

FINANCIAL INSTITUTIONS REFORM AND EXPANSION PROJECT

Debt Market / Infrastructure Component

**THE NATIONAL WORKSHOP ON
MUNICIPAL BOND EXPERIENCES
Potential and Relevance for India
December 4-5, 1995 at Bangalore**

**Volume I
Report of the Workshop**

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ABBREVIATIONS

| | | |
|--------|---|---|
| BMRDA | - | Bombay Metropolitan Region Development Authority |
| BOT | - | Build-Operate Transfer |
| CCI | - | Community Consulting International, USA |
| CPV | - | Cebu Property Ventures and Development Corporation |
| DBP | - | Development Bank of Philippines |
| FIRE | - | Financial Institutions Reform and Expansion Project |
| GASB | - | Government Accounting and Standards Board |
| GBMC | - | Greater Bombay Municipal Corporation |
| GFOA | - | Government Finance Officers Association |
| GO | - | General Obligation Bonds |
| HDFC | - | Housing Development Finance Corporation |
| HUDCO | - | Housing and Urban Development Corporation |
| ICICI | - | The Industrial Credit and Investment Corporation of India Ltd |
| IDA | - | International Development Assistance (World Bank) |
| IL&FS | - | Infrastructure Leasing and Financial Services Ltd |
| IPICOL | - | Industrial Promotion and Investment Corporation of Orissa Ltd |
| LGU | - | Local Government Unit |
| MUDF | - | Municipal Urban Development Fund (TNUDP) |
| NIUA | - | National Institute of Urban Affairs |
| NTADCL | - | New Tiruppur Area Development Corporation |
| OMB | - | Open Market Borrowing |
| PMG | - | Project Management Group (TNUDP) |
| RBI | - | Reserve Bank of India |
| RHUDO | - | Regional Housing and Urban Development Office of USAID |
| RIICO | - | Rajasthan Industrial Investment Corporation |
| RO | - | Revenue Bonds |
| RSEB | - | Rajasthan State Electricity Board |
| SDO | - | Structured Debt Obligations |
| SEBI | - | Securities and Exchange Board of India |
| SLR | - | Statutory Liquidity Ratio |
| SPV | - | Special Purpose Vehicle |
| TACID | - | Tamilnadu Corporation for Industrial Infrastructure Development |
| TEA | - | Tiruppur Exporter's Association |
| TNUDP | - | Tamilnadu Urban Development Project |
| TSS | - | Technical Support Services, Inc, USA |
| USA | - | United States of America |
| USAID | - | United States Agency for International Development |

**REPORT ON THE NATIONAL WORKSHOP ON MUNICIPAL BOND
EXPERIENCES : Potential and Relevance for India
December 4-5, 1995 at Bangalore**

I BACKGROUND

Urban population in India is likely to double its present level within a span of two decades at the current growth rate. With rapid growth in the economy the pace of urbanization is also expected to accelerate further and with industrial growth urban India's contribution to the Gross Domestic Product is estimated to exceed 60 percent by the turn of the century. While the positive link between urbanization and economic development has been recognized for a long time, the ills of urban growth as evident in the deterioration in the physical environment and quality of life in urban centers has received inadequate emphasis from policy makers. The gap between demand and supply of essential services and infrastructure in urban centers is widening rapidly. Available evidence indicates that at least one fifth of the population does not have access to safe drinking water and even for the rest, the quality and quantity of water are totally inadequate. Only 35 percent of the Class IV towns and 75 percent of the Class I cities have an organized sewerage system and 48 percent of the population does not have access to sanitation facilities. The collection efficiency for solid waste ranges from 50 to 83 percent in different size class of towns. Further, disposal of these wastes is often done in very hazardous conditions. The impact of these lacuna is felt in the deteriorating public health conditions which ultimately also reflect on urban productivity. The recent suspected plague outbreak brought this point home with the estimated production losses running into millions of rupees.

One of the major constraints in developing urban infrastructure in India has been the lack of an appropriate financing system. In the past, the main contribution to investments in these services has come from central and state plan allocations. These resources, which generated low cost loans backed by governmental guarantees, have led to a situation of service inefficiencies and lack of adequate attention to effective tariff structures and cost recovery. With the recent financial sector reforms, integration of urban infrastructure finance with the capital market needs to receive greater emphasis. This has become important in view of the likely limitations in budgetary resources in the coming years. The recent years in India have seen tremendous changes with the passing of the 74th Constitutional Amendment and the subsequent creation of State Finance Commissions, which hope to enhance municipal responsibilities, authority and financial soundness. The Constitution (Seventy-Fourth) Amendment Act, 1992 has provided an opportunity to enlarge the functional and financial domain of urban local governments. The State Finance Commissions in different states are currently in the process of reviewing the financial position of municipal authorities and making recommendations on assignment of taxes, sharing of tax revenues and rationalizing the transfers from state governments. Provision of access to the capital market to municipal

and other local agencies is well within the ambit of the series of municipal reforms that have been envisaged in this decentralization effort.

The Debt Market component of the Indo-US Financial Institutions Reform and Expansion (FIRE) program espouses the development of commercially viable urban environmental infrastructure for which it will be possible to access the capital market. One way to accomplish this, which has been successfully used in the USA, is the use of municipal bonds, through which it is possible to tap the debt market for local infrastructure needs. Many other countries in Europe and Asia are also now in the process of adapting the municipal bond model for financing local infrastructure. For example, the Philippines has seen some attempts at issuance of municipal bonds in recent years.

It was in this background that the National Workshop on Municipal Bond Experiences brought together both the US and Philippines experiences, as well as the fledgling attempts by some of the Indian state and local agencies to explore the potential for raising resources from the capital market for urban infrastructure. The workshop was jointly organized by the National Institute of Urban Affairs (NIUA) and Community Consulting International (CCI) in association with Technical Support Services (TSS) at Bangalore on December 4-5, 1995. The participants in the workshop included senior officials from state government, functional and municipal authorities as well as senior management from financial and investment institutions, investment bankers and credit rating agencies. It was probably for the first time that experts and practitioners from the urban and financial sector jointly discussed issues facing the financing of urban infrastructure in India. The workshop provided opportunities for a critical review of US and other country experiences, especially in relation to the possibility of developing a municipal bond system in India. The deliberations also led to a clear identification of emerging policy issues for accessing the capital markets for urban infrastructure.

II COUNTRY EXPERIENCES IN MUNICIPAL BONDS

There is almost a unanimous understanding among the financial community that to enhance market based funds for the urban infrastructure sector, some form of innovative debt structuring will be necessary. One such arrangement which may be especially appropriate to explore is the development of a municipal bond system for Indian cities. The term "municipal bonds" is being used here in a *generic* sense, and covers market borrowing by a variety of authorities and agencies. These include the municipal and state or metro level functional service authorities, financial intermediaries and private or joint sector companies set up as special purpose vehicles (SPVs) to finance or provide services through BOT arrangements. Borrowing is essentially for municipal services and may include water supply, sewerage, roads and transport, land and real estate development, and, in some cases, education and health facilities.

