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Are Indian Cities Generating Sufficient Revenues? The Case of Bengaluru

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ARE INDIAN CITIES GENERATING SUFFICIENT REVENUES? THE CASE OF BENGALURU

Sukanya Bhaumik* **and Kala S Sridhar****

Abstract

This paper estimates the revenue capacities for Bengaluru, based on the city's economy. It attempts to understand factors that affect the citizens' willingness to pay taxes and participate in governance through a survey-based approach. The paper finds that Bengaluru's revenue capacity from own sources was six times higher than its current revenue in 2018-19. In the citizen surveys conducted, it was reported that 70 per cent of the respondent households were willing to pay 5-10 per cent higher in property taxes, if their recommended issue was resolved on a priority basis. In the expert interviews conducted, it was pointed out that the main impediments towards willingness to pay were the lack of transparency in use of funds, inaction against non-payers, and incorrect assessment of properties to ensure adequate property tax collection.

Introduction

Indian municipalities are amongst the weakest in the world in terms of access to resources, revenue raising ability and financial autonomy. The precarious state of municipal finance in India is worrying because cities drive growth and productive employment and also generate public finances for socio-economic development. In 2020, urban areas with 34 per cent of the population contributed to 75 per cent of India's GDP (World Bank, 2020).

Over the next two decades, cities will create 70 per cent of all new jobs in India. They will account for 80-85 per cent of India's tax revenue (Mohanty, 2016). However, cities will not be able to perform their fundamental role as engines of economic growth and structural transformation unless they are firmly in position to meet the 'backlog', 'current' and 'growth' needs of urbanisation. For this, the strengthening of municipal finances in Indian cities is of utmost priority.

At its current state, the municipal revenue in Indian cities is grossly inadequate to meet its mandated functions. Infact, India is probably the only country in the world where the power of urban local bodies (ULBs) to levy taxes has dwindled over the years, eroding their autonomy. Indian municipalities suffer from inadequate 'own revenues', making them dependent on the state government for day-to-day

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civic administration (Bhutani, 2018). As discussed above, India is urbanising at a rapid rate and to meet the growing need for infrastructure, there is an urgent need for cities to raise their revenues to meet their revenue potential /capacities.

Before we delve into understanding 'revenue capacities', we will briefly discuss the importance of devolving of 'function', 'fund' and 'functionaries' (FFF) to the local bodies for efficient decentralisation. For proper functioning of local governments and effective decentralisation, national and provincial governments need to devolve functions, dispense revenue handles to generate funds and delegate functionaries to the local governments (Alok, V. N.,2009).

In that aspect, Article 243W and the 12th Schedule has devolved 18 obligatory functions[i] to Indian urban local bodies. However, it is less specific about the funds and functionaries to execute the same (Mohanty, P. K., Misra, B. M., Goyal, R., &Jeromi, P. D., 2007).

Hence for Indian cities, current 'municipal revenue' is far from sufficient to execute the designated municipal functions and also far less thanthe revenue potential (Vaidya, C., 2009). Therefore, there is a need for fund-function mapping to ensure that each function performed is backed by a corresponding financing source. For this, empowering cities to reach their revenue capacities through maximising their own sources of revenue (taxes and non-taxes) is strongly recommended (Alok, V. N., 2009).

Thus, not only is the current revenue income of Indian ULBs low, it is also much less than its revenue capacity (given its current revenue handles). Revenue capacities are understood as what a municipality is capable of raising as opposed to what it is actually raising. The Economic Survey (2017) pointed out that Indian ULBs don't realise even a fraction of their income from the assigned sources of revenue. The report cited that the cities of Bengaluru and Jaipur are collecting a meager 5 to 20 per cent of the potential income from property taxes.

Hence, for Indian cities to overcome their fiscal problems, it would be the foremost priority for them to enhance their revenue capacities. This paper attempts to estimate the revenue capacity for the city of Bengaluru, based on the city's economy. It also attempts to understand factors that affect the citizens' willingness to pay taxes and their willingness to participate in governance processes through a survey-based approach. While fiscal health refers to the difference between the revenue capacities of a city and its expenditure needs (the focus of Bhaumik (2020)), we focus on revenue capacities in this paper. Consistent fiscal health, i.e., fiscal health over a long time, leads to fiscal sustainability. This naturally leads to the question of how one measures fiscal health in practice. While expenditure needs are reflected in the city's budget (their topography, (in) efficiency of delivering services, their institutional arrangements and citizen preferences), the fiscal health in practice may be measured as the performance of actual revenues, and how they measure up to the city's revenue potential. This makes the paper important.

This paper is organised as follows: First there is a section on municipal finances in Indian cities in general, followed by a literature review which briefly outlines the existing studies, highlighting their gaps. Then a section on theory provides the necessary frameworks. Then the methodology and data sources are described, following which the results from the revenue capacity analyses are presented, along with those from the limited primary survey of citizens. A final section concludes with the main findings and contributions of the paper.

Literature Review

Given the poor state of Indian municipal finances, in this section we make an attempt to summarise relevant studies on the concept of fiscal federalism, fiscal health and revenue capacities of cities (the focus of this paper) in the international and Indian context and analyse the factors that affect the same.

Oates (1999) attempts to provide a comprehensive analysis of the concept of fiscal federalism by discussing the traditional theories: the assignment of functions to levels of government, the welfare gains from fiscal decentralisation, the use of fiscal instruments to assess the current trends in fiscal federalism across nations. The research points out that the first half of the twentieth century was characterised by a strong trend toward increased fiscal centralisation, while the second half of the twentieth century saw the extent of centralisation in industrialised countries reach its peak, with a minor degree of increased devolution of public sector activity.

Oates (1999) points out that currently, there seems to be a growing complexity and specialisation in the vertical structure of the public sector. Recent decades have seen the creation of special districts to provide particular public services and the formation of metropolitan area governments to bring centre cities and their suburbs into a single jurisdiction (again for purposes of addressing specific needs such as transportation and housing).

Most municipalities around the world are struggling to increase revenues while constrained by structural budget shortfalls that threaten service delivery and quality. The 'own source revenue' of ULBs (such as: service fees, fines, property taxes and rents from buildings and properties) are far from optimised. The ULBs are often unaware of how to get more from existing sources and lack the resources and power to mount efforts towards optimising revenues. In addition, local governments need to maintain a sensitive balance between raising taxes and fees and maintaining public support (UN-Habitat, 2015).

Bird (2012) discusses several distinct aspects of measuring and evaluating the fiscal health of cities, which include: initial conditions, processes, and institutional structures. All these factors need to be taken into account when interpreting fiscal indicators. In order to make an assessment of the fiscal health of cities, various factors thought to affect the capacity (and perhaps willingness) of a city to respond to particular types of shocks and the establishment of meaningful links between structures and processes need to be considered. The paper mentions that the development of fiscal health indicators and interpreting the results need to be done cautiously. The paper points out that even the best-designed urban fiscal system for any particular context is unlikely to function well unless it has both adequate political support (including resources) from the top and a good management team in place. Assessing how well the system is doing requires both a systematic analytical approach and detailed local knowledge. There are few shortcuts to success in the never-ending task of improving public policy.

Studies show that the current sources of revenue available to municipalities are highly insufficient to perform all their prescribed functions. Revenue capacities of municipalities differ based on the size of the population, existing tax rates/user charges and taxpaying capacities of the citizens. (Peterson &Annez, 2007).

The foundation for any measure of revenue-raising capacity is the economic base of each local government. The actual capacity to raise revenue depends on the ability of local governments to have access to various tax and revenue instruments. The most frequently used of the approaches found in the literature for measuring the revenue-raising capacity of local governments is to calculate the maximum amount of revenue each local government could raise if it imposed a set of "standard" tax rates on a "standard" set of tax bases (Ladd and Yinger,1989).

It is believed that political, administrative and fiscal decentralisation can strengthen democratic representative institutions. Thus, enhancing overall revenue capacities and increasing the efficiency of the public sector lead to improved social and economic welfare for cities that implement it. At the same time, there is general agreement among experts in decentralisation that the associated increased accountability can only be assured when sub-national governments have an adequate level of fiscal autonomy and discretion in raising their own revenues (Chernick, H., Langley, A. and Reschovsky, A., 2011).

