



Project Data Sheet

Project 39405-013

Project Name Dhaka Water Supply Sector Development Program (Project Loan)

Project Number 39405-013

Country / Economy Bangladesh

Project Status Closed

Project Type / Modality of Assistance Loan
Technical Assistance

Loan 2382-BAN: Dhaka Water Supply Sector Development Program (Project Loan)

Asian Development Fund US\$ 150.00 million

Source of Funding / Amount **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 Environmentally sustainable growth

Drivers of Change Gender Equity and Mainstreaming
Governance and capacity development

Sector / Subsector **Water and other urban infrastructure and services** / Urban policy, institutional and capacity development - Urban water supply

Gender 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	<p>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.</p>
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 physically completed on 30 June 2016.</p> <p>About 8.0 million people have benefitted from improved access to water supply in terms of 24-hour supply, good pressure at the consumers-end, and good quality of potable water. The project includes pipe rehabilitation works carried out on district metering area (DMA) approach for substantial non-revenue water reduction and using the water saved to improve the service level to 24 hours. Dhaka WASA is now working on post-completion DMA management to ensure sustainability of the project investments.</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>
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Status of
Implementation
Progress (Outputs,
Activities, and Issues)

Component A: The project used the DMA approach in rehabilitating and strengthening the water supply system in Dhaka Metropolitan Area. The project has rehabilitated 47 DMAs comprising 2,456 km of water distribution network and installed 106,662 numbers of house connections.

As a result of the effective DMA approach, nonrevenue water (NRW) in the network has been substantially brought down from a high level of more than 50% before the project to less than 10% in most of the completed DMAs.

Major civil works packages financed by the Project were structured with functional guarantees that contractors were required to achieve to ensure physical losses are less than 15%. The residents in the completed DMAs are benefitted with 24-hour water supply with good quality and pressure.

Additionally, a two-tier monitoring system is under implementation for monitoring water quality. The project has constructed 46 deep tube wells, degenerated 18 deep tube wells, installed 200 chlorination units, and distributed water quality test kits to pump operators. DWASA laboratory facilities were also rehabilitated and equipped with modern testing tools that are now being used in monitoring water quality.

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. Through the project, DWASA is providing about 1,000 connections to the population in Korail slum. In Korail, 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. Community Based Organizations in Korail and other slums were mobilized and are in charge with supporting smooth operations of the entire system in consultation with the beneficiaries and Dhaka WASA staff. Water bills for new connections are being distributed, and the residents are regularly paying their water bills without any default. More than 50,000 people have been benefitted in Korail from this initiative. In Sattala slum, 363 connections have been provided, benefitting about 20,000 persons. Dhaka WASA is now replicating the success of Korail and Sattala in other informal settlements.

Component B: Capacity-building and institutional strengthening activities were carried out under the project. DWASA training center has been refurbished and trainings conducted for management, operation, and development system offices staff on DMA operation and management, including conducting zonal level orientation program for each zone. Trainings also included a session on gender in all trainings. The project has conducted 126 training programs with around 2,244 staff trained in various capacity building programs. A total number of 460 pump operators have been trained. Refresher trainings were conducted to 200 pump operators on operating water quality test kits and water quality reporting system. Continuous trainings are essential in maintaining the capacity of the pump operators. NGOs have carried out awareness raising seminars, house to house campaign among men & 100% women dwellers in selected wards of each respective zone on (a) minimization of NRW by discouraging illegal water connection & meter tampering (b) water conservation through economic use of water (c) hygienic use of water.

Through the project, DWASA has established an automated billing system and 100% bills are being issued through online system. DWASA is taking steps to improve the payments to reach toward 100% online system.

Component C: 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. Another project, Loan 3397-BAN, approved in 2016, is being implemented which aims to consolidate and enhance the gains made in the efficiency of the water distribution network achieved under Loan 2382-BAN and Loan 3051-BAN.

Geographical Location	Dhaka
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Safeguard Categories

Environment	B
Involuntary Resettlement	B
Indigenous Peoples	C

Summary of Environmental and Social Aspects

Environmental Aspects	<p>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.</p>
Involuntary Resettlement	<p>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.</p>
Indigenous Peoples	<p>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.</p>

Stakeholder Communication, Participation, and Consultation

During Project Design

During Project Implementation

Business Opportunities

Consulting Services	<p>1. Consultants were selected and engaged under the Project in accordance with ADBs Guidelines on the Use of Consultants (February, 2013, and as amended from time to time). An international consulting firm was engaged as the Design and Management Consultants (DMC) following ADBs quality and cost-based selection (QCBS) procedures. The DMC was based in Dhaka and assisted the PMU in managing the Project, prepared the detailed design, supervised the works and assured 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 was engaged as Financial and Capacity Building Consultants (FCBC) following ADBs 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 was engaged for the performance-based management consultant (PBMC) 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	<p>Procurement of all goods and services financed under the Project was carried out in accordance with ADBs Procurement Guidelines (February 2013, as amended from time to time). All civil works contracts estimated to cost the equivalent of \$1 million or more were procured on the basis of international competitive bidding procedures (ICB). Civil works contracts estimated to cost less than \$1 million were procured using national competitive bidding (NCB). Procurement of goods was, to the extent practicable, 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 were procured following national competitive bidding. A third-party pre-shipment inspection provision were adopted to ensure quality of goods and equipment. NCB procedures applicable to the Project are specified in the Governments Public Procurement Act 2006. Miscellaneous minor goods with cost under \$100,000 equivalent were purchased using shopping procedure. NCB packages valued at more than \$100,000 each were subject to prior review by ADB. The PMU ensured that all procurement complies with the applicable procedures.</p>
Responsible ADB Officer	Pauleta de Almeida, Pedro Miguel
Responsible ADB Department	South Asia Department
Responsible ADB Division	Urban Development and Water Division, SARD

Executing Agencies

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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	18 Sep 2019

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	22 Jan 2020

Financing Plan**Loan Utilization**

Total (Amount in US\$ million)		Date	ADB	Others	Net Percentage
Project Cost	212.00	Cumulative Contract Awards			
ADB	150.00	17 Jun 2022	139.52	0.00	100%
Counterpart	62.00	Cumulative Disbursements			
Cofinancing	0.00	17 Jun 2022	139.52	0.00	100%

Status of Covenants

Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	Satisfactory	Satisfactory	-	Partly 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	17 Jun 2022	50.02	0.00	100%
Counterpart	0.00	Cumulative Disbursements			
Cofinancing	0.00	17 Jun 2022	50.02	0.00	100%

Status of Covenants

Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	Satisfactory	Satisfactory	-	Partly 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	31 Aug 2011

Financing Plan/TA Utilization							Cumulative Disbursements	
ADB	Cofinancing	Counterpart	Beneficiaries	Project Sponsor	Others	Total	Date	Amount
		Gov						
2,500,000.00	0.00	625,000.00	0.00	0.00	0.00	3,125,000.00	17 Jun 2022	967,838.53

Status of Covenants

Category	Sector	Safeguards	Social	Financial	Economic	Others
Rating	Satisfactory	Satisfactory	Satisfactory	Satisfactory	-	Partly satisfactory

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