

UN Capital Development Fund (UNCDF)
UNITED NATIONS DEVELOPMENT PROGRAM
GOVERNMENT OF BANGLADESH

Final Report

**Developing a Methodology for assessing credit
worthiness and credit rating for ULBs of Bangladesh**

December 2016



ICRA Management Consulting Services Limited

in association with

Credit Rating Agency of Bangladesh

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Abbreviations and acronyms

ADB	Asian Development Bank
BBS	Bangladesh Bureau of Statistics
BDT	Bangladesh Taka
BE	Budget Estimate
BMDF	Bangladesh Municipal Development Fund
BMIF	Bangladesh Municipal Investment Finance
BOD	Biological Oxygen Demand
BOT	Built Operate Transfer
BSEC	Bangladesh Security and Exchange Commission
CAGR	Compounded Annual Growth Rate
CAG	Comptroller and Auditor General
CBD	Central Business District
CC	City Corporation
CDA	Chittagong Development Authority
COD	Chemical Oxygen Demand
CRAB	Credit Rating Agency Bangladesh Limited
Cu.m	Cubic Meter
DCB	Demand Collection Balance
DNCC	Dhaka North City Corporation
DPHE	Department of Public Health Engineering
DWASA	Dhaka Water Supply & Sewerage Authority
FY	Financial Year
GoB	Government of Bangladesh
GIS	Geographical Information System
HRD	Human Resource Development
IT	Information Technology
IMaCS	ICRA Management Consulting Services Limited
KDA	Khulna Development Authority
LGD	Local Government Division
LGED	Local Government Engineering Division
LGIs	Local Government Institutes
LPCD	Liters per capita per day
MIF	Municipal Investment Finance
MIS	Management Information System
MGSP	Municipal Governance Service Project
MLD	Million litre per day
MT	Metric Tonnes
NA	Not Applicable
N.Av	Not Available
NCC	Narayanganj City Corporation
NILG	National Institute of Local Government
NGO	Non-Governmental Organization
O.B	Operating Balance
OHT	Overhead Tank
O&M	Operation and Maintenance
PPP	Public Private Partnership
RAJUK	Rajdhani Unnayan Kartripakkha

RDA	Rajshahi Development Authority
RE	Revised Estimate
SWD	Storm Water Drains
SWM	Solid Waste Management
ULB	Urban Local Body
UFMS	Uniform Financial Management System
UNCDF	United Nations Capital Development Fund
WASA	Water Supply & Sewerage Authority
WHO	World Health Organization
WTP	Water Treatment Plant

1. Introduction

1.1. Background

The United Nations Capital Development Fund (UNCDF) supports various government schemes and programs such as poverty reduction; climate change and achieving sustainable development goals in Bangladesh. Along with this agenda, the Municipal Investment Finance (MIF) was introduced in Bangladesh, to establish country-level frameworks for municipal finance and sustainable financing. Under the above initiatives, the Bangladesh Municipal Investment Finance (BMIF) project has been designed to establish new sources of financing for Urban Local Bodies (ULBs) in Bangladesh to improve environment, energy and climate resilience at sub-national levels.

In general, local taxation, fees and resources from fiscal transfers are major sources of income for elected Councils/ Pourashavas in Bangladesh. While creation of urban infrastructure is financed through Grants (from Annual development programs) allocated to ULBs for particular projects, a small amount of debt financing is done through the Bangladesh Municipal Development Fund (BMDf), a World Bank funded project. As demand for investment financing exceeds income generated from sources and non-existence of opportunities for local governments to access financing from capital markets/ financial institutions, it becomes difficult for Government to undertake infrastructural up gradation.

To address these constraints, the BMIF project intends to support the process of enabling the municipalities' to access capital markets and institutional finance to enable them accelerate expansion of urban infrastructure and to explore options to address legal and regulatory constraints to such access. The project also aims to develop an approach that will enable municipalities to secure resources from capital markets through ECOBONDS to secure financing for local governments.

A key step in achieving these outcomes is a systematic assessment of the financial systems of municipalities that are being supported in seeking access to capital markets and institutional finance. To support these activities, UNCDF retained ICRA Management Consulting Services Limited (IMaCS) in association with Credit Rating Agency of Bangladesh Limited (CRAB) to develop a methodology for evaluating credit worthiness of municipalities in Bangladesh.

1.2. Study objectives

The study objective was to enhance capability of public and private sector organizations to evaluate creditworthiness of ULBs in Bangladesh. Specific objectives covered:

- Analysis of range of financial and operational information available in municipalities resulting in the formulation of credit rating and actions that may be taken to ensure that adequate information is made available when the ratings are actually made.
- Engagement with stakeholders on credit rating criteria that would be appropriate for probable financing interventions that will be implemented
- Developing an acceptable credit-rating framework and operational plan incorporating feedback received.

1.3. Scope of work

The scope of work for the exercise covered three tasks as summarised below.

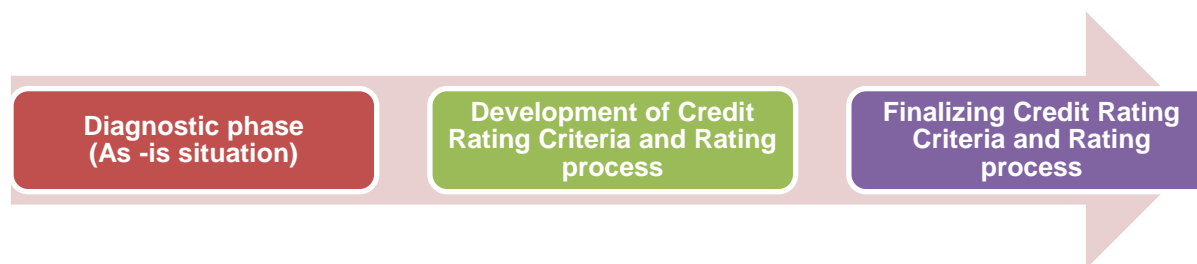
1. **Analyse availability of financial information in Municipalities:** Financial and other information in municipalities would be reviewed to ensure that adequate information is available to conduct a credit rating. IMaCS will evaluate the financial and other information of several municipalities in regard to improve them.
2. **Develop credit ratings criteria:** Propose and disseminate the draft municipal credit rating criteria to allow stakeholders in the private sector and government to discuss and reach consensus on the factors that can be used to systematically assess municipal creditworthiness. Develop draft criteria, engage with stakeholders and facilitate this consensus, taking into consideration the types of financial structures considered feasible by BMIF team.
3. **Design credit ratings process:** This activity was to ensure that all relevant actors in the future ratings process agrees on a standardized ratings process such that the credit rating agencies are able to design a rating process, identify and prepare prototypes of the specific outputs, review the process and draft outputs with credit rating agencies.

1.4. Approach

The approach for this exercise has been finalised in consultations with UNCDF and presented earlier in our Inception Report. Refer *Exhibit 1.1* for a snapshot of our approach. A few key points incorporated in our approach based on our field work and interactions in Bangladesh are summarised below:

1. **Review of Financial and operating information at ULB level:** In discussion with UNCDF, we reviewed the financial and operating position in 6 ULBs in Bangladesh to cover point no. 1 of the Scope of Work. This analysis is based on interactions with national level agencies in Bangladesh dealing with municipal affairs and financing, visits to these ULBs and interactions with UNCDF and other key stakeholders.
2. **Design of Credit Rating framework:** From our local level reviews, we note some critical gaps in existing system of financial reporting and financial performance that need to be factored. Accordingly, we incorporated the following elements in our approach:
 - a. The credit rating framework being designed needs to factor these inherent gaps while at the same time, identifying areas of action at the ULB-level particularly focused on improving accounting / financial information disclosure and on improving revenue buoyancy / financial performance. Accordingly, our Draft Report captures concrete recommendations on actions needed to address these two areas of improvement.
 - b. In designing a rating framework, we have adapted the dimensions and criteria typically used by rating agencies for credit rating and have developed an initial scoring framework that factors available information as it exists today. This will enable the framework so designed to be put to use for credit assessment of ULBs with available information. Our Draft Report applies this scoring framework on the six ULBs studied as part of this exercise to illustrate use of this framework.

Exhibit 1.1 Approach to the exercise



Sub Tasks / area of assessment		
<ol style="list-style-type: none"> 1. Meetings with UNCDF, BMDF and SEC 2. Review structure and functioning of the municipalities in Bangladesh 3. Selection of ULBs to be covered for As-is situation analysis and data collection in discussion with UNCDF, BMDF and our assessment 4. Collect/review information on key parameters such as: <ol style="list-style-type: none"> a) Economic base of ULB b) Financial Indicators / Debt position c) Finances of the state/ central government d) Legal and administrative factors e) Operational efficiency f) Managerial assessment 	<ol style="list-style-type: none"> 1. Review information on key parameters from ULBs, LGD, BMDF and other stakeholders to check availability of data for rating framework 2. Review of lists of sub-national indicators prepared by agencies such as PEFA, World Bank, ADB etc., and check suitability for using in municipal credit worthiness methodology. 3. Recommendations to make ULBs more creditworthy 4. Design Draft Rating criteria and rating process. 5. Identification of gaps to be addressed to ensure ULBs are geared for information disclosures required for ratings 	<ol style="list-style-type: none"> 1. Finalize outputs and a framework for credit rating process in discussion with all stakeholders
Outputs		
<p>Analysis Report: Based on available information on broad rating parameters in selected municipalities</p>	<p>Draft Report: Covering development of Draft Credit Ratings Criteria and Rating Process</p>	<p>Final Report</p>

3. **Design of Credit Rating process:** Based on our review, we find that most ULBs in Bangladesh are constrained with a narrow revenue base, weak capacity and inadequacies in accounting and financial disclosure practices. The framework that is being developed in this exercise will help the Government of Bangladesh, ULBs and other stakeholders to score and monitor the progress that ULBs make as they embark on, and implement specific reforms recommended herein.

1.5. Methodology and study progress

Key activities and milestones undertaken in the exercise till date are summarised below:

1. **Kick-off meetings and submission of Inception Report:** Our team comprising members from IMaCS (and our partner CRAB), commenced the exercise in August 2015 with a visit to Bangladesh and kick-off meetings with various stakeholders including UNCDF, BMDF, and Bangladesh Securities and Exchange Commission (BSEC). These meetings culminated into the submission of an Inception report covering the following:
 - a. Our understanding of Study objectives and Scope of Work.
 - b. Urbanisation trends, and Urban Institutional framework in Bangladesh
 - c. Summary of Rating Methodologies of ULBs based on secondary research
 - d. Our proposed Approach and methodology along with work plan and deliverable
2. **Follow-up visits including meetings in Dhaka, reconnaissance/data collection at ULB level:** We followed up the submission of Inception report with reconnaissance visits and data collection effort during September 2016 at six Urban Local Bodies. These included the following:
 - a. North Dhaka City Corporation
 - b. Narayanganj City Corporation
 - c. Chandpur Pourashava
 - d. Faridpur Pourashava
 - e. Pabna Pourashava
 - f. Tangail Pourashava

After the submission of Inception Report by the consultants, meetings were again held between the Consultant team with UNCDF and BMDF to finalize six potential ULBs in Bangladesh for visiting and collecting information as per the checklist submitted in the Inception report. The following ULBs were visited by the IMaCS & CRAB teams between 22th Sep- 29th Sep 2016 to collect information related to city profile, administration, municipal services, projects and finances. Refer *Annexure I* for the checklist used for the data collection, and *Annexure II* for a list of people met during the course of the exercise.

3. **Presentation and deliberations at UNCDF workshop on 1st Nov 2016 in Dhaka:** Our team made a presentation at the UNCDF workshop to share the findings from our field visits and review of financial and operating performance and to share the initial thoughts on the credit rating framework and process. The presentation broadly touched upon the following:
 - a. Scope of the engagement
 - b. Credit Rating of ULBs and its benefits
 - c. Urban Governance structure and Intergovernmental relationships
 - d. Key Observations from ULB visits
 - e. Recommendations to improve creditworthiness
 - f. Preliminary Credit Rating Criteria & Process

1.6. Report coverage and content

This report covers our **Deliverable III of the engagement i.e., Draft Report** and covers our findings and recommendations relating all Tasks under the Scope of Work. The Draft Report is organised along the following sections:

- **Chapter 1: Introduction** summarises the study background, scope of work, approach, methodology and study progress.
- **Chapter 2 Urban governance and institutional framework** summarises urbanization trends in Bangladesh and traces the institutional framework at the national and sub-national levels in the country. It also provides a summary analysis of extant municipal legislation and devolution of functions to ULBs in Bangladesh.
- **Chapter 3 Operating and Financial Performance in select ULBs** discusses summary findings and observations from a review of information on operating and financial performance of a sample of 6 ULBs that were studied as part of this exercise. City-wise details of this analysis are presented in *Annexure III*.
- **Chapter 4 Suggested Credit Rating framework** builds on the findings of operating and financial performance review and diagnostic phase of the exercise to propose an initial credit rating framework for assessment of Urban Local Bodies. The chapter defines the dimensions (along with weightages) of scoring, parameters for each dimension that gets scored and suggested methodology for scoring ULBs on this framework. As part of this chapter, scores have also been computed on the said framework for the six ULBs that were reviewed during the diagnostic phase of the exercise.
- **Chapter 5 Roadmap for improving credit worthiness at ULB level** builds on the understanding from the review of ULB-level financial and operating performance and captures the thrust areas for reform and transformation necessary to improve ULB-level credit worthiness and financing capacity.
- **Chapter 6 Credit Rating process** provides a primer on the typical steps involved in credit rating for a bond issue.
- **Chapter 7 Action plan towards external financing** provides the steps to be taken by GoB and UNDCF to achieve the desired objective of raising the external finance.

2. Urban governance and institutional framework

2.1. Urbanisation in Bangladesh

Bangladesh, a sovereign republican country in South Asia, is spread over an area of 150,000 sq. km and has a population exceeding 160 million (2015), making it the eight largest country globally in terms of population. Bangladesh's population grew from 130 million in 2001 to 160 million in 2015. The share of urban population also grew rapidly, with urban population now accounting for 34% of total population. Refer *Exhibit 2.1*.

Exhibit 2.1 Trends of Urbanization in Bangladesh

Census Year	Total Population (Million)	Urban Population (Million)	Share of Urban Population (%)
1981	90	13	15
1991	112	21	20
2001	130	29	23
2011	150	42	28
2015	160	54	34

As a result of the increasing urbanization, the infrastructure and service levels in the cities are deteriorating. example- inadequate road spaces, traffic congestion, unplanned drainage, inadequate & unsafe water supply, poor solid waste management practices etc (Refer *Chapter 3* for an analysis of service level indicators in select ULBs). In order to tackle the rapid urbanization and promote planned growth and development in the country, Government of Bangladesh has established various departments working under ministries at central level. The governance system followed in Bangladesh is discussed in the next section.

2.2. Institutional framework for urban management

At the national level, urban management is handled under the purview of the Ministry of Local Government, Rural Development and Cooperatives, which is responsible for development and implementation of legislation regulating Local Government. The Local government in Bangladesh is divided into Rural, Urban and Hill districts which all have similar functions. The Hill Areas are however, administered by the Ministry of Hill Tract Affairs which administers these areas through the Hill District Local Government Parishad Act 1989.

The Ministry of Local Government, Rural Development and Cooperatives has two divisions namely the Local Government division, and the Rural Development and Co-operatives division. Within the Local Government division, the Rural Local Government consists of Divisions, Districts, Sub-districts (Upazila), Unions and Villages and the Urban Local Government comprises Municipalities/ULBs which are categorised into City Corporations and Pourashavas. Refer *Exhibit 2.2* for a list of departments under the Ministry of Local Government, Rural Development & Cooperatives.

Exhibit 2.2 Ministry of Local Government Rural development and Cooperatives

Local Government Division	Rural Development and Co-operatives Division
<ul style="list-style-type: none"> Local Government Engineering Department Water Supply and Sewerage Authority City Corporations Pourashavas Department of Public Health and Engineering National Institute of Local Government 	<ul style="list-style-type: none"> Department of Cooperatives Bangladesh Rural Development Board Rural Poverty Alleviation Foundation Small Farmer Development Foundation Bangladesh Cooperative Bank Bangladesh Dairy Farmer Cooperative Union Limited Bangladesh Academy for Rural Development Rural Development Academy, Bogra Bangabandhu Poverty Alleviation and Rural Development

Source: IMaCS Analysis

A flowchart highlighting the various government department departments and agencies as well as sub-national entities for Local Government is shown in Exhibit 2.3.

2.3. National Level: Local Government Division

The Local Government Division is the nodal department for Local Governance. It implements development and service-oriented activities that are extended up to Union Parishads, Upazila Parishads, Zila Parishads, Pourashavas and City Corporations.

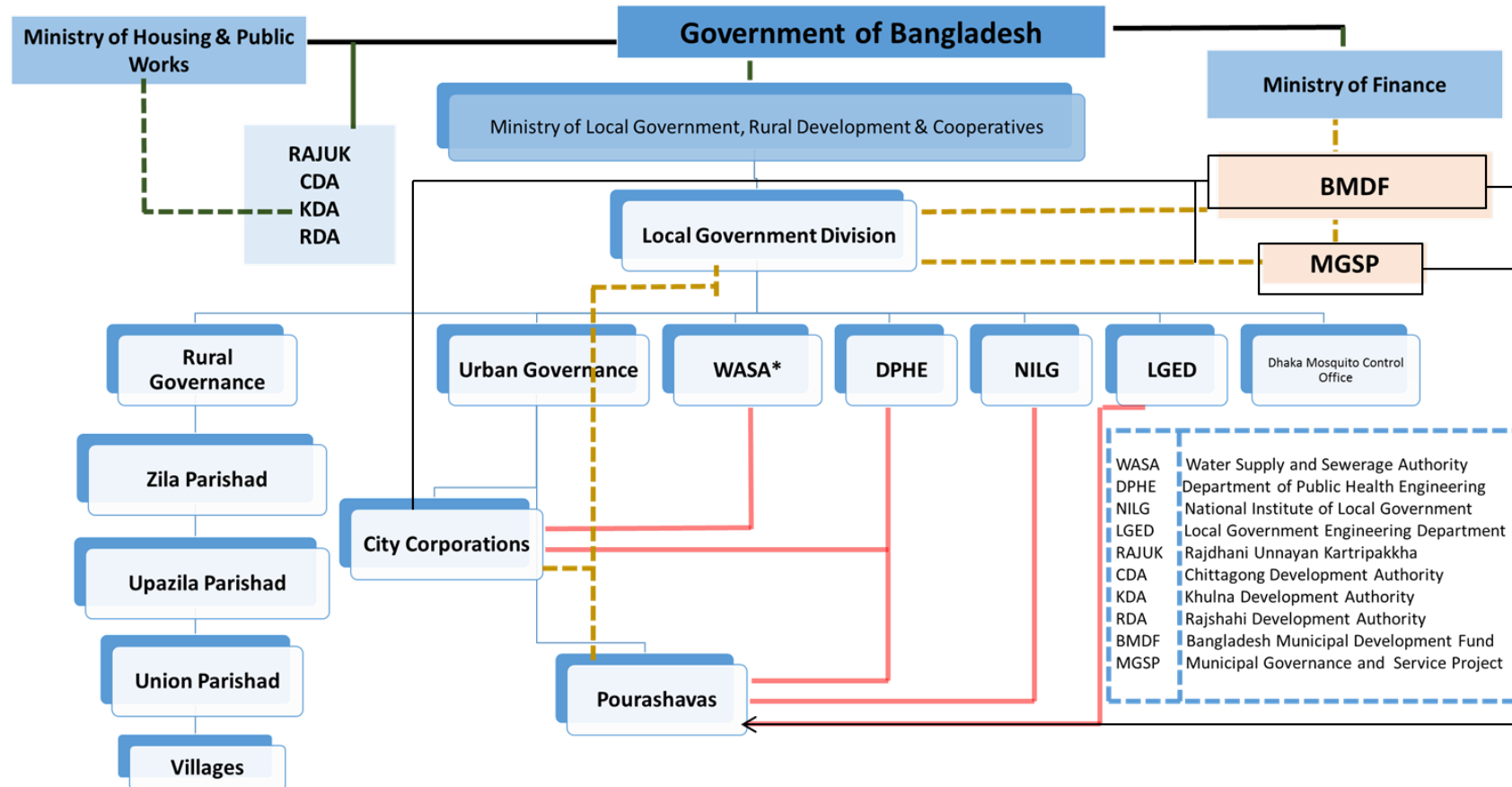
Under the LGD, there are a number of sub-departments including the Local Government Engineering Department (LGED), Department of Public Health Engineering (DPHE), Dhaka WASA, Chittagong WASA, Khulna WASA and NILG are the different departments of this Division. Through these departments /Institutions, the LGD mobilizes local resources; establishes good governance at the local level, provides civic/utility services to the citizen of municipalities and city corporations, rural and urban infrastructures development, supply of safe drinking water, solid waste disposal and sanitation all over the country.