The presentations at the workshop covered US, Philippine and Indian experiences. The US presentations included an overview of the municipal bond market, a case study of the bond issuance process in a small municipal authority as well as the state level supports which are being provided for smaller and weaker municipalities to access the bond market. The papers and other materials based on the US experiences are included in Volume II of this report. The Philippines experience is more recent in origin and the problems and potential highlighted in presentations and materials have considerable relevance for India. The presentations included two specific case studies of municipal bond development in Cebu and Naga cities as well as an overview of investor preferences and the changes in legal codes for local governments which have been made in recent years. The papers and other materials based on Philippine experiences are also included in Volume II. The Indian experiences are rather diverse, ranging from the city of Bombay with its limited borrowing to the experience of financial intermediaries like HUDCO and the emerging state level institutions in Bombay and Tamilnadu. In addition, recent innovations like the Tiruppur Area Development Project by Infrastructure Leasing and Financial Services Limited, which is one of the first projects in urban infrastructure to be developed in a commercial format, as well as Structured Debt Obligations (SDOs) in the power and irrigation sectors, provide the likely directions for the future. The papers and materials for the Indian presentations are included in Part III of Volume II.

The following paragraphs provide a summary of presentations of the country experiences:

US Municipal Bond System: One of the only countries in the world¹ where the use of capital markets to finance investments in urban infrastructure has a long history spanning over a century, is the United States of America. The long history of municipal bonds has built up a tradition of responsibility at the local level which in turn helps to ensure investor confidence in bonds. It must be emphasized that the rules have often emerged gradually with actual experience and self regulatory organizations have contributed significantly to this process.

An Overview: The US municipal bond market has provided access to debt financing for state and local government entities for over a century and a half. The size of the market is large even relative to corporate securities. During the 15 year period from 1970, the dollar volume of municipal debt issued was about double the issuance of corporate debt during the same period (Lamb and Rappaport, 1987, p.3). The combined volume of new issues of long-term municipal securities was \$456 billion during the years 1993 and 1994. The total outstanding volume of debt is estimated at \$988 billion with over 1.5 million in different securities

¹ The only other country with a major municipal bond system is Canada. Some of the other countries like Germany and Japan also have municipal bond systems but relative volumes of outstanding municipal bonds in per capita terms are about a fourth of the US and Canadian markets (Based on Volumes reported in the keynote address at the workshop).

(McGoldrick, 1995 and Fabozzi et. al., 1995). Out of an estimated 83,000 local government or municipal entities, over 50,000 have issued municipal securities. In addition, several thousand public revenue authorities are also issuers of municipal bonds. In the US, the last two decades have seen a tremendous growth in the use of revenue bonds, as opposed to General Obligation (GO) bonds, with their share increasing from one-third in 1970 to over 70 percent by 1994. There is considerable variation across agencies and an effort is made to structure each deal so that it provides the best option for the investor and the issuer. The key features of municipal bonds in the US system are as follows:

- i. The most important feature of the US municipal bond system is the exemption from federal income tax for income from these securities. This has arisen out of the concept of mutual tax exemption so that the federal government exempts the interest income on municipal bonds and state governments exempt income from federal securities. Despite controversies this has so far endured. The US is probably the only country in the world where such an exemption is available for municipal bonds.
- ii. Legal foundation for the GO debt issued by local entities in the US is based on the US constitution. The ability to incur debt, forms of debt and methods of repayment are clearly defined by the constitution of each of the fifty states. Legal interpretations are expressed in detailed governmental codes. However, the debt issued through revenue bonds is not considered as indebtedness within the meaning of constitutional provisions, but its authority is derived from the "special fund doctrine" under the US Constitution. The question of a potential levy of a very high level of taxes does not arise, since the fund for servicing revenue bonds is largely realized from direct user charges for specific services. Importantly, in many of the states, debt issuance in the form of revenue bonds does not result in its consideration as a part of the public debt of the government authority and, therefore, no voter approval becomes necessary. The legal authority to issue debt and pledge specific revenues is crucial in any bond issue.
- iii. A large proportion of revenue bonds is issued by a variety of public revenue authorities including municipal enterprises, water and sewer utilities, special assessment districts, and business improvement districts, which are able to corporatize the service delivery and set the rates for user charges at appropriate levels more easily. In addition, a variety of lease arrangements is also used for long and intermediate term municipal bonds.
- iv. Over the years, acceptable security structures have emerged, which are based on the pledge of defined revenue streams. The revenue streams generally include user charges, debt service surcharge on user charges, tax increments due to infrastructure investments or even assigned taxes or revenues from state or federal governments.

- v. The use of credit ratings is common for most municipal bonds and is facilitated by relatively standardized accounting practices as defined by the Government Accounting and Standards Board (GASB). The GASB is an industry driven body and not a part of the government regulatory bureaucracy.
- vi. Additional credit enhancement is available through bond insurance from private companies to provide a financial guarantee. By 1994, almost 40 percent of the new issue volume of municipal bonds was insured. In addition, while there is a strong tradition to meet debt obligations, investors are likely to be concerned about the popular will and ability to meet the debt servicing costs. Therefore, measures like voter approval, special workshops with service consumer groups and feasibility reports for service demand are considered necessary.
- vii. The investor base for municipal bonds is directly linked to their tax exempt status. The extent of exemption makes them more attractive investments for those in the higher tax brackets. The main investor groups include households, mutual and money market funds, commercial banks and property and casualty insurance companies. Pension funds, despite their long term sources, are not major investors as they already enjoy a tax exempt status. Over the years, the importance of individual investors and mutual funds has increased considerably, mainly due to changes in tax benefits which have reduced the appeal of tax exempt municipal paper for other investors, especially commercial banks. Municipal bond products are well understood in the market and by potential investors. Furthermore, credit rating permits an easy assessment of each product.

Market Access by a Small Authority - Lynwood case: The case of Lynwood, a city in Southern California with a population of 65,000, illustrates the manner in which a small and weak municipal authority was able to access the market successfully. It provides useful lessons for Indian cities.

Lynwood had no credit history, no outstanding debt and poor financial and operating results. It had been facing financial problems over the past 5 years. The financial statistics of the authority were not in good order and considerable effort was needed to make them acceptable to the market. The water system, with about 8,700 consumer accounts, was run down and required critical investments without which the system might have been forced to shut down completely. The City Council had consistently refused to raise the rates for several years. As a result, over the last five years Lynwood had accumulated a deficit of 1.1 million US dollars. In order to ascertain the needed funds to improve the water system, the city sought the help of financial advisors. Before accessing the capital markets for funds through a bond issue, the advisors first had to assist the city to get its finances in order. This required the city to raise water rates so that a sufficient stream of resources could be forwarded to support the obligations of a revenue bond. In order to achieve political acceptability of the

increase in water rates, the city held community meetings throughout the city to familiarize the public with the costs of water services, the need for system improvements, and the need to increase rates. The financial advisors also assisted the city in developing the necessary financial information required to support a bond issue. Finally, the City Council agreed to raise the water rates by over 100 percent and then peg these to an annual 6 percent increase on a regular basis. This permitted a comfortable forecast, leading to a surplus of 2.3 million dollars over the next five years. This made it possible to develop a commercially viable bond structure in terms of security features. These features included :

- . A flow of funds structure giving an order of priority for the use of revenues. For Lynwood, a closed loop revenue system was used so that surplus revenues are retained within the system and cannot be diverted outside the water and sewerage system. The surplus were to be put into a rate stabilization fund.
- . A debt service reserve fund to be funded out of additional bonds.
- . Rate or user charge covenants so that revenues will be levied at levels adequate to meet debt servicing obligations with overcollateralization of cash flows through a debt service coverage ratio of 1.25.
- . Additional bonds test to ensure seniority of debt which provides that additional debt will be issued only if net revenues are 1.5 times the debt servicing requirements.