Bahl and Linn (1992) argue that decentralisation can increase local tax revenue when a country's per capita income level is high so that taxes can be fully exploited without problems, compared to countries with low per capita income levels. The paper discusses the advantages and disadvantages to fiscal decentralisation and how public policy and external events affect the fiscal behaviour of local governments in developing countries. Citing the example of how different metropolitan cities are organised (jurisdiction fragmentation, functional fragmentation and metropolitan wide government) such as Sao Paulo, Mexico City, Johannesburg and Manila. The paper advocates using property taxes (and user charges) for local governments to fulfill their expenditure responsibilities that have limited spillover benefits such as local roads, parks, fire protection, primary schooling etc.

Most studies of urban finance in India consider good reforms that might be politically possible, and that might lie within the present legal framework (Rao and Bird, 2011: Mohanty, et. al., 2007; High Powered Committee, 2011). Bahl (2012) proposes that the largest metropolitan cities in India be given state government status. The paper discusses the factors driving the budgetary needs that will face big cities in the next twenty years and then turn to a review of the options for covering the growing resource gap that will emerge. The reform choices include: giving urban local governments' access to more revenue raising powers, increasing the rate of intergovernmental transfers from both the central and the state governments and giving state government status to the largest metropolitan cities. The paper points out that revenues do not match the expenditure needs at any level of Indian government, and a particularly critical problem has emerged in the case of large cities where infrastructure is inadequate and promises to grow more so with the expected high rates of migration. In recent years, the central government has recognised the urban government finance problem with programmatic assistance and policy advice, but state governments have been slow to follow this lead. The implementation of a comprehensive metropolitan fiscal strategy is a possibility for India, but it would be politically difficult and would involve some costs that might be unacceptable on social as well as economic grounds. The paper concludes that such a strategy would make the Indian metropolitan cities more financially self-sufficient, and giving them more control over their budgets.

Smoke (2000) points out that the economic system in developing countries during the 1980s focused largely on increasing the role of the market and improving the environment in which it operates. However, in the last two decades, there has been a widespread attempt to redefine the role of the public sector in developing countries and to improve its performance. This paper examines the origins, conceptual foundations and practice of fiscal decentralisation in developing countries. First, it considers why fiscal centralisation has been so prominent historically in developing countries, and why this trend has been reversing. Second, it summarises conventional fiscal decentralisation theory and considers its relevance for developing countries. The paper concludes with some observations on how to think about designing more appropriate and effective fiscal decentralisation in developing countries. As economic and political pressures for fiscal decentralisation escalate and forces driving democratisation develop, many countries will feel increasing pressure to decentralise. In spite of this growing interest and support, fiscal reform of local government is likely to be a slow and painful process because serious constraints on decentralisation are not going to disappear suddenly, and some standard analytical tools may have limited applicability.

On average, local governments in developing countries raise property taxes that are equivalent to only about 0.6 per cent of GDP. However, it has been observed that there is an apparent willingness of the central government in these countries to depart with this tax to the benefit of sub-national governments. Overall, it has been seen that property tax is not used more intensively as a source of financing for public services in developing and transition countries, indicating the huge unmet revenue capacities (Bahl, R. W., & Vazquez, J. M., 2008).

In Indian cities, property taxation generates a high level of political opposition that is disproportionate to its yields, which is one of the main barriers towards enhancing revenue capacities. The productivity and performance of property taxes in India as a source of revenue has been poor and it has not been used optimally as an instrument of financing municipal services (Mathur, et al., 2009).

Overall, Indian cities are plagued with massive urban governance challenges: infrastructural deficiencies highly controlled and regulated land and property markets, and limited financial resources of local governments, inadequate managerial, institutional and technical capacities of local governments.

Though enhancing revenue capacities and attaining fiscal health of cities should be made the topmost priority, addressing all other governance issues would also be mandatory to ensure a sustainable future (Nandi, S., & Gamkhar, S. (2013).

In municipalities across the world, property tax is the main source of revenue (Slack, E. 2017). In New York, income from property taxes accounted for 44 per cent of all its tax in 2018-19 (CBC, 2019). In Sao Paulo, urban property taxes (IPTU) accounted for 34 per cent of revenue income in 2011-12 (Afonso 2012). Similarly in Toronto, income from property taxes accounted for 33 per cent of local government revenue (City Charter Toronto, 2019).

Bahl and Martinez-Vasquez (2007) reported that despite the popularity of the property tax as the most important source of revenue for local governments, governments in emerging and transitional countries, on average, raise property tax revenues to only about 0.6 per cent of gross domestic product (GDP). Meanwhile, in the case of Canada and the United States, property tax revenues reach up to 3–4 per cent of GDP.

India's erstwhile Planning Commission (2011) highlights that India is heading towards 40 per cent urbanisation by 2030, with 70 per cent contribution to the country's GDP. This unprecedented growth will lead to an increasing demand for public services, new public infrastructure and the stagnation or even decrease in municipal revenues due to the current socio- political, administrative, or technological shortcomings of the local governments (McKinsey Global Institute 2010).Thus, there is a need for sustainable urban finances. There is a close relationship between the building of strong local financial systems and infrastructure development. For instance, the estimated urban investment required for the 20-year period from 2012– 2013 to 2031–2032, as projected by the government-appointed High Powered Expert Committee (HPEC) on urban infrastructure, is 39.2 lakh crore (Vishal, R., Sridhar, K. S., & Manasi, S., 2021).

In India, as in many countries, property tax is a major fiscal instrument available to urban local bodies for raising their own revenues. In addition, cities in India generally rely on the devolution of resources and grants from state governments (Mohanty, 2007; Singh & Singh, 2015). A report on the finances of metropolitan cities in India by ICRIER (2019) found that the own revenue as per cent of municipal revenues declined from 67.3 per cent in 2012–2013 to 51.6 per cent in 2017–2018.

The Economic Survey of the Government of India for 2016-17 points out that the per capita own revenue of large cities is approximately 3 per cent of per capita urban income. Oommen (2006) describes that the growth rate of per capita taxes of cities in Gujarat, Karnataka, Haryana, Maharashtra and Rajasthan is negative. The ineffectiveness of State Finance Commissions as a constitutional body has had an impact on the tardy devolution of funds to cities. The paper emphasises the need for allocation of responsibilities (functions) and a corresponding transfer of resources (funds) for the efficient functioning of the third-tier government.

The Planning Commission (2011) strongly recommends the development of a financing framework to increase the own source of revenue of cities towards systemic changes in how cities operate and function in India. The study by Bhattacharyya and Bandyopadhyay (2012), reports that the devolution of funds to cities has not been adequately achieved. The current revenues do not always match current expenditures, thus leading to a fiscal deficit in most cities.

Mohanty et al. (2007) found that on average for the period 1999-2000 to 2003-04, actual spending in 30 large municipal corporations in India was only about 24 per cent (under-spending from the normative standards) of the requirements established by the Zakaria Committee Report of 1963, which established norms and standards for the ULBs. The extent of 'under spending' on basic services is very large. It has been observed that most cities were spending only 25 per cent of the normative standards set in 1963. The cities of Pune, Nagpur and Nashik were spending 31.6 per cent, 30.8 per cent and 35.5 per cent of the standard requirement. Meanwhile, the overall spending of the Patna Municipal Corporation was abysmally low at only 5.6 per cent of the normative requirement.

The Economic Survey of India 2016-17 points out that the revenue capacity of Bengaluru from property taxes alone is at least four to seven times of its current property tax revenue. The reason for the vast unmet potential income from property taxes point towards lack of measures such as enhancing property tax coverage, periodic property re-evaluation, reduction in exemptions and concessions, improving billing processes, better payment gateways and increasing stringency in enforcement. Also, the need for adopting geographic information system (GIS) technology in estimating the potential property tax base and encouraging competition among cities (ORF, 2020).

Vishal et al (2021) studied the determinants of own source revenues in Karnataka's cities and estimated the revenue capacities of these selected cities, considering various revenue sources important in the Indian context as well as internationally (e.g., property taxes and user charges). The paper finds that increasing revenue compliance from non-paying and un-assessed properties and taxation of government properties of a commercial nature increases the property tax base for the cities. It recommends increasing the values of properties, in accordance with market values in an economic sense, in a gradual manner, to ensure attaining revenue capacities.

So we find the literature points towards the need to map funds to functions in cities for effective and meaningful decentralisation. It also acknowledges that most cities the world over are struggling to meet their financial requirement to execute their functional responsibilities. Cities are generating far less than what is required to meet their functional domain.

