub-Registrar's offices. During data collection, a tabulation plan to produce tables was prepared and

necessary programs were developed using SPSS by the MIS Specialist under the guidance of the Team Leader and other consultants.

1.2.1 Socio-economic Profile

9. Socio economic survey (SES) was conducted along with inventory of losses with one single questionnaire. The survey provided baseline data on major economic activities and the project impact area, and assess resettlement impacts, and to agree to the most appropriate entitlements for all PAPs. The parameters for which data were collected:
 - i. Household head: name of HHH, age, sex, livelihood or occupation, income, education, and ethnicity;
 - ii. Household members: number of HH members, their livelihood or occupation, school aged children & school attendance, and literacy disaggregated by gender;
 - iii. Living Condition: access to water, sanitation and energy for cooking and lighting; ownership of durable goods; and
 - iv. Access to basic service and facilities, etc.
10. Vulnerable and affected people in the project were identified during the SES. The following criteria have been used to identify vulnerable households who will be entitled to receive special assistance. These will be:
 1. Household headed by women who are widowed, divorced or separated as confirmed by neighbors and Union Parishad (UP) chairman and carry the whole responsibility of raising her family, having to care for dependent household members below 18 years of age.
 2. Household headed by the elderly > 60 years old women or men, as confirmed by neighbors and UP Chairman, who carry the whole responsibility of raising the family, not receiving regular support from children and/or relatives.
 3. Poor Household
 - Household with incomes below BDT 6840⁷per month

⁷ Calculated from the date in the *Report of the household income & expenditure survey 2010, Bangladesh Bureau of Statistics, Statistic Division, Ministry of Planning and considering yearly inflation up to 2017 and HH size of the affected people.*

- Carry the full responsibility of raising the family as confirmed by neighbors and village chairman, including having to support members <18 years of age.
4. Household headed by indigenous person- An Indigenous person or ethnic minority member is confirmed by neighbors and UP Chairman. That person usually carries the entire responsibility of raising the family and supporting household members below 18 years of age

1.2.2 Inventory of Losses

11. The data collected during the census and IOL survey included;

- i. Summary data of Affected Houses (AHs), by ethnicity, gender of head of household, household size, primary and secondary sources of household income in relation to the poverty line, income level, whether house hold is headed by women, elderly, disabled, poor or indigenous peoples;
- ii. Total and affected area of land, by type of land assets;
- iii. Total and affected areas of structures, by type of structure (main or secondary)
- iv. Affected structure on private land and government land with duration of tenure and ownership;
- v. Quantity and types of affected crops and trees;
- vi. Quantity of other losses, i.e. sharecropping, leasing, etc;
- vii. Identify whether affected land or other assets are primary sources of income of the HHs
- viii. Knowledge about the project and preferences for compensation and, as required, relocation sites and rehabilitation measures.

1.2.3 Market Price Survey

12. The Current Market Price has been determined for affected properties based on rates collected from various cross sections of the people through a land and property valuation survey using a structured questionnaire. Mouza rates are also collected from the concerned Sub-Registrar's office. Some knowledgeable persons were interviewed about prices of land, trees, crops and other assets in the project area. The Mouza rates have also been collected from concern Sub-registrar's offices during the determination of the Current Market Price of land. The stamp duty and registration costs will be paid if the land owners purchase alternative lands with compensation money within 12 months from the date of receiving CCL. Only selected people, such as potential buyer or seller of land, deed writer, religious leader, teacher, etc. were interviewed for assessing current market prices of land. Mouza rates

declared by the Government for the year 2017 has been collected from the concern Sub-registrar's office. Actual transacted prices of land (where available) are also collected during property valuation survey. As the land price varies from plot to plot due to nature, accessibility, location etc. so people's opinion on rates of land for various categories of land in mouzas do not reflect actual price. This is why mouza rates as assessed and declared by GoB and unit rates collected from the local people have been taken as the basis for determining CMP. Mouza rates for each category of land have been collected from Sub-Registrar's office and added 200% premium to reach CCL (Cash Compensation under Law). These Mouza rates have been averaged by category of land to determine the unit rate and budget. Unit rates collected from various cross sections of the people have been averaged by mouza and both averaged rates have further been averaged to reach CMP. In some cases, Mouza rates including 100% premium are found higher than the reported price (obtained from the people). In that circumstance, Mouza rate with 100% premium has been treated as CMP as the basis for determining Maximum Allowable Replacement Value (MARV).

13. Property Assessment and Valuation Committee will determine replacement value based on CMP during project implementation period. $RV = CMP + \text{project enhancement} + \text{Stamp Duty \& Registration Cost}$; where CMP includes DC's payment (CCL) and additional compensation on top of DC's CCL. The CMP for affected crops has been determined based on the secondary information collected from Department of Agriculture Extension (DAE) and Department of Marketing. The compensation assessed by the Deputy Commissioner (DC) for trees, crops, and fish through various concerned departments/agencies usually represents the current market price. So, additional compensation on top of DCs payment does not require for trees and crops in most cases. Property Assessment and Valuation Committee (PAVC) will be doing extensive exercise to determine replacement value (RV) for land and current market price (CMP) of trees and crops.
14. Land prices have been determined based on the current market price collected through interviewing of the local people from different cross sections and Mouza rates collected from Sub-Registrar's offices. At least 6-8 persons from each mouza were interviewed to find out the each mouza rate. It is to be noted that 13 Mouzas are found in 12 Substations (except Mirsharai substation since it is in Forest land) where Bashurhat (Feni) Substation has 2 Mouzas (Ramnagor and Sekendarpur).
15. Various categories of people were interviewed to obtain the justified rate of land, structure, trees, and crops. The respondents have opined rates of land, trees, and crops. According to

their knowledge and judgment land price has been assessed. In case of land price, Mouza rates have also been considered to assess the Current Market Price (CMP). Knowledgeable persons including farmers, tree merchant, Imam and other categories of people were interviewed to assess

1.2.4 Stakeholders Consultation

16. Stakeholders Consultation meetings were arranged at 25 convenient sites (covered all 13 at substations and transmission lines) of the project affected area. The affected people and different stakeholders such as land owners, farmers, wage laborers, local elites, sharecropper, lessees, and housewives were disclosed and aware about the impact of the project. Among others, land owners, crop owners, tree owners and small businessmen were present in the consultation meetings. To maximize exposure and participation in the meeting different techniques like- prior communication with the participants, handing over letters of PGCB to local government offices, announcing the market places and mosques were done. Potentially affected people and different level of stakeholders were informed verbally and invited local elites at least one day ahead of the meeting and they were informed about the time, location and objectives of the meeting. KMC officials facilitated consultation meetings. Each of the participants got the opportunity to take part in the discussion and give their opinion about the project. KMC teams drafted meeting minutes, collected attendance sheet, pictures and stored as well. Based on that collected information, this consultation report is prepared. A banner describing the project name and executing agency was hung during consultation meetings and information was disseminated in Bangla to the participants.

1.2.5 Project Cut-off Date: Title and Non-title Holder

17. Two cut-off dates are applicable for the affected people (titled and non-titled). For titled owners the cut-off date is the date of serving notice under section 3 of the ARIPO 1982, whereas for the non-titled persons it is the date of commencement of PAP census. This date was announced at the first public consultation session.

Table 3 Cut-Off date at Sub-stations (for non-titled)

| Sl. No. | Sub-Station Name | Cut-off-date |
|---------|---|--------------|
| 1 | 132/33 kV: Maijdee GIS 2x80/120 MVA | 8-07-2017 |
| 2 | 132/33 kV: Laxmipur GIS 2x80/120 MVA | 18-06-2017 |
| 3 | 400/230/132kV : Korerhat GIS, 2x1000 MVA, 2x325 | 05-07-2017 |
| 4 | 132/33 kV: Basurhat/Daganbhuiyan GIS 2x80/120 MVA | 18-06-2017 |

| Sl. No. | Sub-Station Name | Cut-off-date |
|---------|--|--------------|
| 5 | 132/33 kV: Lakhsam GIS 2x80/120 MVA | 5-07-2017 |
| 6 | 230/132 kV: Kachua GIS 2x250/350MVA | 5-07-2017 |
| 7 | 132/33 kV: Chandina GIS 2x80/120 MVA | 5-7-2017 |
| 8 | 132/33 kV: Kosba GIS 2x80/120 MVA | 19-06-17 |
| 9 | 132/33 kV: Muradnagar GIS 2x80/120 MVA | 5-07-2017 |
| 10 | 132/33 kV: Anand Bazaar/ New Mooring GIS 3x80/120 MVA | 15-06-2017 |
| 11 | 132/33 kV: Patiya GIS 2x80/120 MVA | 5-07-2017 |
| 12 | 230/132 kV: Chowmuhoni GIS 3x250/350MVA | 5-07-2017 |
| 13 | Up gradation of 230/33kV SS at Mirsharai to 400/230/33kV GIS, 2x1000 MVA | 05-07-2017 |

Table 4: Cut-Off date at Transmission line(for non-titled)

| Sl. No. | Transmission Line | Cut-Off-Date |
|---------|------------------------|--------------|
| 1 | Maijdee To Chowmohoni | 9-07-2017 |
| 2 | Laxmipur To Chowmohoni | 07-7-2017 |
| 3 | Korerhat | 05-07-2017 |
| 4 | Korerhat To Chowmohoni | 8-07-2017 |
| 5 | Basurhat | 18-06-2017 |
| 6 | Laxsham To Kochua | 5-07-2017 |
| 7 | Chowmohoni To Kochua | 5-07-2017 |
| 8 | Kochua To Gozaria | 5-07-17 |
| 9 | Muradnagor To Kosba | 5-07-2017 |
| 10 | Chandina | 5-07-2017 |

2. SOCIO-ECONOMIC PROFILE

2.1 Overview

18. This section deals with the general baseline socio-economic profile of the project area and affected households. Socio-economic details of the affected households were collected during the social studies. In addition to the specific social information collected during census survey, general socio-economic information was also collected from affected households to prepare an overall socio-economic profile of the affected households and people.

2.2 Socio-Economic Profile of the Affected Households

19. The Socioeconomic profile deals with various socio-economic details of the surveyed households (2027 numbers of people were covered under the survey) based on the finding of the survey. Demographic and socioeconomic information along with potential impacts on the people and community were collected from the affected people during the survey.

2.2.1 Demographic Characteristics in Project Affected Area

20. The total HH number is 650 (Out of total project affected unit is 655). The total number of PAPs is 2027. The male population is higher than that of the female. Out of them (1309 No.) 64.58% are male and (718) 35.42% are female found in the HH census. The sex ratio is 548female per 1,000 male. This ratio is much lower than the national male-female ratio (109:100) because the social survey couldn't always reach the residence of the affected households since they are losing the only land and or trees at the cropping field. In some cases, land owners are not readily available at ground and neighbors provided information of the HHs. The household size among the affected people is 3.12. It is noted that there is no ethnic minority in the project area. Besides, all of the affected households in the project area recognized as Bengali.

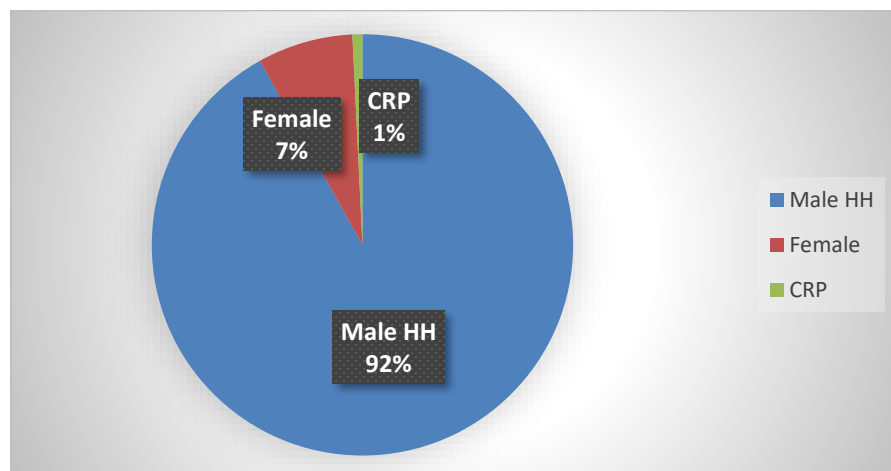
Table 5: Distribution of households and Population

| Area | HH | Mal | | Femal | | Total Populatio | | HH Siz e | Sex Rati o |
|---------------|----|------|-------|-------|-------|-----------------|-----|-------------|---------------|
| | No | No | % | No. | % | No. | % | | |
| Total Alignme | 65 | 1,30 | 64.58 | 718 | 35.42 | 2,027 | 100 | 3.12 | 548 |

Source: Census and SE survey, June-July, 2017

2.2.2 Distribution of Household Head

21. In Bangladesh, men are predominantly heading the household. It is observed (Figure -2) that among the total affected entities including community properties the percentage of male headed households is 92% while female headed household is 7% and community properties (losing only land and/or trees) is 1%. Female-headed households will be eligible for a special grant as per the policy of the RAP.



Source: Census and SE survey, June-July, 2017

Figure 2: Sex-wise distribution of household heads

2.2.3 Age Composition

22. According to national demography, there are 109 males for every 100 females in Bangladesh (BBS 2011). This area is also following the regular trend of Bangladesh and male population is higher in almost all age groups. Eight percent of the people (7.10% male and 1.23% female) were recorded as being over 60 years old, which is higher than the national percentage of 5.74% (BBS 2011). The survey also identified 13.76% are children (age 1-14) and 8.88% are adolescent (age 15-18) of the total population

Table 6: PAPs age composition by sex

| Age group | Male | | Female | | Total | |
|---------------|-------------|--------------|------------|--------------|-------------|------------|
| | No | % | No | % | No | % |
| Age (1 - 14) | 149 | 7.35 | 130 | 6.41 | 279 | 13.76 |
| Age (15 - 18) | 114 | 5.62 | 66 | 3.26 | 180 | 8.88 |
| Age (19 - 20) | 66 | 3.26 | 48 | 2.37 | 114 | 5.62 |
| Age (21 - 30) | 231 | 11.40 | 123 | 6.07 | 354 | 17.46 |
| Age (31 - 40) | 207 | 10.21 | 145 | 7.15 | 352 | 17.37 |
| Age (41 - 50) | 215 | 10.61 | 116 | 5.72 | 331 | 16.33 |
| Age (51 - 60) | 183 | 9.03 | 65 | 3.21 | 248 | 12.23 |
| (Age 60+) | 144 | 7.10 | 25 | 1.23 | 169 | 8.34 |
| Total | 1309 | 64.58 | 718 | 35.42 | 2027 | 100 |

Source: Census and SE survey, June-July, 2017

2.3.4 Marital Status

23. The following figure (Figure 3) shows the marital status of the population (HH members). It is found that 64% are married among which only 0.15% (three people; two female and a

male) are found married in the age below 18 years of old. It means child marriage is not so much available in the project area. , 35% are unmarried and only 1% are widow/widower.

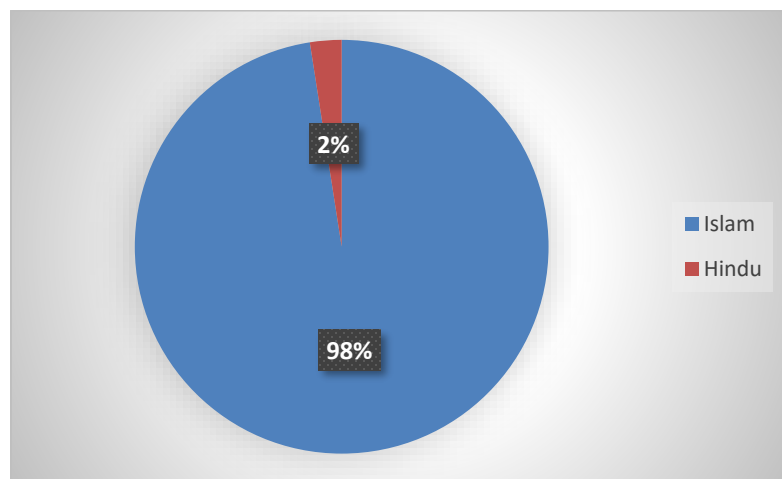
Table 6: Marital Status by sex

| Marital Status | Total | % | Male | % | Female | % |
|---------------------|-------|-------|------|-------|--------|-------|
| Married(>18 Years) | 1286 | 63.44 | 833 | 41.10 | 453 | 22.35 |
| Married(<18 Years) | 3 | 0.15 | 1 | 0.05 | 2 | 0.10 |
| Unmarried | 719 | 35.47 | 472 | 23.29 | 247 | 12.19 |
| Widow/widower | 19 | 0.94 | 3 | 0.15 | 16 | 0.79 |
| Total | 2027 | 100 | 1290 | 63.64 | 718 | 35.42 |

Source: Census and SES June –July 2017

2.2.5 Household by Religion

24. The following Figure-3 shows the distribution of households by religious category. It is found that Islam is the predominant religion in the study area (98%). The percentages of Hindu households are minimal (2%). Among the affected people there is no other religion.



Source: Census and SE survey, June-July, 2017

Figure 3 Affected households and population by religion

2.2.6 Education

25. The education level in the project-affected area (95%) is higher than the national average (62.7%, Bangladesh Economic review, 2017). The SE survey revealed that only 4.74% (male 2.27% and female 2.47%) of all PAPs were illiterate. The survey also identified that the education level at and above the basic university (graduate) level is very minimal. (Table-7)

Table 7: Education level of the PAPs

| Education | Male | | Female | | Total | |
|--------------------|------|-------|--------|-------|-------|-------|
| | No | % | No | % | No | % |
| Illiterate | 46 | 2.27 | 50.00 | 2.47 | 96 | 4.74 |
| Can sign only | 33 | 1.63 | 55.00 | 2.71 | 88 | 4.34 |
| Can read and write | 34 | 1.68 | 23.00 | 1.13 | 57 | 2.81 |
| Primary School | 292 | 14.41 | 209.00 | 10.31 | 501 | 24.72 |
| Below SSC | 355 | 17.51 | 196.00 | 9.67 | 551 | 27.18 |
| SSC | 204 | 10.06 | 102.00 | 5.03 | 306 | 15.10 |
| HSC | 181 | 8.93 | 48.00 | 2.37 | 229 | 11.30 |
| Graduate | 134 | 6.61 | 18.00 | 0.89 | 152 | 7.50 |
| Above | 30 | 1.48 | 17.00 | 0.84 | 47 | 2.32 |
| Total | 1309 | 64.58 | 718.00 | 35.42 | 2027 | 100 |

Source: Census and SE survey, June-July, 2017

2.2.7 Income and Expenditure of HHs

26. Based on Bangladesh Bureau of Statistics (BBS 2011) and yearly inflation (average 6.50% per year) as of 2017, the poverty line⁸ of the affected HHs has been considered up to BDT 6,840 per month for the HHs size of 3.12⁹ people. The income level of the affected people in the project area is very good and only two HHs are found below the poverty line in terms of income (Table-8). These HHs will be eligible for special support as per RAP of the project.

Table 8: Income and expenditure ration of HHs

| Income & Expenditure Range (Monthly) | Income | | Expenditure | | Remarks |
|---|-----------|---------|-------------|---------|---------|
| | Frequency | Percent | Frequency | Percent | |

⁸According to Bangladesh Bureau of Statistics (BBS) the upper poverty line for HH size of 4.41 in 2011 was Tk. 6,626 per HH/month. Acknowledging the national inflation rates by BBS based on consumer price for the country (Average 6.5% per year for 6 years up to 2017) and an average HH size for the affected population being 3.12, BDT 6840 income per HH/month has been adopted as the 2017 poverty line for the project. Therefore HHs with average income up to BDT 6840 per month or BDT 82,000 per year is considered to be living under the poverty line

⁹Household members are not always fully identified during census and socioeconomic survey since none of them are physically displaced. In some time neighbors have provided information of the land/trees /crops owners therefore, all of the HH members are not always enlisted during the survey. The household size and poverty line would be re-fixed during updating of the RP

| | | | | | |
|-----------------|-----|-------|-----|--------|-------------------------------------|
| Upto 6,840 | 6 | 0.92 | 5 | 0.77 | As per Project area Poverty line |
| 6,840-8200 | 25 | 3.85 | 21 | 3.23 | |
| 8,200-10,000 | 71 | 10.92 | 79 | 12.15 | |
| 10,001 – 20,000 | 312 | 48.00 | 382 | 58.77 | |
| 20,001 – 30,000 | 145 | 22.31 | 118 | 18.15 | |
| 30,001 – 40,000 | 49 | 7.54 | 15 | 2.31 | |
| 40,001 – 50,000 | 14 | 2.15 | 3 | 0.46 | |
| Above 50,000 | 28 | 4.31 | 27 | 4.15 | |
| Total | 650 | 100 | 650 | 100.00 | |

Source: Census and SE survey, June-July, 2017

2.2.8 Occupation Pattern

27. Among the affected people, businesses and services appear to be the main occupations (26.74%). Among the male population, most of the eligible and capable members are involved in income generating activities. Female are mostly housewife and also involved in allied activities focusing on maintaining the home and families. As per the socioeconomic survey (June-July 2017) 2.27% male and 1.23% female are found to be totally unemployed. Income and livelihood restoration program can enhance capacity of the people particularly female and vulnerable people for doing more income generating activities.

