Article

Financing India's Urban Infrastructure: Current Practices and Reform Options

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Abstract

Cities in India are envisioned as engines of growth but they suffer from severe service shortages. The realisation of the full potential of cities depends crucially on their ability in meeting the challenges of providing urban infrastructure on a sustainable basis. This article, therefore, reviews the current financing options for urban infrastructure and discusses the strategies for pursuing reform agenda needed to strengthen financial health of the municipalities. Given the inadequacies of the municipal financial resources and capacities, this article emphasises on the need for an integrated policy and regulatory environment, in which urban local bodies (ULBs) can enhance their capacities to generate resources from existing sources at their disposal and also can better utilise innovative sources of infrastructure financing. In particular, possible reform actions to improve municipal finance are clarifications in institutional arrangements for service delivery, true local financial autonomy, sustainable finances supported by user charges, restructuring of intergovernmental grants to incentivise reform with greater assistances for smaller cities, encouraging public–private partnerships (PPPs), deepening of the municipal bond market, local capacity building, strengthening regulatory framework of service delivery and public participation.

Keywords: Municipal finance, urban infrastructure, urban reform, India

JEL Classification: R51, H72

1. The Perspective

Indian cities are envisioned as 'engines of growth' with urban India constituting 31.16 per cent of the national population (Census of India 2011) and contributing 60 per cent of country's gross domestic product (GDP), with a potential to cross 75 per cent by 2031 (Ahluwalia et al. 2014). As per Census 2011 data, 53 million plus cities account for 43 per cent of India's urban population and the corresponding figure for class I cities with population over 3 lakh is about 56 per cent. Moreover, the share of population in towns below 100,000 has also increased and, in particular, the share of census towns is now almost 36 per cent. In essence, urban growth is occurring across the 'urban spectrum'

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(Mukhopadhyay et al. 2014). The McKinsey Global Institute (2010) predicts an urban population of 590 million by 2030, as compared to 340 million in 2008. Therefore, any meaningful long-term vision for India would be incomplete without planning for the cities and quite rightly, the Planning Commission describes urbanisation as one of the country's top four developmental challenges. The realisation of the full potential of cities depends crucially on their ability to provide an 'enabling' environment especially in terms of sustained provision of a wide range of urban services that promote both private sector activities and provide community services to urban residents.

Unfortunately, inadequate provisioning and improper maintenance of public goods and services are very common to almost all the cities in India which, in turn, greatly reduce their economic potential. Many urban residents have little access to basic services such as water and sanitation, solid waste collection and roads and shelter (High Powered Expert Committee [HPEC] 2011). As per Census 2011, only 71 per cent of urban population is covered by individual water connections. The duration of water supply in Indian cities ranges from 1 hour to 6 hours. Even a partial sewerage network is absent in 4,861 cities and towns of India, and about 13 per cent of urban household do not have any access to any form of latrine facility. Of urban households, 37 per cent are connected with open drainage and another 18 per cent are not connected at all. Moreover, there exists a disparity in the access to basic amenities across various size classes of urban centres with large cities experiencing much higher access as compared to the small and medium cities.

Consequently, a substantial amount of investment is needed to remove the current backlogs in infrastructure provision and also to augment the infrastructural facilities for keeping pace with the demand for the same. HPEC (2011) estimated an urban investment need of ₹39.2 lakh crore for the period 2012–31 and the new investment needs are roughly equivalent to an annual amount of 1.1 per cent of GDP by 2032. However, decrepit financial positions as well as the weak capacities of governments at all levels exacerbate the problem of financing urban infrastructure. It needs mention here that the issue of urban public service delivery has much to do with the governance systems as it is with financing (Rao and Bird 2014). The extent to which sound financial arrangements ensure adequate delivery of urban services crucially depends on an efficient and responsive urban governance system. While the governance issues are important, this article takes up the financing issues only and examines the current financing options for urban infrastructure and discusses the strategies for pursuing reform agenda needed to strengthen the financial health of the municipalities.

2. Tracing the Policy Changes for Financing Urban Infrastructure in India

Prior to the 1990s, municipalities used to rely on budgetary support from the state/central government for developing infrastructure. However, top-heavy urban structure, severe service shortages and proliferation of slums in the 1980s necessitated a rethinking of urban plan and policies. The National Commission on Urbanisation (Government of India 1988) acknowledged the critical financial position of the urban local bodies (ULBs) and, apart from recommending significant increase in plan outlays, it floated the idea of private financing and imposition of user charges. After that, urban development programmes embraced the private financing options and reforms were driven at the municipal level to ensure the return of the investment along with visible changes within the institutional and policy framework. In particular, the Eighth Five-year Plan (FYP) (1992–97), for the first time, emphasised on building cost recovery in the municipal system. The 1996 Rakesh Mohan Report sought to overhaul the prevalent financing system by advocating 'commercialisation of infrastructure' through the commodification of urban services, public–private partnership (PPP) and mobilisation of revenue by accessing the capital market. The Ninth Plan period (1997–2002) experienced a substantial reduction in budgetary

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allocation for urban infrastructure development and by the late 1990s, the union Ministry of Urban Development (MoUD) launched a series of urban development programmes that aimed at moving away from state subsidies and guarantees and raising funds from the market and through user fees. These programmes not only promoted private financing options but also focused on building local government capacity in certain aspects such as property tax (PT) reforms, accounting systems and PPP structuring and implementation. Credit enhancement mechanisms such as escrow, pooled financing were promoted to improve the creditworthiness of big and small municipalities (Baindur & Kamath 2009). The 74th Constitutional Amendment Act (CAA) confers legal status to the municipalities and specifies their functional domain. However, in the absence of commensurate financial provisions, most of the ULBs and especially the smaller ones lack financial autonomy and face resource constraint to carry out their 'unfunded mandate'.

The government's attempts at pursuing urban reforms and putting the cities on a fast track of development have culminated in the adoption of the Jawaharlal Nehru National Urban Renewal Mission (JNNURM) in December 2005. The funding comes with conditions that include a series of reforms to be undertaken by the city government requesting funds and by the state within which the city is located. Further, the Rajiv Awas Yojana (RAY), announced in 2009, infuses a huge sum of money to create a slum-free India through the provision of incentives for the tenurisation of settlements and PPPs in affordable housing schemes. The Union Budget of 2014–15 contains the provision of creating a hundred of 'smart cities' as satellites of existing towns in order to further promote the economic competitiveness of the Indian cities. These initiatives can be considered as an extension of JNNURM's envisaged city transformation processes, although a much smaller financial allocation has been made (Burte 2014).

3. Overview of Urban Finance in India: Present Scenario

Municipal functions range from planning for development, urban poverty alleviation, protection of environment, slum improvement and upgrading to functions relating to public health, welfare, safety, regulation and developmental activities.[1] Functional devolution is not backed up by requisite 'municipal finance lists'. Many commissions such as the Local Finance Committee (1951) and the Taxation Inquiry Commission (1953–54) were set up to look into the issues of municipal finance. However, even today, the assignment of finances is completely left to the discretion of the state governments. ULBs can levy and collect only those taxes that are specified by the state governments. The resource base of ULBs typically consists of their own resources (tax and non-tax revenues), shared revenues, state grants and loans from state governments and market borrowings. In general, urban infrastructure is mainly financed through the grants and loans from central and state government, whereas ULBs' own revenues are used to cover the operation and maintenance costs of such facilities. However, exercise of state discretion in both functional and financial devolution to the ULBs has resulted in interstate variations and gross mismatches between the 'functions' and 'finances' of the ULBs.

