

# Government of The People's Republic of Bangladesh Ministry of Shipping

## Bangladesh Regional Waterway Transport Project 1 (Chittagong-Dhaka-Ashuganj Corridor) World Bank-Assisted

### Resettlement Policy Framework (RPF)



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**Bangladesh Inland Water Transport Authority (BIWTA)**

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## Glossary of Terms

AD	Alluvion-Diluvion
ARIPO	Acquisition and Requisition of Immovable Property Ordinance
BBS	Bangladesh Bureau of Statistics
BIWTA	Bangladesh Inland Water Transport Authority
BP	Bank Policy
CCL	Cash Compensation under Law
CENA	Capacity Enhancement Needs Assessment
CLAC	Central Land Allocation Committee
CMP	Current Market Price
DC	Deputy Commissioner
DEPTC	Deck and Engine Personnel Training Centre
DoA	Department of Agriculture
DoF	Department of Fisheries
EA	Environmental Assessment
EC	Entitlement Card
ECoPs	Environmental Code of Practices
EHS	Environmental, Health, and Safety
EIA	Environmental Impact Assessment
EMF	Environmental Management Framework
EMIS	Environmental management Information System
EP	Entitled Person
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
FGD	Focus Group Discussions
GMP	Gender Mainstreaming Plan
GoB	Government of Bangladesh
GP	Gram Parishad
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
HCG	House Construction Grant
HDA	Homestead Development Allowance
HH	Households
HIES	Household Income and Expenditure Survey
IDA	International Development Association
ILO	International Labour Organization
INGO	Implementation NGO
IWM	Institute of Water Modelling
IWT	Inland Water Transport
KII	Key Informants Interview
LA	Land Acquisition
LAD	Least Available Depth
LAP	Land Acquisition Proposal
MEAL	Monitoring Evaluation Audit Learning
MoL	Ministry of Land
MoS	Ministry of Shipping
NGOs	Non-governmental Organizations

PAPs	Project Affected Persons
PAVC	Property Assessment and Valuation Committee
PBCs	Performance-Based Contracts
PCR	Physical Cultural Resources
PFS	Price of Fish Stock
PMU	Project Management Unit
PWD	Public Works Department
RA	Rental Allowance
RAP	Resettlement Action Plan
RIS	River Information Systems
RPF	Resettlement Policy Framework
RSC	Resettlement Sub-committee
SIA	Social Impact Assessment
SMP	Social Management Plans
STG	Structure Transfer Grant
UP	Union Parishad
VNR	Vested Non-Resident
WB	World Bank

## Executive Summary

### Introduction

The proposed 'Bangladesh Regional Waterway Transport Project 1' aims to develop the IWT routes and infrastructure between Chittagong - Dhaka - Ashuganj IWT Corridor, including branches to Ghorashal (via Narayanganj) and Barisal. The World Bank is considering financing of this Project. The implementing agency for this project is Bangladesh Inland Water Transport Authority (BIWTA). The key components of this project with potential environmental impacts are the following:

- Component 1: Improved Inland Waterway Navigation (US\$ 215 million)
- Component 2: Improved Services at Priority Inland Waterway Terminals and Landing Ghats/Stations (US\$75 million)
- Component 3: Institutional Capacity Development and Sustainability (US\$ 70 million)

### Social Impact Assessment

For Component 1 on improvement of inland water ways, a detailed Environmental and Social Impact Assessment (ESIA) has been prepared. This Resettlement Policy Framework (RPF) is developed to (i) ensure all relevant social issues are mainstreamed into the design and implementation of the proposed subcomponents or subprojects. This details the guidelines to be followed for the major activities to be carried out for SIA (including RAP) of specific subprojects. The preparation of RPF has used a time tested methodology of review, data collection, analysis, consultation and framework preparation. This RPF is applicable for the whole project covering all 3 components.

### Policy and Regulatory Framework

In Bangladesh Land acquisition is governed by the Acquisition and Requisition of Immovable Property Ordinance, 1982 (Ordinance II of 1982). There is no national policy in Bangladesh governing social effects of infrastructure development projects on the project area communities. However, the Constitution of Bangladesh provides some rights to the affected persons, communities and groups those are not upheld in the Ordinance II of 1982. The other relevant acts are National Land use Policy, 2001, Bangladesh Labour Act 2006, etc.

Among the World Bank Safeguards, from a social perspective, the Involuntary Resettlement (OP/BP 4.12) is triggered. This policy includes safeguards to address and mitigate the impoverishment risks due to involuntary resettlement. From the social safeguards perspective, the other triggered policies are, public consultation and disclosure requirements of The World Bank, which needs to be met with.

### Overall Project and Components

The Chittagong - Dhaka - Ashuganj Regional IWT Corridor Project (the Project) consists of the three components; 1) Improved Inland Waterway Navigation (US\$ 215 million), 2) Improvements in Terminals and Landing Stations (US\$ 75 million) and 3) Institutional Capacity Development and Sustainability (US\$ 70 million). The typical facilities to be built at these terminals on the water side will include bank protection works, jetties and pontoons; and on the landside will include

office buildings, passenger facilities, parking areas and widening of access roads. The facilities shall specifically incorporate the needs of women users (such as toilet facilities for women, women-only waiting rooms) and less abled users, and address safety-related issues for all users. All terminals will be provided with separate ticket counters, waiting rooms and toilets for women passengers, and ramps for movement of disabled peoples. The typical facilities to be built at cargo terminals on the water side will include bank protection works and jetties; and on the landside will include office buildings, passenger facilities, parking areas and widening of access roads. All terminals will be provided with separate ticket counters, waiting rooms and toilets for women traders, and ramps for movement of disabled peoples. All the landing stations will be provided with drinking water facilities, and separate waiting rooms and toilets for women passengers.

The engineering designs and ESIA studies for the Component 2 works will be carried out during the first year of implementation of the Project and civil works will be carried out over a period of four years after completion of the engineering designs. The overall cost of the Project is US\$ 360 million, and cost of the Component 2 works is 75 million US\$.

### **Socio-Economic Baseline**

Bangladesh's geographical Location is at Latitude between 20°34' and 26°38' North and Longitude between 88°01' and 92°41' East. Bangladesh has an area of 147,570 sq. km. (land: 133,910 sq km, water: 10,090 sq km). It has a coastline of 580 km. Bangladesh has 7 Divisions; Dhaka, Chittagong, Khulna, Sylhet, Rajshahi, Barisal and Rangpur, 64 Districts and 487 Sub districts/Upazillas. The project area passes through 10 Districts covering 17 Upazilas (Sub-district) including Dhaka.

Bangladesh has a population of 150 million (2011 Census Report by BBS). The present Population Growth Rate of Bangladesh is 1.59%. The present literacy rate is about 50% among which the male literacy is 50% and female literacy is 46%. Bangladesh is predominantly a Muslim populate (86.6%) followed by Hindus (12.1%), Buddhists (0.6%), Christians (0.4%) and others (0.3%). The sex ratio is 99.68%. The predominant ethnic group is Bengalis (98%) followed by other indigenous minority (2%) including Chakmas, Marmas, Santals, Garos, Manipuri, Tripura, and Tanchangya. The GDP is \$1,044 (per capita in 2013). The poverty level is at 25% (People living with \$2 per day).

The principal rivers are Padma, Meghna, Jamuna, Surma, Brahmaputra, Most parts of Bangladesh are less than 12 m (39.4 ft) above sea level, and it is estimated that about 10% of the land would be flooded if the sea level were to rise by 1 m (3.28 ft). The temperature ranges are in winter 11° C - 20° C (October - February) and in summer 21° C - 38° C (March - September). The rain fall range is 1,100 mm to 3,400 mm (June - August). The Humidity is highest 99% (July) and lowest 36% (December & January).

The principal crops are Rice, Jute, Tea, Wheat, Sugarcane, Pulses, Mustard, Potato, Vegetables. The Principal Industries are Garments & Textiles (2nd largest in the world), Tea, Ceramics, Cement, Leather, Jute (largest producer in the world), Chemical, Fertilizer, Shrimp Processing, Sugar, Paper, Electric and Electronics, Medicine, Fishing.

Most of the people near river side depend on their sources of livelihood by river correlated activities. Here the major sources of livelihood are carrying people and goods by boat, day

laboring, selling of vegetables and other raw materials, selling clothes, rickshaw or van pulling, whole and retail selling of fruits, etc. There are a huge number of hotels/ restaurant in this ghats.

At the vessel shelter locations, the survey finds that 13.22% people are leading their livelihood by business, 1.99% by rickshaw or van puller, 7.25% by fishing (fisherman). Almost all of the sampled female population (33.15%) are housewives, except 0.18% teacher and 0.54% fisherwomen.

At the ferry ghats, 19.23% of the sampled population is businessmen, 7.07% are rickshaw or van pullers, 1.11% are boatmen, 7.22% are fishermen and many other common occupational groups. There are also 34.07% women who are housewives, this is similar to the vessel shelters and launch routes. About 8.89% of people are unemployed in the locatinos.

Similar other regions of this lower middle income country, in the project area too, the efforts of women in socio-economic development and well-being of their family and surroundings is rather unrecognized. The study findings indicate that the project sites offer minimal opportunities to women. In addition to that, the study also reveals that decision making role of women in the household is negligible with only 1.03% households being headed by women. On the contrary, better communication and transport facility may create more choices for their economic pursuit. Majority of the participants believed that the project will bring more employment opportunities to women in addition to education, which will play a role in gender balance and enhance their role in business. Other than that, some respondents also highlighted that with better transport and communication facility, women will be able to receive better medical facility and overall situation for women will be developed.

## Consultations

Field surveys, consultations with different stake holders, a national consultation workshop and two regional public consultations were carried out to develop a comprehensive Resettlement Policy Framework (RPF) for the Project. All the stakeholders and community correspondents appreciated the project. The concern of the consultation participants were mainly focused on improvement and extension of terminals, safety and security of passengers, impact on livelihood, dredging and environmental issues including management of dredged materials.

## Impacts

Most of the terminals are on GoB land, but proposed launch terminal facilities will require approximately **2.093** ha land acquisition. The proposed 06 vessel shelters are planned to be constructed on public land to avoid any negative impacts on the population near project sites. At most of the project locations, land belongs to BIWTA. This land is used for common purposes such as Ghats for boats, by the nearby communities. There are Persons without title to the land on the BIWTA land with shop and residences. Places of worship are built on BIWTA Land. BIWTA has built shops and leased them to shop keepers. This will lead to loss of livelihoods. At some locations access to common property resources such as Burial grounds will get restricted due to the present interventions. At some locations access granted to cultural practices such as immersion of ashes of the dead in rivers at certain ghats, will be impacted. Further access infrastructure such as roads will cause impacts as the present roads are narrow and they need to be widened for optimizing the capacity of the facilities built.

As per the ESIA, there are no small ethnic communities; indigenous people, at the project locations.

The key social impacts due to project interventions are Land acquisition and subsequent resettlement, Loss of Livelihoods, Inconvenience and nuisance during construction, Loss of access to CPRs and Likely increase in transport costs.

For each of these sub-projects an RAP will be prepared, where required during the planning and design stage. The following social management measures are proposed in this Resettlement Policy Framework:

- Development and adopting a Resettlement Policy Framework (RPF) to be used for all sub-projects under this project. This RPF should serve as a guide for further SIA studies and for preparation of RAPs/ ARAPs under this project.
- Integrate the rehabilitation of livelihoods into design of terminals and other infrastructure facilities. Designs to consider the following:
  - Livelihoods: such as integrating shops and vendors
  - Facilities for women such as: separate counters, waiting areas, sanitation, seating arrangements
  - Facilities for disabled
  - Arrangements to continue cultural practices
  - Design and general arrangement to be ready for impact identification and resettlement plan preparation
- Alternate temporary transit arrangements before resettlement
- Resettlement Policy Framework with clear entitlements
- Grievance Redressal Mechanism
- Community Engagement in planning and implementation
- Gender Mainstreaming Plan
- Disclosure: disclosure of resettlement plans

### **Resettlement Policy Framework**

The primary objective of this RPF is to improve the standard of living of the affected population. The other objectives of this RPF are to; a) Ensure the principles of Social Justice is adhered to at all times, b) Avoid or minimize any negative impacts on the communities, c) If land is required for project facilities, then same may be purchased under Willing Buyer-Willing Seller norm, d) Assist affected population in improving their living standards, income earning capacity, and production levels, etc., e) Encourage and enable community participation in planning and implementing project components and f) Provide assistance to affected communities in redressing their grievances.

This RPF addresses social issues such as Land Procurement, Community Engagement, Special Attention to Women and Other Vulnerable Groups and Grievance Redressal.

This RPF specifies procedures for a) Buying Land under Willing Buyer and Willing Seller concept and registration and mutation of records and b) for land Acquisition using National Policy. When land needs to be acquired as per the Act, the RPF has set the procedures to be followed by project. Compensation norms are set ensuring that the properties (land, structure, and non-structured assets) to be affected by the project will be compensated at their full replacement cost determined

by a legally constituted Resettlement Sub-committee (RSC) as per structure and mandated outlined in the RAP. The payment of compensation and other assistance, target replacement of productive assets and restoration of loss of income and workdays by the relocated households, especially the vulnerable households will be ensured by this committee. Compensation and other cash assistance will be paid through bank bills (cheques) payable to Bank accounts opened by the affected persons eligible for compensation and assistance under RAP. The Bank account will be in the joint name of husband and wife as the case may be. Compensation under law (CUL) will be paid through two different channels as per provision of RAP. CUL will be paid by Deputy Commissioner mandated for acquisition of land for the PMU while PMU will directly pay the remaining as per requirement of the RAPs directly to the project affected persons. PMU with the help of the project consultants will advise, assist, and monitor the affected persons receiving compensation and other cash assistance for better use of the money.

Regardless of their tenure status to the lands used for project component, the project affected persons/ households will be eligible for compensation and assistance. All PAPs irrespective of their title will be entitled to compensation and assistance based on loss and impact categories identified through census survey in respect of the policy guidelines adopted for the project. Nevertheless, eligibility to receive compensation and other assistance will be limited by the cut-off date. The absence of legal title will not bar PAPs from compensation and assistance, as specified in the entitlement matrices. An Entitlement Matrix has been prepared for the project on the basis of field study and consultation with government officials as a part of preparing the resettlement policy framework. A person could be eligible for compensation/entitlement in more than one category of losses and in more than one mouza. DCs will pay CCL for each mauza separately for one person whose lands/assets have been acquired in more than one mauza.

### **Community Engagement, Stakeholder participation and Vulnerables**

BIWTA will ensure the engagement of target communities through continued consultations for planning and full community management of implementation and monitoring of sub-project activities. Consultations will be held at regular intervals with target communities, GS/ GP members, Women, etc.

BIWTA recognizes the fact that affected communities are primary and key stakeholders of the project. Hence, the BIWTA would ensure that these stakeholders are consulted on issues and they participate in all the sub-project activities including planning and implementation. The BIWTA would address the legitimate concerns of community members and provide opportunities and avenues for consultation and their participation. In order to provide a sense of ownership and ensure sustainability, the community members would be a part of the decision making process. The project has a commitment for community participation in each of the sub-projects taken up.

The vulnerable groups include Women Headed Households, Destitutes, Below Poverty Line families, Old Aged, Differently Abled, Chronically Ill and Orphans. It is envisaged that in the course of conducting Social Assessment and preparing and implementing Social Management Plans, interests of these vulnerable groups would be adequately addressed and protected.

### **Grievance Redressal**

The Project will establish a project level Grievance Redress Mechanism (GRM) which will be implemented by Project Implementation Unit (PIU) at BIWTA with an aim to respond to queries

or clarifications about the project, resolve problems with implementation and addressing complaints and grievances. The GRM will focus on corrective actions that can be implemented quickly and at a relatively low cost to resolve identified implementation concerns before they escalate to the point of harm or conflict. GRM will serve as a channel for early warning, helping to target supervision to where it is most needed and identify systemic issues. The GRM will directly focus on and seek to resolve complaints (and requests for information or clarification) that pertain to outputs, activities and processes undertaken by the Project, i.e., those which (i) are described in the Project Implementation Manual; (ii) are funded through the Project (including counterpart funds); and (iii) are carried out by staff or consultants of the organization, or by their partners and sub-contractors, directly or indirectly supporting the project.

GRM will be implemented in two phases: 1) Phase 1 to support safeguards implementation, 2) Phase two of GRM will cover all components and overall project implementation. A formal grievance redress process for phase two will be outlined in the project's operational manual and a protocol will be set up and distributed to project staff and implementers. The project level protocol will build on existing GRM system developed by BIWTA and experience of the initial GRM protocol which supports implementation of the safeguards explained below. The GRM will be IT based supported by toll free helpline. It is envisage that the Project Implementing Unit (PIU) will have a dedicated person who can oversee the preparation of the guidelines and rollout of the project GRM. The Secretary of BIWTA will be responsible for overseeing the overall GRM.

The aggrieved parties will access to legal system. Information on how to submit complaints to the World Bank's Grievance Redress Service is available at <http://www.worldbank.org/GRS>. Information on how to submit complaints to the World Bank Inspection Panel is available at [www.inspectionpanel.org](http://www.inspectionpanel.org).

## **Institutional Arrangements**

BIWTA will arrange for RPF/ RAP/ ARAP implementation and monitoring mechanism. The Project Implementation Unit (PIU) will have a Environmental and Social Cell in the PIU. A Joint Director of BIWTA will head the Environmental and Social Cell of BIWTA. Two Deputy Directors, one each in charge for Environment and Social aspects of the project. The Deputy Director Social will be assisted by a Senior Land Acquisition and Resettlement Specialist and two other consultants each in charge for Community Engagement and Gender. The ESIA consultants will conduct ESIA for sub-projects and prepare RAPs. The Supervision Consultants and Contractors will have Environmental and Social Specialists to supervise and implement RAP/ARAP provisions. NGOs will be commissioned for implementation of RAPs/ ARAPs. M&E Consultants will do the quarterly monitoring and mid-term and end-term impact evaluation and assessments.

An M&E Consultants will be commissioned to conduct quarterly monitoring and evaluation and report to BIWTA. They will visit about an appropriate percentage of all category sub-projects, as decided by BIWTA. The M&E Consultants will conduct mid-term and end-term evaluation of RAPF/ RAP/ ARPA implementation. BIWTA will send quarterly Monitoring Reports on RPF compliance to The World Bank.

The total administrative budget for RPF implementation and social management activities under this project has been worked out as US\$. 3.8 Million. These costs need to be included in the respective sub-projects' budgets.

## 1. Introduction

### 1.1 Introduction

Bangladesh lies predominately within the Bengal basin, the world's largest delta formed by Ganges, Brahmaputra (Jamuna) and Meghna river system and its tributaries and distributaries. Its riverine area covers some 9,384 sq. km and includes some 700 rivers, streams and canals with a total length of about 24,000 km. Of this, approximately 5,923 km have been classed and are navigable during the monsoon (wet) period, shrinking to about 3,865 km in the dry periods- mainly on those parts of the rivers subjected to tidal influence. Navigation is complicated by the braided nature of the rivers, which are characterized by high sediment delivery and - due to extremely low gradients - very low sediment throughput. This makes the rivers extremely sensitive to flooding with rapid geometry (boundary and channel) changes. Problems of navigation are compounded by the growth of inland water vessel size and the Inland Water Transport (IWT) fleet now comprises dry and liquid bulk ships of up-to 3,000 deadweight tons, mainly trading on the class 1 river routes. Moreover, the size of the IWT fleet is growing and currently there are over 22,300 registered vessels which carry over 50% of all freight traffic and one quarter of all passenger traffic. In addition, there are some 750,000 country (traditional) boats, a substantial part of which have been mechanized. Approximately 65% of these are passenger boats, where demand is predominantly generated by rural communities, a substantial proportion of which only has access to river transport.

### 1.2 Project Background

Dhaka - Chittagong and Dhaka - Ashuganj IWT Corridors are highest priority routes for domestic trade and Bangladesh-India bilateral trade. About 80% of country's IWT transport is routed through these corridors and daily about 200,000 passengers use these routes. Inland river terminals (ports) at Dhaka, Narayanganj, Chandpur and Barisal along these routes play very important role in transporting and handling passenger and cargo. The annual passenger and trade volumes in these routes are given in Table 1. Food grains, fertilizers and consumer goods are the main commodities which are transported by cargo vessels and cargo-cum-passenger launches. The cargo terminal at Ashuganj is a key terminal for Bangladesh-India trade and it is connected by road to the north eastern states of India.

Table 1: Annual Passenger and Cargo Details in Major River Ports

Port	2011-2012		2012-2013		2013-2014	
	Passenger	Cargo	Passenger	Cargo	Passenger	Cargo
	(in million)	(in million tonne)	(in million)	(in million tonne)	(in million)	(in million tonne)
Dhaka (Sadharghat)	19.05	6	21.11	6.7	20.55	7.53
Narayanganj	23.13	10.53	22.72	12.76	24.17	13.61
Chandpur	2.1	0.42	2.27	0.47	2.28	0.5
Barisal	5.75	0.6	5.81	0.66	6.47	0.68

Source: BIWTA

The facilities built at these terminals are not sufficient to meet the growing demand of IWT as they lack in adequate facilities for berthing, parking and storage areas, and passenger comfort. The port facilities at Sadharghat terminal at Dhaka and surrounding areas are highly congested with commercial and residential development leading to traffic congestion and inefficient use of port facilities, and also there is no space around the current terminal for further expansion. The Government of Bangladesh (GoB) would like to augment facilities at Sadharghat terminal in Dhaka by building a new passenger terminal at Shashanghat, develop a cargo terminal at Panagaon, and augment and modernize the existing facilities at Ashuganj, Narayanganj, Chandpur and Barisal river terminals.

In addition to river terminals, there are a number of landing stations along Dhaka-Chittagong - Ashuganj corridor which are very important for people living in the rural and remote areas. The landing stations (also known as launch ghats) are berthing points of high importance for the local communities that they serve, yet lack proper infrastructure and other essential facilities such as toilets and drinking water, as well as basic safety features for users, and many are in a highly dilapidated state. They usually consist of one pontoon with shore connection to embark and debark passenger and cargo. They play an important role in the lives of the rural people, as without them vessels would not berth and they would not receive much needed food, medicines, fuel and other consumer essentials.

### **1.3 The Proposed Project**

The project will provide US\$ 360 million in IDA funds to finance interventions aimed at improving IWT for cargo and passengers along the heavily trafficked Chittagong-Dhaka-Ashuganj Regional Corridor. Main interventions include: navigation channel maintenance and improvement; navigation safety improvements; the construction and modernization of select river terminals; development of River Information Systems (RIS); institutional capacity development; and, funding for research and development and feasibility studies for continuing sector improvement to ensure future IWT sustainability. This includes work on sector policies and strategies needed to: improve revenue collection and management; incentivize public and private sector investments especially related to container transport; and, mitigate and improve IWT's impact on the social and physical environment. The Project consists of three components as follows:

#### **1.3.1 Component 1: Improved Inland Waterway Navigation (US\$215 million)**

This component shall include work to guarantee advertised depths and widths of navigation channels on select river routes. The work also includes provision of aids to navigation. The work is to be done on an Output- and Performance-based Contracting method designed to increase the efficiency and effectiveness of river asset management and maintenance. It is designed to ensure that the physical condition of the rivers under contract are adequate for the need of river users, over the entire period of the contract which is six to seven years. This type of contract significantly expands the role of the private sector, from the simple execution of works to the management and conservation

of river assets. This is a departure from the traditional river maintenance contracts used in Bangladesh which have been less-than-optimal. Even where works have been carried out according to plan, the nature of the rivers has meant that advertised depths, aids to navigation and other river infrastructure do not last as long as they should because of deficiencies in the original design, aggravated by inadequate maintenance. The beneficiaries of the new concept are expected to be the river users. In a wider sense, future generations will be able to benefit from a better maintenance of past investments. River users will be able to know the Service Level they can expect in return for the payments they make for the use of the infrastructure (tolls, tariffs, user fees, taxes, etc.). The River Administration shall also benefit by obtaining better overall river conditions with reduced levels of expenditure.

### **1.3.2 Component 2: Improved Services at Priority Inland Waterway Terminals and Landing Ghats/Stations (US\$75 million)**

This component supports the development of two cargo terminals, four passenger terminals and 14 landing ghats. The development of passenger and cargo terminals are within existing inland waterway port areas under the jurisdiction of BIWTA. It includes the modernization and extension of existing facilities to cater for increased demand. Terminals and landing stations are part of the network of about 448 river terminals, 374 landing stations, 23 coastal terminals and 25 pilot stations already provided by BIWTA. The passenger terminals and landing stations will specifically incorporate the needs of women users and less abled users, and all investments will address safety-related issues for all users.

The cargo terminals include: (i) extension of the existing Pangaon Container Terminal with new general cargo vessel berths and land access infrastructure on the Buriganga river; and, (ii) rehabilitation and modernization of the existing general cargo terminal at Ashuganj including river bank erosion prevention, the replacement of pontoons, gangways and other dilapidated marine structures, the extension of berthing space.

The passenger terminals include: (i) construction of a new passenger terminal at Shashanghat, downstream of the existing terminal at Sadarghat where landside congestion preclude the development of additional berths; (ii) rehabilitation works for the passenger terminal at Narayanganj; (iii) rehabilitation of works for the passenger terminal at Chandpur; and, (iv) extension of the existing passenger terminal at Barisal.

### **1.3.3 Component 3: Institutional Capacity Development and Sustainability (US\$70 million)**

A series of activities are proposed that will support BIWTA's overall enhancement of its management systems and human resources capacity for modern, efficient, and high quality management of the IWT sector in line with international standards, and help BIWTA to achieve long-term operational and financial sustainability. Activities to be supported include: (i) the development of River Information Systems to help BIWTA

improve data collection for the planning, maintenance and development of IWT, as well as enhance climate resiliency of the IWT sector in Bangladesh by creating a more systematized baseline understanding of river hydrology and navigational implications, and provision of a Traffic Monitoring System for passengers and cargo; (ii) improvement of Human Resources capacity for better management of the IWT sector through upgrading and modernizing the IWT Deck and Engine Personnel Training Centre (DEPTC) into a regional IWT Training Center with open access to all users in the Region and the world; (iii) commissioning of a study to propose an institutional structure and reforms needed to develop an effective Search and Rescue organization; (iv) a project preparation facility to finance feasibility, surveys, design and safeguards studies for continuous sector development; and, (vi) support for the Project Management Unit including the hiring of key staff and procurement of selected systems needed for implementation of the Project.

#### **1.4 Social Impact Assessment of the Project**

For Component 1 on improvement of inland water ways, a detailed Environmental and Social Impact Assessment (ESIA) has been prepared and presented separately. For other project activities with potential safeguards implications – including improvement of river terminals and landing stations (Component 2), minor civil works associated with modernization of the DEPTC, and the water hyacinth biogas pilot, river training pilots, vessel fleet greening pilots, and future project preparation studies (Component 3) -- given that these interventions will be designed in detail only during project implementation, the social assessment has been carried out using a framework approach. A Resettlement Policy Framework (RPF) and Environmental Management Framework (EMF), which is presented separately, have been developed to (i) ensure all relevant environmental and social issues are mainstreamed into the design and implementation of the proposed subcomponents or subprojects under Component 1 (dredging, navigational aids and cyclone vessel shelters) Component 2 (terminals and landing stations), Component 3 (DEPTC training center modernization, various IWT sustainability pilot schemes and future project preparation), (ii) consider in an integrated manner the potential environmental and social risks, benefits and impacts of the proposed subprojects and identify measures to avoid, minimize and manage risks and impacts while enhancing benefits, (iii) ensure compliance with national and World Bank requirements, and (iv) guide conducting the detailed ESIA of the subprojects where required.

This RPF presents detailed guidelines for the major activities to be carried out for SIA (including RAP) of specific subprojects that have not yet been fully designed and planned during the project preparation stage, and for which construction will only get underway in year 2 or beyond of project implementation. These guidelines include: (i) Social Screening (identification of possible impacts) (ii) Description and establishment of “Social Baseline” against which impacts of the proposed sub-project would be evaluated after identifying influence area for different sub-projects; (iii) analysis of alternatives; (iv) identification of major sub-project activities during both construction and operational phases; (v) assessment, prediction and evaluation of impacts of project activities on the

social baseline; (vi) carrying out public consultations; and (vii) identification of mitigation measures and preparation of impact specific Social Management Plans (SMP) and/or Resettlement Action Plans (RAPs) including monitoring requirements.

