

## Executive Summary

### Environmental and Social Management Framework (ESMF)

#### Introduction

The Kolkata, waterways have been in operation for centuries as a mode of transport between Kolkata ⇌ Howrah (East & West sides of Hooghly River) sides. The congestion in the city is contributing to large inefficiencies in passenger and freight flow in the Kolkata Metropolitan Area (KMA, which is the regional gateway to freight flow in Eastern India), restricting market access as well as port access for export-import traffic. The inefficient flow of freight is adversely affecting economic competitiveness and sustainable growth in the region. The Hooghly River, a defining feature of KMA, currently acts more as a barrier to access than an enabler. Due to the strategic location of Kolkata, and the unique situation of the port in the center of the city, the severity of the mobility issues in KMA calls for a rethink of urban mobility for both cargo and citizens. These sectoral issues are compounded by institutional and spatial development challenges. Institutional arrangements for urban transport are highly fragmented and sometimes overlapping. The proposed project is for an improvement of the waterways sector in all respects.

#### Objectives of ESMF and its contents

For all investments, the ESMF will set out the policies, procedures and guidelines that will be followed to assess and manage Environmental and Social (E & S) issues. This framework is a requirement of the World Bank and is necessary to ensure that the Environmental and Social (E & S) impacts are addressed and properly managed. The project implementation includes analytical studies (preparation of plans, strategies and assessments), procurement of goods (such as vessels, pontoons and gangways) and execution of works (waterside and landside investments in selected jetties). Of these, there will be impacts in the manufacture of goods and in the execution of works. Therefore, during implementation, these potential E & S impacts will need to be managed.

#### Project Development Objectives (PDO)

The project development objectives (PDO) are to:

- (a) strengthen cross sectoral institutional capacity-institutional capacity for strategic spatial planning, logistics and urban mobility; and
- (b) Improve efficiency and safety of passenger and freight movement along the Hooghly River by targeted upgrades of the ferry system.

#### Project Description

In the above context, the West Bengal Transport Infrastructure Development Corporation Limited (an undertaking of the Government of WB) with the help of loan assistance from World Bank is planning to improve the waterways system for optimized usage for the overall development of the Kolkata Metropolitan Area in particular and the development of country and the state in general. This project is titled as **“West Bengal Inland Waterways Transport, Logistics and Spatial Development Project.”**

Subcomponent activities that will be supported as a part of the first year investments cover 30% of the overall project budget. The activities include: (1) Improving the capacity of selected jetties by adding pontoons and gangways; (2) Implementing minor waterside construction works to install 30 gangways and pontoons; (3) Adding 22 new vessels with enhanced designs to existing fleet; and (4) Installing 40 turnstile gates in selected jetties.

The following are the four components and their respective subcomponents:

**Component A: Strengthening Institutional Capacity (USD20 million)**

This component will support institutional capacity enhancements for the GoWB's Departments of Transport and Urban Development. This component is intended to provide West Bengal Transport Department with the required assistance to: (i) assess, identify and develop the scope for sector planning, regulatory and institutional reforms review of governance structures, business and financial planning, safety management and capacity enhancement for key agencies operating within the West Bengal IWT sector; and (ii) provide implementation support to the PMU. This will include, inter alia: (a) a 5-year IWT Institutional Strengthening and Business Plan (ISBP) for West Bengal Transport Department, including organizational, planning, fiscal strengthening, regulatory reform and IT modernization, and implementation support; (b) a Program Management Support and Secretariat Support services to aid in implementation of the ISBP and Training Needs Assessment (TNA) study; (c) support to the Transport Department in Information Dissemination; (d) support to the key agencies in the West Bengal IWT sector on engaging with the private sector; and (e) safety management study to assess the existing River Information System (RIS), identify gaps and design a system to complement it. The proposed Project will finance a comprehensive capacity building program to strengthen the regulatory and operational frameworks for IWT.

Subcomponent A.1: Support for institutional capacity enhancement to regulate, manage, and maintain river transport systems (USD 8 million):

This subcomponent will include a TA to prepare an Institutional Strengthening and Business Plan (ISBP) which will map comprehensively the institutional structure, business processes, and human resource management and identify opportunities for improvement and consolidation. As part of preparing the ISBP, a TNA of the Transport Department and its key subsidiaries will be conducted to support a full capacity building program implemented under the project. The proposed Project will also support implementation of the capacity building programs.

Subcomponent A.2: Safety management: river navigation aids, night navigation technology on some routes, and emergency response system (USD 12 million).

The subcomponent will draw on national and international experience in assessing appropriate aids to navigation, their procurement and deployment to allow 24-hour services / night navigation on the most vulnerable and/or trafficked routes and crossing points. Beginning with pilots at 2-3 crucial locations, deployment of navigation aids will be scaled up based on the investment strategy for the sector. The subcomponent will begin with a TA assessment of the existing River Information System (RIS) followed by implementing an updating to the system.