Analysis of the latest municipal finance data depicts the infirm financial health of the Indian ULBs in terms of their access to resources and revenue-raising capability. Importantly, such an analysis in India, as in many other developing countries, is severely constrained by the lack of systematic and reliable information on local public finance. Successive Finance Commissions have expressed concern over negligence on the maintenance of accounts and audits and proper database at the municipal level (Finance Commission of India 2015). All these data inadequacies have undermined any serious effort to determine resource gap at the municipal level and, thereby, hamstring the formulation of meaningful urban policies.

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As per the Finance Commission data,[2] the total revenue of the ULBs in India accounted for only 0.70 per cent of the country's GDP in the 1990s, which marginally increased to 0.85 per cent in 2002–03 and to 0.94 per cent in 2007–08. These figures are substantially low compared to the estimated municipal revenue–GDP ratios of 6 per cent for South Africa and 7.4 per cent for Brazil (Afonso & Arajuo 2006). The insignificant contribution of urban local finance in the overall public finance in India is further corroborated by minuscule shares of municipal revenues in combined central and state revenues, which declined from about 3.71 per cent in 1990–91 to 2.43 per cent in 2000–01 and to less than 2 per cent at present (GoI 2012). In terms of both revenue and expenditure, the ULBs account for only 2–3 per cent of the combined revenue and expenditure of the central, state and local government. This is in sharp contrast to the situation in advanced countries where local governments normally account for 20–35 per cent of the total government expenditure.

The extent of urban fiscal decentralisation is also quite unsatisfactory as ULBs across the states experienced an increasing financial dependence in recent years (Table 1). The trend of *revenue autonomy ratio* (the percentage share of own revenue (tax as well as non-tax) in the ULBs' total revenue) reveals that own revenue constituted about 63 per cent of the total revenue of the municipalities in 2002–03 and the figure further decreased to about 53 per cent in 2007–08. Grant, assignment and devolution by the state governments (28 per cent and 33 per cent for 2002–03 and 2007–08, respectively); grant from central government and Central Finance Commission (CFC) (3 per cent and 7 per cent for 2002–03 and 2007–08, respectively) and revenue from 'other' sources (5 per cent and 6 per cent for 2002–03 and 2007–08, respectively) are the other contributors to municipal revenue. Part of the increase in financial dependence of the ULBs can be explained in terms of mission compliance transfers under the JNNURM scheme since 2005. More alarmingly, for six out of 20 major states in India, own revenue contributed less than even 20 per cent of their total revenue and, thereby, depended almost totally on grant and transfers. For eight other states, the RA (Revenue Autonomy) ratio hovered between 20 and 40 per cent (Mohanty 2014). Moreover, own revenue was insufficient to meet even revenue expenditures of the ULBs as *financial autonomy ratio* (the percentage share of ULBs' revenue expenditures funded out of own source revenue) figured around 80 per cent for the period under consideration.

Further, on a per capita basis, the total revenue of the ULBs was only ₹733 in 2002–03, which increased to ₹1,430 in 2007–08. Wide state-wise variations were also observed with per capita municipal revenue ranging from ₹374 for Assam to ₹3,417 for Maharashtra in 2007–08 (GoI, 2012). On the other hand, per capita expenditure of the ULBs increased from ₹758 in 2002–03 to ₹1,513 in 2007–08. Moreover, the Mckinsey Report (2010) estimated the expenditure need of ₹6,030 for ULBs' infrastructure and affordable housing. It is also noted that India spends only US$ 17 per capita annually on urban capital investment as compared to the corresponding figures of US$ 116 in China and US$ 127 in South

Table 1. Status of Municipal Finance in India: Some Relevant Indicators

	2002–03	2003–04	2004–05	2005–06	2006–07	2007–08
RA Ratio	63.48	62.48	60.87	57.59	55.66	52.94
FA Ratio	84.63	86.85	85.38	92.21	88.59	82.73
Contribution of Grants and 'Other' Sources in Total Revenue						
State Grant	28.28	27.42	28.57	32.20	31.67	33.42
Central Grant	2.80	3.40	3.69	3.49	6.00	7.30
'Other' revenue	5.44	6.70	6.87	6.72	6.66	6.34

Source: Calculated on the basis of the information provided by the Thirteenth Finance Commission, 2010.

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Africa. The deteriorating state of municipal finance and resultant urban fiscal gap in India, thus, constrain ULBs' ability to provide basic services as per the need of the urban population.

4. Exploring the Local Resources

4.1 Property Tax

PT is the most important urban local tax in India contributing 22 per cent and 28 per cent of ULBs' total revenue and own tax revenue, respectively. Owing to its entry in the State List ('Entry 49') of Seventh Schedule of the Constitution, the state government limits ULBs' autonomy by laying down the framework for determining the tax bases, procedure for valuation, rebate and exemption policies, rate setting, tax liability and measures for dealing with delays and tax evasion.[3] According to the HPEC report (2011), Indian states collect in the range of 0.16–0.24 per cent of the GDP from the PT against the corresponding collection figure of 0.60 for many developing countries. One recent study (Mathur et al. 2009) reported an average annual growth rate of 7.9 per cent in PT revenue during a period in which the economy was growing at 8–9 per cent and urban land values were increasing at least twice as fast in many cities. The under-assessment of properties, poor collection and widespread exemptions have undermined the revenue potential of PT. ULBs do not have any system in place to count the actual number of taxable properties under their jurisdiction. Almost 44 per cent of the properties have been found to be outside the tax net, with the corresponding figure ranging from 40 per cent for Bangalore to almost 60 per cent of taxable properties for a city like Delhi. Prevailing tax rates of properties do not reflect their actual market value. Until recently, in most of the Indian cities, properties were valued on the basis of 'annual rental value' (ARV), defined as gross annual value rent at which property may 'reasonably' be expected to be rented. This system, thus, gave enormous discretion and provided a basis for corruption of tax collectors and yielded very little tax revenue. The wide prevalence of the Rent Control Act capped potential rent increases to a maximum of 25 per cent of the 1948 rents and also provided the original tenants the right to pass property onto their heirs and thus prevented any future increase in rent. In fact, assessed values were found to approximate only 8–10 per cent of the market values of the properties. The non-availability of data on the market values of the properties makes this valuation further problematic. Further, leaving aside the chronic problem of under-assessment, the deficiency in tax management is also pronounced in the area of tax collection. Only, on an average, 37 per cent of the tax demanded is collected, with the corresponding figures being significantly lower for cities such as Delhi (only 19 per cent) and Mumbai (only 1 per cent). In spite of the penal provision for delayed payments or non-payments, ULBs rarely undertake any penal actions against the defaulters. Non-payment of taxes by various government establishments further worsens the overall collection ratio. Exempted properties in India constitute approximately 10 per cent of the total urban properties and about 11 per cent of the assessed properties.

4.2 Other Taxes

State governments in India, partly because of fear of losing financial and political resources, have found to be more or less reluctant to completely devolve 'local' taxes such as profession tax, entertainment tax and advertisement tax to the ULBs. Almost all the state governments collect profession tax at a rate not exceeding ₹2,500 per taxpayer per annum and also entertainment tax and share a portion of the tax proceeds with the ULBs. The coverage of profession tax varies across the states with some of them imposing this tax on persons engaged in any employment while some others levy the same for specified

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professions. States such as Gujarat, Kerala, Rajasthan and Bihar have delegated levy and collection of profession tax to the ULBs. By contrast, the Andhra Pradesh government took over salary payments of the municipalities and stopped sharing tax with the ULBs excepting large municipal corporations. In spite of its significant revenue-enhancing potential, profession tax remains grossly underutilised because of both poor collection mechanism and enforcement at the state level and low ceiling fixed. Further, some states share motor vehicle tax[4] and stamp duty on registration of land with the ULBs. In some states, municipal corporations collect advertisement tax. However, the other two categories of ULBs have not been empowered to levy this tax.