More specifically, the present RPF includes the following coverage for Components 1, 2 and 3 of the proposed project:

- For Component 1 activities, consultants have already carried out an overall ESIA for dredging and navigational aids activities. For cyclone shelters, the required ESIA is included in the ESIA to be carried out for component 2 (as given in below bullet point) activities.
- For Component 2 activities, consultants (independent from design consultants) will be hired by BIWTA to carry out the detailed SIAs of river terminals and landing stations. Terms of reference for carrying out these SIA studies are given in Annex 2 for terminals and in Annex 3 for landing stations. The detailed scope of work for river terminal and landing works for SIA studies are given in Annex 4
- For additional activities under Component 3 with potential safeguards implications, this RPF outlines basic screening criteria, assessment process, and institutional responsibilities and budget to ensure that appropriate management measures are defined, incorporated into design and implemented and monitored as applicable. Expected issues for these components are as follows:
- For the potential minor civil works under Component 3 related to upgrading/retrofitting and modernizing the existing DEPTC, specific scope of activities is not yet defined, but is expected to entail only minor interior renovations and installation of equipment within existing building footprints. As such, a full SIA is not expected to be necessary. Nonetheless, basic Social Management Plans presented in this RPF needs to be implemented. Activities such as the water hyacinth biogas pilot, river training pilots, and vessel fleet greening pilots – potential negative impacts are expected to be minor given the small pilot scale of the investments. Nonetheless, this RPF lays out the requirements to ensure that appropriate screening, and implementation of relevant social management and mitigation measures as necessary, will be carried out.
- Future project preparation studies under Component 3 will meanwhile not themselves cause environmental or social impacts; however, the future investment activities which may follow from the studies – including river maintenance dredging or other investments on additional IWT corridors in Bangladesh -- would likely entail impacts. Therefore, in parallel to detailed feasibility and design studies, independently commissioned ESIA studies in line with applicable World Bank safeguard policy and national requirements on environmental and social assessment and mitigation will be carried out through this project. This RPF specifies the institutional mechanisms to ensure this.

## 1.5 RPF Study Methodology

This RPF has been prepared by Bangladesh Inland Water Transport Authority under the guidance of Ministry of Shipping<sup>1</sup>, Government of Bangladesh.

The methodology followed in preparing the RPF for Component 2 activities (river terminals and landings) consists of the following steps:

- Review of the project details and meeting/discussions with various stakeholders including local communities
- Review of the policy and regulatory requirements
- Reconnaissance field visit and initial scoping and screening of the identified proposed investment sites to determine the key social parameters and aspects that are likely to be impacted by the project activities
- Collecting and analysis of baseline social data with the help of secondary literature review and field data collected under Component 1
- Consultations with the stakeholders including beneficiary/affected communities and developing the consultation process
- An initial assessment of the potential and likely impacts of the project activities
- Prepare an outline social management plan
- Compilation of the present RPF.

Since the details of the scope of proposed activities under Components 3 are mostly not specified at this stage, the methodology for developing RPF sections on these components is proportionally more simplified, with primary focus on the concepts of social assessment and management to be followed.

### **1.5.1 Contents of the RPF Report**

Chapter 2 reviews the prevailing WB policies and national regulatory requirements relevant to social assessment. Chapter 3 presents a simplified description of the project, its various components and other salient information relevant for social assessment. Description of the baseline social conditions is presented in Chapter 4. Screening and assessment of potential social issues as well as the appropriate mitigation measures to address these negative impacts have been presented in Chapter 5 under the Resettlement Policy Framework (RPF). Finally, Chapter 6 includes the data sheets, formats, terms of references, etc. under annexures.

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<sup>1</sup> The MoS has appointed Dr. Bokepalli Kanaka Durga Raja, an individual International Social Consultant to help prepare the RPF.



Figure 1: Locations of Proposed Terminals and Landing Stations in Component 2 of the Project

## 2. Policy and Regulatory Framework

### 2.1 Introduction

This chapter deals with the laws, regulations and policies, of Government of Bangladesh, and the World Bank, related to social issues. Only the laws, regulations and policies relevant to the project are discussed here. This sections needs to be updated as when new laws, regulations and policies are made and enforced or the existing ones are revised.

### 2.2 Social Policies, Laws and Regulations of GoB

Infrastructure development projects using lands in Bangladesh are designed and implemented under the legislative and regulatory framework to compensate the affected persons due to land acquisition using the power of eminent domain. Whenever it appears to the Government that any property in any locality is needed or is likely to be needed for any public purpose or in the public interest, the property is acquired using existing laws and regulations. Land acquisition is governed by the Acquisition and Requisition of Immovable Property Ordinance, 1982 (Ordinance II of 1982). This ordinance supersedes earlier laws including the Land Acquisition Law of 1894 and others that have been in force between 1947 and 1982. There is no national policy in Bangladesh governing social effects of infrastructure development projects on the project area communities. However, the Constitution of Bangladesh provides some rights to the affected persons, communities and groups those are not upheld in the Ordinance II of 1982 which is the instrument followed for land acquisition. The active instruments under the legislative and regulatory framework in Bangladesh are discussed below:

#### 2.2.1 Constitutional Provisions

The fundamental rights under the Constitution indicate the general guidelines for a policy on resettlement/rehabilitation of citizens adversely affected (whatever be the mechanism) due to any activity of the State. Article 40 of the constitution states categorically that every citizen has the right to practice any lawful occupation which implies that anything impeding such right (a) should not be done or (b) there should be supplementary measures to make good the losses incurred by the citizen. Resettlement and rehabilitation of adversely affected people due to infrastructure projects very clearly falls within this requirement for supplementary measures. However, as per Article 42, sub-clause 2, no law with provision of compensation for acquisition of land can be challenged in a court on the ground that such compensation has been inadequate. However, under World Bank OP 4.12 Involuntary Resettlement, every affected person will have access to a project specific Grievance Redress Mechanism for dispute resolution before the matter is moved to the courts. Complaints, the resolution process and the outcome will be reviewed by the project proponents as well as the Bank. Until the dispute is resolved the funds for the disputed asset must be held in an escrow account (top-up payments due from the project agency can be held

until the project closes; the amount placed with the DC may be held for 10 years or more if necessary).

## **2.2.2 The Acquisition and Requisition of Immovable Property Ordinance, 1982**

The principal legal instrument governing land acquisition in Bangladesh is the Acquisition and Requisition of Immovable Property Ordinance, 1982 (Ordinance II of 1982 with amendments up to 1994) and other land laws and administrative manuals relevant to land administration in Bangladesh. According to the Ordinance, whenever it appears to the Government of Bangladesh that any property in any locality is needed or is likely to be needed for any public purpose or in the public interest, the Government can acquire the land provided that no property used by the public for the purpose of religious worship, graveyard and cremation ground. The 1982 Ordinance requires that compensation be paid for (i) land and assets permanently acquired (including standing crops, trees, houses); and (ii) any other damages caused by such acquisition. The Deputy Commissioner (DC) determines (a) 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 (b) 50% premium on the assessed value (other than crops) due to compulsory acquisition. The 1994 amendment made provisions for payment of crop compensation to tenant cultivators. The law specifies methods for calculation of market value of property based on recorded prices obtained from relevant Government departments such as Registrar (land), Public Works Department (structures), Department of Forest (trees), Department of Agriculture (crops) and Department of Fisheries (fish stock). Given that people devalue land during title transfer to minimize tax payment, compensation for land paid by DC including premium largely remains less than the actual market price.

The Ministry of Land (MOL) is authorized to deal with land acquisition. The MOL delegates some of its authority to the Commissioner at Divisional level and to the Deputy Commissioner at the District level. The Deputy Commissioners (DCs) are empowered by the MOL to process land acquisition under the Ordinance and pay compensation to the legal owners of the acquired property. Khas (government owned land) lands should be acquired first when a project requires both khas and private land. If a project requires only khas land, the land will be transferred through an inter-ministerial meeting following the acquisition proposal submitted to DC or MOL as the case may be. The DC is empowered to acquire a maximum of 50 standard bigha (6.75 ha) of land without any litigation where the Divisional Commissioner is involved for approval. Acquisition of land more than 50 standard bigha is approved from the central land allocation committee (CLAC) headed by the chief executive of the Government of Bangladesh proposed by the MOL.

The land owner needs to establish ownership by producing record-of-rights in order to be eligible for compensation under the law. The record of rights prepared under 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 affected person has also to 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 bighas (3.37 ha).

### **2.2.3 Other Relevant Acts**

#### **2.2.3.1 National Land-use Policy, 2001**

The Government of Bangladesh has adopted national Land use Policy, 2001. The salient features of the policy objectives relevant to the proposed are as follows:

- To prevent the current tendency of gradual and consistent decrease of cultivable land for the production of food to meet the demand of expanding population;
- To ensure that land use is in harmony with natural environment;
- To use land resources in the best possible way and to play supplementary role in controlling the consistent increase in the number of land less people towards the elimination of poverty and the increase of employment;
- To protect natural forest areas, prevent river erosion and destruction of hills;
- To prevent land pollution; and
- To ensure the minimal use of land for construction of both government and non-government buildings.

#### **2.2.3.2 The East Bengal State Acquisition and Tenancy Act 1950 (Act XV of 1951)**

The East Bengal State Acquisition and Tenancy Act 1950 (Act XV of 1951) provides the ownership of diluvion land (eroded into river) and alluvion land (accreted in situ). According to sections 86, 87, 88 and 89 of the act, the “original” owner(s) of private land eroded into rivers can claim the land if it reappears in a natural process within 30 years from the date of erosion provided, the total land holding of the original owner(s) does not exceed 60 standard bighas (8 ha). If land is developed artificially and not naturally, the government will enjoy absolute ownership of the land and no case can be filed at the court of alluvion land after 12 months of public notice by collector regarding possession of the land. If a land emerges from the river or sea and that was never owned by any private people, the government will possess the land. The line that demarcates the diluvion land into the river is referred to as alluvion-diluvion line (AD line) to be established and declared by the concerned Deputy Commissioner in a given year. Land on the riverside of the AD line is public land and that on the country side is governed by recorded ownership.

#### **2.2.3.3 Bangladesh Labor Act, 2006**

This Act pertains to the occupational rights and safety of factory workers and the provision of a comfortable work environment and reasonable working conditions. In the chapter VI of this law safety precaution regarding explosive or inflammable dust/gas, protection of eyes, protection against fire, works with cranes and other lifting machinery, lifting of excessive weights are described. And in the Chapter VIII provision

safety measure like as appliances of first aid, maintenance of safety record book, rooms for children, housing facilities, medical care, group insurance etc. are illustrated.

#### 2.2.3.4 Regulation Related to Children

##### **The Employment of Children Act 1938**

This act allowed for children aged 15 or up to work in the railway industry and in transporting goods in port jobs. It also allowed for children aged 15-17 to work night shifts that may last until the morning under certain stipulations such as resting for 13 consecutive hours, working under someone that is 18 years or older, or serving an apprenticeship. It prohibited children under 12 from working in hazardous industries but did not mention protection for children between the ages 12-18.

##### **The Factories Act 1965**

This act prohibited children under 14 to work in or be present in factories. Factories was defined as any place with more than 10 people employed. It also listed various protections for children from hazardous machines and operations. It prohibited any work duration of longer than 5 hours between 7pm to 7am. It also states the weight lifting limits for types of workers (male, female, child).

##### **Shops and Establishment Act 1965**

This act defined a shop or establishment as a place that employs 5 or more people. This act prohibited children under the age of 12 from working in any establishment. It allowed children aged 12-18 to work in establishments but limited the number of work hours to a maximum of 7 hours a day.

##### **The Constitution Of People's Republic of Bangladesh**

The Constitution of Bangladesh while guaranteeing the fundamental rights for the people prohibits all forms of forced labor under Article 34. Article 34 lays down that 'all forms of forced labor are prohibited and any contravention of this provision shall be an offense punishable in accordance with law'.

##### **National Child Labour Elimination Policy 2010**

The main objective of this policy is to make meaningful changes in the lives of the children by withdrawing them from all forms of child labour including the hazardous work and worst forms of child labour.

##### **The Children Act 2013**

The Children Act 2013 repealed the previous Children Act 1974 which was inconsistent with international standards particularly with the UN Convention on the Rights of the Child 1989. Section 4 of this Act provides that notwithstanding anything contained in any other law for the time being in force every person shall be deemed to be a child who is below the age of 18 years. Though there is no specific provision prohibiting child labor it proscribes and punishes some serious offenses against children including exploitation of children (section 80).

Bangladesh has ratified both the [Minimum Age Convention](#)(C138) of the [International Labour Organization](#)(ILO), and the ILO [Worst Forms of Child Labour Convention](#)(C182). In addition, the country also ratified the UN [Convention on the Rights of the Child](#).

#### 2.2.3.5 Regulation Related to Women

A number of existing laws has been amended and new legislations made to prevent woman and female child abuse in Bangladesh. Notables among these legislations are: dowry prevention act, prevention of marriage of minor girls, women and children repression prevention, etc.

##### **Women and Children Repression Prevention Act, 2000**

Under this act, Women Abuse Prevention Cell and rehabilitation centers for abused women have been established to give legal assistance and counseling for prevention of women and children abuse. Over and above, the District and Sessions Judge has fund to defray the cost as legal fee and other costs.

##### **Domestic Violence (Prevention and Protection) Act, 2010**

This act was passed for establishing equal rights of women and children as prescribed in the constitution of Bangladesh for ensuring protection of women and children from family violence. Domestic Violence Prevention and Protection Rules, 2013 were framed for implementing this act.

##### **Citizenship Act (amended), 2009**

The provision for giving citizenship by mother to child was made by the national parliament by amending the citizenship act in 2009.

##### **Mobile Court Act, 2009**

The executive magistrate was given power to take steps by linking Section 509 of the Bangladesh Penal Code in the schedule of Mobile Court Act to resist and prevent eve teasing and sexual harassment of the girls and women.

There are other acts such as Women and Children Violence Protection Law, 2000, Child Marriage Control Act, 2013 (Draft), Domestic Violence Act, 2010, etc.

Bangladesh is also a signatory state to the UN Charter on Prevention of All Forms of Discrimination to Women, 1979 and the Child Rights Charter 1989.

### **2.3 Operational Policies and Directive of The World Bank**

The World Bank has developed a number of Safeguard Policies to ensure that all possible impacts are considered and mitigation measures are spelled out prior to the implementation of any proposed project. These policies ensure that the quality of operations is uniform across different settings worldwide. If the decision is taken that a

Safeguard Policy should be applied, mitigation measures and plans must be developed and in place before the implementation of a proposed project.

The Bank requires screening and classification for all investment projects proposed for Bank financing, to help ensure that they are environmentally and socially sound and sustainable. Screening and classification take into account the environment and social aspects; including especially involuntary resettlement and presence of Indigenous Peoples; cultural property; and trans-boundary and global environmental aspects. The relevant and applicable safeguards policies of the World Bank are also reviewed. The below table describes the relevant safe guard policies of the World Bank and discusses their applicability to the project.

### **2.3.1 Applicable World Bank Policies to Component 2 investments**

The applicable World Bank policies for subprojects under Component 2 of the Project are given in Table 2.

Table 2: Operational Policy and Directives of World Bank

Directive	Policy	Applicability for Project
Environmental Assessment	OP/BP 4.01	Triggered.
Natural Habitats	OP/BP 4.04	Triggered.
Indigenous People	OP/BP 4.10	Not Triggered. Based on the ESIA, there are no indigenous people in the project area.
Physical Cultural Resources	OP 4.11	Triggered.
Involuntary Resettlement	OP/BP 4.12	Triggered. Land is required for project infrastructure facilities. First option would be to reduce land requirement and the next would be to go for government land. In case of private land acquisition the affected people will be compensated at replacement cost. Those who lose their livelihoods will be rehabilitated with their living standards restored or increased (in case of below poverty line people) as per the RPF. Affected people, women and other vulnerabels will be engaged fully in the project activities as per RPF.
Forests	OP/BP 4.36	Not triggered.
Pest Management	OP 4.09	Not triggered.
Safety of Dams	OP/BP 4.37	Not triggered.
Projects in International Waterways	OP/BP/GP 7.50	Triggered.
Projects in Disputed Areas	OP/BP 7.60	Not triggered.
Access to Information		The RPF will be disclosed in country (on BIWTA website and in hard copy in locally accessible locations in the project area, including BIWTA offices at all the existing and proposed terminals, shelters and landing stations) and also sent to WB InfoShop. All these instruments will be translated into Bangla

		(local language) prior to disclosure and disclosed through above channels.
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### **2.3.2 Involuntary Resettlement (OP/BP 4.12)**

The World Bank's experience indicates that involuntary resettlement under development projects, if unmitigated, often gives rise to severe economic, social, and environmental risks: production systems are dismantled; people face impoverishment when their productive assets or income sources are lost; people are relocated to environments where their productive skills may be less applicable and the competition for resources greater; community institutions and social networks are weakened; kin groups are dispersed; and cultural identity, traditional authority, and the potential for mutual help are diminished or lost. This policy includes safeguards to address and mitigate these impoverishment risks.<sup>2</sup>

The overall objectives of the Policy are given below.

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

### **2.3.3 Public Consultation and Disclosure Requirements by The World Bank**

The Bank reaffirms its recognition and endorsement of the fundamental importance of transparency and accountability to the development process. Accordingly, it is Bank's policy to be open about its activities and to welcome and seek out opportunities to explain its work to the widest possible audience.

#### **2.3.3.1 Consultations**

The present project is categorized as Category A project. For all Category A and B projects the borrower should consult all the stakeholders including the project-affected groups and local non-governmental organizations (NGOs) about the project's environmental and social aspects and takes their views into account. The borrower should initiate such consultations as early as possible. For Category A projects, the borrower should consult

<sup>2</sup> Excerpts from WB OP 4.12. WB Operational Manual. December 2001.

these groups at least twice: (a) shortly after environmental and social screening and before the terms of reference for the ESIA are finalized; and (b) once a draft ESIA report is prepared. In addition, the borrower should consult with such groups throughout project implementation as necessary to address ESIA related issues that affect them.

### 2.3.3.2 Disclosure

For a Category A project, the borrower should provide relevant information on project interventions in a timely manner prior to consultation and in a form and language that are understandable and accessible to the groups being consulted. The borrower should provide a summary of the proposed project's objectives, description, and potential impacts for the initial consultation. For consultation after the draft ESIA report is prepared, the borrower should provide a summary of the ESIA's conclusions. In addition, for a Category A project, the borrower makes the draft ESIA report available at a public place accessible to project-affected groups and local NGOs. The borrower also ensures that ESIA reports for Category A subprojects are made available in a public place accessible to affected groups and local NGOs. Both the SIA and RPF will be translated into Bangla. In addition any RAP prepared will be translated into Bangla. All these documents, both in Bangla and English, will be made available to interested public through BIWTA website and in hard copies at all project offices. Public availability of the ESIA report for Category A project in the borrowing country and official receipt by the Bank are prerequisites to Bank appraisal of these projects.

In addition, consultations have been held while preparing EMF as well as RPF. Public consultations were held in Ashuganj and Barisal on 17<sup>th</sup> and 18th November 2015. A national workshop was held on 14<sup>th</sup> October 2015. Community-level focus group discussions and meetings were also held at various terminal and landing station locations. A summary of consultations held and key issues raised are presented in Chapter 4. Additional workshops and consultation events will be held when ESIA are conducted for the planned sub-projects, to disclose and get feedback ESIA's EMPs and RAPs, and this document will be updated progressively based on feedback received.

The EIA, EMF, SIA and RPF will be disclosed in country (on BIWTA website and in hard copy in locally accessible locations in the project area, including BIWTA offices at the existing terminals) and also sent to WB InfoShop.

### 3. Project Description

#### 3.1 Description of Overall Project and Its Components

The project will provide US\$360 million in IDA funds to finance interventions aimed at improving IWT for cargo and passengers along the heavily trafficked Chittagong-Dhaka-Ashuganj Regional Corridor. Main interventions include: navigation channel maintenance and improvement; navigation safety improvements; the construction and modernization of select river terminals; development of River Information Systems (RIS); institutional capacity development; and, funding for research and development and feasibility studies for continuing sector improvement to ensure future IWT sustainability. This includes work on sector policies and strategies needed to: improve revenue collection and management; incentivize public and private sector investments especially related to container transport; and, mitigate and improve IWT's impact on the social and physical environment. The Project consists of three components as follows:

##### 3.1.1 Component 1: Improved Inland Waterway Navigation (US\$215 million)

This component shall include work to guarantee advertised depths and widths of navigation channels on select river routes. The work also includes provision of aids to navigation. The work is to be done on an Output- and Performance-based Contracting method designed to increase the efficiency and effectiveness of river asset management and maintenance. It is designed to ensure that the physical condition of the rivers under contract are adequate for the need of river users, over the entire period of the contract which is six to seven years. This type of contract significantly expands the role of the private sector, from the simple execution of works to the management and conservation of river assets. This is a departure from the traditional river maintenance contracts used in Bangladesh which have been less-than-optimal. Even where works have been carried out according to plan, the nature of the rivers has meant that advertised depths, aids to navigation and other river infrastructure do not last as long as they should because of deficiencies in the original design, aggravated by inadequate maintenance. The beneficiaries of the new concept are expected to be the river users. In a wider sense, future generations will be able to benefit from a better maintenance of past investments. River users will be able to know the Service Level they can expect in return for the payments they make for the use of the infrastructure (tolls, tariffs, user fees, taxes, etc.). The River Administration shall also benefit by obtaining better overall river conditions with reduced levels of expenditure.

##### 3.1.2 Component 2: Improved Services at Priority Inland Waterway Terminals and Landing Ghats/Stations (US\$75 million)

This component supports the development of two cargo terminals, four passenger terminals and 14 landing ghats. The development of passenger and cargo terminals are within existing inland waterway port areas under the jurisdiction of BIWTA. It includes the modernization and extension of existing facilities to cater for increased demand.

Terminals and landing stations are part of the network of about 448 river terminals, 374 landing stations, 23 coastal terminals and 25 pilot stations already provided by BIWTA. The passenger terminals and landing stations will specifically incorporate the needs of women users and less abled users, and all investments will address safety-related issues for all users.

The cargo terminals include: i) extension of the existing Pangaon Container Terminal with new general cargo vessel berths and land access infrastructure on the Buriganga river; and, (ii) rehabilitation and modernization of the existing general cargo terminal at Ashuganj including river bank erosion prevention, the replacement of pontoons, gangways and other dilapidated marine structures, the extension of berthing space.

The passenger terminals include: (i) construction of a new passenger terminal at Shashanghat, downstream of the existing terminal at Sadarghat where landside congestion preclude the development of additional berths; (ii) rehabilitation works for the passenger terminal at Narayanganj; (iii) rehabilitation of works for the passenger terminal at Chandpur; and, (iv) extension of the existing passenger terminal at Barisal

### **3.1.3 Component 3: Institutional Capacity Development and Sustainability (US\$70 million)**

A series of activities are proposed that will support BIWTA's overall enhancement of its management systems and human resources capacity for modern, efficient, and high quality management of the IWT sector in line with international standards, and to help BIWTA to achieve long-term operational and financial sustainability. Activities to be supported include: (i) the development of River Information Systems to help BIWTA improve data collection for the planning, maintenance and development of IWT, as well as enhance climate resiliency of the IWT sector in Bangladesh by creating a more systematized baseline understanding of river hydrology and navigational implications, and provision of a Traffic Monitoring System for passengers and cargo; (ii) improvement of Human Resources capacity for better management of the IWT sector through upgrading and modernizing the IWT Deck and Engine Personnel Training Centre (DEPTC) into a regional IWT Training Center with open access to all users in the Region and the world; (iii) commissioning of a study to propose an institutional structure and reforms needed to develop an effective Search and Rescue organization; (iv) a project preparation facility to finance feasibility, surveys, design and safeguards studies for continuous sector development; and, (vi) support for the Project Management Unit including the hiring of key staff and procurement of selected systems needed for implementation of the Project.

## **3.2 Locations of Component 2**

Locations of the proposed terminals and landing stations, in terms of their geographical coordinates, under Component 2 of the Project are given in Table 3 and are shown in Figure 1.

*Table 3: Locations of Terminals and Landing Stations under Component 2 of the Project*

Item	Name	Position	
		Latitude	Longitude
<b>1 Passenger Terminals</b>			
1.1	Sashanghat	23°41'24.55"N	90°25'34.72"E
1.2	Narayanganj	23°36'58.86"N	90°30'20.53"E
1.3	Chandpur	23°13'59.61"N	90°38'54.65"E
1.4 (recently added)	Barisol		
<b>2 General Cargo Terminals</b>			
2.1	Ashuganj	24°02'34.42"N	91°00'04.58"E
2.2	Pangaon	23°39'30.79"N	90°27'14.68"E
<b>3 Launch Ghats (Landing Stations)</b>			
3.1	Bhairab	24°02'35.76"N	90°59'20.62"E
3.2	Alubazar	23°10'58.57"N	90°34'50.32"E
3.3	Horina	23°09'51.20"N	90°38'32.33"E
3.4	Hijla	22°54'18.07"N	90°31'48.32"E
3.5	Moju Chowdhury	22°52'23.10"N	90°46'56.25"E
3.6	Ilisha (Bhola)	22°47'31.72"N	90°38'33.30"E
3.7	Beduria	22°42'17.22"N	90°33'52.70"E
3.8	Laharhat	22°41'18.11"N	90°29'22.62"E
3.9	Boddarhat	22°39'16.72"N	90°53'57.36"E
3.10	Daulatkha	22°36'11.99"N	90°45'06.14"E
3.11	ChairmanGhat (CharBata)	22°31'19.37"N	91°05'22.23"E
3.12	Sandwip	22°29'03.26"N	91°26'01.06"E
3.13	Tojumuddin	22°24'31.93"N	90°51'36.21"E
3.14	Monpura	22°19'35.89"N	90°58'28.40"E

### **3.3 Proposed Developments in Passenger Terminals**

Details of existing facilities and the proposed facilities to be built in the three passenger terminals are given in Table 4. Typical facilities to be built at these terminals on the water side will include bank protection works, jetties and pontoons; and on the landside will include office buildings, passenger facilities, parking areas and widening of access roads. All terminals will be provided with separate ticket counters, waiting rooms and toilets for women passengers, and ramps for movement of disabled peoples.

Table 4: Existing and Proposed Facilities in Passenger Terminals

Passenger Terminal	Existing Facilities	Proposed Facilities
Sashanghat Passenger Terminal	Greenfield site. There are no existing facilities.	Based on existing concept design drawings (which will be reviewed and potentially adapted / modified during the detailed design phase), proposed facilities to be developed include:
Located 2.5 km downstream of the Sadharghat terminal at Dhaka on the Buriganga River		<ul style="list-style-type: none"> <li>• A Six storied terminal building, with a total floor area of approximately 20,000 square meters;</li> <li>• A quay wall (bank protection) of approximately 250 m length</li> </ul>

		<ul style="list-style-type: none"> <li>Three terminal pontoons of approximately 200m length and five steel gangways</li> <li>A parking yard of approximately 2,000 square meters</li> <li>new landside pedestrian and vehicle access roadways</li> <li>pedestrian and vehicle turn-outs, drop-off, collection and waiting facilities</li> </ul>
Chandpur Passenger Terminal.  Located on Lower Meghna River	Established in 1995. Existing facilities include a walkway (167 m <sup>2</sup> ), steel jetty – 2 nos, steel spud – 6 nos., pontoon – 4 nos., passenger waiting shed (74 m <sup>2</sup> ) and parking yard (8010 m <sup>2</sup> )	Based on existing concept design drawings (which will be reviewed and potentially adapted / modified during the detailed design phase), the proposed facilities include: <ul style="list-style-type: none"> <li>Land development (21,669 m<sup>3</sup>),</li> <li>3-storied terminal Building (4061 m<sup>2</sup>),</li> <li>Bank protection ( 253 m),</li> <li>Boundary wall (231 m),</li> <li>RCC Ramp- 3 nos,</li> <li>Steel gangway – 3 nos,</li> <li>Spud and spud ring -22 nos. Terminal pontoon -4Nos,</li> <li>Steel jetty (267.65m<sup>2</sup>).</li> <li>Widening of 265 m of access road</li> </ul>
Barisal Passenger Terminal  Located on Kirtonkhola River (Lower Meghna Tributary)	Established in 1964. Existing facilities included: two storied terminal building, passenger waiting space, 6nos. of pontoons, 4 nos. of gangway, cargo shed, transit shed, parking yard and access road.	The proposed facilities include: <ul style="list-style-type: none"> <li>Extension of existing terminal building (346 m<sup>2</sup>),</li> <li>construction of 4 storied multipurpose building for port facilities (5600 m<sup>2</sup>),</li> <li>RCC Ramp 2 nos.,</li> <li>Steel Gangway 2 nos., and</li> <li>bank Protection works</li> </ul>
Narayanjang Passenger Terminal  Located on Sitalakya River	Established in 1972. Existing facilities include a single storied building, 4 pontoons, 3 gangways, an RCC jetty and an administrative office. Existing facilities also include cargo handling facilities with 4 pontoons.	The proposed facilities include <ul style="list-style-type: none"> <li>extension of existing terminal building,</li> <li>RCC ramps and</li> <li>2 steel gangways.</li> </ul>

### 3.4 Proposed Developments in Cargo Terminals

Details of existing facilities and the proposed facilities to be built in the two cargo terminals at Pangaon and Ashuganj are given in Table 5. Typical facilities to be built at these terminals on the water side will include bank protection works and jetties; and on the landside will include office buildings, passenger facilities, parking areas and widening of access roads. All terminals will be provided with separate ticket counters, waiting rooms and toilets for women traders, and ramps for movement of disabled peoples.

