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# India: Urban Property Taxes in Selected States

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# INDIA

# Urban Property Taxes in Selected States

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## CURRENCY EQUIVALENTS

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US$1 = Rs. 44.66

## GOVERNMENT FISCAL YEAR

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## ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| BATF | Bangalore Agenda Task Force |
| BDA | Bangalore Metropolitan Region Development Authority |
| BMC | Brihan Mumbai Corporation ("Mumbai") |
| BMP | Bangalore City Corporation |
| BWSSB | Bangalore Water Supply and Sewerage Board |
| CAA | Constitution Amendment Act |
| CAS | Country Assistance Strategy |
| CC | City Corporations (Karnataka) |
| CCF | City Challenge Fund |
| CMC | City Municipal Councils (Karnataka) |
| CMWSSB | Chennai Metropolitan Water Supply & Sewerage Board |
| DA | Development Authorities |
| DFID | Department for International Development |
| DMA | Directorate of Municipal Administration |
| EFC | Eleventh Finance Commission |
| ESW | Economic Sector Work |
| GDP | Gross Domestic Product |
| GOI | Government of India |
| GOK | Government of Karnataka |
| GOM | Government of Maharashtra |
| GOTN | Government of Tamil Nadu |
| HDFC | Housing Development Finance Corporation Ltd. |
| HUDCO | Housing and Urban Development Corporation |
| IAS | Indian Administrative Service |
| IBRD | International Bank for Reconstruction and Development |
| IDFC | Infrastructure Development Finance Company |
| IDSMT | Integrated Development of Small and Medium Towns |
| KAS | Karnataka Administrative Service |
| KHB | Karnataka Housing Board |
| KMA | Karnataka Municipalities Act |
| KMAS | Karnataka Municipal Administrative Service |
| KMCA | Karnataka Municipal Corporation Act |
| KTCP | Karnataka Town and Country Planning Act |
| KUIDFC | Karnataka Urban Infrastructure Development Finance Corporation |
| KUWSDB | Karnataka Urban Water Supply and Drainage Board |
| LG | Local Government |
| MDF | Municipal Development Fund |
| NGO | Non-Governmental Organization |
| PWD | Public Works Department |
| SCB | Slum Clearance Board |
| SFC | StateFinanceCommissions |
| SWM | Solid Waste Management |
| TA | Technical Assistance |
| TMC | Town Municipal Councils (Karnataka) |
| TNUDF | Tamil Nadu Urban Development Fund |
| TP | Town Panchayats |
| UDD | Urban Development Department |
| ULB | Urban Local Body |
| UDPA | Urban Development and Poverty Alleviation (Ministry) |
| URIF | Urban Reform Incentive Fund |
| USAID | United States Agency for International Development |
| UWSS | Urban Water Supply and Sanitation |

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## EXECUTIVE SUMMARY

The property tax is a key revenue source for Urban Local Bodies (ULBs) in India, although, at present, it is relatively underused, and has limited buoyancy relative to the overall growth in economic activity. Municipalities have adequate legal powers to collect and recover property taxes tax due. Yet, across Indian municipal corporations, the average collection ratio of property taxes to demand is one-half of annual demand, which is well below collections of state sales taxes, the central income tax and central excise taxes.

Recent property tax reforms in Bangalore, among other ULBs, show promising results in increasing the yield of the property tax. In furthering these reforms, a common starting point is to improve property tax administration, and to link financing with service delivery. Focusing on the fundamentals of updating property tax rolls, computerizing billing and collection systems, and strengthening enforcement, are important first steps that can yield significant results. Such administrative improvements can increase the yield of property tax revenues – in some cases quite substantially – but these actions will not increase the overall buoyancy of the property tax system.

India faces a major structural problem with its property tax systems, resulting from the failure to resolve conflicts between assessing the true market value of property with rent control ordinances, and other limitations such as the FSI. Moreover, government officials have generally been unwilling to issue new valuation rolls, in some cases for many years. Much of the recent property tax reform in India has entailed stop-gap measures to overcome these problems, rather than engaging in comprehensive reform. Meanwhile, the growth in property tax revenues has remained anemic. Unless these structural issues in properly valuing property are resolved, improved administration will do little to make the property tax a viable revenue source for local governments, and the gap between their local expenditures and revenues is likely to grow over time.

## Foreword

This report was prepared by a team focusing on Urban Governance and Finance, which was led by Dana Weist, and comprised of Roy Bahl, and Somik Lall. The team is grateful to many counterparts in the States of Karnataka and Maharashtra for their assistance. Helpful comments were provided by Sonia Hammam, Patricia Annez, Stephen Howes and Soraya Goga, as well as by the peer reviewers, William Dillinger, Robert Ebel, and George Peterson.

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## INTRODUCTION AND OVERVIEW

Property taxes are a main source of local government 'own source revenues' and, in many countries, may account for 70-80 percent of local government revenues. Property taxes are important revenue sources for Urban Local Bodies (ULBs) in India, accounting, on average, for about half of their own-source revenues, although this share varies by state and individual ULB. While property taxes are significant in India, they are not, at present, used to their full potential. An international comparison shows that India uses the property tax far less than do other developing countries.[1] This limited reliance on property taxes reflects multiple factors: the failure to decide on and implement a property tax structure that can be revenue productive and equitable, weak administration and enforcement, numerous distortions in land and property markets that limit the potential tax base, and an unwillingness to assess property at its current market value.

An encouraging development is the property tax reforms underway and being discussed in various ULBs, which have shown that, with appropriate changes, revenues can be enhanced signifcantly. The issue is of great importance because the 1994 Constitutional Amendment has mandated a move toward greater local government fiscal autonomy. In this decentralization to the third tier, municipal governments will be expected to finance a greater share of their expenditures from own sources. The property tax is a prime candidate as the major local government tax source. With the *octroi* already abolished in many states, and with states seemingly pre-empting sales taxes, there are few other choices for a mainstay of local government finances.

Some would say that India is in a state of flux about how it should tax property, and in fact there are several choices about how to do this. Bahl and Linn (1992) identify three basic forms of property taxation in use around the world. Property taxes are based on (i) annual or rental value (ARV) of the property, (ii) capital value (CV) of the land and improvements, and/or (iii) site value of the land. Most Indian cites use ARV as the base of the property tax. Although a few cities have adopted a CV base (including those in Karnataka, for example), implementation of the capital value system has not begun. The property tax base in Indian ULBs is more appropriately described as being the rental value of property.[2]

Various ULBs in India have adopted a unit value system (sometimes referred to as an area-based system), which in essence is a combination of the ARV and CV systems. In the unit-value system, values per unit of land (usually per square foot) are estimated and the tax base is the product of this unit value and land area, plus the value of the structure. The latter is determined in an analogous way: a basic value per square foot is determined, weighted by construction quality and multiplied by area. This method has been used as a way to get around the limitations imposed on the property tax base by rent controls, or perhaps as a transition to a capital value system.

Property taxation has long been a vexing issue in India, and continues to be. The basic problem that remains is how to get government officials and the public to move to higher levels of property

[1] Roy Bahl "The Property Tax in Developing Countries: Where are We in 2002." Andrew Young School of Policy Studies, Georgia State University, 2003. Some would dispute this comparison on grounds that the IMF Government Finance Statistics, on which these comparisons are based, underreports property tax data for India.

2 Technically, the base is the amount for which a property could be let by a willing landlord to a willing renter in a market free of encumbrances.

taxation, and to a base that better reflects the market value of property. Given the context of the CAA, and the successful movement in some India ULBs to reform their property tax systems, this could be an opportune time for significant property tax reform.

This chapter reviews the property tax reform experience in Bangalore Corporation[3] – which recently introduced a unit value, self assessment system that significantly increased its revenue collection – and the proposed reform in Mumbai Corporation. It also uses some new survey data to simulate the possible revenue and distributional impacts associated with moving to property tax systems that are based more on market values of property. Using data from Pune and Bangalore, this analysis shows that the potential revenue yields from broader land and property market reforms could be quite substantial, and would not impose undue burdens on low-income families.

## PROPERTY TAX REFORM IN BANGALORE

Since April 2000, the Bangalore City Council has enacted three major changes in the property tax. It moved to a unit value method of assessment, a new method of payment and determination of tax liability, and in 2002, it adopted a capital value system of property taxation. A fourth change, hidden beneath these formal revisions, is the adoption of a new valuation roll.

### PROBLEMS WITH THE PROPERTY TAX

Historically, Bangalore's property tax had been anemic in terms of revenue yield. This is partly due to the cap placed on assessed value by rent control ordinances. Some steps have been taken to remedy this problem. The Government of Karnataka recently amended its rent control acts to allow rents to be linked to market rental rates.

Perhaps the major explanation of the poor revenue performance is the failure to reassess properties for nearly 30 years. Another longstanding problem has been enforcement. Before the adoption of the unit value system in 2002, the collection rate in Bangalore was 55 percent (in 1999). Finally, the total enumeration of properties has lagged, and particularly new properties developed on the urban fringe have not been brought on to the property tax roll.

These problems have led to some major steps to fundamentally change the property tax system. Legislation has been approved to introduce a Capital Value System (CVS) for property tax assessment.[4] Although this legislation came into effect from April 2002 in all city corporations in the State, including Bangalore, the CVS has not yet been implemented. Under the CVS, property tax would be levied on the capital value of land and buildings. Karnataka is the first Indian state to move to the CVS. The land portion of the base is the estimated market value of land based on a willing buyer – willing seller definition. This value will be estimated in Bangalore Corporation (BMP) using data on property transfer values from the Stamp Duty Office. The tax rate under the CVS will range from 0.3 to 0.6%.

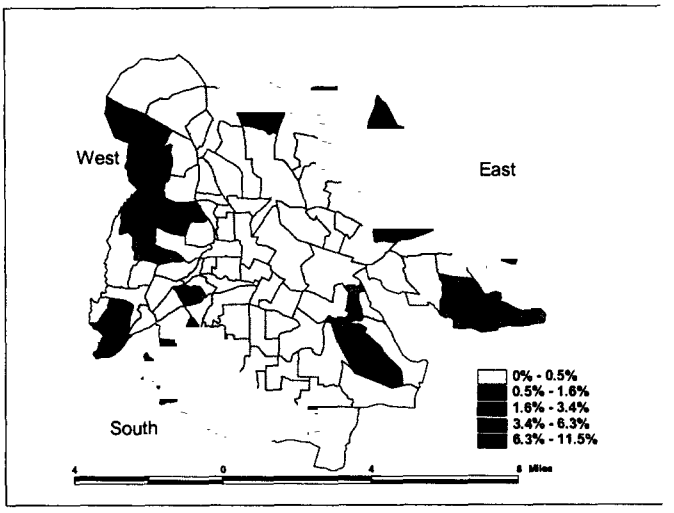
3 The Bangalore City Corporation is also called the Bangalore Mahanagar Palike (BMP).

[4] The Government of Karnataka has amended Section 109 of the Karnataka Municipal Corporation Act, 1976 permitting a move from the Annual Rental Value System to a Capital Value System for the purpose of property tax assessment.

## Unit Value Assessment

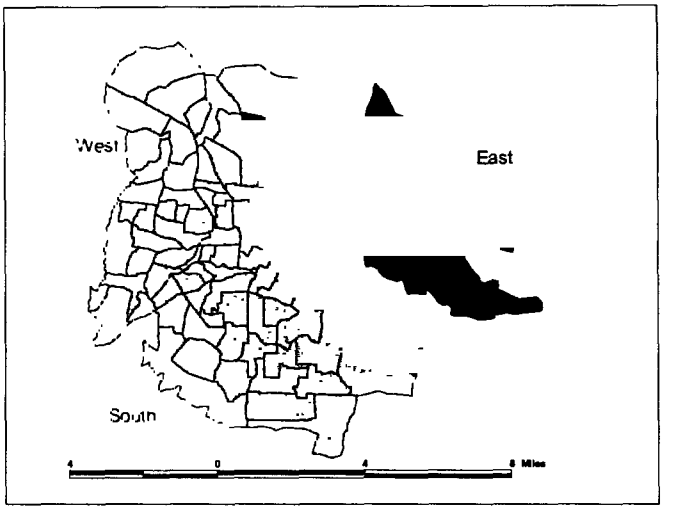
In 2001, BMP moved to a new approach to assessment – an area-based unit value system – and introduced a new valuation roll.[5] At once these reforms got around the problem of rent control constraints and a badly outdated list of values, with quite successful results.

**Figure 1: Share of Unassessed Properties in Bangalore**




Source: Bangalore City Corporation

**Figure 2: Spatial Extent of Revenue Divisions in Bangalore**




Source: Bangalore City Corporation

A systematic approach has been taken to establishing this new roll. For the purpose of property tax administration, the city is classified into three divisions and 100 revenue wards. The spatial extent of the three tax divisions are shown in Figure 1: Share of Unassessed Properties in Bangalore. About three lakh residential and 1.5 lakh non-residential properties are registered in Bangalore.