However, based on this brief survey, we understand that there is a dearth of analysis on the impact that a city's economic base has on the growth and stability of its revenue. Local government's economic base is the aggregate of all public enterprises and private firms located within the city's borders from which revenue (property, sales, or other) is directly or indirectly generated. Public organisations and private businesses serve many functions that support the economic prosperity of a local government such as providing income through employment, improving capital accumulation by constructing buildings, and generating economic activity by producing and selling goods and services (Porter, M., 2015).

Some of these activities within the municipality's revenue base are directly taxed and contribute to the revenue income of the city government. However, others like the service industries are not subject to taxation or other local charges and fees but can still improve a city's fiscal health by increasing employment opportunities, (direct as well as indirect employment) or support a key local industry as an intermediary. Growth in the economic base normally produces more jobs, higher personal income, greater consumption, and more property wealth and thus higher income for the local government (Overton, 2016).

A majority of the urban finance issues in Indian cities can be attributed to the prevailing low equilibrium trap of Indian cities. The poor quality of service delivery in cities leads to the citizen's unwillingness to pay, leading to poor tax collection and thus perpetuating the local government's inability to spend on services (Baloch & Khan, 2019).

Local governmental performance through efficient service delivery is an integral part of a city's prosperity. Correspondingly, advancements in government depend on citizen recognition of performance gains and demonstrated willingness to pay for services. In other words, there is continuity between citizen assessments of government performance and willingness to pay for services(Glaser, M. A., & Hildreth, W. B.,1999).

Glaser, M. A., & Hildreth, W. B.(1999) examines the connection between citizens' perceptions of performance and willingness to pay as a framework for understanding citizen- government relations. The paper finds a strong and consistent relationship between performance assessments and willingness to pay for "good government." Citizens who are satisfied with the performance of local government are also reported to have a higher willingness to pay for services.

Asim et. al (2020) examines how public goods delivery affects property tax assessment and revenue generation and finds that poor delivery of facilities and services affects revenue generation. It points out that taxpayers are very observant; if there are no commensurate provisions of facilities and services, they avoid paying the property tax because they believe that the revenue generated is not effectively utilised.

Summarising, one finds that revenues have been discussed in some detail for Indian cities; however, there is no research that specifically examines the factors that impact the revenue capacities of cities. This paper wants to contribute to the understanding of how the economy of the city impacts its revenue capacity. This paper estimates the revenue capacity for Bengaluru based on the city's economy size and growth. Also, there is an absolute dearth of research on what factors impact a citizen's willingness to pay for services in the Indian context. However, understanding these factors is important for local governments as it will help identify the main roadblocks in attaining their revenue capacities.

This paper thus estimates the revenue capacities for Bengaluru based on the city's economy size and analyses the factors that impact the willingness to pay for services. Estimating revenue capacities helps us understand the gap between the city government's current income and what it is capable of generating, given its current resources, giving the city government an aspiration road map. Finally, the paper attempts to understand the factors that affect a citizen's willingness to pay local taxes and fees in Bengaluru. Understanding these factors will help the local government consider the main roadblocks when attempting to attain its revenue capacities. Table 1below summarises the contributions of this paper.

Table 1: Contributions of the paper

Themes covered in Previous Studies on Revenue Capacities for Indian cities	**Contributions of this Research**
Revenue sources for cities(Mohanty et al 2007)	Impact of city economy on city government's revenue capacities (Indian context)
Revenue potential from user charges, property taxes (Mathur 2009)	Analysis of factors that impact the willingness to pay among citizens and RWAs for Bengaluru and Analysis of Municipal Finance experts assessment on barriers to pay for services

Theoretical Framework

The revenue raising capacity of a local government refers to the maximum amount of revenue a government can raise at a standard (often average) tax rate, or set of tax rates when there is more than one tax instrument. Generally, the revenue raising capacity of a local government is not fully realised as a result of which the revenues actually raised are far below those measured by the capacity (Sridhar & Reddy, 2010).

The 'revenue raising capacity' of a local government differs from the actual revenues raised by a local government. Throughout the world, it has been found that cities are underperforming in terms of realising their maximum revenue potential. Indian cities are no exception, as a result of which we find that most of the local governments are heavily dependent on the transfers in the form of plan and non-plan grants from higher levels of government (Bandyopadhyay & Rao, 2009).

A city's economic base is the foundation from which its revenue is ultimately generated—it is the driver of local prosperity. It is the sum total of the economic resources that produces wealth for residents and businesses, and ultimately generates revenue for the local government (Hendricks and Crawford 2014; Overton 2016; Peterson 1981).

Conceptually, a municipality's economic base is distinct from its revenue base. The economic base of a city encompasses all economic (income generating) activity within the geographic boundary of the city, while the revenue base is a subset of the economic activities which are subject to taxation or other charges and fees. Ideally, the revenue structure of a city should be designed so that increases or decreases in a city's economic base should closely lead to increases or decreases in its revenue (Pagano and 2010; Tannenwald 2004).

Having defined a city's revenue capacity, the reasons for poor revenue income and thus huge unmet revenue capacities (revenue potential), compared with the economic base of Indian cities can be broadly attributed to the following four factors:

1. Systemic Inadequacies: Indian cities face acute systemic challenges, such as: lack of professional cadres, absence of robust human resources, poor financial management, weak public accountability frameworks, high administration costs, corruption and lack of political will (at the local level). State governments control municipal governments' authority to levy taxes and borrow from other sources. They dictate terms with respect to municipal tax rates, exemptions and fiscal transfers. In many cases, the municipal governments need permission from the state government to make fiscal decisions, enhance tax rates or include new fees or charges. The huge dependence on fiscal transfers in Indian cities, which represents approximately 55 per cent (average) of municipal revenues, has disincentivised municipal bodies' efforts towards mobilising higher own revenues (Mohanty, 2016) (Mohanty, et al., 2007)

2. Poor Assessment of Tax Base: Property tax which is the only lucrative tax source for local governments, in most cases is non buoyant. Properties are valued based on rental value or through assessment methods that are far below their actual capital or market transactional value. The Economic Survey of 2016-17 indicated that Bengaluru and Jaipur were only raising between 5 to 20 per cent of their revenue potential from property taxes. It is also estimated that only 63 per cent of assessed properties and 56 per cent of the universe of properties in Indian cities were paying property tax (Mohanty, P. K., 2014). Further, as against the properties actually assessed, collection efficiency was as low as 37 per cent (13th Finance Commission, 2009).

3. Low Rates and Charges: Tax rates in Indian cities are usually the lowest in the world, the rates of fines and fees are obsolete and the process of any enhancement is cumbersome in many cases. The autonomy of municipal governments in formulating tax policy or designing the system is severely restricted. They are at best allowed to fix the tax rates within a certain range and often in designing collection strategies (Mathur et al. 2009).

4. Unwillingness to Pay among Citizens: One reason for cities being unable to meet their revenue potential is the poor collection efficiency of taxes and non-tax income streams. This is due to the unwillingness of the citizens to pay.In many cases, Indian local bodies are stuck in a low equilibrium trap, poor quality of services leads to unwillingness to pay which further leads to a poor collection efficiency which perpetuates the revenue income of the ULBs (Joshi, 2015).

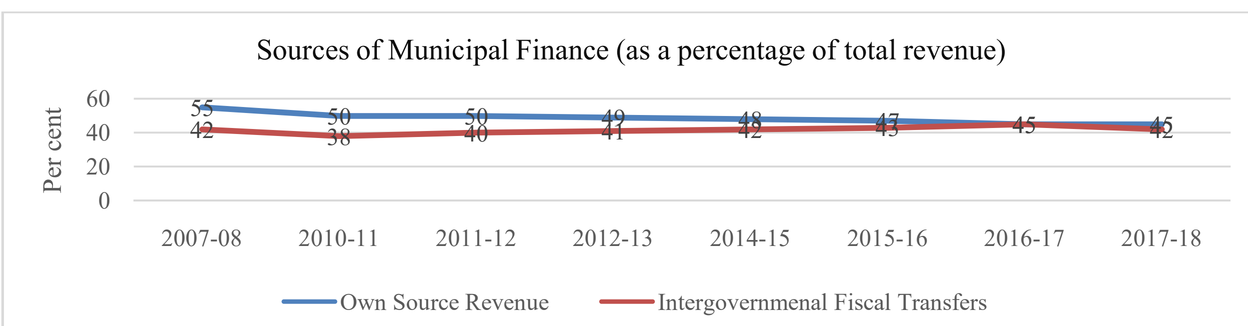
Municipal Finance in Indian Cities

Indian cities have been growing at a rapid pace, and it is estimated that by 2030, 590 million people will live in India's cities (which is almost twice the population of the United States of America) (McKinsey Global Institute, 2010).Further as per United Nations projections, India's urban population will increase from about 461 million in 2018 to 877 million in 2050, with India contributing the largest share of global urban population growth from 2018 to 2050 (UN-DESA 2019).

