Indo-US
Financial Institutions
Reform and Expansion Project -
Debt Market Component
FIRE(D)

Project Notes

Note No. 31
May 2003

Pooled Finance Model for Water and Sanitation Projects: The Tamil Nadu Water and Sanitation Pooled Fund (WSPF)

In the past five years, some of India's larger municipal corporations have accessed domestic capital markets to fund infrastructure projects. However, until recently small- and medium-sized urban local bodies have not been able to access the market. The USAID-FIRE (D) project supported the state of Tamil Nadu's Water and Sanitation Pooled Fund to develop a pooled financing mechanism and issue a bond that is financing water and sanitation projects in 14 small- and medium-sized towns. This Project Note describes the background, objectives, and structure of the state-level pooled finance mechanism, the first example in India, and the role of the Government of India (GOI).

The majority of urban infrastructure projects undertaken by urban local bodies (ULBs) depend on subsidized funds from state governments and semi-public financial institutions that lend to ULBs relying on state government guarantees. This traditional reliance on cheap and readily available funding has hindered the introduction of fair user charges and efficient operations and maintenance. The declining availability of state funds and the Reserve Bank of India's endeavor to discipline lending against state guarantees has limited the flow of funds to ULBs for infrastructure projects and compelled them to explore alternative sources and methods of funding.

One such source, direct access to domestic capital markets that was pioneered under the USAID-FIRE (D) project, is now an accepted option for larger, financially viable ULBs. Since 1996, at least ten ULBs received investment grade credit ratings and six successfully issued municipal bonds. Others are in process. In most cases, bond proceeds funded water and sewerage projects.

Small- and medium-sized ULBs, particularly in those states that have abolished *octroi,*[1] do not have the ability to directly access domestic capital markets nor is direct access cost-effective for them. Another constraint to the expansion of the municipal bond market has been the lack of investor interest in long-term debt. Until now, the term of municipal bonds has not exceeded seven years because longer-term bonds were seen by investors as too risky and priced too high for municipalities to afford.

United States Bond Banks as a Relevant Model

A number of states in the United States created state-level pooled financing structures, often called bond banks, to support borrowing by smaller municipalities that otherwise would find it difficult to directly access the capital market. A bond bank is a state-sponsored intermediary that borrows from the capital markets, usually with some state or federal credit enhancement, and typically uses the proceeds to purchase debt obligations of local governments. Bonds generally are secured by loan repayments of the pool of local borrowers, as opposed to one locality, which helps reduce risk for investors and interest rates for borrowers.

For more than 30 years U.S. state bond banks have provided more than $40 billion in financing for municipal needs at or below market rates. They finance local water and sewer projects, schools, transportation, solid waste management facilities, and economic development. They are considered

[1] *Octroi is a levy on goods brought into a locality, a major revenue source of some Indian cities.*

to be one of the most significant contributions to the municipal bond market during the past ten years.

Bond banks generally do not issue bonds backed by state guarantees. However, most states pledge some form of credit enhancement to provide borrowers interest rate savings. The most common enhancement is the state grants-in-aid intercept. Under this arrangement, if a local borrower fails to make a timely payment of principal and interest, state grants to that locality are "intercepted" to make the debt service payment. Also, most bond banks do not rely on state funds to cover operating expenses; instead they charge various kinds of fees to local borrowers.

Based on this model, the FIRE project supported Tamil Nadu's effort to develop a pooled financing mechanism and to structure a bond issue whose proceeds are financing small water supply and sanitation projects in 14 small- and medium-sized towns.

Objectives and Structure of Indian State-Level Pooled Finance Mechanisms

The objective of a state pooled finance mechanism is to provide a cost-effective and efficient way for smaller ULBs to access the domestic capital market for investment in urban infrastructure. Another objective, for state governments, is to introduce new institutional arrangements for mobilizing urban infrastructure finance. Participating in this mechanism will also encourage ULBs to undertake basic reforms.