Octroi, a tax on entry of goods, used to be an important source of municipal revenue in some states. However, because of its distortionary nature in creating hindrance to free interstate trade and commerce, all major states, except Maharashtra, have abolished this tax. At present, only municipal corporations in Maharashtra utilise *octroi*. The contribution of this tax in the total municipal revenue ranged from 41 per cent for Pune to 65 per cent for Ulhasnagar in 2007–08 which were almost two to three times of the contribution from PT (Mohanty 2014). Some states also used entry tax that also has the same distortionary feature as that of *octroi*. However, the state governments have not been able to provide any alternative major source of revenue to the ULBs and this has further weakened the ULBs' financial health.

4.3 User Charges

The benefit approach to local government finance implies that user charges are the first best instrument for meeting the cost of services as the services should be paid for by those who benefit from them. However, few ULBs in India utilise this important source of tax to cover even operation and maintenance costs of basic services.[5] Some municipalities adhere to 'piggybacking' of user charges on PT which itself has unidentified bases and suffer from problem of improper valuation. In practice, non-tax revenues from all ULBs in India contributed to a mere 0.18 per cent of the GDP. User charges, on an average, even failed to cover 50 per cent of the operation and maintenance cost of basic urban services in 2007–08 (HPEC Report, 2011). Even though JNNURM specifies levy of user charges with the objective of full cost recovery as one of the reform conditionalities for accessing the central fund, available information indicated that only eight and six cities in India achieved full cost recovery of operation and maintenance in water supply and solid waste management services, respectively. Narrow political compulsions, for example, fear of losing votes, restrain the local government from fully exploiting these forms of taxes and fees. Peoples' dissatisfactions with the municipal services induce them to oppose any imposition of user fees.

Two other important sources of non-tax revenue for ULBs, namely, license fees for shops and establishments and parking fees, have not been properly utilised. Regulations related to issuing license are often violated and this, in turn, provides local officials rent-seeking opportunities at the expense of the loss of local exchequer. Even the average parking fees in Indian cities is abysmally low at around ₹90 against the corresponding figure of ₹450–675 for cities in other developing countries. Thus, the underutilisation of many important sources of revenue is pervasive and the resultant loss of revenue, however small that may be, deepens the financial crisis of the ULBs.

4.4 Intergovernmental Transfers

ULBs in India, as in most other countries, suffer from inadequate own source revenue and, therefore, significantly depend on intergovernmental transfer for ensuring a national minimum standard of public services in particular and undertaking a comprehensive urban development plan in general. In fact, the

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13th Finance Commission data reveal a high dependence of the ULBs on grants from higher levels of government. In 2007–08, grants constituted almost 47 per cent of the total revenue of the ULBs in India. This dependency would undoubtedly be higher for small and medium cities. At present, the CFC provides grants to the states for panchayats and municipalities on the basis (a) common criteria, namely, population, area and distance from highest per capita income—reflecting the states' need for resources and (b) other criteria such as index of decentralisation, revenue effort, index of deprivation, index of devolution and Finance Commission grant utilisation index—reflecting states' effort to decentralisation. As significant departures from the practices of providing ad hoc grant to the ULBs by previous CFCs, the 13th CFC, apart from the provision of a general purpose grant, linked the grant for ULBs to the central revenue and also introduced the concept of performance-based grants.[6] The 14th CFC has recommended for ULBs a grant of ₹87,143.8 crores for the period 2015–20 for allocation to states on the basis of 2011 population data with weight of 90 per cent and area with weight of 10 per cent. This grant has two components—basic grant and performance grant with the corresponding shares of 80 per cent and 20 per cent, respectively. Importantly, the 14th CFC has recommended the discontinuation of use of indices of decentralisation for the purpose of transfer of resources to states.[7] Moreover, the Commission has made the availability of performance grant conditional on (a) the submission of audited annual account reflecting the ULBs' receipt and expenditure, (b) evidence of increase in own revenue of the ULBs and (c) publication of service-level benchmarks on urban basic services.

Although the 74th CAA mandates the constitution of the State Finance Commission (SFC), every five years, to review as well as recommend measures for improving financial health of the municipalities, some state governments have failed to constitute the SFC on time. Moreover, owing to socio-economic diversity and variations in the role of the local bodies among the states, the SFCs have failed to employ a uniform and acceptable methodology and provided state-specific recommendations. Reports of the SFCs have turned out to be unsatisfactory as they are based on unreliable financial data. CFCs, thus, have reported difficulty in relying on SFC reports to base their recommendations as envisaged by the Constitutional Act.[8] The state government has also been found to be disinterested in accepting and implementing the SFC recommendation (Finance Commission of India 2010). All these have resulted in inadequate and often discretionary state transfers that hardly correspond to the expenditure needs of the ULBs.

4.5 Jawaharlal Nehru National Urban Renewal Mission

JNNURM, India's flagship urban development programme conceived in 2005, represents the major specific purpose central transfer to ULBs in India. The programme makes resources available to ULBs for building urban infrastructure and links this with a set of reforms at the state and municipal level for improving urban governance. The state level reforms include: (a) implementations of provisions of the 74th CAA including setting up of district planning committees (DPCs) and metropolitan planning committees (MPCs); (b) introduction of community participation law; (c) enactment of public disclosure law; (d) repeal of the Urban Land Ceiling and Regulation Act; (e) reform of the Rent Control Law; and (f) rationalisation of stamp duty. City level reforms include: (a) reforms of the PT system to achieve the collection efficiency of at least 85 per cent; (b) levy of user charges with the objective of full cost recovery; (c) introduction of double-entry system of accounting in the ULBs; (d) preparation of a city development plan (CDP) and detailed project report (DPR); and (e) internal earmarking of fund for the provision of basic services to the urban poor. Further, optional reforms relate to (a) revision of by-laws; (b) simplification of procedural frameworks for conversion of agricultural land for non-agricultural purposes; (c) earmarking 20–25 per cent of developed land for economically weaker sections of population;

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(d) introduction of computerised process of land registration; (e) encouraging PPPs and (f) various other structural and administrative reforms. Under JNNURM, the central government, the state government and the ULBs share the cost of the project in a predetermined proportion depending on the size of the city.

By January 2014, the Mission had allocated ₹66,085 crores resulting in an overall commitment to an investment of ₹123,711 under the scheme—out of which 70 per cent of the funds were allocated for 65 mission cities, reflecting a clear bias against the non-mission cities. On an average, 70 per cent of the total funds have been released till January 2014 and only 40 per cent of the projects have been completed (Kundu 2014). The distribution of JNNURM has been found to be concentrated in comparatively stronger states and larger cities of these states. This is the outcome of reform conditionalities imposed by the central government for accessing funds under the Mission. Quite expectedly, the state and city governments with better administrative and financial capabilities have become successful in implementing the required reforms and thus have enjoyed access to the fund. As on July 2013, the implementation status of reform measures directly related to decentralisation and participatory urban governance has been really pathetic. As many as 12 states have not been able to transfer the functions of the 12th Schedule to the ULBs. At the city level, only about 30 per cent of the mission cities have been endowed with the city planning functions. Community participation law and public disclosure law have been implemented only in two-fifths of the mission cities. The creation of DPC and MPC has also remained a hypothetical myth. This has undoubtedly curtailed the role of ULBs in framing the local development plan and also reduced the scope of citizens' participation in urban governance. Among the ULB-level mandatory reforms, 85 per cent coverage for PT was achieved in only 40 cities. Only 31 cities became successful in touching 90 per cent collection efficiency for PT. Only one-third of the cities achieved 100 per cent cost recovery in water supply. The situation was even gloomier in the case of cost recovery for solid waste. Consequently, internal resource mobilisation capacities of most of the ULBs did not improve as it was expected and these bodies failed to raise matching contribution that resulted in the discontinuation of flow of central funds to them. Moreover, even in the cities that received JNNURM funds, less attention has been paid to provide basic services for all. Instead, commercially viable infrastructure projects have been given priority (Chattopadhyay & Tiwari 2013).

