
APPENDIX 18.
RAP REPORT

**GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF COMMUNICATIONS
ROADS & HIGHWAYS DEPARTMENT (RHD)**

**PREPARATORY SURVEY FOR
DHAKA-CHITTAGONG NATIONAL HIGHWAY NO.1
BRIDGE CONSTRUCTION AND REHABILITATION
PROJECT**

RESETTLEMENT ACTION PLAN

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**On Behalf of
Roads and Highways Department (RHD)**

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Abbreviations and Acronyms

AB	Acquiring Body
ACE	Additional Chief Engineer
AE	Assistant Engineer
AH	Affected Household
AP	Affected Person
ASA	Association for Social Advancement
BA	Bachelor Degree
BBS	Bangladesh Bureau of Statistics
BDT	Bangladesh Taka
BRAC	Bangladesh Rural Advancement Committee
CBE	Commercial and Business Enterprise
CCL	Compensation under Law
CI	Corrugated Iron
CPR	Common Property Resources
CRO	Chief Resettlement Officer
DC	Deputy Commissioner
DCI	Direct Calorie Intake
DOE	Department of Environment
DoF	Department of Fisheries
DCSC	Design and Construction Supervision Consultant
DTL	Deputy Team Leader
DPD	Deputy Project Director
DPM	Deputy Project Manager
EA	Executing Agency
EC	Entitlement Card
EE	Executive Engineer
EMA	External Monitoring Agency
EMU	Environment Management Unit
EP	Entitled Person
ESU	Engineering Service Unit
FGD	Focused Group Discussion
ft	foot / feet (3.28 ft = 1 m)
GDP	Gross Domestic Product
GOB	Government of Bangladesh

GRC	Grievance Redress Committee
HIES	Household Income and Expenditure Survey
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome
HH	Household
HSC	Higher Secondary Certificate
IA	Implementing Agency
ID Card	Identify Card
IGA	Income Generating Activities
IOL	Inventory of Losses
IR	Involuntary Resettlement
IWTA	Inland Water Transport Authority
JICA	Japan International Cooperation Agency
JVS	Joint Verification Survey
LGI	Local Government Institution
LGED	Local Government Engineering Department
LMS	Land Market Survey
LIRP	Livelihood and Income Restoration Program
MA	Master Course
M&E	Monitoring & Evaluation
MIS	Management Information System
MOL	Ministry of Land
MOC	Ministry of Communications
NGO	Non-government Organization
NH-1	National Highway No.1
NRS	National Resettlement Specialist
the Ordinance	Acquisition and Requisition of Immovable Property Ordinance 1982
PAH	Project Affected Household
PAP	Project Affected People
PAU	Project Affected Unit
PAVC	Property Assessment and Valuation Committee
PCU	Passenger Car Unit
PIU	Project Implementation Unit
PD	Project Director
PDB	Power Development Board
PIB	Public Information Brochure

PMO	Project Management Office
PPR	Project Progress Report
PPTA	Project Preparatory Technical Assistance
PRA	Participatory Rapid Appraisal
PWD	Public Works Department
R&R	Resettlement and Rehabilitation
RAC	Resettlement Advisory Committee
RAP	Resettlement Action Plan
RB	Requiring Body
RE	Resettlement Expert
RF	Resettlement Framework
RHD	Roads & Highways Department
RO	Resettlement Officer
RoR	Record of Right
ROW	Right-of-Way
RV	Replacement Value
SAE	Sub-Assistant Engineer
SDE	Sub-Divisional Engineer
SE	Superintending Engineer
SES	Socioeconomic Survey
SSC	Secondary School Certificate
TA	Technical Assistance
UP	Union Paridhad
TOR	Terms of Reference
VHH	Vulnerable Household
WB	World Bank

EXECUTIVE SUMMARY

The Government of Bangladesh (GoB) has undertaken a project to construct three Bridges on National Highway No.1 (NH-1) i.e. Kanchpur, Meghna and Gumti Bridge including rehabilitation of the existing bridges through the Roads and Highways Department (RHD) under the Ministry of Communications (MOC) with financial assistance from the Japan International Cooperation Agency (JICA). The project involves construction of new bridges parallel to the existing bridges with approach road. The length of the bridges including viaduct are Kanchpur 400 m, Meghna 930 m and Gumti 1,410 m respectively. The overall objective of the Project is to mitigate the increasing traffic demand of NH-1, which can be made by;

- i. Construction of new 2nd Kanchpur Bridge, 2nd Meghna Bridge and 2nd Gumti Bridge together with approach road respectively.
- ii. Rehabilitation of existing Kanchpur Bridge, Meghna Bridge and Gumti Bridge

Land Acquisition and Displacement: Construction of the new bridges and rehabilitation of the existing bridges will require no land acquisition. All components of the project will be constructed on the RHD land. But the project interventions will require displacement of about 278 project affected households (PAHs) including 175 residents (residential 107 and commercial 61, three both residential and commercial squatters, one pond owner, one tree owner and two common properties), 103 tenants (residential 98 and commercial 5), have been affected. Besides, 28 wage laborers (shop workers) will also experience loss of livelihoods.

Significance of Impacts: All physically displaced project affected households (PAHs) will experience significant impacts as a result of displacement. Mitigation of all impacts, including the significant resettlement impacts, will be undertaken through implementation of this Resettlement Action Plan (RAP). The RAP identified, and proposed number of remedial measures for addressing the gaps between national legislation and the requirements of Development Partner (such as JICA)'s Policy on Involuntary Resettlement.

Indigenous People: There are no indigenous people (tribal or ethnic minority) within the affected population..

Compensation and Entitlements: The affected persons (APs) will be compensated for their affected structure, trees, cropping field, ponds, business, both squatters and tenants staying on the government land. Compensation is to be paid by the RHD through an NGO/consulting firm

to be engaged by the Design and Construction Supervision Consultant (DCSC) to assist RHD in RAP implementation process. Compensation is based on entitlements including: (i) replacement value for structures, tree, etc. and (ii) other resettlement assistance as required such as transfer grants, re-installation grant (except replacement value) and compensation for loss of business/wage due to dislocation etc. Vulnerable households will be eligible for further cash assistance for relocation and resettlement to improve their living condition. RAP Implementing Agency (IA) will assist the APs in searching alternative relocation sites and in the relocation process. The entitlements as per loss category are presented in Table EX-1 below.

Disclosure, Consultation and Participation: The Displaced Persons (DPs) and their community have been consulted for their perception on the compensation payment process, scope and importance of participation in the project process, relocation requirements, etc. While conducting survey and the group discussions, personal contact and community based stakeholder consultation meetings were held at different stages of the project formation to seek opinions of the various stakeholders on the project. At least 2 formal stakeholder consultation meetings were held at Kanchpur and Meghna and 7 focused group meetings were held with different occupational groups in three bridges. Besides, the RAP disclosure meetings were held in three bridge locations on first August 2012.

For first stage and second stage (consultation and disclosure) meetings, the people were informed through a notice published in the national Daily newspapers and verbal notice through community leaders. During the implementation of the RAP more stakeholders consultation and focused group meetings will be held to seek cooperation from various stakeholders in the decision-making and implementation of the RAP. The RAP will be summarized in an information booklet in Bangla (local language) and disclosed to the affected people during implementation period. The APs will participate in the RAP implementation process through representation in the Grievance Redress Committees (GRCs).

Eligibility of Cut-off Date: All of the APs are identified on the RHD land and no new land acquisition is required for the project. This is why the commencement date of census survey is declared as the cut-off date for eligibility of resettlement benefit for the properties standing on the GoB land. In this project the date of commencement of census i.e. 8th March 2012 in Kanchpur Bridge, and 15th March 2012, in Meghna and Gumti Bridge is declared as cut-off date.

Table EX-1 Entitlement Matrix**Table 5.2 Entitlement Matrix**

Loss Item 1: LOSS OF PHYSICAL STRUCTURES RESIDENTIAL AND COMMERCIAL (WITHOUT TITLE TO LAND)			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Socially recognized owners (Squatters) of structures built on the ROW as identified by Census	1. Replacement Value ¹ (RV) for structure 2. Transfer Grant @ BDT 7 (seven) per sft ² of affected structure. 3. Utility reconnection assistance @BDT2,000/household 4. Removal grant for billboards as lump sum @ BDT 200,000/ number 5. Special Assistance of a one-time payment as recommended by PAVC for each vulnerable households (VHH) i.e. female-headed, disabled-headed, elderly-headed and hardcore poor household with an amount of BDT 10,000/VHH. 6. BDT 12,000/- as one time grant in addition to other compensation for female headed including disabled/handicapped/widow member family. 7. Skill Training for vulnerable households is provided by IA. 8. Owner will be allowed to take all salvageable materials free of cost.	1. Applicable to all structures located on ROW at cut-off dates. 2. PAVC will record structures and recommend the RV of structures. 3. Compensation will be paid for the structures built by the RHD and employees of RHD. 4. Transfer grant would be paid for only primary structure such as residential house (measured in sq ft). 5. Hardcore poor is defined as the households which income level is lower than BDT 60,000/year ³	1. RAP Implementing Agency (IA) will assist the APs in finding alternative site for relocation.
Implementation Issues			
1. Entitled person will be identified through the Census survey to be conducted by IA and RHD at the detailed design stage. 2. RV of structure will be determined by PAVC 3. Compensation must be paid before EP dismantles and removes the structures as per civil works requirement by RHD through IA.			

¹ As determined based on the result of replacement cost survey conducted by study team and to be recommended by PAVC

² Based on Padma Bridge Project (2010) financed by WB, ADB, JICA and IDB because of the proximity of the area and year the survey conducted, the value used for this project is considered to be applicable in due consideration of recent price level.

³ Based on Southwest Area Integrated Water Resources Planning Management Project (2011) financed by ADB

Loss Item 2: LOSS OF STANDING CROPS/FISH STOCK/ TREE WHO HAVE CONTRACT WITH LAND OWNER			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Socially recognized owners, as have contract documents with land owner, of trees and crops grown on public or other land, as identified by IA and verified by PAVC.	<ol style="list-style-type: none"> 1. The crop owners will be issued 60 days prior notice by the RHD to harvest the crops. If it is not near harvesting period, the expected yield will be compensated at RV. 2. In addition, grants for loss of access (right of cultivating) to cultivable land equivalent to the crop harvested in one harvested season, to be verified by PAVC, RV of fish stock and trees as determined by PAVC 3. Owners will be allowed to harvest crops and fish stock and fell the trees. 4. Dislocation allowance for fish pond @ BDT300/dec. 5. Provisions of lease agreement will supersede above entitlements unless otherwise no conflicts with guidelines stated in this matrix. 	<ol style="list-style-type: none"> 1. Applicable for all crops/fish stock on land/pond within ROW at the time of dispossession. 2. If the tree is planted on the RHD land by taking lease, compensation for trees will be paid following the clause of the lease agreement signed between the parties⁴ 3. RV of trees/crops/fish stock will be recommended by PAVC based on data obtained from forest department/ district agriculture extension office/ district marketing office/fishery department respectively/market survey, etc. for those identified through joint on-site verification by PAVC 	Nil
Implementation Issues:			
Loss of agricultural products (standing crops) will be assessed by PAVC and compensation will be paid by RHD through IA			

⁴ Usually, the lease contract is made to pay half of the total sales (market price) to the land owner. Therefore, half price of planted trees is paid to tree owners. Rest half is not required to be paid since the land owner is RHD

Loss Item 3: LOSS OF STANDING CROPS/FISH STOCK/ TREE WITHOUT TITLE TO LAND OR CONTRACT WITH LAND OWNER			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Actual cultivators, without consent to land owner, as identified in census by IA and verified by PAVC during implementation of RAP.	<ol style="list-style-type: none"> 1. The crop owners will be issued 60 days prior notice by the RHD to harvest the crops. If it is not near harvesting period, the expected yield will be compensated at RV. 2. In addition, grants for loss of access (right of cultivating) to cultivable land equivalent to the crop harvested in one harvested season, to be verified by PAVC. 3. RV of fish stock, and trees as determined by PAVC 4. Owners will be allowed to harvest crops and fish stock and fell the trees. 	<ol style="list-style-type: none"> 1. Applicable for all crops/fish stock on land/pond within ROW at the time of dispossession. 2. RV of trees/crops/fish stock will be recommended by PAVC based on data obtained from forest department/ district agriculture extension office/ district marketing office/fishery department respectively/market survey, etc. for those identified through joint on-site verification by PAVC 	
Implementation Issues: None			

Loss Item 4: LOSS OF INCOME (BUSINESS OWNER, WAGE EARNERS AND RENT-OUT HOUSE OWNER)			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Small shop owner affected by displacement 2. Wage earners affected at business enterprises 3. Owner of rent house/rooms affected by the Project	1. Grants for business loss and/or for loss of rental income with an amount equivalent to three months net income not exceeding BDT. 24,000 ⁵ . or 2. Grant to cover temporary loss of regular wage income @ BDT 250 ⁶ for 90 days and 3. Special Assistance of a one-time payment as recommended by PAVC for each vulnerable households (VHH) i.e. female-headed, disabled-headed, elderly-headed and hardcore poor household with an amount of BDT 10,000/VHH. 4. BDT. 12,000/- as one time grant in addition to other compensation for only female headed without elderly support disabled/ handicapped/widow member family. 5. Skill training for vulnerable households is provided by trainer NGO	1 The need of vulnerable groups will be assessed by IA through the need assessment survey ⁷ in the detailed design stage 2 The owners of rented out premises will be entitled for business loss allowance for each unit of premises rented out to separate families or persons.	1. EPs will be brought under income generation program based on need assessment survey result. 2. EPs will be preferentially employed in civil construction work. 3. EPs who lose structure will also be entitled for loss Item 1. 4. EPs who rent premises will also be entitled for loss Item 5.
Implementation Issues:			
1. IA identifies EPs at census, PVAC verifies the compensation amount, and RHD, thorough IA, pays the compensation. 2. Business losses have been assessed during inventory of losses. All categories of business will be paid equal amount as grant			

⁵ As were estimated based on the maximum average daily income of BDT 250/day x 30 days x 3 months and is a little less than BDT 24,000.

⁶ BDT 250 is likely the average of payment per day according to the socio-economic survey implemented.

⁷ Socio-economic survey made to meet demand and supply. To survey the demands of skills (what skill wanted) from enterprise owner and skills the affected people want to attain.

Loss Item 5: LOSS FOR RENTING RESIDENTIAL AND COMMERCIAL HOUSE/ ROOM			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Rentee (who borrows residential structure) as identified by Census and verified by PAVC 2. Rentee (who borrows structures) for his business identified by Census and verified by PAVC	1. Rental assistance for both residential and commercial rentee as per the prevalent rate in the form of grant to cover maximum of 3 months rental but not exceeding BDT. 7,500 ⁸ 2. Actual shifting assistance to be determined by PAVC, or BDT 500 per member up to BDT 5,000 per rentee residential household 3. If advance rental payment was already made by rentee to renter, and renter would not reimburse the advanced payment to rentee, then payment of allowance to renter will be deducted from owners' resettlement assistance package and paid back to the rentee up to the ceiling (3 months' allowance) of owners entitlements with GRC approval 4. Right to salvage materials from demolished structure erected by tenant. 5. Special Assistance of a one-time payment as recommended by PAVC for each vulnerable households (VHH) i.e. female-headed, disabled-headed, elderly-headed and hardcore poor household with an amount of BDT 10,000/VHH. 6. BDT. 12,000/- as one time grant in addition to other compensation for only female headed without elderly support disabled/ handicapped/widow member family. 7. Skill training for vulnerable households is provided by trainer NGO	1. Each rentee of affected premises will be entitled for shifting assistance 2. RHD employees erected structures by their own will be compensated as RV allowed taking away salvage materials.	1. EPs will be brought under income generation program. 2. IA assists finding new rent-out house.
Implementation Issues:			
1. IA identifies EPs at census, PVAC verifies the compensation amount, and RHD, through IA, pays the compensation. 2. Payment shall be done before physical relocation of EPs.			

⁸ Average rental fee per month is less than BDT 2,500 per month according to socio-economic survey

Loss Item 6: UNFORESEEN ADVERSE IMPACTS (IF APPLICABLE)			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
Households or persons affected by any unforeseen impact identified during implementation of the RAP	Entitlements will be recommended as necessary by GRC.	The unforeseen impacts will be identified through special survey by the PAVC as per request from impacted population. The entitlements will be approved by the Ministry of Communication (MOC)	As appropriate
Implementation Issues:			
The unforeseen impacts and affected persons will be identified with due care as per policy of RAP and proposed to the MOC for approval including quantity of losses, their owners and the entitlements.			

Grievance Redress Mechanism: Through public consultations and distribution of the public information booklet, APs will 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 the Ministry of Communications with representatives from the Executing Agency (EA)- here RHD, the RAP IA to be engaged to assist RHD in RP implementation, local government institutions (LGI) representatives and the APs representatives to be selected by RHD in consultation with IA, LGI representative and Resettlement Specialist/Expert from Design and Construction Supervision Consultant. The APs will call upon the support of the IA to assist them in presenting their grievances to the GRCs. The GRCs will review grievances involving all resettlement benefits, relocation and other assistance. Grievances will be redressed within 21 days from the date of lodging the complaints.

Income Restoration Strategy: Vulnerable Project Affected Households (PAHs) (including hardcore poor and female headed, elderly headed, etc.) will be given additional support for livelihood and income restoration.

Institutional Arrangements: A Project Implementation Unit (PIU) will be established by RHD headed by the Project Director at the rank of Additional Chief Engineer. Superintending Engineer and Executive Engineers will be also in place to handle the project activities. The PIU will be responsible for coordinating and overall execution of the project including payment of compensation/resettlement benefits to the entitled persons (EPs) before relocation. The DCSC will appoint an IA for implementation of the RAP for proper resettlement and rehabilitation of the project affected people before and after relocation.

Cost Estimate and Budget: The total indicative cost estimate for implementation of the RAP is **BDT 84,768,648** (Eighty four million seven hundred sixty eight thousand six hundred forty eight) equivalent to USD 1,033,763 (1 USD=82 BDT as of July 2012.) It includes payment of compensation for structure & resettlement benefits with other allowances, training on income generating activities, operation cost of the RAP IA and external monitoring agency (EMA) of the RAP implementation. The total estimated budget is shown in the Table EX 2 below.

Besides, the RAP has kept provision of the budget for structures made by RHD at Kanchpur Bridge and Gumti Bridge which are required to be demolished due to the approach road or construction yard. The unit rates of the RHD structures are same as other affected structures. The total budget for the RHD structures stand at **BDT 29,121,415** (USD 355,139). RHD will pay this amount to the local road division as per RHD rule.

Table EX 2: Summary of Resettlement Cost for Project

	Category of Losses	Kanchpur (BDT)	Meghna (BDT)	Gumti (BDT)	Total Budget (BDT)
A	Compensation for structure	47,088,661	4,452,370	2,540,550	54,081,581
B	Compensation for Trees	838,333	4,533,750	0	5,372,083
C	Other Resettlement Benefits	5,249,603	519,062	607,480	6,376,145
D	Training on IGA for eligible members of affected households and wage laborers	560,000	8,000	72,000	640,000
E	Approximately 3 Trainers for 10 days each @BDT 3000/day/person	90,000	0	0	90,000
F	RHD Capacity Building Training	1,000,000	500,000	500,000	2,000,000
G	Operation cost for RAP Implementing Agency **	5,000,000	2,575,000	2,575,000	10,150,000
H	Operation cost for External Monitoring Agency (EMA)	500,000	300,000	200,000	1,000,000
I	Contingency @ 10% of the Total A-H*	3,235,577	1,288,818	534,444	5,058,839
	Total	63,562,174	14,177,000	7,029,474	84,768,648
	Total (USD)	775,148	172,890	85,725	1,033,763

Note: USD 1 = BDT 82 as of July 2012

*10% of the total budget excluding RHD compensation

**including operation cost for GRC and PAVC

Implementation and Monitoring: Internal monitoring of RAP implementation will be the overall responsibility of the PIU and the DCSC/RAP-IA. The EA along with Resettlement Specialist/Expert of the DCSC will independently be monitoring implementation of RAP as per the guideline as well as assessing the ability of project affected households (PAHs) to restore their living standards and livelihoods to pre-project levels. An external monitoring agency will be engaged by RHD during RAP implementation for ongoing verification.

Glossary of Terms

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

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

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: means 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 starting date of carrying out the census/inventory of losses or any designated date declared by the RHD will be considered as the cut of date for eligibility of resettlement benefit for the properties standing on the GoB land and not covered by Deputy Commissioner (DC). In this Project the dates of commencement of census i.e. 8th March 2012 in Kanchpur and Meghna and 15th March 2012 in Gumti Bridge are declared as cut-off date.

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

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

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

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

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

Project: means Dhaka-Chaittagong National Highway (NH-1) Bridge Construction and Rehabilitation Project

Project Affected Household: combines residential households (HHs), commercial and business enterprises (CBEs), common property resources (CPRs) and other affected entities as a whole.

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

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

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

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

Squatters: means the same as non-titled and includes households, business and common establishments on land owned by the State. Under the project this includes RHD land, slope of the existing road and right of way of the proposed bridge alignments.

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

Vulnerable Households: means households that are (i) headed by single woman or woman with dependents and low incomes; (ii) headed by elderly/ disabled people without means of support; (iii) households that fall on or below the poverty line;⁹ (iv) households of indigenous population or ethnic minority; and (v) households of low social group or caste.

⁹ The poverty lines (updated for 2008) to be cited in the RAP as per Bangladesh Bureau of Statistics (BBS) report.

CHAPTER 1. INTRODUCTION

1.1 Description of the National Highway No.1 –Bridges Construction and Rehabilitation (the Project)

The National Highway No.1 (NH-1), namely, Dhaka-Chittagong Highway, is the lifeline for economy of Bangladesh with a capacity of 25,000 Passenger Car Unit (PCU) per day on 2-lane section and 60,000 PCU per day on 4-lane section. The NH-1 will be a part of the Asian Highway that connects with neighboring countries. On this highway, existing Kanchpur, Meghna and Gumti Bridges are major structures, which are the only way to cross Sitalakhya, Meghna and Gumti rivers. But, these bridges, constructed in the year of 1977, 1991 and 1995, respectively, are being deteriorated for several years. Consequently, they need urgent rehabilitations. In addition, the existing bridges were designed and constructed according to the outdated design standard. Therefore, these existing bridges may necessitate seismic retrofitting to withstand earthquake excitations in accordance with current codes.