Table 5: Existing and Proposed Facilities in Cargo Terminals

Cargo Terminal	Existing Facilities	Proposed Facilities
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Pangaon Terminal  Located next to existing Pangaon Container terminal on Buriganga River.	Cargo	Greenfield site. No existing facilities.	<p>Based on existing concept design drawings (which will be reviewed and potentially adapted / modified during the detailed design phase), The proposed facilities include:</p> <ul style="list-style-type: none"> <li>• Two berths, constructed on RCC piles with a suspended deck – total length 190m;</li> <li>• An apron area of approximately 2,750 square meters</li> <li>• An open storage area of 2,220 square meters;</li> <li>• A transit Shed of 1,500 square meters;</li> <li>• Vehicle parking areas of 500 square meters; and</li> <li>• A new port road of 400m length together with a gate house.</li> </ul>
Ashuganj Terminal  Located on Upper Meghan River	Cargo	Established in 2004 primarily for use by.  Existing facilities include: office (150 m <sup>2</sup> ), RCC Jetty (425 m <sup>2</sup> ), steel jetty (90 m <sup>2</sup> ), pontoons – 2nos., gangway, warehouse (225 m <sup>2</sup> ), parking area (1000 m <sup>2</sup> )	<p>Proposed facilities include:</p> <ul style="list-style-type: none"> <li>• office building, RCC Jetty (425 m<sup>2</sup>),</li> <li>• steel jetty – (2x45m),</li> <li>• pontoon- 2nos.,</li> <li>• gangway – 2nos.,</li> <li>• bank protection,</li> <li>• warehouse (225 m<sup>2</sup>), and</li> <li>• parking area (2000 m<sup>2</sup>)</li> </ul>

### 3.5 Proposed Developments in Landing Stations

Details of existing facilities and the proposed facilities to be built in the 14 landing stations are given in Table 6. All the landing stations will be provided with drinking water facilities, and separate waiting rooms and toilets for women passengers.

*Table 6: Existing and Proposed Facilities in Landing Stations*

Landing Station/ Launch Ghat	Existing Facilities	Proposed Facilities
Bhairab Bazar	Established in 2004. Daily about 300 to 400 passengers use this launch ghat. Existing facilities include two pontoons and one gangway.	The proposed facilities include two pontoons and one gangway.
Alubazar	This is a ferry terminal established in 2001. Daily traffic include 3 launches, 4 ferries and 15 local boats. Daily weight of goods transported is 20 t. Existing facilities include: shore connection seri -1, pontoon -1, steel jetty, ferry ghat with pontoon.	0.18 ha of addition land acquisition required for proposed facilities, which include: <ul style="list-style-type: none"> <li>• Shore connection seri-4</li> <li>• Steel jetty -45m<sup>2</sup></li> <li>• Steel spud – 4nos</li> <li>• Approach Road -372m<sup>2</sup></li> <li>• Passenger waiting sheed-75m<sup>2</sup></li> <li>• Parking yard – 1860m<sup>2</sup></li> <li>• Toilet complex – 42m<sup>2</sup></li> <li>• Bank protection -200m<sup>2</sup></li> </ul>
Horina	This is a ferry terminal established in 2001. Daily traffic includes 2 launches and 4 ferries. Approximate daily weight of goods transported is 15 t. Existing facilities include a ferry ghat with a pontoon	0.093 ha of addition land acquisition required for proposed facilities, which include: <ul style="list-style-type: none"> <li>• Shore connection seri-4</li> <li>• Steel jetty -45.00m<sup>2</sup></li> <li>• Steel spud – 4nos</li> </ul>

		<ul style="list-style-type: none"> <li>Approach Road -372m<sup>2</sup></li> <li>Bank protection -200m<sup>2</sup></li> </ul>
Hijla	The average daily traffic at this launch ghat is 150 passengers and 10 boats. Approximate daily weight of goods transported is 3t. Existing facilities include a shore connection seri and a pontoon	0.12 ha of addition land acquisition required for proposed facilities, which include: <ul style="list-style-type: none"> <li>Passenger waiting shed:125 m<sup>2</sup></li> <li>Parking yard : 2500 m<sup>2</sup></li> <li>Toilet complex: 75 m<sup>2</sup></li> <li>Access road: 1000 m<sup>2</sup></li> <li>Deep tube-well: 01 No</li> </ul>
Ilisha (Bhola)	The average daily traffic at this launch ghat is 251 passengers and 12 vessels. Approximate daily weight of goods transported is 19t. Existing facilities include 2 shore connection seris and a pontoon	0.30 ha of addition land acquisition required for proposed facilities, which include: <ul style="list-style-type: none"> <li>Passenger waiting shed:125 m<sup>2</sup></li> <li>Parking yard : 2000 m<sup>2</sup></li> <li>Toilet complex: 75 m<sup>2</sup></li> <li>Access road: 2000 m<sup>2</sup></li> <li>Deep tube-well: 01 No</li> </ul>
Moju Chowdhury	A ferry ghat established in 2008. Daily traffic is 2 ferries, 2 sea trucks and a launch. Approximate daily weight of goods transported is 20t. Existing facilities include a shore connection seris, a pontoon, and a passenger waiting shed (55 m <sup>2</sup> )	Area required proposed facilities in 0.5 ha but land acquisition is not required. The proposed facilities include: <ul style="list-style-type: none"> <li>Shore connection seri-4</li> <li>Steel jetty -45 m<sup>2</sup></li> <li>Steel spud – 4nos</li> <li>Approach road</li> <li>Passenger shed</li> <li>Parking yard</li> <li>Bank protection</li> </ul>
Laharhat	The average daily traffic at this launch ghat is 277 passengers and 13 vessels. Approximate daily weight of goods transported is 21 t. Existing facilities include: <ul style="list-style-type: none"> <li>Passenger waiting shed : 125 m<sup>2</sup></li> <li>Parking yard : 3375.00 m<sup>2</sup></li> <li>Toilet complex: 75.00 m<sup>2</sup></li> <li>Access road: 2000.00 m<sup>2</sup></li> <li>Deep tube-well: 01 No</li> <li>Shore connection sheri-01</li> <li>Pontoons- 01</li> </ul>	Area required proposed facilities in 0.28 ha but land acquisition is not required. The proposed facilities include: <ul style="list-style-type: none"> <li>Passenger waiting shed: 125 m<sup>2</sup></li> <li>Parking yard : 1500 m<sup>2</sup></li> <li>Toilet complex: 75 m<sup>2</sup></li> <li>Access road: 2000 m<sup>2</sup></li> <li>Shore connection sheri-01</li> <li>Pontoons- 01</li> </ul>
Beduria	The average daily traffic at this launch ghat is 81 passengers and 13 vessels. Approximate daily weight of goods transported is 6 t. Existing facilities include a shore connection seri and a pontoon	Area required proposed facilities in 0.047 ha but land acquisition is not required. The proposed facilities include: <ul style="list-style-type: none"> <li>Passenger waiting shed:125 m<sup>2</sup></li> <li>Parking yard : 2000 m<sup>2</sup></li> <li>Toilet complex: 75 m<sup>2</sup></li> <li>Access road: 2000 m<sup>2</sup></li> <li>Deep tube-well: 01 No</li> </ul>
Daulatkha	The average daily traffic at this launch ghat is 1000 passengers and 4 vessels. Approximate daily weight of goods transported is 730 t. Existing facilities include a 22 m jetty and 1 pontoon	Area required proposed facilities in 0.12 ha but land acquisition is not required. The proposed facilities include: <ul style="list-style-type: none"> <li>Passenger waiting shed:125 m<sup>2</sup></li> <li>Parking yard : 2000.00 m<sup>2</sup></li> <li>Toilet complex: 75.00 m<sup>2</sup></li> </ul>

			<ul style="list-style-type: none"> <li>Access road: 2000.00 m<sup>2</sup></li> <li>Deep tube-well: 01</li> </ul>
Tojumuddin		The average daily traffic at this launch ghat is 307 passengers and 4 vessels. Approximate daily weight of goods transported is 23 t. Existing facilities include 2 shore connection seris and a pontoon	Area required proposed facilities in 0.12 ha but land acquisition is not required. The proposed facilities include: <ul style="list-style-type: none"> <li>Passenger waiting shed:125 m<sup>2</sup></li> <li>Parking yard : 2000.00 m<sup>2</sup></li> <li>Toilet complex: 75.00 m<sup>2</sup></li> <li>Access road: 2000.00 m<sup>2</sup></li> <li>Deep tube-well: 01 No</li> <li>Pontoons- 01</li> </ul>
Monpura		The average daily traffic at this launch ghat is 207 passengers and 2 vessels. Approximate daily weight of goods transported is 9.5 t. Existing facilities include: <ul style="list-style-type: none"> <li>Pontoons-1</li> <li>Sheri - 02</li> <li>Transit shed</li> <li>RCC Jetty 625.00 M</li> </ul>	Area required proposed facilities in 0.12 ha but land acquisition is not required. The proposed facilities include: <ul style="list-style-type: none"> <li>Passenger waiting shed:125 m<sup>2</sup></li> <li>Parking yard : 2000.00 m<sup>2</sup></li> <li>Toilet complex: 75.00 m<sup>2</sup></li> <li>Access road: 2000.00 m<sup>2</sup></li> <li>Deep tube-well: 01 No</li> <li>Shore connection</li> </ul>
Chairman Ghat (Char Bata)		The average daily traffic at this launch ghat is 620 passengers 2 launches, 6 local boats and 12 speed boats. Approximate daily weight of goods transported is 18 t. Existing facilities include: <ul style="list-style-type: none"> <li>Steel Jetty (12m) 1Nos</li> <li>Spud 2 Nos</li> <li>Pontoon 1Nos</li> <li>Waiting Shed 45 m<sup>2</sup></li> </ul>	0.5 ha of addition land acquisition required for proposed facilities, which include: <ul style="list-style-type: none"> <li>Passenger Terminal 120 m<sup>2</sup></li> <li>Parking Yard 550 m<sup>2</sup></li> <li>Deep tube well -1nos</li> <li>Approach Road 450 m<sup>2</sup></li> <li>Bank Protection 290 m<sup>2</sup></li> </ul>
Sandwip Jetty	RCC	The average daily traffic at this RCC Jetty is 200 passengers 2 steamer, 10 local boats and 30 speed boats. Approximate daily weight of goods transported is 30 t. Existing facilities include: <ul style="list-style-type: none"> <li>RCC Jetty 750m</li> <li>Waiting shed 60 m<sup>2</sup></li> <li>Parking yard 200 m<sup>2</sup></li> </ul>	Area required proposed facilities in 1 ha but land acquisition is not required. The proposed facilities include: <ul style="list-style-type: none"> <li>CC Jetty 30m</li> <li>Harbour Basin</li> <li>Passenger Terminal 125 m<sup>2</sup></li> <li>Parking Yard 550 m<sup>2</sup></li> <li>Deep tube well 1nos</li> <li>Approach Road 450 m<sup>2</sup></li> <li>Bank Protection 2000 m<sup>2</sup></li> </ul>
Boddarhat Launch ghat		The average daily traffic at this RCC Jetty is 150 passengers 2 launch and 10 local boats. Approximate daily weight of goods transported is 30 t. Existing facilities include: <ul style="list-style-type: none"> <li>RCC Jetty 750m</li> <li>Waiting shed 60 m<sup>2</sup></li> <li>Parking yard 200 m<sup>2</sup></li> </ul>	0.4 ha of addition land acquisition required for proposed facilities, which include: <ul style="list-style-type: none"> <li>Shore connection seri-4</li> <li>Steel jetty -185.00m<sup>2</sup></li> <li>Steel spud – 4nos</li> <li>Approach Road -150m<sup>2</sup></li> <li>Passenger waiting sheed-100m<sup>2</sup></li> <li>Parking yard – 4048m<sup>2</sup></li> <li>Toilet complex – 42m<sup>2</sup></li> <li>Bank protection -200m<sup>2</sup></li> </ul>

### 3.6 Description of Typical Construction Works

### **3.6.1 Landside Construction**

Landside or onshore construction typically includes site preparation and development, the removal of any existing vegetation, filling of the land above the flood levels, and the grading and excavation of soils for the installation of structural foundations and site utilities that are typical of industrial development projects. Port development may include construction of new infrastructure and/ or rehabilitation of existing infrastructure, such as piers and buildings. Landside facilities typically include:

- Cargo storage and handling facilities (e.g. crane tracks and bridges for loading/ unloading cargo, pipelines, roads, and other areas for cargo distribution, storage and stacking areas, and warehouses);
- Facilities for embarking/ disembarking of passengers (e.g. parking areas and administration buildings);
- Vessel support facilities (e.g. to store and supply water, power, food and oil/ used oil);
- Drainage networks;
- Waste collection facilities;
- Terminal administration buildings with water supply facilities, toilets and watering rooms (separately for women passengers and traders), and ramps for disabled people;
- Equipment maintenance and repair facilities (e.g. vehicle maintenance bays); and
- Widening of access roads.

### **3.6.2 Waterside Construction**

Waterside facilities include berthing facilities (e.g. harbor basins, approaches, and access channels), cargo handling and ferry facilities (e.g. goods transfer quays and piers, shoreline protection, and landing bridges). Bank protection works and Installation of pier columns/ piles and construction of harbor basins and access channels may require excavation of river bed sediment and underlying material. Dredgers will be used for excavation and vibratory pile drivers will be used for construction of pier columns. Uncontaminated dredged material will be used for raising of the land at the terminal site or used to construct breakwaters and other features, or can be disposed of in open water through submerged discharge. Contaminated material will be placed in a confined disposal facility.

## **3.7 Description of Typical Operations at Terminals**

### **3.7.1 Landside Operations**

Land-based operations at terminals include cargo handling; material and fuel storage and handling; passenger embarking/ disembarking; ship support services; waste and wastewater management; vehicle and equipment maintenance; and buildings and grounds maintenance.

Cargo handling includes unloading, storage/ stacking and loading of dry and liquid cargo. Cargo typically includes containers, dry bulk, liquid bulk, and general cargo. Cargo handling includes use of vehicular traffic such as harbor vessels, trucks, buses, terminal trucks, and track cranes. Bulk cargo may be transferred using cranes with grab buckets and front-end loaders, or pneumatic continuous ship loaders and unloaders, or belt conveyors.

Terminal operations generate and manage their own waste and wastewater. Solid waste may be generated from property upkeep and administrative operations while wastewater may originate from storm drainage and from domestic wastewater and sewage. However, the most significant sources of wastes and wastewater are ships and there will be receiving facilities for these and other waste streams.

### **3.7.2 Waterside Operations**

Waterside operations may include maintenance dredging for routine removal of material/ sediment in harbor basins, and access channels. This activity is important to maintain or improve depths and widths and ensure safe access for the ships as well as efficient navigation depth in the neighbourhoods and dock gates to ensure access to basins and dry docks. Maintenance dredging may take place annually or once every few years, depending on the terminal. The terminals at Chandpur and Barisal may require maintenance dredging annually but other terminals may require dredging once in a few years. In addition the water side operations will include small scale maintenance and repair works for vessels, which are mostly related to engine repairs. No repainting works will be carried out these terminals.

### **3.8 Implementation Schedule**

The engineering designs and ESIA studies for the Component 2 works will be carried out during the first year of implementation of the Project and civil works will be carried out over a period of four years after completion of the engineering designs.

BIWTA will procure consulting firms for preparation of detailed engineering designs and to carry out environmental and social assessment of the proposed Component 2 works. The ESIA consultants will be independent of Engineering Design Consultants but both consultants will coordinate each other while planning and design of the facilities.

### **3.9 Cost of the Project**

The overall cost of the Project is US\$ 360 million, and cost of the Component 2 works is 75 million US\$. Detailed break up of Component 2 works are given in Table 7.

*Table 7: Cost of the Project (all components)*

Description	Amount in USD, million
Component 1: Improved Inland Waterway Navigation	235

<b>A. PBC contracts for year-round maintenance of Least Available Depth and Navigational Aids including for Night-time Navigation</b>	<b>205</b>
<b>Independent Performance Monitor</b>	<b>7</b>
<b>Unallocated but for activities associated with PBC contract</b>	<b>3</b>
<b>B. Six shelters-safe harbors for vessels in adverse weather conditions</b>	<b>10</b>
<b>C. Establishment of a Search and Rescue Organization</b>	<b>10</b>
<b>Component 2: Improved Services at Priority Inland Waterway Terminals and Landing Stations</b>	<b>75</b>
<b>A. Development of a new common user general cargo terminal with access infrastructure on the Buriganga River adjacent to the existing Pangaon container terminal</b>	<b>20</b>
<b>B. Rehabilitation and modernization of the existing general cargo terminals at Ashuganj</b>	<b>6</b>
<b>C. Development of a new passenger terminal at Shasanghat</b>	<b>10</b>
<b>D. Upgrade of existing passenger terminals at Narayanganj, Chandpur, and Barisal</b>	<b>10</b>
<b>E. Upgrade of 14 Existing Landing Stations/ Launch Ghats</b>	<b>14</b>
<b>F. Design, Supervision, Safeguards Services As Needed, and Other Unanticipated Activities relating to River Port Terminals</b>	<b>5</b>
<b>Component 3: Institutional Capacity Development and Sustainability</b>	<b>50</b>
<b>TOTAL</b>	<b>360</b>

## 4. Socio-Economic Baseline

### 4.1 Introduction

Bangladesh is Located in the north-eastern part of South Asia. The majestic Himalayas stand some distance to the north, while in the south lays the Bay of Bengal. West Bengal borders on the west and in the east lies the hilly and forested regions of Tripura, Mizoram (India) and Myanmar. These picturesque geographical boundaries frame a low lying plain of about 1,47,570 sq. km., crisscrossed by innumerable rivers and streams. Mighty rivers are Padma (Ganges), Brahmaputra (Jamuna), Meghna and Karnafuli.

Bangladesh's geographical Location is at Latitude between 20°34' and 26°38' North and Longitude between 88°01' and 92°41' East. Bangladesh has an area of 147,570 sq. km. (land: 133,910 sq km, water: 10,090 sq km). Bangladesh is bounded by North - India (West Bengal and Meghalaya), West - India (West Bengal), East - India (Tripura and Assam) and Myanmar and South-Bay of Bengal. It has total of 4,246 km border (border countries: Burma 193 km, India 4,053 km). It has a coastline of 580 km. Bangladesh terrain is mostly flat alluvial plain and hilly in southeast.

Bangladesh has 7 Divisions; Dhaka, Chittagong, Khulna, Sylhet, Rajshahi, Barisal and Rangpur, 64 Districts and 487 Sub districts/Upazillas.

Bangladesh has a population of 150 million (2011 Census Report by BBS). The present Population Growth Rate of Bangladesh is 1.59%. The present literacy rate is about 50% among which the male literacy is 50% and female literacy is 46%. Bangladesh is predominantly a Muslim populate (86.6%) followed by Hindus (12.1%), Buddhists (0.6%), Christians (0.4%) and Others (0.3%). The sex ratio is 99.68%.

The predominant ethnic group is Bengalis (98%) followed by other indigenous minority (2%) including Chakmas, Marmas, Santals, Garos, Manipuri, Tripura, and Tanchangya.

#### 4.1.1 Economy

Bangladesh is one of the members of the Developing 8 and considered as the Next Eleven Economy of the world in 20 coined by Goldman Sachs. The GDP is \$1,044 (per capita in 2013). The poverty level is at 25% (People living with \$2 per day).

#### 4.1.2 Rivers

The principal rivers are Padma, Meghna, Jamuna, Surma, Brahmaputra, Karnaphuli, Teesta, Sitalakhya, Rupsha, Madhumati, Gorai, Mahananda etc. Bangladesh is dominated by the low-lying Ganges Delta, but has highlands in the north

and southeast. The Ganges delta is formed by the confluence of the Ganges (local name Padma or Pôdda), Brahmaputra (Jamuna or Jomuna), and Meghna rivers and their respective tributaries. The Ganges unites with the Jamuna (main channel of the Brahmaputra) and later joins the Meghna, finally flowing into the Bay of Bengal. The alluvial soil deposited by the rivers when they overflow their banks has created some of the most fertile plains in the world. Bangladesh has 57 trans-boundary rivers, making water issues politically complicated to resolve – in most cases as the lower riparian state to India. Most parts of Bangladesh are less than 12 m (39.4 ft) above sea level, and it is estimated that about 10% of the land would be flooded if the sea level were to rise by 1 m (3.28 ft).

#### **4.1.3 Climate**

The temperature ranges are in winter 11° C - 20° C (October - February) and in summer 21° C - 38° C (March - September). The rain fall range is 1,100 mm to 3,400 mm (June - August). The Humidity is highest 99% (July) and lowest 36% (December & January).

#### **4.1.4 Agriculture**

The principal crops are Rice, Jute, Tea, Wheat, Sugarcane, Pulses, Mustard, Potato, Vegetables.

#### **4.1.5 Industry**

The Principal Industries are Garments and Textiles (2<sup>nd</sup> largest in the world), Tea, Ceramics, Cement, Leather, Jute (largest producer in the world), Chemical, Fertilizer, Shrimp Processing, Sugar, Paper, Electric and Electronics, Medicine, Fishing. The principal exports are Garments, Knitwear, Frozen Shrimps, Tea, Leather and Leather products, Jute and Jute products, Ceramics, IT Outsourcing, etc. The principal Imports: Wheat, Fertilizer, Petroleum goods, Cotton, Edible Oil etc. The principal Minerals: Natural gas, Oil, Coal, White clay, Glass sand, etc.

### **4.2 Socio-Economic Baseline of Project Area – ESIA Study**

This section provides an overview of demographic trends, sources of livelihood, land use, agriculture, fisheries, public health, communications, social infrastructure, gender issues, cultural resources, demand for dredged material, and other relevant issues. The study route has been divided in terms of the river route and launch terminals, proposed 6 storm vessel shelters and 3 ferry crossing routes. The river routes include Dhaka and surrounding to Bhairab Bazaar and Chandpur. Dhaka is the major urban center for business development, urbanization, export-import and industrialization of the country. Shadarghat, Bhairab, Ashuganj and Chandpur are the most important and busiest business and river transport routes of the country. The baseline information indicates that regions nearer to the main land enjoy better privilege in terms of education and medical

services, employment opportunity and other advantages. On the other hand, some Char and Islands in the coastal area along the proposed river routes are still facing lack of basic civic amenities i.e. education, health services, electricity, road communication, gas connection, etc.

#### **4.2.1 Demography**

The project area passes through 10 Districts covering 17 Upazilas (Sub-district). Dhaka, the capital of Bangladesh is the largest city in Bangladesh and highest densely populated which has experienced an extremely rapid population growth after the independence, from only 1.6 million in 1974 to about 15.4 million in 2011. Dhaka's density is estimated at 115,000 per square mile or 44,000 per square kilometer, with slum (informal dwelling) densities reported as 4,210 per acre, or 2.7 million per square mile (1 million per square kilometer).

Although only the southern part; near the launch terminals will be included as project sites and area of influence, as no discrete information were found from secondary sources for the southern part, the demographic information demonstrates information on the whole metropolitan city.

Again, the population of Keranigong Upazila is 794,360 and it is the highest among the Upazilas in study area. On the other hand, Monpura Upazila of Bhola District has the lowest population that is 17,080. Population density is the highest and lowest respectively in Dhaka (30551) and Monpura (205). The average household size is 4.72 except Dhaka Metropolitan. The largest household size is 8.42 in Dhaka Metropolitan. Again, Tozumuddin and Keranigong Upazilas have 4.42 house hold size. These two Upazilas are the lowest number of house hold size in the total study area. It indicates that Dhaka city being the capital; people from all parts of the country migrate to Dhaka in search of employment, education and all other facilities. The city is growing at a rate of 6% every year. On the contrary Monpura and other char Upazilas offer less opportunity and people migrate out of these places to areas with better opportunities.

Among the ten districts, literacy is highest in Dhaka (74.6) and Barisal Sadar Upazila that is 69.3% and the lowest is Monpura under Bhola District that is 32.1%.

The table underneath demonstrates some key demographic information and literacy rates across impact Upazilas based on secondary sources (BBS, GOB Web portal, etc.).

#### **4.2.2 Livelihood Sources in various locations**

Most of the people near river side depend on their sources of livelihood by river rrelated activities. For example, Shadarghat (in Dhaka); provides for about 300-400 boatmen, who are depending on river related transport. There are also a large number of labours in this ghat. Here the major sources of livelihood are carrying people and goods by boat, day laboring, selling of vegetables and other raw materials, selling clothes, rickshaw or van

pulling, whole and retail selling of fruits, etc. There are a huge number of hotels/restaurant in this ghat area. There are a variety of livelihoods in this ghat.

A large number of people are engaged in Munshigang Sadar launch ghat as day labour. Again vegetables sellers, other raw materials and business men present in Munshigong Sadar launch ghat. There is a big market in Bhairab Bazar launch ghat. There are about 700 business units/shops in this ghat. And a massive number of people, about 10, 000, are crossing one end to another by using this ghat for livelihoods.

At Harina ferry ghat, approximately 500 fishermen are leading their lives by catching fishes from the river. At Chairman ghat (Boyar char) there is a large number of fishermen (about 15,000-20,000). This is the highest number of fishermen at a single location along the proposed routes. There is a large vegetable market in Chandpur Sadar launch ghat with associated businesses. There are about 1,000 business shops located here. These vegetables are mostly being carried by boat from adjacent Chars. Once again, Ashuganj, Mozu Chowdhury Ghat, etc. play a major role in transporting construction materials and receiving imported goods. Each ghat provides for livelihoods for 2,000-3,000 families including 300-600 shops around the ghats and thousands of day laborers working around the area. For example, the Mozu Chowdhury ghat itself has 500-600 shops catering to several needs of the people visiting ghat. There are 600-700 shops as per ESIA study at Harina.

Ashuganj ferry ghat has about 1,500-2,000 labourers working each day, along with number of people engaged in transporting goods from neighbouring country India. Many vendors (such as vegetables, raw materials, and other things) come to all ghats, jetties, terminals etc. to buy and sell their daily necessities. There are about 1,000 shops in Batakandi Bazar, under Comilla district and a huge number of people have established other related businesses there.

Dakatia Mohana at Chandpur Sadar is a recognised tourist spot. It also provides livelihoods opportunities to local people, labourers, entrepreneurs and small traders. Chandpur provides livelihoods to a large number of peoples as fishermen, fish sellers, vegetables vendors, etc. The people who are living in the banks of river along the route are collecting fishes as a source of livelihood. Some boatmen are running their occupation as 'majhi'.

About 16.31% of total population of Dhaka, Munshigong, Gagaria and Chandpur launch route are business men, 5.70% are into fishing, 8.21% are working as day labour, 1.14% operating boat (boatman) etc. About 8.67% people are unemployed. Women are mostly housewives (33.87% of total population).

At the vessel shelter locations, the survey finds that 13.22% people are leading their livelihood by business, 1.99% by rickshaw or van puller, 7.25% by fishing (fisherman). Almost all of the sampled female population (33.15%) are housewives, except 0.18% teacher and 0.54% fisherwomen.

At the ferry ghats, 19.23% of the sampled population is businessmen, 7.07% are rickshaw or van pullers, 1.11% are boatmen, 7.22% are fishermen and many other common occupational groups. There are also 34.07% women who are housewives, this is similar to the vessel shelters and launch routes. About 8.89% of people are unemployed in these locations.

#### **4.2.3 Land Use**

Land use pattern adjacent to the river route has different scenarios for rural and urban sites. Terminals are established in urban or semi urban areas that have developed the Ghat areas as commercial centers of the region with shops and markets. These terminals generate sources of livelihoods for thousands of households. On the contrary, the terminals in rural regions with minimal transportation facilities are mostly surrounded by fallow land, cultivable land, ponds, ditches and canals. For example, Doulotkhan (Bhola), Sandwip, Tojumuddin, Laharhat, etc. have fewer shops and commercial entities compared to other terminals. Almost 65% of the private lands around the Ferry Ghats and Launch Ghats are found to be used for agricultural production. Majority of the titleholders use their land for commercial purposes. Majority of the non-titleholders are using GoB land for business and other purposes.

#### **4.2.4 Gender Issues**

Similar to many other regions of this lower middle income country, in the project area too, the efforts of women in socio-economic development and well-being of their family and surroundings is rather unrecognized. The sample population in this assessment study has been chosen mostly from river terminals and bordering shops and business centers, where majority are male employers or workers. However among the total household population of the survey, 45% were female. The study findings indicate that the project sites offer minimal opportunities to women. In addition to that, the study also reveals that decision making role of women in the household is negligible with only 1.03% households being headed by women.

On the contrary, better communication and transport facility may create more choices for their economic pursuit. The figure 2 gives expectations of the survey respondents. Majority of the participants believed that the project will bring more employment opportunities to women in addition to education, which will play a role in gender balance and enhance their role in business. Other than that, some respondents also highlighted that with better transport and communication facility, women will be able to receive better medical facility and overall situation for women will be developed.

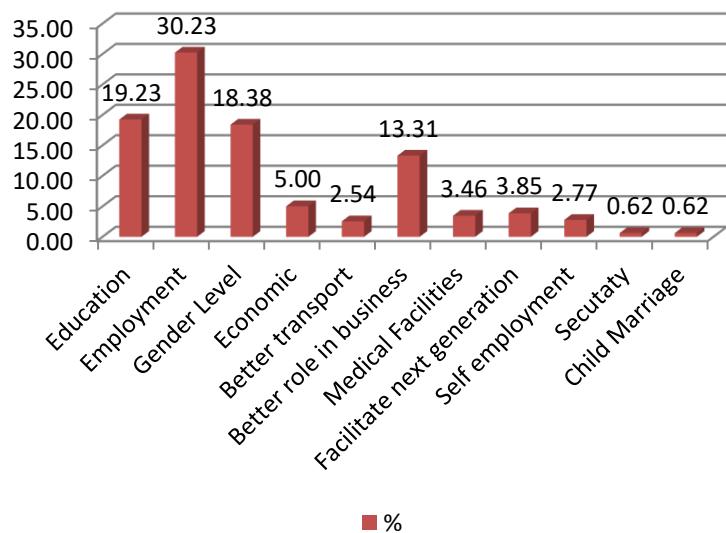


Figure 2: Project role in women empowerment;

The baseline information in the study area indicates that the project site lacks higher education as well as proper health service facilities. Special focus should be paid on sanitation facilities across river route. In addition to that, men and boys are enjoying the most of the recreational facilities compared to women, girls and children. Again, women's movement is mostly induced by household work (by the river) and socialization (ceremonies in community centers).