The entire process of developing the financial analysis and bond structures for Lynwood took 7 months. The first few months went into developing the financing documents, also requiring an updating of financial records, workshops with citizens and community groups and getting the council to approve the necessary rate increases. The bonds were structured as both serial bonds (eight series for 17 percent of the total issuance) and two term bonds (of 12 and 25 years for the remaining 12 and 71 percent of the total bond issuance). The average life of the bonds was 16 years and the true interest cost was 6.68 percent. In fact, due to the rather high coupon rate on the serial bonds, these were sold at a premium. Though the Lynwood bonds received a low credit rating, it at least made it possible for the city to access the market in less than a year's time and at costs which were sustainable by acceptable and affordable rate increases.

The case of Lynwood city highlights the possibility of even a small and weak municipality being able to access the capital market by introducing the necessary financial reforms. The key lessons from the Lynwood case study relate to the need for standardization of financial records, the need for developing popular support for rate increases through greater transparency, and the possibility of using simple and readily acceptable security features once the financial systems and potential revenue surpluses are in place.

State Level Supports: State governments in the United States have created a variety of approaches to improving the capacity of municipalities to access capital markets for infrastructure finance. These initiatives cover a spectrum of intervention from minimal information and technical advisory services to state operation as a lender of last resort. In all forms of assistance, the guiding philosophy is one of maximizing local-level project control and responsibility and of minimizing the role of state agencies in direct project finance and development in the future.

Among the most effective and expanding of these initiatives are state bond banks, which are sometimes called bond pools. These provide access to capital market resources for smaller and financially weaker municipalities which are unable to issue affordable debt on their own. Participation in bond bank borrowing provides notable long-term advantages to these municipalities: they are able to develop the environmental infrastructure needed to address local health concerns as well as achieve state and national standards. To do so, they must adopt internal financial and project management systems and structures which strengthen overall operations of local governments and which create the capacity to support future economic development efforts.

Many innovative arrangements like State Bond Banks and Revolving Funds in different states support better market access for smaller and weaker municipal authorities or for specific sectors like sewerage. This is done through financial intermediation by issuing debt on behalf of the local governments or by pooling smaller issues. These pools may be either blind, where the specific sub-borrowers are not known up-front, or clearly meant for a set of named projects. Many states also have revolving funds to provide similar facilities. State support also helps in reducing the cost of borrowing by providing credit enhancements through financial guarantees, moral obligation pledges (used in 20 out of 50 states) or using intercepts in transfers to local authorities. Some states have also set up guarantee funds for credit enhancement. Another form of credit enhancement that of a state intercept, where state assistance to local governments is withheld and used to pay the debt service if there is a delay. These measures can help to enhance credit ratings and therefore, reduce the cost of funds.

Another very important way in which state governments assist local municipalities in raising capital through the bond market is by providing them with technical assistance and training to identify or design infrastructure projects which are likely to meet with a positive reception in the market. An example of this is in the state of Maryland where an environmental training center works with small governments on the design of water improvement projects and assists those who wish to borrow. This assistance helps them to gain access to the water quality revolving fund or simply more directly to the bond market itself. State assistance typically targets those municipalities whose access to the market is constrained by credit history, small project size, the cost of debt issuance, or a lack of financial and technical expertise on the part of staff or advisors who are accessible and

trusted.

States can also promote local government debt issuance and financial capability by adopting legislative codes or measures that enhance local bond issuance and by promoting standards of fiscal performance, an issue that perhaps is important for India to consider. Most state and local governments in the U.S. conform with standards set by the Government Accounting Standards Board (GASB), an industry association-driven activity rather than a governmental system imposed upon smaller or more local units of government. In this environment, the financial position and performance of municipal governments may be determined readily. This makes the assignment of credit ratings an objective and well-understood process. The transparency of this process is further enhanced by the availability of information about ratings, about the standards, about how to conform with them and by the training that may be provided by both state governments and by associations of state and local government officials.

Regulation of the municipal bond industry is done by the Municipal Securities Rule Making Board (MSRMB), a self-regulatory organization, as well as by the Securities and Exchange Commission (SEC). Further, in many states, Public Utility Commissions help to regulate the service standards and tariff rates of both public and private utilities. States may limit municipal borrowing and issuance of bonds or other debt but are not, for the most part, legally obligated to rescue municipalities from their difficulties. In terms of regulation, municipalities and other units of government are "self regulating" through their voluntary membership in and adherence to standards developed and promulgated by institutions such as the Government Finance Officers Association (GFOA) and the Government Accounting and Standards Board (GASB). Voluntary compliance with GASB standards is widespread and provides several well-understood benefits to municipal governments: First, conformance with GASB standards and recognition of this by auditors who prepare financial statements confers a level of approval on the municipality's accounting system. Second, this results in acceptance by the market, specifically with regard to investors, who are more willing to participate in investments sponsored by governmental units whose financial management has been assessed as sound. Third, financial management within these guidelines enables rating agencies and other interested parties to make an objective assessment of the municipality's financial position, both in its own right and in comparison with other governments. Further, this makes it possible to ascertain whether the municipality is improving or worsening its financial operations on the whole and with respect to its various funds. Some regulation of municipalities on the part of the states does exist, however. States may impose limits on municipalities in terms of property tax rates, local revenue collection, local government spending, and allowable levels of debt.

Municipal Bonds in the Philippines: As in most developing countries, the local governments in Philippines also borrow directly from the higher levels of government or government finance institutions to finance their investments. These include government-

owned commercial and development banks as well as pension funds. In recent years there have also been a few attempts at direct borrowing by municipal authorities using the municipal bond route. However, constraints to developing this route have been faced in the Philippines. The first and most important constraint is a lack of awareness, both on the side of the issuer and the potential investors. The issuers lack the technical knowledge and the financial sector lacks a knowledge of the issuer and potential products. To overcome this constraint, it was felt that it will be necessary to develop test products through which it becomes possible to increase the awareness of both the issuers and investor groups. In addition, specific measures are necessary to bring together the urban and financial sectors on common platforms to discuss their questions and concerns. This will help to enhance awareness as well as identify potential. A second constraint relates to a possible lack of continuity due to political changes at the local level. Unlike in the US, where a tradition of meeting debt obligations already exists, this will need to be built up and safeguarded through legislative measures in countries like the Philippines and India.

An important third constraint relates to identification of a potential investor base with an appetite for long term debt, which is necessary for infrastructure securities. A review of The Philippines' experience in this regard suggests that the most appropriate pools to tap are government insurance and retirement funds, pension funds, trust funds and insurance companies, since these are more likely to have a desire for long-term investments. The retail household sector, though a major investor group, will be concerned about the liquidity of their investment, especially as the secondary markets in debt are almost non-existent in the Philippines. Specific concerns of these investor groups with the safety, adequate yield and liquidity of their investments will need to be incorporated in the development of any test product. The two test products of Cebu and Naga city bonds need to be reviewed in this context.