Inspite of this ongoing wave of urbanisation in India, municipal finances have only weakened overtime. Municipal revenue for Indian cities continued to account for almost an insignificant share of the GDP i.e about 1per cent from the period of 2007-08 to 2017-18 (ICRIER, 2019). The 'own source revenue' of municipal bodies as a percentage of GDP rose between 2010-11 to 2012-13 but declined thereafter; in 2017-18, it stood at 0.43 per cent of GDP, lowest in the last eight years. It must be noted that during the same time frame, the combined income of the centre and state increased from 16 per cent in 2012-13 to 18 per cent in 2017-18(RBI 2022).

Not only is the country's municipal sector small compared to international benchmarks, but ULBs in India have also been subject to significant erosion in their fiscal autonomy over time. In 2012-13, the municipal tax-GDP ratio stood at 0.33 per cent as against the combined ratio (central plus state) tax-GDP ratio of 17 per cent[ii](Mohanty, et al., 2007) (Mohanty P. K., 2016). Over the years, the municipal sector in India has become more dependent on the higher levels of government as income from transfers has only increased as a proportion of total municipal revenue. Infact, intergovernmental transfers which were only about 40 per cent of overall municipal revenue in 2007-08 `surpassed percentage of own source revenue in 2017-18, indicating the increasing fiscal dependency of municipal bodies in India (Figure 1) (ICRIER, 2019).

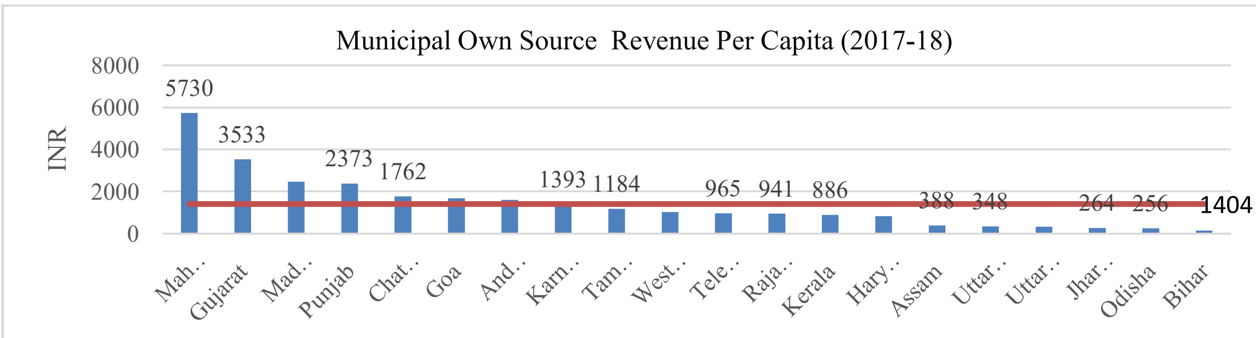
Figure 1: Sources of Municipal Finance (as a percentage of total revenue)



Source: ICRIER Report for 15th Finance Commission

When it comes to the per capita own source revenue of municipalities, Maharashtra (Rs 5730) and Gujarat (Rs 3533) have the highest per capita income while Bihar (Rs 256) and Odisha (Rs 139) have the lowest income (Figure2).

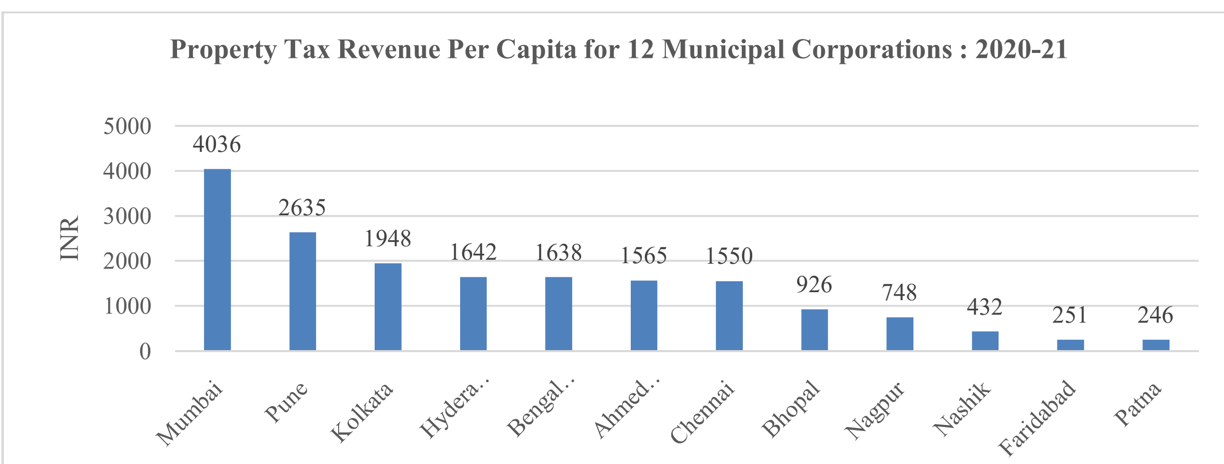
Figure 2: Municipal Own Source Revenue Per Capita (2017-18)



Source: ICRIER Report for 15th Finance Commission

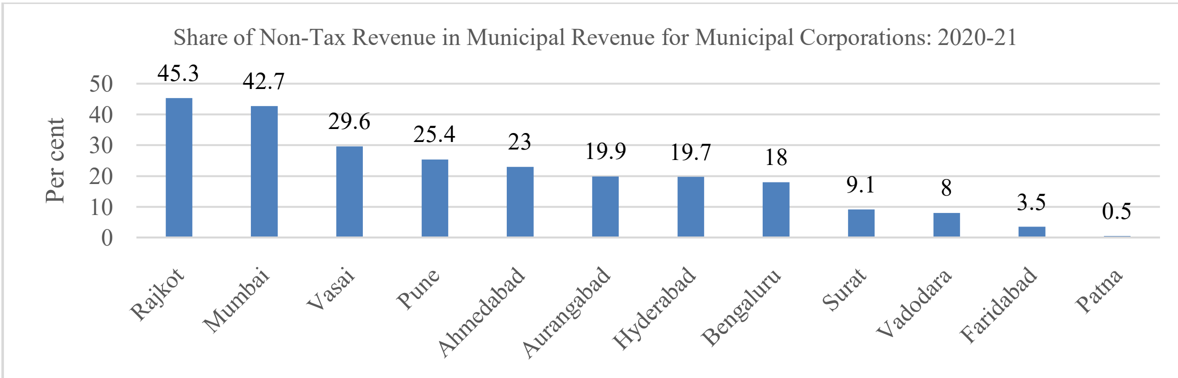
Under 'own source' revenue, property tax is the most important tax for the local bodies in India. A report in 2019, which studied the finances of 37 of the largest municipal corporations[iii] in India, found that in 33 ULBs, property tax was the single largest contributor to own revenue. Municipal corporations of metropolitan cities have larger property tax bases, because of better public infrastructure and higher capitalisation. The per capita property tax revenue of the Municipal corporations of Mumbai (Rs 4036) and Pune (Rs 2635) were among the highest and that of Faridabad (Rs 251) and Patna (Rs 246) were the lowest (Khare, Roy and Mangla 2019) (Figure 3).

Figure 3: Property Tax Revenue Per Capita for 12 Municipal Corporations: 2020-21



Source: Finances of Municipal Corporations in Metropolitan Cities of India (Fifteenth Finance Commission)

Figure 4: Share of Non-Tax Revenue in Municipal Revenue for Municipal Corporations: 2020-21



Source: Finances of Municipal Corporations in Metropolitan Cities of India (Fifteenth Finance Commission)

Non-tax revenues for municipal bodies in India include: user charges, fees and receipts from various other miscellaneous sources such as rental income, sale and hire charges, interest income, etc. and instruments of unlocking land value, i.e. betterment levy, development charges, impact fee, etc. The non-tax revenue for the largest 37 Municipal Corporations in India have declined from 0.13 per cent of GDP in 2012-13 to 0.11 per cent of GDP in 2017-18.The share of non-tax revenue in total municipal revenue for Mumbai stood at 42.7 per cent and about 18 per cent for Bengaluru (Figure 4).