### 4.3 Consultations

Field surveys, consultations with different stake holders, a national consultation workshop and two regional public consultations were carried out to develop a comprehensive Resettlement Policy Framework (RPF) for the Project. Consultation meetings were held during the field visits to identify issues and problems to enable the institution to corrective measures and to identify lessons and opportunities to enhance Project implementation mechanism.

#### 4.3.1 Objectives of Consultations

The GoB as well as international donors (e.g. the World Bank) place great importance on involving primary and secondary stakeholders for determining the environmental and social impacts associated with project implementation. In order to gather local knowledge for baseline conditions, understand perceptions of the community regarding impact significance, and propose meaningful mitigation measures, participation of

stakeholders is an integral part of the environmental and social assessment process. During the preparation of the present RPF, initial consultations with the key stakeholders have been carried out to obtain their views on the Project interventions. Additional consultations have been held on this draft RPF as well as the full draft SIA for the Component 1 on 17<sup>th</sup> and 18<sup>th</sup> November 2015 at Ashuganj and Barisal, respectively. This process will be continued during the subsequent SIAs of the subprojects. The consultation process has been conceived, planned, and initiated with the following key objectives:

- To provide key project information and create awareness among various stakeholders about project intervention;
- To share the terms of reference of the current SIA and RPF for the Component 1;
- To have interaction for primary and secondary data collection with project beneficiaries, affected persons and other stakeholders;
- To identify environmental and social issues such as displacement, safety hazards, employment, and vulnerable persons;
- To begin establishing communication and an evolving mechanism for the resolution of social and environmental problems at local and project level;
- To involve project stakeholders in an inclusive manner; and
- To receive feedback from primary stakeholders on mitigation and enhancement measures to address the environmental and social impacts of the project.

#### **4.3.2 Methodology and Tools for Consultation**

The consultation and participation process undertaken so far has adopted a highly participatory approach fully involving all the stakeholders, both primary and secondary. The various tools used for consultations included household level interviews, focus group discussions (FGD), stakeholders consultation meetings, issue specific consultation meetings, open meetings, and workshops. Newspaper notifications are given before conducting regional workshops in Ashuganj and Barisal.

#### **4.3.3 Consultation Meetings and FGDs**

A total of 24 consultation meetings were held in the project areas. Both male and female stakeholders were consulted through these meetings. Additionally, teachers, businessmen, village leaders, and local government members, farmers, and fishermen were consulted individually. Female heads of the households were also interviewed. List of consultation meetings and details of participants are given in Table 8. Details of consultations meetings carried out national level in Dhaka and regional level in Ashuganj and Barisal are given in Table 9. The information on project interventions and the findings of environmental and social assessment were also be disclosed through newspapers and electronic media (e.g. internet and TV).

*Table 8: Details of Consultation Meetings at the Project sites*

S.No.	Venue	Date & Time	Numbers of male Participants	Numbers of Female Participants

1.	Sadar Ghat , Ward No – 37, Thana : Kotwali, District: Dhaka.	17.09.2015 10 AM	31	3
2.	Aganagar Ward No - 05, Thana: Keraniganj, District: Dhaka.	17.09.2015 12 PM	48	3
3.	Jinjira Bottola Union: Jinjira, Thana : Keraniganj, District: Dhaka.	17.09.2015 2 PM	21	3
4.	Munshiganj Launch Ghat Ward No – 03 Thana: Munshiganj Sadar, District: Munshiganj.	18.09.2015 10 AM	58	6
5.	Munshiganj Ferry Ghat , Thana : Munshiganj Sadar, District: Munshiganj.	18.09.2015 12.00 PM	42	3
6.	Narin Pur Ward No - 04, Thana: Titas, District: Comilla.	18.09.2015 3 .00 PM	19	4
7.	Batakandi Bazaar Ward No - 03, Thana : Titas, District: Comilla.	18.09.2015 5.00 PM	60	3
8.	Bhairab Bazaar Launch Ghat Ward No - 01, Thana: Bhairab, District: Kishorganj.	20.09.2015 10. 00 AM	39	0
9.	Ashuganj Ferry Ghat Ward No - 03, Ashuganj, District: Brahmanbaria.	20.09.15 12 .00 PM	38	1
10.	Shatnol Launch Ghat Ward No- 05, Thana : Matlab Uttar, District: Chandpur.	01.10.2015 12.30 PM	19	2
11.	Horina Ferry Ghat, Ward No- 13, Thana: Chandpur, District: Chandpur.	01.10.2015 4 .00 PM	23	0
12	Horina Ferry Ghat ( Fisherman), Ward No- 13, Thana: Chandpur, District: Chandpur.	01.10.2015 5.00PM	47	4
13.	Boro Station Mul Head, Ward No- 07, Thana: Chandpur, District: Chandpur.	02.10.2015 11.00AM	15	2
14.	Boro Station ( Camp Office), Ward No- 07, Thana : Chandpur, District: Chandpur.	02.10.2015 12.30 PM	15	2
15.	Char Bhairabi, Ward No – 06, Thana: Haimchar, District: Chandpur.	02.10.2015 6 .00 PM	39	2
16.	Moju Chawdhury Ghat, Ward No- 20, Union: Chor Romoni, Thana : Lakshmipur.	03.10.2015 12.30 PM	20	1
17.	Boyar Chor, Chairman Ghat (Fisherman), Union: Horini, Thana: Hatia, District: Noakhali.	04.10.2015 10.30 AM	17	3
18.	Chairman Ghat, 1 No Horini, Thana : Hatia, District: Noakhali.	04.10.2015 12.30 PM	29	2

19.	Tojumuddin Launch Ghat, Ward No-05, Thana: Tojumoddin, District: Bhola.	04.10.2015 1.00 PM	15	4
20.	Kaliganj Launch Ghat, Ward No-04 Ulania, Thana: Mehendiganj, District: Barisal.	06.10.2015 12.00 PM	9	0
21.	Chadpur Launch Ghat, Ward No. 07, Thana- Chandpur, District: Chandpur.(KII)	02.10.2015 10.00 AM	3	0
22.	Dawlat Khan Launch Ghat, Ward No- 08, Thana: Dawlat Khan, District: Bhola. (KII)	04.10.2015 12.30 PM	11	3
23.	Veduria Ferry Ghat, Ward No -06, Thana: Bhola Sadar, District: Bhola.(KII)	05.10.2015 12.00PM	11	0
24.	Lahar Hat, Union: Kaunia, Thana- Bondar Thana, District: Barisal.(KII)	05.10.15 2.00 PM	3	0
Total	632	48		
Grand Total	680			

*Table 9: Details of National and Regional Consultations*

Location	Date	Male Participants	Female Participants	Total Participants
Dhaka	14 Oct 2015	122	05	127
Ashuganj	17 Nov 2015	67	09	76
Barisal	18 Nov 2015	30	00	30

#### **4.3.4 Key Findings of the Consultations**

All the stakeholders and community correspondents appreciated the project. The concern of the consultation participants were mainly focused on improvement and extension of terminals, safety and security of passengers, impact on livelihood, dredging and environmental issues including management of dredged materials. The summary of points discussed in these consultation meetings are given in Table 10.

*Table 10: Summary of Consultations*

S. No.	Venues of Meeting	Findings
1.	Sadar Ghat, Dhaka	Around 30,000 businessmen depend on this ghat. Approach road is narrow. River is polluted. Toilets facilities in the terminals and water vessels are not good enough for the female.
2.	Aganagar Ghat, Dhaka	There is no launch terminal, water is polluted and around 1000 businessmen depend on this ghat. Dredging is necessary on urgent basis. Development of this ghat can increase business.
3.	Jinjira Bottola, Dhaka	Depth of the river is not enough and water is polluted extremely. Lots of businessmen do their business through the river. Lots of products are supplied from this area to all over Bangladesh
4.	Munshiganj Launch Ghat	Existing about 300 boats and 200-250 boatmen. Maximum people are businessmen and day laborers. Approximately 1,000 business institutions have been established around the launch Ghat. About 20,000 people live near the

		riverside. Everyday a lot of loaded trawlers and boats move through the river. Char has arisen in the Shitalakhya and Dhaleshwari river estuary. Dredging is needed and at the time of dredging it is needed to establish sanctuary for the fishes. The waste material from dredging need to removed away from the ghat so that it cannot come back into the river again. The dredging should be done during the winter.
5.	Munshiganj Ferry Ghat	There are not many activities seen in this ghat. Around 100 businessmen depend on this ghat. Water is polluted due to the cement factories. Polluted industrial waste directly goes to river.
6.	Naranpur, Comilla	People have welcomed the project. If the ghats are maintained properly, more people will be travelling through the river routes. Toilet facilities and security are needed to be improved for the river users/ passengers.
7.	Batakandi Bazar	There are no ghats in this area. They suggested that if there is one ghat established in this area, businessmen and local people will be benefitted. There are lots of seasonal crops in this area and it is really expensive to transport through the road. River erosion is also a major problem in this area.
8.	Bhairab Bazaar Launch Ghat	They don't have any route to transport goods to Chittagong and Dhaka. During the winter time, it is hard to use the routes. Dredging the river route of Shurma, Doulakhan and Chatak is urgent. Development of ghat is urgent as well. There is no signaling system here.
9.	Ashuganj Ferry Ghat	Near about 1,500-2,000 laborers depend on this ghat for their livelihood. They have a good communication with India through this ghat to carry their goods. The ghat is well known for the transportation of different goods and products, Many mills & factories have been built around the Ghat, as a result all the chemical contaminants of the factories directly go to the river. It is basically the cargo port. Dredging is necessary and Businessmen want to buy dredged materials.
10.	Shatnall Vessel shelter	Constructing the vessel shelter will change the livelihood of this community. People welcomed this project. Present launch ghat is really small and there is no jetty and passengers waiting room. River erosion in this area is also a major problem.
11.	Harina Ferry Ghat	Approximately 500 fishermen depend on this river for their daily earning. There are about 8,000-10,000 people living on this river embankment. Ferry moves to Harina and Alur bazaar from this ghat. A lot of raw materials are transported regularly through this ghat. Dredging is urgently required here. Due to massive river erosion, ghat has been changed 7 to 8 times. There is no jetty also.
12.	Harina Ferry Ghat (Fishermen)	Around 700 people are fishermen in this area. If the river transport and security are improved, their livelihoods will be changed. Ghats and connecting routes are needed to develop. Dredging is also required.
13.	Chandpur launch Ghat	This is one of the most important ghats in Bangladesh. It maintains a good communication route all over Bangladesh through this river. Everyday about 120-150 launches move through this ghat. There are approximately 1,000-1,200 business institutions around this ghat. Every day about 20,000-25,000 people passes through this ghat. The depth of river is well enough. Facilities for women needed to be improved.
14.	Boro Station Mul Head , Dakatiya	If the vessels shelter is constructed here, business activities and tourism will be increased. Regular maintenance of the vessels shelter is important. It can also be used as terminal all the year round.
15.	Chandpur city (KII)	Local elites welcomed this project and they suggested that connecting road to any ghats/terminals is necessary to improve. Security in the river is also important to increase the numbers of passengers.
16.	Char Bhairabi	There is no government land at the river bank. There is no passenger shade and electricity supply. A vessel shelter at the opposite side of the ghat will lead to change the livelihoods of the community.

17.	Moju Chowdhury Ghat	There are about 500-700 permanent shops and 300 temporary shops depends on this ghat. Hilsha fish is available here. Development of this ghat is really important. Dredging is necessary and businessmen love to buy the dredged materials.
18.	Boyar Char, Chairman Ghat (Fisherman Community)	There are 1,500 fishermen live here and they are dependent on the river. A lot of fishes are supplied from here to the entire Bangladesh by water ways. River sand quality is much better in this region. The land is cultivated with two crops in this area. Such as paddy, wheat, maize, sugarcane, vegetables etc. River transport cannot move without high tide so, dredging is essential.
19.	Chairman Ghat ( Owner Association)	Approximately 15,000-20,000 fishermen live in this area. There is about 600 business units around this place. About 2,000-2,500 homestead surrounding the Ghat. There is abundance of Hilsha fish. Now this Ghat is remained as unused for 20 hours. Dredging is necessary. Improvement of the ghat is also necessary.
20.	Doulat khan launch ghat	About 95% people go through on waterways. The launch move to Noakhali, Alexander, Dhaka, Monpura, Hatiya, Doulatpur etc. from this Ghat. Goods are unloaded here from Cargos. There is river erosion record and threat and it is increasing day by day. There is no traffic signalling light and jetty. The people requested for an approach road to the terminal. There is no passenger waiting room. Development of the ghat is badly needed. Ghat development is important for better business environment.
21.	Tajumuddin launch Ghat	Everyday 400-500 people use this route. Most of the passengers go to the Dhaka and Chittagong. The people use this Ghat to go Jahir uddin, chor mozammel, kolatoli, monpura from this ghat. People also come from 15 K.M away to use this Ghat. In this area there are no other means of communications without Water ways. Dredging is essential and river erosion is common here. Navigability of the river is too low.
22.	Bheduriya ferry Ghat	People can travel to Khulna and Barisal from here through water ways. It is a busy ferry Ghat, everyday ferries are crossing the river up to 7-8 times. There are almost 200-300 business units/shops here. It has also a good communication through river way with Chittagong. Navigation difficulty during the low tide is remarkable. So, dredging is essential. No signal system is available at this Ghat. Need proper management of traffic light. When the terminal is developed, more business institutions will be established.
23.	Lahar hat (vatikana )	About 400-500 people use this Ghat every day. This Ghat is center of 200-250 business institution. Most of the people in this region are Labour and businessman. Almost 200 km distance will be reduced, if the launch or ferry uses this route to go to Chittagong. Communication among Paira, Mongla and Chittagong ports is easier through Laharhat. The whole route is needed to be dredged with a proper planning.
24.	Kaliganj Launch Ghat Vessel Shelter	All the ships from Chittagong use this route for everyday movement. They use Elisha- Barishal- Hatiya- Monpura-Hijla-Noakhali-Chandpur route for their communication. About 100% people depend on this route for their daily activities. No jetty is available in the ghat. Dredging is essential in the 3 km run up to Gobindopur Char. The present condition of Ghat should be improved as early as possible. If the Ghat can be improved, there must be a chance of increasing business sector. A vessel shelter can be made in the "Village Asha" adjacent to the launch Ghat of Ulania bazaar.

#### 4.4 Project Impacts

Most of the terminals are on GoB land, but proposed launch terminal facilities will require approximately **2.093<sup>3</sup>** ha land acquisition. The proposed 6 vessel shelters are planned to

<sup>3</sup> BIWTA

be constructed on public land to avoid any negative impacts on the population near project sites.

At most of the project locations land belongs to BIWTA. This land is used for common purposes such as Ghat for boats, by the nearby communities. There are Persons without title to the land on the BIWTA land with shops and residences. Places of worship are built on BIWTA Land. BIWTA has built shops and leased them to shop keepers. This will lead to loss of livelihoods. At some locations access to common property resources such as Burial grounds will get restricted due to the present interventions. At some locations access granted to cultural practices such as immersion of ashes of the dead in rivers at certain ghats, will be impacted. Further access infrastructure such as roads will cause impacts as the present roads are narrow and they need to be widened for optimizing the capacity of the facilities built.

As per the ESIA, there are no small ethnic communities; indigenous people, at the project locations.

The following are the key social impacts due to project interventions:

1. Land acquisition and subsequent resettlement
2. Loss of Livelihoods
3. Inconvenience and nuisance during construction
4. Loss of access to CPRs
5. Likely increase in transport costs

For each of these sub-projects an RAP will be prepared, where required during the planning and design stage.

#### **4.4.1 Proposed Management Measures**

The following social management measures are proposed in this Resettlement Policy Framework:

- Development and adopting a Resettlement Policy Framework (RPF) to be used for all sub-projects under this project. This RPF should serve as a guide for further SIA studies and for preparation of RAPs under this project.
- The design will consider minimization of land acquisition and related impacts; and provides for access to graveyards, ash immersion points and other such traditional and cultural locations.
- Integrate the rehabilitation of livelihoods into design of terminals and other infrastructure facilities. Designs to consider the following:
  - Livelihoods: such as integrating shops and vendors
  - Facilities for women such as: separate counters, waiting areas, sanitation, seating arrangements
  - Facilities for disabled
  - Arrangements to continue cultural practices

- Design and general arrangement to be ready for impact identification and resettlement plan preparation
- Alternate temporary transit arrangements before resettlement
- Resettlement Policy Framework with clear entitlements
- Grievance Redressal Mechanism
- Community Engagement in planning and implementation
- Gender Mainstreaming Plan
- Disclosure: disclosure of resettlement plans

## 5. Resettlement Policy Framework (RPF)

### 5.1 Introduction

The Government of Bangladesh through the Ministry of Shipping has mandated the BIWTA to finance and develop IWT infrastructure. Now BIWTA aims to promote environmentally sound and sustainable, socially acceptable and economically viable IWT infrastructure sub-projects. BIWTA believes that each of these sub-projects will improve the living standards and the environment of populations of the locations and surrounding areas.

### 5.2 RPF - Objectives

The primary objective of the RPF is to provide guidelines for preparing mitigation plans. Another objective of this RPF is to improve the standard of living of the affected population. The other objectives of this RPF are to;

- Ensure the principles of Social Justice is adhered to at all times
- Avoid or minimize any negative impacts on the communities
- If land is required for project facilities, then same may be purchased under Willing Buyer-Willing Seller norm.
- Land acquisition using National Policy as and when required
- Assist affected population in improving their living standards, income earning capacity, and production levels, etc.
- Encourage and enable community participation in planning and implementing project components
- Provide assistance to affected communities in redressing their grievances

This RPF will address the following social issues:

- ❖ Land Procurement
- ❖ Community Engagement
- ❖ Special Attention to Women and Other Vulnerable Groups
- ❖ Grievance Redressal

### 5.3 Resettlement Policy Framework

BIWTA will use the following principles to minimize adverse impacts on affected persons and their community:

- Avoid or minimize acquisition of private lands and use as much public land as possible;
- Avoid or minimize displacement of people from homesteads, land valued higher in terms of productivity and uses, buildings/structures that are used for permanent business and/or commercial activities, dislocation of Avoid or minimize acquisition of private lands and use as much public land as possible;

- Avoid or minimize displacement of people from homesteads, land valued higher in terms of productivity and uses, buildings/structures that are used for permanent business and/or commercial activities, dislocation of Persons without title to the land /encroachers; and impacts on community facilities, such as educational institutions, places of worship, cemeteries, etc., and buildings/structures that are socially and historically important.
- Where the portion of a plot remaining after acquisition becomes economically unviable, the landowner will have the option to offer the entire plot for acquisition.
- The policy principles adopted are inclusive and cover both titled and non-titled persons. The affected without title will also be entitled for resettlement benefits.

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

- i. Resettlement of the project-affected persons will be planned and developed as an integral part of the project design.
- ii. Absence of legal titles in cases of public land users will not be considered a bar to resettlement and rehabilitation assistance, especially for the socio-economically vulnerable groups.
- iii. Vulnerability, in terms of socio-economic characteristics of the project affected persons/ households, will be identified and mitigated according to the provisions of RPF.
- iv. Homestead-losers, including the poor and vulnerable households squatting on public lands, will be compensated for their physical assets on the lands and assisted during relocation.
- v. People squatting on public lands under acquisition (without any legal agreement for right to use the land) will qualify for financial or any other form of assistance including relocation provided the project interventions affect significantly on their livelihood (lose more than 10% of their income) and cannot survive without income from the affected land/ property.
- vi. Assets like equipment, machinery or parts/ components thereof that can be dismantled and moved away intact will not be eligible for compensation, but the owners will be paid the actual costs of dismantling and moving them.
- vii. Where the project activities cause community-wide impacts affecting community facilities, access to common property resources, etc., PMU will rebuild them with Project finances or provide alternatives in consultation with the user communities.

As per the impacts of the sub-projects, i.e., if the number of PAPs exceeds 20, then a comprehensive Social Impact Assessment needs to be conducted and a Resettlement Action Plan (RAP) needs to be prepared, following the guidelines given in this RPF. When the impacts are limited, i.e., if the number of PAPs are less than 20, then an Abbreviated Resettlement Action Plan (ARAP) needs to be prepared, following the guidelines given in this RPF.

#### **5.4 Buying Land - Willing Buyer and Willing Seller**

When buying land is an easier alternative to land acquisition, BIWTA will use this options as being used by other departments under similar projects. Under the willing buyer and willing seller norm, suitable land is identified by BIWTA. After this, BIWTA representative will approach the land owner and obtain his/her consent. The willing sellers convey their readiness to sell the land in writing to BIWTA. With the local existing market price for similar land is taken as the starting point, and then a price is negotiated with the seller. The Price needs to be at least equal to the prevailing and actual market price in the area, not that of the registration value at the DC's office. After negotiating the price, BIWTA will obtain necessary internal approvals. Meanwhile BIWTA will verify the land ownership, possession, interested parties, documents, etc. with the help of Land Office. After completion of verification, BIWTA and seller both will communicate this decision to Land Office, Department of Land. The seller with the assistance of Surveyor from local registration office, gets the land surveyed and demarcated in the presence of adjoining land owners. Disputes and claims, if any will be resolved then and there. After verification, BIWTA calls a meeting with the seller where all the information about the land is shared and discussed and if seller agrees, then BIWTA will proceed further to purchase the land. The entire process of consultation, negotiation, agreement, transfer of land documents will be recorded by the BIWTA and will be available for review by the World Bank. At any point of time during the process, the seller will have the right to refuse to sell.

#### **5.4.1 Registration and Mutation of Records**

As a first step towards purchase, a Bainā deed is prepared, if necessary, and registered with the local Land Office. This deed is signed by BIWTA and Seller and token advance is given to seller by BIWTA. This Bainā deed is valid for 3 months. The deed is registered with Land Registraton Office after paying necessary fee. Once the registered deed is received, it is kept in the BIWTA office. After Bainā deed, the BIWTA will erect signboards saying that BIWTA is the owner of the land along with land transaction information. Within 3 months, a sale deed is prepared and registered with Land Registration Office. During registration the remaining amount is paid through cheque to the seller. BIWTA receives the sale deed from the Land Registration Office. This deed is kept at the BIWTA local office. Later the Land Dept updates their records, through mutation, once the BIWTA applies for mutation. From then on land belongs to concerned BIWTA.

#### **5.5 Land Acquisition**

When land needs to be acquired as per the Act, the following procedures will be followed:

- BIWTA produces Land Acquisition Proposal (LAP) to DCs with Administrative Approval from the Ministry of inland water transport on the acquisition.
- DCs carry out feasibility study of the acquisition and submit the proposal with the feasibility report to the Ministry of Land (if the land is more than 16.67 acres) or to

the Divisional Commissioner (if the land is less than 16.67 acres) for approval of each case.

- Upon approval of the LAPs from Ministry of Land (MOL) or from Divisional Commissioner, as the case may be, DC serves notice under section 3 of the Acquisition and Requisition of Immovable Property Ordinance (ARIPO), 1982 to the recorded owner of the affected property for public appraisal.
- Acquiring Body (DC) and Requiring Body (here BIWTA) representatives conduct joint verification of the affected property within 3 days of serving notice u/s-3 and wait 15 days to receive any complain from land owners.
- After that the DC serves notice u/s 6 for entertaining claims from the potential affected persons.
- On the basis of joint verification survey data DC writes letter to Public Works Department (PWD) with information of affected structures, list of trees to the Forest Department and type of crops to the Agriculture Department for valuation as per government rule.
- DC also collects recorded land price from the concerned Sub-register's office for 12 months previous time from the date of notice under section 3.
- The DC prepares award for compensation in the name of recorded owner.
- Upon placement of fund, the DC serves notice u/s 7 to the titled DPs for receiving Cash Compensation under Law (CCL) within 15 days from the date of issuing notice u/s 7.
- The affected people are noticed to produce record of rights to the property with updated tax receipt of land, declaration on non-judicial stamp paper, photograph etc. before Land Acquisition section of DC office with the claim.
- Upon fulfillment of the criteria of the DC office i.e. requisite papers and document the LA section disburse CCL in the office or at field level issuing prior notice to the DPs.
- Local Government Institutions representative identifies the affected people during receiving CCL.
- As per ARIPO 1982, DC pays compensation to the legal owner of the properties for land, structure, trees and crops.
- After receiving CCL from the LA office and obtaining clearance from the Treasury Section of the DC the entitled person (EP) deposits the CCL to his own bank account.
- One copy of the CCL will be submitted to the BIWTA office for additional payment of compensation as per RAP
- The BIWTA (or its representative; consultant or NGO) will devise ID number for the CCL holder and prepare entitled persons file and entailment card (EP & EC) for payment
- The BIWTA will prepare ID card with photograph of the EP.
- The ID card will be jointly signed by the BIWTA and its representative and photograph will be attested by the concerned UP Chairman/ Mayor or Ward Councilor of the Municipality.

- The BIWTA/ BIWTA Representative will prepare necessary documents and papers (payment debit voucher, etc.) and submit to BIWTA field office along with EP payment list (indent) and EP-EC
- BIWTA field office makes the payment to EP.

### 5.5.1 Compensation Payment Norms

BIWTA will ensure that the properties (land, structure, and non-structured assets) to be affected by the project will be compensated at their full replacement cost determined by a legally constituted Resettlement Sub-committee (RSC) as per structure and mandated outlined in the RAP. The payment of compensation and other assistance, target replacement of productive assets and restoration of loss of income and workdays by the relocated households, especially the vulnerable households will be ensured by this committee. Compensation and other cash assistance will be paid through bank bills (cheques) payable to Bank accounts opened by the affected persons eligible for compensation and assistance under RAP. The Bank account will be in the joint name of husband and wife as the case may be.

Cash Compensation under Law (CUL) will be paid through two different channels as per provision of RAP. CCL will be paid by Deputy Commissioner mandated for acquisition of land for the PMU while PMU will directly pay the remaining as per requirement of the RAPs directly to the project affected persons. PMU with the help of the project consultants will advise, assist, and monitor the affected persons receiving compensation and other cash assistance for better use of the money.

### 5.5.2 Eligibility for Compensation and Assistance

Regardless of their tenure status to the lands used for project component, the project affected persons/ households will be eligible for assistance. However, a title would be required for payment of compensation for land. Pending further investigations to identify other impacts and impacted persons, PMU will mitigate impacts on the following:

- i. **Private Landowners:** Persons who have legal rights to the acquired lands and other assets, such as houses, other structures, trees, etc. built and grown on them.
- ii. **Persons without title to the land (Squatters):** Socio-economically vulnerable persons/ households including informal settlers, who do not have legal rights to the lands, but use them for residential, commercial or livelihood purposes. They will not be compensated for land, but for the assets built and grown on the land.
- iii. **Owners of Displaced Businesses:** Compensation for income loss from businesses that are: (i) displaced from private lands and those belonging to requiring body and other public agencies and (ii) required to close down temporarily during implementation of the civil works. In both cases, compensation/assistance will apply to the actual owners of the affected businesses.

- iv. **Women headed and other vulnerable households:** Women heading the households and the households having income level up to area specific poverty line per year<sup>4</sup>, physically challenged, elderly members, etc. will be eligible for a special assistance of one-time cash grants.
- v. **Employees of Affected Businesses.** Persons who are employed in the affected businesses enterprises being operated on private or public lands.
- vi. **Rental Income Earners.** Rental income from built premises situated on private lands by any displaced persons and on public land by vulnerable displaced persons<sup>5</sup>.
- vii. **Communities and Groups.** Where local communities and groups are likely to lose income earning opportunities or access to crucial common property resources used for livelihood purposes.

### 5.5.3 Compensation Principles and Standards

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

#### Acquired lands and other assets

- a. Replacement costs based on current market price to be collected from the different cross sections of the people for an equal amount of land of same use and quality.
- b. Replacement costs of houses/structures and other immovable built items (e.g. water supply, sanitation, drainage, etc.), at current market prices of the same building materials plus the current costs of labor to build them.
- a. Current market prices of trees and other assets, which are irreplaceable. Price of fruit trees will be determined considering the maturity and harvest price of fruits.
- b. Current market prices of crops in the field or on trees, if the lands are used before harvest.
- c. If the acquired land is agricultural and amounts to 10% or more of the total productive land owned by the affected household, a transition allowance at three times the value of the crops produced in a year on the acquired land.

#### 5.5.3.1 Displacement from Homesteads

- a. **Displaced from private lands:** Relocation assistance to the affected households who can arrange their relocation on their remaining land or by purchasing alternative lands. The land owners will be paid compensation for land and structure.

<sup>4</sup> According to Bangladesh Bureau of Statistics (BBS,) the consumption expenditure for upper poverty line used in HIES 2010 that considered the minimum size of upper poverty line of BDT 1311 in rural and maximum size of upper poverty line of BDT 2038 in urban area. Acknowledging this, specific poverty lines will be derived according to HH size in particular area with rationales to inflation rates.