LGD is also responsible for planning and implementation of development projects at local level, conducting survey/ research regarding local government and arranging training programme for enhancing knowledge and efficiency of the elected representatives. These activities contribute in the national goal of socio-economic development through opportunities. Various departments constituted under LGD are also involved in the provision of infrastructure in the rural as well as urban area for improving the quality of life of the citizens. The major functions of LGD are discussed below in *Exhibit 2.4*.

2.3.1. Local Government Engineering Department (LGED)

The LGED is among the largest public sector organizations under Local Government Division. It is entrusted with planning and implementation of local-level rural, urban and small-scale water resources infrastructure development programs. It works closely with the local stakeholders to ensure people's participation and bottom-up planning in all stages of project implementation cycle. It promotes labour-based technology to create employment opportunity at local level and uses local materials in construction and maintenance to optimize the project implementation cost with preserving the desired quality. It works in a wide range of diversified programs like construction of roads, bridges/ culverts and markets. The major functions of LGED are discussed below in *Exhibit 2.5*.

Exhibit 2.3 Governance Structure in Bangladesh



Source: iMaCS Analysis

Exhibit 2.4 Functions of Local Government Division

- It manages all matters relating to local government and local government institutions
- It finances, controls and inspects local government institutions
- Manages all matters relating to drinking water
- Develops water supply, sanitation and sewerage facilities in rural and urban areas
- Constructs, maintains and manages upazila, union and villages roads including roads of towns and municipal areas and bridges/ culverts
- It manages matters related to village police
- It develops, maintains and manages growth centres and haat bazaar connected via upazila, union and village roads
- It develops, maintains and manages small scale water resource infrastructure within the limit determined by the government.

Exhibit 2.5 Functions of LGED

Rural Infrastructure Development

- LGED is involved in the construction of upazila & union roads, construction of bridges and culverts on those roads
- It develops growth centres, constructs union parishads complexes and primary schools
- It also constructs jetties, cyclone shelters, develops technical specifications and manuals for construction of rural infrastructure
- It develops and updates rural road master plans, infrastructure database and digital maps
- It develops upazila and union plan book to facilitate local level planning and participation
- It provides technical support to zila and upazila parishads

Urban Infrastructure Development

- LGED is involved in planning and implementation of integrated town centre (bus terminals, markets etc.), municipal roads, bridge/culverts, drainage, water supply and sanitation projects, solid waste management projects, slum upgrading projects
- Development of Land use plan, survey & digital mapping, database and software for the use of municipalities to improve planning & management capacity and resources mobilization & management.
- Institutional development of municipalities through training and computerizations.
- Preparation of district and upazilla town master plan and development of technical specifications and manuals for construction of urban infrastructures.

Small Scale water resources development

- LGED is involved in the construction of flood protection embankment, conservation of water for irrigation and improvement irrigation systems
- Construction of water control structures and Rubber Dams, excavation and re-excavation of Canals.
- It provides training to stakeholders and other members

2.3.2. National Institute of Local Government (NILG)

The NILG is engaged in human resource development of local government functionaries in the country. It was established under the East Pakistan Government Educational and Training Institutions Ordinance 1961 to promote training and research activities in order to strengthen the local government institutions. It works under the direct administrative control of LGD and performs the following functions as shown in Exhibit 2.6.

Exhibit 2.6 Functions of NILG

- It conducts training of elected and appointed local government functionaries both urban and rural, government officials connected with local government bodies.
- It organizes national, international seminars, workshops, conferences, conducts research studies, and publishes books, research reports and journals on local government. It coordinates training and research programmes and develops institutional network on local government training.
- It provides consultancy services to the government (Local Government Division) and local government bodies both urban and rural on various problems and issues.
- It collects information, monitors and evaluates the functions of local government bodies.
- It establishes linkages with similar institutions in the country as well as other countries with the approval of government.

2.3.3. Department of Public Health Engineering

DPHE is responsible for providing drinking water and manage the waste in the country where WASAs operate such as Dhaka, Narayanganj, Chittagong, Khulna and Rajshahi. It coordinates with the ULBs in urban areas for infrastructure development. It installs water supply systems in rural areas in coordination with the Union Parishads. DPHE works under the LGD and has divided its administrative boundaries into 9 circles namely Dhaka circle, Faridpur circle, Khulna circle, Barisal circle, Chittagong circle, Chittagong Hill Track circle, Sylhet Circle, Rajshahi Circle and Rangpur Circle. The major functions of DPHE are listed below in *Exhibit 2.7*.

Exhibit 2.7 Functions of DPHE

- DPHE is responsible for assisting the Pourashavas and City Corporations through infrastructure development and technical assistance. It also assists Local Government Institutes (Pourashavas & City Corporations, Union Parishads) in operation and maintenance of water supply, sanitation, other services etc.
- It supplies adequate number of trained & skilled manpower in the Water Supply & Sanitation sector through institutions for proper and sustainable management of infrastructure and services. It strengthens water testing facilities through establishment of laboratories at different levels in order to institutionalize Water Quality Monitoring and Surveillance program throughout the country both in rural and urban areas
- It carries out Hydro-geological investigations in search of safe source (both surface & ground) of water supply. It conducts research and development activities in search of appropriate and affordable options including the indigenous ones of water supply and sanitation in the country.
- It creates awareness for proper management of water supply & sanitation infrastructure and promotion of personal hygiene practices. It develops safe water supply technologies in the Arsenic affected and other hydro-geologically difficult areas. It ensures water supply and sanitation services/ facilities during and after the natural disasters/ calamities. It establishes National Water Supply & Sanitation Information Center as a center of excellence for sectoral information management
- It is involved in the capacity building of the community, LGIs, private entrepreneurs and NGOs with technical know-how, information, training etc. for water supply and sanitation.

2.3.4. Water Supply and Sewerage Authority (WASA)

The Department of Public Health Engineering in Bangladesh is responsible for the provision of water supply and sanitation facilities across the country except in Dhaka, Narayanganj, Chittagong, Khulna and Rajshahi. These departments work directly under the LGD and are responsible for the provision of water supply and sewerage facilities in the cities where they are established. WASA are generally constituted under the East Pakistan ordinance XIX. The functions under WASA are listed below in *Exhibit 2.8*.

Exhibit 2.8 Functions of WASA

- Construction, operation, improvement and maintenance of the necessary infrastructures for collecting, treating, preserving and supplying potable water to the public, industries and commercial concerns
- Construction, operation, improvement and maintenance of the necessary infrastructures for collecting, treating and disposing domestic sewerage.
- Construction, operation, improvement and maintenance of the necessary infrastructures for drainage facilities of the City

2.3.5. Urban Local Bodies

Pourashavas and City Corporations constitute the two types of urban local bodies in Bangladesh and form the basic planning and development agencies. These are managed under the Department of Local Government under the Government of Bangladesh.

The ULBs are responsible for garbage collection, street lighting, water supply and drainage, traffic management, maintenance of educational institutions, public libraries, parks and gardens. Bangladesh has 331 Urban Local Bodies of which 11 are City Corporations and the remaining 320 are Municipalities (or Pourashavas) Refer *Exhibit 2.9*.

The ULBs in Bangladesh are categorized as larger City Corporations or A, B, and C class city councils based on the annual revenues collected over last three years. Similarly, Pourashavas are further classified into A, B and C categories and are run by elected pourashava councils.

Exhibit 2.9 Existing Urban & Rural Categories in Bangladesh

Division	Districts	Sub Dist	Rural Local Government		Urban Local Government		Population (Census 2011)
			Union Parishads	Hill District Parishads	CCs	Pourashavas	
8	64	489	4552	3	11	320	139,252,683
8 divisions include Barisal, Khulna, Sylhet, Chittagong, Rangpur, Rajshahi, Mymensingh and Dhaka							

Besides ULBs, Bangladesh has divisions, districts, sub districts (upazila), unions and villages which act as the administrative bodies at regional and rural level in the country.

2.3.6. Development Authorities

Besides the establishment of ULBs and WASA, few cities in Bangladesh also have development authorities which are involved in the infrastructure development of the cities. Chittagong and Rajshahi are the cities which autonomous have development authorities. Khulna development authority works under the Ministry of Housing & Public Works. These authorities perform the following functions as mentioned in Exhibit 2.10.

Exhibit 2.10 Functions of Development Authorities

- Prepare Master Plans for the cities and also for the areas in the vicinity
- Prepare short term and long term development programs for improvement and expansion of cities which include construction of new roads, widening and improvement of major city roads, development of industrial and residential estates etc
- Implement development controls within the preview of Bangladesh Building Construction Acts, 1952 with its subsequent revisions. It controls physical development including haphazard construction.

RAJUK or Rajdhani Unnayan Kartripakkha is the capital development authority of Government of Bangladesh. It is responsible for coordinating urban development in Dhaka and Narayanganj. It is a national authoritative board on building planning, estates and resources, plot allotment, and construction approvals from both public and private entities. It works in the purview of Dhaka Improvement Trust (Allotment of Land) Rule of 1969 and The Town Improvement Act of 1953.

2.3.7. Devolution of functions

City Corporations and Pourashavas in Bangladesh are vested with a long list of functions delegated to them under the Pourashava Act 2009 and City Corporation Act 2011. In order to strengthen the municipal institutions the following functions as mentioned in Exhibit 2.11 are transferred to them. The functions related to maintenance of hospitals, town planning, water & sanitation, sewerage are the sole responsibility of ULBs whereas social welfare services, primary health care & protection, roads & transport and cultural facilities are under the purview of ULBs as well as parastatal bodies.

Exhibit 2.11 Service Provisions by ULBs in Bangladesh

S.No	Service	Sole Responsibility	Joint	Discretionary
General Administration				
1	Police	✓		
Education				
2	Pre School			✓
3	Adult Education			✓
Social Welfare				
4	Family Welfare Services		✓	
Public Health				
5	Primary Care		✓	
6	Hospitals	✓		
7	Health Protection		✓	
Housing & Town Planning				
8	Town Planning	✓		
Transport				
9	Roads		✓	
10	Transport		✓	
Environment & Public Sanitation				
11	Water & Sanitation (except few CCs where water is the responsibility of WASA)	✓		
12	Refuse Collection & disposal (except few CCs where sewerage is the responsibility of WASA)	✓		
13	Cemeteries & Crematoria	✓		
14	Slaughterhouses	✓		
Culture, Leisure & Sports				
15	Theatre & Concerts			✓
16	Museums & Libraries		✓	
17	Parks & Open Spaces		✓	
18	Sports & Leisure		✓	
19	Religious Facilities		✓	
Economic				
20	Tourism		✓	

Source: www.clgf.org.uk/bangladesh

2.4. Institutional mechanisms for municipal finance

Government of Bangladesh has created Special funds to provide finance for the development of urban centres. Such initiatives include Municipal Services Project and the Bangladesh Municipal Development Fund.

2.4.1. Bangladesh Municipal Development Fund (BMDF)

BMDF established in 2002, plays an important role in providing an additional window for demand based funding to ULBs for municipal development projects. It provides financial and technical support to the ULBs in the implementation activities. It is a company formed under the Ministry of Finance of the Government of Bangladesh in 1999. BMDF has provided financial support amounting to US\$103 million to 154 ULBs to finance 595 sub-projects under the Municipal Service Project (MSP). It also works with other potential investors to raise funds for urban services.

BMDF provides loan at the rate of interest of the total amount financed @ 5% per annum, which is repayable in 36 quarterly installments. In case of default, penal interest rate charged is @1% per annum for the default period. BMDF follows a unique policy under which the Government of Bangladesh receives loan from its development partners through the standard bilateral agreement. It follows a participatory approach of funding to the ULBs, thereby combining the participation of the beneficiary, Government of Bangladesh and the donors. Refer *Exhibit 2.12* for category wise share of fund providers for the infrastructural work of ULBs and *Exhibit 2.13* for functions of BMDF.

Exhibit 2.12 Category wise distribution of fund providers

S.No	Description	World Bank Share	GoB Share	ULB Share
1	Civil Works	90%	-	10%
2	Vehicle and Equipment	80%	20%	-
3	Consultants and Training	100%	-	-
4	Incremental Operating Cost	75%	25%	-

Source: BMDF

Exhibit 2.13 Functions of BMDF

- To extend financial support to the City Corporations and Pourashavas (Municipalities) referred to collectively as Urban Local Government Bodies (ULBs) with a view to strengthening their institutional and financial capacity to plan, finance, implement and operate infrastructure services.
- To procure, arrange, secure, receive and accept loans, aid, grants, and donations from any lawful source and to create a fund thereof and make available the same for utilization by ULBs;
- To provide and render financial and technical assistance and advice to ULBs seeking to develop infrastructure investment projects on a self-selecting basis;
- To initiate and undertake appropriate training for company personnel as well as for staff of ULBs to promote greater efficiency on the part of company as well as to ensure better understanding by ULBs's staff of the company's procedures and operational requirements, particularly issues pertaining to, inter alia, lending and financial policies, eligibility criteria, and procurement.
- To bring about qualitative improvement of urban livelihood through infrastructure development and environment improvement.

2.4.2. Municipal Governance and Service Project (MGSP)

MGSP is being implemented in Bangladesh through LGD, LGED and BMDF with financial support from World Bank. This initiative has been taken by the Government of Bangladesh in order to tackle urbanization and providing infrastructure facilities such as housing, safe drinking water, drainage and sewerage facilities, proper transport facilities etc in urban areas of the country.

In the first phase, MGSP included 27 ULBs for undertaking infrastructural projects such as roads, drains, kitchen market, street lights, multi-storeyed markets, office buildings, community centres, truck terminals, public toilets and beautification of ponds etc.

2.5. Municipal Legislation

This section reviews Municipal legislation under which City Corporation and Pourashavas operate with particular reference to provisions under the legislation pertaining to funds, borrowing, Debt management, and servicing and investor protection.

2.5.1. Provisions pertaining to organization structure, elected body administrative body, constitute of municipality and term of municipality

As per the Municipal Act, the Municipalities shall be formed with composition of following persons, namely mayor, councillors including female councillors. There shall be a Chief Executive Officer for such Municipality as the Government may direct. The term of a Municipality shall be a period of five years commencing on the day of its first meeting after its constitution.

2.5.2. Provisions pertaining to Municipality fund

Every Municipality will constitute a Municipality Fund under its municipality act. The corpus of this fund would be created through the proceeds of all taxes, rates, tolls, fees and other charges levied by the municipality, all rents and profits payable to the municipality from the property vested in or managed by the municipality, all sums received by the municipality in the performance of its functions under this Ordinance or under any other law for the time being in force, all sums contributed by individuals or institutions or by any local authority, all receipts accruing from the trusts placed under the management of the municipality, All grants made by the Government and other authorities, all profits accruing from investments

2.5.3. Provisions pertaining to Special fund

The moneys credited to a municipality fund shall be kept in a Government treasury, or in a bank transacting the business of a Government treasury or in such other manner as may be specified by the Government from time to time.

A municipality may invest any portion of its fund in such manner as may be prescribed. A municipality may, and if required by the Government shall, establish and maintain a separate fund for any special purpose, which shall be administered and regulated in such manner as prescribed.

The moneys from time to time credited to a municipality fund shall be applied in the following order of preference which will have payment of salaries and allowances to the officers and employees of the municipality, in meeting the expenditure charged on the municipality fund under this Ordinance; in meeting expenditure declared by the municipality, with the previous sanction of the Prescribed Authority, to be an appropriate charge on the municipality fund; and, in meeting the expenditure declared by the Government to be an appropriate charge on the municipality fund.

2.5.4. Provisions pertaining to Corporation Fund

The expenditure to be charged on Municipality fund would include the following:

- All sums to be paid to, or in connection with employment of, any Government servant or any member of the Local Parishad Service who is or has been in the service of the municipality
- All sums as the municipality may be required by the Government to contribute towards the conduct of elections, the maintenance of the municipality Service, the auditing of accounts and such other matters as may, from time to time, be specified by the Government.
- Any sum required to satisfy any judgment, decree or award against the municipality by any Court or tribunal; and any expenditure declared by the Government to be so charged.
- If any expenditure charged on a municipality fund is not paid, the Prescribed Authority may, by order, direct the person or persons having the custody of the municipality fund to pay such amount, or so much thereof as may, from time to time, be possible from the balance of the municipality fund.

2.5.5. Provisions pertaining to Auditing

The accounts of the municipality are audited by any authority from panel which is approved by capable audit authority.

2.5.6. Provisions pertaining to Municipal Taxation

The municipality with the previous sanction of the Government may levy, in the prescribed manner, all or any of the taxes, rates, cesses, tolls, and fees as per the Third Schedule which include the following

- Annual price of building land
- Handover of movable property
- Land development and 2% of levy which are received
- Application of construct and re-construct buildings
- Imported materials for consume, use and sale in municipality area
- Exported materials from municipality
- Fees as tolls

-
- Levied on service, business and sponsor
 - Levied on birth, marriage, adoption and feast
 - Levied on advertisement
 - Levied on animal
 - Levied on display of cinema, drama and theatre show and amusement and recreation
 - Levied on vehicles except motor vehicle and boats.
 - Rate of light and fire
 - Rate for removal garbage
 - Rate for conducting public help related activities
 - Rate for water setup and water delivery
 - Any sub-levied on levy which are prescribe by the government.

The Municipal legislations of Bangladesh provide a fair framework for constituting the municipality which includes functioning of administrative and elected bodies. It also gives an understanding about the constitution of funds such as Municipal Funds & Special Funds to the Municipalities but there is no provision which allows any kind of borrowings such as against capital works, debentures etc.

2.6. Summary

1. **There is heavy reliance on Government of Bangladesh for project financing:** The funds for infrastructure development for the ULBs are provided mainly through government bodies and agencies at the central level. Direct borrowings by ULBs are non-existent.
2. **Inadequate decentralisation of funds, functions and functionaries:** Although ULBs in Bangladesh have been given several functions to execute, many of the project development and implementation activities are driven directly by nodal departments and parastatal agencies including the DPHE, LGED, NILG and rural areas are directly under LGD, GOB.
3. **ULB legislation do not explicitly provide for enabling clauses for commercial borrowing:** There are no provisions of borrowing by the ULBs under the Municipal Acts. However, there is a provision under BMDF for providing loans by creating a Fund for the utilization of ULBs. Based on a review of municipal legislation in other countries, we also observe that it may be useful to incorporate some specific enabling clauses in the municipal legislation including the following:
 - a. **Powers to securitize assets/ receivables:** The ULB Acts in Bangladesh do not provide for allowing ULBs to securitize receivables or escrow its revenues
 - b. **Credit Enhancement structures:** The ULB Acts in Bangladesh do not provide for structuring features including provision of bond repayment fund into which funds towards servicing of debts (internal plus principal) shall be transferred from municipal fund of the ULB.