Data collected by BMP indicate that property assessment is not uniform within the Corporation. Figure 2: Spatial Extent of Revenue Divisions in Bangalore shows that the share of unassessed properties is higher in peripheral parts of the Corporation. This is partly because of limited administrative capacity, which makes it difficult to keep up with new development in the periphery.[6] This finding underscores the importance of strong tax administration that can keep pace with new development.

For assessment purposes, the metropolitan area was divided into six land value zones, with each "zone" assigned a rental value per square foot. A "zone" is not necessarily a contiguous area. As shown below in Table 1, the property tax administration classifies buildings according to five residential and 11 non-residential categories (based on construction type, age of structure, and current use). Each "type" is assigned a value per square foot. Though buildings are assessed according to their capital values, these amounts are "factored" to rental value equivalents using a formula approach. The sum of the land and the

[5] A number of large Indian cities have adopted an area-based system, including Ahmedabad, Bhopal, Patna, Luckknow, Mirzapur, Thrivananthapuram, Bangalore and Hyderabad. (Ravindra and Rao, 2002).

[6] A case study of a large area on the periphery of Bangalore revealed that about 70 percent of developed properties were not brought on to the tax rolls for six years. (Ravindra and Rao (2002)).

building value is the taxable rental value. There is a preferential treatment of owner-occupiers in the form of a 50 percent reduction in rental value for certain types of properties.

When designing the assessment rates, the BMP tried to limit the overall increase in tax liability that a residential taxpayer would face, such that the liability under the self-assessment scheme was no more than 2.5 times the liability under the previous system. While a 250 percent increase may seem very high, in practice, taxpayers' liabilities were very low to begin with.

The so-called "self-assessment" feature of the reform is that each taxpayer who chooses to voluntarily self-assess their tax is charged with identifying the location of their property, and declaring the classification of their structure. Based on the schedule of values provided by the taxing authority, they may then calculate their tax liability. The tax rate, set by BMP, is 20 percent for residential properties and 25 percent for non residential properties. In addition, a 34 percent cess is levied on the total property tax liability and earmarked for specific social services. If a taxpayer does not choose to "self-assess," BMP will assess the value of the property. For those who do comply, a 5 percent tax rebate is given.

The new system also provides for a change in payment procedure. Taxpayers may now pay directly at a bank, in designated payment boxes, at the electric utility, and soon on the internet. The net result of this process is that there is no longer any need for contact with the taxing authority, and taxpayers have many more options for easy payment of their property tax bills.

**Table 1: Rates for Assessment of Residential Buildings (Rates/Square feet/Month)**

| Category | Description of the property (including apartments) | Cost of cons-truction | Use | Zone A Rs./ sq.ft | Zone B Rs./ sq.ft | Zone C Rs./ sq.ft | Zone D Rs. /sq.ft | Zone E Rs. /sq.ft | ZoneF Rs./ sq.ft |
|---|---|---|---|---|---|---|---|---|---|
| I | RCC Madras Terrace | More than Rs. 250/- per sft. | Tenanted | 5.00 | 4.00 | 3.60 | 3.20 | 2.40 | 2.00 |
| | | | Owner Occupied | 2.50 | 2.00 | 1.80 | 1.60 | 1.20 | 1.00 |
| II | RCC Madras Terrace | More than Rs. 150/- but less tan Rs. 250 per sft. | Tenanted | 4.00 | 3.50 | 3.00 | 2.50 | 1.60 | 1.40 |
| | | | Owner Occupied | 2.00 | 1.75 | 1.50 | 1.25 | 0.80 | 0.70 |
| III | RCC Madras terrace | Less than Rs. 150/- per sft. | Tenanted | 3.50 | 3.00 | 2.50 | 2.00 | 1.20 | 1.00 |
| | | | Owner Occupied | 1.75 | 1.50 | 1.25 | 1.00 | 0.60 | 0.50 |
| IV | Tiled and sheet of all kinds | Estimated to be less than Rs. 150 per sft. | Tenanted | 3.00 | 2.50 | 2.00 | 1.60 | 1.00 | 0.80 |
| | | | Owner occupied | 1.50 | 1.25 | 1.00 | 0.80 | 0.50 | 0.40 |
| V | Thatched house/hut | Rs. 0.40/- per sq. foot per month with a minimum Property Tax of Rs.100/- + 34% Cess per property | | | | | | | |

Source: Property Tax Self-Assessment Scheme, Bangalore Mahanagar Palike, 2000.

In reforming its property tax, BMP placed heavy emphasis on transparency and enhancing taxpayer awareness. BMP, along with the Bangalore Agenda Task Force, held many events and fairs to inform taxpayers about the changes involved in the self-assessment system, produced numerous booklets and published a new khata, developed a public relations campaign, and offered assistance to taxpayers in filling in the new forms. It also directed considerable attention to informing the Council of the changes entailed in the reform, and made a concerted effort to link visibly improved service levels (i.e., planted greenways, improved pathways) with the change in the tax.

## RESULTS

There are many ways to evaluate the success of this new system. The most obvious is revenue yield. In fact the first year of experience with the new property tax system shows some encouraging results. Between fiscal years 1999-00 and 2000-01, (see Table 2) property tax revenues increased by 33 percent. This increase was due to several factors: an increase in the collection rate from 64 to 79 percent, a 4 percent increase in the number of properties on the tax roll, and an increase of about 28 percent in the amount of tax payment per property. BMP officials estimate that one-third of the revenue increase was due to revision in value, and that about three-fourths of all property owners paid higher property taxes.

| Table 2: Selected Measures of Property Tax Revenue Performance: BMP | | | | | |
|---|---|---|---|---|---|
| | Revenue Collected | | Assessed Properties | | Prop. Tax |
| Year | Crores | % Growth | Number | % Growth | /Property |
| 1995-96 | 49.7 | ... | 303,393 | ... | 1637 |
| 1996-97 | 60.5 | 21.7 | 338,178 | 11.5 | 1788 |
| 1997-98 | 85.8 | 41.9 | 353,618 | 4.6 | 2426 |
| 1998-99 | 98.4 | 14.7 | 380,956 | 7.7 | 2584 |
| 1999-00 | 118.0 | 19.9 | 388,983 | 2.1 | 3034 |
| 2000-01 | 157.5 | 33.4 | 404,500 | 4.0 | 3894 |
| Source: Completed from data in Ravindra and Rao | | | | | |

Another success of the reform is a reduction in compliance costs. BMP offered its taxpayers a lower cost of compliance in return for a higher payment. Apparently, property tax inspectors regularly harassed taxpayers. It was reported that the inspectors came on to the property, sometimes unannounced, and often times "negotiated" property tax liability with the owners. Apparently, taxpayers were willing to pay more (subject to a ceiling) under the new system to eliminate this contact with inspectors. The fact that tax payment could be made at a bank instead of at the tax offices or to the collectors further reduced compliance costs.

In effect, the BMP solved the problem of an assessment roll that was reportedly 30 years out of date by changing the method of assessment and collection. Taxpayers traded lower compliance costs and more transparency for higher property tax payments. The program's revenue success, one might argue, is more related to it being a general revaluation than to it being a "self-assessment" system.

## Issues of Concern

There is no question that this reform has been successful in the short run. It addressed the problems of a badly outdated valuation roll, and taxpayer resistance to updating this roll. It was accompanied by better enforcement and it produced a significant revenue increase. Many cities around the world are unable to overcome these hurdles. Four issues must be addressed for this system to generate growing and sustained revenue: the long run elasticity of the "self-assessment" system, transparency, the administrative costs of maintaining this system, and horizontal equity.

### *Elasticity*

BMP's budget will grow over time, and it is necessary that the property tax, as the principal source of locally raised revenue, grow in line with these financing needs. Ordinarily, property tax revenues can grow because of (i) adding new properties to the tax rolls, (ii) increasing the values of those on the existing roll, (iii) increasing the collection rate, or (iv) raising the tax rate.

With the unit value approach, capturing the increase in the value of properties will be difficult.7 It will involve making discretionary changes in the property value indexes (six land value zones, and 16 unit values based on building classification). The questions to be answered are: who will make these changes, how often will they be made, and what method will be used? The more infrequent the changes, the greater will be the one-time valuation increases required and the greater will be taxpayer resistance. On the other hand, the more frequent the changes, the greater the administrative costs.

It is true that the property tax revenue growth in year one of the reform was impressive, but much of this may be a one-time increase. Both the collection rate and the number of parcels taxed went up because of voluntary compliance. But, how much more will the collection rate rise, especially given the fact that BMP is already high by Indian standards? About 60 percent of property taxpayers chose the self-

[7] This same concern has been raised by Amresh Bagchi "Reforming the Property Tax: Need for a New Direction," November 1997.

assessment system. Now that so many citizens are freed of the harassment costs and given an easier way to comply with the tax, BMP officials have little to trade for higher taxes in the future. While there is room for increasing revenues as more taxpayers are pulled into the new system, there is no built-in growth to the base. A revaluation based on increasing the index values will eventually be necessary.

### *Transparency*

Transparency is a desirable attribute of the local property tax. If taxpayers understand how they are assessed and charged, they will be more willing to comply with the system.

The annual value system and the previous administrative regime did not produce a transparent system. Tax liability was often negotiated, and though presumably based on market-determined rental values, there had been no general revaluation for 30 years. Most taxpayers had reason to view their tax liability as arbitrarily determined. Arguably for this reason, the collection rate for BMP was in the 50 percent range for most of the 1990s.

The unit-value property tax system does introduce some transparency. To some, the concept is easier to understand: the property tax base is linked to the market value of the property owned. Moreover, a taxpayer can actually calculate tax liability based on a schedule of values, tax rates, and his/her declaration of the physical characteristics of the property. The taxpayer can make the payment to an objective third party, and might have more confidence that the funds will be used for government purposes. For all of these reasons, it might be expected that property owners are more willing to pay the property tax.

In other ways, however, the new system is not transparent. The 16 value indexes used to determine taxable value are developed using various databases, and their construction involves a significant amount of judgment. Few analysts inside government, much less the rank and file taxpayer, understand how these value indexes were derived. The law asks for an assessment of capital value, i.e., the value for which this property would sell in an open market. For the system to be truly transparent, taxpayers must believe that these rental value indexes reflect market rental value of property. But as of yet, there is no evidence about the relationship between these notional estimates of rental value and actual market rents paid.

### *Administrative Costs*

The new area-based system gets mixed reviews in terms of the costs required to operate and maintain it. First, any property tax is expensive to operate properly, and the unit value system in BMP is no exception, and not necessarily an outlier.

On the one hand, it is a mass appraisal system where all property in the city is divided into six value classes. Mass appraisal such as this does significantly reduce the costs of administering the system. But, there are still major costs to be covered, especially given that BMP is just moving to a new valuation system. Among the costs to be considered:

- There would be great advantage to crosschecking to increase the coverage of the tax. This might include coordination of property tax registration with electricity and water connections, business licenses, building permits, property transfers, etc. At present, such cross checking is not routinely done. However, because these data sets are not already integrated, and the numbering systems are not unique, this could be an expensive and difficult task.

- Since tax liability is self-calculated, and the physical characteristics of the property are self-reported, there should be some verification of returns by the property tax office. According to some reports, there is no computerized checking of the returns, and relatively little manual checking. This task could be accomplished at relatively little cost.

- There is need to develop a data system that will enable the property tax officials to track the performance of the tax. For example, the collection rates by area of the city, or the assessment levels and effective tax rates for various types of property should be tracked. At present, it is not possible to obtain accurate data on the total assessed value of all properties subject to tax.

- Training opportunities for valuers and other property tax administrators must be put in place.

### *Horizontal Equity*

The property tax should be horizontally equal. That is, it should treat similar properties in the same way. Or, if properties are to be treated differently, the reasons for this differential treatment should be justified. The newly adopted area-based self-assessment system does offer differential tax treatments. Residential properties are taxed at a lower rate than are non-residential properties. The tax rate is lower for older structures, cet. par., and different for tenanted vs. owned properties. The valuation of property relies on 16 classifications of land and buildings, and there is some subjectivity in this. Certain properties receive partial or total exemption from taxation.

All property tax systems introduce horizontal inequities. In many cases, these can be justified on grounds of the government's goals for its property tax. However, when properties are taxed differently, there is an incentive for land uses to change because of the tax treatment. One might question whether this is a desirable reason for land use choices, especially in a country where urban land markets are developing. Another issue is that when there are horizontal inequities, the tax burden on one class of property rises relative to other classes. The Corporation must question whether such re-arrangements in tax burden are consistent with its policies. All of this points to the need for regular equalization studies to monitor the relationship between taxable assessed value and true market value.

## OPTIONS FOR FUTURE REFORM

The unit value method that has been developed for assessment has virtue. It is administratively less costly than a system where every parcel of land and every structure must be valued. However, to preserve some revenue elasticity in the system, some method of periodic indexing of these values is necessary. To date, no system has been put in place to index these values nor carry out the regular five-year revaluations.

The present system divides all locations in the corporation into six land value classes. The classification for structures is more complicated, with 16 different possibilities. Though the assessed value of land and improvements cannot be separated, it is possible that the latter is much smaller. Thought might be given to taxing only land. This would be administratively cheaper, probably more equitable, and would produce more market-driven land use decisions. It would, however, require a higher nominal rate.

