PROJECT INFORMATION DOCUMENT (PID)
CONCEPT STAGE

Project Name	**Delhi Water Supply and Sewerage Project**
Region	South Asia
Sector	Water supply (60%); Sewerage (40%)
Project ID	P067215
Borrower(s)	Government of India; Government of the National Capital Territory of Delhi (GoNCTD)
Implementing Agency	Delhi Jal Board (DJB)
Environment Category	[ ] A [X] B [ ] C [ ] FI [ ] TBD (to be determined)
Safeguard Classification	[ ] S_1 [X] S_2 [ ] S_3 [ ] S_F [ ] TBD (to be determined)
Date PID Prepared	February 15, 2005
Estimated Date of Appraisal Authorization	August 30, 2005
Estimated Date of Board Approval	November 30, 2005

1. Key development issues and rationale for Bank involvement

Altogether, 80% of the 16 million people living in the National Capital Territory of Delhi (NCTD) has access to piped water and 75% to sewers. Unconnected households, a large share of which lives in informal settlements, rely on public standpipes, tankers and boreholes fitted with handpumps; some households rely on pit latrines, but about 15% of the population has no access to sanitation facilities. Delhi's existing and soon to be commissioned surface water resources, all located outside of the NCTD, and ground water resources translate in an allocation of about 250 lpcd (liter per capita and per day), a fairly generous figure by Indian standards. But, because of inadequate management of the distribution system, residents receive water only a few hours per day; this results in contaminated water distributed and forces households to complement a deficient public WSS service at prohibitive 'coping' costs; the poor suffer most. It is estimated that physical and commercial losses are about 40% and 15% of the water produced respectively and that Non Revenue Water (NRW) is close to 60%, once water legally supplied free of charge is taken into account. The sewerage network has lacked maintenance over the years and overflow of raw sewage in open drains is common, due to blockage, settlements and inadequate pumping capacities. The capacity of the 17 existing wastewater treatment plants is adequate to cater a daily production of waste water of less than 50% of the drinking water produced.

The Delhi Water Board (DJB), created in 1998, is the primary provider of piped water supply and sewerage (WSS) services. Altogether, DJB serves a total of 1.5 million water connections and an estimated 1.3 million sewer connections. DJB, a parastatal under the Chief Minister of the Government of the National Capital Territory of Delhi (GoNCTD), employs about 27,000 staff (18 staff per 1,000 water connections), distributes 60% of the water produced, generates revenues from 40% of the water produced and collects 80% of the bills issued: all very low performance indicators by international standards. Until end 2004, revenues from the sale of WSS services were just sufficient to cover about 60% of DJB operating costs; maintenance has, as a result, been minimal. In the past, DJB has relied heavily on GoNCTD financial support for recurrent and capital expenditures in the magnitude of Rs. 3 billion/year (US$65 million/year) and Rs. 7 billion/year (US$155 million/year) respectively. As financial support for both capital and recurrent expenditures has been passed on as loans by GoNCTD, DJB balance sheet is loaded with a huge debt totaling about Rs. 50 billion (US$1.1 billion) that it is unlikely to be able to service; also, accounts receivable represent more than 12 months of billing, part of it being non

recoverable. DJB has developed an ambitious extension program valued at Rs. 40 billion (US$900 million) to meet demand for WSS services of a population expected to reach 25 million in 2015. A tariff increase, effective as of December 1, 2004, is expected to enable DJB recover operating costs from user fees in 2005.

The GoNCTD recognizes the need for comprehensive reforms of the WSS sector to make the capital city a healthier and more attractive place to live, able to achieve its full economic potential in a competitive international environment. The GoNCTD's Vision for the sector is '*Provision of universal continuous (24/7) safe WSS services in an equitable, efficient and sustainable manner by a customer oriented and accountable service provider'*. The strategy to achieve this Vision includes a phased program towards full service coverage in an efficient and financially sustainable manner by 2015. The GoNCTD proposes to launch immediately a comprehensive reform process with the objective of achieving visible and replicable improvements of the WSS service.

The Government of India (GoI) is also concerned with the poor WSS service provided in urban centers, as none of the 35 Indian cities with a population of more than one million distribute water for more than a few hours per day, despite generally sufficient infrastructure. Also, only a few recover O&M costs from user fees and none have performance indicators that compare with average international standards. The main lessons that can be learned from Bank past experience in the urban WSS sector is that there is an urgent need for shifting the focus from the provision of 'WSS infrastructure' to the provision of 'WSS service' and to create accountability and financing mechanisms to support this shift, if the objective is to halve by 2015 the proportion of the population without *sustainable* access to *safe* drinking water and basic sanitation (Target #10 under Millennium Development Goal # 7).

