Municipal Financial Resource Mobilisation
Status, Concerns and Issues

Prof. Gangadhar Jha

Infrastructure Professionals Enterprise (P) Ltd.
New Delhi

Prepared for the National Seminar on Municipal Finance, sponsored by the
Twelfth Finance Commission, being conducted by the Indian Institute of Public
Administration, New Delhi, December, 29-30, 2003.
Municipal Financial Resource Mobilisation
Status, Concerns and Issues

Gangadhar Jha

Two inter-related developments marked the closing years of the 20th century. First is globalisation that came to the fore after the demise of the bipolarised global politics. Globalisation brought in a vigorous worldwide revolution in communication and information due to unprecedented technological revolution and, above all, an unprecedented growth in international financial flows that is uninhibited by the national boundaries. The nations across the globe were compelled to go for structural adjustments to enhance the national competitive abilities, global trade and foreign direct investments (Rabinovitch 1999). The role of cities became all the more important in this process, as they are important centres of economic activities and “engines of economic growth”. By virtue of this powerful economic role, the cities contribute about 60 percent to the GDP. It is therefore now believed that what will happen to the national economies in future is now largely contingent on what happens to the cities in terms of their institutional and fiscal capacities in providing urban infrastructure support to production activities and improving the quality of life of its growing in habitants.

The second equally important development was the initiation of virtually a wave of decentralisation across the globe. There was increasing realisation in the eighties of the last century that centralised planning and development initiative in the past failed to enhance national development. As a result, developing countries, in particular, adopted decentralisation in a big way. Decentralisation constituted an important agenda in the scheme of World Bank funding in a large number of countries (Davey 1989). More than 60 countries in Europe including the erstwhile command economies and now the ‘countries in tranistion’, Latin

---

1 Prof. Gangadhar Jha is presently Principal Consultant-Urban, Infrastructure Professionals Enterprise (P) Ltd., New Delhi; formerly Research Professor, National Institute of Urban Affairs, New Delhi.
America. Asia and Africa have adopted decentralisation initiative and are in the process of strengthening it (Rabinovitch 1999).

These two phenomena emerging towards the closing years of the last century have implications for the cities in two ways. First, globalisation and the accompanied accentuated shift towards market economy have prospects for accelerating the process of urbanisation (level of urbanisation) and urban growth (concentrated demographic growth in the metropolitan and class-I towns). Second, the cities are called upon to increase their revenue enhancement effort for financing augmentation of municipal services and urban infrastructure for (i) improving the quality of life of urban population, and (ii) attracting investment for generation of employment and income. The institutions of urban local self-government have, therefore, occupied the center-stage; they are called upon to manage change brought about by increasing demographic growth within their jurisdiction. An effective, efficient and responsive discharge of the devolved functions and management of change requires institutional and fiscal capacities in ample measure. On the contrary, the units of urban local governments (ULGs) especially in the developing and transitional economies have been experiencing serious fiscal stress (Bahl and Linn 1992; Bahl 2000; Bird 1994; Jha 1998).

The paper, therefore, analyses fiscal capacity on the basis of available municipal financial data on revenue structure and trends in revenue. Subsequently, it discusses policy issues for revenue enhancement from tax and non-tax sources including the user charge, by accessing the capita market and through effective and innovative urban management systems. This is done by looking into innovative ways of local financial resource generation by the institutions of urban local self-government in India and abroad.

**Institutional Capacity**
Decentralisation has impacted local government units in several ways. One of its impacts is addition to their functional domain. It has led to rising expectation on part of the local population from the local government. The local governments, however, lack institutional capacity for performing functions entrusted to them. The literature on municipal capacity building suggests that capacity building is driven, among other things, by three factors viz. (i) human resource development; (ii) organisational development and (iii) institutional and legal framework (Pellenburg et al 1996). These three important parameters together contribute to strengthening of financial resource mobilization, financial management system and hence the fiscal capacity.

Fiscal capabilities and financial wherewithal are critically important for addressing all the three dimensions mentioned above. Putting in place a sustainable financing system calls for strengthening decentralisation through fiscal decentralisation, that has several useful spin-offs. It improves over-all revenue mobilisation by broadening the tax-net, enables sub-national governments to capture tax base, which is below the thresholds of taxes of higher levels of government, and it enhances efficiency in terms of improved level of services, accountability, willingness to pay and overall development of jurisdictions (Bahl 1999; Musgrave 1983). There is now an increasing realisation in several countries that have gone for decentralisation that it needs to be reinforced by fiscal decentralisation (Bird 1994). It creates conditions for the ULGs to take expenditure decisions and steps to finance these decisions by using their tax authority. Such decisions are taken in public gauge for which they are accountable.

Decentralisation enhances the quality and effectiveness of governance as well. From a financial perspective, the main factor related to governance is that it provides accountability and transparency. This means that elected officials take responsibility for the affairs of the municipality including the appointment of senior staff. Financial accountability is achieved through adherence to regulations of
higher levels of government (e.g. avoid deficit budgeting, follow prescribed accounting standards, and ensure effective tax collection procedures), budget approval by elected officials, periodic reporting, and independent audits. Transparency involves making decisions in public and full disclosure of information used in making decisions. Good governance provides investors with a positive level of comfort.

**Existing State of Municipal Finance**

Analysis of structure and trends in municipal finance is constrained by non-availability of organised data on municipal finance on a regular basis. The Eleventh Finance Commission (EFC) is the only source that contains a time series data on municipal finance. Hence the analysis is based on the EFC data. These have been supplemented by the data from some of the second round of State Finance Commissions (SFCs) that have submitted their reports and wherever these reports contain data on municipal finance.²

**Revenue Structure**

*Municipal Corporations*: Revenue from own sources constitutes the most important indicator of financial wherewithal of any level of government. Analysis of revenue structure of all the municipal Corporations in all the states taken together indicates that the revenue from own sources improved between 1990-91 and 1997-98 with substantial setback in the year 1994-95 (Table-1). Revenue from own sources increased from 75.72 percent to 79.62 percent during this period. Such a rosy picture at the national level notwithstanding, dependence on state transfers has increased in a number of states. In the states of Gujarat, Haryana, Himachal Pradesh, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Uttar Pradesh, revenue from own sources has declined during the period. In

---

² Not all the SFC reports contain data on municipal revenue structure and time series data on municipal finance. A few of them do not contain the data in any form at all!
the states of Haryana, Madhya Pradesh, Uttar Pradesh and Karnataka and Keral, the decline has been quite steep. The second SFC data for Karnataka indicates an improvement in the growth rate of own source revenue. It increased at a CAGR of 19.91 percent between 1996-97 and 2000-2001 (Karnatak 2002). The second SFC data for Andhra Pradesh indicate that the revenue from own sources of Municipal Corporations in the state has declined from 28 percent during 1990/91-1997/98 to 18.22 percent during 1996/97 – 2000/01 (Andhra Pradesh 2002).

**Municipal Councils:** Revenue structure of Municipal Councils (MCs) at the national level seems to have remained steady during 1990/91 – 1997/98. Revenue from own sources of all the MCs in all the states taken together remained around 59 percent (Table-2). But the situation in individual states worsened during this period. In as many as a dozen states, revenue from own sources declined. Such states include Andhra Pradesh, Assam, Gujaraat, Haryana, Himachal Pradesh, Karnataka, Keral, Madhya Pradesh, Rajasthan, Tamil Nadu, and Uttar Pradesh. In some of them, it declined rather steeply. Examples are Assam, Keral, Himachal PradeshMadhya Pradesh, and Uttar Pradesh (Table-2). The data from the second SFC for the states of Andhra Pradesh and Karnataka indicate that the dependence of MCs on state transfers has increased in recent years as the revenue from own sources has declined from 37 percent in 1996-97 to 31.06 percent in 1999-2000 in Andhra Pradesh and from 49.94 percent to 36.90 percent in 2000-01 in Karnataka.

**Nagar Panchayats:** Nagar Panchayats (NPs) present much more grim a situation with respect to revenue from own sources. At the national level, it declined from about 53 percent in 1994-95 to 39.76 percent in 1997-98. Of the 13 states that have NPs, revenue from own sources declined in as many as eight states (Table-3). It needs to be emphasised that NPs constitute the entry point for urban settlements from where they graduate to the higher size categories. NPs,
therefore, need to be serviced and regulated well so that their graduation to municipalities and corporations is smooth.

**Trend in Municipal Finance**

**Municipal Corporations:** Analysis of data on revenue from own sources of Municipal Corporations in all the states taken together suggests a nominal decline in the CAGR between 1990-91 and 1997-98 (Table-4). However, individually, in some of the states (Andhra Pradesh, Tamil Nadu West Bengal, Gujarat and Rajasthan) the growth rate (CAGR) was fairly high. In other states, the own source revenue did not grow at an impressive rate. In four states including Karnataka, it increased at lower than 10 percent. Taking the rate of inflation into account, the growth in own revenue thus appears to be at most nominal in real terms in these states. In Andhra Pradesh as well the second SFC data reveal that the CAGR has declined from 28 percent during 1990-91 and 1996-97 to 18.38 percent between 1996-97 and 1999-2000 (Andhra Pradesh 2002). In Karnataka, growth rate has increased lately as the data culled from the Second SFC suggest that revenue from own sources increased from Rs. 267.26 crores in 1996-97 to Rs. 552.61 crores in 2000-01 representing a CAGR of 19.91 percent (Karnataka 2002) Data on growth in per capita own revenue at constant price would have thrown light on trends in real terms. Constraints on the availability of data, however, do not permit such an analysis.

