

Volume LIV

Issue 3

September 2022

RAIC -

# **ARTICLES**

# SHAFIQ AHMED

Urban Local Governments' Response to Urbanisation and its Impact on Municipal Finance: An Overview of India

1

# POULOMEE GHOSH AND PRATAP RAVAL

The Typologies of Urban Mixed Landuse: Their Characteristics, Geographical Applicability, Regulations and Prevalence in Pune, India

2

# KARNIKA GUPTA AND ISHU GARG

Identifying Smart Citizens in an Indian Context: A Study of Ambala Cantonment

42

# SNEH GUPTA AND RAMBOOSHAN TIWARI

Management of Bio-Medical Waste during the COVID-19
Pandemic in Raipur City

6

# KASUMURTHY POOJITHA AND RAMESH O OLEKAR

A Study on Municipal Bonds as a Source of Revenue for Municipal Corporations in India

86

122

# COLUMN

. 105

## **ABOUT CUS**

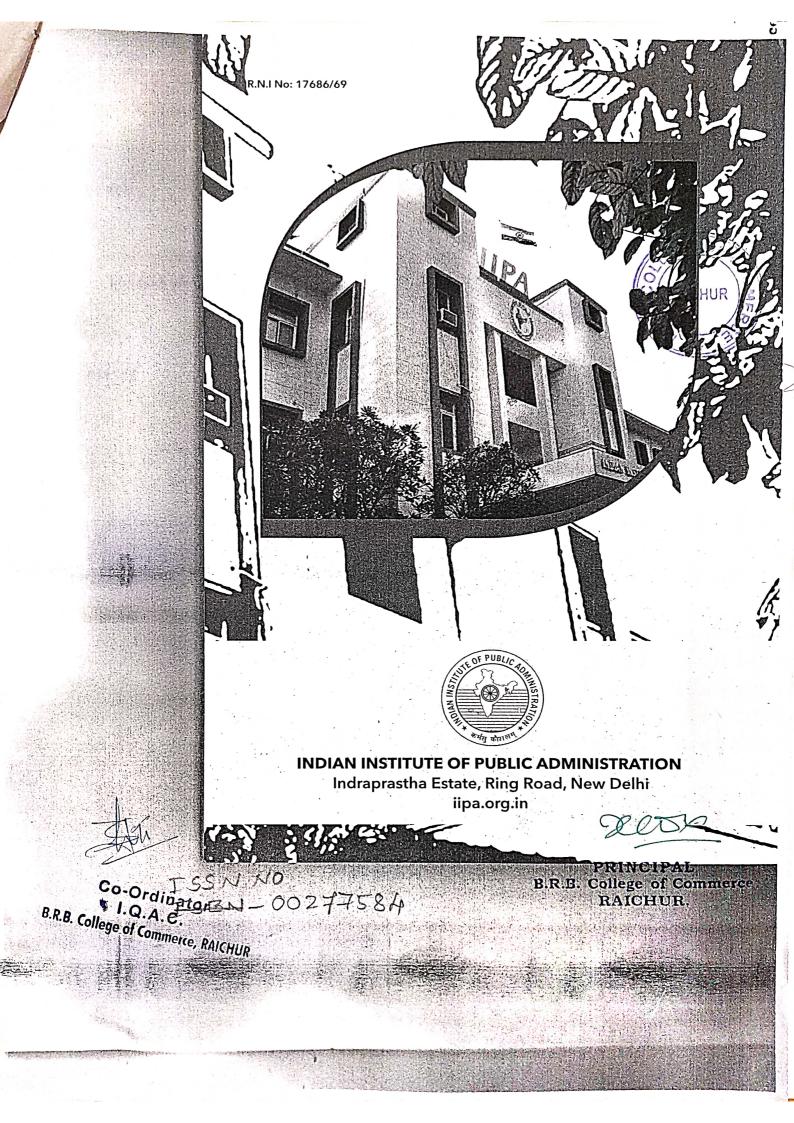
155N. NO. 00277584



भारतीय लोक प्रशासन संस्थान INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

RUER

PACHEL RAICHUR.