Data Sources

The main sources of data for the analysis are the BBMP budget documents (2014-15 onwards), and Karnataka State Economic Survey (2013 -14 onwards). In order to compute the 'normative' ratio, we have used the secondary data collected by Institute on Municipal Finance and Governance (IMFG) University of Toronto and the City of Johannesburg budget data. The paper uses data from OECD on city-wise GDP. Primary surveys for 50 households and 10 Resident Welfare Associations were conducted, the results for which are analysed and discussed below. The paper also uses data from Key Informant Interviews (KIIs) of four sector experts.

Methodology

This paper takes the case of Bengaluru to understand its revenue capacity because of the following reasons:

1. It is one of the fastest growing cities in the Asia Pacific Region in 2023, surpassing the growth rate of Shanghai and Hong Kong as per the report of Oxford Economics (2023). Thus, the significance of Bengaluru in India' growth story is of remarkable importance.

2. Bengaluru is one city to have implemented the much-acclaimed Self Assessment Scheme (SAS) for property taxes. When introduced, tax collection shot up by 33 per cent in 2000-2001. There was an increase in the collection rate, as well as an increase in the number of properties on the tax roll.

3. Bengaluru is also one of the cities with one of the world's worst congestions, due to which its roads and other public services (such as flooding and solid waste management which contribute to congestion) have come into a lot of scrutiny. Recently, many firms threatened to move out of the city if its road infrastructure woes were not fixed, implying loss of an important revenue base for the city.

Overall, Bengaluru is one of the most important cities in the country in terms of its economic and technological contributions. However, the city is still struggling with infrastructure deficits mounting from rapid population growth. The city government has progressively tried to enhance its revenue capacities through policy reform; however, there is still a huge unmet potential.

In order to benchmark Bengaluru's revenue performance, the first part of this paper uses descriptive statistics to work out the revenue capacity of five global cities as a percentage of the city's GDP to compute a 'normative ratio'. This 'normative ratio' is then applied to BBMP's own source revenue to compute 'revenue capacity' as a percentage of Bengaluru's GDP, to help us understand Bengaluru's relative performance on raising property taxes and to see if there is greater potential in the city to raise revenues, in comparison with other cities internationally.

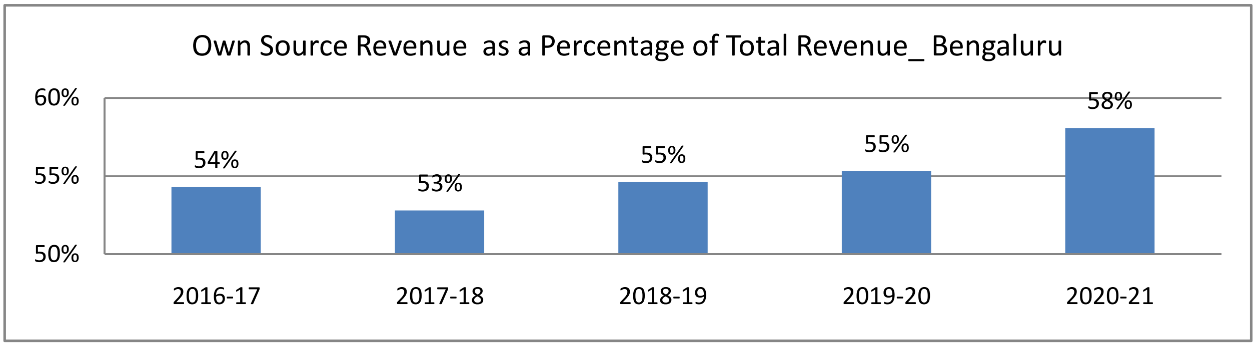
As explained earlier, in order to understand citizen willingness to pay taxes, a survey of 50 households in Bengaluru was undertaken to examine if the city has untapped revenue potential. Simple random surveys from geographically distinct areas within the city were conducted. Given Resident Welfare Associations (RWAs) are the smallest unit of urban governance, and are home associations of citizens, a survey was conducted in ten RWAs across the city, to assess the willingness of their apartments/members to pay taxes, along with other things.

In order to further substantiate the data from the surveys, four 'expert interviews' were conducted; these experts were chosen based on their experience with public finance. The survey results are explained using descriptive statistics while 'Thematic Analysis' has been used to analyse the results of the 'expert interviews'.

Overview: Revenue Income of Bengaluru

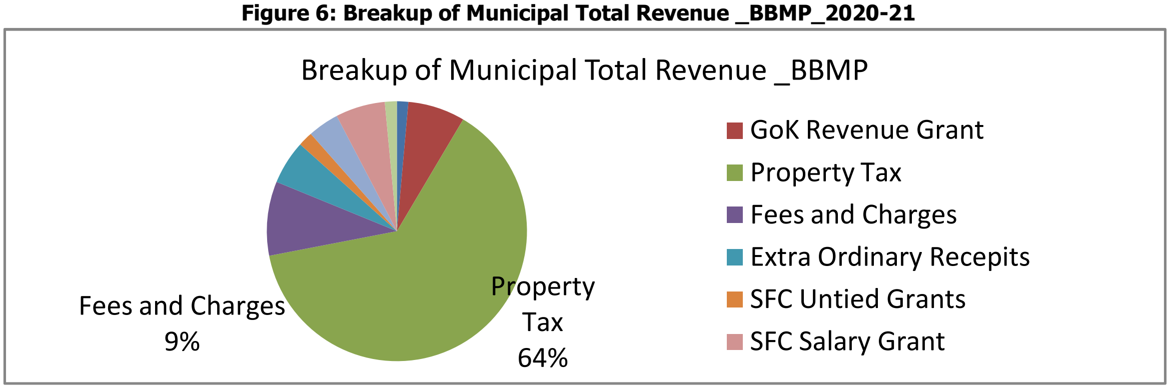
The revenue from 'own sources' as a percentage of 'total revenue' is about 54per cent for Bengaluru during the past 5-year period (Figure 5).The per capita income from property taxes for Bengaluru has been consistently increasing and stood at Rs 1,850 in the past 5 years (average).

Figure 5: Own Source Revenue as a Percentage of Total Revenue_Bengaluru



Source: BBMP Budget Books

Figure 6: Breakup of Municipal Total Revenue _BBMP_2020-21



Source: BBMP Budget Books

Figure 6 shows the break-up of revenue for Bengaluru. Other than property taxes, Bengaluru has no other major 'own source revenue'. In fact, for Bengaluru, all other income sources are less than 10 per cent of total revenue income (individually).

Estimating Revenue Capacities: Normative Approach

As discussed above, the city's economy size impacts the local government's revenue capacities. Ideally, the revenue structure of a city should be designed so that increases or decreases in a city's economic base closely reflects as increases or decreases in its revenue base. (Pagano and Hoene 2010; Tannenwald, 2004).

Currently, there is a lack of analysis on the impact that a city's economic base—the sum total of outputs of its private and public sector enterprises— has on the growth and stability of its revenue. A city's economic base is the foundation from which its revenue is ultimately generated—it is the driver of local prosperity. This paper attempts to assess a city's revenue capacity based on the city's economic base. Specifically, this study focuses on the impact of changes in a city's economic base on its revenue capacity (own-source revenue and total revenue). No previous studies have explored the connection between a municipality's economic base (city's GDP) and its revenue generating capacity.

In order to assess the revenue capacity for Bengaluru, the paper computes an 'ideal' or 'normative ratio'[iv] based on several international cities. In table 1, we determine the ratio (city's revenue income to the city's GDP) for 5 cities-London, New York, Tokyo, Johannesburg and Sao Paulo. These cities have the highest per capita GDP[v] as well high per capita revenue[vi]. The paper uses the average ratio (city revenue income to city GDP) of these cities as a 'normative ratio' that other cities, including cities in India can aspire to achieve.