Disaggregated data on revenue from own sources for different types of urban local bodies are not available in most of the second SFC reports that are available now. This for all the urban local bodies in Punjab grew at a CAGR of 20.21 percent that seems to be impressive even after taking the rate of inflation into account. In Rajasthan, however, this declined from Rs. 219.69 crores in 1996 to Rs. 119.38 crores in 1999-2000. CAGR, therefore, not only declined but became negative (-11.48%) during this period (Rajasthan 2001). This is largely explained by a decline in revenue from Tolls and Octroi.
Municipal Councils: EFC data for Municipal Councils for all the states taken together suggest that revenue from own sources increased at a CAGR of 16 percent in nominal terms that seems to be quite impressive. However, situation in the individual states was not so rosy. In as many as six states, it increased at a CAGR of less than 11 percent in nominal terms. This indicates a nominal increase in revenue from own sources in real terms. The second SFC reports for Karnataka and Andhra Pradesh indicate an improved situation. Revenue from own sources increased at a CAGR of about 32 percent in the former and at 15.42 percent in the latter in nominal terms.

Dominant External Revenue and the Growth in Own Revenue

Conceptually, a dominant share of transfers in the total local revenue need not be looked at as an aberration in local finance. Urban settlements' contribution to the total GDP is substantial. Yet they do not have a legitimate share in the total national resources. Transfers from central and state governments could be taken as a proxy for the share of local governments in the national resources. Hence a high share of external sources in the total local revenue has not to be looked as an evil. However, this should not make them too complacent to ignore the potential of resource generation from own sources. The test lies in at least a 5 percent per annum increase in real terms in revenue from own sources along with an increased share of revenue of external sources. Table-4 reveals that in some of the states with dominant external revenue (Haryana, Kerala, Uttar Pradesh, Karnataka, and Madhya Pradesh), growth in own source revenue of Municipal Corporations was below ten percent in nominal terms. This indicates a dependency syndrome.

Amongst the Municipal Councils, dependency syndrome is visible in as many as five states. In another five states, it increased just around ten percent in nominal terms. The situation amongst NPs is not better either.
The analysis of revenue structure, growth in revenue from own sources and the dependency syndrome suggests that in a fairly large number of states municipal finance is not in a happy situation. In such a situation an analysis of revenue and expenditure at per capita constant price would further bring the fiscal stress of municipal governments in sharp focus. Non-availability of recent data on municipal finance constrained such an analysis.

Strategy for Resource Mobilisation

It should be obvious form the above that fiscal decentralisation has to be at the top of the agenda for municipal financial resource mobilisation. Other equally important aspects of the strategy and the issues involved relate to the very revenue sources of the urban local self-government. These are (i) tax sources; (ii) non-tax sources; (iii) fiscal transfers; and (iv) borrowings. Whereas fiscal transfer depends on discretion of the higher levels of governments, other elements in revenue structure are within the competence of the ULGs that can be used by them effectively for generation of additional financial resources. Other residual spheres of intervention for revenue enhancement are (i) municipal asset management and (ii) political risk management.

Fiscal Decentralisation

Tax Sources

Analysis of revenue structure of municipal governments as well as trends in revenue from own sources in the preceding section of this paper does not reveal a rosy situation of municipal finance in the major states of this country. A common feature of urban local finance across the developing countries is inadequate own sources of revenue. The devolved sources of revenue do not match with wide range of functions required to be performed by them. This has led to increasing dependence of ULGs on higher levels of government. Bahl and
Linn found that in the cities studied by them, the median share of local revenues in financing local expenditures was as low as 30 percent in the Caribbean countries (Bahl and Linn 1992). This, including shared taxes, was around 63 percent in the transitional countries (Bird and Wallich 1993).

This is explained by what Bird (Bird 1994) calls “vertical imbalance” (dependence on the revenue of higher levels of government) and “horizontal imbalance” (uneven access to local public resources). Local finance is thus characterised by a mismatch between functions devolved to ULGs and the devolution of tax authority (Jha 1998). This mismatch is exacerbated by lack of (i) buoyancy and elasticity in local fiscal instruments, (ii) taxes without a wide base, (iii) abolition of buoyant and elastic source of revenue- (Octroi), and (iv) dependence on only one or two taxes that are not easy to implement (Dillinger 1991). Octroi- a buoyant and elastic source of revenue- has been abolished in Nepal, largely in India and Pakistan. Tax on annual rental value of land and buildings (Property Tax) has lost its buoyancy and elasticity due to a host of administrative, legal and behavioral reasons (discretionary considerations and corrupt practices). Taxes like Betting Tax, Tax on Animals, Tax on Vehicles without tires do not enjoy a wide base. Addressing the mismatch between functions and revenue would entail (i) a review of local functional domain and shifting of functions that are in nature of state functions (curative health, medical colleges) from the domain of local governments to the domain of states, (ii) pitting in place concept of core municipal function, agency function and transferred function and financing of only the core municipal functions (water supply, sanitation, solid waste management, drainage, street lighting and cremation grounds) out of own revenue., and (iii) relating the core function with the size categories of towns.

An important aspect of municipal finance in India is that whatever local fiscal instruments have been devolved to the local governments, by and large, these instruments do not have a nexus with urban economies that are growing
over time. This is an anathema and needs to be addressed through devolution of tax instruments that have a direct nexus with the urban economies. One of the contradictions characterising urban local finance in less developed countries is that even though urban economies keep on growing over time, the city governments are becoming impoverished. Taxes to be devolved to the ULGs, therefore, have to be related to the economic base of cities and towns. Buoyancy of local tax instruments depends on their nexus with city economies.

Local Taxes as well must conform to certain basic tenets of local taxation. Local taxes need to be visible, non-sensitive to business cycle, sustainable, should not lead to exporting of tax burden outside the local jurisdiction and should have low administration cost (Bahl 1999). The theory of fiscal federation as well suggests that the local tax base should be immobile (Oats). Local taxes should yield stable revenue and it should be easy to administer (Bird 1994). Taxes, which qualify these tests, include Sales Taxes, Income and Payroll Taxes, Property Taxes, Motor Vehicles Tax and Business Tax. Local Income Tax in the form of piggybacking on central income tax especially seems to be persuasive (Bird 1994).

Local Fiscal Instruments

Sales Tax on retail transaction has been a major source of revenue in U.S.A. Russia has targeted retail sales tax on luxury items. In the Philippines and South Africa, difficulties in getting at the retail sector, has led to taxation of gross sales by business type. Apparently, retail Sales Tax becomes difficult to administer especially in the developing countries due to non-keeping of books of accounts by retailers. Income and payroll taxes are levied in Russia and USA. In India, in some of the states, a similar tax is imposed on professionals, employees and trade. It is known as the Tax on Professions, Trade and Calling. However, the Indian Constitution has capped this tax at Rs.2500 per annum. Moreover, in several states, this tax has been taken over by the state governments. Property
Taxes are universally a local tax but are imposed on different bases in different countries. These are discussed subsequently.

**Promising Areas of Local Tax Reform**

Promising areas of local tax reforms are piggybacking on (i) the prices of petroleum products, and electricity charge, devolving of (ii) Entertainment Tax, (iv) Stamp Duty, and (v) Motor Vehicles Tax. Another equally important aspect of municipal financial resource mobilisation relates to devolution of fiscal autonomy to the municipal governments so that they could set their own rates. In India, the municipal laws provide for minimum and maximum limits of tax rates within which the ULGs have the autonomy to decide the rate. In case the ceiling exceeds, an approval of the state government is mandatory. In the state of Madhya Pradesh, the law provides for state approval only if the tax rate needs to be reduced. This is an innovative provision to prevent populist measure, if any. The concept of self-governance, however, suggests giving autonomy to the ULGs in every sphere of local finance. That could be possible only by reviving the list of local taxes that was introduced in the Government of India Act of 1919 and abolished in the Government of India Act of 1935. The list does not only need to be revived but refurbished as well by adding some new local fiscal instruments discussed above. The National Commission to Review the Working of the Constitution, however, has not agreed to its restoration as it thought that the time is not yet ripe for this (National Commission 2002). Also Professions Tax needs to be devolved back to the ULGs and the existing constitutional cap at Rs. 2,500 needs to be enhanced. Already there is a thinking to increase the cap.