<sup>5</sup> Non-vulnerable PAPs those earn rental income by erecting buildings/structures on public lands will be ineligible for compensation/assistance, if the loss constitutes less than 30% of his/her total household income from all sources or the incumbent is not dependent on the rental income from this structures for his/her livelihood irrespective of size of the loss

b. **Displaced from public lands:** Relocation assistance for Persons without title to the land and unauthorized occupants in their self-relocation process by their own. They will receive cash compensation for their structure at replacement cost, transfer and reconstruction grants, and other cash entitlements plus salvageable materials at no cost. This will be decided case by case during implementation.

### 5.5.3.2 Loss of Business, Employment and Rental Income

**Temporarily closed businesses:** Where business activities come to a complete closure temporarily during construction, the owners will be paid for income loss at rates based on average daily net income for the minimum number of days needed to reopen the individual businesses or to complete the civil works but not over 30 days. This will be applicable to owners opting for temporary relocation too.

**Partially affected businesses:** Where business premises are partially dismantled and the remainder is structurally safe and useable, compensation, calculated as above, for the minimum number of days needed to repair and reopen the individual businesses or to complete the civil works but not over 30 days.

**Businesses completely displaced from present premises:** Owners of affected business will be compensated for loss of income for 60 days in case of small businesses and 45 days in case of large scale business based on average daily net income from the business. They will be assisted in relocating their business in new locations. Owners of businesses opting for permanent relocation will be entitled for this assistance.

**Loss of employment income from displaced businesses (Temporary or Permanent):** Persons who have been continuously employed by the displaced or temporarily closed businesses for at least six months up to the day of the PAP census (cut-off date) will be compensated for the period until their employers restart their operations, or for a maximum of 30 days at the rate of current daily wage rate in the Project area. The daily wage paid by the employers will be the basis for assessing wage rates for the employees.

**Loss of income from rented-out premises:** Three months' rent at the current rates for loss of rental income from premises affected on private lands and vulnerable households on public lands. PAPs' land holdings and total income from all sources have to be captured during RPF implementation for determining vulnerability.

### 5.5.4 Eligibility and Entitlement Matrix

#### 5.5.4.1 Eligibility Criteria

All PAPs irrespective of their title will be entitled to compensation and assistance based on loss and impact categories identified through census survey in respect of the policy guidelines adopted for the project. Nevertheless, eligibility to receive compensation and

other assistance will be limited by the cut-off date. The absence of legal title will not bar PAPs from compensation and assistance, as specified in the entitlement matrices.

PAPs with titles will receive compensation under law and those without title will receive cash entitlements under the RPF policy. Title owners will receive additional compensation on top of DC's payment dispossession. Vulnerable PAPs will qualify for additional assistance to facilitate their relocation and restore their livelihood status. Non-vulnerable households with structures affected will be entitled to compensation for structures and assistance for shifting and reconstruction of the same.

#### 5.5.4.2 Compensation and Entitlements

An Entitlement Matrix has been prepared for the project on the basis of field study and consultations with all stakeholders, in particular the PAPs and government officials, as a part of preparing the resettlement policy framework. A person could be eligible for compensation/entitlement in more than one category of losses and in more than one mouza. DCs will pay CCL for each mauza separately for one person whose lands/assets have been acquired in more than one mauza<sup>6</sup>. Entitle matrix is given below under table 11:

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<sup>6</sup> The awards or CCLs are determined under units of Mauza (minimum boundary under land administration system in Bangladesh). As a result, a person becomes entitled to as many awards or CCLs as the number of mauzas where his/her property is acquired. The awards are paid separately for each mauza and each category of losses i.e. land, structure, trees, etc.

**Table 11: Entitlement Matrix**

Entitled Person	Entitlement	Application Guidelines	Responsibility
• A.1 : Loss of Agricultural Land	•	•	•
• Legal owner(s), as determined by DC • Co-sharers of the acquired land	• Cash Compensation under Law (CUL), which includes 50% premium • Compensation for standing crops • Other compensation and benefits as per LA law	• Market prices of land determined by the DC. • One month's advance notice to be issued in time to harvest standing crops. • Standing crops (if any) will be assessed at the time of taking over land by DC.	• BIWTA is responsible for overall execution and coordination, • DC will pay CUL to all legal owners • BIWTA to inform PAPs of RAP policies, assist in updating records, etc.
<b>A.2 : Loss of Homestead Land</b>	•	•	•
• Legal owner • Co-sharers	• Cash Compensation under Law (CUL), which includes 50% premium on market price.	• Market prices of land • Rental Allowance	• Same as A.1
<b>A.3: Loss of Ponds and Fish Stock</b>	•	•	•
• Legal owner of the pond, • Legal tenant as per registered lease.	• Cash Compensation under law (CUL), which includes 50% premium and cost of digging. • If the pond is under lease compensation from DC as per lease conditions.	• Market price for pond. • If the fishpond is on public land or on vested land and under lease from GoB, the PAP is entitled to compensation for existing fish stock at current market price as per law.	• DC will pay CUL to all legal owners, genuine lease holders and those with the legal evidence of interest in the lands. • DC will determine CUL of fish stock and market price of pond with assistance from concerned departments.
<b>A-4: Loss of Houses/Structures Used for Living and Commercial Activities</b>	•	•	•
• Legal owner as determined by DC	• Cash Compensation under law (CUL), which includes 50% premium.	• Legal Owners: Applies to all houses/structures standing on the acquired private lands at the time of issuance of Notice-3.	• DC will pay CUL for structures to all legal owners, • DC will determine CUL

<b>A-5: Loss of Trees, Bamboo and Banana Groves</b>	<ul style="list-style-type: none"> <li>• Legal owners as determined by DC</li> <li>• People with valid lease</li> <li>• Groups sponsored by public agencies/ NGOs.<sup>7</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Timber trees and bamboos: Compensation under law (CUL) at market price.</li> <li>• Fruit-bearing trees (without timber value) and banana groups: Compensation under law (CUL) at market price.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated market value of different species of trees as per LA law, based on categorization as per Divisional Forest Office.</li> <li>• Where ownership is in group, compensation will not be paid to any individual or the sponsoring agency, but market price of trees will be paid to group members as per their share.</li> </ul>	<ul style="list-style-type: none"> <li>• DC will determine market price of trees</li> <li>• BIWTA to inform PAPs of RAP policies, assist in updating records,</li> <li>• DC will determine CUL based on price provided by Forest Department.</li> </ul>
<b>A-6: Loss of Standing Crops</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Compensation for standing crops</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated market value at harvest, to be determined by DC</li> <li>• Advance notice to be issued in time to harvest the standing crop.</li> </ul>	<ul style="list-style-type: none"> <li>• DC will determine market price of crops with assistance from Department of Agriculture Extension and Marketing Department at district level</li> </ul>
<b>B: ADDITIONAL COMPENSATION/GRANTS</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<b>B.1 Loss of Agricultural Land</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<ul style="list-style-type: none"> <li>• Legal owner(s), as determined by DC</li> <li>• Co-sharers/ to be determined by title deeds/records by DCs.</li> </ul> <p><b>Current owners and users of vested property (land) or without lease (to be identified by the PAVC during survey).</b></p>	<ul style="list-style-type: none"> <li>• Compensation Top-up on CUL to reach Replacement Cost, where applicable.</li> <li>• Transition allowance (TA) for two crops @ BDT 300/dec/ crops</li> <li>• Rental allowance for vested and non-resident (VNR) property (without lease) equivalent to DC's rate fixed for legally leased VNR.</li> </ul>	<ul style="list-style-type: none"> <li>• Current market prices of land determined by the PAVC</li> <li>• Replacement Cost includes current market price (CMP) plus stamp duty and registration cost for titling. @ 10 % of CMP</li> <li>• One month's advance notice</li> </ul>	<ul style="list-style-type: none"> <li>• BIWTA is responsible for overall execution and coordination</li> <li>• DC will pay CUL to all legal owners, and those with the legal evidence of interest in the lands.</li> <li>• BIWTA will determine Replacement Cost with assistance from the projects' Property</li> </ul>	

<sup>7</sup>NGOs or public agencies enter into contracts with groups of community peoples under the Social Forestry Rules 2004 (revised March 2010) for social forestation on slopes of flood embankments, roads, railway embankment, riversides or any other public spaces. These groups are not owner of the land but get a share of the revenues from the planted trees (sale of logs and residues) as they are also responsible to nurse the trees under the contract.

		<ul style="list-style-type: none"> <li>Compensation Top-up will be paid by BIWTA and calculated when CUL is less than Replacement Cost.</li> <li>TA will be paid to a person losing any quantity of productive land area @ BDT 300 per decimal/crop for two times</li> </ul>	Assessment and Valuation Committee and the RAP Implementing Agency
<b>B.2 : Loss of Homestead Land</b>	•	•	•
<ul style="list-style-type: none"> <li>Legal owner(s), as determined by DC</li> <li>Co-sharers to be determined by title deeds to be determined by DC</li> <li>Current owners and users of vested property (land) without lease</li> </ul>	<ul style="list-style-type: none"> <li>Compensation Top-up on CUL to reach Replacement Cost, where applicable.</li> <li>Homestead Development Allowance (HDA) for title holders and persons without title to the land</li> <li>Restoration of pre-acquisition level basic utilities (water supply, sanitation, electricity, etc.) at relocated site.</li> <li>Rental allowance (RA) for comparable living accommodations to owner users of lands.</li> </ul>	<ul style="list-style-type: none"> <li>Current market prices of land determined by the PAVC to be the basis for determining Replacement Cost and Compensation Top-up.</li> <li>Replacement Cost includes current market price and stamp duty &amp; registration cost for titling @ 10% of CMP.</li> <li>Compensation Top-up will be paid by BIWTA</li> <li>HDA for titled holder @ BDT 20,000 for each HH and for Persons without title to the land it is BDT 50 per square feet of floor area of affected primary structure</li> <li>Rental Allowance (RA) will be determined by PAVC and paid to owner users of vested property without lease.</li> </ul>	<ul style="list-style-type: none"> <li>BIWTA is responsible for overall execution and coordination, ensuring GOB's support and timely financial disbursements.</li> <li>DC will pay CUL to all legal owners</li> <li>DC will determine CUL and BIWTA will determine Replacement Cost with assistance from the projects' Property Assessment and Valuation Committee.</li> </ul>
<b>B.3: Loss of Ponds and Fish Stock</b>	•	•	•
<b>Legal owner of the pond to get compensation for land area, while Persons without title to the land to get compensation for fish stock.</b>	<ul style="list-style-type: none"> <li>Compensation Top-up payment on CUL to reach Replacement Cost</li> <li>Market price of fish stock (PFS) and PAPs are allowed to harvest and take away the fish stock.</li> </ul>	<ul style="list-style-type: none"> <li>If the fishpond is on public land or on vested land and not under lease from GoB, the PAP is entitled to compensation for existing fish stock at current market price</li> </ul>	<ul style="list-style-type: none"> <li>BIWTA is responsible for overall execution and coordination, ensuring GOB's support and timely financial disbursements.</li> <li>BIWTA will determine current market price of fish stock and Replacement Cost of pond with assistance from the PWD.</li> </ul>

<b>B.4: Loss of Houses/Structures Used for Living &amp; Commercial Activities</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<ul style="list-style-type: none"> <li>• Legal owner as determined by DC</li> </ul>	<ul style="list-style-type: none"> <li>• Compensation Top-up payment on ODC's CUL to reach the replacement cost</li> <li>• Structure Transfer Grant (STG)</li> <li>• House Construction Grant (HCG)</li> <li>• Vulnerable and female headed households will get special cash assistance.</li> <li>• All house/structure owners are permitted to take away the salvageable building materials free of cost.</li> </ul>	<ul style="list-style-type: none"> <li>• Legal Owners: Applies to all houses/structures standing on the acquired private lands at the time of issuance of Notice-3.</li> <li>• Persons without title to the land will be paid compensation (replacement cost) for all structures built on public lands.</li> <li>• Shiftable Structure - Structure transfer grant (STG) for shiftable structures will be @ 10% (ten percent) of the replacement cost of structures and House construction grant (HCG) @ 10% (ten percent) of the replacement cost of structures;</li> <li>• Non-Shiftable Structure - STG only for non-shiftable structures @ 10% of replacement cost of the structure.</li> <li>• Vulnerable households: One-time cash assistance @ BDT 5,000 (five thousand).</li> <li>• Women headed vulnerable households without adult male members to shoulder household responsibilities will get additional one-time cash assistance of BDT 5,000 (five thousand).</li> <li>• Small mobile structures on wooden or bamboo legs (poles not fixed on ground) which can be shifted without dismantling (structures on legs) are not eligible for compensation (small pan-bidi shops, groceries, tea stalls, etc.) but will be assisted in finding alternative location and given Structure Transfer Grant (STG) to cover any damage and cost of shifting @ 10% (ten percent) of the replacement cost of structures.</li> </ul>	<ul style="list-style-type: none"> <li>• BIWTA to inform PAPs of RAP policies, assist in updating records, pay Top-up, HCG, STG, HDA and SGB, and monitor and report progress on RAP implementation.</li> <li>• BIWTA will determine Replacement Cost of structures with assistance from the PWD.</li> </ul>

		<ul style="list-style-type: none"> <li>• Tenants of residential or commercial premises will be eligible for shifting grant of BDT 5000 (five thousand) for shifting of belongings and one month rental allowance @ BDT 3000 (three thousand).</li> </ul>	
<ul style="list-style-type: none"> <li>• Non-titled persons and Persons without title to the land those own houses/structures built on public lands/BIWTA's lands (shops and residences)</li> </ul>	<ul style="list-style-type: none"> <li>• Replacement cost of structures determined by PAVC.</li> <li>• Structure transfer grants (STG) and House construction grant (HCG) for houses/structures.</li> <li>• Eligible for plot of 4.00 decimal at CUL value in the RS if they desire so.</li> <li>• Homestead Development Allowance (HDA) for land development</li> <li>• Vulnerable and female headed households will get special cash assistance.</li> <li>• All house/structure owners are permitted to retain the salvageable building materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>
<ul style="list-style-type: none"> <li>• B.5: Loss of Trees, Bamboo and Banana Groves</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<ul style="list-style-type: none"> <li>• Legal owners Socially recognized owners, such as Persons without title to the land</li> <li>• People with valid lease from GOB agencies.</li> <li>• Groups sponsored by public agencies/ NGOs.<sup>8</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Compensation Top up (if any) on DC's CUL for timber trees, bamboo, fruit bearing trees (with timber), etc. and 30% of timber value in case of fruit bearing trees.</li> <li>• Banana groves: Compensation Top up on DC's CUL estimated for one time crop of each grown-up tree on private</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated market value of different species of trees, based on categorization as per Divisional Forest Office.</li> <li>• Value of fruits for the grown up (big and medium) trees will be calculated as 30% of timber value for one year.</li> </ul>	<ul style="list-style-type: none"> <li>• BIWTA to inform PAPs of RAP policies, assist in updating records, pay market price Top-up, HCG, TRG, and CS, and monitor and report progress on RAP implementation.</li> <li>• DC will determine CUL and BIWTA will determine Replacement Cost</li> </ul>

<sup>8</sup> NGOs or public agencies enter into contracts with groups of community peoples under the Social Forestry Rules 2004 (revised March 2010) for social forestation on slopes of flood embankments, roads, railway embankment, riversides or any other public spaces. These groups are not owner of the land but get a share of the revenues from the planted trees (sale of logs and residues) as they are also responsible to nurse the trees under the contract.

	<p>land or current market value planted on government land (not covered by DC).</p> <ul style="list-style-type: none"> <li>• Trees grown under public/NGO sponsored program</li> </ul>	<ul style="list-style-type: none"> <li>• Where ownership is in group, compensation will not be paid to any individual or the sponsoring agency.</li> </ul>	<p>of structures with assistance from the projects' Property Assessment and Valuation Committee</p>
<ul style="list-style-type: none"> <li>• B 6: Loss of Standing Crops</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<ul style="list-style-type: none"> <li>• Cultivator whether owner, lease holder, tenant, sharecropper, etc. (formal or informal arrangements) identified by Census and verified by PAVC.</li> </ul>	<ul style="list-style-type: none"> <li>• Compensation Top up (if any) on DC's CUL for legal owner and market price of crops planted on GoB land by local people</li> <li>• Cultivator will retain the crops and plants.</li> </ul>	<ul style="list-style-type: none"> <li>• Estimated market value at harvest, to be determined by PAVC.</li> <li>• Advance notice to be issued in time to harvest the standing crop.</li> </ul>	<ul style="list-style-type: none"> <li>• Same as above</li> </ul>
<b>B.7 Loss of Community Properties</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
<ul style="list-style-type: none"> <li>• Community/ Managing Committee of the affected Community properties constructed on Private/ Wakfo or Government land including access to graveyards and immersion points</li> </ul>	<ul style="list-style-type: none"> <li>• Compensation Top-up on DC's CUL to reach the Replacement Cost or Replacement Cost in case of non-payment by DC.</li> <li>• Structure Transfer Grant (STG)</li> <li>• House Construction Grant (HCG).</li> <li>•</li> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>• Project Authority and consultant will consult the Community including Managing Committee to finalize relocation site of the new community structure</li> <li>• Community structure will be better or at last similar to the previous one if it is constructed by the project.</li> <li>• If the structure is constructed by the managing committee, the project will ensure monitoring during construction.</li> <li>• In case on mosque, the affected one cannot be demolished until new one is constructed</li> </ul>	<ul style="list-style-type: none"> <li>• BIWTA to inform PAPs of RAP policies, assist in updating records, pay Top-up, STG, HCG, and monitor and report progress on RAP implementation.</li> <li>• BIWTA will determine Replacement Cost of structures with assistance from the projects' Property Assessment and Valuation Committee and the INGO</li> </ul>
<b>C. OTHER RESETTLEMENT BENEFITS</b>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>
C.1: Loss of Business Income from Displaced Commercial Premises	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>	<ul style="list-style-type: none"> <li>•</li> </ul>

<ul style="list-style-type: none"> <li>Business operators in the affected permanent premises (title-holders and non-title holders; whether owning or renting premises)</li> <li>Owner of the rented-out premises situated on private and public lands</li> </ul>	<ul style="list-style-type: none"> <li>Compensation for loss of business/trading income.</li> <li>Cash assistance for 30 (thirty) days for temporarily relocation business</li> <li>Cash assistance for 60 (sixty) days net income for Permanently relocated business</li> <li>Compensation for loss of rental income from rented-out premises on the right of way.</li> </ul>	<ul style="list-style-type: none"> <li>Compensation for loss of permanent loss of business income for large-scale<sup>9</sup> business premises based on average daily net income but not over 1000 (one thousand) per day for 45 (forty five) days as determined by PAVC.</li> <li>Compensation for loss of permanent loss of business income for small and medium business premises based on average daily net income but not over BDT 500 (five hundred) per day for 60 (sixty) days as determined by PAVC.</li> <li>Partially and temporarily affected business owners will receive compensation for the number of days needed to repair and/or reopen the businesses not exceeding 30 (thirty) days @ daily net income but not over BDT 500 (five hundred)/day.</li> <li>Three months' rent to owner of the rented out premises on private land, as determined by PAVC.</li> </ul>	<ul style="list-style-type: none"> <li>DC may determine compensation for loss of business income based on onsite verification jointly with BIWTA or only consider business structures.</li> <li>BIWTA will determine average net daily income from affected businesses with assistance from the projects' Property Assessment and Valuation Committee and the IA and based on findings will determine compensation for loss of business/rental income.</li> <li>BIWTA to inform PAPs of RAP policies assists in updating records, pay Top-up or market price, and monitor and report progress on RAP implementation.</li> </ul>
C 2: Temporary Loss of Income (Wage Labors in affected shops )	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>
<ul style="list-style-type: none"> <li>Adult persons employed continuously for at least six months in businesses displaced from private and public lands.</li> </ul>	<ul style="list-style-type: none"> <li>Grant to cover temporary loss of income (GTL) from wage employment</li> </ul>	<ul style="list-style-type: none"> <li>Length of employment to be counted backward from the cut-off date.</li> <li>GTL will be equivalent to 30 days wage at the rate of daily wage at current market price determined by PAVC.</li> </ul>	<ul style="list-style-type: none"> <li>BIWTA will determine average daily wage rate in the project area with assistance from the projects' Property Assessment and Valuation Committee and the IA and based on findings will determine compensation for loss of wage.</li> </ul>

<sup>9</sup> Business premises operating large business such as industry, wholesale depot, etc. and having Income Tax certificate

• Women and other Vulnerable persons	<ul style="list-style-type: none"><li>• Additional allowance of 30% over and above the entitlements</li><li>• Women will be actively considered and will get employment opportunities in created by project and as specified in RPF.</li></ul>	<ul style="list-style-type: none"><li>• RPF guidelines for women and other vulnerables</li></ul>	<ul style="list-style-type: none"><li>• BIWTA Environment and Social Cell</li></ul>
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## 5.6 Dredged Material Disposal Plan

It is estimated that the dredged material will be of 5.8 million cu.m. Composition of the dredged material is dominated by sand followed by silt and clay in the lower reaches. All the dredged material will be disposed-off in the River/ Estuary and/or Scour Holes.

On-land disposal of the dredged material will not be undertaken. If any such requirement arises, there will be a written agreement with individual/ communities requesting the facility. However, the following will not be used for disposal of dredged material.

- Government Land with Encumbrances
- Land likely to cause adverse impact on income and livelihood of individual or community
- Agriculturee land
- Beels/ Marshy /Reed land

### Principles for lease agreement

The Project Management Unit of the Bangladesh Inland Water Transport Authority (BIWTA) will arrange land for disposal of the dredged materials following GoB law i.e. Acquisition and Requisition of Immovable Property Ordinance 1982 (Ordinance No. 2) and subsequent amendment until 1994. The procedure for this is described in detail in this RPF. The land will be requisitioned through the concerned Deputy Commissioners of the project districts. The PMU will pay the required amount to DC office as per law as required for renting/leasing for the particular land for the sand deposition. DC office will annually assess the rent for the land and claim fund from the PMU to disburse to the lessees. A lease agreement would be signed between the PMU and the land owners according to the broad principles as under:

1. DC will identify the actual owners of the proposed land taking into account of the record of rights to the property
2. Rent would be paid through the DC office on yearly basis at the beginning of the year
3. Land will be used for project purposes only (sand deposition)
4. Land will be restored to original condition and returned to the land owners after agreed lease period.
5. The lease agreement will be based on requisition of land

The locations of options for dredge material disposal are given in table 12 and 13 below:

**Table 12: Details of Dredging and Dredged Material Placement Locations in the River**

**Table 13: Details of Dredging in the Loop Rivers and Dredged Material Placement Locations on the Land**

Route No.	Name of the River	Part of Upper Meghna or Lower Meghna	Priority	Route Class	Channel Width, m (no slope)	Dredging Depth, m	Base Line Dredge Volume, m <sup>3</sup>	Potential Annual Volume with 50% Re-Sedimentation Rate, m <sup>3</sup>	Minimum Dredging Distance to be Maintained from Banks/Chars, m	Position of the Disposal location		Distance from Dredging to Placement Site, km	Area, m <sup>2</sup>	Maximum Volume that can be Disposed at the Placement Location, m <sup>3</sup>
										Easting (BUTM_X)	Northing (BUTM_Y)			
1 & 2	Upper Meghna	Upper	A	1	76	-4.3	37,500	56,250	100 m	560116	2582960	1	190,000	570,000
5	Upper Meghna	Upper	A	1	76	-4.3	236,000	354,000	100 m	601533	2658403	5	146,330	438,990
										589324	2643917	1.3	500,000	1,500,000
7&8	Upper Meghna	Upper	B	2	76	-2.8	370,000	555,000	100 m	583069	2641001	1.2	290,000	870,000
9	Upper Meghna (Branch)	Upper	C	3	30	-2.1	126,800	190,200	100 m	584135	2630914	1	34,500	103,500
										581828	2627380	1	33,500	100,500
										579518	2623529	1	34,000	102,000
Total								1,155,450						3,684,990

## 5.7 Community Engagement

BIWTA will ensure the engagement of target communities through continued consultations for planning and full community management of implementation and monitoring of sub-project activities. Consultations will be held at regular intervals with target communities, GS/ GP/UP members, Women, etc. In general, the following consultations will be carried out during the project cycle.

- Socio-economic survey for preparing the baseline of the PAPs and vulnerable families
- Estimation of land requirement; possibilities of willing sale
- Motivation of titleholders to facilitate the willing sale
- Implementation of the IEC/ Communication plan for awareness creation about project activities
- Identifying livelihood support programs
- In order to keep the momentum of engagement, activity specific consultations and a quarterly overall consultation will be held with all community groups.

### 5.7.1 Stakeholder Participation

BIWTA recognizes the fact that affected communities are primary and key stakeholders of the project. Hence, the BIWTA would ensure that these stakeholders are consulted on issues and they participate in all the sub-project activities including planning and implementation. The BIWTA would address the legitimate concerns of community members and provide opportunities and avenues for consultation and their participation. In order to provide a sense of ownership and ensure sustainability, the community members would be a part of the decision making process. The project has a commitment for community participation in each of the sub-projects taken up.

## 5.8 Special Attention to Women and Other Vulnerable Groups

The vulnerable groups include Women Headed Households, Destitutes, Below Poverty Line families, Old Aged, Differently Abled, Chronically Ill and Orphans. It is envisaged that in the course of conducting Social Assessment and preparing and implementing Social Management Plans and Resettlement Action Plans, interests of these vulnerable groups would be adequately addressed and protected.

### 5.8.1 Vulnerable Groups

Like in other projects, as per available experience, in these sub-projects as well, women are likely to experience differential socio-economic setbacks due to their disadvantaged positioning within socio-economic structures and processes. This is likely to be manifested most in the adverse conditions to their participation and engagement. In order to mitigate such impacts, BIWTA during verification and socio-economic survey shall collect information on the following:

- Number of women headed households and Small Ethnic Communities households and other vulnerable persons
- Socio-demographic characteristics of affected women and Small Ethnic Communities and other vulnerable groups
- Health status including number of children per woman
- Women's role in household economy by collecting information on usual activity; occupation; etc.
- Time Disposition
- Decision making power among women

As women are often the worst victims of transition between poverty and alleviation, they have to be integrated in the project as full-fledged participants taking part in all the stages of the project starting from planning through implementation and on to the post-project stages. This is the only way to make sure that the process of restoring living standards an exercise in equitable distribution of resources and benefits in a gender sensitive manner.

### **5.8.2 Actions to be taken**

The BIWTA and its representative offices has to perform following tasks:

- Ensure participation of vulnerable groups in project activities
- Ensuring project benefits to vulnerable persons
- Carrying out other responsibilities towards vulnerable groups

Participation and engagement of women and other vulnerable groups can be ensured specifically in the following ways:

- During the project initiation, conduct a survey and identify Women and Other Vulnerable Groups in the village. Document their details, socio-economic status, poverty, vulnerability, etc. during this survey.
- Ensure that the women and other vulnerable groups are consulted and invited to participate in group-based activities, to gain access and control over the resources.
- Ensure that women and other vulnerable groups are actually taking part in issuance of identify cards, opening accounts in the bank, receiving assistance amounts through cheques in their name, etc. This will further widen the perspective of participation by the women and other vulnerable groups in the project implementation. While registering properties make sure they are registered in both the spouses names.
- Provide separate trainings to women and other vulnerable groups for upgrading the skill in the alternative livelihoods and assist throughout till the beneficiaries start up with production and business.
- Initiate women's Self-Help Group linking with special development schemes of the Government. Also form special SHGs for other vulnerable groups where possible and required.
- Encourage women and other vulnerable groups to evaluate the project outputs from their point of view and their useful suggestions should be noted for taking necessary actions for further modifications in the project creating better

and congenial situation for increasing participation from women and other vulnerable groups.

- Wherever possible, women and other vulnerable groups involvement in construction activities should be encouraged in order to help them have access to benefits of project activities.

All these done in a participatory manner might bring sustainable results in positive outcomes including income improvement of women and other vulnerable groups.

#### 5.8.2.1 Other Actions

The following actions would result in women and other vulnerable groups' participation and their engagement.

- Cases of assistance to vulnerable groups/ persons should be handled with care and concern considering their inhibited nature of interaction.
- All assistances would be paid in a joint account in the name of both the spouses; except in the case of women headed households and women wage earners.
- BIWTA representatives shall prepare a list of able bodied and willing women and other vulnerable persons for constructional activities and utilize their services.
- At present there are not many women among the project staff. It should be noted that this project primarily interacts and deals with women at village level, but the number of women staff at cluster, district and regional level is far below that of men. Hence, at least half (subject to a minimum of one third) of the project staff and all other involved agencies (including consulting agencies) staff should be woman. When qualified/ skilled women are not available, women with lesser qualifications/ skills may be employed and trained. They may be encouraged and facilitated to obtain the necessary qualifications and/or skills during the employment. Women personnel may be replaced during the period of project contract, only with women persons of equivalent qualifications and experience.
- Same wage rate for men and women must be ensured.
- Small ethnic communities' population identified and they should be given first preference in selection for any project benefit, viz., infrastructure, demonstration projects, tube wells, livelihoods, etc.
- The petty contracts arising out of the sub-project should be considered for entrusting to SHGs on community contract basis.
- While selecting community members for training at least half of them should be women and vulnerable persons.

