

**Indo - USAID
Financial Institution Reform and Expansion (FIRE) Project**

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FIRE I - Project Background and Innovations

The most fundamental challenge faced by any new development initiative is the introduction of new concepts and the development of a consensus among stakeholders on the solution and approach to creating change. The success of the first phase of the FIRE Project lies in having been able to meet those challenges.

The FIRE Project was conceived in the early 1990's, an historic period when India moved towards liberalization of its economy and began the devolution of power to the local level, brought about by the 74th Constitutional Amendment. The emphasis of new policies was on investment, job creation, and economic growth. Infrastructure was recognized as an essential element in that growth equation.

At the same time, there was a growing recognition that India faced serious challenges due to its rapid urbanization. It was clear that the demand for urban environmental infrastructure could not be met through public sector investments and management alone. It was within this context that the FIRE Project was designed over a period of three years, through a participatory development process rooted in India. The project initiated activities in November 1994.

It was also recognized that resources did exist for project development within financial institutions and directly from the capital market. However, access to these resources required the discipline of commercial viability. This became the fundamental theme around which the FIRE Project was developed.

Since 1994, the project has worked to foster the development of a commercially viable urban infrastructure finance system that can effectively finance improvements in urban environmental services (water, sewerage and solid waste). This goal has been pursued through four objectives:

1. Development of commercially viable urban environmental infrastructure projects (CVIPs) that incorporate the needs of the urban poor;
2. Development of a commercially viable urban infrastructure finance system and encouragement of private sector participation in service delivery;
3. Improvement of municipal administration and finance; and
4. Strengthening capacity-building in the urban environmental infrastructure sector.

The project comes under the auspices of the Ministry of Urban Development, Government of India, and is funded by the United States Agency for International Development (USAID). The project implementation team consists of four partners: the National Institute of Urban Affairs (NIUA), Housing and Urban Development Corporation (HUDCO), Infrastructure Leasing and Finance Corporation (IL&FS) and a U.S. institutional contractor, The Communities Group International (TCGI). The role of NIUA is to advocate policy change and to coordinate the delivery of technical assistance and training. HUDCO and IL&FS, as financial institutions, provide support in the

identification, development, and financing of commercially viable projects. Acting as financial intermediaries, they channel U.S. government guaranteed loans to selected municipal corporations, state authorities and private enterprise. The role of TCGI has been to provide project management and administration, as well as technical assistance, research and training support to the project partners and to local, state and national institutions.

The following sections describe some of the approaches used and innovations made towards achieving each of the above stated objectives.

1. Supporting the Development of Commercially Viable Urban Environmental Infrastructure Projects

One of the key achievements of the FIRE Project has been to successfully demonstrate that it is possible in India to structure an urban environmental infrastructure project in a commercial format and to attract private sector capital to finance the same.

Most conventional infrastructure investments have been developed within a project finance framework. The FIRE Project, however, generated an alternative analytical approach within an urban finance framework. This broader approach is appropriate for municipalities with a relatively strong and stable financial base and performance, especially when net operating revenues for the water and sewerage sector alone may be inadequate to fund investments. This approach is justifiable in light of the higher economic returns generated by urban environmental infrastructure – returns such as improved public health conditions and environmental quality. Within this context, the following three aspects of commercial viability must be recognized:

- Commercial viability essentially means project or investment structures that are able to generate adequate revenues from project specific assets and other general sources, including targeted and sustainable subsidies, to cover project specific costs, including the obligations arising from market based debt;
- Projects must be environmentally and socially sound and ensure a proper risk management framework; and
- Institutions operating on a commercial basis within a proper regulatory framework are essential to ensure commercial viability in overall investment decisions.

The FIRE Project provided support for exploring the possible development of CVIPs in more than 20 cities and urban authorities. These helped introduce numerous innovations and models for other cities to follow in the development of similar infrastructure projects. For example:

- The Tiruppur Area Development Program was India's first water supply and sewerage project with private sector participation to be structured along

commercial lines. India's first public-private company, a "special purpose vehicle," in the water and wastewater sector was formed under this arrangement. Financial closure on this project is anticipated shortly.