An increasing demand on local services, abolition of Octroi, loss of buoyancy and elasticity of annual rental value (ARV) based Property Tax and the consequent fiscal stress of ULGs in India have become compelling reasons to innovate new sources of revenue. These compulsions have already led some of the municipal governments to introduce new sources of local revenue. In the
national capital, the Municipal Corporation of Delhi (MCD) imposes a Toll Tax on commercial vehicles that enter the MCD jurisdiction. Different types of vehicles have to pay different rates, which range, from Rs. 25 per entry to Rs. 500 per entry (BOX 1). MCD also levies a Tax on consumption of electricity at a low rate of 2 paise per unit and yet the revenue yield is impressive.

In the state of Madhya Pradesh, which has been thinking lately to bring back Octroi, a few municipal governments introduced a Paryavaran Kar (Tax on Environment) on the lawries, which unloaded consignments in the city (Raipur). Also a Niryat Kar (Tax on Export from local area) was as well imposed to generate additional revenue. These were, however, withdrawn at the instance of the state government on grounds of resistance from the traders. The Pune Municipal Corporation in Maharashtra levies a Street Tax at the rate of 5 per cent of ARV as a piggybacking on Property Tax for part financing an elaborate scheme of improving traffic and transportation (Jha 1998). In the state of Haryana in India, the state government introduced an elaborate scheme of taxation to mobilise revenue for ULGs after the abolition of Octroi (boxes-I and II below). This as well could not get off the ground due to lack of political will and the political risk management involved in it. The scheme of local taxation as conceived in Haryana was, nevertheless, quite commendable for mitigating the fiscal stress of municipal governments. The state governments need to give serious thought to it. BOX-I: New fiscal Tools Innovated by Cities. It provides an agenda for local resource mobilization.
PUNE:
- Street Tax @5 per cent of ARV
- Use of Land as resource
- Transfer of Development rights
- Marketing of FSI

RAIPUR:
- Niryat Kar (Export Tax)
- Paryavaran Kar (Environment Tax)

Municipal Corporation of Delhi
Toll Tax on Commercial Vehicles including government Vehicles
(a) Tempos and Taxies: Rs. 25 per entry (monthly coupon, Rs. 500)
(b) Buses and mini trucks: Rs 50 per entry (monthly coupon, Rs. 1000)
(c) Six wheeler trucks: Rs. 50 per entry (monthly coupon Rs. 1500)
(d) Ten wheeler trucks and trawlers: Rs. 200 per entry (Monthly coupon Rs. 3000)
Sixteen wheeler trawlers: Rs. 500 per entry (Monthly coupon Rs. 5,000)

Box-II: New Fiscal Tools Innovated in Haryana

- Local Area development Tax @ 4 per cent of the value of goods moving from one area to another within the state
- Tax on Profession, Trade and Callings
- Fire Tax @ one per cent of ARV
- Rs. 100 tax on Driving License
- Five paise per unit on power consumption
- Rs 2,500 per year on hotels, restaurants, banquet halls, petrol pumps, nursing homes, gas agencies, private schools and colleges, furniture show rooms, milk dairies, industrial units.
- Rs. 1,500 per year on private laboratories, commercial colleges, computer centers and show rooms of big companies.
- Rs. 1,000 per year on workshops, service stations, ice factories, flour mills
- Tent houses, cable operators, printing presses, medical and general stores.
- Levies on registration of new vehicles

Enhancing Revenue from Existing Taxes

There exists substantial scope for revenue enhancement from existing local taxes. Tax administration is constrained by (i) not-so-effective tax administration and (ii) difficulties encountered in administration of the major tax - the Property Tax.
Effective Tax Administration

Maladies in tax administration relate to (i) lack of effective and objective valuation of the tax base, (ii) assessment of demand, billing and collection. Widening of tax-net, addressing the question of under assessment, review of exemptions of lands and buildings from Property Tax are required to be objectively addressed. Some of the cities have now gone for tax mapping for widening the tax-net. Physical surveys of lands and buildings by using GIS base maps tried in the cities of Ludhiana, Indore, Mirzapur, Ghaziabad, Agra, Lucknow, Kanpur and other cities have yielded encouraging results for widening of local tax-net. It has also helped in imparting objectivity and transparency in valuation and assessment of Property Tax.

Poor tax collection is another area of concern for local tax administration In the state of Gujarat in India, which is amongst some of the progressive states with respect of urban administration, average collection ratio was only about 40 to 46 per cent (NIUA 1993). A study for the Eleventh Central Finance Commission in India revealed that 47 per cent of the sample municipal bodies were collecting only up to 50 percent of PT demand. Statistics for other municipal bodies as well depict poor tax collection (Jha 1998).

Non-realisation of potential of revenue from tax sources due to poor tax-administration is a major reason for low revenue mobilisation. To give an example, the first State Finance Commission (SFC) in Rajasthan believed that there was a potential for additional revenue generation of about Rs. 1544 million against the actual generation of Rs. 2129 million (Rajasthan 1995).

Tax collection and generation of additional revenue could be ensured through (i) a scheme of incentives and penalties for municipal staff and the taxpayers and (ii) by profitably adopting the ABC Analysis, which is usually applied in management of inventory in an organisation or a project. An innovative
scheme of incentives and penalties tried in Delhi in the recent past led to three times increase in PT revenue in five years (Sharma 1991). Some city governments have put in place friendly payment gateways like collection through banks and web-based tax collection. Indore Municipal Corporation has introduces a system of group health insurance of senior citizens. This enables the senior citizens to avail of free hospitalization up to Rs. 20,000 provided they have paid Property Tax. A few cities have put in place a tax collection system by involving the banks and on-line payment of PT.

**Refurbishing Major Taxes**

Octroi and PT have traditionally constituted the mainstay of municipal finance in India. In India, it is abolished in all states except in the states of Punjab, Orissa and the municipal corporations in Maharashtra and Gujarat. In the State of Punjab, it was abolished though, the same was restored in 2002 following an order of the Punjab High Court. The ARV system of PT, which was imported from Britain during the colonial rule, is suffering from a host of infirmities (Jha 1991). Analysis of data on revenue from PT reveals that share of PT in the total tax revenue is declining. In the state of Rajasthan, the share of PT in total revenue is only about 2 percent!

Decline in fiscal role of PT in India is due to a host of administrative and legal reasons. Revenue generation from PT depends on an updating of the base according to the prevailing rental values. This is hardly done despite a legal provision for this in municipal laws. Other administrative reasons pertain to lack of transparency in determination of the base and rationalisation of rate structure. The greatest harm to PT has been inflicted by the Rent Control Laws (RCLs). The provision for determination of fair rent in the RCLs has been extended by the courts for determination of even ARV for PT. This has depressed the base and hence loss of revenue productivity (Jha 1993). Other arguments against the
existing system of PT relate to broader issues of rising land values that it is unable to capture and its inability to achieve urban development objectives.

Insurmountable problems in ARV system have led to abandoning of ARV as the base of this tax in India and to switch over to a new system of PT based on unit values. Though there are variations of this model of PT, broadly it envisages a zonal rate for different homogenous zones in to which the city jurisdiction is divided. Zonal rate constitutes the basic tax to be paid by all lands and buildings without any exemption. Elements of progression are brought into the system on the basis of location, quality of construction, age of buildings and land use. These are graded and different values are imputed to different grades. The unit values are then determined in the form of a ready reckoner. These values are applied in determining the base by multiplying the carpet area with the unit values per sq. feet. The simplest variation of this system that is also known as the Area Detail System (ADS) exists in Patna in Bihar. It has only three locations, three qualities of construction, three uses so that it works on the basis of a 27 column matrix in Patna (Vaidya 1996).

The system seems to be objective, simple to administer and easier for the taxpayers to comprehend. This imparts transparency to the determination of the base. When introduced in Patna, despite a reduction in the rate from 69 per cent to 9 per cent, the revenue increased substantially. These positive attributes of the system have led to its snowballing effect in India. The system first introduced in Andhra Pradesh, has now traveled to Ahmedabad in Gujarat, Rajasthan, Uttar Pradesh, Madhya Pradesh, Tamil Nadu and now MCD in Delhi has decided to replace the ARV system by a Unit Value system of PT. Besides adopting a Unit Value system of Property Tax, the State Government of Uttar Pradesh has also amended municipal laws for de-linking the standard rent concept of the Rent Control Law from valuation of Property Tax base.
Transparency, objectivity and simplicity of the unit value system notwithstanding, the system is unlikely to enjoy buoyancy and elasticity as the unit values are frozen. In order to address this problem the unit values would need to be reviewed periodically and indexed with inflation. This involves hard political risk management. Karnataka, a state in India, has therefore opted for a capital value system. The capital value announced by the government periodically for the administration of Stamp Duty is taken as the base of PT. Though this is an artificial capital value created through fiat, it would still be a better value than the market value for which there hardly exists any market evidence in the developing countries due to several and severe distortions in the real estate market.

In any scheme of refurbishment of PT, what is important is that it has to be conceived within the existing legal framework in each country so that it could be sustainable in law. Also intervention is required on all the four important organs of PT viz. (i) nature of base, (ii) valuation and assessment practices, (iii) rate structure, and (iv) collection efficiency. Isolated intervention on any one of these organs will fail to enhance revenue productivity of the tax. All these organs would need to be addressed at the same time.

