



COMPENDIUM OF GOOD PRACTICES

# Urban Reforms in Indian Cities





**FINANCIAL  
MANAGEMENT  
REFORM**

**E-GOVERNANCE  
REFORM**

**PRO-POOR  
REFORM**



an initiative of



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## PREFACE

The National Institute of Urban Affairs is the National Coordinator for the PEARL Initiative (Peer Experience and Reflective Learning). The PEARL program ensures capacity building through cross learning and effective sharing of knowledge related to planning, implementation, governance and sustainability of urban reforms and infrastructure projects – amongst cities that were supported under the JnNURM scheme.

The PEARL initiative provides a platform for deliberation and knowledge exchange for Indian cities and towns as well as professionals working in the urban domain. Sharing of good practices is one of the most important means of knowledge exchange and numerous innovative projects are available for reference on the PEARL website. “Knowledge Support for PEARL” is a program supported by Cities Alliance that aims to qualitatively advance this initiative. One of its key components is to carry out a thematic and detailed documentation of good practices in various thematic areas related to planning, governance and service delivery.

In an effort to fill the critical knowledge gaps for efficient service delivery in Indian cities, a number of exemplary good practices from cities across the country have been compiled into five thematic volumes. Each volume addresses a specific issue such as water supply & sanitation, urban transportation, solid waste management, cultural heritage and urban reforms. Cases are examined from the perspective of increasing operational efficiency, enhancing systemic capacity, the creation of efficient public private partnerships and building long-term sustainability.

The present volume focuses on the theme of ‘Urban Reforms’ undertaken by the city governments towards improving financial management and implementing e-governance and pro-poor reforms as part of the JnNURM. This documentation draws attention to the sustained efforts of the ULBs in anchoring innovations at city level and highlights the involved processes, supporting mechanisms, implementation approaches, contextual nuances and efforts to ensure sustainability and replicability.

We hope that this volume can become a useful resource for practitioners and officials who will provide momentum to urban reform implementation in India.

Jagan Shah  
June 2015



## ACKNOWLEDGEMENTS

The compendium of good practices titled “Urban Reforms” is the outcome of a collective contribution of several individuals as well as institutions. NIUA would like to acknowledge their contribution to the fullest extent.

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Dr. Debjani Ghosh  
Project Coordinator



## LIST OF ABBREVIATIONS

ADB	Asian Development Bank	KMAM	Karnataka Municipal Accounting Manual
ARV	Annual Rental Value	KMC	Kolkata Municipal Corporation
AG	Auditor General	KMDA	Kolkata Metropolitan Development Authority
AIILSG	All India Institute of Local Self Government	KPSC	Karnataka Public Service Commission
AISO	All India Services Officers	KUIDFC	Karnataka Urban Infrastructure Development and Finance Corporation
ASCI	Administrative Staff Collage of India	KUSP	Kolkata Urban Services for Poor
ATI	Administrative Training Institute	LF	Local Fund
BBMP	Bruhat Bengaluru Mahanagara Palike	MAD	Municipal Affairs Department
BCC	Bijapur City Corporation	MCGM	Municipal Corporation of Greater Mumbai
BCMC	Bijapur City Municipal Council	MeDD	Municipal e-Governance Design Document
BISAG	Bhaskaracharya Institute for Space Applications and Geo-informatics	MIS	Management Information System
BPL	Below Poverty Line	MNMAMM	Model National Municipal Asset Methodology Manual
BPMC	Bombay Provincial Municipal Corporation	MoA	Memorandum of Agreement
BPR	Business Process Reengineering	MoHUPA	Ministry of Housing and Urban Poverty Alleviation
BSUP	Basic Services for the Urban Poor	MPUSP	Madhya Pradesh Urban Services for the Poor Programme
CA	Chartered Accountants	MRC	Municipal Reforms Cell
CAA	Constitutional Amendment Act	MRV	Monthly Rental Value
CCC	City Civic Centers	MSWAN	Maharashtra State Wide Area Network
CLPOA	City Level Programme of Action	NBO	National Building Organisation
CMA&TP	Chief Municipal Architects & Town Planning	NeGP	National e-Governance Plan
CMC	City Municipal Councils	NFBS	National Family Benefit Scheme
CMR	City Management Report	NIUA	National Institute of Urban Affairs
CMU	Change Management Unit	NIPFP	National Institute of Public Finance and Policy
CRISIL	Credit Rating Information Services of India Limited	NMAM	National Municipal Accounts Manual
CSIP	Calcutta Slum Improvement Project	NMBS	National Maternity Benefit Scheme
CSS	Centrally Sponsored Scheme	NMC	Nashik Municipal Corporation
CTI	City Level Training Institutes	NMMP	National Mission Mode Project
CVB	Capital Value Basis	NOAPS	National Old Age Pension Scheme
DCR	Deputy Commissioner for Revenue	NRW	Non-Revenue Water
DEAAS	Double Entry Accrual Accounting System	NSDP	National Slum Development Programme
DFID	Department for International Development	NUWA	National Urban Water Award
DMA	Directorate of Municipal Administration	OBS	Opening Balance Sheet
DPR	Detailed Project Report	PAR	Performance Appraisal Report
DUDC	District Urban Development Cell	PEARL	Peer Experience and Reflective Learning
DUs	Dwelling Units	PIC	Property Identification Code
EDP	Electronic Data Processing	PIC	Project Implementation Committee
EWS	Weaker Sections	PRG	Peer Review Group
FBAS	Fund Based Accounting System	PSCB	Puducherry Slum Clearance Board
FDI	Foreign Direct Investment	PT	Property Tax
FIRE-D	Financial Institutions Reform and Expansion Program - Debt and Infrastructure	RI	Revenue Inspectors
FYP	Five Year Plan	RMC	Rajkot Municipal Corporation
G2B	Government to Business	SAS	Self Assessment System
G2C	Government to Citizen	SFC	State Finance Corporation
G2G	Government to Government	SIUD	State Institute for Urban Development
GDRC	General Development Control Regulation	SJSRY	Swarna Jayanti Sahari RozgarYojana
GIS	Geographic Information System	SLB	Service Level Benchmarks
GoK	Government of Karnataka	SLNA	State Level Nodal Agency
GoM	Government of Maharashtra	SLS	Slum and Livelihood
GoWB	Government of West Bengal	SMC	Surat Municipal Corporation
GPR	Government Process Reengineering	SSK	Sishu Siksha Kendra
GUDM	Gujarat Urban Development Mission	SUDA	State Urban Development Agency
GVMC	Visakhapatnam Municipal Corporation	TCPD	Town and Country Planning Department
GWRA	Gujarat Water Regulatory Authority	TCPO	Town and Country Planning Organisation
HED	Hydraulic Engineering Department	TNUIFSL	Tamil Nadu Urban Infrastructure Financial Services Limited
HMC Act	Hyderabad Municipal Corporations Act	ToR	Terms of Reference
HPC	High Power Committee	UAA	Unit Area Assessment
ICAI	Chartered Accountants of India	UDRI	Urban Development Research Institute
ICT	Information and Communications Technology	UFW	Unaccounted-for Water
IEFSUP	Internal Earmarking of Funds for Services to Urban Poor	UIDSSMT	Urban Infrastructure Development Scheme for Small and Medium Towns
IHSDP	Integrated Housing and Slum Development Programme	UIG	Urban Infrastructure and Governance
IIR	India Infrastructure Report	ULBs	Urban Local Bodies
ILCSP	Integrated Low Cost Sanitation	ULCRA	Urban Land Ceiling and Regulation Act
IMC	Indore Municipal Corporation	URIF	Reforms Incentive Fund
IMaCS	ICRA Management Consulting Services Limited	USAID	United States Agency for International Development
IPAI	Institute of Public Auditors of India	USHA	Urban Statistics for Human Resource and Assessments
JNNURM	Jawaharlal Nehru National Urban Renewal Mission	VAMBAY	Valmiki Ambedkar Awas Yojana
KEIP	Kolkata Environmental Improvement Project		
KMAAM	Karnataka Municipal Accounts Audit Manual		
KMABR	Karnataka Municipal Accounting and Budgeting Rules		



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## SECTION 1

# INTRODUCTION

Reforms play a key role in defining a nation's macro-economic vision and facilitating momentum to it. Reforms in the urban sector are not new in India, and during the last two decades, a number of initiatives to implement them have been undertaken in the country. At the city level, reforms are decisive and play an important role by assisting the Urban Local Bodies (ULBs) in

systematizing and overcoming procedural glitches in urban governance. Urban reforms assist in improving ULBs transparency, accountability, financial status and credit worthiness and can provide the necessary platform for private investments in urban infrastructure and services thereby augmenting the concept of 'investor friendly' cities.

# ROAD MAP FOR REFORMS IN INDIA

India's reform process started in early 1990s with the enactment of the 74th Constitutional Amendment Act (CAA) empowering the ULBs. It has been a major reform initiative to strengthen urban administration and decentralize powers and functions to the third tier of governance. In 1994, Ministry of Finance had set up an Expert Group on Commercialization of Infrastructure Projects which submitted the India Infrastructure Report (IIR 1996). IIR recommendations included infrastructure, service provisions and governance reforms in urban settlements (United States Agency for International Development/USAID, 2011). The 9th Five Year Plan (FYP 1997-2002) was greatly influenced by the IIR and agreed on the need to explore new, market-based forms of financing such as municipal bonds and the concomitant municipal finance reforms in order to achieve this.

In 1994, the USAID initiated the Financial Institutions Reform and Expansion Program - Debt and Infrastructure, known as the FIRE (D) Program. The program conducted the capacity needs assessment of local governments in 2001-02 and established the deficiencies in financial management, resource mobilization and project development. A major component of the program included promotion of a comprehensive approach for wide-scale and sustainable urban sector reforms and for increasing investment in urban infrastructure, specifically benefitting the poor (USAID, 2011). Several other stand alone initiatives of urban reforms emerged in the country all through the 1990s, spurred by enlightened city administrators/industry leaders or made necessary by calamities. These include the transformation of Surat in the aftermath of plague in the early 1990s, the financial reforms in Ahmedabad, innovative PPP projects for sewerage and water supply in Alandur and Tirupur etc. In some cases the state government was instrumental in introducing reforms at the city level as in the case of Hyderabad and Bangalore for transparency and accountability, streamlining and simplification of issue of building permissions in Pune and Mysore etc. Most of these were individual initiatives, often project or programme based, funded through grants from the World Bank Group, with technical assistance provided by multi-lateral agencies like the USAID, DFID, ADB etc. at individual city and state level. However these initiatives lacked a common framework for integration at the national level.

In the early years of the new millennium, two initiatives by the national government triggered the urban development investment landscape in India. Introduction of 100 percent Foreign Direct Investment (FDI) in integrated townships and infrastructure projects and creation of the Urban Reforms Incentive Funds (URIF). URIF, announced during 2002-03 budget, was to incentivize the urban reforms in seven key areas which included

repeal of the Urban Land Ceiling and Regulation Act (ULCRA), rationalization of stamp duty, reform of rent control, introduction of computerized process of registration of property, reform of property tax, levy of reasonable user charges and introduction of double entry system of accounting in the ULBs. This was followed by the 10th FYP (2002-2007) announcement on comprehensive urban reforms and public private partnerships in urban infrastructure projects.

In 2005, the Government of India (GoI) launched the Jawaharlal Nehru National Urban Renewal Mission (JnNURM) as a logical next step in the urban reforms trajectory initiated during the 8th FYP period. This seven year mission (2005-2012) focused on 65 mission cities<sup>1</sup> aimed to encourage cities to initiate steps for bringing about improvement in the existing service levels in a financially sustainable manner. The formulation of JnNURM was primarily based on the assumption that that in order to make cities work efficiently and equitably, it is essential to provide incentives and support urban reforms at state and city levels, develop appropriate enabling and regulatory frameworks, enhance the credit worthiness of municipalities and integrate the poor with the service delivery system. The objective of the mission was to create economically productive, efficient, equitable and responsive cities.

**JnNURM consisted of two sub-missions for the 65 mission cities:**

1. Sub-Mission on Urban Infrastructure and Governance (UIG) and
2. Sub-Mission on Basic Services for the Urban Poor (BSUP)

**In addition, for all other urban centres, the mission had two other components:**

- I. Urban Infrastructure Development Scheme for Small and Medium Towns (UIDSSMT)
- II. Integrated Housing and Slum Development Programme (IHSDP).

This mission mode program synthesized and subsumed the pre-JnNURM reform efforts and programs, and designed a comprehensive urban reform agenda with 23 reforms, of which 13 were mandatory and rest optional to be implemented and completed within the mission period at state and city levels. In case of optional reforms, states could choose any two reforms for implementation every year. The tri-partite Memorandum of Agreement (MoA) between MoUD, the state government and the ULBs included all 23 reforms. The state governments and the cities committed a specific timeline for implementing these reforms within the mission period in order to receive funds for urban investments.

<sup>1</sup>Eventually the mission period was extended to 2014 and the number of mission cities was increased from the earlier 63 to 65

The results of JnNURM at the end of the seventh year of the mission period were mixed - several states and cities achieved significant progress, implemented best practices and on occasions completed reforms well in advance of their deadlines, while some failed to even initialize the process. It is perhaps imperative to document the experience of some of the well performing cities/states, which were able to successfully implement the setting up of frameworks for service delivery, ensure efficiency and accountability, use technology and mobilize resources.

## ABOUT THE COMPENDIUM

It is in this context that the National Institute of Urban Affairs (NIUA) initiated this 'Compendium of Good Practices in Urban Reforms' as part of its flagship Peer Experience and Reflective Learning (PEARL) programme, which provides a platform for deliberation and knowledge exchange among Indian towns as well as professionals working in the urban domain. The objective of this compendium is to document and disseminate good practices in urban reforms to inform about initiatives in this area. This documentation contemplates the sustained efforts of ULBs anchoring innovations at the city level and highlights the process involved supporting mechanisms, implementation approaches, sustainability, challenges, replicability and contextual nuances. While the laggard cities can use these cases as a benchmark for learning, it can also help policy makers for informed decision making.

## METHODOLOGY

A Peer Review Group (PRG) was formed to support the documentation team at the NIUA, including urban experts with experiences ranging from the field of municipal reforms, capacity building, financial management to infrastructure management. The PRG provided the thematic robustness in the selection of cities, so that they represent different thematic categories, scales and innovation, and also provide their comments/suggestions to improve the quality of the framework adopted to document the good practices. The compendium has focused on innovative

approaches in six of the mandatory reforms outlined under the JnNURM. These six reforms and their broad categorization is presented below:

## CATEGORY I: FINANCIAL MANAGEMENT REFORMS

Streamlining the municipal finance structure initiates a virtuous cycle of better service delivery, capital investment, increase in revenue and credibility resulting in empowerment and self-sustainability of the ULBs. This category primarily focuses on the following two components:

- a) Improving the operational efficiency of ULBs - It includes the Municipal Accounting Reform.

### Municipal Accounting Reform

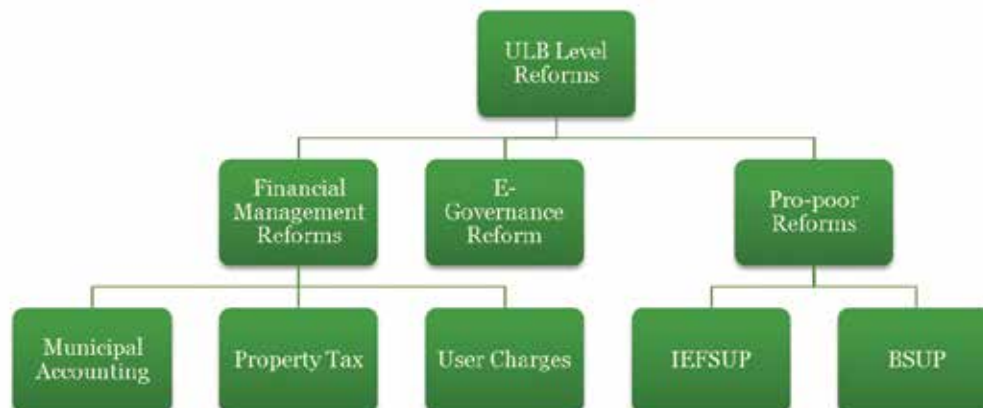
Cities were expected to make a transition from a largely cash based accounting system to a modern municipal accounting system, based on double entry and accrual principles, allowing an all-inclusive representation of ULBs assets and liabilities leading to better financial management, transparency and self reliance.

- b) **Augmenting the source of funding** - This component of financial management category includes **Property Tax** and **User Charges Reforms**.

### Property Tax Reform

Property Tax (PT) is the single most important tax revenue source available to an ULB. One of the main objectives of the 74th CAA was to make the ULBs efficient units of self governance. For this, ULBs had to be able to generate their own revenues. Guidelines of the PT Reform emphasized the need for proper mapping of properties using the Geographical Information System (GIS) system so that the ULB would be able to have a full record of properties in the city for inclusion in the tax net, enabling self-assessment (through a system which is formula driven and where the property owner can calculate the tax due) and improving collections to achieve at least 85% of the demand.

FIGURE 1: CATEGORIZATION OF ULB LEVEL MANDATORY REFORMS



## User Charges Reform

Complete cost recovery of User Charges, as a mandatory reform of JnNURM required the ULBs to levy reasonable user charges for the services provided. For uninterrupted urban service delivery, linkages between asset creation and asset maintenance are necessary. Asset maintenance or Operation and Maintenance (O&M) in turn relies solely on cost recovery. Institutional frameworks for formulating policy on user charges has been considered important for initiatives in this category.

## CATEGORY 2: E-GOVERNANCE REFORM

The essence of the e-Governance reform was to bring about changes in traditional methods of management, administration and operation of ULBs with respect to service delivery. It simplifies the process of interaction between citizens and ULB staff, ULB staff and management and also the ULB and other departments related to municipal administration. This category includes innovative e-initiatives by ULBs in service delivery based on citizen centric approach.

## CATEGORY 3: PRO-POOR REFORMS

Commitment from ULBs to earmark funds and provide access to basic services to the urban poor communities was the rationale behind pro poor reforms. These reforms were crucial in achieving a part of city's vision of improved quality of life and services. This category included two components:

- a) **Provision of Basic Services to Urban Poor (BSUP):** Providing basic services improves quality of life and reduces vulnerabilities of poor communities. Initiatives in the domain of comprehensive assessment of poor communities, identification of deficiency indicators (infrastructure and socio-economic), logical framework for prioritization of urban poor clusters, and community based participatory approaches in implementation have been documented in the study.
- b) **Internal earmarking of funds for services to urban poor (IEFSUP):** Earmarking of funds for the urban poor constitute separate budget provisions and targets for expenditure.

### Selection of the cities for documentation

Scoring of reform process as identified and calibrated by the Ministry of Urban Development (MoUD) was established as the common process evaluation tool for UIG and UIDSSMT. The monitoring process for UIG cities had a definite timeline and reporting structure. The scoring (reform wise and ULB level) was documented and published on the JnNURM's website quarterly by the Mission Directorate at MoUD. However, the timeline, reporting structure and scoring of reforms (reform wise and ULB level) in case of UIDSSMT was not defined and updated. Lack of scoring information and non-availability of reform wise scoring for almost 90 percent of the UIDSSMT cities/towns affected the selection process. Therefore only 64 UIDSSMT cities/towns across 27 states/UTs were shortlisted in consultation with the

reform appraisal agencies for prioritization.

The percentage of reform achievement at the ULB level and achievements at individual reform level were considered as the key criterion for first level of prioritization (Annexure, Table No. 2) for UIG cities. The benchmark for this criterion was based on the deliberations at a conference<sup>2</sup> organized by the Mission Directorate.

- 1) 85 percent of reform achievement at ULB level
- 2) 75 percent of reform achievement at individual reform level

Based on the experiences of appraisal agencies<sup>3</sup> and analysis of performance reporting of 64 shortlisted UIDSSMT cities/towns, appraisal agencies recommended some of the cities/towns which implemented innovative initiatives for best/good practice documentation. (Annexure, Table 3a and 3b) for UIDSSMT cities/towns.

Second level of prioritization included selection of two cities for each of the five reforms across UIG and UIDSSMT by the PRG members (Annexure, Table 4a and 4b) based on their experiences and sectoral knowledge. A priority list was suggested by each expert, which led to the final selection of cities (Annexure, Table 5a and 5b). Five cases were documented in details with city visits and five cases were documented as a snapshot through secondary sources. Emphasis was given to the UIDSSMT cities/towns during selection to nominate small cities/towns which were promising to consider their level of access to financial resources and capacity building requirements. This provided an opportunity to document a wider spectrum of cases.

Objective criteria (objectively verifiable indicators) were developed based on the objectives of each of the reforms to understand the reform process and facilitate documentation during the city visits. These were a balance of both the process and outcome oriented approach with each objective criteria clearly indicating the outcome oriented qualifying indicator. The process of selection of cities and documentation was within the framework of these objective criteria and their verifiable indicators (Annexure, Table 6a,b,c).

### The compendium is structured into three distinct sections:

- The first part sets the context with the theoretical background for the reforms agenda in India, impetus for the first version of reforms, about this documentation (objectives, methodology, approach, categorization) and selection of cities for documentation.
- The second part narrates the outcomes, enablers, challenges, sustainability for each of the mandatory reforms implemented at the ULB level and summarizes the learning from the case studies.
- The third part is a compilation of the 10 case studies highlighting the situation before the initiative, the process of implementation and situation after implementation.

<sup>2</sup>Conference of Principal Secretaries and Secretaries (Urban Development) of States/UTs on implementation of JnNURM in July 2013.

<sup>3</sup>CRISIL, Deloitte, IMaCS and TCPO

## SECTION 2

# REFORM OVERVIEW

### INTRODUCTION

In this section, an overview of the ULB level reform and the experiences of implementing those reforms are discussed category wise. Each category highlights reform achievements in addition to challenges faced and the overcoming strategies adopted by the cities during implementation. The narrative of section 2, summarizes consequential learning from the ten documented cases that are compiled in section 3 of this volume and can be referred for details.