4.6 Other Innovative Sources

Investment requirement for urban infrastructure has far outweighed the available financial resources and this necessitates exploring the alternative sources of fund to finance urban infrastructure, particularly the long-term capital investment. Accordingly, the issuance of municipal bonds, pooled finance mechanisms and PPPs have become popular modes of financing urban infrastructure.

4.7 Municipal Bonds

Municipal bonds are debt obligations issued by cities to raise resources from capital markets to finance urban infrastructure. The advent of the Indo-United States Agency for International Development (USAID) collaborative financial institutions' reforms and expansion debt (FIRE-D) project in 1994 and initiatives of the FIRE-D programme (through provision of a 50 per cent fund under the housing guarantee programme for 30 years to finance long-term capital investments in urban infrastructure) facilitated the development of domestic capital market in India. In 1997, the Bangalore Municipal Corporation, backed by a state government guarantee, started the practice of municipal bond financing for urban infrastructure with ₹125 crore municipal bond issue. Ahmedabad Municipal Corporation's bond issue of

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₹100 crore in 1998 was the first significant move towards mobilising the private capital for urban infrastructure and that too without a state government guarantee. However, especially since the middle of the last decade, the municipal bond market has failed to keep the momentum of the initial promising start. The value of the municipal bond market was highest in 2005–06 with ₹3,000 million but then sharply declined to ₹300 million in 2007 and practically no issues have been made after 2010 (Banerjee, Gangopadhyay, Thampy & Wong 2013). Municipalities, having access to 'soft money' available for project financing through JNNURM, have relinquished the riskier mode of market borrowing (Sheikh & Asher 2012).[9] Importantly, large ULBs with a strong economic base have issued municipal bonds whereas smaller ULBs have remained outside the purview of this bond market.[10] In recent times, even the municipalities, for example, Nagpur and Indore with a successful record of fund raising, have faced difficulties in accessing the municipal bond market. The Government of India, through JNNURM, has assigned credit ratings to the 65 mission cities for encouraging them to access the capital market. About 55 per cent of them have found to be in the investment grade. However, as per their CDP, only one-third of them have intended to utilise the municipal bond market (Khan 2013).

Several structural and administrative problems continue to constrain the municipal bond market in India. Securities and Exchange Board of India (SEBI) guidelines make the rating of all debt instruments of more than 18 months' tenure mandatory. However, credit rating becomes extremely difficult as many ULBs do not maintain systematic information pertaining to legal and administrative framework, economic base of the service area, financial resources, extent of the state government's dependence, etc. and this misrepresents the real picture of the income and expenditure of these bodies. In many cases, myopic political compulsions compel local politicians to thwart any initiatives towards improving revenue collection through, for example, revision in PT, imposition of user fees, etc. All these result in the precarious financial health of the ULBs, having a deleterious impact on their capacity to access the capital market. Bond issuance by municipal authorities has also shown that projects have not been ready to absorb the funds mobilised. In the case of the Ahmedabad Municipal Corporation and Nashik Municipal Corporation, inadequate financial as well as physical planning and the delayed utilisation of funds led to a huge interest burden on the part of the corporations towards bondholders. Over-collateralisation is another common feature of municipal bond issuance in India. Often, the amount of revenue in the escrow account is more than sufficient to meet future payment obligations and thus might cloud the future borrowing prospects of the municipal bodies. Interestingly, there are no specific statutes in India that contemplate the insolvency of local bodies, leave alone govern the procedures of their insolvency. This would undoubtedly discourage the potential subscriber from buying municipal bonds (Chattopadhyay 2006).

4.8 Pooled Financing

Any successful bond issue depends on the financial strength of the ULBs and their ability to sustain long-term debt repayment. On both these aspects, small and medium ULBs are weak and so pooled financing has been used to improve their creditworthiness so that they can access capital market. The idea is that although individually these bodies have insufficient revenue and poor credit rating but pooled revenues of them are sufficient for acquiring investment grade rating and covering future debt obligations on a sustainable basis. Economies of scale arising out of pooling projects together help these ULBs to achieve a marketable size of the pooled bond issuance and also to access capital market at a lower rate. The Water and Sanitation Pooled Fund (WSPF) by the Tamil Nadu Urban Development Fund (TNUDF) and Greater Bangalore Water and Sanitation Project (GBWASP) by the Karnataka Urban Infrastructure Development and Finance Commission (KUIDFC) were the first attempts at pooled finance projects in India. Subsequently, in 2006, the Government of India approved the Pooled Finance Development Fund (PFDF)

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scheme to facilitate ULBs to access the capital and financial markets for investment in essential municipal infrastructure. State governments enjoy the discretion for operationalising PFDF through setting up of the State-Level Pooled Finance Entity (SPFE) to provide the institutional framework for pooled finance. SPFEs set up special purpose vehicles (SPVs, e.g., TNUDF in Tamil Nadu and KUIDFC in Karnataka) to make project decisions, channel funds, monitor projects and reform progress. Provisions related to escrow account, debt reserve and third-party guarantees are kept to safeguard the interest of the investors.[11]

Under PFDF, the Government of India has made provision of a sum of money, to be available as grants to the ULBs, for both credit enhancement and for covering two-thirds cost of project development, subject to the implementation of JNNURM-related reform measures at the state and municipal level. In spite of these efforts, the pooled financing mechanism has failed to generate positive interests of the ULBs and also of the investors. The experience of second WSPF bond issue of 2008 was disappointing as the bond was undersubscribed.[12] Despite the tax-free status, the instrument, with the coupon rate of 7.25 per cent, clearly lost ground in the financial market to other tax-exempted instruments like mutual fund and provident funds (Vaidya & Vaidya 2011).[13]

4.9 Public–Private Partnership

Since the late 1990s, private sector participation in the provision of urban infrastructure has been encouraged as that shares the financial burden of the public sector towards service provision and also infuses greater efficiency in the governance framework and, thereby, improves service delivery. The Ministry of Finance has set up a PPP cell that provides national legal frameworks for PPPs through model documents, guidelines, databases and toolkits, which are to be followed by the state and city governments. Some state governments, for example, Gujarat, Andhra Pradesh, Maharashtra and Karnataka, have passed Infrastructure Acts under which PPPs are included. However, confirmatory changes in the Municipal Acts have yet to take place in these states. PPPs have received further fillips with the introduction of JNNURM as the attendant reform conditionalities have made both the macro-environment as well as project-level micro-environment more congenial to such initiatives. However, PPPs in the urban sector in India are few in number and even fewer in urban social infrastructure (water supply, sanitation and SWM) (GoI 2012).