Any tax is said to be as good as it is implemented\(^3\). Revenue enhancement from PT calls for innovative tax administration backed by a computerised PT Information System and taxpayer-friendly payment gateways. Widening of tax net requires comprehensive property contact surveys using GIS base maps (Tax Mapping). A pilot project in Rajnagar locality of Ghaziabad covering an area of only 2.17 sq. mts, for tax mapping using the GIS base maps has resulted in increase in an annual rental value of Rs. 3.26 crores. PT demand increased from Rs. 40 lakhs to Rs. 78.2 lakhs including Water Tax and Sewerage Tax. (IPE 2003a). A similar ongoing-exercise in Agra that is presently continuing suggests that the total number of properties to be brought on the tax records will

---

\(^3\) The “Patna Model” is a living example. Even though it received the Dubai Best Practice Award in municipal management, the employees of the Patna Municipal Corporation do not get their salaries for months together!
increase from the existing about 1.41 lakhs to an estimated 2,80 lakhs. Revenue increase will, therefore, be substantial (IPE 2003b)

Using Land as Resource

Land is emerging as a resource for revenue enhancement. ULGs have started using it in innovative ways. Amongst several innovative use of land as a resource in India, two innovative practices deserve special mention. The City and Industrial Development Corporation (CIDCO) in New Mumbai has generated massive funds to finance development of New Mumbai by providing all the needed urban infrastructure including its connectivity by rail and road over the creek with the island city of Mumbai. Funds generated by using land were used even for providing shelter for the economically weaker sections of the society. CIDCO was created by the state government under the Companies Act, in which the state government holds an equity. It did not have to spend huge funds for development of New Mumbai. The second example pertains to Delhi. During implementation of the Master Plan for Delhi (1961-1981), which was the first ever-urban planning exercise in India, land was used as a resource to generate substantial amount of funds. A seed capital of Rs. 120 million was initially created by the central government for acquisition and development of about 61 thousand acres of land for various land uses. The seed capital thus created was revolved to more than Rs. 223 billion by 1981 which was used to provide basic infrastructure (Jha 1986). The cost of acquisition and development of land was met from the funds thus generated and the entire sale proceeds of the developed land were credited to the fund.

In addition to using land as a resource, there are interesting land based non-property taxes which are used to generate financial resources and also to regulate the use of land in a number of countries. These include Vacant Land Tax, Tax on Land Value Increment and Betterment Levy.
Land based Non-Property Taxes

In India, Chennai Municipal Corporation levies a Tax on Vacant Land (VLT) at the rate of Rs. 104 per ground (290 sq. ft.). The Municipal Corporations of Delhi, Kolkata and Mumbai as well levy this tax on the capital value (CV) of land. MCD levies it at the rate of 5 per cent of CV. Mumbai Municipal Corporation levies the same at the rate of 12 per cent of CV. More than generating the resources, VLT is used to regulate the use and development of vacant land, which will add to the housing stock.

A number of countries in Latin America, Australia, Syria, Turkey and other Afro-Asian countries have taken recourse to VLT. Peru taxes vacant land on an increasing scale. The rate of tax is doubled every year till the vacant land is developed. In case one owns additional plot of land, it attracts additional tax burden (Smith 1979). In Ecuador, it is levied at the rate of 10 per cent. In Chile, it is levied at the rate of 3 percent, which graduates to 6 percent of land value over a period of three years, and frozen at this. In Buenos Aires (Argentina), Vacant Land Tax is levied at 5 to 10 percent. In Syria, it is levied at a graduated rate on the basis of land values. In Australia, a surcharge of up to 5 percent is levied on unimproved urban land. Vacant land is taxed in Taiwan, Turkey, Senegal, and Korea and even in Pakistan.

Tax on Land Value Increment

Land values appreciate largely due to improvements brought about by the city governments through city development initiatives. Land Value Increment Tax (LVIT) is used with the basic objective of mopping up some of the land value increment for the use and benefit of the community at large.

There are two varieties of LVIT. It is imposed in some countries on the realised increased in land value. In others, it is levied on unrealised value increments. Israel and Malaysia impose this tax on the realised value. Italy,
Taiwan levy it on unrealised value. In Sydney (Australia), land value increment is recovered partly through tax at the time of change in zoning from rural to urban at the rate of 30 percent.

LVIT, however, is a tax imposed by the central governmental and is not very productive largely due to problems confronted in assessment of land value increments. There are ways, however, to get over the assessment problems and share the proceeds of this tax with the municipal authorities.

A popular tax for sharing in the land value increment is Stamp Duty used extensively in India. Though imposed and administered by the state governments, the proceeds are shared with municipal bodies. As the land value increments are brought about by local development initiatives of municipal governments, there exists a rationale and justification for its devolving to ULGs.

Betterment Levy

This as well is levied to recover increase in urban land values resulting from implementation of specific urban development project. The proceeds from this levy are used to meet capital cost of the project. It is levied on the project beneficiaries and continues till the full capital cost of the project is recovered. It has, however, been constrained by two problems. First is the element of arbitrariness in assessing the extent of land value increments in quantitative terms. The second is the physical distance of properties from the implemented project up to which the properties are supposed to have benefited. Additionally, how does one distinguish which part of the land value increment is due to natural increase (scarcity value) and which is due to the impact of the project in question?

Non-Tax Sources

Generation of additional financial resources calls for innovative approaches. Traditionally known sources of revenue have a limit up to which they
could be stretched. Non-tax sources have, therefore, constitute promising areas of resource mobilisation. Non-tax sources include fees, charges, price, remunerative municipal projects and enterprises and land based mechanisms of revenue generation.

Special Assessment District

Special Assessment District (SAD) is a popular device used extensively in USA. SAD is used to recover the cost of upgrading a service in a given area within a city. The cost of upgrading the service is recovered from beneficiaries by imposing a charge on the assessed value of beneficiary properties and is collected along with PT (Johnson 1993). Cost is recovered in the form of contribution that is used to service the debt incurred for service up-gradation. SAD has been used in California, Maryland and Taxes in U.S.A (Kirwan 1989). Levy of SAD in the developing countries could be formalised by providing for this in the Town Planning Legislation. The authority to administer it, however, would need to be vested in municipal governments. Alternatively, it could be put in the municipal law itself.

Valorisation Charges

Practiced in Columbia, it is similar to SAD. Valorisation charges have been used to finance street improvements, sewer extension and similar projects through a system of charging. The cost of public works is allocated to properties that benefit from projects directly. Cost is allocated in direct proportion to benefits conferred (Doebele, Grimes and Linn; Bird 1994). As a cost recovery mechanism, Valorisation Charges are allocated on the basis of assignment of prescribed benefits to properties in the demarcated series of equally wide parallel zones along the project. Adjustments are made to take account of variation in the lot size and frontage.

Development Impact Exactions (DIE)
DIE, practiced widely in USA, is yet another innovative mechanism to recover the cost of service resulting from the construction of new housing stock by builders. As it is charged on the builder for additional services that are required to be augmented by the civic authority, it mitigates the adverse impact on the community (Johnson 1993). DIE takes into account (i) competent local comprehensive planning system, (ii) a well thought out capital improvement programme, and (iii) development of an impact monitoring system.

In India, the Municipal Corporation of Hyderabad, has recently introduced it as an Impact Fee. The Ahmedabad Municipal Corporation as well has introduced it.

**Development Charge (DC)**

Whereas DIE is used to recover the added cost of a housing project, DC is used to recover the cost of providing services and infrastructure in already existing housing areas, which do not have such services, or the services are deficient. It is used also in situations of altogether new development. Provision of services in un-serviced residential and non-residential areas is examples of the levy of development charges. MCD in Delhi has been taking recourse to DC in unauthorised colonies on the basis of unit area. In new development areas, DC is included in the price of land and capitalised.

**User Charge and Cost Recovery**

Amongst the non-tax sources, User Changes happen to be the most important mechanism for cost recovery.

Water supply is most suited for imposition of user charges. Yet almost all the municipal governments and the parastatals have been incurring deficits in provision of this service. To give a few samples, the second SFC report of Tamil Nadu reveals that during the years 1995/96 to 2000-01, tdeficits incurred in the
areas under Municipal Councils and Town Panchayats was about Rs. 229 crores. However, there was a surplus of Rs. 430.28 crores in the Municipal Corporation areas. In Himachal Pradesh, accumulated deficit between 1997-98 and 2001-02 was Rs. 1552.33 crores (Teotia 2003). In Kolkata, collection through water charges was Rs. 8.29 per KL against an estimated cost of Rs. 63.10 KL in 2002. On sewerage, revenue collected was Rs. 25 per capita per annum against an expenditure of Rs. 112 per capita per annum (IPE 2003c). In the hill town of Manali, the accumulated losses on account of water between 1998/99 and 2002/03 was about Rs. 43. crores (Gupta and Teotia 2003).