Cebu Bonds: The Cebu city bonds were developed in response to the city's urgent and pressing needs for large investments in infrastructure to support economic development. While the existing legislation did permit the local government unit (LGU) to borrow for the market, it capped its total borrowing in relation to its total tax revenue. For Cebu, this meant that it could only borrow 5 million pesos as compared to its requirements of over 1 billion pesos. Besides this urgent need, there was considerable political support for these investments as well as recognition of the need to borrow from other than conventional sources, namely the national government--itself faced with a severe budget crunch--and through official development assistance. It was perceived that these conventional sources would be very time consuming exercises while the funds were needed urgently. Therefore, the Cebu government approached the Development Bank of Philippines (DBP) to act as financial advisors to the city and as lead underwriters for mobilizing the needed resources from the market.

The structure evolved by the DBP used the land resources of the city in an imaginative manner. Direct sale of land by the city, though it would have been faster, would

not have allowed any benefits from the potential appreciation in real estate prices to accrue to the government. It was, therefore, necessary to develop a structure by which it would be possible to realize the benefits of price appreciation. Secondly, it was felt that the investor community may not have adequate faith in the city undertaking the projects by itself. In order to meet this concern, a joint venture was created (by the name of Cebu Property Ventures and Development Corporation - CPV) with Ayala Land Incorporated, a highly-reputed Filipino real estate firm. The land was then put up as equity (comprising about 74.8 percent share of total equity) in the joint venture. Despite a smaller equity share, the day to day management was kept firmly with the Ayala Land Inc. The Board of Directors had representation from the equity holders as well as from financial institutions. In order to raise the resources for infrastructure, bonds worth 300 million Pesos were issued by the Cebu local government which were fully converted to equity in the CPV. These came to be known as the Cebu equity bonds. Later, a proportion of the shares were sold directly on the open market in a second tranche of 700 million Pesos. This permitted listing of these shares on the exchange and therefore ensured liquidity. This would also gradually move a greater share of ownership of the CPV out of government hands. The Department of Finance of the national government readily approved the Cebu bonds, as there was no burden on them for guarantees or budget allocations. The Cebu experience provided an invaluable learning experience for both the local government officials and the financial advisors.

Successful floatation of the Cebu bonds was also due to a financial structure which responded to the three common investment yardsticks of yield, liquidity and safety. In addition, considerable efforts were also made to ensure transparency and to educate all the actors about the entire process. To ensure sustainability and security for the issue, opinions and approvals by all the relevant local government officials, Department of Justice, Department of Finance, and from the Office of the President were obtained. Despite these efforts, a change in government at Cebu led to questioning and probing, which might have created a perceived risk of continuity. However, this was ultimately solved due to the total transparency adopted. Subsequent amendments in the Local Government Code have now removed this risk by making it mandatory to meet all the outstanding debt obligations. In addition, specific covenants were built in and a reserve fund was created. To ensure adequate yield rates, the offer allowed for a premium of 5 percent above the market rates for a national government or highly rated corporate security. Liquidity was ensured by designing a convertible bond issue and the subsequent listing and trading in the CPV equity.

Naga City Bonds: Unlike the Cebu equity bonds, Naga City serial bonds were designed as more typical municipal bonds. These are revenue bonds to be issued for financing a central city bus terminal where projected revenues from fees and charges were adequate to generate a financial internal rate of return of 22.6 percent. The bus terminal would add much-needed infrastructure to contribute to economic activities in Naga city. The financing options for the city were reviewed and it was decided that a bond issue would be an attractive option. It must, however, be recognized that market conditions were also appropriate in that there was

excess liquidity and a stable interest rate, leading investors to consider longer terms. The bond option was also aided by the fact that the city was aware that government guarantees might not be forthcoming in the future. In addition, the city wanted to develop the capacity for future market borrowing.

In actual development of the bond structure, Naga city received technical assistance through the United States Agency for International Development. This was supported by the necessary legislative measures, notably the local ordinances required for a bond issue. A technical group working with the local government helped to prepare the materials related to a feasibility study for the bus terminal, design the bond issue and the supporting offer documents. The Bond issue was designed with five series to target it to different investor groups, especially Naga city residents, who had a first option on the first series of the bond issue. The bonds were secured by the land and other improvements of the project, a pledge on the revenues of the project and a pledge on the share of Naga city in the Internal Revenue Allotment from the National government. The entire process took about two and a half years.²

Lessons from the Philippines: The Philippine experience in Cebu suggests that if the existing institutions are not likely to be acceptable to the market it is necessary to create structures which benefit from a better market image of the joint sector partners. Similarly, innovative use of the main resources of the local agency is necessary. In this case, land was used as a resource to both give the basic security for the instrument as well as provide it with the necessary liquidity to attract investors. More importantly, the Filipino presentation also highlighted two important policy issues. First, it is necessary to evolve a supportive legal and policy structure which will provide incentives for local authorities to access the market. For example, the new Philippine code now permits local authorities to borrow through either a general obligation or a revenue bond structure with a cap on the debt servicing ratio at 20 percent.

Secondly, a careful assessment of the supply side is necessary in terms of resource pools and investor behavior in order to orient the instruments to their preferences. Lastly, in both the cases of Cebu and Naga city, the initiative came from local political leaders. Both the mayors enjoyed popular support and were visionary enough to see the need to innovate on the financial front and build up local capacity for market borrowing. At the same time, considerable innovation was required, and this came through the participation of the financial community in developing these arrangements. From the discussions, it clearly emerged that

² Indications from the Naga city are that they may not go ahead with the actual bond issue as an alternative cheaper source of fund has been offered to the city by an international finance institution. This hints at the need to evolve an overall financing strategy without which the local incentive for market borrowing even for commercially viable projects may not really be forthcoming when alternative cheaper funds are made available even though they may not be essential for the given project.

Indian cities would similarly have to take a lead to look ahead and to work with the financial community to explore innovative arrangements for financing.

Indian Experiences: Compared to the US and Philippine experiences presented at the workshop, true market borrowing not guaranteed by higher levels of government for urban environmental services has, to date, not been common in India. However, the Indian presentations made at the workshop point to the possibilities likely to emerge. In India, the financing of urban infrastructure has largely been through plan allocations, with some institutional financing now emerging on the scene. The most important financial intermediary at present is the Housing and Urban Development Corporation (HUDCO), a national-level intermediary. In addition, some municipal development funds also exist at the state level. A variety of new state level intermediaries are also under consideration. Some experience does exist in Structured Debt Obligations (SDO) for other sectors such as power and irrigation which may provide some guidelines for the urban sector.

The presentations on Indian experiences included the plans being considered by the Bombay Municipal Corporation, the changes being envisaged by the existing and proposed financial intermediaries, including HUDCO, the Tamilnadu Urban Development Fund (TUDF) and a proposed fund in Maharashtra with equity contribution by Bombay Metropolitan Regional Development Authority (BMRDA); and, lastly the more innovative public-private structure with a Special Purpose Vehicle (SPV) being developed by Infrastructure Leasing and Financial Services (IL&FS) as well as the SDOs being developed in the power and irrigation sectors.