Private sector participations get operationalised through varieties of arrangements that include: service contracts under which the private sector receives compensation for providing service to people who cannot pay for such services; concession agreements for design, development and maintenance of 'public' infrastructure for which there is less scope of revenue generation; service arrangement with the possibility of full cost recovery and viability gap funding arrangement for non-remunerative services under which private players are provided with long-term debt to set up and develop infrastructure projects.

Importantly, the project outcomes have been mixed. Technically simple projects, with small gestation periods and lesser uncertainty (e.g., water supply distribution project in Hubli–Dharwad, Belagum and Gulbarga; the collection and transportation of solid waste in Delhi and Chennai) have become successful. On the other hand, projects with greater management and technical complexities that involve long gestation period, difficulties in estimating demand and assessing risks (e.g., water supply project in Tirupur; Coimbatore bypass project) have faced problems (Sahasranaman & Kapoor 2014). In particular, commercial non-viability and relatively smaller size of most of the urban infrastructure projects considerably reduce the scope of private sector participation. The unsatisfactory state of municipal finances and lack of capacity makes it really difficult for the ULBs to attract private players. Further, in recent times, projects that involve large-scale land acquisition are subjected to sociopolitical resistances from local groups. Moreover, the absence of strong regulation relating to minimum performance standard, penalties

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for defaulting on performance standard for private operators have made poor people vulnerable. There are some instances, for example, in the case of GBWSP, where poor people did not receive water even after paying the capital cost contribution (Ranganathan 2011). A major criticism of PPPs is that most of these projects are consultant driven and exclude citizen participation as neither people themselves nor their elected municipal representatives have got any chance to reflect their opinion. Acknowledging the near complete dependence of the majority of urban population on 'public' infrastructure and, therefore, the importance of peoples' participation, the 12th FYP of the government has emphasised on people public–private partnerships (PPPPs) along with a proper framework for regulating and monitoring of private sector performance (GoI 2012).

4.10 Role of the Development Finance Institutions

The institutional finance from government-owned development finance institutions (DFIs) for urban infrastructure is very limited in volume. This type of financial arrangement is characterised by 'directed credit regime' in which different financial institutions, for example, the Housing and Urban Development Corporation Limited (HUDCO), Life Insurance Corporation in India (LIC), etc. are mandated to invest in specific priority sectors including urban infrastructure projects. In addition, the high statutory liquidity ratio requirements for the banking sector also make funds available for priority purposes. Initially in 1989–90, when HUDCO opened the infrastructure finance window to provide financial assistance for the urban infrastructure projects at less than the market rate of interest, many state and city agencies and the small cities with less than one million population in particular accessed HUDCO loans. These 'subsidised' financial provisions resulted in poor cost recovery and widespread service inefficiencies accompanied with suboptimal utilisation of funds. In addition, the enactment of fiscal responsibility legislation has pressed the state governments to reduce and restrict their guarantee for municipal borrowing. All these virtually make both the ULBs and their infrastructure projects commercially unattractive to the DFIs. In fact, in recent times, HUDCO's lending to urban infrastructure has constituted only 20 per cent of its overall lending (Khan 2013).

5. Unpacking the Reform Options

Given that the responsibility of managing urban services has been decentralised to ULBs, the importance of availability of adequate resources is more than ever. However, financial resources from disparate sources fall far short of the total investment requirement for the urban areas. An important financing issue in India concerns the need to distinguish urban services from urban infrastructure. Various tax and non-tax revenue sources need to be explored for financing urban services whereas financing infrastructure (capital expenditures) requires large funding. Acknowledging such distinction, this section discusses the reform options and strategies available to bridge the urban fiscal gap within the prevailing fiscal federal framework in India.

5.1 Reframing Functional Domain of the ULBs

Reform should begin with the attempt to establish clearly the functional jurisdiction of ULBs as only after their functions are known could any decision be taken on how these could be financed. Although the 12th Schedule of the 74th CAA specifies the functions of the ULBs, large interstate variations exist

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as regards the assignment of municipal functions and expenditure responsibilities, particularly in respect of planning and redistribution-related functions. The functional domain also varies with the size of the ULBs as the capacity of large municipal corporations is different from those of municipalities and *nagar panchayats* and so are their financing needs. Moreover, the rapid growth of new census towns in 2011 and their significant contribution in urban growth[14] raises serious concerns as they are marked by the absence of a proper governance structure and insufficient urban infrastructure. Many of them prefer not to have a municipal status as that entails the discontinuation of government funding and various other concessions available for panchayats, which are more in number and much larger. Further, state-appointed development authorities and constitutionally mandated DPCs and MPCs tend to operate in an insular function and their lack of coordination results in fragmented decision-making structure that further weakens the municipalities.

Given the overlapping functional jurisdiction of multiple entities, two issues demand urgent attention and they are: (a) identifying the functions for which ULBs are solely responsible and (b) identifying the functions for which municipalities need to partner with other agencies and, in such cases, clear-cut division and synchronisation of planning, financing and implementing among the partnering agencies. Following the traditional framework of fiscal federalism,[15] Mohanty (2014) reframes the ULBs' functional domain in terms of (a) 'essentially municipal' function (urban planning including town planning, sanitation, conservancy and solid waste management, provision of urban amenities such as parks, street lightings, parking lots, regulation of land use and construction of building, registration of births and deaths, burials and burial grounds etc.); (b) 'agency' function (safeguarding the interest of the weaker section of the society, slum improvement and upgradation, urban poverty alleviation) and (c) 'shared' or 'concurrent' functions (planning for economic and social development, roads, water supply, fire services, environment protection). This alternative classification provides a useful starting point around which deliberations can take place for zeroing in on the functions with which ULBs can be entrusted with.

5.2 Strategising Resource Mobilisation

Given the revenue shortfalls of the ULBs in India, the major fiscal challenge is to identify the sources of additional revenue to cover such shortfalls. International experiences exhibit that own revenue of the municipalities and intergovernmental transfers cover more than 80 per cent of total funding requirement. The contribution of 'other innovative sources of financing' (debt financing, PPPs and land monetisation) in total urban funding varies from just 6 per cent in New York to 13 per cent in London to 18 per cent in Shanghai (Khan 2013). Thus, problems of revenue shortfalls can principally be addressed through an increase in own revenue of the ULBs or increase in the intergovernmental transfer and its restructuring or both. Revenue enhancement of the Indian ULBs can be realised through (a) increasing revenue effort from existing local taxes and (b) strengthening the revenue raising power of the ULBs by assigning them some broad-base revenue sources. The strong financial health of the ULBs then would make them attractive before the private investors and help them to explore the 'other innovative sources of financing'.