The following generic structure for a state-level pooled finance mechanism is applicable to Indian states, each of which must select its own specific mechanism. It is a hybrid of project specific and general revenue bonds in developed countries.

- *State entities*. The bond issuer will be a trust or special purpose vehicle formed under the India Trusts Act that will serve as a debt fund. The debt fund, similar to a bond bank in the U.S., will be the pooled financing entity. It will be set up with an initial debt service reserve contribution from the state government. An asset management company should be named to manage the trust or debt fund.
- *Source and use of bond proceeds*. The fund's debt will be offered to domestic investors. The funds raised by the bond issue could be used either to purchase the bonds of participating ULBs or be disbursed as loans to them.
- *Debt service plan*. The hierarchical order of sources for bond repayment is:
  a) Project revenues, i.e., water tariffs and interest on deposits of connection fees, forwarded regularly to the debt fund, which would maintain an escrow account;
  b) If necessary to make the annual bond payment, the escrow account would be supplemented by the fund's taking municipal tax and fee revenues or intercepting state government transfers;
  c) Debt service reserve fund (DSRF) equivalent to one to two years of annual debt service payments. The DSRF would be established upfront, before bond closing, and replenished annually if needed by the state government with optional participation of All-India Financial Institutions (FIs) or international donors; and
  d) Additional credit enhancements may be negotiated with potential investors. They could come from the state government, the GOI Pooled Finance Development Fund (PFDF), a coalition of ULBs, FIs, or donors. These entities may guarantee all or a portion of outstanding principal and interest payments through the DSRF or additional mechanisms. These credit enhancements would vary by bond and by state.

The state pooled financing entity could be assigned the following functions:

- support ULBs in development of commercially viable infrastructure projects (CVIPs);
- prescribe guidelines for ULBs to strengthen their overall financial position;
- access capital markets on behalf of ULBs;
- access GOI PFDF for additional credit enhancement;
- access the GOI City Challenge Fund to cover initial transaction costs such as rating fees and to institute the reform process in ULBs;
- manage disbursal and repayment of bond; and
- increase the size of the debt service reserve fund.

Tamil Nadu and USAID Establish India's First Pooled Finance Fund

The Water and Sanitation Pooled Fund was set up following extensive discussions among state officials, Tamil Nadu Urban Infrastructure Financial Services, Ltd. (TNUIFSL), GOI, USAID, and the FIRE project. The key entities involved each had different roles. The WSPF was incorporated as a trust in August 2002 with a six-member Board of Trustees consisting of state officials and TNUIFSL's CEO and with an initial debt service reserve contribution from the state. USAID provided a backup guarantee through its Development Credit Authority (DCA). TNUIFSL, the asset management company of the Tamil Nadu Urban Development Fund (TNUDF, a multi-sector urban development project financed by the World Bank), manages the fund.

The purpose of the trust, WSPF, is to channel financial resources including financing raised from private markets into high priority infrastructure investments, contributing directly to improved living standards of the urban population. It will finance and refinance water and sanitation projects of small and mid-sized towns. This fund was set up to enable local bodies to participate in the capital market without increasing the contingent liabilities of the state.

FIRE(D)

The FIRE project supported the efforts of WSPF to structure a Rs. 30.41 crore (US$6.4 million) bond issue whose proceeds would finance small water and sanitation projects in 14 locales. The bonds have a face value of one lakh each (approximately US$2000), 9.20 percent annual interest rate, 15-year maturity, redemption in 15 equal annual installments, and are puttable/callable at the end of 10 years. The bonds were assigned a credit rating of Ind AA (SO) by FITCH and LAA (SO) by ICRA. While the bonds were unsecured, a multi-layered credit enhancement mechanism was set up, with the following order:

- ULBs set apart monthly payments equal to one-ninth of their annual payment into escrow accounts they hold, and transfer the same during the tenth month into the WSPF's escrow account;
- In case ULB project revenue payments are insufficient, the WSPF may withdraw funds from ULB bank accounts where tax collections are remitted and/or directly intercept state transfer payments;
- Bond Service Fund (BSF), a state-funded Rs. 6.9 crore reserve fund (an amount equal to about one and a half times annual debt service) set up before the bond issue, would then be tapped; (BSF is not an entity; rather it is state funds held in liquid securities by the WSPF.)
- USAID's guarantee of 50 percent of the bond's principal through DCA would replenish the BSF, if needed.