Reforms are complex activities often involving larger state and city level strategies in addition to policy/legal changes which help the ULBs in the implementation process. The aim of the JnNURM was to encourage reforms and fast track planned

development of identified cities with a focus on efficiency in the urban infrastructure and service delivery mechanisms, community participation, and accountability of ULBs/ parastatal agencies towards citizens. To encourage sustainable institutional transformations, the JnNURM reform set out to establish a link between asset creation and asset management, as both are important components for ensuring sustained service delivery. While the objective of this section is to bring forth possible lessons and insights derived from the implementation experiences of the selected cities, it may be mentioned here that the adoption or replication of these strategies by other cities needs careful and critical consideration.

# CATEGORY 1: FINANCIAL MANAGEMENT REFORM

## MUNICIPAL ACCOUNTING

Good financial and expenditure management is necessary for the ULBs to minimize wastage of existing resources, budgeting the revenue income and to plan capital expenditures appropriately. Prior to JnNURM, most ULBs were following the cash-based accounting, which led to inadequate cash management and a lack of quality information for planning, decision-making and financial control.

As cities in India started developing infrastructure projects that reflected principles of commercial viability and private sector participation, better financial management was essential. The need for financial management reforms was mooted by the FIRE-(D) program, mandated to establish a system for financing infrastructure, promote better governance by the city governments to manage infrastructure development and attract private sector investments. Financial intermediaries such as the Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) established in 1993 and the Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL) in 1996, funded by various multi-lateral agencies had initiated training and capacity building programmes for the ULBs to improve their financial management and municipal accounting systems (FIRE-D Project Notes Compilation, 2004).

As a response to this emerging need of financial management, the GoI under JnNURM introduced Double Entry Accrual Accounting System (DEAAS) in the ULBs of India to enhance the relevance, objectivity, timeliness, completeness and comparability of the accounting statements. DEAAS is a modern accounting system based on double entry and accrual principles and leads to improvements in the financial management system, transparency and self reliance of the ULB. As opposed to cash basis, accrual basis is a superior method for accounting of the economic resources of ULBs. It helps in correct presentation of financial statements through an income and expenditure account, a balance sheet and a statement of cash flows. Double entry accounting is a system of accounting where every transaction involves a debit entry in one account and a credit entry in another account.

The recommendations of the National Municipal Accounts Manual (NMAM) prepared under the FIRE-(D) project released by the MoUD in December 2004, provided the framework for articulating the various objectives of the municipal accounting reform of JnNURM. Through the implementation of DEAAS, the ULBs undertook the following modern accounting reforms:

- Budgeting, accounting, internal controls and auditing
- Reengineer business processes to align with accrual-based accounting system
- Integrate financial management systems with financial ac-

counting system

- Staff training and building financial management capacity

## Reform Achievements

This category, documents the reform implementation process and achieved outcomes of two cities, viz. Bijapur and Indore in Karnataka and Madhya Pradesh respectively, where the ground for further improvement in municipal accounting was already prepared (prior to JnNURM) through several reform-linked multi-lateral projects, thereby accelerating the reform implementation process.

DEAAS was a paradigm shift for the **Bijapur City Corporation (BCC)** in Karnataka and **Indore Municipal Corporation (IMC)** in Madhya Pradesh, in its pursuit of efficiency, responsiveness and accountability. As a result of the DEAAS reform, both the cities have achieved financial discipline leading to risk mitigation, resource management skills and transparency in governance. The key achievements of the BCC and IMC from the DEAAS reform are elaborated in the following paragraphs.

- **Financial Discipline:** The DEAAS reform has enabled the BCC to develop updated information on account that is segregated into assets, liabilities, incomes and expenses in a double entry system leading to the achievement of financial discipline, eliminating risks through earmarking of specific urban services and specific purpose of expenditure. Fund-wise reporting has made the BCC more rational towards its service delivery by analyzing the cost-benefit from each activity and plan for self-sustenance. In IMC, DEAAS has helped the ULB staff to quickly manage problems and get adapted to the new opportunities. Besides, daily reporting greatly eased out the stress involved in preparing quarterly and year-end financial statements leading to devotion of substantial time of management executives and accountants for overall financial management.
- **Resource Management:** BCC undertakes two rounds of public meetings for pre-budget allocation. In addition, Municipal Councilors of all the wards come together in the BCC once in three months in the presence of the Mayor, Deputy Mayor, Commissioner and Accountants to undertake the financial resolution and fund allocation of State Finance Commission (SFC) funds, ULB funds, Urban Infrastructure Development Scheme for Small & Medium Towns (UIDSSMT) funds etc. Effective use of resources and taking stock of works done has directly helped in checking wastages, stopping misuse and analyzing the consumption pattern. Financial management has helped the BCC in optimum utilization of funds for better citizen services.
- **Accountability:** Timely financial reporting has helped the

BCC to become an accountable and transparent ULB which has created a sense of trust on the local authority among the staffs, citizens, contractors and the elected representatives. To ensure accountability of the ULB, BCC discloses its annual accounts regularly with audit objections in the public domain through its website and the local newspapers, highlighting the transparent functioning of the ULB and citizen's awareness. In IMC, external audit cycles have helped increase the accountability of the staffs. Internal reporting of all income and expenditure on a daily basis has helped the IMC in achieving precision in the accounting system and transparency in governance.

- **Overcoming Challenges:** There was dependence on external consultants in the initial years of reform implementation by both the cities due to technical challenges faced by the municipal staff. IMC faced challenges arising from technology and insufficient staff numbers capable of handling the new system. Much of these difficulties were eliminated by institutionalization of reforms that has enabled the grooming of in-house experts of both the cities, who have attended numerous trainings regarding change in accounting procedure and their roles and responsibilities. At the city level, both the ULBs organized multiple sessions of in-house trainings for capacity building of the ULB staff through CAs and consultants to train them in addition to the state level training sessions.

## PROPERTY TAX

One of the main objectives of the 74th Constitution Amendment was to make the ULBs efficient units of self governance, bring in autonomy and to increase dependency on their own revenues. Property tax (PT) is generally considered to be an appropriate source of raising local revenues as it is a visible tax forming a substantial base for estimated revenue for the ULB. There is a direct connection between the services financed by the tax and the benefit to property values. However, valuation of properties is one of the biggest challenges for ULBs in India. The main constraints are lack of an appropriate methodology, lack of transparency and incomplete record of properties.

Property tax (also called general purpose tax or general tax) is a generic term, which not only include property tax but also include a variety of service taxes and cesses, such as water tax, sewerage tax, scavenging tax, drainage tax, conservancy tax, education tax, fire tax, education cess and tree cess. PT tax structure differs from state to state in India and many states have problems related to the fixation of tax base and tax rate, tax assessment, tax collection, tax exemptions, dispute resolution etc.

Prior to JnNURM, in most states, deficiencies in the existing system of property taxation did not allow for full exploitation of the revenue potential. Deficiencies occurred on account of inefficient assessment, information and administrative systems. To strengthen the financial autonomy of the local body a holistic reform of the property tax system was therefore essential. It is in this context that the GoI had recommended the adoption of a system which is formula based and allows self-assessment.

Different cities have tried out alternative approaches to introduce a self- assessment system. These may be a **rental value based system**, **capital value based system** or a **unit area system** based on multiple factors.

## Methods of Valuation of PT

**Rental Value based system:** This system of property taxation followed in most Municipal Acts is a rent based rateable valuation system where the annual value or the Annual Rental Value ( ARV) of the property shall be deemed to be "the gross annual rent at which the land or buildings might, at the time of assessment, be reasonably expected to be let from year to year ..." If assessed on the Annual Ratable Value (ARV) of land and building, it may include service taxes on water supply, drainage, street lighting etc.

**Capital Value based system:** In many Municipal Acts there is an alternative provision for assessment of properties (particularly those self occupied) on a Capital Value Basis (CVB). The annual value is arrived at on the basis of estimated market value of land and cost of construction at the time of construction or acquisition. Capital value reflects the market's assessment of the income to be derived from a property in future including income generated by more intensive use of the property. The tax base comprises the assessed value of land and improvements i.e., the value at which a willing buyer and seller would agree in a free market. It follows that the capital value is extremely elastic and the property tax will have a base that will grow with the economy.

**Unit Area assessment system:** The Unit Area Assessment (UAA) System is a simple arithmetical system of calculation of property tax based on covered area of the building and the unit area value or unit area tax for the category (of locality or amenity, etc.) in which the premise is located through which it is possible for any citizen to self-assess his property tax and file his return form (this could also be applied to vacant land). In the unit area value system the entire city has to be grouped into somewhat homogeneous categories for specifying a unit area value. Such groupings could be done taking into consideration factors like average rental value, average capital value of land, quality of physical infrastructure, availability of social and market infrastructure, type of development, economic classes of occupants etc. In principle, the base of the property tax should respond to the increasing value of properties. In practice, there is growing evidence that this tax has not been a buoyant source of revenue. The growth in revenue has not been commensurate with the potential due to inadequate policies, legal problems and inefficient administration (Vaidya.C, 2000).

Each state/ULB had to decide which system is most suitable given its local circumstances. JnNURM did not mandate that there should be a change in the system of assessment since this may take a couple of years to finalize and implement. The first priority was to achieve full coverage of assessments within the existing system and full recovery of taxes. The JnNURM property tax reform sought to establish a simple, transparent and equitable property tax regime that encourages voluntary compliance. Various steps in the Memorandum of Agreement (MoA)

emphasized the need for:

- Proper mapping of properties using a GIS system so that the ULB is able to have a full record of properties in the city and bring them under the tax net
- Making the system capable of self-assessment (that is a system which is formula driven and where the property owner can calculate the tax due), and
- Improve collections to achieve at least 85% of demand. (Handbook on Primers, JnNURM 2010).

For higher efficiency, the reform emphasized on providing in-house computer trainings to revenue inspectors. The ULBs were also responsible for educating the community about these new techniques through taxpayer education programme, by publishing information brochure about Self Assessment System (SAS), neighborhood campaigns, dispute resolution mechanisms, by deployment of kiosks at various ward offices, mobile property tax alerts about collections and receipts etc. The reform emphasized the need to implement the elimination of exemptions and recognize both, defaulters and honest tax payers.

#### **A comprehensive implementation of the property tax reform reaps multiple benefits such as:**

- Increases revenue for the ULBs,
- Provides buoyancy to keep pace with inflation and increased costs,
- Provides simple to understand, transparent citizen-friendly systems and processes,
- Establishes a system capable of self assessment and ease of payment for the property owners,
- Provides lower/ no litigation and associated costs, decrease in revenues locked up for years in litigation,
- Provides cleaner administration, increasing the faith and trust of citizens in the ULB and councillors, and,
- Establishes a good database and information systems to enable better tax planning and policy making by the ULB.

### **Reform Achievements**

The following paragraphs highlights the property tax reform implementation process and outcome of the **Visakhapatnam Municipal Corporation (GVMC)** of Andhra Pradesh and **Bruhat Bengaluru Mahanagara Palike (BBMP)** of Karnataka. As a result of the property tax reform both the cities have established a citizen-friendly system capable of self assessment. By GIS mapping of properties, the unmapped properties have been brought under the tax net resulted into increment in collection ratio of the ULB revenues in both the cities. The following paragraphs discuss the key achievements of GVMC and BBMP from property tax reform.

- **Reform in Assessment Method:** GVMC has not adopted the UAA method advocated by the JnNURM, rather chose to continue with the Annual Rental Value (ARV) PT assessment system and was successful in increasing both the coverage and collection ratio during the reform period. In GVMC, the revenue from property tax was almost doubled from Rs. 7,785 lakhs in 2010-11 to Rs. 14,433 lakhs in 2013-14.

On the other hand, erstwhile Bangalore Mahanagara Palike (BMP) in 2002, initiated the property tax reforms in the existing ARV assessment system by bringing an optional Self Assessment System (SAS) scheme. In January 2007, BMP was expanded from 240 sq. km. to 800 sq. km. as the Bruhat Bengaluru Mahanagara Palike (BBMP) incorporating neighboring 7 City Municipal Councils (CMC), 1 Town Municipal Council and 110 villages around Bangalore. While the erstwhile CMC and TMC were collecting property tax under the Capital Value System (CVS) scheme, in the erstwhile area under BMP, ARV system was followed. To bring in uniformity in tax administration GoK amended the law to introduce the area based system of property tax assessment for the whole of BBPM jurisdiction. As part of JnNURM reform Bangalore revamped the SAS system in Unit Area Assessment (UAA) System of taxation for the expanded jurisdiction of BBMP since February 2009.

- **Transparency in decision making:** A greater transparency in finalization of ARV per square meter of plinth area through stakeholder meetings and publishing the rental values for objections and suggestions was brought in by the GVMC. The Monthly Rental Value (MRV) per sq.m. of plinth area was notified in the District Gazette and local newspapers in advance and the owners of buildings were aware of the MRV fixed for their individual properties, their localities and the property tax payable. Involvement and participation of stakeholders in the property tax assessment system has made the system more acceptable while significantly reducing corruption in the assessment of property tax. In addition, political willingness of the elected representatives in taking strong decisions for larger well being of the society has played a key role in successful implementation of property tax reform in both GVMC and BBMP.
- **Reform in mapping of properties:** As part of property tax reform, GVMC adopted GIS mapping, assessment of properties using tablet PCs, assigning unique Property Identification Codes (PICs) to each property. GVMC completed the Comprehensive Survey and GIS Mapping Project covering 3,52,000 properties in 2009. By the GIS mapping of properties, the unmapped properties have been brought under the tax net. The complete networking and computerization enabled the GVMC to get real time demand/collection statements which in turn improved the tax collection efficiency. In BBMP the inventories of all the properties were developed with the help of satellite images. Field Surveys were carried out to get the approximate land dimensions, number of floors, land use, plot numbers etc. All the properties of BBMP have been registered as identified through GIS mapping and an unique PIC was assigned to each property. A total of 16.19 lakh properties have been issued with unique PIC through GIS survey which includes an addition of 1.01 lakh newly identified properties in 2013-14.
- **Increase in Coverage and Collection ratio:** In GVMC, The coverage ratio has been increased from 84% (before reform implementation) to 100% in 2012-13. Collection efficiency

of 90% was achieved in 2009-10, but declined from 2010 onwards due to the property tax revisions of 2010-11. In BBMP, in 2013-14, in the core area, against the tax demand of Rs. 852 crore, the tax collection was Rs. 775.5 crore (91% collection against demand). In the same year in the entire BBMP area, tax demand was Rs. 1800 crore and the collection was Rs. 1323.2 crore (73.5%). As indicated by the GVMC officials, gradual recovery of collection was observed from the properties that were embroiled in legal battles, properties like steel plants, navy etc. for which the demand had not been recovered for many years.

- **Technological Intervention:** Property tax reform is technology intensive. Both the cities have adopted the latest technologies in various stages of reform to take the advantage of the reform opportunity. Efficient technologies were used in GIS based mapping of properties, assigning unique PICs, in assessment of property tax, web-based property tax information facility, e-payment of tax etc. The problem of shortage of manpower at the field level was eliminated in GVMC with the introduction of tablet PC assessment since 2013. In BBMP, an IT enabled PT calculator known as 'User Friendly Web Based Tax Calculator' that assesses PT based on parameters like category, type of house, year of construction, zone, built up area etc. was enabled for SAS.
- **Improved Citizen Interface:** In both GVMC and BBMP the effective Citizen Interface Mechanism in complaint monitoring and time bound resolution system is very popular amongst the citizens. Tax-payer education programme were conducted through help desks, RWAs, TV, Radio, newspapers, local camps etc. to reduce any kind of confusion. The multi-modal multi-centre payment options had been well received and adopted with remarkable enthusiasm by the citizens. As a result of the JnNURM PT reform the tax payers of both the cities have alternative payment options like help centers (Citizen Service Centres, Bangalore-One), counter collection in the Corporation and banks etc. BBMP has introduced *Spandana*, an online complaint registration system that enables citizens to register grievances online or by SMS.

## USER CHARGES

As per the JnNURM User Charges Reform guidelines, for managing the delivery of urban services ULBs were required to revise user charges so as to recover the entire cost of O&M for the service by the end of the reform timeline. This mandatory reform was critical for achieving self-sustainability of services and for improving the financial strength of ULBs. The mission objectives were to establish linkages between asset creation and asset management through a series of reforms for long-term project sustainability and to ensure adequate funds to meet the deficiencies in urban infrastructural services. It was felt that such financially viable user charges could potentially generate resources for expanding or upgrading the service. Rational user charges encourage people to realize the need for conservation of precious resources by reducing wastage and optimizing usage. Setting of differential tariffs can provide subsidies to the identi-

fied groups through a redistributive mechanism.

After the commencement of the JnNURM, while the immediate priority for the ULBs was to commit to the achievement of full cost recovery, ULBs had to protect the interests of vulnerable groups through cross subsidies and, simultaneously, commit to practical and achievable efficiency improvement plans such as increase in coverage (base) of users, reduction in losses, improvement in method of measurement of services and improvement in billing and collection efficiency.

JnNURM proposed a step by step method or a process to be followed for achieving the User Charges reform that included setting up a body for recommending a user charge structure and establishment of proper accounting system for each service so as to determine the O&M cost separately. For revenue mobilization, it was important to identify the unauthorized connections and introduce metering. Latest technologies in digitization of maps, leak detection surveys, reduction of non revenue water, etc. were important aspects to achieve user charges reform in local bodies.

## Reform Achievements

This study documents user charges reform implementation process of the **Surat Municipal Corporation (SMC)**, in Gujarat and **Municipal Corporation of Greater Mumbai (MCGM)**, in Maharashtra. As a result of this reform both the cities have achieved 100% O&M cost recovery of services. The following paragraphs details out highlighting aspects of user charges reform implementation and achievements.

- **Increase in Recovery:** To implement the User Charges reform SMC made use of the Amendments made in the BPMC Act, formulated the Water Meter Policy on user charges and integrated latest technologies in water audit, leakage mapping, installation of water meters for volumetric tariff system etc. to attain 100% cost recovery of services. SMC surpassed its 100% benchmark and achieved 126% O&M cost recovery in 2013-14. The systemic change in the form of the amendment in Bombay Provincial Municipal Corporation (BPMC) Act in levying the user charges was the starting point for recovering 100% O&M cost in SMC. Various other aspects were equally responsible for the successful implementation of the reform. Some of the key enablers were the supply of piped water to the households, the setting up of Non-Revenue Water (NRW) cell in 2007 and the gradual shift to metering.
- **Dedicated Department:** In MCGM, the Hydraulic Engineering Department (HED) established prior to the JnNURM, is a dedicated separate water supply division in MCGM, responsible for all the water and sewerage related activities. This has helped the ULB to complete the User Charges reforms related activities on time.
- **Accountability:** MCGM is ensuring accountability by making the Water Charges Rules available in the public domain. Any deviation or discretion noticed by the citizen is intimated to the concerned authority. In MCGM, regularization of unauthorized connections by installing water meters has helped reduce Unaccounted-for Water (UFW) supply. Additionally, partnering with self-help groups has resulted

in increased efficiency of the service delivery to all sections of the population. Introduction of technology in the bill generation, payment and grievance redressal has improved citizen interface.

- **Coordination and Cooperation:** In both the SMC and MCGM, institutional coordination in decision making is indirectly resulting in greater recovery of services. Citizen's cooperation is one of the attributes for the success of user charges reform in Surat. Public protests are found to be nil or minimal in SMC in an occasion of increase in user charges, as

it was informed that citizens do not mind paying more price for an assured quality service.

- **Technological Acceptance:** The online payment options, payment through ITZ cash cards, SMS, system in the mobile phones, online complaint management system etc. are well accepted in these two cities. Also in SMC the supply of piped water to the households in new areas and the gradual shift towards metering in all the areas has been readily welcomed by citizens.

## CATEGORY 2: E-GOVERNANCE REFORM

The National e-Governance Plan (NeGP) was launched by the GoI to institute and enable mechanisms to improve the system of governance and thus provide better services to the citizens by effective use of Information & Communication Technology (ICT). NeGP comprised 27 Mission Mode Projects (MMPs) and 10 components. e-Governance in municipalities was one of the MMPs under the NeGP, which expected to result in improved service delivery by local governments for the citizens.

The Planning Commission's decision to make NeGP part of JnNURM for 35 cities with 1 million population and as a new Centrally Sponsored Scheme (CSS) for other cities and towns was followed by release of guidelines on the National Mission Mode Project (NMMP) on e-Governance as a part of the JnNURM. The e-Governance initiative followed the Central Government MMP and JnNURM guidelines and was in accordance with the state government guidelines.

**The broad aim for implementing e-Governance in municipalities was to:**

- Focus on clearly identified citizen services that would be covered with clearly laid down service levels and outcomes to be achieved.
- Improve efficiency and effectiveness in interaction between local government and its citizens and other stakeholders.
- Improve quality of internal local government operations and management information systems to support and stimulate good governance.
- Bring about transparency and accountability in urban local body operations.
- Help improve the reach of delivery of services to citizens.

**Following services were to be covered under this reform at the ULB level:**

- Basic citizen services: birth and death registration and health programs
- Revenue earning services: property tax and licenses

- Development services: water supply and other utilities, building plan approval
- Efficiency improvement services: procurement and monitoring of projects
- Back office improvements: accounting and personnel management system
- Monitoring: citizen grievance redressal

### Reform Achievements

The two case studies of e-Governance reform, viz. **Nashik Municipal Corporation** (NMC) of Maharashtra and **Rajkot Municipal Corporation** (RMC) of Gujarat had perceived the mission as an opportunity to implement e-Governance reform of JnNURM across an array of functional divisions of the ULBs. As an outcome of the reform both the cities have developed nine different modules and achieved operational efficiency in service delivery.