5.3 Enhancing Municipal Revenue from Existing Taxes

It is incontestable that ULBs in India, in general, have limited taxing instruments. For these instruments, municipalities should be given full fiscal autonomy so that they can set their own tax rate. Given the state government's control over municipal taxes, the state law of Madhya Pradesh deservers appreciation as it innovatively exercises 'control' in which ULBs require state approval only in the case of reduction in tax

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rate and this induces local politicians not to adopt any populist tax reduction policy that could undermine cities' revenue capacity. Nevertheless, the gross underutilisation of the available taxing instruments has considerably weakened the financial health of the ULBs. PT, in spite of being the mainstay of municipal revenue, is incompetently administered and there is substantial potential for increase in revenue from PT. Quite rightly, JNNURM puts in place 85 per cent collection rate for PT as one of the criteria to gain access to funds under the scheme. The PT system should be objective, simple to administer and easier for the taxpayers to comprehend. Reform initiatives should start with linking PT to their market values through transition from 'ARV' to 'unit area'[16] method (UAM) of tax determination under which properties are classified on the basis of parameters such as type of construction, category of use and location.[17] Another variant of UAM, capital value system (CVS), has been implemented in 57 *Nirmala Nagara* cities of Karnataka. CVS determines PT on the basis of value of land and building taking future use into account. 'Self-assessment' for filing up the tax return, as practiced by the JNNURM cities of Andhra Pradesh, Gujarat, Karnataka and Delhi, can also be adopted for other cities. Periodic evaluations of these rates, preferably every five years, are also important to keep pace with the changes in the general price level and the conditions of urban property market. Most of the Indian states' Municipal Acts include vacant land under the definition of property and so all states should authorise their municipalities to levy vacant land tax,[18] for example, at a rate of 0.2–0.5 per cent of present value of land, as adopted by Andhra Pradesh. Further, necessary steps should be taken to ensure general acceptability of this tax through public disclosure of tax calculation method. Ward committees and *area sabhas* (committees) should be utilised to generate peoples' awareness and to increase compliance in PT collection. State governments should help the ULBs, especially the smaller ones, to build their capacities to design, implement and enforce such tax regime. In some ULBs, rent control legislation eroded the tax base. One of the reform conditionalities for accessing the JNNURM fund is to repeal the rent control act and state governments should intervene to revoke this act. Introduction of the Geographic Information System (GIS)-based mapping system is the other important reform tool that can improve the PT collection by enabling the ULBs to have full records of properties so that tax can be levied on it. The tax payment system should be made easier through the utilisation of several new modes of tax payments, for example, electronic clearing system (ECS) online credit payment and so on. Most importantly, the state government should provide autonomy to the ULBs and empower them to levy, collect and appropriate the revenues from PT. All the government properties belonging to central government, state government and local body should be covered under the tax net. In recent times, the establishments of many commercial organisations and several developed and modern institutions in urban areas have opened up new opportunities to increase collection from this tax. Even a small percentage change in proceeds from this most buoyant source can significantly enhance municipal revenue collection. The Bruhat Bangalore Mahanagara Palike provides an optimistic picture as this municipal corporation reformed its PT system by revising the area-based values, introducing a self-assessment system and enabling online payment of the tax and all these initiatives resulted in increase in revenue collection form PT from ₹440 crore in 2007–08 to ₹1,210 crore in 2011–12.

States should empower all categories of ULBs to impose advertisement tax. The 14th CFC has recommended to bring newer forms of entertainment such as boat rides, cable television and Internet cafes under the entertainment tax net. Acknowledging the revenue potential of profession tax, the Commission has also recommended increase in ceiling from ₹2,000 to ₹12,500 per annum along with necessary constitutional amendment to increase the limits on the imposition of professions tax by states. Proceeds from other taxes such as motor vehicle tax and stamp duty, some of which are collected by the state governments, should be completely and/or in a significant proportion provided to the municipalities. For the states in which *octroi* has been abolished, the government should provide adequate alternative sources of revenue to the municipalities. Here, the Goods and Services Tax (GST), provided an agreement is reached

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between the Government of India and the state governments on GST, provides a buoyant option for the state governments who by sharing a small proportion of GST with the ULBs can significantly improve the latters' financial health. Rao and Bird (2014) estimate that 1 per cent levy on a conservative estimate of GST base of ₹16,000 billion, which is about 0.34 per cent of the GDP, could significantly augment municipal resources.

User charges are considered as an important tool to recover cost of services and to ensure economic efficiency by disciplining both the users and abusers of urban services. All the services, for example, water supply, which are measurable and for which consumers can be identified, should be charged on the basis of costs. A system of graded water charges, that is, low charges up to a certain level of consumption and progressively higher charges for subsequent higher use, might be acceptable to the people. An innovative cross-subsidy structure, from higher income groups and commercial users to lower income groups, can be used to meet the needs of poor people. Some other additional charges, for example, charges for new connection and transmission lines, as used in Kolkata and Mumbai, can be levied to supplement user charges. Many other states and municipalities levy different charges that need to be replicated at larger scale. The Hyderabad Municipal Corporation levies garbage collection charge on bulk garbage generators such as hotels, function halls and markets. Rajasthan imposes a small cess on domestic and commercial consumption of electricity to meet street light expenses. ULBs should also be encouraged to use 'polluters pay' and 'congesters pay'[19] charges as that would be convenient for both to increase revenue as well as to attenuate the problems of pollution and congestion. ULBs in India believe that people in general and the poorer people in particular do not have the capacity or willingness to pay. However, for one municipality in West Bengal, people paid user charges for garbage cleaning systems (Chattopadhyay 2012). This is indicative of the fact that people are quite willing to pay provided the quality of services delivered is commensurate with the fees charged. Municipalities might also concentrate on introducing technology- and incentive- based reforms as they are least politically contested and, yet, enhance the efficiency in collection of taxes and fees. The Kolkata Municipal Corporation has introduced a detailed accounting procedure using information technology to collect ward-wise expenditure information. This has resulted in multiple benefits in terms of increase in revenue through improved collection of PT, reduction in cost of information collection, reduction in delay in projects and duplication of service[20] (Banerjee et al. 2013).

ULBs can also utilise land as a financial instrument to augment their resources. Presently, the urban development authorities (UDAs) of major cities levy 'conversion charge', 'betterment charge', 'development charge' and 'impact fee'. In view of the skyrocketing land values, land-related charges and fees need an upward revision and the amount generated from such revision can be used to carry out the functions of city improvement. UDAs earn revenue by leasing or selling lands belonging to government authorities. The amount of revenue from land leasing and selling has recorded a substantial increase, for example, as in Ahmedabad and Kolkata, in recent years (Sridhar 2011). Efforts, then, should be made to systematically transfer the revenues accruing to UDAs to the municipalities.[21] Monetisation of land further frees up spaces required for building new urban amenities and housing for the poor. Despite land's attractiveness as a financial instrument, many Indian cities lack proper documentation of land holdings. Institutional fragmentation characterises the land-use planning. Although ULBs own large tracts of land, they lack the autonomy to lease land independently to increase their revenues. International experiences suggest that, for example, in Shanghai, the municipality generated significant revenue by leasing land to private investors to finance the initial phases of city regeneration (Ren et al. 2013). In conformity with the decentralisation initiatives, ULBs should be provided with authority over their land assets, especially for selling and leasing purposes.

Apart from these options, as Mohanty (2014) suggests, ULBs, particularly the larger ones, may adopt a generic financing strategy based on the principle of tax increment financing (TIF) to finance urban

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infrastructure. Planned development of cities leads to betterment of infrastructural situation which, in turn, contributes to increase in land value and tax base of those cities. TIF strategy allows the use of increased tax revenue for capital infrastructure by ensuring the creation of a 'ring fenced fund' in the ULBs. A variant of TIF strategy was successfully implemented in the case of Magarpatta City near Pune where the Magarpatta Town Development and Construction Company, consisting of local farmers who contributed land for the project, built a planned city with borrowed fund. This newly built city has contributed to the revenue of the Pune Municipal Corporation through a sizable PT increment.

Land pooling and readjustment (LPR) provides another innovative technique of financing land and infrastructure, especially in the smaller towns (Sahasranaman 2012). Under this method, smaller tracts of land can be pooled where ULBs can provide infrastructural facilities by using their own resources or borrowed fund. This would improve the value of the pooled land, a part of which can be used for public sale and the rest can be returned to the original landowners. The partial loss of landowners in terms of volume of land is offset by the increased value of land and, therefore, LPR can be utilised as an alternative in resolving the complexities of land acquisition. Proceeds from the public sale of land can be used for further infrastructural development.

