The Committee on Accounting Standards for Local Bodies
The Institute of Chartered Accountants of India
ICAI Bhawan, PO Box No. – 7100, Indraprastha Marg, New Delhi – 110002.

Municipal Bonds for Financing Urban Infrastructure in India: An Overview

The Institute of Chartered Accountants of India

(Set up by an Act of Parliament)

New Delhi

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Foreword

India is a fast growing economy with a thriving democracy endowed with potential to reap demographic dividend in the years to come. Urbanisation is increasing at a fast pace, which in turn, changing the profiles of cities and towns, and increasing demand for urban infrastructure in India. In this regard, a well-functioning Local Government is a key to the delivery of urban services and infrastructure. In India, the third tier of the Government (Local-self Government), i.e., Local Bodies came into existence in the year 1992 post 73rd and 74th Constitutional Amendments. Many responsibilities were placed on the local bodies with this decentralisation initiative. As per the report of High Powered Expert Committee (HPEC) of Ministry of Urban Development, approximately ₹ 40 lakh crore is the estimated requirement for developing infrastructure during 2011-2031. Without adequate resources with the Local-self Government, the quality of services and infrastructure would not be able to meet the expected level of demand. Therefore, the topic of municipal finances is central to effective service delivery and creation of high quality urban infrastructure.

Globally amongst others, tapping the capital market to raise funds through municipal bonds is one of the innovative paths to enable local bodies raise required resources on timely and fair basis. However, to routinely access capital markets, Urban Local Bodies (ULBs) in India need to have the capacity to develop commercially viable projects and most importantly healthy municipal revenue base. Since issuing bonds is a way of sourcing money from the subscribing public, essential transparency and governance aspects also gain importance. Sound financial management system at ULB's level assumes high importance to raise additional funds on the strength, and quality of their own balance sheets.

In this direction, the ICAI, as a partner in nation building, is making significant efforts to prescribe and support in implementation of high quality Accrual Accounting Framework for Local Bodies that is at par with the internationally accepted accounting and financial reporting Standards for application by Governments of all levels. This would enable local bodies to provide decision useful financial statements and financial information to the investors.

This publication is being issued in a direction to explore the opportunity of financing urban infrastructure through municipal bonds. Other major facets covered in this publication include salient features of the SEBI regulations, International overview, and how ICAI and its members can support ULBs in improving their accounting discipline in order to access capital market.

I congratulate CA. Jay Chhaira, Chairman, Committee on Accounting Standards for Local Bodies (CASLB); CA. Rajesh Sharma, Vice-Chairman, CASLB; and other Members of the CASLB for bringing out this publication. The Contribution made by the Study Group under Convenorship of CA. M. P. Vijay Kumar, Central Council Member, ICAI and Member, CASLB, is appreciated.

I also thank the Pune Municipal Corporation (PMC) for sharing their experience of the municipal bond issue post issuance of the SEBI Regulations, 2015 and assisting the Study Group in understanding various aspects relating to municipal bond issue and the challenges faced by them while issuance.

I am sure that this publication would be useful for all concerned including members of the ICAI.

New Delhi **CA. Nilesh Shivji Vikamsey**

February 2, 2018 **President, ICAI**

Preface

The Government of India at all three tiers, i.e., Central Government, State Governments and Local-self Government (Local Bodies) require finances for infrastructure projects and their expenditure. Amongst the three, the Local Bodies have limited funds from their own sources. Consequently, they have to depend heavily on grants from Central and State Governments. It may be noted that existing sources of finances of local bodies are not expected to suffice given scale of infrastructure development and upgradation that is required under Smart Cities Mission and Atal Mission for Rejuvenation and Urban Transformation (AMRUT).

To address these funding issues wholeheartedly, municipal bonds and pool financing can be seen as notable options. Though municipal bonds are in existence in India since 1997, however, only 26 municipal bond issues (including recent bond issue of Pune Municipal Corporation) have taken place since then. In the earlier years, the response from the investors was also not good as these bonds were not tradable and lacked regulatory clarity.

The Securities and Exchange Board of India (SEBI) has issued SEBI (Issue and Listing of Debt Securities by Municipality) Regulations in 2015 (also amended in 2017) that has brought fresh air to the field of municipal bond market. Subsequent to the issuance of SEBI's regulations, Pune Municipal Corporation (PMC) in 2016 raised ₹ 200 crore by their 24×7 Water Supply Project. This bond issue received a good response and was oversubscribed by six times.

The Committee on Accounting Standards for Local Bodies (CASLB) recognising the need for creating awareness about this innovative mean of financing is bringing out this publication that attempts to provide an introductory information regarding municipal bonds covering different facets with regard to municipal bond issue and management such as relevance of municipal bond, overview of global and Indian municipal bond market including SEBI Regulations, bond rating criteria and methodology, etc. The publication also highlights the need of accounting discipline and financial management in local bodies that is an essence for accessing capital market and the role of the ICAI in supporting the cause of accounting reforms in local bodies in India.

I gratefully acknowledge the efforts of Study Group constituted under Convenorship of CA. M. P. Vijay Kumar, Central Council Member, ICAI; comprising of other experts: CA R. S. Murali, Co-convenor; and Members CA. Srikanth Viswanathan and CA. K. Subalakshmi, who have contributed greatly in the formulation of this publication. I also thank PMC for sharing their experience with regard to municipal bond issue with us and Study Group.

I sincerely appreciate the efforts put in by CA. Vidhyadhar Kulkarni, Head, Technical Directorate, Ms. Deepti Dhiman Chadha, Secretary, CASLB, CA. Nikita Gupta, Sr. Executive Officer, and Ms. Nisha Gupta, Data Entry Operator for bringing out this publication.

I believe that this publication would be very useful to all concerned.

New Delhi
January 27, 2018

CA. Jay Chhaira
Chairman
Committee on Accounting Standards for Local Bodies

Abbreviations

AMRUT	Atal Mission for Rejuvenation and Urban Transformation
ASICS	Annual Survey of India's City Systems
ASLBs	Accounting Standards for Local Bodies
BoD	Board of Directors
BSE	Bombay Stock Exchange
CA	Chartered Accountants
C&AG	Comptroller and Auditor General
CASLB	Committee on Accounting Standards for Local Bodies
CBLO	Collateralised Borrowing & Lending Obligation
CDLP	Comprehensive Debt Limitation Policy
CGA	Controller General of Accounts
CIDB	Construction Industry Development Board
CME	Corporate Municipal Entity
CR	Confidential Report
CWSSB	Chennai Metropolitan Water Supply and Sewerage Board
EMMA	Electronic Municipal Market Access
FFC	Fourteenth Finance Commission
GBWASP	Greater Bangalore Water Supply and Sanitation Project
GDP	Gross Domestic Product
GO	General Obligation
GOI	Government of India
GoM	Government of Maharashtra
HPEC	High Powered Expert Committee
HR	Human Resource
HUDCO	Housing and Urban Development Corporation
IAS	Indian Administrative Service
ICAI	Institute of Chartered Accountants of India

INCA	Infrastructure Finance Corporation Limited of South Africa
INR	Indian Rupee
IPSASs	International Public Sector Accounting Standards
IT	Information Technology
KPI	Key Performance Indicator
MoF	Ministry of Finance
MoPR	Ministry of Panchayati Raj
MoUD	Ministry of Urban Development
MSRB	Municipal Securities Rulemaking Board
NMAM	National Municipal Accounting Manual
NYSE	New York Stock Exchange
OTA	Office of Technical Assistance, US Department of Treasury
PFDFS	Pooled Finance Development Fund Scheme
PMC	Pune Municipal Corporation
PPP	Public-Private Partnerships
PWD	Public Works Department
RBI	Reserve Bank of India
SBI Caps	SBI Capital Markets Ltd.
SEBI	Securities & Exchange Board of India
SLR	Statutory Liquidity Ratio
SPV	Special Purpose Vehicle
SR	Service Registers
ULB	Urban Local Body
US	United States
USD	US Dollar

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1. Background

1.1 Prelude to this Study

In India, the changing economic landscape and the need for increasing funds, triggered by the growth in economy, have begun exerting pressure on municipal bodies. Post 74th Amendment to the Constitution of India in 1992, the responsibilities of the third tier of the government, i.e., the local bodies, has also increased. Thus, by solely relying upon the funding from the Central and State Governments, the growing requirements of the local bodies, particularly the municipal bodies, for creating urban infrastructure and public amenities may not be achieved.

Several innovative funding methods have been followed across the globe to fund such requirements based on the local suitability. One such method is garnering funds by the issue of municipal bonds.