Table 9: Principal occupation of the affected population in the Project area

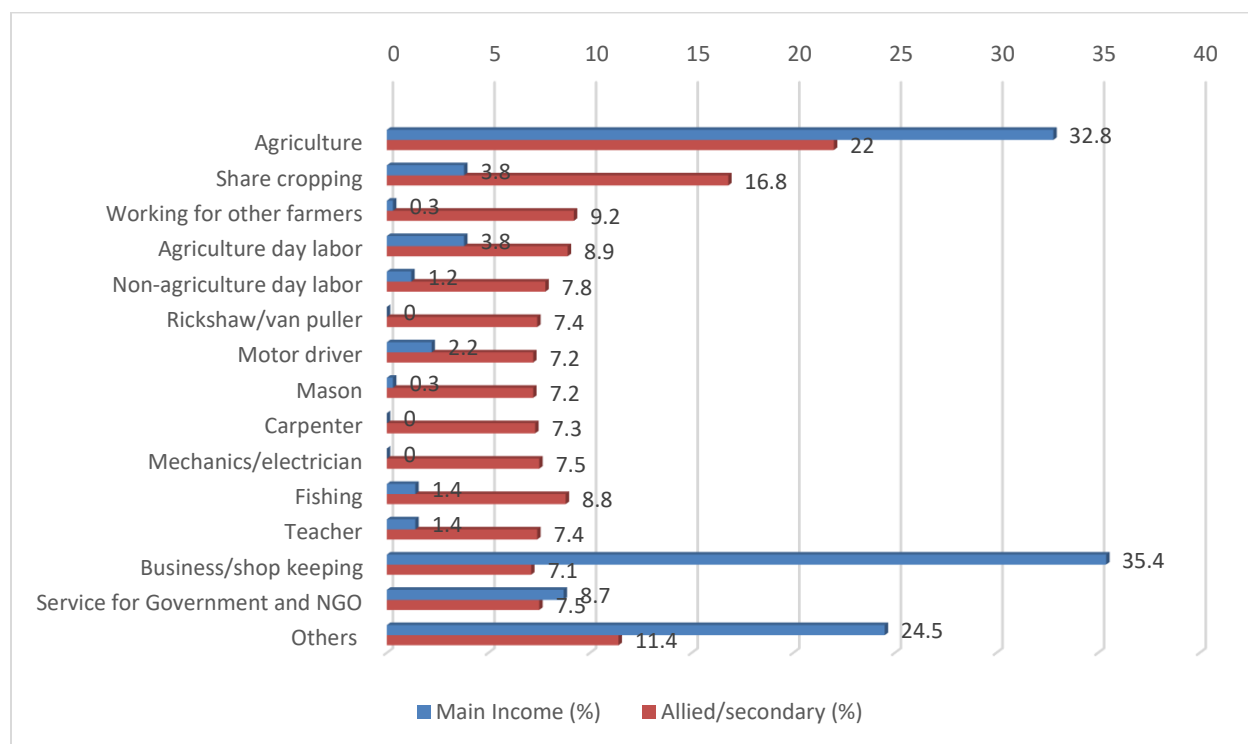
| Sl. No | Occupation | Male | | Female | | Total | |
|--------|----------------------|------|-------|--------|-------|-------|-------|
| | | No | % | No | % | No | % |
| 1 | Service | 241 | 11.89 | - | - | 241 | 11.89 |
| 2 | Business | 301 | 14.85 | - | - | 301 | 14.85 |
| 3 | Day Labor | 56 | 2.76 | - | - | 56 | 2.76 |
| 4 | Agriculture | 137 | 6.76 | - | - | 137 | 6.76 |
| 5 | Boatman | - | - | - | - | - | - |
| 6 | Motor driver | 25 | 1.23 | - | - | 25 | 1.23 |
| 7 | Carpenter | 3 | 0.15 | - | - | 3 | 0.15 |
| 8 | Mason | 5 | 0.25 | - | - | 5 | 0.25 |
| 9 | Electrician | 1 | 0.05 | - | - | 1 | 0.05 |
| 10 | Housewife | - | - | 468 | 23.09 | 468 | 23.09 |
| 11 | Unemployed | 46 | 2.27 | 25 | 1.23 | 71 | 3.50 |
| 12 | Student | 337 | 16.63 | 101 | 4.98 | 438 | 21.61 |
| 13 | Medical practitioner | 3 | 0.15 | - | - | 3 | 0.15 |
| 14 | Layer | 1 | 0.05 | - | - | 1 | 0.05 |

| Sl. No | Occupation | Male | | Female | | Total | |
|--------|------------|-------|-------|--------|-------|-------|--------|
| | | No | % | No | % | No | % |
| 15 | Others | 65 | 3.20 | - | - | 65 | 9.43 |
| 16 | Child | 80 | 3.94 | 124 | 6.14 | 204 | 3.85 |
| 17 | Disabled | 8 | 0.39 | - | - | 8 | 0.39 |
| | Total | 1,309 | 64.56 | 718 | 35.44 | 2,027 | 100.00 |

Source: Census and SE survey, June-July, 2017

2.2.9 Economic Activities of PAPs

28. The survey identified that business and agriculture are the main occupation of the PAPs. On the other hand the figure-4 below shows that share cropping and agriculture are the allied/secondary income sources of the affected people whereas women are also connected to such activities along with household chores.



Source: Census and SE survey, June-July, 2017

Figure 4 Economic Activities of Eligible PAPs

2.2.9 Dependence

29. Among the affected people (2027), only 838 are earning income and remaining 1189 members are depending on them. Taking into consideration the total affected population, one wage earner must support 1.41 dependents. The survey identified no women engaged in any service group resulting they are some dependent to male. But, for men, the

dependency statistic would be 1.56 respectively. In table-5, shows the detailed of dependency rate of the PAPs.

2.3 Poverty and Gender

2.3.1 Overview

30. The socioeconomic survey revealed that no women are engaged in any generating activities particularly rather allied activities. Housewife is the main occupation in case of capable women (more than 18 years). Since the project alignment crosses the mostly rural area, the income opportunity of women is very low. It was found during the survey that male household members remain reluctant to have adult female household members engage in outside work and services.

2.3.2 Vulnerable Groups

31. The census data show that 188 households are within the vulnerable category. Out of vulnerable households, 48 are female headed HHs, 130 are elderly (>60 yrs.) male-headed HHs, six are under the poverty line, and four are disable male HHs. As defined in this RAP, the vulnerable HHs will be eligible for special resettlement benefits in order to help maintain their livelihoods once the project work begins.

| Table 10: Type of Vulnerability Type of Vulnerable household | Number | Percentage |
|--|--------|------------|
| Female headed household | 48 | 25.53 |
| Elderly age 60+ Male headed household | 130 | 69.15 |
| Male headed under poverty line | 6 | 3.19 |
| Disable Male headed HHs | 4 | 2.13 |
| Total | 188 | 100 |

Source: Census and SE survey, June-July, 2017

3. LAND ACQUISITION AND OTHER IMPACTS

3.1 Overview

32. Census and IOL were conducted to determine the overall impact of the project. Both private and government lands are to be acquired for thirteen GIS substations and total 883 no. towers¹⁰ will be erected for the engineering construction of the project. The project avoided physical displacement during designing of the project. In case of impact on premises, local PAPs were consulted to find an alternative place to elude avoid physical displacement and impacts on any structures.

3.1 Scope of Land Acquisition

33. The project will require the acquisition of 86 acre land for the twelve substations. Out of the total land, 75 acres are private land and 11 acres are Govt. land. The Mirsharai substation is on the new Char land which was acquired by Bangladesh Economic Zone Authority (BEZA) under World Bank funded project. Such government lands will be inter-ministerial transfer as per government rule. The proposed land for acquisition is null category and being used for agricultural purpose. Compensation of the private and government land has been provisioned in this RAP. By law, the Deputy Commissioner will pay compensation for all categories of land to be permanently acquired or temporarily taken for the project following the Acquisition and Requisition of Immovable Property Ordinance (ARIPO) 1982 and subsequent amendment until 2017. A Property Assessment and Valuation Committee (PAVC) will determine the final replacement cost for acquired land during the implementation of the RAP. This RAP includes replacement costs based on tax roll data and market survey for the land shown in Table-11.

Table 11: Land by GIS Locations; permanently acquired (in Acre)

| Sl. no | Location of the Substations (District) | Substation Name | Land to be acquired (in Acre) | | Type of land |
|--------|--|---|-------------------------------|------------|--------------|
| | | | From Private Owners | Govt. Land | |
| 1 | Noakhali | 230/132 kV: Chowmuhoni GIS 3x250/350MVA | | 5.00 | Null |
| 2 | Chandpur | 230/132 kV: Kachua GIS 2x250/350MVA | 5.00 | | Null |
| 3 | Comilla | 132/33 kV: Muradnagar GIS 2x80/120 MVA | 5.00 | | Null |
| 4 | Comilla | 132/33 kV: Lakhsam GIS 2x80/120 MVA | 2.00 | | Null |
| 5 | Noakhali | 132/33 kV: Maijdee GIS 2x80/120 MVA | 5.00 | | Null |

¹⁰ As per ESA report of this project

| Sl. no | Location of the Substations (District) | Substation Name | Land to be acquired (in Acre) | | Type of land |
|--------|--|---|-------------------------------|------------|--------------|
| | | | From Private Owners | Govt. Land | |
| 6 | Chittagong | 132/33 kV: Patiya GIS 2x80/120 MVA | 5.00 | | Null |
| 7 | Comilla | 132/33 kV: Chandina GIS 2x80/120 MVA | 2.00 | | Null |
| 8 | Chittagong | 132/33 kV: Anand Bazaar/ New Mooring GIS 3x80/120 MVA | 20.00 | | Null |
| 9 | Noakhali | 132/33 kV: Basurhat/Daganbhuiyan GIS 2x80/120 MVA | 2.00 | | Null |
| 10 | Laxmipur | 132/33 kV: Laxmipur GIS 2x80/120 MVA | 5.00 | | Null |
| 11 | Brahmanbaria | 132/33 kV: Kosba GIS 2x80/120 MVA | 5.00 | | Null |
| 12 | Chittagong | 400/230/132kV : Korerhat GIS, 2x1000 MVA, 2x325 | 19.00 | 6.00 | Null |
| Total | | | 75.00 | 11.00 | |
| | | | 86.00 | | |

Source: Census and IOL survey, June-July, 2017

34. Apart from the above 12 substations, another substation at Mirsharai will be established on government land which was acquired under a project of Bangladesh Economic Zone Authority (BEZA) and financed by WB. This land will be transferred to the PGCB by the BEZA under an Inter-Ministerial agreement. .No social negative impact was identified there.

3.1.1 Affected People Title and Non-Title Holders Loosing Land

35. During census and socioeconomic survey the consultant has collected information of the land owners from two different sources. Firstly they collected recorded owners of the land from the Tahsil Office at Upazila and Union Level. They have also collected information from the land owners readily available at ground using structured questionnaire. According to the information collected from Tahsil office a total of 185 land owners were identified among which 101 people were found available at site. Socio-demographic information and impacts were collected through interview of the 52 land owners at the field level. Some of the land owners were reluctant to provide their land information since the notice under section 3 by the DC office is not yet served. They will provide all information during LA process. Among the identified land owners, 24land owners will lose more than 30% land and another 28 less than 30% land

Table 12: Affected Title and Non-Title Holders

| Name of Substations | A. Number of Title Holders Loosing Land (% of the total holdings) | | B. Number Of Non-Title Holders Loosing Land (% of total holdings) | | Total | Total |
|---------------------|---|-----------|--|----------|-----------|----------|
| | < 30% | >30% | <30% | >30% | A | B |
| Basurhat GIS | 3 | 0 | 0 | 0 | 3 | 0 |
| Chandina GIS | 2 | 5 | 0 | 0 | 7 | 0 |
| Kochua GIS | 2 | 4 | 0 | 0 | 6 | 0 |
| Korerhat GIS | 4 | 13 | 0 | 0 | 17 | 0 |
| Kosba GIS | 1 | 2 | 0 | 0 | 3 | 0 |
| Laxmipur GIS | 7 | 0 | 0 | 0 | 7 | 0 |
| Laxsham GIS | 1 | 0 | 0 | 0 | 1 | 0 |
| Maijdee | 2 | 0 | 0 | 0 | 2 | 0 |
| Muradnagar GIS | 4 | 0 | 0 | 0 | 4 | 0 |
| New Mooring GIS | 2 | 0 | 0 | 0 | 2 | 0 |
| Total | 28 | 24 | 0 | 0 | 52 | 0 |

Source: Census and IOL survey, June-July, 2017

3.1.2 Impact on Employee/Labor in Connection with Land

36. As per the census, no employee was identified in connection with this land who are working as full time employee for the proposed land parcels. As per the field information, required labors are contracted by land owners as day laborer for a short period during seed cultivations and harvesting period. So they will not be permanently affected by acquisition of land as they have available such work opportunities during cultivation and harvesting period.

3.1.3 Impact on Sharecroppers in connection with land

37. A total 21 sharecroppers were identified by the census. As per the field information, they have been working on the proposed acquired land for these substations (table-12) for an average 2.5 years. The sharecroppers will be affected after acquisition of land by losing their

work opportunities permanently as they do not have any secondary income source. The affected sharecroppers will be entitled to have compensation and resettlement assistance as per the provision of policy adopted in this project. To ensure entitlement, the sharecroppers will have to ensure and submit legal agreement papers.

Table 13 Affected number of the Sharecroppers

| Sl. No. | Sub-Station | No. of Sharecropper |
|---------|----------------|---------------------|
| 1. | Kosba GIS | 10 |
| 2. | Korerhat GIS | 4 |
| 3. | Muradnagor GIS | 5 |
| 4. | Laxmipur GIS | 1 |
| 5. | Maijdee GIS | 1 |
| | Total | 21 |

Source: Census and SE survey, June-July, 2017

3.1.4 Lose of Trees

38. The Project will also require removal of trees of various sizes and species. The CSS and IOL survey found varieties of trees only on transmission line area. Total numbers of affected trees on transmission line area together in the Project area by category are presented in Table 11. Total numbers of affected trees are 23,753. The highest number of trees is found under timber (9,305) category followed by fruit trees (7,503) and bamboo (6,836) in the Project area. Out of the total number of affected trees, 12,055 are large, 5900 are medium, 4,641 are small, and 1,157 are plant. Size of trees has been determined based on the girth category by considering species but the Department of Forest (DoF) will further assess it during the land acquisition process. All the APs will receive compensation for the trees and fruits. Also, they will be able to take away the timber. APs will get also additional compensation for fruit-bearing trees.

Table 14: Lose of trees by category

| Type of tree | No | Percentage | Large | Medium | Small | Plant | Total |
|---------------|-------|------------|-------|--------|-------|-------|-------|
| Fruit bearing | 7,503 | 31.59 | 4,437 | 1,517 | 939 | 610 | 7,503 |
| Timber | 9,305 | 39.17 | 2,257 | 3,408 | 3,093 | 547 | 9,305 |
| Firewood | 97 | 0.41 | 68 | 13 | 16 | 0 | 97 |
| Medicinal | 12 | 0.05 | 9 | 0 | 3 | 0 | 12 |

| Type of tree | No | Percentage | Large | Medium | Small | Plant | Total |
|--------------|--------|------------|--------|--------|-------|-------|--------|
| Bamboo | 6,836 | 28.78 | 5,284 | 962 | 590 | 0 | 6,836 |
| Total | 23,753 | 100.00 | 12,055 | 5,900 | 4,641 | 1157 | 23,753 |

Source: Census and IOL survey, June-July, 2017

3.1.5 Lose of Crops

39. It is already mentioned earlier that all 86 acre of the affected land to be acquired is agricultural/cropped land. During the stinging of the transmission line, 804 acre land will be temporarily affected losing different crops. A LILO of 400 KV DC Korerhat to BSRM-TL has been designed with 29 towers from which eight towers are within the deep forest area where the survey team could not reach due to security reason and non-availability of network signal. Crops will be affected by the cultivators both land owners and sharecroppers in the substation areas and transmission lines. Sharecroppers will be entitled to have compensation and other benefits as per policy of the RAP.

40. Crop compensation for the land to be acquired and temporarily used is also considered in the budget of this RAP. The total land area being considered for crop loss is 360.32 ha from which 34.82 ha will be acquired and 325 ha (325km X 10m width) will be temporarily used for the transmission line. Farmers will not be able to cultivate crops for twice or thrice due to nature of the construction of the transmission line. Therefore compensation has been assessed for three times of the crop value for the temporary used land. If the crop is not damaged during construction, compensation will not be paid. If the crop is at or near harvesting period the crop owners will be allowed to harvest the crops. Details of loss of crop area are presented in Table- 15.

Table 15: Details of affected crop area

| Particulars | Area (Acre) | Area (ha) |
|------------------------------------|-------------|-----------|
| Affected Crop Area (Acquisition) | 86 | 34.82 |
| Affected Crop Area (Temporary use) | 804 | 325.50 |
| Total | 890 | 360.32 |

Source: Census and IOL survey, June-July, 2017

3.1.6. Affected Common Property Resource

41. Five CPRs including two Mosques, two Masrasha, and a School will be affected in the transmission line by the project interventions by losing only trees. None of the CPRs will lose

their structure due to the project. Therefore no CRP needs to be relocated. The Management committee will authorize someone (President or Secretary) to receive compensation cheques on behalf of the CPR.

Table 16 Name of the CPR and Affected entities:

| Sl. NO. | Name of the CPR | Affected Properties | Area/District |
|---------|---------------------------------|---------------------|---------------|
| 1 | Soralidegirpar Jame Mosque | Tree | Brahmanbaria |
| 2 | Rashidia amdadul Ulum madrasha | Tree | Noakhali |
| 3 | Kala Muria Praimari School | Tree | Chittagong |
| 4 | Nobogram Uttorpara Jame Mosque | Tree | Noakhali |
| 5 | Madrasah Jamea Karemia Noakhali | Tree | Noakhali |

Source: Census and IOL survey, June-July, 2017

3.5 Temporary Disruption of Structures during Stinging of Transmission Line

42. As per the IOL survey, 119 Private structures will be disrupted by the project during stinging of the transmission line. Although these structures will not be dismantled since there will be no land acquisition during stinging of the wires, these will be temporarily disrupted and HHs will experience trouble within 10meter area (to be used for transmission line). No structures are found within the tower base but all are in between towers. Nature of impact and compensation to be entitled for temporary disruption will be assessed by PAVC. In case of changing of the alignment of transmission line during construction stage or any structure is affected by the project interventions, the RAP will be updated addressing the changes to be taken place. Table-17 shows the numbers of structures fallen within theright of way.

Table 17 No. of structures within right of way

| Sl. No. | Transmission Line | Category of Private Structure with ROW (10 meter) | | | | Total Structures |
|---------|------------------------|---|------------------------------|--------------------------|-----------------|------------------|
| | | Pacca (Pacca+Pacca+Pacca) | Semi Pacca (Tin+Pacca+Pacca) | Tin Made (Tin+Tin+Kacha) | Kacha/T hatched | |
| 1 | Maijdee To Chowmohoni | 4 | 3 | 1 | 1 | 9 |
| 2 | Laxmipur To Chowmohoni | 3 | 3 | 1 | 0 | 7 |
| 3 | Korerhat | 0 | 1 | 3 | 0 | 4 |
| 4 | Korerhat To Chowmohoni | 7 | 7 | 4 | 2 | 20 |
| 5 | Laxsham To Kochua | 5 | 3 | 2 | 0 | 10 |

| Sl. No. | Transmission Line | Category of Private Structure with ROW (10 meter) | | | | Total Structures |
|---------|----------------------|---|------------------------------|--------------------------|-----------------|------------------|
| | | Pacca (Pacca+Pacca+Pacca) | Semi Pacca (Tin+Pacca+Pacca) | Tin Made (Tin+Tin+Kacha) | Kacha/T hatched | |
| 6 | Chowmohoni To Kochua | 10 | 12 | 6 | 2 | 30 |
| 7 | Kochua To Gozaria | 6 | 7 | 6 | 2 | 21 |
| 8 | Muradnagar To Kosba | 2 | 6 | 3 | 0 | 11 |
| 9 | Chandina | 1 | 2 | 1 | 0 | 4 |
| 10 | Potia | 0 | 1 | 2 | 0 | 3 |
| 11 | Bosurhat | - | - | - | - | - |
| Total | | 38 | 45 | 29 | 7 | 119 |

Source: Census and SE survey, June-July, 2017

3.6 Summary of Impact

43. The table beneath shows the summary of impact by the project on the people and local community. The details of summery have illustrated previously by sector.

Table 18: Summary of Impact

| Sl. No. | Categories of loss | Unit | Sub Station | Trans-Mission line | Total |
|---------|---|------|-------------|--------------------|--------|
| A | Acquisition of Land for the project | Acre | 86 | 0 | 86 |
| A1 | Acquisition of Private Land for the project | Acre | 75 | 0 | 75 |
| A2 | Acquisition of Govt. Land for the project | Acre | 11 | 0 | 11 |
| A3 | Temporarily Use of Land | Acre | 0 | 804 | 804 |
| B | Total length of alignment | Km | 0 | 325 | 325 |
| C | Loss of Crop Area due to both Acquisition and Temporary use | Acre | 86 | 804 | 890 |
| C1 | Affected Crop Area (Acquisition) | Acre | 86 | 0 | 86 |
| C2 | Affected Crop Area (Temporary use) | Acre | 0 | 804 | 804 |
| D | HHs losing trees only | No. | 0 | 23753 | 23,753 |
| E | Affected CPR | No. | 0 | 5 | 5 |
| F | Temporary disruption of structures during stinging of transmission line | No. | 0 | 119 | 119 |
| G | Affected Households (HHs) | No. | 52 | 598 | 650 |
| G1 | Affected Male Headed HH | No. | 45 | 557 | 602 |
| G2 | Affected Female Headed HHs | No. | 7 | 41 | 48 |
| H | Project Affected Persons (PAPs) | No. | 205 | 1822 | 2,027 |

| Sl. No | Categories of loss | Unit | Sub Station | Trans-Mission line | Total |
|--------|---------------------------------------|------|-------------|--------------------|-------|
| H1 | Male PAPs | No. | 126 | 1183 | 1,309 |
| H2 | Female PAPs | No. | 79 | 639 | 718 |
| I | Average HH Size | No. | 3.94 | 3.05 | 3.12 |
| J | Vulnerable Households | No. | 20 | 168 | 188 |
| J1 | Female headed household | No. | 7 | 41 | 48 |
| J2 | Elderly age 60+ Male headed household | No. | 13 | 117 | 130 |
| J3 | Male headed under poverty line | No. | 0 | 6 | 6 |
| J4 | Male HH with disability | No. | 0 | 4 | 4 |

Source: Census and SE survey, June-July, 2017

4. CONSULTATION, DISCLOSURE AND PARTICIPATION

4.1 Overview

44. A wide range of stakeholders was informed of details of the project and possible adverse impacts related to land acquisition and involuntary resettlement. Timing, frequencies, and topics were different from stakeholders to stakeholders according to their degree of involvement, positions, and responsibilities. The potential stakeholders were identified during personal contact with people. Influential community persons and PAPs were closely consulted. Views of these stakeholders were incorporated properly.