According to the traffic survey conducted in this study (conducted in February and March, 2012), the NH-1 almost exceeded its traffic volume capacity to 78,000 PCU counted on Kanchpur Bridge and 73,300 PCU on Meghna and Gumti Bridges. Recently, the Government of Bangladesh has decided to widen NH-1 into 4 lanes in order to mitigate excess traffic volume and remove traffic bottlenecks. But, these existing 2-lane bridges are becoming a critical bottleneck for traffic movement through NH-1. It is obvious the existing 2-lane bridges will fail to cope with increased traffic volume of the NH-1 and cause serious traffic congestion. Therefore, the construction of 2nd Kanchpur, 2nd Meghna and 2nd Gumti Bridges are becoming an essential issue.

1.2 Objective and Purpose of the Resettlement Action Plan (RAP)

The objectives of the RAP are:

- a) To assess the nature and magnitude of the likely displacement,
- b) To explore all viable alternative project designs to avoid, where feasible, or minimize displacement,
- c) To assess the legal framework covering resettlement and policies of the government and implementing agencies,
- d) To identify any inconsistencies between such policies and the JICA's policy,

- e) To review past borrower and likely implementing agencies' experience with similar operation,
- f) To discuss with the agencies responsible for resettlement the policies and institutional, legal, and consultative arrangements for resettlement, including measures to address any inconsistencies between government or implementing agency policies and JICA policy and,
- g) To discuss any technical assistance to be provided to the recipient government.

Due to the existing urgency to keep smooth road communication with eastern zone of Bangladesh especially port city Chittagong, the Roads and Highways Department (RHD) has planned to construct three Bridges parallel to the existing Kanchpur, Meghna and Gumti Bridges, the RAP is prepared in accordance with the requirements of the JICA environmental and social considerations. .

This is the RAP for "Dhaka-Chittagong National Highway No.1- Bridges Construction and Rehabilitation Project". The purpose of this RAP is to address the social impact caused by the Project, proposing mitigation measures such as compensation, assistance etc to the Project affected people, content of which RAP was secured by RHD as per the requirement of JICA Guideline. This RAP is based on a detailed baseline survey carried out to understand the existing situation at each of the Project sites in March to July in 2012.

CHAPTER 2. POTENTIAL IMPACTS

2.1 Outline of the Project

The overall objective of the Project is to meet the increasing traffic demand of NH-1, which can be made by

- a) Construction of 2nd Kanchpur Bridge, 2nd Meghna Bridge and 2nd Gumti Bridge together with approach embankment road respectively.
- b) Rehabilitation existing Kanchpur Bridge, Meghna Bridge and Gumti Bridge

Location of the project is shown in Figure 2.1 and Table 2.1.

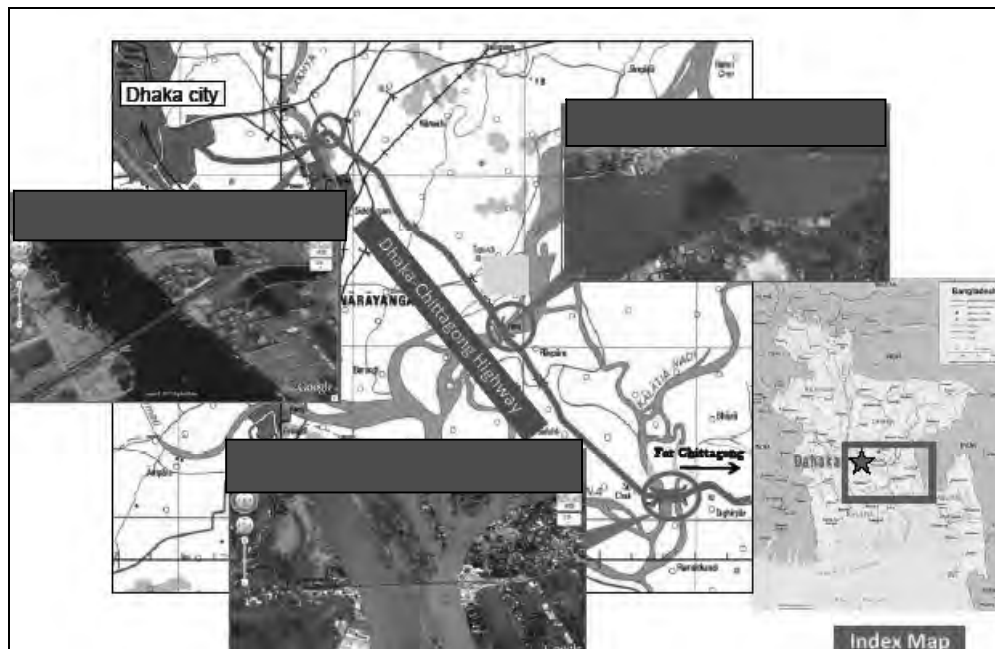


Figure 2.1 Location of the Three Bridges

Table 2.1 Location of the Bridges

Name of the Bridge	Side	District	Upazila	Union
Kanchpur Bridge	Dhaka	Narayanganj	Siddhirganj	Shimrail,
	Chittagong		Sonargaon	Kanchpur
Meghna Bridge	Dhaka	Narayanganj	Sonargaon	Pirojpur
	Chittagong	Munshiganj	Gajaria	Baliakandi
Gumti Bridge	Dhaka	Munshiganj	Gajaria	Baushia
	Chittagong	Comilla	Daudkandi Municipality	

The three bridges located in three (3) different districts on NH-1 and their approach roads can

are constructed within RHD land. Additional land acquisition will not be required for the Project components. However, some squatters, tenants, residential households, and commercial enterprises will be affected due to the Project.

Affected areas include locations of construction of new bridges, embankments for approach road, temporary road for construction and construction yards. Among the above the most serious component is the construction of embankment for approach road (permanent impact) and secondly, the installation of construction yard (tentatively impact during construction period only), which cause removal of people outside of those areas. .

Outline of the Project is summarized in Table 2.2.

Table 2.2 Outline of the Project

Description		Kanchpur	Meghna	Gumti
Project Area (m)		1,296.5	1,930.0	2,410.0
Characteristics of 2nd bridges	Length m	396.5	930.0	1,410.0
	Width m	18.4	17.75	17.75
	Navigation clearance m	width: 61m height: 12.2m	width: 75m height: 18m	width: 75m height: 7.5m
Pier of 2nd bridges	Number	5 pier	11 pier	16 pier
	Foundation type	Steel pipe sheet pile	Steel pipe sheet pile	Steel pipe sheet pile
	Foundation width (m)	31.3m x 8.5m	32.44m x 14.97m	29.95m x 13.73m
	Maximum pile length (m)	33m	48m	70m
Characteristics of existing bridges	Length (m)	396.5	930.0	1,410.0
	Width (m)	14.64	9.2	9.2
	Navigation clearance m	width: 61m height: 12.2m	width: 75m height: 18m	width: 75m height: 7.5m
Approach roads to bridges	Length (m)	300m at Dhaka side and 300m at Chittagon side	500m at Dhaka side and 500m at Chittagon side	700m in Dhaka side and 300m in Chittagon side
	Maximum height of embankment (m)	7m at Dhaka side and 12m at Chittagon side	10m at Dhaka side and 9m at Chittagon side	7m at Dhaka side and 6m at Chittagon side

Source: Study Team

Overall plan and typical cross-section of the Project is illustrated in Figure A.4-1 to A.4-3 in Annex-4 while comparison of bridge shape of existing bridges and 2nd bridges are shown in Figures A.4-4 to A.4-6 in Annex-4.

2.2 Alternative Routes and Minimizing Resettlement

Three alternative routes, namely Route A, Route B and Route C were proposed for respective three bridge sites to compare their feasibilities in the view of (1) cost, (2) technical issues and (3) environmental and social issues qualitatively. Alternative routes of each bridge are set as shown in Table 2.3.

Table 2.3 Establishment of Alternative Routes

Alternative Route	Kanchpur Bridge	Meghna Bridge	Gumti Bridge
A	Next to existing bridge at downstream side to lessen relocation.	Next to existing bridge at upstream side to lessen relocation.	Next to existing bridge at downstream side to lessen relocation.
B	Secure distance from exiting bridge at downstream side to avoid souring effects of exiting bridge.	Secure distance from exiting bridge at upstream side to avoid souring effects of exiting bridge.	Secure distance from exiting bridge at downstream side to avoid souring effects of exiting bridge.
C	Next to existing bridge at upstream side opposite to Alternative A.	Secure distance from exiting bridge at upstream side to avoid souring effects of exiting bridge, and minimize resettlement issue on route B.	Next to existing bridge at upstream side opposite to Alternative A.

Basically, Route A is set near to existing bridge either upstream or downstream whichever relocation is expected to be lesser and Route C is set opposite side of Route A (Kanchpur Bridge, Gumti Bridge) while Route B is set away from exiting bridge to avoid scouring effect of the existing bridge. Then cost, technical issues and environmental and social issues are examined and evaluated. Result of evaluation for each bridge is shown in Table 2.4 to Table 2.6.

Comparison was made based on considering following factors:

Impact on Roar User

- 1) Convenience road user

Impact on socio environment

- 2) Resettlement
- 3) Public facility

- 4) Land acquisition
- 5) Traffic safety for vessels
- 6) Economic activity (sand unloading, ferry terminal operation, factory, etc)

Impact on natural environment

- 7) Ecosystem
- 8) Hydrological condition
- 9) Noise/air pollution
- 10) River flow
- 11) Land scape

Other factors

- 12) Obstacle object
- 13) Construction condition
- 14) Project cost

As the results of comparison analysis made above, Route A of each Bridge is found to be most feasible among three (3) alternatives.

Table 2.4 Comparison of Alternative Routes on Kanchpur Bridge

Kanchpur Bridge		Route A	Route B	Route C
Route				
Summary		Next to existing bridge(down stream)	Route that secures distance from existing bridge (down stream)	Next to existing bridge(up stream)
① Convenient to road user		No specific problem ◎	Two intersections are needed at the point of connecting existing road, so it's lower safe △	No specific problem ◎
Impact on Socio-environment	② Resettlement	45 structure (15 houses, 20 shops,10 stalls) ◎	60 structure (40 houses, 20 shops) ○	60 structure (30 houses, 30 shops) ○
	③ Public facility	No ◎	Mosque relocation △	No ◎
	④ Land acquisition (area, landowner)	0 m ² ◎	5,000 m ² △	2,000 m ² △
	⑤ Traffic safety for vessels	Negligible (one foundation combined with both bridge) ◎	Slightly (two foundations are separated) ○	Negligible (one foundation combined with both bridge) ◎
	⑥ Economic activities (sand unloading, ferry terminal operation, factory etc)	20 shops, 10 stalls 30 Sand loading/unloading workers ○	20 shops 30 Sand loading/unloading workers ◎	30 shops 60 Sand loading/unloading workers △
Impact on natural environment	⑦ Ecosystem	Some impacts to natural fauna and flora during construction ○	Some impacts to natural fauna and flora during construction ○	Some impacts to natural fauna and flora during construction ○
	⑧ Hydrological conditions	Slightly (enlarge scoring if some foundation will be combined) ○	Negligible (scoring will be same around existing bridge) ◎	Slightly (enlarge scoring if some foundation will be combined) ○
	⑨ Noise / air pollution	Moderate impact since some houses are remained along new accesses ○	Moderate impact since some houses are remained along new accesses ○	Moderate impact since some houses are remained along new accesses ○
	⑩ River flow	Negligible (one foundation combined with both bridge) ◎	Slightly (two foundations are separated) ○	Negligible (one foundation combined with both bridge) ◎
	⑪ Landscape	Negligible (two bridges are close) ◎	Slightly (two bridges are separated) ○	Negligible (two bridges are close) ◎
⑫ Obstacle Object (steel towers, water pipe, gas pipe)		No specific problem ◎	No specific problem ◎	No specific problem ◎
⑬ Construction condition		Construction period is shorter comparing to Route B Bridge Length: 400m Earthwork: 47,000m ³ ◎	Construction period is the longest Bridge Length: 540m Earthwork: 102,000m ³ △	Construction period is shorter comparing to Route B Bridge Length: 400m Earthwork : 35,000m ³ ◎
⑭ Project cost Evaluation		Cheap ◎	Expensive △	Cheap ○

Legend ◎ : Excellent, ○ : Good, △ : Poor

Note: Number of structure within the proposed alignment were counted and rounded up based on the number of roofs identified through Google maps and site reconnaissance made

In the Census survey, number of actual affected households of Route A is 231 households, which include one household with several rentees per one structure. It is estimated 5.1 households per one structure on an average. Based on such estimation, that of Route B and Route C is both 308 households. It is therefore Route A is the most feasible due that number of actual affected households is the smallest compared with the other plans.

Table 2.5 Comparison of Alternative Routes on Meghna Bridge

Meghna Bridge		Route A	Route B	Route C	
Route					
Summary		Next to existing bridge(up stream)	Secure distance of 250m upstream near old ferry route	Secure distance of 250m upstream of shifted ferry route Minimize resettlement issue (Ctg. side) on Alignment B	
① Convenient to road user		No specific problem	⊙	No specific problem	
Impact on Socio-environment	② Resettlement	10 structure (5 houses, 5 shops)	⊙	250 structure (90 houses, 150 shops, 10 stalls)	△
	③ Public facility	No	⊙	Mosque relocation	△
	④ Land acquisition (area, landowner)	15m from Holcim Cement boundary (RHD will agree with Holcim Cement)	⊙	0 m ²	⊙
	⑤ Traffic safety for vessels	Negligible (one foundation combined with both bridge)	⊙	Slightly (two foundations are separated)	○
	⑥ Economic activities (sand unloading, ferry terminal operation, factory etc)	5 shops Fishery	⊙	150 shops 50 Sand loading/unloading workers Fishery	△
Impact on natural environment	⑦ Ecosystem	Small Plantation Some impacts to natural fauna and flora during construction	△	Many roadside trees shall be cut	△
	⑧ Hydrological conditions	Slightly (enlarge scoring if some foundation in main channel will be combined, but bank erosion will be little)	○	Slightly (new bridge impact is small, but scoring around existing bridge will be large by protection)	○
	⑨ Noise / air pollution	Negligible impact since few houses remaind along new access on Chittagon side	⊙	Severe impact since many houses remaind along new accesses A school is located near the new access	△
	⑩ River flow	Negligible (one foundation combined with both bridge)	⊙	Slightly (two foundations are separated)	○
	⑪ Landscape	Negligible (two bridges are close)	⊙	Slightly (two bridges are separated ,loss of road side trees)	○
⑫ Obstacle Object (steel towers, water pipe, gas pipe)		No specific problem	⊙	No specific problem	⊙
⑬ Construction condition		Construction period is the shortest Bridge Length: 930m Earthwork : 39,000m ³	⊙	Construction period is the longest Bridge Length: 1,100m Earthwork : 84,000m ³	△
⑭ Project cost		Cheap	⊙	Expensive	△
Evaluation		⊙		△	○

Legend ⊙ : Excellent, ○ : Good, △ : Poor

Note: Number of structure within the proposed alignment were counted and rounded up based on the number of roofs identified through Google maps and site reconnaissance made

In the Census survey, number of actual affected households of Route A is 19 households, which include one household with several rentees per one structure. It is estimated 1.9 households per one structure on an average. Based on such estimation, that of Route B Plan and Route C Plan is 475 households and 114 households, respectively. It is therefore Route A is the most feasible due that number of actual affected households is the smallest compared with the other plans.

Table 2.6 Comparison of Alternative Routes on Gumti Bridge

Gumti Bridge		Route A	Route B	Route C			
Route							
Summary		Next to existing bridge(down stream)	Route that secures distance from existing bridge(down stream)	Next to existing bridge(up stream)			
① Convenient to road user		No specific problem	⊙	No specific problem	⊙		
Impact on Socio-environment	② Resettlement	20 structure (5 houses, 15 shops)	⊙	80 structure (40 houses, 40 shops)	△	20 structure (20 shops)	⊙
	③ Public facility	No	⊙	No	⊙	No	⊙
	④ Land acquisition (area, landowner)	0 m ²	⊙	0 m ²	⊙	32,000m ²	△
	⑤ Traffic safety for vessels	Negligible (one foundation combined with both bridge)	⊙	Slightly (two foundations are separated)	○	Negligible (one foundation combined with both bridge)	⊙
	⑥ Economic activities (sand unloading, ferry terminal operation, factory etc)	15 shops 100 sand loading/unloading workers cultivating farm on sand bars Fishery	⊙	40 shops 100 sand loading/unloading workers Fishery	△	20 shops 100 sand loading/unloading workers cultivating farm on sand bars Fishery	○
Impact on natural environment	⑦ Ecosystem	Some impacts to natural fauna and flora during construction	○	Some impacts to natural fauna and flora during construction	○	Some impacts to natural fauna and flora during construction	○
	⑧ Hydrological conditions	Slightly (enlarge scoring if some foundation will be combined)	○	Negligible (scoring will be same around existing bridge)	⊙	Slightly (enlarge scoring if some foundation will be combined)	○
	⑨ Noise / air pollution	No impact since no house remained along new access	⊙	Moderate impact since several houses remained along new access	○	Negligible impact since few houses remained along new access	⊙
	⑩ River flow	Negligible (one foundation combined with both bridge)	⊙	Slightly (two foundations are separated)	○	Negligible (one foundation combined with both bridge)	⊙
	⑪ Landscape	Negligible (two bridges are close)	⊙	Slightly (two bridges are separated)	○	Negligible (two bridges are close)	⊙
⑫ Obstacle Object (steel towers, water pipe, gas pipe)		No specific problem	⊙	No specific problem	⊙	No specific problem	⊙
⑬ Construction condition		Construction period is shorter comparing to Route B Bridge Length: 1,410m Earthwork : 33,000m ³	⊙	Construction period is the longest Bridge Length: 1,390m Earthwork: 41,000m ³	○	Construction period is shorter comparing to Route B Bridge Length: 1,410m Earthwork: 33,000m ³	⊙
⑭ Project cost		Cheap	⊙	Slightly expensive	○	Cheap	⊙
Evaluation		⊙		△		○	

Legend ⊙ : Excellent, ○ : Good, △ : Poor

Note: Number of structure within the proposed alignment were counted and rounded up based on the number of roofs identified through Google maps and site reconnaissance made

In the Census Survey, number of actual affected households of Route A Plan is 24 households, which include one household with several rentees per one structure. It is estimated 1.2 households per one structure on an average. Based on such estimation, that of Route B Plan and Route C Plan is 96 households and 24 households, respectively. It is therefore Route A is the most feasible due that number of actual affected households is the smaller compared with the other plans.

2.3 Project Impacts

Infrastructure development projects generally displace people involuntarily from their places of work or residence or means of livelihood and thereby create situation leading to severe physical, economic, social and environmental problems. Table 2.7 shows major impacts of losses caused by the Project on the Affected Persons or Households.

Table 2.7 Major Impacts of Losses Caused by the Project

Impacts of Losses
Social impacts
• Loss of residences and business places (Squatter)
• Loss of CPR (Common property resources)
• Loss of pond and tree owners
• Loss of tenants (Business and residences)
• Loss of income for wage labor
Physical assets impacts
• Loss of housings, business shops
• Loss of water pump
• Loss of bill board
• Loss of backfill of fish pond without land title

To address all the above mentioned problems, the RAP will be prepared incorporating some mitigating measures to encounter the negative social and economic impacts to be mentioned as the following chapters.

However this RAP is still tentative nature so that in the detailed design stage, it shall be carried out a detailed study on the RAP, which the losses caused by the Project shall be minimized.

CHAPTER 3. CENSUS AND SOCIOECONOMIC STUDIES

3.1 Methodology for Census and Socioeconomic Survey

The census and a socio-economic survey was carried out in March 2012 to provide requisite details on the project affected households (PAHs) to further assess the magnitude of likely impacts and to identify measures for mitigation of adverse impacts. The survey included (i) Census of the affected households (ii) Socioeconomic survey of the households living in the project surrounded areas (iii) Inventory of losses (IOL (iv) Replacement cost surveys (v) Video filming of the affected properties (vi) sketch mapping (not to scale) of the affected structure and other assets (vii) community based public consultation, and (viii) focused group discussion with the affected population, etc. The survey identified the households, commercial and business enterprises, tenants (both residential and commercial) and community properties on project right of way.

The socioeconomic survey collected a wide range of data, for example, demography, age/sex distribution, education, occupation, income/poverty data, types of businesses, types and ownership status of affected structures and other assets.

A total of 499 households were surveyed in the project surrounded areas of the three bridges along possible alternative routes with a structured socioeconomic survey questionnaire. The socioeconomic survey covers all categories of people irrespective of occupation, income, age or sex living in the project surrounded area. Data of the socioeconomic survey includes information of households not directly affected by the Project, but information regarding presence of vulnerable people and data needed for formulation of necessary relocation assistance schemes are fairly collected and Resettlement Action Plan that reflects all relocation requirements can be prepared..

The Table 3.1 below presents the bridge wise number of affected households based on the census survey. Out of total affected households 8.2% is female headed and 91.8% is male headed.

Table 3.1 Bridge wise Number of Surveyed Households

Type of Household head	Kanchpur		Meghna		Gumti		Total	
	No.	%	No.	%	No.	%	No.	%
Male Headed HH	235*	91.1	20	100.0	24*	92.3	279	91.8
Female Headed HH	23	8.9	0	0.0	2	7.7	25	8.2
Total Number	258*	100.0	20	100.0	26*	100.0	304**	100.0

Note: * One owner of common property is not included

Source: Study Team, 2012

** Total two owners of common property are not included

3.2 Results of the Census Survey

A total of 274 households or 972 peoples will be relocated due to the project interventions as shown in Table 3.2. Besides, two community properties will also be relocated from the project area. A total of 231 households and shop tenants will be displaced in Kanchpur Bridge, 19 in Meghna Bridge and 24 in Gumti Bridge. In addition to 274 households to be displaced, a total of 28 wage laborers will also lose their sources of livelihood due to the project of which 26 at Kanchpur Bridge and 2 at Gumti Bridge. These peoples and properties are located in RHD owned land and have not official land ownership. Bridge wise impacts are shown in the Table 3.2 below.