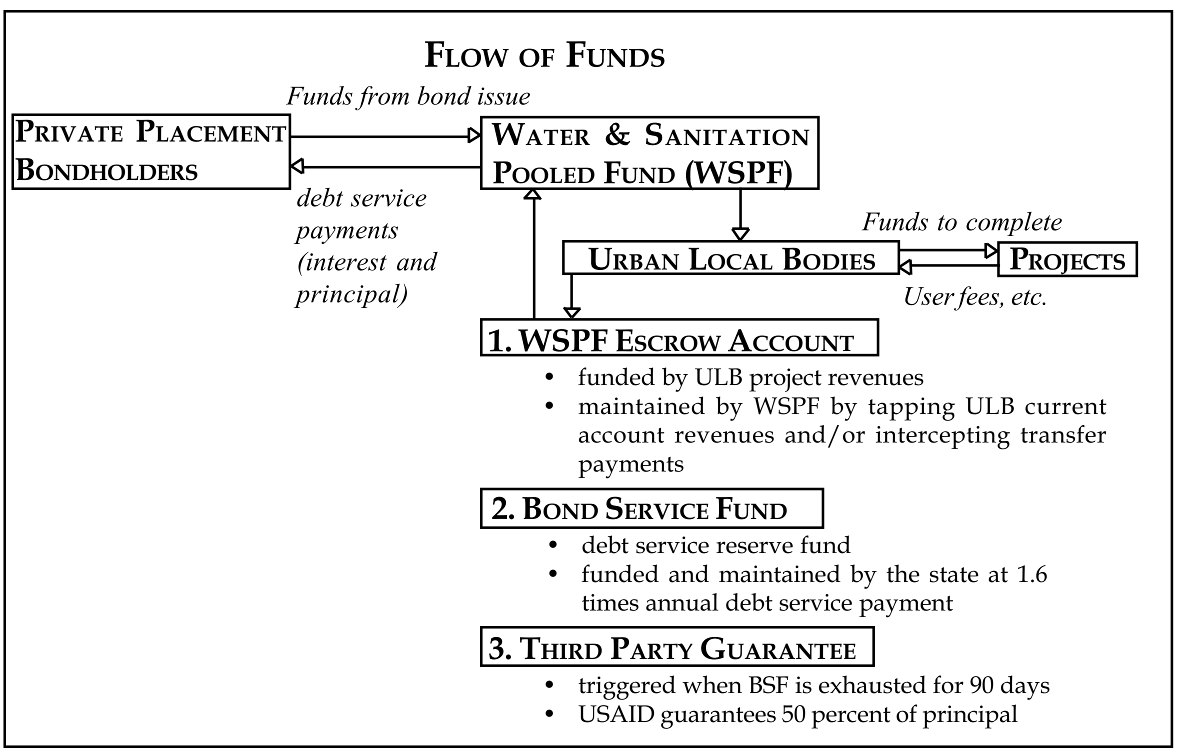
The DCA guarantee – of up to 50 percent of the authorized amount of US$6.4 million with a 15-year term – facilitated the success of the issue. Its two objectives were to lengthen the term of the bonds and to provide local bodies improved access to financial markets. This USAID DCA activity supported the development of CVIPs, private sector participation in them, decentralization, enhancement of infrastructure service access to poor communities, improvements in water and sanitation policy, capacity building of city officials, and fiscal and other reforms in small and medium ULBs. Restricting the DCA guarantee to 50 percent of principal (effectively 25 percent of outstanding debt service) promotes private sector appraisal and participation.