Services provided by a public organisation are grouped as (i) public-goods and (ii) non-public or exclusionary goods and services wherein users are identifiable and they can be excluded if they do not pay for the use of services. Water supply, sewerage, urban transport, solid waste collection, maintenance of parks and gardens qualify for imposition of user charges. Economic rationale of cost recovery entails that user charges have to be based on the unit cost of providing a service.

There exist a wide range pf practices for recovery of capital cost and operations and maintenance cost. Capital cost, in case of water supply, is recovered through one-time connection charge, development charge and betterment levy. But these instruments recover only a fraction of the total capital cost. A substantial one-time connection charge in water supply and sewerage projects now forms part of the HUDCO funded projects. In some of the cities, cost recovery has been successfully tried by using land as resource (CIDCo in New Mumbai and DDA in Delhi during the First Master Plan through a Revolving Fund). In development of new area, capital cost is capitalized as part of land price.

Practice of recovery of operations and maintenance cost is not different. Municipal governments and parastatals are not recovering even the maintenance
cost. In India, maintenance cost recovery through user charges is hardly one-third of the total operations and maintenance cost (NIUA 1993, TRF 1997).

Many municipal bodies are, however, levying user charges in quite inefficient manner. Most of them adhere to piggybacking of user charges on PT or the ferule size as a proxy for water consumed. Charging on the basis of metered water use is not yet prevalent in a large number of cities and towns on the pretext that meters do not work especially if the water quality is not good. In this age of technological advancement, this argument does not seem to hold ground. Charging for water as piggybacking on PT is a bad system of charging especially when PT is suffering from depressed base and a number of infirmities characterise its administration. This makes the service delivery inefficient and inadequate. Efficiency requires to charge “wherever possible “ (Bird 1994). Besides being an important tool of cost recovery, User Charges have commendable attributes. User charges enhance efficiency. Like price in a market economy, it provides a signal to municipal bodies for the demand of services. It ensures economical use of the service by preventing misuse and abuse of the services provided. It disciplines both the users and the abusers and fits into the very economic rationale of local government to improve efficiency, “to ensure that local citizens get in local services what they want, and are willing to pay for” (Bird 1994).

There is now evidence, though not on a very large scale, compulsions of paucity of funds with the state governments and disciplining of borrowings by the Reserve Bank of India, the era of financial profligacy is waning out with the result that states are not in a position to meet fiscal gaps of the cities and parastatals on a continuous basis. Almost all water supply systems are experiencing huge deficits. The Irrigation and Public Health Department in Himachal Pradesh revised water tariffs in March, 2001 after a gap of nine years relating the charging on the basis of metering and fixing penalties for not installing of meters within a stipulated time. As a result, revenue doubled in a year (Teotia 2003). However,
the order for charging was withdrawn in July, 2001 by introducing a flat rate regime again and freezing the same at Rs. 40 per month. This has become a compelling reason for rationalisation of user charges for water. Karnataka state government has issued directives for a minimum charging and revision of tariffs on a periodical basis. In Chandigarh, the Chandigarh Administration has substantially revised tariffs for water (Gupta and Teotia 2003). The State Government of Punjab increased the tariff in July 2003 not only for the current year but has issued directives for further upward annual revision up to 2007-08 (Punjab 2003).

All the directly chargeable services have therefore to be charged on the basis of costs. In any scheme of user charge, the needs of lower income groups can be taken care of by working out an innovative cross-subsidy structure based on subsidy from one income group to another, from one land use to another, and from one account to another. The Mumbai Municipal Corporation's Bombay Electric Supply and Transport (BEST), which provides electricity and transport, electricity account gives subsidy to the transport account, which incurs deficit.

**Institutional Finance**

Requirement of funds for augmentation of urban services and urban infrastructure is astronomical largely due to rapid pace of urbanisation and growth as also deficiencies in the existing level of services. There exist two options to finance capital investments. First is on “as-you-go” basis, which entails investment in one go. The other is to use surplus on revenue account, which is generally hard to come by due to fiscal stress afflicting most of ULGs. Softer option for financing urban infrastructure, however, in most of the developing countries is through budgetary support by the central/ state governments and directed credit. These have done a lot of harm to infrastructure financing per se as they hardly motivate the municipal governments to rationalise pricing and cost recovery in provision of urban infrastructure and services.
Municipal bodies need an access of funds by raising the same from financial institutions and from the capital market. Every country has, by now, financial institutions in one form or the other. In India, the leading financial institution to fund urban development projects is HUDCO at the national level. It has an urban infrastructure window that funds infrastructure development projects. Most of the states in India have constituted their own urban infrastructure finance institutions (Kerala, Karnataka, Tamil Nadu). Tamil Nadu has created an Urban Development Fund, which is managed as an asset management company in collaboration with leading non-banking financial institutions like HDFC, I&LFS and ICICI. The experience of this has been rewarding and it is now being replicated in other states. Tamil Nadu Urban Development Fund now borrows from the capital market to augment its funds.

An important role of institutional finance should be to promote efficient use of funds advanced. Hence financial institutions need to provide technical assistance for improving the municipal management system. They also need to use their funding for leveraging reforms in municipal management and cost recovery. Financial institutions also need to gradually come out of the system of guaranteed regime of lending. As discussed subsequently, it amounts to a perverse incentive to borrowers and adversely affects motivation for a rational system of cost recovery. HUDCO is now increasingly striving to come out of such a system of funding. It has provided a non-recourse line of credit of Rs. 10 billion to the Bangalore Mahanagar Palika without any state guarantee (Urban Finance 2003).

Directed Credit

Directed credit approach relied upon in a big way in East Asian countries retarded the development of market-based capital financing mechanism in Asia. It also increased vulnerability of East Asian economies to volatile flows of international capital (Stein 1998).
Accessing the Capital Market

As mentioned earlier, urban infrastructure (UI) in developing countries is generally financed through plan or budgetary allocations from the higher levels of government or through lending by financial institutions (FIs). Both these methods are not conducive to promote an efficient use of scarce resources. Plan or budgetary allocations, by their very nature, are treated as soft money. Pricing and cost recovery, therefore, does not constitute a serious agenda in such a system of funding. Municipal governments or the UI agencies, therefore, are not found pro-active due to such an assured flow of soft funds. Similar is the case with guaranteed regime of lending by the FIs. As the guarantee is given by the higher levels of government, borrowing organisations never care for pricing and cost recovery for repayment of loan. These two traditional systems of funding, by and large, make cost recovery initiative rather subdued. It has led to a mindset that UI is a social welfare service. The motivation for cost recovery in such a system becomes a casualty. Accessing the capital market through appropriate debt instrument is, therefore, desirable.

This is, however, predicated on a number of imperatives. First, there must exist a long-term debt market. UI, by its very nature, involves lumpy investments and cost recovery is not feasible in the sort run. Hence there has to be a long-term debt market. Second, UI projects have to be commercially viable or else no investor will like to put one’s money in such projects. Third, accessing the capital market requires investment grade credit rating. This again brings back up-gradation of skills and innovative management practices as an imperative. Fourth, financial reporting and accounting system needs to be such that it provides information on (i) innate financial strength, and (ii) financial performance of municipal governments for raising funds from the capital market. Fifth is the availability of funds for project development as the mortality rate in development of commercially viable or bankable projects is fairly high at least in the beginning.
The aforesaid imperatives for accessing the capital market appear to be daunting. These have been addressed in the Indian cities in a number of ways, which are replicable.

India has been dealing with imperatives mentioned above since 1994 under an Indo-USAID collaborative program for commercialisation of UI, developing a market based UI finance system and a long-term debt market. It envisages improving internal municipal management system and financial management through municipal institutional capacity building initiatives. Known as Financial Institutions Reform and Expansion – Debt Market Development (FIRE-D) launched in 1994, it initially made available a House Guarantee (HG) fund of US$125 million to be raised form the US capital market. The FIRE-D programme requires to structure commercially viable projects for water supply, sanitation and solid waste. These are the sectors that are eligible for funding out of the HG fund. Commercially viable UI projects (CVUIP) are funded out of the HG fund. But only up to 50 per cent of project cost. The balance needs to be raised from the Indian debt market. As the HG money is available for a period of 30 years, CVUIPs become instruments to help develop a long-term debt market in India. The programme through policy advocacy in the states, technical assistance to the cities as also putting in place a series of mechanisms and processes including the credit rating of city governments has enabled some of the cities to access the capital market by issuing municipal bonds.

The problem of credit rating has been addressed by supporting CRISIL and ICRA - the two reputed credit rating organisations- to develop a methodology for municipal credit rating. Improving skills and management capabilities is addressed through technical assistance to the city governments. Accounting and financial reporting system has been dealt with by involving the Institute of Chartered Accounts, India which has develop generic guidelines for preparing accounting manuals. As a result, the state of Tamil Nadu has become the first state to have switched over to double entry accrual based accounting system for
municipal governments across the state. Maharashtra is presently engaged in groundwork to switch over to an accrual based accounting system. It has triggered municipal accounting reform in a number of cities.