**Component B: Technical Assistance for Investment Prioritization (USD8 million)**

With a large project area and multiple institutions, technical analysis and plans including an IWT strategy, spatial development strategy and comprehensive mobility plan are essential to ensure improved accessibility and to leverage wider economic development opportunities around the Project's investments. This will complement the institutional capacity strengthening efforts highlighted in Component A and tackles the "structural elements" that form the bases

for the main challenge this project is set to face; constrained accessibility. Accordingly, this component is set to investigate and drive the medium- and long-term planning that defines the relationship between the port (including its externalities) and the city

(with its livelihood and mobility). This will cover spatial, mobility and logistics planning. The component will be implemented through two subcomponents.

**Subcomponent B.1: Spatial and Logistics Master Planning (USD5 million).**

The subcomponent includes two TAs to prepare (i) Spatial Development Strategy (SDS) and (ii) Logistics Master Plan (LMP). Both these TAs will focus on strengthening the planning capacity which will support sound investments as well form an effective linkage between planning, fiscal policy and the budget process for the KMA. The TA on LMP will include technical support to be provided to a high-level council on logistics (Logistics Council) the GoWB recently created. Additional studies focusing on preparing local plans for subprojects that are identified by the SDS and the LMP are also included in this component (i.e. multi-modal station area plans to ensure improved accessibility and time savings for commuters).

**Subcomponent B.2: Prioritizing investments in IWT and linkages to transport network (USD3 million)**

This subcomponent involves preparing strategic plans to prioritize investments in the IWT in the short and medium terms and provide a long-term vision for mobility within the KMA. Two strategic plans will be prepared under this subcomponent; Integrated Strategic Development Plan (ISDP) and a Comprehensive Mobility Plan (CMP). The subcomponent will also support capacity building at the local level to plan and design the immediate surroundings around terminals, which will encourage multi-modal coordination, urban regeneration, and private sector engagement.

### **Component C: Infrastructure investments to improve water transport (USD 115 million)**

This Component provides for infrastructure investments to improve passenger and freight urban mobility. It will be implemented in two phases addressing short and longer-term solutions to the critical condition of the current IWT system. The first phase provides investments that are urgently needed to support the IWT system as recent bridge collapses are endangering the KMA population, and the resulting restrictions on truck flow have further hampered freight traffic. The second phase deals with longer term improvements to the efficiency and safety of IWT through investments in infrastructure. For the second phase, this Component adopts a framework approach for investments. Specific subprojects under the framework will be selected and designed upon completion of the ISDP, which will identify the nature and locations of all subprojects. The Bank will appraise, in turn, each subproject prepared and brought forward for financing until all project funds allocated to the subcomponents have been committed. The framework also integrates a systematic stakeholder engagement process during subprojects preparation.

**Subcomponent C.1: Improve infrastructure capacity of the existing network:** Activities under this subcomponent are intended to support the capacity of the existing system including, inter alia: (a) pontoons, gangways and tensile gates to enhance the capacity existing jetties. 26 sites are selected, and the expected value of this investment is USD 18.64 million; and (b) 22 new ferries will be built based on the design with improved safety standards and fuel efficiency at an expected cost of USD 9.28 million; and (c) electronic smart ticketing gates at 40 Nos. Ferry Points at an expected cost of USD 8.85 million. A feasibility study for these investments was prepared.

Subcomponent C.2: Enhancing Passenger Movement: This subcomponent includes long term investments to be identified in the ISDP including inter alia: (i) terminals jetties, road access and ancillary infrastructure in addition to other investments required to ensure navigable fairways; (ii) improved design of inland water transport vessels and solutions to modernize the fleet; and (iii) system management (e.g. river information systems integrated with the national river information system and the port information system). The exact number of jetties and their locations will be determined after analysis of economic benefits, access, intermodal connectivity, and social and environmental impacts.

Subcomponent C.3: Improving Infrastructure Capacity for Freight Movement: These investments will provide an alternative for truck movement, focusing on decongesting movement on land by facilitating access through the Hooghly River. Investments will include: (i) roll on-roll off (ro-ro) jetties, terminals, and road access; (ii) design and financing solutions for private participation in ro-ro vessels, and system management. The exact number of jetties and their locations will be determined after analysis of economic benefits, access, intermodal connectivity, and social and environmental impacts. Private sector involvement will be encouraged in investment in infrastructure, operation of terminals, financing and operation of vessels.

#### **Component D: Support to Implementation (estimated cost USD 7 million)**

This component will finance technical assistance and advisory services to the PMU and the Steering Committee (SC), including project management and coordination costs associated with project implementation, consultancy services for feasibility, conceptual, and detailed designs, safeguards instruments for subprojects, and the preparation of follow-on operations. It will provide for mobilization of expertise, exchange of international experience, and advisory services to support the SC (and the Logistics Council once established) in preparing and adopting a shared vision focused on improving logistics and developing a coordinated roadmap of future investments and key policy reforms needed to realize that vision.

### **Project cost & financing**

The Table 1 provides the breakdown of the project cost and the financing plan.