A central valuation unit, located at the state level, could be a desirable reform option for Karnataka. Since all local governments in the State will eventually move to the capital value system, there would be economies of scale in centralizing the valuation process. Moreover, there would be a greater degree of uniformity in taxable property values across the state. This was recommended by the SFC, and was included in the Fiscal Year 2003/2004 GoK Budget, but has yet to be implemented.

The property tax administration could be streamlined. With self-declaration, there is need for central checking of the returns. In addition, crosschecking with other registration systems (e.g., water, electricity) could lead to an increased coverage of the property tax. A proper system of record keeping does not presently exist, and should be developed to support the new system.

Properties are now subject to different tax rates. A reform option would be to equalize the tax rates on all uses of property, and let differential tax liabilities be related only to differences in property value. This would make the tax more horizontally equal, would eliminate incentives for tax-induced land use changes, and would make tax burdens depend solely on the value of the property.

A unique numbering system might be considered for property tax, electricity and water connections, business licenses, etc. This could enhance the chances of capturing new properties on to the tax roll and could increase the options available for enforcement.

The property tax surcharge, or "cesses," might be eliminated. At present, taxpayers pay an additional 34 percent of their property tax liability in cesses.[8] If legal limits to the property tax rate will permit, it would be better to have a transparent and general property tax rate levied by local governments, with all of this revenue accruing to the general fund. There is no apparent reason why some subset of local government services should be financed by an earmarked property tax. In some cases the cess is to finance state government services, and a better route would be the re-assignment of functional responsibility.

## PROPERTY TAXES IN MUMBAI

### BACKGROUND AND FISCAL POSITION

The Brihanmumbai Municipal Corporation (BMC) faces budget pressures because of population growth and a large backlog of public services. BMC is responsible for many essential services (e.g., primary education, basic health, water, roads, slum upgrading, etc.), and it must enhance its local revenue mobilization. The main source of BMC revenue, the *octroi*, is under fire as a poor form of local taxation in that it impedes commerce and its method of collection invites corruption. It has been abolished in many states, and has been abolished for municipal councils in Maharastra.

Because state governments across India are facing fiscal deficits, and because of the push to strengthen the fiscal position of rural local governments, the longer-term revenue solution for ULBs will not lie wholly in intergovernmental transfers. In the face of this situation, the continuing slow growth in property tax revenues is a major concern facing the state and BMC. In its present form, it is unlikely that the property tax can be an important part of the long-term solution to financing urban public services. A significant reform would seem essential.

### PROPERTY TAX PERFORMANCE

The trend in BMC property tax revenues is shown in Table 3. Over the past 20 years, it has fallen from the equivalent of about 60 percent of *octroi* collections (the other major own-source revenue) to about 30 percent. The same pattern is observed for other local bodies in Maharastra (United Nations, 2002). By 2001, the property tax in Mumbai was financing only about 10 percent of total expenditures.

[8] This includes an educational cess (10 percent); health cess (15 percent); beggary cess (3 percent); and library cess (6 percent.)

**Table 3: Property Taxes in Brihanmumbai Municipal Corporation**

| Year | Property Tax Revenue | Property Tax as % of Octroi Revenue[1] | Property Tax Per Parcel (Rs in thousands | Property Tax as % of Rateable Value |
|---|---|---|---|---|
| **1980/81** | 418,930 | 59.8 | 2.11 | 29.6 |
| **1990/91** | 882,156 | 21.9 | 3.93 | 25.9 |
| **1995/96** | 1,983,700 | 22.9 | 8.24 | 38.4 |
| **1998/99** | 3,377,400 | 29.6 | 13.51 | 45.3 |
| **2001/02** | 5,146,000 | 33.6 | 20.19 | 43.3 |

Note: This section draws heavily from materials gathered from BMC officials and from "Rationalization of Property Tax in Brihanmumbai."
Budgets A,B, and E

Source: Data for 1980/81 and 1990/91 from "Rationalisation of the Property Tax in Brihanmumbai"; data for 1995/1996 and later from BMC

## PROPERTY TAX STRUCTURE[9]

### Tax Base

The property tax base in BMC is the ARV of property. This is defined in much the same way as in most countries that have followed the British tradition: the annual rent at which land and buildings might reasonably be expected to fetch in an open market, from year-to-year, after allowing deductions for repairs and maintenance. The issue surrounding the ARV approach has always been the definition of a "reasonable" rent. In Mumbai, this has been defined as the actual rent paid, and for rent-controlled properties, as the controlled rent. The presence of rent control legislation and the fact that annual rateable value has been tied to these controlled rents, has seriously limited the growth in the property tax base in Mumbai. This is discussed further below.

Mumbai has attempted to get around these limitations to the size of its taxable property tax base by prescribing a separate assessment regime for "special" properties. For example, certain commercial and industrial properties are assessed at up to five times the rental rates in their area. These include, for example, banks, industrial estates, hotels, office premises, and certain factories. This departure from the standard approach to the measurement of rental value, though practiced in Mumbai, is not prescribed in the Municipal Act.

The tax base is further reduced by a number of exemptions and deductions. A sum of 10 percent is deducted from gross annual rateable value of all properties, to account for maintenance needs. Since no proof of maintenance or improvements is required, this is simply a standard deduction from rateable value.

The types of exemptions from property tax provided in Mumbai are not unusual by comparison with the international practice: properties used for public worship, properties used by charities; schools, colleges, hostels, orphanages, etc.; and lands belonging to a foreign state. The estimated revenue loss due to exemptions is about 14 crores (Ravindra and Rao, p.73).

[9] This section draws heavily from materials gathered from BMC officials and from "Rationalization of the Property Tax in Brihanmumbai."

There are complicated provisions for the taxation of government property, and these vary by type of property. Generally, government properties pay an amount in lieu of property tax, with the amount being set against that which a private owner would pay on a comparable property. For example, the tax in lieu for state government properties is set against a rateable value that is 75 percent of the level that would accrue if the property were privately owned, where rateable value is determined as 9 percent of the estimated capital value of the property. Similar approaches are taken for railway and the port trust properties, though the assessment formulae and the tax rates that apply differ by class of property. No estimates are available on the revenue cost of this special treatment of government property. On the other hand, it should be noted that government property is totally exempt in many countries.

## Tax Rates

State law limits the tax rates. A longstanding tradition for Indian municipal corporations is that tax rates are structured according to an intended use of the tax revenues, e.g., street tax, water tax, etc. Revenues derived in each rate category are assigned to one of the five budget heads of the BMC, but within each budget head there is no effective earmarking of the tax. At present, 12 different property tax rate categories are applied. The present statutory rates are described in Table 4. The existence of tax rates that are more than 100 percent of the value of the tax base is suggestive of how far Mumbai has drifted from a tax on the (market) rental value of property.

**Table 4: BMC Property Tax Rates in 2002**

| | Unmetered Water Supply | | Metered Water Supply | |
|---|---|---|---|---|
| | Residential | Non Residential | Residential | Non Residential |
| General Tax | 26 | 26 | 26 | 26 |
| Fire Tax | 4 | 4 | 4 | 4 |
| Water Tax | 65 | 130 | - | - |
| Sewerage Benefit Tax | 7.5 | 15 | 7.5 | 15 |
| Education Cess | 12 | 12 | 12 | 12 |
| State Education Cess | 6 | 12 | 6 | 12 |
| Tree Cess | 0.5 | 0.5 | 0.5 | 0.5 |
| Street Tax | 15 | 15 | 15 | 15 |
| TOTAL | 187.5 | 320.5 | 83.5 | 112.5 |

Source: Data supplied by BMC

## PROPERTY TAX ADMINISTRATION

Mumbai's property tax problems lie primarily with the failure to tax the market value of property. But, other issues surrounding the administration of the tax also limit its productivity. Problems with the administrative system hamper the productivity of the property tax, and would do so even if the tax base definition were changed to capture the true growth in property values.

Generally, one thinks of four components of property tax administration: (i) property and ownership identification, (ii) record keeping, (iii) valuation, and (iv) collections/appeals. Unless all four facets of the administrative system work effectively, the end result of stronger revenue collection may not be realized.

Mumbai officials believe they have an accurate list of parcels in the corporation area. The files are computerized and regularly updated, and properties have been assigned unique numbers. Hence record keeping and the maintenance of a complete tax roll are not perceived as a major problem.

Under the existing rental-value system, valuation may not be a major administrative concern for Mumbai. For rental properties that are already registered, the values are fixed and there is no requirement to update these. This leaves only the job of valuing newer properties, redeveloped properties and certain commercial and industrial properties. The increase in properties on the tax roll has amounted to about 1 percent of the total number of properties in each year. However, should Mumbai move to a CV system where regular revaluation is required, much investment in the valuation function (training and development of procedures) will be required.

At present, the valuation of new properties in Mumbai generally follows a formulaic approach, where field assessors rely on a table of guidance values produced by the BMC. BMC is divided into 128 zones and a rental value per square meter is defined for each. The basic value unit is based on the estimated value provided by the office of the (state) stamp collector. These data are reportedly based on estimates of true market values. These values are adjusted for specific parcels based on land use, construction type, and special features.10 Though the approach is complicated in that many factors are taken into account, and it lacks transparency because it is not clear how the "adjustment factors" are derived, it is described in some detail in a guidance document issued by the BMC.

Finally, the collection rate for property taxes in Mumbai (the ratio of actual collections to the amounts demanded) appears to be on the order of 50 percent (Ravindra and Rao, 2001, and United Nations, 2002). This is an interesting statistic. Even with a very low effective rate, the BMC can collect only about one-half of the tax that is due. However, note from Table 5, that this collection rate is about the average for Indian cities.[11] Ravindra and Rao (2002) report that the collection rate on property tax in BMC has drifted down in the past five years, and that the collection rate for water and sewer charges is well above that for the general property tax.

**Table 5: Percentage of Revenue Collected Against Demand of Major Cities**

| | 1998-99 | 1999-00 |
|---|---|---|
| Mumbai | 57.4 | 55.6 |
| Calcutta | 50.0 | 55.0 |
| Bangalore | 54.9 | 63.8 |
| Hyderbdad | 66.6 | 74.8 |
| Bhopal | 17.6 | 19.4 |
| Ludhiana | 60.0 | 70.0 |
| Mirzapur | 19.0 | 31.0 |
| Ahmedabad | 15.6 | 12.5 |
| Chennai | 63.2 | 63.1 |
| Jaipur | 43.3 | 58.9 |
| Patna | 56.0 | 66.0 |

Source: DA. Ravindra and Vasanth Rao, *Property Reform in India* (UNDP Study, Draft June 2002),

## PROPERTY TAX PERFORMANCE: EVALUATION

The property tax in BMC falls short on most norms that countries around the world apply to their property tax practice. It is not elastic with respect to the growth in local economic activity nor with respect to the growth in property values. It cannot keep up with the growth in the demand for, and cost of, public services. It is not equitable either in the way it treats similar dwellings nor in the way it treats families in different income classes. It is not easily understood by those who must pay it, and this lack of transparency likely erodes confidence in the tax. Finally, in conjunction with rent controls, it may harm economic development decisions that otherwise might improve the physical capital of the city. There also are some advantages. The property tax in Mumbai does have the strengths of being a significant and

[10] For example, the valuation for a department store in any given area is 3 times the residential letting rate, that for a five star hotel is 5 times, and that for a bungalow or row house is 1.1 times.

[11] Some BMC officials took issue with these estimates and reported a much higher collection rate.

potentially important revenue source for the Corporation, and there is the possibility if not the expectation that it will be the principal revenue source of the corporation in the long run. It is a tax that has long history in Mumbai and it is more or less accepted by taxpayers.

## Revenue Growth

The data in Table 6 show the level and growth of property tax revenues over the period from 1980 to the present. Unfortunately, estimates of the economic base (or GDP) are unavailable, so the income elasticity of the property tax cannot be calculated. Note, however, that the growth in property tax revenues, even taking discretionary rate increases into account, was well less than that in either total revenues or total *octroi* collections.

**Table 6: BMC Growth in the Property Tax Base**

| Year | Properties | | Rateable Value | | |
|---|---|---|---|---|---|
| | Number | Percent Increase | Amount (in crores) | Percent Increase | Rateable value per thousand properties (in crores) |
| 1980/81 | 198,135 | ... | 141.2 | ... | 0.71 |
| 1990/91 | 224,356 | 13.2 | 341.4 | 41.8 | 1.52 |
| 1995/96 | 240,862 | 7.3 | 516.1 | 51.1 | 2.14 |
| 1998/99 | 249,945 | 3.8 | 746.9 | 44.7 | 2.99 |
| 2000/01 | 251,212 | 0.5 | 909.0 | 21.8 | 3.62 |
| 2001/02 | 254,769 | 1.4 | 1186.8 | 30.4 | 4.67 |
| 2002/03 | 267,832 | 5.1 | 1293.5 | 9.0 | 4.84 |

On an *a priori* basis, little built-in growth in the property tax base is expected. The market value of properties may increase, but in Mumbai, little of this increase is captured in the taxable base. There are at least two reasons for this. First, the Rent Control Act defines the "standard rent" for premises, and this amount (less a 10 percent maintenance deduction) is the base for property taxation. As a result, older properties, including many properties over 50 years of age, are still defined at pre-WWII rent levels. The second limit on the growth in taxable value is that while newer properties may be assessed at market value, once the ARV is established, it is fixed for all future years. The result of these practices is that the only growth in the property tax base purposes is from bringing new properties on to the tax rolls, or redevelopment.