4.2 Venue and Nature of Participants of the Consultation Meetings

45. A total of 25 consultation meetings were conducted with the project affected people and other stakeholders at different locations in the substation surrounded areas and along the transmission lines. In total, 257 persons participated in the consultation meetings, of which 242 are male and 15 are female. It is to be noted that the consultation meetings were held in the open place including Bazaar areas where female do not usually attend the meetings. The venues of the meetings were selected by the participants. The female was personally consulted during questionnaire survey in absence of senior male members of the family. Table-19 presents the details of venue, date & time, gender, and nature of participants.

Table 19: Venue and Nature of the participants

| SL. No. | Date and time | Location of meetings | Type of Participants | Number of participants | | |
|---------|------------------------------------|--|---|------------------------|--------|-------|
| | | | | Male | Female | Total |
| 1 | Date: 15-06-2017 Time: 11.30 am | Anandabazar, Chittagong. | Businessman. | 5 | 0 | 5 |
| 2 | Date: 05-07-2017 Time: 1.00 pm | Amzurhat, Patiya, Chittagong | Businessman. | 9 | 0 | 9 |
| 3 | Date 04/7/2017 5.30 pm | Anandabazar, Chittagong. | Businessman, Ward Councillor | 9 | 0 | 9 |
| 4 | Date: 05-07-2017 Time: 2.30 pm | Lilir Char Bodli Para Mirsharai, Chittagong. | Fisherman. | 9 | 0 | 9 |
| 5 | Date: 05-07-2017 Time: 5.00 pm | Buria, Korerhat, (Mirsharai) | Business, Mechanic, Service, farmer, Student, Teacher | 10 | 0 | 10 |
| 6 | Date: 17-06-2017 Time: 9.15 am | Sonapur Noakhali. | Housewives, Rickshaw puller, Business, service | 4 | 10 | 14 |
| 7 | Date: 18-06-2017 Time: 10.30 am | Atiatoli Laxmipur | Business, Service, farmer, Student. | 7 | 0 | 7 |

| SL. No. | Date and time | Location of meetings | Type of Participants | Number of participants | | |
|---------|----------------------------------|---|---|------------------------|--------|-------|
| | | | | Male | Female | Total |
| 8 | 07-7-2017 3.30 pm | Uttar Durgapur Chandroganj Laxmipur | Driver, business, farmer, student, day labourer | 10 | 0 | 10 |
| 9 | Date:19-06-17 Time:3.00 pm | Kosba, Brahman Baria. | Business, Service, farmer, Student. | 9 | 0 | 9 |
| 9 | 05/7/2017 3.30 pm | Chandina, Comilla. | Business, services, labourer, agriculture | 10 | 0 | 10 |
| 10 | Date: 5/07/2017 3.30 pm | Kochua, Chandpur. | Business, Service, farmer, Student. | 12 | 0 | 12 |
| 11 | Date: 5/07/2017 12.30 pm | Laksam, Comilla. | Business, Agriculture | 12 | 0 | 12 |
| 12 | Date: 05-07-2017 Time:2.30 pm | Muradnagar, Comilla. | Farmer, Business, Service, Housewife, Student. | 20 | 3 | 23 |
| 13 | Date:18-06-2017 Time:10.30 am | Dagonbhuiyan | Business, service. | 5 | 0 | 5 |
| 14 | Date 10-07-2017 Time 4.00 pm | Begumganj | Business, Farmer, day Laborer | 9 | 0 | 9 |
| 15 | Date:8-07-2017 Time:3.30 pm | Joypur Purbo Joar, Chittagong. | Business, Farmer, Teacher | 11 | 0 | 11 |
| 16 | Date:8-07-2017 Time:2.15 pm | Boroyea Chittagong. | Business, Farmer, Student | 08 | 0 | 08 |
| 17 | Date:8-07-2017 Time:2.00pm | Poschim Joyar Chittagong. | Business, Farmer, Driver | 06 | 0 | 06 |
| 18 | Date:8-07-2017 Time:5.30pm | Habilder Basha Chittagong. | Business | 07 | 0 | 07 |
| 19 | Date:6-07-2017 Time:5.30pm | Atyatoli Lokkhipur | Business, Farmer, day Laborer | 11 | 0 | 11 |
| 20 | Date:8-07-2017 Time:12.00pm | Datto Barir More, Noakhali | Business, Farmer, Student | 10 | 0 | 10 |
| 21 | Date:8-07-2017 Time:4.30pm | Uttor Najirpur, Noakhali | Business, Farmer, Service, Driver, | 09 | 0 | 09 |
| 22 | Date:9-07-2017 Time:11.30am | Ananta Pur , Noakhali | Housewife, farmer, day Laborer, Auto Driver, Service. | 08 | 02 | 10 |
| 23 | Date:9-07-2017 Time:2.00pm | Gopinath Pur, Noakhali | Business, Student, Service, driver, Contractor, Rickshaw Puller | 10 | 0 | 10 |
| 24 | 11.07. 2017 Time 11.50am | Habildar Basha, Joraganj (Mirsharai), CTG | UP Chairman, Member, Business | 12 | 0 | 12 |
| Total | | | | 232 | 15 | 247 |

4.3 Issues Identified by Stakeholders

46. By the consultation meetings, the identified positive and negative impacts are pointed out below;

47. Identified Positive Impacts:

- Electricity service, especially in sub-station surrounded area would enhance
- Different local business would emerge
- Displacement of houses or business premises will not take place
- Livelihood will not be disturbed
- Local employment would increase
- Irrigation system would develop by supplying uninterrupted electricity
- New industries will be established and income opportunities will be created
- Economic activities would be much better
- Income and livelihood opportunities would increase due to project intervention.
- The standard of living will be high.

48. Identified Negative Impacts:

- A large amount of private land will be acquired for sub-stations
- Sharecroppers will be affected by losing employment due to acquisition of agricultural land
- Owners of Laximpur GIS area were reluctant to give up their land due to the installation of a new brick chimney.
- Owners of Korerhat area opposed to providing proposed land for GIS substation due to losing fertile land of the village
- Owners of Patiya area were also reluctant to give up the proposed land for GIS substation and even opposed to providing any SES data
- Cultivation will not be possible with a tractor which will be under electric towers.
- Land will be used for tower permanently but compensation will be provided for only crops
- Construction of multi-storied building will be restricted to the transmission lines
- Land value would decrease
- Temporary compensation for permanent loss in case of tower location
- Electric sub-station reaction may be harmful to the health of the local people
- Orchard will be destroyed due to the project
- High risk for living, business, and even agricultural activities under high voltage transmission line

- Local people are not fully aware of the project interventions, potential impact and mitigation measures

4.3.1 Change of sub-station Locations

Laxmipur GIS

49. The proposed location for Laxmipur GIS (Figure-5) is within an established Brickfield on that land. During the consultation meeting, the owner strongly recommended shifting the location of the substation as his business is going to be destroyed. Shutting down the brickfield will result in unemployment of local workers too. Additionally, the owner mentioned his future investment which is already in line for the extension of the brickfield. Considering these issues and recommendations the location of the substation has been shifted as per stakeholders consultation. The figure shows recommended GIS location (in red box) instead of previously proposed location (in Yellow box)



Figure 5 Previous and newly Proposed Location for Laximipur GIS

Patiya GIS, Chittagong

50. Substation location of Patiya has been changed thrice for the land owner's unwillingness. Land for the proposed Patiya GIS substation is owned by the single family. During consultation meeting, they raise two points and urged to shift the location of the substation. First reason, since a large quantity of land was acquired for Dhaka-Chittagong Highway they do not want to lose any more land again. Secondly, the land of the selected location (yellow box) is used as bed-seed for the paddy cultivation since its comparatively upper land than the surroundings. As a result, they recommended some other land except this one. Finally, PGCB shifted the location to the new one shown in the red box that is far from the previous one. Land owners of the new location also refused to provide any information later Government notice from DC office.



Figure 6 Previous and newly Proposed Location for Patiya GIS

Korerhat GIS, Chittagong

51. The substation location of the Korerhat has been changed to the opposite of the previous location. The yellow box (figure-7) shows the previous location of the substation which has been located on the highly fertile land of that local community. Major Rice supply of the local market is generated from that land which is the prime income source of most of the residents.

Local community gets three crops a year from that land. During consultation meeting, they sturdily suggested relocating the substation to the opposite side of the road which is shown in the redbox. The newly proposed land is less fertile than before. Newly proposed areas are single or double-cropped whereas primarily selected land was multi-cropped or commercially used land.



Figure 7 Figure-Previous and newly Proposed Location for Korerhat GIS

4.4 Description of Consultations

52. Consultations were held with the different stakeholders such as local leaders, farmers, businessman, service holder, housewives, day laborers, etc. In the consultation meetings, discussions held on the project description, the scope of the project, social safeguard issues, probable impacts and mitigation measures about the project, etc. Professionals of KMC participated in the consultation meeting and responded to the questions of the participants. Apart from the consultation meetings, some group discussions were also held with various

occupational groups along the transmission lines. The opinion of the people will be reflected in the Resettlement Action Plan (RAP).

Table 20: Summary of Issue Raised and Minimization

| SL | Issue | Questions/Comments of the participants | Responses |
|----|-------------------------------|--|---|
| 1. | Time frame of the Project | When the project will start | The assessment of this project is going on. Power Cell will start the field implementation of the project after finalization of assessment and agreement as required |
| 2. | Information about the project | Why the information of the project was not disseminated previously | Engineering activities have been done for selection of the substation sites and transmission line. Now social & resettlement activities are being carried out. To make aware of the local people firstly consultation meetings are being conducted and after that HH census and survey will be carried out among the potentially affected people. Such consultation will be continued during implementation o the project. |
| 3. | Project impact | What is impact of this project | Every project has some sort of positive and negative impacts. For the negative impacts, some people have to sacrifice for a bigger interest of the country. The project will acquire private agricultural land for the substations, but no displacement will take place. Along the transmission line only crops, trees, etc. will be affected. There may be the impact on income and livelihood of the land owners at substations but such impact will not take place in the transmission line. |
| 4. | Location of Tower | How tower locations will be compensated | Land for tower location will not be acquired, as these lands will be affected temporarily so only compensation for affected trees and crops will be provided. |
| 5. | Location of Tower | Whether the tower destroy any structures | The tower location will have no impact on any structures since |

| SL | Issue | Questions/Comments of the participants | Responses |
|-----|----------------------------|--|--|
| | | | the transmission line will be passing through cropping field. |
| 6. | Location of Land | Stakeholders suggested about two locations for the substation. One is on the south side of the current location, and another is in the north western side of the present location. Because ninety percent of required land for substation are publicly owned. As these lands were occupied by CWASA before, but the verdict has been given in favor of the local people. They are now waiting for gazette to publish. Some people have already mutated their land. | The location is almost finalized by a team of professionals based on engineering point of view. But people's opinion will be taken in to account. People's opinion will be brought to the notice of the project authority for further consideration. But it is to be noted that compensation will be paid for the acquired land as per policy of the World Bank. |
| 7. | Land selection | What will be the consequence if people are not willing not give their land for the project | As per Bangladesh government law, landowners are bound to give their land to Bangladesh government if it is required. So, project authority will give proper compensation as per Bangladesh government and World bank policy. |
| 8. | Change of Project location | Whether there is any chance for change of the project location | Different assessments are being carried out to select a feasible site, probably this is final assessment so, the site will not be not be changed since there is no impact on the settlement by the site. |
| 9. | Substation location | The land owners requested to change the proposed site of substation to another adjacent location | The project location has been selected based on engineering survey. In spite of that people's opinion will be taken care of and substation location may be changed to minimize adverse impacts. |
| 10. | Substation Location | The land owners of this area strongly recommended shifting the location to the opposite side of the road, because those selected lands are the major source of crop production of this union. Establishment of the substation will not only hamper the food supply chain but also many farmers will be unemployed. The newly | Since the present location is multi cropped private land and local people are very much reluctant to give this land and there is another alternative land (only 300 meter west) which is single cropped and a bit high land, so the location may be changed. The issue will be forwarded to the project authority for making decisions. |

| SL | Issue | Questions/Comments of the participants | Responses |
|-----|---------------------|--|--|
| | | proposed location is vested property | |
| 11. | Substation Location | Additionally, they proposed two sites one at northern west and another at the southern west site of the of the present substation location, adjacent to Feni River side. Those lands are mainly govt. the land where the acquisition is not required and even if needed the compensation amount would be less than the previous. | Both of the newly proposed sites will be analyzed and shared with the project authority for selecting one of the two alternative locations. |
| 12. | Survey | Why the survey is being conducted | By the survey, the overall impact of the project on the people will be assessed. Based on the assessment, a resettlement action plan (RAP) will be prepared to mitigate negative impacts |
| 13. | Survey | Who is doing this survey | Knowledge Management Consultants (KMC) Ltd has been appointed to conduct the census and IOL survey on behalf of the PGCB |
| 14. | Survey | Who will be included in the survey | The HH will be affected due to sub station and transmission line including tower location for land, business trees, crops, they will be included |
| 15. | Survey | With whom the survey will be conducted | The affected people losing land, trees, crops, business or any other assets due to the project will be covered by the survey |
| 16. | Survey | Who is conducting the survey and with whom | KMC Ltd. a social consulting firm has been appointed by power-cell is conducting the survey. Affected people losing land, trees, crops, and business are being covered in the survey. |
| 17. | Land acquisition | If there is any land acquisition by the project | Yes, land will be acquired for sub-stations only. |
| 18. | Land Estimation | How much land will be acquired for the project | About 86 acres land will be acquired for 13 sub-stations under the project. |
| 19. | Land dispute | What will happen in case of disputed land | Compensation will be paid the legal title holders, but in case of any dispute, compensation will be not paid until resolved by court |

| SL | Issue | Questions/Comments of the participants | Responses |
|-----|---|---|---|
| 20. | Land acquisition | What will happen for tower location | Temporary compensation will be given for using land, crops, and trees |
| 21. | Land Relocation | According to the location on the map, there are few plots owned by the local people which is high land used for seedbed. If that land is acquired, the owners will be highly affected. So they suggested shifting the location of the substation to adjacent cropped lands. | Suggestions will be forwarded to the Project authority. Hopefully, the site will be changed considering the facts. |
| 22. | Compensation | Who will get compensation | The affected persons for losing land, crops, trees or any other assets will get compensation |
| 23. | Compensation measurement | What is the measurement process of compensation | Compensation is measured based on current market price following Bangladesh government law and World Bank resettlement policy. |
| 24. | Compensation Delivery process | Who will provide the compensation money | Power cell is responsible to pay compensation for the affected land and other assets through DC office and or with assistance from NGO/ Consulting firm. |
| 25. | Compensation Payment | When compensation will be paid | Compensation will be paid prior to takeover the possession. In this regard, people will have to update their record of rights to receive compensation at an early stage of land acquisition process. |
| 26. | Compensation for affected properties at Tower locations | How compensation will be assessed for affected properties at tower locations | Land for tower location will not be acquired, as these lands will be affected temporarily so only compensation for trees/ crops will be provided |
| 27. | Compensation | Which losses will be counted for compensation | The project will pay compensation only for affected land and other assets at substation areas. In the transmission line including tower locations compensation will be paid for only standing crops/tree. |
| 28. | Compensation for leaseholders | How the compensation will be given to the leaseholders | Compensation will be provided to the leaseholders in case of valid agreement and social recognition. |

| SL | Issue | Questions/Comments of the participants | Responses |
|-----|---------------------------------|---|---|
| 29. | Compensation | Who will provide them compensation | Power cell is responsible to pay compensation through DC office to the affected titled holders. Additional compensation and other resettlement benefits as per policy o the RAP will be paid through NGO or Consultant firm. |
| 30. | Compensation | As these lands are agricultural or primary production land, they were asking for good/decent price as compensation. | Compensation will be assessed as per current market price following GoB law and WB policy (OP 4.12) on are settlement policy. People will be able to purchase alternative lands with the compensation money. |
| 31. | Compensation | How land price will fix | It will be fixed based on current market price following GoB Law and WB policy (OP 4.12) on involuntary resettlement. |
| 32. | Payment of compensation | Who will pay compensation | DC will take all responsibility for final assessment and disbursement of compensation to tiled holders on behalf of the project. Additional compensation and resettlement benefits will be paid by the project with assistance from the NGO/ Consulting firm. |
| 33. | Compensation | If there is any compensation available for business obstruction in project construction period | Yes, compensation will be provided for business loss in case of displacement due to the project interventions. But that business premises would be in the IOL list. |
| 34. | Compensation for land | Whether there is any compensation for land | Yes, compensation will be given for the private land acquisition following the land acquisition law. |
| 35. | Compensation for Electric Tower | Whether there is any compensation for tower location | Tower location will be temporarily taken from the people during the construction period. So, compensation will be provided for crops, trees, etc. along 10 meter width right of way. |
| 36. | Compensation for crop | How will the compensation of cropgive during the implementation period | Compensation will be provided for loss of standing cropsfor each season considering types of crops. |
| 37. | Compensation for tree | What is the procedure to determine tree compensation | Current market price of trees will be provided as per the scheduled rate of Department ofForest. |

| SL | Issue | Questions/Comments of the participants | Responses |
|-----|--|---|--|
| | | | Trees owners will be allowed to fell and take away of the trees. |
| 38. | Compensation For Business loss | How will the compensation for loss of business be counted | If any business affected by the project then, the business owners will get grants business restoration. |
| 39. | Member of GRC | Who will be the member of GRC committee | GRC will be formed with the project officials, representatives of RAP implementing agency, local UP Chairman/Member/Councilor, affected people and women groups. |
| 40. | Compensation | The land price is very high in this area, whether the appropriate price will be given to the owner | Indeed, compensation will be given at replacement cost so that people can purchase alternative land with compensation money. |
| 41. | Compensation | As per GoB law affected land shall be compensated for its 3 times, what would the assessment process in the project | If the new law is approved, then the land price will be assessed for 3 times as compensation. The project will follow the land acquisition law of Bangladesh. |
| 42. | Compensation for Electric Tower | Whether there is any compensation for tower location | Tower location will temporarily affect the crops or trees, so compensation will be provided for crops, trees, etc. for 10x10 meter area. In the transmission line between one to another, compensation will be paid for the crops and trees as affected by the project activities. |
| 43. | Compensation for houses under Electric Cable (Transmission line) | Whether the houses under the electric cable will get any compensation | Yes, there is a certain clearance under the electric cable, if any house affected then the owner will get compensation. But the alignment is designed in such a way so that no houses will be affected by the transmission line. |
| 44. | Fish Compensation | Whether there is any compensation for fish as well as for pond | If there is any pond affected during land acquisition at substation area, compensation will be provided for fish stock. But under the transmission line, there will have no impact on the pond and fish stock. |
| 45. | Compensation for land at | Whether there is any compensation for land to be used at tower locations | Tower location will temporarily affect land and crops/trees. So, |

| SL | Issue | Questions/Comments of the participants | Responses |
|-----|--------------------------------|---|---|
| | Electric Tower locations | | land compensation will not be paid as per project policy. |
| 46. | Security | People requested to ensure proper security before the project starting | After ensuring the highest security and meeting all necessary requirements, the project will be initiated |
| 47. | Job Opportunity | Whether any job opportunity for the local people with the project | Certainly, firstly local people will be prioritized for working opportunity with the project. |
| 48. | Electricity /Power Improvement | As the area is declared as Mirsharai Economic Zone, people are hoping for electricity improvement early. | This project aims to improve present power supply system. So, there is a good chance for power improvement in this locality through this project. |
| 49. | Income Opportunity | If there will be any income opportunities for them in the Project area | The project will create an opportunity to work as unskilled daylaborer at the implementing stage of the project. Usually, local people particularly affected people will be preferentially deployed in project civil works. |
| 50. | Grievance | If any owner does not get appropriate compensation, then what will they do | A grievance redress committee (GRC) committee will be formed including local representatives to resolve any grievance in a participatory way. Any aggrieved person may apply to the GRC for resolving his /her claims. |
| 51. | Shifting of Sub-station | Their recommendation was to shift the substation location to the east side of the current location because there are unused lands owned by the government itself. | Although the substation location was selected by the Engineers on a technical point of view people's opinion will be taken into account. Changing of location is possible if new location has no resettlement impact and feasible on the social and technical point of view. So, people's suggestions will be forwarded to the project authority. |
| 52. | Outcomes of Project | How they will be benefited by the project | The power supply will be uninterrupted after the project is completed. So, economic activities will be more strengthened and people will be more benefited by the project. Local people will be getting preferential employment in the |

| SL | Issue | Questions/Comments of the participants | Responses |
|-----|---|---|--|
| | | | civil works based on their eligibility. |
| 53. | Relocation | Whether the project authority will provide resettlement facility for the people who will lose their assets | People will get compensation and resettlement benefits (where applicable) for their lost assets. No people will be displaced by the project, only agricultural/open land will be acquired by the project. |
| 54. | Work opportunity | Whether local people will be prioritized as worker during civil construction | Yes, local people will be prioritized to have work opportunity in the project. |
| 55. | Objective of the project | What will happen to the project | The project will install 13 substations and transmission lines in the eastern part of Bangladesh. In this way, electricity supply will be more strengthened and uninterrupted. |
| 56. | Funding source | What is the funding sources for this project | GoB and the World Bank |
| 57. | Drainage system | There is a water channel/ drain near the proposed substation location. People showed concern about the channel. | Sub-station will be built maintaining all social and environmental obligation, so there is no chance to block the water flowing channel. |
| 58. | Impact on Business | Whether there will be any problem due to the project for existing business | There will be no negative impact on local business due to the project. |
| 59. | Loss of wage labour | What will happen for wage labour for business loss | Affected wage labours will get also compensation as per RAP policy. |
| 60. | Job Opportunity | Whether unemployed educated person will get chance for job | The project will deploy skilled and unskilled employees during construction and operation phase of the project. So educated and even non-educated eligible people will get preferential employment in the civil works. |
| 61. | Safety for Residential Structure Under Electric Cable | What are the safety measures for the residential structure under electric cable | The highest protection will be taken for stringing of cable. Safety hanger will be provided where required. However, the people, living under the cable, will be aware of the required measures |
| 62. | Benefits from the Project | If there are any benefits from this project in this locality? | The aim of this project is to improve the present power supply system. So, this locality |

| SL | Issue | Questions/Comments of the participants | Responses |
|-----|-------------------------------|--|--|
| | | | will also get uninterrupted power supply. Again, during implementation period, people will get the opportunity to work on the project as per their eligibility. |
| 63. | Alternative Land | Whether there is any chance to give alternative land | No. The project authority will give compensation land and other affected assets. Land for land is not possible in Bangladesh due to the scarcity of land. |
| 64. | Project Duration | How many months require to implementing the project | It depends on the decision of the Government. So, such information will be correctly disseminated after starting the project. |
| 65. | Damage to land | Land demand will be decreased and no high-rise building will be built, so how they can meet these losses | Although there will be are striction of construction high rise building under the transmission line due to security reason people can produce crops and other activities. Transmission lines are for the betterment of the country and particularly in the project area. |
| 66. | Opportunities by this project | How the local community will get benefit from the project | During construction of the project affected people will be deployed preferentially. After completion of the project, local people will be getting uninterrupted power supply. |
| 67. | Impact of Tower | Whether the tower will have adverse impact on agricultural production | No, the proposed tower will be built following appropriate distance so that there will have no chance to have any adverse impact on agricultural production. |
| 68. | Project implementation | Who will implement the project | Civil construction will be conducted by the appointed contractors, and resettlement activities will be implemented by power cell in assistance with RAP implementing agency (NGOs/Consultant Firms) |

4.5. Consultation Outcomes

53. Affected people were informed about the project objectives, goals, and made aware of the probable project impacts and the mitigation measures. They were informed about cut-off date i.e (commencement date of the census) that was declared in mass consultation at the community level. It was made clear that any encroachment or changing of the category of land, structure, etc. after that date will not be compensated. It was also mentioned that all PAPs will be entitled to have appropriate compensation for lost assets as per the policy of this project. In some locations, people have raised issues to change the location of the substations to minimize adverse impacts on the cropping field. These issues have been revisited by the KMC officials and shared with the project authority to make decision. The participants were also informed that employment opportunity for local people would be possible during the construction. Probable positive and adverse impacts of the project during construction and operation and necessary mitigation measures to be taken by the project were also explained to the participants.