As regards project development fund, at the national level, HUDCO has created a fund for funding project development and structuring. Some of the state governments have as well taken the initiative to create similar funds for financing project development initiatives. Andhra Pradesh Urban Infrastructure Finance Development Corporation in the state of Andhra Pradesh, Gujarat Urban Development Corporation and also the Gujarat Municipal Finance Board in Gujarat, Kerala Urban Development Finance Corporation in Kerala, Urban Development Fund in the state of Madhya Pradesh created as a debt service reserve fund by intercepting the transfers to the municipal governments for debt, Urban Development Fund in Punjab are some the initiatives so far taken by some of the state governments. Urban project development could be supported by these financial institutional mechanisms.

In some European and South American countries, the local government credit markets have been developed in stages beginning with a central government financed loan fund that applies commercial standards and practices. The next stage is loans provided by commercial banks; the third is bond issuance in the domestic capital market. Central governments can encourage this transition by channeling funds to commercial banks and promoting credit enhancement measures through pooled funds, grant intercept mechanisms, guaranteeing loans, and passing legislation that permits local government assets and revenues to be used as loan collateral. They can also assist municipalities with project structuring and strengthen financial management through a combination of regulations and technical assistance.

In Canada the municipal credit market is focused on issuing bonds in the domestic capital market. A few of the larger cities also issue bonds in
international markets. Six of ten Canadian provinces have established municipal finance authorities, which pool the borrowing requirements of the municipalities within their jurisdictions and issue debentures. These authorities have access to the municipal tax base in the case of default and five of the six receive additional credit enhancement through a provincial guarantee of their debentures. Other provinces either directly assist municipalities in accessing capital markets, create large municipalities with strong economic bases, or provide direct loans to municipalities. All provinces set limits on municipal borrowing levels and debt service costs, prescribe and monitor accounting and financial management standards, and provide technical assistance to local governments. Municipal credits are rated by domestic and/or international rating agencies. Loans are underwritten using either the negotiated or tendered method with frequent issuers favoring the negotiated method of debt issuance. The Canadian capital market has the capacity to meet local government borrowing requirements on investment grade securities and the sophistication to price credit risk into its rates. Defaults on loans are not a problem.

Due to a number of policy-support by the central and state governments, the process of accessing the capital market is snowballing and, by now, the following cities have accessed the capital market for raising of funds. Nevertheless, two conditions need to be addressed through policy intervention. First is that local governments must demonstrate they are financially and operationally stable and have the ability to repay capital purpose loans. The second is the availability of lenders who are satisfied with the local government’s ability to service loans and the legal recourse available to them in case of loan default.

### Municipal Bonds Issued by the City Governments

<table>
<thead>
<tr>
<th>City</th>
<th>Year</th>
<th>Size of Issue (Rs. million)</th>
<th>Govt. Guarantee</th>
<th>Credit Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bangalore</td>
<td>1997</td>
<td>1250</td>
<td>Yes</td>
<td>A-(SO)</td>
</tr>
<tr>
<td>2. Ahmedabad</td>
<td>1998</td>
<td>1000</td>
<td>No</td>
<td>AA(SO)</td>
</tr>
<tr>
<td>City</td>
<td>Year</td>
<td>Amount</td>
<td>Government Guarantee</td>
<td>Type</td>
</tr>
<tr>
<td>--------------------</td>
<td>------</td>
<td>--------</td>
<td>----------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Ludhiana</td>
<td>1999</td>
<td>100</td>
<td>No</td>
<td>LAA-(SO)</td>
</tr>
<tr>
<td>Nasik</td>
<td>1999</td>
<td>1000</td>
<td>No</td>
<td>AA-(S0)</td>
</tr>
<tr>
<td>Nagpur</td>
<td>2000</td>
<td>500</td>
<td>No</td>
<td>LAA-(SO)</td>
</tr>
<tr>
<td>Madurai</td>
<td>2001</td>
<td>300</td>
<td>No</td>
<td>LA+(SO)</td>
</tr>
<tr>
<td>Indore</td>
<td>2001</td>
<td>500</td>
<td>Yes</td>
<td>A(SO)</td>
</tr>
<tr>
<td>Kolkata</td>
<td>2001</td>
<td>500</td>
<td>No</td>
<td>AA(SO)</td>
</tr>
<tr>
<td>Ahmedabad (Tax Free)</td>
<td>2002</td>
<td>1000</td>
<td>No</td>
<td>AA(SO)</td>
</tr>
<tr>
<td>Hyderabad (Tax Free)</td>
<td>2002</td>
<td>825</td>
<td>No</td>
<td>LAA+(SO)</td>
</tr>
<tr>
<td>Tamil Nadu (Pooled Finance)</td>
<td>2002</td>
<td>304</td>
<td></td>
<td>LA(SO) AA(SO)</td>
</tr>
</tbody>
</table>

Barring the Tamil Nadu pooled finance organisation, ten cities have so far accessed the capital market. Ahmedabad has done it twice. These cities have raised Rs 6,945 millions from the capital market. Also barring Bangalore and Indore, the other cities have accessed the capita market without government guarantee. Municipal Corporations of Ahmedabad and Hyderabad and the Tamil Nadu Water and Sanitation Pooled Fund have issued tax-free municipal Bonds. Requests of the Visakhapatnam Water Supply and Sewewrafe Board and the Hyderabad Water Supply Sewerage Board are presently under the consideration of the central government.

Keeping the total number of municipal Corporations in the country, this does not appear to be impressive. Nevertheless, what is important is the beginning that has been made. It has motivated the cities to be pro-active. This beginning has led to a change in the mindset that urban infrastructure and services are social welfare services; these as well have cost of production that need to be met through rational pricing and cost recovery. It has led to motivation on part of city managers to adopt innovative management system. In order to give fillip to the development of municipal bond market, the central government amended the Income Tax Act for enabling issuance of tax-free municipal bonds and permitted Rs. 2,000 million in 2001-02 and Rs, 5,000 million in 2001-03 to be raised through tax-free municipal bond. It also introduced municipal accounting
reforms as mentioned earlier. The central government introduced two incentive funds to motivate the state governments to introduce reforms for attracting investments in urban settlements.

In the budget of 2002-03, the Finance Minister introduced (i) Urban Reform Incentive Fund, and (ii) City Challenge Fund. Urban Reform Incentive Fund (URIF) with an initial outlay of Rs. 500 crore has been set up to provide reform linked assistance to the states. Detailed Guidelines have been formulated to give financial assistance to states for introducing reforms that have been identified in the Guidelines. The City Challenge Fund is an incentive based grant facility that will support cities to fund the transition costs of moving towards sustainable and creditworthy institutional systems of municipal management and delivery, and sector level reforms (e.g. in the urban water and sanitation sector). This fund will meet the expenses to be incurred by the cities to finance the cost of developing a reform program and its implementation. Credit worthiness and hence sustainability of the reform plans will be used as benchmarks for assessing the proposals. Importantly, the fund will support those reform programs that are developed and owned by the urban municipalities.

Amongst several factors inhibiting the development of municipal bond market (i) lack of credit worthiness of large number of city governments and municipalities, (ii) problem of credit enhancement, and (iii) need for technical assistance credit worthiness, (iv) lack of robustness in revenue generation from own source of revenue, and (v) lack of professional skills for structuring and development of commercially viable or bankable projects, (vi) lack of confidence amongst the lenders about the ability of local governments to service the debt are important factors. A recent Municipal Bond assessment study in three states has reiterated some these concerns (NIUA 2002). Quite many of these concerns will be, hopefully, addressed by the policy initiatives discussed above. These factors apart, here are other issues relating to the widening and deepening of
capital market, adherence to SEBI regulation and the extent of financial disclosures and related issues (Bagchi and Kundu 2003).

**Pooled Financing**

The nascent market based urban infrastructure finance system by accessing the capital market through floating of Municipal Bonds, is generally amenable, by and large, to very large Municipal Corporations in sprawling metropolitan cities that have strong economic base. Small and medium towns whose number is substantial (5161 according to the 2001 Census) are not in a position to access the capital market on stand-alone basis largely due to their lack of credit worthiness individually. Moreover, it will not be cost effective as well. Pooled financing structures exist in the U.S.A., Canada (Bond Banks), and even in Southeast Asia viz. the Philippines (Local Government Unit Credit Guarantee Corporation) and Malaysia (Local Government Credit Guaranty Corporation) to support borrowings by smaller municipalities. These are state sponsored intermediaries that borrow on its own financial strength for a number of smaller municipalities that are individually not in a position to access the capital market on their own. Pooled finance mechanism thus serves as debt fund for small and medium size municipal entities. A spin-off of this structure is that it can be used to leverage urban reforms in small and medium towns.

