Combined Project Information Documents / Integrated Safeguards Datasheet (PID/ISDS)

Appraisal Stage | Date Prepared/Updated: 16-Feb-2020 | Report No: PIDISDSA27629
BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country</th>
<th>Project ID</th>
<th>Project Name</th>
<th>Parent Project ID (if any)</th>
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<tbody>
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<td>India</td>
<td>P166020</td>
<td>West Bengal Inland Water Transport, Logistics and Spatial Development Project</td>
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<td>Estimated Board Date</td>
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<td>18-May-2020</td>
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<td>Financing Instrument</td>
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<td>Government of India</td>
<td>West Bengal Transport Infrastructure Development Corporation</td>
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Proposed Development Objective(s)

The project development objectives (PDO) are to (i) improve the efficiency and safety of passenger and freight movement across the Hooghly River; and (ii) establish a spatial planning framework to enhance accessibility within Kolkata Metropolitan Area.

Components

- Strengthening Institutional Capability
- Technical Assistance (TA) for Planning and Investment Prioritization
- Infrastructure investments to improve water transport
- Support to Implementation

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

| Total Project Cost | 150.00 |
| Total Financing | 150.00 |
| of which IBRD/IDA | 105.00 |
| Financing Gap | 0.00 |
The review did authorize the team to appraise and negotiate

B. Introduction and Context
Country Context

1. **While Gross Domestic Product (GDP) growth has slowed in the past three years, India remains one of the fastest growing major emerging market economies.** The current slowdown is primarily due to unresolved balance sheet issues in the banking and corporate sectors, compounded by stress in the non-banking segment of the financial sector. These issues have prevented a sustainable revival in private investment, and private consumption growth has also slowed in FY19/20. As a result, growth is expected to reach 5 percent in FY19/20. To address the slowdown, the Government has introduced various economy-wide and sectoral reforms (including a cut in corporate taxes, as well as steps to support the automobile and real estate sectors, non-banking financial companies, and medium and small enterprises). As a result, growth should pick up gradually from FY20/21 onward and revert toward potential. On the fiscal side, the general government deficit is estimated to have widened to above 6 percent of GDP in FY18/19, and it is expected to rise further in FY19/20, owing to recently adopted tax cuts and the impact of slower economic growth on tax proceeds. The current account balance is expected to improve in FY19/20, reflecting mostly a sizeable contraction in imports. Given this and robust capital inflows, India’s foreign exchange reserves rose to US$457.5 billion at end-December 2019 (equivalent to more than 11 months of imports).

2. **Since the 2000s, India has made remarkable progress in reducing absolute poverty.** Between FY11/12 and 2015, poverty declined from 21.6 percent to an estimated 13.4 percent at the international poverty line (US$1.90 per person per day in 2011 Purchasing Power Parity (PPP), continuing the earlier trend of rapid poverty reduction. Owing to robust economic growth, more than 90 million people escaped extreme poverty and improved their living standards during this period. Despite this success, poverty remains widespread. In 2015, 176 million Indians were living in extreme poverty, while 659 million—half the population—were below the higher poverty line commonly used for lower middle-income countries (US$3.20 per person per day in 2011PPP). With the recent growth slowdown, the pace of poverty reduction may have moderated.

3. **India has nearly 7,500 km of coastline and 14,500 km of navigable waterways, however, water transport collectively accounts for less than 6 percent of the overall freight traffic.** Inland Water Transport (IWT) today plays a negligible role in national freight transport, carrying only 0.5 percent of India’s freight.¹ The country continues to underutilize the waterways with small, shallow draft vessels. Commercial shipping using large modern vessels is not currently feasible on most rivers despite the urgent demand expressed by many potential shippers, according to the country’s regulatory agency, the Inland Waterways Authority of India (IWAI).² India will need to pursue an integrated approach that aims to optimally utilize all transport modes, especially in urban agglomerations where land-based freight transport is negatively impacting the quality of life.

4. **West Bengal lies on India’s eastern boundary along the Bay of Bengal.** With over 91 million inhabitants, it is India’s fourth-most populous state. The proposed project area covers the five most populous districts of southern West Bengal, including the Kolkata Metropolitan Area (KMA), the urban agglomeration of the state capital, Kolkata.³ Around 30 million people are concentrated in the project area, which spread

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¹ In China, the United States, and the European Union, between 5 percent and 7 percent of all freight traffic is conducted on inland watercourses

² This is mainly because of a lack of high-quality inland waterway networks with proper navigation, ports, terminals, and modally interconnecting infrastructure.