Greater Bombay Municipal Corporation (GBMC): GBMC is one of the oldest Municipal Corporations in this part of the world. Bombay's position as the financial capital of India is also reflected in the size and strength of GBMC. It operates through five different budgets. The total size of the four of these presented is Rs. 19,000 millions in 1994-95, with a capital expenditure of Rs. 1380 million. One of these budgets (budget G) is the utility budget dealing with water supply, sewerage and storm water drainage in the metropolis. The main revenues are from water and sewerage related charges and taxes. This budget is maintained on a commercial accounting basis and has generated revenue surpluses ever since its separation, enough to meet about 40 percent of the annual capital expenditure on various water supply and sewerage projects.

GBMC has raised additional resources for their capital works through loans from the International Development Association (IDA) and the World Bank. In addition, debt funds have been raised through the quota-based Open Market Borrowing (OMB) allocated by the state government in the past³ and debentures issued by GBMC for investing its own internal

³ The practice of allocating a part of the state Open Market Borrowing (OMB) quota to local authorities has been stopped totally since the last 2 years.

funds such as balances in the employees provident funds, sinking funds, and so on. Despite the fact that in the past its debt needs have been satisfactorily met through these measures, GBMC now realizes that it needs to look beyond these traditional resources.

In the changing economic scenario in the post liberalization period in India, Bombay with its status as the financial capital of India needs to evolve as a global city with a competitive edge over other such cities in the larger region. This poses a major challenge for the Corporation to develop ways in which the infrastructural constraints are eased and a more supportive policy framework emerges. In this perspective, GBMC realizes that the question of Bombay's entry into the capital market goes beyond a simple mobilization of additional resources, which may not be a problem for GBMC at present, to larger issues of introducing the necessary efficiency and reforms in its administration and financial management. Market access would require assessment of the creditworthiness of the Corporation and, in the process, necessitate some long overdue reforms in financial and accounting practices and procedures. These would be necessary to ensure continuing investor confidence and loyalty. Bombay thus visualizes that municipal bonds can become the "thin end of the wedge for a thoroughgoing, long overdue reform process of urban local governance".

Financial Intermediaries - HUDCO: While direct market borrowing by municipal and other state or local authorities has not been common in India on any significant scale so far, some experience in institutional intermediaries has already begun to emerge. The major intermediary for financing urban infrastructure in India is the Housing and Urban Development Corporation (HUDCO), established in 1971 and today representing a net worth of Rs. 6,750 million. However, most of its assets to date have been used for housing related activities.

HUDCO has been lending in the infrastructure sector since 1989-90. It hopes to expand its activities in this area in the coming years. HUDCO has so far financed about 358 infrastructure projects with a total investment of Rs. 21632 million, with a major share for water services. Although HUDCO relies on state government guarantees for most of its loans, financial viability of the projects is also assessed. HUDCO also insists that the borrowing agencies introduce tariff revisions before financing water projects. Many of the state governments, including Karnataka, Punjab and Andhra Pradesh have revised their tariff rates on the basis of HUDCO's efforts and insistence. Similarly, HUDCO has insisted on the introduction of meters to facilitate consumption-linked charges for water services. HUDCO's financing pattern is also linked to the city size with loans at concessionary rates being available to cities with less than 500,000 population. HUDCO has been financing a variety of infrastructure projects besides water supply. These include sanitation, solid waste collection and disposal, roads and highways, and airports. Of these, some of the new projects related to solid waste and airports have been developed in the public-private partnership format.

Proposed Financial Intermediaries - BMRDA, MUDF: In addition to HUDCO, there have been some efforts at financial intermediation at state and metro levels also. Two of these experiences, one in Tamilnadu and the other in Bombay, were also presented at the workshop. Interestingly, both were developed as a part of the World Bank's urban development program. These funds have been providing loans to municipal authorities in their respective areas with an excellent recovery performance. The MUDF was conceived in 1987 as a part of the IDA financed TNUDP. The fund operates on a loan grant mix concept as per the World Bank covenants. It has financed both remunerative and non-remunerative urban services in 80 municipalities in 10 project areas. The fund is expected to be self sufficient, with a spread of 2 percent generated from lending activities. By September, 1995, the MUDF had disbursed around Rs 1500 million. Apart from the loans, the fund also provided technical assistance grants for feasibility studies, management improvement plans and preparation of five-year Financial Operating Plans. The fund has contributed to strengthening capacity of municipal authorities to develop capital investment programs through improved financial discipline.

In both these cases, however, interesting arrangements now relate to proposals to set up new intermediaries with the possibility of participation by private financial institutions. BMRDA has generated considerable surpluses from one of its major land development projects for an International Finance and Business Center. It plans to use some of this to contribute to the equity of a state level financial intermediary. It envisions an intermediary role to help build up the capacity of local authorities to borrow directly from the market over a period of 10 to 15 years. In order to manage this fund efficiently, some private participation is also being explored. At present, a Trust Fund and Asset Management Company structure has been suggested for this arrangement. However, during the presentation, issues were raised with respect to the need to explore and assess the alternative institutional structures, keeping in mind the need for professional management on the one hand in combination with the need to borrow from the market and from other international agencies. Further, it was also suggested that the manner in which these resources may be mobilized and the role of different stakeholders such as the BMRDA, state government, World Bank and other private financial institutions in this process will also need to be defined and articulated clearly.

In Tamilnadu, with World Bank funding completed by September 1996, it is proposed to set up a financial intermediary in a similar format as above. The MUDF resources are expected to be transferred to this intermediary with additional resources from private financial institutions including ICICI, HDFC and IL&FS. The government plans to hold only a 49 percent stake, with full management freedom being given to the private sector. The issues raised during the Tamilnadu presentation related to the appropriate debt equity structure and selection of assets of MUDF to be transferred to this intermediary. Also required is an appropriate strategy to identify potential projects which would meet commercial financing norms.

Alternative Financing Structures - The Case of Tiruppur by IL&FS: In recent years there have also been attempts to develop urban infrastructure projects in commercial formats, especially by Infrastructure Leasing & Financial Services (IL&FS). IL&FS's approach has been to develop alternative financing structures which will be amenable to mobilizing resources through the capital market. One way to do this would be to create a Special Purpose Vehicle (SPV) through which financing may be arranged for the infrastructure sector. The advantage of this approach is that such an entity will have a quasi-corporate structure with equity participation of major stakeholders in a given project, including the government. This would help to domicile the financing of an infrastructure project in a separate entity which may also undertake to manage its provision and delivery. This format can help both in mobilizing resources from the capital market as well as to involve the private sector agencies in provision of infrastructure services under a Build-Operate-Transfer (BOT) arrangement.

IL&FS has developed such an arrangement for an environmental infrastructure project in Tiruppur, an export center for knitwear, in the state of Tamilnadu. The SPV, New Tiruppur Area Development Corporation (NTADCL), has been formed with initial equity participation by TACID (a state level agency for industrial infrastructure development), Tiruppur Exporters' Association (TEA) a local industrialists' group, Government of India and IL&FS. In addition, an equity stake will also be made by the BOT operator, with surplus generated from land development. The financing plan for the project is projected to be 28 percent equity and 72 percent debt. The debt is expected to be mobilized from the US capital markets (through IL&FS under the FIRE(D) project), World Bank line of credit to IL&FS, commercial banks, domestic Development Finance Institutions (DFIs) and suppliers' credit. NTADCL will raise a substantial part of the debt from DFIs in the form of revenue bonds.