5.4 Assigning New Sources of Revenue

Importantly, even full realisation of available revenue instruments would be insufficient to cover municipal revenue shortfall (Bandyopadhyay and Rao 2009). It is, therefore, imperative to look for new municipal revenue sources that have a broad base, high buoyancy and are relatively simple to administer. Not many taxes possess all the desirable properties. Based on the international experiences, Bahl (2012) argues for payroll tax especially for the formal sector employee residing mostly within the municipal jurisdiction and for whom such tax can be levied at their work place or as a surcharge on the income tax. However, this tax is unsuitable for workers in the informal sector and who live in areas different from their workplaces. Turnover tax is the other fiscal instrument that has a significant revenue potential. However, this tax is distortive in nature and causes significant inter-jurisdictional inefficiencies.

Moreover, Bahl (2012) proposes conferment of state government status to large cities in India as that would lead to their fiscal empowerment and come to their aid for overcoming service deficiencies. Large boundaries of the proposed metropolitan state would allow them to use broad base tax, for example, payroll tax, more efficiently. These entities can also access the state taxes and receive their share of the central–state value-added tax. Improvement in their financial health further makes them attractive to private investors. Appropriation of state structure would also solve the problem of inadequate and fragmented institutional capacity at the metropolitan level. However, given the federal structure and inter-party competition and rivalry in India, it is politically challenging to carry out such urban rescaling as political leaders are generally found to be reluctant to relinquish their power and control. Clearly, the conferment of statehood entails loss of significant revenue sources, for example, in terms of shared revenue and VAT, for the 'residual' state to the metropolitan state. The arrangement might also increase inter- and intrastate urban disparities.

5.5 Restructuring Intergovernmental Transfer

Financial grants from a higher to the municipal level significantly contribute to redress the problem of revenue shortfall. These grants need to be utilised to supplement and not to substitute the municipal resources. The ad hoc nature of intergovernmental fiscal transfer demands certain serious rethinking.

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State governments should timely constitute the SFCs, which should develop proper norms for estimating expenditure needs and make necessary recommendations for a transparent and predictable transfer to the ULBs. The SFCs seriously need proper administrative support and adequate resources for their smooth functioning. Following the policy direction of the 14th CFC and reforms under JNNURM, SFCs could link the grants to ULBs' performance in implementing a desired set of reforms. Most importantly, state governments should seriously consider the recommendations of the SFCs. Time synchronisation between constitution of SFCs, submission of their report and preparation of action taken report (ATR) by the state government is very crucial so that all the relevant documents are available to the CFC on timely basis. The 14th CFC further emphasises on the stability and predictability of the disbursement of the grant to the municipalities to enable them to plan and execute their functions efficiently.

The unsatisfactory performance of JNNURM in actualising most of the urban reforms places the mission's 'one size fit for all' approach under scanner. ULBs of the small and medium towns should be given longer time and greater assistance from higher level of governments to implement the reform measures. These cities require a special unconditional grant from the central and state government to meet their infrastructural demands. On a positive note, acknowledging such requirements, the HPEC (2011) has proposed a New Improved JNNURM (NIJNNURM) that would aim to link funds to a set of reforms that will be differentiated across different types of ULBs. Greater emphasis has been placed on capacity building of the ULBs, especially those of small and medium towns, so that they can undertake the reform measures in transparent and accountable way.

5.6 Exploring the Innovative Sources

Public funds alone shall not be adequate for meeting investment needs in urban infrastructures. ULBs need innovative financing such as market-based funds and PPPs. Even a modest contribution from these sources can be helpful in bridging the urban fiscal gap and also inspiring the ULBs to resort to these sources. The municipal bond market in India, although started with lot of positivism, is currently at its lowest phase. The majority of the PPP in urban infrastructure have also failed to match the expectations of the policymakers. Without the financial empowerment of municipalities, it is difficult to make them market-oriented and capable of mobilising resources from the capital market. The reform measures, as outlined above, could be helpful in ameliorating the financial health of the municipalities. A portion of the JNNURM fund, especially for the bigger cities, needs to be explicitly leveraged with commercial debt capital and, thereby, incentivise the development of municipal bond market. The government needs to rethink the interest cap of 8 per cent per annum on tax-free municipal and pooled bonds and may think of defining the cap on the basis of a broader benchmark, for example, average Prime Lending Rate of few large banks in the country, to make municipal bond an attractive financial instrument. It is also necessary to create a separate statute for municipal bankruptcy so as to safeguard as well as attract private investors. A system of grading of municipalities by developing certain urban indicators would be helpful for the ULBs to identify their strengths and weaknesses and infuse a sense of competitiveness among them. In this context, Seddon (2014) distinguishes creditworthiness from market worthiness and proposes a robust conceptualisation of market worthiness of municipalities consisting of three different, although interrelated, dimensions—revenue dynamics, quality of administration and information infrastructure and related indicators that provide a useful analytical framework for such grading system. Following the 14th CFC recommendation, utmost importance should be given to the collection and availability of detailed municipal data on a regular basis, preferably in a uniform accounting framework consistent with the accounting format and codification pattern suggested by the National Municipal

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Accounts Manual (NMAM) of the MoUD. The Commission has also incentivised the maintenance of proper financial data through linking of performance grant to maintenance of audited accounts.

This sort of financing arrangements further demand institutional strengthening of the municipalities and it is imperative to build technical, financial and legal expertise at all levels to handle the new instruments. Proper auditing of financial documents along with the implementation of a double-entry accrual-based accounting system and periodic disclosure of income and expenditure statement, cash flow statement would provide the potential investors the much-needed information to asses risk on regular basis. Banerjee et al. (2013) suggests the creation of an 'augmented version of SPV' to oversee both operation and finance of projects administered by the ULBs. SPVs could arrange for an escrow account, consisting of own source revenue and untied grant available with the municipalities along with future cash flows, to ensure return to the investors on a sustainable basis. Further, they could provide the much-needed technical expertise and monitor the projects till their completion and this performance aspect is really crucial as municipalities' failure to convert finance into high-quality urban infrastructure would preclude any further investment. HUDCO can also help the ULBs, especially the smaller ones, to access the capital market through providing guarantees on municipal debt, underwriting specific pooled bond issue and directly investing in lower rated municipal bond and thereby improving their creditworthiness.

Further, as a large section of urban poor depends on urban services provided by the government, it is necessary to formulate a robust regulatory framework for both economic regulation (including tariff regulation) and service regulation. The framework should be flexible enough to allow and incorporate citizens', especially the urban poor, priorities and to monitor progress of the project which, in turn, ensures the effectiveness of such projects.

6. The Way Forward

Cities in India are envisioned as engines of growth but they suffer from severe service shortages. The extent to which Indian cities succeed in meeting the challenges of providing urban infrastructure and amenities will determine the contribution that they would be able to make to the country's growth dynamics. However, it is evident that the financial requirements for managing urban amenities in India on the scale needed cannot be supported through current methods and institutional capacities. Quite contrary to the underlying spirit of fiscal decentralisation, devolution of municipal functions has not been followed by the devolution of finance and functionaries at the municipal level. Even the ULBs have underused the taxing power and instrument, *albeit* limited, that they have. Undervaluation of properties coupled with poor coverage and collection have severely damaged the revenue potential of PT. User charges are rarely levied to cover the cost of urban services. State governments, out of their fear of losing political power, have found to be, by and large, reluctant to increase both municipal taxing power as well as amount of shared taxes. Ad hoc transfers from the Finance Commission have failed to address the expenditure needs of the ULBs. Given such a dismal financial situation, rarely are the municipal projects perceived as commercially viable for which fund can be arranged through PPPs or accessing the capital market. Further, the ULBs find it really difficult to arrange their contribution in JNNURM-funded projects that resulted in the discontinuation of flow of central funds to them. In essence, financing urban infrastructure and services is and will be the most formidable challenge in the years to come.