-
- c. **Investor Protection:** To address relatively higher perceived credit risk, adequate provisions for attachment of municipal funds or assets has to be elaborated in the existing acts to ensure timely servicing of debt.

3. Operating and financial performance in select ULBs

This section summarises findings from our review of the operating and financial performance in six Urban Local Bodies and covers an analysis of a) demographics b) urban service issues and gaps and c) financial performance in these ULBs. The six ULBs covered in our review included the Dhaka North City Corporation, Narayanganj City Corporation, Chandpur Pourashava, Faridpur Pourashava, Pabna Pourashava and Tangail Pourashava.

These ULBs were selected in consultation with UNCDF. Together they account for 9.1% of urban population of Bangladesh and thus provide a meaningful sample to draw conclusions for wider trends in operating and financial performance of ULBs in Bangladesh in general.

This chapter seeks to summarise the overall perspective emerging from the review of six ULBs and by extension, some conclusions for the urban sector in Bangladesh as a whole. For the sake of brevity of this chapter, city-level analysis for each of the six cities is presented in Annexure III.

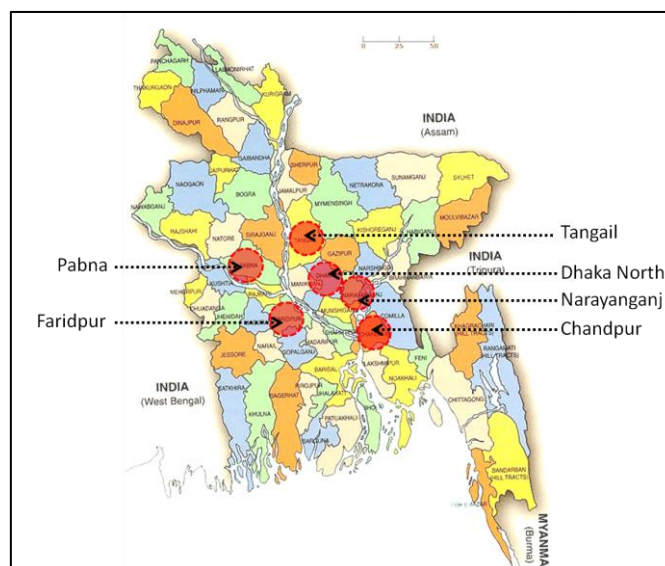
3.1. Cities reviewed: a brief overview

The selected City Corporations and Pourshavas are located in three divisions and six districts of Bangladesh. Refer Exhibit 3.1 for details of divisions / districts to which these ULBs belong and Exhibit 3.2 for the spatial location of the ULBs within Bangladesh.

Exhibit 3.1 List of Selected ULBs

S.No	Division	District	ULB
1	Dhaka	Dhaka	Dhaka North City Corporation
2	Dhaka	Narayanganj	Narayanganj City Corporation
3	Chittagong	Chandpur	Chandpur Pourashava
4	Dhaka	Faridpur	Faridpur Pourashava
5	Rajshahi	Pabna	Pabna Pourashava
6	Dhaka	Tangail	Tangail Pourashava

Exhibit 3.2 Spatial location of ULBs reviewed



A brief overview of the cities reviewed is presented below:

3.1.1. Dhaka North City Corporation (DNCC)

Dhaka North City Corporation is located in Dhaka district of Dhaka division. It was established in Nov 2011, prior to which the area was governed under the former Dhaka City Corporation. Low-lying and situated in the middle of one of the largest river deltas in the world, North Dhaka is vulnerable to flooding during the monsoon season.

Dhaka North City Corporation extends up to an area of 83 sq. km which is divided into five zones and 36 Wards. It has a rich and growing upper middle class population driving the market for modern consumer and luxury goods, and has seen the growth of varieties of industries and many economic institutions. Main commercial areas of Dhaka North City Corporation include Mahakhali, Gulshan, Kawranbazar, Farmgate, and Uttara.

Besides, Bashundhara-Baridhara area is a fast developing economic area that is home to high-tech industries, corporations and a large shopping precinct. Growth has been especially strong in finance, banking, manufacturing, telecommunications and service sectors, even as tourism, hotels and restaurants remain key drivers for the economy of Dhaka North.

3.1.2. Narayanganj City Corporation (NCC)

Narayanganj is located at a distance of 17 km, southeast of Dhaka, on the bank of the river Shitalakhya and at the confluence of Shitalakhya and Buriganga Rivers. Narayanganj is situated in Zone-II and prone to moderate earthquakes.

It is an important business centre for industries especially jute trade, processing plants, and the textile sector of the country. It covers an area of 72 sq. km with 27 wards, having a total population of 14,18,782 (Census 2011).

3.1.3. Chandpur Pourashava

Chandpur Pourashava lies in Chandpur district and is bounded by Munshiganj zila, a part of Comilla zila in the north, Noakhali zila, Lakshmipur zila, Barisal zila in the south and by Shariatpur zila, Munshiganj zila and River Meghna in the west. It has a population of 179,000 (Census 2011) and extends over an area of 22.9 sq. km.

The economy of Chandpur is predominantly agricultural. Chandpur produces variety of crops such as rice, wheat, vegetables, cash crops, spices, pulses and others. Catching fish is an important source of income for residents in the city. Hilsha, a popular fish of the country, is abundantly available in the city

The municipality is the economic centre of the Faridpur district and in consequence has a vibrant central business district at Chalkbazar. The municipality boasts of a cable factory and a brick field, and four jute mills, a further cable factory, 30 further brick fields, and a plastic factory which all are located very close to the municipality area. Other smaller scale industries include sawmills, flour mills, bakeries, and an ice factory. Main land uses are residential, agricultural, water bodies and transport, and other significant land uses include mixed use, educational, commercial and health, in that order.

3.1.4. Faridpur Pourashava

Faridpur Pourashava is located 140 km west of Dhaka, across Padma River on the banks of Kumar River. It has a population of 1,46,921 (2015) and extends over an area of 17.38 sq. km.

The increase in urbanization and migration from the neighboring areas has led to the rise in population of Faridpur. As per Census 2011, there are 16,146 households in Faridpur Pourashava and the average literacy rate is 77.3%.

Industries such as jute mills, cable factories, plastic factories, saw mills, flour mills, bakeries etc. form the economic base of Faridpur. The income level of the people in Faridpur is low as with 45% of the population falling in the category of below poverty line.

3.1.5. Pabna Pourashava

Pabna Pourashava lies in Pabna district located in Rajshahi division of Bangladesh. It lies on the northern bank of Padma River (Ganges). It was established in 1832 and is one of the oldest districts of Bangladesh.

The city extends to an area of 27.20 sq. km with 15 wards, 46 mohallas. Agriculture is the major economic base of Pabna. It is rich in the cultivation of paddy, jute, wheat, sugarcane, oil seeds, onion, garlic, pulses etc. Besides the crops, Pabna produces a large amount of fruits such as mango, banana, lychee, coconut, guava, papaya etc. As Pabna is located close to river, it produces large amount of fishes. It has 88 fisheries, 1069 dairies, 714 poultries and 37 hatcheries.

There are 340 industries which include 4 large scale industries, 45 small scale industries and 291 small scale industries. Industries in Pabna include textile industries (mainly cotton and jute mills). Industries such as paper mill, flour mill, agro based industries and pharmaceuticals also contribute to the economy.

3.1.6. Tangail Pourashava

Tangail Pourashava lies in Tangail district in the central region of Bangladesh at a distance of 98 km North West of Dhaka. It is located on the banks of River Louhajang and is one of the important cities of Central Bangladesh. Established in 1887, the Tangail Pourashava is one of the oldest ULBs in the country.

Agriculture is the major occupation of the whole district as close to 50% people are involved in agricultural activities. Its major agricultural products are paddy, potato, jute, sugarcane, sesame, linseed, wheat, mustard seeds, pulses, mangoes, jackfruit, bananas, litchis, pineapples etc. The economy of Tangail is also dependent on manufacturing of Tangail saris, fisheries, dairy products, industries, weaving, poultry farms etc.

3.2. Area, demographic profile and economy

Refer Exhibit 3.3 for a snapshot of demographic indicators of these cities.

Exhibit 3.3 Demographic Indicators

Category	DNCC	NCC	CDR	FDR	PBN	TGL
Population (lakh)	39.57	14.18	1.79	1.21	1.44	1.67
Area (sq. km.)	82.64	72.43	22.90	17.38	27.20	31.99
Population Density (persons/sq. km.)	47,887	19,588	7,817	6,998	5,310	5,233
Slum Population (%)	N.Av.	N.Av.	28%	23%	10%	N.Av.

Source: IMaCS Analysis. DNCC=Dhaka North Municipal Corporation, NCC=Narayanganj Municipal Corporation, CDR=Chandpur Pourashava, FDR=Faridpur Pourashava, PBN=Pabna Pourashava, TGL=Tangail Pourashava, N.Av.= Information not available.

- Being the trade centres of the country, the two city corporations have reported a very high population density as compared to the Pourashavas. Dhaka North City Corporation recorded the highest population and extending over to a larger area.
- Dhaka and Narayanganj are home to diverse industries, factories and service organizations and therefore, have deeper economic base, while Pourashavas are predominantly agricultural, with a few small-scale industries.
- In Chandpur and Faridpur Pourashavas, a significant proportion of population live in slums. Formal information on slums was not available in some of the cities reviewed and limited a detailed comparison on this aspect.

3.3. Operational performance

In this section, we review the institutional capacity and service levels across the six ULBs.

3.3.1. Institutional capacity

As per the Pourashava Act and the City Corporation Act (also discussed in detail in Chapter 2 earlier) the ULBs are responsible for the following functions:

- **Public Health** comprising of water supply, sewerage and sanitation etc.
- **Public Welfare** comprising of public facilities for education, recreation etc.
- **Regulation** including enforcement of building by-laws, dealing with encroachments etc.
- **Public safety** comprising of fire protection, street lighting etc.
- **Public works** viz., management of roads, culverts and drainage systems etc.

In Dhaka and Narayanganj, the water supply and sewerage services are handled under DWASA. Similarly the function of building permission in Dhaka and Narayanganj is with RAJUK. In the Pourashavas, these functions are under the purview of the municipalities.

Refer for staffing details across three ULBs for which information was available. *Exhibit 3.5* provides for function wise staffing details for Faridpur and Pabna Pourashavas.

Exhibit 3.4 Staffing Details: Sanctioned and Actual Posts

S.No.	ULB	Sanctioned Posts (nos.)	Actual Posts (nos.)	Vacancy (%)
1	NCC	683	158	77%
2	FDR	221	148	33%
3	PBN	220	95	57%

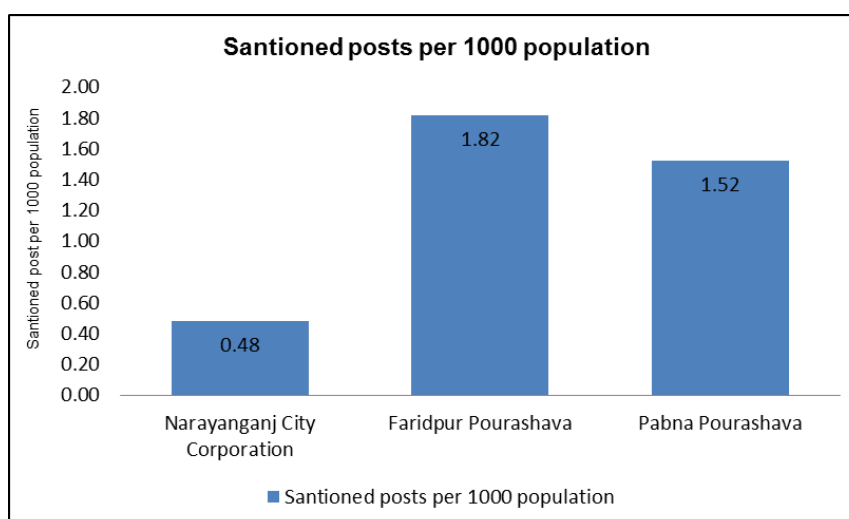
Source: IMaCS Analysis. DNCC=Dhaka North Municipal Corporation, NCC=Narayanganj Municipal Corporation, CDR=Chandpur Pourashava, FDR=Faridpur Pourashava, PBN=Pabna Pourashava, TGL=Tangail Pourashava, N.Av.=Not Available,

Exhibit 3.5 Staffing details: function wise

S.No.	Function	Sanctioned (nos.)		Employed (nos.)		Vacancy (%)	
		FDR	PBN	FDR	PBN	FDR	PBN
1	Administration	79	82	61	41	23%	50%
2	Health & Sanitation	110	33	67	11	39%	67%
3	Public Works, Water & Engineering	32	105	20	43	38%	59%
4	Total	221	220	148	95	33%	57%

Source: IMaCS Analysis. FDR=Faridpur Pourashava PBN=Pabna Pourashava,

Exhibit 3.6 Sanctioned posts per 1000 population



Source: IMaCS Analysis

Observations on institutional capacity are summarised below:

- **Lower sanctioned positions relative to peers:** Narayanganj with sanctioned positions of 0.48 per 1000 population has the lowest staff to population ratio among the six ULBs. This suggests a particularly acute situation, especially when seen in the context of over 77% vacancies that exist. Pabna and Faridpur, also fare poorly on this parameter with a ratio of 1.52 and 1.82 respectively. While not strictly comparable, a review of sanctioned positions review in ULBs in India (in the states of Andhra Pradesh and Karnataka), it is seen that the sanctioned staff ratio is higher than 3 per 1000. Therefore, staffing at ULB level seem significantly low relatively to peers.

- **High level of vacancies:** NCC and Pabna report vacancies for over half of their sanctioned positions. Staffing is limited especially in Health & Sanitation, and Engineering departments.
- **Lack of E-governance cadre:** Although E-Governance is a main reform agenda of developing countries, none of the ULBs appear to have specialist positions for e-governance.

3.3.2. Service Delivery

Exhibit 3.7 highlights the service levels across the six ULBs with major issues and gaps.

Exhibit 3.7 Service Levels –Key issues and gaps

S.No.	Name of the Indicator	DNCC [#]	NCC [#]	CDR	FDR	PBN	TGL	Issues and Gaps
Water Supply								
1	Coverage (%)	87%	87%	65%	55%	86%	33%	Poor population coverage with intermittent supply
2	Per Capita Consumption (LPCD)	123	123	35.87	71.97	N.Av.	26.88	Very low per capita supply, against a standard norm of 140 lpcd
Sewerage, Sanitation and Storm Water Drainage								
1	UGD Network (Yes/No)	Yes	No	No	No	No	No	No sewerage system in ULBs except partial coverage in DNCC (30% of area)
2	Storm water drains coverage	90%	35%	44%	40%	N.Av.	55%	Significant gap in drainage coverage, which should be at least 100% of road length
Solid Waste Management								
1	Efficiency of collection of MSW	60%	86%	100%	39%	68%	70%	SWM collection has been good in Chandpur and NCC while FDR very poor facilities
Roads and Street lights								
1	Road Length	1338	565	182	226.4	201	352.5	Most of the corporation roads are single lane earthen roads. Street lights reported seems adequate but can be switched over to energy efficient lights
2	Road length per sq. km.	16.20	7.85	7.95	13.03	7.40	11.02	
3	Street lights spacing (metres)	N.Av.	78	36.4	28.84	25	60.78	

Source: IMaCS Analysis. DNCC=Dhaka North Municipal Corporation, NCC=Narayanganj Municipal Corporation, CDR=Chandpur Pourashava, FDR=Faridpur Pourashava, PBN=Pabna Pourashava, TGL=Tangail Pourashava, N.Av.=Not Available, N.A.=Not Applicable. #: DWASA caters to the DNCC and NCC area, specific data points aren't for these ULBs

Observations on service delivery in the cities reviewed are summarised below:

- **Water supply:** The existing service levels for water supply in the city are inadequate in spite of presence of adjoining water bodies in most of the ULBs. The major sources of water supply are the bore wells and rivers. The supply of water stands at a very low number, with lowest in Tangail at around 27 LPCD, against a standard norm of 140 LPCD. Less than 75% of the population in the three Pourashavas (except Dhaka, Narayanganj and Pabna) have access to piped water supply and a significant number of people continue to depend on ground water sources including bore wells for water supply.
- **Sewerage, Sanitation and Storm Water Drainage:** The cities do not have any sewerage network. Only DNCC has been partially covered (approximately 30%) by a sewerage network. In the absence of fully functional comprehensive sewage system in the city till date, the households mostly depend on septic tanks and soak pits for disposal of sewerage. Storm Water Drainage network is also very poor in the ULBs, while it should

cover at least 100% of the total road length of the city. Waste water stagnation is noticed in many places resulting in breeding of mosquitoes and flies resulting in insanitary conditions in many of the ULBs.

- **Solid Waste Management:** Chandpur and NCC are reported to have performed well in terms of solid waste collection while Faridpur stands the lowest position. There is a need for strengthening capture/reporting of baseline service levels across all sectors to enable a bottom-up aggregation of service levels and reflecting the same in computation of actual performance on these indicators.
- **Roads and Street Lights:** The total length of road network is highlighted in Exhibit 3.7. Approximately 7-16% of the total area under ULBs lies under road network, which is very less against the standard norm of 15-20%. Also, most of the roads are single lane resulting in traffic jams and congestion. Faridpur and Tangail have a significant proportion of earthen roads in their total road network. Street lights are not very well placed and there is scope for energy efficient lighting.

3.4. Financial Performance

3.4.1. Financial accounting and audit

Key features of ULBs' financial management and accounting system are summarised below:

- **Cash-Based System for preparation of financial statements:** ULBs follow a cash based system for preparation of accounting statements. The Accounts are prepared following GoB standards. Budgets are also prepared in the similar formats.
- **Budget preparation:** Each of the ULBs prepare **budget**, before the commencement of each financial year. The Municipal Acts has provision detailing the budget preparation. However, in actual the budget preparation is merely become only compliance exercise and ULB do not take it seriously. The huge variance reported between the actual accounts and budget estimates clearly undermines the importance of budget preparation exercise. Ideally, the budget shall be prepared using previous year's analysis as it is an implementation plan for any ULB for that particular financial year.
- **Audit process:** Audits of ULBs' accounts are typically conducted on a regular basis by the office of the Comptroller and Auditor General (CAG), GOB. Additionally, The Director of Foreign Aided Projects Audit under CAG also conducts audit of projects. It is reported that ULBs in Bangladesh are regularly getting their accounts audited well in time.

3.4.2. Financial Performance: Revenue Account

The analysis of financial performance has been somewhat constrained by the limitations on data availability and granularity of information obtained specifically on three aspects:

1. **Nature of Grants:** There is little clarity on the nature of grants received, as all these Grants have been shown as receipts under the Development Account. For the purpose of analysis these Grants have been treated as capital in nature and reflected in Capital Account, although one is not certain even after discussions at the local level.

2. **Non-availability of Financial Information:** For DNCC and NCC, financial information wasn't available for 2011-12, and only information for FY 2012-13 to FY 2015-16 was analysed in these two ULBs.
3. **Clarity on budget heads:** There were certain items, the nature of which couldn't be ascertained, such items are included in the analysis as extraordinary items to facilitate comparison across the ULBs.