Table 3.2 Number of Affected Households

Type of loss	No of PAHs				No of people			
	Kanchpur	Meghna	Gumti	Total	Kanchpur	Meghna	Gumti	Total
Required for Displacement								
1 Residential house owners	100	1	6	107	412	3	19	434
2 Residential rentee	98	0	0	98	313	0	0	313
3 Shop owners	26	17	18	61	98	40	61	199
4 Shop tenants	4	1	0	5	12	4	0	16
5 Residential and shop owner	3	0	0	3	10	0	0	10
Sub Total (1-5)	231	19	24	274	845	47	80	972
Not required for Displacement								
6 Land owners	0	0	0	0	0	0	0	0
7 Land lease right holder	0	0	0	0	0	0	0	0
8 Structure (absentee house or shop) owners not residing in	0	0	0	0	0	0	0	0
9 Seasonal cropper on char	0	0	0	0	0	0	0	0
10 Pond/fish cultivator	1	0	0	1	5	0	0	5
11 Tree owners (including plantation owners)	0	1	0	1	0	6	0	6
12 Wage earners (Employees)	26	0	2	28	26	0	2	28
13 Community owned structures including physical cultural resources	1	1	0	2	1	1	0	2
Sub Total (6-13)	28	2	2	32	32	7	2	41
Grand Total (1-13)	259	21	26	306	877	54	82	1,013

Source: Study Team, 2012

Table 3.3 Number of Vulnerable Households

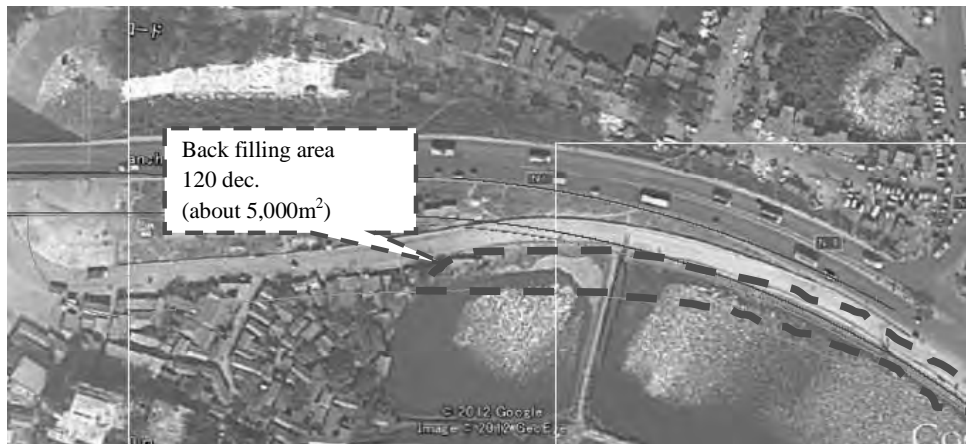
	Kachpur	Meghna	Gumti	Total
Vulnerable family				
Annual income<60,000 and Female headed household	11	0	1	12
Annual income<60,000	2	1	3	6
Female headed household	12	0	1	13
Total vulnerable household	25	1	5	31

Source: Study Team, 2012

3.3 Inventory of Assets

3.3.1 Lands

Figure 3.1 shows location of fish pond that may be affected by the Project at Kanchpur Bridge while Figure 3.2 shows location of plantation area in Meghna Bridge. Land for fishpond and plantation belongs to RHD and there is no land acquisition is required while compensation for fish and tree will be made.



Note: 1dec. \approx 40m²

Figure 3.1 Location of Fish Pond Affected at Kanchpur Bridge

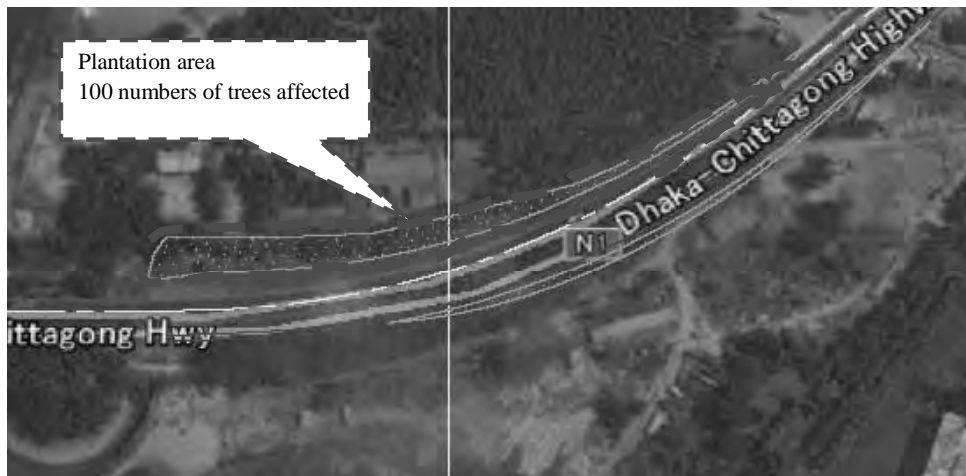


Figure 3.2 Location of Plantation Area Affected at Meghna Bridge

Table 3.4 Area to be Used in Three SitesUnit: m²

		Kanchpur	Meghna	Gumti	Total
Land to be used (all land is inside RHD land)	Road and embankment m ²	21,600	30,000	27,000	78,600
	Construction yard m ²	3,000	25,000	22,000	50,000
	Temporary road m ²	10,000	10,000	4,000	24,000
	Total area m ²	34,600	65,000	53,000	152,600

For the construction of Meghna Bridge, a land (400m x 10m), concrete fence (450m) and a part of store houses presently owned by Holcim Cement Industry are required and included in Table 3.4 and Table 3.5. Land occupied by Holcim Cement Industry is also owned by RHD.

A total of 2,552 square feet (237.3 square meter) semi pucca, 26,335 sft (2,449.2 square meter) tin made, Katcha 803 sft and Thatched 905 sft (84.2 square meter) have been affected by the Project interventions.

3.3.2 Structures

Table 3.5 Number of Structures to be Affected

	Unit	Kachpur			Meghna	Gumti			Total
		Constructed by		RHD owned Structure	Squatters	Constructed by		RHD owned Structure	
		Squatters	RHD Employees	Squatters		Squatters	RHD Employees		
Primary Structures									
Pucca ¹	Sqf	0	0	0	0	0	0	575	575
Semi-Pucca ²	Sqf	1,359	5,730	25,582	988	205	0	432	34,296
Tin Made ³	Sqf	19,815	1,298	4,422	4,732	1,788	115	0	32,170
Katcha ⁴	Sqf	487	1,136	0	0	316	160	0	2,099
Thatched ⁵	Sqf	710	0	0	146	49	0	0	905
Sub-total		22,371	8,164	30,004	5,866	2,358	275	1,007	70,045
Secondary Structures									
Pucca Latrine	No.	4	0	8	0	0	0	0	12
Slab Latrine	No.	24	4	6	0	0	1	0	35
Tube well	No.	8	0	0	0	1	2	0	11
Boundary Wall (Brick 5")	Rft	71	41	0	1,500	0	0	0	1,612
Boundary Wall (Tin made)			0	1520		0		0	1,520
Water Pump	No.	1	0	2	0	0	0	0	3
Bill Board	No.	2	0	0	0	0	0	0	2
Fish pond to be Backfilled	Dec ⁶	120	0	0	0	0	0	0	120

¹ Pucca: Brick built houses.

² Semi Pucca: Brick wall with corrugated iron (CI) sheet roof.

³ Tin Made: Fence and roof is made of corrugated iron sheet.

⁴ Katcha: roof is made of CI sheet and fence is with bamboo, wood, earth, etc.

⁵ Thatched: roof and fence both are made of straw/bamboo etc.

⁶ Dec (≅40m²)

3.3.3 Trees

Some Roby crops (mainly wheat and paddy) are produced during winter season under the Gumti Bridge. Some trees are found at Meghna Bridge location (Chittagong side planted by local people by taking lease of the land from RHD. These trees will need to be fallen down for bridge approach road and construction yard. Road side trees and shrubs which have planted by RHD employees around Kanchpur Bridge will also be affected.

Table 3.6 Number of Trees to be Affected

Name of the Bridge	Name of the Tree	Big	Medium	Small	Plant	Total
Kanchpur	Palm	0	3	0	0	3
	Mango	0	66	27	60	153
	Kadom	0	0	1	0	1
	Coconat	0	0	0	1	1
	Betel nut	0	1	0	0	1
	Rain tree	0	2	0	0	2
	Jackfruit	4	7	19	19	49
	Nim	1	2	3	0	6
	Black Berry	0	3	0	0	3
	Sajna	0	1	0	0	1
	Mehogini	3	6	3	0	12
	Mehedi	0	0	7	0	7
	Guava	0	32	11	0	43
	Jambura	0	5	5	0	10
	Papaya	0	9	20	0	29
	Lemon	0	9	0	0	9
	Ata	0	3	2	0	5
	Dalim	0	0	1	0	1
	Doya	1	4	2	0	7
	Banana	40	20	15	0	75
Koroi	0	1	1	0	2	
Subtotal		49	174	117	80	420
Meghna	Rentree	0	0	50	0	50
	Boroi	0	0	20	0	20
	Akashmoni	80	600	1,000	100	1,780
	Subtotal	80	600	1,070	100	1,850
Gumti		0	0	0	0	0
	Subtotal	0	0	0	0	0
Grand total No		129	774	1,187	180	2,270

Remark: Big (diameter:2ft), Nedium(1ft), Small(<1ft) and plant(nursing)

3.3.4 Business and Commercial Activities

A total of 66 business institutions were affected in this project (61 squatters and 5 tenants) of which mostly dealing in tin made structures. Business and commercial activities of these affected institutions are operating retailing shops and their business activities will be affected by the project. At Meghna Bridge 18 business enterprises have been enumerated whereas at Gumti Bridge it is 18 and at Kanchpur Bridge it is 33.

3.4 Results of Socioeconomic Survey

The Socioeconomic survey covers 338 households (67.74%) Meghna Bridge, 142 households (28.46%) in Kanchpur Bridge and 19 households (3.81%) in Gumti Bridge area.

3.4.1 Distribution of Population by Sex

A total of 2,241 people are found in 499 surveyed households (average household size is 4.49), of which 52.07% are males and 47.93% are females. The Table 3.7 below presents the total number households and people surveyed in three bridges.

Table 3.7 Bridge Area Wise Distribution of Households and Population by Sex

Name of the Bridge	HH		Male		Female		Total population	
	No.	%	No.	%	No.	%	No.	%
Kanchpur	142	28.46	282	12.58	286	12.76	568	25.35
Meghna	338	67.74	836	37.30	746	33.29	1582	70.59
Gumti	19	3.81	49	2.19	42	1.87	91	4.06
Total	499	100	1167	52.07	1074	47.93	2241	100

Source: Socioeconomic survey conducted by Study Team, 2012

3.4.2 Duration of Living in the Project Areas

In the Kanchpur Bridge area, 32% of the surveyed households have been staying for 11 to 20 years, 30% households have been staying for less than 10 years and 20% households have been staying for 21 to 30 years. It is found that 13% of households have been staying in the project area for above 40 years. Details on duration of living of the surveyed people in the project areas are shown in Table 3.8.

Table 3.8 Duration of Living in Project Area

Range of year	Kanchpur		Meghna		Gumti		Total	
	No.	%	No.	%	No.	%	No.	%
Up to 10	42	29.58	83	24.56	11	57.89	136	27.25
11 to 20	45	31.69	116	34.32	3	15.79	164	32.87
21 to 30	28	19.72	88	26.04	4	21.05	120	24.05
31 to 40	9	6.34	16	4.73	0	0.00	25	5.01
Above 40	18	12.68	35	10.36	1	5.26	54	10.82
Total	142	100	338	100	19	100	499	100.00

Source: Study Team, 2012

3.4.3 Religion of Affected Households and Population

Distribution of surveyed population by religion under the Project area is presented in Table 3.9. It is found that about 96.70% (2167) surveyed population belong to Islam religion and remaining 3.30% (74 people) belong to Hindu (Sanatan) religion by faith. In the Kanchpur Bridge project area 100% of the surveyed population found Muslim, while in the Meghna Bridge area 96.27% and 3.73% of the surveyed population found Muslim and Hindu respectively. According to the survey a large number (16.48%) of Hindu population were found in Gumti Bridge area.

Table 3.9 Surveyed Population by Religion

Religion	Kanchpur		Meghna		Gumti		Total	
	Population	%	Population	%	Population	%	Population	%
Islam	568	100	1523	96.27	76	83.52	2167	96.70
Hindu	0	0	59	3.73	15	16.48	74	3.30
Total	568	100	1582	100	91	100	2241	100

Source: Study Team, 2012

3.4.4 Age, Education and Occupation

Population by age and sex

The male and female population is almost equal in numbers within the age group 21-30years; male population is slightly higher in numbers than that of female population within the age groups 1-10 years, 31-40 years, and above 60 years. Male population is significantly higher in numbers than that of female population within the age groups 11-20 years and 51-60 years. It should be mentioned here that female population is higher in number than that of male population within the age groups 41-50 years. Details on distribution of the surveyed population by age and sex are shown in Table 3.10.

Table 3.10 Distribution of Surveyed Population by Age and Sex under the Entire Project Area

Age Group	Male		Female		Total	
	Number	%	Number	%	Number	%
1 to 10	275	12.27	259	11.56	534	23.83
11 to 20	244	10.89	212	9.46	456	20.35
21 to 30	207	9.24	205	9.15	412	18.38
31 to 40	153	6.83	138	6.16	291	12.99
41 to 50	124	5.53	147	6.56	271	12.09
51 to 60	104	4.64	57	2.54	161	7.18
Above 60	60	2.68	56	2.50	116	5.18
Total	1167	52.07	1074	47.93	2241	100

Source: Study Team, 2012

Education level

About 19% of the total surveyed population is found illiterate. However, some of the illiterate population can sign their names only. Out of 19% illiterate people, the males are 9.06% while the females are 9.77%. It is found that 31.59% of the people have gone to primary schools while 27.76% have education between class six and class ten. Only 5.35% and 3.17% of the people have completed SSC and HSC level education respectively. Only 1.16% of the people have obtained Bachelor degree while 0.22% of the people have obtained Master degree. However, 0.22% of the people found Hafez-E-Quran. Details about the status of education of the male and female people are shown in Table 3.11.

Table 3.11 Distribution of Population by Education Level under the Entire Project Area

Education level	Male		Female		Total	
	Number	%	Number	%	Number	%
Grade 1 to 5	354	15.80	354	15.80	708	31.59
Grade 6 to 10	317	14.15	305	13.61	622	27.76
SSC	74	3.30	46	2.05	120	5.35
HSC	47	2.10	24	1.07	71	3.17
BA	19	0.85	7	0.31	26	1.16
MA	4	0.18	1	0.04	5	0.22
Hafez	5	0.22	0	0.00	5	0.22
Below Grade 1	144	6.43	118	5.27	262	11.69
No Schooling	203	9.06	219	9.77	422	18.83
Total	1167	52.07	1074	47.93	2241	100

Source: Study Team, 2012

Remark: SSC: Secondary School Certificate
HSC: Higher Secondary Certificate
BA: Bachelor Degree
MA: Master Course
Hafez: Hafez-E-QurAn Course (Muslim School)

The status of education of the surveyed people in Kanchpur, Meghna and Gumti Bridge areas is presented in the following tables (Table 3.12, 3.13 and 3.14). About 18% of the people in Kanchpur Bridge found illiterate. The people who can only sign their names are also considered as illiterate people. Out of 18.13% illiterate people, the illiterate males are 8.27% while the illiterate females are 9.86%. About 34% of the population under the Kanchpur Bridge area has gone to primary schools for their education. It is found that about 28% of the people have education between class six and class ten. Only 3.70% and 2.29% of the people have completed SSC and HSC levels of education respectively. Details about the status of education of the male and female population are shown in Table 3.12.

Table 3.12 Distribution of Population by Education Level in Kanchpur Bridge

Education level	Male		Female		Total	
	Number	%	Number	%	Number	%
Grade 1 to 5	88	15.49	103	18.13	191	33.63
Grade 6 to 10	79	13.91	78	13.73	157	27.64
SSC	11	1.94	10	1.76	21	3.70
HSC	9	1.58	4	0.70	13	2.29
BA	6	1.06	3	0.53	9	1.58
MA	2	0.35	0	0	2	0.35
Hafez	1	0.18	0	0	1	0.18
Below Grade-1	39	6.87	32	5.63	71	12.50
No Schooling	47	8.27	56	9.86	103	18.13
Total	282	49.65	286	50.35	568	100

Source: Study Team, 2012

The status of education of the people under the Meghna Bridge area is shown in Table 3.13. It is found that 18.46% of the people (male 8.91%, female 9.54%) in Meghna Bridge are illiterate. About 31% of the people have gone to primary schools and 28.13% of the people have education between class six and class ten. Only 6.26% and 3.67% of the people have completed SSC and HSC courses respectively. Only 1.07% and 0.19% of the people have obtained Bachelor and Master degrees respectively. However, 0.19% of the people are Hafez-E-QurAn.

Table 3.13 Distribution of Population by Education Level in Meghna Bridge

Education level	Male		Female		Total	
	Number	%	Number	%	Number	%
Grade 1 to 5	250	15.80	235	14.85	485	30.66
Grade 6 to 10	224	14.16	221	13.97	445	28.13
SSC	63	3.98	36	2.28	99	6.26
HSC	38	2.40	20	1.26	58	3.67
BA	13	0.82	4	0.25	17	1.07
MA	2	0.13	1	0.06	3	0.19
Hafez	3	0.19	0	0.00	3	0.19
Below Grade-1	102	6.45	78	4.93	180	11.38
No Schooling	141	8.91	151	9.54	292	18.46
Total	836	52.84	746	47.16	1582	100

Source: Study Team, 2012

The status of education of the people under the Gumti area is presented in Table 3.14. It is found that 29.67% of the people (male 16.48%, female 13.19%) are illiterate. About 35% of the people have gone to primary schools and 21.98% found within the range of education from class six to class ten. Only 1.10% of the people have completed Hafez-E-QurAn course.

Table 3.14 Distribution of Population by Education Level in Gumti Bridge

Education level	Male		Female		Total	
	Number	%	Number	%	Number	%
1 to 5	16	17.58	16	17.58	32	35.16
6 to 10	14	15.38	6	6.59	20	21.98
SSC	0	0	0	0	0	0
HSC	0	0	0	0	0	0
BA	0	0	0	0	0	0
MA	0	0	0	0	0	0
Hafez	1	1.10	0	0	1	1.10
Below Grade-1	3	3.30	8	8.79	11	12.09
No Schooling	15	16.48	12	13.19	27	29.67
Total	49	53.85	42	46.15	91	100

Source: Study Team, 2012

From the above findings on the status of education/literacy of the people, it is found that illiteracy rate of the female is higher than that of male in Kanchpur and Meghna Bridge area. On the contrary, illiteracy rate among male people is found higher in Gumti Bridge area.

Character of the population

An overwhelming number of population under the entire project area is housewives (24.01%) followed by business person (14.86%), daily wage laboring occupation (5.62%), service/employment (5.04%), overseas employment (1.25%), pulling rickshaw and van (1.16%), others (1.07%) and drivers (0.98%). It is found that 24.94%, 11.65%, 4.69% and 3.61% of the population are students, children, unemployed and old people respectively. Details about Character of the male and female population are shown in Table 3.15.

Table 3.15 Distribution of the People by Characters under the Entire Project Area

Present Character of the Population	Male		Female		Total	
	No.	%	No.	%	No.	%
Student	284	12.67	275	12.27	559	24.94
Housewife	0	0.00	538	24.01	538	24.01
Small Retailing Shop Business Person	330	14.73	3	0.13	333	14.86
Child	143	6.38	118	5.27	261	11.65
Day labor	114	5.09	12	0.54	126	5.62
Service	81	3.61	32	1.43	113	5.04
Unemployed	73	3.26	32	1.43	105	4.69
Old people	37	1.65	44	1.96	81	3.61
Overseas Service	26	1.16	2	0.09	28	1.25
Rickshaw/Van Polar	25	1.12	1	0.04	26	1.16
Others	17	0.76	7	0.31	24	1.07
Driver	21	0.94	1	0.04	22	0.98
Disabled	5	0.22	2	0.09	7	0.31
Agriculture	5	0.22	1	0.04	6	0.27
Tailor	1	0.04	5	0.22	6	0.27
Doctor	2	0.09	1	0.04	3	0.13
Fisherman	2	0.09	0	0	2	0.09
Mason	1	0.04	0	0	1	0.04
Total	1167	52.07	1074	47.93	2241	100

Source: Study Team, 2012

Characters of the population in Kanchpur, Meghna and Gumti Bridge are separately shown in

Tables 3.16, 3.17 and 3.18. It is found that an overwhelming number of the population in Kanchpur Bridge area is housewives (22.89%) followed by business person (12.32%), service/employment (10.92%), daily wage laborers (2.82%), pulling van and rickshaws (2.11%), others (1.76%), drivers (1.06%), overseas service (0.53%), agriculture (0.35%) and doctor (0.35%). It is found that 25.00%, 12.50%, 3.70% and 3.52% of the population are students, children, unemployed and old people respectively. Details on Characters of the male and female population are shown in Table 3. 16, Table 3.17 and Table 3.18.

Table 3.16 Distribution of the People by Characters in Kanchpur Bridge Area

Present Character of the Population	Male		Female		Total	
	No.	%	No.	%	No.	%
Student	62	10.92	80	14.08	142	25.00
Housewife	0	0	130	22.89	130	22.89
Child	39	6.87	32	5.63	71	12.50
Small Retailing Shop Business person	67	11.80	3	0.53	70	12.32
Service	47	8.27	15	2.64	62	10.92
Unemployed	19	3.35	2	0.35	21	3.70
Old people	8	1.41	12	2.11	20	3.52
Day labor	13	2.29	3	0.53	16	2.82
Rickshaw/Van Polar	11	1.94	1	0.18	12	2.11
Others	6	1.06	4	0.70	10	1.76
Driver	5	0.88	1	0.18	6	1.06
Overseas service	3	0.53	0	0.00	3	0.53
Doctor	1	0.18	1	0.18	2	0.35
Agriculture	1	0.18	1	0.18	2	0.35
Tailor	0	0	1	0.18	1	0.18
Total	282	49.65	286	50.35	568	100

Source: Study Team, 2012

Characters of the male and female population in the Meghna Bridge area are shown in Table 3.17. Among the total population 24.53% found housewives, followed by business person (15.49%), daily wage laborers (6.45%), service/employment (3.16%), overseas service (1.52%), drivers (0.95%), pulling rickshaw and van (0.88%) and others (0.88%).