The pattern of increase in rateable value is presented in Tables 3 and 6. The results of fixing taxable values and thereby limiting the growth in the tax base are clear: the property tax grows slowly, and the increase in tax revenue must come from increases in statutory tax rates. Indeed, property tax rates in Mumbai have reached levels that seem to call into question whether this really is a property tax. By 2002, the nominal tax rate on residential property was 83.5 percent of rateable value if water supply is metered, and 187.5 percent if water supply is not metered. The comparable numbers for non-residential properties were 112.5 percent and 320.5 percent respectively. By many standards, these rates would be considered to be confiscatory. The structure of tax rates is described in Table 4.

This revenue performance is the product of many factors. We can demonstrate this by disaggregating the components of revenue growth using the data that are available, to give an idea of the relative contributions to revenue yield of improved collection efficiency and more realistic valuation. Consider the identity,

$$TC = [TC/TL]\,[TL/RV][RV/PR][PR/P]\,[P]$$

Where

TC = Tax collections
TL = Tax Liability
RV = Rateable Value
PR = Number of properties
P = Population

The first term on the right hand side in this identity is the collection ratio; the second is the (average) nominal tax rate; the third is taken to represent the valuation level; and the fourth represents the coverage of the tax base. The numeric values for these terms can be calculated from the data presented in Tables 3 and 6. Using 2000/2001 data, assuming that the collection ratio had been 75 percent instead of 50 percent, and assuming that the rateable value had been 20 percent higher, estimates show that the level of revenue would have been higher by nearly 80 percent. These results suggest the very great potential for property tax revenue increases. (Further estimates of the yield of adopting different property tax systems are discussed below.)

## Equity

The equity or fairness of the property tax might be evaluated in two ways. The vertical equity of the system considers whether the effective tax rate rises with income levels. There are no data with which to estimate the progressivity of the property tax in Mumbai. However, there is anecdotal evidence that suggests that property tax regressivity is not a serious policy issue.

- The level of property taxation is low. The feasibility study estimated that the average tax rate against rateable value is only 0.001875. Ravindra and Rao estimate per capita property tax revenues for 1998/1999 in BMC as Rs. 114. This compares to Rs. 98 in Calcutta and Rs. 65 in Hydrabad, but Rs. 272 in Ahmedebad and Rs. 162 in Bangalore.
- There is a preferential assessment for hutments and for non-permanent structures.
- Collection rates may be lower in low-income neighborhoods.

A more serious fairness problem is horizontal equity, i.e., the equal treatment of those in the same circumstance. Because taxable property values are fixed once they are determined, the system is by definition inequitable. So long as property values are rising, there is a built-in advantage, *cet. par.*, for older properties. The problem has become more acute in Mumbai because the newer properties in the suburbs are taxed at much higher rates than those in the island city, despite the fact that inner-city public services are much superior to those provided in the suburbs.

## Transparency

An oft-mentioned criticism of the Mumbai property tax is that it is not transparent, i.e., taxpayers do not understand the system. The implication of this is that the local population will lose confidence in the tax and the compliance rate will fall. Note that the collection rate is presently only about 50 percent, even though the average effective rate of taxation appears to be as low as 0.1 percent.

Certainly, there are features of the Mumbai property tax that raise issues of transparency. The assessment of new properties is based on estimated neighborhood property values, weighted by numerous factors that have to do both with the use of the property and with the quality of construction of the improvements. While these weights are clearly identified and open to public scrutiny, few would understand their derivation. This does effect public confidence in the tax, but it should be pointed out that this kind of criticism could be levied at most property tax systems around the world.

In other respects, the property tax system in Mumbai is transparent and easily understood. Once assessed, rateable value does not change for most residential properties. Basic property values for neighborhoods are set with reference to stamp duty estimates (reported in the "Ready Reckoner"), and these estimates are available to the public and seem to enjoy considerable confidence.

## REFORM PROPOSAL AND EVALUATION

BMC is considering a major reform of its property tax system: a switch to a capital value system. This strategy has been adopted in part because it seems a way to circumvent the rent control constraint and gain some buoyancy for the property tax base. There is no question that the property tax in Mumbai must be divorced from the rent control ordinance. The present situation yields slow growth in revenue and creates a horizontally inequitable system that taxpayers are unlikely to support at any greater effective tax rate.

The BMC Council has adopted a proposal to shift to a CV system, and a thorough feasibility study has been done ("Rationalization of the Property Tax in Brihanmumbai"). The proposed legislation has been sent to the State. Still, many details must be worked out before BMC can implement this plan. BMC estimates that implementation of the CV system would take about one year.

Under the new system, the tax base would become the CV of land and buildings, i.e., the price at which a property would sell in an unencumbered market. Valuation will be based on estimates of capital value per square meter for corporation areas, as made by the State Stamp and Registration Office. These CV estimates will be adjusted by "weights" to reflect the construction quality of the structure, property use, and the age of the structure. The proposed weights from the feasibility study would give less property tax burden, *cet. par.*, to buildings that are older, of poorer construction quality, and used for residential purposes. This will take account of some notions of ability to pay the property tax, but it will also minimize the "tax shock" on older properties whose tax liability has been minimal. The estimated revenue-neutral, effective rate of tax is about 0.1875 percent of CV. Exempt and "special" properties will be treated much the same as they are now.

While adoption of a CV property tax base would be an improvement over the present system, a number of issues might be raised concerning the structure of what is being proposed. Six stylized questions are raised below.

### Does the Stamp and Registration Department Produce Estimates of Capital Value that Will Capture the Location Value of Property?

The Stamp Department receives declared values of land and buildings from those wishing to transfer properties. In some cases, it adjusts those declared values. These are subject to a substantial tax; hence there is an incentive to under-declare the transfer price.[12] The Stamp and Registration Department has estimated that nearly 70 percent of documents are undervalued by about 20 percent.[13] The World Bank finds a similar degree of undervaluation in survey data in Pune (see below). The Maharastra Town Planning Division does not automatically accept declared values. It has a valuation cell that makes independent assessments of CV of properties, and compares these with declared values. The independent assessments are derived from various sources, including evidence from the declared value of sales, information taken from builders, real estate agents and advertisements, field analyses, and the valuation of

[12] In a study of stamp duties, Das-Gupta (2002) found a negative association between the growth rate of the effective tax rate and the average value per document.

[13] See "Improving Maharashtra's Revenue Performance," Chapter 3 of *Maharashtra: Reorienting Government to Facilitate Growth and Reduce Poverty* (World Bank, 2002.)

government land. These estimates are made for zones and sub zones in the corporation, and are updated regularly. Results are published in a volume known as the "Ready Reckoner". Various state and Corporation officials estimated these capital values as about "80 to 90 percent correct". A question is whether the BMC, the voters and the courts will "accept" these estimates of location value.

### Why Should Values Be Adjusted For Land Use Differences?

Under the proposed new system, each property will be given a coefficient for its land use, and property tax liability will be adjusted depending on this use. Since the base values are for location alone, and the characteristics of the structure are not taken into account, "weights" are needed to make this a tax on individual properties. The intention is some form of fairness in taxation, i.e., if a hotel is located in the same neighborhood as a warehouse, each would be taxed at the same rate per square meter of carpet area if only the stamp duty base were used. The land use coefficient proposed will raise the tax on the "superior use" (hotel) relative to the other use (warehouse). Some notion of ability to pay has been introduced. While the politics of this can easily be seen, such a provision does introduce some distortions to the system. There can be a built-in penalty for investors who upgrade land use in an area and focus on land uses that yield the highest return. Likewise, the weight for the "age" and construction quality would provide a penalty for any who would build a new structure in an older neighborhood. An alternative would be to use only the location values to establish the tax base, in which case the new property tax would provide maximum incentive for redevelopment. But, this would give an appearance of favoring the wealthy and more of the tax shock of revaluation would be borne by residents in older housing and in the older areas of the city.

### Should the Switch to a CV Base be Accompanied by an Increase in the Effective Rate?

There is an important need to increase BMC revenues. The revenue neutral tax rate for the switch to a capital value system is estimated to be only 0.001875, even after applying the weights for construction quality, age and land use. This is a very low rate by international standards, even after adjusting for income level. On the one hand, an increased statutory rate would generate significant revenue, and there is an argument to "get it done now" before the opposition can come together.[14]. Given the significant administrative cost of the property tax, it would seem almost essential to raise the rate.

On the other hand, the property tax is notoriously unpopular in most countries, and there almost certainly will be outcries in Mumbai about rate increases and revaluation. Moreover, a rate increase now may confuse the issue of whether this is a tax increase or a tax structure change, and thereby stiffen opposition to the changeover to the CV base. This view would lead to the argument to get the new, bouyant tax base in place and worry about the rate increase later.

### Will the New Tax Base be Buoyant?

There is no evidence on the built-in growth of the property tax base as measured by the Stamp and Registration Department. Judging by the growth in rateable value per parcel in the present system (which is primarily due to the introduction of new properties), one could speculate that the base does have some automatic growth. Translating this potential growth in the tax base into property tax revenues, however, will require improvements in enforcement. It also will require an administrative capacity and a political commitment to revalue on a regular schedule. This commitment is very difficult to honor.

[14] The feasibility study simulated a 15 percent revenue increase, which could be accomplished by raising the tax rate to only 0.0026 of capital value.

## Will the New System Provide Incentives to Invest in Real Property?

If the effective rate of the property tax is increased, and if the new CV system is adopted, there could be many incentive effects for property investment. There will be a shift in the distribution of burdens by areas of the city, with the suburban and newer areas getting some relief relative to older areas, by comparison to the present system. However, the user, age and construction categories all have built-in "penalties" for new real estate investments. All of these property tax effects might be outweighed, however, if a better quality of public services results from the reform. At the very low rates that are being discussed, the economic development effects do not seem a major concern.

## How to Get Around the "Revenue Shock" Inherent in Any Such Switch in the Property Tax Base?

A major problem with any switch in tax structure, especially one that changes the entire tax base (and even one that is revenue neutral), is that there will be winners and losers in terms of tax liability. The feasibility study estimated, in some detail, the winners and losers under a revenue-neutral change. About 46 percent of properties would face an increase in taxes, and a total of abut 20 percent would face an increase of 100 percent or more. Only 7 percent of taxpayers would have faced a tax reduction of more than 75 percent. In order to minimize such shocks, a transition period is usually offered where a ceiling on tax increase and a floor on tax reduction are offered for a limited period of time. This has been proposed in the Mumbai feasibility study as a limit of property tax reduction to 75 percent and a ceiling of 400 percent for increases. This floor and ceiling should enhance the possibilities of enactment of this change in tax structure. "Hold harmless" provisions are dangerous however, because they can become institutionalized. It is important they be adopted for a fixed period and that their phasing out is well planned and widely known. The feasibility study in Mumbai recommends a period of five years.

On top of these general questions, there are concerns about implementation of the new system, i.e., what steps must be taken to institute a CV system in Mumbai. Three considerations would seem crucial. The first is to establish a computerized tax roll, with the new valuation and tax base information. These data must also contain information about all salient features that effect the calculation of the tax liability (land use, description of property, etc.), and there must be provision for updating it on a continuing basis.

A second implementation issue is enforcement. The collection ratio must be raised above its present level if the new system is to succeed at increasing the rate of revenue mobilization and reducing horizontal inequities. Third, attention must be paid to "selling the reform" to the voters. Taxpayers must be educated about the new system, not only in terms of how it works, and the fairness with which it treats them, but also in terms of how it benefits them. The latter will include the need to demonstrate that the increase in burdens that they will incur under a capital value property tax will bring them an improvement in public services.

## REVENUE AND DISTRIBUTIONAL IMPLICATIONS OF PROPERTY TAX REFORMS: PUNE

This section simulates the revenue and distributional implications of alternate property tax systems using recently collected survey data from BMP and Pune.[15] Survey data for individual households are used to simulate tax liability for different property tax bases. The simulations show that considerable revenue benefits can be gained from moving to market-based (either market rental or market capital value) assessment systems.

### PUNE PROPERTY TAX

Property taxes are an important revenue source for the Pune Municipal Corporation (PMC). PMC has 3.2 lakh registered properties and another 90,000 in the fringe villages, which have recently been incorporated into the PMC jurisdiction. For the year 1999-2000, revenues from property tax collection were Rs. 3,815 lakhs (Karnik and Pethe, 2003), which is about 9.3 percent of own-source revenues.