A large part of our recommendations contained in chapter 4 relate to actions necessary to correct this situation through a targeted and structured reforms aimed at improving financial management and accounting standards as well as improving the information dissemination and disclosure protocols at local levels.

Nevertheless there are some fairly useful observations that emerge from the review of financial performance, which are summarised below. Refer to the summary tables contained in Exhibit 3.8 and Exhibit 3.9, providing a snapshot view of the Income-Expenditure on the Revenue Account and financial ratios of the selected cities respectively.

Exhibit 3.8 Revenue Account – Summary

Revenue Account BDT Million	FY 2014-15 (Actuals)					
	DNCC	NCC	CDR	FDR	PBN	TGL
INCOME						
Grant Income	0.0	8.0	0.3	2.6	0.2	0.2
Own Source Revenue	3715.8	329.4	197.5	152.1	73.4	88.0
Tax Revenue	2673.4	184.9	101.6	43.6	35.0	43.1
<i>Land and Residence Tax</i>	<i>1858.6</i>	<i>54.7</i>	<i>11.2</i>	<i>7.9</i>	<i>5.7</i>	<i>8.7</i>
<i>Fixed Asset Transfer Tax</i>	<i>763.3</i>	<i>85.5</i>	<i>35.0</i>	<i>19.6</i>	<i>15.9</i>	<i>29.0</i>
<i>Occupation / Business Tax</i>	<i>0.0</i>	<i>22.5</i>	<i>5.0</i>	<i>4.5</i>	<i>4.0</i>	<i>4.2</i>
<i>Water Tax</i>	<i>0.0</i>	<i>0.0</i>	<i>47.0</i>	<i>10.2</i>	<i>7.9</i>	<i>0.0</i>
<i>Transportation Tax</i>	<i>0.0</i>	<i>20.8</i>	<i>2.0</i>	<i>0.7</i>	<i>0.0</i>	<i>0.0</i>
<i>Advertisement Tax</i>	<i>51.5</i>	<i>1.2</i>	<i>1.0</i>	<i>0.4</i>	<i>0.7</i>	<i>0.7</i>
<i>Other Taxes</i>	<i>0.0</i>	<i>0.1</i>	<i>0.4</i>	<i>0.4</i>	<i>0.8</i>	<i>0.4</i>
Non Tax Revenue	1042.3	144.5	95.9	108.5	38.4	44.9
<i>Rental Income</i>	<i>0.0</i>	<i>9.9</i>	<i>11.4</i>	<i>52.4</i>	<i>7.1</i>	<i>9.7</i>
<i>License and Fees</i>	<i>525.4</i>	<i>26.0</i>	<i>60.9</i>	<i>10.1</i>	<i>18.4</i>	<i>17.1</i>
<i>Rates</i>	<i>0.0</i>	<i>21.8</i>	<i>15.9</i>	<i>10.8</i>	<i>6.7</i>	<i>12.0</i>
<i>Other Income from Water</i>	<i>0.0</i>	<i>0.0</i>	<i>0.0</i>	<i>22.1</i>	<i>0.0</i>	<i>0.0</i>
<i>Others</i>	<i>517.0</i>	<i>86.8</i>	<i>7.7</i>	<i>13.1</i>	<i>6.1</i>	<i>6.0</i>
SUB-TOTAL	3715.8	337.4	197.8	154.7	73.6	88.2
EXPENDITURE						
Salaries/ Wages & Allowances	813.8	81.3	97.7	60.6	43.7	18.2
Administrative Expenses	245.8	29.2	18.5	14.3	11.7	11.5
O&M Expenditure	692.0	126.5	34.3	44.8	1.7	155.3
Repayment of Loans	0.0	0.0	2.7	0.0	0.0	1.0
Other Miscellaneous Expenditure	17.4	372.7	16.6	16.6	2.7	40.0
Extraordinary Expenses	0	356.6	4	5	0	30.2
SUB-TOTAL	1769.0	966.3	173.8	141.3	59.8	256.3
REVENUE SURPLUS/DEFICIT	1946.7	-628.9	24.0	13.4	13.8	-168.1

Source: iMaCS Analysis. DNCC=Dhaka North Municipal Corporation, NCC=Narayanganj Municipal Corporation, CDR=Chandpur Pourashava, FDR=Faridpur Pourashava, PBN=Pabna Pourashava, TGL=Tangail Pourashava, N.Av.=Not Available, #: Components of Tax Revenues and Non-Tax Revenues of DNCC have been estimated on the basis of averages of the budgeted data provided.

Exhibit 3.9 Financial Performance – Key Ratios

Key Finances and Ratios		DNCC	NCC	CDR	FDR	PBN	TGL
Revenue Growth	CAGR %	42%	-4%	5%	-4%	7%	-4%
Revenue Income per capita [avg]	BDT	674	258	1018	1252	481	696
Revenue Surplus/Deficit per capita [avg]	BDT	280	-20	154	235	88	-87
Tax receipts/Own sources revenue income [avg]	%	75%	57%	46%	30%	46%	39%
Non-tax receipts/ Own sources revenue [avg]	%	25%	43%	54%	70%	54%	61%
Operating Ratio - RE/RI [avg]	%	61%	77%	82%	81%	82%	116%
Revenue Expenditure per capita [avg]	BDT	395	271	866	1031	394	783
O&M Expenditure per capita [avg]	BDT	151	23	122.35	305	28	396
Capital expenditure per capita [avg]	BDT	663	345	827	996	484	1532
Collection efficiency - Tax [FY 16]	%	N.Av.	70%	97%	N.Av.	87%	76%
Existing debt per capita [FY 16]	BDT	N.Av.	7.03	42.21	N.Av.	N.Av.	22.87
Debt to Revenue Ratio	%	N.Av.	3%	4%	N.Av.	N.Av.	3%

Source: iMaCS Analysis. DNCC=Dhaka North Municipal Corporation, NCC=Narayanganj Municipal Corporation, CDR=Chandpur Pourashava, FDR=Faridpur Pourashava, PBN=Pabna Pourashava, TGL=Tangail Pourashava, N.Av.=Not Available, avg=Average

As can be observed from the Exhibits above,

- Revenue Income, growth and composition:** Except for DNCC which has seen its revenue income grow at a CAGR of 42% during the review period, other ULBs report marginal to negative growth in revenue during this period. Revenues of NCC, FDR and TGL have actually fallen during this period. Land & Residence Tax and Fixed Asset Transfer Tax are the main revenue heads along with License and Fees income.
- Revenue Income per capita:** Although DNCC ranks first among the cities covered in terms of revenue income, it is noted that smaller cities (Pourashavas) like Chandpur and Faridpur have better per capita income, at BDT 1018 and BDT 1252 respectively. In per capita terms, DNCC actually fares poorly which is a contrarian trend. In our analysis of cities in India, we have generally found that larger cities tend to also have a higher revenue per capita given that their relatively higher economic base and potential.
- Expenditure per capita and Operating ratio:** In per capita terms again, Revenue Expenditure, O&M Expenditure and Capital Expenditure are lower in the City Corporations, while Pourashavas like Chandpur, Faridpur and Tangail show a relatively higher expenditure per capita. So there is again no clear trend emerging among the cities with respect to expenditure on per capita terms. Overall both revenue income and revenue expenditure in per capita terms are significantly lower than peer Indian cities.
- Collection efficiency:** Among the cities that provided information on Tax Collection Efficiency, Chandpur had the best tax collection efficiency at 97% followed by Pabna at 87% and Tangail at 76%. However revenue income levels are low and there is a need to ensure that the tax collection efficiency remains high as efforts to raise revenue demand through better tax administration and judicious / periodic rate increases are effected.
- Operating ratio, Debt and Debt to revenue ratio:** Operating ratio for DNCC is the lowest while Tangail and Narayanganj report a revenue deficit. Debt outstanding is limited. As one would expect, Debt outstanding is negligible as observed in the Debt to Revenue ratio of between 3% and 4% in Narayanganj, Pabna and Tangail.

4. Credit rating framework

4.1. Rating framework: overview

As explained in chapter 3, there are a few gaps in existing system of financial reporting and financial performance that need to be factored while designing a credit rating framework. Accordingly, we have developed the rating framework taking into account some of these inherent gaps. We see this framework as a starting point in the process of moving towards improvements in financial and operational information management and disclosure by the ULBs. As the ULBs get down to implement the various actions and recommendations identified in chapter 4, we believe that the framework can be further strengthened, based on a review of the actions implemented in a 2-3 year timeframe.

In designing the framework, we have developed a framework with factors, criteria, weightages to arrive at a score on a 0-100 point scale. The framework has been designed taking into account the limitations highlighted in chapter 3 and so as to facilitate its use for credit assessment of ULBs. We have applied this scoring framework on the six ULBs studied as part of this exercise to illustrate scoring and interpretation of this framework. It is to be noted that, this is only an initial framework to initiate tracking the performance of ULBs, given the negligible history of market borrowings. As ULBs improve their financial and operating strength and begin accessing borrowings, the framework may need to be evolved to ensure that the factors and criteria are designed to reflect credit history and strength more closely.

4.1.1. Factors and description

Exhibit 4.1 provides the factors used in the rating framework. In arriving at these, we have taken into account and adapted the dimensions and criteria typically used by rating agencies for credit rating (refer *Annexure IV* for factors used by select rating agencies).

Exhibit 4.1 Rating framework: Factors used



4.2. Factor-wise criteria and scoring approach adopted

The parameters to be measured under each of the five factors identified above, the rationale for their use and scoring approach are described below. The scoring framework is then used to compute a consolidated score (on a scale of 0-100) and seeks to provide a rating score of the ULB concerned. Refer Annexure V for list of factor wise Credit Rating Criteria.

4.2.1. Factor 1 Policy and Institutional framework

This Factor reflects the legal, administrative and institutional framework and is provided a weightage of 20% in the framework. This index measures the extent of functions, functionaries of each ULB and their administrative setup. It captures the provisions under municipal legislation, and institutional structure of ULBs. The criteria included covers functions devolved to ULBs, division of responsibilities and their delegation, powers of taxation and levying of user charges, tariff settings, public disclosures, billing and collection mechanism with management of arrears etc. Refer *Exhibit 4.2* for the criteria, rationale and scoring framework for Factor 1 Policy and Institutional framework.

Exhibit 4.2 Factor 1: Policy and institutional framework – criteria and scoring

S. No.	Criteria	Description	Rationale	Suggested scoring basis
i	Well defined functions and functionary	Organizational structure and functional domain	Enable investors to understand structure of ULB and its functions	High - An organogram of ULB available with well-defined structure of departments and clear on the staffing, Moderate - Organogram of ULB is available with well-defined structures of departments but not clear on staffing, Low - Organogram has no clear structure of departments and staffing
ii	Democratic Governance	Presence of elected government	Reflects citizen participation	High - Elected government present, Low - No elected government
iii	Powers of taxation and levying user charges	Powers of taxation and levying user charges in municipal act	Reflects power of ULB to introduce/raise tax revenue	High - ULB has power to levy/rationalise taxes on their own, Low - ULB has power to levy/rationalise taxes with prior approval of Government
iv	Transparency in operations and links with public and other stakeholders	Transparent procurement process and MIS reporting for public viewing	Commitment to include public involvement in decision making	High - E-procurement, Moderate - Advertisement through website but paper based submission, Low - Paper based procurement process
v	Synergising with other schemes to channelize funds through convergence	Utilization rate of funds from centrally sponsored schemes	Reflects Project Implementation ability	High - Approved and utilization of funds through convergence of schemes and information kept in computerised format for regular reporting the expenditure and utilisation, Moderate - Approved and utilization of funds through convergence of

S. No.	Criteria	Description	Rationale	Suggested scoring basis
				schemes but information keeping is not regular but maintained annually in register, Low - No utilization of funds through convergence of schemes
vi	Disclosures of Citizen charter, Annual Budgets, Service levels, etc. made by ULBs	Availability of documents for public viewing/ uploading on website. (1) Citizen Charter, (2) Annual Budget/ Account statement, (3) Service levels uploaded on website and (4) Project related information with Periodic updation	Commitment towards transparency and citizen service delivery	High - All 4 documents are available through public platforms, Moderate - At least 2 documents are available with periodic updation, Low - Less than 2 documents are available or more with no periodic updation
vii	Billing and collection mechanisms with management of arrears in collection	System of billing and procedures for collection	Measures tax administration ability	High - Computerised Demand and collection mechanism with periodic updates, Moderate - Computerised Demand and collection mechanism with no periodic updates, Low - No Computerised demand/ collection statements

4.2.2. Factor 2 Economic base and potential

This parameter accounts for 10% of the total share of credit rating framework and measures the economic base of the ULBs to get an idea for the future growth potential. The dimensions covered in the index include population growth rate of the ULB, economic profile, growth rate in per capita income and diversity in tax base and tax structure. Refer Exhibit 4.3 for the criteria, rationale and scoring framework for Factor 2 Economic base and potential.

Exhibit 4.3 Factor 2: Economic base and potential – criteria and scoring

S. No.	Criteria	Description	Rationale	Suggested scoring basis
i	Population of ULB	Urban population as per last census	Reflects future growth potential	>=10 lacs-High, 2-10 lacs-Moderate, < 2 lacs-Low
ii	GDP growth rate of the ULB	GDP growth rate of the last 5 years	Reflects future growth potential	>=120% of the National GDP growth rate-High, 100-120% of the National GDP growth rate - Moderate, <National GDP growth rate - Low
iii	Per capita income	Average per capita income in last 5 years	Reflects future growth potential	>=120% of the average National per capita income of the last 5 years - High, 100--120% of the average National per capita income of the last 5 years- Moderate, <average National per capita income of the last 5 years - Low

4.2.3. Factor 3 Financial strength

This parameter measures the financial performance and financial position of each ULB and accounts for a significant share of the total weightage i.e. 40%. The Financial Performance Index captures the financial position and performance of the ULB by evaluating a set of key financial ratios. The Financial Performance Index seeks to assess the impact of the key operating and governance decisions on the financial performance of the ULB. The dimensions covered include accounting system, budgets and income- expenditure statements, auditing, financial investment plans, tax base and credit enhancement measures. Refer Exhibit 4.4 for the criteria, rationale and scoring framework for Factor 3 Financial strength.

Exhibit 4.4 Factor 3: Financial strength

S. No.	Criteria	Description	Rationale	Suggested scoring basis
Systems & Powers				
i	System of accounting	Adherence to accounting procedures laid by the government	Standardization of financial information lowers ratings costs and ease comparison	High-Double Entry and Accrual Basis , Low-Single Entry and Cash Basis
ii	Financial Reporting	Availability of Budgets and Income & Expenditure statements	Essential for an ongoing picture of municipal finances & financial management	High-Budgets, Income and Expenditure Statement, Balance Sheet and Asset Registers, Moderate-Budgets, Income and Expenditure Statement and Asset Registers, Low-Only budgets/Income and Expenditure Statement
iii	Status of Audit of Annual Accounts	Periodic auditing of accounts	Reflects adherence to compliance	High-Audited within 6 months of account closure, Moderate- Audited within 18 months of account closure, Low-Audited after 18 months
iv	Financial Investment Plan (FIP) for next 5 year	Details on investment planned and phasing	Reflects potential growth in service levels and revenues	High - FIP prepared and used to prepare the annual budgets and monitored periodically, Moderate - FIP prepared and used to prepare the annual budgets but not monitored periodically, Low - No FIP prepared
v	Tax base and related trends	Timeliness of revision in rates of taxes and user charges etc.	Reflects potential growth in revenues	High-Revised at earliest stipulated time frame, Moderate-Revised once within two periods, Low-Not updated in the last two periods
vi	Credit enhancement measures, if any	Information on commercial borrowings/ involvement of private developers in service delivery	Reflects project management ability	High - If external borrowing done by ULB using Municipal bonds, Moderate - If external borrowing done by ULB using

S. No.	Criteria	Description	Rationale	Suggested scoring basis
				commercial loan from FIIs/ Involved pvt. developer for investing in Infrastructure Low - If no external borrowings done by ULB from FIIs/ Not involved pvt. developer for investing in Infrastructure
Ratios				
i	Share of own revenues sources in total receipts	Own revenue receipts/total revenue receipts	Reflects standalone position of the ULB	>=90% - High, 75-90% - Moderate, <75% - Low
ii	Share of tax revenue to total own revenue sources	Total tax revenues/Own sources revenues	Reflects taxing avenues for the ULB	>=60% - High, 40-60% - Moderate, <40% - Low
iii	Collection efficiency of tax resources	Tax collected/ Demand raised	Reflects billing and collection abilities	>=90% - High, 70-90% - Moderate, <70% - Low
iv	Extent of rule based transfers from the Central Government	Rule-based revenue receipts/total revenue receipts	Reflects certainty and stability in transfers	>=20% of revenue income- High, 10-20% of revenue income-Moderate, <10% of revenue income-Low
v	Cost recovery of key services	User charges collected/cost of services (water supply/sewerage/SWM)	Reflects profitability from key services	>=85% - High, 60-85% - Moderate, <60% - Low
vi	Per Capita O&M Expenditure	O&M Expenditure/ Population	Reflects ULBs capacity to carryout O&M expense for service provision	>=BDT 1400-High, 1000-1400 - Moderate, <1000-Low
vii	Trends in surplus/deficit	Surplus/deficit over the period	Reflects profitability potential	Based on the surplus as reported in the last 5 years; if 5-High, 3-5 years-Moderate, <3 years-Low
vii	Operating Ratio	Revenue expenditure/revenue receipts	Reflects profitability potential	<=0.75 - High, 0.75-0.95 - Moderate, >0.75 - Low
ix	Debt-Service Coverage Ratio (DSCR)	Net Operating Income / Total Debt Service	Reflects potential debt service capability	>=1.50 - High, 1.00-1.50 - Moderate, <1.00 - Low

4.2.4. Factor 4 Operating performance

This parameter measures the operating performance of different service level indicators and their efficiency in each ULB accounting for 10% of the total share of the credit rating framework. The Operating Performance Index captures the key operational parameters critical for a municipal body such as water supply & sewerage coverage, non-revenue water, door to door collection of municipal solid waste, treatment of solid waste, road adequacy and street light adequacy.

Refer Exhibit 4.5 for the criteria, rationale and scoring framework for Factor 4 Operating performance

Exhibit 4.5 Factor 4: Operating performance – criteria and scoring

S. No.	Criteria	Description	Rationale	Suggested scoring basis
i	Coverage water supply	Percentage of Households connected to the piped water supply	Reflects ULB's future financial obligations towards service delivery	>=80% - High, 65-80% - Moderate, <=65% - Low
ii	Non-Revenue Water (NRW)	Percentage of non-revenue water	Reflects ULB's future financial obligations towards service delivery	<=20% - High, 20-40% - Moderate, >40% - Low
iii	Coverage Sewerage System	Percentage of Households connected to the sewerage system	Reflects ULB's future financial obligations towards service delivery	>=75% - High, 55-75% - Moderate, <=55% - Low
iv	MSW Door-to-door collection	Percentage of HHS covered by door to door collection	Reflects ULB's future financial obligations towards service delivery	>=75% - High, 55-75% - Moderate, <=55% - Low
v	Treatment of solid waste collected	Percentage of solid waste treated after collection	Reflects ULB's future financial obligations towards service delivery	>=75% - High, 55-75% - Moderate, <=55% - Low
vi	Road adequacy	Road length per sq. km.	Reflects ULB's future financial obligations towards service delivery	>=20 - High, 10-20 - Moderate, <=10 - Low
vii	Street lights adequacy	Average distance between two poles	Reflects ULB's future financial obligations towards service delivery	25-35 m - High, 35-45 m - Moderate, Above 45 m - Low

4.2.5. Factor 5 Managerial Capacity

This parameter measures the managerial capacity of the ULBs and accounts for 20% of the total share of the credit rating framework. This index covers the analysis of track record of ULBs in executing projects within the stipulated cost and time, manpower adequacy, MIS and other IT integrations, stability of top leadership.