ULBs in India urgently need an integrated policy and regulatory environment, in which they can enhance their capacities to generate resources from existing sources at their disposal and also can make better utilisation of innovative sources of infrastructure financing. Sincere efforts must be in place to emphasise on innovative tax rate setting and efficient collection of PT, replacement of *octroi* with

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suitable financial arrangements, tariff setting power of the municipalities under certain special circumstances, use of vacant land commercially for raising additional revenue and so on for financial empowerment of municipalities without which it would be difficult to make them market-oriented and capable of mobilising resources from the capital market. State governments need to bring in necessary legislations for facilitating such efforts. The recommendations of the SFCs should be implemented by state governments to improve the financial health of municipal bodies. A standardised budgeting framework should be followed to clearly identify and plan revenue and expenditure at the municipal level. A proper accounting system via switch over to accrual-based accounting system should be made mandatory for all the municipalities. It is also indeed crucial to create and maintain a centralised database of municipal finance of all the ULBs through financial process reforms and e-governance tools. Because of the interconnectedness between financial health of municipalities and the aspects of municipal management as a whole in reshaping each other, a narrow focus on the financial management alone can result in an inadequate and lopsided view of the issues at hand. Active citizen participation in the monitoring and evaluation of municipal functions and expenditures, through, for example, regular incidence of ward committee meetings, complete disclosure of financial information and social audit and citizens' report card, would be useful to establish financial and social accountability and operational transparency of the municipalities. These initiatives are expected not only to enhance the capacities of ULBs to improve revenue mobilisation, to access and leverage public as well as private funds for development of urban sector on a sustainable basis but also to help in creating an environment in which municipalities can play their role more effectively and ensure better service delivery.

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Notes

1. The Twelfth Schedule of the 74th CAA specifies 18 functions to be devolved from state governments to ULBs in India.
2. The Finance Commissions' data on urban finances are based on some surveys, often taken from unscientific samples of municipalities. The Fourteenth Finance Commission specified a two-stage sampling technique (selecting 30 per cent of the district of the 26 states in the first stage and then selecting all municipal corporations, 30 per cent of the municipalities and 15 per cent of the *nagar panchayats* in the second stage using probability proportional to size method of sampling and 2001 population as the auxiliary variable) for the collection of municipal finance data by the respective state governments. Even then the Commission noted significant state-wise variations in the collected data which rendered them unusable for analysis of municipal finance.
3. Two states in India, namely, Haryana and Rajasthan, arbitrarily abolished the property tax in all cities of the states without consulting the ULBs and it significantly reduced the fiscal strength of the ULBs (HPEC 2011).
4. Andhra Pradesh, Karnataka and West Bengal share this tax with their ULBs.
5. Mohanty et al. (2007) found that only two out of their sample of 25 municipalities were able to cover more than 75 per cent of cost of providing services through fees. Ten of them could recover less than 10 per cent of the cost while six others experienced cost recovery of around 10–20 per cent.
6. This makes the receipt of grant conditional to state governments' fulfilment of nine conditions related to proper budgeting, accounting and audit practices at the local body level; a system of better administration at local body

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level; an electronic transfer system to local bodies at the state level; compulsory levy of property tax and constitution of a state-level property tax board; and defining of service standards by the state government (NIUA 2011).

7. Given the constitutional provision, the CFC is unable to determine the devolution of power and functions to the local bodies. Moreover, the prevalence of state-wise diversity in the institutional and financial aspects of assignment of functions to municipalities and the lack of reliable information complicates the construction of any optimal model of decentralization and comparison of the same to actual level of decentralization (The Fourteenth Finance Commission Report 2015).
8. In fact, the CFCs are in favour of constitutional amendment either to delete the requirement for the Commission to base its recommendations on SFC reports or to require it to recommend merely keeping in view the SFC reports but not based on them (The Fourteenth Central Finance commission Report 2015).
9. In 2007–08, two years after the introduction of JNNURM, ULBs incurred a capital expenditure of ₹180 billion, of which only 3 per cent was in the form of borrowing (Parikh 2011).
10. In 2012–13, out of total borrowing of ₹920 crores, municipal corporations borrowed ₹854 crores. Moreover, municipal corporations of Maharashtra and Madhya Pradesh turned out to be significant borrowers with the corresponding amount of ₹548 crores (The Fourteenth Finance Commission Report 2015).
11. For example, in the case of WSPF, credit enhancement was provided through the escrow of property tax and other collections, a bond service fund provided by the Government of Tamil Nadu and a United States Agency for International Development (USAID) guarantee of the 50 per cent of principal amount and access to SFC devolution to the participating ULBs.
12. The first trench of 45 crore rupees worth of bond found subscribers worth only 6 crore rupees (Vaidya et al. 2011).
13. In India, there are no interest restrictions on the issue of taxable bonds in the market. By contrast, the government mandates an interest rate cap of 8 per cent on tax free municipal and pooled bond.
14. According to the 2011 census, the number of census towns in India is 3,894 and 2,352 have been added in the last decade. Between 2001 and 2011, almost 30 per cent of the urban growth in India is due to reclassification of rural areas into census towns.
15. Musgrave (1959), for analytical purposes, distinguishes among three categories of fiscal functions, namely, stabilization function, redistribution function and allocation function. At the most general level, the traditional theory of fiscal federalism contends that 'the central government should have the basic responsibility for the macroeconomic stabilization function and for income redistribution in the form of assistance to the poor'. Local governments, with very limited means for traditional macroeconomic control, are vulnerable to severe macroeconomic fluctuations and, so, the stabilization function can be achieved through national fiscal and monetary policies. Mobility of economic units can create problems in the case of differential local redistribution programme, for example, an aggressive local programme for support of low-income households is likely to induce poor individuals eligible for benefits and, on the other hand, encourage wealthy residents to move out of the jurisdiction. A limited resource base of local authorities and their frail administrative capacities, further, exacerbates the problem. On the other hand, local governments, being close to the people and therefore having greater information regarding consumer's preferences, are in the best position to assume the responsibilities of allocation function.
16. The Patna Municipal Corporation introduced area-based assessment of property tax in 1992–93. Subsequently, this model was adopted by many other municipalities, for example, Bangalore, Ahmedabad, etc. and this resulted substantial increase in their revenues from property tax.
17. The unit area method practically averages the tax rate on the basis of these parameters and, so, turns out to be regressive for commercial properties that tend to heterogeneous in nature.
18. Although not very common in India except two states, municipalities of many Latin American Countries levy VLT at a rate of up to 3 per cent of the capital value of land.
19. In cities such as New York and London, fees are imposed on vehicles entering the city congestion zone within a specified time and also parking fees are quite high. The imposition of such charges decongests the city and generates revenue for city corporations.

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20. Earlier, the lack of detailed expenditure made it easier to misutilise municipal funds, for example, repairing the same road in consecutive years.
21. For example, the Jaipur Development Authority (JDA) shares 15 per cent of its revenue from land leasing and sales to Jaipur City government. The Bangalore Development Authority transfers funds to the city corporation on an *ad hoc* basis (Sridhar 2011).

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