The project will be implemented under a BOT arrangement, and the selected BOT operator is also expected to participate in equity of the SPV. The project components include water supply services for the industries and the municipal agency, sewerage facilities in the municipal area and effluent treatment for the industrial units. The commercial viability of the project hinges on the supply of water to industries for whom the current cost of water from private markets is very high. The Tiruppur project is the first project of this type in India to be developed through a SPV and under a BOT arrangement.

The total project cost is estimated at Rs 5890 million. This investment is proposed to be recovered through a composite water charge with additional revenues from land development contributed by the state government.

Structured Debt Obligations - RIICO and IPICOL: In recent years, a number of structured debt obligations have been developed in the infrastructure sector when the issuing authority did not have adequate capacity. While basic commercial viability of the underlying investment is essential, the structured arrangement essentially provides for additional safety

measures to reduce the perception of risk and, therefore, the cost of borrowing. The basic principles in these arrangements have been a layer of safety cushions for the investors, including channelizing of identifiable cash flows directly into an escrow account for debt servicing, securitising of bonds by project assets, a back up by liquid investments of the borrower and lastly a state government guarantee to meet the interest payments in case all other cushions fail.

There have been two recent issues of this type in the states of Orissa and Rajasthan. In the first case, the Orissa government wanted to set up a steel project for which Industrial Promotion and Investment Corporation of Orissa Limited, IPICOL, was identified as a special purpose vehicle. IPICOL is primarily engaged in providing financial assistance to industry in Orissa. IPICOL's balance sheet was rather limited, with a total asset base of about Rs. 1250 million, in comparison to the project requirements of Rs. 1300 million. Therefore, a structured arrangement was developed, including an irrevocable guaranty for timely payments of interests and principal by the State Government. This was made available through budgetary support and was enshrined in a tripartite agreement among IPICOL as the primary obligor, the state government of Orissa and the trustees to the bond holders, the Industrial Credit and Investment Corporation of India (ICICI). Additionally, certain liquid investments in treasury and government securities were also provided to the trustees who could dispose of these to make interest payments should IPICOL fail to meet interest payments. The arrangement included an important role for the trustees with specific time measures attached to the review and assessment by the trustees. This arrangement received an "A" rating and the subscription was fully paid up with a wide spectrum of investors including financial institutions, commercial banks, provident funds and corporates from across the country.

Based on the IPICOL experience, another SDO was also developed in Rajasthan for financing power plants. Rajasthan Industrial Investment Corporation was identified as a SPV which would lend bond proceeds worth Rs. 2,500 million to Rajasthan State Electricity Board (RSEB), proposed to implement the project. The State Government of Rajasthan exempted stamp duty on the transfer of these bonds and also provided a guaranty for interest payments. To overcome the general perception of state government guarantees as being good for ultimate credit risks but not for timeliness of servicing, a structured arrangement was worked out. Under this, based on an analysis of RSEB's revenues, 23 top customers were selected and their receivables were assigned to an escrow account over which RSEB had no control. The trustees, ICICI, monitor these receipts at defined times and in the event that revenues are insufficient will call upon the government of Rajasthan to bridge the gap by intercepting budgetary support to either RSEB or RIICO. In a situation where even this defense is breached the trustees are enabled to call upon the guaranty of the government of Rajasthan to make sure that interest payments are met on time. As a consequence of this kind of structuring, this bond issue was rated LAA and the whole issue was placed with investors very easily. While these SDOs suggest rather innovative arrangements for market

borrowing, they also need to use security mechanisms which may be more sustainable in the long run.

III POTENTIAL FOR DEVELOPING A MUNICIPAL BOND SYSTEM IN INDIA

While there was near unanimity among the participants regarding the need to access the capital market for urban infrastructure, there was considerable concern regarding various constraints which may inhibit this process. It was felt that to develop a municipal bond system in a sustainable manner it would be necessary to overcome these constraints. In fact, the possibility of market access through municipal bonds will itself provide the necessary incentives and motivation at the local and state levels for far-reaching reforms in municipal governance.

Demand Side Constraints: Discussions throughout the workshop highlighted the need to overcome the poor market image of this sector, and of municipal and functional authorities in particular, especially in relation to their poor financial health and financial management capabilities, persisting inefficiencies in service provision, and the inherited structure of inadequate and politically sensitive tariff structures. A major constraint also arises out of the past dependency of local agencies regarding Central and State Plan funds. Therefore, there is a need to develop capacity beyond such plan borrowing and to develop project structures in a commercial format with which it will be possible to access the market.

In addition to the general capacities at the local level, there are several sectoral demand side constraints which were also highlighted by the discussions. For example, the low level of prices charged for these services, which recover less than 50 percent of operation costs, has given this sector the image of a social service. This is further compounded by inefficiencies in cost recovery and in service delivery due to a lack of consumer orientation. A second important constraint relates to the probable inability of conventional government accounting systems to satisfy potential investors regarding the true picture of their financial status, especially as understood by the financial community in general. A third constraint arises out of the fact that most authorities at present simply do not have the necessary credit histories upon which their credit worthiness can be established for the purpose of projecting a positive market image.

Supply Side Constraints: Supply side constraints include the macro constraint posed by a stagnant domestic savings rate in the economy and lack of a well developed debt market. Growth in the Indian capital market has been dominated by equities, especially by the corporate sector for manufacturing industries. The main reasons for this are the lack of a deep and wide investor base and an almost non-existent secondary market for debt in the Indian market. In the past, government debt securities, which have dominated the debt scene,

have had a captive market due to the SLR and other directed credit policy requirements. This has also inhibited debt market development. The lack of a secondary market is also due to the long history of regulated interest rates and a lack of market makers due, at least in part, to the poor capitalization of financial institutions. Further, the investor base is not varied enough and tends to follow the "herd mentality." For the secondary market to develop it is necessary that there are differing views on interest rates, leading to buying and selling of the debt paper.

For urban infrastructure, an added constraint lies in the fact that financial sector professionals have not viewed this sector as a potential market and, as a result, they lack information and sector experience at present. The challenge, therefore, is to improve the market image (in terms of risks and returns) of this sector through real improvements in infrastructure systems along with developing an interest among potential dealers and institutions through appropriate incentives.

Emerging Issues for Evolving Market Access:

These demand and supply side constraints suggest that measures to develop capital market access should be ones which help in introducing the much needed local reforms, enhance the overall savings rate and contribute to debt market development. Thus the need is to develop a system which responds to and overcomes the constraints in an effective manner. The workshop discussions focused on issues related to choices for the financing system, appropriate financing structures and other policy issues for central and state government support.

Financing System and Structures: Within the larger perspective of municipal bonds, three alternative (though not exclusive) routes for market borrowing were discussed. They are the *Direct Access* route, the *Financial Intermediation* route involving financial intermediaries as borrowers from the capital market, and the *SPV Intermediary* route where the SPV is used as a financing vehicle by a group of local borrower entities or for specific projects.