³ The five districts are Howrah, Hooghly, South and North 24 Parganas, and Kolkata.
linearily on both sides of the Hooghly River from Tribeni, to the north of KMA, to Roychak in the South. According to the 2011 census, Kolkata is the seventh most populous city in the country, and at that time, the city had a population of 4.5 million, while the metropolitan region was estimated at 14.1 million. Kolkata has one of the highest population densities in the world (24,000/sq. km). The daily passenger volume within the Kolkata Metropolitan Area (KMA) is approximately 25 million, and this is expected to increase to 32 million by 2025. In addition, more than 30,000 trucks travel within the KMA every day. Kolkata’s economy is estimated at US$150 billion, making it the country’s third most-productive metropolitan area after Mumbai and Delhi. The logistics’ sector is estimated at US$20 billion by 2020, leveraging the state’s strategic geographic location and regional partnerships.

2. The Government of West Bengal (GoWB) has identified logistics as its key growth sector as the logistics sector is expected to grow at 9-10 percent over the next few years. The state has a natural advantage due to its strategic location. Its port is the gateway to North-East and Central India and the land-locked countries of Nepal and Bhutan. By creating a freight and logistics-based economy and leveraging its geographic location and regional partnerships, West Bengal has the potential to become a logistics hub and attracting private investment provided key market failures are addressed through policy reforms. These include: (a) infrastructure and connectivity gaps; (b) enabling logistics policy and institutions for private sector engagement; (c) supporting land use policies; and (d) access to finance. With the recognition that efficient logistics systems are and increasingly will become of paramount importance for the competitiveness of West Bengal’s economy, a World Bank Development Policy Loan (DPL) focused on logistics sector reform is under preparation.

3. The inefficient flow of passenger and freight traffic within the KMA has had an adverse effect on the livability and competitiveness of the KMA and is hindering the growth of West Bengal’s logistics sector. Kolkata has narrow roads, limited availability of land, and unregulated land use. Severe traffic congestion is endemic, a consequence of inadequate infrastructure and public transport relative to the high population and economic density. Unplanned land use, insufficient transport investments, and fractured institutional coordination have drastically increased congestion throughout the KMA, creating serious challenges to accessibility and livability. In 2019, Kolkata ranked 160th of 231 cities, the second lowest Indian city in a quality of living ranking. The low livability and public transport accessibility in Kolkata disproportionately affect vulnerable and excluded groups such as the poor, women and elderly.

4. The Hooghly River, a defining feature of KMA, acts more as a barrier to accessibility than an enabler of freight and passenger transport. IWT along the Hooghly River has long been underutilized. Its growth is critical to an efficient, comprehensive and multi-modal transport system for both freight and passengers in the KMA. Moreover, the Port of Kolkata (located on the Hooghly River) is India’s oldest operating port and its sole major riverine port. Like many older trade hubs, the Kolkata Port is at the heart of the metropolitan region and is an important contributor to the local economy. However, the port generates significant volumes of urban freight, and its location results in a disproportionate share of externalities.

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4 Logistics Park Development and Promotion Policy of West Bengal, Department of Commerce and Industry, January 2018
5 Accessibility refers to the overall ability to reach desired services and activities, and therefore the time and money that people and businesses must devote to transportation. It is an important spatial characteristic and a critical link between transportation and land use. Factors affecting accessibility include mobility (the ease and quality of travel modes), proximity, transportation system connectivity, affordability, convenience, and social acceptability.
6 Ranking by Mercer Quality of Living Index (2019) Delhi has 18 percent and Mumbai 21 percent road space
such as congestion on local streets and highways, infrastructure damage, pollution, greenhouse gases, and noise.

5. **The KMA lacks an integrated spatial strategy to inform infrastructure investments and land use, which would help distribute people, activities and supporting infrastructure in an efficient manner.** The lack of strategy limits accessibility to infrastructure and amenities within the KMA, restricts coordination between stakeholders, and accentuates the conflicting attributes of a trade hub and a livable city. Multi-sectoral and multi-agency solutions that optimize the transport system and rethink Kolkata’s long-term development patterns are urgently needed. The relationship between the port, freight and city requires long-term spatial planning that can integrate developments, prioritize investment infrastructure, and holistically analyze the metropolitan area. Coordinated, integrated spatial planning can transform the coalescence of the port and city into a livable and competitive region by introducing new land use patterns, strengthening connectivity within the city, and transforming or even relocating existing development nodes.

**FREIGHT AND PASSENGER MOVEMENT**

6. **Access to Kolkata Port is a challenge due to the geographical location of the city on the east side of the Hooghly River.** The River separates the port and large consumption centers, including eastern India’s largest wholesale market, from the hinterland on the western side. This creates enormous pressure, pollution, and congestion in a city with only 6 percent road space. More than 80 percent of freight and passenger traffic currently crosses the river via Kolkata’s three bridges. To curtail congestion, the city has restricted the movement of trucks to the port to certain bridges and only during limited hours, reducing port access and increasing the cost of logistics. Consequently, today, trucks regularly wait more than 12 hours to cross the river, illegally parking along local roads. The magnitude of freight traffic within the city is expected to increase significantly with the construction of the Eastern Development Freight Corridor, a major freight-dedicated rail corridor that will link Ludhiana in Punjab and Dankuni in West Bengal (near Kolkata). In addition, there are no spatial or mobility plans that can identify opportunities for through traffic (about 30 percent of freight traffic) to be handled by alternative routes or transport modes that bypass the KMA. However, market feedback indicates a growing interest in establishing roll on-roll off (ro-ro) services to cross the river at different locations, bypass the existing bridges, and shorten connections to the Port.

