



ASIAN DEVELOPMENT BANK

Bangladesh: Dhaka Water Supply Sector Development Program (Project Loan)

Project Name	Dhaka Water Supply Sector Development Program (Project Loan)
Project Number	39405-013
Country	Bangladesh
Project Status	Approved
Project Type / Modality of Assistance	Loan Technical Assistance
Source of Funding / Amount	Loan 2382-BAN: Dhaka Water Supply Sector Development Program (Project Loan) Asian Development Fund US\$ 150.00 million Loan 2383-BAN: Dhaka Water Supply Sector Development Program (Program Loan) Asian Development Fund US\$ 50.00 million TA 7001-BAN: Management Support for Dhaka Water Supply and Sewerage Authority Technical Assistance Special Fund US\$ 2.50 million
Strategic Agendas	Inclusive economic growth
Drivers of Change	Governance and capacity development
Sector / Subsector	Water and other urban infrastructure and services - Urban policy, institutional and capacity development - Urban water supply
Gender Equity and Mainstreaming	Effective gender mainstreaming
Description	The overall expected impact of the Dhaka Water Supply Sector Development Program (DWSSDP) is to contribute to sustained economic growth and public health improvement, in urban water supply sector, particularly in Dhaka Metropolitan Area, through improvement of living standard in the basic human needs by improving the water supply. The supply of clean water will impact on reduction in child mortality and improvement of general health, conversion to economic activity by saving time to fetch and to store water, and conservation of precious natural resources-the surface and ground water. The program and project loans are designed to complement each other in achieving progress in these key sector objectives.
Project Rationale and Linkage to Country/Regional Strategy	The National Poverty Reduction Strategy (NPRS) emphasized the need for safe water. One of the seven point strategic agenda of the NPRS is water and sanitation. The goal of NPRS is to reduce the number of people who do not have access to safe water (26%) by half and to reduce water pollution. Improvement of water supply infrastructure in urban areas and ensuring quality services have been identified as prerequisite for hygiene and nutrition and contributing factors towards poverty reduction by reducing health risks and creating employment. The NPRS also envisages introduction of water supply projects for all urban areas and water quality monitoring and surveillance. The water supply programs need to focus on provision of basic services as well as participation of private and public sectors in collaboration with strengthened local government institutions. The Asian Development Bank (ADB) has been supporting the Government's efforts to ensure safe water supply to the urban population. ADB has supported six development projects for secondary towns in Bangladesh since the 1980s. The program is to provide support to Dhaka Water Supply and Sewerage Authority (DWASA) in contributing to the national target through developing institutional capacity and infrastructure in Dhaka.
Impact	Sustained economic growth and public health improvements in urban centers in Bangladesh, particularly in Dhaka Metropolitan Area.
Project Outcome	
Description of Outcome	Provision and sustainable operation of improved water supply services through rehabilitation and improvement of management and operation in the urban water supply institutions, particularly in Dhaka,

Progress Toward Outcome	<p>Project has elapsed 84%, of which 49.42% is the physical implementation progress of pipeline rehabilitation.</p> <p>About 1.2 million people have benefitted from improved access to water supply, which includes pipe rehabilitation works carried out on district metering area (DMA). This resulted in achieving substantial non-revenue water reduction. Collection efficiency improved to more than 96% and DWASA is working towards sustaining collection efficiency above 90%.</p>
-------------------------	--