**Table 1 Break down of Project cost and Financing plan**

S. No	Project Components	Project Cost	IBRD/ IDA Financing	Counterpart Funding
		(All figures in US\$ million)		
1	Strengthening Institutional Capacity	20	14	6
2	Technical Assistance for Investment Prioritization	8	5.6	2.4
3	Infrastructure investments to improve water transport	115	80.5	34.5
4	Support to Implementation and Technical Assistance	7	4.9	2.1
<b>Total Costs</b>		<b>150</b>	<b>105</b>	<b>45</b>
<b>Total Financing Required</b>		<b>150</b>	<b>105</b>	<b>45</b>

### **Policy, Legal and Institutional Framework**

The project will be planned, designed, implemented and operated in line with the policy, legal and institutional framework provided by the applicable national environmental legislation,

applicable national social legislation and the World Bank Operational Policies (OPs) pertaining to environmental and social safeguards. The clearances / approvals / no objection certificates to adhere to these legislations and requirements will be obtained, and any conditions stipulated will be adhered with.

It is to be noted that the social legislations pertaining to resettlement and rehabilitation are covered in the ESMF Volume 2 Resettlement Policy Framework (RPF)

### World Bank Policies and Requirements

Following World Bank's OPs and Requirements on environmental and social safeguards were reviewed to determine its applicability to this project. Table 2 provides the details.

**Table 2 Applicable World Bank Operational Policies and Standards**

World Bank Operational Policy	Details	Applicability
OP/BP 4.01	Environmental Assessment	Triggered
OP/BP 4.04	Natural Habitats	Triggered
OP/BP 4.11	Physical Cultural Resources	Triggered
OP/BP 4.12	Involuntary Resettlement	Triggered
OP/BP 7.50	Projects on International Waterways	Triggered

### World Bank's EHS Guidelines

The World Bank's Environment, Health & Safety guidelines are relevant to the manufacture of the vessels, pontoons and gangways; and all the civil works to be done. During the subproject assessments, these guidelines will be used to ensure effective EHS management under the project. The EHS guidelines are provided in ESMF as **Appendix 2**.

### World Bank Project categorization

In the Bank's internal documentation, the project is classified as **Category A** and the following policies have been triggered: OP/BP 4.01 (Environmental Assessment), OP/BP 4.04 (Natural Habitats), OP/BP 4.11 (Physical Cultural Resources), OP/BP 4.12 (Involuntary Resettlement), and OP/BP 7.50 (Projects on International Waterways).

The Project is classified as Category A because : (a) construction and upgrading of terminals, Jetties and their ancillary infrastructure may require dredging that may cause significant and irreversible environmental and health impacts; , and (b) significant physical and economic displacement of people and assets. The Project affected people shall include both formal and informal occupants in the subproject areas including squatters and encroacher of permanent and temporary nature for works taken up from year two onwards. Though land acquisition is expected to be minimal, the project may impact significant number of informal settlers perusing petty to small business/trade'.

### Baseline scenario, project investments and their E & S impacts

The project baseline extends along the Hooghly River from Tribeni in the north to Noorpur in the south (Refer Figure 3.1 Location map). Adjoining the river, these are primarily in the KMA and KMDA areas, and it is managed by the Kolkata Port Trust (KoPT). The project implementation includes the procurement of goods and execution of works. The goods include vessels, pontoons and gangways which are made at designated areas by specialized contractors / fabricators. The execution of work includes waterside and landside investments in selected jetties. These will have direct, physical environmental and social (E & S) impacts

that have to be assessed and managed through appropriate measures during planning, designing, constructing and operating stages. There are various preparation studies that will be undertaken. Once these studies are identified, the E & S requirements will be embedded as required. This chapter outlines the project investments that have E & S impacts. These include ribbon development, drainage, biodiversity and related aspects, Heritage areas are noticed along the waterways from the north to south especially along the core urban areas.

### **Project investments - First Year Subprojects and E & S impacts**

These are subprojects to be supported as a part of the first year (30% of project budget):

- 1) Improving the capacity of selected jetties by adding pontoons and gangways;
- 2) Implementing minor waterside construction works to install gangways & pontoons;
- 3) Adding new vessels with enhanced designs to existing fleet;
- 4) Installing turnstile gates in selected jetties.

### **Gangways and Pontoons**

Thirty Pontoons and gangways are being planned to improve the capacity of selected jetties. The suppliers of these will be causing E & S impacts in their respective production facilities. These are minor, reversible impacts that can be addressed through appropriate management measures. During the operation phase, these gangways and pontoons – made of steel – will not cause any E & S impacts on the river Hooghly or on the landslide / river banks. The list of jetties selected in Year one is included in ESMF Volume 1 as **Appendix 4**.

### **Minor Waterside Construction Works**

To fix gangways and pontoons at selected jetties, minor waterside construction works will be required. This will require cordoning off small portion of the banks to complete foundation works. E&S impacts will be minor and temporary in nature. Also, jetty will be closed for passengers during this period. Therefore, there will be no construction-related E&S impacts.

List of jetties that will be finally selected in Year 1 (30% of project budget) will be 30 that include renovation of jetties. Total number of Jetties is 19 and 11 on Kolkata side and Howrah side respectively.

### **New Vessels with Enhanced Designs**

The project investments will be modernizing the fleet through new 16 vessels with enhanced designs. In the production of these vessels, there are minor, reversible Environmental and Social (E & S) impacts. Further, during the operation of these vessels, there are environmental issues such as air pollution from the engines using diesel as fuel,

The noise pollution due to operating these engines sewage / sullage generation and disposal due to the in-vessel toilets is taken in to consideration. The social issues include passenger safety and providing accessibility to disabled persons for entering these vessels both during high and low tide.