The reason for the selection of these five cities (London, New York, Tokyo, Johannesburg and Sao Paulo) is discussed below:

1. New York, London and Tokyo have been ranked as the best run cities globally as per the World Economic Forum (The Universe of Cities Index, 2017).
2. New York and Tokyo have the highest income from own sources, 74 per cent and 82 per cent respectively in 2015-16 (Slack, 2017).
3. The three cities of New York, London and Tokyo have the highest GDP in Purchasing Power Parity terms (OECD Data).
4. The cities of Sao Paulo and Johannesburg belong to middle income countries of Brazil and South Africa respectably, andare thus comparable to Indian cities. Both cities have been growing annually at4 per cent and 2 per cent respectively IBGE (2017) (Economic data, Joburg, 2022)

Table 2: Normative Ratio – City Government Revenue to City GDP

City	In Million USD		Ratio
	City Revenue (Own Sources)	City GDP	OSR to City GDP
	1	2	3
London	18,428	460,712	4%
Tokyo	1,32,339	22,05,652	6%
New York	93,719	18,74,398	5%
Johannesburg	3,874	70,480	5%
Sao Paulo	12,859	1,96,231	7%
Normative Ratio (Average)			6%

Source: OECD Metropolitan Areas Data (2019) and Institute on Municipal Finance and Governance (2017)

Carvalho (2014) points out that, Brazilian municipalities (such as Sao Paolo) have substantial autonomy with respect to property tax policy and administration compared to many other developed and developing countries, despite their administrative challenges which they have tried to surmount with property tax reform. In column 1 of the above table (Table 2), the own source revenues for the respective five cities are recorded. It must be noted that the data for all cities has been converted to USD at the respective exchange rate for the given year. In column 2 in the table, we have the respective city's GDP for the year 2018-19. In column 3 we compute the ratio of city's own source revenue (column 1) as a percentage of city's GDP. In the case of all the cities (except Sao Paulo) we find the ratio to be between 4-6 per cent. We take the average (normative ratio) to be 6 per cent (for own source revenue as a percentage of city GDP).

Table 3: Computing Revenue Capacity for Bengaluru based on City GDP

Year	City Revenue (Own Source Revenue-OSR)	City GDP	Current Ratio	Normative Standard (Computed)	Revenue Capacity (In Rs Million) based on normative standards	Revenue Capacity Gap	Per Capita Actual Revenue	Per Capita Revenue Capacity
			OSR to City GDP	OSR to City GDP				
	(In lakh crores)			(In lakh crores)		(In lakh crores)	(In Rs)	(In Rs)
1	2	3	4 ((2/3)*100)	5	6	7	8	9
2013-14	2.9	269	1.07%	6%	16.14	13.3	2,401	13,450
2014-15	3.4	312	1.10%	6%	18.72	15.3	2,864	15,600
2015-16	4.8	364	1.31%	6%	21.84	17.1	3,964	18,200
2016-17	5.1	420	1.23%	6%	25.2	20.1	4,290	21,000
2017-18	4.5	489	0.93%	6%	29.34	24.8	3,791	24,450
2018-19	4.1	543	0.75%	6%	32.58	28.5	3,402	27,150
Average						19.8	3,452	19,975

Source: BBMP Budget Documents (2013-20) and Karnataka State Economic Survey (2013-20)

In the above table (table 3) we compute the revenue capacity of Bengaluru based on the normative ratios computed in the previous table (Table 2).In table 2, column 2 indicates the actual own source revenue of BBMP for the years 2013-14 to 2018-19 in Rs lakh crores (Source: BBMP Budget Documents). In column 3, the city's GDP (current prices) is recorded from the Karnataka State Economic Survey, again in Rs lakh crores. Then the ratio of own source revenue to city's GDP is computed (Column 4) for the respective years. We find that for Bengaluru, the ratio of actual own sources to GDP is between 0.7 per cent to 1.2 per cent (average about 1 per cent). Now, we apply the normative ratios computed in the previous tables (column 5) to compute the revenue capacity for Bengaluru, based on the normative standard (column 6). We find that the revenue .capacity gap for the city is approximately Rs 19.8 lakh crore (Column 7).

On a per capita basis, the current revenue is about Rs 3452 (Column 7), while the computed per capita revenue capacity (average) is Rs 19,975 (column 7), which is approximately 6 times higher than current per capita actual revenue Rs 3452.

Thus, using the 'normative ratio' based on international cities, we estimate the revenue capacity for Bengaluru to be six times higher than its current revenue (average). This estimate is based on the current GDP of Bengaluru. Hence, based on the normative standards, the revenue capacity from own sources is 6 per cent of the city's GDP at Rs 19.8 lakh crore in 2018-19.

Willingness to Pay Survey: Citizens and Resident Welfare Associations

This section attempts to understand the factors that impact the citizen's willingness to pay and how tackling these issues would be imperative for the city government in order to attain its revenue capacity. As explained earlier, a limited citizen survey of 50 households and 10 Resident Welfare Associations (RWAs) was undertaken in the city, to assess willingness to pay to understand how that contributes to the city's revenue raising capacity. It must be noted here that the sample size is not statistically relevant for the population of the city, the main purpose of the survey was to understand the factors that contribute towards the willingness to pay from the citizens' perspective. It should be noted that RWAs are the smallest unit of urban governance, so citizens can well be represented by RWAs, hence a survey of selected RWAs in the city was undertaken.

The survey instrument and guidelines have been approved by the ethics committee constituted by the Institute for Social and Economic Change, Bengaluru. During the citizen and the RWA surveys, every participant was informed about the purpose of the survey and only after taking their consent, the questionnaire was administered. Similarly, the guidelines for the semi-structured interviews for the 'sector experts' were also approved by the ethics committee and consent was taken from all the experts before enlisting their names and credentials.

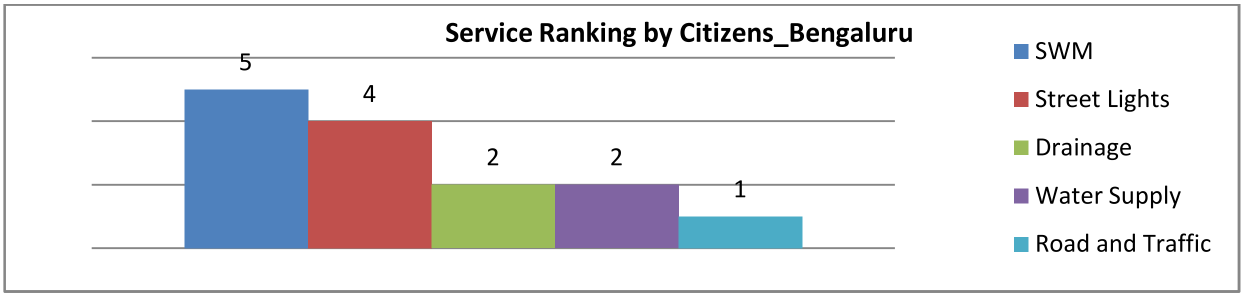
Willingness to Pay Survey: Results

The households were selected from geographically distinct areas of the city. Due to Covid-19 restrictions, the surveys were all conducted online. The questions were broadly based on the themes of: Payment of property taxes, Satisfaction with service delivery and Factors contributing to willingness to pay for services. The overview of the results has been discussed below.

About 98 per cent of the respondents of the survey were house owners. Nearly 68 per cent of the respondent households in Bengaluru claimed to pay property taxes. The main reasons for not paying were stated as: 'Property dispute with family members', 'financial challenges' and 'not important'.

Nearly 80 per cent of households surveyed in Bangalore were satisfied with the street light and waste management (rating 4 and 5), water supply and drainage were the main issues of concern (rating 1 and 2) by 50 per cent of the households (Figure 7).

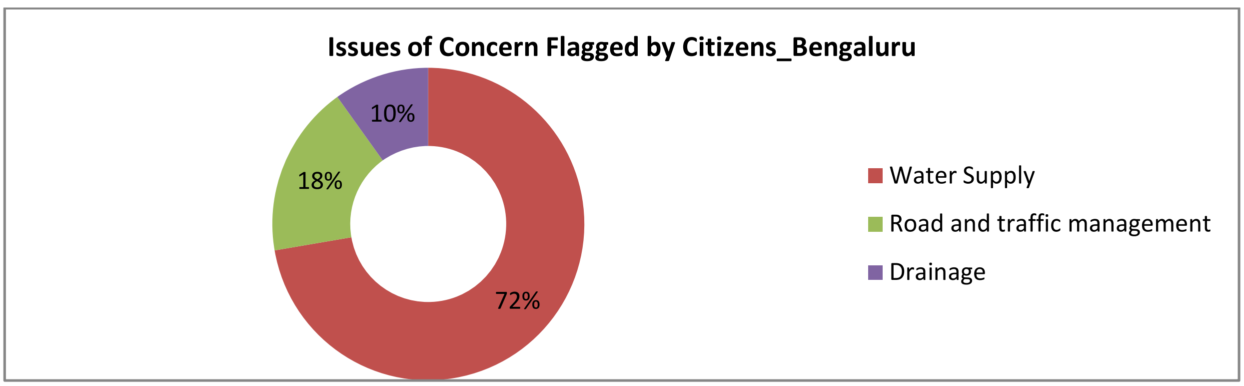
Figure 7: Service Ranking by Citizens_Bengaluru



Source: Willingness to Pay Survey Citizens

In Bengaluru, nearly 72 per cent of the households faced issues with water supply and wanted the local government to take up the issue on priority (Figure 8).