### 5.9 Grievance Redress Mechanism (GRM)

#### 5.9.1 Objective of the GRM

The Project will establish a project level Grievance Redress Mechanism (GRM) which will be implemented by Project Implementation Unit (PIU) at BIWTA with an aim to respond to queries or clarifications about the project, resolve problems with implementation and addressing complaints and grievances. The GRM will focus on corrective actions that can be implemented quickly and at a relatively low cost to resolve identified implementation concerns before they escalate to the point of harm or conflict. GRM will serve as a channel for early warning, helping to target supervision to where it is most needed and identify systemic issues.

The GRM will directly focus on and seek to resolve complaints (and requests for information or clarification) that pertain to outputs, activities and processes undertaken by the Project, i.e., those which (i) are described in the Project Implementation Manual; (ii) are funded through the Project (including counterpart funds); and (iii) are carried out by staff or consultants of the organization, or by their partners and sub-contractors, directly or indirectly supporting the project. It is envisaged that such cases would fall under (but are not limited to) the following categories:

- request for information, comment or suggestion, e.g., request for clarification as to the delay in reimbursing expenses of participants in a given training event;
- violation of rights or non-performance of obligations, e.g., complaint by consultant or firm whose contract is suspended as a result of presumed poor performance or non-delivery of agreed-upon outputs;
- grievances or offenses involving a violation of law, e.g., allegations of corruption; and
- complaints against project staff, members of project committees, consultants, and sub-contractors involved in project implementation

GRM will be implemented in two phases: 1) Phase 1 to support safeguards implementation, 2) Phase two of GRM will cover all components and overall project implementation. A formal grievance redress process for phase two will be outlined in the project's operational manual and a protocol will be set up and distributed to project staff and implementers. The project level protocol will build on existing GRM system developed by BITWA and experience of the initial GRM protocol which supports implementation of the safeguards explained below. The GRM will be IT based supported by toll free helpline.

It is envisaged that the Project Implementing Unit (PIU) will have a dedicated person who can oversee the preparation of the guidelines and rollout of the project GRM. The Secretary of BITWA will be responsible for overseeing the overall GRM.

### **5.9.2 Scope of GRM**

In the first phase the project will focus on establishing protocol and procedures for GRM related to safeguards as required per Bank policies. Bank-financed projects that trigger the OP 4.12 on Involuntary Resettlement require projects to establish a GRM in order to collect grievances related to the resettlement process which applies to this project. The scope of such GRM is relatively narrow, as it only solicits complaints from project

beneficiaries that are affected by project activities and covered by dedicated Resettlement Action Plans (RAPs) thus the project protocol will be extended and expanded later to cover all project related grievances throughout project cycle.

In phase two, the project-level GRM will not only aim to address social but also environmental, financial management, procurement and other issues and will build on grievance system practices set up to meet requirements of OP 4.12. It will also build on existing informal and traditional structures of grievance redress—such as village committees and local user groups involved in delivery of the project and may be a cost-effective and a more accessible approach to grievance redress. However, its impartiality would need to be carefully examined before relying on traditional systems. Given that poor and marginalized communities often face the most obstacles in accessing and using GRMs, throughout the design process special attention must be given to integrating design features that make GRMs participatory and socially inclusive.

### **5.9.3 Phase One - GRM under Safeguard Issues**

In the first phase of the GRM, the proposed GRM will build on existing BIWTA GRM system and will be supported to setting up of Toll Free number to register complaints for which the back of system will need to be developed to ensure that the following steps are followed:

- A. List of front line staff, district and PIU with clear roles and responsibilities and the contact details. This is required to forward the complaint to the concerned official responsible for the task that may generate complaint and will be responsible for resolving too.
- B. Outsource only the management of the system “receiving, registering, forwarding and closing the grievance”.
- C. Grievance will be addressed by the concerned person responsible for the task.
- D. During this phase the GRM would cover all grievances apart from the resettlement related issues.

Given below is the suggested work-flow:

- Receive Complaint through the toll free number.
- Register Case no by issuing a complaint number to the complainant; Date and channel of receipt; Name of complainant; Gender, Father or husband, Complete address,
- Nature of compliant – list of options (loss of land/property or entitlements),
- Forward the compliant to the concerned person immediately via SMS.
- Within five days complain examined and resolved and reported on line.
- If not resolved within five days, SMS alert is sent out by the system to senior management.
- Complaint investigated and resolved within seven days from the date of receiving the complaint.
- Confirmation received from complainant on grievance redress and ticket number closed.

- Monthly reports to be generated from the system that provides feedback to improve the process of implementation of RPF.

Option for the complainant to move to the court is available under the existing laws

#### **5.9.4 Phase Two – Establishment of Implementation Arrangements for Setting up Project Level GRM**

This phase will start along with the start of civil works/ contracts. Experience from the phase one of GRM implemented to support social and environment safeguards will be used to extend the protocol and inform the design of project wide GRM. The project PIU will need to identify groups of users that are likely to use the GRM and assess the resources – human, financial, and technological – that are available (and required) for the GRM to function effectively while establishing the protocol to support all project components and implementation. PIU will need to develop standard operating procedures and flowcharts to detail how the grievance redress process will unfold within the project's operating structures and how it will be monitored and reported on. The overall process will be overseen by BIWTA Chairman. More specifically;

- Assign a dedicated GRM officer at the PIU (e.g. drafting operating procedures, guidelines and manual, and stand-alone information for GRM staff and users); and assign grievance redress responsibilities and train staff at the local level to handle grievances
- Raise awareness of the availability of the GRM through project-related events and by posting information about the GRM in public locations / project sites (e.g. via project boards)
- The communications strategy should aim to reach out to poor and marginalized groups and communication materials should be translated into local language
- Accept grievances through a variety of locally-appropriate channels (e.g., in-person, phone – set up toll free number, email);
- Register all grievances (e.g., ensure that all complaints lodged through local authorities are logged and tracked, and that data on resolutions is made public)
- Follow a clear and transparent procedure of complaint investigation (e.g., field visits, inspection of contractors and/or local project implementation teams, discussion with relevant service providers, etc.)
- Take a remedial action within a specified amount of days
- Monitor and evaluate grievance-related data

#### **5.9.5 Legal Options to Aggrieved Parties**

The aggrieved parties will have two kinds of options for addressing their grievances. One is the grievance redress mechanism incorporate in this framework as above. The other is the general legal environment consisting of court of law to address their grievances. These options will be disclosed to the communities during the public consultation process.

### **5.9.6 Grievance Redress Service of The World Bank**

In addition to seeking to resolve their grievances through the GRM established at the government level, “communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project such as this operation may also submit complaints to the Grievance Redress Service (GRS) established by the World Bank. The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may also submit their complaint to the WB’s independent Inspection Panel, after having brought the complaint to the World Bank’s attention through its GRS. Information on how to submit complaints to the World Bank’s Grievance Redress Service is available at <http://www.worldbank.org/GRS>. Information on how to submit complaints to the World Bank Inspection Panel is available at [www.inspectionpanel.org](http://www.inspectionpanel.org).

### **5.10 Institutional Arrangements and Capacity Enhancement**

BIWTA will arrange for RPF/ RAP/ ARAP implementation and monitoring mechanism. The Project Implementation Unit (PIU) will have a Environmental and Social Cell in the PIU. These arrangements are given in Figure 3. At overall project level all RPF/ RAP/ ARAP oversight will be ensured by BIWTA. A Joint Director of BIWTA will head the Environmental and Social Cell of BIWTA. Two Deputy Directors, one each in charge for Environment and Social aspects of the project. The Deputy Director Social will be assisted by a Senior Land Acquisition and Resettlement Specialist and two other consultants each in charge for Community Engagement and Gender. The ESIA consultants will conduct ESIA for sub-projects and prepare RAPs. The Supervision Consultants and Contractors will have Environmental and Social Specialists to supervise and implement RAP/ARAP provisions. NGOs will be commissioned for implementation of RAPs/ ARAPs. M&E Consultants will do the quarterly monitoring and mid-term and end-term impact evaluation and assessments. The arrangements for overseeing RPF compliance and RAP/ ARAP implementation are given in Table 13.

The following are the functions of Senior Land Acquisition and Resettlement Specialist and Social Team:

- Ensuring overall implementation of the RFP/ RAP/ ARAP in the project.
- Coordinating on a day-to-day basis with the implementing agencies for implementation of the RFP/ RAP/ ARAP.
- Advising and assisting the BIWTA and implementing agencies during the appraisal of the sub-projects to be taken up.
- Acting as an early warning system for the BIWTA with regard to the actions to be taken as per the RFP/ RAP/ ARAP.
- Preparing regular quarterly reports on the social compliance for the BIWTA for its own use or for transmission to The World Bank
- Ensuring that recommendations from supervision and monitoring are integrated into the project and the RFP/ RAP/ ARAP is updated periodically as necessary.
- Conducting social supervision of sub-projects on a quarterly/ half yearly basis.

- Taking all those actions which are necessary for effective implementation of the RFP/ RAP/ ARAP.
- Training and orientation of the PMU and implementing agencies' teams on the requirement, application and implementation of the RFP/ RAP/ ARAP.
- Reviewing the monitoring and evaluation reports submitted by the M&E Consultants to check compliance with the RFP/ RAP/ ARAP, as applicable to the sub-component/activity.
- Regularly visit project sites to review compliance with RFP/ RAP/ ARAP.
- Provide guidance and inputs to the BAPEPS and implementing agency teams on social management aspects.
- Ensure that GRM is functioning and act as a single point of contact for resolving queries related to social issues.

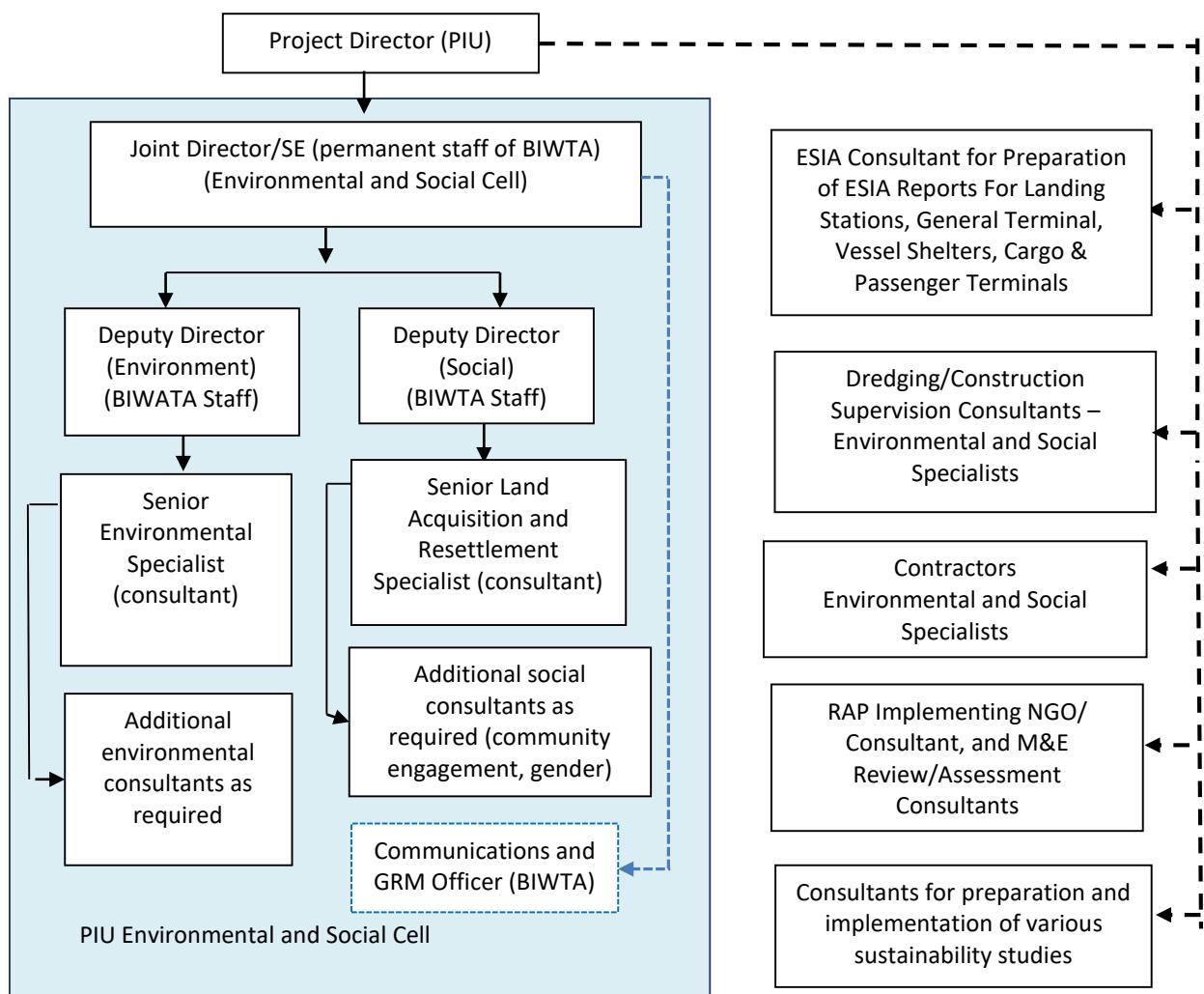


Figure 3: Institutional Structure for Environmental and Social Management of the Project

**Table 14: Institutional Arrangements and Functions for RPF Compliance**

Level	Organisation	Functions
Project	BIWTA Environment and Social Cell	<ul style="list-style-type: none"><li>➤ Orientation and training to Field Units on RPF/ RAP/ ARAP and providing oversight on the SIA process and its outputs.</li><li>➤ Assisting in fulfilling requirements for all Category sub-projects</li><li>➤ Review of monitoring reports submitted by the M&amp;E Consultants on RAP/ ARAP implementation.</li><li>➤ Regularly visiting sub-project sites to review RPF compliance during sub-project planning and implementation.</li><li>➤ Providing guidance and inputs to the Field Units on social management aspects.</li><li>➤ Managing Monitoring Evaluation of RPF/ RAP/ ARAP implementation.</li><li>➤ Preparing Quarterly Compliance Reports and sharing them with The World Bank.</li><li>➤ All the actions related to ensure compliance with RPF.</li></ul>
Field	NGO	<ul style="list-style-type: none"><li>➤ Managing RPF/ RAP/ ARAP implementation and monitoring</li><li>➤ Collecting data for monitoring.</li><li>➤ Providing social assistance to communities.</li><li>➤ Coordination with the other agencies for RPF compliance.</li><li>➤ Monthly reporting on RPF compliance to BIWTA.</li><li>➤ All the actions related to ensure compliance with RPF as directed by BIWTA.</li><li>➤ Compliance screening and Categorization of all sub-Projects and support in preparation of RAPs/ ARAPs.</li></ul>

### **5.10.1 Monitoring, Evaluation and Assessment**

An M&E Consultants will be commissioned to conduct quarterly monitoring and evaluation and report to BIWTA. The quarterly monitoring and evaluation will be done by these consultants. They will visit about an appropriate percentage of all category sub-projects, as decided by BIWTA. They will prepare appropriate formats for monitoring. BIWTA will send quarterly Monitoring Reports on RPF compliance to The World Bank. The M&E Consultants will conduct mid-term and end-term evaluation of RAPF/ RAP/ ARPA implementation. There is a need to internalize the Social Safeguards Management processes at all levels, as these cannot be treated as stand-alone and parallel functions any more. This internalization of social processes helps in better implementing the safeguards provisions, provided the capacity of implanting supervising agencies is adequately built in Safeguards Management.

### **5.10.2 Social Monitoring Indicators**

The monitoring indicators are presented in table 14. While these are general, indicators can be added based on the sub-projects.

**Table 15: Social Monitoring Indicators**

<b>Monitoring Indicators</b>	<b>Frequency</b>	<b>Agency</b>
<ul style="list-style-type: none"><li>• Payment of compensation and entitlements before replacement</li><li>• Time taken for land acquisition</li><li>• Number of grievances registered and resolved</li><li>• Number of court cases</li><li>• Income patterns</li><li>• Land holding status</li><li>• Income from land</li><li>• Changes in occupations</li><li>• Housing status (area, floor, walls, roof, etc.)</li><li>• Ownership of household assets</li><li>• Length of rural roads (connectivity to nearest launch ghats)</li><li>• Journey time</li><li>• No. of training programs conducted</li><li>• No. of personnel trained</li><li>• Trainees' understanding of the training content</li><li>• Achievement of learning objectives</li><li>• Adherence to contract conditions and standards (housing, sanitation, crèches, use of local labour, equal wages to men and women, avoidance of child labour, etc.)</li><li>• Absence of inconvenience and nuisance during implementation</li><li>• Adherence to RPF/ RAP/ ARAP provisions/ guidelines during sub-project preparation and implementation</li></ul>	<ul style="list-style-type: none"><li>• Quarterly by Independent Consultants</li><li>• Annually by PIU</li></ul>	<ul style="list-style-type: none"><li>• PIU guiding the collection of information on indicators</li><li>• M&amp;E Consultants</li><li>• Implementing NGO</li></ul>

### 5.10.3 Capacity Enhancement

In order to enhance the capacity of BIWTA in social safeguards implementation several measures are proposed. These include a). orientations on RPF/ RAP/ ARAP and its components, b) national and international trainings on Social Assessment, Social Management and RAP Implementation. A detailed Capacity Enhancement Needs Assessment (CENA) need to be taken up for this purpose. The training programs will need to be designed as per the recommendations of this CENA. However, lump sum budget is provided for these initiatives.

### 5.11 RPF Budget

The total administrative budget for RPF implementation and social management activities under this project has been worked out as US\$. 2.2 Million. The cost of implementing the proposed mitigation measures under respective Resettlement Action Plans (RAPs/ ARAPs), staff costs are not included in this costing. The detailed breakup of the administrative budget is presented in the table below.

**Table 16: Administrative budget for RPF activities**

S No.	Activity	Amount in US\$
1	Social Safeguards Capacity Enhancement Needs Assessment	50,000
2	Orientations and workshops on RPF/ RAP/ ARAP	50,000
3	Safeguards Training – National and International	150,000
4	Consultants for Monitoring and Evaluation and Mid-term and End-term Impact Evaluation and Assessment at US\$. 75,000 per year for 6 years	600,000
5	Preparation of specific social related community awareness materials (lumpsum) for communication campaign	100,000
6	NGO for RAP/ ARAP implementation assistance at US\$ 50,000 per year for 6 years	300,000
7	Outsourced Staff Costs 10 persons * 7 years * US\$10,000	700,000
8	NGO Costs Lump sum	450,000
9	Land requirement – Purchase LS Provision	150,000
10	Land requirement – Leased Land LS Provision	150,000
11	R&R Assistance LS Provision	1,000,000
12	Sub Total	3,400,000
13	Contingencies @ about 10%	400,000
14	<b>Total</b>	<b>3,800,000</b> <b>US\$ 3.8 Million</b>

## **6. Annexures**

## 6.1 Annexure 1: Social Screening Data Sheet

### Part a: General Information

<b>1. Location of the sub-project</b>	
• Name of Sub-Project	
• Name of the Division	
• District	
• Block	
• Location	
<b>2. Implementing Agency Details (sub-project level)</b>	
• Name of the Department/Agency	
• Name of the designated contact person	
• Designation	
• Contact Number	
• E-mail Id	

### Part b: Social Impacts Information

#### 1. Land Requirement for the sub-project:

Details	Unit	Quantity	Classification/ Category	Present Usage and Users
Government Land	Acres			
Private Land	Acres			
Title Holders	Number			
Non-Titleholders – Encroachers	Number			
Non-Titleholders – Persons without title to the land (Squatters)	Number			
Various users of Govt. Land under various tenures	Number			
People losing livelihoods/ access due to loss of Govt. Lands project	Number			

#### 2. Agricultural Land affected due to sub-project:

Details	Unit	Quantity
Total Affected	Number	
Title Holders	Number	
Non-Titleholders – Encroachers	Number	
Non-Titleholders – Persons without title to the land (Squatters)	Number	
BPL Families losing Agricultural Land	Number	

**3. Dwellings affected due to sub-project:**

Details	Unit	Quantity
Total Affected	Number	
Title Holders	Number	
Non-Titleholders – Encroachers	Number	
Non-Titleholders – Persons without title to the land (Squatters)	Number	
BPL Families losing Dwellings	Number	

**4. Commercial properties affected due to sub-project:**

Details	Unit	Quantity
Total Affected	Number	
Title Holders	Number	
Non-Titleholders – Encroachers	Number	
Non-Titleholders – Persons without title to the land (Squatters)	Number	
BPL Families losing Commercial Properties	Number	

**5. Common Property Resources Affected: (Please give each type by number)**

Type	Unit	Quantity
	Number	

S No	Items	Results
1.	Total no of HH affected due to proposed project activity (Single or multiple impacts)	
2.	Total no of vulnerable HH affected due to proposed project activity (Single or multiple impacts)	
3.	Total number of Community Property Resources affected	

Part c : Result/Outcome of Social Screening Exercise		
1.	No SA Required	
2.	SA Required	

**Part d: Transect Walk Map**

While filling in this data sheet, the implementing agency should hold a consultation with the local community through the Gram Parishad/ Ward in order to determine and sort out issues of land availability (including forest land), moderate any adverse social and environmental impacts and elicit necessary community participation in the programme. For this purpose the implementing agency should organise an informal 'Transect Walk' and prepare a map (Not To Scale) of this and

attach the same to this data sheet. The following points should be borne in mind while preparing this map.

- The Transect walk shall be undertaken by the Officer filling in this data sheet, accompanied by the member of Parishad/ Ward and other community members after adequate advance publicity.
- During the Transect Walk, issues relating to land requirements and its impact on landowners, encroachers, Persons without title to the land, etc. need to be discussed with members of the local community present. Collect all land related revenue records, maps and gazettes for supporting the claims and attach to this report. To this check list attach a typical cross section of the structure at its widest and note the land required.
- Environmental impact on vegetation, land, soil and water etc. shall be identified and noted for resolution.
- During the walk, due opportunity shall be given to interested persons to put forward their points of view.
- At the end of the walk and after recording the issues that arose during the walk, the action taken/ proposed to resolve the issues be noted. This shall be recorded by the official of the Parishad and countersigned by the members of Parishad/ Ward. A copy of this document shall be attached to the data sheet.
- During or after (as convenient) the Transect Walk, a map (Not To Scale) with the location of buildings, the features around the site, ownership of land need to be prepared. Identify all structures, viz., places of worship, schools, hospitals and other common property resources, forest land, etc. and locate on this Transect Walk Map.
- To this map attach some photographs showing and highlighting the most critical places.

## **6.2 ANNEX 2: Terms of Reference for Environmental and Social Impact Assessment (ESIA) and Resettlement Action Plan (RAP) of River Terminals, Landing Stations and Vessel Shelters under Bangladesh Regional Inland Water Transport Project 1 (Dhaka-Chittagong-Ashuganj Corridor)**

### **A. Background**

The Bangladesh Inland Water Transport Authority (BIWTA) is planning to develop 'Bangladesh Regional Inland Water Transport Project 1 (Dhaka-Chittagong Corridor Project)', which involves investments in development of Inland Water Transport (IWT) routes and infrastructure between Dhaka – Chittagong IWT Corridor, including branches to Ashuganj, Narayanganj and Barisal. The World Bank is currently considering the project for financing. Key components of this proposed project include:

- **Component 1: Improved Inland Waterway Navigation:** This component includes inland Waterway Maintenance through long-term performance-based contracts for: (i) dredging/ river maintenance and provision of visual Aids to Navigation Class 1 route between Dhaka and Chittagong Corridor, including Class 1, 2 and 3 branches to Ashuganj, Narayanganj and Barisal; (ii) construction and maintenance of six vessel storm shelters along the aforementioned routes; and (iii) maintenance dredging of the main river ferry crossing routes (Chandpur and Shariatpur; Lakshmipur and Bhola; and Beduria and Laharhat). This component shall include work to maintain advertised depths and mark channel routes through provision of long-term (7-years) performance-based contracts for maintenance dredging and provision of visual aids to navigation including light buoys (lateral marks, cardinal marks, isolated danger and other marks), radar beacons (for navigation during rain and fog), leading lines and other aids to assist day and night navigation.
- **Component 2: Improved Services at Priority Inland Waterway Terminals and Landing Ghats/Stations:** This sub-component includes works to improve six common user cargo and passenger terminals with last mile connectivity access infrastructure, as well as fourteen river landings and one general terminal on the Dhaka-Chittagong route and connecting routes. The passenger terminals included are: a new terminal at Shasanghat near Dhaka and a new terminal at Chandpur, and rehabilitation/ upgradation of two existing terminals at Narayanganj and Barisal. The cargo terminals included in the project are: a new terminal at Pangaon near Dhaka and rehabilitation/ upgradation of existing Ashuganj cargo terminal.

BIWTA has carried out an Environmental and Social Impact Assessment (ESIA) for the Component 1 and an Environmental Management Framework (EMF) and Resettlement

Policy Framework (RPF) for the project. The present TOR has been prepared for the detailed ESIA and Resettlement Action Plan (RAP) studies for the works under Component 2 (6 Passenger Terminals and 14 landing stations) and Component 1 (6 vessel shelters).

## B. Project Overview

Locations of the proposed sites for the terminals, landing stations and vessel shelters are given in Figure 1. Description of existing and proposed facilities at the terminal sites, landing stations and vessels shelters are given in Table 1, Table 2 and Table 3, respectively.