The Direct access route refers to market borrowing by a local municipal or state/metro level functional authority. For this route the main concerns expressed were a need for some regulation or control on total borrowing and that this route will be possible for only some of the larger and stronger municipal and functional authorities. Moreover, it was felt that such borrowing, especially when it is in the general obligation structure by municipal governments, may have to be within the constraint posed by the rising internal debt of the government. In the second route of financial intermediation, financial intermediaries access the market directly and use these proceeds to either purchase the bonds of local agencies or provide loans to local borrowers. This route has been used extensively in Europe where municipal banks have generally obtained their resources from contractual savings institutions and other long term resources borrowed from the market. Even in the USA, where direct

access by local authorities is the dominant route for capital market access, many state level arrangements like state bond banks and revolving funds provide intermediation to smaller (and weaker) municipalities or for sectors such as water and sewerage. The main concerns expressed for India related to the appropriate institutional form of these agencies which would permit them to have the necessary independence to evolve a viable portfolio of assets. The extent of state versus private and institutional control should be such that it is possible to move towards market rigor and promote credit histories through which the direct access route becomes feasible for many local issuers. A critical requirement in the functioning of intermediaries will be rigorous appraisal mechanisms which will ensure viability and bankability of infrastructure projects financed by them. It was felt that their main function should be to promote more viable borrowing by local agencies, rather than simply routing government grants. Further, they must also maintain a good credit rating themselves in order to be able to borrow from the market directly at competitive rates.

A third alternative is collaboration among several local or other service delivery authorities, who create regional pools with a special purpose vehicle (SPV) to raise resources through debt and equity. This may be effective in reducing costs of issuance and for using structured arrangements which may be difficult to develop for a small single borrower entity. Such an SPV may also be used as a financing vehicle for financing specific projects where the creditworthiness of local entities may not be adequate for direct access, even though the specific project or service may provide adequate opportunities for commercial structuring. In such an arrangement, the strength of sponsors, the legal status of the SPV and the financial assessment of the specific project or service become important concerns for potential market access.

An important aspect which repeatedly arose in discussions was the type of credit enhancement which would be required. Besides evolving structured debt arrangements with measures like a debt service reserve fund, it was also suggested that it would be useful to explore the possibility of setting up a Bond Guarantee Corporation on a commercially sustainable basis either at the national or state levels. It was felt that the state government guarantees which have been used in the past for urban infrastructure sector were not likely to be very sustainable and often were not viewed very positively in the market. It was also suggested that it would be necessary to review the possibility of using a variety of credit enhancement measures generally associated with the revenue bond structures in the US municipal bond system, such as rate covenants, overcollateralization, debt service reserve fund and other covenants related to the flow of funds structure, and an additional bonds test. There was general consensus regarding the need to use a revenue bond structure for at least those services where the "User Pays" principle is possible to be applied. However, even in these cases, double barreled structures with a general tax backing may be necessary in the initial stages. For other services, a general obligation bond structure may prove to be more appropriate.

Other Policy Issues: In order to develop market access for the urban infrastructure sector, several other policy issues were also discussed at the workshop deliberations. Probably the most important of these was the question of tax exemption for income from urban infrastructure bonds. While it was felt that such subsidies in general tend to be economically inefficient, the positive externalities which accrue from investments in urban infrastructure would lend support to such exemptions and other fiscal benefits. It was felt that it would be useful to assess the experience of different countries more closely in this regard by reviewing the available studies. It was also suggested that if tax exempt status was to be provided, it would be necessary to provide this for all "public purpose infrastructure regardless of ownership status". In addition to seeking such measures for lowering the cost of funds, it was also felt that the unique features and potential of urban areas in terms of possible involvement of the local corporate sector, use of urban land and participation of private sector through appropriate public-private arrangements also need to be developed more rigorously.

Another important issue discussed at the workshop related to the need for credit ratings to be introduced for such borrowing. The process of a credit rating of municipal securities can have significant benefits. It would, therefore, be necessary to evolve an appropriate methodology and build up capacity to rate such debt locally. It was felt that development of credit rating for direct access by local entities will help to usher in more responsible borrowing on the one hand and help in introducing the long overdue local reforms related to administration, accounting, project development and financial management.

On the question of a regulatory authority, it was felt that both the Reserve Bank of India (RBI), in the case of General Obligation Bonds, and the Securities and Exchange Board of India (SEBI), in the case of Revenue Bonds, will need to be involved in this process. With regard to existing legislation and practices, the state governments will also play an important role. However, in view of the 74th Constitution Amendment and the move towards greater local autonomy it is necessary to evolve a state level framework which would be more enabling in nature. The state government should provide a broad framework within which local authorities will have the necessary freedom to access the market. An important issue in this regard which was frequently discussed concerned a cap or ceiling on direct market borrowing by local entities. While in some cases such as Bombay, the Municipal Act provides a ceiling in relation to the property tax base, the Philippine experience suggests a performance based cap in the form of maximum debt service ratio of 20 percent of total revenues. The American experience, however, emphasizes the need for market linked ceilings which may be through mandatory credit ratings. This, however, presupposes strong regulatory frameworks to be in place, especially related to disclosure requirements to protect investor interests.

The state government framework should also facilitate market borrowing through state supports such as more viable credit enhancement measures, technical support for local authorities to develop projects in a commercial format, and incentives for more commercial

tariff structures at the local level. Besides such supports, however, the state governments will need to also develop viable financial intermediaries be able to access the markets as discussed above. On the whole, the participants agreed that it will be necessary to evolve a state level framework which successfully achieves a delicate balance between local autonomy and state and other regulatory controls.

Road Ahead for Municipal Bonds:

In the inaugural session the focus was placed on the need to access capital markets and the concerns which need to be addressed while developing a municipal bond system in India. The deliberations at the workshop attempted to explore the possibilities of developing a municipal bond system in India. On the issue of the need to access capital markets for urban infrastructure, there was general consensus that a municipal bond system will need to be adapted for its applicability in India. It would also require sustainable efforts at capacity building and significant policy reforms in the areas of administrative mechanisms and procedures, tariff structures and institutional arrangements for service delivery. Innovative use of incentives and sanctions in the areas of inter-governmental fiscal relationships and infrastructure finance will be required to induce some of these changes to take place. Similarly, it is necessary to use the limited governmental funds more appropriately and with greater leverage, as for example to capitalise the suggested Bond Guarantee Corporation and state level financial intermediaries in the joint sector.

In summing up the deliberations of the workshop in the final session, an emphasis was placed on the need to identify the measures for different levels of the government and by other actors in the financial community to facilitate the adaptation of the municipal bond system to India. The Philippine experience clearly showed that the legal provisions did not automatically lead to any municipal bond issuance. On one hand, it is necessary to develop bankable projects and, on the other, to evolve appropriate financing structures to respond innovatively to investor preferences and concerns. Similarly, the new arrangements using SPVs and structured debt arrangements in India suggest that innovative use of security and credit enhancements can make projects viable. However, it is only through projects which are inherently commercially viable that it will be possible to develop financing systems which are also commercially viable in the long run.

The most important set of measures of course have to be linked to local initiatives where efforts are needed to identify priorities, determine the infrastructure investments for which market access would be appropriate and develop project structures in a commercial format. The role of financial advisors in this process would be crucial, particularly to help structure innovative arrangements in light of situation analysis and local potential. Local initiatives will need to be backed by both capacity development and political will for tariff revisions and improved administration and financial management.