### **Turnstile Gates**

These are standard turnstile gates that are in use in a range of transport terminals, particularly seen in city metro stations. The investments are to install turnstile gates at 40 selected jetty locations.

As these are standard items that are bought out, the minor environmental impacts caused by metal cutting and painting in the supplier's production unit are additional.

**Table 3 Investments in the first year projects and E & S issues**

S. No.	Description of Project investments	Location /E&S issues	Environmental and Social (E & S) impacts
1	Gangways and Pontoons	Manufacturing site	Solid waste, waste water, air pollution, noise pollution, worker safety and labour / worker camps.
2	Minor waterside construction works	Jetty site	Construction waste, debris, waste water, worker safety, community safety and temporary community disturbances
3	New vessels with enhanced designs	Manufacturing site	Solid waste, waste water, air pollution, noise pollution, worker safety and labour / worker camps.
4	Turnstile gates	Minor environmental/ social issues at the manufacturing site;	Being a bought-out item, it is beyond the purview of the project.

**Project investments - Subprojects during the remaining project period**

Project investments to be taken up after the first year of investments and during the remaining project period include the following:

- Construction of new jetties & renovation of existing jetties (will be initiated from First Year investment onwards)
- Construction of LCT jetties with Roll-On Roll-Off (RO RO) vessels
- Addition of steel vessels
- Construction of ferry terminals at selected ferry points
- Addition of cruise vessels
- Addition of electric ferries/vessels
- Water taxi
- Electronic Smart Ticketing Gates at selected ferry points (will be initiated from first year investment onwards)
- Riverfront development (without riverbank protection)
- Development of a training institute for vessel operators
- Development of parking facility for vessels and yacht
- Ancillary infrastructure (such as road access, pedestrian access to passenger jetties and terminals, infrastructure within the area of jetties, terminal buildings, parking facilities, holding area for trucks, restrooms for operators/truck drivers, etc.)

**Design and construction of priority terminals associated with selected jetties**

In planning and design of these priority terminals, there is potential for land use change that could have environmental impacts. For instance, construction of building may require tree-felling and other construction-related E&S impacts that have to be managed. These may have been planned in busy crossings, urban, and rural areas. All of these will be located in the KMA.

**Design/construction of new jetties and ancillary facilities for passengers and freight**

Like the investments in the first 30%, there will be more jetties for both passengers and freight. These will include works both on the waterside and landside. There will be potential construction-related E & S impacts.

### Upgrading / rebuilding existing passenger jetties

Like the investments in the first 30%, there will be more jetties for both passengers and freight. These will include works both on the waterside and landside. There will be potential construction-related E & S impacts.

### Ancillary infrastructure

Ancillary infrastructure such as road access, pedestrian access to passenger jetties and terminals, infrastructure within the area of selected ghats and jetties, terminal buildings, and other amenities for the physically challenged, women, children, old, and infirm. These will have construction-related E & S impacts.

### Enhancing the WBSTC's maintenance workshops

Enhancing maintenance workshops operated by WBSTC which might include investments in the physical structure of workshops and strengthening the operational capacity. Here again, there will be environmental and social issues to be considered. These include:

- a) Managing waste water / solid waste treatment and disposal,
- b) Managing the facilities for oil & lubricant management, and
- c) For used oil / lubricant storage and disposal, which are inevitable in a maintenance workshop

### RO RO terminals in the Kolkata Metropolitan Area

The two RO RO Terminals in the KMA needed infrastructure within the selected areas. Infrastructure may include berthing and mooring structures and equipment, vehicle marshalling areas, on-off loading areas, link spans and passenger boarding bridges, storage sites, and terminal buildings, including customs and border control facilities. These will necessarily include E & S impacts that need to be considered during the planning, designing, constructing and operating these terminal facilities.

**Table 3.2 Project Investments during project period and E & S issues**

Sl. No.	Description of Project Investments	E & S issues
1	Priority terminals associated with selected jetties	Tree-cutting, construction and demolition debris, solid waste, waste water, oil waste, air pollution, noise pollution, worker & community safety.
2	New jetties and ancillary facilities for both passengers and freight	
3	Upgrading / rebuilding existing passenger jetties	
4	Ancillary infrastructure	
5	Enhancing the WBSTC's maintenance workshops	Construction debris, soil / land contamination, used oil waste, air pollution, noise pollution, worker safety.
6	Ro-Ro terminals in the Kolkata Metropolitan Area	Tree-cutting, construction and demolition debris, solid waste, waste water, oil waste, air pollution, noise pollution, worker & community safety.

## ESMF Procedures and Management Measures

### Introduction

This outlines the ESMF procedures, which are applicable to all subprojects after the first year's investment, i.e. in the remaining project period. These subprojects will be screened and scoped. If the screening and scoping reveals that there is a need for conducting the ESIA, then

this will be conducted. The ESIA and ESMPs will be prepared. The ESMPs will be integrated with the bid / contract documents. The national / state / local level approvals will be obtained as required. Further, the World Bank clearance for the subprojects will also be obtained and as required.