The tax base is annual rental value. A unit or area-based method is currently being used to assess rental value. The city is classified into three zones, and the rateable values are based on a notional rent fetching capacity of the property.[16] These values range from Rs. 1-1.3 per square foot for residential properties. The assessment rate is twice this amount for commercial properties. A 40 percent rebate on the rateable value is offered to owner-occupied properties, and another 15 percent rebate is offered for maintenance expenditures.[17] Once the rateable values are established, a general tax rate, ranging from 14 to 38 percent is applied to determine tax liability. The tax rate is set according to the rateable value and is listed in Table 7.

In addition to this general tax rate, additional surcharges or cesses are included for water supply, conservancy, and fire services. These cesses are approximately 15 percent of the rateable value. Discussions with PMC officials indicate that the total rateable value is estimated at Rs. 150 crores, with collection rates around 80 percent. Residents in slums are not liable for property taxes. In notified slums however, flat charges of Rs. 192 for services such as toilets and street maintenance, and Rs. 375 for individual water connections are levied annually.

PMC has 25 tax inspectors and five supervisors to monitor property tax collections. Tax payments can be made in one of 14 ward offices. While the property tax bill is sent once a year, payments can be made every six months.

**Table 7: Tax Rates Based on Annual Rateable Values in Pune**

| Annual Rateable Value (Rs.) | General Tax Rate (%) |
|---|---|
| 1-2000 | 14 |
| 2001-5000 | 21 |
| 5001-20000 | 30 |
| 20001 + | 38 |

Source: Pune Municipal Corporation

### PUNE SURVEY DATA

Recently collected household survey data for Pune are used to estimate the revenue and distributional impacts of various property tax systems and valuation procedures. The Pune household

[15] The analysis focuses on residential properties because the household survey data provides information only on this category

[16] The description of the assessment process is based on discussions with PMC officials.

[17] The maintenance rebates are offered regardless of whether the resident or the landlord has incurred these expenditures.

survey was conducted during August-September 2002, and was designed to be representative of the PMC area. The corporation is divided into 48 wards. All households except for residents of military cantonments and institutional populations (e.g., prisons) are part of the sampling universe. The target sample size was 2900 households, and the final sample size was 2850. To ensure that all parts of the corporation are covered, sample fractions in each ward were chosen in proportion to the number of households of that ward according to the preliminary estimates of the Census (March 2001).

Property tax yields for this sample of properties were estimated under various scenarios. Our principal concern is how the shift to a system that taxes market values would impact revenues and the distribution of tax burdens, by comparison with the present system. The first step is to calculate a baseline, i.e., the revenue yields and tax burden distribution under the present system as estimated using this survey. PMC guidelines are used to estimate tax liability for all properties.[18] This analysis is possible because the survey included information on the covered area of each dwelling unit.

The basic comparison in this analysis is property tax liability under the present system against vs. property taxes under a market value system. These survey data are also used to estimate the revenue cost of rent control, and to estimate the undervaluation of property by the stamp office.

## EVALUATING THE PRESENT RENTAL VALUE SYSTEM

Using the broad guidelines provided by the PMC, property taxes are estimated for survey properties using the unit or area-based method. The average property tax liability is estimated to be Rs. 3,815. The data in Table 8 (Columns 1 and 2) show how estimated property taxes vary across housing categories, for all housing units and for owner occupiers, respectively. Note the very great differences among property types, and particularly the high estimates for *wadas* and *chawls* vs. other housing in the core city area.

While these are estimates of property tax liability, it is useful to evaluate the extent to which these are related to actual property taxes paid to the PMC. For the sample of owner-occupied dwelling units, survey respondents were asked about their property tax payments to PMC in the previous year (i.e. 2001). The data in Table 8 provide a comparison of estimated and reported property tax payments.

[18] The 40% homeowner rebate was applied to owner occupied housing

| Table 8: Differences between Estimated and Reported Property Taxes in Pune | | | | |
|---|---|---|---|---|
| | For all housing units | For owner occupied housing units | | |
| Housing Category | Estimated property taxes | Estimated property taxes | Reported Property taxes | Difference between estimated and reported property taxes |
| Non-notified squatter settlement | 0.0 | 0.0 | 530.0 | -530.0 |
| Notified squatter settlement | 570.0 | 570.0 | 931.4 | -361.4 |
| Resettlement | 2418.4 | 1386.3 | 828.8 | 547.4 |
| Unauthorized colony | 2864.0 | 2353.3 | 2056.7 | 284.5 |
| Wadas | 11850.4 | 6200.9 | 1863.9 | 4376.5 |
| Cooperative Housing | 9482.7 | 9626.5 | 2559.8 | 6713.1 |
| Private Builders / Colonies | 3962.9 | 3310.7 | 2774.9 | 56.1 |
| Core city area | 5131.2 | 5090.6 | 3063.7 | 1848.4 |
| Chawls | 6693.0 | 3772.7 | 2212.5 | 1411.1 |
| Urban village | 2189.8 | 2029.2 | 1782.1 | 241.0 |
| Overall | 3815.6 | 2049.0 | 1605.6 | 586.6 |

Average property tax liability is estimated at Rs. 2049 for owner-occupied dwelling units[19]. In comparison, reported average property taxes for the same units are Rs. 1606. The reported tax estimates are about 28 percent less than the estimated tax liability. There is of course, considerable variation in these estimates across housing categories. The data for notified squatter settlements are not property taxes per se but represent service charges that are levied for water supply and basic amenities. This explains why the estimated amounts are less than the reported amounts. For the non-slum categories, taxes paid are consistently lower than the estimated property tax liability.

The question arises, why should the average difference between computed liability and reported payments be so great as 28 percent. Assuming that our survey did provide data that allowed an accurate estimate of tax liability, we can speculate that the difference is due to either under-assessment or application of an incorrect tax rate. Either way, a shortfall of 28 percent in true tax liability is a significant revenue cost, even if it applied only to owner occupied properties.

Next, for all properties, tax liability is estimated based on the 'true market rental value" of the property. The estimates of market rents are provided by the respondents. The question asked was "what is the true monthly rental value for a similar unit in this neighborhood". This is used as an approximation of the market rental value of a dwelling unit. The data in Table 9 show that the average level of property tax liability would be Rs. 1883, which is 55 percent greater than the estimates using the present area-based system.

A market rent base for property taxation would lead to lower tax liabilities for housing types with the poorest amenities. Housing category '*wadas*' represent the old part of the city where housing quality has been deteriorating over the years. '*Chawls*' are group housing initially developed for industrial workers. Services and amenities in *wadas* and *chawls* are quite poor due to infrequent maintenance and structural upgrades. Further, with the exception of households in the slums, incomes of residents in this housing category are the lowest.

[19] The tax estimates for owner occupied housing are lower than the general estimates reported in Table 8 (Rp 2048 vs. Rp 3815) in part due to the 40 percent rebate offered to these properties.

In summary, moving from a unit value system to a market rental value system increases aggregate tax revenue potential by 55 percent and plays a redistributive role by reducing the burden in areas with poor services and amenities, which are homes to the poorer residents of the city.

**Table 9: Difference in Property Tax Estimates Using Area Based and Rental Value Systems in Pune**

| Housing Category | Area based System | Rental Value System (Market Rents) | Difference in Property Tax | Per Capita Income |
|---|---|---|---|---|
| Non-notified squatter settlement | | | | 14,015.2 |
| Notified squatter settlement | | | | 14,427.8 |
| Resettlement | 2,427.2 | 3,993.9 | 1,566.7 | 19,087.3 |
| Unauthorized colony | 2,864.0 | 5,486.1 | 2,622.1 | 22,544.3 |
| Wadas | 11,509.9 | 10,999.8 | -510.1 | 22,958.8 |
| MHADA Plots | 2,012.9 | 3,303.3 | 1,290.4 | 20,456.2 |
| MHADAFlats | 903.6 | 7,228.5 | 6,324.9 | 20,127.1 |
| Cooperative Housing | 9,698.1 | 18,596.3 | 8,898.2 | 52,730.1 |
| Employer Housing | 5,704.1 | 11,356.9 | 5,652.8 | 25,979.9 |
| Private Builders / Colonies | 3,969.6 | 12,466.3 | 8,496.7 | 37,573.0 |
| Core city area | 5,176.1 | 12,859.5 | 7,683.4 | 30,851.8 |
| Chawl | 6,957.3 | 5,021.2 | -1,936.1 | 17,183.4 |
| Urban village | 2,211.1 | 5,387.5 | 3,176.3 | 22,005.2 |
| Total | 3,444.2 | 5,327.0 | 1,882.8 | 21,480.9 |

Source: World Bank (2002) – Pune Household Survey

## THE IMPACT OF RENT CONTROL

Many local governments limit the level of rateable value to the level of controlled rents, and this seriously compromises efforts to use the property tax as a principal source of financing local services. Many students of the Indian property tax have made this point over the years. Two questions continue to arise: who really benefits from rent control, and what is the property tax loss due to rent control?

Rent control regulations in India were designed over 50 years ago to protect the interests of lower and middle-income groups. However, there is limited evidence to show that this regulation affects all income groups. Survey data from Pune (reported below in Table 10) show that the benefits from rent controls apply to *all* income categories. For households reporting no increases in rents over their stay in the current place of residence, 35 percent belong to the two *highest* income categories. Similarly, approximately 40 percent of households with annual increases in rents of less than 1 percent are in the two highest income quintiles. Thus, the benefits of rent control do *not* disproportionately accrue to poor and middle-income households.

An estimate of the revenue cost of rent control is made in the following way. In the household survey, the sample of renters are asked "How much was the monthly rent when the dwelling unit was first rented?" With rent controls, the rateable value would be fixed using the rental value at the time of initial letting. Using the initial rent as the rateable base and the rates prescribed by the PMC, property taxes were estimated for this sample of properties. Average property tax per household is estimated to be Rs. 1714. This estimate only includes data for renters and excludes residents in slums (both notified and non notified). In comparison, average property taxes using the unit value system (for the same sample) are estimated to be Rs. 9,355, which is 445 percent higher than estimates using initial rents (see Table 10). Further, using market rents, average property taxes are estimated to be Rs. 10,186, which is an increase of approximately 500 percent.[20]

**Table 10: Distribution of Rent Increase Across Income Groups in Pune**

| Welfare Category | Annual increase in rent (%) | | |
|---|---|---|---|
| Quintile | 0 | 1 | 2.5 |
| 1 | 20.6 | 20.1 | 18.4 |
| 2 | 18.9 | 17.7 | 20.2 |
| 3 | 24.6 | 22.5 | 24.1 |
| 4 | 20.6 | 23.0 | 22.7 |
| 5 | 15.4 | 16.7 | 14.5 |

Source: World Bank (2002) – Pune Household Survey

Even if there are measurement and estimation errors, there is no doubt of the magnitude of the impact or the cost of rent control on the city's finances. A 4-5 fold increase in property tax revenue potential is possible by de-linking property taxes from the rental value system in cases where property tax assessments are limited by stringent rent control regulations.

## Capital Value Estimates

A final simulation estimates the revenue impact of moving to a CV system of property assessment. Many cities and States such as Maharashtra and Karnataka are altering their property tax assessment legislations to experiment with various forms of CV assessment. In principle, the CV should reflect the market value of the property, or the price the property would fetch in the market. Most Indian cities that are planning a shift to CV intend to use the registered or 'stamp value' of the property as the base for capital value assessments.

The Town and Country Planning Department (TCPD) in Maharashtra conducts property valuation based on a quasi-hedonic model approach. Discussions with TCPD officials suggests that valuers use information on recent sales, future developments, infrastructure quality and local amenities/ disamenities to estimate market values for properties in various zones within the city. Due to the location of heterogeneous properties within zones, limited trained staff to conduct appraisals, and considerable informality in the valuation process, it is possible that in practice, this valuation system may not produce accurate estimates of property values. Further, high stamp duty on property transactions may produce incentives for underreporting the true value of property transactions.

The reported market values of a small number of properties in this sample are compared with stamp value data for those properties.[21] To estimate the market values of properties, respondents in the sample survey were asked "What would be the estimated present market price for a similar unit in this neighborhood?" These values are compared to estimated stamp values of the properties. Stamp values are computed by multiplying the per square foot values estimated by TCPD by the area of the property.

[20] The market rental values probably are still biased downwards as people's perception of rent are influenced by rent controls in various segments of the market. It will take several years after repealing rent control regulations for market rents to start approximating true market values.

[21] We would like to thank TCPD officials for providing us with stamp duty values (called "Ready Reckoner" values) for a sample of properties.

Properties in non-notified or notified slums are not included. The final sample has data on 126 properties. By this estimate, the average stamp values (or approximation of the Ready Reckoner value) are Rs. 6.12 lakhs, compared to the average market value of Rs. 7.25 lakhs. This suggests that perceived market values are about 18.5 percent higher than the stamp values.

The distribution of the difference between these two estimates of property value is provided in Table 11. Market values are higher than stamp values for properties in unauthorized colonies, cooperative-housing societies, housing units developed by private developers (which are usually high value properties), and in the core city area. On the other hand, market values are lower for properties in the "*wadas*", *chawls* and on the urban fringe which have recently been annexed into the city's jurisdiction. These results are consistent with the notion that housing quality and amenities may not be picked up using large, area-based classification of property rates, as in the stamp value system.