5. LEGAL AND POLICY FRAMEWORK

5.1 Legal framework

54. The Acquisition and Requisition of the Immovable Property Ordinance (ARIPO) 1982 and the subsequent amendments made during 1993 and 1994 constitute the legal framework that governs all cases of land acquisition in Bangladesh. The 1982 Ordinance requires that compensation is 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 DCs in all the cases, determine the market value of acquired assets on the date of the notice of acquisition (notice under section 3 of the Ordinance). The DCs then add 50% premium of the assessed value for cash compensation under the law (CUL) of all acquired assets except standing crops due to compulsory acquisition. The CUL paid for land is generally less than the “market value” as owners customarily report undervalued land transaction prices in order to pay lower stamp duty and registration fees. 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. Under the 1982 Ordinance, the Government is obliged to pay compensation only for the assets acquired. Households and assets moved from existing land (acquired already) of the executing agencies for project purpose will not be included in the acquisition proposal. The ARIPO has again been amended in 2017 with a provision of 100% premium instead of 50% premium (amendment 1994) on average transacted deeds in a particular Mouza/vicinity of the proposed alignment/site. The amendment has a provision to acquire community property (places of worship, graveyard and cremation grounds) for development purposes in consultation with the community people.
55. The PGCB will undertake land acquisition process through the Deputy Commissioner’s office before the start of civil works construction. The private land acquisition has been largely avoided or minimized to the extent feasible and displacement of people has been fully avoided in the substations. The project didn’t acquire any land for transmission line rather only for sub-stations. The project also didn’t acquire land owned by the indigenous peoples or affect their livelihood and cultural resources. Along the transmission lines some 119

residential HHs will experience temporary disruption during construction period. If any of these 119 HHs require displacement due to the project interventions that would be incorporated in the RAP and compensation for the affected structures along with other resettlement benefits would be paid as per RAP policy. In compliance with World Bank OP 4.12 specifications, all displaced households will be assisted with their relocation and livelihood restoration assistance/compensation.

5.2 World Bank OP 4.12 on Involuntary Resettlement

56. The project triggers the World Bank's OP 4.12 on Involuntary Resettlement that requires that the economic, social, and environmental risks out of involuntary resettlement are mitigated and livelihoods of the displaced persons are restored. Involuntary resettlement may cause severe long-term hardship, impoverishment, and damage unless appropriate measures are carefully planned and carried out. For these reasons, the overall objectives of the policy of involuntary resettlement are the following:

- (a) Involuntary resettlement should be avoided where feasible, or minimized, exploring all viable alternative project designs.
- (b) Where it is not feasible to avoid resettlement, resettlement activities should be conceived and executed as sustainable development programs, providing sufficient investment resources to enable the persons displaced by the project to share in project benefits.
- (c) Displaced persons should be meaningfully consulted and should have opportunities to participate in planning and implementing resettlement programs.
- (d) Displaced persons should be assisted in their efforts to improve their livelihoods and standards of living or at least to restore them, in real terms, to pre-displacement levels or to levels prevailing prior to the beginning of project implementation, whichever is higher.

The policy requires that the following measures are taken to achieve the above objectives:

- (a) The resettlement plan includes measures to ensure that the displaced persons are
 - i. informed about their options and rights pertaining to resettlement;
 - ii. consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives; and
 - iii. provided prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project.
- (b) If the impacts include physical relocation, the resettlement plan or resettlement policy framework includes measures to ensure that the displaced persons are
 - i. provided assistance (such as moving allowances) during relocation; and

- ii. provided with residential housing, or housing sites, or, as required, agricultural sites for which a combination of productive potential, convenient relocation sites, and other factors is at least equivalent to the advantages of the old site.
- (c) Where necessary to achieve the objectives of the policy, the resettlement plan also includes measures to ensure that displaced persons are
- i. offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living; and
 - ii. provided with development assistance in addition to compensation measures such as land preparation, credit facilities, training, or job opportunities.

57. The policy links implementation of resettlement plan to the implementation of the investment component of the project to ensure that displacement or restriction of access does not occur before necessary measures for resettlement are in place. Resettlement measures include the provision of compensation and of other assistance required for relocation, prior to displacement, and preparation and provision of resettlement sites with adequate facilities, where required. In particular, taking of land and related assets may take place only after compensation has been paid and, where applicable, resettlement sites and moving allowances have been provided to the displaced persons.

58. The Bank policy does not bar compensation and assistance to the displaced persons under the resettlement plan in absence of their legal title to land. The non-titled rights may come from the continued possession of the public land where the government has not sought eviction or from the customary and traditional law and usage.

5.3 Social Safeguards Policy Compliance

59. The legal framework on land acquisition in Bangladesh is only compensatory and lacks any measures for livelihood restoration and social inclusion of the affected persons. It covers only the legal title holders and does not recognize the non-titled persons like squatters/encroachers, informal tenants of acquired lands and lease-holders without legally constituted agreement. The legal framework does not deal with social and economic consequences of land acquisition or population displacement due to vacating project sites for civil works construction. Under legal framework compensation for assets is provided at a market price determined through a legal procedure which does not ensure Replacement Cost (RC) of the property acquired. Payment of compensation is conclusive for the dispossession of the acquired property. Relocation and livelihood restoration rest solely with

the affected persons receiving compensation. As a result, land acquisition potentially diminishes productive base of farm families and imposes risks of the impoverishment of those affected and displaced by the project.

60. Following are the specific short-fall of the legal framework in Bangladesh with respect to the WB OP 4.12:

- (1) The affected persons including land owners are not informed about their options and rights pertaining to resettlement.
2. They are not consulted on, offered choices among, and provided with technically and economically feasible resettlement alternatives.
3. They are not provided prompt and effective compensation at full replacement cost for losses of assets attributable directly to the project.
4. Any physical relocation is not assisted and supported with residential housing, or housing sites, or, as required, agricultural sites equivalent to the advantages of the acquired sites.
5. The affected persons are not offered support after displacement, for a transition period, based on a reasonable estimate of the time likely to be needed to restore their livelihood and standards of living.
6. The affected persons are not provided with development assistance other than compensation such as assistance for land preparation, credit facilities, training, or job opportunities.
7. No efforts are taken for ensuring socially inclusive design and implementation of project interventions.
8. The embankment settlers are not covered under the land acquisition law and hence evicted without any assistance.

5.4 Project's Social Management and Resettlement Policy

61. Since the 1982 Ordinance with subsequent amendment until 2017 falls short of the requirements of the WB safeguard policies, the project has been developed following the Ordinance and in compliance with the WB's social safeguard requirements including OP 4.12. The ARIPO 1982 will be the instrument to legalize land acquisition for the project, and the WB OP 4.12 will be the basis to implement impact mitigation measures. The project resettlement policy has also been benefited from the experience in the resettlement of similar other projects within PGCB and other infrastructure agencies of the GoB.

5.4.1 Policy Principles

62. PGCB will undertake land acquisition process ahead of the award of civil works contracts to facilitate DCs to complete land acquisition for respective substations before the start of civil works construction. PGCB will prepare land acquisition plans (LAPs) for the same and submit to concerned DC office for processing with prior consultation with the land owners. In case of delay of land acquisition, an informal agreement is supposed to be documented with the potential land owners that civil works construction will continue pending compensation payment but compensation will be paid to all legal owners without dispute on titles within sixmonths of signing the agreement. Compensation funds will be placed with the DCs for payment and the payment process will be coordinated to ensure timely disbursement to the land owners. In the transmission lines land will not be acquired but temporarily used for tower base and stinging of the wire maximum thrice during the construction period. Crops and trees owners will be eligible for compensation and benefits for the affected trees and crops as per ARIPO 1982.

63. In addition to the above, PGCB will use the following principles to minimize adverse impacts on affected persons and their community:

- Avoid or minimize acquisition of private lands and use as much public land as possible;
- Avoid or minimize displacement of people from homesteads, land valued higher in terms of productivity and uses, buildings/structures that are used for permanent business and/or commercial activities, dislocation of squatters/encroachers; and impacts on community facilities, such as educational institutions, places of worship, cemeteries, etc., and buildings/structures that are socially and historically important.
- The transmission line will be designed in such a way that these will not beaffected any homestead, commercial premises or community properties.
- Where the portion of a plot remaining after acquisition for substations becomes economically unviable, the landowner will have the option to offer the entire plot for acquisition.
- Avoid or minimize adverse impacts on Indigenous Peoples.

5.4.2 Impact Mitigation Principles

64. Where adverse impacts are found unavoidable, PGCB will plan to mitigate them in accordance with the following principles:

1. Compensation for acquired land will be paid at replacement cost ahead of civil construction is started.

2. Compensation and other benefits for the affected trees and crops will be assessed at current market price and paid directly by PGCB with assistance from RAP Implementing Agency.
3. The absence of legal titles in cases of public land users will not be considered a bar to resettlement and rehabilitation assistance, especially for the socio-economically vulnerable groups.
4. Vulnerability, in terms of socio-economic characteristics of the PAPs/ households, will be identified and mitigated according to the provisions in the RAP.
5. Crops owners will be allowed to harvest the crops if it is near or at harvesting stage.
6. Trees owners will be allowed to fell and take away the trees free of cost.
7. No compensation will be paid for land to be used for towers and transmission lines rather compensation for affected trees and crops will be paid. However, to ensure sustenance of their income streams, PGCB will undertake the following measures in consultation with the concerned communities and design supervision consultant:
 - Plan and implement the construction works in a manner to avoid/minimize inconvenience and disruption to the embankment/road users, and to business/trading activities where applicable.
 - Ensure payment of benefits to the sharecroppers and lessees of land if they are even socially recognized
8. Where the project activities cause community-wide impacts affecting community facilities, access to common property resources, etc., PGCB will rebuild them with project finance or provide alternatives in consultation with the user communities.

5.4.3 Eligibility for Compensation and Assistance

65. Regardless of their title and tenure status to the lands used for substations or transmission lines, the PAPs/households will be eligible for compensation and assistance. PGCB will mitigate impacts on the following:
- (1) *Private Landowners.* Persons who have legal rights to the acquired lands and other assets, such as houses, other structures, trees, crops, etc. built and grown on them.
 - (2) *Owners of Structures:* According to the design of the substation and transmission lines, no structures will be affected by the project. But if there is any structure affected during the construction phase of the project the PGCB will pay compensation at replacement cost and along with transfer and reconstruction grants. Business restoration grants will be paid in case of loss of business.

- (3) *Owners of Trees.* Compensation for trees affected at substations and transmission lines will be paid at current market price to be assessed by PAVC. Trees owners will be allowed to fell and take away the trees free of cost. Compensation for fruits will also be paid @ 30% of timber value for fruit bearing trees.
- (4) *Compensation for crops:* Compensation for standing crops and transitional allowance for one year will be paid at substations while compensation for crops will be assessed based on the damage of standing crops or for loss of access to cultivate the crops in the transmission lines.
- (5) *Usufruct Rights Holders.* Owners of an affected business, agricultural, fisheries, and other activities on leased-in government land, where lessees (formal or informal) stipulate compensatory conditions in cases where lands are taken back or acquired before lease expiration.
- (6) *Women headed and other Vulnerable households:* Women heading the households and the households having income level up to BDT 82,000/year¹¹, physically challenged, elderly members, and similar others will be eligible for a special assistance of one-time cash grants.
- (7) *Community and Groups.* Where local communities and groups are likely to lose income earning opportunities or access to crucial common property resources used for livelihood purposes.

5.4.4 Compensation Principles and Standards

66. The following principles and standards will be used to determine compensation and assistance for persons/households in the different impact categories:

(1) **Acquired Lands and Other Assets**

- Replacement costs for an equal amount of land of same use and quality, including the registration costs and stamp duties.
- Replacement costs of houses/structures and other immovable built items (e.g. water supply, sanitation, drainage, etc.), if affected, at current market prices of the same building materials plus the current costs of labor to build them.
- Current market prices of trees and other assets which are irreplaceable. Price of fruit trees will be determined considering the maturity and harvest price of fruits.

¹¹According to Bangladesh Bureau of Statistics (BBS) the upper poverty line for HH size of 4.41 in 2011 was Tk. 6,626 per HH/month. Acknowledging the national inflation rates by BBS based on consumer price for the country (Average 6.5% per year for 6 years up to 2017) and an average HH size for the affected population being 3.12, BDT 6840 income per HH/month has been adopted as the 2017 poverty line for the project. Therefore HHs with average income up to BDT 6840 per month or BDT 82,000 per year is considered to be living under the poverty line.

- Current market prices of crops in the field or on trees, if the lands are used before harvest.
- If the acquired land is agricultural and amounts to 20% or more of the total productive land owned by the affected household, a transitional allowance (TA) at three times the value of the crops produced in a year on the acquired land.

(2) Land Temporarily Used for Transmission Lines

Agricultural lands:

- Users/owners will qualify for compensation of crops to be damaged or barred to produce crops for installation of towers and transmission lines grown in one year on the acquired lands;
- Current market prices of crops in the field or on trees, if the lands are used before harvest; and
- Compensation amount to be assessed by PAVC in case of land is used prohibiting crop cultivation

(3) Leasehold Lands

- *Formally leased-in from any agencies of the Government:* Compensation as stipulated in the lease agreement.
- *Formally leased-in khas land or vested non-resident (VNR) land:* Compensation, if any, stipulated in the lease agreement.

5.4.5 Eligibility of Cut-Off Dates

67. Eligibility to receive compensation and resettlement assistance will be limited by cut-off date (COD). The cut-off date for CUL (Ordinance II of 1982) is considered for those identified on the project location/ right of way land proposed for acquisition at the time of service of notice under section 3 or joint verification by DCs whichever is earlier (legal COD).
68. The commencement date of the census and IOL survey will be considered as “cut-off” date for eligibility for any non-titled persons such as squatters/encroachers or other informal settlers living in the project right of way or similar designated date by PGCB (social COD).
69. Any persons moving into the project area after the cut-off dates will not be entitled to have compensation by DCs or any assistance from PGCB. However, any displaced persons (PAPs) not covered in the enumerations before the CODs can be enlisted with sufficient proof and approval from the GRCs. In case, land acquisition and RAP implementation delays more than a year, PGCB will adopt revised CODs for the applicable substations.

6. ENTITLEMENTS, ASSISTANCE, AND BENEFITS

6.1 Introduction

70. All PAPs, irrespective of their title, will be entitled to compensation and assistance based on loss and impact categories identified through census and socioeconomic survey and as defined in the RAP's entitlement matrix. As indicated earlier, the eligibility to receive compensation and other assistance will be limited by the cut-off date.

6.2 Eligibility Policies and the Entitlement Matrix (EM)

71. PAPs eligible to receive compensation and assistance to restore livelihood under the project are individuals, households, communities, and private and public entities, regardless of the possession of the legal title, who is residing, working or cultivating lands and other assets that are acquired for the Substations as of the cut-off date. Furthermore, those who may be affected due to temporary land use due to tower base and transmission lines are also eligible for compensation for disruptions to their livelihood activities.

72. A detailed inventory of affected assets lost (Detailed Measurement Survey) will be completed during the implementation of the project and final compensation amount for each category of affected properties will be provided to each entitled persons (EPs). Vulnerability in terms of income and households size will be finalized during updating of the RAP before implementation.

6.3 Categories of PAPs and Types of Losses

73. The PAPs census under the project has been categorized in the following four categories.

1. Persons whose land is being used for agricultural, residential, or commercial purposes and is in part or in total affected (temporarily or permanently).
2. Persons whose assets, other than land or structure, are partly or fully affected (temporarily or permanently).
3. Persons whose annual or perennial crops and/or trees are affected.
4. Persons affected who belong to socially and economically vulnerable groups.

6.4 Entitlement Matrix

74. The entitlement matrix was based on ARIPO 1982 and World Bank OP 4.12) for the overall project (Table-20). The matrix lists show categories of losses/impacts and links each to types of affected people/units and then specifies optional compensation measures available to the affected entity.

Table 21: Entitlement Matrices

Matrix I : Loss of Agricultural Lands

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> | <u>C. Application Guidelines</u> | <u>D. Implementation Issues</u> | <u>E. Responsibility</u> |
|--|---|---|---|--|
| <p>3. Legal owner(s) as determined by DC during CUL payment, or by the court in cases of legal disputes.</p> <p>4. Co-sharers to be determined by title deeds/records and mortgage documents by DCs.</p> | <p>3 CUL, which includes 50% premium on current market price, or RC, whichever is higher.</p> <p>4 Transition Allowance (TA) for income loss from productive lands.</p> | <p>1. Current market prices of land determined by the PAVC to be the basis for determining RC and top-up payment.</p> <p>2. RC includes current market price and applicable stamp duty & registration cost for titling.</p> <p>3. One month's advance notice to be issued in time to harvest standing crops. If not possible, the value of crop at harvest price is to be paid.</p> <p>4. Top-up will be paid by PGCB when CUL is less than Replacement Cost (RC).</p> <p>5. TA will be paid to a person losing more than 20% of his/her total productive land area @</p> | <p>1. PAPs to be informed of the details of compensation policies after issuance of Notice u/s 3.</p> <p>2. Landowners to be assisted to procure any missing legal documents required to claim compensation from DCs.</p> <p>3. Mauza-wise current market prices of lands to be determined, considering their quality in terms of number and types of crops produced a year, flooding, irrigation facilities,</p> | <p>1. PGCB is responsible for overall execution and coordination, ensuring GoB's support and timely financial disbursements.</p> <p>2. DC will pay CUL to all legal owners, and those with the legal evidence of interest (sharecroppers, lessees) in the lands.</p> <p>3. PGCB/IA to inform PAPs of</p> |

| | | | | |
|--|--|--|---|---|
| | | BDT 1000 per decimal of acquired agriculture land. | <p>accessibility and other factors influencing market prices.</p> <p>4. The project will not be used to collect outstanding dues or taxes on the acquired or other lands.</p> <p>5. In case of PAP losses his/her land in more than one plot, Top-up will be calculated based on total CUL and total RC for the total land acquired from the owner.</p> | <p>RAP policies, assist in updating records, pay Top-up and TA, and monitor and report progress on RAP implementation.</p> <p>4. DC will determine CUL and PGCB will determine RC with assistance from the projects' PAVC and the IA.</p> |
|--|--|--|---|---|

Matrix II: Loss of Timber and Fruit Trees (including Bamboo and Banana Groves) in Substations and Transmission Lines

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> | <u>C. Application Guidelines</u> | <u>D. Implementation Issues</u> | <u>E. Responsibility</u> |
|---|---|---|--|---|
| 5 Legal owners as determined by DC during CUL | 4. Compensation will be based on the following criteria | 1. Current market prices of trees determined by the | 1. Where ownership belongs to | 1. DC will determine the market price of trees and pay CUL to |

| | | | | |
|---|--|--|--|--|
| assessment process on acquired land. | c. Net Present Value or | PAVC based on scheduled rate of | groups, the project | all legal owners, and those with the legal evidence of interest in the lands. ¹³ |
| 6 Legally and Socially recognized owners of trees in the Transmission Lines | d. Current age, life span, productivity, current market price | Department of Forest | authority will ensure that the compensation is distributed among the members as per agreements. | 2. PGCB/IA to inform PAPs of RAP policies, assist in updating records, pay market price, Top-up (if required), and monitor and report on the progress of RAP implementation. |
| 7 People with a valid lease from GoB agencies. | 5. Trees owners at Substations and Transmission lines will be paid compensation for fell-down trees | 2. Owners will be allowed to take away salvaged materials free-of cost | 2. PAVC will identify the affected persons by the existing usufructuary rights (lease holder, NGO groups, etc.). | |
| 8 Groups sponsored by public agencies/ NGOs. ¹² | 6. Fruit compensation will be assessed based on age and productivity of the trees @ 30% of timber value. | | | |

¹²NGOs or public agencies enter into contracts with groups of community peoples under the Social Forestry Rules 2004 (revised March 2010) for social forestation on slopes of flood embankments, roads, railway embankment, riversides or any other public spaces. These groups are not owner of the land but get a share of the revenues from the planted trees (sale of logs and residues) as they are also responsible to nurse the trees under the contract.

¹³Interest in land in terms of legal ownership and usufruct rights through lease, rent or customary rights.