A beginning has already been made in the state of Tamil Nadu by creating the Water and Sanitation Pooled Fund (WSPF) in August 2002. Managed by a multi sector Tamil Nadu Urban Infrastructure Financial Services Ltd. (TNUIFSL), WSPF, it finances and refinances water supply and sanitation projects of municipalities in small and medium size towns (FIRE-D 2003). It raised Rs. 30.4 crores from the capital market through Bond issue to finance small water and sanitation projects in 14 municipal areas at 9.20 percent rate of interest with 15-year maturity. Of this Rs. 16 crores was granted the status of tax free Municipal Bonds. The Bond issue was structured with a multi-layered credit enhancement
mechanism that secured a credit rating of AA(SO) by FITCH and LAA(SO) by ICRA. A catalytic element in structuring of this Bind issue was the Direct Credit Authority (DCA) Guarantee that the USAID now offers for supporting development of commercially viable infrastructure projects, augmentation of infrastructure, private sector participation, decentralisation and ensuring access of urban poor to the basic urban services.

Pooled finance structures like the one in Tamil Nadu needs to be encouraged in other states as well. With this end in view, the Government of India has formulated Guidelines that will help create pooled finance structures in states (India 2003). The Guidelines identify the small and medium towns with a population of up to a million. It envisages (i) facilitating development of bankable urban infrastructure projects, (ii) reducing the cost of borrowing with appropriate credit enhancement measures, (iii) raising funds from the market for bankable projects through Bonds, (iv) support municipal bodies in project development for urban infrastructure, and (v) restructuring of existing costly debts. Triggering pricing and financial management reforms in the small and medium towns as well as facilitating development of Municipal Bond markets are the other objectives that the Guidelines envisage for the State Pooled Finance Entity (SPFE).

The Guidelines envisage creation of SPFE and operated by state governments. They will issue debt securities on behalf of the municipal bodies without state guarantee. Escrowing of resources for servicing of debt and setting up Debt Service Reserve Fund and getting them managed by the trustees of the Bond issue are other mandates for the SPFEs. The central government is to support SPFEs through Pooled Finance Development Fund (PFDF). For this, Rs. 50 lakh has been proposed for this year (2003-04) as a token amount. An allocation of Rs. 400 crores has been made in the Tenth Plan for this initiative.

Central assistance from PFDF is to be given for (i) reform packages for the municipal and urban local bodies concerned, and (ii) contribution to the Debt
Service Reserve Fund (DSRF). Contribution to the DSRF would be to the extent of 50 percent of the DSRF requirement as determined by a credit rating agency or 10 percent of the amount to be raised from the market whichever is less. This will be admissible for a minimum AA rating. The balance amount is to be contributed by the State /Union Territories Government.

Public- Private Partnership (P-3)

P-3 has come handy in recent years in the municipal sector due to its several spin-offs. It facilitates financing of urban services, augments the level of services, enhances efficiency of service delivery system, and brings in new technology. P-3 is pushed through either by way of privatisation or by contracting out of services to private operators and providers. Interesting forms of privatisation have immersed like BOT, BOOT, BOO, BOLT and others. However, in order to enhance efficiency and effectiveness of the delivery system, municipal government and the urban infrastructure agencies are going for management contract. Privatisation has not yet materialised on a scale as required in less developed economies. There are only sporadic examples of privatisation. Water supply is privatised in Manila. Interestingly, two private providers were granted concession for eastern and western parts of the city to promote competition. After privatisation, the efficiency of the delivery system increased and the tariffs decreased (Dumol 2000)\(^4\). Other examples are Buenos Aires, and Macao. France has had a long history a privatisation of water supply, which is also practiced in U.K.

\(^4\) The company operating in areas on the east bank of the river had to walk out of the concession agreement due to exchange rate risk brought about by the southeast Asian financial crisis.
In India, privatisation in water sector has been limited to management contracts rather than concession contracts. Presently two very large water supply projects with private sector participation are being implemented in Tiruppur (Rs. 1,023 crores in Tamil Nadu) and in Visakhapatnam (Rs. 4.100 crores industrial water supply project). Concession contract and management contracts, besides enhancing the efficiency of the system, contributes to cost saving and hence make available additional financial resources. Some of the water supply undertakings (in Indore, Faridabad, for example) have profitably gone for energy audit that has helped them in additional cost savings.

Privatisation and contracting out have been tried in a number of services like solid waste collection, street light maintenance, maintenance of parks and gardens, collection of Octroi with substantial cost savings and efficiency enhancement in a number of cities. Cost savings in the wake of privatisation /contracting out, implies additional resource generation.

Asset Management

Municipal governments generally own assets like land, plants and equipments. Many of them do not, however, have an inventory of assets owned by them. They are, therefore, not in a position to have efficient and optimum use of their assets. They are also not able to leverage their assets for raising funds from the market. It has come to light that the Municipal Corporations do not have knowledge of even the lands owned by them. Initiatives taken in asset management in recent years in Ludhiana, Indore, Lucknow and Agra has brought to light substantial amount of new found land belonging to them but not on their office records. These now could be leveraged for generation of additional resources. Asset management also helps in using passive assets for remunerative uses.
Political Risk Management

Paying taxes and user charges is perhaps the most unpleasant thing. Hence no body likes to pay these. It requires provision of quality services that induces the users to pay for. A hike in taxes and user charges, though quite legitimate for financing of augmented supply of services, leads to agitation and political unrest. Here comes the skill of political risk management. It lies in the political domain of local governance. The Mayor and Chairpersons along with the elected Councillors have a pivotal role in managing the political risk of tax and tariff increases. They need to appreciate that good economics is not a bad politics if they need to be re-elected. But this would call for a strong Mayor system or the cabinet form of local government so that Mayors and Chairpersons could have a popular and dominant position for political risk management.

We have discussed in the preceding pages leading contemporary issues and practices in financial resource mobilisation. There are many more interesting community based financing practices (Orangi Pilot Project, in Pakistan; Allandur Sewerage system in Tamil Nadu; solid waste collection in Ludhiana in Punjab and elsewhere). Constraints on the size of this paper do not permit to discuss those innovative financing practices. Nevertheless, these have provided much needed insights into how a communitarian government, which a municipal entity is supposed to be, can conceptualise innovative ways of doing things and adopt innovative practices. Such practices and experiences are emerging day by day. What is therefore needed is to be innovative in finding out solutions to the complex civic problems.

We end up this rather long discussion by a simple, persuasive and useful rule of financing urban services:

If the beneficiaries of the service can not be identified and excluded from consuming it, finance it by taxes; if the beneficiaries can be identified and
excluded, finance it through user changes; if the service provision requires long term investment of huge funds (as in UI), finance it by borrowing; and if the local communities could be organised, try to devise community based financing and implementation process.
Table 1: Revenue from Own Sources of Municipal Corporations in Major States

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>40.15</td>
<td>51.45</td>
<td>59.49</td>
<td>46.91*</td>
</tr>
<tr>
<td>2</td>
<td>Assam</td>
<td>28.95</td>
<td>63.51</td>
<td>88.68</td>
<td>N.A.</td>
</tr>
<tr>
<td>3</td>
<td>Gujarat</td>
<td>74.55</td>
<td>77.76</td>
<td>73.54</td>
<td>N.A.</td>
</tr>
<tr>
<td>4</td>
<td>Haryana</td>
<td>82.08</td>
<td>52.72</td>
<td>45.45</td>
<td>N.A.</td>
</tr>
<tr>
<td>5</td>
<td>Himachal Pradesh</td>
<td>86.02</td>
<td>78.19</td>
<td>65.49</td>
<td>N.A.</td>
</tr>
<tr>
<td>6</td>
<td>Jammu &amp; Kashmir</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mun. Corpn. does not exist</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Karnataka</td>
<td>45.75</td>
<td>34.23</td>
<td>32.37</td>
<td>60.89</td>
</tr>
<tr>
<td>8</td>
<td>Kerala</td>
<td>79.61</td>
<td>79.1</td>
<td>48.92</td>
<td>N.A.</td>
</tr>
<tr>
<td>9</td>
<td>Madhya Pradesh</td>
<td>52.88</td>
<td>50.17</td>
<td>35.92</td>
<td>N.A.</td>
</tr>
<tr>
<td>10</td>
<td>Maharashtra</td>
<td>89.41</td>
<td>89.09</td>
<td>65.51</td>
<td>N.A.</td>
</tr>
<tr>
<td>11</td>
<td>Orissa</td>
<td>67.24</td>
<td>86.15</td>
<td>84.56</td>
<td>N.A.</td>
</tr>
<tr>
<td>12</td>
<td>Punjab</td>
<td>83.17</td>
<td>92.39</td>
<td>85.54</td>
<td>N.A.</td>
</tr>
<tr>
<td>13</td>
<td>Rajasthan</td>
<td>79.29</td>
<td>78.28</td>
<td>88.23</td>
<td>N.A.</td>
</tr>
<tr>
<td>14</td>
<td>Tamil Nadu</td>
<td>56.22</td>
<td>62.98</td>
<td>67.44</td>
<td>N.A.</td>
</tr>
<tr>
<td>15</td>
<td>Uttar Pradesh</td>
<td>35.71</td>
<td>24.47</td>
<td>27.7</td>
<td>N.A.</td>
</tr>
<tr>
<td>16</td>
<td>West Bengal</td>
<td>19.22</td>
<td>94.99</td>
<td>94.08</td>
<td>N.A.</td>
</tr>
</tbody>
</table>

| All States | 75.72 | 20.52 | 79.62 | N.A. |

**Source:** Report of the Eleventh Finance Commission for 2000-2005 and Second SFC Reports of Karnataka and Andhra Pradesh

