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## PPIAF Supports the Design of PPPs for City-Wide 24/7 Water Service

### *Water for Everyone, All the Time, in Karnataka, India*

In the mid-2000s, a pioneering contract for privately operated water service in sections of Hubballi-Dharwad, Belagavi and Kalaburagi cities proved that 24/7 water service was possible in India. Until then, despite the availability of enough water, residents in the majority of Indian cities received water for only a couple of hours a day due to poor management, system leaks, and financial problems of utilities.

That initiative, financed as part of a World Bank project, also showed that it was feasible to shift from flat rate to volumetric billing and to partner with the private sector. Service increased from 10 hours a week to 24 hours a day; revenues increased almost seven fold; and despite an increase in clients, the volume of water was reduced by 2,500 m<sup>3</sup>/day, because leakage dropped to only seven per cent in the demonstration zones.

Urban policy makers are now encouraging 24/7 water service through national and state-level programs. The Government of Karnataka sought a second round of funding from the World Bank to offer continuous water service to all three city residents. The Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) appointed consultants to develop the PPP transaction design.

The new project sought to build on the pilot, with an eye on replicability and long-term sustainability, and included the following considerations:

- The pilot achieved its aims by replacing almost all distribution network pipes, but this would be not be affordable on a city-wide basis.
- The operator's fees, paid by World Bank financing during the pilot, will have to be covered by user fees and other municipal sources in the second iteration.
- Poor information about asset conditions makes it difficult to define the capital development program needed to optimize performance. The PPP design had to offer enough flexibility to address these uncertainties, while incentivizing the operator to pursue capital-efficient solutions and optimize between O&M and capital costs.

- All capital costs in the pilot were financed by the World Bank grant. The municipal government should help fund a part of the cost to demonstrate its commitment and leverage scarce state funds.
- The new project should build a well-functioning utility at the city level that could continue beyond the end of the PPP period, thus providing a clear exit strategy.

## PPIAF SUPPORT

Working through the World Bank project team that helped prepare the city-wide expansion, PPIAF's technical assistance was used to support KUIDFC to do the following:

- Review documentation from the KUIDFC transaction advisors;
- Prepare a list of key issues to be considered in the design of the PPP;
- Convene stakeholder workshops to shape the PPP documentation and ensure risks are well articulated and shared among the parties;
- Provide guidance on procurement and contractual issues to facilitate the new design; and
- Prepare for other aspects of the PPP, such as the bid strategy (e.g., tender of one or multiple cities) and supporting the city and state-level actors through the bid process.

The new contract will last 12 years and have three distinct stages:

- **Start-up** (1 year): A comprehensive assessment of the existing system; preparation and submission of the Service Improvement Plan for the city; and procurement of some advance third-party contracts.
- **Transition** (3 years): The private operator (PO) converts the current service to continuous pressurized water supply.
- **Sustaining** (8 years): The PO continues to operate and maintain the new system.

## KEY CONTRACT AND PROJECT DESIGN FEATURES

KUIDFC and the World Bank team introduced these contract and project design features, based on lessons from the pilot, with PPIAF funding:

- The contract was extended from five to 12 years.
- The performance-based management contract makes the operator responsible for designing and implementing the capital works program of the government through third party contracts.
- The performance fee is linked to continuity of pressurized service; level of non-revenue water; resolution of customer complaints; and revenue collection efficiency.

- The PO plays a key role in designing the utility's capital development program. To avoid encouraging the PO to minimize its operating risks by replacing as many assets as possible, the contract provides a capital expenditure envelope. If the PO achieves 24/7 service within the envelope, it receives 20 percent of the savings as a 'gain share'.
- A public utility company will be formed, fencing it off from the general functions of the local government.
- Although the capital costs remained entirely publicly funded, there was greater cost sharing between the state (75 percent) and local governments (25 percent), which used their own revenues and commercial financing, backed by a reserve on the untied transfers received from the state

## OUTCOMES

The three cities launched the bidding process in early 2014. Several bidders were pre-qualified, including global firms in joint ventures with Indian companies. The client decided to award a contract for Hubballi-Dharwad to a joint venture of Malaysian, Greek and Indian firms. The contracts for the other two cities are to be re-bid. Most of the issues raised on the bid documents related to contractual clauses regarding guarantees and liabilities rather than contract design.

## IMPACT

Used well, PPIAF grants exemplify that a little can go a long way. With modest but expert-level inputs (<\$75,000) from PPIAF, KUIDFC managed to help the three cities make strategic decisions regarding the PPP structure. At present, one city has successfully signed up a private operator for a 12-year contract.

The World Bank is mobilizing \$100 million to support the investment in the 24/7 project. The project includes policies to facilitate piped water access for poor residents, waiving connections fees for dwellings smaller than 600 square feet (approximately 55 square meters) and providing a lifeline block tariff to support affordable consumption for low-income households. Using this project design, the PPP paves the way for transitioning about one million people from intermittent water supply to continuously pressurized 24/7 service. Sixteen percent of them live in low-income households, most of which currently collect water from standpipes. This implies a substantial win for women and children, who bear the biggest brunt of waiting in line for water. A successful outcome will provide a new model for project delivery that can then also benefit residents of other Indian cities.

Photo Credit  
Jan Bogaerts

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PPIAF, a multi-donor trust fund housed in the World Bank Group, provides technical assistance to governments in developing countries. PPIAF's main goal is to create enabling environments through high-impact partnerships that facilitate private investment in infrastructure.