Table 3.17 Distribution of the People by Characters in Meghna Bridge Area

Present Character of the Population	Male		Female		Total	
	No.	%	No.	%	No.	%
Student	209	13.21	186	11.76	395	24.97
Housewife	0	0.00	388	24.53	388	24.53
Small Retailing Shop Business person	245	15.49	0	0.00	245	15.49
Child	101	6.38	78	4.93	179	11.31
Day labor	94	5.94	8	0.51	102	6.45
Unemployed	52	3.29	30	1.90	82	5.18
Old people	25	1.58	29	1.83	54	3.41
Service	33	2.09	17	1.07	50	3.16
Overseas service	23	1.45	1	0.06	24	1.52
Driver	15	0.95	0	0.00	15	0.95
Rickshaw/Van Polar	14	0.88	0	0.00	14	0.88
Others	11	0.70	3	0.19	14	0.88
Disabled	5	0.32	2	0.13	7	0.44
Tailor	1	0.06	4	0.25	5	0.32
Agriculture	4	0.25	0	0.00	4	0.25
Fisherman	2	0.13	0	0.00	2	0.13
Doctor	1	0.06	0	0.00	1	0.06
Mason	1	0.06	0	0.00	1	0.06
Total	836	52.84	746	47.16	1582	100

Source: Study Team, 2012

Characters of the population in the Gumti Bridge area are shown in Table 3.18. Among the total population housewives are always large in number (21.98%). This is due to the female of Bangladesh is mostly engaged in households chores. Other occupational groups are mainly male except a few female engaged in tailoring, service, day laboring, etc.

Table 3.18 Distribution of the People by Characters in Gumti Bridge Area

Present Character of the Population	Male		Female		Total	
	No.	%	No.	%	No.	%
Student	13	14.29	9	9.89	22	24.18
Housewife	0	0.00	20	21.98	20	21.98
Small Retailing Shop Business person	18	19.78	0	0.00	18	19.78
Child	3	3.30	8	8.79	11	12.09
Day labor	7	7.69	1	1.10	8	8.79
Old people	4	4.40	3	3.30	7	7.69
Unemployed	2	2.20	0	0	2	2.20
Driver	1	1.10	0	0	1	1.10
Service	1	1.10	0	0	1	1.10
Overseas service	0	0.00	1	1.10	1	1.10
Total	49	53.85	42	46.15	91	100

Source: Study Team, 2012

Occupation of the household heads

It is found from the survey that main occupations of the household heads in the Kanchpur Bridge, Meghna Bridge and Gumti Bridge are small retailing shop business, service, day labor, housewives, pulling van and rickshaws, driving, agriculture, overseas service, fishermen, doctors and others are main occupations of the surveyed household heads in order of numbers and percentages. It is found that 1.13% males and 1.72% females were old people and 0.45% males are disabled. Detail statistical information on occupations of the household heads is shown in Table 3.19.

Table 3.19 Distribution of the Household Heads by Occupation

Occupation	Character	Kanchpur		Meghna		Gumti		Total	
		Male	Female	Male	Female	Male	Female	Male	Female
Business	No.	57	2	201	0	15	0	273	2
	%	47.50	9.09	66.34	0	83.33	0	61.90	3.45
Service	No.	35	7	19	2	0	0	54	9
	%	29.17	31.82	6.27	5.71	0	0	12.24	15.52
Day labor	No.	10	3	43	3	3	0	56	6
	%	8.33	13.64	14.19	8.57	16.67	0	12.70	10.34
Housewife	No.	0	6		25	0	1	0	32
	%	0	27.27	0.00	71.43	0	100	0.00	55.17
Rickshaw/Van Polar	No.	7		7		0	0	14	0
	%	5.83	0	2.31	0.00	0	0	3.17	0.00
Driver	No.	4	0	9		0	0	13	0

	%	3.33	0	2.97	0.00	0	0	2.95	0.00
Old People	No.	1	0	4	1	0	0	5	1
	%	0.83	0	1.32	2.86	0	0	1.13	1.72
Agriculture	No.	1	0	3		0	0	4	0
	%	0.83	0.00	0.99	0.00	0	0	0.91	0.00
Overseas service	No.	0	0	4	0	0	0	4	0
	%	0	0	1.32	0	0	0	0.91	0
Fisherman	No.	0	0	2	0	0	0	2	0
	%	0	0	0.66	0	0	0	0.45	0
Student	No.	0	0	1	1	0	0	1	1
	%	0	0	0.33	2.86	0	0	0.23	1.72
Disabled	No.	0	0	2	0	0	0	2	0
	%	0	0	0.66	0	0	0	0.45	0
Doctor	No.	0	0	1	0	0	0	1	0
	%	0	0	0.33	0	0	0	0.23	0
Others	No.	5	4	7	3	0	0	12	7
	%	4.17	18.18	2.31	8.57	0	0	2.72	12.07
Total	No.	120	22	303	35	18	1	441	58
	%	100	100	100	100	100	100	100	100

Source: Study Team, 2012

3.4.5 Marital Status

The survey was designed, undertaken and analyzed collected data in a way which adequately identify gender differences. Distribution of population of the Project area by sex and marital status is given in Table 3.20. Gender disaggregating marital status shows that out of 555 married males and 548 married females, 5 males (0.90%) and 41 females (7.48%) belong to the age group 11-20 years who are married. It indicates that in spite of several programs of GoB promoting the delay of marriage until after 20 years of age for females, but the adolescent girls in the project area get married within 20 years and also even under 18 years of their age. It is found that numbers of unmarried males and females under the entire surveyed area are 329 and 180 respectively. Out of 329 unmarried males, 239 (72.64%) are the highest that belong to the age group 11-20 years followed by 88 (26.75%) belong to 21-30 the age group. Out of 180 unmarried females, 169 (93.89%) belong to 11-20 years of age followed by 10 (5.56%) belong to 21-30 years. Details on marital status of surveyed population in the entire project area are shown in Table 3.20.

Table 3.20 Marital Status of Affected Male & Female Population under the Entire Project Area

Marital Status	Sex	Character	Age Level						Total
			11 to 20	21 to 30	31 to 40	41 to 50	51 to 60	Above 60	
Married	Male	No.	5	119	151	124	103	53	555
		%	0.90	21.44	27.21	22.34	18.56	9.55	100
	Female	No.	41	187	135	126	37	22	548
		%	7.48	34.12	24.64	22.99	6.75	4.01	100
Unmarried	Male	No.	239	88	2	0	0	0	329
		%	72.64	26.75	0.61	0.00	0.00	0.00	100
	Female	No.	169	10	0	0	1	0	180
		%	93.89	5.56	0.00	0.00	0.56	0.00	100
Widower/ Widow	Male	No.	0	0	0	0	1	7	8
		%	0	0	0	0	12.5	87.5	100
	Female	No.	1	1	1	15	17	34	69
		%	1	1	1	22	25	49	100
Abandoned	Female	No.	1	5	2	6	2	0	16
		%	6.25	31.25	12.50	37.50	12.50	0.00	100
Divorced	Female	No.	0	2	0	0	0	0	2
		%	0	100	0	0	0	0	100

Source: Study Team, 2012

3.4.6 Income and Poverty Dimensions

As per the Statistical Year Book of Bangladesh 2005, average household size is 5.13 and 40.94% of households earn less than BDT 60,000 per year. Average annual income and expenditure of these households are BDT 24,648 and BDT 32,072 respectively. Table 3.22 shows that as per this survey, each of 53 households (10.62%) in the Project area earn less than BDT 60,000 per year. Income level up to BDT 60,000/year has been categorized as vulnerable in “Southwest Area Integrated Water Resources Planning and Management Project (2011) “financed by ADB and this value is adopted to this study because of proximity of the area and reflects current social condition of recent years. These 53 households may be considered as extremely poor and each of 185 households (37.07%) within the range of BDT 60,001 to 120,000 is poor. It should be mentioned that each of 261 households (52.30%) earn above BDT 120,000 is non-poor.

It is found in the Kanchpur Bridge area that each of 21 households (16.90%) earn income less than BDT 60,000 per year. These households are considered as extremely poor. Each of 59 affected

households (41.55%) earns income ranging from BDT 60,001 and 120,000 per year which households are considered as the poor. On the contrary, each of 59 affected households (41.55%) earns income above BDT 120,001 is considered to be the non-poor.

It is found in the Meghna Bridge area that each of 24 households (7.11%) earn income less than BDT 60,000 per year. These households are considered as extremely poor. Each of 120 households (35.50%) earns income ranging from BDT 60,001 and 120,000 per year. These households are considered as the poor households. On the contrary, each of 194 households (57.40%) earns income above BDT 120,001 is considered to be non-poor.

It is found in the Gumti Bridge area that each of 5 households (26.31%) earn income less than BDT 60,000 per year. These households are considered as extremely poor. Each of 6 households (31.58%) earns income ranging from BDT 60,001 and 120,000 per year. These households are considered as the poor households. On the contrary, each of 8 households (42.11%) earns income above BDT 120,001 is considered to be non-poor.

Table 3.21 Distribution of the Households by Annual Income in the Three Bridge Areas

Yearly Income level	Kanchpur		Meghna		Gumti		Total	
	No.	%	No.	%	No.	%	No	%
Up to TK 30,000	9	6.34	6	1.78	1	5.26	16	3.21
30,001-60000	15	10.56	18	5.33	4	21.05	37	7.41
60,001-90,000	25	17.61	51	15.09	1	5.26	77	15.43
90,001-120,000	34	23.94	69	20.41	5	26.32	108	21.64
Above 120,000	59	41.55	194	57.40	8	42.11	261	52.30
Total	142	100	338	100	19	100	499	100

Source: Study Team, 2012

3.4.7 Yearly Household Expenditure

Table 3.22 shows almost similar trend on yearly household expenditure compared to income in Kanchpur, Meghna and Gumti Bridge areas. In Kanchpur Bridge area, each of 40% of the households has yearly expenditure above BDT 120,000. Each of 29% of the households has yearly expenditure ranged from BDT 60,000 to BDT 90,000. Each of 8% of the households has yearly expenditure within BDT 30,000. In Meghna Bridge area, each of 52% of the households has yearly expenditure above BDT 120,000. It is found that each of 20.41% of the households has yearly expenditure ranged from BDT 90,001-BDT 120,000. Each of 20% of the households has yearly expenditure ranged from BDT 60,001-BDT 90,000. Each of 2.07% of the households has

yearly expenditure within BDT 30,000. In the Gumti Bridge area, each of 47.37% of the households has yearly expenditure above BDT 120,000. Each of 21% of the households has yearly expenditure ranged from BDT 60,001-BDT 90,000 and each of another 21% of the households has yearly expenditure ranged from BDT 30,001-BDT 60,000.

Table 3.22 Distribution of Households by Yearly Expenditure in the Three Bridge Areas

Yearly Expenditure level	Kanchpur		Meghna		Gumti		Total	
	No.	%	No.	%	No.	%	No	%
Up to TK 30,000	11	7.75	7	2.07	0	0.00	18	3.61
30,001-60000	13	9.15	20	5.92	4	21.05	37	7.41
60,001-90,000	41	28.87	66	19.53	4	21.05	111	22.24
90,001-120,000	20	14.08	69	20.41	2	10.53	91	18.24
Above 120,000	57	40.14	176	52.07	9	47.37	242	48.50
Total	142	100	338	100	19	100	499	100

Source: Study Team, 2012

3.4.8 Access to Electricity

In Kanchpur area, out of 142 households, 128 households (90.14%) have electricity supplied from national grid. In Meghna Bridge area, out of 338 households, 263 households (77.81%) have electricity access from national grid while 2.66% are from solar energy and 19.53% have no any source of electricity. In Gumti Bridge area out of 19 households, 9 households (47.37%) have electricity access from national grid while 5.27% are from solar energy by themselves and 47.37% have no any source (Table 3.23).

Table 3.23 Distribution of Households by Access to Electricity by Type

Name of the Bridge	National Grid		Solar panel		Do not have any type of electricity		Total	
	No of HHs	%	No of HHs	%	No of HHs	%	No of HHs	%
Kanchpur	128	90.14	0	0.00	14	9.86	142	100
Meghna	263	77.81	9	2.66	66	19.53	338	100
Gumti	9	47.37	1	5.26	9	47.37	19	100

Source: Study Team, 2012

3.4.9 Utilization of Electricity

Table 3.24 shows utilization of electricity by the consumers including light, fan and others. The highest utilization of electricity is for light (51.28% in Kanchpur Bridge, 54.75% in Meghna

Bridge and 62.50% in Gumti Bridge) and second highest utilization is for fan (34.08% in Kanchpur Bridge, 32.91% in Meghna Bridge and 25% in Gumti Bridge)

Table 3.24 Use of Electricity for Various Purposes

Type of uses	Kanchpur		Meghna		Gumti		Total	
	No.	%	No.	%	No.	%	No.	%
Light	480	51.28	1078	54.75	30	62.50	1588	53.78
Fan	319	34.08	648	32.91	12	25.00	979	33.15
Others	137	14.64	243	12.34	6	12.50	386	13.07
Total	936	100	1969	100	48	100	2953	100

Source: Study Team, 2012

3.4.10 Water and Sanitation

Percentage distribution of households by main sources of drinking water is shown in Table 3.25. It is found that 90.48% of households use shallow/hand tube wells for drinking water in the Gumti Bridge area followed by 58.41% of households in the Meghna Bridge area that is further followed by 51.39% of households in the Kanchpur Bridge area. It is found that deep tube wells are used by 38% and 22% households for drinking water in the Meghna Bridge and Kanchpur Bridge areas respectively. Over 25% of the population drinks supply water in Kanchpur bridge area.

Table 3.25 Distribution of Households by Source of Drinking Water

Source of water	Kanchpur	Meghna	Gumti
	% of households	% of households	% of households
Shallow/hand tube well	51.39	58.41	90.48
Deep tube well	21.53	38.05	0
Supply	25.69	3.24	4.76
River	1.39	0.29	0
Pond	0	0	0
Canal	0	0	4.76
Rain Water	0	0	0
Total	100	100	100

Source: Study Team, 2012

In Kanchpur Bridge area, about 41% households use pond water for various purposes except drinking followed by 21% households use supply water that is further followed by 16%

households use river water for the same purposes. However, shallow/hand tube wells and deep tube wells are also used by 12.41% and 10.34% households respectively for the same purposes. In the Meghna Bridge area, 45% and 29.14% of households use river and shallow/hand tube well water respectively for the same purpose. However, 18% households use deep tube wells for the same purposes. On the other hand, 58% households in the Gumti Bridge area use river water for the said purpose. It is followed by 32% households use pond water for the said purposes. Details on use of sources of water used by the surveyed households in Kanchpur, Meghna and Gumti Bridge area for various purposes other than drinking are shown in Table 3.26.

Table 3.26 Distribution of Households by Sources of Water for Other Utilization of Water

Source of water	Kanchpur	Meghna	Gumti
	%	%	%
Shallow Tube well	12.41	29.14	0
Deep Tube well	10.34	17.71	0
Supply	20.69	3.43	5.26
River	15.86	44.57	57.89
Pond	40.69	5.14	31.58
Canal	0	0	5.26
Total	100	100	100

Source: Study Team, 2012

The project area wise distribution of households by sanitation facilities is shown in Table 3.27. In the entire project areas, 67.33% households use water sealed slab latrines followed by 21.24% households use pucca (Sanitary) latrines that is further followed by 6.21% households use hanging latrines. In the Kanchpur Bridge area, about 62% households use water sealed slab latrines followed by 32.39% households use pucca latrines. In Meghna Bridge area, about 69% households use water sealed slab latrines followed by 17.46% households use pucca latrines that is further followed by 7.40% households use hanging latrines. In the Gumti Bridge area, about 79% households use water sealed slab latrines followed by 16% households use hanging latrines.

Table 3.27 Distribution of Households by Sanitation Facilities

Use of Toilets	Kanchpur		Meghna		Gumti		Total	
	No.	%	No.	%	No.	%	No	%
Pucca	46	32.39	59	17.46	1	5.26	106	21.24
Slab	88	61.97	233	68.93	15	78.95	336	67.33
Katcha	2	1.41	17	5.03	0	0	19	3.81
Hang	3	2.11	25	7.40	3	16	31	6.21
Open Space	3	2.11	4	1.18	0	0	7	1.40
Total	142	100	338	100	19	100	499	100

Pucca: Mud wall toilet

Slab: Toilet with concrete ring over the cesspit

Katch: Bamboo wall toilet

Hang: Toilet directly dropping on to ground/pond over silted elevated house

Source: Study Team, 2012

3.4.11 Institutional Loan

Table 3.28 shows distribution of households under the Kanchpur, Meghna and Gumti Bridge areas, those took microcredit from locally active different NGOs and Banks. Different national NGOs such as BRAC, ASA, Grameen Bank, local NGOs/Samity (Society) and private of government Banks have provided loans to the people with a view to uphold their standard of living. Duration of most of the loans is less than 2 years except only 1 loan is for 10 years. In most of the cases minimum size of loans is more than BDT 10,000.

Table 3.28 Microcredit Support Taken by the Surveyed Households

Name of the Bridge	Name of Source	No. HH	Average loan size (BDT)	Minimum size of loan (BDT)	Maximum size of loan (BDT)	Duration for loan (yr)
Kanchpur	BRAC	25	65,920	10,000	400,000	2
	ASA	21	81,429	10,000	450,000	1
	Local NGOs	11	77,818	5,000	500,000	1
	Govt. Banks	3	128,333	10,000	300,000	2
	Grameen Bank	3	21,667	10,000	40,000	1
	Private Bank	1	120,000	120,000	120,000	10
Meghna	Grameen Bank	43	53,384	10,000	500,000	1
	Local NGOs	40	19,075	5,000	70,000	1
	BRAC	34	121,000	3,000	900,000	1
	ASA	29	47,207	10,000	150,000	1

	Private Bank	28	2,514,643	20,000	40,000,000	2
	Govt. Banks	13	44,962	8,000	150,000	2
Gumti	BRAC	5	70,000	20,000	130,000	1
	ASA	2	25,000	20,000	30,000	1
	Local NGO	1	53,000	53,000	53,000	1
	Grameen Bank	1	40,000	40,000	40,000	1

Source: Study Team, 2012

3.4.12 Housing Pattern

Table 3.29 shows that overwhelming percentages of houses (ranging from 75% to 86% of houses) are tin roofed in the project area. It was followed by pucca (concrete roof with brick wall) houses (5%-8%) in these Bridge areas which are further followed by semi-pucca (Tin roofed with brick wall) houses (5%-7%).

Table 3.29 Housing Pattern in the Project in Terms of Housing Material

Type of Structure	Kanchpur		Meghna		Gumti		Total	
	No.	%	No.	%	No.	%	No.	%
Pucca	16	5.14	57	8.25	0	0	73	6.94
Semi-Pucca	22	7.07	34	4.92	0	0	56	5.32
Tin roofed and fenced	260	83.60	516	74.67	43	86	819	77.85
Katcha	7	2.25	44	6.37	3	6	54	5.13
Thatched	6	1.93	40	5.79	4	8	50	4.75
Total	311	100	691	100	50	100	1052	100

Source: Study Team, 2012

3.4.13 Household Assets

The Project area wise household assets are shown in Table 3.30. It is found that furniture, fridges, TVs, and other electronic materials and household accessories are found in the Project areas. Overwhelming numbers of chairs, beds, tables, shelves and dress stands are found in the Project areas. It is found that the highest and the lowest household appliances are found in the Meghna Bridge and Gumti Bridge area respectively compared to Kanchpur Bridge area.

Table 3.30 Household Assets

Household Appliances	Kanchpur		Meghna		Gumti		Total	
	No.	%	No.	%	No.	%	No.	%
Chair	300	18.33	1618	33.99	39	25.83	1957	29.89
Bed	295	18.02	681	14.31	36	23.84	1012	15.46
Table	149	9.10	441	9.26	13	8.61	603	9.21
Almirah	110	6.72	183	3.84	9	5.96	302	4.61
Dress Stand	75	4.58	196	4.12	13	8.61	284	4.34
Fridge	55	3.36	122	2.56	0	0.00	177	2.70
Mobile Phone	215	13.13	529	11.11	17	11.26	761	11.62
Television	106	6.48	216	4.54	6	3.97	328	5.01
DVD Player	25	1.53	37	0.78	1	0.66	63	0.96
Radio	11	0.67	13	0.27	4	2.65	28	0.43
Cassette Player	9	0.55	10	0.21	1	0.66	20	0.31
Iron	19	1.16	17	0.36	0	0.00	36	0.55
stands for electronic equipment	2	0.12	3	0.06	2	1.32	7	0.11
stands for household accessories	266	16.25	694	14.58	10	6.62	970	14.81
Total	1637	100	4760	100	151	100	6548	100

Source: Study Team, 2012

Health care facility

There are several categories health care facilities in the Project surrounded areas such as hospital, clinic, rural dispensary, etc. within the reach of the people. These are mostly found within 5 km except Government Hospital in Kanchpur Bridge area. In other Bridge areas the scenario is almost similar. Details on health care facilities and distance from their residence in the Kanchpur Bridge, the Meghna Bridge and the Gumti Bridge areas are shown in Table 3.31.

Table 3.31 Distance of Healthcare Center

Name of Bridge	Healthcare center	Up to 1 km		1 to 3 km		3 to 5 km		Above 5 km		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
Kanchpur	Government Hospital	2	1.41	1	0.70	1	0.70	138	97.18	142	100
	Upazila Health complex	3	2.07	19	13.10	65	44.83	58	40.00	145	100
	Private Hospital	105	74.47	24	17.02	7	4.96	5	3.55	141	100
	Rural healthcare center	135	97.12	2	1.44	2	1.44	0	0.00	139	100
	Family care center	122	84.72	5	3.47	2	1.39	15	10.42	144	100
Meghna	Government	2	0.59	2	0.59	4	1.18	330	97.63	338	100

	Hospital										
	Upazila Health complex	3	0.89	21	6.21	81	23.96	233	68.93	338	100
	Private Hospital	84	24.85	98	28.99	31	9.17	125	36.98	338	100
	Rural healthcare center	266	79.17	13	3.87	31	9.23	26	7.74	336	100
	Family care center	237	70.33	23	6.82	2	0.59	75	22.26	337	100
Gumti	Government Hospital	0	0.00	1	5.26	2	10.53	16	84.21	19	100
	Upazila Health complex	1	5.26	2	10.53	12	63.16	4	21.05	19	100
	Private Hospital	3	15.79	13	68.42	2	10.53	1	5.26	19	100
	Rural healthcare center	15	78.95	4	21.05	0	0.00	0	0.00	19	100
	Family care center	18	90.00	2	10.00	0	0.00	0	0.00	20	100

Source: Study Team, 2012

3.4.14 Educational Institutions

A lot of educational institutions are found in the Project area mostly schools, colleges and Madrasah. There is no University in the project area. The educational institutions are mainly located within 5 km except Universities. Islamic religious institutions such as Madrasah and Maktob are also found a bit more in number in the Project area. It is found that overwhelming percentages of primary schools, non-formal education, *Madrassa* and *Maktob* are located within 1 kilometer distance in the Kanchpur Bridge, the Meghna Bridge and the Gumti Bridge area. Available educational institutions in the Kanchpur Bridge, Meghna Bridge and Gumti Bridge and distance from the residence shown in Table 3.32.