7. **IWT is underleveraged for passenger transport due to a lack of infrastructure, an inadequate fleet of vessels, weak governance and financing issues.** River transport as an alternative mode of transportation of passengers and freight can ease the pressure on the existing transport infrastructure and supplement other modes. The development of waterways and ferry services can provide feasible options to better integrate transport networks and better connect the hinterland with KMA’s markets and job centers. The existing ferry has been operational for decades, but it caters to a very limited portion of passenger traffic (less than 2 percent), and passenger volumes are decreasing. Currently, 165 ferries operate across 57 KMA ferry points serving more than 145 million passengers per year. About one quarter of all ferry passengers are females. Passenger ferries are hampered by poor service, lack of amenities, minimal maintenance, accessibility limitations and safety concerns. Due to the limited capacity of the ferry system, a large number of unlicensed *bhut bhutis* (mechanized country boats) operate to fill the demand. The *ghats* (ferry

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7 Delhi has 18 percent and Mumbai 21 percent road space
terminals) are overcrowded and have few facilities, limited seating (if any), toilets and drinking water. The ferry system is not well integrated with the metropolitan region’s other transit modes. Access roads and pathways connecting to many of the ghats are in poor condition and not maintained. Fixes to the entire ferry network are needed in the short and medium-term to allow for safe and effective service delivery. The capacity of the existing IWT infrastructure requires immediate enhancement, and its integration with other transit modes is urgent.

8. **The strategic location of Kolkata, the unique location of the port at the heart of the city, and the severity of the congestion call for a rethink of urban mobility.** While many transport modes (rail, metro, bus, highways, waterways) serve the KMA, there is a severe capacity constraint with demand exceeding supply for passengers and overall low quality of services. The last Comprehensive Mobility Plan was developed in 2008, when the city needs were quite different, and it has only been partially implemented. While elements of innovation have emerged, like the expansion of bus services by the private sector, the introduction of electric buses and the extension of the metro, KMA now seeks to renew its overall vision for sustainable urban mobility and accessibility to better reflect the needs of its citizens, develop a roadmap for implementation, and strengthen its institutional capacity, funding and financing mechanism.

INSTITUTIONAL FRAMEWORK

9. **Infrastructure challenges facing IWT are compounded by weak institutional capacity.** Institutional arrangements for IWT are highly fragmented and sometimes overlapping. National, state, and local governments are involved in IWT in different capacities, including the IWAI, and Kolkata Port Trust (KoPT). IWAI primarily undertakes the development and maintenance of IWT infrastructure on national waterways through grants received from the Ministry of Shipping, Road Transport and Highways. KoPT is the port operator and the main land owner on the Hooghly riverbanks. At the state level, there are four IWT entities under the Transport Department. The human and technical capacity of these state institutions to regulate, manage, and operate transport systems is limited. Private sector participation in IWT is limited, with only a few private companies operating passenger ferries and numerous unlicensed small private operators in bhut bhutis.

10. **The Transport Department has taken steps towards to clarify the institutional and governance structure of the IWT sector by creating a new IWT Secretariat.** The Secretariat will be the regulatory body for the sector, while the existing West Bengal Transport Commission (WBTC) will oversee IWT operations. However, a governance framework for the IWT sector, including a definition of roles and responsibilities across relevant agencies, formal mechanisms for coordination, financing, operations and engagements, and which promotes the participation of the private sector within an established vision for the sector is urgently needed. Moreover, supporting the growth of IWT as part of a comprehensive mobility strategy for the KMA will require coordination and cooperation with metropolitan urban/land planning agencies for the development, management and operation of a comprehensive and integrated network.

11. **The proposed West Bengal Inland Water Transport, Logistics and Spatial Development Project is an integrated package of institutional, regulatory, planning and physical interventions that will improve**

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specific IWT services and strengthen the GoWB’s capacity to administer, regulate and deliver transport services within KMA. The proposed Project will facilitate passenger and freight movement across the Hooghly River, improve accessibility within the KMA, enhance the quality of life of its residents and contribute to the growth of the state’s logistics sector. The proposed Project will facilitate high-level policy dialogue needed to address the complex policy reforms and large investments that are required to elevate IWT in a comprehensive and coordinated manner. Proposed interventions under the Project will attempt to directly improve female participation and accessibility and actively engage the private sector in IWT.