Matrix III: Loss of Standing Crops

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> | <u>C. Application Guidelines</u> | <u>D. Implementation Issues</u> | <u>E. Responsibility</u> |
|--|--|--|--|--|
| 2. Cultivator (the person who planted the crop) whether the owner, lease holder, tenant, sharecropper, etc. (formal or informal arrangements) identified by Census or joint verification. | 3. Compensation for standing crops affected at the time of dispossession of land of use of the land during installation of towers or stringing of wire. 4. Cultivator will retain the crops and plants. | 1. Estimated market value at harvest, to be determined by PAVC. 2. Advance notice to be issued in time to harvest the standing crop. If not possible the value of the crop at full harvest price is to be paid. 3. Share-croppers may avail of livelihood restoration Program 4. Compensation to the crop owners would be assessed by the PAVC and paid by PGCB with assistance from IA | 1. Market value at harvest will be established by PAVC through on-site verification before dispossession of land. 2. Verify whether or not the crop is standing on the acquired lands at the time of dispossession. 3. PAVC will verify owner and tenant cultivators. 4. Crops owners at Transmission lines will be paid compensation for the time of damaging the crops or prohibiting crop production due to the installation of towers or stringing of wires | 1. DC will determine the market price of crops with assistance from District Agriculture Marketing and District Agriculture Extension and pay CUL to all legal owners, and those with the legal evidence of interest in the lands. 2. PGCB/IA to inform PAPs of RAP policies assists in updating records, pay Top-up or market price, and monitor and report progress on RAP implementation. 3. PGCB will determine the market price of crops using data on yield and market price from the same sources used by DCs and compare with the actual |

| | | | | |
|--|--|--|--|--|
| | | | | market price available from local market places with assistance from the projects' PAVC and the NGO. |
|--|--|--|--|--|

Matrix IV: Temporary disruption and Loss of Income (Wage Earners in Agriculture)

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> | <u>C. Application Guidelines</u> | <u>D. Implementation Issues</u> | <u>E. Responsibility</u> |
|---|--|--|--|--|
| <p>1. HHs experience temporary disruption of structure during construction</p> <p>2. Adult persons employed continuously for at least six months in agriculture by the land owners and his employment will be terminated due to loss of land</p> <p>3. Women heading the HH without the elderly support and vulnerable people having income below</p> | <p>1. Compensation up to BDT 100000 to be assessed by PAVC and confirmed by GRC.</p> <p>2. Grant to cover temporary loss of income (GTL) from wage employment</p> <p>2. Women headed and vulnerable HHs will get additional cash grant of BDT 15,000 and BDT 10,000 respectively on top of compensation and other benefits</p> | <p>1. Length of employment to be counted backward from the cut-off date.</p> <p>2. GTL will be equivalent to 90 days wage at the rate of daily wage at a current market price determined by PAVC.</p> <p>3. For temporary disruption of structure, the EP will be entitled to have compensation which will be assessed by PAVC and confirmed by GRC before using the land.</p> | <p>1. The PAVC will verify each of the disrupted HHs before taking over land and assess the compensation.</p> <p>2. The PAVC to verify and Ensure that land owner will loss more than 70% of his land in the substation location</p> | <p>1. PGCB will determine average daily wage rate in the project area with assistance from the projects' PAVC and the IA and based on findings will determine compensation for loss of business/rental income.</p> <p>2. PGCB/IA to inform PAPs of RAP policies assists in updating records, pay GTL and monitor and report on the progress of RAP implementation.</p> |

| | | | | |
|---|--|--|--|--|
| thepoverty line, elderly headed, and land less. | | | | |
|---|--|--|--|--|

Matrix III: Loss of Usufruct Rights in Mortgaged-in, Leased-in and Khai-Khalashi Lands

| <u>A. Entitled Person</u> | <u>B. Entitlement</u> | <u>C. Application Guidelines</u> | <u>D. Implementation Issues</u> | <u>E. Responsibility</u> |
|---|---|--|---|---|
| <p>1.2.4 Persons with legal agreements.</p> <p>1.2.5 Persons with customary rights.</p> | <p>2. Compensation as per Loss Categories I & II above, to be shared as per usufruct/ mortgage contracts.</p> | <p>1. Legal Agreement: Legal owner and mortgagee/leaseholder will be paid CUL by DC as per the law.</p> <p>2. Verbal Agreement: Legal owner will pay the outstanding liabilities to the interested persons upon receipt of CUL from the DCs.</p> <p>3. In cases where CUL is smaller than RC, the legal owner will get the top- up from PGCB (i) if all liabilities are already paid up; (ii) if not, the legal owner will get the residual after all liabilities are paid up. If the liability exceeds the amount</p> | <p>1. PAVC will verify the persons with interests in the acquired assets due to mortgage, lease or khai-khalashi right.</p> <p>2. Any disputes over verbal agreements to be resolved through grievance redress procedure.</p> | <p>1. DC will determine and pay compensation to persons with the legal agreement as per conditions laid down in the agreements.</p> <p>2. PGCB with the help of implementing agency will determine and pay compensation to persons with the verbal agreement as per agreed conditions.</p> <p>3. PGCB will ensure that the liabilities to the lease holder are paid completely.</p> |

| | | | | |
|--|--|---|--|--|
| | | to be paid by the PGCB, the landowner will pay it. | | |
|--|--|---|--|--|

6.5 Compensation Payment

75. In cases of acquisitions, a part of the compensation for lands and other affected assets built or grown there on will be assessed and paid to the title holding PAPs by the DCs, the head of the Acquiring Body. If this payment, CUL, is found to be lower than the replacement costs of land/structure and market prices of trees/crops/perennials, PGCB will directly pay the difference as 'Top-up' to make up for the shortfall.
76. With and without acquisition, compensation/assistance due to all other PAPs who are not covered by the acquisition ordinance, but qualify according to this RAP, will also be directly paid by PGCB.
77. Where an owner loses lands and other assets in more than one mauza or land administration unit, the person will be counted once, and his/her top-up will be paid as a single amount. The amount of top-up due to the affected person will be determined by comparing the total amount of CUL paid by the DCs for lands and other assets acquired in all mauzas with the total replacement costs and/or market prices thereof.
78. Where DC's CUL payment is not made together for all lands and other assets acquired from an owner due to legal disputes or other reasons, PGCB will determine the top-up for the acquisitions as a whole, but pay on the lands and other assets for which CUL has been paid. Top-up for the rest will be paid whenever the CUL payment is made after resolution of the disputes.
79. Compensations/entitlements due to the PAPs, including those who are not covered by the acquisition ordinance, but eligible according to this RAP, will be paid in full before they are evicted from the acquired private and public lands.
80. The PGCB will ensure that the properties to be acquired or displaced for the project will be compensated at their full replacement cost determined by the PAVC following the guideline of the RAP.
81. As part of the Detailed Measurement Survey of each project affected entity (an individual, household or community) completed by the DC or IA on behalf of the PGCB, the entitlement matrix (EM) will then be used to offer compensation options to each project affected entity.

7. INCOME RESTORATION, REHABILITATION, AND GENDER

7.1 Introduction

82. Mitigating the loss of land, assets, and livelihoods is the main focus of the RAP. RAP policy dictates that the standard of living and livelihood opportunities of the displaced people are upheld to at least the pre-project level. PGCB will, therefore, focus on implementing this requirement for both titled and non-titled PAPs. Additional measures will be taken to provide appropriate support in terms of livelihood restoration for the PAPs failing to cope with relocation.

7.2 Livelihood Impact and Risks

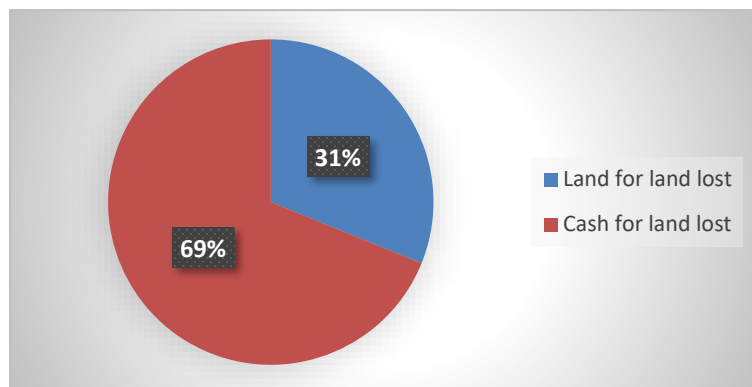
83. If proper planning for income and livelihood restoration is not taken, implementation of the project may severely impact the livelihood of PAPs. Landowners may not purchase alternative land with compensation money and may fail to utilize their money in income generating alternatives. These occurrences may push the affected people into conditions worse than before the project began. Quick payment of compensation and other benefits as per policy and proper planning and guidance by the IA concerning the utilization of compensation money by the affected people will improve the chances for the restoration of livelihoods.

7.3 Income and Livelihood Restoration

84. According to the survey, no household or business is going to be affected by the substations. Few households will experience temporary disruption during installation of the transmission lines since these are fallen in between towers. According to the PGCB, they will have an alternative engineering solution to avoid displacement of the households during installation of the transmission lines. Further check survey will be carried out during implementation according to the standard practice to finalize the alignment. In case of disruption, the households will be entitled to have temporary disruption allowance not over BDT 100,000 on the claim and confirmed by the local level GRC. Only owners of land, tress and standing crops are main affected persons in this project. In this project, women headed HH without elderly support will get BDT 15,000 and other vulnerable HHs will get BDT 10,000 on top of compensation and other benefits and also get preference for employment in the civil construction works based on their eligibility. It is expected that the short-term measures such as training on income generating activities and compensating the loss of productive assets and income will mitigate somewhat the dislocations removal of some livelihood resources.

7.4 Compensation options for losing land

85. As per the survey, 69% of the affected HHs in the substations require cash for land lost while 31% require land for land lost (Figure-8). Due to the scarcity of land in Bangladesh land for the land option is not yet addressed in any development projects. Therefore cash assistance for the affected land will be provided in this project. Such issues will be addressed in the Resettlement Action Plan.



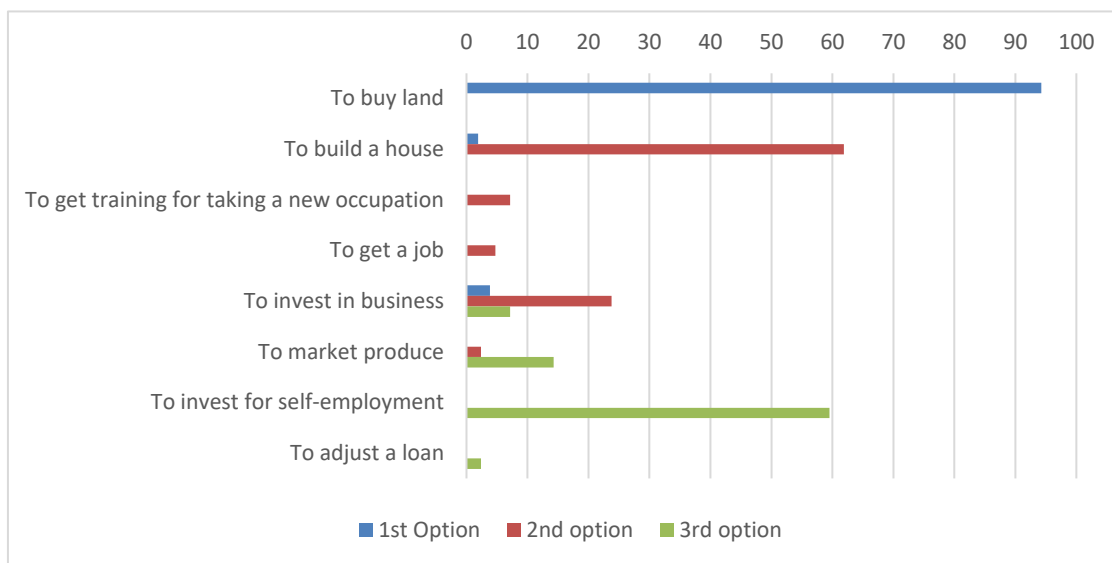
Source: Census and SE survey, June-July, 2017

Figure 8 Compensation option of losing land

7.5 Preferred options for spending the compensation money

7.5.1 Substations Areas

86. The HHs affected in substations will lose their agricultural land by the project. Along with land they will also be affected by losing agricultural activities. The survey identified that 24 owners will lose >30% land on the affected. As per the preferred options identified by the affected HHs in the substations, they preferred to buy land again after getting compensation. In the second option, they preferred to build house, to invest in business and to get training for taking new occupation accordingly. And in the third options, they preferred to invest for self-employment. Figure-9 describes people's opinion about investment of their compensation money.

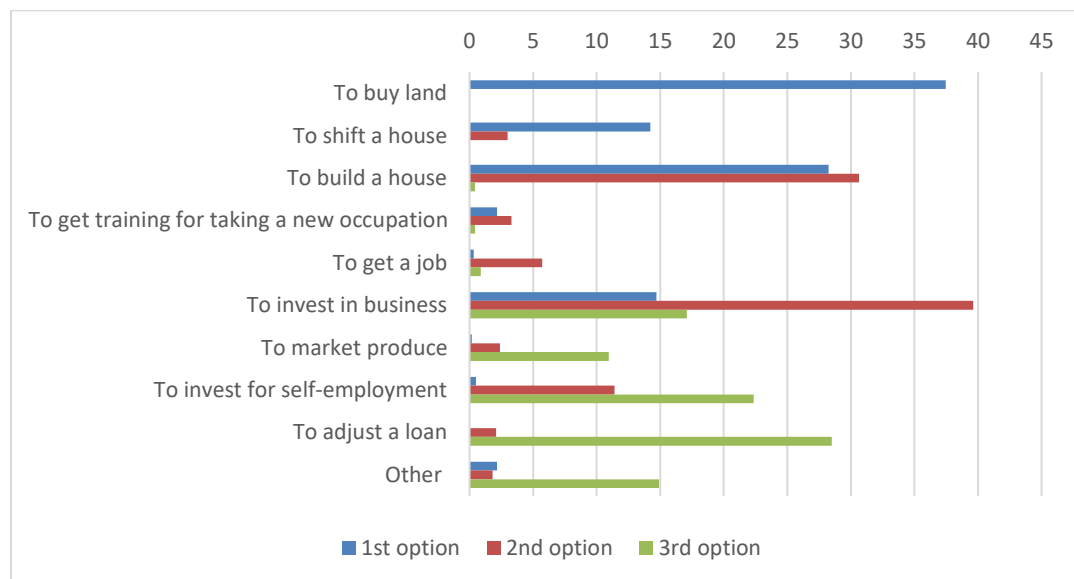


Source: Census and SE survey, June-July, 2017

Figure 9 people's opinion about investment of their compensation money for Substations.

7.5.2 Transmission line

87. Affected HHs along the transmission lines want to buy land, to build home, to shift home (if dislocated) and to invest in business in the first option for spending compensation money. In the second option, they want to invest in business, to build home and to invest for self-employment etc. And in the third option they preferred compensation to adjust loan, to invest in business etc. Figure-10 presents the opinion of the people in investing compensation money for their better livelihood.



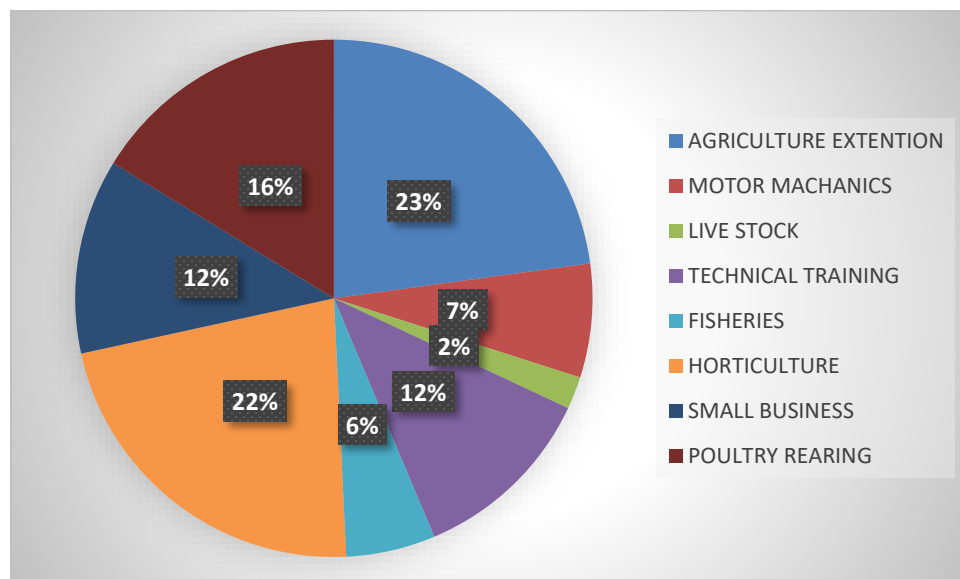
Source: Census and SE survey, June-July, 2017

Figure 10 Opinion of the People in Investing Compensation for TL

7.6 Sources/Opportunities for employment in locality

7.6.1 Substations

88. It is identified that agricultural opportunities like agriculture extension, horticulture and poultry rearing are the available employment opportunities in the substations area. Along with the opportunities, livestock, fisheries small business, technical training are also supportive opportunities for employment in the locality. The proposed area for substation area is agricultural land and located in rural area, so agricultural activities are the available opportunities for livelihood in locality identified by PAPs.

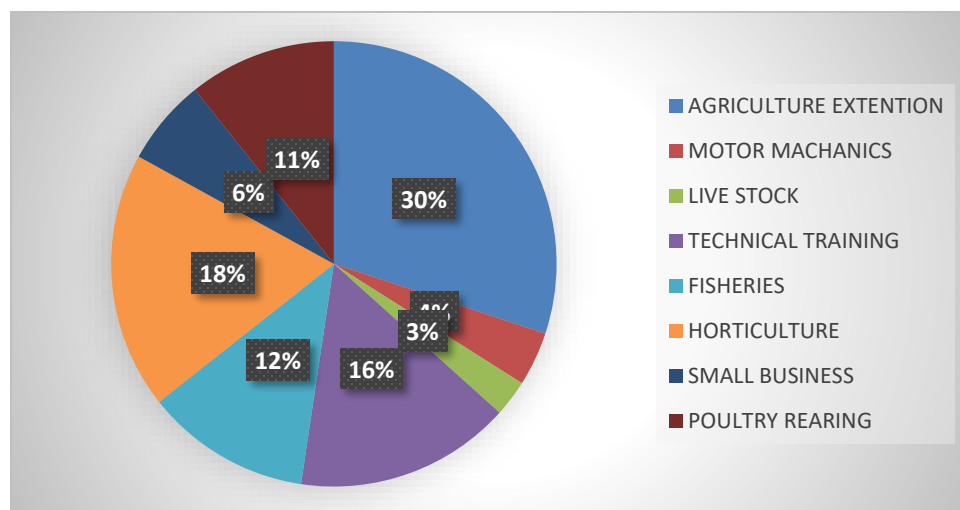


Source: Census and SE survey, June-July, 2017

Figure 11 Sources/opportunities for Employment in Local area for Substations

7.6.2 Transmission Line

89. Agriculture extension, technical training, small business and poultry rearing are the available sources/ opportunities in the ROW of transmission line of the project. The beneath figure shows percentage of sources/opportunities for employment in locality. The route mainly covered rural areas so the sources/opportunities for employment in locality are mainly linked to agricultural activities.



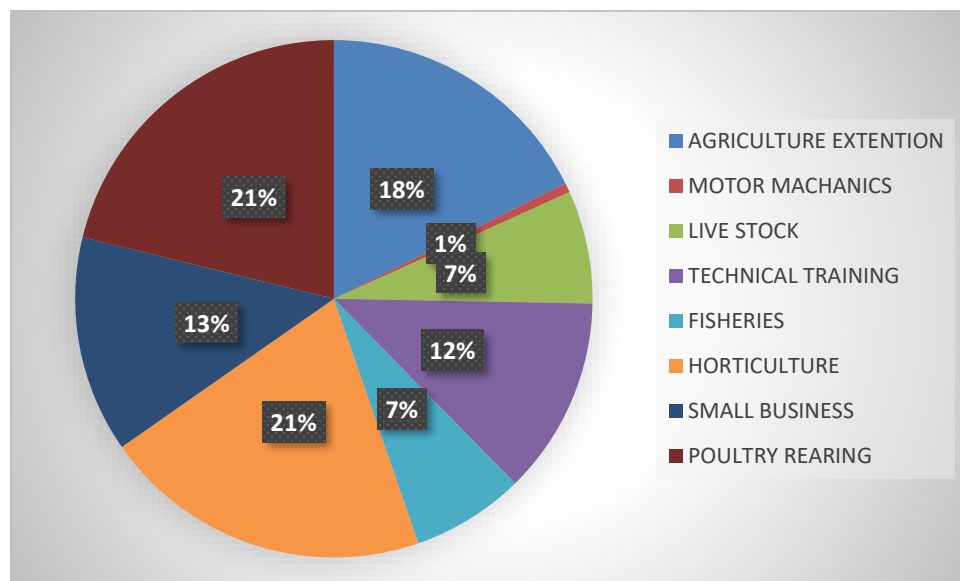
Source: Census and SE survey, June-July, 2017

Figure 12 Sources/opportunities for Employment in Local Area for TL

7.7. Preferred Training to Develop Skills for Taking up a New Occupation

7.7.1 Substations Areas

90. Agriculture extension, technical training, horticulture, small business and poultry rearing are the most preferred option for family members to develop skills for taking up a new occupation. PAPs believe that more than one skill and different skill for their HH members will strongly secure their livelihood.