Implementation Progress

Description of Project Outputs	<p>Improved distribution system and quality control in DWASA (project component A) - Rehabilitated and strengthened distribution network</p> <p>Strengthened DWASA capacity and institution (project component B) - Strengthened financial and operational management capacity of DWASA</p> <p>Project management and implementation support (project component C) - PMU and management support adequate and operational</p> <p>Improved distribution system and quality control in DWASA (project component A) - Improved water quality and monitoring system</p> <p>Strengthened DWASA capacity and institutions (project component B) - Trained staff and resources for DWASA</p> <p>Strengthened DWASA capacity and institution (project component B) - Demand control and public awareness</p> <p>Project management and implementation support (project component C) - Feasibility study of the future water treatment plant completed and tender documents prepared</p>
Status of Implementation Progress (Outputs, Activities, and Issues)	<p>Component A: This project is, for the first-time in the country, implementing rehabilitation of water distribution network on a DMA approach. On this approach, a zone of the network is hydraulically isolated facilitating measurement of inflows and outflows and assessment of water losses. Compared to traditional approach of replacing pipes, the DMA approach has been found to be effective in controlling physical losses in the network. Moreover, major contracts have been structured with functional guarantees the contractor is required to ensure physical losses less than 15% at 1 bar pressure before full payment is made. The project plans to rehabilitate 64 DMAs comprising around 1,805 km of pipelines that will benefit approximately 8 million consumers in Dhaka. As the DMAs are getting completed, DWASA staff and consumers are realizing the benefits of the approach. Currently, 800 km of pipeline have been replaced. Rehabilitation works have been done to about 35,708 service connections, including installation of new water meters. Installation of about 163 bulk water meters and 2,863 sluice valves done. Water connections and supply points improved for about 300 registered slum areas and still ongoing. Water losses have substantially been reduced in the DMAs that are nearing completion.</p> <p>A two-tier monitoring system has been prepared, and is under implementation for monitoring water quality. 200 DTWs are now equipped with new chlorinators and test kits and 100 DTWs are expected to be covered in June 2015. Moreover, consistent with ADBs and the governments socially inclusive and gender sensitive approach, the project is also implementing works to serve people in low-income areas of Dhaka. In one of the informal settlements called Korail occupied by approximately 20,000 households with a population of more than 50,000, the works have already started. The residents earlier did not have any adequate water supply system, and were forced to buy water from private vendors at exorbitant rates. The project is instrumental in improving access to water to the people in this informal settlement and following activities have been undertaken in Korail: (i) necessary pipeline network has been laid; (ii) a new tubewell with electricity connection and a chlorinator unit has been installed; and (iii) DWASA has so far provided 500 connections to the users comprising of 20-30 households per connection. In Phase II of the Korail work, another 500 connections are in preparation which would benefit 50,000 people. Another informal settlement area, Shattola slum, is also being considered, where 4 km pipeline network will be installed that would benefit around 38,762 people. It is expected that this will be replicated in other informal settlements under the DWASA service area.</p> <p>Component B: To ensure sustainable network management and improved service delivery on a long-term basis, regular activities are implemented under the project for capacity-building and institutional strengthening. DWASA training center has been refurbished. Number of training courses and budget allocation for trainings has substantially increased over the past 5 years. More than 1,100 staffs were trained in the training center.</p> <p>The demand control and public awareness campaign for water conservation is also under implementation. These activities aim to inform public the value of water conservation, repair of leaking taps, billing and payment methods, etc. There are 6 NGOs working with DWASA for these activities. DWASAs customer data base has fully been computerized. Billing accuracy is 100% and payment collection is 95%. Each operations zone has a complaint center, and recently, a computerized call center, DWASA link 16162, was introduced. DWASAs revenue collection has increased due to computerization of customer database, improved billing and payment system, and stronger monitoring by the management.</p> <p>Component C: DWASA, with support from consultants, is working to ensure that all project activities are accomplished in a timely manner. Future water treatment plant has been taken up under another ADB-financed project Loan 3051-BAN: Dhaka Environmentally Sustainable Water Supply Project - approved in 2013.</p> <p>Provided about 200 chlorination units at 200 water supply points. Additional 100 units will be installed by July 2015.</p>
Geographical Location	Dhaka