#### NAGARLOK

Editorial Advisory Board Surendra Nath Tripathi, Director General, IIPA and Editor, NAGARLOK

KUSUM LATA Associate Professor (Urban and Regional Planning) CUS, IIPA. New Delhi

#### Members, Editorial Advisory Board

SANJAY KUMAR V.N. ALOK Joint Secretary (NULM) Associate Professor Urban Finance IIPA, New Delhi Ministry of Housing and Urban Affairs Government of India P.S.N. RAO CHARRU MALHOTRA Director and Professor School of Planning and Architecture Associate Professor, e-Governance & ICT IIPA, New Delhi New Delhi O.P. MATHUR SACHIN CHOWDHRY Professor. Urban Governance Institute of Social Sciences Associate Professor Public Administration IIPA, New Delhi New Delhi K.K. PANDEY AMIT SINGH Professor. Urban Management IIPA, New Delhi Assistant Professor Urban Development HITESH VAIDYA IIPA, New Delhi Director, NIUA

# Copy Editor

USHA JHA. IIPA

#### About the Journal

Nagarlok, a quarterly journal of Urban Affairs, is recognised under the UGC-Care List Group I. It emphasises research and scholarly analysis on range of urban themes: Urban life, metropolitan systems, city regions, urban planning and development, urban infrastructure, urban economy, urban environment and sustainability and urban policy. With a cutting edge approach to linking theoretical development and empirical research. NAGARLOK encompasses key material from an unparalleled range of critical, comparative and geographic perspectives.

The views expressed in the items published in the journal are those of the authors and do not in any sense represent those of the IIPA, publisher and estator. Copyright of the materials published belong to the IIPA but they may be reprinted published elsewhere with our formal permission and acknowledgement to this journal plus a complimentary copy to our library.

All contributions should be sent to the Joint Edinor, NAGARLOK at magarlok@gmail.com. Business enquiries should be addressed to the Register, IIPA, LP, Estate, Ring Road, New Delhi-110002.

Subscription Rates

Email: poolitnacnowgarvyowgmail.com

# NAGARLOK

Issue 3

Vol. LIV

July-September, 2022

	PAGE
Articles	PAGE
Urban Local Governments' Response to Urbanisation and its Impact on Municipal Finance: An Overview of India Shafiq Ahmed	1
The Typologies of Urban Mixed Landuse: Their Characteristics Geographical Applicability, Regulations and Prevalence in Pun India Poulomee Ghosh and Pratap Raval	
Fig. 1 (e.g.)	22
Identifying Smart Citizens in an Indian Context: A Study of Ambala Cantonment Karnika Gupta and Ishu Garg	40
Management of Bio-Medical Waste during the COVID-19 Pandemic in Raipur City Sneh Gupta and Rambooshan Tiwari	42
A Study on Municipal Bonds as a Source of Revenue for Municipal Corporations in India Kasumurthy Poojitha and Ramesh O Olekar	69
Note	86
Empowering Poor by Leveraging Physical Planning Jit Kumar Gupta	H
Book Review	94
Column	101
National Level Activities during July – September, 2022  K K Pandey	
Redevelopment of Chandni Chowk, Shahjahanabad, Delhi Kusum Lata	105
News from States: Urban Flooding in India Sachin Chowdhry	108
Climate Change Misses	114000

Climate Change Mitigation and Adaptation through Nature Based College of Comme Amit Kumar Singh RAIGHUR.

# A Study on Municipal Bonds as a Source of Revenue for Municipal Corporations in India

KASUMURTHY POOIITHA\* RAMESH O OLEKAR\*

**ABSTRACT** 

Though the 74th Constitutional Amendment Act (CAA) autonomy to local governments, equivalent devolution of finance autonomy is absent. Municipal Finances in India are identified by the mismatch between the funds and functions of least governments. The investment requirement of urban infrastructure over the years is increasing with the increase in population. Prese to 1990, urban infrastructure was financed largely through grants and Plan funds of governments. After 1990, the concest of municipal bonds has evolved. The present study focuses on overview of municipal bonds in India, trends, process of issurage municipal bonds using secondary data. And it concludes 📶 the municipal bond market has grown drastically over the years

Keywords: Credit Rating, Financial Autonomy, Municipal Finance, Municipal Bonds

# INTRODUCTION

The confined means of income to the local bodies lead to fund fire  $oldsymbol{\mathrm{L}}$  developmental projects through issuance of municipal beam India. Municipal bond market in India is in a nascent stage where most of the developed countries, it is very vibrant (Devender Kar Pant, 2001). The 74th Amendment paved the way for the issue municipal bonds in India. It mainly focused on decentralisation local bodies and gave them autonomy.