Table 3.32 Distance of Educational Institutes

Name of Bridge	Educational institute	Up to 1 km		1 to 3 km		3 to 5 km		>5 km		Total	
		No.	%	No.	%	No.	%	No.	%	No.	%
Kanchpur	University	0	0.00	1	0.71	3	2.13	137	97.16	141	100
	College	45	32.14	46	32.86	43	30.71	6	4.29	140	100
	High School	93	66.43	43	30.71	4	2.86	0	0.00	140	100
	Primary School	128	93.43	9	6.57	0	0.00	0	0.00	137	100
	Non-formal Education	133	97.08	3	2.19	0	0.00	1	0.73	137	100
	Madrasah	129	96.27	4	2.99	1	0.75	0	0.00	134	100
	Maktob	103	100	0	0.00	0	0.00	0	0.00	103	100
Meghna	University	0	0.00	0	0.00	1	0.30	337	99.70	338	100
	College	6	1.77	37	10.91	124	36.58	172	50.74	339	100
	High School	201	59.47	111	32.84	17	5.03	9	2.66	338	100
	Primary School	326	96.74	10	2.97	0	0.00	1	0.30	337	100
	Non formal Education	318	99.07	2	0.62	0	0.00	1	0.31	321	100
	Madrasah	326	98.49	3	0.91	0	0.00	2	0.60	331	100
	Maktob	258	99.61	1	0.39	0	0.00	0	0.00	259	100
Gumti	University	0	0.00	0	0.00	0	0.00	19	100	19	100
	College	0	0.00	0	0.00	13	68.42	6	31.58	19	100
	High School	3	15.79	14	73.68	2	10.53	0	0.00	19	100
	Primary School	19	100	0	0.00	0	0.00	0	0.00	19	100
	Non formal Education	19	100	0	0.00	0	0.00	0	0.00	19	100
	Madrasah	19	100	0	0.00	0	0.00	0	0.00	19	100
	Maktob	15	100	0	0.00	0	0.00	0	0.00	15	100

Source: Study Team, 2012

CHAPTER 4. LEGAL FRAMEWORK

4.1 Law and Policy on Land Acquisition in Bangladesh

The current legislations governing land acquisition for Bangladesh is the Acquisition and Requisition of Immovable Property Ordinance 1982 (hereinafter, “the Ordinance”) and subsequent amendments (1989, 1993, 1994 and 2004). The Ordinance provides certain safeguards for landowners and has provisions for payment of ‘fair value’ for the property acquired. Besides, the 1994 amendment made provisions for payment of crop compensation to tenant cultivators. However, it does not cover project-affected persons without titles or ownership record, such as informal settler/squatters, occupiers, and informal tenants and lease-holders (without document) and does not ensure replacement value of the property acquired. It does not permit the affected persons to take the salvageable materials for which compensation have been paid by the DC. It has no provision of resettlement assistance and transitional allowances for restoration of livelihoods of the non-titled affected persons.

In all cases, the Deputy Commissioner (DC) determines (i) market value of acquired assets on the date of notice of acquisition (based on the registered value of similar property bought and/or sold in the area over the preceding 12 months); and (ii) 50% premium on the assessed value (other than crops) due to compulsory acquisition. The DC payments or “awarded” to owners is called cash compensation under law (CCL). The value thus paid is invariably less than the “market value” as owners customarily report undervalued land transaction prices in order to pay lower stamp duty and registration fees. As a result, compensation for land paid by DC, including premium, remains less than the real market price or replacement value (RV).¹

The land owner has to establish ownership by producing a record-of-rights (RoR) in order to be eligible for compensation under the law. ROR prepared under Section 143 or 144 of the State Acquisition and Tenancy Act 1950 (revised 1994) are not always updated and as a result legal land owners have faced difficulties trying to “prove” ownership. The APs must also produce rent receipt or receipt of land development tax, but this does not assist in some situations as a person is exempted from payment of rent if the area of land is less than 25 bighas² (3.37 ha).

Khas (government owned) lands should be acquired first when a project acquires both khas and private land. If a project acquires only khas, the land will be transferred through an inter-ministerial meeting following the preparation of acquisition proposal submitted to DC/MOL. Places of worship, graveyard and cremation grounds are not to be acquired for any purpose.

The DC processes land acquisition under the Ordinance and pays compensation to the legal owners

¹ There is provision for Arbitration Appellate Tribunal on compensation assessment by the DC, but the law allows only 10 percent enhancements on the DC “award.”

² 1 Bigha = 1,340 square meters

of the acquired land. The Ministry of Lands (MOL) is authorized to deal with land acquisition through the DCs.

The Ordinance will be applied for this Project including its subsequent amendments. In addition to the 1982 Ordinance the Project will also use Padma Multipurpose Bridge Project Land Acquisition ACT 2009 for the process of land acquisition. However these rules are mainly applied for formal land title holders only and the affected people by the Project are non-titled people without application of these rules.

4.2 National Policy on Involuntary Resettlement

The Government of Bangladesh, with the help of ADB technical assistance (TA), has prepared a national policy on involuntary resettlement, which is consistent with the general policy of the Government that the rights of those displaced by development project shall be fully respected, and persons being displaced shall be treated with dignity and assisted in such a way that safeguards their welfare and livelihoods irrespective of title, gender, and ethnicity.

The Policy on involuntary resettlement recognizes that:

- I All those displaced involuntarily by either project or non-project impacts like erosion and eviction must be resettled and rehabilitated in a productive and sustainable manner.
- II People who are resettled must be able, through their own efforts and/or with support as may be required, to restore or improve upon their level of living.
- III Cash compensation shall be paid in development project at replacement value to those displaced for land and other assets acquired based on established prior ownership and/or user rights. In addition to cash compensation and resettlement, a benefit sharing will be considered where feasible.
- IV Cultural and customary rights of people affected by project are to be protected, particularly those belonging to *adibasis* (indigenous people) and ethnic minorities.
- V Gender equality and equity in all stages and processes of resettlement and rehabilitation will be fully respected.
- VI Affected persons will be informed and consulted in a transparent manner, including formal disclosure of project impacts and mitigation measures.
- VII Vulnerable groups, including landless, *adibasis*, poor women headed households, physically challenged people, elderly and those falling below the nationally defined poverty line (by the government) displaced by project or non-project impacts, are

entitled to additional benefits and assistance in a manner that addresses their specific needs related to socio-economic vulnerability.

VIII Similarly, affected persons and/or businesses on government leased land will be eligible for compensation for loss of access to land and sites.

The draft Policy was submitted to the Government in November 2007. It has been approved by the Ministry of Land on 1 January 2008 and is placed before the Cabinet later in February 2008. Ministry of Land has enacted “The Padma Multipurpose Bridge Project (Land Acquisition) Act 2009” and “Dhaka Elevated Expressway Project Land Acquisition Act, 2011”. As of August, 2012, this policy is still in the process of evaluation and approval by the Government.

4.3 JICA’s Policy on Involuntary Resettlement

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

- I. The key principle of JICA policies on involuntary resettlement is summarized below.
- II. Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives.
- III. When, population displacement is unavoidable, effective measures to minimize the impact and to compensate for losses should be taken.
- IV. People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels.
- V. Compensation must be based on the full replacement cost³ as much as possible.
- VI. Compensation and other kinds of assistance must be provided prior to displacement. For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public. It is desirable that the resettlement action plan include elements laid out in the World Bank Safeguard Policy, OP 4.12, Annex A.

³ Description of “replacement cost” is as follows.

Land	Agricultural Land	The pre-project or pre-displacement, whichever is higher, market value of land of equal productive potential or use located in the vicinity of the affected land, plus the cost of preparing the land to levels similar to those of the affected land, plus the cost of any registration and transfer taxes.
	Land in Urban Areas	The pre-displacement market value of land of equal size and use, with similar or improved public infrastructure facilities and services and located in the vicinity of the affected land, plus the cost of any registration and transfer taxes.
Structure	Houses and Other Structures	The market cost of the materials to build a replacement structure with an area and quality similar or better than those of the affected structure, or to repair a partially affected structure, plus the cost of transporting building materials to the construction site, plus the cost of any labor and contractors’ fees, plus the cost of any registration and transfer taxes.

- VII. In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance. When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.
- VIII. Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans.
- IX. Appropriate and accessible grievance mechanisms must be established for the affected people and their communities.

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

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

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

4.4 Gap Analysis between JICA Guideline and Bangladesh Policy

There is an essential gap between JICA Guidelines and Laws of Bangladesh since any compensation/ assistance is no required to move out none-titled for the project while JICA Guidelines specifies “to improve or at least restore the life level and livelihood of affected people, who has title or not”. Table 4.1 suggests how to fill up these gaps in details.

Table 4.1 How to Fill up the Policy Gaps Between JICA Environmental and Social Considerations Guidelines and Laws of Bangladesh

No.	JICA Environmental and Social Considerations Guidelines (JICA Guidelines)	Laws of Bangladesh	Gaps between JICA Guidelines and Laws of Bangladesh	Action taken to fill up gaps
1.	Involuntary resettlement and loss of means of livelihood are to be avoided when feasible by exploring all viable alternatives.	Not specified	The 1982 ordinance legislated nothing , while the JICA guidelines require to avoid/ minimize resettlement/ loss of livelihood	Route to minimize such impacts were chosen in the view of number of relocated households as shown in Section 2.2 <i>Feasible route selection</i>
2.	When population displacement is unavoidable, effective measures to minimize impact and to compensate for losses should be taken.	Not specified for non titled people	There is no provisions for compensation to the non-titled residents in Bangladesh ordinance, while JICA guidelines acknowledge all affected persons whether legally residing or not, eligible for compensation	Compensations were proposed even if non-titled affected people providing: <ul style="list-style-type: none"> - Compensation for structures, trees - Structure transfer assistance - Structure reconstruction assistance - Moving assistance for residential house owner - Tenant moving allowance

No.	JICA Environmental and Social Considerations Guidelines (JICA Guidelines)	Laws of Bangladesh	Gaps between JICA Guidelines and Laws of Bangladesh	Action taken to fill up gaps
3.	People who must be resettled involuntarily and people whose means of livelihood will be hindered or lost must be sufficiently compensated and supported, so that they can improve or at least restore their standard of living, income opportunities and production levels to pre-project levels.	Not specified for keeping living standard of affected people same or above pre-project levels.	There is no provisions for maintaining living standard of affected people at same or above pre-project levels in Bangladesh ordinance, while JICA guidelines require that no one is worse off as a result of resettlement and would maintain their living level at least original levels	Assistances were proposed in the forms of : <ul style="list-style-type: none"> - Grant for business loss - Compensation for losses of plant and fish-stock - Grant for loss of wage employment - Rental fee loss for displaced rent-house owner - One time moving assistance for tenant business owner r - Introduction of micro-credit, - Provision of job training, - Provision of priority employment, etc
4.	Compensation must be based on the full replacement cost as much as possible.	Compensation is made based on the pre-determined government prices as are usually quite cheaper than market prices	Compensation is made based on the pre-determined government prices that are usually lower than replacement cost.	Compensation is proposed market price plus surveyed and verified by PVAC
5.	Compensation and other kinds of assistance must be provided prior to displacement.	Payment is made on predetermined time, regardless before or after the construction starts	Compensations and other assistances are made regardless before or after construction, while JICA guidelines requires to make it prior to relocation	Compensation and assistances were proposed to be provided in timely manner before relocation

No.	JICA Environmental and Social Considerations Guidelines (JICA Guidelines)	Laws of Bangladesh	Gaps between JICA Guidelines and Laws of Bangladesh	Action taken to fill up gaps
6.	For projects that entail large-scale involuntary resettlement, resettlement action plans must be prepared and made available to the public.	There is no provision for the formulation of RAP and public hearing. Deputy Commissioner contacts to land owner through land Acquisition Officer (LAO), and if land owner has no objection, confirmation operation for compensation amount etc. will be proceeded	There is no provision for preparation of resettlement action plan that describes all features of resettlement requirements and ready to disclose public.	RAP shall be prepared since the relocated peoples are estimated more than 200.
7.	In preparing a resettlement action plan, consultations must be held with the affected people and their communities based on sufficient information made available to them in advance.	The 1982 Ordinance have provisions to notify the owners of property to be acquired.	There is no provision in the law for consulting the stakeholders but the land allocation committees at district, division and central government level.	Seven Focus Group Discussion (FGE), 2 stakeholders meetings and door to door consultation for 310 households affected were implemented.
8.	When consultations are held, explanations must be given in a form, manner, and language that are understandable to the affected people.	No description	Requirements of JICA guidelines are not specifically mentioned in the Bangladesh laws and rules.	Explanation was made in local language (Bengal) verbally and with written screen.
9.	Appropriate participation of affected people must be promoted in planning, implementation, and monitoring of resettlement action plans.	There is no provision for the monitoring related activities with the participation of affected people.	There is no provision in Bangladesh ordinances, while JICA guidelines recommend participation of affected people in planning, implementation and monitoring of RAP.	Based on FGD, Stakeholders' meeting and door to door survey, almost all of them prefers "self relocation" ⁴

⁴ Third preferable option in 4 resettlement options as indicated by ADB. Best is "affected but no need to move", Second is set-back, Third is self relocation by which he/she aggressively takes full responsibility to decide where to

No.	JICA Environmental and Social Considerations Guidelines (JICA Guidelines)	Laws of Bangladesh	Gaps between JICA Guidelines and Laws of Bangladesh	Action taken to fill up gaps
10.	Appropriate and accessible grievance mechanisms must be established for the affected people and their communities.	In case AP have objection to compensation amount, the AP should protest and entrust the matter to the Arbitrator. If AP has appeal against Arbitrator's decision, then AP should file a law suit to the court and wait for the sentence.	The laws of Bangladesh states appeal to Arbitrator and court case, while JICA guideline recommends establishing appropriate grievance mechanism for amicable settlement to minimize legal confrontation.	Setting up of grievance mechanism accessible for none-titled affected people was
11.	Affected people are to be identified and recorded as early as possible in order to establish their eligibility through an initial baseline survey (including population census that serves as an eligibility cut-off date, asset inventory, and socioeconomic survey), preferably at the project identification stage, to prevent a subsequent influx of encroachers of others who wish to take advantage of such benefits.	No such an activity required	There is no provision in Bangladesh ordinances, while JICA guidelines recommends identification of affected people the earliest possible time preferably at the project identification stage	Census, socioeconomic survey and registration were implemented 16 th March 2012, next ay of stakeholders' meetings at Kanchpur and Meghna and all the affected people and his properties were registered and their photos were taken in that time.

go. Worst is preparation of group relocation sites.

No.	JICA Environmental and Social Considerations Guidelines (JICA Guidelines)	Laws of Bangladesh	Gaps between JICA Guidelines and Laws of Bangladesh	Action taken to fill up gaps
12.	Eligibility of benefits includes, the Project Affected Persons (PAPs) who have formal legal rights to land (including customary and traditional land rights recognized under law), the PAPs who don't have formal legal rights to land at the time of census but have a claim to such land or assets and the PAPs who have no recognizable legal right to the land they are occupying.	-	-	There is no legal rights holder except Holcim Cement Factory and Plantation owner who made formal contract with government/RHD to borrow lands
13.	Preference should be given to land-based resettlement strategies for displaced persons whose livelihoods are land-based.	-	-	There is no land-based affected people
14.	Provide support for the transition period (between displacement and livelihood restoration).	There is no provision for support for the transition period.	There is no provision in Bangladesh ordinances, while JICA guidelines require providing support for the transition period	Following are provided: - Moving assistance for residential house owner - Tenant moving allowance
15.	Particular attention must be paid to the needs of the vulnerable groups among those displaced, especially those below the poverty line, landless, elderly, women and children, ethnic minorities etc.	There is no provisions for either acknowledgement of or compensation to vulnerable groups	There is no provision in Bangladesh ordinances, while JICA guidelines require providing special attention to vulnerable people and groups.	Vulnerable allowances were proposed to widowed, old, disabled and poor house head families such as - Special Assistance for Vulnerable households - Special Assistance for Vulnerable households

CHAPTER 5. ELIGIBILITY

5.1 Project Resettlement Principles & Policies

- I. The Government of Bangladesh will use the Project Resettlement Policy (the Project Policy) for the “Dhaka-Chittagong National Highway No.1 Bridge Construction and Rehabilitation Project” specifically because existing national laws and regulations have not been designed to address involuntary resettlement according to international practice, including JICA’s policy. The Project Policy is aimed at filling-in any gaps in what local laws and regulations cannot provide in order to help ensure that PAPs are able to rehabilitate themselves to at least their pre-project condition. This section discusses the principles of the Project Policy and the entitlements of the PAPs based on the type and degree of their losses. Where there are gaps between the Bangladesh’s legal framework for resettlement and JICA’s Policy on Involuntary Resettlement, practicable mutually agreeable approaches will be designed consistent with Government practices and JICA’s Policy.
- II. Land acquisition and involuntary resettlement will be avoided where feasible, or minimized, by identifying possible alternative project designs that have the least adverse impact on the communities in the project area.
- III. Where displacement of households is unavoidable, all PAPs (including communities) losing assets, livelihoods or resources will be fully compensated and assisted so that they can improve, or at least restore, their former economic and social conditions.
- IV. Compensation and rehabilitation support will be provided to any PAPs, that is, any person or household or business which on account of project implementation would have his, her or their:
 - Standard of living adversely affected;
 - Right, title or interest in any house, interest in, or right to use, any land (including premises, agricultural and grazing land, commercial properties, tenancy, or right in annual or perennial crops and trees or any other fixed or moveable assets, acquired or possessed, temporarily or permanently;
 - Income earning opportunities, business, occupation, work or place of residence or habitat adversely affected temporarily or permanently; or
 - Social and cultural activities and relationships affected or any other losses that may be identified during the process of resettlement planning.
- V. All affected people will be eligible for compensation and rehabilitation assistance, irrespective of tenure status, social or economic standing and any such factors that may discriminate against achievement of the objectives outlined above. Lack of legal rights to the assets lost or adversely affected tenure status and social or economic status will not bar the PAPs from entitlements to such compensation and rehabilitation measures or resettlement objectives. All PAPs residing, working, doing business and/or cultivating land within the project impacted

areas as of the date of the latest census and inventory of lost assets(IOL), are entitled to compensation for their lost assets (land and/or non-land assets), at replacement cost, if available and restoration of incomes and businesses, and will be provided with rehabilitation measures sufficient to assist them to improve or at least maintain their pre-project living standards, income-earning capacity and production levels.

- VI. PAPs that lose only part of their physical assets will not be left with a portion that will be inadequate to sustain their current standard of living. The minimum size of remaining land and structures will be agreed during the resettlement planning process.
- VII. People temporarily affected are to be considered PAPs and resettlement plans address the issue of temporary acquisition.
- VIII. Where a host community is affected by the development of a resettlement site in that community, the host community shall be involved in any resettlement planning and decision-making. All attempts shall be made to minimize the adverse impacts of resettlement upon host communities.
- IX. The resettlement plans will be designed in accordance with “Acquisition and Requisition of Immovable Property Ordinance”, (1982) and JICA’s Policy on Involuntary Resettlement.
- X. The Resettlement Plan will be translated into local languages and disclosed for the reference of PAPs as well as other interested groups.
- XI. Payment for land and/or non-land assets will be based on the principle of replacement cost.
- XII. Compensation for PAPs dependent on agricultural activities will be land-based wherever possible. Land-based strategies may include provision of replacement land, ensuring greater security of tenure, and upgrading livelihoods of people without legal land titles. If replacement land is not available, other strategies may be built around opportunities for re-training, skill development, wage employment, or self-employment, including access to credit. Solely cash compensation will be avoided as an option if possible, as this may not address losses that are not easily quantified, such as access to services and traditional rights, and may eventually lead to those populations being worse off than without the project.
- XIII. Replacement lands, if the preferred option of PAPs, should be within the immediate vicinity of the affected lands wherever possible and be of comparable productive capacity and potential¹. As a second option, sites should be identified that minimize the social disruption of those affected; such lands should also have access to services and facilities similar to those available in the lands affected.
- XIV. Resettlement assistance will be provided not only for immediate loss, but also for a transition period needed to restore livelihood and standards of living of PAPs. Such support could take

¹ Agricultural land for land of equal productive capacity means that the land provided as compensation should be able to produce the same or better yield the AP was producing on his/her land prior to the project. The production should be in the planting season immediately following the land acquisition. It can be for a future period if transitional allowance equal to the household’s previous yield is provided to the AP household while waiting for the land to get back to the same productivity as the previous land.

- the form of short-term jobs, subsistence support, salary maintenance, or similar arrangements.
- XV. The resettlement plan must consider the needs of those most vulnerable to the adverse impacts of resettlement (including the poor, those without legal title to land, ethnic minorities, women, children, elderly and disabled) and ensure they are considered in resettlement planning and mitigation measures identified. Assistance should be provided to help them improve their socio-economic status.
- XVI. PAPs will be involved in the process of developing and implementing resettlement plans.
- XVII. PAPs and their communities will be consulted about the project, the rights and options available to them, and proposed mitigation measures for adverse effects, and to the extent possible be involved in the decisions that are made concerning their resettlement.
- XVIII. Adequate budgetary support will be fully committed and made available to cover the costs of land acquisition (including compensation and income restoration measures) within the agreed implementation period. The funds for all resettlement activities will come from the Government.
- XIX. Displacement does not occur before provision of compensation and of other assistance required for relocation. Sufficient civic infrastructure must be provided in resettlement site prior to relocation. Acquisition of assets, payment of compensation, and the resettlement and start of the livelihood rehabilitation activities of PAPs, will be completed prior to any construction activities, except when a court of law orders so in expropriation cases. (Livelihood restoration measures must also be in place but not necessarily completed prior to construction activities, as these may be ongoing activities.)
- XX. Organization and administrative arrangements for the effective preparation and implementation of the resettlement plan will be identified and in place prior to the commencement of the process; this will include the provision of adequate human resources for supervision, consultation, and monitoring of land acquisition and rehabilitation activities.
- XXI. Appropriate reporting (including auditing and redress functions), monitoring and evaluation mechanisms, will be identified and set in place as part of the resettlement management system. An external monitoring group will be hired by the project and will evaluate the resettlement process and final outcome. Such groups may include qualified NGOs, research institutions or universities.

