

## RISK ASSESSMENT AND RISK MANAGEMENT PLAN

Risk Description	Risk Assessment	Mitigation Measures or Risk Management Plan
<b>Project-Specific</b>		
Different views and requirements among co-financiers (ADB, AFD, EIB) delay approval processes.	Low	Cofinancing arrangements will be signed among co-financiers, clarifying the roles and responsibilities of each party. Close consultations will be continued, including fielding joint review missions.
Poor designs proposed by design–build contractor are not corrected because of DWASA’s limited technical expertise.	Medium	<p>Experts (consultants) will assist bid document preparation and evaluation to define performance requirements clearly, and ensure the engagement of a highly qualified contractor.</p> <p>The design–build contractor will be made responsible for the first 3-year operation to incentivize design innovation and ensure an integrated design.</p> <p>Supervision consultants will closely review the designs proposed by the contractor.</p>
Land acquisition process will be delayed.	High	<p>Public consultation meetings to explain the scope of the project and entitlements of affected people were held during project preparation. Consultations will continue.</p> <p>Local NGOs will be engaged to facilitate implementation of land acquisition and resettlement including income restoration activities.</p> <p>Advance actions are being taken as part of project readiness efforts.</p>
Increase in the volume of water supply by the project will deteriorate water quality of nearby water bodies.	Low	DWASA developed a sewerage master plan and is committed to implementing the plan. Two wastewater management projects will be implemented to more than offset the incremental water supply caused by the project.
DWASA will not operate the project facilities efficiently, particularly the intake and WTP, because of limited experience.	Low	<p>The design–build contractor will be engaged, either through a technical support or management contract, for the initial 3-year operation of the facilities, from intake to WTP as an integrated system.</p> <p>Performance requirements of operators will be specified in the bid documents.</p>
Provision of new or regularized connections in low-income communities will not proceed as planned.	Low	An experienced NGO will be engaged to assist the formation of community-based organizations in low-income communities to facilitate installation of new or regularized connections.
DWASA’s policy is changed as a result of management change after the next	Low	ADB and co-financiers will engage in close dialogue with the government and DWASA to ensure continuity.

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election.		Project need and scope have been widely recognized in the government.
Saidabad WTP phase 3 project interferes with the project implementation.	Low	It is covenanted that DWASA will ensure no overlap of construction in the same section of the pipeline corridor to avoid unnecessary complications.
Water quality of Meghna River will deteriorate over time.	Low–Medium	Water quality will be monitored continuously to detect any change.  Meeting of project steering committee, which includes members from the Department of Environment, will discuss measures to prevent adverse activities, particularly in the immediate upstream of the intake.
<b>Financial Management</b>		
Ongoing reforms are interrupted, leading to poor financial management.	Low	DWASA is highly committed to continued improvements. Implementation will be closely monitored under the project.  Relevant DWASA staff will be trained.
Water tariffs will remain low and DWASA cannot fully recover loan repayment and/or full O&M cost.	High	Tariff increase beyond 5%, and ensuring a minimum debt service coverage ratio of 1.0 for DWASA by the government, are covenanted.  The government will establish an independent regulatory authority, which will regulate tariff adjustments proposed by water supply and sewerage authorities through an independent and transparent mechanism, aiming at future full cost recovery. The progress of government actions will be closely monitored.  Establishing a regulatory framework is being supported by ADB TA. <sup>a</sup>
<b>Corruption</b>		
Project stakeholders will be involved in corrupt practices.	Medium	ADB's Anticorruption Policy (1998, as amended to date) was clearly explained to the government and DWASA. All contracts financed by ADB shall include provisions specifying the right of ADB to audit and examine the records and accounts of the executing agency and all project contractors, suppliers, consultants, and other service providers.  The project management unit will follow government rules and procedures for all expenses and revenue items, including cash, and the proper and accurate maintenance of financial records.  A project website will be established at DWASA to provide transparency on project details, including procurement. DWASA will establish a system for handling complaints received in relation to contracts and

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		<p>procurement, among others.</p> <p>In addition to annual statutory auditing conducted by the Foreign Aided Projects Audit Directorate under the Comptroller and Auditor General of Bangladesh, DWASA will hire technical auditors to carry out a technical audit of the project on a random basis. The technical auditor will share the report with ADB on a confidential basis.</p>
<b>Procurement</b>		
<p>DWASA's limited experience in the procurement of large-scale design and build contractors will cause delayed and improper procurement.</p>	Low	<p>The procurement specialist (consultant) will assist in the recruitment of the design and build contractor.</p> <p>Advance actions will be taken for early recruitment of consultants and contractors.</p> <p>Bid documents for design–build contracts will be prepared by the experienced consultants.</p> <p>ADB will organize training programs on procurement for DWASA officials.</p>
<b>Overall Medium</b>		

ADB = Asian Development Bank, AFD = Agence Française de Développement (French Development Agency), DWASA = Dhaka Water Supply and Sewerage Authority, EIB = European Investment Bank, NGO = nongovernment organization, O&M = operation and maintenance, TA = technical assistance, WTP = water treatment plant.

<sup>a</sup> ADB. 2013. *Technical Assistance to Bangladesh for Establishing a Regulatory Framework for Urban Water Supply and Sanitation*. Manila.

Source: Asian Development Bank.