- **Operational Efficiency:** e-Governance reform in NMC has resulted in overall ease of day-to-day functions due to centralization of database, increasing efficiency of staff, increase in tax demand and tax collection, greater transparency, improvements in functions like obtaining birth death certificates, etc. In the case of RMC, with the intervention of technology, in day to day administration improved the operational efficiency and reached all sections of communities through mobile technology. The tie up with post offices in Rajkot for better services facilitated the corporation in cost effective solutions and effective service delivery mechanism.
- **Leadership:** In the case of NMC, the efficient implementation of e-Governance reforms owed to the strong leadership at the top administrative level. The Commissioner and the HoD-IT played a pivotal role in conceptualizing the implementation and preparation of relevant documentation like the Terms of Reference (ToR), contractual documents and Detailed Project

Report (DPR). The HoDs played a key role in giving shape to the implementation at an operational level i.e. encouraging the staff to learn computers, providing inputs for customization of the software and finally, adopting the Management Information System (MIS) generated for monitoring the efficiency of the staff. In the case of RMC, early computerization of work had helped the RMC to implement the newer aspects of e-Governance reform.

- **Overcoming Sustainability Challenges:** The ToR mandated handholding and support for a limited period of time and did not take care of long term sustainability of maintenance and regular updation of the staff as well as the software. This problem was resolved to an extent as in both the cities the e-Governance cell was composed of professionals from multi-disciplinary skill and they have helped in the sustainability of initiatives with their innovative skills. Unwillingness of senior municipal staff to learn computers and enthusiasm of junior staff to shift towards new technologies in addition to the state government mandate of fixing the maximum age of 45 for learning computers has further aggravated the challenge. Another challenge in NMC was, the posts for

system administrator and programmer were lying vacant and was being run by the IT staff who were on deputation from other departments of NMC. Many of these challenges were resolved with effective leadership and communication. In both the cases timely, strategic and rigorous capacity building has helped the reform implementation being successful.

- **Reduction in Corruption:** Indirect impact of the e-Governance reform implementation included reduction in corruption in property tax assessments and increase in accountability with better MIS and reporting formats available to monitor the activities. As a result evidence-based decision making was made possible.
- **Popularity:** As per the data provided by RMC, it was found that the percentage of e-Governance services users were doubled from approximately 2 lakhs in 2006-07 to around 4 lakh in 2010-11. Only with 10 percent internet penetration in Rajkot, RMC introduced m-Governance services and was very popular and successful in tripling the m-transactions during the 2009-2011 period.

## CATEGORY 3: PRO-POOR REFORM

The objective of Basic Services for the Urban Poor (BSUP) reform was to, provide basic services (including water supply and sanitation) to all poor including security of tenure, improved housing at affordable prices and delivery of social services for education, health and social security to poor people. Provision of basic services was expected to improve the quality of life and reduce the vulnerabilities of poor communities. To attain this objective a framework was evolved that included the following 7-point agenda:

- The State/ULB must formulate and adopt vide a resolution a comprehensive policy on providing basic services to all urban poor
- Conduct of House Hold (HH) level survey, covering all poor settlements
- HH survey to cover infrastructure deficiency indicators and socio-economic deficiency indicators
- Creation of database, including identification of HHs for priority targeting of schemes
- Participatory ranking and prioritization of clusters of urban poor settlements
- Frequency of updating the database
- Coverage plan (assuming 100% coverage of urban poor population in the city by 2011-12)- known as the 7-point charter:

Housing (dwelling units), Water supply, Sanitation, Solid Waste Management, Primary Education, Health care and Social Security

### Reform Achievements

**Kolkata Municipal Corporation (KMC)** of West Bengal and the **Yanam Municipality** of Puducherry had been selected as case studies for documentation of BSUP reforms. As a result of the implementation of the BSUP projects, civic infrastructure of the slums have been improved in both the cities. Social amenities have helped enhance the overall quality of life of the urban poor and the city environment as a whole. While KMC has successfully developed in-situ infrastructure for providing basic services to the urban poor, Yanam has been successful in constructing dwelling units and distributing land ownership/property rights to the slum dwellers.

- **Slum Survey:** As part of the JnNURM-BSUP reform, KMC undertook a rigorous BPL survey in 2008. The number of BPL households as a percentage of the total households within the KMC area had been calculated to be at 17%. KMC adopted a premise-wise survey to prepare a detailed database of access to various services at the household level within the slums. Based on this database, KMC set minimum standards and

projected the requirements of services for the urban poor in the forthcoming years. KMC has also used the Socio-Economic Survey conducted in 2002, as the base-line for the identification of deficiency indicators (physical and socio-economic infrastructure).

- **In-situ Infrastructure up-gradation:** KMC has achieved to provide 98% coverage in Water Supply, 90% coverage in Sanitation and Solid Waste Management, and 80% coverage in Primary Education and provision of Health care (2014). Social security schemes are universally covered for the eligible beneficiaries.
- **Construction of Housing Units:** Yanam Municipality of Puducherry, is one of the first few Indian cities that has proactively attempted to implement a slum free city plan (“hut-less” city) at the ULB level through various programmes. The construction of affordable housing/rental housing for urban poor has restricted further proliferation of

slums. Facilitation of a supportive financial environment has enabled the poor to construct pacca houses on *patta* land. This has addressed the issue of security of land tenure to a large extent. Yanam Municipality has taken initiatives to give land ownership/property rights to the slum dwellers who have resided on public lands or temple lands for more than 5 years. The participatory decision-making in Yanam has empowered the community and strengthened the slum dwellers association.

- **Long term Impact:** BSUP projects are not quantifiable immediately. Rather they have long lasting multi-dimensional impacts. The housing projects have been able to provide the slum dwellers better housing facility, access to basic infrastructure, improved hygiene condition and an enabling urban environment leading to an enhanced quality of civic life while safeguarding public health.

**SECTION 3**

# **GOOD PRACTICES IN URBAN REFORM**

# MUNICIPAL ACCOUNTING REFORM IN BIJAPUR CITY CORPORATION (BCC), KARNATAKA

Bijapur City Municipal Council (BCMC) of Karnataka with a population of 3.27 lakh (2011 census), spreading across 97.5 sq. km. of area, became Bijapur City Corporation (BCC) in December 2013. BCC town had received support under the UIDSSMT scheme of JnNURM and had been performing well compared to many other UIDSSMT cities of Karnataka. The city thus selected as one of the promising practices in Double Entry Accrual Accounting System (DEAAS) Reform for detailed documentation.

## A. SITUATION BEFORE IMPLEMENTATION

Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC) set up in 1993, had been extending financial assistance by way of loans and advances to ULBs of Karnataka, from time to time for their developmental schemes. To manage such a large financial corpus, KUIDFC recommended the ULBs of Karnataka to adopt DEAAS, that allows maintaining separate accounts for separate funds, to ensure better accounting practices. As a result BCC initiated municipal accounting reform in a piecemeal manner in the beginning of 2005. Finally, the BCC adopted the DEAAS as part of the JnNURM reforms in line with National Municipal Accounts Manual (NMAM), in 2008.

Prior to 2005, Bijapur was maintaining its accounts manually in single entry cash based system in which the financial information was limited only to two items: receipts and payments. The difference between capital and revenue items was not clearly identified in the register. The budgeting practice was unscientific and resulted in incremental cost. Financial reporting was inappropriate as it did not include fund management, resource mobilization, budgetary control, financial status, financial performance etc. As a result the BCC was unaware of what it owns and what it owes.

Keeping in view of the problems related to single entry cash based system of accounting the BCC undertook the DEAAS reform and prioritized the development of an appropriate reporting system on financial performance, an internal check and control system by computerization of accounts and a system for preparation of budget that leads to better urban governance.

## B. PROCESS OF IMPLEMENTATION

The implementation of DEAAS involved mapping of the existing system, reengineering of information flows, computerization of accounts of works, documentation of assets, verification of payrolls etc. In the following paragraphs, the process of implementation is discussed in two parts: facilitation at state level and implementation at ULB level:

## STATE LEVEL FACILITATION

The Government of Karnataka (GoK) provided the necessary policy/regulatory and institutional framework for implementation of accounting and other financial reforms at the ULB level, and also facilitated capacity building of relevant ULB staff for undertaking the migration to the new systems.

## REGULATORY FRAMEWORK

- The Karnataka Municipal Accounting and Budgeting Rules, 2006 (KMABR, 2006) vide Government Notification No. UDD 16 CAR 2006 dated 21-12-2006, set forth the broad policies and procedures under the new accounting system.
- Karnataka Municipal Accounting Manual (KMAM) vide Government Notification No. UDD 306 GEL 2007 dated 24-11-2007, provided detailed accounting policies and procedures including uniform Chart of Accounts applicable to entire State.
- Karnataka Municipal Asset Management and Valuation Methodology Manual of 2010 (KMAM and VM) vide Government Notification No. UDD 310 GEL 2010 dated 6-1-2011, which is in line with Model National Municipal Asset Methodology Manual (MNMAMM) of 2009 contained information on preparation of Opening Balance Sheet (OBS) of assets, valuation methodology, updation, maintenance and management of assets and registers etc.
- Karnataka Municipal Accounts Audit Manual (KMAAM) contained information on the new audit system, financial statement, audit procedures, methods and coordination mandates of both the statutory and financial statement audits etc.
- Opening Balance Sheet (OBS) Guidelines were prepared to help the ULBs to prepare opening balance sheet under new accounting system in the transition years.

## INSTITUTIONAL FRAMEWORK

Following are the various institutions created by the GoK for coordination, training and development activities of the ULBs of Karnataka:

- **District Urban Development Cell:** The Deputy Commissioners of the Districts have overall supervision and control of the ULBs coming under the district. The Deputy Commissioners are assisted by the District Urban Development Cell (DUDC) in the district. Project Directors are appointed for heading the DUDC in the state. The Bijapur DUDC provides technical assistance and training to the staffs of the BCC for

implementing the municipal accounting reform at the ULB level.

- **State Institute for Urban Development:** State Institute for Urban Development (SIUD), Mysore is an apex state urban training institute, established by the Department of Urban Development, GoK in 1999. SIUD is responsible for good urban governance through research and capacity building of all stakeholders in the ULBs. SIUD suggests methodologies through action research and documentation of best practices and also conducts multiple workshops to enhance the capacity of the municipal staffs.
- **Municipal Reform Cell:** Municipal Reforms Cell (MRC) was created in 2005 as an SLNA under the Directorate of Municipal Administration (DMA), GoK exclusively for implementation of computerization and other reforms in all the ULBs of Karnataka. The objective was to bring about better governance in ULBs through the use of technology and Government Process Reengineering (GPR). It focused on creating robust database generated from day-to-day administration of the ULBs by using IT/communication tools and technologies.

A state level Municipal Data Center was established within the MRC and a centralized database of all the ULBs were maintained from there. The entire process of rolling out of Municipal Applications of ULBs was handled by the IT professionals of the MRC, duly appointed by the Department. MRC hand held the ULBs in implementation of computerization reforms and maintenance of the same and further the task of capacity building and training to Municipal staff was also vested with the cell.

MRC co-ordinated with the various other Government and autonomous bodies such as e-Governments Foundation (application support organization), Survey of India (technical advice support agency in GIS implementation), Karnataka Urban Infrastructure Development Finance Corporation (funding agency) and Software Technology Parks of India (for O&M of Data Center) for performing various functions.

## CAPACITY BUILDING

For effective implementation of this new system, professional accountants and accounting consultants were appointed at the ULBs through Karnataka Public Service Commission (KPSC). During the development of the new accounting system, periodic conduct of administrative workshops, trainings, meetings were carried out for the accountants, accounting consultants and other staff of the ULBs by the Administrative Training Institute (ATI), Mysore, MRC and the SIUD. Training programmes for elected representatives were also carried out for effective decision making. These trainings, aimed at improving the overall governance system, played an important role in upgrading skills and bringing about an attitudinal change for applying good practices and technology in urban governance.

## ULB LEVEL IMPLEMENTATION INITIATIVES

As part of the implementation strategy, BCC hired external consultants for professional assistance and followed a step by step

approach to migrate to DEAAS. The key components have been elaborated below:

- **Recruitment of consultants :** Chartered Accountants (CA) firms were appointed as 'Field level Consultants' for hand-holding in the first year for professional assistance to migrate from single entry cash based accounting system to double entry accrual based accounting system. An auditor (CA) was appointed for auditing of financial statements for vouching the true and fair views of financial reports.
- **Computerization of Accounting Function:** To comply with the accrual based double entry accounting principles, procedures and codification suggested in the accounting manual, 'Fund Based Accounting System' (FBAS) software in client server environment was deployed in BCC in 2006. It eased out the pressure on the system by reducing manual work. BCC had stored financial transactions from financial year 2005-06 till now. This automated system of preparation of accounting records and financial statements is readily available at any point and is uploaded on the website regularly. This web-based software had enabled the BCC to access its own database as and when required.
- **Migration to DEAAS:** The migration from cash based accounting system to accrual based system was gradual and did not face much resistance or put any pressure on the existing system. Until 2008 when the migration to DEAAS was completed, the BCC was using DEAAS system in parallel with the old cash-based system to give the municipal staff enough time to become proficient in the new system. The account statements were put up online from 1<sup>st</sup> April 2008 onwards on the BCC website.
- **Integration of financial management and accounting systems:** The new accounting rules made it mandatory for BCC to prepare fund wise accounting reports with the heads of 'General Fund', 'Water Supply and Sewerage Fund' and 'Enterprise Fund'. This in turn had assisted the BCC in determining the extent of recovery of cost of providing services to citizens and separate the funds allocated for each purpose.
- **City Management Report:** As part of DEAAS reform, BCC prepares City Management Report (CMR) that includes audited financial statements, details of major works carried out, additional revenue generation measures for further developmental works, cost and performance indicators etc. Year wise CMRs are available on the BCC's website since 2010-2011 (City Management Report, 2014).
- **Opening Balance Sheet:** Opening Balance Sheets (OBS) are being prepared in BCC in accordance with the GoK's OBS guidelines. BCC had undertaken a complete valuation of its assets and liabilities and prepared draft balance sheet. Fixed assets had been physically identified, enumerated and brought into the records as part of this exercise (NIUA, Progress Report on Urban Reform Agenda , March 2014).

## C. SITUATION AFTER IMPLEMENTATION

- **DEAAS:** Since 2008 the Financial Statements in BCC are prepared as per the KMABR of 2006 in the double entry

accounting system. Fund wise accounts are maintained consisting of General Fund, Water Supply and Sewerage Fund and Enterprise Fund. All the transactions have been classified in appropriate heads i.e. Revenue/Capital and Income/Expenditure.

- **Recognition of Revenue:** Due dates are recognized and demands are ascertained for all tax and non-tax revenue of BCC well in advance. Entertainment tax, duty/surcharge on transfer of immovable properties etc. are considered as assigned revenues. Incomes from sources such as Khata transfer fee, building regulation fee, SWM Fee, parking fee etc., which are of an uncertain nature or for which the amount is not ascertainable or where demand is not raised in regular course of operations, is recognized on actual receipt like fee for certificates and extracts.

General Grants, which are revenue earning in nature, are recognized as income on actual receipt. These grants include salary grants, electricity grant, untied State Finance Corporation (SFC) grants and untied SFC special grants. These are being detailed in Schedule 6 of Income and Expenditure Account. Specific grants, which are re-imbusement of specific revenue expenditure are recognized as income in the accounting period in which the corresponding revenue expenditure is charged to the income and expenditure account. Specific grant received towards capital expenditure is treated as a liability till such time that the fixed asset is constructed or acquired. On construction/acquisition of fixed asset, the grant corresponding to the value of the asset so constructed/acquired is treated as a capital receipt and transferred to capital contribution.

- **Recognition of Expenditure:** All revenue expenditures along with their due dates are recognized well in advance and are treated as expenditures in the period in which they are incurred. In case of works, expenditures are accrued as soon as the work has been measured and becomes due for payment.
- **Fixed Assets:** All Fixed Assets are accounted at cost less accumulated depreciation. The cost of fixed assets include cost incurred/money spent in acquiring, installing or constructing the fixed asset, interest on borrowings directly attributable to acquisition or construction of qualifying fixed assets up to the date of commissioning of the assets and other incidental and indirect expenses incurred up to that date.
- **Depreciation:** Depreciation is provided on a straight line basis based on the estimated useful life of the asset. In case of newly purchased assets depreciation is provided at 50% of the normal rate if the assets are put to use for less than six months.
- **Other Disclosures:** The arrears collected during a financial year from property tax, advertisement tax, encroachment fee, trade license fee, water charges are properly accounted and are detailed in Schedule B-14 of the Balance Sheet. Earmarked Fund had been created as per the provision of the statute.
- **Website:** The BCC's website hosts key financial information such as budgets, income and expenditure, receipts and payments, cost and performance, City Management Reports etc.

# MUNICIPAL ACCOUNTING REFORM IN INDORE MUNICIPAL CORPORATION (IMC), MADHYA PRADESH

## SNAPSHOT

### A. SITUATION BEFORE IMPLEMENTATION

Indore Municipal Corporation (IMC) with a population of 21.6 lakh (2011) and area of 526 sq. kms. is the largest city of Madhya Pradesh. "The IMC on its own had gone for various administrative and revenue mobilization reforms including accounting reforms and computerization efforts" (Joshi, R. India Infrastructure Report, 2003). Municipal accounting reform initiatives with varying degree of success started in IMC since 1999 when it was required to prepare and submit balance sheets for international funding and while doing so, IMC figured out various gray areas in municipal financing that led the decision makers to undertake reform measures. The previous system of accounting was manual cash based single entry accounting system. Previously, the accounts did not effectively differentiate between revenue and capital receipts and payments, the cash book was not prepared for years, it took months to finalize accounts and that too inadequately, up-to-date information on finances were rarely available, asset-liability position was unknown, accounting was a time-consuming and man-power intensive process, the budget was the only financial document prepared by the IMC. It was therefore not possible to prepare an income-expenditure statement or a balance sheet for the corporation.

Keeping in view of the inefficiencies in the accounting system, IMC conceived, initiated and carried out the reform process on its own without any technical or financial assistance from any organization and took some specific measures towards accounting system reforms during 2000-01. The changes with respect to accounting and budgeting systems were in the areas of computerization of accounting system and process, conversion of accounting system from single-entry cash-based to double-entry accrual-based system of accounting, and separation of the capital account from the revenue account. IMC, with its technical partner, developed a new tailor made accounting software package in order to computerize its accounting processes. With these initiatives IMCs' accounting system improved many fold.

The effort IMC made to improve its accounting system was rather commendable, although there was scope of improvement and need for institutional support in various areas for a holistic framework in the accounting system. To complete the reform initiatives the state Government of MP adopted the modern DEAAAS reform in compliance with the JnNURM reform agenda, since 2008.

### B. THE PROCESS OF IMPLEMENTATION

#### STATE LEVEL FACILITATION

##### REGULATORY FRAMEWORK

The State Government had made appropriate amendments in the Municipal Corporation Act of 1956 under Section 12(2) to implement municipal accounting reform in the local bodies of Madhya Pradesh (MP) in 2007. The state of MP passed a notification to commit to the modern municipal accounting system, including the adoption of DEAAAS in all the ULBs of MP. The State Municipal Accounting Manual was prepared in line with NMAM with the help of professionals in 2007 and was adopted by the IMC since April 1, 2008.

##### CAPACITY BUILDING

As part of the Madhya Pradesh Urban Services for the Poor Programme (MPUSP) funded by the DFID-UK and Government of MP during 2006-2012, RCVN Noronha Academy of Administration and Management, Bhopal was designated as the nodal training institution in the state for capacity building of the ULBs to undertake various kind of reforms. Designated City Level Training Institutes (CTI) like Institute of Public Auditors of India (IPAI) have conducted training programs for the staff of IMC related to DEAAAS from 2008 onwards for a mandated period of 3 years.

#### ULB LEVEL IMPLEMENTATION INITIATIVES

**Recruitment of consultants: Consultants were appointed at various levels of reform implementation:**

- Chartered Accountant (CA) firms were appointed in IMC to help the accounts department in conducting **Valuation of Assets and Liabilities** along with the creation of an **Opening Balance Sheet (OBS)**.
- **Computerization of Accounting Function:** The double-entry based accounting package developed by a consultant had been used to record all transactions, which have formed the basis for preparation of **Annual Financial Statements** from 2007-08 onwards.
- **Migration to DEAAAS:** CA consultants were hired to support IMC with finalization of accounts in line with DEAAAS. They have organized on-job trainings for associated capacity development of IMC staff. Following the end of their tenure, since 2013, another consulting agency was appointed as the

new accounts consultants for IMC. The firm is currently providing 11 accounting personal to IMC, who are operating from the IMC headquarters and zonal offices.

### **C. SITUATION AFTER IMPLEMENTATION**

- Necessary business process changes for aligning existing business processes as per the requirement of DEAAS were implemented with effect from April 1, 2007.
- Different financial statements were generated under DEAAS, such as income and expenditure statements, balance sheets, tax sheets, salary statements, establishment schedule etc.
- Audits were conducted by the Auditor General (AG) on an annual basis. Pre audit/concurrent audits are taking place which are conducted by the Local Fund (LF) Department. All income and expenditure is being monitored on a daily basis and is being reported to the state LF department on an annual basis. The balance sheets are audited by an external auditor each year.
- Account codes were linked with the budget codes.
- Ledger and other statements were maintained on real time basis which takes into account past year's data as well as the actual requirements in specific sectors.
- Budget was prepared through a consultative process with various stakeholders.
- The asset register was updated at regular intervals.
- Daily reporting greatly eased out the stress involved in preparing quarterly and year-end financial statements. Instead of spending long hours in preparation of periodic financial statements, management executives, accountants etc. can devote more time on financial management after the reform.
- Real-time accounting allowed the management to quickly adapt to opportunities and address problems.
- Credit rating of the IMC was done for the first time in 2008-09, with a rating of BBB+.

# PROPERTY TAX REFORM IN GREATER VISHAKHAPATNAM MUNICIPAL CORPORATION (GVMC), ANDHRA PRADESH

The Greater Visakhapatnam Municipal Corporation (GVMC), in Andhra Pradesh, was formed on 21 November, 2005 by merging Gajuwaka Municipality and 32 Gram Panchayats with the Municipal Corporation of Visakhapatnam. Additionally, 2 other municipalities of Anakapalle and Bheemili were merged in August 2013 to form the present city. The city now spreads over 630 sq.kms. and had a population of 20.9 lakhs as per the 2011 Census.