- The Ahmedabad Water Supply and Sewerage Project--India's first municipal bond without a government guaranty was issued to partially finance this project. In addition to working with the corporation, the FIRE Project provided assistance to the range of private consultants engaged by the city. The methodology for evaluating and rating municipalities - the first of its kind in India - was developed by the credit rating agency CRISIL with the assistance of the FIRE Project.
- The Pune Water Supply and Sewerage Project proposed the introduction of private sector participation in turnkey construction, operation and maintenance, and billings and collection. By securing an in-principle commitment from ICICI, and favorable reviews by the Housing Development Finance Corporation and the Bank of Maharashtra, the Pune Municipal Corporation (PMC) and the project design broke new ground in introducing new domestic financial institutions into the urban environmental infrastructure sector. The other main achievement of the project design was to introduce new players into the sector. During the process, the PMC also utilized domestic legal advisors and the Infrastructure Development and Finance Company (IDFC) as financial advisors.
- The Vijayawada Capital Investment Program--This program was particularly noteworthy for its security arrangements and financial packaging, which introduced the concept of "senior mezzanine debt" to a municipal infrastructure project and provided a model for smaller cities that may be limited in their ability to access the capital market. The FIRE Project again provided support to CRISIL in producing a credit rating for Vijayawada. This rating was based on a structured debt obligation--an innovation in India--through which debt instruments are secured by the cash flow from a specific asset or pool of assets.
- The Nagpur Water Supply and Sewerage Project--The FIRE Project assisted the city in development of Request-For-Proposal (RFP) documents for consultancy services that combined technical, engineering, and financial services.
- The Nagpur Solid Waste to Energy Project, once completed, will be one of India's first municipal solid waste to energy projects, and was contracted on a BOOT (Build-Own-Operate-Transfer) basis.
- The Surat Solid Waste Disposal Project--The FIRE Project assisted the city in developing the pre-qualification documents for a solid waste disposal project. This project was designed on a BOO (Build-Own-Operate) basis.

- The Kolhapur Solid Waste Disposal Project--The FIRE Project supported the structuring of this project as a BOOT arrangement. One formal government permission is awaited, subsequent to which the project agreements can be signed.
- The Ahmedabad Walled City Revitalization Project and the Surat Inner City Revitalization Project both represent an approach to identification of potential CVIPs through a comprehensive urban planning process.
- The Hyderabad Municipal Corporation--The FIRE Project provided technical assistance to improve the municipal corporation's financial management and accounting systems. This included the development of an accrual-based revenue and expenditure statement to monitor the financial performance of the corporation, and a statement of assets and liabilities on an accrual basis to determine the financial position of the corporation.

2. *Supporting the Development of a Commercially Viable Urban Infrastructure Finance System*

The successful development of CVIPs emphasized the observation that funding is available in the capital markets and from financial institutions. However, projects must have security arrangements that provide investor comfort. With the aim of supporting viable finance systems, the FIRE Project introduced the following innovations:

- FIRE launched the national discussion on a municipal bond system in India. In 1995, the FIRE Project organized a national workshop entitled "Municipal Bond Experiences and the Potential and Relevance of a Municipal Bond System for India". The following year, the Rakesh Mohan Committee was established by the Ministry of Finance. This committee issued recommendations for capital market development, which included the development of a municipal bond system in India.
- FIRE developed a municipal credit rating system. Subsequent to the 1995 municipal bond workshop, the Ahmedabad Municipal Corporation (AMC) took the ground breaking step of requesting a municipal credit rating. With technical assistance and support from the FIRE Project, CRISIL worked to develop a methodology based on an assessment of urban local bodies in India and international experience in the rating of municipal bonds. In March 1996, Ahmedabad was the first city in India to receive a credit rating. Since then, over 30 other cities have followed suit.
- FIRE introduced new municipal debt instruments:
 - Ahmedabad, in January 1998, became the first city in India and South Asia to issue a municipal bond without a government guaranty, to finance a water supply and sewerage project. Nashik and Ludhiana have also

issued municipal bonds, and more bond issues are now being planned in several other cities.