1.2 Need and Purpose of the Study - Key Questions and Issues to be Addressed

The basic purpose of this study is to compile various knowledge sources with regard to municipal bond market to create awareness amongst various stakeholders including members of the Institute of Chartered Accountants of India (ICAI) and to discuss different facets of municipal bond issue including relevance of municipal bond to urban sector, overview of global as well as Indian municipal bond market, Securities and Exchange Board of India (SEBI) guidelines in this regard, and rating mechanism, etc. Some of the key areas that are addressed in this study are:

- What are Municipal Bonds? Their need and role.
- How are these bonds issued – an overview of SEBI guidelines.
- A perspective of global practices.
- Role of ICAI in area of accrual accounting reforms that is a key to municipal bond issue.
- Role that ICAI members can play in this regard.

2. Introduction to Municipal Bonds

2.1 What are Municipal Bonds?

A municipal bond is a debt security issued by an Urban Local Body (ULB), Special Purpose Vehicle (SPV) or State level Parastatal, to finance capital expenditures such as the construction of highways, bridges or schools or any other project of public utility such as water saving project, energy saving project, etc. When local governments need funding to finance certain projects that serve a civic purpose, they issue municipal bonds as a way to supplement revenue/capital funds for these public projects either partly or fully. In general, municipal bonds are exempt from central, state, and local taxes, making them especially attractive to people in high income tax brackets.

Municipal bonds are obligations that entitle investors to interest plus repayment of principal at a specified date. Urban local bodies issue bonds to pay for the development of large, expensive, and long-lived capital projects. They are an important fixed income asset class for investors seeking above-market tax-advantaged yields. They offer a safe and high-yielding asset class during low interest rate environments as well as an attractive tax-advantaged asset class during rising interest rate periods. The yield, or yield to maturity, is the rate of interest a bondholder will be paid when also taking into account the price paid for the bond as well as the length of time until date of maturity. When an investor is interested in purchasing municipal bonds, the yield is a more important indicator of potential returns than the coupon or interest rate.

2.2 Relevance of Municipal Bonds to Urban Sector

India's urban population has been constantly growing since independence and the urbanisation rate is close to 31.16% (2011 Census). Urbanisation refers to the demographic shift whereby a greater percentage of the population begins living in cities and towns as against villages. India is second only to China in total urban population. The existing infrastructure is no longer sufficient to keep pace with the rapid growth in urbanisation resulting in inadequate service provision and environmental degradation. The Smart Cities Mission and the Atal Mission for Rejuvenation and Urban Transformation (AMRUT) have also put the municipalities on the center stage of urban development. Accordingly, more funds are required to meet these requirements.

As per the report of the High Powered Expert Committee (HPEC), India's urban population to increase:

- From 377 million today to 600 million by 2031,
- From living in 50 metropolitan cities in 2011 to living in 87 by 2031,
- From 160 million population in metropolitan cities in 2011 to 255 million by 2031, and
- From 217 million population in other cities and towns in 2011 to 343 million by 2031.

The HPEC report also states that:

- 7,935 cities and towns in 2011, up from 5,161 in 2001,
- 475 Urban Agglomerations in 2011, up from 384 in 2001,
- Slum population, on average, is 25% of urban population, and
- Urban poverty in 2011-12 was 26.4%.

Urban planning, urban infrastructure development, and public service delivery of universal standards must address this challenge. The way forward according to the report of HPEC is:

- Creating urban infrastructure and reforming governance for service delivery,
- Providing access to universal service standards for all, including the poor,
- Consciously building rural-urban synergy,
- Recognising importance of urban transport, and
- Focussing on metropolitan planning.

As per the HPEC report, the investment requirement of urban infrastructure during 2011-2031 is estimated to be approximately ₹ 40 lakh crore which excludes cost of land, inflation adjustments, etc. According to India Brand Equity Foundation (2016), India needs ₹ 31 lakh crore (US $ 454.83 billion) to be spent on infrastructure development over the next five years, with 70%

of funds needed for power, roads and urban infrastructure segments. It is estimated that India's cities will require around $1.2 trillion of capital investment to cater to the growing demand for civic services over the next 20 years. However, lack of funds with the local bodies (municipalities) leads to fiscal imbalance between the finance and function. It also leads to poor urban amenities and civic services that have a negative impact on the quality of life of citizens.

As only a part of the capital requirement can be met through the grant funds from Central and State Governments, municipalities need to seek resources through other means. In other words, municipalities/ ULBs cannot continue to depend indefinitely on grants from Central and State Governments and are required to become financially self-reliant. In this direction, accessing capital market can be seen as a viable option for ULBs to meet their funding requirement to create urban infrastructure.

It was indicated in the report of Fourteenth Finance Commission (FFC) that total ULB revenues in 2012-13 were ₹ 96,640 crore, of which, own source income was only 51.6% (₹ 49,913 crore) while the remaining was from other sources including market borrowings which were only 1.4% of the total revenue. It indicates that capital market is not being explored by ULBs. The FFC also observed that municipal bonds have played only a limited role in funding urban infrastructure projects and hence should be explored as an option for infrastructure financing. In US and many developing countries like Russia and Mexico, it is one of the principal modes of financing urban infrastructure.

It is evident from the above that current sources of funds of local bodies, i.e., grants, taxes, and fees, etc., cannot meet their funding requirements to create urban infrastructure. The report of HPEC also recommended that ULBs should explore both traditional as well as other innovative means of financing. In the above context, municipal bonds seem a very bright option to raise funds by municipalities. Municipal Bonds have various advantages which are discussed in the later part of this document. The Securities and Exchange Board of India (SEBI) has also issued the SEBI (Issue and Listing of Debt Securities by Municipality) Regulations in March 2015. This provides a great opportunity to Indian municipalities. They need to pay attention and explore this area of market based financing. In past, Central Government had also tried to promote municipal bonds by providing tax-exemptions and by introducing Pooled Finance Development Fund Scheme (PFDFS). Recently, MoUD, GOI, has also announced that it shall subsidise the interest cost of municipal bonds upto 2% p.a.

2.3 Overview of Global and Indian Municipal Bond Market

Many countries have successfully raised funds through municipal bonds. United States is in the forefront of issuance of municipal bonds and utilising it for creation of urban infrastructure. Most structures in US revolve around leveraging additional revenue/taxes accruing to ULBs due to increased development. The money thus raised is used to finance social housing and create additional infrastructure. Developing countries like South Africa, Hungary, Russia, and Mexico also have relatively well developed municipal bond markets. One leading example is the Infrastructure Finance Corporation Limited (INCA) of South Africa. It is the largest private municipal lender, which has approximately 20% of the market share. In countries such as USA, where this is the principal mode of financing urban infrastructure, municipal bonds have been successful in raising capital for infrastructure investments in cities because the government granted tax-free status to municipal bonds and public disclosure of financial information is mandated. Municipal bonds have been used successfully by Local Governments in the US and China. In the US, the municipal bond market is around $3.7 trillion (2016).

Municipal bonds are also not new to India. They have been in existence in India since 1997. Cities such as Ahmedabad, Bengaluru, Nashik, and Madurai, have issued them, mostly privately placed with institutions, and not tradable.

Between 1997-2010, 25 municipal bond issues have taken place in India, which include pooled financing issues, and thereby mobilising funds to the tune of nearly ₹ 1,746 crore, approximately US $17 billion. Some of the states like Tamil Nadu have resorted to what is called as 'pool financing' of gathering municipalities whereby a set of municipalities are funded for specific infrastructure projects as a pool and the funding of the same managed by a state agency, by sourcing funds from suitable lenders. In general, the repayment is made by the municipalities with or without budgetary support of the government. Table 1 gives a summary of the bond issues in India during 1997-2010. Rating agency CARE estimates that large municipalities in India could raise ₹ 1,000 to ₹ 1,500 crore every year through municipal bond issues.