B. College of Commerce, RAICHUN Assistant Professor, Department of Commerce, Soma Subhadramma Ran Women's College, Station Road, Raichur - 584101. Email: poojithachowdary95@gmail.com

A STUDY ON MUNICIPAL BONDS /87 KASUMURTHY POOJITHA AND RAMESHOOLEK

Later in the year 1996, the Government of India had set wakesh Mohan Committee for commercialisation of infrastructure in dia which endorsed private sector participation and access of capital arkets. Municipal bodies were permitted to issue tax-free municipal winds through the amendment of Section 10(15)(viii) of the Income Tax 🚉 , 1961, by the Ministry of Finance under certain specific guidelines the year 2001. And again Ahmedabad Municipal Corporation was first to issue tax-exempt municipal bonds in India.

In the year 2015, the Securities Exchange Board of India restructured eligibility criteria for issuing and listing of municipal bonds. The municipal corporations which are planning to issue municipal bonds we to ensure that the following criteria is fulfilled: (a) It should have negative net worth in the previous three fiscal years; (b) It should ave no prior default in debt repayment in the previous year; (c) It must ossess a minimum investment grade rating of Better Business Bureau BBB); and (d) RBI's wilful defaulters list should have no mention of municipal entities, their group companies, promoters or directors.

# Review of Literature

Brad Johnson & Chetan Vaidya (2001) described the groundwork prepared for the bond issue, the conception and financing pattern of the project and the issue of municipal bonds. The authors argue that the echnical framework set up for the Ahmedabad Municipal Corporation bonds can act as a blueprint for future development initiatives.

Chattopadhay (2006) delineated the problems and prospects related to the municipal bond market along with recent initiatives to propel the development of a viable and vibrant municipal bond system in India.

Chandrasekaran and Katayama (2012) stated that municipal development projects benefiting the public often get impeded by the political and institutional framework of the Central Government. In many cases in India, a major constraint is financing these projects. According to the 12th Finance Commission Report, most of the infrastructure initiatives have been stalled due to financial constraints. For instance, the shortfall in finances to achieve the water and sanitation sector goals in India's Tenth Plan is estimated at INR 179 billion. Without the discretion to issue municipal bonds, municipalities are often dependent on transfers from the Government of India (Gol). Chandrasekaran and Katayama described municipal bonds as an avenue

operation of Municipal bonds and highlighted the list of taxable and non-taxable municipal bonds. Lastly he concluded that municipal bonds can play the role of financing the development of infrastructure in smart cities. Nallathiga suggested for certain changes in the institutional capacity towards management of finances in Urban Local Bodies.

# Objectives of the Study

- (i) To study the overview of municipal bonds in India;
- (ii) To understand the process of raising money through municipal bonds in India; and
- (iii) To analyse the trend of municipal bonds issuance in India.

#### Research Methodology

To study the overview of municipal bonds and understand the process of raising money through municipal bonds, descriptive research method is employed. Analytical research method is used to analyse the trend in municipal bonds issuance in India. Secondary data is collected from sources such as Government of India and other institution(s) or agencies reports such as CARE, Indian Urban Infrastructure and Services, Working papers and websites such as National Stock Exchange (NSE), Bombay Stock Exchange (BSE), city finance, C bonds, INDmoney were used to collect the relevant data for undertaking this study. Trend of municipal bonds issuance in India is analysed using Bar graph. The present article confines to study municipal bond market in relation to Indian municipal corporations and their bonds.