5.2 Cut-off-date of Eligibility

The cut-off-date of eligibility refers to the date prior to which the occupation or use of the Project area makes residents/users of the same eligible to be categorized as PAPs and be eligible to the Project entitlements. In the Project, the cut-off-date was determined as the date when census survey is started on 8th March 2012 for Kanchpur Bridge and 15th March 2012 for Meghna and Gumti Bridge. This date has been disclosed to each affected community by the relevant local governments and the communities have disclosed to their populations. The establishment of the eligibility cut-off

date is intended to prevent the influx of ineligible non-residents who might take advantage of the Project entitlements

5.3 Principle of Replacement Cost

All compensation for assets owned by households/shop owners who meet the cut-off-date will be based on the principle of replacement cost. Replacement cost is the amount calculated before displacement which is needed to replace an affected asset without depreciation and without deduction for taxes and/or costs of transaction as follows:

Replacement cost survey for the structures and trees was conducted using structured questionnaire among the local people knowledgeable about price of housing materials and construction cost, such as businessmen (CI Sheet, Rod, Bamboo, or Wood), etc. At the same time information was collected from other people who constructed structures. The structures are mainly categorized in five different groups i.e. Pucca, Semi Pucca, Tin made, Katcha (bamboo) and Thatched. Some secondary structures such as latrine, tube wells, boundary wall, water tank, bill board, etc. were also found affected. Compensation rates for affected structures were determined based on the current market prices for building material and labour costs collected from 26 persons. Market surveys were carried out to determine the cost of construction and the rates for four categories of structures.

Different species of trees both fruit bearing and timber type have been evaluated through interviewing the local people based on girth and species. Rents paid by the PAPs within the project area were also collected in the replacement cost survey.

Result of unit cost survey and unit cost to be adopted for this project is shown in Table 5.1.

Table 5.1 Result of Unit Cost Survey

Item	Kanchpur, Meghna and Gumti Bridge (2012)				Unit Cost Adopted for This Project
	Kanchpur	Meghna	Gumti	Average	
Residential Houses					
Semi Pucca	873BDT/sft	1,048BDT/sft	960BDT/sft	960BDT/sft	970* BDT/sft
Tin Made	485BDT/sft	689BDT/sft	371BDT/sft	515BDT/sft	525* BDT/sft
Katcha	253BDT/sft	300BDT/sft	275BDT/sft	276BDT/sft	286* BDT/sft
Thatched	130BDT/sft	125BDT/sft	120BDT/sft	125BDT/sft	135* BDT/sft
Other Structures					
Katcha Latrine	2,200BDT/No	2,500BDT/No	2,500BDT/No	2,400BDT/No	2,400BDT/No
Slab Latrine	3,960BDT/No	3,055BDT/No	4,200BDT/No	3,738BDT/No	3,738BDT/No
Pucca Latrine	20,300BDT/No	22,455BDT/No	19,750BDT/No	20,835BDT/No	20,835BDT/No
Tube-well	16,778BDT/No	17,818BDT/No	18,000BDT/No	17,532BDT/No	17,532BDT/No
Boundary Wall (Tin made)	280BDT/ft	N/A	N/A	280BDT/ft	280BDT/ft
Boundary Wall (Brick) 5"	948BDT/ft	531BDT/ft	500BDT/ft	660BDT/ft	660BDT/ft
Removal cost of water Pump					5,000BDT/No
Removal of Billboard					200,000BDT/No
Trees					
Large Tree	6,050BDT/No	6,020BDT/No	N/A	6,035BDT/No	6,035BDT/No
Medium Tree	4,065BDT/No	4,060BDT/No	N/A	4,032BDT/No	4,032BDT/No
Small Tree	1520BDT/No	1,510BDT/No	N/A	1,515BDT/No	1,515BDT/No
Plant	110BDT/No	105BDT/No	N/A	107BDT/No	107BDT/No
Rental Fee	1,000~3,000 BDT/Month				2,500BDT/Month

* :BDT10/sft of re-installation grant is added to the unit cost

5.4 Entitlement Matrix

Types of loss due to implementation of the Project, eligibility and qualification of persons including entitlements are summarized in Table 5.2.

Table 5.2 Entitlement Matrix

Loss Item 1: LOSS OF PHYSICAL STRUCTURES RESIDENTIAL AND COMMERCIAL (WITHOUT TITLE TO LAND)			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Socially recognized owners (Squatters) of structures built on the ROW as identified by Census	<ol style="list-style-type: none"> 1. Replacement Value² (RV) for structure 2. Transfer Grant @ BDT 7 (seven) per sft³ of affected structure. 3. Utility reconnection assistance @BDT2,000/household. 4. Removal grant for billboards as lump sum @ BDT 200,000/ number 5. Special Assistance of a one-time payment as recommended by PAVC for each vulnerable households (VHH) i.e. female-headed, disabled-headed, elderly-headed and hardcore poor household with an amount of BDT 10,000/VHH. 6. BDT 12,000/- as one time grant in addition to other compensation for female headed including disabled/handicapped/widow member family. 7. Skill Training for vulnerable households is provided by IA. 8. Owner will be allowed to take all salvageable materials free of cost. 	<ol style="list-style-type: none"> 1. Applicable to all structures located on ROW at cut-off dates. 2. PAVC will record structures and recommend the RV of structures. 3. Compensation will be paid for the structures built by the RHD and employees of RHD. 4. Transfer grant would be paid for only primary structure such as residential house (measured in sq ft). 5. Hardcore poor is defined as the households which income level is lower than BDT 60,000/year⁴ 	<ol style="list-style-type: none"> 1. RAP Implementing Agency (IA) will assist the APs in finding alternative site for relocation.
Implementation Issues			
<ol style="list-style-type: none"> 1. Entitled person will be identified through the Census survey to be conducted by IA and RHD at the detailed design stage. 2. RV of structure will be determined by PAVC 3. Compensation must be paid before EP dismantles and removes the structures as per civil works requirement by RHD through IA. 			

² As determined based on the result of replacement cost survey conducted by study team and to be recommended by PAVC.

³ Based on Padma Bridge Project (2010) financed by WB, ADB, JICA and IDB because of the proximity of the area and year the survey conducted, the value used for this project is considered to be applicable in due consideration of recent price level.

⁴ Based on Southwest Area Integrated Water Resources Planning Management Project (2011) financed by ADB

Loss Item 2: LOSS OF STANDING CROPS/FISH STOCK/ TREE WHO HAVE CONTRACT WITH LAND OWNER			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Socially recognized owners, as have contract documents with land owner, of trees and crops grown on public or other land, as identified by IA and verified by PAVC.	<ol style="list-style-type: none"> 1. The crop owners will be issued 60 days prior notice by the RHD to harvest the crops. If it is not near harvesting period, the expected yield will be compensated at RV. 2. In addition, grants for loss of access (right of cultivating) to cultivable land equivalent to the crop harvested in one harvested season, to be verified by PAVC, RV of fish stock and trees as determined by PAVC 3. Owners will be allowed to harvest crops and fish stock and fell the trees. 4. Dislocation allowance for fish pond @BDT300/dec. 5. Provisions of lease agreement will supersede above entitlements unless otherwise no conflicts with guidelines stated in this matrix. 	<ol style="list-style-type: none"> 1. Applicable for all crops/fish stock standing on land/pond within ROW at the time of dispossession. 2. If the tree is planted on the RHD land by taking lease, compensation for trees will be paid following the clause of the lease agreement signed between the parties⁵ 3. RV of trees/crops/fish stock will be recommended by PAVC based on data obtained from forest department/ district agriculture extension office/ district marketing office/fishery department respectively/market survey, etc. for those identified through joint on-site verification by PAVC 	Nil
Implementation Issues:			
Loss of agricultural products (standing crops) will be assessed by PAVC and compensation will be paid by RHD through IA			

⁵ Usually, the lease contract is made to pay half of the total sales (market price) to the land owner. Therefore, half price of planted trees is not required to be paid to tree owners. Rest half is not paid since the land owner is RHD

Loss Item 3: LOSS OF STANDING CROPS/FISH STOCK/ TREE WITHOUT TITLE TO LAND OR CONTRACT WITH LAND OWNER

Entitled Persons	Entitlements	Application Guidelines	Additional Services
<p>1. Actual cultivators, without consent to land owner, as identified in census by IA and verified by PAVC during implementation of RAP.</p>	<p>1. The crop owners will be issued 60 days prior notice by the RHD to harvest the crops. If it is not near harvesting period, the expected yield will be compensated at RV.</p> <p>2. In addition, grants for loss of access (right of cultivating) to cultivable land equivalent to the crop harvested in one harvested season, to be verified by PAVC.</p> <p>3. RV of fish stock, and trees as determined by PAVC</p> <p>4. Owners will be allowed to harvest crops and fish stock and fell the trees.</p>	<p>1. Applicable for all crops/fish stock standing on land/pond within ROW at the time of dispossession.</p> <p>2. RV of trees/crops/fish stock will be recommended by PAVC based on data obtained from forest department/ district agriculture extension office/ district marketing office/fishery department respectively/market survey, etc. for those identified through joint on-site verification by PAVC</p>	
<p>Implementation Issues: None</p>			

Loss Item 4: LOSS OF INCOME (BUSINESS OWNER, WAGE EARNERS AND RENT-OUT HOUSE OWNER)			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Small shop owner affected by displacement 2. Wage earners affected at business enterprises 3. Owner of rent house/rooms affected by the Project	1. Grants for business loss and/or for loss of rental income with an amount equivalent to three months net income not exceeding BDT. 24,000 ⁶ . or 2. Grant to cover temporary loss of regular wage income @ BDT 250 ⁷ for 90 days and 3. Special Assistance of a one-time payment as recommended by PAVC for each vulnerable households (VHH) i.e. female-headed, disabled-headed, elderly-headed and hardcore poor household with an amount of BDT 10,000/VHH. 4. BDT. 12,000/- as one time grant in addition to other compensation for only female headed without elderly support disabled/ handicapped/widow member family. 6 Skill training for vulnerable households is provided by trainer NGO	1 The need of vulnerable groups will be assessed by IA through the need assessment survey ⁸ in the detailed design stage 2 The owners of rented out premises will be entitled for business loss allowance for each unit of premises rented out to separate families or persons.	1. EPs will be brought under income generation program based on need assessment survey result. 2. EPs will be preferentially employed in civil construction work. 3. EPs who lose structure will also be entitled for loss Item 1. 4. EPs who rent premises will also be entitled for loss Item 5.
Implementation Issues:			
1. IA identifies EPs at census, PVAC verifies the compensation amount, and RHD, through IA, pays the compensation. 2. Business losses have been assessed during inventory of losses. All categories of business will be paid equal amount as grant			

⁶ As were estimated based on the maximum average daily income of BDT 250/day x 30 days x 3 months and is a little less than BDT 24,000 as is a threshold value between poor and non poor

⁷ BDT 250 is likely the average of payment per day according to the socio-economic survey implemented.

⁸ Socio-economic survey made to meet demand and supply. To survey the demands of skills (what skill wanted) from enterprise owner and skills the affected people want to attain.

Loss Item 5: LOSS FOR RENTING RESIDENTIAL AND COMMERCIAL HOUSE/ ROOM			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
1. Rentee (who borrows residential structure) as identified by Census and verified by PAVC 2. Rentee (who borrows structures) for his business identified by Census and verified by PAVC	1. Rental assistance for both residential & commercial tenants and renter as per the prevalent rate in the form of grant to cover maximum of 3 months rental but not exceeding BDT. 7,500 ⁹ 2. Actual shifting assistance to be determined by PAVC, or BDT 500 per member up to BDT 5,000 per tenant residential household 3. If advance rental payment was already made by rentee to renter, and renter would not reimburse the advanced payment to rentee, then payment of allowance to renter will be deducted from owners' resettlement assistance package and paid back to the rentee up to the ceiling (3 months' allowance) of owners entitlements with GRC approval 4. Right to salvage materials from demolished structure erected by tenant. 5. Special Assistance of a one-time payment as recommended by PAVC for each vulnerable households (VHH) i.e. female-headed, disabled-headed, elderly-headed and hardcore poor household with an amount of BDT 10,000/VHH. 6. BDT. 12,000/- as one time grant in addition to other compensation for only female headed without elderly support disabled/ handicapped/widow member family. 7. Skill training for vulnerable households is provided by trainer NGO	1. Each rentee of affected premises will be entitled for shifting assistance. 2. RHD employees erected structures by their own will be compensated as RV allowed taking away salvage materials.	1. EPs will be brought under income generation program. 2. IA assists finding new rent-out house.
Implementation Issues:			
1. IA identifies EPs at census, PVAC verifies the compensation amount, and RHD, through IA, pays the compensation. 2. Payment shall be done before physical relocation of EPs.			

⁹ Average rental fee per month is less than BDT 2,500 per month according to socio-economic survey

Loss Item 6: UNFORESEEN ADVERSE IMPACTS (IF APPLICABLE)			
Entitled Persons	Entitlements	Application Guidelines	Additional Services
Households or persons affected by any unforeseen impact identified during implementation of the RAP	Entitlements will be recommended as necessary by GRC.	The unforeseen impacts will be identified through special survey by the PAVC as per request from impacted population. The entitlements will be approved by the Ministry of Communication (MOC)	As appropriate
Implementation Issues:			
The unforeseen impacts and affected persons will be identified with due care as per policy of RAP and proposed to the MOC for approval including quantity of losses, their owners and the entitlements.			

5.5 Livelihood Restoration

Mitigation of loss of assets and livelihood is the main focus of the resettlement action plan. Additional measures will be taken to provide appropriate support to the livelihood restoration aspects of affected households (AHs) under the Livelihood and Income Restoration Program (LIRP). The IA will develop LIRP in close coordination with Resettlement Expert and RU during detailed design stage and incorporate in the updated RAP. According to the known impacts, AHs losing structure, will be paid compensation for their lost assets and be encouraged for self relocation. The squatters affected households, losing housing of business structure, business, income and other properties will be paid compensation/grants. The RAP includes the following categories of AHs for income restoration and livelihood support.

- i. Vulnerable households having Income level up to BDT 60,000¹⁰ per year.
- ii. Vulnerable households having no adult male members to shoulder household responsibility (women headed households) without elderly children/ physically handicapped headed households etc. women heading the household will preferably be the eligible member.

For additional support to usual income restoration assistance as mentioned above, the RAP Implementing Agency will specifically undertake assessment of needs and skill base of vulnerable PAPs of age between 15 to 45 years. The IA will recommend the eligible members of affected vulnerable households with their relevant profile to the RHD for holding training on some income generating activities. The eligible members of the affected households will be preferentially employed in the project civil construction. The Project authority may keep provision (clause) in the contract document with the civil contractor. The short-term livelihood regeneration assistance under the RAP policy and long-term income generation program under the livelihood and income restoration program (LIRP) will be organized as follows:

Table 5.3 Mitigation Measures for Vulnerable Households

1. Eligible members of vulnerable households having yearly income up to BDT 60,000	1.1. Short-term: Compensation for structure and other lost assets, transfer grant and preferential employment in construction. 1.2. Long-term: Needs and capacity identification, human development and skill training under the LIRP.
2. Eligible members from poor female headed households having no adult male members to shoulder household responsibility.	2.1, Short-term: In addition to support as additional subsistence allowance. 2.2 Long-term: As 1.2 above.

¹⁰ Income level up to 60,000/year has been categorized as vulnerable in Southwest Area Integrated Water Resources Planning and Management Project (2011) financed by ADB

CHAPTER 6. COMMUNITY PARTICIPATION

The affected people and other stakeholders such as local Union Parishad Chairmen, Members, community leaders, local elites and affected persons at community level were consulted in the process of RAP preparation. Focused group discussions were held with different occupation groups among the affected people, especially businessmen, residential households, laborers, women, etc. in three bridge locations. The people actively participated in the discussion and gave opinion about resettlement relocation and environmental issues.

6.1 Project Stakeholders

The primary stakeholders of the project include the residential structure owners, local business community and as well as other affected households. Other stakeholders include Roads and Highways Department (RHD), Department of Environment (DOE), Department of Fisheries (DoF), Inland Water Transport Authority (IWTA) District and Upazila administration in Narayanganj, Munshiganj and Comilla districts, Union Parishad and other government & non-government agencies working in the project influenced area.

There is no land acquisition in this project and that is why involvement of the Deputy Commissioner will be minimum. The other stakeholders include the business community such as contractors, sub-contractors and suppliers during the construction period. The local government representatives will also be benefited in gaining peoples support as a result of local development. The local NGOs working in the area will also find their wider scope for poverty reduction activities.

Table 6.1 Identified Project Stakeholders

Governorates and Districts	District and Upazila administration in Narayanganj districts
	District and Upazila administration in Munshiganj districts
	District and Upazila administration in Comilla districts
	Union Parishad
Ministries	Department of Environment (DOE)
	Department of Fisheries (DoF)
	Inland Water Transport Authority (IWTA)
RHD	Superintending Engineer, bridge
	Social and Environmental Circle (SEC)
	Executive Engineer,, Local decision
NGO's	BRAC (Bangladesh Rural Advancement Committee)
	DORP (Development Organization of Rural Poor)
Academia	Ph.D.Mr. S. M. A. Rashid, Chief Executive of CARZINAM, Center for Advanced Research in Natural Resources Management,
	Ph.D. Iqbal, Head of Environmental Science, the State University (No specialist was available from IUCN)
	Ph.D. Hafiza khatun, Geograph and Environment, Dhaka University
International Agencies	Japan International Cooperation Agency

6.2 Stakeholder Consultations

In the initial stage of the project, meeting with different levels officials such as University Teachers, Department of Environment (DOE) etc. was conducted, as expert consultation. Besides, the potential affected persons along with local government representatives (Union Parishad Chairmen and Members), community leaders and other stakeholders were consulted through community level consultation meetings and personal contract. The opinion of the different levels stakeholders regarding the project have been considered in preparation of this RAP.

6.2.1 Expert Consultation:

Opinions of environmental and social experts were collected through several times of expert consultation meetings and reflected into the RAP.

Summary of Expert Consultations

Date: 15 February 2012

Consulted experts: Ph.D. Hafiza khatun, Geograph and Environment, Dhaka University

Comments	Reflection of the Comments to the RAP
Since informal residents, who are usually very poor, are displaced by the project without compensation as per Bangladesh Rules, consideration has to be made.	Even if for landless people, following compensations are provided: <ul style="list-style-type: none"> - Structures and trees with replacement cost - Transfer and reconstruction of structures - Business restoration grant for 3 months (employer and employees) - Moving assistance for rentee - Grant for employees for loss of employment - Transition allowance for 3 months - Rental allowance for house/room renter - Sifting allowance for residents - Vulnerable allowance for poor and widowed - Job training
Information disclosure is very weak and please provide as much information to project affected people and stakeholders	Stakeholders meeting, group discussion, door to door consultation (census and socioeconomic survey) were implemented
Preference of affected for relocation shall be incorporated into RAP so far feasible	Their request of financial assistance to restore living standard was incorporated to RAP
Livelihood Impact	Assistance to restoration of livelihood such as provision of transfer grant, preferential employment in construction, human development and skill training, and additional subsistence allowance to poor female headed families will be provided. Livelihood and Income Restoration Program (LIRP) will be prepared and these assistances will be fully incorporated based on the JICA guidelines.
Social issues needs to be addressed such as	Conflicts among community peoples will be

conflict between migrated workers with local people, spread of communicable diseases such as skin, HIV/AIDS etc. due to migrant workers;	resolved through consultation meeting held by RAP Implementing Agency (IA). HIV-AIDS awareness campaign via approved service provider will be implemented. All these measures will be fully incorporated into Environmental Monitoring Plan (EMP)
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6.2.2 Community Level Stakeholders Consultation

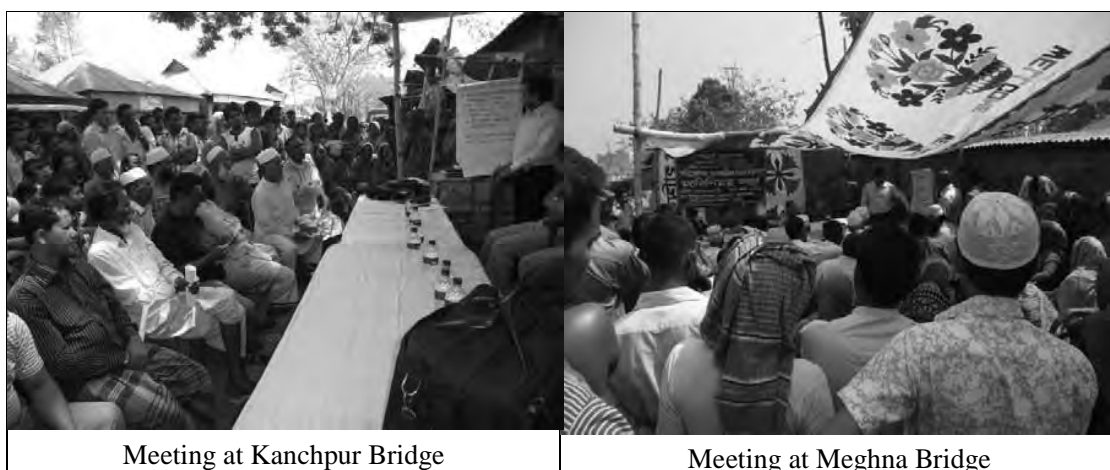
Table 6.2 Brief Overview of the 1st Consultation Meeting

Dates	15 March, 2012	
Time	10:30 am	2:30 pm
Venue	Shenpara, Kanchpur, Sonargaon, Narayangonj	Tetuitala Bazar, Meghnaghat, Baliakandi, Gazaria, Munshiganj
How accessible the venue was to the stakeholders	Meetings were held in the center of most probable settlements to be displaced by the project	
Method of notification	Invitation letters, advertisement on newspaper, mosque announcement and personal contact	
Method of consultation	Verbal explanation first in general by the host and individual question/ answer by the participants	
Language spoken	Bengali	
Contents/agenda of the presentation	The goals and objectives of the Project, relocation requirements, tentative timeline of the Project execution, roles and responsibilities of the stakeholders and the Project authorities, alternative design options, cut-off dates etc. were discussed in the meeting. The Social and Natural Environmental Engineers of the consultant team discussed the issues using flip chart and sought opinion of the participants on the Project needs, probable impacts and mitigation measures.	
Used documents/materials for the explanation	Flip-chart	

Table 6.3 Number of the Participants at the 1st Consultation Meeting

Place	Kanchpur	Megna / Gumti
Governmental Institutions	6 (2)	6 (2)
Local People	28 (0)	10 (0)
NGOs	0	0
Media	0	0
Consultant/Study Team	6 (0)	6 (0)
Total	40 (0)	22 (2)

* (Number of females) Females did not put signature on the attendants list although many were participated



Meeting at Kanchpur Bridge

Meeting at Meghna Bridge

Explanation by RHD:

- New land acquisition is not required for construction of the proposed bridges and for this overall impact on the community will be minimal
- These proposed bridges will be constructed in RHD land acquired for the existing bridges
- Some residential households, commercial enterprises and common properties will require relocation due to the project
- A detailed socioeconomic survey and inventory of assets through structured questionnaires was conducted among the households within and surrounded the project area.
- The cut-off date for conducting this survey is
 - March 8, 2012 for Kanchpur Bridge
 - March 15, 2012 for Meghna Bridge and Gumti Bridge
- The residential households are to be relocated in new location due to the project
- Commercial enterprises would be relocated for continuing business
- They have to search alternative livelihood for the time being
- Wage labourers may lose their job for some days/weeks
- The vulnerable households/ women headed households may experience adverse impacts due to the project
- The commercial enterprises may be closed for some days/weeks
- Besides, some other adverse impacts/ challenges may be encountered during construction of the bridges and mitigation measures will be taken accordingly.
- Project authority ensured consideration of the alternative design options in Meghna Bridge location to avoid mass relocation at the same time they emphasized on the scarcity of government land and limitation of scopes for relocation. They told that compensation for lost assets will be paid based on best practices of other similar projects in Bangladesh.

