

**PROJECT INFORMATION DOCUMENT (PID)  
CONCEPT STAGE**

Report No.: AB1366

<b>Project Name</b>	<b>Dhaka and Chittagong Water Supply and Sewerage Project</b>
<b>Region</b>	South Asia
<b>Sector</b>	Urban water supply (25%); Sewerage and Sanitation (75%)
<b>Project ID</b>	P093988
<b>Borrower(s)</b>	Government of Bangladesh
<b>Implementing Agency</b>	Dhaka Water Supply and Sewerage Authority (DWASA) and Chittagong Water Supply and Sewerage Authority (CWASA)
<b>Environment Category</b>	<input type="checkbox"/> A <input checked="" type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> FI <input type="checkbox"/> TBD (to be determined)
<b>Safeguard Classification</b>	<input type="checkbox"/> S <sub>1</sub> <input checked="" type="checkbox"/> S <sub>2</sub> <input type="checkbox"/> S <sub>3</sub> <input type="checkbox"/> S <sub>F</sub> <input type="checkbox"/> TBD (to be determined)
<b>Date PID Prepared</b>	January 19, 2005
<b>Estimated Date of Appraisal Authorization</b>	March, 2007
<b>Estimated Date of Board Approval</b>	September 2007

**Key development issues and rationale for Bank involvement**

In 2004, about 34 million, or 25% of the country's total population of 135 million live in urban areas; out of this, 13 million live in Dhaka and 3.5 million in Chittagong. In 2015 and 2025, the urban population should reach 35% and 50% of the country's total population; at those dates, Dhaka is likely to reach 22 million and 30 million and Chittagong 5.5 million and 8.5 million.

In Dhaka, piped water is available to about 70% of the population. To the four million people living in slums there is no other reliable alternative and water points are remotely located. The Dhaka Water and Sewerage Authority (DWASA) currently obtains most of its water from an over exploited aquifer; for the future, it envisages developing mostly surface water sources, whose quality is rapidly deteriorating due to industrial pollution. The sewerage network serves less than 20% of the population. Trunk sewers suffered major damage during recent floods and only about 40% of the waste water that is discharged to the system reaches the treatment plant. About 50% of the population has no access to adequate sanitation facilities. DWASA is also responsible for the underground storm water drainage system and associated pumping stations; natural channels and wetlands that help Dhaka cope with storm water flows are rapidly disappearing due to urban development. Public health is affected by the limited coverage of the water supply and waste water service and recurrent flooding. The overall performance of DWASA, a public authority that enjoys reasonable management autonomy, needs improvement, in particular with regards to Non Revenue Water and collection of bills. DWASA revenues, however, are currently sufficient to cover O&M, depreciation and financing costs.

In Chittagong, piped water is distributed a few hours per day, affecting both the population, which has to rely on wells and tankers, and the many industries located in the city and its export processing zone. Chittagong has no sewerage system: households rely on septic tanks, pit latrines or have no sanitation facilities. Storm water is under the responsibility of the Chittagong City Corporation. CWASA enjoys less autonomy than DWASA; its sales and profits have recently increased but its equity has gradually been eroded by accumulated losses.

The Bank has financed four water supply and sanitation (WSS) projects in Dhaka and three in Chittagong; the fourth Dhaka WSS project was closed in 2002. Both WASAs have recently

developed their systems using their own financial resources and assistance from the Government. In 2004, the Bank approved a project aimed at improving the water supply service in areas affected by high arsenic content in groundwater.

### **Proposed objective(s)**

The main objectives of the project would be to:

- Re-engage with two utilities the Bank has had a long association with and assist them develop a strategy to provide a reliable, sustainable and affordable WSS service to meet the Millennium Development Goal (MDG); and
- Support immediate improvements of the water supply, sewerage and storm water drainage situation in coordination with other financing agencies.

### **Preliminary description**

The project would include the following components:

**Dhaka WSS.** The Government has approached bilateral and export credit agencies to finance an extension of Dhaka's main surface water production scheme and the Asian Development Bank for improving water distribution. Assuming that these financing is sufficient to cover DWASA's medium term water supply investment needs, the project would focus mostly on:

- The rehabilitation of existing sewers to ensure full utilization of the existing waste water treatment plant;
- The rehabilitation of existing drains and natural retention reservoirs and construction of selected storm water pumping stations;
- The improvement of WSS service in selected slums, with the assistance of specialized NGOs;
- The updating of the waste water and storm water drainage master plans; and
- The assistance to DWASA's performance improvement plan.

Should a gap occur in the financing plan of the DWASA water supply program, the project could provide a complement, mostly for extension and rehabilitation of the water distribution system.

**Chittagong WSS.** The Government has approached bilateral agencies to finance an extension of the water supply system. As there is no concrete proposal yet for improving waste water collection and treatment and storm water drainage, the project would mostly support an update of the master plans and the preparation of necessary studies for future investment projects. As for Dhaka, the project could finance water supply, should a shortfall occur in the above financing plan.

### **Safeguard policies that might apply**

**OP 4.01 Environmental Assessment.** Mitigation of the environmental impact of construction activities associated with the rehabilitation of existing and extension of new water supply, waste water and storm water drainage infrastructure would be identified and addressed in the Environmental Assessment (EA) and Environmental Management Plan (EMP). The latter would in addition review arrangement for disposing the sludge generated by the waste water treatment plant and for tipping septage. The waste water and storm water drainage master plans would include a comprehensive EA/EMP to support proposed solutions.

**OP 4.12 Involuntary Resettlement.** Limited involuntary resettlement is likely to result from the storm water drainage program. A Resettlement Plan (RP) would be prepared prior to appraisal

and include inventory of buildings, property value, consultation process and clarify compensatory mechanism proposed.

**Communication Strategy.** Constant communication with external and internal stakeholders would take place in connection with the need for implementing regular tariff increases, potential outsourcing of commercial operations and resettlement. Specialized NGOs would be closely associated to the design and implementation of the improvement of the WSS service in slums.

### **Tentative financing**

Source:	(US\$million)
Borrower	40
International Development Association	100
<b>Total</b>	<b>140</b>

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