### **Screening & Scoping**

At the initial subproject stage, the basic environmental and social information will be collected, collated and reviewed. In specific, the key information will be two-fold:

- (i) Whether the project will have:
  - a) significant impacts,
  - b) limited impacts,
  - c) or no impacts; and
- (ii) Whether the project is in an Eco sensitive area or not.

Once the information is collected and the extent of significance is determined, the categorization of the subproject will be done.

If the subproject categorization is Category A or B, then scoping and further the conduct of the ESIA will be required. Whereas all subprojects classified as Category C will not need to be scoped or an assessment carried. All Category C subprojects will be outside the purview of the ESMF procedures after screening.

If the subproject requires national / state level clearance, the ToR given by the State's Expert Appraisal Committee should necessarily be considered in scoping out the key issues as a part of the detailed assessment.

### **Conducting the ESIA**

All subprojects classified as either Category A or B will have to conduct an ESIA as per a generic ToR for conducting the ESIA (Refer ESMF **Appendix 8**). This ToR will be tailor-made to suit the specific subproject. At the planning and design stage, an analysis of alternatives will be carried out in order to determine possible design and construction alternatives as applicable. Public and stakeholder consultations are an integral part of the ESIA, and the inputs / feedback from these consultations should necessarily be incorporated in the planning and design stage.

Under the project, the subproject activities will include procurement of goods, e.g. vessels or pontoons or gangways, and/or execution of onsite civil works. There will be slight variations in the way that ESIA will be conducted for different types of subproject activities. Further, the nature of the contracting arrangements also changes the manner in which the ESIA are conducted. The specific type of subprojects/contracting arrangements includes the following:

- i. Procurement of goods e.g. vessels, pontoons and gangways
- ii. Using EPC contracting arrangements for goods & civil works
- iii. Design build contracting arrangements for goods & civil works

### **Preparing the ESIA and ESMP**

#### **Draft Environmental and Social Impact Assessment (ESIA)**

Once the ESIA is conducted, the ESIA report will be prepared in line with the structure included in the ToR as given in the ESMF **Appendix 8**.

## **Draft Environmental and Social Management Plan (ESMP)**

Once the ESIA report is done, the ESMP report will be prepared in line with the structure included in the ToR as ESMF **Appendix 8**.

## **Final ESIA and ESMP**

The draft ESIA and the draft ESMP will be submitted to the World Bank for its review and approval. At that time, any comments received will be incorporated in the final version which will be sent to the World Bank for approval.

## **Integrating the ESMPs with the bid / contract documents**

The bid / contract documents will necessarily reflect the ESMP as appropriate to the contractor. It will be cross-checked that all the elements of the ESMP are included.

At time of approving the bid / contract documents, the World Bank will verify that the ESMP is integrated prior to the approval of the individual bid / contract. This will be done for all post-review contracts, which will necessarily cover all subprojects with E & S issues.

In the case of the EPC contracting arrangement, all the ESMP requirements will be a part of the bid / contract documents as the ESMP has been prepared with detailed designs. However, in the case of the Design-Build contracting arrangement, the ESMP requirements are based only on preliminary designs. Implementation ESMP will be prepared by the Design-Build contractor. These will be in line with the ESMP requirements and will be approved prior to acceptance.

## **Obtaining the National / State level clearances as required**

All national / state level clearances have to be obtained. This will include clearances from the MoEF&CC, State Environmental Impact Assessment Authority (SEIA), CZMA, Kolkata Port Trust and other state agencies as required. The ESIA will explicitly include the clearances required, and all the clearances will be obtained.

## **Obtaining the World Bank approval**

For obtaining the World Bank approval, the following documents will be required:

Final ESIA & ESMP that have incorporated the Bank's comments

- ESMP integrated with the bid / contract documents
- All the national and state level clearances as required

## **Public / Stakeholder Consultations, Disclosure**

### **Different stakeholders and their views / perspectives**

The following are the different stakeholders and beneficiaries. Their views / perspectives are also included here. The specific details of the outcome of the meeting are provided for commuters & Jetty workers Vessel Suppliers. Further input from Vessel Operators, jetty operators, and passengers

The passengers or the daily commuters are the major stakeholders. They pointed out some problems that they faced and these problems were of similar types irrespective of the location of the jetties. Some of the issues that they pointed out are listed as below:

- (a) The jetties and vessels needed upgradation
- (b) The vessels are too high to climb especially for the senior citizens and women commuters
- (c) Travelling, getting on and off and walking on the gangway is a challenge for the physically challenged people, insisted for some handrails, and space for wheelchairs
- (d) Washrooms on the vessels are in poor condition
- (e) Washrooms in and around the jetty are not in usable condition
- (f) There are no proper rest area in and around the jetty
- (g) Putting up of shade on the pontoon
- (h) Widening of the gangway
- (i) Electronic display of vessel timing and route
- (j) Announcements of the arrival and departure of the vessel.

### **Consultation with the local governing bodies**

The major governing bodies in this case are Kolkata Municipal Corporation (KMC), Kolkata Metropolitan Development Authority (KMDA), West Bengal Transport Corporation (WBTC) and Kolkata Port Trust (KoPT). After consultation with the concerned authorities, the various issues like waste disposal (solid and liquid wastes) and the contingency plan were discussed. The KMC collects the solid waste from the vessels daily from designated places along the 35 ghats. They also mentioned that the liquid waste was disposed directly into the river without any treatment. Further Input from consultation with the shop owners and other beneficiaries were also considered.