## A. SITUATION BEFORE IMPLEMENTATION

Andhra Pradesh initiated the property tax reform in 1989, by undertaking amendments in the municipal laws. Reforms in property tax were initiated in Andhra Pradesh in the year 1989 by undertaking amendments to municipal laws. A.P. Municipalities Act, 1965 (APM Act) and Hyderabad Municipal Corporations Act, 1955 have been amended by Act No. 20 of 1989 in order to evolve a scientific and new method to levy property tax on municipalities and corporations in the state and to simplify the procedure of assessment. The amended Act has come into force from 1<sup>st</sup> November 1990. Assessment of property tax rules were issued in the year 1990.

Salient features of the amendments to the A.P. Municipalities Act, 1965 (Section 87) was The Annual Rental Value (ARV) of lands and buildings were to be fixed with reference to the following factors: location of the building, type of construction, plinth area, age of the building and nature of usage. There has to be consultation with stakeholders on fixation of monthly rent per sq. mt. of plinth area. ARV of lands and buildings was to be fixed notwithstanding anything in AP Buildings (lease, rent and eviction) Control Act, 1960. Rebate was allowed from ARV based on the age of the building and to the owner of the occupied residential buildings.

The impact of property tax reform undertaken during the 90s in the new system of property tax were: tax payers acceptability, transparency in the fixation of assessments, simplicity in fixation of assessments, buoyancy in revenue and considerable reduction in corruption. There was considerable increase in property tax receipts on account of reforms introduced in this area. In this background, JnNURM property tax reform was introduced within an existing system with a specific set of time bound agenda (M. Prasada Rao, Property Tax reforms in Andhra Pradesh and Telengana, 2015).

## B. PROCESS OF PROPERTY TAX REFORM IMPLEMENTATION

GVMC follows the Annual Rental Value (ARV) System to

calculate property tax at present. Property tax rates are calculated on the basis of building types and tax zones within which the building falls. Final rates are arrived upon the basis of average of the Monthly Rental Value (MRV) of properties in the zones. Property tax rates would vary if the property was occupied by a tenant.

## PROPERTY TAX ASSESSMENT REFORM

- **Reform in Regulatory Framework:** As stated earlier, GVMC derived the property tax related norms from the Hyderabad Municipal Corporations (HMC) Act of 1955 and Hyderabad Municipal Corporations (Assessment of Property Tax) Rules of 1990. As a starting point of property tax reform, Hyderabad Municipal Corporation (Assessment of Property Tax) Rules, 1990 was amended in 2006.

**The salient features of 2006 amendment were as follows:**

- Rule 7(3) of HMC (Assessment of property tax) Rules as amended by G.O. Ms. No. 596 dated 20-11-2006 of MA & UD Department provided that the commissioner shall fix monthly rent for each category in a zone per sq. mt. or sq. ft. of plinth area and notify the rate of monthly rent.
- Educational institutions which are charitable institutions and used for charitable purposes were made eligible for exemption from property tax in the Municipalities.
- As per the amendments issued to Assessment of Property Tax Rules in G.O.Ms.No.596, M.A, dated 20-11-2006, a building which has superior sanitary and electrical fittings, leading to higher cost of construction, having preponderance of marble flooring, teak wood for doors, windows and cupboards shall be classified as RCC posh building.

The Hyderabad Municipal Corporations Act, (HMC Act) 1955 as amended by Act No. 20 of 1989 effective from 1-11-1990 and the Hyderabad Municipal Corporations (Assessment of Property Tax) Rules, 1990 as amended by G.O. Ms. No. 596 MA dated 20-11-2006, provided a detailed, new method for assessment of property tax in the Municipal Corporations: Sections 197 to 238 and Sections 264 to 289 of the Hyderabad Municipal Corporations Act, 1955 and the Hyderabad Municipal Corporations (Assessment of Property Tax) Rules, 1990 as amended in 2006 has provided an elaborate step by step procedure for determination of ARV, is mentioned below:

- GVMC is divided into 8 taxation zones for the assessment of property tax
- Buildings are classified into 6 categories based on their construction

- Further classification of buildings are based on the nature of usage
- To arrive at average monthly rental value (MRV) fixable for each category of building per sq.mt. of plinth area, information has to be gathered relating to the prevailing rental values of 20% of rented buildings of various categories as per nature of construction and nature of usage in each zone in a format prescribed in Form – L of the Rules.
- Issue of draft notification indicating MRV per sq.ft. of Plinth Area in respect of various categories of all buildings for all zones and calling for objections and suggestions from the public
- Issue of final notification indicating MRV per sq.ft. of Plinth Area in respect of various categories of buildings for all zones after considering objections and suggestions
- Preparation of assessment list of buildings by gathering data on rental zone, zonal rate, location of the building, plinth area, plot area, nature of construction, nature of usage, age of the building, depreciation allowance, seashore allowance, rate of taxation and building approval status
- Calculation of property tax and preparation of special notices
- Service of special notices
- Disposal of complaint petitions

Section 226(3) of the HMC Act specifies that the new assessment book would be prepared at least once in every five years. The revision of the property tax rate is done state-wide in all the ULBs of Andhra Pradesh. Zonal rates are fixed on the basis of the survey conducted. Once the rates are finalized, they are printed on the gazette upon approval from the Commissioner, the Examiner of Accounts, and the Council. The last revision was in 2007, the rates came into force from 2010 with due approval. Presently, proposals have been placed to urge the Government

to amend the Act for reducing the revision period from 5 years to 3 years.

- **Self-Assessment System (SAS):** To improve the tax collection, web-based formula driven SAS of property tax information module facility was introduced on the GVMC's website (GVMC, Online Services) as part of the reform. The tax payer can calculate the property tax due and pay the tax online via payment gateway (photo-1). One can check the status of payment and search their property related information by their name or the assessment number. There are over 45,000 (as on July 2014) registered users for self assessment system of property taxation on GVMC's website.

## REFORM IN MAPPING OF PROPERTIES

- **Creating Database:** To create a database of all the utilities and services, GVMC initiated the GIS mapping program since 2006. Consultants had been assigned with the task of mapping of properties using GIS techniques. Base map was prepared for the entire GVMC area with the help of 0.5 meter resolution image in the first phase.
- **Attributing Data:** In the second phase, fieldwork was undertaken with the help of the base map prepared in the previous phase to create attribute data. Features present in the map were verified, validated, measured, photographed and updated (addition/deletion) as per the in-situ ground conditions during the field work. The existing database was updated with the help of the attribute data collected during the field survey. The survey data (non-spatial data) was then linked with the spatial data (property maps) to create a centralized database.

In 2009, the consultants recruited for comprehensive survey and GIS mapping project, submitted their report to the GVMC. As

**TABLE 1: COMPREHENSIVE SURVEY AND GIS MAPPING PROJECT REVENUE REPORT OF 2009**

	Total No. of Properties	Area as per GVMC Database (sq. mt.)	Area as per GIS Survey (sq. mt.)	Revenues as per GVMC Assessments Yearly in Rs.	Revenues as per Survey Assessments Yearly in Rs.	Total Increase in Revenue Yearly in Rs.	Total Revenue Increase in %
Under-Assessed Properties	235749	38634095	46917598	755631496	1039077524	283446028	38%
Un-Assessed Properties	50745	0	3821231	0	106948703	106948703	100%
Over Assessed Properties	22244	2023478	1722103	75623334	63839654	-11783680	-16%
Vacant Land Properties	48250	0	7486203	0	196025290	196025290	100%
<b>Total</b>	<b>356989</b>	<b>40657573</b>	<b>59947135</b>	<b>831254830</b>	<b>1405891171</b>	<b>574636341</b>	<b>69%</b>

Source: Report of the Comprehensive Survey and GIS Mapping Project of 2009, procured from the Jind Technologies Pvt. Ltd. on 7<sup>th</sup> July 2014

**TABLE 2: INCREASE IN ACTUAL DEMAND AFTER TABLET PC ASSESSMENT**

Property Tax Assessments before introducing the Tablet PC		
Year	Total No. of Assessments (properties)	Actual Current Demand (in lakh)
2012	359298	14338.21
Property Tax Assessments after introducing the Tablet PC		
2013	372362	14939.15
2014	414123	16929.87

Source: Procured from the Tablet PC Consultant, Jit World Technologies Pvt. Ltd. on 7<sup>th</sup> July 2014

per their report 47,000 vacant lands were identified and brought to the vacant land tax net. A total of 2,84,000 new properties consisting of under-assessed and un-assessed properties were identified and brought under tax net. As per the report if all the properties assessed in this GIS exercise are brought under tax net, 69% revenue increment worth Rs. 57.46 Crore, was expected to be generated, (Table-1).

- **Assigning Unique Property Identification Code (PIC):** The centralized and computerized property tax data base had assigned unique PIC to each of the identified properties. A property could be located easily with the PIC which is a combination number consisting of the ward, the colony and the block. The code is used by all the departments and other government agencies and forms a part of the statutory regulatory or revenue records. This system helps in exchange of information by various authorities, both Central and State, and in preventing the leakage of revenue.

## IMPROVEMENTS IN MANAGEMENT OF THE SYSTEM

- **Institutional Arrangements:** The Revenue Department of GVMC looks after the Property tax related activities and is in charge of tasks such as creation of a new property database, partition of existing properties, bill generation, tax collection, recovery of arrears etc. The Revenue Department is headed by the Additional Commissioner for Finance followed by the Deputy Commissioner for Revenue (DCR). GVMC is divided into eight administrative zones. Each zone is governed by a zonal office and each zonal office comprises of a revenue section in charge of tax collection from the respective zone. Each zonal office had a revenue officer (who reports directly to the zonal commissioner), supported by a revenue inspector and a tax collector. In July 2014, there were 10 revenue officers, 17 Revenue Inspectors, and 15 tax collectors in GVMC.
- **Capacity Building:** As part of the property tax reform the Revenue Inspectors are trained and motivated on behavioral aspects. In-house computer training to Revenue Officers and Revenue Inspectors are provided by the HRD of GVMC. Urban Development Research Institute (UDRI), Hyderabad conducts regular training programmes for the Municipal Staffs on Municipal revenues improvement. Tablet PC

training is given by the consultant, who was responsible for provisioning of Tablet PCs in the GVMC.

- **Tablet PC based Reassessment System:** This was an initiative undertaken by the GVMC from January 2013. A consulting agency, was hired to supply the tablet PCs and to train the Revenue Inspectors (RI) on tablet PC functioning. All the Revenue Inspectors were given the pre-programmed tablet PCs that covers all the aspects of assessment criteria in a digital format in which they can maintain a database of all the properties in their respective zones. The RI identifies the under-assessed properties through GIS information/ Town planning-related information like Building Penalization Schemes, unauthorized constructions, and occupancy certification/trades licenses information or through physical verification of non-residential information.

Assessment of new properties and reassessment of existing ones on the basis of alterations made to the structure, are carried out on a regular basis by the tax collector. The owner in turn is obliged to present the required information, after which the tax rates are revised and intimated to the property owner. The process includes inspection and measurement of the property in the presence of the owner, the revenue inspector and the tax collector. Objections to the revised rates are to be raised within 15 days of issuance of the notice. After identification, the RI and the field inspector visit the property premises and revise the necessary modules (measurements, usage, nature of construction, etc.), in the tablet PC followed by capturing photographs of the building in the tablet.

- **Property Tax Calendar:** GVMC had a clearly defined property tax calendar for assessment, billing and collection. Property tax is collected on a half-yearly basis. Assessment and revaluation is carried out throughout the year. Demand registers are prepared by end of March and August. Demand bills are computer generated and distributed door to door in April/May and September/October by the GVMC staff. Bulk text messages are sent to the tax-payers informing about the amount to be paid. After issuance of bills for first cycle by end of July and for second cycle by end of December, the users are required to pay property tax.
- **Improvement in Collection of Pending Dues:** Beyond 30th June and 31st December, 2% penalty per month is imposed



1. Online Tax Calculation and Payment Gateway

2. City Civic Centre- Soukaryam

on tax defaulters. Warrant notices are issued to those who do not make payments on time. In special cases tax collectors go door to door to collect tax. GVMC officials mentioned some innovative measures to collect pending dues. For instance the list of defaulters are put up on the website, then the GVMC team visits the defaulter, followed by announcing their name in the locality on microphone. These measures are most of the time sufficient to make the defaulters pay the property tax but there are instances of stubborn defaulters for whom, ‘Silent Dharna’ is being observed in front of their houses, followed by ‘Ringing Bell Dharna’ and ‘Trumpet Dharna’.

- Citizen Interface Mechanism:** To provide internet access to all citizens, GVMC established computerized City Civic Centers (CCC), which were outlets for citizens to have access to the internet for works related to the civic services (photo-2). The CCCs had string of computers on the network and allows citizens to make online payments of their dues for property tax. There is an option of filing complaints online,

which generates a reference number and a tentative time line for action. One can follow the status of the redressal process using the reference number. In case, the problem is not solved within the time mentioned during the complaint registration, it is automatically escalated to the higher authorities. Call Centers attend the Citizen Service Requests by manual operations from 6am to 8pm and by IVRS after 8pm in the evening. ‘Dial Your Commissioner’ service of GVMC enables anyone to talk to the Commissioner directly once in a week.

- Tax Revisions:** Tax revisions are being published on the gazetteers and newspapers. GVMC set up tax payer education camps and tax collection camps at neighborhood level. Tax related brochures are available at the Swakaryam Centres. Step by step simplified method of online tax calculation and payment is clearly stated on the GVMC website. GVMC honors prompt and honest taxpayers with cash awards (currently Rs. 20,000) by lucky draw in every zone. Tax payers who pay within one month from the date of notification are given 5% rebate on property tax.

TABLE 3: COVERAGE RATIO

Year	Total Properties	Total Assessments	New Assessments	Growth in New Assessment (%)	Coverage Ratio (%)
2004-05		170573			
2005-06	224862	188884	18311	11	84
2006-07	225906	192020	3136	2	85
2007-08	343480	295393	103373	54	86
2008-09	356989	314150	18757	6	88
2009-10	370015	327463	13313	4	88.5
2010-11	383744	345370	17907	5	90
2011-12	399220	359298	13928	4	90
2012-13	372362	372362	13064	4	100
2013-14	414123	414123	41761	11	100

Source: Revenue Department, GVMC, procured on 7th July 2014

TABLE 4: PROPERTY TAX COLLECTION IN GVMC (2004-05 TO 2013-14)

Year	Demand (in lakh)			Collection (in lakh)			Collection in %		
	Current Demand	Arrear Demand	Total Demand	Current Demand	Arrear Demand	Total Demand	Current Demand	Arrear Demand	Total Demand
2004-05	2555	1907	4462	2184	1287	3471	85	67	78
2005-06	2750	1069	3819	2405	604	3008	87	57	79
2006-07	3484	823	4307	2919	447	3366	84	54	78
2007-08	4612	1865	6477	3734	1772	5506	81	95	85
2008-09	5651	1917	7568	4697	1763	6461	83	92	85
2009-10	6439	1417	7856	5464	1452	6916	85	102	88
2010-11	10857	1558	12415	7062	722	7785	65	46	63
2011-12	12623	5469	18091	9407	4359	13766	75	80	76
2012-13	12508	4235	16743	10627	3637	14264	85	86	85
2013-14	14339	2667	17006	12208	2225	14433	85	83	85

Source: Revenue Department, GVMC, procured on 7<sup>th</sup> July 2014



Meeting with the GVMC officials



Meeting with the GIS Consultants

## C. SITUATION AFTER IMPLEMENTATION

### Increase in Coverage Ratio

In 2013-14, the total number of properties in GVMC's assessment register was 414123. This number was 100% to the total number of properties in the city, in other words the coverage ratio was 100%. Total number of new assessments during the stated financial year was 41761, which was 11% increase from the previous year. GVMC reached 85% coverage ratio in 2006-07, 90% in 2010-11 and 100% in 2012-13. During 2007-08, there was an increase of 54% of assessed properties due to the GIS mapping. Table-4 shows the total number of properties, the total number of assessments, the growth in total number of assessments and coverage ratio of properties in GVMC over the past ten years.

### Increase in Collection Ratio

Table 4 shows the demand and collection statement for the past ten years. GVMC's current property tax collection efficiency for the financial year 2013-14 stands at 85% against the current demand raised, and that of arrear efficiency is 83% against arrears demand raised. Overall, collection performance for current demand and current arrears for 2013-14 stands at 85%. Target collection efficiency as marked in JnNURM is 90% was almost achieved in 2009-10, but started decreasing from 2010 onwards due to the property tax revision during 2010-11 and since 2011-12 it is picking up gradually. Collection of revenue from property tax had almost doubled from Rs.7785 lakh in 2010-11 to Rs. 14433 lakh in 2013-14 due to significant arrears recovery and increased collection efficiency.

# PROPERTY TAX (PT) REFORM IN BRUHAT BENGALURU MAHANAGARA PALIKE (BBMP), KARNATAKA

## SNAPSHOT

The jurisdiction of Bangalore City Corporation (BCC) was increased in the year 2007, with the merger of neighboring seven City Municipal Councils (CMC), one Town Municipal Council and 110 villages around Bangalore. With the addition of these peripheral areas, the Bangalore Mahanagara Palike came to be called as Bruhat Bengaluru Mahanagara Palike (BBMP) from 16-01-2007. The number of wards increased from 100 to 147 wards. With an estimated population of 84 lakh in 2011, Bangalore was the third most populous city in India spreading across 800 sq. km. of land.

### A. SITUATION BEFORE IMPLEMENTATION

**Self Assessment System:** In the year 2000, Bangalore initiated the property tax reforms and brought the optional SAS of Property Tax scheme. The objectives of the scheme was to get property owners to voluntarily declare their property tax liability and to make timely payment. Under this SAS (ARV) system property was assessed on the basis its location, quality of construction, usage, occupancy and the age of the building. All these physical and usage features of the property were taken together and the annual rental value per square foot per month was determined.

About 60% of the property owners adopted this system and paid their property tax in the course of first two months from the date of commencement of the year. The collection of property tax increased by almost 34% in one year following the adoption of the SAS system in 2000. This improved collection of property tax from Bangalore encouraged the GoK to amend the Karnataka Municipal Corporation Act (KMC Act) for implementing the SAS all over Karnataka during the year 2001. (NIUA, Documentation of Best Practices , 2009).

**Zoning:** Under this scheme the location of the property was classified into zones based on the published guidance value notified by the Department of Stamps and Registration. For each of the zones the rental rates per square foot were pre-determined linking building to location, type and quality of construction and age of the buildings.

### Unit Area Value System

In 2002, KMC Act pertaining to the method of assessment of property was amended to bring in the Capital Value System (CVS). While the mended property tax assessment by capital value method law was introduced in all the ULBs, the taxpayers of Bangalore protest against its implementation. In keeping with the suggestions of the property taxpayers of BBMP the Government had amended the KMC Act to introduce property tax assessment under Unit Area Value (UAV) system. In the KMC

Act a new Section 108A had been inserted with corresponding Rules for property tax assessment on the basis of Unit Area Value.

Like in the earlier property tax scheme, the city of Bangalore had been classified into 6 value zones on the basis of the guidance value published by the Department of Stamps and Registration. The published guidance value was adopted as a basis for zone classification as this would prevent any official discretion and thus avoid complaints of subjectivity in the classification.

### B. PROCESS OF IMPLEMENTATION

#### Legal Reform

As a prerequisite to the JnNURM programme, BBMP signed the MoA with the GoI on December 2006 for implementation of various reforms. In January 2007, BMP was expanded from 240 sq. km. to 800 sq. km to form BBMP making it the largest ULB in the country. While the erstwhile CMC and TMC were collecting property tax under the CVS scheme, the erstwhile area under BMP, ARV system was being followed. With the merger of the erstwhile CMCs and TMCs with BMP, there were two methods of property tax assessment system in one city: CVS for the newly added zones and SAS for the old BMP area. Hence there was an urgent need to bring in uniformity in tax administration. Since there was resistance from the taxpayers from moving into CVS the Government conceded to the people's request and amended the law to bring in an area based system of property tax assessment for the whole of BBMP jurisdiction.

Bangalore introduced Unit Area System of taxation for the entire jurisdiction of BBMP since February 2009. Unit Area Value method is considered to be an improved methods of PT assessment compared to Rental Value System of assessment. The jurisdiction of BBMP had been classified into 6 value zones (A, B, C, D, E and F) based on the guidance value for registration of properties by the Inspector General of Registrations, GoK. Properties were again classified based on the cost of construction, usage of buildings, whether it is residential or non-residential, self occupied or let out. The rate per square feet, per month was fixed on the basis of zones and class of buildings.

#### Administrative Reform

As part of JnNURM PT reform, GIS based PT System was introduced in BBMP in collaboration with the NIC since March 2012. The inventories of all the properties within BBMP was developed with the help of satellite images from IKONOS and Google. Field Surveys were carried out to get the approximate land dimensions, number of floors, land use, plot numbers etc. All the properties of

BBMP have been registered as identified through GIS system and an unique Property Identification Numbers (PID) was assigned to each property. PID is a numeric combination of ward number, street number and plot number.

The validation of the properties with vital statistics such as owner name, address of the property etc. is being carried out by revenue officials of BBMP. The updated information of new PIDs is then uploaded on the web based search engine. Total of 16.19 lakh properties have been issued with unique PID through GIS survey which includes an addition of 1.01 lakh newly identified properties in 2013-14. This had helped in bringing all the 'missing properties' under the tax net. The GIS maps with PIDs are available to the staffs of all the city centres functioning in BBMP, where online payments are processed. The MIS data of properties are again validated and updated as and when citizens pay the property tax. The personnel of the revenue department from BBMP collect the updated information of the properties and prepare a report of the defaulter cases.

Following the online SAS in which property owners can calculate the PT to be paid using the 'User Friendly Web Based Tax Calculator' had proved to be a success in BBMP. This IT enabled calculator assesses PT based on parameters like category, type of house, year of construction, zone, built up area etc. One can assess one's property and calculate how much PT one had to pay in minutes. Due to this system not only had the tax revenue gone up, but the consequent transparency had raised the credibility of BBMP.