Table 1

City	Issue Year	Issue Size (₹ crore)	State Guarantee	Purpose
Ahmedabad	1998	100.00	No	Water supply and sewerage
	2002	100.00	-	Water supply and sewerage
	2004	58.00	-	Water supply and storm water drainage and roads and bridges.
	2005	100.00	-	Roads and water supply
Bengaluru	1997	125.00	Yes	City road and drains
Chennai	2003	42.00	Yes	Chennai water supply augmentation project – Chennai Metropolitan Water Supply and Sewerage Board (CWSSB).
	2005	50.00	Yes	Water Supply – CWSSB
	2005	45.80	-	Roads
Hyderabad	2003	82.50	Yes	Road construction and widening
	2003	50.00	Yes	Drinking water – Hyderabad Metropolitan water
Ludhiana	1999	10.00	-	Water supply and sewerage
	1999	100.00	No	Water supply and sewerage
Nashik	2002	50.00	-	Underground sewerage scheme and storm water drainage system
Indore	2000	10.00	Yes	Improvement of city roads
Nagpur	2001	50.00	No	Water supply
	2007	21.20	-	Water supply and sewerage
Madurai	2001	30.00	No	City roads

City	Issue Year	Issue Size (₹ crore)	State Guarantee	Purpose
Vishakhapatnam	2004	20.00	No	Water supply
	2004	50.00	-	Water supply
	2010	30.00	-	Water supply
Tamil Nadu Water and Sanitation Pooled Fund	2002	30.20	USAID	Refinancing loans for water and sanitation projects of 13 ULBs
	2008	6.70	-	-
	2010	83.19	-	-
	2012	51.00	-	-
	2013	51.00	-	-
Karnataka Water and Sanitation Pooled Fund	2005	100.00	USAID	Water supply component of a green field project for 8 ULBs, Greater Bangalore Water Supply and Sanitation project (GBWASP)
	2010	300.00	-	Lending to ULBs through Directorate of Municipal Administration
Total Amount		**1746.59**		

As indicated in the Table 1 (above), the aggregate value for the municipal bond issues in India is not significant whereas as per RBI data, the corporate bond issuance in 2014-15 was ₹ 4,78,962 crore. Municipal bonds, therefore, are not significant in the Indian debt market. Out of the 94 cities which were assigned credit ratings as smart cities & AMRUT cities and required additional funds, only a couple of cities have tapped the market for funds. The lack of operational efficiency reduces the creditworthiness of the municipal entities, thus making their bonds less attractive. As per the Fourteenth Finance Commission, the cost recovery and the collection efficiency of user charges remain far below the service level benchmarks specified. While bigger municipal bodies can go for bond issues relatively more easily, the smaller municipalities often find it difficult to access the market due to lack of capacity and scale. The municipalities which have had successful issues in the past have faced the brunt. The Nagpur Municipality planned to raise funds in 2007 to the tune of ₹ 128 crore but was able to garner only ₹ 21 crore. The retail participation in the bond market has been weaken in India leading to a large unrealised potential. A tax concession on the returns earned on municipal bonds and the liquidity provided by exchange-traded bonds will be good incentives to encourage broader participation in the municipal bond markets. If the demand and supply side issues can be addressed, the potential for municipal bonds remains large and will be helpful in filling the large deficit in urban infrastructure financing.

2.4 Benefits of Municipal Bonds in India

There are several benefits of municipal bonds to both the investors and the urban local bodies. Municipal bonds help to boost the municipality, as well as pose as a secure investment, externally verified by credit rating entities. A well run ULB can raise these bonds easily. Such bonds indirectly help better governance at the municipal level. ULBs, over a period, can become independent financially (achieving the objectives of the 74th Constitutional Amendment). The money raised from municipal bonds can enable municipalities to create and improve urban infrastructure that will boost quality of urban life. The citizens having invested in these bonds can demand officially operational as well as financial information about the management of the ULBs. This is likely to increase transparency and governance at the ULB level. These bonds may also prove to be a good investment option for investors looking beyond fixed deposits and small saving schemes. The government can progressively reduce their funding to the ULBs once the ULBs are able to raise funds regularly and properly utilise them. Municipal bonds in India enjoy tax-free status if they conform to certain rules and their interest rates will be market-linked. Their tradability implies that an investor would not need to hold them till maturity. Of the total municipal bonds issued, 40.7% were taxable, and 59.3% were tax-free bonds (1997-2007).

In case the municipal bond market matures like in USA, secondary bond market can develop increasing the investment opportunities for small investors. Municipal bonds are very advantageous option as far as the size of borrowing and the maturity period (often 10 to 20 years) are concerned, as these characteristics are considered ideal for urban infrastructure financing.

When appropriately structured, municipal bonds can be issued at interest costs that are lower than the risk-return profile of individual ULB. As the size of the issue and frequency increase over time, competencies develop, thereby reducing the transaction costs, making it a convenient source of funding in the long run. Being fixed income assets, municipal bonds have lower volatility than stocks. Therefore, they are very appealing for investors with lower risk appetites. Free from taxation makes municipal bonds a very attractive buy for investors. Sheltering investments from taxation allows growth to compound quicker than a taxable amount.

There are several benefits of municipal bonds over borrowings from banks. Firstly, for the purchaser of municipal bonds, there is no need to establish any long-term relationship with the issuer, however, banks have to establish such relationship. Secondly, banks focus mostly on short term lending rather than the long term which is required for infrastructure development.

Municipal bonds also have an advantage over grants from higher governments in terms of timings as the constraints with regard to annual budget cycles and grants decisions, etc., do not exist.

Municipal bodies will also make efforts to improve their fiscal discipline and financial reporting in order to obtain the best credit rating for bond issue. For Infrastructure projects, municipal bonds would be very ideal as the interest payments can be mapped with the cash inflow of toll and other user charges from those projects.

3. Existing Means of Municipal Funding and Scope for Municipal Bonds in India

The activities of the municipalities are funded by several sources both from within and outside. There are three main sources for funding a project undertaken by the ULBs:

- Own source – These are internal revenue sources that may be used towards capital expenditure. These units are mostly loss making, and therefore the revenue earned cannot finance a capital-intensive project. According to the Thirteenth Finance Commission, in 2012-13, municipal revenue constituted 1.76% of GDP (at market prices) in India. This is well below other emerging economies like Brazil and South Africa, where corresponding figures are 5% and 6%, respectively. The main sources of municipal revenues can be boxed under the following sub-categories:

- *Tax revenues* – Property tax, advertisement tax, vacant land tax, etc.
- *Non-tax revenues* – User charges, municipal fees, sale and hire charges, etc.
- <u>Assistance from higher levels of government</u> – These are usually in the form of grants-in-aid. A grant is a sum of money given by the higher level of government. The amount and nature of grants given to ULBs by the government differs across states since it depends on the policy of the respective State Government. Grants are usually given to ULBs for implementing government plans. Grants can be classified into two main categories:
- *Tied-up Grants* – The grants given by the government for a specific purpose. For example, grants given by the government for implementation of the Swarna Jayanti Sahari Rozgar Yojana are tied-up grants, and cannot be utilised for any other purpose.
- *Untied Grants* – These are the general grants given by the government, which can be utilised by the ULBs for any purpose. In other words, they have the freedom to spend those grants as per their choice and requirements.
- <u>Borrowing</u> – Funds required for capital expenditure can be borrowed from financial institutions such as Nationalised Banks, HUDCO, etc. Precautions are to be taken while borrowing the funds, as most financial institutions do not lend to ULBs without a government guarantee. Borrowing has a further sub-category:
- *Pooled financing* – The Pooled Finance Development Fund Scheme (PFDFS) was set up by the Central Government with the main aim of providing credit enhancement facilities to ULBs based on their creditworthiness. To lower costs of financing and transaction costs, small local bodies collectively form a Special Purpose Vehicle (SPV) and borrow funds from institutional investors for a common purpose such as to build a commercially viable water and sewage

infrastructures project. As a condition for lending, most institutional investors are to be secured with a State Government guarantee.

- Public-Private Partnerships (PPP)– PPP is an important variant of the involvement of the private sector in the provision of services/ functions, which were hitherto provided by the public agency. This partnership model ensures the leveraging of public sector strengths (which primarily relate to risk sharing) with those of private sector (which relate to investment capital, technical and/or managerial efficiency). The partnership can be on a project-to-project basis or on a programmatic basis with involvement of for-profit organisations.

For various managerial and political reasons underlying the governance of the municipalities that are beyond the scope of this study, there are issues in sourcing timely funds in municipalities. This coupled with the need of the citizens for better infrastructure and service, the municipalities and the higher levels of government are looking for different methods of financing.

Considering the needs of the municipalities for sources of funds, there appears to be good scope for the growth of the municipal bond market in India. First of all, this will expose the municipal bodies to the market mechanism where efficiency is a major criterion for survival. Over a period of time successful fund raising through municipal bonds and resulting improved governance will create public confidence in the municipal bodies not only as efficient public service providers, but also as safe and good investment options.

As of 2016, the market capitalisation of NYSE was 18.486 trillion USD and that of the Municipal bonds was 3.700 trillion USD. Applying the same proportion to Indian scenario where the market capitalisation in BSE was 1.482 trillion USD, the municipal bond capitalisation should have been 0.296 trillion USD or INR 18.86 lakh crore. This in a simple way gives a rough estimate of the scope for municipal bonds in India.

3.1 Types of Municipal Bonds

Municipalities can issue different types of bonds. Based on the American bond market, there are generally two types of municipal bonds: General Obligation bonds, and Revenue bonds.

- **General Obligation Bonds:** General obligation (GO) bonds are issued in the belief that a municipality will be able to repay its debt obligation through taxation. These bonds are backed by the taxing power of the issuer. These bonds therefore may not be for specific revenue-generating projects such as a toll road. In some countries, there are two types of GO bonds:

  - Unlimited Tax GO bonds: These are guaranteed, i.e., they will be paid out based on the power of the taxable base. For example, it can use property taxes to repay the bonds.
  - Limited Tax GO bonds: These are not guaranteed and are based on narrow taxing power. There may be a limited tax general obligation bond that is issued to build a new hospital in a small county. This is paid out of any additional levy of tax made by the local body. Such instance could arise based on the requirements of local issues and the bond subscribed by the local population.