Refer *Exhibit 4.6* for the criteria, rationale and scoring framework for Factor 5 Managerial efficiency.

Exhibit 4.6 Factor 5: Managerial efficiency – criteria and scoring

S. No.	Criteria	Description	Rationale	Suggested scoring basis
i	Track record in executing projects within stipulated cost and time	Availability of project utilising certificates and project implementation register	Reflects project management ability	High - Within stipulated time and cost, Moderate - Within 12 months of stipulated time and 120% cost, Low - After 12 months of stipulated time and above 120% cost
ii	Manpower Adequacy	Vacant posts/ Sanctioned posts	Reflects Service delivery capacity of ULB	<=10% - High, 10-30% - Moderate, >30% - Low
iii	MIS and other IT integrations	Availability of periodic MIS reports on financial information and service levels	Enable information availability for comparative analysis	High - Server linked MIS for projects, staff, accounts and service levels, Moderate - Computerised maintenance of records for projects, staff, accounts and service levels, Low - Absence of computerised system

S. No.	Criteria	Description	Rationale	Suggested scoring basis
iv	Stability of top leadership	Avg tenure of Commissioner/equivalent	Stable but not stagnant leadership mean projects are more likely to continue uninterrupted, plans not change as frequently.	>=2.5 years-High, 18 months to 30 months - Moderate, <18 months - Low

4.3. Weightages for each factor

Refer Exhibit 4.7 for suggested weightage of factors in the rating framework. It may be observed that weightage for financial performance is kept at 40% and other factors cumulatively at 60% to start with. The weightage for financial performance can be increased from 40% to 60% as financial systems and performance improves in the medium to long term.

Exhibit 4.7 Rating framework: Factor-wise weightages

Factor	Suggested weightage
Policy and Institutional framework	20%
Economic base and potential	10%
Financial strength	40%
Operating performance	10%
Management efficiency	20%

4.4. Scoring scale

The rating score denotes the historical and current Performance assessment of the ULB and is a number typically in the range 25-100. An initial interpretation of the score may be as given in *Exhibit 4.8*.

Exhibit 4.8 Scale and interpretation

S. No.	Range of score	Interpretation
1	85 – 100	Excellent - Excellent operational performance and financial position;
2	70 – 84	Good - Strong operational performance and financial position;
3	55 – 69	Moderate - Average operational performance and financial position;
4	35 – 54	Weak – Below average operational; performance and financial position
5	25 – 34	Poor - Poor operational performance and financial position;

We have suggested a numeric rating scale for initial scoring. As the data and information on the above framework becomes available, rating agencies may converge these scores with their own credit rating scales in the medium term.

4.5. Application of framework and interpretation

The rating framework has been applied on the 6 ULBs that were reviewed as part of the diagnostic phase. The selected ULBs were analysed on the five broad parameters and various sub-parameters within each category.

Both qualitative and quantitative information was mapped and the sub-parameters were assigned a ranking (high, moderate and low) keeping in the view the stated basis of evaluation. The final scoring, thus arrived is given in Exhibit 4-9 *Credit Rating Framework -*

Test Run. The detailed information on rating criteria and grading & computation sheets are enclosed in Annexure VI (a) and Annexure VI (b) respectively.

Exhibit 4-9 Credit Rating Framework - Test Run

Parameter	DNCC	NCC	CDR	FDR	PBN	TGL
Policy and Institutional framework	17.14	17.14	14.29	14.29	14.29	12.86
Economic Base and Potential	3.33	3.33	1.11	1.11	1.11	1.11
Financial strength	22.22	21.67	27.22	22.22	25.56	18.89
Operating performance	4.29	3.81	3.81	4.29	4.29	2.86
Managerial Efficiency	8.33	8.33	8.33	8.33	8.33	8.33
Total Score	55.32	54.29	54.76	50.24	53.57	44.05

Source: IMaCS Analysis. DNCC=Dhaka North Municipal Corporation, NCC=Narayanganj Municipal Corporation, CDR=Chandpur Pourashava, FDR=Faridpur Pourashava, PBN=Pabna Pourashava, TGL=Tangail Pourashava

As can be seen from the above table,

- North Dhaka emerges as the city with highest score among the six cities with a score of 55.32 followed by Chandpur with the score of 54.76 while Tangail has the lowest score of 44. Other cities are clustered in scores between 50 and 54.3.
- The higher scores of North Dhaka are mainly on account of relatively better scores on Policy and Institutional Framework and Economic Potential (High population base) which accounts for 20% and 10% weightages respectively, while Chandpur scored highest on Financial strength which has a high weightage of 40% in the scoring framework. On operating performance, Faridpur and Pabna score relatively better than even Chandpur.
- It is to be noted that the relative scores of the cities should not be interpreted as a ranking. Rather the absolute scores need to be seen against the maximum in terms of the gaps that need to be covered for the cities towards becoming more credit-worthy.

As the borrowing capacity of ULBs in Bangladesh is limited, to start with Government of Bangladesh may use the framework to assess the cities while providing for loans and funding through its institutions and agencies including the BMDF. As the ULBs and Government of Bangladesh embark on reforms, it would be useful to apply this framework on a wider set of ULBs and use the framework to measure the progress made temporally. An independent scoring of a wider cross section of cities periodically (say every 1-2 years) will also help in measuring progress made with respect implementation of reforms suggested in chapter 3.

5. Roadmap for improving credit worthiness

5.1. Existing limitations and Thrust areas for actions

Based on a review of the urban institutional, operational and financial scenario in Bangladesh's urban sector and the outcomes of applying the credit scoring framework in the six ULBs, there are three critical limitations that the National nodal apparatus and ULBs in Bangladesh need to address to achieve threshold-level credit capacity for municipal borrowings and for tapping external finance:

1. **Weakly developed systems for Accounting, Financial management and information disclosure:** ULBs in Bangladesh follow a cash-based system of accounting. There is little clarity on the difference between revenue and capital receipts as Grants received from national departments are accounted for, under the Development Fund and the scope of utilisation of these proceeds is not clear. Further there is very little analysis of aspects like Budget vs actuals or information disclosure beyond the information that is reported under the published accounts. External investors looking to extend loans would expect the borrowers in this case, the Urban Local Bodies to have effective financial management and accounting system, with requisite accounting controls, timely audits and capacity to disclose quality information on a regular basis.
2. **Narrow revenue base coupled with inadequate own revenues and uncertain grant receipts:** As reflected in our observations on financial performance in chapter 3, ULBs in Bangladesh not only have a narrow revenue base relative to their scope of functions, but also are observed to have very low and buoyancy of revenue streams (5 of the 6 ULBs reviewed have shown a revenue growth of less than 6% annually; this is low especially when seen in the context of an already low revenue base). Based on our deliberations with ULB officials and a review of the financial accounts, we note that investment in capital projects is extremely reliant on grants from nodal departments at the national level. A key challenge we see is that most of these Grant Transfers appear to be in the nature of scheme-based transfers and do not offer visibility.
3. **Weak capacity to deliver services:** We have observed that on the employees to population metric, most ULBs seem to be inadequately staffed and also note that there are a fairly high level of vacancies even vis-à-vis the existing level of sanctions. This reflects in fairly low levels of recurring expenditure in per capita terms and suggests the prevalence of the vicious cycle leading to poor service delivery (low investment → poor services → inability to charge → inability to invest) in the cities.

Addressing these limitations is crucial in enabling transformation of ULBs to be in a position to access capital markets and external financing. Our recommendations on the thrust areas for action emerge from these gaps we see in the urban sector in Bangladesh and are organised around three thematic areas namely, **(1) Effective financial management, accounting and information disclosure** (with requisite accounting controls, timely audits and capacity to disclose quality information), **(2) Improving Revenue visibility and buoyancy** (to enable create a stable and buoyant revenue surplus to honour and meet their debt obligations), and **(3) Capacity building for effective service delivery**.

5.2. ACTION AREA 1: Effective accounting and information disclosure

External investors are particularly demanding with respect to accounting discipline, quality and credibility of reporting of financial information. Actions necessary to improve financial discipline and disclosure are listed below:

5.2.1. Shift to Accrual-based accounting system

The implementation of accounting reform is a critical pre-requisite towards improving credit worthiness at the ULB level and is crucial to enable improved (i) asset-liability traceability and management, (ii) expenditure management and (iii) revenue stability and buoyancy. It helps overcome inherent limitations of cash-based accounting systems including lack of cognisance to timing of cash flow events, weak distinction between revenue and capital items and inadequate rigor in tracking and managing assets and liabilities.

At present, ULBs across Bangladesh are following cash method of accounting and system of recording following GOB standards. However, there is need for LGED to initiate a programmatic effort to enable ULBs to adopt accrual-based accounting and to implement the same in a standardised manner to enable easy comparison and harmonized development of accounting and information management. A possible roadmap for the same is suggested below:

1. Prepare a National-level Municipal Accounting Manual incorporating accrual accounting principles, with a standardised identification of budget heads/ accounting codes.
2. Launch a programmatic capacity building program to get this Accounting Manual adapted in the ULBs in a phased manner. To keep the implementation effort manageable, the initiative could be launched in a phased manner with initial implementation in say about 10 cities (select larger corporations and a few Pourshavas) before a full roll-out. This will require setting up a nodal implementation unit possibly under the LGED. The implementation may require engaging a leading international Accounting firm to steer the implementation while training a few local accounting firms to support ULBs with audits once the implementation is done.
3. Enable ULB-level capacity building by a) inducting staff at the ULB level with experience and qualifications in accounting/finance and b) creating documentation in local language to enable knowledge transfer and sustained adherence to systems thus developed.
4. Make computerisation of accounts an intrinsic part of the implementation process to improve efficiency of administration.

5.2.2. Strengthening of budget preparation process

There is a need for Budget Preparation Manual by LGED at GoB Level to be adopted by all the ULBs in the Country. The key tasks for strengthening of budget preparation are:

- Proper analysis of previous year's budget and accounts is to be carried out by ULBs to avoid huge variance between the Budget Estimate (BE), Revised Estimate (RE) and Actuals of receipts and expenditures. Budget preparation requires cooperation from all the departments of ULB.

- LGED should consider launching Budget preparation software that can be used across all ULBs.
- LGED should develop policies/ rules related to budget implementation and monitoring

5.2.3. Computerization

LGED shall guide ULBs to develop a computerised system for keeping accounting, service levels and project information in digital form. MS excel sheet spread sheets shall be developed for periodic financial information and reporting requirements. In this regard, the LGED may revive their Uniform Financial Management System (UFMS) and MIS system which is presently not in use. It is recommended that all ULBs shall maintain their project implementation information in a standard form to record project expenditure in accordance with agreed project components, disbursement categories and sources of funds.

5.2.4. Timely finalisation and Audit of Accounts

ULBs should be required to finalise financial statements and annual accounts including Budgets, Income and Expenditure Statements, PL and Balance sheet as per the prescribed formats given under the Accounting Manual in timely manner.

The timely finalisations of accounts strengthen the ULB's capacity to plan their expenditure and project execution in better manner. Delay in finalisation of accounts and backlogs in completion of audits are viewed unfavourably by investors, and other stakeholders. It also creates uncertainty and doubts about the veracity of the information put out by the ULB.

Audits of ULBs' accounts are typically conducted on a regular basis by the office of the Comptroller and Auditor General (CAG), GOB. Additionally, the Director of Foreign Aided Projects Audit under CAG also conducts audit of projects. While we understand that ULBs in Bangladesh are regularly getting their accounts audited in time, improving the rigor and standards for the same will help in providing assurance to investors.

5.2.5. Information disclosure

Effective information disclosure allows ULBs to be accountable to various other stakeholders including lenders, credit rating agencies, donors, private contractors and so on. The creation of a robust online platform for disclosure of municipal finances will facilitate easier evaluation of municipalities by lenders and investors. Disclosure on financial performance (Income and Expenditure, Balance sheet and Cash flow statements) and underlying drivers for financial performance (including cost recovery levels, collection efficiency) etc. are critical. Additionally information pertaining to procurement, service-levels, and operational information etc., should also be ideally disclosed. All relevant information should be available for public access on a dynamically updated website maintained by the ULB. The existing provision on under exiting Municipal legislation is presented below.

At present clause no. 93 (3), chapter 2 of Local Government (municipality) Ordinance, 2009 enforce ULBs to share *“a copy of the annual statement of accounts under sub section shall be placed at a conspicuous place in the office of the municipality for public inspection, and all objections or suggestions concerning such accounts received from the public shall be considered by the municipality”*.

It is suggested that the existing municipal legislation be strengthened to bring bring more clarity on disclosure to be done by ULBs. The existing Local Government (municipality) Ordinance, 2009 also require ULBs to disclose the annual accounts for public inspection but does not require disclosing of other information.

5.3. ACTION AREA 2: Revenue buoyancy

City-level financial sustainability is crucial for ULBs to consistently invest in creation of urban infrastructure for seamless delivery of urban services for improved quality of urban living. As discussed in the chapter 3, that ULBs are realising lower revenue income per capita through their existing revenue sources, largely owing to limited revenue sources, inefficient tariffs/ fee structures and poor collection efficiency due to gaps in tax administration.

A key yardstick for assessing and improving financial performance of an ULB is its access and ability to tap own-revenue streams. These typically include Taxes (e.g., Holding Tax, Advertisement Tax etc.), User Charges (for water, sewerage services, SWM door-to-door collection etc.) and other Fees and charges (Trade license fee, Building permissions, Rental income, and Parking fee etc.). A healthy level of own source income, (backed by legislative provisions for periodic revision and enforcement) and consistent good collections (collection efficiency upwards of 90%) are critical for improving credit capacity.

- 1. Taxes:** Holding typically forms an important own revenue stream for ULBs often comprising over 30% of an ULB's revenue income. ULBs also have access to occupation taxes and Advertisement tax. Actual revision is often not effected owing to weak regulatory framework. Further, low coverage, under-assessments, and poor collection efficiency often constrain ULBs from maximizing realization. Administrative improvements, multiple payment modes (online, mobile etc.) and expeditious settlement of arrears are also instrumental in unlocking and improving coverage and revenue realizations.

Exhibit 5.1 Critical areas for revenue improvement

Municipal Taxes and Fees Improvement

1. At least 90% coverage,
2. At least 90% collection
3. Make a policy to, periodically revise property tax, levy charges and other fees
4. Post Demand Collection Book (DCB) of tax details on the website,
5. Achieve full potential of advertisement revenue by making a policy for destination specific potential with dynamic pricing

Implementation steps

- Improve holding tax collection

- Identifying unassessed properties by cross verification with other information sources
- Adoption of GIS based property tax information system
- Introduction of reward & penalty schemes
- Send demand notices to all registered properties and provide alternative payment channels
- Undertake drives for collection of holding arrears
- Introduce one-time settlement scheme for Holding Tax

- Improve Advertisement tax collection

- Amend Regulation related to advertisement tax
- Incorporate features like auto-escalation of advertisement tax by amending regulations
- Streamlining the process of fixation and collection of advertisement taxes
- Identify new locations for augmenting advertisement tax and Generate revenue from Municipal Hoardings
- Undertake drives for collection of Advertisement tax arrears

- Improve Occupation tax collection

- Conduct survey to bring all companies under tax net
- Revision of tax rate every 5 year.

2. **User charges:** User charges are levied against services provided by ULBs. User charges for water supply and sewerage are typically the largest constituents of user charges. User charges for municipal solid waste management are also levied in a few ULBs. ULBs are expected to levy and collect user charges at least to the extent of meeting their O&M cost obligations. However, most ULBs do not achieve 100% O&M cost recovery and the gaps/shortfalls are often met from taxes and other general revenue funds, which in effect ends up reducing the revenue surplus available with ULBs for capital investments and debt servicing. A key deterrent to user charge reform is often poor service levels which make citizens reluctant to pay. Therefore any efforts to improve user charge revenue realization need to be preceded by tangible improvements to service levels. Strong cost-recovery and collection efficiency performance on user charges are typically credit positives. Specific actions towards improving service levels, coverage and realizations (including metering and differentiated tariffs for water supply, levy of user charges for sewerage and solid waste services etc.) tend to improve credit standing of ULBs.

Improvement in levy and collection of user charges

1. Adopt a policy on user charges for individual and institutional assessments in which differential rates are charged for water use while placing safeguards to take protect the vulnerable
2. Make action plan to reduce water losses to less than 20% and publish on the website
3. Separate accounts for user charges,
4. At least 90% billing and collection

3. **Other own source income:** Many ULBs control a large land and building asset pool which tend to be weakly monetized. Inability to maintain assets, weak capacity to modernize and develop these assets, and weak price discovery mechanisms often constrain ULBs from monetizing these assets effectively. Further ULBs also do not adequately monetize land development and transit orientation opportunities by preparing master planning and using land-use improvements. ULBs can potentially seek to maximize their revenue from rental from municipal properties. And under the trade licenses the objective of strategy is to rationalize the fees charged for issuing/ renewal of trade licenses by the Corporation. While undertaking such an exercise, it is important to compare the rates adopted by selected other ULBs. In addition to the existing source of revenues from parking, ULB's should explore other avenues for collecting parking fees while giving priority to reduction of congestion & convenience of citizens.

<p>Improvement steps for Revenue from Municipal Properties, Trade licenses and Parking fee</p> <p>A. Rentals from municipal properties</p> <ol style="list-style-type: none"> Benchmark the rental with market rates <ul style="list-style-type: none"> Conduct a quick survey to benchmark the rental charges in nearby areas and similar locations Develop an objective framework for deriving the rental taking into account the location, structure and age of the property and having an auto-escalation clause Details of the occupancy status along with prescribed rent to be put in public domain including Corporation's website Allocation of shops to be made online Improve the condition of Municipal Properties <ul style="list-style-type: none"> Identify the upgradation requirements of the community halls Upgrade the properties - explore the possibility of appointing a private agency to do the same on Built-Operate-Transfer (BOT) basis. Outsourcing of only O&M of the properties can also be considered Reservations and bookings to be made on-line <p>B. Trade licenses</p> <ol style="list-style-type: none"> Revise and rationalise trade licenses rates Increase scope and coverage of trade licenses Identify trade license defaulters <ul style="list-style-type: none"> Identification of defaulters through cross verification with parallel information sources Conduct physical survey of the shops <p>C. Parking fee</p> <p>Identify new avenues for augmenting parking fees</p> <ul style="list-style-type: none"> Notify parking regulations Levy Institutional parking fees
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5.4. ACTION AREA 3: Strengthening institutional capacity

Significant capacity building measures need to be taken for Municipal officials in order to ensure sustained implementation of the above recommendations. As the primary responsibility shall rest on the staff of revenue, fees and accounts department, the capacity building measures need to be prioritized for the officials of these departments. A summary of Capacity building need is discussed in Exhibit 5.2.

Exhibit 5.2 Critical capacity Building Needs

Area	Actions Needed	Responsibility
Accrual Accounting	GO/Legislation/Modification of Municipal Finance Rules for migrating to double-entry accounting	LGD
	Training of personnel	LGD/ ULBs
	Involve Local Audit firms in implementation	LGD/ ULBs
	Completion of registers and Valuation of assets and liabilities	LGD/ ULBs
E-Governance	Develop a single and integrated ULB information system across all ULBs	LGD/ ULBs
	Basic computer training, like usage of Internet and Office application, has been provided to over 80% of ULB staff.	
	Application training has been offered to specific user departments.	