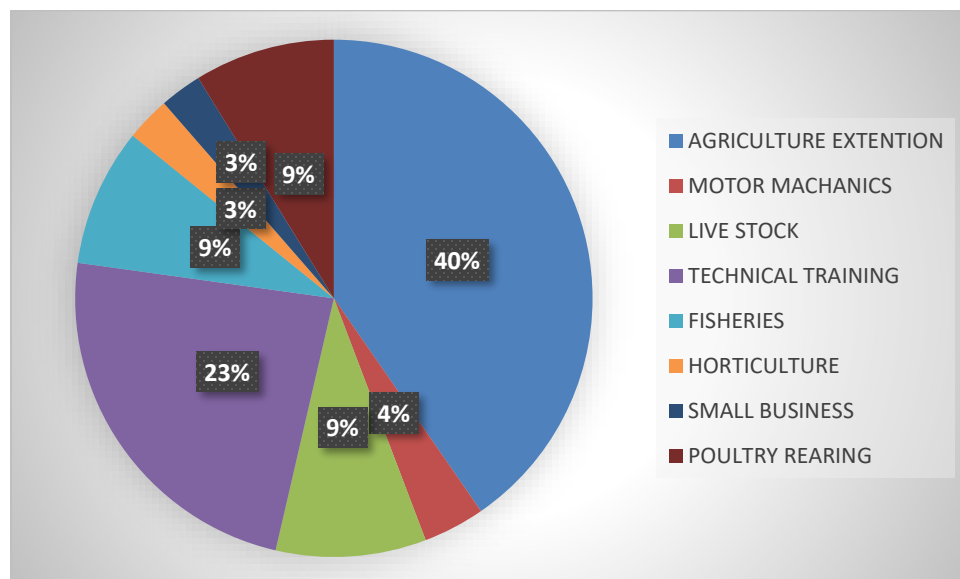


Source: Census and SE survey, June-July, 2017

Figure 13 Options to Develop Skills for Taking up new Occupations for Substations

7.7.2 Transmission Line

91. Agriculture extension and technical training are the most preferred option for family members to develop skills for taking up a new occupation. PAPs preferred technical training for the young boy or adolescent girls rather agriculture. Like the PAPs of substations, PAPs by affected TL also believe that more than one skill and different skill for their HH members will secure their livelihood.

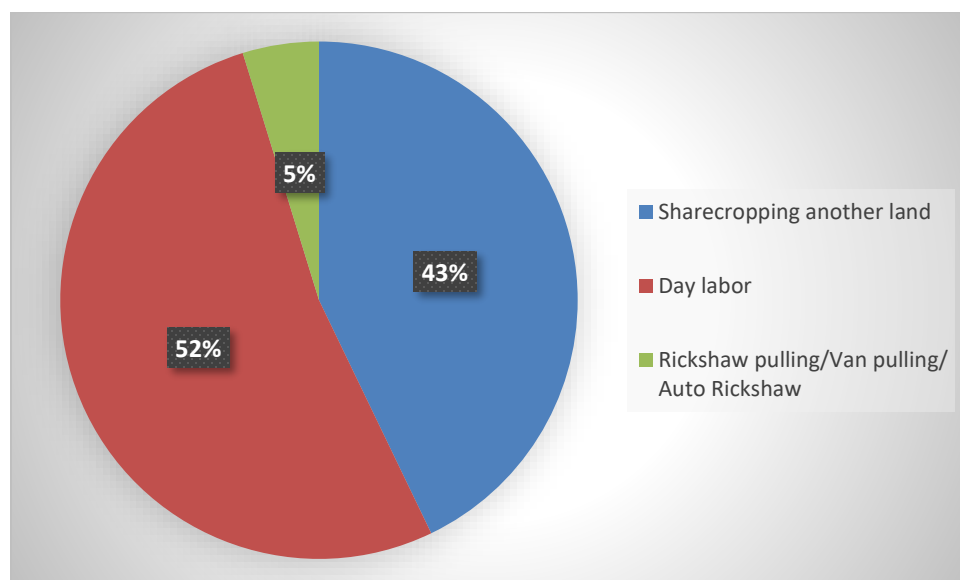


Source: Census and SE survey, June-July, 2017

Figure 14 Options to Develop Skills for Taking up new Occupations for TL

7.7.3 Sharecroppers

92. A total of 21 Sharecroppers will be permanently affected at five substations due to acquisition of agricultural land. There is no sharecropper in remaining seven substations. As per survey the sources/opportunities for employment in locality for the affected sharecroppers are sharecropping in others land, day labouring and Rickshaw/Van/Auto rickshaw pulling, etc.



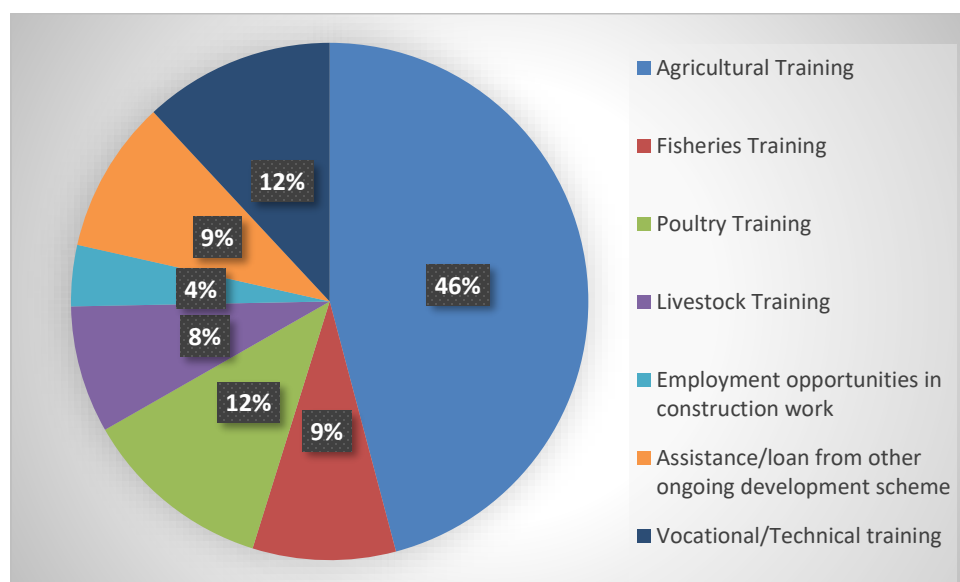
Source: Census and SE survey, June-July, 2017

Figure 15 Options to Develop Skills for Taking up new Occupations for Sharecroppers

7.8 Income Restoration Assistance

7.8.1 Substations Areas

93. Affected HHs preferred agricultural, fisheries, poultry, livestock and vocational/technical training as income restoration assistance by the project. As per the policy adopted by this project, different income restoration assistance will be ensured following the preference by the affected HHs. The beneath figure shows the percentage of income restoration options.

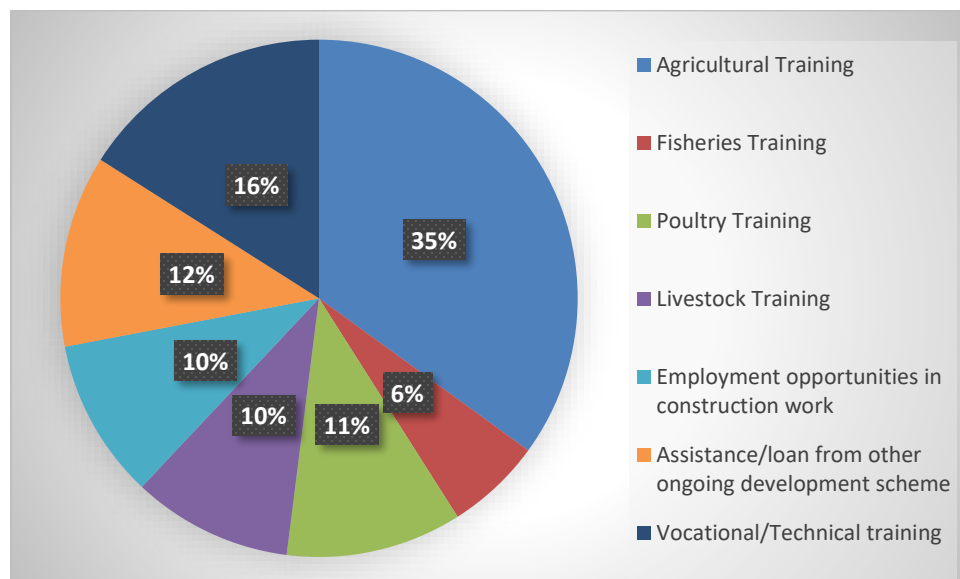


Source: Census and SE survey, June-July, 2017

Figure 16 Options for Income Restoration Assistance for Substations

7.8.2 Transmission line

94. HHs affected in the transmission lines preferred different training such as different agricultural activities, livestock, vocational/technical as income restoration assistance by the project. Some HHs also preferred loan/assistance for doing business or other income generating activities. Income restoration for the HHs will be ensured following the policy adopted in the RAP.

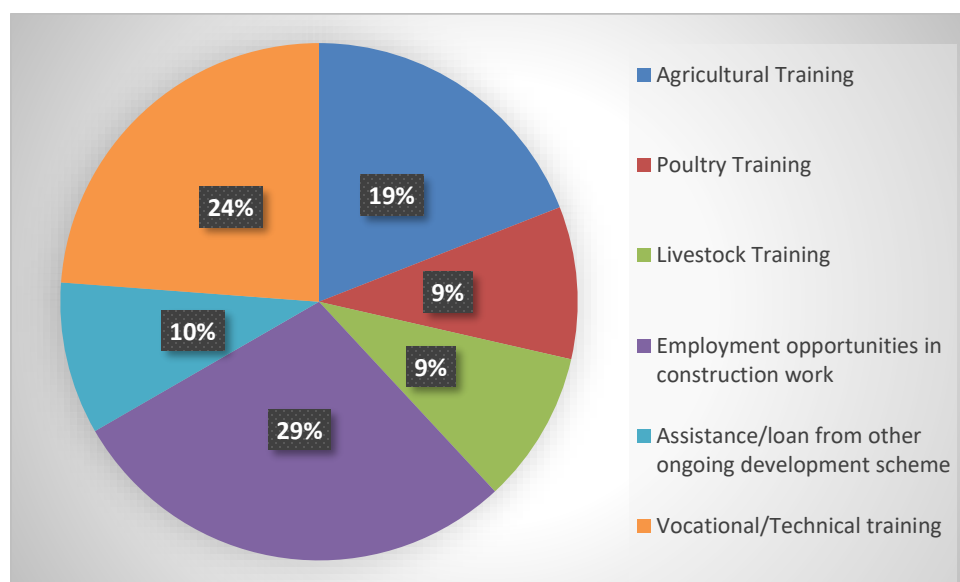


Source: Census and SE survey, June-July, 2017

Figure 17 Options for Income Restoration Assistance for TL

7.8.3 Sharecroppers

95. To secure livelihood, the affected sharecroppers require different training on income generating alternatives. The percentage of income restoration assistance is fragmented in the following figure.



Source: Census and SE survey, June-July, 2017

Figure 18 Options for Income Restoration Assistance for Sharecroppers

7.9 Rehabilitation Measures

96. Necessary rehabilitation measures have been suggested in the entitlement matrices of the RAP. It is expected that proposed rehabilitation measures for restoration of income and livelihood would help the affected people to uphold or at least restore their livelihood standard.

7.9.1 Assistance to Vulnerable Groups

97. Vulnerable households including women headed household, elderly headed households and households below poverty line will be entitled to:

- additional allowance for loss of land or other assets; and,
- prioritized employment once civil work begins

7.9.2 Employment in Construction Work

98. Physically capable vulnerable PAPs will be given preferential opportunities to work on the project, including earth carrying, bricks carrying, guard, cook, slope turfing, watering, and some other technical and non-technical jobs as per the PAPs capability and skills. Women and vulnerable groups will be given priority for available jobs. Equal wages for male and female for similar types of works will be ensured. Standard labour law of Bangladesh and ILO will be followed during the period the PAPs are employed, as well as the entire construction and operation period.

7.9.3 Future Plans for Income and Livelihood Restoration

99. Two types of actions will be offered to the PAPs seeking help with income and livelihood restoration. These will be, i) payment of compensation and resettlement benefits and ii) training in alternative income generating activities. According to the preferences of the PAPs, training in alternative income generating activities was the most popular mitigation action. A needs assessment will be conducted during implementation of the RAP by PGCB.

7.10 Gender Considerations

100. Compensation for lost assets including land, structure, trees, crops, etc. will be paid to actual owners irrespective of gender considerations as per LA law and RAP policy. Separate toilets, shaded rest areas, calm breast-feeding corners, etc. for the female workers will be provided in the construction camps. Equal salary for the male and female would be ensured by PGCB and the contractors during undertaking the work.

8. GRIEVANCE REDRESS MECHANISMS

8.1 Introduction

101. The law on land acquisition allows landowners to object to acquisitions at the beginning of the legal process. Once the objections are heard and disposed of, there is virtually no provision to address grievances and complaints that individual landowners may bring in the later stages of the process. Since the ordinance does not recognize them, there is no mechanism to hear and redress grievances of people who do not have legal titles to the acquired lands. As seen in various projects, complaints and grievances may range from disputes over ownership and inheritance of the acquired lands to affected persons and assets missed by censuses; valuation of affected assets; compensation payment; and the like.

102. Considering the need, PGCB have established a procedure to answer to queries and address complaints and grievances about any irregularities in application of the guidelines adopted in this RAP for assessment and mitigation of social and environmental impacts. A three-tier Grievance Redress Committee (GRC) will be formed from which one at Upazila level for receiving and settlement of grievances from the affected persons and their communities, one at Project Management Office (PMO) level to redress unresolved cases at Upazila level GRC and another at Executive Director (P&D) PGCB level to resolve cases those are unresolved at PMO level. The procedure will help to resolve issues/conflicts amicably and quickly, saving the aggrieved persons from having to resort to expensive, time-consuming legal action. The procedure will however not pre-empt a person's right to go to the courts of law.

8.2 Grievance Redress Process

103. All complaints will be discussed at focus group meeting at community level and resolved by IA on behalf of PGCB. If it is not resolved at this level the aggrieved persons will be assisted by the IA field team to lodge complaints before the local level GRC. Local level GRC (LGRC) will scrutinize the cases and hear the complaints those are within their mandate within 4 weeks and resolve it. At local level GRC (at Upazila level) the Member Secretary (Field Coordinator of RAP implementing agency) will review and sort the cases in terms of the nature of the grievance, urgency of resolution, and schedule hearings in consultation with the Convener (nominated by PGCB). If the case is not within the purview of GRC (cases under arbitration) they will refer these to the DC office for further action as per the Land Acquisition law. If the resolution at the local level fails, the local GRC will refer the complaint with the minutes of the hearings for further review to the PD at the Project Management

Office. The PMO headed by the Project Director will review and resolve the case within 4 weeks.

104. The PD will assign the Executive Engineer (Project) to work as part of the PMO to review the grievance cases and assist PD in making decision. The PMO will review the case records and pay field visits for cross-examining issues and consult the GRC members and the aggrieved persons, if required. If a decision at this level cannot be reached, the aggrieved person(s) can refer the case to the Executive Director (P&D) Power Cell with all supporting information for final hearing and resolution. At the DG level, an official designated by the DG, will make any decisions on unresolved cases no more than 5 weeks.
105. A decision agreed with the aggrieved person(s) at any level of hearing will be binding upon PGCB. The aggrieved person will have every right to go to the court of law for review and resolution at any level of the grievance redress mechanism (GRM).
106. Various steps in the grievance process are summarized in and match the institutional responsibilities identified in Chapter 9.

Table 22: Steps in Grievance Resolution Process

| | |
|--------|--|
| Step 1 | <p>2.2.1.1 The IA on behalf of PGCB informs PAPs and counsels them on land acquisition and resettlement policy, compensation and entitlement modalities, entitlement packages, and eligibility and process to obtain the entitlements.</p> <p>2.2.1.2 PAPs with clear understanding approach DC and PGCB for CUL and assistance under the RAP as applicable.</p> <p>2.2.1.3 PAPs with confusion and valid complaints on land acquisition and resettlement process and entitlements approach GRC for resolution.</p> |
| Step 2 | <p>i. The IA assists the aggrieved PAPs to produce a written complaint to the convener of local level GRC (LGRC) at Upazila Level with stories, expectations and any parties. The IA counsels the aggrieved persons on the mandate and procedure of grievance resolution.</p> <p>ii. GRC scrutinize the case records and sort out cases to be referred to the DC or the court of law and those to be resolved in GRC.</p> <p>iii. Hearing is organized on cases with merit at the GRC secretariat (Field office of IA) or at the Office of Upazila Chairman at local level and resolution is given by the GRC in 4 weeks of receiving the complaints.</p> <p>iv. Aggrieved PAPs satisfied with the resolution approach the EA (PGCB) for resettlement assistance under the provision of the RAP. The agreed resolution is forwarded to PMO for approval by the PD before processing entitlements for the entitled person.</p> <p>v. In case the resolution is not acceptable to the aggrieved person, he/she approaches the PMO through the LGRC convener with assistance from the implementing agency for further review.</p> |
| Step 3 | <p>i. Cases with all proceedings are placed with the PMO, where the PD reviews them with assistance from the Executive Engineer (Project). If found necessary, field investigation is carried out and the resolutions are given within 4 weeks of receiving the complaints.</p> <p>ii. Aggrieved PAPs satisfied with the resolution approach the EA for resettlement assistance under the provision of the RAP. The resolution will be sent to the Conveners office to communicate to the aggrieved persons for acceptance. The PD then approves the resolution accepted by the aggrieved person.</p> |

| | |
|--------|--|
| | iii. In case the resolution is not acceptable to the aggrieved person, he/she approaches the Director General, Power Cell through the PD PMO with assistance from the convener of LGRC. |
| Step 4 | <p>i. Cases with all proceedings from GRC and from PMO are placed with the DG, Power Cell where the DG appoints a reviewer to resolve the grievance in view of the merits and redirect the case records to the PD, PMO with written resolutions within 5 weeks of receiving the complaints at DG office.</p> <p>ii. Aggrieved PAPs satisfied with the resolution approach the EA for resettlement assistance under the provision of the RAP. The resolution will be sent to the Conveners office of LGRC to communicate to the aggrieved persons for acceptance. The PD then approves the resolution accepted by the aggrieved person.</p> <p>iii. Aggrieved PAPs may opt to approach to the Court of Law, if the resolution at DG level is not acceptable to him/her.</p> |
| Step 5 | <p>i. The resolution accepted by the aggrieved persons at any level (LGRC, PMO, DG) is approved/nodded by the PD and forwarded back to the Conveners' office of LGRC keeping records at his/her office.</p> <p>ii. Based on the approved resolution, the implementing agency processes his/her entitlements and assists EA in arranging payment.</p> |

107. To ensure that grievance redress decisions are made in formal hearings and in a transparent manner, the Convener will apply the following guidelines:

- i) To ensure that grievance redress decisions are made in formal hearings and in a transparent manner, the Convener will apply the following guidelines:
- ii) Reject a grievance redress application with any recommendations written on it by a GRC member or others such as politicians and other influential persons.
- iii) Remove a recommendation by any person that may separately accompany the grievance redress application.
- iv) Disqualify a GRC member who has made a recommendation on the application separately before the formal hearing:
- v) Where a GRC member is removed, appoint another person in consultation with the PD.

108. The Convener will also ensure strict adherence to the impact mitigation policies and guidelines adopted in this RAP and the mitigation standards, such as compensation rates established through market price surveys.

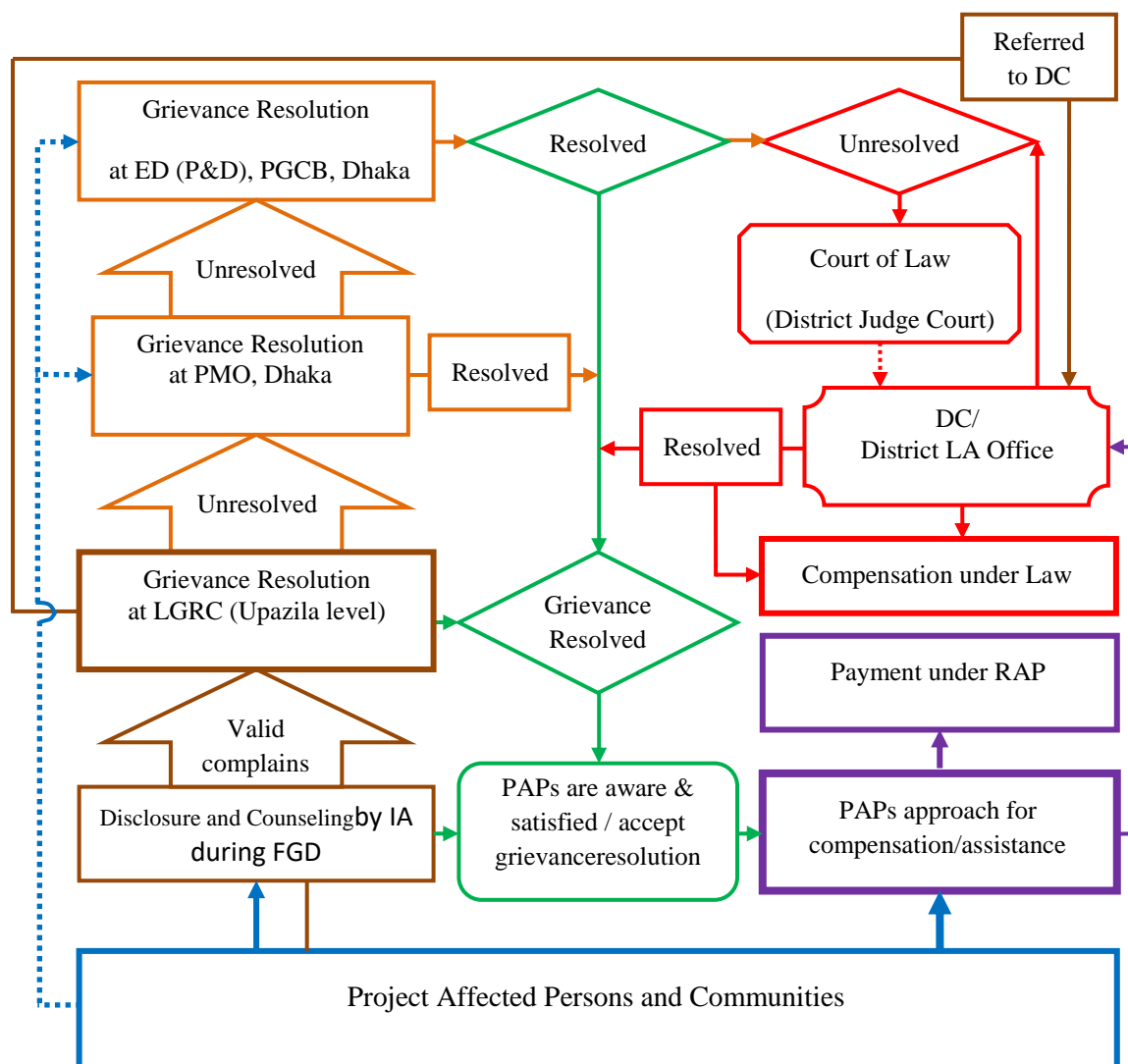


Figure 19 **Grievance Redress Process Flow Chart**

8.3 Grievance Redress Committees (GRCs)

109. A three-level grievance redress mechanism has been defined for this project (Table-23). At Level 1, a grievance redress committee (GRC) is established at the Upazila level. The members of GRC should represent all concerned agencies involved in project implementation. It will be comprised of five members headed by an executive engineer (or a designated official to be nominated by PGCB) as the convener. The other four members include the Field Coordinator of RAP implementing Agency who acts as the GRC Member Secretary, Upazila Chairman of the concern Upazila or his/her delegated Vice-Chairman, one male and one female representatives from the PAPs are members of the Local Level

GRC. The second level GRC will be a three-member committee headed by PGCB Project Director. The third level GRC is a two-member committee headed by the Executive Director of PGCB.