- **Revenue Bonds:** Revenue bonds are bonds supported by the revenue from a specific project such as a water supply project or a sewerage project. Such bonds secure both interest and principal payments by specified revenue sources through income-generating projects. For example, if a revenue bond is issued to upgrade a water supply network, the water charges collected from users would be used to pay off the bond.

In short, general obligation bonds are repayable through tax collection of the municipality whereas revenue bonds are supported by revenue flow from a specific project. Generally, these bonds are given tax benefits by the government. Some of these bonds are also guaranteed by the State Government, as "urban" matters are state subject. In India also most of the bond issues have been guaranteed by the State Governments.

3.2 Risks Related to Municipal Bonds

Revenue generation may be delayed or slower than anticipated in longer projects. With the annual interest payments to be periodically made, the ULBs may run into a liquidity problem, and may not have generated sufficient cash to pay to the investors. These may carry a low rate of interest compared to other types of securities. It is often difficult for municipal bonds to keep up with the competition, thus finding it hard to find willing investors. In India most of the bond issues have been guaranteed by the government. Also, initial transaction costs for accessing bond market is high since the ULB must invest in meeting the pre-requisites of its first bond issue. As with any investment, investing in municipal bonds entails risk. Investors in municipal bonds face several risks, specifically including:

- Call risk –The potential for an issuer to repay a bond before the maturity date, something that an issuer may do if interest rates decline, when the bonds have a floating rate. Bond calls are less likely when interest rates are stable or moving higher.
- Credit risk – The risk that the bond issuer may experience financial problems that make it difficult or impossible to pay interest and principal in full.
- Interest rate risk – If bonds are held to maturity, the investor will receive the face value amount back, plus interest that may be set at a fixed or floating rate. The bond's market price will move up as interest rates move down and it will decline as interest rates rise, so that the market value of the bond may be more or less than the par value.
- Inflation risk – For an investor, municipal bonds may not beat inflation, as they are conservative investments.
- Liquidity risk – The risk that investors would not find an active market for the municipal bond, potentially preventing them from buying or selling when they want and obtaining a certain price for the bond. Many investors buy municipal bonds to hold them rather than to trade them, therefore, the market for a particular bond may not be especially liquid and quoted prices for the same bond may differ.
- Political risk – Usually local bodies are headed by elected representatives. If the political orientation of such elected representatives is different from those at the next level say the State Government, then there are delays in implementation of projects. Any such change in political orientation and scenarios at local bodies, the fund-raising plan and/or project execution plan may get affected.

4. Mechanics of Municipal Bond Markets

4.1 Regulatory Framework for Municipal Bond Market in India

The Securities & Exchange Board of India (SEBI) had issued regulations to facilitate issuance of municipal debt and listing of debt securities by municipalities in India during March 2015 (amended in 2017). This will enable investment in public infrastructure of the 100 Smart Cities that the Government of India (GOI) proposes to build. The SEBI (Issue and Listing of Debt Securities by Municipality) Regulations, 2015 (amended in 2017) prescribes the eligibility, terms and conditions for public issue including tenure, credit rating, minimum subscription, accounting, auditing and reporting requirements and other disclosures, etc. The key features of SEBI (Issue and Listing of Debt Securities by Municipality) Regulations, 2015 (amended in 2017) are:

- Listing of debt securities issued through public issue or on private placement basis on a recognised stock exchange.
- Eligible Municipality can itself or through Corporate Municipal Entity (CME) can raise funds through municipal bonds. CME means a company as defined under Companies Act, 2013, which is a subsidiary of a municipality and which is set up for the purpose of raising funds for a specific municipality or group of municipalities. The regulation states that the CME, its promoter, group company or directors should not have been named in the list of willful defaulters published by the Reserve Bank of India (RBI) or should not have defaulted on payment of interest or repayment of principal amount in respect of debt instruments issued by it to the public.
- Under public issue, revenue bonds intended to be issued shall have a minimum investment grade rating.
- An issuer making public issue of municipal bonds shall only issue revenue bonds. In case of private placement, an issuer may issue both general obligation bonds and revenue bonds.
- The issuer shall create a separate escrow account for servicing of municipal bonds with earmarked revenue. The issuer shall appoint a monitoring agency such as public financial institutions or nationalised banks to monitor the earmarked revenue in the escrow account.

Some key considerations as per SEBI Regulations, 2015 (as amended in 2017) are summarised in Table 2:

Table 2

S.No.	Criteria	Considerations as per SEBI Regulation
1.	Eligibility	a) The municipality (issuer) shall be allowed to raise money under the laws that govern it. b) The municipality shall have surplus as per its Income & Expenditure Statement in any of the immediately preceding three financial years. CME shall not have negative net worth for the last three financial years. c) The municipality shall not have defaulted in repayment of debt securities or loans obtained from banks or financial institutions during last three hundred and sixty five days.
2.	General requirements in case of Public Issue	a) The municipality will issue only revenue bonds in case the issue is a public issue. b) Minimum tenure of revenue bonds issued shall be 3 years. c) Maximum tenure of revenue bond issue shall be 30 years.
3.	Minimum subscription	The minimum subscription limit shall not be less than 75% of the issue size.
4.	Utilisation of issue proceeds	a) The proceeds of the issue shall be clearly earmarked for a defined project or a set of projects as specified in the offer document. b) The municipality's contribution for each project shall not be less than 20% of the project costs, which shall be contributed from their internal resources or grants. c) The municipality shall establish a separate project implementation cell and designate a project officer. d) The municipality shall disclose the schedule

S.No.	Criteria	Considerations as per SEBI Regulation
		of implementation of the project in the offer documents and the funds raised by the issuer shall be utilised in accordance with the disclosed schedule.
5.	Credit Rating	a) Minimum credit rating of A+ is required from at least one of the recognised credit rating agencies. b) Every rating obtained by an issuer shall be periodically reviewed by the registered credit rating agency.
6.	Listing of debt securities (mandatory listing)	The issuer shall make an application for listing on one or more recognised stock exchanges.
7.	Other requirements	a) The issuer shall maintain 100% asset cover sufficient to discharge the principal amount at all times for the debt securities issued. b) The issuers may provide an option to buy-back the debt securities at their face value, from the investors.
8.	Security of debt	a) Debentures shall be secured through the properties or assets or the receivables of the municipality. b) The total value of secured debentures issued shall not exceed the market value of immovable property/other assets or receivables of the municipality for which a charge shall be created. c) In case unsecured debentures are intended to be listed on stock exchange(s) then the debt securities shall either be backed by guarantee from State Government or Central Government or shall have a structured payment mechanism.

S.No.	Criteria	Considerations as per SEBI Regulation
9.	Accounting, Auditing and Reporting	a) The accounts of municipality shall be prepared in accordance with the National Municipal Accounting Manual (NMAM) or similar municipal accounting manual adopted by the State Government. b) In case of a CME, the accounts shall be prepared in accordance with Section 129 and 134 of the Companies Act, 2013, and the rules made there under. c) In case of the issuer being a municipality, the accounts of the issuer shall be audited by the persons appointed by the municipality, as permissible under its constitution/state legislation governing the municipality. d) In case of a CME, the accounts of the issuer shall be audited by an auditor, in terms of Section 139 of the Companies Act, 2013, and the rules made there under.
10.	Disclosure	The municipality/ CME shall make disclosures as required by the regulations.

In 2016, SEBI issued guidelines for listed municipal bonds including periodical reporting for investors. SEBI has given certain relaxations with regard to the submission of audited financial statements, mid-year financial statements, etc., compared with other corporate listed bonds.

The SEBI Municipal Bond Regulations not only brought fresh air to the field of municipal bond market but also provided a well laid out process for issue of municipal bonds. These are very similar to the issue of bonds or shares of the corporate sector taking into considerations the peculiarities and the needs of the municipal sector.

4.2 Recent Case of Pune Municipal Corporation (PMC) Bond Issue

During 2017, Government of Maharashtra (GoM) had given its approval for PMC's bond program. PMC has raised municipal bonds for ₹ 200 crore

@7.59% as the first tranche of a 5-year bond program for raising ₹ 2,264 crore. The project is to develop 24x7 water project to provide safe and equitable water to all its residents for the next 30 years. The objective is to transform Pune into the 'most livable city in India'. The issue was oversubscribed by almost 6 times. It shows the interest of financial institutions in the municipal bond market of healthy Local Bodies. PMC has been proactively working with Government of Maharashtra (GoM), Ministry of Finance (MoF), Ministry of Urban Development (MoUD), SEBI, SBI Capital Markets Ltd. (SBI Caps) and advisors from the US Department of Treasury's Office of Technical Assistance (OTA) in developing this new financial-asset-class. Hon'ble Prime Minister of India, while inaugurating the National Institute of Securities Markets in Navi Mumbai on December 24th, 2016, urged SEBI and Department of Economic Affairs to ensure that at least 10 cities in India issue municipal bonds within one year in the context of the 'Smart Cities Mission'. Union Government has proposed to give a compensation of 2% interest subsidy on the total size of the bond issue. Both these events have been pivotal in providing an impetus to PMC's Municipal Bonds program.