### Citizen Interface Mechanism

As a result of the JnNURM, PT reform BBMP tax payers have multiple options of paying the property tax. Hassle free payments could be made anytime using credit/debit card online. Alternative payment options like help centers (Citizen Service Centre, Bangalore One), counter collection in the corporation and banks etc. have made tax payment convenient for the citizen.

The Citizen Service Centres provide various services such as payment of property tax, obtaining mutation certificates of properties (*Khatha Certificate/Khata Extracts*), applications for registration of khathad, application for sanctioning of building plans, birth and death certificates, complaints/requests and sug-

gestions etc. It is a single window service delivery point for the citizens of BBMP.

BBMP had introduced *Spandana* (<http://sasbbmp.com/spandana>), an online complaint registration system that enables citizens to register grievances online or by SMS. The complaint registration system of BBMP had an exclusive 24 X 7 Citizen Call Centre that facilitates registering of complaints related to administration, electrical, engineering, forest, health, horticulture and revenue departments. Cumulative complaints received from these sources are tracked and a definite resolution is being provided for in the least possible time. The success of *Spandana* is apparent from the fact that more than 2.25 crore complaints had been registered since the introduction of this system on March 2014.

### C. SITUATION AFTER IMPLEMENTATION

Bangalore has been increasingly raising revenues through PT after the implementation of PT reform as summarized below: (Progress Report on Urban Reform Agenda, March 2014)

- As per the latest Appraisal report of March 2014, the coverage ratio in the core area of BBMP had increased from 89.1% in 2012-13 to 95.8% in 2013-14. In the expanded BBMP area the coverage ratio had increased from 84.4% to 87.55% in the same period.
- In 2013-14, total number of properties assessed in the core area was 7,12,206 of which 6,82,429 have paid property tax (91.8%). In BBMP area the total number of properties are 16,17,400 out of which tax was collected from 14,16,089 (87.5%).
- The collection ratio from PT in the core area had increased from 90.8% to 91% whereas the collection ratio of BBMP as a whole had decreased from 75.5% to 73.5% during 2012-13 to 2013-14.
- In 2013-14, in the core area, against the tax demand of Rs. 852 crore, and the tax collection was Rs. 775.5 crore (91% collection against demand). In the same year in the entire BBMP area, the tax demand was Rs. 1800 crore and the collection was Rs. 1323.2 crore (73.5%). It is to be mentioned here that PT collection in BBMP suffers from arrears locked in dispute cases.

# USER CHARGES REFORM IN SURAT MUNICIPAL CORPORATION (SMC), GUJARAT

SMC was expanded from 112.3 sq.km to 326.5 sq.km. in 2006. The new jurisdiction of SMC accommodates 44.6 lakh people (Census 2011). Flood and the outbreak of pneumonic plague in Surat during September 1994 severely affected the city. The city authorities tried revamping the entire administration in a very brief period of time. Keeping up with that momentum, SMC had taken all the opportunities that the JnNURM had offered to improve governance and infrastructure of the city. Surat had been in news throughout the JnNURM mission period for being one of the best performing cities in various categories of reforms (photo-1-2), few of them are summarized in Box-1.

## A. SITUATION BEFORE IMPLEMENTATION

SMC followed uniform volumetric charge system for water pricing. In this system, a fixed amount was charged per unit of water consumption, which varied with the category of users and the size of the water connection. While the uniform tariff system simplified the calculation, at the same time there was no incentive for the consumer to save precious water leading to the violation of the principle of water conservation. Prior to 2008-09, water and sewerage charges were embedded within property tax or was collected in the form of flat water charges. Property Tax was calculated based on the Annual Rateable Value (ARV) system as per Section 129 of Bombay Provincial Municipal Corporation Act (BPMC Act) of 1949 and the components of property tax were, water tax, water charge, conservancy tax, general tax, and betterment charges. Before 2008-09, for residential and non-residential properties, a certain percentage of the rateable value (with a fixed minimum amount) was levied as water tax on a monthly basis. Whereas a fixed **water charge** for the **un-metered** water connections (for city area) was levied on a monthly basis as per the Ferrule size.

In the absence of volumetric metering at consumer level and critical points in the water supply system, SMC's reported

NRW scores a 'D' with respect to reliability levels under the SLB framework, suggesting that this is a serious cause for concern. In 2006 and 2007, before SMC's expansion was fully in place, SMC continued to receive frequent complaints (9,644 complaints in 2006 and 9,903 complaints in 2007) from various zones about pressure, leakages and breakages in the system. To address these issues, SMC decided to adopt a systematic approach of leakage mapping and leak repairs and a city wide water audit was planned.

JnNURM provided the institutional support and clarity for planning, implementation and monitoring towards these initiatives. Recognizing the importance of improving service delivery, beyond just addition of physical infrastructure, SMC constituted an NRW Cell in 2007 with the mandate to plan, develop,

### BOX -1

For taking the 'Most Inclusive Approach' in implementation of reforms by the JnNURM

'Best Performing City' award, 'Best City in implementation of 7- Point Charter Award', 'Best City for Improvement in Financial Management', all in 2008-09 from the MoUD.

'Best BSUP City among Large States' (2009-10 ) from the MoHUPA

'Excellence in Financial Reporting' by the Institute of Chartered Accountants of India (ICAI).

'Best Performance in Innovation' (2010-11) from the All India Institute of Local Self Government (AIILSG).

'Excellence in Solid Waste Management Award' from the JCB, CII-APTDC.

'National Urban Water Award' (NUWA-2010) for its 'Leakage Mapping' initiative by the Administrative Staff Collage of India (ASCI) in 2009-10



1. Best Performing City in implementation of Reforms



2. Best City for having the most Inclusive Approach

implement and monitor an action plan for reduction of NRW, conducting periodic water audits, undertaking leakage mapping and repairs in a phased manner.

## B. PROCESS OF IMPLEMENTATION LEGAL REFORM

### Bombay Provincial Municipal Corporation (BPMC) Act

The **BPMC Act of 1949** was amended in 2007 to allow the ULBs of Gujarat to go for restructuring of tariff structure. As per Section 141 B of the BPMC Act, ULBs can recover user charges in consideration with the O&M of the services by continuing with the previous charge/ or increasing<sup>1</sup>/ or decreasing the charges as per the increase/ decrease in the O&M cost. Section 141B gives the commissioner due authority to levy water and sewerage charges after due approval from the Standing Committee. Thus since 2008-09, the user charges in SMC are not related to property tax anymore.

### Water Meter Policy

'User Charges and Water Meter Policy' was adopted by the SMC since 1<sup>st</sup> April 2008 to achieve the targeted reforms of recovering full O&M charges. User charges are reviewed and revised as per the requirement of the policy, accordingly, "water and sewerage charges" are fixed for the budget with General Board Resolution. As per new water meter policy effective since Dt.01-04-2008 (SMC, 2014),

- All new residential and religious purpose water connections above 15mm (1/2") dia size shall compulsorily be metered.
- All existing water connections prior to 01-04-2008, above 15mm (1/2") dia size for residential and religious purposes were shifted to metered connections.
- All non-residential, commercial and industrial connections above 1/2" size are already metered as per water meter policy prior to 01-04-2008.
- For all 15 mm (1/2") dia water connections for residential

and religious purpose properties registered in the jurisdiction of SMC, annual "Water and Sewerage Charges" shall be levied per family as mentioned in Table-4 below.

### Volumetric Tariff System

As per the provisions made in the 'User Charge and Metering Policy', SMC had clearly defined the user charge structure separately for residential/ non-residential and religious/ non-religious as follows:

- Fixed annual 'water and sewerage' charge per family for all 15 mm/ 0.5"/½ " (half inch) diameter water connections (Table-1)
- Charges on volumetric basis for all more than ½" diameter connections
- Minimum user charges for more than ½" diameter connections (Table-2 below)

### Tariff Structure

#### Fixed Annual Water and Sewerage charges for 1/2" diameter, water connections for Residential and Religious purpose:

For all 15 mm (1/2") diameter water connections for residential and religious purpose properties registered in the jurisdiction of SMC, annual "Water & Sewerage Charges" shall be levied per family as mentioned in Table-1 below.

### Installation of Water Meters

JnNURM reform emphasized on 100% metering to conserve water by creating public awareness to control the wastage of water. SMC is gradually switching to a system of metered connections since March 2008. In this system, both O&M expenditures and the level of consumption of water is taken into consideration. Water tariffs are based on the O&M expenditures of supplying water and the carpet area of the household for which the connection is given. The cost (expenditure) of salaries of the employees and water treatment are covered by the water tariff

**TABLE 1: ANNUAL USER CHARGES FOR 1/2" DIAMETER, WATER CONNECTIONS FOR RESIDENTIAL AND RELIGIOUS PURPOSE ONLY**

Carpet Area(in sq. meters)	Year 2013-14	Year 2014-15
	Annual Water and Sewerage charges per family ( in Rs.)	Annual Water and Sewerage charges per family ( in Rs.)
0-15	348	348
16-25	600	600
26-50	960	960
51-100	1440	1440
101-200	2100	2100
201 -500	3750	3750
501 and above	7500	7500

<sup>1</sup>State's intervention is necessary in case the tariff increment is 40% or above

**TABLE 3: RESIDENTIAL AND RELIGIOUS PURPOSE WATER AND SEWERAGE CHARGES**

Sl. No.	Connection Size (in inch)	For monthly consumption up to 30000 liters		For monthly consumption greater than 30000 liters	
		2013-14	2014-15	2013-14	2014-15
Charges per 1000 liters per family (in Rs.)					
1	3/4"	4.50	4.50	12.00	12.00
2	1.0"	4.50	4.50	12.00	12.00
3	1.5"	4.50	4.50	12.00	12.00
4	2.0" and above	4.50	4.50	12.00	12.00

(Mathur and Sridhar, Pricing Urban Water: A Marginal Cost Approach, 2011). After 2006, when SMC area was expanded from 112.3 sq.km to 326.5 sq.km., metering became mandatory to new domestic connections of all diameters and also compulsory to old domestic connections with diameter above 1/2" (i.e. excluding 1/2" diameter).

**For 15 mm (1/2") size water based commercial and industrial purpose connection:**

From 01-04-2012, all new 15 mm (1/2") size water based commercial and industrial connections were compulsorily metered and volumetric based charges were applicable as per Table-4. "Water & Sewerage Charges" were levied as per Table-2, until water meters were installed on all existing water based commercial and industrial connections. After water meters were installed on the existing connections, volumetric based charges were applicable as per Table-4.

**For all water connections above 15 mm (1/2") size - Volumetric basis as per meter:**

Keeping in view of the JnNURM 's target, SMC introduced new user charges and water meter policy from 01-04-2008. Accordingly, "Water & sewerage charges" were fixed for budget year 2014-15 and was applicable as per type of usage as below. Since then, for all residential and religious purpose water connections above 15 mm (1/2") size connections, "Water & sewerage charges" has been applicable as per Table-3 below.

**For all Non-residential purpose water connections above 15 mm (1/2") size connections, "Water & sewerage charges" is applicable as per Table-4 below.**

**Service Level Benchmark**

As per the MoUD's benchmark an ULB had to achieve 100% metering. In 2013-14, SMC had targeted achieving metering of 6% of total connections of which 3% had been achieved as on February 2014. SMC had undertaken a pilot project for 24x7 water supply with 100% metering in North Zone of SMC that will cater to around 2000 connections for existing as well as projected population. Based on success of the same, this project is envisaged to be scaled up for rolling out across the city.

**Setting up of a body for recommending user charge structure**

The State Government is considering the idea of setting up of a body for recommending user charges structure and carrying out further evaluation. On February 29, 2012, Government of Gujarat proposed to establish Gujarat Water Regulatory Authority (GWRA). In future, the tariffs maybe fixed and regulated through this body.

**ADMINISTRATIVE REFORMS**

**Setting up of NRW Cell**

A Non-Revenue Water (NRW) cell was set up in SMC in 2007. The NRW cell was formed with the objective of undertaking a thorough estimate of NRW levels and then progressively improving and maintaining overall NRW level at 20% as earmarked in the Service Level Benchmark (SLB). The NRW cell had six main objectives: efficiency enhancement in transmission and distribution network, achieving equity in distribution, achieving financial recovery, creating awareness for water conservation, conducting periodic water audit (every three years) and implementation of efficiency and equity measures as per requirement. As a part of this action plan, SMC initiated two major activities: water audit of the core city area of 112.28 sq. km., and leakage mapping exercise (SMC, 2014).

**Water audit**

Water audit is a thorough accounting of all water into and out of a utility as well as an in-depth record and field examination of the distribution system that carries the water, with the intent to determine the operational efficiency of the system and identify sources of water loss and revenue loss. NRW cell of SMC is conducting water audit to establish the quantum of NRW in the core city area of 112.28 sq. km. to keep track of water that is being lost due to leakage and other factors to estimate the quantum of NRW level. In February 2014, SMC estimated that NRW is slightly above 20% and is trying to bring that down to below 20% levels (Deloitte and PRIA, 2014).

**Leakage Mapping**

NRW cell is conducting "Leakage Mapping" exercise in which leakages and contaminations are recorded on daily basis.

**TABLE 4: NON-RESIDENTIAL PURPOSE WATER AND SEWERAGE CHARGES: 2014-15**

TYPE	Sr. No.	PURPOSE OF USAGE	Charges Per 1000 Liters (in Rs.)
(A)	1	Premises for public institutional services like bus, railways, Gujarat Electricity Board, Surat Electricity Company, banks	20.00
	2	General(non water based ) Industries like power looms/ Diamond/jari -Kasab/Work shop	15.00
	3	Temporary water connection for non-commercial, individual construction purpose	20.00
(B)	1	For halls and Vadi's used for social functions	15.00
	2	Properties like dispensary, hospital, nursing home, maternity home, dispensary chemist etc. related with medical services	14.00
	3	Photo studios	17.00
	4	Dhobi ghat	15.00
	5	Private swimming pools	32.00
	6	Gymkhana and sports club	32.00
	7	All types of restaurants and canteens (inclusive of tea /snacks/farsaan shops)	20.00
	8	Properties like nursery, plantations activity used for commercial use	25.00
	9	Properties used for residential use for private/limited company	20.00
	10	Guest houses	27.00
(C)	1	Soft drinks/soda manufacturing organizations	27.00
	2	Ice cream /ice manufacturing organization	27.00
	3	Cold storage plant	27.00
	4	Central air condition plant	27.00
	5	Cinema / theatre	27.00
	6	Film processing /sound studios/film laboratory	27.00
	7	RCC/PCC materials and marble mosaic tiles manufacturing works	27.00
	8	Temporary water connection for commercial purpose constructions	27.00
	9	Temporary water connection for public fair, function, exhibition	27.00
	10	All types of hotels - up to three - stars	27.00
(Detailed Case)	1	Dyeing and printing houses (except pandesara GIDC)	27.00
	2	4-star/5-star hotel	35.00
	3	Water park/amusement park	27.00
(E)	1	Commercial purpose /shops other than mentioned above	12.00
(F)	1	For educational institutions	8.00
(G)	1	For residence purposes outside the city area	15.00
	2	For commercial purposes outside the city area	30.00
	3	For industrial purposes outside the city area	36.00

Leakage Mapping had resulted in saving precious potable water and reduced the probability of water borne diseases. During the period of April-Jan, 2013, a reduction of 25% in leakage had been realized. SMC had been awarded with the National Urban Water Award (NUWA-2010) for this initiative by the ASCI. The positive impacts of leakage mapping is depicted in the following graph.

### Separate accounting system for water supply

SMC had fully migrated to double entry accrual basis of accounting system since 2007-08. It had established separate accounting system for each service to determine the O&M cost, category wise. The current accounting system for water supply, sewerage, storm water drainage and solid waste management is enabled to capture the information separately for each category at zonal, departmental and project level.

## REFORM IN CITIZEN INTERFACE MECHANISMS

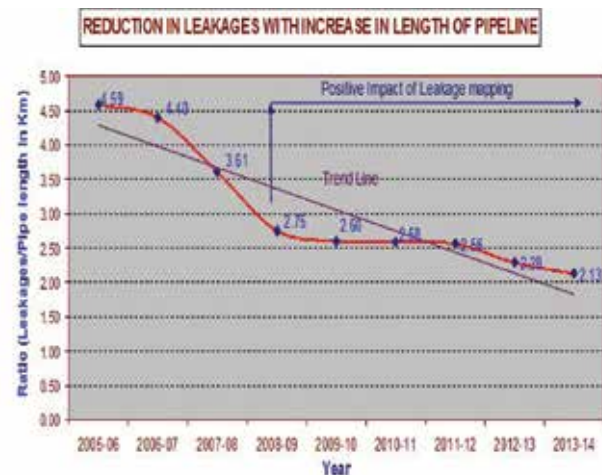
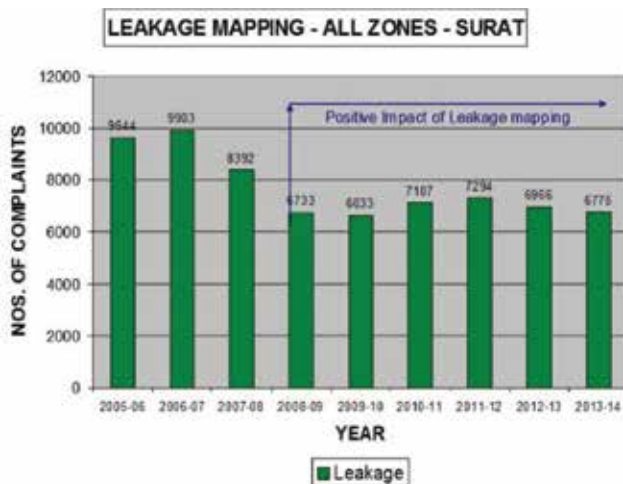
To deal with inefficiencies in billing and collection SMC went for a systemic overhaul and introduced technology based multiple payments gateways such as the CCCs, online payment via credit/debit card (from PC/kiosks), using mobile apps developed for payment of tax and tariffs etc. Complaint related to any of these

services can be registered using all the above mentioned options. Complaints are auto assigned to the concerned department. These options have improved the compliance of users in user charge payments.

SMC currently had 16 CCCs, that facilitate single point/single visit solution, speed-up the processing, bring transparency, and accountability. These CCCs are involved in multiple activities like collecting Property Tax, Professional Tax, issuing Birth and Death Certificates, Complain Registration, etc. Separate kiosks were set up in the CCCs from where citizens can pay their bills. All SMC services and several other citizen centric services are available from a single location i.e. the SMC website. 24 hours complaint lodging is possible through internet. A host of civic services are available in the m-governance solution. Separate mobile app had been developed for water billing and payment.

## OTHER REFORM MEASURES Adoption of Service Level Benchmarks (SLBs)

MoUD had defined parameters for minimum standard of performance for a ULB in its service delivery. State level SLB cell of Gujarat was constituted in 2012 for monitoring and implementation of these SLBs. Critical reforms are covered in these



Source- NRW Cell, SMC



1. SMC mobile apps for bill payment



2. City Civic Centre



3. Kiosk for bill payment

benchmarks such as metering and reduction in NRW which have a direct impact on cost recovery. SMC had updated its SLB status in 2014 as per the requirement of the 13th Finance Commission. As mentioned earlier, for the year 2013-14, SMC had targeted to extend metering to 6% of which until February 2014 3% was achieved, while the MoUD benchmark for metering is 100%. SMC has already realized the MoUD's benchmark for the extent of Non Revenue Water (NRW) of 20% and committed to reducing it below 20%.

### C. SITUATION AFTER IMPLEMENTATION

The time line to achieve 100% recovery of O&M costs from user charges stated in the MoA was 2011-12. SMC has not only met the deadline, it has surpassed the target by recovering 100.03% of the O&M cost in 2012-13 (table-5). In 2013-14 (till 28<sup>th</sup> February 2014), the total recovery of user charges was 126% of the of the total O&M cost (table 6).

**TABLE 5: RECOVERY FOR USER CHARGES IN 2012-13**

Description	O&M cost (in lakhs)	Recovery from user charges (in lakhs)	Recovery in %
Water Supply	11869	13708	115.49
Sewerage	9528	3887	40.8
Solid Waste Management	5948	9757	164.05
Total	27345	27352	100.03

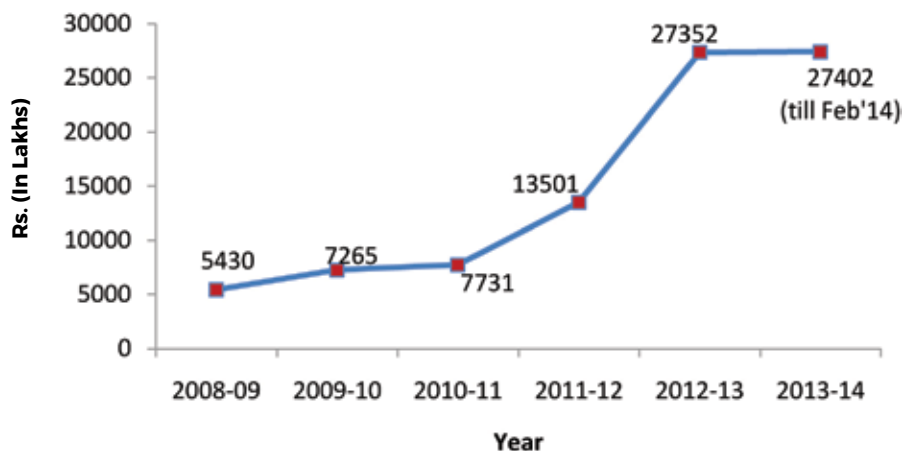
Source: Appraisal Report of 2014

**TABLE 6: RECOVERY FROM USER CHARGES IN 2013- 14 (TILL 28 FEBRUARY 2014)**

Description	O&M cost (in lakhs)	Recovery from user charges (in lakhs)	Recovery in %
Water Supply	8938.85	14131.31	158.09
Sewerage	6355.48	4470.43	70.34
Solid Waste Management	6453.76	8800.5	136.36
Total	21748.09	27402.24	126

Source: Appraisal Report of 2014

**FIGURE 1: SHOWS THE INCREASE IN THE TOTAL COST RECOVERY OF USER CHARGES (IN RS.) FROM 2008 TO 2014. THE RECOVERY HAD ALMOST BEEN DOUBLED FROM 2011-12 TO 2012-13.**



# USER CHARGES REFORM IN MUNICIPAL CORPORATION OF GREATER MUMBAI (MCGM), MAHARASHTRA

## SNAPSHOT

MCGM is the largest corporation in the country in terms of its functional responsibilities and revenue-raising powers. The revenues raised by the MCGM have been found to be more than many other smaller states of India. MCGM is the key agency responsible for service delivery, infrastructure development and maintenance of the city area. MCGM is involved in the management of water supply and sewerage services, it levies tariffs and collects user charges. The population of Mumbai as per 2011 Census is 124.78 lakhs and covers an area of 603 sq. km.