- The structured debt obligation (SDO) was introduced by the FIRE Project as a means of strengthening a city's credit rating for a proposed bond issue.
- FIRE developed guidelines for tax free municipal bonds. Recently the FIRE Project worked with NIUA to provide technical assistance and advice in drafting guidelines for the issuance of tax free municipal bonds.
- FIRE is advocating a system of regulatory controls. Through seminars, studies, and publications, the Project has begun to advocate a regulatory system which, while maintaining prudent norms, will support the continued development of a viable and vibrant municipal bond system in India.

3. *Supporting Improvements in Municipal Administration and Finance*

The Project developed numerous tools to assist urban local bodies develop commercially viable projects. A few of these include:

- The City-Level Environmental Status Report (ESR) and City Infrastructure Priorities (CIP) methodology to identify infrastructure investment priorities, and an Urban Performance Indicators System (UPIS) to provide a comparative database to analyze the relative infrastructure delivery, financial and administrative performance of cities.
- Checklists and reporting formats for project pre-identification, pre-feasibility and feasibility analysis; a computer-aided project financial assessment tool; and tendering guidelines for integrated financial and engineering consultancy services for project development.
- Use of private sector consultants to manage implementation of infrastructure projects on behalf of public sector entities, including the development of model contracts for construction, operation and maintenance, and billing and collections.
- FIRE is supporting municipal accounting and budgeting reforms for strengthening the role of the city in the finance system. At the national level, the project supports the Institute of Chartered Accountants of India (ICAI) in the development of uniform financial reporting formats for urban local bodies. It is also supporting the Tamil Nadu state government in the development of

computerized double entry, accrual-based accounting systems for urban local bodies.

4. *Supporting the Capacity Building of Officials from the Urban and Financial Sectors*

Capacity-building of public and private officials has taken several forms, including:

- Development of training modules on four topics, namely: project development for urban infrastructure, municipal finance and accounting, management of urban services, and urban environmental management to support NIUA's program of training local government officials
- Dissemination of technical studies and project notes on pertinent FIRE Project topics.
- Support for courses at the Center for Environmental Planning and Technology (CEPT), Ahmedabad, and at School of Planning and Architecture (SPA), Delhi.
- Numerous presentations on various FIRE themes to public and private audiences at national, regional and state seminars and workshops.

Lessons Learned from FIRE Phase I¹

The experiences from the FIRE Project's first phase have highlighted several lessons for the environmental infrastructure sector. Despite the recent efforts in project development, successful project closure has eluded this sector more often than not. Even when project development appeared to be adequate, process management and political commitment have wavered. This of course has been true of other sectors, as evidenced by the power sector, where new governments have resorted to renegotiations and even cancellation of contracts signed by a previous government. Even in a few cases where projects appear to be heading for technical and financial closure, project development and negotiations have generally taken much time and considerable resources. The following main constraints, which inhibit the process, have been identified:

- Weakness in process management: Unlike conventional projects, environmental infrastructure projects require considerable efforts in preparing project documentation, developing institutional arrangements for project structures, getting approvals and clearances from stakeholders, financial structuring, contractor selection, and ensuring overall financial closure. A wide range of actors is involved in this process. Typically, most public sector agencies do not

¹ This section is based on an upcoming FIRE Project Note on "Constraints to Developing Commercially Viable Infrastructure Projects", written by Dr. Meera Mehta.

have the necessary human resources to carry out these tasks. Often, projects have failed to take off because process management support has been missing. Such support requires both capacity and legitimacy to function properly. It is in recognition of the need for this critical support that many state governments have set up project development facilities and funds for the development of infrastructure projects on a commercial format.