110. Aggrieved people will first file with the local-level GRC. If the grievance is not resolved at local level the case will be forwarded to project (PMO) level GRC with minutes and other documents. If it is not resolved at PMO level the case will be forwarded to Ministry level. People will have every right to bring the case to a court of law at any level of the GRM.

Table 23. Composition of GRC

| Level | Members of the GRC at different levels |
|---|--|
| Level 1 Local (Upazila) level GRC | Executive Engineer/Deputy Project Director- Convener Field Coordinator of IA– Member Secretary Upazila Chairman or his representative- Member Agriculture Extension Officer at Upazila level - Member One representative from PAPs male or female (female in case of female aggrieved person) – Member |
| Level 2 Project Level (PMO) | 3. Project Director – Convener 4. Team Leader RAP implementing Agency- Member Secretary 5. Executive Engineer of the project, PGCB-Member |
| Level 3 ED Level | 1. Executive Director (P&D) PGCB, Dhaka - Convener 2. Chief Engineer, PGCB- Member Secretary |

8.4 GRC's Scope of Operations and Decision Requirements

111. The scope of work and responsibility/ jurisdiction of the GRC is:

- Any grievances presented to the GRC should ideally be resolved on the first day of hearing or within one month of the case being filed for complicated cases that require additional investigations.
- Grievances of indirectly affected persons and/or persons affected during project implementation will also be reviewed by the GRC.
- The GRC will not engage in any review of the legal standing of an “awardees” other than in direct losses or distribution of shares of acquired property among the legal owners and associated compensation or entitlement issues.
- GRC decisions should ideally be arrived at through consensus, or as a minimum, based on a majority vote. Any decision made by the GRC must be within the boundaries

established by the social safeguard policies of World Bank (OP 4.10, 4.10 and 4.12) as a whole.

- The GRC will not deal with any matters pending in the court of law. But if the parties agree on through a written appeal, GRC can mediate. The parties will withdraw the litigation.
- A minimum three (03) members shall form the quorum for the meeting of the LGRC.

8.5 Filing a Grievance/Complaint with GRC

112. PAPs will be able to file their grievances without any fear and intimidation. Where required, the PGCB and IA will assist the PAPs with drafting any grievance notifications. All grievances must be submitted in writing to the LGRC convener. The complainant may be represented by the PAP him/herself or appointed agent such as locally elected officials/legal advisors. The judgment made by GRC will be communicated to the concerned PAP in writing. If dissatisfied, and with the agreement of the GRC, the PAP may request a further review of the judgment of LGRC by the Project-level GRC. In such cases, the case will be forwarded to the Convener of the project-level GRC with all documentations by the LGRC convener. If the disputant still remain unsatisfied, he/she can approach to ED through the LGRC and Project level GRC. They will enjoy opportunity to go to the formal court of law if still remain dissatisfied with the decision of any level of the GRM.

8.6 Documentation of Grievance

113. The affected persons and their communities will be informed of the project's GRM in open meetings at important locations and in PAP group meetings. Bangla translations of the RAP and the GRM in the form of information brochures will be distributed among the PAPs. The PAPs will also be briefed on the scope of the GRC, the procedure for lodging grievances cases and the procedure of grievance resolution at the project level.

114. To ensure impartiality and transparency, hearings on complaints will remain open to the public. The LGRCs will record the details of the complaints and their resolution in a register, including intake details, resolution process and the closing procedures. GRC will maintain the following three Grievance Registers:

- **Intake Register:** (1) Case number, (2) Date of receipt, (3) Name of complainant, (4) Gender, (5) Father or husband, (6) Complete address, (7) Main grievance regarding social (loss of land/property or entitlements) or environmental, (8) Complainants' story and expectation with evidence, and (8) Previous records of similar grievances.

- **Resolution Register:** (1) Serial no., (2) Case no., (3) Name of complainant, (4) Complainant's story and expectation, (5) Date of hearing, (6) Date of field investigation (if any), (7) Results of hearing and field investigation, (8) Decision of GRC, (9) Progress (pending, solved), and (10) Agreements or commitments.
- **Closing Register:** (1) Serial no., (2) Case no., (3) Name of complainant, (4) Decisions and response to complainants, (5) Mode and medium of communication, (6) Date of closing, (7) Confirmation of complainants' satisfaction, and (8) Management actions to avoid recurrence.

115. Grievance resolution will be a continuous process in RAP implementation. The PMO and IA will keep records of all resolved and unresolved complaints and grievances (one file for each case record) and make them available for review as and when asked for by World Bank and any other interested persons/entities. The PMO will also prepare periodic reports on the grievance resolution process and publish these on the PGCBwebsite.

9. INSTITUTIONAL ARRANGEMENTS FOR RAP IMPLEMENTATION

9.1 Introduction

116. PGCB's PMO is responsible for land acquisition and involuntary resettlement associated with this project. The PMO will take necessary actions, including forming various organizations and mobilizing the RAP implementing agency (IA) that will deliver all the compensation packages.

9.2 RAP Implementation Roles and Responsibilities

117. Bangladesh does not have a legal process for RAP implementation. Therefore, an implementation procedure has been defined, based on the output of many other successfully completed donor funded projects in Bangladesh, with RAP requirements.

9.2.1 The PGCB Project Director

118. The Project Management Office (PMO) led by the PD will be established at PGCB headquarters for the implementation of the overall project activities, and will oversee the implementation of the RAP. The essential duties of the PD will be coordinating preparation and implementation of the land acquisition and resettlement activities in a timely and socially acceptable manner. These duties will include:

- reviewing and updating schedules for the implementation of civil works, and coordinating them with the process tasks required for land acquisition and resettlement compensation;
- coordinating the monitoring of all RAP-implementation related activities performed at the PMO level and ensuring that all tasks related to land acquisition and compensation, including the placement of acquisition funds with the DC's office, are all completed on time.
- consulting with Chief Engineer or ED to resolve any issues that are deemed instrumental for land acquisition and preparation and implementation of the resettlement activities.
- ensuring the all mandatory reporting is completed and transmitted to the agencies as defined in the RAP;
- monitoring the payments to PAPs, confirming that their compensations/entitlements are delivered in full before the land is taken over for civil construction.
- ensuring payment of compensation for crops and trees for temporary used land in the transmission lines

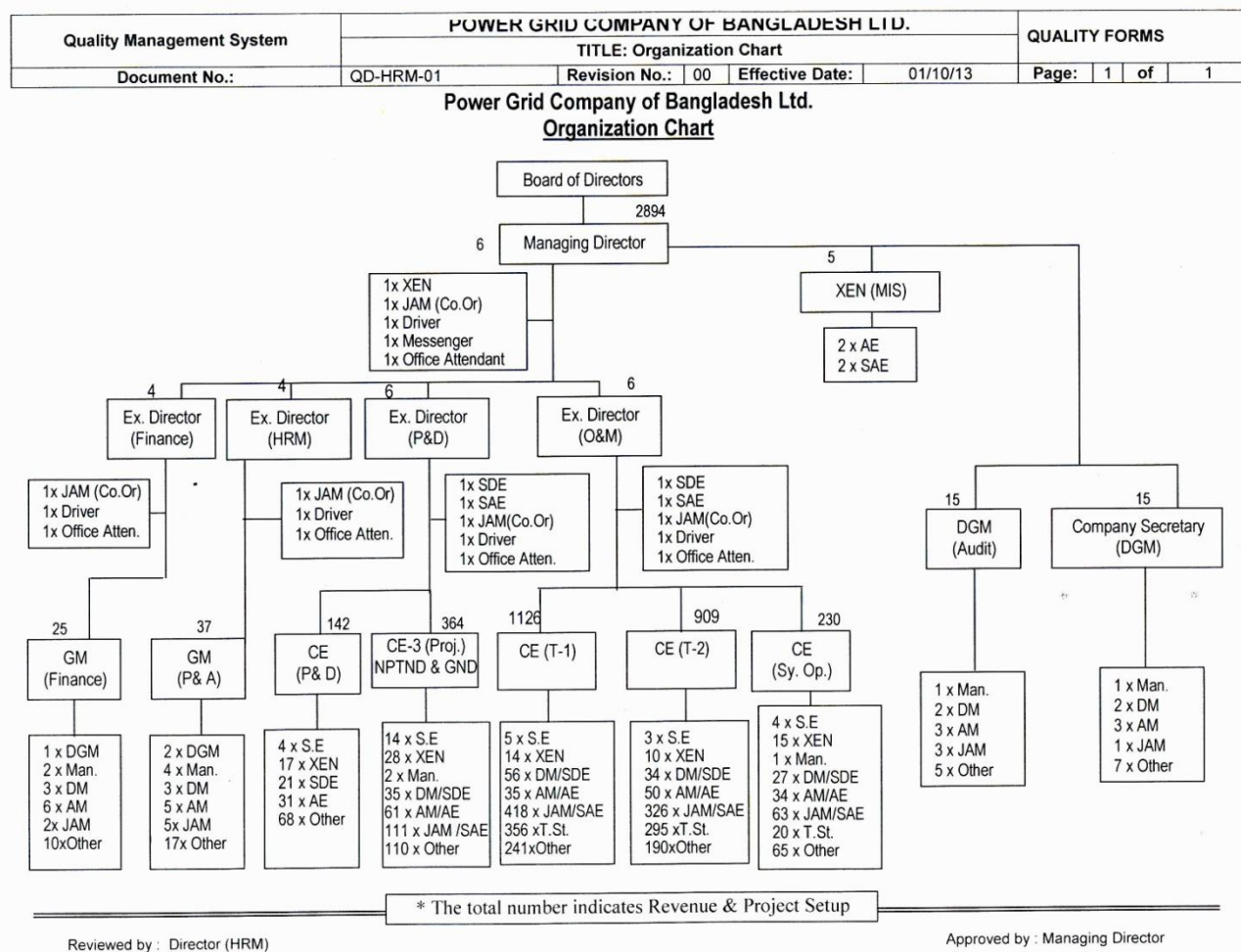


Figure 20 Organogram of the PGCB

9.2.2 The RAP Implementing Agency (IA)/NGO

119. With guidance from the PMO, the IA/INGO will work at the PAP-level, addressing the seven areas identified below. They should have enough capacity to identify problems or complaints at the grass roots level, and assess the needs of PAPs for the restoration of income and livelihoods. The IA/INGO will play a major role in the:

- i. disclosure of project information;
- ii. public consultation meetings;

- iii. socioeconomic surveys on PAPs specifically the detailed measurement survey used to identify exact losses and compensation ending at a written agreement;
- iv. consultation with PAPs and other stakeholders;
- v. processing the collected data for the completion of compensation packages;
- vi. implementation of RAP including payment of compensation and entitlements, and restoration and rehabilitation assistance; and
- vii. monitoring the implementation of the RAP.

9.2.3 Deputy Commissioner's Office (Land Acquisition)

120. The office of Deputy Commissioner (DC) will be responsible for land acquisition, in particular the assessment of affected assets under ARIPO 1982. It will appoint representatives to be members of the Property Assessment and Valuation Committee (PAVC), tasked with re-examining and quantifying losses and determining valuation of affected properties, using the base date provided in the RAP. The PGCB and the IIA shall liaise with the DC office to ensure that the detailed information on PAPs, ownership and property values documented in the RAP are incorporated in the DC's assessments. Dc office will pay compensation to titled owners of land and other affected properties to be identified during joint verification survey in the Substation locations. A true-copy of the CUL will be provided to PGCB with attestation by the concerned officials (preferably LAO/Additional LAO) so that PGCB can calculate additional compensation on top of DC's payment.

9.2.4 Construction Supervision Consultant (CSC)

121. The CSC will be recruited by the PGCB to provide assistance to the PMO on all aspects of the project, mainly detailed design and construction supervision duties. The CSC will have technical competence in the safeguard area and will work with both levels of government to make sure that safeguard compliance is achieved.

9.3 RAP Implementation Committees and Organizations

122. Several committees will be formed to assist PGCB for smooth implementation of the RAP. They include the PAVC and GRC. These committees will be formed by the Ministry of Power Energy and Mineral Resources (MoPEMR)

9.3.1 Property Assessment and Valuation Committee

123. Deputy Commissioners (DC) and PGCB will conduct joint on-site verification of affected physical properties on private land proposed for acquisition for the project in selected

substations. DCs will also assess the market price of the affected land, structure, trees and crops with data and assistance from Sub-Registry offices for land, Public Works Department (PWD) for structure, Department of Forest (DoF) for trees, and Agriculture Extension and Agriculture Marketing departments for crops. The DCs will not compensate the households, shops or any other entities affected on GOB land or having no legal documents/title to the assets affected for project purposes. However, as per World Bank OP 4.12 on involuntary resettlement, the authorized and unauthorized occupants of public land, sharecroppers, lessees with no legal papers will also be entitled for compensation and assistance following the RAP. These non-titled affected persons and their physical and economic losses will be assessed and replacement value of affected physical assets and income will be determined by a Property Assessment and Valuation Committee (PAVC) established for each Upazila under the project. The PAVC will be a 5-member committee at each Upazila. The members of PAVC will be nominated by the Superintending Executive (Grid Circle) PGCP and approved by the Project Director, PMO, Dhaka.

Membership of PAVC

| | |
|---|--------------------|
| Superintending Executive (Grid Circle) PGCP | : Convener |
| Executive Engineer, Grid Maintenance Division (GMD) of the concern jurisdiction, PGCB | : Member |
| Field Coordinator of the RAP Implementing Agency/NGO | : Member-Secretary |
| Representative of concerned DC office | : Member |
| Upazila Vice Chairman (concern Upazila) | : Member |

124. The PAVC will verify and cross check the field book of the joint verification survey (JVS) conducted jointly by PGCB and the Deputy Commissioners at respective project area. The PAVC will also review and certify the census of affected households (titled and non-titled) and assets by the PGCB conducted through IA/NGO. If there is major variation between Census and JVS data (more than 10%) in assessing affected properties, PAVC will consult the JVS for titled losses and the Census for non-titled losses. PAVC will assess quantity and category of affected physical property (structure, tree, business, common properties, etc.) on substations and transmission lines. Replacement value of the affected physical property will also be determined by the PAVC based on current market price. The PAVC will design and conduct a property valuation survey (PVS) through survey and public consultation and

consult secondary data to recommend replacement value of land and structures and market price of trees and crops as well as amount of loss of income at current market price.

9.3.2 Grievance Redress Committee

125. A three-tier grievance redress committee system has been proposed for this project. First tier is at local level (Upazila), second tier is at PGCB's PMO level and third tier is at ED level. Details of GRC's makeup are described in Chapter 8 of this RAP.

9.4 Implementation Timetable

126. The RAP implementation period depends primarily on how efficiently the private land acquisition process is completed. In Bangladesh, once the surveys and analyses have been completed, a complex and time bounded set of steps are followed (Figure-21). It begins with a review, assessment and finalization of all data on PAPs provided in the RAP, followed by notices given to those affected. This is followed a number of different work streams, depending on whether to compensation deals with titled and untitled land or assets.

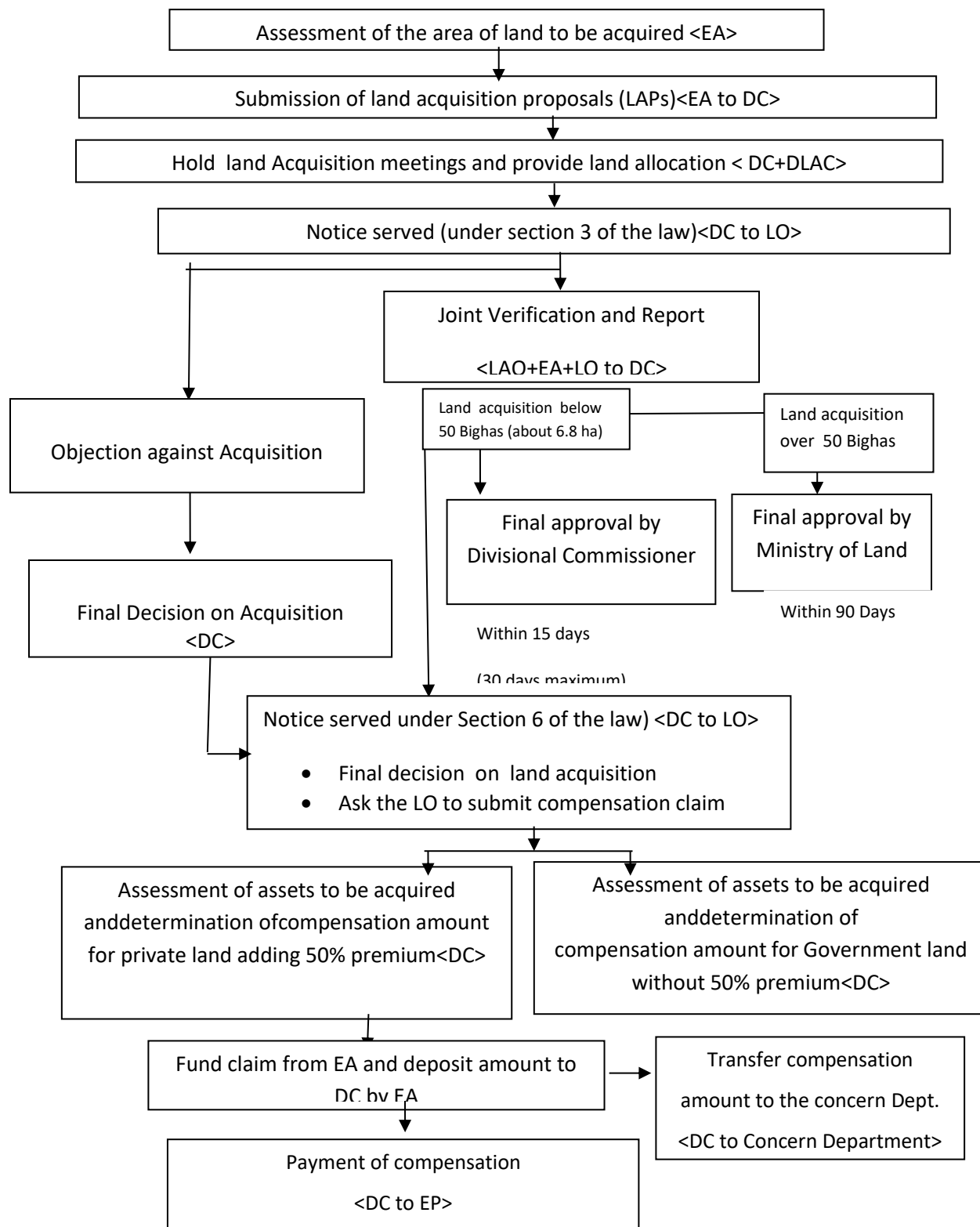


Figure 21 **Procedures of Land Acquisition under the GOB**

EA=Executing Agency (PGCB), DC=Deputy Commissioner, AC (Land)=Assistant Commissioner Land, LO=Land Owner, LAO=Land Acquisition Officer

127. In order to address any grievances and additional compensation/resettlement benefits, the RAP implementation will be started prior to start of the land acquisition process and would continue for at least three months after completion of civil works.
128. This project requires acquisition of about 86 acres of land for substations, triggering an up to 36 months process, from the date of submission of LA proposal to DC to complete payment for land lost. Therefore, the PGCB will need to engage the IA for 36 months, but scaled down after about the 24th month. A time-bound implementation schedule has been developed for 36 months from the date of mobilization of IA/INGO to the site (Figure-22).
129. The implementation schedule is based on the principle that (i) all displaced persons and families are paid their due compensation and assistance prior to relocation; and (ii) relocation of the families and businesses will be synchronized with the schedule. The activities listed include vacating lands for construction, payment of additional grant over CCL to reach replacement cost, income and livelihood restoration activities, and social development for vulnerable families. This schedule will be finalized once the detailed design is completed and accurate surveys are in place and the RAP budget is updated and finalized.