Safeguard Categories

Environment	B
Involuntary Resettlement	B
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	The Program is designed to maximize environmental and public health benefits. The Initial Environmental Examination and the environmental assessment of the policy matrix conducted for the Program show that net environmental benefits are positive and large. The main beneficiaries of the improved network are Dhaka City residents, who will be provided with a constant and pressurized supply of higher-quality water, which serves a large proportion of the population. This will improve the quality of life and raise standards of individual and public health as improvements in hygiene reduce diseases from poor sanitation. It also will result in social benefits from reduced time spent on water collection, increased time for productive and income-generating activities, and reduce expenditures on health care due to waterborne diseases.
Involuntary Resettlement	The Project is designed to minimize land acquisition and resettlement by (i) continuing the practice in Dhaka of burying new water pipes in roads and avoid the need to acquire land, (ii) using trench-less technology where possible in relining pipes and installing new pipes to limit the excavation of trenches and reduce disturbance of residents and business, and (iii) locating new facilities (overhead reservoirs and chlorination units) on vacant government land wherever possible. Anticipated impacts are limited to (i) loss of income by shops and other businesses if trenches and excavated soil make access difficult for customers, (ii) loss of income by hawkers if they have to move from their normal location, and (iii) loss of land if some private land has to be acquired for some new overhead reservoirs. Losses of income are expected in minor roads, because work is allowed on major roads only at night when most businesses are closed to reduce traffic congestion. The overall impacts are to be minimized further through careful selection of sites and alignment during detailed design implementation. Resettlement plans are being prepared for subzones based on the framework. Resettlement plans will ensure that socioeconomic conditions, needs, and priorities of vulnerable groups are identified; and that land acquisition and resettlement does not disadvantage vulnerable groups. The resettlement plans are disclosed in the ADB website.
Indigenous Peoples	During program development and design, no impact on indigenous peoples were identified. The Program will result in environmental and public health benefits to the whole program population. The likelihood the Program affecting indigenous peoples is small. Any likely impacts are addressed by resettlement plans. Further, no permanent land acquisition is envisaged.

Stakeholder Communication, Participation, and Consultation

During Project Design

During Project Implementation

Business Opportunities

Consulting Services	<p>1. Consultants have been selected and engaged under the Project in accordance with ADB's Guidelines on the Use of Consultants (February, 2013, and as amended from time to time). An international consulting firm has been engaged as the Design and Management Consultants (DMC) following ADB's quality and cost-based selection (QCBS) procedures. The DMC is based in Dhaka and is assisting the PMU in managing the Project, preparing the detailed design, supervising the works and assuring the technical quality of design and construction. The DMC conducted the feasibility study for future water source development, and prepared preliminary design and tender documents.</p> <p>2. An international consulting firm has been engaged as Financial and Capacity Building Consultants (FCBC) following ADB's QCBS procedures. FCBC is responsible for implementing all activities outlined in Component B of the Project, in particular: (i) preparing and providing operational and technical training to the staff of DWASA; (ii) providing corporate financial planning, financial reforms and management advisory assistance to DWASA; (iii) conducting public awareness and demand control as well as resettlement implementation activities. FCBC has engaged non-government organizations (NGOs) in order to manage parts of the demand control, community awareness program and resettlement implementation works, and has engaged professional media and public relations firms to conduct the public outreach programs and media campaigns.</p> <p>3. In addition, consultants may be engaged for the performance-based management consultant (P BMC) contract, to outsource O&M operations (under Component B-1 after the rehabilitation work is completed) on a pilot-basis for one of the four zones.</p>
Procurement	Procurement of all goods and services to be financed under the Project is being carried in accordance with ADB's Procurement Guidelines (February 2013, as amended from time to time). All civil works contracts estimated to cost the equivalent of \$1 million or more are being procured on the basis of international competitive bidding procedures (ICB). Civil works contracts estimated to cost less than \$1 million are being procured using national competitive bidding (NCB). Procurement of goods will, to the extent practicable, be grouped into packages larger than \$500,000 to be suitable for ICB procedures. Goods that cannot be grouped into larger contracts and are estimated to cost less than \$500,000 per contract are procured following national competitive bidding. A third-party pre-shipment inspection provision is being adopted to ensure quality of goods and equipment. NCB procedures applicable to the Project are specified in the Government's Public Procurement Act 2006. Miscellaneous minor goods with cost under \$100,000 equivalent are purchased using shopping procedure. NCB packages valued at more than \$100,000 each are subject to prior review by ADB. The PMU ensures that all procurement complies with the applicable procedures.