C. Proposed Development Objective(s)

Development Objective(s) (From PAD)
The project development objectives (PDO) are to (i) improve the efficiency and safety of passenger and freight movement across the Hooghly River; and (ii) establish a spatial planning framework to enhance accessibility within Kolkata Metropolitan Area.

The PDO will be measured by six PDO indicators given below. These indicators are further detailed in Results Framework in section VI of this document.

Key Results
12. The key results that will measure the achievement of the PDO are as follows:
   a. Improve the efficiency and safety of passenger and freight movement across the Hooghly River
      i. Increased passenger volume on waterway (disaggregated by gender)
      ii. Time reduction in passenger movement across the river for three representative routes
      iii. Percentage of reduction in travel distance for truck movement across the river for one representative route
      iv. Increased number of trucks on waterway on a selected route
   b. Establish a spatial planning framework to enhance accessibility within Kolkata Metropolitan Area
      v. Safety Management System established and implemented
      vi. Spatial and mobility plans developed and approved by the Minister in Charge

D. Project Description
The project comprises four components.

5. Component A: Strengthening IWT Institutional Capacity (US$20 million). This component will support institutional capacity enhancements for the GoWB’s Department of Transport. It will provide the Department with the required assistance to 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.

6. Subcomponent A.1: Support for institutional capacity enhancement to regulate, manage, and maintain river transport systems (US$8 million): This subcomponent will finance the preparation of the Institutional Strengthening and Business Plan (ISBP), which will comprehensively map the institutional
structure, business processes, and human resource management and identify opportunities for improvement and consolidation. As part of preparing the ISBP, a Training Needs Assessment (TNA) of the Transport Department and its key subsidiaries will be conducted to support a full training program implemented under the project. Interventions under this subcomponent will aim to increase the percentage of women in technical and non-technical job roles in the IWT Department as well as with the ferry operators.

7. Subcomponent A.2: Safety management: river navigation aids, night navigation technology on some routes, and emergency response system (US$12 million). The sub-component will draw on national and international experience in assessing appropriate aids to navigation and their procurement and deployment to allow 24-hour services/night navigation on the most hazardous and/or trafficked routes and crossing points. Beginning with pilots at two-three crucial locations, deployment of navigation aids will be scaled up based on the investment strategy for the sector. The subproject will finance the hardware and software for the navigation system and emergency response system. The Project will finance an assessment of the existing River Information System (RIS) and the implementation of a system update.

8. Component B: Technical Assistance for Planning and Investment Prioritization (US$8 million). With a large coverage area and multiple institutions, the Project will finance a spatial development strategy (SDS), logistics master plan (LMP) and a comprehensive mobility plan (CMP) to ensure improved accessibility to the IWT network and identify ways to create wider economic development opportunities around the Project’s investments. This will complement the institutional capacity strengthening efforts and tackle the structural elements that form the basis for the Project’s main challenge: constrained accessibility. Accordingly, this component will focus on the medium and long-term spatial, mobility and logistics planning to improve the livelihood and mobility within the city and the linkages to the port. The TA will help the GoWB with a broad roadmap for future transport investments that promotes a more balanced modal mix, improved modal integration, mainstreaming of IWT, better climate adaptability/resilience, and emissions reduction. The component will be implemented through two subcomponents.

9. Subcomponent B.1: Spatial Development Strategy and Logistics Master Planning (US$5 million). The subcomponent will finance preparation of (a) a spatial development strategy and (b) logistics master plan. Focus will be on strengthening the capacity to support investments as well from an effective linkage between planning, implementation capacity and coordination, and the budget process for the KMA. The LMP will include technical support to be provided to a high-level council on logistics recently created by GoWB.

10. Subcomponent B.2: Prioritizing investments in IWT and linkages to transport network (US$3 million). This subcomponent will prioritize investments in the IWT in the short and medium-term and provide a long-term vision for mobility within the KMA. The analytical work under this sub-component include the Integrated Strategic Development Plan (ISDP) and comprehensive mobility plan.

11. Component C: Infrastructure investments to improve water transport (US$115 million). This Component will provide infrastructure investments to improve passenger urban mobility and freight movement. It will be implemented in two phases addressing short and long-term solutions to the critical
condition of the current IWT system. The first phase (subcomponent C.1) provides investments that are urgently needed to support the IWT system. The second phase (subcomponents C.2 and C.3) deals with long-term improvements to the efficiency and safety of IWT through infrastructure investments.

12. **Subcomponent C.1: Improve infrastructure capacity of the existing network (US$40 million):** Activities under this subcomponent are intended to support the capacity of the existing system including, inter alia: (a) pontoons, gangways and turnstile gates to enhance the capacity existing jetties. 26 sites have been selected, and the expected value of this investment is US$18.64 million; (b) 22 new passenger ferries will be built based on the design with improved safety standards and fuel efficiency at an expected cost of US$9.28 million; and (c) electronic smart ticketing gates at 40 jetties at an expected cost of US$8.85 million.