PMC's Standing Committee and General Body have approved a consumption based telescopic water tariff structure for the next 30 years. This policy will progressively increase the revenues generated from the '24x7 Water Project' leading it towards self-sustenance. Additionally, as a part of the structured escrow payment mechanism, a portion of PMC's Property Tax has also been pledged for the debt servicing of the bond program. As per the financial prudence prevailing at different points in time in the future while simultaneously adhering to the relevant regulatory framework, the bonds may also be partly/fully paid from PMC's several revenue sources.

Some key points on the process of municipal bonds issue:

1. <u>Funding for water supply project</u>: PMC went for bonds issue since they wanted to raise capital for their 24x7 Water Supply project which could cost them ₹ 3,200 crore. Their revenue sources were not significant enough to fund this project and PMC tried sourcing from international lending agencies. The conditions were not suitable for PMC, and that is when they thought of going for issue of municipal bonds. The total money that PMC has planned to raise ₹ 2,264 crore for this project, and the PMC would be funding the balance amount.

2. <u>No government guarantee</u>: The issue is not guaranteed by the State

Government but secured through the assets mentioned in the debenture trustee agreement. It is not revenue bonds but a combination of revenue and general obligation bonds where a certain portion of property tax receipts are kept in a separate escrow account for servicing the bonds. The bonds are listed in the Bombay Stock Exchange (BSE), but these are not traded much since these are not as attractive in terms of minimum investment ticket and returns. There are only two investors currently.

3. Accrual accounting: The unique advantage that the PMC had is that it had been following double entry accrual system of accounting and preparing the balance sheet since 2006-07 which many of the other municipal corporations in the country do not have. The PMC raised ₹ 200 crore with a Face Value of ₹ 10 lakhs each under the Private Placement route and no Corporate Municipal Entity (CME) was formed. The bonds were issued in the name of PMC only.

4.3 Challenges in Municipal Bonds Issue in India

As per the report of HPEC (2011), Indian Urban Local Bodies are among the world's weakest in terms of financial autonomy and in terms of their capacity to raise external capital.

External sources, whether in the form of bank loans, bonds or other capital market instruments, will be available to municipalities only on the basis of the internal revenues they generate now and are expected to generate in the future. Till 2010, only 25 municipal bond issues took place and since then, only one bond issue (PMC) has taken place during the year 2017. There are various challenges and short-comings related to the municipal bond market in India that have made municipal bonds less attractive amongst the local bodies as well as the investors.

Some of the reasons are: It has been observed that over the years the dependence of ULBs has increased on Central and State Government(s) for grants. As per the 13th finance commission, 47.1% of the total municipal revenue consisted of grants from the Central and State Government(s) in 2007-08. Transaction cost involved in accessing the capital market which consist of management fee, royalty fee and underwriter's expenses, etc., is generally high. Generally, investor friendly accounting records are not kept by the local bodies in India. The accounting and auditing practices prevailing in local bodies may discourage investors from investing in municipal bonds. Municipal bond market may be illiquid as there may not be any secondary market for municipal bonds currently.

Collateralised Borrowing and Lending Obligations (CBLO) allow an investor to borrow against an underlying listed security in an exchange traded market. Currently, only Central Government securities are allowed to be used under CBLO. Though, there has been no case of default by municipal corporations till now, however, occurrence of any possible defaults is required to be addressed by relevant Act /regulations /guidelines which is currently not in place. There is also a lack of transparency and disclosures with regard to planning and implementing infrastructure projects.

A few areas in SEBI Regulations (Issue and Listing of Debt Securities by Municipality) 2015 (amended in 2017) also need further consideration. The regulation provides for an option to issuer for buy-back of debt securities from investors at a value which shall not be less than face value. This eliminates the option of a premature buy-back of deep discount bonds, as this will affect municipal finances adversely. Sub-regulation 4 of regulation 23 of the said SEBI Regulations deals with the movements in rating levels. If a rating is downgraded by two notches or more, the issuer is required to explain reasons for the downgrade and take preventive steps to recover rating and cash flows. Such conditions are not applied on corporate bond issuers.

4.4 Municipal Bond Market Process in a Matured Market – the Case of United States

In the USA states, cities, and counties, are known as municipal issuers, as they are eligible to issue municipal bonds. Depending on the needs and abilities such issuers raise money from the bond market. In all bond issuances, the issuer serves as the focal point and manages the bond issue process. However, in some cases, the bond measure for a public project must first be approved by voters.

The methods and procedures by which municipal debt is issued are governed by an extensive system of laws and regulations, which vary from state to state. Most bonds bear interest at either a fixed or variable rate of interest, which can be subject to a cap known as the maximum legal limit; some bonds may be issued solely at an original issue discount, or 0% coupon.

The issuer of a municipal bond receives cash at the time of the bond issue in exchange for a promise to repay the purchasing investors over a specified period. Repayment periods can vary from a few months to say upto 40 years, or even longer. The proceeds from a bond issue is typically used to pay for capital projects or for other similar purposes.

Tax regulations governing municipal bonds generally require all money raised by a bond sale to be spent on capital projects within three to five years of issuance. Certain exceptions permit the issuance of bonds to fund other items, including ongoing operations and maintenance expenses in certain cases, the purchase of single-family and multi-family mortgages, and the funding of student loans, among many other things.

Because of the special status of most municipal bonds granted under Section 103 of the Internal Revenue Code, which provides that the interest on such bonds is exempt from gross income, investors usually accept lower interest payments than on other types of borrowing (assuming comparable risk). This makes the issuance of bonds an attractive source of financing to many municipal entities, as the borrowing rate available to them in the municipal, or public finance, market is frequently lower than what is available through other borrowing channels.

The US bond market is also supported by the Electronic Municipal Market Access (EMMA) system, operated by the Municipal Securities Rulemaking Board (MSRB), which serves as the official source for municipal securities disclosures and related market data in the United States. EMMA provides free on-line access to centralised municipal securities disclosure documents for all municipal securities, escrow deposit agreements for refinancing of outstanding bonds, real-time municipal bond trade price information, interest rates, etc., together with daily statistics on trading activity and investor education materials.

The key features of the American (USA) Municipal Bond market can be understood by specific roles played by several personnel involved in the municipal bond market:

<u>Municipal advisor</u>

- Under the Dodd-Frank Wall Street Reform and Consumer Protection Act, municipal advisors have been given an important role in overseeing financial and legal circumstances surrounding the issuance of bonds.

- The municipal advisor serves as a fiduciary for the municipal issue, taking care of all the assets and finances involved in the issuance process. Legally, the advisor is obligated to represent the interests of the issuer and serve as a source of financial advice. This entails offering advice on structuring, selling, and promoting bonds, as well as serving as the central liaison between other members of the financial team, especially the underwriters and credit rating agency.
- Although municipal financial advisory services have existed for many years, municipal advisors have played a key role in the bond issuance process since regulations enacted in 2014 that require municipal issuers to appoint a municipal advisor (or file to opt out).

Bond counsel

- After appointing a municipal advisor, bond issuers recruit a syndicate of legal professionals to serve as the financing team's bond counsel.
- The counsel works to verify the legal details of the issuance and ensure that the issuing agency is complying with all applicable laws and regulations. As the formal legal advisor for the deal team, the bond counsel will typically draft core documentation relating to bonds, including loan agreements, indentures, and other critical documents.
- Along these lines, the bond counsel is also tasked with reviewing and advising on any legal issues that might arise, and interpreting how tax laws affect the issuance. For instance, the bond counsel will decide if an issuance is exempt from state or federal taxes.

Underwriter

- Once a municipal advisor and bond counsel have been established, they work together to identify an underwriter that will manage the distribution of the bonds.
- The underwriter is an organisation that publicly administers the issuance, and distributes the bonds. As such, they serve as the bridge between the buy and sell side of the bond issuance process. Underwriters connect issuers with potential bond buyers, and determine the price at which to offer the bonds. In doing so, most underwriters will assume full risk and responsibility for the distribution and sale of the bonds issued by the issuing agency.