- Need for a project "champion:" More and more state governments are talking about increased private sector involvement in the delivery of urban environmental services. However, the political will to move forward with specific projects often remains questionable. Experience suggests that to break this barrier, it is essential that there is a locally-rooted "champion" fully committed to moving the project forward to closure. It is common among public agencies to find that officers in charge of project development are transferred in the middle of the process. This enhances project development risks to a great extent. Experience suggests that in view of the high probability of transfers of officers, with the increased risk of losing upfront investments, the private sector is increasingly requiring that dialogue be converted to a demonstrable commitment.
- Lack of clarity in sub-sector priorities: Another major constraint relates to the lack of clarity in appropriate models and approaches for commercialization of different sub-sectors of urban infrastructure such as water, sanitation, solid waste, roads and public transportation, area development and management improvements. Commercial structuring across sectors requires different approaches. These approaches are closely linked to the specific problems/issues at hand, and the solutions must arise from the same. Clear policy guidelines are required for each sector.
- Risk management: In view of a lack of strong regulatory frameworks, the burden of risk management largely falls on contract documentation. While contractual documents address risks during the construction and operation period, considerable risks also exist at the project development stage itself. This is evident from the number of projects that have been abandoned due either to inadequate project preparation or political exigencies. These development stage risks will need to be addressed through better project preparation and process management.
- Lack of commercial orientation in the provision of services: Another major constraint in project development relates to the lack of commercial orientation among authorities charged with service provision. Under the 74th Constitutional Amendment Act, provision of water supply and sanitation services in most states vests with the local or municipal authority. However, there is no clear link among investments, costs, and revenues of service provision. There is a lack of clarity of objectives and in the identification of efficiencies. Service provision is hampered by political interventions in day-to-day operations. Tariff policies are often structured to favor affordable rates for the poor, who nevertheless remain without

access to the service. The change in this regime will require a move towards institutions that operate on commercially-accepted principles.

- Private sector capacity: The premise for private sector participation rests on the assumption that there exist domestic (or even international) private sector firms with interest and capacity to work in the water and sanitation sector. A systematic assessment of private sector capacity, and the effort needed to develop it, is necessary. Most domestic firms have limited, if any, experience on the operations side of water and sewerage systems. The main reason for this has been that there has never been a demand for such private services. Only a few international firms, which have opened offices in India, possess the skills and are ready to take on operations related contracts. There is likely to be a need for partnerships among different private sector companies to undertake different roles, ranging from project development, financial management and packaging, demand and risk assessment, social planning, along with the traditional construction and engineering.

The Way Forward for FIRE II

Initiated in June 1999, the second phase of the FIRE Project will continue to address the issues that emerged during the first phase of the project and to build upon the lessons learned and the pilot efforts in project and financial markets development.

The project will expand adopted pilot efforts to more cities, and simultaneously work with state governments towards creating a supportive environment for institutionalizing these principles. As a major initiative toward this, the project has already begun the development of a state-level "roadmap" for private sector participation (PSP) in urban water and sanitation. To be developed through a two-track consultative and project development process, the potential key elements of this roadmap include:

- The context and forms of PSP, as a solution to specific local problems
- Legal and institutional reforms required
- Incentives, to both the private and public bodies, for the development of the sector
- Review of the procurement and bidding process, including evaluation
- Tariff reforms with incentive-based financing mechanisms
- Procedural, administrative, technical, and financial support from the state government
- Regulatory mechanisms and the appropriate role for consumers

FIRE II also proposes to include a wider range of infrastructure project partners, including NGOs and CBOs, along with other private sector financial institutions; and to support the development of an urban management training network.

To date, when an increased number of bilateral and multilateral agencies are involved in the sector in India, the FIRE Project is working in tandem with the other donor programs to leverage benefits. The project has been interacting in varying degrees with the World Bank, the UNDP/World Bank Water and Sanitation Program for South Asia, the U.K. Department For International Development, the Asian Development Bank, and German Technical Cooperation (GTZ).

As in the first phase, FIRE II continues to remain flexible in its approach, focusing upon demand-driven development. It will continue to emphasize partnerships as a means of fostering a sense of ownership among urban local bodies and strengthening local capacity for efficient, effective urban management.