As per the MoA signed on October 07, 2006, MCGM was required to revise user charges in such a manner that by the year 2012, income from user charges of a particular service recovers the full cost of O&M of the service. As per the latest Appraisal report of 2014, MCGM had achieved the expected outcomes from user charges reform as per timeline.

### A. SITUATION BEFORE IMPLEMENTATION Existing Regulatory Framework

As per the Mumbai Municipal Corporation Act, if the premises are not charged for water by measurement, a 'Water Tax' and a 'Water Benefit Tax' are levied as water charge on all the properties in Greater Mumbai. The water tax is levied as a percentage of property tax and an additional water tax known as the 'water benefit tax' is also levied. 'Water Tax' and 'Water Benefit Tax' are applied to the annual rateable value of premises, with the tax rate discriminating between residential and non-residential properties. Municipal Corporation is held responsible for all functions relating to the provision of water. In a similar way 'Sewerage Tax and 'Sewerage Benefit Tax' are levied as a percentage of water charge .

### Existing Institutional Framework

The Hydraulic Engineering Department (HED) is responsible for Construction of water works and O&M of water supply system. HED Generates water and sewerage charges bills and effects recoveries, it frames water charges rules and by-laws from time to time, prepares future plan and identifies capital works to provide adequate, safe and equitable water, grants new water connection for enhancement of existing water connections. HED issues

water meters, tests and maintains them on a time to time basis. HED uses the following framework (Image 1) of "Water Charges Rules" for levying water charges.

### Different accounting system for water supply and sewerage

MCGM had established a separate accounting system for each service to determine the O&M cost, category wise way back in 1974. JnNURM had strengthened this practice by strictly ring-fencing the water supply and sewerage account from other budgets. MCGM had fully migrated to DEAAS since 1994.

### B. PROCESS OF IMPLEMENTATION Improvement in user interface for collection

AQUA is a water billing software for calculating demand, based on metered consumption. It raises bills pertaining to water charge, water tax, sewerage charge and sewerage tax. Repetitive routine actions like bills approval, bill generation etc. are handled by this software. This system was installed in all the wards of MCGM in 2005-06 (AQUA, 2014). Online payment gateway is available to citizens with internet facility through a portal (<http://portal.mcg.gov.in/>) to pay water bills. Other payment centres include 80 Sify Collection Centres throughout the city. Citizens can also make payment through ITZ cash card and SMS from their mobile phones.

Online Complaint Management System (OCMC) is a web enabled browser based complaint management system. Complaint registration facility is available to citizen at <http://www.praja.org/>. The system is integrated with the Citizen's Charter containing specific Service Level Agreements (SLAs) with time bound solution of the complaint. Complaint automatically escalates to higher level if they are not attended as per the SLA at a particular level.

### C. SITUATION AFTER IMPLEMENTATION

The collections in the form of 'water charges, water tax and sewerage charge, sewerage tax' covers the O&M costs entirely, as a result in MCGM the 'Water Supply and Sewerage' services are completely self sustaining.

**IMAGE 1: CATEGORY WISE REVISED RATE OF WATER CHARGES  
EFFECTIVE FROM 16.06.2013**

**BRIHANMUMBAI MAHANAGARPALIKA**  
Hydraulic Engineer's Department

**NOTIFICATION**

As per S.C.R.149 dt. 09.05.2012 Municipal Commissioner has accorded sanction vide no. MGC/F/923/ dt. 05.06.2013 to increase existing water charges rates for domestic & non-domestic purpose by 8% w.e.f.16.06.2013.

Details of amendments are as under

Water Charges Rule No.	Categories	Existing rate prior to 16.06.2013 (Rate per 1000 Ltrs.) In Rs.	Revised rate with effect from 16.06.2013. (Rate per 1000 Ltrs.) In Rs.
1.01 & 1.01(A)	Slum area , and Gaothan area etc.	3.00	3.24
1.1	Co-operative societies and Premises etc.	4.00	4.32
1.2	Hall ,Hospitals, Coaching Classes etc.	16.00	17.28
1.4	Commercial Establishments, requiring Licensee of Health department under section 394 of MMC Act,Photo Studio etc.	30.00	32.40
1.5	Offices,Shops,Malls, Lodges,Theater,Godowns, Factories ,Work Shops etc.	40.00	43.20
1.6	Race Course,Hotels having Three Star and Above etc.	60.00	64.80
6 2.4	1. Covered under Rule 1.01(A) hereinbefore.	6.00	6.48
	2. Covered under Rule 1.1 hereinbefore.	8.00	8.64
	3. Covered under Rule 1.2 hereinbefore	32.00	34.56
	4. Covered under Rule 1.4 hereinbefore	60.00	64.80
	5. Covered under Rule 1.5 hereinbefore	80.00	86.40
	6. Covered under Rule 1.6 hereinbefore	120.00	129.60

Note : Sewerage charges @ 60% of Water Charges are leviable.

Copies of Revised Rates Water Charges Rule, Sewerage and Waste Removal Rule books will be made available shortly for sale in the office of Public Relation Office, ground floor annex building, mahanagarpalika marg, Fort, Mumbai 400001.

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## **E-GOVERNANCE REFORM IN NASHIK MUNICIPAL CORPORATION (NMC), MAHARASHTRA**

With a population of 14.9 lakhs (as per Census 2011) covering an area of 259 sq. km., Nashik Municipal Corporation (NMC) is the administrative headquarter of Nashik District of Maharashtra. NMC signed the MoA for the implementation of the mandatory and optional reforms at the ULB level under the JnNURM programme on 29th November 2006. NMC prepared the Municipal e-Governance Design Document (MeDD) on the basis of the National Design Document of the National Mission Mode Project (NMMP) and submitted it to the Government of Maharashtra (GoM) in September 2007.

### **A. SITUATION BEFORE IMPLEMENTATION**

e-Governance reform in Nashik is an extension of the state's vision to make the governance system transparent and to increase the accessibility of information in the public domain. NMC envisaged Information and Communications Technology (ICT) as a catalyst for improving the overall governance system across departments at all levels. NMC's e-Governance reform intention was, to use the recent advances in ICT to transform the relationship between governments and citizens, to contribute to the achievement of good governance goals, to facilitate accessibility of civic services to the city residents at the doorstep so that there is upgradation in the process of service delivery, information management, transparency, citizen involvement etc.

Maharashtra was the first state to release a dedicated e-Governance policy in 2011. The policy laid the groundwork for development of an integrated environment for delivering various Government to Citizen (G2C), Government to Business (G2B), Government to Government (G2G) and Government to Employees (G2E) Services in a seamless and cost effective manner. As part of the policy and in order to provide faster and more efficient governance and easier access to information, the state implemented the Maharashtra State Wide Area Network (MSWAN) through which the state government created an integrated community encompassing 35 districts, 358 talukas, 6 divisional headquarters, and several hundred horizontal offices connected with the state headquarters in Mantralaya, Mumbai. All departments in the state had to earmark a certain part of their operating budget for e-Governance reform. The focus of the earmarked budget for e-Governance was on e-enablement of citizen services and creation of backend infrastructure support for the same.

Likewise, NMC had its own network. NMC had created a Wide Area Network (WAN) platform in 2006 from its own

budget which helped to connect the head office with its 6 divisional offices and 18 collection centres. With the advent of JnNURM mission and approval of large scale projects it became imperative for NMC to switch to advanced technological systems and solutions to enhance the service delivery mechanism.

### **B. PROCESS OF IMPLEMENTATION** **State Level Initiatives**

The state of Maharashtra played an important role in motivating the ULBs in progressing towards achievement of e-Governance vision of 'transforming governance and enriching lives through the power of ICT'. The GoM identified six priority pillars to use e-Governance as a tool to become more proactive and responsive to citizens needs. The key pillars were: policy/legal framework, capacity building framework, funding framework, institutional framework, core e-Government infrastructure and common state wide projects.

#### **Legal Framework: e-Governance Policy of Maharashtra, 2011**

Some of the key e-Governance policy decisions which had a strong influence on implementation and dissemination of e-Governance initiatives in local governments of Maharashtra are:

- Performance in e-Governance was made a mandatory component in the Performance Appraisal Report (PAR) of all India Services Officers (ISO) of GoM.
- All the IT related projects had to be approved by Project Implementation Committee (PIC) or the High Power Committee (HPC).
- Marathi language was made the first and mandatory language in all e-Governance initiatives
- A cabinet sub-committee was constituted for monitoring and enhancing the implementation of e-Governance initiatives in the state
- The e-mail policy provided guidelines for usage of e-mail messaging solution implemented by GoM including naming convention, password policy, security, data retention, data backup etc.
- Application form for 16 odd revenue services were made uniformed by using e-Governance system resulting in hassle free application process.
- Rates of G2C services provided through different delivery mechanisms like CSCs, Sangrams, Setu, MahaOnline etc. have been harmonized all across the Maharashtra state. Same fee was charged to citizens irrespective of the delivery mode.

- e-Tendering had been made mandatory to all state departments and government agencies for tenders whose estimated value was greater than Rs. 10 lakhs.

## ULB (/NMC) Level Initiatives

Following is a brief account of module wise interventions made at the NMC level as part of e-Governance reform:

### 1. Property Tax Module

Prior to JnNURM, NMC was using a property tax module developed in 2006 on Fox based platform. Over the period of time the software became redundant and was not able to cater to the increased requirements. To upgrade the system, NMC appointed a software consultant to prepare new web based software which is in compliance with the guidelines prescribed by the National Mission Mode for e-Governance. Due emphasis was laid on meeting the requirements of the staff and also generating MIS which could be used by the administration to monitor the property approvals and revenue collections.

As part of the implementation of this module, integration with accounts and real time updation of revenue collections had been done. A separate dashboard is available at different levels for the Commissioner, Dy. Commissioner, HoDs that shows live-data of collection figures. A centralized system for head office and six divisions and 18 collection centres were created. This helped in integration of the data at the head office in addition to easy and timely availability of reports for decision making. The new system is integrated with payment gateway accessible to the citizens. NMC had tied up with ICICI bank through which citizens can access their demand online and pay bills online or in any of the ICICI branches in the city. User-wise logs have been maintained to ensure accountability.

### 2. Accounting Module

Untill 2008, NMC was working on a manually handled single entry accounting system. There was minimal computerization of activities. During the JnNURM, NMC was migrated to Double Entry Accounting system (DEAS) from April 2009. The migration was done with the help of Tally software. NMC also prepared FoxPro based software which was being used for maintaining budgetary provisions and daily data entry. Later, NMC upgraded the Tally package to 'Tally ERP 9 silver' and is currently using the 'Tally ERP Server' version. All divisional offices and collection centers of NMC were digitally connected and data entry was carried out on Tally software by its own staff.

This facilitated an access to updated real time collection figures. NMC was able to prepare the income and expenditure statements and Balance Sheets for the last three financial years. Monthly reconciliation of accounts were also carried out. NMC's spot billing system along with photographs of water meters on the bill ensured that proper readings were taken by the employees and accurate bills were generated. The bills were distributed immediately to the house owner which had reduced the number of trips made by the employees. For ensuring accountability and responsibility of the users, user wise logs have been maintained.

The users were satisfied with the new interface and can generate reports on their own as a result the NMC staffs are able to work at a faster pace.

### 3. Water Tax Module

NMC was using a water tax module which was developed in 2006 on a standalone Fox based platform. This system was incompatible for integration with payment gateway and finance module and there was high dependency on software consultant for the generation of MIS. The process was also incurring huge O&M cost. The staff spent days in collecting data and integrating them into meaningful MIS. To deal with these issues, NMC appointed a software consultant to prepare new web based software in compliance with the guidelines as prescribed by the National Mission Mode for e-Governance. Additionally, to tap the leakages in the system; NMC started the spot billing system by taking photographs of the water meters.

### 4. Birth and Death registration

Prior to e-Governance reform, NMC was issuing birth and death certificates manually that involved considerable delays. Getting a duplicate copy was more difficult since the earlier records were not properly maintained at one place. As part of the e-Governance reform, NMC appointed a software consultant to prepare birth and death certificate software. The data from 1890 was entered into the system. This software was designed to translate the data in local dialect.

NMC is now able to provide the birth and death certificates within 2-3 days of application. Citizens can download the forms from the NMC website and apply online. NMC is further planning to issue digitally signed birth and death certificates to its citizens. NMC with this robust platform is now able to provide quick solutions for the problems of citizens. With the launch of the module, there was a flurry of complaints. The merging of the output with the citizen charter had helped NMC in improving its service delivery mechanism and also to gain trust of its citizens. Citizens are now assured of guaranteed and timely resolution to their civic issues.

### 5. Online Citizen Grievance and Redressal System

NMC had an in-house module of complaint monitoring prior to 2008 which was functional on a standalone basis. To enhance the scalability of the module, NMC developed a 24X7 integrated web-based online and telephoning solution. The complainant has to provide a few personal details for the creation of his/her profile and a unique reference number would be generated for each of the complaints which could be further used to track the complaint status. An automated alert is sent on the email of the complainant as and when there is a change in the status of the complaint. There is an option of reopening the complaint for someone who is not satisfied with the resolution provided. A dash board has been prepared for the Commissioner and the HoDs to track the complaints and for the quick resolution of the same. The MIS is generated at department, division and time wise. The complaint resolution framework has been merged

with the citizen charter and escalation mechanism has been introduced.

### **6. Tracking of Waste Collection Vehicles (through GPS)**

NMC appointed a software consultant to deploy the GPS devices on waste collection vehicles. The implementation was an uphill task since there was minimal cooperation from the waste collecting agencies while fixing the devices on the vehicles. Also, post fixing of the devices there were huge number of cases of tampering with the device.

With the new system, NMC was able to track the waste collection vehicles on a real time basis at a single click. The software generated location maps and reported the current whereabouts of the vehicles. The status of the vehicle (moving/idle/device tampered) were color coded and shown on the map. MIS was generated for unscheduled stoppage of vehicles for more than 5 minutes. A route map was generated for each of the vehicle separately. As a result citizens had an access to the portal through NMC's website and could track the real time position of the waste collection vehicles. This had helped in streamlining the performance of the waste collection vehicles. The complaints regarding the waste collection issues have reduced drastically.

### **7. Digitization of Records**

NMC had started the work for digitization of its records since 2006. During the 1<sup>st</sup> phase digitization has been done for city roads, buildings, water network, sewage network and storm water network. NMC was streamlining the existing setup and integrating the departments to create a simplified and efficient system. Three modules : (1) municipal accounting, (2) HR with biometrics and smartcards and (3) inventory management were being designed and developed to be implemented as part of ERP. The developed modules are bilingual applications that provide flexibility and ease to the staff.

### **8. Personnel Management System**

NMC has appointed an agency to digitize service records of all employees. In the meantime, NMC had started the work of preparation of Enterprise Resource Planning (ERP). Hence, the existing work was migrated into the Payroll Management module of the ERP. In this process all the service books were scanned.

### **9. Computerization and Enterprise Resource Planning (ERP)**

With the availability of digitized records, NMC officers and engineers are now able to use it as a ready reference for future planning, carrying out repairs and maintenance. MIS for GIS within NMC is organized with all information to be published online readily available from the various departments.

The GIS system was optimized to be used in minimum configuration computer to ensure penetration of GIS at all levels. NMC had developed the GIS systems on an open source platform with mechanisms to mitigate risks like hacking. To protect the authenticity of information available on GIS system, NMC departmental staffs are allowed to do the analysis but for updation

and editing, a procedural approval is required. A unique system of integrating GIS based property tax ID with water tax ID had been introduced in NMC.

## **C. SITUATION AFTER IMPLEMENTATION**

### **Transfer of technical know-how**

The capacity building efforts for each module commenced while the software was in the final stage of design. The ToRs mandated the consultant to provide trainings to the relevant municipal staffs. The trainings were carried out at the corporation office and at a suitable time for most of the municipal staff to participate. Few champions were identified in each department and trained on the overall module software. These champions then trained the departmental staff. This ensured that trainings are conducted in a timely manner and that individuals are trained only on those features of the overall software that they require for their day to day functions. The fact that there is a designated training facility/ area inside the corporation office where trainings happen on a regular basis also instilled a sense of seriousness among the municipal staff.

NMC adopted an e-Governance implementation strategy that was largely based on planning and installation of core e-Governance infrastructure which had eventually reduced the overall cost and increased the IT capacity with maximum flexibility. The NMC departmental staff have worked with the software designers in collaboration to customize and integrate the departmental functions into its process so that software designed are utilized to the maximum.

The detailed ToRs prepared for each of the module software development, benefitted from the experience of the HoD, IT who possessed a thorough understanding of the functional divisions. Detailed work process, flow charts were prepared for various functions of a department. Redundancies were removed and relevant administrative orders and notifications further ensured smooth transition. Presence of capacity building and hand-holding clauses allowed for sustainability. The ToRs allowed hiring medium sized local software development firms. The idea that the functional and operational knowledge of the municipal staff is key to designing the software and the role of the developer is to use technology to enhance the efficiency of these functions and operations was very well accepted by the software development firms. This resulted in symbiotic working relationship wherein, the final outcome was a software responding to the needs of the department and the municipal staff taking full ownership of the same.

The carefully designed ToRs and contract documents mandated the consultants hired for development of software for each module, be housed in the corporation office itself. This established a symbiotic working relationship with the developers where communication and feedback was quick. IT staff had actively participated in the process re-engineering as well as the designing of the software. Availability of developers to the relevant department heads and municipal staff ensured that the end result acknowledge the operational demands of the relevant functions.

## SCREENSHOTS OF THE E-GOVERNANCE MODULES



1. Property Tax - Citizen Interface



2. Income and Expenditure Statement in DEAS

3. Water Tax - Spot billing

4. Birth and Death certificate - Registration Screen

Employee Number	Cost Center	Employee Name	LIC Deductions
2523	A230241	SUSHILA VISHNU GAIKWAD	1,165.00
3168	A230241	PUNDLIK KACHARU GANGURDE	410.00
3171	A230241	SHIVAJI NAMDEO JADHAV	563.00
4891	A230241	DAMU PUNJA LHAMOE	669.00
4914	A230241	SANJAY S ALHAT	4,139.00

5. Employee LIC Deduction Report



6. Portal showing the location status of the Waste Collection Vehicles

There are direct and indirect impacts of e-Governance reform in NMC:

***Direct impacts***

- The overall ease in day-to-day functions
- Centralization of database
- Reduction of load on each staff (property tax and water tax are now merged, the same person delivers bills and is in-charge of collecting both water and property tax)
- Better monitoring resulted in increase in demand (tax) and collection (tax)

***Indirect impacts include***

- Increase in accountability (HoDs now have better MIS and reporting formats to monitor),

- Reduction in corruption (property assessments, redistribution of properties after merging the tax so as to avoid corruption by individuals)
- Evidence-based decision making. For eg. SWM monitoring can divert vehicles, in case of tax collection, the authority can re-direct staff to those areas which have less collection
- Transparency (citizens can monitor SWM vehicles online),
- The ease provided to the citizens in paying PT and WT from any zone and improvements in other functions like obtaining birth death certificates, etc. has led to renewed trust

# E-GOVERNANCE REFORM IN RAJKOT MUNICIPAL CORPORATION, GUJARAT

## SNAPSHOT

Rajkot Municipal Corporation (RMC) is the headquarter of the Rajkot district of Gujarat and is one of the rapidly growing urban centres in India. In the last 50 years, the city's population has grown by approximately six times. The city is home to a population of 12.9 lakhs (2011 census). The municipal limits of Rajkot is 104.9 sq km area. RMC had received the National e-Governance award from the MoUD in 2011 for successful implementation of e-Governance reform.

### A. SITUATION BEFORE IMPLEMENTATION

RMC had a long history of using computers for municipal functions, that started as early as in 1989. The e-Governance reform agenda under JnNURM had boosted RMC to achieve further. RMC was the first ULB in Gujarat where the online Octroi (local tax collected on various articles brought into a district for consumption) posts were started. Online data for the issuance of computerized birth and death certificates started since 1973. Property tax and water charge assessment and collection is done online since 1994. Birth and death registration data since 1950 had been computerized. Since 2000 all birth and death certificates are available online.

Municipal e-Governance Design Document (MeDD) was prepared based on the National Design Document and as per the guidelines of the NMMP on e-Governance. The city had implemented all the modules of the e-Governance reform following the NeGP guidelines through the approved DPR and these are functional since 2007.

### B. PROCESS OF IMPLEMENTATION ADMINISTRATIVE REFORMS

#### Recruitment of Consultants

Since 2007, as part of the Gujarat Urban Development Mission (GUDM), Bhaskaracharya Institute for Space Applications and Geo-informatics (BISAG) is the designated state technology advisor for implementation of e-Governance Reform in the ULBs of Gujarat. A Mumbai based consultant had prepared the DPR for e-Governance project in RMC. The DPR, prepared as per the NMMP and NeGP guidelines got approved by the MoUD and the Municipal e-Governance Action Plan was finalized in 2009 and another software consultant was appointed for the implementation of the e-Governance Action Agenda in Rajkot. RMC made a time bound agreement with the implementation agency for implementation of each e-Governance initiative. The e-Governance cell was monitoring the agency's work for adherence to the agreed milestones. The consultants worked closely with the in-house Electronic Data Processing (EDP) team at RMC.