Summary of discussions:

Meeting at Kanchpur Bridge Site

SI	Position	Sex	Question/ opinion	Responses / reflection to RAP
1	Chairman, Kanchpur Union Parishad	Male	The people living in the bridge adjacent area are mostly land less and vulnerable. They have been living in this place for 20-30 years. 'We, the local people want the new bridge parallel to existing one with immediate effect but these poor people should be relocated by the project'- the Chairman urged. Some small shop owners are also dealing in within the project area. They should be paid compensation and other assistance properly.	Even if for landless people, following compensations are provided: <ul style="list-style-type: none"> - Structures and trees with replacement cost - Transfer and reconstruction of structures - Business restoration grant for 3 months (employer and employees) - Moving assistance for rentee - Grant for employees for loss of employment - Transition allowance for 3 months - Rental allowance for house/room renter - Sifting allowance for residents - Vulnerable allowance for poor and widowed - Job training
2	Resident	Male	He is living in the project site for about 30 years. He has small piece of land in a distant place but that is not suitable for constructing house. They have a social network here and publicly known as citizen of this area. He has no way of relocation by own-self.	Self-relocation is encouraged with proper compensation as life level would not deteriorated after relocation
3	Resident	Female	She is living here for 25 years as tenant. She has no land for relocation even she has no structure to live in. She is widow and leading the family with one adult son who is taking household hold responsibility on his shoulder.	Allowance for tenant and vulnerable allowance are provided in addition transit and shifting allowances
4	Resident	Male	They are living here for about 25 years. His parents buried in the nearer graveyard. He has no alternative land for relocation. Wanted compensation and as well as relocation in government land by the project.	Basically self relocation is encouraged. However, if the relocation site is required, local government can consider to provide alternative land on the char (sand bar) not far away from the site (as was not recorded in minutes of meetings) ¹
5	Resident	Male	He needs compensation for the structure and relocation by the project.	Same as above.
6	Resident	Male	Also requested relocation in project sponsored relocation site	Same as above.
7	Member, Kanchpur Union Parishad		There are some land within RHD boundary where these people may be relocated. Government may think about khash land for their relocation. But this should be in the nearer place so that their means of livelihood will not be hampered	Same as above.

¹ This was informed to participants on the meeting held at Kanchpur on 1st August 2012

Meeting at Meghna Bridge Site

SI	Position	Sex	Opinion	Responses / Reflection to the RAP
1	Resident	Male	Most of the business enterprises are run by poor people. They have no alternative sources of income. Some wage laborers are engaged in business enterprises such as hotel, tea stall, etc. They will lose their job due to the project. Poor and vulnerable people are living on the RHD land beside the market. They have no alternative land for relocation. So, the project authority should think about relocation of the affected people instead of cash compensation.	Special assistance for vulnerable people will be provided if they are identified as poor during census in addition to ordinary compensation.
2	Resident	Male	They have been living on the RHD land as they have no alternative land for living. He urged relocation on Government land by the project instead of compensation money.	Self relocation is encouraged
3	Resident	Male	There is a mosque in the project area that may be affected by the project. People of this area are very poor and they will be unable to relocate in new location by themselves. Their livelihood is mostly attached with this market. He requested the project authority as well as RHD to arrange relocation site for the poor people and the market.	Adequate compensation and assistance will be provided to the affected people so that living standard of the people can be at least maintained or even better. Nonetheless, the route will be selected to minimize relocation of affected people ²
4	Resident	Male	The GOB has acquired land in this area for two times. After that some people became landless and some of them are living in RHD land and within the proposed bridge alignment. As the JICA is financing the project so there is a guideline about the squatters and vulnerable people. All of the people living here are vulnerable and they have no scope of relocation. He urged to arrange relocation site in the RHD land. He told that RHD has huge land in this area and they may allocate a portion of the total land for cluster relocation of the household and market.	Land will not be provided to the affected people but adequate cash compensation fairly assessed by evaluation committee will be given. Other necessary assistance such as transfer grant and livelihood restoration program will be provided to the affected people to maintain living standard as present level or better.
5	Resident	Male	He requested the project authority not to leave the affected people in worse off condition. He demanded relocation of the affected people	Resettlement plan will be established so that their livelihoods will be better off or maintained in the minimum.
6	Resident	Male	The JICA is financing the project and hopefully there are some scopes of relocating the poor and vulnerable people. All of the people living here are vulnerable and They have no land for self relocation. The businessmen are dealing in here for long time. He urged relocation of the affected household and shops within RHD land	Self relocation is promoted with sufficient compensation as prescribed.

² Finally, the route which affects the present participants, alternative C, was cancelled and other route which does not affect these participants were chosen.

			in a safer position. He told that they need no cash compensation but need relocation by the project.	
7	Resident	Female	They have come here in 1988 after losing all assets in devastating flood in that year. She has no land and has only one adult son who is doing wage laboring to shoulder the household responsibility. She urged relocation in new site by the project.	Aged, widowed or poor households are supported as prescribed.
8	Resident	Male	He is living here for 25 years and earning livelihood by wage laboring. He wants relocation in project sponsored site.	Self relocation is encouraged under the compensation and assistances to be proposed in RAP
9	Resident	Male	He requested the project authority to shift bridge alignment a little bit western side avoiding settlement so that displacement of the market and households may be minimized.	Alignment was changed to other locations not affect the participants of the meetings
10	Resident	Male	He requested to use vacant land and avoid mass displacement of the household and shops.	Alignment was changed to other locations not affect the participants of the meetings

Participants basically agreed for relocation brought about by the Project on the condition that sufficient compensation would be made to affected residents so that their living standard would not worsen compare with before relocation.

Summary of the second stakeholders' meetings

Table 6.4 Brief Overview of the 2nd Consultation Meeting

Dates	1 August, 2012		
Time	2:30 pm	12:00 am	10:00 am
Venue	(Kanchpur Site) Shenpara, Kanchpur, Sonargaon, Narayanganj	(Meghna Site) Tetuitala Bazar, Meghnaghat, Baliakandi, Gazaria, Munshiganj	(Gumti Site) Chittagong end, Under abatement, Daudkand, Comilla
How accessible the venue was to the stakeholders	Meetings were held in the center of most probable settlements to be displaced by the project		
Method of notification	Invitation letters, advertisement on newspaper, mosque announcement and personal contact		
Method of consultation	Verbal explanation first in general by the host and individual question/ answer by the participants		
Language spoken	Bengali		
Contents/agenda of the presentation	In the consultation meeting the RAP and EIA policy (mitigation measures of the project impacts) were disclosed to the affected people using flip chart. The affected people were informed about the meeting through publishing in		

	the newspaper, personal contact from Union leaders verbally, announcement in the mosque, etc. The issues disclosed in the meeting were project components and revised alignment by which some people who were registered by previous census as affected people, become as not affected, cut off-date declared during the survey (informed as finally revised to 16 th March from 08 th March 2012), Methodologies adopted during survey, findings of the survey, entitlement matrix as prescribed in the RAP, Grievance redress mechanism, compensation payment procedure, relocation requirements & options, timeline of relocation after payment of compensation, etc. The findings of the environmental survey and proposed mitigation measures of any adverse impacts were also disclosed in the meeting.
Used documents/materials for the explanation	Flip-chart

Table 6.5 Number of the Participants at the 2st Consultation Meeting

Place	Kanchpur	Megna	Gumti
Governmental Institutions	3(1)	3 (1)	3(1)
Local People	71(25)	18 (0)	30 (0)
NGOs	0	0	0
Media	0	0	0
Consultant/Study Team	2(0)	2 (0)	2(0)
Total	76 (26)	23 (1)	35 (1)

* (Number of females)

Explanation by RHD/Study team:

<p>a. The new bridge will be constructed parallel to the existing bridge within 30 meter to the downstream.</p> <p>b. No new land acquisition will be required for any components of this project. All of the project activities will be done in RHD land.</p> <p>c. Cut-off date of the census survey was 08 March 2012. It was declared in the first stage consultation meeting.</p> <p>d. Methodologies of the survey such as census and socioeconomic survey, inventory of affected assets, video filming and sketch mapping of all affected structures and other properties</p> <p>e. Findings of the survey and impact of the project</p> <p>f. Compensation package as prescribed in the RAP was also disclosed in the meeting as follows-</p> <ul style="list-style-type: none"> i. Replacement value of the affected structures, trees and other assets ii. Transfer grants and re-installation grants for structure iii. Grants for alternative housing iv. Grants for loss of business v. Moving assistance for tenants businessmen vi. Grants for vulnerable households vii. Grants for female headed households viii. Grants for wage earners ix. Training on income generating activities for eligible members of vulnerable HHS x. Owners will be allowed to take all salvaged materials free of cost xi. Eligible affected persons will be preferentially employed in civil construction <p>g. Grievance redress mechanism and right to submit grievances to the Grievance Redress Committee</p> <p>h. Compensation payment procedure and role of PAPs, IA and RHD in making payment</p> <p>Regarding Environmental impacts and mitigation measures, the Environmental Specialist explained that that about 27 major environmental and social concerns have identified in this project and accordingly mitigation measures have been proposed. It was discussed that the impacts are broadly classified into following 4</p>

categories that will be faced during preconstruction, construction and operation stage:

- Social Environment
- Natural Environment
- Ecological Environment
- Environmental Pollution

The Social Specialist has explained impacts on social environment. The Environmental Specialist explained the impacts on natural and ecological environment and environmental pollution.

Environmental Impact/Issue	Mitigation Measures
<ul style="list-style-type: none"> • Cultural Heritage • Accident 	<p>No mitigation measures are required</p> <ul style="list-style-type: none"> • Follow BRTA rules and Regulations • Preparation of Health and Safety Management Plan (HSMP) including prevention of traffic accidents
<ul style="list-style-type: none"> • River Erosion and Siltation • River Transport 	<ul style="list-style-type: none"> • Construction of sheet pile steel pipe foundation to encounter scouring • Follow BIWTA navigation rules and regulations • River Traffic control and ensure lighting device
<ul style="list-style-type: none"> • Hydrology • Biota and ecosystem 	<p>Not required</p> <ul style="list-style-type: none"> • Prohibit leaking of oils from construction vessels including of emergency removal system of leaked oils • Plantation of 3 times of trees to be cut; Tree planting will be carried out through the RHD Tree-planting Unit, in conformity with their existing guidelines
<ul style="list-style-type: none"> • Global Warming • Air Pollution 	<ul style="list-style-type: none"> • No mitigation measures are required • Implement dust suppress plan and routine mitigation measure shall be taken to emitting equipments during construction
<ul style="list-style-type: none"> • Surface and Ground Water Pollution 	<ul style="list-style-type: none"> • Increase retention time of the outflow hydraulic fills to increase sedimentation, thus, reduce sediment load to the river • Removal of Arsenic from newly constructed Wells
<ul style="list-style-type: none"> • Soil pollution • Waste 	<ul style="list-style-type: none"> • Oil storage shall be with concrete floor and oil fence • Contractor will be required to facilitate proper reuse and disposal plan, and manage the construction waste • Dumping of waste at approved dumping sites
<ul style="list-style-type: none"> • Noise and Vibrations 	<ul style="list-style-type: none"> • Enforce noise emission standards • Regulate the construction process • Install barrier if required
<ul style="list-style-type: none"> • Ground Subsidence • Offensive Odor 	<ul style="list-style-type: none"> • No action required • Proper treatment of camp waste and proper maintenance of heavy equipment etc
<ul style="list-style-type: none"> • Bottom sediment • Landscape 	<ul style="list-style-type: none"> • Treatment of liquid waste before discharged • Vegetation of the slope surface of embankment

After disclosing the policy of the RAP and EIA the participants were requested to put comments or question on the project policy. The affected people raised some questions about the policy and impact mitigation measures. All of the questions were on resettlement and compensation issues. There were no questions raised on the environmental issues.

It shall be noted that most of the affected residents agreed with monetary compensation (self relocation)

Meeting at Kanchpur Bridge Site

Position	Sex	Comment/Question	Answer and Policy of Countermeasure
Shop keeper	Male	Sand stock yard beside the bridge at Chittagong end where some laborers are working to load and unload the trucks. Whether they will get compensation/grants or not	The work of sand downloading from barge, tentatively stockpiling on land and uploading to truck is never affected by the project since there is huge open space around the site. The sand businessmen will be given at least 6 months prior notice by the RHD not to stock the sand within the 30 meter area from the existing bridge. Shifting of sand stock yard and move the laborers to the new stock yard is possible at no cost. Hence, no negative impacts are identified to sand stock yard laborers.
Housewife	Female	Housing structure affected and enumerated. Urged about relocation site if possible as she has no alternative place of relocation.	The Executive Engineer (RHD): The Project will be started probably in early 2014 and you have at least 18 months time in hand to be relocated. All of the affected households should think about alternative relocation site. From the Project compensation for all of the affected properties will be paid that will be sufficient for self relocation. Union Parishad announced in the meeting that they will prepare a list of the landless people to the Deputy Commissioner's office (Narayanganj) according to the requirements of the GOB for relocation in new site under GOB rule. Those who receive cash compensation from RHD may avail such land with adequate cost. The site prepared by local government can be on the Char (sand bar) near to the site.
Housewife	Female	They have no alternative land for relocation. If there is any opportunity to allocate land to them for relocation, that will be helpful to them.	Same answer was given to her describing the land scarcity and entitlements of the resettlement plan as presented in the meeting
House renter	Male	His hotel is affected where some laborers are working. He wants adequate compensation for business and laborers. If possible require relocation site for continuing hotel business	The hotel has been covered under inventory of assets. All of the wage laborers have been enlisted during survey. Household number has been pasted on the wall of structure and video filming has been done. Compensation will be paid according to the policy of the RAP. He is encouraged for self relocation in anywhere after getting compensation as there is no scope of relocation by the Project.

Meghna Bridge Site

Position	Sex	Comment/Question	Answer and Policy of Countermeasure
Shop keeper	Male	His business structure is affected by the project. During survey (March 2012) his structure was made of CI sheet but after that he changed category of structure and now it is Semi pucca (brick and wall with CI sheet roof). Will he get compensation for changed category of structure?	The census survey and inventory of asset survey was started on March 15 2012 and that date was declared as the cut-off date. After the established cut-off date no changes in quality of quantity of structure will be entertained. So, he will basically get compensation for the category which was recorded during census and asset inventory. However at the time of detailed design, formal census by RHD and NGO will be implemented and the compensation prices are updated based on

			the evaluation by Price Assessment and Valuation Committee (PVAC)
Chairman, Baluakandi UP	Male	The policy so far described is well and the people will not be worse off if it is properly implemented. He thanked to the RHD and especially JICA for introducing this policy for poor businessmen. He urged to make payment without hassle so that the affected people will not face any trouble. He ensures extending all sorts of cooperation to the project authority from his end.	It was ensured that the affected people will be paid compensation/resettlement benefits without hassle and cheques will be handed over at site in presence of the local chairmen or members. It was also informed that the affected people would be ready to vacate the project site within 30 days from the date of payment of compensation.

Gumti Bridge Site

Position	Sex	Comment/Question	Answer and Policy of Countermeasure
Shop keeper	Male	Compensation package so far disclosed for the affected people is enough but it would be ensured that this amount would be directly paid to the entitled persons. If it is paid through any intermediary persons, the affected persons will not get full amount	<p>The compensation amount will be paid to the entitled persons through account payee cheque at their door step issuing prior notice regarding date venue and time of handing over cheques.</p> <p>There will be no middle man to help them rather the RHD will engage one NGO or consulting firm as RAP implementing Agency to assist RHD and as well as the affected people in compensation payment procedure.</p>
Shop keeper	Male	How many months will require to start civil construction of the Project? How many times we may continue business at present location? How is the size and outlook of the proposed bridge.	<p>The Project is scheduled to be started in early 2014 and you have at least 18 months time in hand to vacate the project site. Before construction is started every one will have to leave the place and encumbrance free land will be handed over to the contractor.</p> <p>The length of the proposed bridge is 1410 meter and width is 17.45 meter. This will be constructed a very closed to the existing one and distance between these two bridges will be less than one meter.</p>
Shop keeper	Male	The local people especially the affected people should get opportunity to work in civil construction. Is there any provision in the project to engage affected people in civil construction?	<p>According to the policy of the Resettlement Action Plan, the affected people will be preferentially employed in civil construction where possible.</p> <p>During implementation of the Project labor contracting society will be formed to bargain collectively for seeking job and getting salary while they are in job.</p>

Summary of the third stakeholders' meetings

Table 6.6 Brief Overview of the 3rd Consultation Meeting

Dates	1 September, 2012		
Time	2:30 pm	12:00 am	10:00 am
Venue	(Kanchpur Site) Shenpara, Kanchpur, Sonargaon, Narayangonj	(Meghna Site) Chittagong end, Baliakandi, Gazaria, Munshiganj	(Gumti Site) Chittagong end, Daudkand, Comilla
How accessible the venue was to the stakeholders	Meetings were held in the center of most probable settlements to be displaced by the project		
Method of notification	Invitation letters, advertisement on newspaper, mosque announcement and personal contact		
Method of consultation	Verbal explanation first in general by the host and individual question/ answer by the participants		
Language spoken	Bengali		
Contents/agenda of the presentation	<p>In the consultation meeting, policies of the RAP and EIA (mitigation measures of the project impacts) were disclosed to the affected people using flip chart. On August 01, 2012, these policies were disclosed, but due to JICA requirements and some changes in the policy, disclosure of the policy requires again.</p> <p>The affected people were informed about the meeting through publishing in the national daily newspaper (Both Bengali and English daily), personal contact, announcement in the mosque, etc. The disclosed issues in the meeting were project components and alignment, cut off-date declared during the survey (16 March 2012), methodologies adopted during survey, findings of the survey, entitlement matrix as prescribed in the RAP, grievance redress mechanism, compensation payment procedure, relocation requirements & options, timeline of relocation after payment of compensation, etc.</p> <p>The findings of the environmental survey and proposed mitigation measures of any adverse impacts were also disclosed in the meeting.</p>		
Used documents/materials for the explanation	Flip-chart		

Table 6.7 Number of the Participants at the 3rd Consultation Meeting

Place	Kanchpur	Megna	Gumti
Governmental Institutions	1(0)	1 (0)	1(0)
Local People	72(40)	79 (61)	56 (28)
NGOs	0	0	0
Media	0	0	0
Consultant/Study Team	5(0)	5 (0)	5(0)
Total	78 (40)	85 (61)	62 (28)

* (Number of females)

Explanation by RHD/Study team:

- a. The new bridge will be constructed parallel to the existing bridge within 30 meter to the downstream.
- b. No new land acquisition will be required for any components of this project. All of the project activities will be done in RHD land.
- c. Cut-off date of the census survey was 16 March, 2012.
- d. Methodologies of the survey such as census and socioeconomic survey, inventory of affected assets, video filming and sketch mapping of all affected structures and other properties
- e. Findings of the survey and impact of the project
- f. Compensation package as prescribed in the RAP was also disclosed in the meeting as follows:
 - i. Replacement value of the affected structures, trees and other assets
 - ii. Transfer grants and re-installation grants for structure
 - iii. Grants for alternative housing
 - iv. Grants for loss of business
 - v. Moving assistance for tenants businessmen
 - vi. Grants for vulnerable households
 - vii. Grants for female headed households
 - viii. Grants for wage earners
 - ix. RHD employees will be eligible for compensation and other assistances for the structures erected by themselves
 - x. Training on income generating activities for eligible members of vulnerable HHs
 - xi. Owners will be allowed to take all salvaged materials free of cost
 - xii. Eligible affected persons will be preferentially employed in civil construction
- g. Grievance redress mechanism and right to submit grievances to the Grievance Redress Committee
- i. Compensation payment procedure and role of PAPs, IA and RHD in making payment

Regarding Environmental impacts and mitigation measures, the Environmental Specialist explained that about 27 major environmental and social concerns have identified in this project and accordingly mitigation measures have been proposed. It was discussed that the impacts are broadly classified into following 4 categories that will be faced during preconstruction, construction and operation stages of the project:

1. Social Environment
2. Natural Environment
3. Ecological Environment
4. Environmental Pollution

The Social Specialist has explained impacts on social environment. The Environmental Specialist explained the impacts on the following natural and ecological environment and environmental pollution and mitigation measures.