13. **Subcomponent C.2: Enhancing Passenger Movement (US$40 million):** This subcomponent includes long-term investments to be identified in the ISDP including, inter alia: (a) terminals jetties, road access and ancillary infrastructure in addition to other investments required to ensure navigable fairways; (b) improved design of inland water transport vessels and solutions to modernize the fleet; and (c) 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. The ISDP will offer a phased approach to private sector solutions to vessel financing, and this subcomponent will create a pilot project demonstrating the solutions.

14. **Subcomponent C.3: Improving Infrastructure Capacity for Freight Movement (US$35 million):** These investments will provide an alternative for truck movement, focusing on decongesting vehicular movement by facilitating access across the Hooghly River. Investments will include: (a) ro-ro jetties, terminals, and road access; (b) design and financing solutions for private participation in ro-ro vessels, (c) and system management. Locations where connectivity across the river can be effectively utilized to enhance cargo movement have been identified based on preliminary assessment and demand. The exact number of jetties and their locations will be determined after analysis of economic benefits, access, intermodal connectivity, and social and environmental impacts through the ISDP. While there are no ro-ro vessels currently operating, market demand studies indicate the potential for a private sector solution. This component will aim to create a pilot project to increase the number of ro-ro vessels in operation as part of the private sector solution.

15. **Component D: Support to Implementation (US$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. This component will include capacity development and policy support on climate mitigation and adaptation through specific consultancies, knowledge events, and staff training.
E. Implementation

Institutional and Implementation Arrangements

16. **The Project's implementation arrangements build on existing institutional arrangements for IWT in Kolkata.** Oversight will be the responsibility of a SC, including all concerned stakeholders. The Department of Transport will ensure that meetings of the SC are held regularly (i.e. at least once a month) for the first year of project implementation.

17. **GoWB has identified the West Bengal Transport Infrastructure Development Corporation Limited (WBTIDCLL) as the primary implementing agency.** WBTIDCLL will be responsible for implementing all project activities, monitoring implementation progress, and producing progress reports. A PMU has been established within WBTIDCLL. The PMU will have overall responsibility for implementing the Project, including all technical, operational, environmental, and social safeguards, procurement, financial management and communication activities. The PMU will be headed by a Project Director and will be staffed with technical experts and specialists. The PMU will receive implementation support from the World Bank and from a dedicated infrastructure project management firm to be hired under the Project for the duration of the project. This assistance falls under the capacity building program that is further detailed under Component A. The implementation period of the period is planned for five years (July 2020 to June 2025).

18. **Technical Lead Agencies.** Kolkata Metropolitan Development Authority (KMDA) and the GoWB Urban Development Department will be the technical lead agencies for planning initiatives, including the SDS and the CMP. The Department of Industry, Commerce and Enterprise will be the technical lead for the LMP. The technical lead will provide technical inputs to the procurement process of TAs including preparation of ToRs and review of deliverables, facilitation of contractors and consultants, and certification of payment claims by contractors and consultants. All works related to vessels, including safety management will be the responsibility of WBTIDCLL. WBTIDCLL will also be responsible for contracting the civil works, managing the supervision consultants and project finance.

19. **The operation and maintenance management function can be exercised by existing entities.** The Bank will coordinate with WBTIDCLL for capacity building and institutional strengthening of all institutions. After four years, the IWT system will require additional financing which will then sustain the cost of the WBTIDCLL as well as any new institutional arrangements.

F. Project location and Salient physical characteristics relevant to the safeguard analysis (if known)

The proposed project will be implemented in Hooghly River, a distributary of the Ganga River. The project influence areas stretch from Tribeni to Roychak. It flows between Kolkata and Howrah cities. Both sides of the stretch are heavily built-up and densely populated. Apart from few bridges across the river connecting both sides, the ferry services that this project aimed at improving is the lifeline of this twin urban conglomerates. The terrain is flat, and the gradient towards the river is also shallow. Consequently, drainage to the river from both banks is challenging. The Hooghly River is affected by sewer outlets and drainages which open into the river directly. There is also abstraction of large amount of water for industrial uses. As a
result, the river is characterized by wide variations in turbidity, high value of total dissolved solids and fecal coliform. Because of the dense urban development, there is no protected biodiversity conservation areas along the project stretch. Hooghly as part of Ganga river, is habitat to Gangetic Dolphin which is considered as endangered by IUCN. Report on the distribution of Gangetic Dolphins in the project stretch reported sightings ranging from 11-50. There are numerous heritage sites including prominent built heritage all along the river. Entry and exits from the terminal sites are very narrow, sometimes 500m long (or more) and challenging. All along the river, and along the entries and exits of terminals, there exists a whole range of private and public properties in and apparently large number of squatters. These sensitivities of the project area shall be considered in planning and design of various activities.