- As such, underwriters play a central role in deciding the return and span of maturities, and typically collect fees in exchange for their services. If the price is wrong, the underwriter is left holding the bonds.
- Given the underwriter's role as a price marker, they also serve as a strategic partner to the issuing team, analysing market conditions and trading, help in deciding how and when the bonds should be sold.
- In many cases, there will be a co-manager who works with the underwriter to help provide the capital to buy the issuance. In large issuances, the underwriter(s) will often put together a syndicate or selling group. This would consist of a group of bond salespeople who are skilled in the art of determining the right price for an issuance, and a group of investors who will be willing to buy those bonds.

Brokers

- Brokers are the intermediate step between the underwriter and the actual bond holders, the cement-and-pavement financial professionals who answer orders for bond purchases.
- In most cases, underwriters will communicate and sell their maturities through multiple brokers. The broker seeks to distribute their bonds from the underwriter at a small percentage profit. Given the current legacy systems of the bond market, the distribution and sale of bonds is an exceptionally manual process requiring tremendous labor overhead and paperwork. As such, most municipal bond brokers only sell to high net worth individuals and organisations seeking to buy large quantities of bonds.
- Many of the people with direct ties to the impacted communities are therefore unable to contribute to their local governments, given little or no access to the profitable bond market.

Bond holder (individual & syndicate)

- Municipal bond holders may purchase bonds either from the issuer or broker at the time of issuance (on the primary market), or from other bond holders at some time after issuance (on the secondary market). In exchange for an upfront investment of capital, the bond holder receives payments over time composed of interest on the invested principal, and a return of the invested principal itself.

- Repayment schedules differ with the type of bond issued. Municipal bonds typically pay interest semi-annually. Shorter term bonds generally pay interest only until maturity; longer term bonds are generally amortised through annual principal payments.
- Longer and shorter-term bonds are often combined in a single issue that requires the issuer to make approximately level annual payments of interest and principal. Certain bonds, known as zero coupon or capital appreciation bonds, accrue interest until maturity at which time both interest and principal become due.

Modern bond platforms

- Over the last decade many traditional and new market participants have begun to apply current technology solutions to the municipal market remedying latent problems associated with many aspects of the municipal bond market.
- Security: The historical default rate for municipal bonds is lower than that of corporate bonds. The Municipal Bond Fairness Act (HR 6308), introduced in September 9, 2008, included a table giving bond default rates up to 2007 for municipal versus corporate bonds rating by rating agencies.
- Denominations: Most municipal notes and bonds are issued in minimum denominations of $5,000 or multiples of $5,000.

These features of American municipal bond market bring to light the advanced stage of the same, and also indicate the levels to which the Indian municipal bond market can grow.

5. Rating of Municipal Bonds

The municipal bond issue has certain pre-requisites. Apart from governance aspects, updated accounts and certain satisfying performance indicators (financial and non-financial) are needed. Based on these, the municipalities need to get rated by rating agencies for the bond issue.

Rating of municipal bonds is a necessary condition for bond issue and the support of various rating agencies are taken by the municipal bodies in this regard. There are five rating agencies (CRISIL, ICRA, India Ratings, CARE and Brickwork Ratings) in India that rate municipal debt, the rating methodology is similar. Ratings are assigned on the basis of unaudited financial figures. Except a few large municipalities, in most of the cases, information on the financials, and no real data on the operations or the city GDP, etc., is available for credit rating. This may lead to misleading information with regard to income and expenditure of ULBs, which is a matter of serious concern.

5.1 Mechanism and Models of Rating Methodology

Broadly, the rating agencies evaluate the legal framework, the economic base, the financial position, the quality of management, the operational efficiency and the details of the project being funded. As an example, description of CRISIL methodology for municipal bond rating is given below:

5.1.1 Legal and Economic Framework

(a) Legal and Administrative Framework

The presence of a clear legal and administrative framework adds clarity and confidence to the rating process. The legal framework is vetted through an evaluation of the Municipal Act that defines the legal, structural and administrative elements of a municipal body. Specifically, the rating agencies evaluate based on the criteria given in Table 3:

Table 3

Indicators	Evaluation criteria
Municipal function domain	The extent of obligatory and discretionary services that the municipality must perform is studied. This gives an idea of the municipal body's operational responsibilities.
Taxing powers allocated to the municipal body	Gives an idea of the revenue potential of the municipality in relation to its obligations.
Tax rates levied by the municipal body and the basis of assessment	Measures taken by the municipal body to rationalise taxes and add clarity to the assessment procedure is evaluated.

Indicators	Evaluation criteria
The minimum and maximum tax rates and specific user charges that can be levied by the municipal body	Assesses the level of flexibility and autonomy enjoyed by the municipal body.
Elections and decision-making process in the municipal body	To evaluate the time taken in decision making, the extent of transparency and responsiveness to pertinent issues.
Mechanism of transfer of State Government grants to municipalities	Level of clarity and transparency of this transfer arrangement defines the stability of the grant receipts.
Borrowing powers and administrative requirements for mobilising funds from the capital market	Assesses the municipality's flexibility in raising funds. The manner in which sinking funds for repayment of debt is maintained is also evaluated.
State Government municipal body linkages	The Act would specify the revenues that the municipal body would receive by way of loans, grants or transfers from the State Government. The extent to which these transfers are discretionary is evaluated. Formula linked transfers are evaluated favourably as they are assumed to be a steady source of revenue.

(b) Economic and Social Profile

The rating agencies evaluate the economic base of service area with respect to evaluating the tax paying capacity of the citizens living in the municipality area. The key indicators examined are given in Table 4:

Table 4

Indicators	Evaluation criteria
The population base and its growth rate	The income and demographic profile of the population is studied.
The level of industrial activity	The key industries present in that area give an idea of the economic base.
The level of commercial activity	An assessment is made of the sales tax collections, stamp duty collections from property transfers, and collections from license fee from hotels, restaurants, etc.
Indicators of tax paying capacity	Indicated by the per capita income levels and literacy levels, number of vehicles registered with the Road transport office, fixed line penetration and the number of cellular phone users, etc.

5.1.2 Municipal Finances

An evaluation of the municipality's financial position includes an analysis of the past five years' financials. The parameters evaluated are given in Table 5:

Table 5

Indicators	Evaluation Criteria
Overall surplus/deficit	The surplus position is examined to see whether it accrues from an increase in revenue or the control of expenditure or a mix of both. Level of surplus also provides a sense of fund availability for debt servicing and part funding of infrastructure additions.

Indicators	Evaluation Criteria
Revenue receipts	• Extent of tax based revenues - how self-reliant the municipal body is. • Growth in property tax collections • Tax collection efficiency - both current and arrears indicate managerial efficiency • Frequency and extent of tariff revisions • Extent of user charges – profile of the charges, basis for levy (flat rate or consumption based) • Ratio of transfers from state to total revenues is an indicator of dependence on State.
Revenue expenditure	• Head wise (expenditure on salaries, repairs, etc.) and activity wise (expenditure on water supply, sewerage, primary education, health, etc.) analysis of expenditure. • Extent of cost recovery (cost in providing municipal services) • Extent of revenue surplus - ability of the municipality to fund its capital expenditure.
Capital account	• Stability of the capital receipts • Extent of capital expenditure to total expenditure - greater the spend on capital expenditure, the better.

Indicators	Evaluation Criteria
Debt profile	• Extent of capital expenditure financed by debt. A high ratio implies insufficient internal finances. • Debt service coverage ratio, loan retirement schedule, and average interest rates, are analysed.

5.1.3 Operational Effectiveness and Policy Framework

(a) Operating and Service Efficiency

The municipality's operating efficiency is studied by an in-depth evaluation of its services such as water supply, sewerage, primary education, health services, etc. Parameters used include per capita water supply, extent of sewerage coverage, water or sewerage treatment capacity, and number of schools or hospitals. A low level of current service implies pressure on the municipal body to spend extensively on infrastructure. Rating agencies and funders also evaluate the corporation's organisational arrangement for delivering its service, its existing infrastructure for providing the service, the level of revenue expenditure, past trends in capital expenditure and the proposed level of service enhancement. Track record of collection of major taxes such as property and water, etc., is also evaluated. Cost of services recovered from collection of charges levied on various services is also assessed.

(b) Policy Framework

The ability of a local body to implement necessary reforms as well as organisational capacity building is evaluated in detail. Local body's efforts towards improving its operations and accounting quality are also evaluated. Initiatives taken by the local bodies to implement reforms and collection mechanisms, etc., are also taken into consideration.

(c) Property Tax Collection

The details of the trends in tax-rate revisions, administrative structure, system and procedures for improving collections are examined.

Some project specific areas for which funds are being raised are also assessed on the following lines:

- Proposed projects,
- Project tenure and funding,
- The existing level of service,
- The improvements envisaged through the project,
- The project costs,
- The means of funding the project,
- The effect of debt funding on the municipal body's debt service coverage ratio (the cash flow available to repay the principal and interest installment for a year), and
- Any proposed structure for credit enhancement of the loan/bonds being raised.