Area	Actions Needed	Responsibility
Procurement	Implement e-procurement on priority in all ULBs	LGD/ ULBs
	Review Existing Procurement Rules	LGD
Technical / Engineering expertise	Undertake an independent assessment of adequacy of sanctioned posts in terms of numbers and assessment of capabilities / capacity required in ULBs Conduct an assessment of training needs for upgrading capacity of existing officials and develop a comprehensive training program for ULB officials. Implement an institutional framework for recruiting, deployment and training of a dedicated Urban Cadre.	LGD
Project Development / PPP know how	Setup a central PPP Cell and build capacity at City level for Project Development	LGD

6. Credit rating process

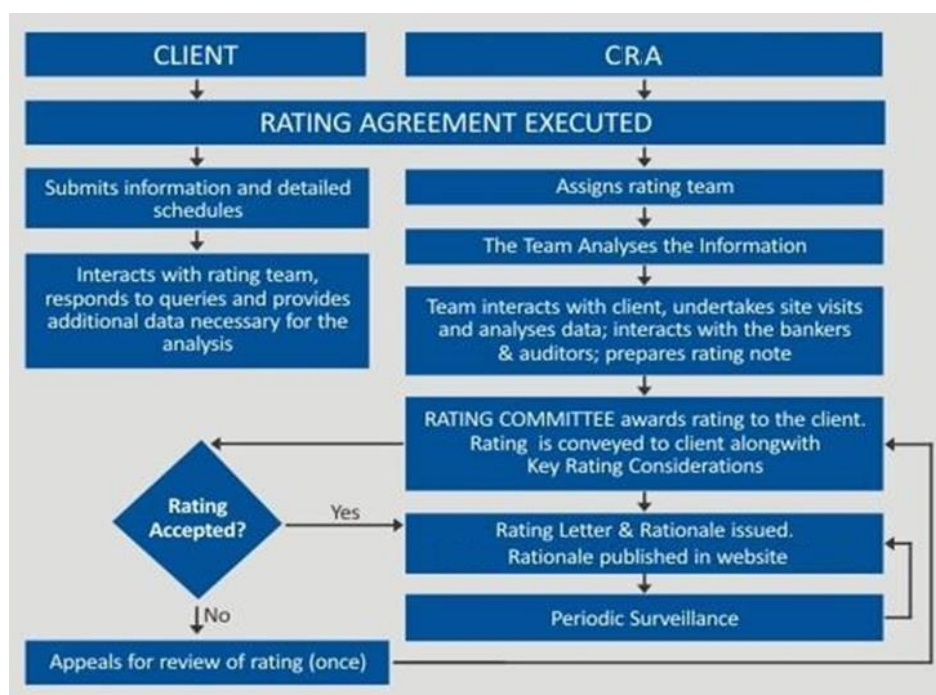
6.1. Rating process: a brief outline

Any bond issuance has to be necessarily rated by a Credit Rating agency before accessing the market. Additionally, the rating agencies shall also undertake regular surveillance of credit profile of issues and review the credit rating on outstanding bonds every year after issuance.

Credit ratings reflect the likelihood of default of the proposed bond and therefore are crucial to pricing of bonds. The rating of a Bond is correlated to the risk premium associated with the bond and hence the required bond yield/ coupon interest of the bond issue and also the eligible investors that may buy the issue. Ratings nomenclature for long-term debt ratings are alphabetical with the best credit quality being typically denoted as “AAA” down to “C” denoting substantial risk and “D” denoting a defaulted security. Refer Annexure V for a summary of frameworks and key indicators identified in municipal bond rating approaches of select rating agencies.

The credit rating process shall commence with the appointment of a rating agency either by the Government of Bangladesh or by the concerned ULB followed by conducting the rating process. If the rating is for the purpose of raising a bond issuance (i.e., Issue rating, as opposed to an Issuer rating which is more diagnostic in nature), during the course of the rating process, discussions with leading merchant bankers, independent bond trustees and legal counsel may be initiated since the rating agency may need to interact with these entities before finalisation of the rating structure and concluding the rating for bond issuance. However, in case sufficient capacity exists within the ULB to interact on these aspects with the rating agency, the same may be conducted in house.

Exhibit 6.1 Typical credit rating process



Source: Rating process as described by CARE, an Indian rating agency.

6.2. Process for credit rating and key considerations

The rating agency will assign a rating to the bonds issued by an ULB, specifically for issuance of municipal bond. The issuer of the bond is typically the ULB, which seeks to deploy the proceeds of the bond issuance to a project executed by it. Rating for municipal bonds will be driven by the following:

- a. The credit quality, diversity and concentration of loans of ULB. The credit quality of the loans is essentially the credit quality of the ULB which are the underlying and eventual obligors
- b. The underlying loan documents that provide for a structured payment mechanism (SPM) envisaged for securing the loan repayment by ULB. These mechanisms typically include (i) interception of any grants of National Government and b) Escrow mechanisms to ring fence ULB cash flows for servicing the underlying loan.
- c. The structure provides for credit enhancements to the bond issue in various forms such as senior-subordinate bond structures, third party guarantees, escrow, and interception mechanisms in aid of the bonds.

6.2.1. Issuer credit quality

Assessment of the credit quality of the borrowing ULB is the starting point. The assessment would be on the lines of credit scoring framework presented in chapter 4 where the ratings provide feedback about the operational and financial profile of ULBs. We note that in Bangladesh, the ULBs are heavily dependent on GoB, their responsibilities (and hence expenditure commitments) flow from legislation passed by the GoB. Ratings for ULBs therefore are heavily influenced by the credit rating/assessment of the national government. An ULB's rating would also be influenced by its standalone strengths as reflected in own revenues and overall revenue balance.

6.2.2. Loan credit quality and mapping to default likelihood

The starting point for the rating would be the rating of the individual ULBs. The rating for the constituent loans, however, could possibly be notched up from this base line in the presence of credit enhancements. These could take the form of interception of state government grants, debt service reserve funds (DSRF), and escrow mechanisms created from ULB/PPP cash flows for securing the loan's repayment. The level of comfort from such mechanisms (which determine the notching of the loan's rating from the base line credit quality of the ULBs/PPPs, if at all) will also depend on the quality of monitoring mechanisms put in place to invoke/administer the credit enhancements (for example, drawing on DSRF or calling on the National Government to intercept the grant as and when required).

Once the Loan is rated, the credit ratings are translated to default likelihood. Rating agencies have mapped their ratings to default rates using historical ratings and default experience. It can be argued that default likelihood and recovery post-default in the municipal sector would be linked to the next higher tier of government, given the resources of the Government (to whom the ULBs are closely tied) and the essential nature of the services provided by ULBs.

Typical pooled bond structures would incorporate tenures ranging from 10 to 15 years. The ULBs would typically create an escrow account, which would be used for repayment of

pooled bond investors. Generally speaking, prepayments are undesirable from an investor viewpoint and issue conditions typically incorporate clauses where ULBs cannot prepay without bond holder consent.

6.3. Illustrative case studies of municipal bond issuances in India

6.3.1. Municipal bonds by Ahmedabad Municipal Corporation India¹

Access to capital markets commenced in 1998, when Ahmedabad Municipal Corporation (AMC), constituted in 1950 under the Bombay Provincial Municipal Corporation Act (BPMC), 1949, issued the first municipal bond in the country without state government guarantee for financing infrastructure projects in the city. The first bond, rated AA (SO) by CRISIL was a public issue underwritten to an extent of 25% and mobilized Rs 1 billion. The innovative credit enhancement measures that were used to prioritize the municipal cash-flows for servicing the bondholders set the trend for evolving such recourse structures for municipal financing in India.

The experience of AMC encouraged several local entities to explore credit ratings as a prelude to accessing the capital markets. Of these entities, only a few managed to secure credit ratings at levels acceptable to investors and smaller sub-set issued municipal bonds. As of 2008, funds mobilized through municipal bonds aggregated to only Rs 12.2 billion despite the large investment gap in this sector.

AMC has mobilized Rs 3.5 billion through four bond issues (1998, 2002, 2004 and 2005). While AMC mobilized resources through a public issue for its first municipal bond issuance, the subsequent three issues have been private placements restricted to institutional investors.

The experience of successfully placing four bond issues has facilitated capacity within AMC staff and established confidence amongst the investor community on AMC's ability to effectively utilize bond proceeds and service bond commitments in a timely manner. Capacity development at AMC has been supported by institution building by the state government to develop state-owned GSFS Capital & Securities Ltd – a wholly owned subsidiary of Gujarat State Financial Services⁴ (GSFS), as an intermediary to facilitate capital market access by state government entities. While the first issue was lead-managed by Infrastructure Leasing & Financial Services Ltd. (IL&FS), GSFS Capital & Securities Ltd has been the lead manager among others for the subsequent bond issues of AMC. Retaining GSFS Capital & Securities Ltd has ensured continuity in investor relationships and provided access to a new investor base – Public Sector Undertakings of the State Government. In addition, corporate entities based in Gujarat have invested in bond issues floated by AMC, demonstrating the importance of the need to develop a local investor base.

The investor class has been varied across the four issues. The first issue attracted diverse set of investors such as public, private and foreign banks, mutual funds and retail investors. Retail investors were consciously targeted in the first bond issue in order to encourage residents to participate in the development of the city, as is the practice in developed markets.

¹ Source: Developing a Regulatory Framework for Municipal Borrowing in India. World Bank. 2011.

However, this practice of public issue of bonds was discontinued in subsequent forays on account of higher costs associated with public issues. This trend towards private placement of bonds has manifested itself amongst other issuers as well. The second bond issue attracted a diverse investor base comprising state undertakings, private sector companies and insurance companies. The third issue was subscribed entirely by five public sector banks. The fourth issue attracted banks and insurance companies as investors. Hence, while the first and second issues had diverse investor classes, the investors in the third and fourth issues were limited to banks and insurance companies. Investor base has been limited for third and fourth issues due to a perception that it is easier to manage stakeholder expectations for a smaller investor group in comparison to a diverse investor base.

While the investors in the first issue have received bond redemptions at the end of the tenor, AMC has exercised its call option in the second and third issue and repaid investors given the favorable interest rate regime and its own internal accruals. This reflects the development of AMC's treasury operations as a consequence of repeated market forays and the resultant awareness of market practices.

The frequent issuances of municipal bonds have not only enhanced AMC's resource-raising skills, but have also provided an incentive to improve performance in other areas to maintain their credit rating. Therefore, these bond issuances have proved to be a catalyst for institutionalizing far-reaching performance improvements in the organization. Over the past decade, the organization has improved both its financial performance benchmarks as well as its project conceptualization and execution capability.

The scale of capital investments undertaken by AMC have increased dramatically over the years. AMC has started using bond issues as a mechanism to bridge the capital investment gap in a particular year. This has the added advantage that credit ratings and surveillance by rating agencies have created necessary monitoring mechanism within AMC to ensure completion of projects in accordance with project implementation schedules.

6.3.2. Pooled Bond issuance – the Karnataka Water and Sanitation pooled fund

In 2005, the Government of Karnataka (GoK) accessed market borrowings through the pooled finance mechanism to finance the Greater Bangalore Water and Sewerage Project (GBWASP) proposed to be implemented across (erstwhile) seven CMCs and one TMC adjoining the Bangalore Municipal limits. These CMCs and TMC have since been merged with the Bangalore Mahanagar Palike in 2006-07. The overall cost of the project was approximately Rs 340 crore, which was proposed to be funded by a variety of sources including a pooled bond issue of Rs 100 crore.

In order to access the municipal bond market, the GoK constituted the Karnataka Water and Sanitation Pooled Fund (KWSPF) as a SPV, specifically created to tap the market borrowings. KWSPF was constituted as a trust under the Indian Trusts Act, 1882. Karnataka Urban Infrastructure Development and Finance Corporation (KUIDFC), which is the nodal agency in Karnataka for implementation of externally aided projects, acted as the asset management company for the trust.

KWSPF (the issuer) issued Rs. 100 crore of fixed coupon tax-free pooled finance bonds in July 2005. The bond issue was rated LAA (SO) by ICRA, indicating high credit quality, and was fully subscribed. The issue had a tenor of 15 years with a 3-year moratorium and did not carry any put/call option. Repayment would start from the fourth year with the principal redeemed in twelve equal instalments. The bonds carried a coupon rate of 5.95%.

Timely repayment is being ensured through a structured payment mechanism monitored by Canara Bank, which was appointed as an independent trustee to the bond holders. The KWSPF structure incorporates many credit enhancements. The KWSPF Trust issued loans out of the pooled bond proceeds. Each of these underlying loans was backed by a structured payment mechanism whereby the erstwhile city municipal corporations (CMCs) concerned will fund 1/10th of their annual repayment instalment by depositing equivalent funds in a designated bank account. These balances will then be pooled together to fund an escrow account opened in the name of the KWSPF trust. The bond holders will be serviced from the funds lying in this escrow account. Such an arrangement reduces the risks associated with a large annual repayment having to be funded at one time by the CMCs. Further, well before the bond holders due date, the independent trustee will check the adequacy of funds in the escrow account and issue notice to the GoK to top up the deficit, if any.

GoK will be obliged to top it up to the extent of deficit. If there is a deficit even after this top up, the WSPF trustee will utilise the BSF (sized at Rs 25.5 crore). The BSF will be topped up within 60 days of the utilisation by a combination of a USAID guarantee (50% of bond principal) and the GoK.

The BSF was sized by the rating agency (ICRA) at Rs 25.5 crore in order for the bonds to achieve the target LAA (SO) rating. This BSF was funded upfront and hence acted as a source of credit enhancement. Also acting as credit enhancement was a guarantee from USAID (a departmental undertaking of the US government) to the extent of 50% of the bond principal.

The rating agency initially made an assessment of the standalone credit quality of the CMCs. Though not strictly a credit enhancement, the GoK promise to intercept devolution funds (the devolution funds are an essential component of the financial strength of the CMCs duly reflected in their standalone credit quality assessment) provided comfort to the extent it imposed an element of discipline in debt servicing. The prefunded BSF and the USAID guarantee are designed to provide support in the event of default by the CMCs and the inability of the State Government to provide the requisite top-ups from devolution funds.

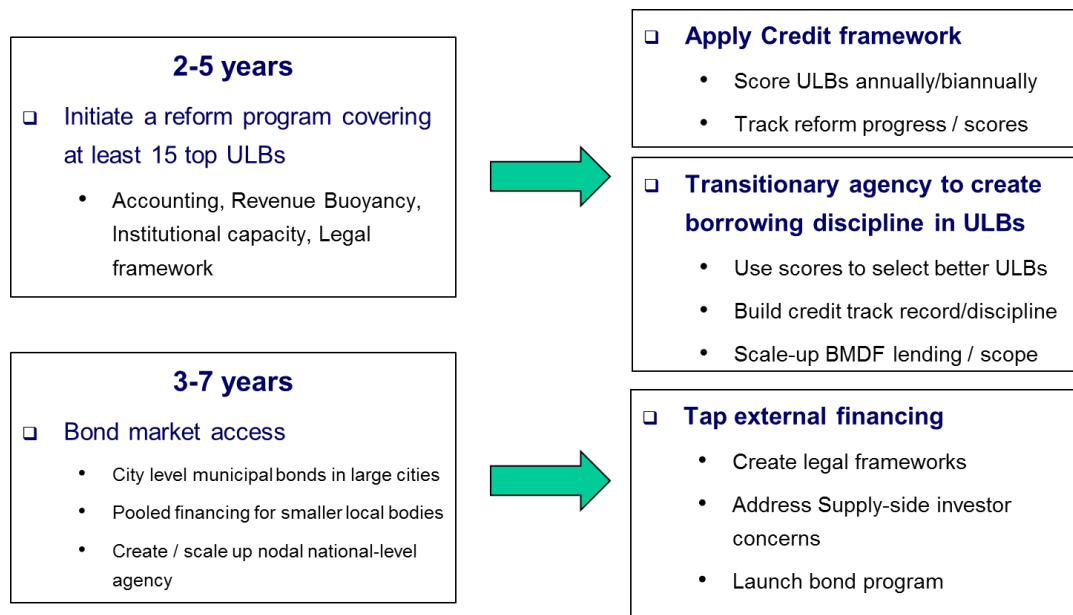
The overall framework for sizing the quantum of credit enhancement is one of expected loss (EL) to investors in the rated bond. EL refers to the probability-weighted-average loss arising to investors in various default scenarios. These various scenarios were constructed assuming various timings of default, number of defaults (amongst the 8 CMCs), and availability of funds from the State Government. The probabilities for the different default scenarios were constructed after considering the standalone default likelihood over time and the default correlations between the CMCs and the State as also amongst the CMCs themselves.

7. Action Plan towards external financing

7.1. Next steps for GoB and UNCDF

The Exhibit 7.1 shows the next steps suggested for GoB and UNCDF to take this initiative forward to achieve the desired success in strengthening the credit worthiness of ULBs across Bangladesh and hence move to external financing in a phased manner.

Exhibit 7.1 Next steps to move to external financing



The imperatives that emerge from the prevailing urban context in Bangladesh requires strengthening of the existing urban financing framework by using Transitional agency like as BMDf to achieve the desired objectives by facilitating/incentivizing reforms as precursors for external financing. The framework could create a range of medium and long-term benefits including the following:

Phase 1: Immediate – to - medium term actions (2-5 years)

To begin with GoB may select 15-20 top ULBs of Bangladesh to start the implementation of strengthening the creditworthiness process of ULBs by

- Accelerating the pace of implementation of actions areas identified in chapter 5.
 - accounting reforms and information disclosure,
 - Revenue enhancement (bouncy) and
 - Strengthening institutional capacity at ULB level
- Evaluating the strengthening progress:
 - the progress of strengthening creditworthiness in ULBs can be tracked using the proposed credit framework and setting the targets in planned manner to migrate ULBs from their existing score of 40-50 marks to 75+ marks.
 - Score ULBs periodically (biannually or annually) to track the progress

- Introducing better performing ULBs to benefits of leverage and rigor of debt servicing discipline by utilising the BMDF’s existing framework through scaling-up the lending size and scope of support to ULBs.

After achieving the progress in selected ULBs, the same model can be extended to other category of ULBs in country.

Phase 2: Long – term actions (3-7 years)

Once the ULBs achieve the desired level of credit worthiness, the ULBs shall be allowed to access the external finance and capital markets by

- Facilitating bigger ULBs to raise city level municipal bonds
- Pool financing for smaller ULBs
- Scaling up the lending to ULBs through BMDF
- Greater scope for private sector participation in urban asset creation and service delivery

The access to the external financing shall require GoB to:

- Create enabling legal environment for bond raising and addressing the supply-side investor concerns,
- make Credit rating mandatory for ULBs in long term, and
- launch bond programme at national level to support selected ULBs.

7.2. Relevant experience of urban financing experience in India

The Tamil Nadu Urban Infrastructure Financial Services Limited (TNUIFSL) and Tamil Nadu Urban Development Fund (TNUDF), the AMC and the Fund respectively, have both played an important role in Tamil Nadu in creating a healthy shelf life of projects, making finances available to the ULBs, while at the same time also supporting their capacity building. Box below provides a summary of the history, achievements and the key performance highlights of Tamil Nadu Urban Development Fund (TNUDF) under Tamil Nadu Urban Development Project (TNUDP).