State governments will need to play an enabling role to support the local development in this manner, both by granting considerable local autonomy as well as a supporting framework which will help to reduce the cost of funds. The state governments need to streamline and rationalize the process of granting approvals for local borrowing, explore the possibilities of developing and strengthening existing financial intermediaries to become commercially viable, evolve sustainable measures for credit enhancements, develop incentives to influence local governments to move towards better tariff structures for environmental services⁴ and most of all provide autonomy to these authorities. The state level framework has to be such that it enables the stronger authorities to access the market directly while the others are supported to have access to markets indirectly through appropriate financial intermediation.

At the central government level, the main issue to be deliberated was the need for tax exemption for income from urban infrastructure debt and other fiscal benefits. While specific measures will need to be defined, it was agreed that strong fiscal incentives were necessary and justified in view of the large positive externalities of investments in urban environmental infrastructure.

Most importantly, however, it is necessary to *Learn by Doing*, through developing innovative commercially viable project structures. The lessons from these experiments need to be drawn carefully to introduce policy changes and supports necessary for successful and sustainable market access for urban infrastructure in the future. From a "Maybe" for a municipal bond system in India, to become a "Yes" it requires considerable innovation and experimentation. It must, however, be recognized that without access to the capital market the fate of urban centers can only worsen, jeopardizing economic growth prospects in the coming years.

⁴ For example, in the recent Amendment in Maharashtra in municipal legislation it is now mandatory for the local authorities to clearly identify the subsidies in each service and prepare an annual report on subsidies accruing to different user groups.

IV WORKSHOP PROGRAM

Day 1: December 4, 1995

09:30-10:00 Registration

10:00-11:00 Inaugural Session

Chairman:

Mr. D.M. Sukthankar, Chairman,
National Institute of Urban Affairs (NIUA)
Former chief

Introductory Remarks

Mr. Earl Kessler, Director,
Regional Housing and Urban Development Office, South Asia
(RHUDO/South Asia), U.S. Agency for International
Development (USAID)

Dr. Dinesh Mehta, Director, NIUA

Dr. Thomas Chapman, Program Manager,
Community Consulting International (CCI)

Keynote address

Mr. Deepak Satwalekar, Managing Director,
Housing Development Finance Corporation (HDFC)

11.00-11.30 Tea

First Technical Session : Municipal Bond Experiences I

Chairman:

Mr. Earl Kessler, Director, RHUDO, USAID

11.30-12.15 **An Overview of Municipal Bond Experiences - USA**

Mr. Richard Dixon, Senior Associate, Technical Support Services
(Former Chief Administrative Officer - Los Angeles County)

**Issues for Financial and Institutional Structuring of Municipal
Revenue Bonds : Presentation with US Case Studies**

Mr. Peter Wong, Senior Associate, Technical Support Services
and First Vice President, Grigsby Brandford and Company, USA

12.15-12.45 **Indian Experiences**

Mr. Anupam Dasgupta, Additional Municipal Commissioner,
Municipal Corporation of Greater Bombay

12:45-01:30 **Discussions**

01:30-02:30 **Lunch**

Second Technical Session : Municipal Bond Experiences II

Chairman:

Mr. H.U. Bijlani, Former Chairman and Managing
Director, HUDCO and Vice President, NIUA

2.30-3.30 **Municipal Bond Markets in the Philippines and Cebu City
Municipal Bonds**

Mr. Jacinto D. Rosario Jr, President, Urbancorp Securities, Manila,
Philippines

**Municipal Bond Markets in the Philippines : Legal, Financial and
Institutional Arrangements and Presentation on Naga City
Municipal Bonds**

Mr. Joel C. Valdes, President, Urbancorp Investments, Inc, Manila,
Philippines

3.30-3.45 **Tea**

03:45-04:15 **Indian Experiences**

Mr. Sundaresan, Director Finance,
Housing and Urban Development Corporation (HUDCO)

Mr. Hetal Gandhi, Asst Vice President,
Infrastructure Leasing and Financial Services (IL&FS)

Mr. L.K. Narayanan, Vice-President, DSP Financial Consultants Ltd

04:15-05:30 **Discussions**

Day 2: December 5, 1995

Third Technical Session : State Level Supports

Chairman: Mr. Sundaresan, Director Finance, HUDCO

09:15-10:00 **US State Support for Municipal Bond Issuance - An Overview of the US Experience with Specific Examples**

Ms. Jeanine Kleimo, Senior Associate, Technical Support Services

Issues for State Support for Municipal Bonds System in India

Dr. Meera Mehta, Senior Urban Finance Advisor, CCI

10:00-10:30 **Indian Experiences**

Mr. Madhavan Nambiar, Project Director, Project Management Group, Tamil Nadu Municipal Development Project, Madras

Mr. Dev Mehta, Metropolitan Commissioner

Bombay Metropolitan Region Development Authority (BMRDA)

10:30-11:30 **Discussions**

11:30-12:00 **Tea**

Recommendations: The Road Ahead

Chairman:

Mr. D.M. Sukthankar, Chairman, NIUA

12:00-12:30 **Issues Emerging from Workshop Presentations and Discussions**

Dr. Dinesh Mehta, Director, NIUA

12:30-01:30 **Discussions**

01:30 **Lunch**

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THE FIRE (D) PROJECT

The objective of the Indo-US Financial Institutions Reform and Expansion (FIRE) project, funded by the U.S. Agency for International Development (USAID), is to support the Government of India in its efforts to strengthen domestic capital markets to enable them to serve as efficient sources of development finance. One of the components of the FIRE project seeks to expand the debt market through the financing of commercially viable urban environmental infrastructure projects, defined as those which result in the provision of affordable urban services on a full cost-recovery basis by their sponsoring municipal corporations and authorities. This Debt Market/Infrastructure component, (FIRE-D), is under the auspices of the Union Ministry of Urban Affairs and Employment with USAID support targeted to the National Institute of Urban Affairs (NIUA), the Housing and Urban Development Corporation Limited (HUDCO) and the Infrastructure Leasing and Financial Services Limited (IL&FS) as well as to selected local entities.

The FIRE-D Project is designed to foster the development of a commercially viable infrastructure finance system by channelling USAID Housing Guaranty (HG) funds to selected demonstration cities and states to assist in the financing of urban environmental infrastructure projects. HUDCO and IL&FS, acting as financial intermediaries, make loans to selected municipal corporations, state boards and authorities and private enterprises which have formed partnerships with municipal entities. Eligible projects include water supply, sanitation, solid waste management, and integrated area development schemes. NIUA acts as the advocate for policy change and the coordinator for delivery of technical assistance and training directed at the development of local government capacity in the areas of identification, development and management of commercially viable urban environmental infrastructure projects; pricing and cost recovery for urban services; and financial management systems to support accessing of capital markets. It is expected that the participating institutions will be able to replicate the policy changes and project development initiatives beyond the demonstration states and municipalities to other areas throughout India.

This USAID-funded program will make available up to \$125 million from US capital markets in loans, combined with grant funds for management support, technical assistance and training. Loan guarantees must be matched with capital investment raised in the Indian debt market through FIRE's creation of innovative financial instruments.

Technical assistance, training and research support is provided by a consortium of US firms led by Community Consulting International (CCI) in association with Technical Support Services (TSS). Principal partners in the consortium include the Wall Street investment banking firm of Grigsby Branford and Company (GB&C) and the Government Finance Officers Association (GFOA) of the USA and Canada.

For more information on the FIRE(D) Project, contact the project office at the address mentioned above.