The Fund appointed M. S. Darashaw & Co. of Chennai to be the bond manager. The company privately placed the bond issue with domestic investors in December 2002. The list of subscribers and amounts are:

Karnataka Bank	Rs. 2000 lakhs
ICICI Bank	Rs. 1000 lakhs
City Union Bank	Rs. 25 lakhs
Gujarat Industries Power Co Ltd., PF	Rs. 11 lakhs
Metlife Insurance PF	Rs. 5 lakhs
Total:	*Rs. 3041 lakhs* (Rs. 30.41 crore)

This was the first successful bond issue of its kind outside of the U.S., using a pooled financing structure for financing water and sanitation projects of small and medium municipalities. A key to its success was that all projects pooled demonstrated collection of user charges and/or fixed fees from citizens.

Beneficiaries. The majority of the proceeds were disbursed to ULBs in January 2003, in amounts ranging from 16 lakhs (US$33,000) to 547 lakhs (US$1,140,000). Most are refinancing TNUDF loans at lower interest rates, for projects that are underway. Eight projects



are connecting urban areas on the periphery of Chennai with the new Krishna Water Supply scheme. The new water mains, tanks, and pumps will increase the daily supply significantly to an average of about 50 liters per capita per day, still far below international norms. Another three are similar water projects in towns near Chennai; a fourth is 85 kilometers away. One project will provide underground drainage in Madurai and another a solid waste management scheme in Coimbatore. Most of the areas with new access to water are slums. Half of all the beneficiaries are estimated to be low income with monthly incomes of Rs. 2,500-5,500 (US$50-120).

Role of the Government of India in Supporting Pooled Financing

On the basis of this highly successful pilot, the GOI's Ministry of Urban Development and Poverty Alleviation (MOUD) requested FIRE project support in developing a Rs. 400 crore (US$80 million) GOI Pooled Finance Development Fund. The fund will make grants to states to facilitate the establishment of state pooled financing entities and to use for credit enhancement. The long-term goal is a revolving credit enhancement system. It will also provide technical assistance grants to state pooled financing entities to assist ULBs to implement reforms, develop CVIPs, and access private sector financing for urban infrastructure projects.

With FIRE project support, MOUD is developing guidelines to help states create their own pooled financing mechanisms. For example, access to PFDF will be subject to participating ULBs agreeing to specific standards, such as accounting and financial management standards, pricing and tariff reforms, and environmental management and water conservation measures. The PFDF will evaluate state applications for grants and award funding on a competitive basis to facilitate the establishment of state pooled financing entities. To qualify, states must designate a state pool financing entity and provide matching grants to a credit enhancement reserve account. Ultimately, the state pooled funds will help the GOI better achieve its decentralization efforts by improving provision of sustainable infrastructure services by ULBs throughout India.

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Lee Baker, Chief of Party of the FIRE project, wrote this *Project Note* using reports and memos from the Water and Sanitation Pooled Fund and USAID/India. All *Project Notes* are available online at www.indiaurbaninfo.com under *newsletters* and at www.dec.org under *title search* "FIRE(D) Project Note."

The mission of the Indo-US FIRE-D Project is to institutionalize the delivery of commercially viable urban environmental infrastructure and services at the local, state and national levels. Since 1994, the Project has been working to support the development of demonstration projects and of a sustainable urban infrastructure finance system. Now, the Project is also pursuing this mission through:

- Expansion of the roles of the private sector, NGOs and CBOs in the development, delivery, operation and maintenance of urban environmental infrastructure;
- Increased efficiency in the operation and maintenance of existing water supply and sewerage systems;
- Strengthened financial management systems at the local level;
- Development of legal and regulatory frameworks at the state level;
- Continued implementation of the 74th Constitutional Amendment; and
- Capacity-building through the development of an Urban Management Training Network.

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Funded under USAID Contract
#386-C-00-99-00071-00

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