Environmental Impact/Issue Mitigation Measures

- | | |
|--------------------------------|---|
| 1. Cultural Heritage | No mitigation measures are required |
| 2. Accident | - Follow BRTA rules and Regulations
- Preparation of Health and Safety Management Plan (HSMP) including prevention of traffic accidents |
| 3. River Erosion and Siltation | - Construction of sheet pile steel pipe foundation to encounter scouring |
| 4. River Transport | - Follow BIWTA navigation rules and regulations
- River Traffic control and ensure lighting device |
| 5. Hydrology | - Not required |
| 6. Biota and ecosystem | - Prohibit leaking of oils from construction vessels including of emergency removal system of leaked oils
- Plantation of 3 times of trees to be cut; Tree planting will be carried out through the RHD Tree-planting Unit, in conformity with their existing guidelines |
| 7. Global Warming | - No mitigation measures are required |
| 8. Air Pollution | - Implement dust suppress plan and routine mitigation measure shall be taken to |

	emitting equipments during construction
9. Surface and Ground Water Pollution	<ul style="list-style-type: none"> - Increase retention time of the outflow hydraulic fills to increase sedimentation, thus, reduce sediment load to the river - Removal of Arsenic from newly constructed Wells
10. Soil pollution	<ul style="list-style-type: none"> - Oil storage shall be with concrete floor and oil fence
11. Waste	<ul style="list-style-type: none"> - Contractor will be required to facilitate proper reuse and disposal plan, and manage the construction waste - Dumping of waste at approved dumping sites
12. Noise and Vibrations	<ul style="list-style-type: none"> - Enforce noise emission standards - Regulate the construction process - Install barrier if required
13. Ground Subsidence	<ul style="list-style-type: none"> - No action required
14. Offensive Odor	<ul style="list-style-type: none"> - Proper treatment of camp waste and proper maintenance of heavy equipment etc
15. Bottom sediment	<ul style="list-style-type: none"> - Treatment of liquid waste before discharged
16. Landscape	<ul style="list-style-type: none"> - Vegetation of the slope surface of embankment
<p>After disclosing the policy of the RAP and EIA the participants were requested to put comments or question on the project policy. The affected people raised some questions about the policy and impact mitigation measures. All of the questions were on resettlement and compensation issues. There were no questions raised on the environmental issues</p> <p>It shall be noted that all of the affected residents agreed with monetary compensation (self relocation)</p>	

Meeting at Kanchpur Bridge Site

Position	Sex	Comment/Question	Answer and Policy of Countermeasure
Housewife	Female	One tube well is affected along with housing structures. Whether the tube well was counted or not. How compensation will be paid for tube well	All of the structures including tube wells, toilets and other secondary structures have been enlisted during inventory of losses (IOL). Compensation has been determined based on current cost of the tube wells and other structures. The unit rate has been collected from businessmen and other knowledgeable people of the locality. So, compensation for all affected structures will be paid at a time during implementation of the project.
Businessman	Male	There are some sand business enterprises beside the bridge. Some laborers are working for loading sand on the truck and unloading it from the barge. Whether they are entitled for compensation or not.	This issue was discussed in last disclosure meeting held on August 01, 2012. There are no structures of the sand businessmen in the bridge location. And we have at least 15 months time to start civil works of the bridge. The sand businessmen will be officially noticed few months ahead of starting construction not to stake sand within required area of the proposed bridge. So, income and livelihood of the businessmen and wage laborers will not be disturbed and this is why they will not be eligible for compensation/assistance.

Squatter	Female	They have some fruit bearing and timber type trees (Mango, Rain tree) beside their houses. Whether they will get compensation for these trees or not.	All of the within the proposed area have been counted and as per policy of the RAP trees owners will be paid compensation
Squatter	Male	His residential premises are affected by the project and he demanded adequate compensation for them. Compensation is to be paid directly to the entitled persons but not via the local government representatives or any one.	Compensation will be paid at the door steps of the affected people. A property assessment and valuation committee will be responsible to determine the unit price of the affected properties. Only entitled persons will be paid compensation/assistance through account payee cheques.

Meghna Bridge Site

Position	Sex	Comment/Question	Answer and Policy of Countermeasure
Businessman	Male	My business is affected by the approach road. How many times we will get from now to dismantle structures? What is the expected time of starting construction work	The compensation will be paid as per policy of the RAP before displacement from the project site. During survey all of the affected structures have been counted and accordingly budget has been prepared. At least 15 months will be on hand to dismantle structures. Because, expected time of starting the construction is early 2014.
Businessman	Male	We need compensation on time and without hassle. Sufficient time is required after getting compensation	Compensation will be paid in cheques (account payee) at the door steps of the affected people. The EPs will be allowed for at least 30 days times to stay in the present location after payment of compensation.
Squatter	Female	We are very poor and have a little scope of income. I have adult son but jobless. Is there any provision of getting work in the project.	During construction of the bridge local people will be deployed (based on eligibility) on priority basis in civil construction on.

Gumti Bridge Site

Position	Sex	Comment/Question	Answer and Policy of Countermeasure
Housewife	Female	Living on Government land for last 15 years. We did sand filling and constructed housing structure. We have no sufficient income. We need adequate compensation and job opportunity for our male members in civil construction.	Compensation will be paid for structures only but not for land as because the land is owned by RHD. Compensation will be paid as per policy of the RAP. Compensation for structure, transfer and re-installation grants and other assistance as per policy will be paid that will make the affected persons well off. The affected people will be preferentially deployed in civil construction based on eligibility.
Housewife	Female	They have only one source of income (shop at Gumti ghat) is getting affected. They have bank loan and have to pay by monthly installment. Demanded adequate compensation in time.	Compensation for the structures and as well as business will be paid. They have more than 1 year time in hand to relocate. Adequate compensation will be paid for the affected properties at the door steps of the affected people.

Businessman	Male	The local people especially the affected people should get opportunity to work in civil construction of the project.	According to the policy of the Resettlement Action Plan, the affected people will be preferentially employed in civil construction as per eligibility of the APs
Housewife	Female	As per discussion the project will arrange training on income generating activities. Will our family members get that opportunity.	During implementation of the RAP, the vulnerable APs will be brought under income and livelihood restoration program and arranged training on income generating activities. One member of each affected households will be selected based on need assessment survey.

6.2.3 Focused Group Discussion

Discussions were held with the affected communities and businesses at Kanchpur, Siddhirganj Municipality of Siddhirganj, Narayanganj (Dhaka end), at Chittagong end of the Kanchpur Bridge under Sonargaon Thana of Narayanganj district, at Meghna Bridge Dhaka end Sonargaon, Narayanganj, Jamaldi Bazaar Bus stand (Meghna Bridge, Ctg. end), Baliakandi, Gazaria, Munshiganj, at Bausia near Pakhir Mour, Gazaria, Munshiganj and at new Ferry ghat, Daudkandi, Comilla of Gumti (Chittagong end). 7 (seven) focused group meetings were held in three bridge locations. Date, location and the number of participants of each discussion is listed in Table 7.6

Table 6.8 Details of FGD Meetings

Sl.	Date	Location of the meeting	Participants	Category of participants
1	23.03.12	Kanchpur Bridge, (Dhaka end, near abutment of the existing bridge) Shimrail, Siddhirganj, Narayanganj	21	Shop owners, truck drivers and helpers, laborers, women businessmen, barge operators, etc
2	17.04.12	Kanchpur Bridge (Dhaka end), beside the abutment, Simrail, Siddhirganj, Narayanganj	20	Shop owners (both squatters and tenants), truck drivers and helpers, laborers, women businessmen, barge operators, etc
3	17.04.12	Kanchpur Bridge, (Chittagong end), Kanchpur union, Sonargaon, Narayanganj	21	Residential household heads, tenants, Shop owners (squatters and tenants), truck drivers and helpers, laborers, barge operators, etc
4	17.04.12	Gumti Bridge, (Chittagong end), Daudkandi Municipality Comilla	19	Residential household heads, Shop owners (squatters and tenants), truck drivers and helpers, laborers, barge operators, etc
5	17.04.12	Gumti Bridge, (Dhaka end), near Pakhir Morh, Baushia, Gajaria Upazila of Munshiganj district	8	Coal businessmen, Shop owners (squatters), truck drivers and helpers, laborers, barge operators, etc
6	23.03.12	Meghna Bridge, (Dhaka end), Pirojpur union, Sonargaon, Narayanganj	19	Shop owners (squatters and tenants), laborers, etc.
7	17.04.12	Meghna Bridge (Chittagong end), Jamaldi Bazaar Bus stand, Baliakandi, Gazaria, Munshiganj	19	Shop owners (squatters and tenants), truck drivers and helpers, laborers, barge operators, etc
Total			127	

The local people attended the focused group discussion meeting include truck drivers, sand and stone carrying laborers of ships and trucks, tea stall operators, grocery shop keepers, handicraft artisans, hotel managers and waiters, etc. Local NGO officers were also present in the meeting to know about the project so that they can plan about allocating loan for the potential displaced persons.

Explanation by RHD

In the focused group meeting the affected people were informed about the goals and objectives of the project, relocation requirements, compensation payment procedure and probable package of compensation. It was discussed that the physical work of the project may start in early 2014 and within this intermediary 2 years time they would search alternative sites for relocation.

Details are as follows;





- The cut-off date as declared in consultation meetings i.e. 8 March for Kanchpur Bridge and 15 March for Meghna and Gumti Bridges. No changes in number and quantity of the structure and other properties will be entertained
- As per JICA Environmental and Social considerations, in spite of lack of legal rights to the land all of the affected households/people would be paid compensation for structure including shifting allowance and reconstruction grants.
- Business operators including tenants would be paid grants for income and livelihood restorations
- Residential households including tenants would be paid one time grants for relocation of structures/households
- Wage labourers would be paid livelihood restoration grants
- Vulnerable households (women headed without elderly support, income level under below poverty line, physically handicapped, etc.) would be paid additional grants
- Compensation and resettlement assistance for lost assets and livelihood will be paid through account payee cheques at the door steps of the entitled persons
- Everyone should open bank account for receiving cheques.
- Each of the affected person will get an ID card
- The affected persons will be preferentially employed in project civil work based on eligibility
- A Non-governmental Organization/Agency would be deployed by the RHD to assist the affected people in getting compensation and facilitating during relocation.
- A detailed socioeconomic survey and inventory of assets have been conducted for preparation of a household profile and assessing the quantity of affected assets.
- According to the survey result and project scenario, an entitlement policy matrix would be prepared based on World Bank guide line and best practices.
- The locally active NGOs are advised to plan for giving loan to the potential affected people considering probable project schedule and relocation requirements due to the project.

- Besides, some other adverse impacts/challenges may be encountered during construction of the bridge but those will be mitigated in a transparent manner
- Concern over traffic safety such as pedestrian crossing as well as signage will be recommended.

Table 6.9 Summary of Focussed Group Meeting

Issues Discussed	Participant's Opinion , Comments and Suggestions	Response to Questions/Action Point
General perception about the project and the awareness about the proposed project.	Most of the participants are in favor of the project and have been made aware of the proposed project through the various surveys that have taken place	Acceptance of the project
Support of local people for the proposed project?	Almost everybody said that they will support the project and advised the Consultants to take precautions in the environmental mitigation to avoid the various impacts anticipated during the preconstruction, construction and operation stages of the project and to ensure protection of the natural water bodies of the areas.	The Consultants informed that during the study, the design and layout of all infrastructures have been considered the anticipated adverse impacts. EMP covers specific measures to follow during the construction process in protecting natural water bodies
Land Acquisition and Resettlement	Land acquisition and resettlement will be the major issue. According to the participants, this can be mitigated through proper compensation and assistance to the affected persons	New land acquisition is not required for construction of the proposed bridges. As a result, overall impact on the community will be minimized. These bridges will be constructed in RHD land which was acquired for the existing bridges. Some residential houses, commercial enterprises and common properties are found within the proposed area those are required to be relocated before starting civil construction. As per JICA Environmental and Social considerations, in spite of lack of legal rights to the land all of the affected households/people would be paid compensation for structure including shifting allowance and reconstruction grants.
Employment Status: Percentage of employment/unemployment/underemployment	Unemployment is common in the project area	Employment opportunities for construction workers will increase if the construction will start.

Issues Discussed	Participant's Opinion , Comments and Suggestions	Response to Questions/Action Point
Impact of the project on the aquatic environment	The livelihood of the fishermen community should be taken into consideration	Exact Impact on aquatic environment to be assessed during detail design. As a conclusion of impact prediction, fishery is not affected and aquatic diversity remains same since water quality or hydrological condition is not affected (or worsen) by the project. By scouring, river bottom around piers may be deepen and this may increase/ strengthen the diversity of ecosystem.
If this bridges are improved, there may be large groups of workers living temporarily in the area, and construction operations that generate noise and dust. Are there any other issues about construction, including noise and dust that might worry you?	The respondents strongly welcome the bridge construction activities. Many observed that the measures are temporary and besides there will be more chances for local communities to be employed during construction, providing both skilled and unskilled labor. Participants did not mention any other problems which might bother them other then following basic safety rules.	Residents understand that construction impacts can be expected and do not have an issue with these, provided safety measures are taken.

Issues Discussed	Participant's Opinion , Comments and Suggestions	Response to Questions/Action Point
		
<p><i>Focused group meeting at Kanchpur Bridge (Dhaka end), beside the abutment, Siddhirganj</i></p>		
		
<p><i>Meeting at Kanchpur Bridge, Chittagong end, Senpara, Sonargaon, Narayanganj</i></p>		

CHAPTER 7. GRIEVANCE PROCEDURE

7.1 Objectives of Grievance Redress Committee

In order to provide an accessible mechanism to APs to raise their issues and grievances as well as raise concerns about their assistance, Grievance Redress Committees (GRCs) will be established in the project in Union Parishad/Ward. The GRCs are officially recognized “non-judicial” community-based body that will seek to resolve non-judicial disputes arising out of various matters related to the implementation of the RAP. The fundamental objectives of GRCs are to resolve any resettlement-related grievances locally in consultation with the aggrieved party to facilitate smooth implementation of the social and environmental action plans. Another important objective is to democratize the development process at the local level and to establish accountability to the affected people.

7.2 Composition of the GRCs

GRCs will be formed at Union/Word level for any grievances involving resettlement benefits, relocation, and other assistance. A gazette notification on the formation and scope of the GRCs will be required from the MOC. The GRC for each Ward/Union will be comprised as follows;

1. Executive Engineer, RHD – Convener
2. Resettlement Expert (RE) of Design and Construction Supervision Consultant (DCSC)- Member
3. Field Coordinator, Implementing Agency- Member Secretary
4. Union Parshad Chairman/ Word Councilor- Member
5. One representative of APs – Member (Female member in case of female aggrieved person)

At least 3 persons will need to fill the quorum of the GRC meeting.

The GRCs will be activated with power to resolve resettlement, compensation and environmental issues not to be addressed under legal suit in the courts. The GRCs will receive grievance cases from the affected persons through the Implementing Agency (IA). The IA will assist the APs in lodging their complaints in a proper format acceptable to the GRCs after they get ID cards from RHD or informed about their entitlements and losses.

7.3 Appeal Procedure and Conflict Resolution

APs will be able to file their grievances without any fear and intimidation with no cost to APs. Where required, the IA will assist the APs in drafting the grievances. All grievances must be

submitted in writing to the Convener, GRC. Illiterate APs can file complaints in verbal form and IA shall assist the APs by writing down their complains into written format. The complainant may be represented by the AP him/herself or appointed agent. The judgment made by GRC will be communicated to the concerned AP in writing. If dissatisfied, and with the agreement of the GRC, the AP may request a further review of the judgment of GRC by the Project Director.

GRC procedures and operational rules will be publicized widely through community meetings and pamphlets in the local language (Bengal) so that APs are aware of their rights and obligations, and procedure of grievance redress. Illiterate APs will be also properly informed through community dialogue during census survey.

The appeal procedure and conflict resolution is described in Table 7.1 and schematically shown in Figure 7.1.

Table 7.1 Steps for Grievance Redress

Step 1	The Implementing Agency (IA) informs APs about their losses and entitlements If satisfied, the AP claims resettlement payments to the EA. If confused, proceed to Step 2
Step 2	The AP approaches the IA field level officials for clarification. The IA will clarify the APs about their losses & entitlements as per RAP policy. If resolved, the AP claims resettlement payments to the EA. If not resolved, proceed to Step 3
Step 3	The AP approaches to the GRC. IA staff assists the APs producing the complaints and organize hearing within 21 days of receiving the complaints. Both written complaints in local dialect or verbal complaints are acceptable. IA shall assist the APs to prepare written form for succeeding procedures at no cost to APs. Then proceed to Step 4
Step 4	GRC to scrutinize applications, cases referred to Deputy Commissioner through IA if the case is under arbitration law and beyond their mandate as per scope of work. If the case is within the mandate of GRC, proceed to Step 5
Step 5	GRC sessions held in presence of the aggrieved APs, minutes recorded. If resolved, the Project Director approves the decision of the GRC after recommendation of APD If not resolved, proceed to Step 6
Step 6	The AP may accept GRC decision, if not, he/she may file a case to the court of law for settlement. Then proceed to Step 7
Step 7	The GRC minutes, approved by the Project Director, received at Conveners' office back. The approved verdict is communicated to the complainant AP in writing. The AP then claims resettlement payments to EA

- All complaints from the APs will be received at the field office of the IA, the member secretary of the GRCs with a copy to the concerned Local Government Institution

representatives. Grievances can be filed verbally or in written form, but in case of the verbal form, written form shall be prepared with assistance of IA at no cost to APs

- The representative of the IA in the GRCs upon receipt of complaints will inform the convener (RHD Executive Engineer) of the GRC and the convener will organize a hearing session for the complainants in the office of the concerned Union Parshad Chairman/Ward Councilor's from where the complaint was receipt or at RHD Field Office in the project aea or other location(s) as agreed by the Committee.
- The GRC will review the proceedings and pass verdicts to convey to the concerned AP through the IA.
- If there are such matters relating to arbitration through the courts, the matter will not be addressed by the GRC and be referred to the Deputy Commissioner.
- The GRC will settle the disputes within maximum 21 days of receiving the complaints from the APs.
- Resolution of the GRCs will be sent to the PD for approval and after approval these will be adopted in the process of resettlement for issuance of ID cards, determination of loss and entitlements and payment thereof.

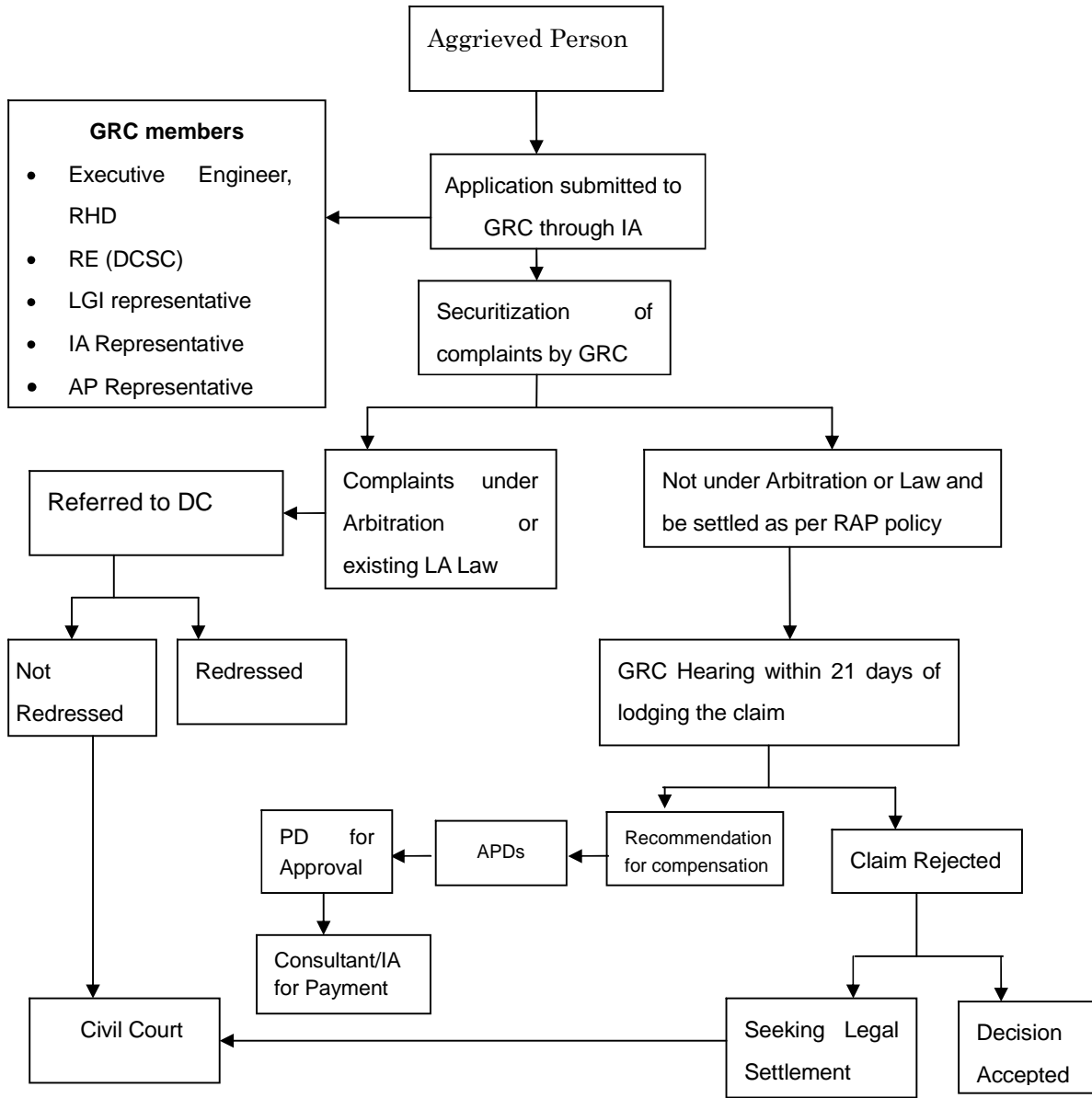


Figure 7.1 Grievance Redress Mechanism

7.4 TOR for GRC

The scope of work and the Terms of Reference (TOR) for GRC are:

- (i) The GRC shall review, consider and resolve grievances related to social/resettlement and environmental mitigations during implementation of the RAP received by GRC
- (ii) Any grievances presented to the GRC should ideally be resolved on the first day of hearing or within a period of three weeks, in cases of complicated issues requiring additional investigations.
- (iii) Grievances of indirectly affected persons and/or persons affected during project implementation will also be reviewed by GRC
- (iv) The GRC will not engage in any review of the legal issues that are to be settled in the court of law
- (v) GRC decisions should ideally be arrived at through consensus, failing which resolution will be based on majority vote. Any decision made by the GRC must be within the purview of RAP policy framework and entitlements
- (vi) The GRC will not deal with any matters pending in the court of law
- (vii) A minimum three (3) members shall form the quorum for the meeting of the GRC.

GRC meetings will be held in the respective Union Parishad or Ward Office or at RHD Field Office in the project area or other location(s) as agreed by the Committee. If needed, GRC members may undertake field visits to verify and review the issues at dispute, including titles/shares, reason for any delay in payments or other relevant matters.

All GRC documents will be maintained by IA for review and verification by DCSC and JICA. The RHD Field Office(s) will act as the Secretariat to the GRC. GRC members will attend a training and orientation meeting prior to commencement of their work. The training will be conducted by Resettlement Specialist/Expert of the DCSC.