TNUIFSL and TNUDF – achievements under TNUDP-II and expectations during TNUDP-III

The Tamil Nadu Urban Development Fund (TNUDF) was created in 1996, in view of the potential of the Municipal Development Fund (MUDF), a revolving fund set up to administer the on-lending component of phase I of the Tamil Nadu Urban Development Project (TNUDP-I). TNUDP-II was conceived as a follow-up project to TNUDP-I. TNUDF became the first public-private partnership providing long-term debt for civic infrastructure on a non-guarantee mode. The investment component of TNUDP-II was routed through TNUDF, which was formed by transferring the assets of MUDF as GoTN’s contribution in the Fund. Financial Institutions including ICICI Bank Limited (ICICI), Housing Development Finance Corporation Limited (HDFC) and Infrastructure Leasing and Financial Services Limited (ILFS) also contributed to the equity of TNUDF. The administration of TNUDF is entrusted to a Board of Trustees nominated by GoTN and participating financial institutions.

A Grant Fund was also established to fund technical assistance for projects preparation at the local body level and for funding poverty. TNUIFSL was established as the Fund Manager of TNUDF and project development vehicle for the fund. Financial Institutions held majority stake in TNUIFSL while GoTN holds a minority stake.

As a financial intermediary under TNUDP-II, TNUDF provided loans of nearly INR 270 crore (\$ 60 million) which catalysed urban investment of more than INR 575 crore (\$ 128 million). Nearly INR 125 crore (\$28 million) of private co-financing was mobilised and non-guaranteed bonds worth INR 115 crore (\$ 25 million) were mobilised. Till FY 2005, TNUDF has approved 192 projects at a total project cost of Rs.1070 crore and has

sanctioned loan assistance of Rs.605 crore. TNUDF also pioneered the first pooled finance initiative in India with USAID (US \$ 6.3 million) and the first revenue bond in India for Madurai ring road (US\$6 m). TNUDF demonstrated good repayment performance on sub-loans with a 99.7% recovery rate from ULBs.

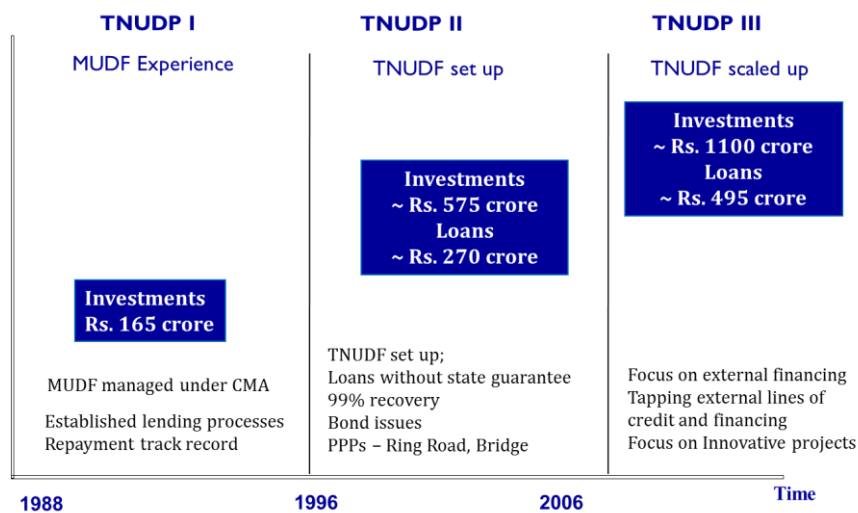
Meanwhile in a capacity building and project development role, TNUFSL, the fund manager of TNUDF, pioneered innovations in the urban financing space during TNUDP-II including the following:

- The first Pooled Finance initiative in India for water supply projects
- The first Revenue Bond in India for a ring road - Madurai Ring Road
- PSP in Municipal Solid Waste Management and
- Build-Operate-Transfer approach for Toll bridge and Underground Sewerage projects
- Support to accounting reforms, e-governance and preparation of City Corporate Plans

TNUDF and its asset manager, Tamil Nadu Urban Infrastructure Financial Services Limited (TNUFSL) have important roles during TNUDP-III, the third phase of the program. The investment component under TNUDP-III envisages loans to the urban sector to the extent of \$ 150 million through TNUDF. TNUFSL would also manage three Grant Funds, for viability gap funding, project development and urban transport component respectively.

Exhibit 7.2 below shows the progress and scaling of the urban fund over last 20 years under TNUDF.

Exhibit 7.2 Performance of the Tamil Nadu fund



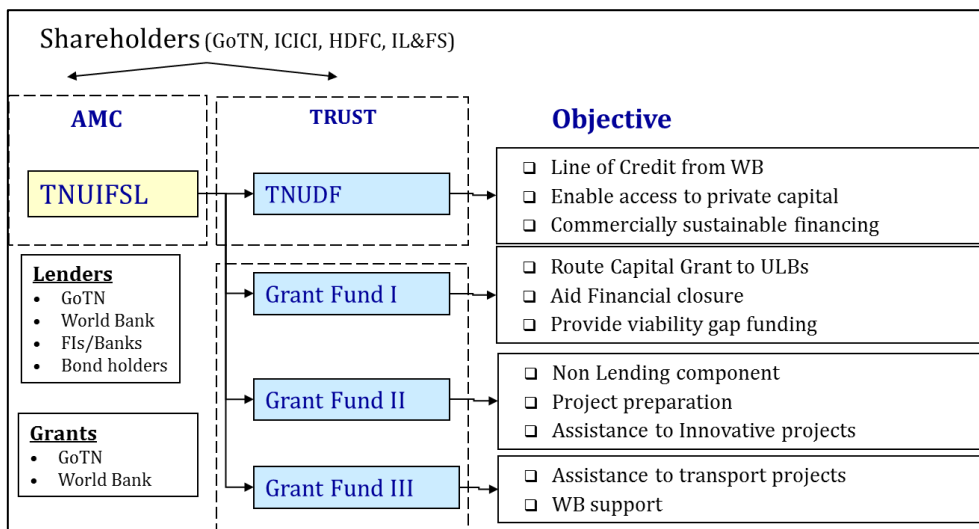
Analysis of the AMC Fund Model:

The AMC-Fund model seems to have helped bring a combination of creating ‘quick win’ investment projects in the short term while driving capacity building and reform initiatives to sustain the investment momentum and development impact in the long term. An analysis of the AMC-Fund model adopted in Tamil Nadu reveals the following characteristics which are relevant:

- The AMC-Fund model is **flexible and scalable** and allows the AMC to handle multiple funds with different objectives. Exhibit 7.3 below shows the funds that were to be managed by TNUFSL, the AMC under the third phase of the Tamil Nadu Urban Development Program (TNUDP-III). While TNUDF was set up to provide non-guaranteed debt financing to municipal projects, TNUFSL also handled three other grant funds for Viability Gap financing / Capital Grants, Project Development and Transportation component of the TNUDP-III program.

- The AMC is incentivised to focus on **project development** by linking its revenue model to investment performance of TNUDF. By having a separate Trustee company to guide and oversee implementation of the charter of TNUDF, the model allowed separating the investment objectives of the infrastructure fund from the AMC’s functioning. Similarly creating a GSF addressed viability considerations. The AMC’s operations were actively supported by a Capacity Building program. For example, accrual accounting and e-governance applications were rolled out in all the Urban Local Bodies in Tamil Nadu during TNUDF-II.
- The model allows **flexibility and options with respect to the capital structure** of the fund(s) and the AMC depending on the commercial sustainability and expertise requirements respectively. The structure allowed for flexibility in the capital structure. In the case of TNUFSL-TNUDF, the AMC was set up as a Company in which private shareholders, namely IL&FS, HDFC and ICICI Bank held 51% stake, while Government of Tamil Nadu held 49% stake. Being set up as a ‘private’ company, the AMC had flexibility in recruitment and market based remuneration to attract and retain talent. However the fund, Tamil Nadu Urban Development Fund was set up as a Trust with 74% capital contribution by Government of Tamil Nadu with the private shareholders bringing in the rest. The Grant Funds for project development and Capital Grants were also completely provided for by the Government of Tamil Nadu.

Exhibit 7.3 Funds managed by TNUFSL under TNUDF-III



The Transitional agency had to juggle multiple roles. On the one hand, it will need to play the role of a ‘market maker’ by undertaking project development and capacity building activities. At the same time, it will also need to play the role of a ‘responsible advisor’ of the Infrastructure Fund (s) from which it will need to disburse ‘loans’ after a diligent appraisal of the risks and repayment capacities.

In the context of Bangladesh, where urbanization is still very nascent and several Urban Local bodies are small, the capacity building and project development challenges can be quite significant. It is here that the commitment of the GoB to the initiative is critical and BMDF shall be required to become BMDF++ with enhanced scope related to capacity building support to ULBs and scale-up lending.

Annexures

Annexure I Detailed Data Checklist of Information collection

List of Preliminary Information Requirement Urban Local Bodies

CITY PROFILE

1. City details

City Profile	
Population 2001 Census	
Population 2011 Census	
Number of Households 2011 Census	
Population Projected 2021	
Area (Sq. Km.)	
Municipal Wards (No.)	
Divisions/Zones (No.)	
Last Election Date	
Number of Slums	
Number of Households in Slums	
Slum Population	

ADMINISTRATIVE

2. Organisation structure – executive and administrative setup up to the level of department heads

3. Financial powers of the various authorities

Financial Sanctioning Powers of Authorities	BDT Lakh
Council	
Mayor/Chairperson	
Standing Committees	
Commissioner/Executive Officer/Chief Officer	

4. Number of staff (department wise)

Department	Number	
	Sanctioned	Vacant
Administration		
Revenue		
Health & Sanitation		
Public Works		
Others		
Total		-

MUNICIPAL SERVICES

5. Details related to Water Supply

Water Supply	Existing	Proposed
Sources Total (MLD)		
Source 1 (MLD)		
Source 2 (MLD)		
Supply (MLD)		
Treatment (MLD)		
Storage Capacity (MLD)		
ESRs (nos)		
Water Mains (km)		
Distribution (km)		
Covered Area (sq. km.)		
Population Covered ('000)		
Tap water coverage (% of households)		

6. Details related to Sewerage

Sewerage	Existing	Proposed
Generation (MLD)		
Covered Area (Sq. km.)		
STP Capacity (MLD)		
STP Utilisation (MLD)		
Sewerage Line (km)		
Population Covered ('000)		

7. Details related to Roads & Drains

Roads (km)	Existing	Proposed
Corporation Roads		
National Highway		
State Highway		
District and Other Roads		
Total Road Length (Own)		
Cement Concrete (CC) road		
Asphalt road		
Other		
Drains		
Natural Major (Km)		
Natural Minor (Km)		
Storm Water Drains (SWD) (Km)		
Road Side Drains (RSD) (Km)		
Area Coverage by SWD		

8. Details related to Streetlights

Streetlights	Existing	Proposed
Total No. of Streetlights		
Coverage Area (%)		
Coverage Roads		
Total No. of Street Light Poles		

9. Details related to Solid Waste Management (SWM)

SWM (Existing)	Existing	Proposed
Daily Generation (MT)		
Daily Collection (MT)		
Collection points		
Household Segregation (Y/N)		
Vehicle Capacity (Cu. M)		
Landfill site (Hectare)		
Waste Treatment (MT)		
Total Staff in SWM		

10. Building permission

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
No. of applications received						
No. of applications approved						
Income (BDT. crore)						

PROJECTS

11. Details of ongoing projects/schemes

Status of Ongoing Projects/Scheme as On March 31, 2016 (BDT Crore)							
BDT. Crore	Project Cost		Funding		Released		Expenditure
	Actual	Approved	GoB	ULB Own/ Loan	GoB	ULB Own/ Loan	
Project 1							
Project 2							
Project 3							

12. Details of proposed projects/schemes in future

BDT Crore	Project Cost		Proposed Funding		Status
	Actual	Approved	GoB	ULB Own/ Loan	
Project 1					
Project 2					
Project 3					

FINANCIAL

13. Annual budget for last 5 years (2012-13, 13-14, 14-15, 15-16 and 16-17)

14. Annual accounts (revenue and capital) FY2012 to FY2016, if available.

15. Income and Expenditure statements (for last 4 years)

16. Cash and bank balance as on March 31st 2016

Cash Balances (BDT) as on June 30 th	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16
Opening					
Closing					
ULB's Own Balance					

17. City Investment Plan (CIP)

18. Fund transfer details from the Government during the last five years

19. Budget provisions for the ULB by the Government in FY2017 budget estimates

20. Copy of the latest loan sanction letters

21. Statement of the existing loans & liabilities (if any) as on March 31, 2016

Outstanding Balance (Debt/Liabilities) (BDT)	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16
Total					

22. Repayment schedule of existing loans & liabilities (if any)

Repayment Schedule (Debt/Liabilities) (BDT)	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Total					

23. Details of proposed fresh loans (if any)

Details of Proposed Fresh Loans	FY15-16	FY16-17	FY17-18	FY18-19	FY19-20
Total	-	-	-	-	-

24. Details of proposed fresh debt programme (if any) including expected interest rate and repayment pattern

25. Details of credit enhancement features (if any) being considered for the proposed debt programme

REVENUE INFORMATION

26. Current/previous/proposed rates of key taxes and user charges

27. Number of properties

Properties in Town	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16
Residential					
Commercial					
Industrial					
Other/Open Plots					
Total					

28. Demand Collection Balance (DCB) for Property / holding tax

Demand Collection Balance (Property Tax) (BDT Crore)	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16
Demand					
Arrears					
Current					
Total					
Collection					
Arrears					
Current					
Total					

29. Demand Collection Balance (DCB) for Other Revenue sources such as Water/ Sewerage user charges/ Lease Rentals/ Trade license/ and others (if any).

Demand Collection Balance (Lease) (BDT Crore)	FY2011	FY2012	FY12-13	FY13-14	FY14-15	FY15-16
Demand						
Arrears						
Current						
Total						
Collection						
Arrears						
Current						
Total						

Demand Collection Balance (fees) (BDT Crore)	FY2011	FY2012	FY12-13	FY13-14	FY14-15	FY15-16
Demand						
Arrears						
Current						
Total						
Collection						
Arrears						
Current						
Total						

Annexure II List of people met at UNCDF, BMDF and ULB level

S.No.	Name of official	Name of the Organisation	Designation
1	Mr. Iqbal Abhullah Harun	UN Capital Development Fund (UNCDF)	Senior Advisor, Public Finance
2	Mr. Suresh Balakrishnan	UNCDF	Regional Technical Adviser
3	Mr. Jesmul Hasan	UNCDF	Programme Analyst
4	Mr. Syed Hasinur Rahman	Bangladesh Municipal Development Fund (BMDF)	Managing Director
5	Ms. Syeda Sultana Nasrin	BMDF	Finance manager
6	Mr. Gazi Mohammad Mohsin	BMDF	Program Manager
7	Mr. Md. Aamir H. Shikder	BMDF	Coordinator (ULB)
8	Mr. Mahbubul Alam	Bangladesh Securities and Exchange Commission (BSEC)	Executive Director
9	Md. Amirul Islam	Dhaka North City Corporation	Chief Accounts Officer
10	Md. Momtaz Uddin	Dhaka North City Corporation	Deputy Secretary
11	Dr. Salina Hayat Ivy	Narayanganj City Corporation	Mayor
12	Hemayet Hossain	Narayanganj City Corporation	Chief Accounts Officer
13	AHM Samsuddoha	Chandpur Pourashava	Executive Engineer
14	Mr. Syed Md. Mushiur Rahman	Chandpur Pourashava	Head of Accounts
15	Md. Shahabuddin	Chandpur Pourashava	Sub Assistant Engineer (Electricity)
16	Chandranath Ghosh	Chandpur Pourashava	Social Development Officer
17	Orup Kumar Sham	Chandpur Pourashava	In Charge, Cleaning Section
18	Sk, Mahtab Ali Methu	Faridpur Pourashava	Mayor
19	Md. Shahjahan Miah	Faridpur Pourashava	Chief Executive Officer
20	Md. Tanzilur Rahaman	Faridpur Pourashava	Secretary
21	Mollah Md. Shafiqul Islam	Faridpur Pourashava	Assistant Engineer
22	Engr. Md. Tabibur Rahman	Pabna Pourashava	Executive Engineer
23	Mr, KH Ziaul Islam	Pabna Pourashava	Assistant Engineer
24	Mr. Md. Zamilur Rahman Miron	Tangail Pourashava	Mayor
25	Mrs. Shahnewaz Parwin	Tangail Pourashava	Secretary
26	Parbir Kumar Dutta	Tangail Pourashava	Head of Accounts
27	Mirza Arif	Tangail Pourashava	Executive Engineer

Annexure III: City Profiles of selected six city – Detailed Analysis

1. City Profiles of six cities – Detailed Analysis

This section presents the existing situational analysis of selected cities in terms of their

- a. Demographic and Economic Profile
- b. Urban service issues and gaps and
- c. Financial performance.

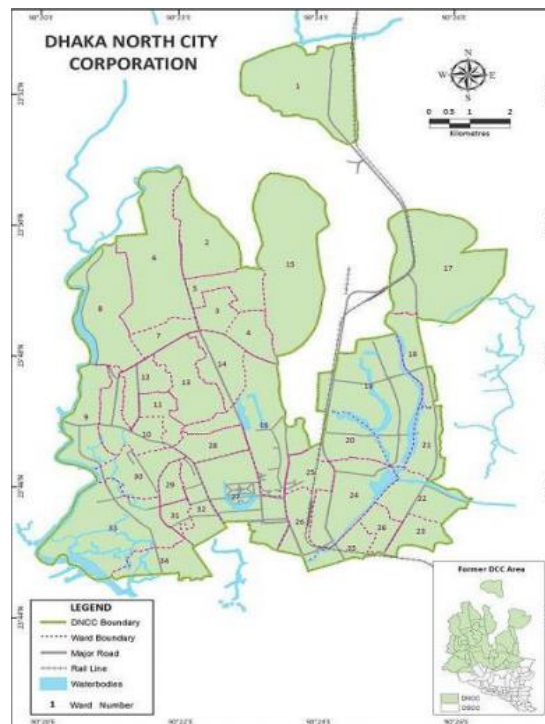
The study covers six ULBs, namely, *Dhaka North City Corporation*, *Narayanganj City Corporation*, *Chandpur Pourashava*, *Faridpur Pourashava*, *Pabna Pourashava* and *Tangail Pourashava*. Detailed profile of each of the six cities is discussed below.

1.1. Dhaka North City Corporation

1.1.1. Background of the City

Dhaka North City Corporation is located in Dhaka district of Dhaka division. It is surrounded by was established on November 29, 2011. Prior to the establishment of the corporation, the urban area was governed by the former Dhaka City Corporation. Low lying and situated in the middle of one of the largest river deltas in the world, Dhaka is vulnerable to severe flooding from upstream during the monsoon season. The vulnerability of the city is expected to increase with the rise of sea levels as a result of climate change. Dhaka North City Corporation extends up to an area of 82.638 sq. kms which is sub-divided into five zones having 36 Wards.

Exhibit 1 Dhaka North City Corporation - Regional Setting



Source: <http://cusdhaka.org/maps/598/attachment/dcc-north-new>

1.1.2. Demographic profile

Population

The population of Dhaka North City Corporation area is 3,957,302. The total numbers of households in the city are 172,254 as recorded in 2014.

Urban Poor

The total number of slums in Dhaka city corporation area is approximately 4,342.

1.1.3. Economic Base

The economic development of Dhaka North since 1971 has been most impressive. It has a rich and growing upper middle class population driving the market for modern consumer and luxury goods. It has also seen the growth of varieties of industries and many economic institutions.