#### Computerization of Municipal work

Through the e-Governance project, all the services were brought under one umbrella. Computerization of work had two aspects: one is to provide citizen centric services and the other is to manage the back office administration. The front end software was developed on dot net platform, while the back-end was supported by SQL server on Windows technology. Additional gateways of a 24x7 call centre and SMS based communication was also introduced.

RMC website ([www.rmc.gov.in](http://www.rmc.gov.in)) is a comprehensive repository of various services provided by the municipality. Citizens can calculate and deposit their property tax and user charges online. A report with details of revenue collected each day is sent via e-mail to Municipal Commissioner, Deputy Commissioner and accountant. Other services like birth and death certificates, marriage certificates, licenses, etc. are available online. It provides the facility to register an RTI or a grievance online.

Business Process Reengineering (BPR) for migration to e-Governance system was undertaken well before the initiation of JnNURM, yet JnNURM played an important role in accelerating and facilitating the whole process.

### REFORM IN CITIZEN INTERFACE MECHANISMS

#### People's Participation

RMC's website has an interactive Citizen's Forum Portal, where citizens can give suggestions to the Corporation. These suggestions are further checked by the Electronic Data Processing (EDP) manager and are then sent to the Municipal Commissioner for approval. Citizens can go online or call the helpline to lodge any municipal service related complaints. A database of court cases is also available online.

#### City Civic Centres

Municipal service delivery from the computerized online CCC had started in RMC since 2005. The key objective of the CCCs were to make the RMC's services available "just a click away, almost at the doorstep of the citizen" (2-3 kms from their home/office). The way forward was to provide true, online real time data with the help of latest technology and delivering services that are transparent, faster and efficient. Currently there are six CCCs in different areas of RMC. Each CCC is designed in such a way that it caters to the citizens living within 3 km of radius. At present services that are offered at the CCC are property tax assessment and collection, water charges assessment and collection, new water connection, complaint redressal, shop and establishment permission, birth and death certificates, building

plan permission and various tax collection. The CCCs are convenient and citizen friendly facilitated with spacious seating arrangements, drinking water, TV, magazines etc. The customers are given a numbered token and are called upon as per their turn. The staff at the CCCs, handling the clientele are well trained and give personalized attention.

### **m- Governance**

RMC had launched a mobile application based on the android platform, where citizens can access details about their property tax, water charges, marriage registration, status of their complaints etc. RMC had launched another android mobile based application in March 2014 having a detailed time table and routes of the 60 city bus services which are running on 30 different routes daily, across the city. The professional tax system module had been integrated with the m-Governance system.

### **Citizen's Grievance Monitoring**

RMC's website had incorporated the citizen's grievance monitoring system. When a complaint is lodged, it is recorded automatically into the complaint tracking module. As per '*Nagrik Adhikar Patrak*' if a complaint is not addressed within the stipulated time indicated during complaint registration, it is escalated to the higher level official, automatically. There is a 24x7 call centre and SMS based complaint registration system in RMC.

## **C. SITUATION AFTER IMPLEMENTATION**

Under the NMMP on e-Governance, 12 modules were being implemented in RMC, some of them are mentioned below:

- Property tax system software, that also calculated user charges was introduced in RMC in 2007. Bills were generated through this software and the collections were recorded auto-

matically when the citizens pay their dues at any of the CCCs through debit/credit card or cash/cheque. As a result, augmentation in collection ratio of property tax has increased. Only by linking the water charges with property tax collection and by computerizing the tax calculation and payment option, RMC had generated huge demand and revenues.

- RMC had implemented customized in-house software for accrual based double entry accounting. The software had been integrated to other modules like property tax and payroll. Employee database and information related to pension, gratuity, leave etc. was computerized and integrated with the payroll system.
- RMC had developed building plan approval software to generate online building plan permission. Digitally signed Building plan permission certificates were issued from the CCCs. Citizens/builders/architects can download the form from the websites. At the time of submitting the filled-up form, the software automatically generates the queries based on General Development Control Regulation (GDCR) rules and gives provisional permission
- RMC had implemented e-tendering system since 2007. Currently, all projects procurements above Rs 10 lakhs are done through e-procurement.
- All the formats with regard to various licenses are available on the website. The fees for same can be deposited at any civic centre. Online licenses are also being issued in RMC. Trade license data since 1973 had been computerized.
- Birth and death certificates were issued from the civic centres on the same day of the application. The e-Governance module of RMC uses various data-base for promoting social welfare schemes, for instance the birth data is being used to send out vaccination-related SMSs to the citizen.



**FIGURE 2: VARIOUS STAGES OF HOUSING REHABILITATION**



Stage 1. Motivation Campaign



Stage 2. Bank Loan Procurement Workshop



Stage 3. Distribution of Lease Deeds



Stage 4. Lottery for choice of floor



Stage 5. Distribution of keys



Stage 6. Possession

Source: CLPOA

1 shows the sites of the slum development projects undertaken as part of KEIP and BSUP implementation during the JnNURM period within KMC. The JnNURM-BSUP projects implemented by the KMC is highlighted in yellow.

## **B. PROCESS OF IMPLEMENTATION**

### **Creation of Database and Mapping**

As part of JnNURM-BSUP reform, KMC had undertaken BPL survey in 2008. The number of BPL households as a percentage of the total households within the KMC area had been calculated to be at 17%. The KMC did not follow the Finance Commission prescribed “Income Poverty” criteria to identify the BPL households. A separate scoring method was devised at the level of the State Government, in which the income poverty criteria was used for screening the households, and then the “Access to Basic Services” criterion was applied. This was done to cross-verify whether the income quoted by the household claiming to be a BPL one is really correct, or whether there is significant under-quoting. In addition to this, the KMC had undertaken a premise-wise survey to prepare a detailed database of access to various services at the household level within the slums. Based on such database, KMC set minimum standards and projected the requirements of services required for the urban poor in forthcoming years. The

database of the Socio-Economic Survey conducted in 2002, was also referred as a baseline for identification of deficiency indicators (physical and socio-economic infrastructures deficiencies).

Currently, the previous database is being updated under the RAY scheme since 2011. For this project the slum survey commonly known as the USHA Survey (Urban Statistics for Human Resource and Assessments) is being undertaken by the KMC (ongoing), as per the slum survey formats and guidelines prepared by the MoHUPA. USHA survey involves identifying the slums, assessing urban poverty, generating HH level physical infrastructure data and creation of livelihood profiles of the poor. The data generated in the USHA survey is then compiled and mapped on the GIS.

### **Rehabilitating Poor Clusters through Housing**

BSUP Housing projects are the redevelopment projects that targeted the replacement of slums and squatter settlements by creating multi-storied housing with the provision of basic amenities. The areas selected for BSUP housing projects were peri-urban settlements with rural characteristics, having heterogeneous population. Chief Municipal Architects & Town Planning (CMA&TP) department of KMC was responsible for the construction of the DUs. On completion of construction,

**TABLE-1: ACHIEVEMENT STATUS OF 7-POINT CHARTER OF BSUP REFORM IN KMC AS ON AUGUST 2014**

S No.	Name of the Service Services	Units	Coverage
1	Housing	22897	12%
2	Water Supply	193886	98%
3	Sanitation	178059	90%
4	Solid Waste Management	178059	90%
5	Primary Education for 6-14 yrs (SSK, Municipal School, ICDS,GSFP etc.)	171164	79%
6	Health Care	158274	80%
7	Social Security (NOAPS, NFBS, JSY, IGNDOS, IGWPS etc.)	Universal coverage of eligible beneficiaries	

Source: Procured from the Project Management Unit - KMDA in August 2014

they have handed over the ready to move in flats to the Bustee Service department who then took over to the flat-distribution and related responsibilities. The whole process of rehabilitation had multiple dimensions, some of them are shown in the photo cluster (Figure 2).

### Community Mobilization

Civil societies were being involved by the KMC for awareness building and campaigning among the beneficiaries regarding the project, its direct and indirect benefits, to mobilize the beneficiaries for cost contribution etc. These civil societies have acted as the hand holding support for the project affected people for forming user groups, building committees for O&M of the residential complexes and the basic civic services. Civil societies have helped in developing behavior change among the beneficiaries for ensuring healthy community life, hygienic practices and cleanliness. The civil society played an important role in understanding the problems of the beneficiaries and articulating them to the KMC.

City Level Programme of Action (CLPOA) is one such civil society organization working closely with the KMC's Bustee department for implementation of BSUP projects. CLPOA acts as a link between different departments of KMC and the beneficiaries. In the inception stage of the BSUP projects, CLPOA conducted stakeholders meetings, facilitated Bank Loans for the beneficiaries, organized camps for cash deposit, loan repayment etc. The Law department of KMC prepared the Lease Deeds for the beneficiaries and handed them over to the Bustee Service Department. with the help of the CLPOA, conducted distribution of Dwelling Units (DUs) by lottery system and the allotment letter distribution programmes among the beneficiaries. CLPOA was the facilitator for creation of building committees/cooperative among the beneficiaries for resource development and maintenance of the buildings.

### DPR Preparation

The DPRs were prepared in-house by the KMC in accordance

to BSUP guidelines for in situ development. Infrastructure facilities such as water supply, sewerage, solid waste disposal, roads, storm water drains and street lighting were provisioned in the DPRs. Provision of community facilities such as community centre, community primary health care centre, primary education centre, parks and open spaces were included in the DPRs. There was a provision in the DPR for convergence of the Central and State Government schemes in the health, education and social security sectors. The site plans of the housing clusters was presented in the DPRs.

### Budgeting the Reform

The cost for the implementation of the BSUP housing projects are borne by the Central Government, GoWB, KMC and the beneficiaries. The cost sharing among the centre, state and KMC is at the ratio of 50:30:20. A flat contribution of Rs. 30,000 was collected from each HH beneficiary. On behalf of the beneficiaries KMC had facilitated approving loans with minimum interest rates from nationalized banks.

### Identification of the beneficiaries

Slums that were predominantly occupied by the Below Poverty Line (BPL) and the Economically Weaker Sections (EWS) population were prioritized for the BSUP projects. Slum clusters were prioritized based on the information obtained from the BPL survey and the socio-economic survey. The ward councillors were involved in assessing and finalizing the list of beneficiaries for in-situ rehabilitation.

### Identification of land for rehabilitation projects

The BSUP Housing projects were envisaged as in-situ development projects not involving any relocation of the slum people. Vacant KMC owned lands were identified in the vicinity of the selected slums for construction of houses. The required land for a particular project had been liberated by the KMC and protected from future encroachment by constructing compound walls. This model of development had enabled the beneficiaries to live in



Meeting with the KMC officials



Meeting with the beneficiaries



BSUP Project at Sen Pally, Ward No. 129



Park developed adjacent to the BSUP Project

their huts until they get the possession in the newly constructed DUs.

### Tenure Rights

The law department of KMC prepared the Lease Deeds for the beneficiaries. The allotment of the DUs are on 99-year non-resalable lease and are in the name of the female head of the family (as applicable) and her male counterpart/kin as a nominee. Legal titles on the name of women were provided to promote women empowerment.

### Shifting beneficiaries

Lotteries for distribution of DUs among the beneficiaries are being conducted by the Bustee Service Department. Ground floors were reserved for the physically challenged and senior citizens HHs. Once the beneficiaries receive the allotment letter they were to shift and settle themselves in the new DU within the stipulated time frame.

### Housing Co-operative Societies

Separate provisions were made in the DPRs for the upkeep and maintenance of public assets created by JnNURM-BSUP-Housing projects. As per the provision, housing co-operatives had to be formed amongst dwellers in each of the project areas for the

well being of the community and surroundings. The co-operative will be responsible for overall O&M of the created infrastructure. Co-operatives can collect a certain amount from the members for this purpose.

### Provision of universal access to Basic Services

BSUP reform agenda also had the scope of provisioning basic services to the existing slums other than the rehabilitated ones. The slum HHs and the public standposts are being provided with eight hours of daily piped water supply. The tanker supply of water is available on request and on payment. Health workers visit these slums twice in a month for preventive health care. Table-1 shows the current status of the service delivery in the slums in KMC.

### Integration with the Social Security Schemes

Multiple centre and state government social security schemes have been integrated with the BSUP projects. These schemes address the issues of the employment of the poor, old age security, maternity benefit etc. Bustee Services Cell at KMC issues the beneficiary application forms for the social security schemes. Duly attested forms with recommendation from Local Councillor, with supporting documents are submitted to the Borough Executive Engineer. The Municipal Commissioner with

recommendation of the DG (Bustee) and Borough Chairman, approves and prepares the list of beneficiaries. Grievances are being dealt by the DG Bustee. Programmes such as Swarna Jayanti Sahari RozgarYojana (SJSRY), Valmiki Ambedkar Awas Yojana (VAMBAY), Wage Employment Programme, National Slum Development Programme (NSDP), Integrated Low Cost Sanitation (ILCSP), Sishu Siksha Kendra (SSK), National Old Age Pension Scheme (NOAPS), National Family Benefit Scheme (NFBS), National Maternity Benefit Scheme (NMBS), Anapurna, Antyodaya Anna Yojana etc. are ongoing in KMC.

### **C. SITUATION AFTER IMPLEMENTATION**

Table no. 1 shows 12% of the total BPL household of KMC have been provided with the housing that ensures security of tenure. 98% of the BPL households in KMC have an access to water supply, 90% of such population is covered by the sanitation and

solid waste management initiatives of KMC. Approximately 80% of the BPL household in KMC have access to primary education and primary health services provided by the KMC.

As a result of these housing rehabilitation projects:

- Access to basic amenities like safe drinking water, sanitation, toilets, and solid waste management have generated a formal level of living.
- Convergence with other social programs like NOAPS, NFBS, NMBS, Annapurna and Antyodaya Anna Yojana has improved the overall socio-economic conditions of slum dwellers.
- Anxiety of temporary living and struggle for the basic amenities of life had minimized with the security of tenancy.
- A sense of ownership and a sense of security had emerged among dwellers.

# BSUP REFORM IN YANAM MUNICIPALITY OF PUDUCHERRY UNION TERRITORY

## SNAPSHOT

The Union Territory (UT) of Puducherry was constituted out of the four erstwhile French establishments of Pondicherry, Karaikal, Mahe and Yanam lying geographically separated from one another. Puducherry State consists of four separate geographical areas, viz. Puducherry and Karaikal near Tamil Nadu, Mahe in Kerala and Yanam in Andhra Pradesh. Yanam region is located about 840 km north east of Pondicherry, near Kakinada in Andhra Pradesh. Yanam region consists of Yanam town and six villages and is treated as Municipality for the purpose of local administration. The region, covers of 30 sq. kms. of area with a population of 55,626 (2011 census).

Basic Services for the Urban Poor (BSUP) reforms in Yanam Municipality was undertaken as part of the Integrated Housing and Slum Development Programme (IHSDP) of the Ministry of Housing and Urban Poverty Alleviation (MoHUPA). Yanam Municipality signed the MoA with the MoUD, to undertake various reforms including pro-poor reforms in 2009. The Town and Country Planning Department (TCPD) of Puducherry is the SLNA for implementation of JnNURM reforms. JnNURM in association with other State level schemes have given impetus to the whole process of development of the urban poor in Yanam. JnNURM's BSUP Reform agenda had acted as an encouragement to initiate the improvement work in the existing service levels in a financially viable manner.

## A. SITUATION BEFORE IMPLEMENTATION

Yanam is one of the first few Indian cities that had proactively attempted to implement a slum free city plan ("hut-less" city) through a step by step process that involved the assessment of the present status of slums, estimating housing shortage for urban poor, identifying demand-supply gap and prioritizing slums for improvement prior to JnNURM. The Government of Puducherry set the objective to make the UT a "hut less" (slum free) territory and to attain that, Yanam Municipality had availed the ongoing state level schemes that are also targeting to the improvement of urban poor community.

### Slum Upgradation Scheme

- **Construction of rental housing:** as part of the state level 'Slum Up-gradation Scheme', land sites are being acquired at different parts of the urban areas to construct low cost tenements in multi-storeyed blocks. The tenements are made available to the slum dwellers on rental basis.
- **Sites and Services Development:** Another initiative under this scheme is the "Sites and Services" type of plotted development, in which the provision of a bare minimum of essential infrastructure needed for habitation is laid out. The plots are then made available to the urban poor on either ownership basis or land lease tenure.

### Environmental Improvements in Urban Slum Scheme

The 'Environmental Improvements in Urban Slum Scheme' seek to improve the environmental conditions in the existing slums by extending physical and social infrastructures. The Slum Clearance Board of Puducherry has undertaken the activities for improvement of slums by extending basic amenities such as roads, electricity, water supply, sewerage, education, health, social infrastructure etc. In most of the slums, water supply for 10 hours is maintained for poor households. Public stand posts are installed in the slum neighbourhoods. All the slums are adequately provided with street lights under this scheme. Installation and upgradation of roads, drains and other basic services for both the notified and identified slums are being carried out through this scheme.

## B. PROCESS OF IMPLEMENTATION OF BSUP REFORM IN YANAM

### Household and Livelihood Survey

As part of the reform the Puducherry Slum Clearance Board (PSCB) assigned the work of Slum and Livelihood (SLS) survey to a consulting agency on 23<sup>rd</sup> April 2010. The consultant conducted the HHL survey to identify and map all the poor settlements

LOCATION OF PUDUCHERRY UNION TERRITORY - PONDICHERRY, KARAIKAL, YANAM, MAHE



existing in Yanam Municipality. The objective was to bring all the slums (notified/non-notified) within the formal system enabling them to avail the basic amenities that is available for the rest of the city. HHL format included infrastructure deficiency and socio-economic deficiency indicators in its documentation. This survey data was being verified by the PSCB and eventually was entered in the online MIS developed by National Building Organisation (NBO). On the final compiled survey database, missing gaps in housing and infrastructure were identified. Based on the intensity of infrastructure gaps, urban poor settlement clusters were prioritized by 'Participatory Ranking' that ensured people's participation in decision making.

### Provision of Housing

Yanam had taken initiatives to give land ownership/property rights to the slum dwellers based on certain criteria. Slum dwellers who have resided on public lands or temple lands for more than five years, are eligible for *Patta*. *Patta* gives property rights and permits the construction of *pucca* houses on the occupied land. This legal document issued by the Government enables the owner for seeking of institutionalized financial support. Government of Puducherry through state schemes, provides financial assistance for construction of *pucca* houses to those residents who live in huts and own a *patta*.

### Provision of Basic Services

The upgradation of roads, drains and other basic services for both the notified and identified slums were being carried out through the state schemes "Slum Up-gradation Programme" and Environmental Improvements in Urban Slums" operated by the TCPD. All the slums are adequately provided with street lights.

## C. SITUATION AFTER IMPLEMENTATION

- Construction of affordable housing/rental housing for urban poor has addressed the issue of further proliferation of slums.
- Facilitation of a supportive financial environment has enabled the poor to construct *pucca* houses on the *patta* land. This has addressed the issue of security of land tenure to a great extent.
- The participatory decision making had empowered the community and strengthened the slum dwellers association.
- The earmarking of separate funds for separate services would help in providing basic services to urban poor in an appropriate manner.
- Improved civic infrastructure and social amenities has enhanced the overall quality of life of the urban poor and the city environment as a whole.