As the linkages between the State Government and municipal bodies are very strong, the credit quality of the State Government becomes a crucial factor in the rating assigned to the municipal bodies. Currently, there are no structured mechanisms by which the finances of State Government are rated with specific reference to issue of bonds. In future, the credit rating of states in this regard is likely to gain importance.

5.2 Rating Scale

CRISIL's rating definitions are given in Table 6 which ranges between AAA (High) to D (Default). Other rating agencies have similar definitions of credit worthiness.

Table 6

Rating Symbol	Definition
AAA (Highest Safety)	Instruments with this rating are considered to have the highest degree of safety regarding timely servicing of financial obligations. Such instruments carry lowest credit risk.
AA (High Safety)	Instruments with this rating are considered to have

Rating Symbol	Definition
	high degree of safety regarding timely servicing of financial obligations. Such instruments carry very low credit risk.
A (Adequate Safety)	Instruments with this rating are considered to have adequate degree of safety regarding timely servicing of financial obligations. Such instruments carry low credit risk.
BBB (Moderate Safety)	Instruments with this rating are considered to have moderate degree of safety regarding timely servicing of financial obligations. Such instruments carry moderate credit risk.
BB (Moderate Risk)	Instruments with this rating are considered to have moderate risk of default regarding timely servicing of financial obligations.
B (High Risk)	Instruments with this rating are considered to have high risk of default regarding timely servicing of financial obligations.
C (Very High Risk)	Instruments with this rating are considered to have very high risk of default regarding timely servicing of financial obligations.
D (Default)	Instruments with this rating are in default or are expected to be in default soon.

6. Municipal Management for Bond Market

6.1 Governance Pre-requisites in Municipal Management

One of the major issues that the ULBs in India face is the quality of governance/management. Development of a municipal bond market in India depends on significant improvement in the credit quality of municipal corporations. The credit quality is reflected in the quality of governance of the ULBs. The issues in relation to governance of ULBs can be summarised under 3PT® perspectives:

- Policy
- Process
- People
- Technology

6.2 Policy Issues

Well laid out policy for all areas of operations within ULBs is pre-dominantly absent. For instance, most of the ULBs do not have any accounting policies clearly laid out. Though over a decade many states like Tamil Nadu, Karnataka, and Gujarat are following accrual accounting, the financial statements do not contain detailed accounting policies. Accounting Standards for Local Bodies (ASLBs) that prescribe high quality accrual accounting framework and accounting principles are also not being applied.

Policies in terms of rules, regulations, and norms are prevalent in matters relating to staffing, services rules in relation to HR, and engineering related rules adopted from PWD of the state. These are mandatory and often archaic. Though many of the municipalities often have budgets larger than many large corporate houses but their management practices are not at par with the corporate houses. Great Mumbai Municipal Corporation had a budget of ₹ 37,052 crore, while Kolkata Municipal Corporation ₹ 3,745.10 crore, and Chennai Municipal Corporation ₹ 4,878 crore as budgets for 2016-17.

Most of the ULBs do not have any annual report equivalent, and circulation of the financial statements to citizens (key stakeholder) is unheard of. Bangalore Municipal Corporation, more than a decade ago, published their financial statements in the national dailies for a few years, and also held pre-budget discussions with citizens.

At the state level, there is no consolidated information with regard to the financial position or financial performance of the municipalities. For instance, no state has consolidated or even summarised financial statements of all the ULBs in the state. These are some of the issues affecting the governance of ULBs and are concerns while evaluating the organisation for funding whether it be through bonds or otherwise.

6.3 Process Issues

Process issues are possibly the major issues, and are innumerable. The systems and processes, in general, followed in municipalities are normally based on governmental procedures; but in reality they are much watered down due to the size, regional practices, lack of supervision /control and lack of effective audit. E-governance in many of the municipalities has not matured as the internal processes are not robust and hence the changeover has been difficult.

Most of the municipalities do not have documented processes or manuals (accounting, budgeting, HR, IT, etc.). Also, even within a state the processes (say accounting) differ in different regions. Currently the municipalities may not have 'process' approach to management and hence the controls may generally not be watertight. From the perspective of rating the organisational process for funding, like bond issue, it will be extremely difficult for the evaluator to rate the process robustness of these institutions.

The municipalities have an audit system, often done by the state accounts or audit departments. In some states, in recent times, the services of Chartered Accountants (CAs) are being used either for updating backlog of accounts or for audit purposes. In general, the internal audit system is not prevalent in municipalities.

6.4 People Issues

As Local-self Government, the municipalities could actually have a lot of power for recruiting their own staff. But due to their financial dependence on the State and Central Governments they are still under the influence of the State Government for recruitment of their staff. The sanctioning of staff is still with the government and all the rationale of having or not having the staff at the municipality level is decided by the state.

As a result of the above and other local reasons, there has been no specific look at the staffing at the municipalities as service providers or implementers of various programs. The municipalities have several staffing issues, some of which are:

- Inadequate staff though sanctioned,
- No posts for some specialised areas: like legal, IT,

- No specific cadre for even technical areas like accounting (very few states are now attempting this),
- Almost all the staff have only generic qualification, and
- Many senior officials in municipalities occupy the position out of years of experience not out of qualification, specialisation, or special training.

In some of the states, the Municipal Commissioner (even at the Corporations level) is not from IAS cadre. This makes a lot of difference in the quality of governance. In some of the states, the state cadre officers occupy the Commissioner position. Both the IAS and the state level officials may not be trained in municipal management. At the state level, there is no blue book by which the management of the municipality is carried on. In many countries, City Manager's (equivalent to Municipal Commissioner) job is a credible one as is understandable from the career requirements specified for them. (See Table 7)

Table 7

Degree Level	Master's preferred; Bachelor's may be acceptable
Degree Field	Public administration, business administration, or a related field
Experience	5 years municipal government experience
Key Skills	Writing and public speaking skills; knowledge of municipal and administrative laws and procedures; management theory and practices and dispute resolution procedures
Salary (2016)	$83,775 (median for city managers)

Sources: Moab city job description (October 2012), Haines City job description October 2012), PayScale.com

The municipalities, in general, do not have any HR department and issues related to employee development are generally not addressed. Training programmes are based on funds available under a project or sponsorship of government or multilateral agencies. No system for understanding the training needs is present in the ULBs. Performance appraisal is generally absent though SR (Service Registers) and CR (Confidential Report) systems are present. There is no specific Key Performance Indicator (KPI) or performance measure with which the employee performance is either evaluated or recognised. Hence, there are several factors that contribute for the current status of municipal performance. When an assessment for funding the municipality arises, it may be extremely difficult to assess the HR aspects. It is a fact that even in large corporations there might be no senior official who can understand bond issue related matters.

6.5 Technology Issues

Initially, the municipalities started with computerisation of various activities. Functional areas like accounting, payroll, bill issue, etc., were introduced. With improvements in technology and connectivity, revenue collection, building plan approval, etc., got in. Slowly e-seva facilitation centers were introduced. In the last decade, the focus has been on e-governance initiatives. E-governance initiatives have brought in lot of relief for the citizens. However, the internal operation engine for the municipalities has not changed much. E-governance has not resulted in efficiency gains as expected. The main reason for the same is that the e-governance exercise is being attempted as an IT or computerisation exercise and not as a governance initiative. Most of the e-governance initiatives are yet to address issues relating to information security and privacy. Invariably the same officers who were involved in computerisation are used or else the IT department spearheads with focus on technology and not on service delivery, and hence, there have been no expected efficiency or control gains.

After about two decades of accounting computerisation and accrual accounting, still in almost all the municipalities the financial statements are not generated. They are made in spreadsheets outside the system. The municipalities are still at the mercy of the IT service providers. While outsourcing technology areas is alright and makes ‘value for money’ sense, there is no one within the municipal system either to receive the service properly or supervise its quality. With all the e-governance efforts, the municipalities may not be able to provide an evaluator (like rating or funding agency) for the information required, from its operational MIS in a reliable manner.

In brief, policy gaps in various areas including lack of proper accounting policy, recruitment policy, training policy, information technology policy, etc., influence the management. In terms of processes, in general, the municipalities are yet to come out of the governmental system of working. Though they have complicated processes, most of the processes are not documented and hence control becomes difficult. In terms of control processes, many of them do not have internal audit system, and are audited by the State agencies. Only, in a few states, the services of Chartered Accountants have been considered.

There are various people issues, right from recruitment to skill upgrading. For instance, many states do not have specific cadre for accounting staff and persons without accounting qualification or background are in accounting departments. With the complications of the features of municipalities, the employees are not able to cope, resulting in unacceptable quality of accounting records and financial statements. In western countries, there are specific requirements identified for municipal services, and open market recruitments are made. Information technology initiatives, particularly those relating to e-governance has been taken up in a massive way in recent times with varying success levels in implementation. Many municipalities do not have the wherewithal for rollout of these initiatives or even for maintaining them.