**Table 1 in Annex 1: Details of existing and proposed facilities at the six terminal sites**

Passenger Terminal	Existing Facilities	Proposed Facilities
Sashanghat Passenger Terminal Located 2.5 km downstream of the Sadharghat terminal at Dhaka on the Buriganga River	Greenfield site. There are no existing facilities.	The proposed facilities to be developed include: A Six storied terminal building, with a total floor area of approximately 20,000 square meters; A quay wall (bank protection) of approximately 250 m length Three terminal pontoons of approximately 200m length and five steel gangways A parking yard of approximately 2,000 square meters new landside pedestrian and vehicle access roadways pedestrian and vehicle turn-outs, drop-off, collection and waiting facilities
Chandpur Passenger Terminal. Located on Lower Meghna River	Established in 1995. Existing facilities include a walkway (167 m <sup>2</sup> ), steel jetty – 2 nos, steel spud – 6 nos., pontoon – 4 nos., passenger waiting shed (74 m <sup>2</sup> ) and parking yard (8010 m <sup>2</sup> )	The proposed facilities include: Land development (21,669 m <sup>3</sup> ), 3-storied terminal Building (4061 m <sup>2</sup> ), Bank protection ( 253 m), Boundary wall (231 m), RCC Ramp- 3 nos, Steel gangway – 3 nos, Spud and spud ring -22 nos. Terminal pontoon -4Nos, steel jetty (267.65m <sup>2</sup> ). Widening of 265 m of access road
Barisal Passenger Terminal	Established in 1964. Existing facilities	The proposed facilities include:

Passenger Terminal	Existing Facilities	Proposed Facilities
Located on Kirtonkhola River (Lower Meghna Tributary)	include: two storied terminal building, passenger waiting space, 6nos. of pontoons, 4 nos. of gangway, cargo shed, transit shed, parking yard and access road.	Extension of existing terminal building (346 m2), construction of 4 storied multipurpose building for port facilities (5600 m2), RCC Ramp 2 nos., Steel Gangway 2 nos., and bank Protection works
Narayanganj Passenger Terminal Located on Sitalakya River	Established in 1972. Existing facilities include a single storied building, 4 pontoons, 3 gangways, an RCC jetty and an administrative office. Existing facilities also include cargo handling facilities with 4 pontoons.	The proposed facilities include extension of existing terminal building, RCC ramps and 2 steel gangways.
Pangaon Cargo Terminal Located next to existing Pangaon Container terminal on Buriganga River, near Dhaka	Greenfield site. No existing facilities.	The proposed facilities include: Two berths, constructed on RCC piles with a suspended deck – total length 190m; An apron area of approximately 2,750 square meters A open storage area of 2,220 square meters; A transit Shed of 1,500 square meters; Vehicle parking areas of 500 square meters; and A new port road of 400m length together with a gate house.
Ashuganj Cargo Terminal Located on Upper Meghan River	Established in 2004 primarily for use by. Existing facilities include: office (150 m2), RCC Jetty (425 m2), steel jetty (90 m2), pontoons – 2nos., gangway, warehouse (225 m2), parking area (1000 m2)	Proposed facilities include: office building, RCC Jetty (425 m2), steel jetty – (2x45m), pontoon- 2nos., gangway – 2nos., bank protection, warehouse (225 m2), and parking area (2000 m2)

**Table 2 in Annex 1: Details of existing and proposed facilities at the landing stations**

Landing Station/ Launch Ghat	Existing Facilities	Proposed Facilities
Bhairab Bazar	Established in 2004. Daily about 300 to 400 passengers use this launch ghat. Existing facilities include two pontoons and one gangway.	The proposed facilities include two pontoons and one gangway.
Alubazar	This is a ferry terminal established in 2001. Daily traffic include 3 launches, 4 ferries and 15 local boats. Daily weight of goods transported is 20 t. Existing facilities include: shore connection seri -1, pontoon -1, steel jetty, ferry ghat with pontoon.	Estimated 0.18 ha of addition land acquisition required for proposed facilities, which include: Shore connection seri-4 Steel jetty -45m <sup>2</sup> Steel spud – 4nos Approach Road -372m <sup>2</sup> Passenger waiting sheed-75m <sup>2</sup> Parking yard – 1860m <sup>2</sup> Toilet complex – 42m <sup>2</sup> Bank protection -200m <sup>2</sup>
Horina	This is a ferry terminal established in 2001. Daily traffic includes 2 launches and 4 ferries. Approximate daily weight of goods transported is 15 t. Existing facilities include a ferry ghat with a pontoon	Estimated 0.093 ha of addition land acquisition required for proposed facilities, which include: Shore connection seri-4 Steel jetty -45.00m <sup>2</sup> Steel spud – 4nos Approach Road -372m <sup>2</sup> Bank protection -200m <sup>2</sup>
Hijla	The average daily traffic at this launch ghat is 150 passengers and 10 boats. Approximate daily weight of goods transported is 3t. Existing facilities include a shore connection seri and a pontoon	Estimated 0.12 ha of addition land acquisition required for proposed facilities, which include: Passenger waiting shed:125 m <sup>2</sup> Parking yard : 2500 m <sup>2</sup> Toilet complex: 75 m <sup>2</sup> Access road: 1000 m <sup>2</sup> Deep tube-well: 01 No
Ilisha (Bhola)	The average daily traffic at this launch ghat is 251 passengers and 12 vessels. Approximate daily weight of goods transported is 19t. Existing facilities include 2 shore connection seris and a pontoon	Estimated 0.30 ha of addition land acquisition required for proposed facilities, which include: Passenger waiting shed:125 m <sup>2</sup> Parking yard : 2000 m <sup>2</sup> Toilet complex: 75 m <sup>2</sup> Access road: 2000 m <sup>2</sup> Deep tube-well: 01 No

Landing Station/ Launch Ghat	Existing Facilities	Proposed Facilities
Moju Chowdhury	<p>A ferry ghat established in 2008. Daily traffic is 2 ferries, 2 sea trucks and a launch.</p> <p>Approximate daily weight of goods transported is 20t.</p> <p>Existing facilities include a shore connection seri, a pontoon, and a passenger waiting shed (55 m<sup>2</sup>)</p>	<p>Area required for proposed facilities is 0.5 ha but land acquisition is not required. The proposed facilities include:</p> <p>Shore connection seri-4          Steel jetty -45 m<sup>2</sup>          Steel spud – 4nos          Approach road          Passenger shed          Parking yard          Bank protection</p>
Laharhat	<p>The average daily traffic at this launch ghat is 277 passengers and 13 vessels. Approximate daily weight of goods transported is 21 t. Existing facilities include:</p> <p>Passenger waiting shed : 125 m<sup>2</sup>          Parking yard : 3375.00 m<sup>2</sup>          Toilet complex: 75.00 m<sup>2</sup>          Access road: 2000.00 m<sup>2</sup>          Deep tube-well: 01 No          Shore connection seri-01          Pontoons- 01</p>	<p>Area required for proposed facilities is 0.28 ha but land acquisition is not required. The proposed facilities include:</p> <p>Passenger waiting shed: 125 m<sup>2</sup>          Parking yard : 1500 m<sup>2</sup>          Toilet complex: 75 m<sup>2</sup>          Access road: 2000 m<sup>2</sup>          Shore connection seri-01          Pontoons- 01</p>
Beduria	<p>The average daily traffic at this launch ghat is 81 passengers and 13 vessels. Approximate daily weight of goods transported is 6 t. Existing facilities include a shore connection seri and a pontoon</p>	<p>Area required for proposed facilities is 0.047 ha but land acquisition is not required. The proposed facilities include:</p> <p>Passenger waiting shed:125 m<sup>2</sup>          Parking yard : 2000 m<sup>2</sup>          Toilet complex: 75 m<sup>2</sup>          Access road: 2000 m<sup>2</sup>          Deep tube-well: 01 No</p>
Daulatkha	<p>The average daily traffic at this launch ghat is 1000 passengers and 4 vessels. Approximate daily weight of goods transported is 730 t. Existing facilities include a 22 m jetty and 1 pontoon</p>	<p>Area required for proposed facilities is 0.12 ha but land acquisition is not required. The proposed facilities include:</p> <p>Passenger waiting shed:125 m<sup>2</sup>          Parking yard : 2000.00 m<sup>2</sup>          Toilet complex: 75.00 m<sup>2</sup>          Access road: 2000.00 m<sup>2</sup>          Deep tube-well: 01</p>

Landing Station/ Launch Ghat	Existing Facilities	Proposed Facilities
Tojumuddin	The average daily traffic at this launch ghat is 307 passengers and 4 vessels. Approximate daily weight of goods transported is 23 t. Existing facilities include 2 shore connection seris and a pontoon	Area required for proposed facilities is 0.12 ha but land acquisition is not required. The proposed facilities include: Passenger waiting shed:125 m <sup>2</sup> Parking yard : 2000.00 m <sup>2</sup> Toilet complex: 75.00 m <sup>2</sup> Access road: 2000.00 m <sup>2</sup> Deep tube-well: 01 No Pontoons- 01
Monpura	The average daily traffic at this launch ghat is 207 passengers and 2 vessels. Approximate daily weight of goods transported is 9.5 t. Existing facilities include: Pontoons-1 Sheri - 02 Transit shed RCC Jetty 625.00 M	Area required for proposed facilities is 0.12 ha but land acquisition is not required. The proposed facilities include: Passenger waiting shed:125 m <sup>2</sup> Parking yard : 2000.00 m <sup>2</sup> Toilet complex: 75.00 m <sup>2</sup> Access road: 2000.00 m <sup>2</sup> Deep tube-well: 01 No Shore connection
Chairman Ghat (Char Bata)	The average daily traffic at this launch ghat is 620 passengers 2 launches, 6 local boats and 12 speed boats. Approximate daily weight of goods transported is 18 t. Existing facilities include: Steel Jetty (12m) 1Nos Spud 2 Nos Pontoon 1Nos Waiting Shed 45 m <sup>2</sup>	0.5 ha of addition land acquisition required for proposed facilities, which include: Passenger Terminal 120 m <sup>2</sup> Parking Yard 550 m <sup>2</sup> Deep tube well -1nos Approach Road 450 m <sup>2</sup> Bank Protection 290 m <sup>2</sup>
Sandwip RCC Jetty	The average daily traffic at this RCC Jetty is 200 passengers 2 steamer, 10 local boats and 30 speed boats. Approximate daily weight of goods transported is 30 t. Existing facilities include: RCC Jetty 750m Waiting shed 60 m <sup>2</sup> Parking yard 200 m <sup>2</sup>	Area required for proposed facilities is 1 ha but land acquisition is not required. The proposed facilities include: CC Jetty 30m Harbour Basin Passenger Terminal 125 m <sup>2</sup> Parking Yard 550 m <sup>2</sup> Deep tube well 1nos Approach Road 450 m <sup>2</sup>

Landing Station/ Launch Ghat	Existing Facilities	Proposed Facilities														
		Bank Protection 2000 m <sup>2</sup>														
Boddarhat Launch ghat	<p>The average daily traffic at this RCC Jetty is 150 passengers 2 launch and 10 local boats.</p> <p>Approximate daily weight of goods transported is 30 t.</p> <p>Existing facilities include:</p> <table> <tr> <td>RCC Jetty</td> <td>750m</td> </tr> <tr> <td>Waiting shed</td> <td>60 m<sup>2</sup></td> </tr> <tr> <td>Parking yard</td> <td>200 m<sup>2</sup></td> </tr> </table>	RCC Jetty	750m	Waiting shed	60 m <sup>2</sup>	Parking yard	200 m <sup>2</sup>	<p>0.4 ha of addition land acquisition required for proposed facilities, which include:</p> <p>Shore connection seri-4</p> <p>Steel jetty -185.00m<sup>2</sup></p> <p>Steel spud – 4nos</p> <p>Approach Road -150m<sup>2</sup></p> <p>Passenger waiting sheed-100m<sup>2</sup></p> <p>Parking yard – 4048m<sup>2</sup></p> <p>Toilet complex – 42m<sup>2</sup></p> <p>Bank protection -200m<sup>2</sup></p>								
RCC Jetty	750m															
Waiting shed	60 m <sup>2</sup>															
Parking yard	200 m <sup>2</sup>															
Tomuruddin	<p>The average daily traffic at this launch ghat is 600 passengers 2 launches, a sea truck and 6 local boats. Approximate daily weight of goods transported is 18 t.</p> <p>Existing facilities include:</p> <table> <tr> <td>Steel Jetty (28m)</td> <td>1Nos</td> </tr> <tr> <td>Spud</td> <td>2 Nos</td> </tr> <tr> <td>Pontoon</td> <td>1Nos</td> </tr> </table>	Steel Jetty (28m)	1Nos	Spud	2 Nos	Pontoon	1Nos	<p>0.5 ha of addition land acquisition required for proposed facilities, which include:</p> <table> <tr> <td>Passenger Terminal</td> <td>120 m<sup>2</sup></td> </tr> <tr> <td>Parking Yard</td> <td>550 m<sup>2</sup></td> </tr> <tr> <td>Deep tube well</td> <td>1nos</td> </tr> <tr> <td>Approach Road</td> <td>450 m<sup>2</sup></td> </tr> </table>	Passenger Terminal	120 m <sup>2</sup>	Parking Yard	550 m <sup>2</sup>	Deep tube well	1nos	Approach Road	450 m <sup>2</sup>
Steel Jetty (28m)	1Nos															
Spud	2 Nos															
Pontoon	1Nos															
Passenger Terminal	120 m <sup>2</sup>															
Parking Yard	550 m <sup>2</sup>															
Deep tube well	1nos															
Approach Road	450 m <sup>2</sup>															

**Table 3 in Annex 1: Details of existing and proposed facilities at vessel shelters**

Vessel Shelter	Existing Facilities	Proposed Facilities
Shatnal Amirabad Chadpur Mehendiganj Sandwip (Sarikait) Nolchira	All the proposed locations are greenfield sites, except in Chandpur where an existing Madrasa Ghat terminal can be modified as vessel shelters	<p>About 4 ha of land acquisition is required for proposed facilities, which include for each site:</p> <p>Dredging for navigation and basin</p> <p>Bank protection</p> <p>Berthing facilities (spud, ramp, gangway, pantoon)</p> <p>Mooring facilities</p> <p>Break water system</p> <p>approach road</p> <p>Attendant room</p> <p>Water supply</p>

### C. ESIA and RAP Studies

The proposed study is being commissioned to assess environmental and social consequences of the proposed developments including their pre-construction, construction, and operation and maintenance phases, and to ensure that land acquisition and involuntary resettlement required for the project are carried out in line with the World Bank's Operational Policies as well as compliance with applicable national regulations on environment and social aspects. The proposed study is aimed at screening and assessing the proposed developments against adverse environmental and social impacts and recommending, where necessary, appropriate mitigation and enhancement measures, and course of action for implementation. The study will also provide recommendations on gender and disability sensitive design, including aspects of terminal design and management that reduce specific barriers that women and physically disabled face in using the facilities. These include but are not limited to issues of safety, lighting, drinking water facilities, separate toilets and waiting areas. The ESIA and RAP will need to follow the framework provided in the EMF and RPF prepared for the Bangladesh Regional Inland Water Transport Project 1 (see last paragraph of section A); comply with the World Bank safeguards requirements given in different operational policies (a list of applicable policies are provided at end of this document). The ESIA will also comply with the national environmental requirements defined through Bangladesh Environmental Conservation Act, 1995 and subsequent regulations and guidelines. For purposes of these TOR, it is assumed that two separate ESIA reports (one for terminals and other one covering both landing stations and vessel shelters) will be prepared; however, during the scoping stage the consultant shall verify whether the Bangladesh Department of Environment will require a stand-alone ESIA for each terminal, and if so, shall prepare separate reports for each of terminals.

The ESIA will take into account the natural environment (air, water, and land); human health and safety; social aspects (involuntary resettlement, physical cultural resources and gender aspects and for physically disabled people for terminal design); climate change and its implications, and also induced impacts as well as the cumulative impacts of other development projects in the area. The ESIA will consider natural and social aspects in an integrated way. It will also take into account the country's overall policy framework, national legislation, and institutional capabilities related to the environment and social aspects; and obligations of the country, pertaining to project activities, under relevant international environmental treaties and agreements.

#### **D. Specific Tasks for the Consultant - ESIA**

To complete the ESIA study or studies, the consultant will:

##### **1. Review the Project details**

Review the proposed developments and their geographic, ecological, social, and temporal context, including any offsite investments that may be required. Work closely with BIWTA and its design consultants to identify the need for any additional land

requirements for proposed developments, including associated facilities or other directly related investments. Review the ESIA for Component 1 and EMF and RPF studies for investments in Component 2 (documents are available on BIWTA website). Define 'project influence area' on the basis of the project scope and extent. Review the shapes of river channels within the influence area and how they change over time.

## **2. Review of the Legislative and Regulatory Framework**

Review the policy, legal, and administrative framework within which the ESIA is carried out. Review the national environmental requirements. Identify relevant international environmental agreements to which the country is a party. Review the country's resettlement and rehabilitation policies. Also review the WB OPs and their triggering status for the Project. Also state the policy requirements as applicable to the proposed investments, and actions taken/planned in response to each OP triggered.

Review existing systems on grievance management and citizen's feedback within BIWTA, and suggest measures for strengthening to ensure access to community and timely response during both construction and operation phases of the proposed subprojects.

## **3. Scoping**

Scoping is the first step of the ESIA and is essentially the process of identifying the significant issues relating to the proposed action and of determining the scope of the issues to be addressed in the ESIA. The key tasks include: i) carry out reconnaissance field visits; ii) carry out stakeholder mapping, hold initial stakeholder consultations, and develop a stakeholder participation plan for the completion of the studies; iii) identify the key aspects to be studied during the detailed ESIA, iv) finalize ESIA ToRs in consultation with the stakeholders for approval of DOE if required; v) prepare work plan for the subsequent ESIA tasks; and vi) prepare the Scoping Statement compiling the process and outcome of the scoping tasks described above. Review the definition of project influence area and revise if necessary. Facilitate, on behalf of BIWTA, the obtaining of DOE's approval of the final TORs for ESIA, if required.

## **4. Project Planning and Analysis of Alternatives**

Provide input to the BIWTA and its design consultants for inclusion of waste collection and treatment facilities (ship related waste management), land use planning, climate change adaptation and resilience, last mile connectivity, female and physically disabled friendly facilities(such as separate toilets, waiting areas and ticket counters, inspection areas, adequate lighting and safety features, etc.), relocation of public facilities (for example, the local boat crossing point at Pangaon to be relocated), and access roads to public facilities (e.g. access to graveyard/burial and ashes immersion sites will be restricted at both Pangaon and Shasanghat) to be incorporated in the project planning and design. In addition to these, study integrating the resettlement aspects into the

design process, for e.g. provision for building of shops and facilities (that affected people can be given priority to occupy) in the terminal designs.

Systematically compare feasible alternatives to the proposed project location, design, and operation - including the "without project" situation - in terms of their potential environmental and social impacts; and state the basis for selecting the particular project design.

## 5. Detailed Baselines Studies and Analysis

Review relevant physical, biological, and socioeconomic conditions of the study area, including any changes anticipated before the project commences. Also identify current and proposed development activities within the project area but not directly connected to the project. Also analyze the trends in the key environmental and social parameters of the area. Data should be relevant to decisions about project location, design, operation, or mitigatory measures.

Review the primary and secondary data collected during the preparation stage of the Bangladesh Regional Inland Water Transport Project 1 by the IWM ESIA team, and presented in EMF and RPF reports, and collect additional data if required on the following aspects:

**Physical Environment.** The data on physical environment should cover, *inter alia*:

- physiography,
- climate,
- geology and seismology,
- soils,
- hydrology and river dynamics, including annual and seasonal peak discharges, recurrence intervals and flood levels for various peak discharges (including at minimum for 5, 10, and 100-year flood events as well as historic maximum discharge), annual and seasonal low-flow discharges and recurrence intervals including historic minimum discharge, etc.
- groundwater,
- vulnerability of area to flooding and storm surges,
- river morphology, including erosion and sedimentation / sediment deposition patterns, currents and bathymetry
- soil quality,
- river bed sediment quality, in areas where dredging may be required and/or construction activities may disturb sediments, such as piling works (including the presence of contaminants, pollutants or heavy metals such as PCBs, POPs, hydrocarbons, and heavy metals such as arsenic, cadmium, mercury, etc.).
- water quality, in particular including major ions, TSS, TDS, DO, BOD, NO<sub>3</sub>, pH, etc.,
- ambient air quality and noise

Characterize the baseline status for each parameter, and discuss trends underway independent of the project which could change baseline conditions over the life of the project, including trends in land use changes and climate change.

**Biological Environment.** The data on biological environment should cover, *inter alia*:

- natural habitats and ecosystems;
- flora - trees, grasses, others;
- fauna - mammals, birds including migratory birds, reptiles, amphibians, insects, fish and red listed species;
- biodiversity including carrying capacity;
- protected and non-protected areas including hunting, poaching, illegal fishing;
- wetlands;
- fish;
- benthic flora and fauna; and
- others as identified by the consultant.

The trends underway independent of the project which could change baseline conditions over the life of the project, including trends in land use changes and climate change, should also be covered.

**Socio-Economic Baseline.** The socioeconomic baseline should identify and characterize all affected households as well as general socioeconomic aspects of the area of influence of each project investment location. This shall include using mobile application to geo-tag all affected households with Photographs of household members and the asset(s) affected, prepare maps of affected households and communities, and describe their present socioeconomic conditions, mobility, livelihoods, gender and vulnerability based on household surveys of all directly and indirectly affected households, and consultations with communities and key stakeholders. The data will also cover:

- population and demography;
- use of land, river and natural resources in the project area including for agriculture, fishing, livestock, grazing;
- other economic activities e.g. sand quarrying/extraction, trade, services;
- existing river traffic (both commercial and recreational) and navigation routes, etc; existing traffic patterns on access routes;
- social infrastructure and services including education, health, communications, others;
- economic activities;
- identification of direct and indirect beneficiaries;
- access and security;
- community organizations;
- vulnerable groups and poverty situation;
- gender aspects;
- Physically disabled;

- recreation areas;
- cultural heritage and cultural property;
- objects of special interest, e.g. cultural practices, graveyards and monuments; and
- others as identified by the consultant.

## 6. Stakeholder Consultations

The consultants need to identify all the stakeholders; both direct and indirect, and carry out a detailed stakeholder analysis and identify key stakeholders at each site.

Continued consultations are required during the project preparation with the affected communities and relevant stakeholders. In addition, at least two major consultation meetings are to be held at the project sites (the first one during the initial stages of ESIA study and the second one after preparation of draft ESIA report) with the affected communities and businesses as well as other relevant stakeholders including boat owner associations, commuters, auto-rickshaw unions, women, institutional stakeholders and local nongovernmental organizations, etc. Consultation methodologies should also include Focus Group Discussions (FGD) and key informant interviews, which shall be briefly documented using mobile application and geo-tagged, to complement larger consultation events and ensure social inclusion of the consultation process. FGD should include in particular different user groups of the future terminals, including specific FDGs with women only, as well as with stakeholders with physical disabilities. All consultations shall be fully documented, including with photolog, and included in an annex to the final ESIA report.

Documentation should include dates and locations of consultation events, stakeholder groups consulted, information shared and issues raised, and how feedback received will be taken into account in the analysis and design of the project.

## 7. Environmental Impact Assessment

Predict and assess the project's likely positive and negative impacts, in quantitative terms to the extent possible, associated with Project siting, design, construction, and operation. This analysis will require in depth interpretation, particularly on impacts related with instream construction activities such as piling, bank protection works and dredging (on aquatic ecology and river erosion); disposal of dredge spoils; management of solid and liquid waste (from ships and cargo activities); water and sanitation; air and noise quality; site remediation and disposal of contaminated soils- especially for Shasanghat where the site is currently being used for metal scrap business, ship breaking and fabrication facilities; occupational health and safety issues; on-land traffic impacts, emergency management; and traffic safety issues associated with terminal development and ongoing use. Predict the impacts and mitigation measures due to construction of breakwaters, RCC piles and sheet piles. Analyze the morphology of river channels within the influence area and how they change over time due to construction of proposed facilities and the increased traffic movement.

Explore opportunities for environmental enhancement. Identify and estimate the extent and quality of available data, key data gaps, and uncertainties associated with predictions, and specify topics that do not require further attention.

## **8. Social Impact Assessment**

Assess the impacts of land acquisition (if any) and land use change (even if it is government land) on the livelihoods of the affected people and their socioeconomic conditions through detailed census surveys, and identify the options for resettlement of affected people and restoration of their livelihoods through focused consultation with affected groups. Assess the impact of proposed developments on the access to public facilities, community health and safety, gender and employment.

The social research and census surveys should cover the squatters living in the proposed development areas owned by BIWTA (for e.g. in Pangaon area about 50 squatters; both residential and commercial and others on public land; in Shashanghat area about 50 businesses dealing with scrap from shipbreaking and fabrication; in Barisal area about 60 shops). There are common property resources to be considered during the assessment at both sites. A robust socio-economic baseline of all these affected people will form the backbone of this assessment. The assessment should not limit the surveys to the impacts cited here, but list all the direct and indirect impacts due to the proposed project. All socio-economic survey should be carried out using mobile device for real time data collection.

The social impact assessment will cover the directly affected people and affected communities to formulate development strategies in order to assist in determining project impacts on the social, economic, cultural, and livelihood activities of affected communities. This will establish a social baseline against which changes resulting from the intervention can be measured in the future. A socio-economic survey of the area to analyse the demographic, socio-economic cultural and other social relations and stakeholders needs to be conducted. Local tenure and property rights arrangements, which may include usufruct or customary rights to the land or other resources taken for the project including common property resources needs to be assessed.

## **9. Cumulative and Induced Impacts**

Consider and assess the cumulative impacts of other development projects in the area (on-going and planned). In particular, review the projects and facilities associated with IWT and consider and assess any potential interaction of impacts of those projects with those of proposed facilities.

## **10. Environmental Management Plan (EMP)**

Prepare EMP complete with mitigation plan, compliance monitoring plan, effects monitoring plan, institutional arrangements, training needs, documentation and communication protocol, grievance redressal mechanism, cost of implementing EMP, and mechanism to integrate EMP with the Project (e.g., through design changes, contractual clauses, etc.). Prepare environmental code of practices (ECoPs) with standard mitigation measures and best management practices to address the impacts associated with both during construction and operation phases of the proposed facilities. Describe in details who will (a) implement the environmental mitigation activities; (b) carry out environmental monitoring; (c) supervise environmental mitigation and monitoring; (d) design, implement and apply the environmental management information system (EMIS); and (e) prepare monthly/ quarterly progress reports on environmental management. Include measures for emergency response to accidental events (such as entry of raw sewage or toxic wastes into the river, collision of boats, flooding of facilities, etc.). Provide an itemized budget for implementing the EMP, as well as descriptions of minimum qualifications for key personnel responsible for its implementation. Prepare a detailed plan, including schedule and necessary budget, to monitor the implementation of mitigating measures and the impacts of the project during construction and operation (e.g., emissions thresholds and ambient levels of pollutants where these may be detrimental to human health, soil erosion, etc.). Provide guidance for reporting and enforcement and conducting environmental audits.

The EMP should be divided into two sections: one encompassing the requirements of the civil works contractors (in a format that can be annexed easily to the bid packages), and one for all other aspects of environmental management during construction and operational phases.

## **11. Resettlement Action Plan (RAP)**

A stand-alone Resettlement Action Plan shall also be prepared, in accordance with World Bank OP 4.12 on Involuntary Resettlement, as well as applicable Bangladeshi land acquisition, resettlement and rehabilitation laws, regulations and guidelines.

Aside from the RAP (described below), the social management plan should be delivered as a stand-alone section of the ESIA and should include, among other aspects: (i) Social mitigation and enhancement measures for the proposed investments, ii) Grievance redressal mechanism, iii) Monitoring protocol, and iv) Strategies and plans for a) Community consultation and engagement, b) Women engagement, c) Small, ethnic and vulnerable communities development, d) Communication plan and e) Capacity building.

In preparation of the RAP and any other social management plan, the tasks to be performed are as below:

- To photograph the affected/ displaced family with the affected assets and number each asset; to videograph the entire affected area including the affected land and assets.
- To conduct census survey of all PAPs residing/ using the corridor of impact to collect an inventory of types and extent of losses of each affected household, family composition and details on age and sex of all the members of the household, income and expenditure levels and occupational patterns, vulnerability status, legal ownership status (private, traditional and customary ownership, lease), asset ownership status and skills possessed. Prepare a fact sheet and attach the photograph of each project-affected person/family.
- Assess in detail all the adverse impacts and categorise each type of losses specific to the project area.
- To conduct focus group discussions on the preliminary designs options such on location, accessibility, facilities, safety and others and integrate the outputs in the technical design with that of the mitigation measures proposed.
- To carry out public consultations with different project affected social groups about their options and rights pertaining to resettlement and with other stakeholders like NGOs, District Administration, etc., and provide a plan for continuous public consultation during implementation.
- Identification of key formal and informal institutions operating at village, up-zilla and regional levels and assessment of their role in community decision making processes as these affect project activities.
- To carry out market survey and focus group discussion with different social groups including women and vulnerable to prepare socially, technically and economically feasible income generation schemes including skill upgradation plans.
- To determine the legal framework of private land, customary and traditional laws governing land tenure, usufruct rights, leasehold and land acquisition, or transfer plans for the total project including for tree plantation, if any, according to the revenue records (including acquisition for temporary purposes).
- Based on draft detailed designs conduct field verification and consultation to identify locations for further minimization of social impacts if any, and integrate with final designs.
- To establish the legal status of the affected people and carry out joint verification with the revenue department and implementing agency, of the project affected area to prepare land acquisition plans and provide specific details on the gaps between physical ownership and revenue records; identify land allotted to affected people by government departments and other agencies, if any.
- Modify and update database of project affected persons on a user friendly platform.

- To finalize estimate of land required for resettlement and for economic rehabilitation.
- To identify the land and prepare a plan for relocation in consultation with the project displaced people with different social groups including women and local administration.
- To prepare a plan that ensures the host population will not be adversely impacted and plan for consultation on the impact on resources and infrastructure with increase in population of the host areas.
- Based on project RPF policy provide an appropriate action plan for additional support for the vulnerable, and other action plans if necessary.
- To determine the impact on community assets/ cultural property and prepare a management plan for relocation and restoration in consultation.
- To develop terms of reference for NGOs, external evaluation consultants, and for any other study identified for impact evaluation.
- To assess institutional capacity and propose the institutional arrangement for implementation of RAP, addressing grievances, and ensuring gender equity, and identify the roles and responsibilities of each agency.
- To identify various formal and informal institutions that may provide support for the implementation of RAP.
- To develop a training program on R&R, based on the assessment of the capacity of the implementing agency.
- To develop monitoring indicators and formats for physical and financial progress, process monitoring and impact evaluation and indicators to for other stakeholders and finalize the same.
- To prepare an implementation schedule synchronized with time frame of civil works, and ensure that no civil works will begin until people are fully compensated and adequately rehabilitated.
- Conduct risk assessment for proposed mitigation measures.
- To develop detailed budget based on the based on the outcomes of study.
- Develop a mobile based web based interactive application for monitoring, grievance redressal and feedback, which can be used by the community including PAPs, during preparation and implementation.

## **E. Deliverables**

The deliverables to be submitted are:

- Inception report, including results of scoping, final proposed TOR for ESIA, and work plan
- Executive Summary (a summary of the ESIA report), written in a form that is understandable and accessible to a layman audience, in both English and Bengali
- Draft and final ESIA Reports, including Environmental and Social Management Plans (e.g. for social plans: relocation of ghats, enhancement of ghat and terminal facilities, etc.)

- Draft and final Resettlement Action Plan, with adequate measures for compensation, relocation, livelihoods restoration, grievance redresses and budgetary provisions, in both English and Bengali

## F. Time Schedule

The assignment is expected to be completed within 10 months. The inception report should be submitted within 4 weeks. The draft ESIA and RAP reports along with management plans should be submitted at the end of the 6th month.

## G. Study Team

The proposed core team for the ESIA study is given below. The man months shown are initial estimates only for core skill areas, and may not be inclusive of all required skills and team members necessary to complete the studies. The consultant is responsible to make a determination on the required staffing to complete the assignment, and is free to employ whatever resources are required.

S.No.	Key Specialists	Man Months
1	Environmental Specialist and Team Leader – International experience with experience on ESIAAs for ports or terminals	10 months
2	Environmental Engineer - National with expertise on management and remediation of contaminated soils and sediments, preferably with relation to port or terminal development.	4 months
3	Ecologist – National with experience on river ecology, and preferably prior knowledge of the ecology of the relevant rivers under study.	5 months
4	Social Development and Social Research Specialist – International experience with experience in SIA and preparation of RAPs	10 months
5	Community Engagement Expert – National with experience in engaging communities in preparation of RAPs; preferably female 2 persons	6 months for each person
6	Gender Expert – National with experience in gender mainstreaming in preparation of RAPs; preferably female	4 months

## H. Applicable OPs

Operational Policies (OP) / Bank Procedures (BP) that are applicable to the proposed ESIA study are:

- OP / BP 4.01 Environmental Assessment
- OP / BP 4.04 Natural Habitats
- OP 4.11 Physical Cultural Resources
- OP / BP 4.12 Involuntary Resettlement
- OP / BP 7.50 Projects on International Waterways
- BP 17.50 Disclosure of Operational Information

The consultants will also make use of and follow applicable thresholds and standards outlined in the WBG Environmental, Health, and Safety (EHS) Guidelines, including both General EHS Guidelines as well as EHS Guidelines for Ports, Harbors and Terminals (available for download at <http://www.ifc.org/wps/wcm/connect/9e558c00488556ebaf4fa6a6515bb18/Final%2B-%2BPorts%252C%2BHarbors%2Band%2BTerminals.pdf?MOD=AJPRES&id=1323152828015>).