### **Stakeholder Consultation Workshop**

Further on October 31, 2019 a consultation workshop was carried out with various stakeholders to get their views on the project. More than 35 people participated. This is separately documented and provided in the ESMF as **Appendix 9**. The workshop was held at the Conference Hall, PMU's office at Paribahan Bhaban – II (CSTC Complex – Ground Floor), Kolkata, West Bengal on October 31, 2019. During the workshop, detailed discussion and suggestion on the ESMF and RPF by the participants were noted and incorporated in the document. (List of Participants and the Minutes of the Meeting are a part of **Appendix 9**. The main findings of the workshop are as follows:

- All stakeholders were supportive for this project
- Important E & S issues were presented and discussed. In some cases definite solutions were also discussed. For example
- With regards to the fuelling station, oil pollution, availability of toilets and drinking water at all jetties, gender issues, issues of physically challenged and old age people
- Together with Jetty limits, Jetty terminal building facilities and terminal officer will solve many problems of the jetties
- Good Practices that can be further improved and the bad practices that need to be changed for better in the waterways sector were also discussed

## **Disclosure of Project Information**

PMU will ensure that relevant information about E & S safeguard issues is made available in a timely manner, in an accessible place, and in a form and language(s) understandable to the public and other stakeholders. The purpose of such disclosure is that the public can provide meaningful inputs into project / subproject design and implementation.

### **At the State Level**

This ESMF and entire subproject ESIAs / ESMPs will be disclosed at the state level in the project website. Further, executive summary of this ESMF will be available in English and translated in Bangla. This will also be available as an easy to download document in the project website. Website disclosure will be kept up-to-date throughout project implementation.

In addition, it is recommended that the information (in hard copy) shall be made available for public access at the local body authority offices of each of the jetty locations, and also at the jetty location itself. Also, the documents will be circulated to all stakeholder departments (like Irrigation and Waterways, KoPT, PCB, UDMA, Fisheries, IWAI, etc.). The draft ESMF is anticipated to be disclosed by November 30, 2019 and subsequently the Final ESMF by December 15, 2019.

### **On World Bank's External Website**

This ESMF and the entire subproject ESIAs / ESMPs will be disclosed on World Bank's external website. ESMF will be disclosed and the resulting management plans shall also be disclosed as the project progresses.

## **Environmental Impacts and Mitigation measures**

Further to the site visits and understanding of the project and as a part of ESMF, it is necessary to formulate possible and probable identification of impacts and the proposed mitigation measures. This has been summarized and provided in ESMF. As in the case of any development project, potential environmental impacts such as handling / disposal of solid wastes, impacts to water quality, increased noise levels and air emissions issues have to be identified and addressed. Further, bad or poor practices such as the means of disposal of bilge water, commuter-centric facilities at the jetty locations, are important to be identified and suitably addressed.

It is important to note that at this stage only Year 1 activities are taken up. The Year 1 activities are largely restricted to waterfront side developments or activities. The ESMF is prepared for various project activities, its associated potential impacts and suggested mitigation measures. These are presented in the Chapter 6 of ESMF report.

## **Implementation Arrangements**

A project Management Unit (PMU) will be responsible for the Implementation.

### **Project Management Unit (PMU)**

For this WBIWTLSD project, Environmental, Social and safety cell is located in the Project Management Unit (PMU). The PMU under the West Bengal Transport Infrastructure Development Corporation Limited (WBTIDC) will be responsible for ensuring that this ESMF

is adhered during implementation. The Project Director (PD) will have the overall responsibility whereas a dedicated Environmental Specialist and Social Development Expert will have a day-to-day implementation responsibility. This should be detailed to meet all Institutional aspects of the West Bengal Transport Logistics and Spatial Development Project (WBTLSDP).

The two specialists will work coordinate with each other, and also with the technical and procurement officers of the PMU to ensure that the ESMF requirements are adequately incorporated in the various activities that have been proposed. The specialists will work closely with the contractors and consultants for the day-to-day implementation aspects and associated safeguards compliance.

### **Institutional strengthening and Business Planning (ISBP) consultants**

These consultants will be appointed shortly will have one expert to deal with the environmental and social issues. He/ she will work and contribute in terms of institutional strengthening arrangements on E&S issues.

### **Contractors**

The contractors will be responsible for ensuring the effective implementation of the ESMP requirements at the subproject level. These will be a part of the contract documents to which they will have to adhere. As required, the contractor will assign one or two staff in each subproject to ensure that ESHS requirements are met on a day-to-day basis. The assigned staff will report to the PMU's Environmental and Social Specialist on a monthly basis and confirm compliance to the safeguard requirements.

### **Project Management (PMC) / Supervision Consultants (SC)**

If the project will engage project management / supervision consultants to oversee the contractor on behalf of the PMU, there will be one environmental engineer / officer in the consultants' team to oversee the day-to-day implementation of the ESMP measures in the different subprojects. Lapses in implementation will be brought to the notice of the PMU, which is to take necessary corrective and preventive action in consultation with the respective contractor.