## Overview of Municipal Bonds in India

Municipal bonds are the debt instruments and issued by the local bodies to raise funds for their developmental projects that would require huge capital expenditure. Municipal bonds can be termed as the loan taken by the local body from the investors. The investors Co-Offinators which is tax free as return on their investment. The Galegorisation of municipal bonds is done in two ways – The General 5. College of and are repaid from government funds or taxes) and the Revenue Bonds (used for funding specific projects and are repaid through revenues or taxes generated by these specific projects). Until 2017, the only issuances in India have been of general obligation bonds and

. .... data these bonds have been sold via private

A STUDY ON MUNICIPAL BONDS /89 KASUMURTHY POOJITHA AND RAMESH O OLEKAR

# Risks involved in Investment of Municipal Bonds EGE O

- Call Risk It is a risk associated with interest rates. If interest rates decline, the potential to repay bond before maturity date by the issuer increases and vice-versa.
- Credit Risk It is a risk associated with financial problems of the issuer that may make it difficult to repay interest and principal amount.
- Interest Rate Risk It is a risk relating to the inverse relationship between the bond's market price and the interest rates.
- Inflation Risk Municipal bonds are not suitable to overcome inflation.
- Liquidity Risk It is a risk associated with lack of market for municipal bonds which doesn't enable the investors to buy and sell bonds.
- Political Risk The fund raising project may get affected due to change in the political scenario of the State government and the local government.

# Process of Raising Money through Municipal Bonds in India

Generally the projects for which municipal corporations tend to raise money through bonds are infrastructure projects that require huge capital expenditure. The municipal corporations can choose between the general obligation bonds and revenue bonds. Total project cost is evaluated considering various factors. Any municipal corporation wishing to raise funds through bonds have to obtain investment grade rating from any of the recognised credit rating agencies (Credit Rating Information Services of India Limited (CRISIL), Investment Information and Credit Rating Agency of India (ICRA) and others) in India. An Escrow Account has to be opened in order to make debt payments to the investors which acts as a third party between the municipal corporation and the investors until the completion of a Project/Plan. Financial and other information is disclosed as per the Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015. Completion of all these requirements enables a municipal corporation to raise money either through public issue or a private placement. REST

Interpretation: The highest amount of Pa 412

90 / NAGARLOK VOL LIV, Issue 3, July-September 2022

#### Trend of Municipal Bonds Issuance in India

TABLE 1: MUNICIPAL ISSUANCES IN INDIA SINCE 1997

				(Rupees in c		
	Sl. No.	Name of the Munici- pal Bonds Issued	Year of Issue	Purpose of Issue	Amount Raised	
	1	Bengaluru	1997	City Roads/ Street Drains	125	
	2	Ahmedabad	1998	Water Supply and Sewerage	100	
	3	Ludhiana	1999	Water Supply and Sewerage	10	
	4	Nasik ·	1999	Water Supply and Sewerage	100	
	5	Indore	2000	Improvement in City Roads	10	
	6	Madurai	2001	City Road-Project	30	
	7	Nagpur	2001	Water Supply	50	
	8	Ahmedabad	2002	Water Supply and Sewerage	100	
	9	Nasik	2002	Underground Sewerage scheme and storm water drainage	50	
	10	Tamil Nadu Water and Sanitation Pooled Fund	2002	Water and sanitation projects of 13 ULBs	30.41	
	11	Hyderabad	2003	Road Construction and Widening	82.5	
	12	Hyderabad Metropolitan Water Supply and Sewerage Board	2003	Drinking water	50	
	13	Chennai Water Supply and Sewerage Board	2003	Water supply augmentation project	42	
	14	Ahmedabad	2004	Water Supply, Storm water drainage, roads and bridges	58	
	15	Vishakhapatnam	2004	Water supply Project	20	
	16	Vishakhapatnam	2004	Water supply	50	
	17	Karnataka Water and Sanitation Pooled Fund	2005	Water supply Project of a Greenfield project for 8 ULBs	100	
1.0.	A.C	Chennai Metropolitan Water Supply & Sewerage Board ICHU	2005	Water Supply	50	
college of	-olan	Chennai	2005	Roads	45.8	
	20	Ahmedabad	2005	Roads and water supply	100	
	21	Nagpur Metropolitan Water	2007	Water Supply	21.2	