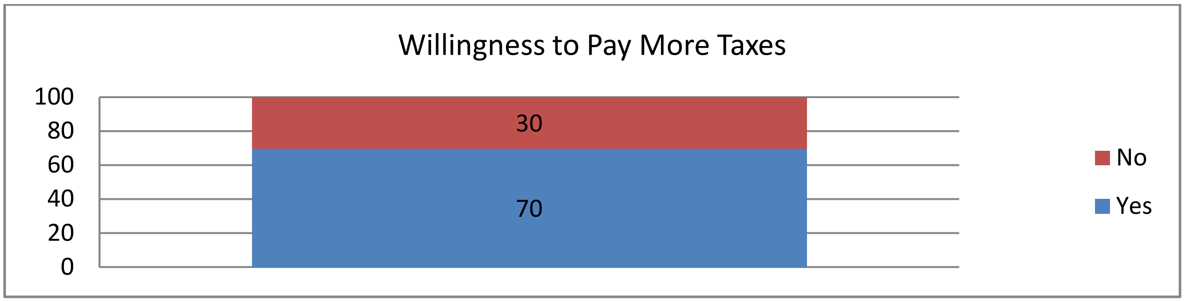
Figure 8: Issues of Concern_Bengaluru



Source: Willingness to Pay Survey_Citizens

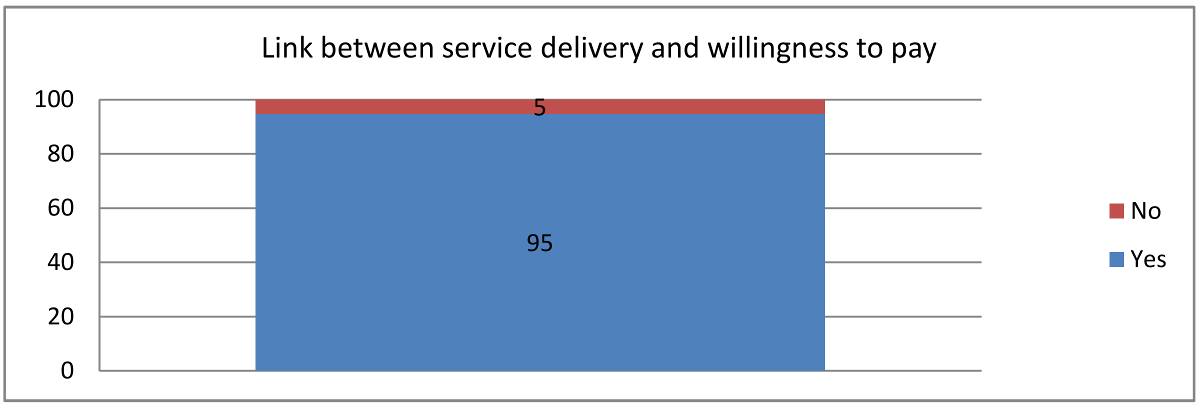
Nearly 70 per cent of the respondent households claimed that they were willing to pay a 5-10 per cent increase in property taxes if the recommended issue was resolved on priority. While this may not be adequate to bridge the revenue capacity, it would garner additional resources. Infact, more than 95 per cent households agreed that there was a direct relationship between willingness to pay and quality of service delivery (Figure9). Unfortunately, our sample consisted of only those respondents who answered via the internet, so are middle and higher income households. The same finding may not have been replicated with the inclusion of lower income households in the sample.

Figure 9: Willingness to Pay More Taxes



Source: Willingness to Pay Survey_Citizens

Figure 10: Link between service delivery and willingness to pay

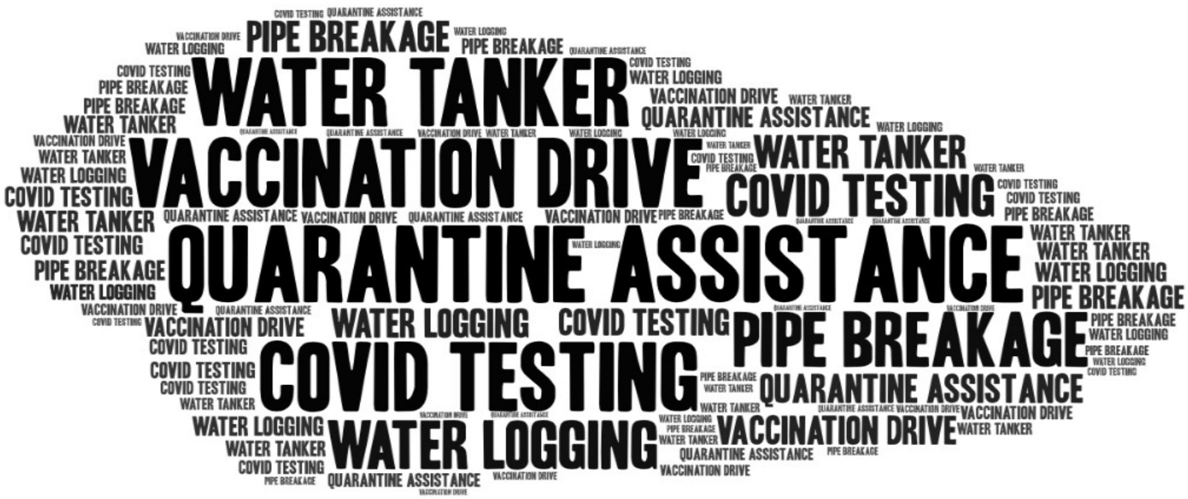


Source: Willingness to Pay Survey_Citizens

As explained earlier, we also surveyed several Resident Welfare Associations (RWAs) to understand the perspective of citizen groups at a collective level, on issues of service delivery and payment of local taxes. The 10RWAs surveyed were from all geographically distinct areas of the city. All these were active RWAs and were meeting at least once monthly. RWAs claimed that about 60 per cent of the households were paying property taxes on a regular basis. These RWAs had worked on issues of water logging, drainage and street parking related issues. The RWAs in Bengaluru mentioned that they would like a sustained interaction with the local government (BBMP ward officers) as it would help them advocate their issues better.

During the pandemic (during the lockdown and Covid waves) RWAs claimed to have worked with facilitating home quarantine, seeking emergency help: ambulance facilities and at home emergency medical supplies, organising vaccination drives (Picture 1).

Picture 1: Activities undertaken by RWAs in the past year



Expert Interviews by Sector Experts

As discussed in the section on research methodology, the research conducted in-depth interviews with four sector experts, each of whom has a diverse specialisation in the field of citizen activism, municipal finance and urban capacity building.

The structure of interviews was semi-structured. However, the broad themes discussed were: issues with Indian municipalities in achieving their revenue capacities, roadblocks to active citizen activism, organising citizen led movements in Indian cities and all other factors that affect the citizen's willingness to pay for services.

Table 4 below introduces the four experts and their areas of specialisations, While the first two experts have Bengaluru specific expertise (Mr Pabbisetty and Ms Zibi Jamal), the third and fourth experts specialise in municipal finance issues and urban governance (Ms Utkarsha Kavdi and Mr Ravikant Joshi).

Table 4: Profile Municipal Sector Experts

Name of expert	Credentials
Sridhar Pabbisetty	Former CEO, Namma Bengaluru Foundation and Founding Director, Kautilya School of Public Policy
Zibi Jamal	Founder Member, Whitefield Rising
UtkarshaKavdi	Director · Regional Centre for Urban and Environmental Studies (RCUES), AIILSG, Mumbai
Ravikant Joshi	Senior Consultant, Urban Finance and Governance

Picture 2 summarises the discussions by each of the experts. Based on the interview, a thematic analysis was undertaken that can be said to effect willingness of citizens to pay local taxes.