## **I Proposed/Indicative Structure of ESIA Report**

The ESIA report will be in two parts; 1) EIA and EMP and 2) SIA and RAP.

The suggested and indicative contents of the EIA and EMP report is given below:

Executive Summary: Concisely discusses significant findings and recommended actions.

### **1. Introduction**

- 1.1 Overview
- 1.2 Background of the project
- 1.3 Objective of ESIA
- 1.4 Approach to work
- 1.5 Area/Corridor of Impact
- 1.6 Composition study team

### **2. Legal and administrative framework**

- 2.1 GoB requirements (legislation; guidelines and rules; policies; international treaties signed by Bangladesh; national and provincial authorities; environmental procedures), their applicability, and compliance status for the Project.
- 2.2 World Bank requirements (operational Policies and safeguard requirements; and WBG Environmental Health guidelines) and their triggering and compliance status for the Project.

### **3. Project description**

- 3.1 Need and purpose of project
- 3.2 Project location
- 3.3 Salient features
- 3.4 Description of project components
- 3.5 Construction activities
- 3.6 Construction machinery, materials and other supplies (including estimated numbers/quantities)
- 3.7 Waste generation and disposal (including estimated quantities)
- 3.8 Manpower requirements
- 3.8 Operation and maintenance (supplies; waste generation and management; manpower requirements; others).

**4. Baseline description/analysis**

- 4.1 Study area
- 4.2 Physical environment
- 4.3 Biological environment

**5. Project alternatives**

- 5.1 Without project alternative
- 5.2 Site Options
- 5.3 Design Options
- 5.6 Other temporary and permanent facilities

**6. Climate Change**

- 6.1 Climate Change
- 6.2 Risk of flooding

**7. Public Consultation and Information Disclosure**

- 7.1 Scoping sessions
- 7.2 Focused group discussions
- 7.3 Public consultations
- 7.4 Information disclosure

**8. Potential environmental impacts and their mitigations**

- 8.1 Impact assessment, prediction, and characterization method.
- 8.2 Impacts during construction phase
- 8.3 Impacts during operational phase
- 8.4 Impacts during decommissioning phase.

**9. Cumulative and Induced Impacts**

- 9.1 Cumulative impacts of on-going and planned projects in the area and on Indus River
- 9.2 Induced impacts of the Project.

**10. Environmental management plan (EMP)**

- 10.1 Types of impacts and their mitigations
- 10.2 Mitigation measures
- 10.3 Environmental Code of Practices
- 10.4 Monitoring Plan
- 10.6 Communication and documentation
- 10.7 Cost of EMP
- 10.8 Integration with Project (contract clauses, others)
- 10.9 Grievance redressal.
- 10.10. Institutional strengthening

**REFERENCES**

**ANNEXES**

- Flora and fauna list
- Documentation on Public consultations
- Environmental code of practices, etc.

The suggested and indicative contents of the SIA and RAP report is given below:

**Executive Summary:** Concisely discusses significant social findings and recommended mitigation measures and actions.

## **1. Introduction**

- 1.1 Overview
- 1.2 Background of the project
- 1.3 Objective of SIA and key tasks
- 1.4 Approach and methodology
- 1.5 Area/Corridor of Impact
- 1.6 Composition study team

## **2. Legal and administrative framework**

- 2.1 GoB requirements (legislation; guidelines and rules; policies; international treaties signed by Bangladesh; national and provincial authorities; social procedures), their applicability, and compliance status for the Project.
- 2.2 World Bank requirements (operational Policies and safeguard requirements; and WBG Environmental Health guidelines) and their triggering and compliance status for the Project.

## **3. Project description**

- 3.1 Need and purpose of project
- 3.2 Project location
- 3.3 Salient features
- 3.4 Description of project components
- 3.5 Construction activities
- 3.6 Construction machinery, materials and other supplies (including estimated numbers/quantities)
- 3.7 Waste generation and disposal (including estimated quantities)
- 3.8 Manpower requirements
- 3.8 Operation and maintenance (supplies; waste generation and management; manpower requirements; others).

## **4. Baseline description/analysis**

- 4.1 Study area
- 4.2 Demographic Profile
- 4.3 Socio-economic profile
- 4.4 Socio-economic analysis based on primary data
- 4.4 Cultural aspects (cultural heritage; archaeology; and other objects of special interest, e.g. graveyards, monuments).

## **5. Stakeholder Analysis**

- 5.1 Stakeholders at different levels
- 5.2 Stakeholder expectations
- 5.3 Overall issues emerged during consultations

## **6. Public Consultation and Information Disclosure**

- 6.1 Stakeholder consultations
- 6.2 Focused group discussions

6.3 Public consultations

6.4 Information disclosure

## 7. Potential social impacts and their mitigations

7.1 Impacts

7.2 Risks and Assumptions

7.3 Issues of significance

7.4 Resettlement and compensation

7.5 Impacts and their mitigations during construction phase

7.6 Impacts and their mitigations during operational phase.

## Annexure

### I. Resettlement Action Plan (RAP) as an annexure

#### 1. Introduction

1. Brief Introduction of the sub-project
2. Description of Component(s) that cause land acquisition/alienation and resettlement
3. Overall Estimates of Land Acquisition and R&R

#### 2. Measures to Minimize Resettlement

1. Description of Efforts Made for Minimizing Displacement
2. Description of the Results of these Efforts
3. Description of Mechanisms to Minimize Displacement and Loss of Livelihood/Income during Implementation

#### 3. Census and Socio-Economic Surveys

1. Provide the results of the census and socio-economic surveys
2. Identify all categories of impacts and the extent of impact on each affected

#### 4. Consultation and involvement of PAPs

1. Describe various Stakeholders
2. Summarize process of consultation on the results of socio-economic surveys
3. Describe the need and mechanisms to conduct updates to socio-economic surveys
4. Describe how this process of consultation would be continued through implementation and monitoring
5. Describe the plan for disseminating information to Project Affected Persons

#### 5. Entitlement Framework

1. Provide a definition of PAFs and PAPs together with their categorization based on impacts
2. Describe R&R entitlements for each category of impact
3. Describe method of valuation used for affected land, structures and other assets
4. Using Entitlement Matrix, present a table of all PAFs/PAPs and their losses/ impacts and entitlements

#### 6. Relocation (if applicable)

1. Does the Project need community relocation sites? If yes, have they been inspected and accepted by PAPs?

2. Have the Project Affected Persons agreed to the strategy for housing replacement? Will new housing be constructed/allocated? If PAPs are to construct houses, explain if compensation entitlement for housing is sufficient to help them construct houses.
3. List of proposed sites along with number of affected families to be relocated
4. Describe respective mechanisms for (i) procuring/acquiring/alienating ; (ii) developing and (iii) allotting resettlement sites
5. Provide detailed description of arrangements for development of resettlement sites including provision of social infrastructure
6. Describe the feasibility studies conducted to determine the suitability of the development of sites.

## 7. Income Restoration

1. Are the compensation entitlements sufficient to restore income streams for each category of impact? If not, what additional economic rehabilitation measures are necessary?
2. Briefly spell out the restoration strategies for each category of impacts, and describe institutional, financial and technical arrangements/aspects involved
3. Describe the process of consultation with PAPs to finalize strategies for income restoration
4. How do strategies for restoration vary with the area/locality of impact
5. If income restoration involves change in livelihoods or other economic activities allow substantial amount of time for capacity building, accessing institutional funds/credits/markets, preparation and implementation. Work out the rate of returns for each of the economic activities opted by the entitled person.
6. How are the risks of impoverishment proposed to be addressed?
7. Explain the main institutional and other risks for effective implementation of plans for restoration of livelihood
8. Describe the process for monitoring the effectiveness of income restoration activities

## 8. Institutional Arrangements

1. Describe institution(s) responsible for: (a) delivery of each item/activity in the entitlement policy; (b) implementation of resettlement and rehabilitation programs and (c) coordination of all other activities as described in the Rehabilitation Action Plan
2. State how coordination issues will be addressed in cases where resettlement and rehabilitation are spread over a number of institutional/departmental jurisdictions
3. Indicate the agency that will coordinate all implementing agencies – do they have the necessary mandate and the resources
4. Describe the external (non-Project) institutions/departments involved in the process of resettlement and restoration of income such as land development, land allocation, credit, training for capacity building and the mechanisms in place to ensure adequate cooperation and performance of these institutions/departments

5. Describe the results of the institutional capacity assessment and give the institutional development plans including staffing schedule and training requirements
6. Discuss institutional capacity for, and commitment to, resettlement and rehabilitation

## **9. Monitoring and Evaluation**

1. Describe the internal monitoring process
2. Define key monitoring indicators for resettlement, rehabilitation and participation and provide a list of these indicators which would be used for internal monitoring
3. Describe institutional (including financial) arrangement
4. Describe frequency of reporting and contents of reports
5. Describe the process for integrating feedback from internal monitoring into implementation
6. Describe financial arrangements for external monitoring including process for awarding and maintenance of contracts for the entire duration of R&R
7. Describe the methodology for external monitoring
8. Describe frequency of external reporting and its contents

## **10. Redress of Grievances**

1. Describe the structure and process of grievances mechanisms at various levels including step-by-step process for registering and addressing grievances and provide specific details regarding registering complaints, discussing them with PAPs, response time, communication modes etc.
2. Describe the mechanism for appeal
3. Describe the provision, if any, to enable PAPs to approach civil courts in case these provisions fail.

## **11. Implementation Schedule**

1. List the chronological steps in implementation of R&R Action Plan including identification of agencies responsible for each activity along with a brief explanation of each activity
2. A month-wise implementation schedule (Gantt chart) of activities to be taken as part of R&R Action Plan
3. Description of the linkage between R&R implementation and initiation of civil works for each of the Project component

## **12. Costs and Budgets**

1. Clear statement of financial responsibility and authority
2. List the sources of funds for R&R and describe the flow of funds
3. Indicate if costs of R&R are included in the overall Project costs
4. Identify R&R costs, if any, to be funded by the WB
5. Provide a cost-wise, item-wise budget estimate for the entire R&R costs including administrative expenses, monitoring and evaluation and contingencies
6. Describe the specific mechanisms to adjust cost estimates by *inflation* factor
7. Describe provisions to account for different types of contingencies

## II Documentation on Public consultations

Figure 1 in Annex 1: Locations of the proposed terminal, landing stations and vessel shelter sites

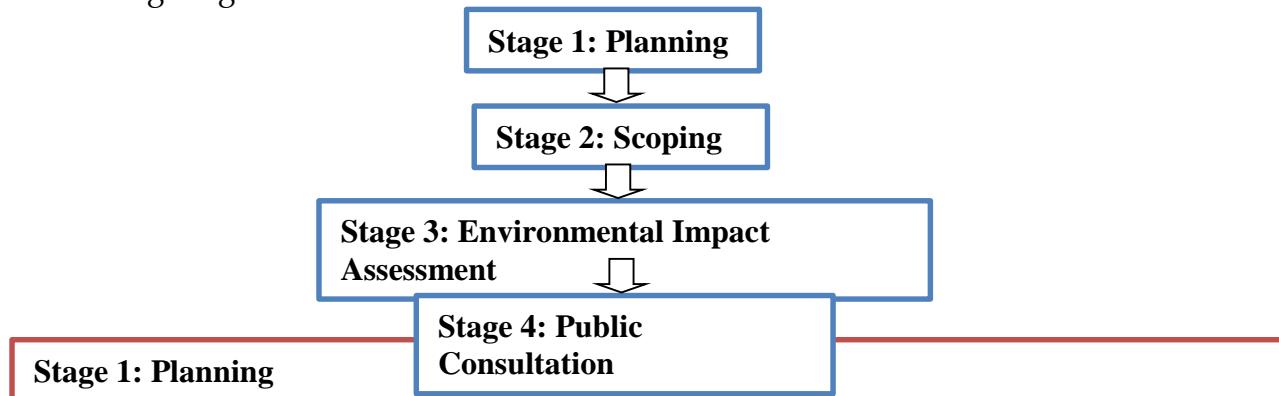




## ANNEX 2: Scope of Work for ESIA studies for Improvement of Terminals and Landing Stations

### 1.1. Environmental Assessment Process

The environmental assessment will be conducted using major stages as shown in the following diagram.



Soon after the commencement of planning and design process, based on desk study, reconnaissance survey and experience of earlier projects, detailed methodology and schedule should be prepared for the effective and timely execution of the Environmental Assessment.

**Desk Study:** To collect the secondary information and checking out the methodology for carrying out the EA study and fixing of responsibilities of the EA team members for preparing a complete, addressing all issues, Environmental Management Plan.

**Reconnaissance survey:** To collect the first hand information about the project area and develop a perspective of the entire team and revise the methodology and work program.

#### Experience from Earlier Project:

**Focus on the main issues:** It is important that the EA does not try to cover too many topics in too much detail. Effective scoping can save both time and money by focusing the EA studies on the key issues.

**EA requires the formation of a multidisciplinary team and the leadership of a strong EA coordinator.** The range of effects considered in the EA requires the skills of technical experts to be employed on an assessment team, led by a Team Leader. It is important to involve the right people (e.g., scientists, engineers, policymakers, government representatives, representatives of public interest groups and the local community) and agencies (e.g., the developer, the aid agency, regulatory authorities and politicians) in the EA process. Selection will be made through consultation at different stages.

**Make maximum use of existing information before engaging expensive field studies.**

**Determination of Project influence Area.** Based on reconnaissance survey and desk study and modeling, project influence area will be finalized.

**Present clear and appropriate options for mitigation of impacts and for sound environmental management.** Mitigation is an integral part of impacts assessment. Application of appropriate mitigation can eliminate or reduce negative impacts, and

improve the net overall environmental performance of a project. Hence public consent, practical viability will be considered in proposing the mitigation measures.

**Post-EIA audits and monitoring programs are essential to ensuring that EA commitments are carried out and that future EA improve.** An effective monitoring plan will be proposed in consultation with the client and the World Bank. Proper budgeting will be ensured for smooth functioning of monitoring plan proposed.

## **Stage 2: Scoping**

Scoping will identifies which of the activities has a potential to interact with the environment. Scoping will be conducted early in the EA process so that a focus on the priority issues (i.e. those that have the greatest potential to affect the natural and/or environment) can be established for the rest of the EA process. Necessary consultation with stakeholders will be made after scoping to incorporate any unattended issues. Key elements/inputs to the scoping exercise will be as follows:

- Gathering and reviewing existing environmental data like atmosphere, climate, topography, congestion area, alternative requirement, land use pattern, hydrology and drainage pattern, major River and waterways, religious, cultural and archaeological sites and sensitive areas.
- Identifying project stakeholders; including PAPs, Government and non-government agencies (utilities), Bangladesh Water Development Board, Department of Fisheries, Agricultural Department, Department of Environment (DOE) etc.
- Assemble and review relevant legislative requirements, environmental standards and guidelines (national and international) associated with the proposed development as well as the World Bank's operational policies and standards.
- Gathering existing information sources and local knowledge;
- Informing stakeholders of the project and its objectives and get input on the EA;
- Identifying the key environmental concerns (community and scientific) related to a project and the relative importance of issues;
- Defining/preparing the EA work program, including a plan for public and stakeholder involvement;
- Carrying out monitoring of natural environment including air, water, soil, noise etc.
- Defining the range of project alternatives to be considered.
- Obtaining agreement/consensus on the methods and techniques to be used in EA studies and document preparation;
- Determining/freezing the spatial and temporal boundaries for the EA studies.

The following issues will be addressed through scoping, but will not be limited to.

- To improve the quality of EA information by focusing scientific efforts and EA analysis on truly significant issues;
- To ensure environmental concerns identified and incorporated early in the project planning process, at the same time as cost and design factors are considered;
- Reducing the likelihood of overlooking important environmental issues;
- Thinning the chance of prolonged delays and conflicts later in the EA process by engaging stakeholders in a constructive participatory process early in the EA process.

The scooping report will be submitted to DOE in a form of IEE for approval.

### **Stage 3: Environmental Impact Assessment**

After conducting IEE, the EIA should be conducted, as per TOR for EIA suggested in IEE study and approved by DOE. The process of EIA study is briefly described below. Analysis of the Project Design and Components: All the components of the DCA IWT PROJECT and design specifications will be analyzed to get insight of the project interventions. This will guide detail environmental baseline survey and particular investigations.

Data collection on Environmental and social baseline: Environmental and social baseline condition of the proposed subprojects has already been collected through several field visits, surveys and intensive consultation with local people. Intensive consultation with the stakeholders should be carried out for updating the baseline condition to obtain their perceptions on the proposed interventions and the possible impacts.

Major Field investigations: At this stage, detailed field survey (social and environmental) will be carried out to obtain information on the possible impact of the interventions on the environmental parameter.

Assessment of Environmental and social Impacts: The impacts of the proposed subprojects on the environmental and social components will be identified through consultation with experts and local community. The impacts will be analyzed and graded qualitatively (e.g. high, medium, low) in order to identify the major impacts. The future-without-project condition will be generated through trend analysis using information collected. The future-with-project condition will be predicted using professional judgment of the multi-disciplinary team members based on information collected. Difference between the two (with and without project) conditions will be taken as impact of the proposed interventions. The impact of the priority reach will also be monitored. Moreover, cumulative impacts of the project inside or outside the project area will be analyzed. Possible mitigation measures for alternatives of the project will be identified in this stage. For true impacts prediction following questionnaire will be attempted to answer:

- How will a particular project activity give rise to an impact?
- How likely is it that an impact will occur?
- What will be the consequence of each impact?
- What will be the spatial and temporal extent of each impact?

Analysis of Alternatives: The various criterial to be considered in evaluating various alternatives are given below

- Technical Aspects: Robustness, constructability, geology, maintenance requirements, history of performance, etc.
- Financial Aspects: Construction cost and maintenance cost
- Environmental Aspects: project footprints, material requirements, impact on river flows and channels, impact on flood plains and erosion, impact on chars, impact on aquatic and terrestrial habitats, impact on river banks, safety, etc.

- Social Aspects: Land acquisition, Resettlement, Impacts on navigation, Impacts on char people, socioeconomic impacts, etc.

Evaluation of impacts: Impact assessed on different parameters will be evaluated for both positive (+) and negative (-) impacts considering magnitude, immediacy, reversibility and sustainability.

Preparation of environmental management plan: The EMP will be prepared suggesting mitigation measures for minimizing the effect of the negative impacts, compensation measures for the negative impacts which cannot be mitigated, enhancement measures for increasing the benefits of the positive impacts, emergency plan for taking care of natural hazards and accidental events. An environmental monitoring plan will also be suggested in the EMP. Each component of the EMP will be divided into pre-construction, during construction, post construction and operation and maintenance phases. Responsibilities of the institutions in the implementation of the EMP will be suggested to ensure efficient utilization of all the parties involved. The EMP should also include institutional capacity assessment and capacity building plan.

EIA Report Preparation: All the findings would be presented in the EIA reports.

#### **Stage 4: Public Consultation**

“Public consultation” refers to the process by which the concerns of local affected persons and others who have plausible stake in the environmental impacts of the project or activity are ascertained with a view to taking into account all the material concerns in the project or activity design as appropriate. All Category ‘A’ projects or activities shall undertake public consultation. The key points of public consultation are given below:

##### **Stakeholder Consultation at all Stages of Project**

- Identification of primary and secondary stakeholders.
  - Primary stakeholders include people having direct impact.
  - Secondary stakeholders include village representatives, women's group, voluntary organizations NGOs, field level officers and staff, other government officials.
- Structured Consultation at the subproject sties, district and divisional levels

##### **Consultation at Village Level**

- Along with preliminary inventory and survey information dissemination will be done along the bank and the affected villages included in the project influence area canvassing about the project. Date and venue for detailed consultation will be fixed.
- Pictorial method (Pamphlet) will be adopted to explain proposed improvements and possible environmental impact in the concerned villages.
- Public consensus would try to be arrived for and mitigation proposed.
- Public suggestion and graveness will be addressed at appropriate level.

##### **Consultation at Upazila and District Level**

- Consultation with officers of Agricultural Department, Forest Department, Soil Department, Fisheries Department, Department of Public Health Engineering (DPHE), etc.

- Consultation with the elected representatives and other stakeholders.

#### **Consultation at Divisional level**

- Consultation with senior department officers, like DOE office, District Commissioner Offices, Settlement offices etc. and mechanism of regulatory clearance, utility shifting, land acquisition etc.

After completion of the public consultation, the design consultant shall address all the material environmental concerns expressed during this process, and make appropriate changes in the draft EIA and EMP. The final EIA report, so prepared, shall be submitted by the client to the concerned regulatory authority for appraisal.

### **6.3 Annexure 3: Format for Preparation of Resettlement Action Plan**

As per the impacts of the sub-projects, i.e., if the number of PAPs exceeds 20, then a comprehensive Social Impact Assessment needs to be conducted and a Resettlement Action Plan (RAP) needs to be prepared, following the guidelines given in this RPF.

#### **1. Introduction**

4. Brief Introduction of the sub-project
5. Description of Component(s) that cause land acquisition/alienation and resettlement
6. Overall Estimates of Land Acquisition and R&R

#### **2. Measures to Minimize Resettlement**

4. Description of Efforts Made for Minimizing Displacement
5. Description of the Results of these Efforts
6. Description of Mechanisms to Minimize Displacement and Loss of Livelihood/Income during Implementation

#### **3. Census and Socio-Economic Surveys**

3. Provide the results of the census and socio-economic surveys
4. Identify all categories of impacts and the extent of impact on each affected

#### **4. Consultation and involvement of PAPs**

6. Describe various Stakeholders
7. Summarize process of consultation on the results of socio-economic surveys
8. Describe the need and mechanisms to conduct updates to socio-economic surveys
9. Describe how this process of consultation would be continued through implementation and monitoring
10. Describe the plan for disseminating information to Project Affected Persons

#### **5. Entitlement Framework**

5. Provide a definition of PAFs and PAPs together with their categorization based on impacts
6. Describe R&R entitlements for each category of impact
7. Describe method of valuation used for affected land, structures and other assets
8. Using Entitlement Matrix, present a table of all PAFs/PAPs and their losses/ impacts and entitlements

#### **6. Relocation (if applicable)**

7. Does the Project need community relocation sites? If yes, have they been inspected and accepted by PAPs?

8. Have the Project Affected Persons agreed to the strategy for housing replacement? Will new housing be constructed/allocated? If PAPs are to construct houses, explain if compensation entitlement for housing is sufficient to help them construct houses.
9. List of proposed sites along with number of affected families to be relocated
10. Describe respective mechanisms for (i) procuring/acquiring/alienating ; (ii) developing and (iii) allotting resettlement sites
11. Provide detailed description of arrangements for development of resettlement sites including provision of social infrastructure
12. Describe the feasibility studies conducted to determine the suitability of the development of sites.

## 7. Income Restoration

9. Are the compensation entitlements sufficient to restore income streams for each category of impact? If not, what additional economic rehabilitation measures are necessary?
10. Briefly spell out the restoration strategies for each category of impacts, and describe institutional, financial and technical arrangements/aspects involved
11. Describe the process of consultation with PAPs to finalize strategies for income restoration
12. How do strategies for restoration vary with the area/locality of impact
13. If income restoration involves change in livelihoods or other economic activities allow substantial amount of time for capacity building, accessing institutional funds/credits/markets, preparation and implementation. Work out the rate of returns for each of the economic activities opted by the entitled person.
14. How are the risks of impoverishment proposed to be addressed?
15. Explain the main institutional and other risks for effective implementation of plans for restoration of livelihood
16. Describe the process for monitoring the effectiveness of income restoration activities

## 8. Institutional Arrangements

7. Describe institution(s) responsible for: (a) delivery of each item/activity in the entitlement policy; (b) implementation of resettlement and rehabilitation programs and (c) coordination of all other activities as described in the Rehabilitation Action Plan
8. State how coordination issues will be addressed in cases where resettlement and rehabilitation are spread over a number of institutional/departmental jurisdictions
9. Indicate the agency that will coordinate all implementing agencies – do they have the necessary mandate and the resources
10. Describe the external (non-Project) institutions/departments involved in the process of resettlement and restoration of income such as land development, land allocation, credit, training for capacity building and the mechanisms in place to ensure adequate cooperation and performance of these institutions/departments
11. Describe the results of the institutional capacity assessment and give the institutional development plans including staffing schedule and training requirements
12. Discuss institutional capacity for, and commitment to, resettlement and rehabilitation

## 9. Monitoring and Evaluation

8. Describe the internal monitoring process
9. Define key monitoring indicators for resettlement, rehabilitation and participation and provide a list of these indicators which would be used for internal monitoring
10. Describe institutional (including financial) arrangement
11. Describe frequency of reporting and contents of reports
12. Describe the process for integrating feedback from internal monitoring into implementation
13. Describe financial arrangements for external monitoring including process for awarding and maintenance of contracts for the entire duration of R&R
14. Describe the methodology for external monitoring
8. Describe frequency of external reporting and its contents

## **10. Redress of Grievances**

4. Describe the structure and process of grievances mechanisms at various levels including step-by-step process for registering and addressing grievances and provide specific details regarding registering complaints, discussing them with PAPs, response time, communication modes etc.
5. Describe the mechanism for appeal
6. Describe the provision, if any, to enable PAPs to approach civil courts in case these provisions fail.

## **11. Implementation Schedule**

4. List the chronological steps in implementation of R&R Action Plan including identification of agencies responsible for each activity along with a brief explanation of each activity
5. A month-wise implementation schedule (Gantt chart) of activities to be taken as part of R&R Action Plan
6. Description of the linkage between R&R implementation and initiation of civil works for each of the Project component

## **12. Costs and Budgets**

8. Clear statement of financial responsibility and authority
9. List the sources of funds for R&R and describe the flow of funds
10. Indicate if costs of R&R are included in the overall Project costs
11. Identify R&R costs, if any, to be funded by the WB
12. Provide a cost-wise, item-wise budget estimate for the entire R&R costs including administrative expenses, monitoring and evaluation and contingencies
13. Describe the specific mechanisms to adjust cost estimates by *inflation* factor
14. Describe provisions to account for different types of contingencies

## **6.4 Annexure 4: Format for Preparation of Abbreviated Resettlement Action Plan**

When the impacts are limited, i.e., if the number of PAPs are less than 20, then an Abbreviated Resettlement Action Plan (ARAP) needs to be prepared, following the guidelines given in this RPF.

### **1. Introduction**

1. Brief Introduction of the sub-project
2. Description of Component(s) that cause land acquisition/alienation and resettlement
3. Overall Estimates of Land Acquisition and R&R

### **2. Census and Socio-Economic Surveys**

1. Provide the results of the census and socio-economic surveys
2. Identify all categories of impacts and the extent of impact on each affected

### **3. Consultation and involvement of PAPs**

1. Describe various Stakeholders
2. Summarize process of consultation on the results of socio-economic surveys
3. Describe the plan for disseminating information to Project Affected Persons

### **4. Entitlement Framework**

1. Describe R&R entitlements for each category of impact
2. Describe method of valuation used for affected land, structures and other assets
3. Using Entitlement Matrix, present a table of all PAFs/PAPs and their losses/ impacts and entitlements

### **5. Income Restoration**

1. Are the compensation entitlements sufficient to restore income streams for each category of impact. If not, what additional economic rehabilitation measures are necessary.
2. Briefly spell out the restoration strategies for each category of impacts, and describe institutional, financial and technical arrangements/aspects involved
3. Describe the process of consultation with PAPs to finalize strategies for income restoration
4. If income restoration involves change in livelihoods or other economic activities allow substantial amount of time for capacity building, accessing institutional funds/credits/markets, preparation and implementation. Work out the rate of returns for each of the economic activities opted by the entitled person.
5. How are the risks of impoverishment proposed to be addressed?

### **6. Institutional Arrangements**

1. Describe institution(s) responsible for: (a) delivery of each item/activity in the entitlement policy; (b) implementation of resettlement and rehabilitation programs and (c) coordination of all other activities as described in the Rehabilitation Action Plan

### **7. Monitoring and Evaluation**

1. Describe the internal monitoring process

### **8. Redress of Grievances**

1. Describe the structure and process of grievances mechanisms at various levels including step-by-step process for registering and addressing grievances and provide specific details regarding registering complaints, discussing them with PAPs, response time, communication modes etc.
2. Describe the mechanism for appeal
3. Describe the provision, if any, to enable PAPs to approach civil courts in case these provisions fail.

#### **9. Implementation Schedule**

1. List the chronological steps in implementation of R&R Action Plan including identification of agencies responsible for each activity along with a brief explanation of each activity.

#### **10. Costs and Budgets**

1. Clear statement of financial responsibility and authority
2. List the sources of funds for R&R and describe the flow of funds
3. Indicate if costs of R&R are included in the overall Project costs
4. Identify R&R costs, if any, to be funded by the WB
5. Describe the specific mechanisms to adjust cost estimates by *inflation* factor
6. Describe provisions to account for different types of contingencies