A STUDY ON MUNICIPAL BONDS /91
KASUMUKTHY POOJITHA AND RAMESH O OLEKAR

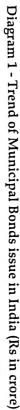
				(Table 1 con
22	Tamil Nadu Water and Sanitation Pooled Fund	2008	- GRAICHUR	6.7
23	Vishakhapatnam	2010	Water Supply	30
24	Tamil Nadu Water and Sanitation Pooled Fund	2010	- 8 1	83.19
25	Karnataka Water and Sanitation Pooled Fund	2010	Lending to ULBs through Directorate of Municipal Administration	300
26	Tamil Nadu Water and Sanitation Pooled Fund	2012	- P	51
27	Tamil Nadu Water and Sanitation Pooled Fund	2013	Municipal Administration and Water Supply	51
28	Pune	2017	Water metering project	200
29	Tamil Nadu Water and Sanitation Pooled Fund	2017	16	80
30	Indore secured	2018	Development of infrastructure	113.90
31	Bhopal	2018	Implementation of projects defined under AMRUT	175
32	Ahmedabad	2019	Development projects under AMRUT	200
33	Hyderabad	2019	Strategic Road Development Plan	200
34	Lucknow	2020	Infrastructure project	285.80
35	Ghaziabad	2021	Sewage Treatment plant	150

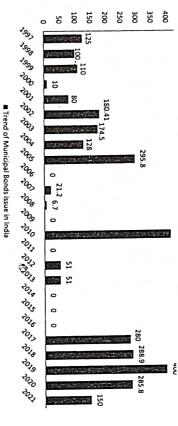
Source: https://cityfinance.in/bocrowings/municipal-bond, https://cbonds.com/bonds/, https://www.indmoney.com/bonds

of Rs. 200 crores each. The years 2005, 2017, 2018 and 2020 witnessed the municipal bond issuances of more than Rs. 200 crores while the years 1997 to 2004 and 2021 except 2000 and 2001 had more than Rs. 100 crores municipal bonds. Less than Rs. 80 crores bonds were issued in the years 2000, 2001, 2007, 2008, 2012 and 2013 while the years 2006, 2011 and 2014 2016 bod to requiring bond issues. Abmedalad 2009, 2011 and 2014-2016 had no municipal bond issues. Ahmedabad Municipal corporation has raised highest amount of Rs.558 crores in the form of municipal bonds since 1997-2021. And Bengaluru Municipal

1.Q.

92 / NAGARLOK VOL. LIV, Issue 3, July-September 2022





# CONCLUSION

corporations in India and can have a vast market when backed by are backed by the Government guarantee and while others are not greater importance in the recent times. Some of these bond issues government guarantee and are offered with handsome interest making Municipal bonds act as an important source of finance for municipal infrastructure projects of Municipal Corporations in India assumed them tax-free. Raising finance through municipal bonds for financing the

# REFERENCES

- Brad Johnson and Chetan Vaidya. (2001). Ahmedabad Municipal Bond: Lessons and Pointers. Economic and Political Weekly, 36(30), 2884-2891. https://www. jstor.org/stable/4410921
- for more? ASCI Journal of Management, 42(1), 1-19. Chandrasekaran, P. and Katayama, R. (2012). Municipal Bonds: Is India ready

5

ယ Chattopadhay, S. (2006). Municipal Bond Market for Financing Urban 2787-2791. https://www.jstor.org/stable/4418407 Infrastructure on Journal Storage (JSTOR). Economic and Political Weekly, 41(26),

ò-Ordinat Economic Times. Devender Kumar Pant (2001). Credit Rating and Municipal Bond Market—

I.Q.A.C Ramakrishna Nallathiga. (2015). Municipal Bonds As a Source of Finance ... College of Commerce 1866. Humastructure Development in India. Ramakrishna Nallathiga: cfm?abstract\_id=2930028 SSRN. Nagarlok, XLVII(3), 57-72. https://papers.ssrn.com/sol3/papers.

Camal M (2021) Rethinking the Concept of Municipal Bonds to Improve

# KASUMURTHY POOJITHA AND RAMESH O OLEKAR A STUDY ON MUNICIPAL BONDS /93

Websites

https://vinodkothari.com/wp-content/upicads/2019/11/Municipal-Bonds\_Way-Forward.pdf

http://mohua.gov.in/upload/uploadfiles/files/POOLED%20FINANCE%20 DEVELOPMENT%20FUND04.pdf

https://pahleindia.org/pdf/publication/Municipal-Bond-Market-in-India.pdf

https://www.bseindia.com/stock-share-price/debt-other/scripcode/ 929003/929003/

College of Commerce PRINCIPAL RAICHUR. 2.8 RGE OF RAICHUR