*Pertains to the year 1999-2000*
Table: 2 Revenue of Municipalities from Own Sources in Major States

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>N.A.</td>
<td>43.47</td>
<td>46.71</td>
<td>31.06*</td>
</tr>
<tr>
<td>2</td>
<td>Assam</td>
<td>97.25</td>
<td>63.51</td>
<td>88.68</td>
<td>N.A.</td>
</tr>
<tr>
<td>3</td>
<td>Gujarat</td>
<td>56.11</td>
<td>54.55</td>
<td>54.07</td>
<td>N.A.</td>
</tr>
<tr>
<td>4</td>
<td>Haryana</td>
<td>67.97</td>
<td>81.81</td>
<td>65.9</td>
<td>N.A.</td>
</tr>
<tr>
<td>5</td>
<td>Himachal Pradesh</td>
<td>60.95</td>
<td>49.26</td>
<td>38.1</td>
<td>N.A.</td>
</tr>
<tr>
<td>6</td>
<td>Jammu &amp; Kashmir</td>
<td>3.42</td>
<td>3.2</td>
<td>2.41</td>
<td>N.A.</td>
</tr>
<tr>
<td>7</td>
<td>Karnataka</td>
<td>54.93</td>
<td>64.13</td>
<td>49.93</td>
<td>36.9</td>
</tr>
<tr>
<td>8</td>
<td>Kerala</td>
<td>64.69</td>
<td>63.93</td>
<td>41.1</td>
<td>N.A.</td>
</tr>
<tr>
<td>9</td>
<td>Madhya Pradesh</td>
<td>38.07</td>
<td>40.29</td>
<td>28.72</td>
<td>N.A.</td>
</tr>
<tr>
<td>10</td>
<td>Maharashtra</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
<td>N.A.</td>
</tr>
<tr>
<td>11</td>
<td>Orissa</td>
<td>56.17</td>
<td>64.49</td>
<td>68.87</td>
<td>N.A.</td>
</tr>
<tr>
<td>12</td>
<td>Punjab</td>
<td>77.39</td>
<td>75.3</td>
<td>85.39</td>
<td>N.A.</td>
</tr>
<tr>
<td>13</td>
<td>Rajasthan</td>
<td>82.35</td>
<td>84.85</td>
<td>72.34</td>
<td>N.A.</td>
</tr>
<tr>
<td>14</td>
<td>Tamil Nadu</td>
<td>62.57</td>
<td>63.61</td>
<td>54.59</td>
<td>N.A.</td>
</tr>
<tr>
<td>15</td>
<td>Uttar Pradesh</td>
<td>39.19</td>
<td>27.43</td>
<td>25.36</td>
<td>N.A.</td>
</tr>
<tr>
<td>16</td>
<td>West Bengal</td>
<td>21.17</td>
<td>24.33</td>
<td>21.06</td>
<td>N.A.</td>
</tr>
<tr>
<td></td>
<td><strong>All States</strong></td>
<td><strong>59.51</strong></td>
<td><strong>60.92</strong></td>
<td><strong>58.85</strong></td>
<td>N.A.</td>
</tr>
</tbody>
</table>

*Pertains to the year 1999-2000  
**Source:** Report of the Eleventh Finance Commission for 2000-2005 and Second SFC Reports of Karnataka and Andhra Pradesh
## Table 3: Revenue of Nagar Panchayats from Own Sources in Major States

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>N.A.</td>
<td>38.91</td>
<td>40.08</td>
</tr>
<tr>
<td>2</td>
<td>Assam</td>
<td>89.07</td>
<td>94.72</td>
<td>40.01</td>
</tr>
<tr>
<td>3</td>
<td>Gujarat</td>
<td>72.36</td>
<td>79.72</td>
<td>67.62</td>
</tr>
<tr>
<td>4</td>
<td>Haryana</td>
<td>N.P. does not exist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Himachal Pradesh</td>
<td>72.35</td>
<td>70.54</td>
<td>67.62</td>
</tr>
<tr>
<td>6</td>
<td>Jammu &amp; Kashmir</td>
<td>14.7</td>
<td>15.5</td>
<td>16.02</td>
</tr>
<tr>
<td>7</td>
<td>Karnataka</td>
<td>57.74</td>
<td>64.34</td>
<td>47.57</td>
</tr>
<tr>
<td>8</td>
<td>Kerala</td>
<td>Nagar Panchayat does not exist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Madhya Pradesh</td>
<td>31.91</td>
<td>48.12</td>
<td>13.88</td>
</tr>
<tr>
<td>10</td>
<td>Maharashtra</td>
<td>Nagar Panchayat does not exist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Orissa</td>
<td>68.16</td>
<td>63.18</td>
<td>63.69</td>
</tr>
<tr>
<td>12</td>
<td>Punjab</td>
<td>64.23</td>
<td>67.13</td>
<td>77.99</td>
</tr>
<tr>
<td>13</td>
<td>Rajasthan</td>
<td>67.46</td>
<td>68.87</td>
<td>66.06</td>
</tr>
<tr>
<td>14</td>
<td>Tamil Nadu</td>
<td>37.67</td>
<td>38.13</td>
<td>24.63</td>
</tr>
<tr>
<td>15</td>
<td>Uttar Pradesh</td>
<td>33.31</td>
<td>46.35</td>
<td>35.31</td>
</tr>
<tr>
<td>16</td>
<td>West Bengal</td>
<td>3.72</td>
<td>6.45</td>
<td>5.26</td>
</tr>
<tr>
<td><strong>All States</strong></td>
<td></td>
<td><strong>49.84</strong></td>
<td><strong>53.11</strong></td>
<td><strong>39.76</strong></td>
</tr>
</tbody>
</table>

Table 4: Growth in Own Revenue of Municipal Corporations in Major States

<table>
<thead>
<tr>
<th>Sl.No.</th>
<th>States</th>
<th>Revenue from Own Sources</th>
<th>Revenue from External Sources</th>
<th>CAGR* Own Source Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Andhra Pradesh</td>
<td>59.49</td>
<td>40.51</td>
<td>28</td>
</tr>
<tr>
<td>2</td>
<td>Assam</td>
<td>88.68</td>
<td>11.32</td>
<td>14.1</td>
</tr>
<tr>
<td>3</td>
<td>Gujarat</td>
<td>73.54</td>
<td>26.46</td>
<td>18.4</td>
</tr>
<tr>
<td>4</td>
<td>Haryana</td>
<td>45.45</td>
<td>54.55</td>
<td>14.4</td>
</tr>
<tr>
<td>5</td>
<td>Himachal Pradesh</td>
<td>65.49</td>
<td>34.51</td>
<td>17.26</td>
</tr>
<tr>
<td>6</td>
<td>Jammu &amp; Kashmir</td>
<td>Mun. Corpn does not exist</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Karnataka</td>
<td>32.37</td>
<td>67.63</td>
<td>10.3</td>
</tr>
<tr>
<td>8</td>
<td>Kerala</td>
<td>48.92</td>
<td>51.18</td>
<td>7.5</td>
</tr>
<tr>
<td>9</td>
<td>Madhya Pradesh</td>
<td>35.92</td>
<td>64.18</td>
<td>3.6</td>
</tr>
<tr>
<td>10</td>
<td>Maharashtra</td>
<td>65.51</td>
<td>34.49</td>
<td>12</td>
</tr>
<tr>
<td>11</td>
<td>Orissa</td>
<td>84.56</td>
<td>15.44</td>
<td>16.4</td>
</tr>
<tr>
<td>12</td>
<td>Punjab</td>
<td>88.54</td>
<td>11.46</td>
<td>13.5</td>
</tr>
<tr>
<td>13</td>
<td>Rajasthan</td>
<td>88.23</td>
<td>11.77</td>
<td>18.9</td>
</tr>
<tr>
<td>14</td>
<td>Tamil Nadu</td>
<td>67.44</td>
<td>32.56</td>
<td>25.5</td>
</tr>
<tr>
<td>15</td>
<td>Uttar Pradesh</td>
<td>27.7</td>
<td>72.3</td>
<td>5.8</td>
</tr>
<tr>
<td>16</td>
<td>West Bengal</td>
<td>94.07</td>
<td>6.93</td>
<td>107.04</td>
</tr>
<tr>
<td><strong>All States</strong></td>
<td><strong>66.11</strong></td>
<td><strong>33.89</strong></td>
<td></td>
<td><strong>-1.3</strong></td>
</tr>
</tbody>
</table>

* CAGR relates to the period 1990-91 to 1997-98
REFERENCES


