



## BANGLADESH: RAJUK WATER

Bangladesh has a population of 160 million people. With 20 million living in the capital, Dhaka, it is one of the most densely populated cities in the world. Rapid urbanization has put a strain on urban infrastructure and the ability of the city to provide adequate housing, safe drinking water, and other essential services. To address these issues, the Capital Development Authority for Dhaka—or Rajdhani Unnayan Karttripakkha (RAJUK)—under the Government of Bangladesh (GoB) is developing the country's largest integrated, greenfield Purbachal township. The township, near Dhaka, is expected to accommodate approximately 1.5 million people—eight percent of Dhaka's population—helping decongest the capital. The GoB sought IFC's assistance to structure a public-private partnership (PPP) to develop water distribution and supply facilities in Purbachal, engaging IFC in December 2016.

After a competitive bidding process, United Water Delcot Limited—a consortium of United Water Suqian Limited (China) and Delcot Limited (Bangladesh)—won the bid and signed a contract on November 11, 2019 with RAJUK. The project is expected to develop a water distribution network and supply facilities with a capacity to produce 340 million liters of potable water per day (MLD) to ensure uninterrupted piped water to the occupants of the new township. The project will be developed in four phases, with the first phase to be commissioned by December 2020.

*This series provides an overview of public-private partnership stories in various infrastructure sectors, where IFC was the lead advisor.*

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## BACKGROUND

Dhaka is one of the most densely populated cities in the world (22,234 people per sq. km). Decentralizing population and activities away from Dhaka's center to reduce intense congestion is one of the top priorities of the GoB. The development of the Purbachal township, about 8 kilometers from the city's airport in the northeastern suburbs of Dhaka, is a key element of GoB's strategy.

Bangladesh's publicly managed piped water supply faces severe challenges—only 10 percent of the population has access to piped water, the system has high losses of 25 to 30 percent, limited hours of supply, and poor water quality, particularly in the dry seasons.

Recognizing the need for private sector investment and expertise to mobilize capital and introduce best practice efficiencies, RAJUK chose to develop the 340 MLD water distribution network and supply facilities for the township through a PPP (the project). Once completed and operational, the project will provide important lessons and experience for the GoB, as they implement massive investment plans (US\$ 20 billion) in the sector over the next five years.

## IFC'S ROLE

IFC was appointed as lead transaction advisor by the GoB, through its PPP Authority, to advise RAJUK on the project.

IFC contributed to the project by:

- ▶ conducting detailed technical and legal due diligence, groundwater studies and extensive stakeholder consultations;
- ▶ assessing financial feasibility under different PPP structures;
- ▶ delivering advice on environmental and social issues beyond scoping exercise by conducting multiple assessments to provide more detailed and implementable advice;
- ▶ setting enhanced standards for water supply service delivery—more stringent than those applied in public projects in Bangladesh;
- ▶ attracting international investors to implement the project;
- ▶ preparing bid documents and assisting RAJUK to evaluate bids and prepare and negotiate the contract.

## TRANSACTION STRUCTURE

IFC designed an innovative transaction structure modeled on international best practice, ensuring the project's bankability. The project develops the water distribution and supply facility under a Design-Build-Finance-Operate-Maintain-Transfer model. Some of the key and innovative structuring elements are:

- ▶ flexibility for phased development of the project to allow for optimal asset utilization;
- ▶ optimal determination of bulk water source through a combination of deep tube wells and a tie-up to another bulk water project, helping RAJUK avoid unnecessary capital expenditure and associated delays;
- ▶ a hybrid annuity PPP model to reduce demand risks and incentivize operational efficiencies and the use of high quality materials—under this model about US\$36 million (about 50 percent of the project capital cost) will be reimbursed to the private sector through construction linked milestone payments, incentivizing quality construction and lowering the fixed annuity payments to the operator over the life of the contract with payments based on achieving important key performance indicators;
- ▶ a bankable structure with provisions for an escrow, an irrevocable letter of credit mechanism, international arbitration, and an independent engineer;
- ▶ fully automated operation and maintenance (O&M) to ensure an uninterrupted supply of pressurized potable water that meets World Health Organization and national quality standards; and
- ▶ setting of water tariffs remaining with public authorities (RAJUK) to ensure affordability for consumers, with the private partner billing and collecting from consumers.

## BIDDING

An international bid process was launched in February 2018. Fifteen companies purchased the bid documents, two of whom submitted competitive bids in June 2018. The Project achieved commercial closure in November 2019, when the contract was signed between RAJUK and United Water Delcot Limited—a consortium of United Water Suqian Limited from China and Delcot Limited from Bangladesh.

## EXPECTED POST-TENDER RESULTS

- ▶ The Project will ensure uninterrupted access to high quality piped water, impacting the public health of about 250,000 people by 2023 and 1.5 million people over next 15 to 20 years when the township reaches full occupation.
- ▶ The 24/7 clean water supply for township residents will meet WHO quality standards, which exceed national standards, establishing a new benchmark for water projects in Bangladesh.
- ▶ The Project facilitated US\$36 million of foreign direct investment in Bangladesh.