Housing categories with lower market values would fetch a lower premium due to poor housing stock and relatively lower levels of services and amenities. In sum, the perceived market values are higher in aggregate than the stamp values, and they appear to better reflect housing quality and availability of publicly provided services.

**Table 11: Difference Between Market And Stamp Value Estimates in Pune**

| Housing Category | Difference in Property Values (in Rs. 1000) |
|---|---|
| Unauthorized colony | 268 |
| Wadas | -52 |
| Cooperative Housing | 219 |
| Private Builders / Colonies | 118 |
| Core city area | 264 |
| Chawl | -16 |
| Urban village | -25 |

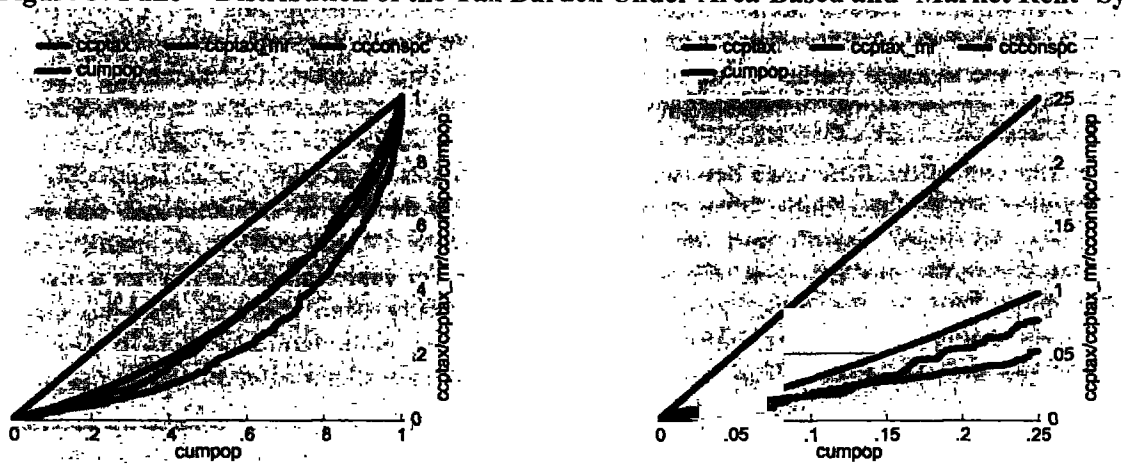
Note: Sample size – 126 properties
Source: World Bank (2002) – Pune Household Survey

## Incidence of Property Taxes

In addition to enhancing revenues, a good tax system should be fair. This analysis of fairness focuses on vertical equity, i.e., the distribution of the effective tax rate on families at different income levels, and especially in how much of the property tax burden is borne by the poorest families. Calculating the incidence of the property tax requires detailed information about the share of properties that are owned versus rented; the income distribution of renters, home-owners and property owners. As well, it requires a number of assumptions, the most important of which is the extent to which landlords can shift the property tax forward to renters. Because of the significant distortions in the land and property markets in most municipal corporations, this analysis assumes that property owners are able to shift the burden of the property tax forward to renters, rather than bear it themselves in the form of lower capital income from their properties. This assumption also implies that the tax on land as well as that on structures is shifted forward, another unlikely outcome. It is likely, therefore, that these estimates will overstate the regressivity (understate the progressivity) of the property tax system. However, there is no reason to believe that the estimated change in the distribution of burdens, occasioned by a change in the assessment base, will be biased by this assumption about shifting.

The distribution of property tax burdens has been computed under two scenarios: the unit-based system as presently exists, and a simulated market rental system. Concentration curves are shown below in Figures 3a and 3b.

**Figure 3: Pune -- Distribution of the Tax Burden Under Area-Based and 'Market Rent' Systems**




**(a) Entire Sample** **(b) Poorest 25%**

A concentration curve is a cumulative distribution based on the distribution of income. The green curve shows the distribution of income (per capita), the red curve represents property taxes with unit or area based system, and the blue curve shows estimated tax using 'market rents'. Figure 3.b shows the same distributions for the poorest 25 percent of the population. The greater the area between a curve and the 45 degree diagonal, the more unequal the distribution.

Our prior expectation is that the market-based system would be less regressive than the unit-based system. The discussion above noted that the tax burden shifts away from properties that have fewer amenities and are occupied by poorer families. The results are described in Figure 3a. This concentration curve clearly shows that there are significant distributional improvements from moving from an area-based to a 'market rental' approach. In comparison to the area-based system, the tax burden using the market rents is less regressive with respect to income. For example, under the market based system, the lowest 40 percent of the population would appear to pay about 10 percent of the property tax. So while there have been considerable revenue gains by moving from the previous rental value system to the area based system, further revenue as well as distributional gains could be achieved by moving to a more 'market' based system that reflects the true value of housing services.

Figure 3.b, shows that the poorest 25 percent of the population receives about 10 percent of the overall income and pays about 8 percent of the total property taxes with the area based system. In comparison, they would pay 5 percent of the overall property taxes if taxes were assessed with 'market rents.' In summary, property taxes in Pune are currently progressive with respect to incomes. The Corporation would likely increase revenues as well as reduce the tax incidence on the poor with experiments to use market values and rents as the basis of assessment.

## Summary of Findings

The analysis for Pune shows that there are significant revenue gains from moving towards a 'market'-based rental value system. Moving from a unit value system to a rental value system (showing market based rents) increases aggregate tax revenue potential by 55 percent and plays a redistributive role by reducing the burden in areas with poor services and amenities, which are home to the poorer residents of the city. Further, the distribution of property taxes would be less regressive if market-based rents are used for the analysis. The revenue increase of 55 percent is a lower bound estimate of the gain in revenues, as the effects of rent controls still influence market transactions. It may take several years after repealing rent controls before market rents approximate the true value of housing services.

Rent controls in Pune have typically imposed significant costs to the city. Estimates for renters suggest that revenues could potentially increase by over 400 percent by de-linking the property tax from rental values and implementing an area-based tax. Further, on equity grounds, the analysis does not support the hypothesis that rent controls help the poor and the middle class. For households reporting no increases in rents over their stay in the current place of residence, 35 percent belong to the highest two income categories.

## REVENUE AND DISTRIBUTIONAL EFFECTS OF PROPERTY TAX REFORMS: BANGALORE

Alternative property tax systems for Bangalore are analyzed in three ways. First, estimates are calculated for residential properties using the new area-based property tax system. The second analysis estimates property taxes based on the previous annual rateable values (ARV) system. The ARV of a property was defined as the "gross annual rent at which the building or land may reasonably be expected to let from month to month or year to year." This assessment process was problematic as there were no firm guidelines on what constituted reasonable rental value and there was considerable discretion in the assessment process. As the Corporation did not issue any guidelines to the revenue officers on fair and objective assessment, this often led to informal agreements between assessors and homeowners, leading to a revenue loss for the city corporation. In practice, rent as assessed under the previous system, does not appear to be linked to the market/capital value of the property. Moreover, if the property was under Rent Control Act, then the rent fixed by the rent controller was the basis for arriving at the ARV (Ravindra and Rao, 2003).

The third part of the analysis estimates property tax revenues using 'market rents' and "capital values" of the property to examine the potential increase in revenues from moving to a market value assessment base. These estimates only evaluate the impact of different assessment options in increasing revenues. Additional revenue gains may arise from administrative reforms, improved valuation of properties, changing land use and zoning ordinances, and other initiatives, but they are not analyzed here.

### SURVEY DATA: BANGALORE

Household survey data from Bangalore were employed to develop these estimates. The Bangalore household survey was conducted during the period July through September 2001, and was designed to be representative of the BMP area. The Corporation is divided into 100 wards. All households, except for residents of military cantonments and institutional populations, are part of the sampling universe. The target sample size was 3000 households, and the final sample size is 2905. The sample fractions in each ward were chosen in proportion to the number of households of that ward, according to the preliminary estimates of the Census (March 2001).

Households in the sample survey were geo-coded, so it is possible to examine the exact location of each sample point. Using the street address and zone information provided in the SAS booklet, sample households were assigned to zones as per the city's classification system. The ratable value for each property was then computed using the same formula as employed by the BMP. Data on construction type, use and age of the house are derived from the survey. Because housing information is available for all households[22] (owners and renters), estimates for the entire city are generated with the methodology. Taxes were then computed based on the Corporation's tax rates and surcharges.

[22] Age of the rental unit is computed as being equal to that of the nearest neighbor. This is a good approximation if housing units were built in stages. The age of the dwelling unit is an important criterion in determining the tax. The age determines the rebate in the tax base from depreciation. Rate of depreciation ranges from 10% for properties

A randomly selected sample of 105 properties was drawn to assess the accuracy of the survey data. The survey estimates were compared to actual tax payments registered in BMP's records, and the difference between the two sources was only Rs. 60 per property, which is a small deviation between predicted and actual tax payments. Thus, these data are reasonable for the analysis.

## ANALYSIS OF ALTERNATE PROPERTY TAX SYSTEMS

First, estimated property tax liabilities are compared to what households reported they paid. Data were only available for owner-occupied units. Using the area-based method (with BMP guidelines), the average property tax per household for sample properties is estimated at Rs. 2937. The tax is spread evenly across income categories. The average tax burden per household across the quintiles 1-5 respectively is Rs. 1483, Rs. 2260, Rs. 2869, Rs. 2339, and Rs. 4533. These data suggest that property tax liability increases with income.

Data on payments made under the self assessment scheme are available for 990 homeowners (out of 1178 who reported participating in the SAS). The average property tax reported to have been paid under SAS is Rs. 2550, whereas the estimated property tax for the same sample is Rs. 2377. The difference between the two estimates is only Rs. 175. Considerably larger differences are found for properties in revenue sites (about Rs. 300 per property) and high-end private developments (about Rs. 775 per property).

Property tax liability was also estimated for the previously used rental value system. For owner-occupied housing units, residents were asked "How much did you pay in property taxes before the last revision?" This value was used as the property tax estimate prior to implementation of the unit value system in April 2000. For renter-occupied housing units, residents were asked "How much do you pay in rent each month? Using reported rents as the rateable values, the property tax was estimated for each property using the tax rates and other factors specified by the BMP. After property taxes were estimated for owners and renters, they were compared to estimates from the unit value system.

constructed during the last 5 years to 70% for properties older than 55 years. The basic property tax is determined on the basis of size, location, age, use and occupancy status of the dwelling unit. To this a surcharge for social development activities is added. Of the total property tax paid, 74.6% is for the basic property tax rate, which includes all adjustments on the tax base, and 25.3% for social development *cesses* (surcharges).

The average property tax under the previous rental value system is Rs. 1818, which is about 62 percent lower than the estimate using the unit based system. The distribution of this increase across housing categories is shown in Table 12. These comparisons show that the unit value system led to an increase in property taxes for all classes of property.

**Table 12: Distribution of Property Tax Changes By Moving from Rental Values to Area-Based Rental Value System in BMP**

| Housing category | Property Taxes (in Rupees) using Rental Values System | Unit Value System | Difference |
|---|---|---|---|
| Non-notified squatter settlement | 126.37 | 295.11 | 168.74 |
| Notified squatter settlement | 496.46 | 938.57 | 442.10 |
| Resettlement | 198.09 | 503.252 | 305.15 |
| Unauthorized revenue site | 1877.34 | 2714.35 | 837.00 |
| Vatara | 1180.77 | 4368.82 | 3188.05 |
| BDA/KHB/BMP/EWS plots | 2699.62 | 3658.44 | 958.81 |
| BDA/KHB/BMP/EWS flats | 1114.97 | 1552.60 | 437.62 |
| Cooperative Housing | 2354.50 | 3038.60 | 684.09 |
| Employer Housing | 1568.20 | 3139.36 | 1571.16 |
| Private Builders | 2593.82 | 4337.62 | 1743.79 |
| City Improvement Trust Board | 1784.73 | 3128.17 | 1343.43 |
| Average | 1820.02 | 2794.53 | 974.50 |

The next simulation attempts to estimate the revenue impacts of moving to a market rental value base. Surveyed respondents were asked to value the monthly rental cost for a similar unit in the neighborhood.

This estimate of the market rental cost of a dwelling unit, is likely an underestimate. As rent control legislations were repealed recently, residual effects of this system will still affect people's perception of market rents. The price data may also be biased downwards due to limited publicly available information on recent transactions. Further, both rents and prices will be somewhat distorted due to FSI restrictions and inefficient zoning regulations. Thus, these values are likely to be higher once the residual effects of rent controls dissipate, and other development restrictions are corrected.

All survey respondents were asked to estimate the monthly rental value for a similar unit in the neighborhood. Using the same procedure as for current rents (for the sample of renters), property taxes are estimated with 'market rents' for each household in the entire sample. The average property tax using 'market rents' is Rs. 3910 per household, which is 33.1 percent higher than the present system and 115.1 percent higher than estimates under the previous rental value system (see Table 13). On average, owner-occupied households pay Rs. 3357 whereas renters pay Rs. 4750.