G. Environmental and Social Safeguards Specialists on the Team

Venkata Rao Bayana, Social Specialist
Asferachew Abate Abebe, Environmental Specialist

SAFEGUARD POLICIES THAT MIGHT APPLY

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<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>The overall project design and implementation strategy envisages, (i) capacity improvement of existing jetties and modernizing fleet by purchasing additional vessels in the first year of the project; and (ii) design and construction of priority terminals, jetties along with ancillary infrastructure during 2nd to 5th year of the project, based on the strategic development plan (to be prepared in the 1st year). The environmental and social risks for the project, thus arise both during construction and operation stages. The risks include: (a) impacts due to location and planning of new/ upgradation of IWT terminals, Jetties and their ancillary infrastructure; (b) environment and safety impacts during the construction of these facilities, including dredging as needed; (c) contamination of the river water, including from bilge water, potential oil spills during operation phase, (d) potentially inadequate collection, management and final disposal of solid wastes both during construction and operation; (e)</td>
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potentially inadequate provision for sanitation, and lack of appropriate management and final treatment of sewage; (f) potential accidents involving passengers, crew and workers, and including collision among vessels that may result in accidental spills; (g) inadequate crowd management (both during construction and operation), especially as the exits are very narrow and long in many places; (h) safety and security of passengers specially women and children using the services and (i) disposal of vessels themselves; some vessels are expected to retire early in the operation stage. In addition, specific risks during construction stage include: (a) crowd management during construction, as in most places construction will go on while the current ferry services continue; (b) construction zone safety management as the space available for construction work is very small in most places; (c) Construction workers and passenger interface leading to potential gender based violence as the passenger movement and construction shall happen simultaneously and (d) construction waste management, preventing any spillage of construction wastes in the river. One of the key social impacts anticipated due to upgradation and other construction activities is Physical and economic displacement of people and assets. The Project affected shall include both formal and informal occupants in the sub project areas including squatters and encroacher of permanent and temporary nature.

Most of the above-stated risks could be addressed by careful planning, design which either avoids scenarios where such risks will actually materialize, or by minimizing such potential; and appropriate implementation of the actions related to avoidance or minimization. It was agreed that the Project interventions will be planned and designed with comprehensive sanitation and solid waste management features. Similarly, appropriate planning and design will be undertaken to ensure that all safety related aspects (work zone safety, passenger safety, crowd management) are fully integrated.
To ensure this, Environmental and Social Management Framework (ESMF), that sets out the procedures and requirements to manage all safeguard aspects; and Resettlement Policy Framework were prepared for the Project and will be used to prepare ESIA and ESMP for sub-projects. Environmental and Social Impact Assessments (ESIA) was prepared for the first year investments that were prepared for the project readiness / appraisal (Component C.1) along with sub project Environmental and Social Management Plans, Resettlement Plans as applicable. New vessels will be manufactured during the first year. Impacts from vessel construction are envisaged to be temporary, localized and are not significant. These include Generation of Solid Waste, Wastewater, Air Pollution, Noise Pollution, Workers health and Safety. The ESIA prepared for the first year provided mitigation measures for these potential impacts.

Further, during the first year, an integrated strategic development plan for IWT will be prepared. This will determine the rest of the investments to be financed after the first year of the project period. A Cumulative Impact Assessment and a Strategic Environmental and Social Assessment will be prepared as part of the strategic plan. The scope of the CIA will be determined by the scope of the strategic planning.

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<td>Natural Habitats OP/BP 4.04</td>
<td>Yes</td>
<td>There is no known natural habitats (protected or otherwise) in close proximity to the river. Only protected area is the Alipore Zoo and the Botanical garden (located in the middle of Kolkata City and Howrah city respectively). The protected areas of Sundarbans are located about 50km southeast of Haldia. However, the river Hoogly/Ganga is in itself a natural habitat for Gangetic Dolphin and other aquatic fauna, and has deep cultural and religious significance. The impacts on the river will be studied in detail as part of the environmental and social assessment of the relevant sub-project and separate</td>
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<td>OP/BP</td>
<td>Safety of Dams OP/BP 4.37</td>
<td>No</td>
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<tr>
<td>OP/BP</td>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>Yes</td>
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projects in Disputed Areas OP/BP 7.60 No No part of the project’s influence area is disputed.

KEY SAFEGUARD POLICY ISSUES AND THEIR MANAGEMENT

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:

The project envisages (i) capacity improvement of existing jetties and modernizing fleet by purchasing additional vessels; and (ii) design and construction of priority terminals, jetties along with ancillary infrastructure. These will have positive impacts by improving cross-river passenger ferry infrastructure and services and freight movement between Kolkata and Howrah cities along the Hooghly river.