Transparency issues: In the expert interviews, it was pointed out that one of the main impediments towards willingness to pay is the lack of transparency in use of funds; citizens cannot attribute payment of taxes to service delivery. There is a widespread perception of corruption and misuse of funds by the government amongst citizens.

Ownership Issues and Exemptions: Another factor that is a barrier towards cities being able to enhance their revenue capacities is the incorrect assessments of property based on use/size/built-up area. Also, there is a high prevalence of exemptions (religious places, educational institutions and government properties) is a major factor responsible for cities being unable to meet their revenue capacities.

Extraneous/No Consequences: One disincentive factor that affects willingness to pay among citizens is the existing inaction against non-payers. As in most cases, non-payers get away without any consequences; many potential payers might also resort to non-payment.

Institutional Weaknesses: Overall, the institution structures that ensure robust collection efficiency and timely revisions of taxes are weak in Indian cities. There is a dearth of trained human resources to ensure higher tax collection. The assessment method of taxes and user charges are often non-dynamic and archaic, it is often difficult to carry out any changes.

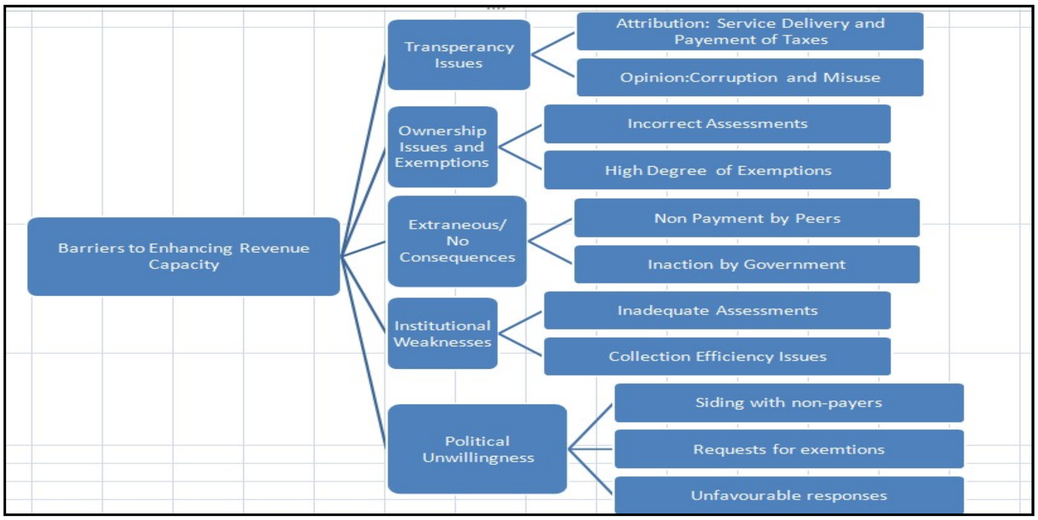
Political Weaknesses: The local political structures lack the will power to ensure high collection efficiency as it might require them to support the local governments in taking several politically unpopular steps. Many a times, it is the local political structure that seeks exemptions and is responsible for nonpayment of taxes and user charges, thus further weakening the position of the local governments.

The above mentioned issues summarise the discussions with sector experts. These issues are deep rooted in urban governance challenges as well as lack of proper decentralisation of powers to the local governments. City governments need to address these issues in a stage-wise manner (by implementing a Long Term Fiscal Health Plan), as is done by many cities in the developed countries. First, the non-fiscal measures may be taken up such as reducing exemptions and using GIS to map properties. As stated, strict penalties should be applicable to the non-payers. In the true spirit of the 74^{th} Constitutional Amendment Act, city governments should be given autonomy to raise water tariffs and property taxes. Adequate and skilled human resources should be deployed with appropriate technology devices (such as smart phones, tablets and laptops). A study for Karnataka's Administrative Reforms Commission (Sridhar et al (2022)) found that Bengaluru's local body is characterised by the ubiquitous absence of technology for property measurements and so forth.

Addressing these issues will ensure that there is an increase in willingness to pay local taxes among citizens and ensure that revenue capacities are enhanced.

We recognise that urban governance challenges are a lot more complex than mere public finance and raising revenue capacities. The complexity of coordination across various agencies, and the low political and administrative autonomy of cities underlie the fiscal malaise faced by city governments in India. But finances are a major part of governance, and this paper is an attempt to show how Indian cities are performing below their capacity, and the extent to which they can improve to reach their potential.

Picture 2: Thematic Analysis of Expert Interviews



Conclusion

The paper finds that for Bengaluru, the current ratio of own sources revenue to GDP is 1 per cent. Based on the normative approach of international cities, the paper computes the revenue capacity for the city to be approximately 6 times higher than the current income from own sources of revenue at Rs 19,975 on a per capita basis.

Computing revenue capacities based on the local government revenue and local income helps assess the potential income based on the city's current economic state and well-being. It also takes into context the city's government's current income based on present income sources.

Also, the analysis of primary data collected from Citizen Survey, RWA Survey and Expert Interviews points towards a direct association between willingness to pay (very crucial in meeting revenue capacity) and quality of service delivery. It might be extremely helpful for local governments to prioritise service delivery issues, strengthen citizen led groups and local civic bodies. Infact, the analysis of the survey data and inputs from the experts indicate that there is an urgent need on the part of the city governments to strengthen and enhance meaningful citizen engagement. There is a widespread concern among citizens about government inefficiency and lack of transparency. Also, inaction towards non-payers has become a disincentive for many citizens. Hence, addressing each of these issues towards a systemic short to medium term plan (upto 5 years) would enhance willingness to pay, build confidence among citizens and thus lead to the cities meeting their revenue capacities.

However, these suggestions may be specific to Bengaluru and some progressive Indian cities, which are economically growing, are characterised by citizen activism and relatively good governance. Cities which are economically stagnant and have low citizen activism, may not benefit from these suggestions.

This paper fills an important gap in the area of municipal finance of Indian cities, by computing revenue capacities based on the city's GDP. The paper builds on the research that dictates that a city's economy is directly linked with city government's revenue and as the city's economy grows or shrinks so does the revenue of the local government. Also, as a first, the paper dwells on the factors that impact a citizen's willingness to pay local taxes.

While the findings are important, more work needs to be conducted on the intersection of the city's economic development and local finances. Particularly, studies are needed that use other metropolitan cities and studies that explore longer time horizons. Researching this area has the potential to increase the capacity of our local government's ability to meet the challenges of the future, and create better and more livable cities.

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[i] List of 18 functions

1. Urban planning including town planning.
2. Regulation of land-use and construction of buildings.
3. Planning for economic and social development.
4. Roads and bridges.
5. Water supply for domestic, industrial and commercial purposes.
6. Public health, sanitation conservancy and solid waste management.
7. Fire services.
8. Urban forestry, protection of the environment and promotion of ecological aspects.
9. Safeguarding the interests of weaker sections of society, including the handicapped and mentally retarded.
10. Slum improvement and upgradation.
11. Urban poverty alleviation.
12. Provision of urban amenities and facilities such as parks, gardens, playgrounds.
13. Promotion of cultural, educational and aesthetic aspects.
14. Burials and burial grounds; cremations, cremation grounds; and electric crematoriums.
15. Cattle pounds; prevention of cruelty to animals.
16. Vital statistics include registration of births and deaths.
17. Public amenities including street lighting, parking lots, bus stops and public conveniences.
18. Regulation of slaughter houses and tanneries.

[ii] ASCI (2015) and 15th Finance Commission of India (2020)

[iii]Mumbai, Pune, Kolkata, Hyderabad, Bengaluru, Ahmedabad, Chennai, Bhopal, Indore, Nagpur, Surat, Rajkot, Aurangabad, Vasai, Nashik, Ludhiana, Faridabad, Patna, Srinagar, Kollam, Jodhpur, Gwalior, Kozhikode, Jabalpur, Thiruvananthapuram, Amritsar, Raipur, Coimbatore, Madurai, Thrissur, Kota, Asansol, Dhanbad, Ranchi

[iv]Normative ratio between a city's revenue income and its GDP

[v]OECD ranking of cities by GDP by PPP (Purchasing Power Parity)

[vi] Data from Lincoln Institute of Land Policy (2016)

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