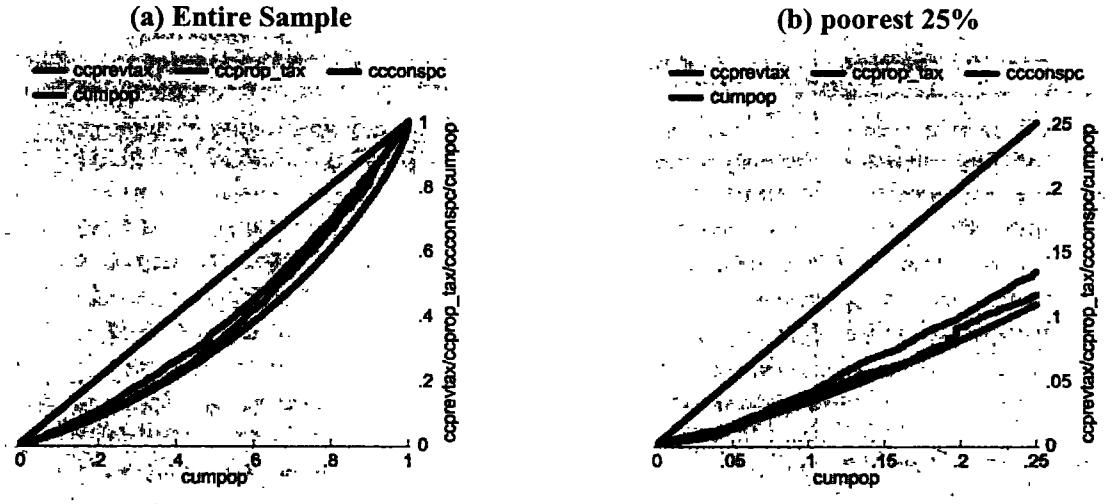
**Table 13: Estimated Property Taxes Under Alternate Assessment Systems: BMP**

| *Property Assessment System* | *Estimated Average Property Taxes (Rs.)* | *Percent Change from Rental System* | *Percent change from Area Based System* |
|---|---|---|---|
| Rental Values | 1818.0 | | |
| Area Based System | 2937.5 | 61.6% | |
| Market Rents | 3910.7 | 115.1% | 33.1% |
| Market Values | 3890.2 | 114.0% | 32.4% |

The Government of Karnataka has amended Section 109 of the Karnataka Municipal Corporation Act, 1976 permitting a move from the ARV system to a CV system for property tax assessment. According to the CV system, property taxes will be levied on the total property cost, which is defined as the cost of land and construction less depreciation. As noted above, the tax rate under this system ranges from 0.3 to 0.6%.

Survey respondents were asked to estimate market values of their properties. The question was phrased similar to the question on market rents where respondents were asked the price of a similar house

**Figure 4: Bangalore -Distribution of the tax burden under rental value and area based systems**




(as theirs) in their neighborhood. Using these values as the perceived market prices, property taxes were computed based on the methodology provided in the revised Karnataka Municipal Corporations (amendment) Act 2000. The average property tax using this method is Rs. 3890, which is about the same as the market rental value base, and about one-third more than the present system of assessing unit values. It produces more than double the revenues vs. the previous rental value system (see Table 14). In general, owners pay less than renters. The average property tax for occupied housing is Rs. 3119 compared to Rs. 5224 for renters.

The analysis across assessment systems suggests that there are considerable potential revenue gains from moving to a system that reflects market values. The unit-value system is a step in the right direction. In comparison to the rental value system, revenues increase by 62 percent in a unit value system. Further potential gains arise from a capital or market-based assessment system. Interestingly, predicted revenues from market rental values and capital values are about the same, confirming theoretical priors of equivalence in relatively free markets. If the Corporation moved to capital value assessments, there is considerable scope for enhanced revenues.

## INCIDENCE OF PROPERTY TAXES

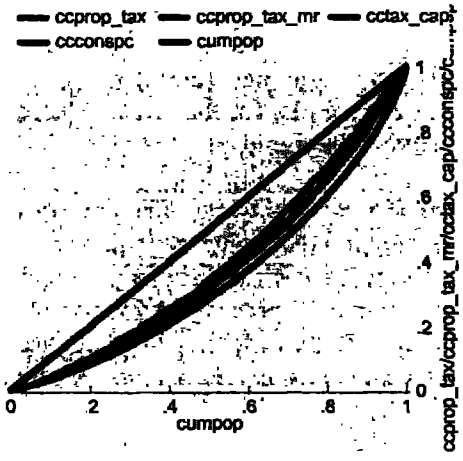
Concentration curves of property taxes in BMP computed with data from the previous rental values and the present area based (unit value) system are shown in Figure 4. The green curve shows the distribution of income (per capita), the blue curve represents property taxes with unit or area based systems, and the red curve shows estimated tax using the previous rental value system. It is difficult to distinguish if there are significant differences between the two tax assessment systems.

The figure on the right shows the distribution for the poorest 25 percent. This figure shows that the poorest 25 percent get about 11 percent of the overall income, and pay about 11 to 14 percent of the total property taxes. The poor in general are shown to pay around the same proportion of property taxes as they receive in income.

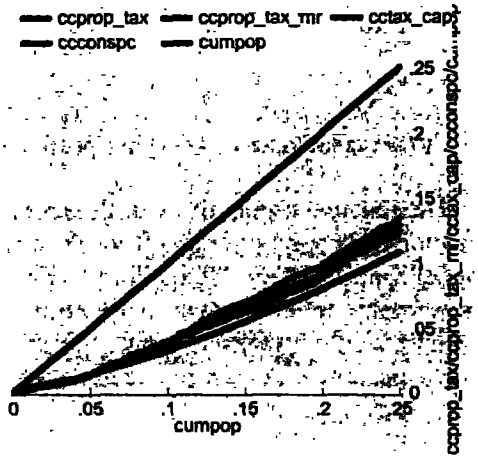
Figure 5.a. shows that the distribution of property taxes using 'market rents' and 'market values'. The green curve shows property tax distribution with the area based system, the blue curve shows taxes

**Figure 5: Bangalore -Distribution of the tax burden under "market rents" and "market vcalues"**

**(a) Entire Sample**




**(b) Poorest 25%**




with 'market rents' and the red curve shows the same with 'market values'. Neither figure shows significant differences in the distributional impact of alternate assessment systems.

In summary, property taxes under various assessment systems are marginally regressive with respect to income, but there are no significant differences in the distribution of the burden among these estimates.

## SUMMARY AND REFORM IMPLICATIONS

Property taxes have been relatively underutilized in Indian cities. There is great potential for enhancing their revenue productivity, and given the directions laid down by the 74th CAA on decentralized governance and finance, there is a strong mandate to tap this potential. It falls to the state governments to lead any reform effort.

The question is, "where does India Start"? Ordinarily, one would point to improving property tax administration, and to the need for focusing on financing service delivery. Dillinger (World Bank, 1998) notes that focusing on fundamentals, that is, updating property tax rolls, computerizing billing and collection systems, and strengthening enforcement, are important first steps that can yield significant results. However, India also has a major problem with the structure of its property tax systems, and much of this can be traced back to the failure to resolve the conflict between assessing the true market value of rents, and rent control ordinances. In addition, government officials have generally been unwilling to issue new valuation rolls, in some cases for many years. The recent history of property tax reform in India has been one of stopgap measures to overcome these problems, rather than engaging in comprehensive reform. Meanwhile, the growth in property tax revenues has remained anemic. Unless these structural issues are resolved, improved administration will do little to make the property tax a viable revenue source for local governments.

In the following sections, three areas where property tax reform in India can make progress are discussed: structural reforms, administrative improvements, and changes that can build the confidence of taxpayers.

## STRUCTURAL REFORMS

### Increasing Revenue Yield

If the property tax is to be a mainstay of local government finance in India, then its revenue yield must be increased. The yields reported in this study for Bangalore, Mumbai, and Pune are not adequate to support a large share of local public service financing, and Ravindra and Rao (2002) report a similar problem for other Indian ULBs. With the phasing out of *octroi*, it is essential for the property tax to carry more of the revenue load, or for other productive sources of revenue to be found.

The revenue productivity of the property tax can be increased in many ways. The most obvious is a revaluation of property to market levels, either through maintaining a rental value system, or by moving to a capital value system. Bangalore's experience showed that moving from the previous rental value-based assessment to an area based system increased revenues by around 62 percent. Adoption of market rental values would increase revenue yields in Pune by an estimated 55 percent, and in Bangalore by an another 34 percent. For those places whose valuations are still tied to controlled rents, the potential increases are even greater.

Second, the legal tax rates could be increased. At present, the inclination is to keep tax rates at nominal levels. For example, if Mumbai were to move to a capital value system, the planned rate is 0.02 percent, which will not generate sufficient revenues to make the property tax a major source of financing local government services. To move to a productive level of property taxation, the nominal rates of property tax will need to be increased significantly. Effective rates in industrialized countries are on the order of 1 percent of full value, and in many developing countries approach one half that level. Indian states should consider setting a target level of effective rates based on needs for financing public expenditures. Bangalore is proposing a reasonable starting nominal rate, between 0.3 and 0.6 percent.

Third, states could begin to investigate their exemption policies. In many cases the exemptions are standard and given by all countries, e.g., charities, properties used for religious purposes, foreign embassies, etc. In other cases, exemptions may have been given for exceptional purposes or that stretch the meaning of "charities" or "religious properties." Increased revenues could be gained from removing the preferential treatment of certain types of properties, e.g., residential properties, owner-occupied properties, or vacant land.

Finally, state government cesses as surcharges on the local property tax might be removed and their financing shifted to state government sources. This would free up room for rate increases in the local property tax.

### Increase Buoyancy

Another needed structural reform is an increase in the buoyancy of the property tax, that is, having property tax revenues grow automatically to match the growth in local expenditure needs. This requires putting in place a property tax base that will grow as property values grow, and one where the growth can be captured by existing administrative machinery.

The switch to an area-based valuation system in several Indian cities did increase revenues significantly on a one-time basis, but does not necessarily produce a buoyant system. This is because there is need to install a method of increasing the location values and structure values on a regular basis. At least in Bangalore, such a method may not yet be in place. Instituting a method of updating values could prove difficult. A capital value or rental value system, based on market values, may produce a buoyant tax base, but again there would have to be provision for regular revaluation. The present laws do

provide for revaluation in regular intervals, but this frequently is not done. Bangalore's valuation roll, for example, did not change for 30 years before the area based system was introduced in 2001.

There are two ways to build buoyancy into the property tax system. One is to regularly revalue as is required by law. This would imply a large increase in the base, and therefore in tax liability, every fifth year. The other would be to develop a method of indexing the tax base, and then doing a "reconciliation" every fifth year. The fifth year shock would be less severe under this method, but the drawback of this method is that some properties would be inappropriately valued in the intervening years.

### Equity

Structural change could also improve the horizontal equity of the property tax, whereby equals are treated equally under the tax, and the tax does not interfere with market decisions in inappropriate ways. Among the structural changes that might be considered are to remove the commonly-used preferential rates of tax that are levied against residential vs. non residential properties, and against owner occupied vs. rented properties. A better route is to allow the level of assessed value of the property to be the sole guide in determining the taxation of a property. Rent control is a major problem, and as is shown above, similar properties under and not under rent controls might face tax burden differences by as much as a factor of four.

Vertical inequities may arise from the failure to assess at full market value. The results from the Pune survey showed that *chawls* and *wadas*, which tend to be located in areas that suffer from poor public services, are taxed more heavily than core city housing. It is also shown that the shift to a market value approach (rental or capital value) will not increase the regressivity of property tax burdens.

## IMPROVED ADMINISTRATION

There is much room for improvement and professionalization of the property tax administration in India. Some of this can be done even before structural changes are decided upon, but some of the administrative improvements clearly will need to await some decisions about the choice of a property tax base.

In four facets of property tax administration -- identification of the tax base and the tax payers, valuation, record keeping, and collections -- there is work to be done in the Indian states.

### Identification of Properties

For the small sample examined here, and from other reviews, it is clear that all taxable properties have not been identified. Particularly on the urban fringe, many properties are not brought promptly onto the tax roll, and considerable revenue is lost. In Bangalore, for example, there is evidence that as much as 70 percent of newly developed properties do not enter the tax rolls during the first six years after development.

In many ULBs, tax maps are out of date. Some records are not computerized, and there is too little provision for cross checking with other records (e.g., utility bills) to determine property characteristics.

### Valuation

Proper and up-to-date valuation is the main issue of property tax administration (and policy) in most developing countries, and this also true in India. If the tax base does not reflect current market

value, the tax cannot be productive, its revenues cannot grow, and it will not be fair in its burden distribution. The first step the Indian states must take is to decide on the tax base and the revaluation period.

Valuation itself is a difficult administrative task. If an area-based system or a capital value system is chosen, then the basic data must come from the Stamp Duty Office. What scant evidence we have from these case studies is that stamp estimates understate market value by about 20 percent. With stamp and transfer taxes as high as 15 percent of transaction value in some states, there is a great incentive to understate this value. A thorough examination of the efficacy of using the stamp data as the basic unit for valuing property is a high priority task.