Key environmental risks

The environmental risks of construction and upgrading of terminals, Jetties and their ancillary infrastructure, both during construction and operation stages, include: (a) noise and air pollution during manufacturing of vessels, pontoons and gangways; (b) health and safety impacts during construction of vessels, pontoons and gangways; (c) contamination of the river water, including from bilge water, potential oil spills, (c) potentially inadequate collection, management and final disposal of solid wastes; (d) potentially inadequate provision for sanitation, and lack of appropriate management and final treatment of sewage; (e) potential accidents involving passengers, crew and workers, and including collision among vessels that may result in accidental spills; (f) crowd management during construction, as in most places construction will go on while the current ferry services continue; (g) construction zone safety management as the space available for construction work is very small in most places; (h) construction waste management, preventing any spillage of construction wastes in the river. Mitigation measures to protect Gangetic Dolphin have been included in the project ESMF prepared for the whole project and ESIA for the first year investments.

Key social risks

The social assessments of improving cross-river passenger ferry infrastructure and services and freight movement along with the development of Multimodal Logistics Hubs indicates minimal social impacts for phase one works and moderate to substantial impacts for phase two works. In all, for phase one works, there will be temporary impacts on livelihood of 13 petty vendors doing business on the Pontoons and Gangways in the 30 proposed Jetties. In phase 2, most of the developments are planned on landside and these will be determined as per the Inland Water Transport Strengthening and Development Plan (IWTSDP) which is under preparation. Preliminary estimates indicate about 2500 sq mts of private land may be required and about 2250 families will be affected for phase two works. Close to 95% of them (2138) will be non titleholders - largely hawkers and petty shop holders. The existence of common property resources cannot be ruled out. In view of these impacts, OP/BP 4.12 has been triggered as part of the overall Project;
and the OP 4.10 is not triggered as the Project is fully implemented in an urban setting with the habitations having no characteristics of tribal/indigenous population outlined in OP 4.10. The RPF has been prepared for the entire project and disclosed and also an Abbreviated RAP was prepared for year one works (Phase 1) and disclosed. For Phase two works (years 2-5) an SIA will be conducted based on Integrated Strategic Development Plan for IWT, following this a RAP/ARAP will be prepared as required.

2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
The passengers benefit from the improved cross river travel facilities, travel time and logistics that will improve the transportation of goods and people. The project will create job opportunities for communities living around the influence area and for those involved in manufacturing and construction industries. The project will also have positive impacts on the vulnerable population including women as the project will improve accessibility to social, education and medical facilities; including pre and post-natal health attention for women and their children. It will generate employment opportunities for women, and they can also get involved in small-scale commercial operations.

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
For minimization of social impacts which includes impact on structure, land, etc., various alternatives were considered to decide on the feasibility of the project and accordingly the design was finalized. Efforts have been made to minimize the adverse impacts of the project by (i) utilizing available KoPT (Government) lands as much as possible (ii) limiting the land width requirement at critical locations (iii) undertaking works more on waterfront side to avoid possible impacts on land and assets.

The analysis of alternatives has been done at two levels, firstly, the alternative analysis was done considering the “with and without project scenarios” which considered the potential social impacts, both positive and negative, of the sub-project. Secondly, an analysis of alternatives was done to decide on either rehabilitating the existing jetty infrastructure or proposing new jetties adjacent to existing ones. With all these measures, the impacts were limited to be temporary on 13 vendors for phase one works.

4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
West Bengal Transport Infrastructure Development Corporation Limited (WBTIDCL) is the implementing agency for the project. WBTIDC does not have prior experience of implementing World Bank financed projects, but is broadly aware of the Bank safeguards policies. In order to implement the safeguard aspects of the project, the PMU has prepared ESMF, RPF, ESIA, and ARAP and created an Environmental, Social and Health and Safety Cell. So far, WBTIDCL hired one Environment and one Social experts. The Project Director (PD) will have the overall responsibility whereas dedicated Environmental and Social Experts will be responsible for the day-to-day implementation the ESMF and RPF and will use the services of Project Management Consultant's Social and Environmental specialists. The specialists will coordinate with each other, and also with the technical and procurement officers of the PMU to ensure that the ESMF and RPF requirements are adequately incorporated in project activities. The specialists will work closely with the contractors and consultants for the day-to-day implementation aspects and associated safeguards due diligence. To ensure successful safeguards implementation, a series of orientation, capacity building and training activities are planned for project staff, contractors, consultants and other relevant stakeholders.

5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies,
Stakeholders: From an environmental and social perspective, the primary stakeholders of the project include: (i) the community residing along/close to the jetties, (ii) vendors/businessmen/shop owners; (iii) ferry users; (iv) local market and other trade associations; and (vi) workers and other staff to be employed by the Contractors; (v) project affected population. The secondary stakeholders include officials of the WBTIDC, KoPT, KMA, IWAI, Fisheries, Utility Departments, local bodies like panchayats and municipalities where jetties are located and representatives from the Civil Societies/Non-Governmental Organizations (NGOs) supporting environment, marine ecology and other social and environmental causes.