| Sl. No. | Activities/steps | Year 1 | | | | Year 2 | | | | Year 3 | | | |
|---------|--|--------|---|---|---|--------|---|---|---|--------|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| A | LAND ACQUISITION AND PAYMENT | | | | | | | | | | | | |
| 1 | Land Acquisition Processing by DCs | | | | | | | | | | | | |
| 2 | Notice under section 3, Joint Verification, Notice under section 6 | | | | | | | | | | | | |
| 3 | LA Estimate and Fund Placement with DCs | | | | | | | | | | | | |
| 4 | Notice under Section 7 by DCs | | | | | | | | | | | | |
| 5 | Payment of CUL by DCs | | | | | | | | | | | | |
| 6 | Transfer of Land to PGCB by DC | | | | | | | | | | | | |
| B | SOCIAL PREPARATION FOR COMPENSATION PAYMENT | | | | | | | | | | | | |
| 1 | Mobilization of IA/INGO to the field | | | | | | | | | | | | |
| 2 | Information Campaign | | | | | | | | | | | | |
| 3 | Updating and disclosure of RAP | | | | | | | | | | | | |
| 4 | Preparation and approval of Guidelines for PGCB to pay for resettlement benefits | | | | | | | | | | | | |
| 5 | IA assistance to PAPs for CCL collection | | | | | | | | | | | | |
| 6 | Preparation and approval of final RAP budget based on PAVC recommendation | | | | | | | | | | | | |

| Sl. No. | Activities/steps | Year 1 | | | | Year 2 | | | | Year 3 | | | |
|---------|---|--------|---|---|---|--------|---|---|---|--------|---|---|---|
| | | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 | 1 | 2 | 3 | 4 |
| 7 | Photograph of EPs and Issuance of ID Cards | | | | | | | | | | | | |
| 8 | Determination of Entitlements for titled and non-titled Eps | | | | | | | | | | | | |
| C | PAYMENT OF COMPENSATION AND RESETTLEMENT BENEFIT | | | | | | | | | | | | |
| 1 | Coordinate with DC offices on land acquisition | | | | | | | | | | | | |
| 2 | Assist APs in the process of CuL collection | | | | | | | | | | | | |
| 3 | Prepare CCL statement as per DC payment | | | | | | | | | | | | |
| 4 | Preparation of EP file and EC | | | | | | | | | | | | |
| 5 | Preparation indent (EP payment list) | | | | | | | | | | | | |
| 6 | Opening Bank Account by the PAPs | | | | | | | | | | | | |
| 7 | PAPs apply and receive CCL | | | | | | | | | | | | |
| 8 | Payment of RC/AG for RC | | | | | | | | | | | | |
| D | RELOCATION/ RESETTLEMENT | | | | | | | | | | | | |
| 1 | Payment of resettlement benefits to EPs | | | | | | | | | | | | |
| 2 | DPs relocated elsewhere after payment | | | | | | | | | | | | |
| E | GRIEVANCE REDRESS MECHANISM | | | | | | | | | | | | |
| 1 | Complaints from aggrieved APs | | | | | | | | | | | | |
| 2 | Review, Approval and Actions | | | | | | | | | | | | |
| F | DATA RECORD AND MONITORING | | | | | | | | | | | | |
| 1 | Design, Develop and Operate Data record | | | | | | | | | | | | |
| 2 | Internal Monitoring by PGCB | | | | | | | | | | | | |
| G | INCOME AND LIVELIHOOD RESTORATION | | | | | | | | | | | | |
| 1 | Need Assessment Survey on IGA training | | | | | | | | | | | | |
| 2 | Development of training Modules | | | | | | | | | | | | |
| 3 | Training on IGA for vulnerable people | | | | | | | | | | | | |
| H | REPORTING BY INGO | | | | | | | | | | | | |
| 1 | Inception Report | | | | | | | | | | | | |
| 2 | Monthly Progress Report | | | | | | | | | | | | |
| 3 | Final Report | | | | | | | | | | | | |

Figure 22RAP Implementation Schedule and Construction Mobilization

CUL=Cash Compensation Under Law, AG=additional grant, RC= replacement cost

10. MONITORING AND REPORTING

10.1 Monitoring System

130. **Internal Monitoring-** a monitoring system has been established to ensure the effective and efficient implementation of land acquisition, involuntary resettlement and compensation for lost assets. More specifically, the objectives of the monitoring will be to: 1) check if compensation, restoration and rehabilitation assistance, and other entitlements are completed and in a timely fashion; 2) see if the standards of living of PAPs are restored to pre-project levels or improved once compensation has been delivered; and, 3) identify problems and resolve them.
131. To check compliance with the RAP, monitoring will be conducted by the IA/INGO and from time to time by the PMO and at least semi-annually by the CSC staff.
132. **External Monitor-** An external independent monitor will be contracted by PGCB to report on whether entitlements are being provided in a timely complete manner. The monitoring will be conducted at the discretion of the external monitor and at least once in every 6 months during the RAP implementation period. Each inspection will result in a compliance report.
133. **Reporting-** The PMO will monitor the implementation status of land acquisition and involuntary resettlement activities. The Report will be submitted to PGCB who then will pass it on to World Bank.
134. PMO will consolidate Information (as quantitatively as possible) on RAP delivery in a quarterly progress report. The report will contain write ups addressing the following areas:
- accomplishments to-date;
 - objectives attained and not attained during the reporting quarter;
 - problems and challenges regarding land acquisition and involuntary resettlement; and
 - proposed countermeasures/actions for the next quarter.
135. The indicators to be covered by the monitoring activities are listed in Table-24 and can be converted to a simple checklist and then used as the main compliance monitoring tool.

Table 24: Monitoring Indicators

| Monitoring Issues | Monitoring Indicators |
|---|--|
| Budget and timeframe | <ul style="list-style-type: none"> • Have all land acquisition and involuntary resettlement staff been appointed and mobilized for field and office work on schedule? • Have capacity building and training activities been completed on schedule (As per RAP)? • Are involuntary resettlement implementation activities being achieved against agreed implementation plan? • Are funds for land acquisition and involuntary resettlement being allocated to the EA on time? • Have funds been disbursed according to RAP? • Has the land made encumbrance- free and handed over to the contractor in time for feasibility study implementation? |
| Delivery of PAPs entitlements | <ul style="list-style-type: none"> • Have all PAPs received entitlements according to numbers and categories of loss set out in the entitlement matrix? • Are activities related to income and livelihood restoration being implemented as planned? • Have all processes been documented? • Have resettlement information brochures/leaflets been prepared and distributed? |
| Consultations, grievances, and special issues | <ul style="list-style-type: none"> • Have consultations taken place as scheduled, including meetings, groups, and community activities? • Have any PAPs used the grievance redress procedures? • What grievances were raised? • What were the outcomes? • Have conflicts been resolved? • Have grievances and resolutions been documented? • Have any cases been taken to court? |

| Monitoring Issues | Monitoring Indicators |
|--------------------|--|
| Benefit monitoring | <ul style="list-style-type: none"> • What changes have occurred in patterns of occupation compared to the pre-project situation? • What changes have occurred in income and expenditure patterns compared to pre-project situation? • Have PAPs income kept pace with these changes? • What changes have occurred for vulnerable groups? |

136. The PMO will periodically prepare and send status reports on RAP implementation to World Bank by incorporating monthly updates in the Quarterly Project Progress Reports. To that end, the following relevant documents shall be submitted together with the progress reports, by the PMO to World Bank:

- a draft RAP approved by the PGCB before feasibility study appraisal;
- the final RAP approved by the PGCB after the PAPs' detailed measurement survey (DMS) has been completed and the budget is updated; and,
- IA/INGO Monitoring reports on land acquisition and resettlement.

137. The PMO in cooperation with the CSC, the IA/ INGO will review the reports and highlight gaps or issues, then formulate immediate (within a day or two) corrective actions.

11. RESETTLEMENT COSTS AND BUDGET

11.1 Budget and Financial Plan

138. The resettlement cost estimate for the Project includes eligible compensation, resettlement assistance and support cost for RAP implementation and monitoring as per the entitlement matrix. The estimated cost in this budget is indicative which needs further update during finalization of the RAP. The unit cost and the evaluation is done based on the inventory of assets. The resettlement costs and budget covers compensation and resettlement which includes the replacement cost of land, other assets, and special assistances. The costs for land acquisition has been estimated at current market price for the year 2017 with necessary supplements for replacement cost, and additional assistance for loss of income and vulnerabilities as per the entitlement matrix. There is 02% contingency over the total budget to meet unforeseen expenditures. PGCB will ensure that the land acquisition budget is delivered on time to the DC and that the funds for assets compensation are provided to PGCB for distribution to the affected PAPs. PGCB will also confirm with World Bank that all RAP compensation defined in the approved RAP is fully provided to PAPs prior to the award of the civil work contract.

139. Compensation and resettlement funds will be provided to the PAPs in two separate ways:

- 1) Compensation under the Land Acquisition Law and ARIPO 1982 will be disbursed through the Deputy Commissioners; and,
- 2) Additional compensation on top of DC's payment (if required) and other assistance for resettlement of project-affected persons will be disbursed by PGCB through the INGO in the field with necessary cooperation from PGCB.

11.2 Calculation of Estimated Costs

140. The estimated costs for all assets acquired are based on replacement costs as reported in the Market Survey conducted for this Project. The current market price (CMP) for assets acquired complies with replacement value. The CMP thus prepared will be reviewed, verified and determined by the Property Assessment and Valuation Committee (PAVC), based on the recommendation contained in the CMP study.

11.3 Summary Land Acquisition and Resettlement Budget

141. The land acquisition and resettlement budget has been estimated based on current market price of land, trees and crops. The budget includes compensation for private land, trees, crops and transitional allowance. It also includes temporary disruption cost of structure (if any). Other associated costs such as administrative costs of the DC offices, operation cost for the RAP implementing agency/INGO and cost for external monitoring agency. It also includes 5% contingency to meet unforeseen expenses during implementation. Total estimated budget stands at BDT 3,399,022,038 equivalent to USD 41,963,235.03.

Table 25 Summary of the budget

| Sl. No. | Particulars | Estimated amount of Compensation in BDT | % |
|---------|--|---|-------|
| A. | Compensation for land at Substations | 2,560,128,200 | 75.32 |
| B | Compensation for Trees | 102,919,150 | 3.03 |
| C | Compensation for Crops | 126,620,000 | 3.73 |
| D | Compensation for structures under transmission line | 11,900,000 | 0.35 |
| E | Resettlement Benefits | 306,088,760 | 9.01 |
| F | RAP Implementation and Monitorig | 69,000,000 | 2.03 |
| G | Administrative cost for LA process @ 2% of the total budget | 63,533,122 | 1.87 |
| H | Contingency @ 5% of the total budget | 158,832,806 | 4.67 |
| | Grand Total inclduing compensation, benefits, operation and administrative costs | 3,399,022,038 | 100 |

11.4 Assessment of Market Price for Land

142. According to the land acquisition law and practice of Bangladesh, the category of land will be determined by the Deputy Commissioner of the respective district. For the preparation of the compensation and resettlement budget, category wise price of the affected land has been determined based on the field situation. Average Mouza rates (declared by the GoB for the year 2017) and people's opinion (obtained through questionnaire survey) have been considered for assessment of budget. For Govt. land, only recorded price was considered for cost estimation for government land acquisition. On the other hand, average of the

reported and recorded price was considered for cost estimation of private land acquisition. It is to mention that Mouza rates (including 100% premium) is higher than reported price (people's opinion) in some substation locations. In that case Mouza rates (including 100% premium) has been taken into account for assessing budget. The census and IOL survey have identified that only agricultural land will be affected by the project. The concerned Deputy Commissioner (DC) of the district will finally determine the category of land following land acquisition law for compensation payment. The difference between DC prices for various lands and the CMP recommended and /or adopted by PAVC (based on this report and recommendations) will be provided by the EA (PGCB) as additional payments to meet the replacement cost for land. Table beneath presents the average CMP for land for each of the substations.

Table 26: Average CMP of land

| S. L | Substation with District | Mouza | Catego ry of land | Record ed price of Mouza Rate | Record ed price as per Mouza Rate includi ng 100% premiu m | Report ed price per decima l (avg.) obtaine d from the local people | Top up value |
|------|------------------------------------|--------------------|-------------------|-------------------------------|--|---|--------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | (7-6) |
| 1 | Murad Nagar Sub Station,Comilla. | Poschim Vobanipur. | Null | 23,262 | 46,524 | 35,000 | (11,524) |
| 2 | Basurhat Sub Station,Feni. | Ramnagor | Null | 65,417 | 130,834 | 250,000 | 119,166 |
| | | Sekendarpu r | Null | 42,619 | 85,238 | 150,000 | 64,762 |
| 3 | Kosba Sub Station,B-Baria. | Kaliar | Null | 5,944 | 11,888 | 30,000 | 18,112 |
| 4 | Halisohor Sub Station,Chittagon g. | Halisohor | Null | 379,957 | 759,914 | 850,000 | 90,086 |
| 5 | Laksam Sub Station,Comilla | Gazimura | Null | 42,385 | 84,770 | 150,000 | 65,230 |
| 6 | Lakkipur Sub Station,Lakkipur. | Jadia | Null | 46,000 | 92,000 | 60,000 | (32,000) |
| 7 | Maijdee Sub Station.Noakhali | Chor Uria | Null | 14,799 | 29,598 | 55,000 | 25,402 |

| S. L | Substation with District | Mouza | Category of land | Recorded price of Mouza Rate | Recorded price as per Mouza Rate including 100% premium | Reported price per decimal (avg.) obtained from the local people | Top up value |
|------|-----------------------------------|--------------------|------------------|------------------------------|---|--|--------------|
| 8 | Potia Sub Station, Chittagong. | Allai | Null | 230,605 | 461,210 | 400,000 | (61,210) |
| 9 | Choumohoni Sub Station, Noakhali. | Choumohoni | Null | 231,590 | 463,180 | 200,000 | (31,590) |
| 10 | Kochua Sub Station, Chadpur. | Toragor | Null | 118,646 | 237,292 | 65,000 | (172,292) |
| 11 | Korerhat Sub Station, Chittagong. | Joypur Purbo Joyar | Null | 31,367 | 62,734 | 75,000 | 12,266 |
| 12 | Chandina Sub Station, Comilla | Ashra | Null | 130,444 | 260,888 | 270,000 | 9,112 |

Source: Market Survey, June, 2017

11.5 Estimated budget for land

143. The replacement value for the affected land will be determined by the PAVC during implementation stage based on the average CMP and adding stamp duty and registration cost with the CMP. The budget of this RAP has a provision of stamp duty & registration cost under a separate head (@12% of land compensation) as per entitlement matrix. The estimated amount for land acquisition has been assessed based on CMP (table-27 above) which is BDT 2560 million (USD 31.61 million).

Table 27: Land Acquisition Budget

| Sl. No. | Category of loss | Quantity in acre | Rate in acre | Estimated amount of Compensation in BDT |
|-----------|---|------------------|--------------|---|
| A. | Compensation for land at Substations | | | |
| A1 | Private Land | | | |
| 1 | Murad Nagar, Comilla. | 5 | 4,652,400 | 23,262,000 |
| 2 | Basurhat, Feni.(Ramnagar) | 0.8 | 25,000,000 | 20,000,000 |

| Sl. No. | Category of loss | Quantity in acre | Rate in acre | Estimated amount of Compensation in BDT |
|---------|--|------------------|--------------|---|
| 2.1 | Basurhat, Feni.(Sekendar Pur) | 1.2 | 15,000,000 | 18,000,000 |
| 3 | Kosba , B,Baria | 5 | 3,000,000 | 15,000,000 |
| 4 | Halisohor/Ananda Bazar, Chittagong. | 20 | 85,000,000 | 1,700,000,000 |
| 5 | Laksam , Comilla | 2 | 15,000,000 | 30,000,000 |
| 6 | Laxmipur , Laxmipur | 5 | 9,200,000 | 46,000,000 |
| 7 | Maijdee. Noakhali | 5 | 5,500,000 | 27,500,000 |
| 8 | Patiya, Chittagong. | 5 | 46,121,000 | 230,605,000 |
| 9 | Kochua, Chadpur. | 5 | 23,729,200 | 118,646,000 |
| 10 | Korerhat (Mirsharai), Chittagong. | 19 | 7,500,000 | 142,500,000 |
| 11 | Chandina. Comilla | 2 | 27,000,000 | 54,000,000 |
| | Total of Private Land | 75 | | 2,425,513,000 |
| A2 | Government Land (Acre) | | | |
| 1 | Chowmohoni, Noakhali. (Mouza rate without premium) | 5 | 23,159,000 | 115,795,000 |
| 2 | Korerhat (Mirsharai), Chittagong. (Mouza rate without premium) | 6 | 3,136,700 | 18,820,200 |
| | Total of Government land (Acre) | 11 | | 134,615,200 |
| | Sub-Total of Land | | | 2,560,128,200 |

11.6 Compensation for Trees

144. The compensation for affected trees on private land of in the substations and transmission lines are presented in Table-28. In some cases the trees will not be fell down but will require tuning of the branches for easy stinging of the wires. In case of installation of the towers affected trees will need to fell-down. The trees owners will be allowed to fell and take away the trees after payment compensation. In case of tuning of the branches the PAVC will assess the losses and compensation through detailed measurement survey during RAP implementation. This RAP considers all trees might be affected within the transmission line

and substations for full compensation and budget has been prepared accordingly based on the rates obtained from the market survey during census and IOL survey. The amount of compensation for trees at substations and transmission is BDT 103 million.

Table 28. Total budget for affected trees

| B | Compensation for Trees | No. | Rate (BDT) | Estimated amount of Compensation in BDT |
|---|------------------------|-------------|------------|---|
| | FRUIT | | | |
| 1 | Large (no.) | 4437 | 8500 | 37,714,500 |
| 2 | Medium (no.) | 1517 | 3500 | 5,309,500 |
| 3 | Small (no.) | 939 | 1500 | 1,408,500 |
| 4 | Plant (no.) | 610 | 200 | 122,000 |
| | TIMBER | | | |
| 1 | Large (no.) | 2257 | 12000 | 27,084,000 |
| 2 | Medium (no.) | 3408 | 7000 | 23,856,000 |
| 3 | Small (no.) | 3093 | 1000 | 3,093,000 |
| 4 | Plant (no.) | 547 | 50 | 27,350 |
| | FIREWOOD | | | - |
| 1 | Large (no.) | 68 | 12000 | 816,000 |
| 2 | Medium (no.) | 13 | 7000 | 91,000 |
| 3 | Small (no.) | 16 | 1000 | 16,000 |
| 4 | Plant (no.) | 0 | 50 | - |
| | MEDICINAL | | | |
| 1 | Large (no.) | 9 | 8,500 | 76,500 |
| 2 | Medium (no.) | 0 | 2,500 | - |
| 3 | Small (no.) | 3 | 1,600 | 4,800 |
| 4 | Plant (no.) | 0 | 50 | - |
| | BAMBOO | | | |
| 1 | Large (no.) | 5284 | 500 | 2,642,000 |
| 2 | Medium (no.) | 962 | 500 | 481,000 |
| 3 | Small (no.) | 590 | 300 | 177,000 |
| 4 | Plant (no.) | 0 | 0 | - |
| | Sub-Total Tree | 7503 | | 102,919,150 |

11.7 Value of Crops

145. The budget for compensation of standing crops for land has been estimated based on a fixed rate for total crop land. It is standard practice in Bangladesh for calculating crop

compensation on the basis of per acre single crop rate BDT 50,000(per acre). Compensation for standing crops for land acquisition has been estimated for a year BDT 50,000and BDT 20,000 for Transitional allowance for crop production. And compensation for standing crops for temporary use of land for three times BDT 150,000.

Table 29: Total Budget for Crops Production

| C | Compensation for Crops | Acre | Rate | Estimated BDT |
|-----|--|------|---------|---------------|
| 1 | Acquisition of land | | | |
| 1.1 | Compensation for standing crops production BDT @ 50000/- per acre | 86 | 50,000 | 4,300,000 |
| 1.2 | Transitional allowance for crop production BDT @ 20000/- per acre | 86 | 20,000 | 1,720,000 |
| 2 | Temporary use of land for transmission lines | | | |
| 2.1 | Compensation for crop production BDT @ 50,000/- per acre for 3 times | 804 | 150,000 | 120,600,000 |
| | Sub-Total of C | | | 126,620,000 |

11.8 Compensation for temporary Disruption of Structures under transmission line:

146. In total, 119 HHs will be disrupted during stinging of the transmission lines who have various categories of structures within the right of way (in between towers) including pacca-38, semi-pacca-45, tin made-29, Kacha/Thatched-7. The nature of impacts on structures will be assessed by PAVC and confirmed by GRC during implementation of the project. According to the PCGB they will have check survey as per standard before finalization of the alignment to avoid displacement. They will take mitigation measures such as “Scuff Folding” as an engineering solution to avoid adverse impacts on the structure. Despite all measures if the HH experience disruption due to the project transmission line he/she will be entitled to have compensation up to BDT 100,000 to be assessed by PAVC.

Table 30: Budget for temporary affected structures

| D | Compensation for structures under transmission line | No. | Rate | Estimated Cost in BDT |
|---|--|-----|--------|-----------------------|
| 1 | Compensation for disruption of structures during stinging of transmission line | 119 | 100000 | 11,900,000 |

11.9 Resettlement Benefit and cost

147. Apart from the compensation for affected land and other assets, vulnerable HHs and project affected people will have resettlement benefit as per the policy matrix of the project. Stamp Duty and Registration Cost @ 12% of replacement cost of land will also be ensured to the respected affected HHs. Compensation for fruits for fruit bearing trees (Large and Medium) @30% of timber value will also be ensured. The total cost of resettlement benefit is BDT 306 million.

Table 31. Resettlement Benefits and Costs

| E | Resettlement Benefits | No/BDT | Rate | Total Estimated Cost |
|---|---|------------|---------------|----------------------|
| 1 | Special assistance to male headed vulnerable (below poverty line, elderly, disable) HHs @ Tk. 10,000/- as one time grant. | 140 | 10,000 | 1,400,000 |
| 2 | Special assistance to female headed vulnerable HHs @ Tk. 15,000/- as one time grant. | 48 | 15,000 | 720,000 |
| 3 | Stamp Duty and Registration Cost @ 12% of replacement cost of land | 0.12 | 2,425,513,000 | 291,061,560 |
| 4 | Compensation for fruits for fruit bearing trees (Large and Medium) @30% of timber value | 43,024,000 | 30% | 12,907,200 |
| | Sub-Total of E | | | 306,088,760 |

11.10 Payments for Livelihood Restoration Programs and RAP Implementation

148. Apart from the compensation and resettlement benefits some associated costs will be required for implementation of the Resettlement Action Plan. These includes hiring for IA, external monitor, and ILRP programs, and capacity building training for the executing agency, and contingency (5% of total cost) amount to meet unforeseen expenses during implementation of the RAP. Total amount for such associated costs will be BDT 291 million.

Table 32: Budget for RAP Implementation and Monitoring

| F | RAP Implementation and Monitoring | Rate | Total estimated Cost |
|---|---|------|----------------------|
| 1 | Cost for hiring RAP Implementing Agency | LS | 50,000,000 |
| 2 | Capacity building training for officials of Executing Agency | LS | 2,000,000 |
| 3 | RAP External Monitoring Agency | LS | 7,000,000 |
| 4 | Income and Livelihood Restoration Program (ILRP) implementation | LS | 10,000,000 |

| F | RAP Implementation and Monitoring | Rate | Total estimated Cost |
|---|--|------|----------------------|
| 5 | Administrative cost for LA process @ 2% of the total budget (3,176,656,110) | 0.02 | 63,533,122 |
| 6 | Contingency @ 5% of the total budget (3,176,656,110) | 0.05 | 158,832,806 |
| 7 | Total | | 291,365,928 |