### **Training & Capacity Building**

To ensure successful ESMF implementation, a series of orientation, capacity building and training activities will be undertaken by the PMU with the contractors, consultants and other stakeholders who are directly implementing or indirectly involved with these subprojects. The training programmes will be practical and will include work with realistic case studies based on the type of subprojects supported under the project. The training will cover the following issues:

- a) National and World Bank requirements for environmental assessment;
- b) Screening and scoping procedures; and
- c) Main provisions of ESMPs for proposed subprojects, including mitigation and monitoring requirements.

Such training will enable these target groups to recognize and assess the potential negative environmental and social impacts and set of measures to mitigate them.

## **Monitoring and Supervision**

At the construction and operation stages, monitoring and supervision of the environmental and social management measures will be done. This will be the responsibility of the PMU and undertaken on an on-going basis.

### **Grievance Redressal Mechanism (GRM)**

Grievance Redressal Mechanism (GRM) is an integral part of the institutional arrangement in relation to environmental and social safeguard issues. At present, grievances related to employees and others are dealt on a case to case basis depending upon the nature of grievances. Safeguards-related grievances are expected from affected persons and other interested groups during the project implementation.

Under the project, a GRM at PMU level will be established for resolution of such grievances. Anticipated grievances could be:

- Environmental (e.g. air, noise and water pollution) and social (e.g. labour and community safety) issues arising from the project activities,
- non-payment of resettlement and rehabilitation assistance,
- name of affected persons missing,
- affected persons missed out/ not enumerated during the survey,
- social category and vulnerability incorrect,
- difference in land area acquired/purchased and measured at site,
- type and use of land acquired/purchased not considered correctly,
- wrong measurement of structure/building affected,
- wrong valuation of structure/building,
- damage to adjoining property,
- Construction activities at the site, quality of works, safety, etc.

In view of the above, a Grievance Redressal Committee (GRC) will be constituted in the PMU with the aim to resolve as many grievances as possible related to resettlement and rehabilitation and land acquisition/purchase through consultations and negotiation. The GRC will comprise Seven (7) members. The GRC will be constituted within a month before the implementation of activities under subcomponent during the first year of investment starts. A draft format for monitoring of grievances (received, type of grievances, grievances redressed, time required for resolving the grievances, etc.) has been provided in ESMF Volume as **Appendix 11**.

### **ESMF Budget**

The budget for the ESMF including for subproject preparation – conducting / preparing ESIA's / ESMPs, monitoring and reporting, training & capacity building and stakeholder consultations – is estimated to be US\$ 550,000 or Rs. 38.50 million.

## **RESETTLEMENT POLICY FRAME WORK (RPF)**

### **Social Impact Assessment**

As a part of the project preparation, a Social Impact Assessment (SIA) was conducted for various ferry sites on both sides of the Hooghly River to understand and address the social development issues due to the proposed project interventions. In particular, the assessment

covered scope for land acquisition, extent of resettlement and rehabilitation, impact on livelihoods, safety and gender issues and develop measures to avoid or minimize and mitigate the adverse social impacts and enhance positive impacts.

A Social Development Expert (SDE) has been engaged by the PMU to deal with matters related to social impacts and resettlement & rehabilitation. Since the adverse impacts of the proposed project during the first year of investments are likely to be very limited, the service of an external agency is not envisaged. However, from the second year investment onwards, development on land side and upgrading of access roads for RO-RO services might cause substantial involuntary resettlement. In such a case, support of an external agency for the implementation of RAP will be required.

During the first year investments subcomponent “Enhancing Passenger Movement” will be undertaken to support the capacity of the existing system. This will cover a total of thirty (30) identified ferry locations on both sides of the Hooghly River, building of (22) new transport vessels with improved design and installing 40 turnstile gates in selected jetties. All the activities under this subcomponent shall be on the waterfront side. During site visit it was observed that for the first year project investments there would be temporary impact on livelihood of 13 petty vendors doing business on the Pontoons and Gangways within the proposed Corridor of Impact (COI) in the 30 proposed Jetties for a maximum period of one month. An Abbreviated Resettlement Action Plan (ARAP) has been prepared to mitigate the temporary loss of livelihood of the 13 petty vendors for one month. For the works from year two onwards, based on initial assessment, it is estimated that 2250 families would be affected for works from year two onwards; and the total Project Affected Families including for Year One works, it is estimated at 2263 families.

### **Need for Resettlement Policy Framework (RPF)**

From the second year onwards, most of the developments are planned on landside on Kolkata Port Trust land. However, the existence of informal settlers (encroachers and squatters – land occupied for residential, commercial and other purposes e.g. cattle shed, petty shop, workshed, etc.) and common property resources (religious structures, culturally sensitive sites, burial/cremation place, shrines, hand pumps/wells, public toilets, etc.) cannot be fully ruled out. In light of the above potential impacts, a Resettlement Policy Framework (RPF) has been prepared which will guide (i) for conducting Social Screening, (ii) Social Impact Assessment (SIA) based on the outcome of social screening, and (iii) preparation of Abbreviated Resettlement Action Plan (ARAP) or Resettlement Action Plan (RAP) depending upon the magnitude of impacts.