Consultations: Stakeholder consultation mechanisms have been established and will continue to remain central to the design and implementation of sub-projects under the Project. This includes procedures for dissemination of information and consultation with local communities through various stages of the sub-project cycle. While initial involvement requires stakeholder participation in planning/designing of project, implementation phase requirements encourage feedback for a more 'participatory monitoring'.

Guidance on consultations has been laid out in the ESMF and RPF to ensure proper consultation with stakeholders at key stages of sub-project preparation and implementation. The consultation process is designed such that: (i) affected people are included in the decision making process; (ii) public awareness/information sharing on project alternatives and benefits is promoted and; (iv) views and design solutions are solicited. Over-all, the consultation strategy/process is designed to enhance positive and avoid/manage adverse impacts from the project.

Follow-up consultations will also be conducted, as needed through pre-construction and construction stages of the proposed project. Outputs from this process will be integrated into the engineering design to the extent possible. Consultations on social and environmental issues and design propositions, with both primary and secondary stakeholders are being/will be conducted as part of the DPR preparation and EIA/SIA studies. The public consultation process so far has indicated that the people support the proposed project interventions. Safety concerns have primarily been highlighted by the people during field interactions.

Disclosure: In addition to site level consultation, a consultation meeting on draft RPF was conducted in local language Bengali by the PMU for comments/suggestions/feedback from participants/stakeholders. The outcome of the consultation meeting was included, wherever feasible, in the final RPF and disclosed on the Project Authority’s website. An Abbreviated RAP for phase one works was also prepared and disclosed. The executive summary of RPF is translated into local language Bengali and disclosed on the Project Authority’s website. Similarly ESMF and ESIA were prepared and disclosed. Copies 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. The ESMF and RPF were reviewed by the Bank and disclosed locally on January 10, 2020, following all due clearance and disclosure procedures. The Executive Summary of the ESMF was sent to the Board on January 28.

B. Disclosure Requirements

<table>
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<th>Environmental Assessment/Audit/Management Plan/Other</th>
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<th>Date of submission for disclosure</th>
<th>For category A projects, date of distributing the Executive Summary of</th>
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The World Bank
West Bengal Inland Water Transport, Logistics and Spatial Development Project (P166020)

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<td>10-Jan-2020</td>
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"In country" Disclosure
India
10-Jan-2020

Comments

Resettlement Action Plan/Framework/Policy Process

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment

Does the project require a stand-alone EA (including EMP) report?  
Yes

If yes, then did the Regional Environment Unit or Practice Manager (PM) review and approve the EA report?  
Yes

Are the cost and the accountabilities for the EMP incorporated in the credit/loan?  
Yes

OP/BP 4.04 - Natural Habitats

Would the project result in any significant conversion or degradation of critical natural habitats?  
No

If the project would result in significant conversion or degradation of other (non-critical) natural habitats, does the project include mitigation measures acceptable to the Bank?  
Yes
### OP/BP 4.11 - Physical Cultural Resources
Does the EA include adequate measures related to cultural property?
Yes
Does the credit/loan incorporate mechanisms to mitigate the potential adverse impacts on cultural property?
Yes

### OP/BP 4.12 - Involuntary Resettlement
Has a resettlement plan/abbreviated plan/policy framework/process framework (as appropriate) been prepared?
Yes
If yes, then did the Regional unit responsible for safeguards or Practice Manager review the plan?
NA

### OP 7.50 - Projects on International Waterways
Have the other riparians been notified of the project?
Yes
If the project falls under one of the exceptions to the notification requirement, has this been cleared with the Legal Department, and the memo to the RVP prepared and sent?
NA
Has the RVP approved such an exception?
NA

### The World Bank Policy on Disclosure of Information
Have relevant safeguard policies documents been sent to the World Bank for disclosure?
Yes
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?
Yes
All Safeguard Policies

Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?
Yes

Have costs related to safeguard policy measures been included in the project cost?
Yes

Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?
Yes

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?
Yes

CONTACT POINT

World Bank

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Rakhi Basu
Transport Specialist

Borrower/Client/Recipient

Government of India

Implementing Agencies

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Washington, D.C. 20433
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Web: http://www.worldbank.org/projects

APPROVAL

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<td>Rakhi Basu</td>
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**Approved By**

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<th>Safeguards Advisor:</th>
<th>Agi Kiss</th>
<th>17-Feb-2020</th>
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<tbody>
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<td>17-Feb-2020</td>
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<tr>
<td>Country Director:</td>
<td>Sumila Gulyani</td>
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**Note to Task Teams:** End of system generated content, document is editable from here. Please delete this note when finalizing the document.