2. Proposed objective(s)

The medium-term objectives pursued by the proposed project, designed as first phase of the above long-term strategy, would be embedded in a Performance Memorandum of Understanding (PMoU) to be entered into by GoNCTD and DJB for a five year period:

- ***Reliability***: DJB would: (i) initiate the 'outsourcing' of provision of WSS service (O&M and commercial activities) to professional Operators with the main objective of gradually moving from intermittent supply system to a continuous (24/7) supply system in two Operational Zones (OZ); (ii) systematically rehabilitate existing WSS infrastructure in these two OZ; (iii) selectively rehabilitate existing trunk WSS infrastructure in other parts of DJB service area to reduce energy consumption and remove major bottlenecks; (iv) implement a series of measures to improve DJB's overall management performance; and (v) prepare a 'roll-out' plan for improving the WSS service in the entire DJB service area.
- ***Sustainability***: DJB would: (i) gradually raise user charges so that revenues exceeds cash O&M expenses by year five; (ii) clean its balance sheet and restructure its capital; and (iii) reach full cost recovery (O&M, depreciation and financing costs) in the two OZ through a combination of efficiency gains and increased revenues. GoNCTD would gradually reduce operating subsidies paid to DJB to fully phase them out by year five, and disburse them on the basis of actual DJB performance indicators.
- ***Affordability***: DJB would: (i) reduce its energy costs, currently representing 42% of its O&M costs, by refurbishing its largest pumping plants; (ii) reduce its establishment costs, currently representing about 45% of its O&M costs, notably by freezing recruitment and outsourcing selected tasks; (iii) design a tariff structure that meets simplicity and equity criteria in addition to financial objectives; and (iv) implement specific WSS sub-projects to cater for the needs of low income communities.

3. Preliminary description

To achieve the medium-term objectives, the proposed project would be supported by a Specific Investment Lending (SIL) operation. It would include the following components:

- ***Component 1: First Phase of Water Distribution and Waste Water Collection Improvement*** (i) implementation of two six–year 'Management Contracts' with two professional Operators in two OZ serving a total of about 1.8 million people through 165,000 water connections (or 12% of DJB's total operation); and (ii) rehabilitation of existing WSS facilities in the two OZ including pumping equipment, mains, water connections (where most of the leaks are likely to be located), bulk and individual meters, sewers and connections.
- ***Component 2: Trunk Water[1] and Sewerage Infrastructure Improvement*** including the rehabilitation of selected WSS infrastructure city-wide to address priority bottlenecks, improve energy efficiency, and promote environmental sustainability.
- ***Component 3: Organizational Strengthening Measures*** including: (i) staffing rationalization through instituting a staff performance appraisal system and training in the field modern utility management techniques; (ii) implementation of computerized Customer Service Centers (CSC), Management Information System (MIS) and Information Technology (IT) plan; (iii) implementation of external and internal change communication strategy; and (iv) assistance to the supervision of the Management Contracts.
- ***Component 4***: ***UWSS Services to the Poor***, including implementation of WSS sub-projects for low income communities in the two OZ associated with the Management Contracts[2].
- ***Component 5: Roll-Out Plan***, including preparation of: (i) a City-wide restructuring of trunk WSS infrastructure and distribution systems, to support changeover to a 24/7 water supply regime ; (ii) institutional restructuring of WSS functions for the entire NCTD area; and (iii) a long-term strategic plan for water resource management and trunk WSS infrastructure for the NCTD and its satellite cities (total population of about 25 million).

4. Safeguard policies that might apply

- **OP 4.01 Environmental Assessment** is triggered. While the project mostly involves improvement and rehabilitation of existing WSS infrastructure and it also includes (much more limited) construction of new WSS infrastructure. Due to significant construction activities envisaged in the project, environmental impacts associated with construction would be identified and addressed in the Environmental Assessment (EA), currently underway. The EA and Environmental Management Plan (EMP) are expected to bring out the exact site specific and sub-projects specific issues and ways of mitigating them.
- **OP 4.12 Involuntary Resettlement** is not triggered. However, the application of this policy will be reviewed during project preparation. A Social Assessment (SA) was carried out to identify adverse impacts and prepare a policy framework for future investments under the roll-out plan (Component 5 of the project). The study indicated that adverse impacts have been minimized during route selection of pipes. Land will not have to be acquired; no one will be displaced or partly affected. There may be temporary impacts on mobile vendors for whom specific measures will be provided. Baseline

[1] Most, if not all trunk water supply infrastructure would be 100% financed by DJB and would thus not be part of the Bank-financed project

[2] The project would support the preparation of a program to scale up improved services to the poor in the entire DJB area. DJB would also finance pilot WSS projects for low-income communities outside the two OZ.

surveys will be carried out for subsequent sub-projects to be identified under the roll-out plan and the policy framework applied as needed.

- **Communication Strategy**. An enabling environment to support the reform process would be facilitated by a constant communication with external and internal stakeholders. Communication strategies are being developed and communication with internal and external stakeholders has already begun.

5. Tentative financing

Source:		(US$million)
Borrower		106
International Bank for Reconstruction and Development		140
	Total	246

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