### **Applicable Legal and Regulatory framework**

The major Acts and Rules of the Central and the State Government to be followed are:

1. Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013.
2. Memorandum: No. 756-LP/1A-03/14(Pt-II) Date: 25.02.2016 - Direct land purchase from land owners, Land and Land Reforms Department, Govt. of West Bengal.
3. The Right to Information Act, 2005.
4. Other prevailing Acts and Rules as applicable.

Other than these the World Bank Guidelines which are to be followed are:

1. World Bank OP/BP 4.12 – Involuntary Resettlement

## 2. Indigenous Peoples OP/BP 4.10

### **Entitlement Matrix**

Based on the legal and regulatory framework an Entitlement Matrix has been prepared. The entitlements of different categories of eligible persons are presented in a matrix form indicating the type of loss, category of entitled person, unit of entitlements, etc. Affected families will be eligible for compensation and R&R assistance or specific R&R assistance depending upon the status of ownership rights and type of loss.

**Land (Title Holder)**: Compensation for land as per the First Schedule and Second Schedule of the RFCTLARR Act, 2013 .As per Second Schedule of RFCTLARR Act, 2013:

- a) One-time payment of Rs. 5 lakhs per affected family
- b) Subsistence grant @ Rs. 3000/-per month for a period of one year
- c) Stamp duty and other fees payable for registration of **land**, if allotted to the affected families

**Or**, as per the provisions of Memorandum No. 756-LP/1A-03/14(Pt-II Date: 25.02.2016 – Govt. of WB), whichever is higher

**Structure (Title holder)**: Compensation for land as per the First and Second Schedule of the RFCTLARR Act, 2013 As per Second Schedule of RFCTLARR Act, 2013

- a) Provision of housing unit (a constructed house as per PMAY specifications) or the equivalent cost of the house for the displaced.
- b) One-time financial assistance of Rs. 50,000/- as transportation cost to displaced families.
- c) One-time resettlement allowance of Rs. 50,000/- to displaced families.
- d) Right to salvage affected materials.

**Or**, as per the provisions of Memorandum No. 756-LP/1A-03/14(Pt-II Date: 25.02.2016 – Govt. of WB), whichever is higher.

### **Workshop, work-shed, cattle shed, petty shop, Kiosk, etc. of Title and Non Holder:**

A minimum of Rs. 25,000/- to each displaced family (artisan, small trader or self-employed person or the family).

### **Tenants (Residential, commercial, Residential cum commercial, storage, office, etc) of Title and Non-Title Holder:**

Rental Assistance for three months @Rs.5,000/- per month.

### **Structure (Residential, Commercial, and Residential cum commercial) & other immovable structure or assets attached to the land or building of Non-Title Holder:**

- a) Value of structure determined (without depreciation and without application of solatium).
- b) Right to salvage affected materials

**Livelihood of Title and Non-Title Holder**: A minimum wage of Rs.8,177/- per month to each affected commercial structures for the number of days it loses its livelihood, provided that there should be loss of livelihood for more than 10 days. However, for losses less than 10 days, the wage would be calculated on a pro-rata basis.

**Vendors**: The Vendors should be relocated such that he/she can cater the same number of passenger/customer or a minimum wage of Rs.8,177/- per month to each affected vendors for

the number of days it loses its livelihood, provided that they should obtain a vending license and there should be loss of livelihood for more than 10 days. However, for losses less than 10 days, the wage would be calculated on a pro-rata basis.

**Vulnerable Title and Non-Title Holder:** Additional assistance of Rs. 25,000/- per family.

**Religious structure, well, and other facilities on public land:** To be reconstructed/ rehabilitated at project cost in consultation with local communities and ULBs/ Gram Panchayat, as the case may be.

**Unforeseen impacts:** Unforeseen impacts encountered during implementation will be addressed in accordance with the principles of RPF.

## **Grievance Redressal Mechanism (GRM)**

Grievance Redressal Mechanism is an integral part of the institutional arrangement in relation to social safeguard issues. Grievances related to employees and others are dealt on a case to case basis depending upon the nature of grievances. Social safeguards related grievances are expected from affected persons and other interested groups during the project implementation and therefore, it is important to set up a GRM at PMU level for resolution of such grievances. A seven member Committee for GRM will be formed at PMU.

## **Disclosure**

In order to make the ARAP/RAP preparation and implementation process transparent, salient features of RPF shall be translated in Bengali and disclosed on the Project Authority's website. The documents available in the public domain will include Entitlement Matrix and ARAP/RAP (summary in Bengali) and the list of affected persons eligible for compensation and R&R assistance. Copy of all documents will be kept in PMU for ready reference. As per Access to Information Policy of the World Bank, all safeguard documents will also be disclosed and available at the World Bank's Portal.

## **Consultation Workshop**

A consultation workshop was held at the Conference Hall, PMU's office at Paribahan Bhaban – II (CSTC Complex – Ground Floor), Kolkata, West Bengal on October 31, 2019. Detailed presentation on RPF was made which was followed by discussion and suggestion on the Resettlement Policy Framework and the Environmental and Social Management Framework by the participants. The suggestions were suitably incorporated in the ESMF/RPF document.

## **Budget**

The Government of West Bengal will provide an adequate budget for land acquisition compensation and R&R assistance from the counterpart funding. The budget estimates and its sources will be reflected in ARAP/RAP.