Discussions with the valuation department in Maharashtra indicated that the Town and Country Planning Department conducts property valuation based on a quasi-hedonic model approach. Valuers apparently use information on sales, future developments, infrastructure quality and local amenities/dis-amenities to estimate market values for various zones in the city. Due to the location of heterogeneous properties within zones, limited trained staff to conduct appraisals, and considerable informality in the valuation process, it is of concern that the valuation system may not accurately reflect property values. Further, high stamp duties in many states provides the incentive for under-reporting property transactions.

If an area-based system is adopted, as is used now in some of the larger ULBs, then a method of updating the guidance values on a regular basis is necessary. This will require not only reliable values from the Stamp Office, and from the state Ministries of Construction, but also a set of procedures for updating these values. It also will require trained staff, capable of valuing real property, and perhaps a central valuation unit in each state should be considered. There is much to be done to implement a system of this kind. Most local governments do not have a cadre of trained assessors to evaluate property values and update them regularly. A capital value system is even more difficult, because valuation of individual units will be required. In either case, a method of requiring updating of any new construction or major renovations, sub divisions, etc. will need to be put in place. A capital value system will be difficult and costly to implement, and it will be expensive. Its introduction will require much careful planning, and will take time. The costs and the complexities of introducing a capital value system should not be underestimated.

A rental value system could also work, if market vs. controlled rents were to become the tax base and if a tax roll of current market rents could be maintained. But this raises the issue of the assessment of market rents. With rent controls being repealed in several States, it is likely that the new equilibrium of rental prices will reflect market values. This transition however, will not be instantaneous. It may take many years before the rental market functions efficiently. Even in the absence of rent controls, land use and zoning ordinance in most Indian cities are likely to influence the functioning of the housing market. For example, restrictions on development through FSI limit intensive development in central parts of the city, leading to a distortion in prices throughout the housing market. In addition, poor zoning plans and limited enforcement further lead to inefficient spatial development across the city.

## Collections

The collection rate in most ULBs is weak. This is important because an increase in the effective rate of property tax is probably needed. If enforcement is a problem at the current low level of rates, it will be even more of a problem at higher tax rates. Available statistics suggest that a collection rate over 50 percent might be considered comparatively good in Indian ULBs right now. In most ULBs, a 20 percent increase in the present collection rate should be attainable with stronger enforcement efforts.

The reasons for weak collection performance probably vary across cities. In some cases the argument is that enforcement possibilities are weak. The ultimate sanction, confiscation of property, is not a politically attractive alternative in any country. Short of this, however, there are many steps that might be considered:

- Provision to collect from tenants under some circumstances would address some of the problems of absentee landlords, but can be an expensive proposition.
- Better collection procedures and improved recordkeeping could help increase collection rates.
- Requirement that taxes be paid in full during the period of a legal challenge could improve compliance.

## TAXPAYER CONFIDENCE

Taxpayers may not be confident in the property tax, and this may effect compliance. There are many ways in which tax payers lose confidence in the tax. First, it is necessary to develop a linkage between property tax payments and service delivery. If taxpayers do not see that their taxes buy better public services, they are less willing to pay the tax. If property taxes keep increasing without perceptible increases in service availability or quality, it is unlikely that the tax increases will be sustainable. And, in some cases in India, the tax is used to pay statewide services via a cess that is surcharged to the basic property tax. Eliminating cesses, which lessen the link between taxes paid and benefits received, and are often not collected nor remitted in full to the State, may also be called for.

Second, taxpayers may feel that the tax is unfair in that it burdens other, equally situated owners or occupiers (or businesses) more than it does them. The Indian property tax is a case study in horizontal inequity because of the large number of exonerations and preferential treatments offered. A property tax that treated every parcel the same, irrespective of use, would be more acceptable. In this case, only the value of the property would matter in determining tax liability.

A related issue is whether the provision of better public services is somehow reflected in the tax base. Using the sample survey data for Pune and Bangalore, it is found that in general, property taxes (using the area-based system) are linked to the level of services as well as to the quality of the housing unit. However, these values are not associated with any variables representing location-based premiums. These include proximity to the city center or some recreational amenity. Once area-based taxes are replaced with estimates of market rents or market values, the sensitivity to public service availability and quality increases (coefficients have larger magnitudes), and property taxes could reflect the importance of location based amenities. Market-based systems, in this sense, produce a fairer property tax.

Third, taxpayers object to high compliance cost. For a tax that yields so little, the property tax does seem to impose a high compliance cost on taxpayers. Harassment by collectors has been a particular thorn. Note that in Bangalore, the introduction of a "self-assessment system," where property taxpayers could bypass any direct dealings with assessors, contributed significantly to an increased tax yield. One of the hallmarks of Bangalore's success was that they streamlined the property tax system so that it was more understandable to citizens, and easier for them to comply with. Bangalore also launched an extensive public awareness campaign about the property tax reform, which engaged the Council and citizens in support of the reform.

Finally, the state must track the performance of the property tax of ULBs, and stand ready to provide technical assistance, or even legal changes in the tax structure, where necessary. This implies a research function. Understanding the composition of the property tax base, the shares of taxes paid by different groups, and how they might be affected by a potential reform is an important part of designing

and sustaining a successful property tax reform. Such analysis requires detailed data on properties, and a capacity to do the analytical work.

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## APPENDIX: SURVEY DESIGN AND IMPLEMENTATION

Detailed household surveys have been carried out in the cities of Bangalore, Karnataka; Pune, Maharashtra; and Jaipur, Rajasthan. [23] These surveys are part of the World Bank's research program on improving management of rapidly growing urban areas. This note provides details on the Bangalore survey design and implementation – the same methodology was used in Pune and Jaipur. All the samples are selected to be representative at the level of the city.

The surveys were designed in close coordination with city managers and after extensive consultations with city officials, private sector representatives. The survey design was guided by the following principles and objectives:

The survey should provide a comprehensive image of the city, but should be manageable. An interview time of one hour was seen as an absolute maximum. In the trade-off between sample size and the number of survey questions, we opted for a larger sample in order to facilitate geographic analysis of survey outcomes.

A key component is a comprehensive consumption module that provides information on the welfare status of each household. This allows us to produce a poverty profile for the city and enables the assessment of welfare effects of city policies (see, e.g., Hentschel and Seshagiri 2000).

The household roster and associated questions are compatible with the questions contained in the March 2001 Census of India. This provides a cross-check of the survey's representativeness and will allow future use of small area estimation techniques to produce a detailed urban poverty map—e.g., poverty rates by enumeration areas or city blocks.

Two substantive modules collect information on housing and water supply. The former is mainly designed to provide data about the fiscal situation: housing finance and property taxes, as well as detailed information on property characteristics to allow estimation of hedonic housing price models. The urban service provision module includes questions on the status of water supply, user satisfaction with various aspects of service provision and willingness to pay for improvements.

A prime objective is to analyze survey results spatially. We collected a latitude/longitude coordinate pair for each household in the survey. This allows mapping of survey results, re-aggregation and indicator calculations for geographically defined zones in the city, and integration of survey data with GIS-derived variables.

Incidentally, Bangalore has been the focus of a comprehensive socioeconomic study before. In 1979, Rao and Tewari published "The Structure of an Indian Metropolis. A Study of Bangalore." That study was aimed at describing city structure and dynamics with respect to demography, social relations, and economic and ecological conditions. It also had a strong planning perspective because one of the goals of the study was to support city development strategies. Finally, that study intended to provide a database for many other uses as well as a base line for future studies.

### SAMPLE DESIGN

*The Bangalore Urban Survey was designed to be representative of the Bangalore City area, and carried out in August 2001.* According to preliminary 2001 census results, this area has a total population

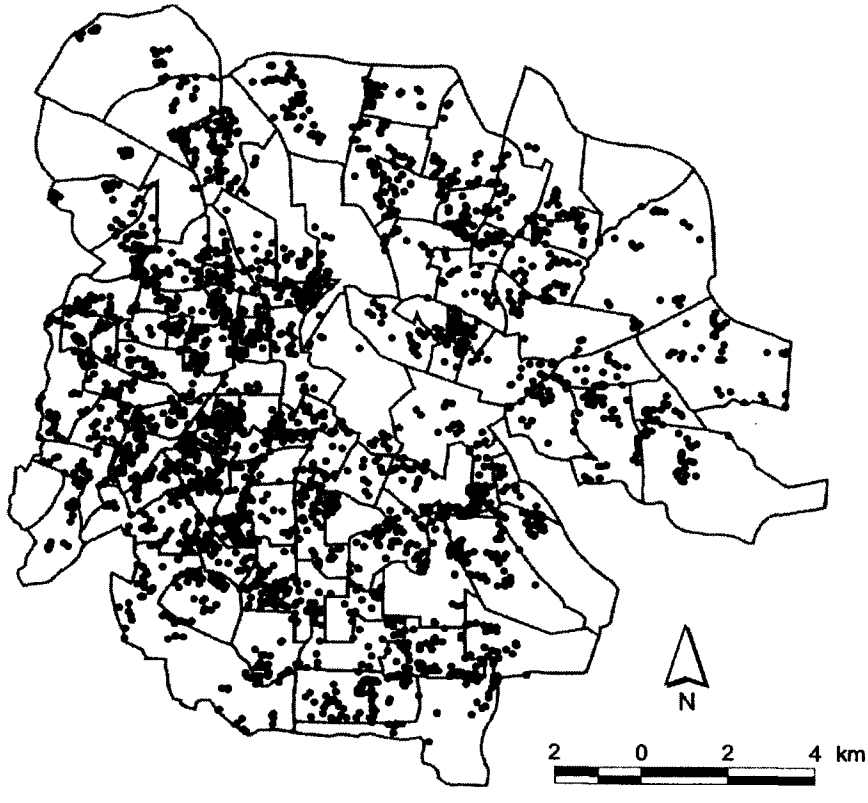
[23] This Appendix note draws heavily on Deichmann, U., S.V. Lall, A. Suri and P. Rajoria (2003). Information-Based Instruments for Improved Urban Management. World Bank Policy Research Working Paper 3002.

of 4.1 million and 930,000 households. The city area is divided into 100 wards. All households of the city are part of the sampling universe with the exception of residents of military cantonments and institutional populations (e.g., prisons). The target sample size was 3000 households, and the final sample size is 2905. This sample size yields acceptable sampling errors for all important parameters and allows for the disaggregation of survey indicators into at least 5-7 strata. To ensure that all parts of the city are covered by the sample, we chose sample fractions in each ward in proportion to the number of households of that ward according to the preliminary estimates of the Census of March 2001.

*The household survey in Pune was conducted during August-September 2002,* and was designed to be representative of the Pune Municipal Corporation area. The city area is divided into 48 wards. As in the case of Bangalore, all households in the city with the exception of residents of military cantonments and institutional populations are part of the sampling universe. The target sample size was 2900 households, and the final sample size is 2850. The same sampling methodology as in the case of Bangalore was used for the Pune survey.

We did not have access to the household listings from the 2001 census for use as a sampling frame. Instead, the master sampling frame consists of the most recently available electoral roles. In India these roles are typically very complete. There is no reason to believe, for example, that slum populations are omitted, because these populations represent important vote banks. Within each ward, the sample taken was completely random. Due to the nature of an urban survey, where travel times are short, there was no need to resort to cluster sampling and its associated complications. Figure 6 shows the distribution of sample points within the Bangalore urban area.

**Figure 6: Bangalore Survey Locations and Ward Boundaries**



The sample population of 13,453 in Bangalore has a sex ratio of 875 females per 1000 males, which is lower than the 906 for Bangalore district according to the Census 2001 data.[24] The lower sex ratio is likely due to the large number of single male migrant workers and the large number of male students in the many technical colleges in the city. This is reflected in the population pyramid in Figure 7, which shows a much larger number of males in economically active age than females. Migrants come alone to the city, in search of employment, and initially stay with relatives. Although these single member households are using the urban services, the service providers often do not consider their requirements in demand assessments. Since many of the services are charged at a flat rate, the additional usage is a net revenue loss to the service providers. The average size of sample households is 4.6 and is comparable to the average of 4.5 for the Bangalore municipal area according to the provisional results of the Census 2001. Detailed results from the census will show whether the low number of children in the 0-9 categories are due to respondents' not listing small children in some cases, or whether this is indeed a reflection of the changing demographic structure in a modern Indian city.

**Figure 7: Age and Sex Distribution of the Survey Population**


Source: Bangalore Urban Household Survey, 2001

The lack of consultation or coordination between KUWSDB and ULBs appears to have resulted in instances where ULBs have added extensions to the water supply system within six months of its completion, thereby reducing pressure and diminishing the performance of the whole system. It would be more efficient if the level of government providing water services – in this case, ULBs – were responsible for investing in infrastructure. Such an arrangement would potentially provide incentives to pay attention to the financial sustainability and O&M implications of new investments.

[24] The detailed census figures for Bangalore Urban have not been released yet.