Many of the issues discussed above are not directly related to the municipal bond issue but do have a bearing on the same.

7. Way Forward for Developing Municipal Bond Market in India

7.1 General Approach

Though SEBI has issued SEBI (Issue and Listing of Debt Securities by Municipality) Regulation, 2015 (amended in 2007), however, still various other initiatives and reforms are required to be undertaken to develop a mature municipal bond market in India.

Local bodies would require improving their governance and management practices. Simultaneously, financial management reforms are required to be pursued proactively at the level of local bodies. Report of Thirteen Finance Commission emphasised proper accounting and audit mechanism and adequate transparency would be critical for the success of the municipal bond issue. Accordingly, the reforms and improvement in this area requires the attention of the urban-administrators. Review of the existing relevant acts and guidelines in this regard must be undertaken. Capacity building of ULBs on implementing accounting and financial management reforms must also be undertaken seriously.

Some administrative reforms such as increased autonomy to ULBs for setting and collecting taxes and levying user charges and fees, etc., are required to be undertaken. ULBs should be given significant power and control over their own finances.

The Ministers, IAS officers at the state level, and senior officials of the ULBs need to be sensitised on various aspects of municipal bonds and the issue and management. Also, the citizens need to be trained and sensitised on the process and safety of investment in the municipal bonds. Hence, the trainings at various levels and at varying degrees need to be made. Where required, digital media messages, presentations, and short films may be made in this regard.

The Comprehensive Debt Limitation Policy (CDLP) give powers to ULBs to borrow funds as determined under the relevant act/rules of the respective State Government. However, as per the Annual Survey of India's City Systems (ASICS) 2014 conducted by Janaagraha, out of 21 cities only 4 cities were covered by CDLP.

Government can also consider categorising municipal bonds as "priority sector" for the purpose of investment/lending. Pension fund, insurance fund, provident fund, and relevant foundations/trusts may be encouraged to mandatorily invest in these bonds by expanding their range of "approved investments". Investment in these bonds may also be made admissible for Statutory Liquidity Ratio (SLR) investment by banks.

To make these bonds more attractive to investors, the cap of 8% interest rate for tax-free municipal bonds may be reviewed for increase. It can also be considered to include municipal bond investments under list of eligible investments for claiming deduction under Section 80C of Income Tax Act, 1961.

Municipal bonds may also be considered for inclusion under CBLO and bankruptcy law/regulation applicable in case of any default by ULBs is required to be introduced. Government can also consider promoting PFDFS for smaller ULBs whereby these municipalities can pool their assets and issue bonds backed by pooled assets. An entity with financing authority at State level may be set-up to monitor accounting, budgeting and financing activities of the local bodies.

In short, the success of municipal bonds totally depends on how quickly we reform our municipalities in terms of governance, transparency, information disclosure and improved efficiency. Hence, under Indian conditions while different types of bonds could be issued based on the requirements, the key issue will be the way the municipalities are managed.

7.2 Role of ICAI Members

The ICAI members have a vital role to play in matters relating to the issue of Municipal Bonds. The Chartered Accountants may contribute during complete life cycle of the Municipal Bonds.

- Conceptualisation of the Municipal Bond Issue: This involves the analysis of financials of the municipalities, guiding the municipalities as to the sizing of the issue, supporting them in various steps involved in the bond issue, and preparing the municipal employees for the issue – before and after.
- Support for Creating CME: The Chartered Accountants may help the municipalities to create CMEs (a company as per norms).
- Certifications: Necessary certifications that are required in relation to the bond issue and advising local bodies with regard to various statutory compliances as per the relevant regulations and guidelines.
- Preparation of Annual Accounts: Chartered Accountants can play an important role in preparing/guiding the local bodies in preparation of financial statements required for the bond issue.
- Audit: Chartered Accountants have an important role to play in audit of CME being a Company, audit of escrow account and project accounts as per relevant regulations/guidelines.
- Support for Rating of Bonds: The rating agencies rate the bond issue, and the municipalities would need support during various stages of the process including providing the right type of information for the rating

agencies, and discussion with rating agency on behalf of the municipalities.

- Training: This is a very vast area where the service for the members of ICAI can be utilised. Various personnel at the municipality level require training for the municipal bond issue as well as for implementing accrual accounting reforms which are mandatory for bond issue. Chartered Accountants can impart trainings in this regard.

- Implementation of Accrual Accounting: Accrual based financial statements are one of the requirement for bond issuance. Chartered Accountants can provide their support to local bodies in implementation of accrual accounting in local bodies.

- Review of Existing Municipal Acts and Accounts Manuals: Chartered Accountants can provide their support in assessment of existing systems and review of relevant legislative framework of local bodies with respect to issuance of bonds and accrual accounting implementations. Chartered Accountants can also be involved in preparation and review/ revision of the state accounts manuals.

- Financial Analysis: Chartered Accountants can provide services with regard to assessment of revenue systems for debt raising and assessing financial viability of various investment plans, preparation of financial projections and revenue mobilisation plans and project feasibility reports of local bodies, etc.

Thus, Chartered Accountants can provide complete suite of services right from conceptualisation to the settlement of bonds.

7.3 Accrual Accounting Reforms as an Essence of Debt Raising through Municipal Bonds - Role of ICAI

Traditionally, cash basis of accounting is followed in local bodies in India. However, subsequent to 73rd and 74th Constitutional Amendments, various efforts have been made by the Government of India to bring transparency and accountability in operations of local bodies by undertaking implementation of accrual accounting reforms. For taping the capital market too, local bodies would require to produce accrual based financial statements (particularly using accrual based high quality financial reporting standards), as these statements would be able to meet the information requirements of the investors enabling them to make rational decisions with regard to investments.

In light of the above, as a partner in nation-building, the ICAI took up the responsibility to prescribe high quality Accrual Accounting Framework for third tier of government, i.e., Local-self Government. ICAI has been involved since the beginning of these reforms, supporting the cause of the introduction of accrual accounting in the municipalities. ICAI proactively formed the Committee on Accounting Standards for Local Bodies (CASLB), and is engaged in the process of developing Accounting Standards for Local Bodies (ASLBs). ICAI and its members have also been conducting workshops and imparting trainings to the local bodies in matters relating to accrual accounting and audit.

The ASLBs being formulated, are based on the International Public Sector Accounting Standards (IPSASs) that are internationally accepted accounting and financial reporting standards for application by governments of all levels. Existing Accounting Standards (ASs) issued by the ICAI and prevailing accounting practice, accounting guidelines in India for local bodies, are also referred while formulating ASLBs. In other words, modifications to the IPSASs are made in light of the Indian conditions keeping in view the peculiarity in nature of activities of local bodies in India.

A robust and consultative process is followed for issuance of ASLBs to ensure participation of all stakeholders in the standard-setting process, i.e., composition of CASLB is fairly board-based; nominees from various stakeholder organisations such as C&AG, CGA, MoUD, MoPR and other relevant organisations, etc., are invited on the CASLB and the exposure drafts are issued before finalising the standards to invite public comments including the comments of specified bodies such as C&AG, CGA, MoUD, MoPR, Directorates of Local Bodies/ Local Fund Audit, Municipal Corporations, various relevant Government Departments/ Ministries, etc.

ASLBs issued by the ICAI are sent to the Technical Committee on Budget and Accounting Standards for Urban Local Bodies constituted by MoUD, and C&AG, and to the Technical Committee on Budget and Accounting Standards for Panchayti Raj Institutions constituted by MoPR jointly with C&AG for their consideration and recommending the same to the State Governments for implementation.

ASLBs are being issued in a dynamic environment which can be undertaken for revision and updation as and when required. ASLBs are principle based rather than prescriptive one and provide detailed and additional guidance on various areas that are either not covered fully or are covered partially in NMAM. In other words, ASLBs are being issued as an extension of the NMAM and are supplementary to the same as these contain additional guidance. Implementation of these standards will help in regulating the financial operations of local bodies in India.

In view of the above, ICAI can play a very strategic and important role in improving the accounting practices in local bodies in India that will enable them to raise funds from capital market by producing investor friendly financial statements and disclosures.

State Governments are required to have a well laid out approach for issue of municipal bonds. ICAI can provide the necessary support to various State Governments in various matters relating to the governance, financial management, maintenance of accounting records and preparation of financial statements, government role in the issue of municipal bond, requirements of proper accounts for credit rating, and so on. Such inputs could be made in terms of round tables, discussion forums, training to senior government officials, etc. Various training programmes are also being organised by the ICAI through CASLB on accrual accounting reforms in local bodies.

ICAI may support local bodies/ other stakeholder organisations in organising periodic seminars and conferences in matters relating to municipal bonds, and municipal finance in general, and programmes to create awareness amongst the members of the ICAI with regard to the role they can play in these areas.

Annexure

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