# ANNEXURE

TABLE 1: COMPREHENSIVE URBAN REFORMS AGENDA OF JnNURM

Mandatory reforms at ULB level	Mandatory reforms at State level	Optional reforms
E-Governance	Implementation of 74th CAA	Introduction to Property title certification
Municipal accounting	City planning functions	Revision of building bye laws to streamline the approval process
Property tax	Rent control	Revision of building bye laws - rain water harvesting
User charges	Rationalization of Stamp Duty	Earmarking of 20-25% of developed land in all housing projects for EWS/LIG
Internal earmarking of fund for basic service for urban poor	Urban land ceiling control and regulation act	Simplification of legal and procedural framework for conversion of agriculture land for non agricultural purposes
Provision of basic service to urban poor	Community participation law	Introduction of computerized process of registration of land and property
	Public disclosure law	Bye laws on reuse of recycled water
		Administrative reforms
		Structural reforms
		Encouraging PPP

**TABLE 2: INVENTORY OF UIG CITIES WITH PERFORMANCE RANKING.  
THE CITIES SELECTED FOR GOOD PRACTICE IN A PARTICULAR REFORM ARE HIGHLIGHTED**

S. No	State	City / Reform Committed	% of ULB level reforms achievement	E-Governance	Shift to Accrual based Double Entry Accounting	Property Tax (85% coverage) and (90% collection efficiency)	100% Cost Recovery (Water Supply and Solid Waste)	Internal Earmarking of Funds for Services to Urban Poor	Provision of Basic Services to Urban Poor
1	<b>Maharashtra</b>	<b>Nashik</b>	100	<b>100</b>	100	100	100	100	100
2	Maharashtra	Pune	100	100	100	100	100	100	100
3	<b>Maharashtra</b>	<b>Greater Mumbai</b>	100	100	100	100	<b>100</b>	100	100
4	Andhra Pradesh	Hyderabad	99	100	100	95	100	100	100
5	<b>Andhra Pradesh</b>	<b>Vishakhapatnam</b>	99	100	100	<b>100</b>	95	100	100
6	Kerala	Kochi	99	100	100	100	95	100	100
7	Kerala	Thiruvananthapuram	99	100	100	100	95	100	100
8	Maharashtra	Nanded	98	100	85	100	100	100	100
9	<b>Gujarat</b>	<b>Surat</b>	95	100	70	100	<b>100</b>	100	100
10	<b>Madhya Pradesh</b>	<b>Indore</b>	94	100	<b>100</b>	90	75	100	100
11	Gujarat	Ahmedabad	94	100	70	100	95	100	100
12	<b>Karnataka</b>	<b>Bangalore</b>	93	100	100	<b>100</b>	70	100	85
13	Karnataka	Mysore	93	100	100	100	70	100	85
14	Maharashtra	Nagpur	93	100	100	100	55	100	100
15	Madhya Pradesh	Bhopal	89	100	100	90	45	100	100
16	Madhya Pradesh	Jabalpur	88	100	100	85	45	100	100
17	Gujarat	Vadodara	88	75	70	100	85	100	100
18	Tamil Nadu	Chennai	88	100	100	80	45	100	100
19	Andhra Pradesh	Tirupati	87	100	100	50	70	100	100
20	Chattisgarh	Raipur	87	50	85	90	95	100	100
21	<b>Gujarat</b>	<b>Rajkot</b>	87	<b>100</b>	60	95	75	100	90
22	Andhra Pradesh	Vijayawada	85	75	85	100	80	100	70
23	Delhi (MCD)	Delhi (MCD)	83	100	100	50	80	100	70
24	Uttar Pradesh	Kanpur	83	88	100	90	85	50	85
25	Tamil Nadu	Coimbatore	82	75	100	85	30	100	100
26	Uttar Pradesh	Lucknow	82	88	100	90	80	50	85
27	Tamil Nadu	Madurai	81	75	75	80	55	100	100
28	Rajasthan	Jaipur	80	100	100	50	40	100	90
29	Uttar Pradesh	Allahabad	80	88	100	90	70	50	85
30	Uttar Pradesh	Meerut	80	88	100	90	70	50	85
31	Uttar Pradesh	Varanasi	78	75	100	90	70	50	85
32	Uttar Pradesh	Agra	78	75	100	90	70	50	85
33	Haryana	Faridabad	77	88	70	85	50	100	70

S. No	State	City / Reform Committed	% of ULB level reforms achievement	E-Governance	Shift to Accrual based Double Entry Accounting	Property Tax (85% coverage) & (90% collection efficiency)	100% Cost Recovery (Water Supply & Solid Waste)	Internal Earmarking of Funds for Services to Urban Poor	Provision of Basic Services to Urban Poor
34	Rajasthan	Ajmer	77	100	100	50	40	100	70
35	Uttar Pradesh	Mathura	77	88	100	90	50	50	85
36	<b>West Bengal</b>	<b>Kolkata</b>	76	75	100	60	20	100	<b>100</b>
37	Tripura	Agartala	73	50	100	70	20	100	100
38	Madhya Pradesh	Ujjain	71	38	100	65	25	100	100
39	Himachal Pradesh	Shimla	71	75	100	40	40	100	70
40	Jharkhand	Ranchi	70	63	100	30	60	75	90
41	Orissa	Bhubaneswar	70	75	100	45	35	75	90
42	Goa	Panaji	70	63	75	95	85	0	100
43	Uttarakhand	Nainital	69	63	85	65	70	75	55
44	Uttarakhand	Dehradun	68	63	100	45	70	75	55
45	West Bengal	Asansol	66	38	100	40	20	100	100
46	Uttarakhand	Haridwar	65	63	85	45	70	75	55
47	Meghalaya	Shillong	64	13	75	90	90	100	15
48	Bihar	Bodhgaya	57	38	70	80	75	75	70
49	Orissa	Puri	57	13	85	55	25	75	90
50	Assam	Guwahati	55	13	85	85	0	50	100
51	Puducherry	Puducherry	55	38	0	85	40	100	70
52	Gujarat	Porbandar	55	63	70	85	50	50	15
53	Bihar	Patna	54	50	70	75	10	50	70
54	Jammu & Kashmir	Srinagar	53	75	100	0	45	75	25
55	Jammu & Kashmir	Jammu	50	75	100	0	25	75	25
56	Chandigarh	Chandigarh	44	25	15	80	45	0	100
57	Punjab	Ludhiana	36	13	25	55	25	100	0
58	Sikkim	Gangtok	36	0	25	20	80	75	15
59	Mizoram	Aizwal	28	0	60	20	0	75	15
60	Manipur	Imphal	22	0	30	10	0	75	15
61	Jharkhand	Dhanbad	20	0	55	35	15	0	15
62	Jharkhand	Jamshedpur (UA)	16	0	55	20	5	0	15
63	Punjab	Amritsar	9	0	25	30	0	0	0
64	Arunachal Pradesh	Itanagar	7	0	0	0	0	25	15
65	Nagaland	Kohima	7	0	0	0	0	25	15

TABLE 3A: UIDSSM TOWNS INVENTORY

E-Governance			Municipal accounting			Property Tax		
S.No	State	Town	S.No	State	Town	S.No	State	Town
1	<b>Kerala</b>	<b>Alappuzha</b>	1	Karnataka	Gajendergarh	1	Karnataka	Gajendergarh
2	Tamil Nadu	Sivagangai	2	Karnataka	Davanagere	2	Karnataka	Davanagere
3	Rajasthan	Udaipur	3	Karnataka	Kolar	3	Karnataka	Bijapur
4	Rajasthan	Jodhpur	4	<b>Karnataka</b>	<b>Bijapur</b>	4	<b>Tamil Nadu</b>	<b>Sivagangai</b>
5	Rajasthan	Kota	5	Kerala	Alappuzha	5	Tamil Nadu	Ramanathapuram
6	Rajasthan	Hanumangarh	6	Chattisgarh	Raigarh	6	Uttar Pradesh	Ballia
7	Rajasthan	Bikaner	7	<b>Rajasthan</b>	<b>Udaipur</b>	7	Uttar Pradesh	Fatehpur
8	Uttar Pradesh	Ballia	8	Rajasthan	Jodhpur	8	Uttar Pradesh	Chaziabad
9	Uttar Pradesh	Fatehpur	9	Rajasthan	Kota	9	<b>Uttar Pradesh</b>	<b>Gorakhpur</b>
10	Uttar Pradesh	Ghaziabad	10	Rajasthan	Hanumangarh	10	Uttar Pradesh	Jhansi
11	Uttar Pradesh	Gorakhpur	11	Rajasthan	Bikaner			
12	Uttar Pradesh	Jhansi	12	Uttar Pradesh	Ballia			
13	West Bengal	Kandi	13	Uttar Pradesh	Fatehpur			
14	West Bengal	Siliguri	14	Uttar Pradesh	Ghaziabad			
15	<b>Orissa</b>	<b>Cuttack</b>	15	Uttar Pradesh	Gorakhpur			
16	Orissa	Nayagarh	16	Uttar Pradesh	Jhansi			
17	Orissa	Sambalpur	17	West Bengal	Siliguri			

TABLE 3B: UIDSSM TOWNS INVENTORY

User Charges			IEFSUP			BSUP		
S.No	State	Town	S.No	State	Town	S.No	State	Town
1	Karnataka	Gajendergarh	1	Karnataka	Gajendergarh	1	Karnataka	Gajendergarh
2	<b>Karnataka</b>	<b>Kolar</b>	2	Karnataka	Davanagere	2	Karnataka	Davanagere
3	Karnataka	Bijapur	3	Karnataka	Kolar	3	Karnataka	Kolar
4	Kerala	Alappuzha	4	Karnataka	Bijapur	4	Karnataka	Bijapur
5	Tamil Nadu	Sivagangai	5	Kerala	Alappuzha	5	Kerala	Alappuzha
6	Tamil Nadu	Ramanathapuram	6	<b>Himachal Pradesh</b>	<b>Dharamshala</b>	6	Himachal Pradesh	Hamirpur
7	Uttar Pradesh	Ballia	7	Himachal Pradesh	Hamirpur	7	Tamil Nadu	Sivagangai
8	Uttar Pradesh	Fatehpur	8	Chattisgarh	Raigarh	8	Tamil Nadu	Ramanathapuram
9	<b>Uttar Pradesh</b>	<b>Ghaziabad</b>	9	<b>Rajasthan</b>	<b>Udaipur</b>	9	<b>Puducherry UT</b>	<b>Yanam</b>
10	Uttar Pradesh	Gorakhpur	10	Rajasthan	Jodhpur	10	Rajasthan	Udaipur
11	Rajasthan	Kota	<b>Other Best Practice suggested by the Appraisal Agencies for Documentation</b>	11	<b>Rajasthan</b>	<b>Jodhpur</b>		
12	Rajasthan	Hanumangarh		12	Rajasthan	Kota		
13	Rajasthan	Bikaner		13	Rajasthan	Hanumangarh		
14	Uttar Pradesh	Ballia		14	Rajasthan	Bikaner		
15	Uttar Pradesh	Fatehpur		15	Uttar Pradesh	Ballia		
16	Uttar Pradesh	Ghaziabad		16	Uttar Pradesh	Fatehpur		
17	Uttar Pradesh	Gorakhpur		17	Uttar Pradesh	Ghaziabad		
18	Uttar Pradesh	Jhansi		18	Uttar Pradesh	Gorakhpur		
19	West Bengal	Diamond Harbour		19	Uttar Pradesh	Jhansi		
20	West Bengal	Siliguri		20	West Bengal	Diamond Harbour		
21	Orissa	Cuttack		21	West Bengal	Siliguri		
22	Orissa	Nayagarh		22	Orissa	Cuttack		
23	Orissa	Sambalpur		23	Orissa	Nayagarh		
			24	Orissa	Sambalpur			

**TABLE 4A: LIST OF CITIES AND TOWNS FOR DETAILED DOCUMENTATION**

S.no	State	City or town	Reform	Notes
1	Maharashtra	Nashik	e-Governance	
2	Karnataka	Bijapur	Municipal accounting	
3	Andhra Pradesh	Vishakhapatnam	Property tax	
4	Gujarat	Surat	User charges	
5	Madhya Pradesh	Bhopal	IEFSUP	*Only one city from these two cities will be selected for detailed documentation
6	West Bengal	Kolkata	BSUP	

**TABLE 4B: LIST OF CITIES AND TOWNS FOR SNAPSHOT**

S.no	State	City or town	Reform	Notes
1	Gujarat	Rajkot	e-Governance	
2	Kerala	Allapuzha	e-Governance	
3	Madhya Pradesh	Indore	Municipal accounting	
4	Rajasthan	Udaipur	Municipal accounting	
5	Karnataka	Bangalore	Property tax	
6	Tamilnadu	Sivagangai	Property tax	
7	Maharashtra	Greater Mumbai	User charges	
8	Karnataka	Kolar	User charges	
9	Tripura	Agartala	IEFSUP*	*Only one from these two cities/towns will be selected for caselette documentation
10	Himachal Pradesh	Dharamsala	IEFSUP*	
11	Andhra Pradesh	Hyderabad	BSUP*	* Only one from these two cities/towns will be selected for caselette documentation
12	Puducherry UT	Yanam	BSUP*	

**TABLE 5A: FINAL LIST OF 5 CITIES/ GOOD PRACTICES FOR DETAILED DOCUMENTATION**

Category	State	City/ Town	Reform
Financial Management Reform	Karnataka	Bijapur	Municipal accounting
	Andhra Pradesh	Vishakhapatnam	Property tax
	Gujarat	Surat	User charges
E- Governance Reform	Maharashtra	Nashik	e-Governance
Pro-poor Reform	West Bengal	Kolkata	BSUP

**TABLE 5B: FINAL LIST OF 5 CITIES/ GOOD PRACTICES FOR SNAPSHOTS**

Category	State	City/ Town	Reform
Financial Management Reform	Madhya Pradesh	Indore	Municipal accounting
	Karnataka	Bangalore	Property Tax
	Maharashtra	Greater Mumbai	User Charges
E- Governance Reform	Gujarat	Rajkot	e-Governance
Pro-poor Reform	Puducherry UT	Yanam	BSUP

TABLE 6A: GOOD PRACTICES THAT RESPOND TO THE FOLLOWING CRITERIA AND THEIR INDICATORS

Category 1: Financial Management Reforms	Objective Criteria	Qualifying Indicators
Improving the operational efficiency of ULBs - <b>Municipal Accounting</b>	Operational efficiency and management	Effective devolution of cash flows between ULBs and States / Center, Integration of financial management and accounting systems, Accounting manual, Compliance of laws & regulations with DEAS, Valuation of assets & liabilities, Outcome budgets preparation, Integrated ERP structure
	Transparency	Internal audit / control mechanism, Proactive in disclosing their financial information, Publishing accounts
	Financial and social accountability	External audit, active participation of citizens in the monitoring and evaluation of ULB programmes and expenditures (Social audit, public hearings, citizens' report cards are effective tools for this purpose)
	Service delivery reforms and citizens' facilitation mechanisms	Re-engineering the business process to align with DEAS, citizens' charters
	Financial viability	Credit rating, recurrent surplus, revenue surplus, Public Private Partnership
Augmenting the source of funding - <b>Property tax</b>	Properties assessment and management	Method of assessment, Revision of guidance values, Appreciation / Recognition of honest tax payers, Elimination of exemptions
	Capacity building of staff	In house computer training to Revenue inspector and building inspectors to achieve higher manpower efficiency
	Technology driven	GIS based mapping of properties, GIS-based property tax system, Unique Property Identification Code, Unique Property Identification Code, web-based property tax information facility, e-payment of tax, (Provision for online update of information on change of ownership and land valuation)
	Community engagement	Taxpayer education programme, Published information brochure for self-assessment, Neighbourhood camps, Establish dispute resolution mechanism, Initiated deployment of kiosks at v
Augmenting the source of funding - <b>User charges</b>	Institutional framework	Setting up a body for recommending a user charge structure
		Establishment of proper accounting system for each service so as to determine the O&M cost separately
	Revenue mobilization	Identification of unauthorized connections and metering
	Technology driven	Latest technologies in digitization of maps, leak detection surveys, reduction of non revenue water, etc.

**TABLE 6B: GOOD PRACTICES THAT RESPOND TO THE FOLLOWING CRITERIA AND THEIR INDICATORS**

Category 2: E-Governance Reform	Objective Criteria	Qualifying Indicators
<b>E-Governance</b>	Systems Improvement- internally improve systems and procedures for back end increase in efficiency	Preparation of municipal E-Governance implementation plan
		Business process re-engineering
		IT cell recruitment, capacity building/PPP for setting up of E-gov portal
		Integration of GIS with property tax, water tax, etc collection systems
		All modules integrated with back-end accounting for real time entry of receipts and expenses
		Personnell management system including biometric registration, etc
		Assesst life-cycle management
		MIS, online document management system
	Accountability- improving accountability by sharing relevant information in an efficient manner	Online citizen charter, relevant organizational disclosures mandated through RTI, etc.
		Availability of information in local language, transliteration
		Establishing kiosks, citizen facilitation/ information centers, etc.
	Transparency- inducing transparency related to processes for improved trust between ULB, citizen and other stakeholders	E-procurement
		E-monitoring
		Building plan approval
		Online grievance redressal
	Citizen empowerment	Sharing of critical data like, pollution level, green cover in the city, market information for empowering citizens with right information to aid in decision making

TABLE 6C: GOOD PRACTICES THAT RESPOND TO THE FOLLOWING CRITERIA AND THEIR INDICATORS

Category 3: Pro-poor Reforms	Objective Criteria	Qualifying Indicators
<b>BSUP Reform</b>	Comprehensive assessment of poor communities	Urban poor - housing stock inventory, Database on household level information
	Identification of deficiency indicators:	
	infrastructure	Baseline survey, Gap analysis
	socio-economic	
	logical framework for prioritization of:	
	urban poor clusters	Pre-defined criteria, Guidelines, Vulnerability index etc.
	target groups	
Community based approaches in provision of basic services	engagement of local community based organizations/civil societies	
<b>IEFSUP Reform</b>	Legal framework	Amendments to municipal accounting rules
	Extent of earmarking done and spent	Slums needs assessment
	Preparation of pro-poor budget documents separately (in addition to ULB budget)	Target to be defined
	Monitoring and evaluation of earmarked funds	Separate municipal fund for 'services to the poor'; coding / categorization to identify all income and expenditure

**LIST OF PEOPLE CONSULTED DURING THE FIELD VISITS**

Sl. No.	Name	Organization	Designation	Email/Contact No.
<b>Bijapur Municipal Corporation</b> , M.G Road, Bijapur-586101, Karnataka, India, Phone Number : 08352-278536, Fax Number : 08352-278532. Time of documentation: July, 2014				
1	C. Ramdas	Bijapur Municipal Corporation	Municipal Commissioner	itstaff_ulb_bijapur@yahoo.co.in
2	A. H. Holeyannavar	Bijapur Municipal Corporation	Audit Officer	
3	Prabhu S. Jangamshetti	Bijapur Municipal Corporation	Account Superintendent	9448261399
4	M. R. Choudaki	Bijapur Municipal Corporation	Accountant	9972209403
5	Devendra Dhanpal	Bijapur Municipal Corporation	Office Manager	9741618282
<b>Greater Visakhapatnam Municipal Corporation</b> , Tenneti Bhavan, Ram Nagar, Visakhapatnam - 530002, Andhra Pradesh, India. Tel.: +91 - 0891-2746300, Fax: +91-891-2568545				
1	M.V.Satyanarayana	Greater Visakhapatnam Municipal Corporation	Municipal Commissioner	commissioner_gvmc@yahoo.co.in, 9848308823
2	S.S Varma	Greater Visakhapatnam Municipal Corporation	Additional Commissioner (Finance)	varma_ss@yahoo.com, 7729995960
3	V.Ravindra	Greater Visakhapatnam Municipal Corporation	Deputy Commissioner for Revenue	
4	Dr. Y. Srinivasa Rao	Greater Visakhapatnam Municipal Corporation	Zonal Commissioner (Zone-III)	
5	G.V.Pallam Raju	Greater Visakhapatnam Municipal Corporation	Executive Engineer	
6	P.V.Ramana Murthy	Greater Visakhapatnam Municipal Corporation	Town Planner	
7	C.Paramasiva Raju	Jit World	CEO, Consultant	ceo@jitworld.com, 8008164234
8	Prasad Amujuri	Xinthe Technologies Private Limited	Project Manager-GIS,	prasad.amujuri@xinthe.com
9	Chella Rao	Greater Visakhapatnam Municipal Corporation	Consultant	9848134066
<b>Surat Municipal Corporation</b> , Muglisara, Main Road, Surat - 395003, Gujarat. Telephone: 0261-2422244, Fax: 0261-2422110				
1	S.N. Mehta	Surat Municipal Corporation	Deputy Commissioner (Finance)	dcf@suratmunicipal.org, 9724345009
2	B.B. More	Surat Municipal Corporation	Assessment and Recovery Officer	9724345507
3	M.Y. Bham	Surat Municipal Corporation	Accountant, Assessment and Recovery Cell	9825460545
4	Dilip Jariwala	Surat Municipal Corporation	Chief Accountant	9427896105
5	Rajesh Patel	Surat Municipal Corporation	Finance Officer	9624744166
6	D. N. Basak	Surat Municipal Corporation	Town Planner	basak.debasish@gmail.com
7	R. J. Pandya	Surat Municipal Corporation	Town Planner	
8	A. J. Pandya	Surat Municipal Corporation	Hydraulic Engineer	9724345427
9	A. V. Sorathia	Surat Municipal Corporation	Deputy Engineer, Hydraulic Department	9724345421

Sl. No.	Name	Organization	Designation	Email/Contact No.
10	Jagadish L. Thadam	Surat Municipal Corporation	Assistant Engineer, Hydraulic Department	9724344877
11	E.H. Pathan	Surat Municipal Corporation	Executive Engineer, Drainage and Solid Waste Department	exen.drainage@suratmunicipal.org, 9724345411
<b>Nashik Municipal Corporation, Rajiv Gandhi Bhavan, Sharanpur Road, Nashik, Telephone(PBX) : 0253 - 2575631 / 2 / 3 / 4</b>				
1	Sanjay Khandare	Nashik Municipal Corporation	Commissioner	commissioner@nashikcorporation.gov.in
2	R. M. Bahiram	Nashik Municipal Corporation	Deputy Commissioner (tax)	dmc_t@nashikcorporation.gov.in
3	Prashant Magar	Nashik Municipal Corporation	Head of Department-Computer Cell	hod_computer@nashikcorporation.gov.in
4	S V Gholap	Nashik Municipal Corporation	Deputy Chief Accountant	
5	Yardly Abraham Thomas	CRISIL Infrastructure Advisory	Manager – Urban Practice,	yardly.thomas@crisil.com
6	Ashutosh Shahu	CRISIL Infrastructure Advisory	Associate	Ashutosh.Shahu@crisil.com
<b>Kolkata Municipal Corporation, 5, S.N. Banerjee Road, Kolkata – 700013, West Bengal, Tel: 033-22861034, Fax: 033-22861434/22861334, Email: mc@kmcgov.in</b>				
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1	Swapan Samaddar	Kolkata Municipal Corporation	Member- Mayor-In -Council	9830361410
2	Khalil Ahmed	Kolkata Municipal Corporation	Municipal Commissioner	mc@kmcgov.in
3	Sristidhar Santra	Kolkata Municipal Corporation	Joint Municipal Commissioner (D)	jmc_dev@kmcgov.in, 8902728820
4	Kamal Sarkar	Kolkata Municipal Corporation	Dy CE (C)/ Head, Chief Municipal Architects and Town Planning Department (CMA&TP)	townplanningkmc@gmail.com, ksarkar65@gmail.com, 9674279805
5	Pranab Ghose	Kolkata Municipal Corporation	Executive Engineer (C), CMA&TP	townplanningkmc@gmail.com, 9433474871
6	Manas Kumar Guha	Kolkata Municipal Corporation	Executive Engineer (C), CMA&TP	townplanningkmc@gmail.com, 9051237876
7	Tapan Kumar Bhattacharjee	Kolkata Municipal Corporation	Executive Engineer (C), CMA&TP	9831968667
8	Sandip Saha, AE (C)	Kolkata Municipal Corporation	Executive Engineer (C), CMA&TP	sahasandip201@gmail.com, 9434315217
9	Kalicharan Bannerjee	Kolkata Municipal Corporation	Dy. Manager, Social Welfare and Urban Poor Alleviation Department (SW&UPA)	kc_banerjee@kmcgov.in
10	Mukul Ranjan Barai	Kolkata Municipal Corporation	Chief Manager, SW&UPA	mrbarai68@gmail.com
11	Dayamay Mukherjee	Kolkata Municipal Corporation	Dy. Manager, Bustee Service Department	9830198975
12	Debasis Chatterjee	Kolkata Municipal Corporation	Dy CE, Bustee Service Department	
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