Responsible ADB Officer	Manoj Sharma
Responsible ADB Department	South Asia Department
Responsible ADB Division	Urban Development and Water Division, SARD
Executing Agencies	<i>Dhaka Water Supply and Sewerage Authority</i> Engr. Taqsem Khanmddwasa@bangla.netWASA Bhaban, 98 Kazi Nazrul Islam Avenue, Kawranbazar, Dhaka-1215 <i>Ministry of Local Gov't,Rural Dev't,&Co-operatives</i> Mr. Shaikh Khurshid AlamRoom No. 604, Bldg. No. 7, 6th Floor, Bangladesh Secretariat <i>Ministry of Finance</i> Dr. Mohammad TarequeBldg. No. 7, Room 239, 2nd Floor, Bangladesh Secretariat

Timetable	
Concept Clearance	25 Aug 2005
Fact Finding	15 May 2007 to 30 May 2007
MRM	11 Jul 2007
Approval	10 Dec 2007
Last Review Mission	-
PDS Creation Date	28 Apr 2006
Last PDS Update	19 Mar 2015

Loan

Financing Plan		Loan Utilization			
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	0.00	Cumulative Contract Awards			
ADB	0.00	-	0.00	0.00	%
Counterpart	0.00	Cumulative Disbursements			
Cofinancing	0.00	-	0.00	0.00	%

Loan 2382-BAN

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
10 Dec 2007	12 Dec 2007	14 Dec 2007	30 Jun 2014	30 Jun 2016	-

Financing Plan		Loan Utilization			
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	212.00	Cumulative Contract Awards			
ADB	150.00	10 Dec 2007	136.44	0.00	98%
Counterpart	62.00	Cumulative Disbursements			
Cofinancing	0.00	10 Dec 2007	95.59	0.00	68%

Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	-	-	-	-	Satisfactory

Loan 2383-BAN

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
10 Dec 2007	12 Dec 2007	14 Dec 2007	30 Jun 2014	-	06 Oct 2014

Financing Plan		Loan Utilization			
	Total (Amount in US\$ million)	Date	ADB	Others	Net Percentage
Project Cost	50.00	Cumulative Contract Awards			
ADB	50.00	10 Dec 2007	50.02	0.00	100%
Counterpart	0.00	Cumulative Disbursements			
Cofinancing	0.00	10 Dec 2007	50.02	0.00	100%

Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	-	-	-	-	Satisfactory

TA 7001-BAN

Milestones					
Approval	Signing Date	Effectivity Date	Closing		
			Original	Revised	Actual
10 Dec 2007	13 Apr 2008	13 Apr 2008	31 Jan 2011	15 Jun 2011	-

Financing Plan/TA Utilization							Cumulative Disbursements	
ADB	Cofinancing	Counterpart				Total	Date	Amount
		Gov	Beneficiaries	Project Sponsor	Others			
2,500,000.00	0.00	625,000.00	0.00	0.00	0.00	3,125,000.00	10 Dec 2007	967,838.53

Status of Covenants						
Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	-	-	-	-	Satisfactory

Project Page	http://www.adb.org/projects/39405-013/main
Request for Information	http://www.adb.org/forms/request-information-form?subject=39405-013
Date Generated	22 August 2015

ADB provides the information contained in this project data sheet (PDS) solely as a resource for its users without any form of assurance. Whilst ADB tries to provide high quality content, the information are provided "as is" without warranty of any kind, either express or implied, including without limitation warranties of merchantability, fitness for a particular purpose, and non-infringement. ADB specifically does not make any warranties or representations as to the accuracy or completeness of any such information.