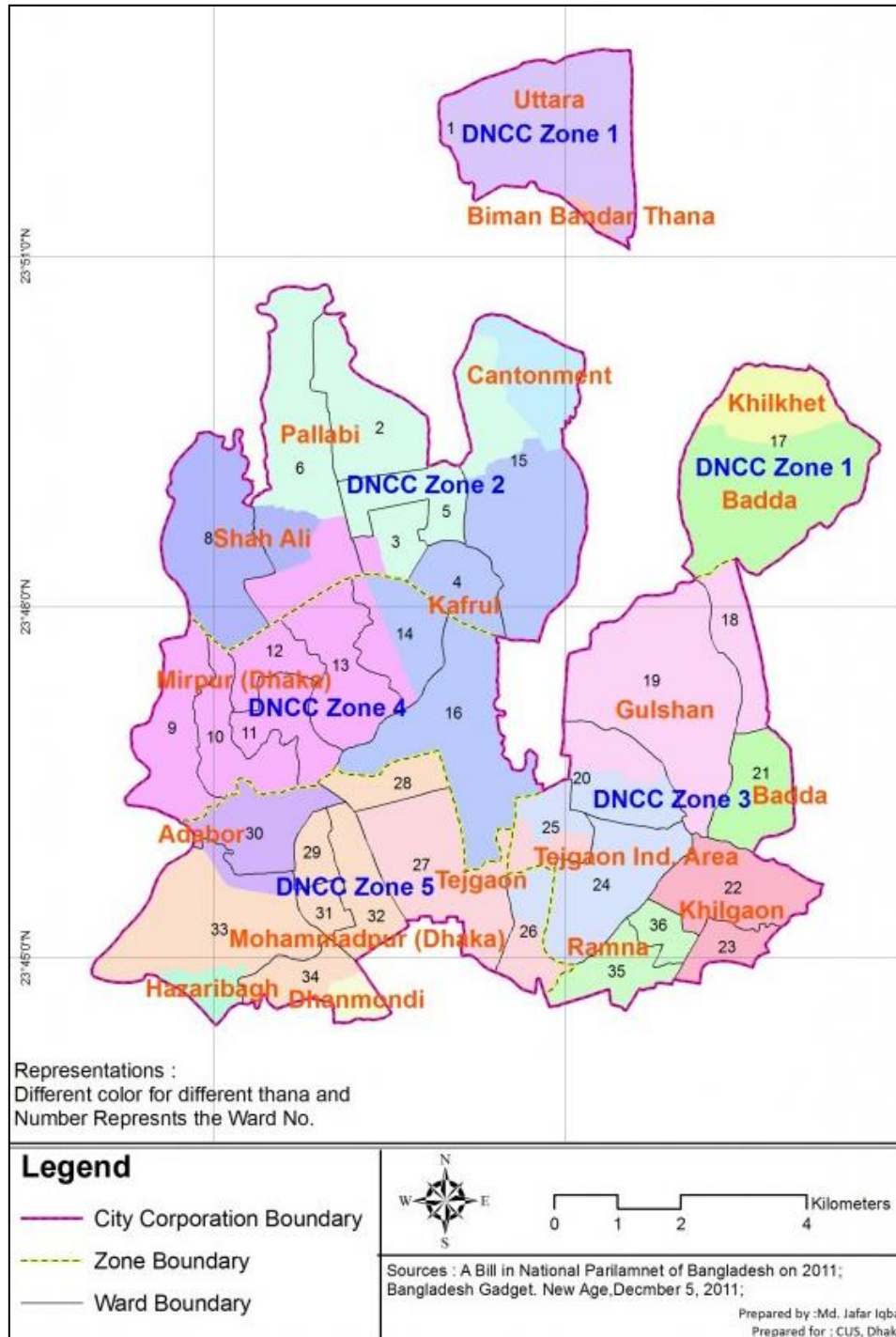
The main commercial areas of Dhaka North City Corporation include Mahakhali, Gulshan, Kawranbazar, Farmgate, and Uttara. Besides, Bashundhara-Baridhara area is a fast developing economic area that includes high-tech industries, corporations and a large shopping precinct. Growth has been especially strong in finance, banking, manufacturing, telecommunications and service sectors, while tourism, hotels and restaurants continue as important elements in the economy of Dhaka North. Most of the public and private banks of the country have their branches in Dhaka North with modern facilities.

1.1.4. Institutional/ Organizational Structure

Dhaka North Municipal Corporation

Dhaka North City Corporation consists of 36 wards covering thanas of Mirpur, Mohammadpur, Sher-E-Bangla Nagar, Pallabi, Adabor, Kafrul, Dhaka Cantonment, Tejgaon, Gulshan, Rampura, Banani, Khilkhet, Lalmatia, Kallanpur, Baridhara, Badda, Uttara, Uttarkhan, Dakshinkhan & some others. Dhaka City Corporation (DCC) is the former self-governing corporation that is associated with the task of running the affairs of the city of Dhaka. The incorporated area was divided into several wards. Each ward has an elected ward commissioner. The mayor of the city is elected by voting every five years, although the last mayoral election took place in 2002. The Corporation was dissolved by the Local Government (City Corporation) Amendment Bill 2011 on 29 November 2011, passed in the Parliament of Bangladesh, and it formally ceased to exist on 1 December 2011, following the President's approval, making way for Dhaka North and Dhaka South City Corporations.

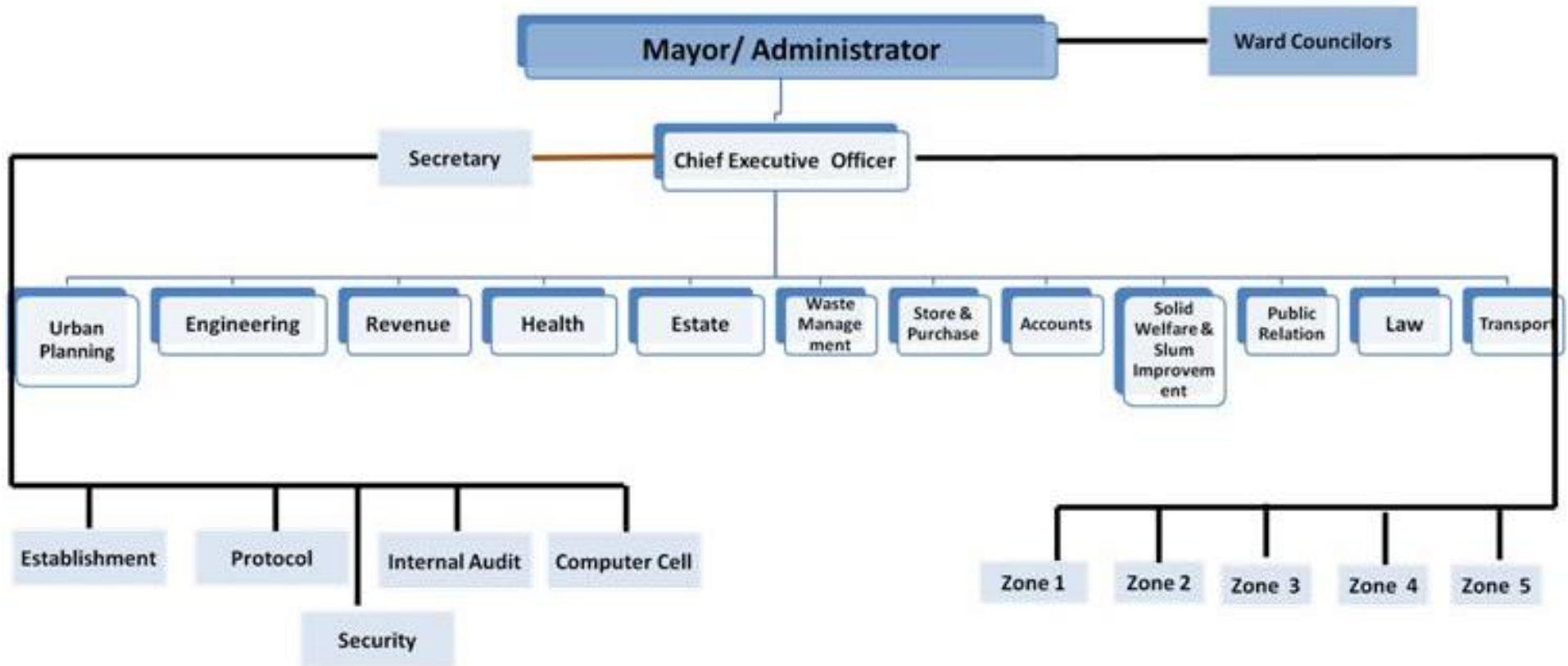
Exhibit 2 Dhaka North City wards



Source: Dhaka North City Corporation, Bangladesh

Dhaka North City Corporation is headed by a Mayor who is assisted by Chief Executive Officer, Councillors and a Secretary. The City Corporation area is divided into 5 zones which are administered by 12 departments namely Urban Planning, Engineering, Revenue, Health, Estate, Waste Management, store & Purchase, Accounts, Social Welfare & Slum Improvement, Public Relations, Law and Transport.

Exhibit 3 Dhaka Municipal City Corporation Organogram



Source: Dhaka North City Corporation, Bangladesh

1.1.5. Service Delivery

Water Supply

Dhaka Water Supply and Sewerage Authority is the agency responsible for providing and managing water supply in Dhaka. Total connections under Dhaka North City Corporation are 350772 which comprise of 88.5% residential consumers, 10% commercial consumers, 0.09% industrial consumers and 0.5% each for government offices and community services. Ground water is the major source of water supply in the city constituting 78% and remaining 22% water supply is through surface water. There are 702 tube wells, 4 water treatment plants, 38 hydrant and 1643 road side taps. The total supply of water is 2200-2300 MLD / day and production of water per day is 2420 MLD. Total 45 MLD water is treated in the city. The proposed water treatment capacity is 1,100 MLD in which 500 MLD intake is from Meghna River, 450 MLD from Jashaldia and 150 MLD from Tetul-jhara-Bhakturta Well Field Construction project.

Exhibit 4 Dhaka North City Corporation Water Supply Details

Water Supply	Existing
Total connection	350,772
Deep Tube well	702
WTP	4
Hydrant	38
Road side Tap	1643
Source 1 (MLD) - Underground	78%
Source 2 (MLD) – Surface	22%
Demand (MLD)	2250
Capacity (MLD)/ Production per day (MLD)	2420
Supply (MLD)	2200-2300
Treatment (MLD)	45

Source: Dhaka North City Corporation, Bangladesh

Exhibit 5 Dhaka North City Corporation Water Supply Connection

Category	Number of Consumers	%
Residential	310,743	88.59%
Commercial	36,182	10.31%
Industrial	318	0.09%
Community	1,910	0.54%
Office (Govt.)	1,619	0.46%
Total	350,772	100%

Source: Dhaka North City Corporation, Bangladesh

Sewerage

Dhaka Water Supply and Sewerage Authority is the agency responsible for providing and managing sewerage in Dhaka. The total length of sewerage line in the city is 916 kms.

Storm Water Drains

Refer Exhibit 6 for existing situation analysis of storm infrastructure/ services. In Dhaka North City Corporation the storm water drainage network system covers 350 kms, open canal 74 kms and box culvert 10.5 kms.

Exhibit 6 Dhaka North City Storm Water Details

Drains	Km
Storm Water Drains (SWD) (Km)	350
Open Canal	74
Box Culvert	10.5

Source: Dhaka North City Corporation, Bangladesh

Solid Waste Management

Solid waste generation in Dhaka City is 0.3 to 0.5 kilogram per capita per day (2001). The waste is collected from 950 open points and 245 containers from 170 routes. There is a 50 acre landfill site at Amin Bazar area in Dhaka.

Exhibit 7 Dhaka Municipal City Corporation Solid waste management system

Aspect	Status
Daily Generation (MT)	2700-2800 tons/day
Landfill site (Acre)	50

Source: Dhaka North City Corporation, Bangladesh

1.1.6. Financial Performance Analysis

The financial analysis has been carried out to understand the current financial status of the North Dhaka City Corporation. The Financial statements have been reviewed for the last 4 years commencing from 20012-13 to 2015-16. The actual budgets have been taken for all the years for analysis.

Financial Status at a Glance

Exhibit 8 provides a summary of the Revenue and Capital Accounts of North Dhaka City Corporation during FY 2012-13 to FY 2015-16. Key points to note are summarized below:

Exhibit 8 Summary – Revenue and Capital Account

Financial Status at a Glance	2012-13	2013-14	2014-15	2015-16	CAGR
	Million BDT				%
Revenue Account					
Income	1,832.4	2,463.0	3,715.8	5,575.3	45%
Expenditure	1,306.6	1,611.2	1,769.0	4,481.4	51%
Surplus/ Deficit	525.7	851.7	1,946.8	1,093.9	28%

Financial Status at a Glance	2012-13	2013-14	2014-15	2015-16	CAGR
	Million BDT				%
Capital Account					
Receipts	2,407.4	2,120.8	1,585.7	2,967.0	7%
Payments	2,706.7	2,753.3	2,718.2	2,952.0	3%
Surplus/ Deficit	(299.3)	(632.5)	(1,132.5)	15.0	
Overall Status incl. O.B.	528.8	748.0	1,562.2	1,108.9	

Source: North Dhaka City Corporation, IMaCS Analysis

1. Revenue Income grew at a CAGR of 45% between FY 2012-13 and FY 2015-16, with own income growing at a CAGR of 45%. The revenue base of North Dhaka City Corporation is very low with revenue income per capita at BDT 463 (FY 2012-13). Own source revenue constitutes for 100% of its total revenues, which largely comprises of Land, Residence Tax and Land Transfer Tax and License and Fees Income. Exhibit 9 highlights the different sources of revenue for the City Corporation.
2. Revenue Expenditure has grown faster at a CAGR of 51% during FY 2012-13 and FY 2015-16, driven by a jump in O&M and administrative costs amongst others.
3. Operating surplus increased from BDT 528.8 million to BDT 1108.9 million during FY 13-16.

Exhibit 9 Sources of Revenue

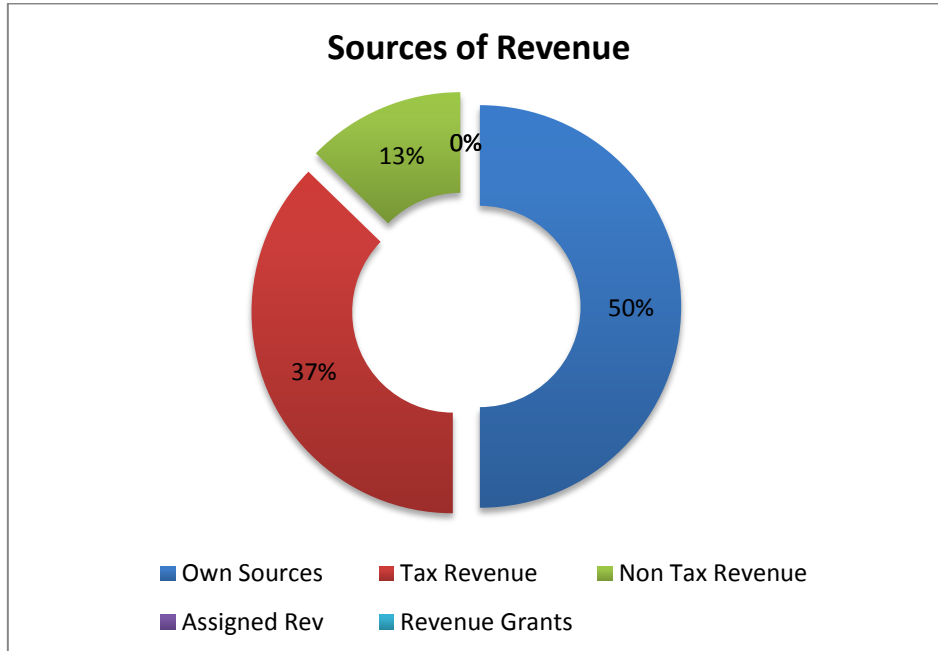
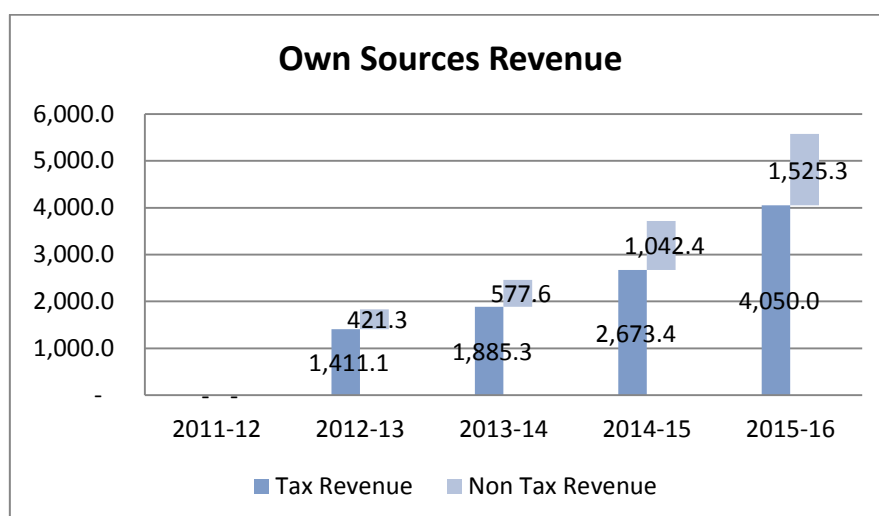


Exhibit 10 Tax and Non Tax Revenues


Revenue Account

The following section provides an in-depth review of the revenue account, in order to assess the municipal fiscal status. The revenue account comprises of two components - revenue income and revenue expenditure.

Revenue Income

Exhibit 11 provides a snapshot of growth in various heads under Revenue Income. Revenue Income broadly comprises **Own source income** (including holding taxes, professional taxes and other non-tax income including fees, charges and rentals) and **Devolution and Transfers** (including Devolution income, Assigned revenues and Grants, investment income).

Exhibit 11 Revenue Income

Items	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT				%	%
Own Sources	1,832.4	2,463.0	3,715.8	5,575.3	100%	45%
Tax Revenue	1,411.1	1,885.3	2,673.4	4,050.0	75%	42%
Non Tax Revenue	421.3	577.6	1,042.4	1,525.3	25%	54%
Total	1,832.4	2,463.0	3,715.8	5,575.3	100%	45%

Source: North Dhaka City Corporation, IMaCS Analysis

Own Source Income

Income from own sources grew at a CAGR of 45% during FY 2012-13 to FY 2015-16 to reach BDT 5575.3 million in FY 2015-16. Own source income accounted for 100% of the Revenue Income. Taxes including Land and Residence Tax, Fixed Asset Transfer Tax, Water Tax, Advertisement Tax, etc. grew at 42% CAGR during FY 2012-13 to FY 2015-16 to touch BDT 4050 million in FY 2015-16. Non Tax Income has also increased to BDT 1525.3 million (Refer Exhibit 11).

Tax revenues constituted about 75% of total revenue receipts in FY 2015-16. In case of North Dhaka, the tax revenue comprises of Land and Residence Tax, Land Transfer Tax, Occupation/Business Tax, Advertisement Tax and Transportation Tax. Exhibit above shows the details of the Tax revenue income of North Dhaka City Corporation.

Non Tax revenue constituted 25% of North Dhaka City Corporation's income in FY 2015-16. Non tax revenue consists of rental income from municipal properties and assets, water charges, license and fees, development charges, building permission, sanitation fee, daily market fee etc. It can be observed that rental income from municipal properties/assets for the maximum share of non-tax revenue in all the years.

Revenue Expenditure and Surplus

Revenue expenditure has grown faster (CAGR 51% during FY 12-16) than revenue income but the revenue surplus has also increased over the period.

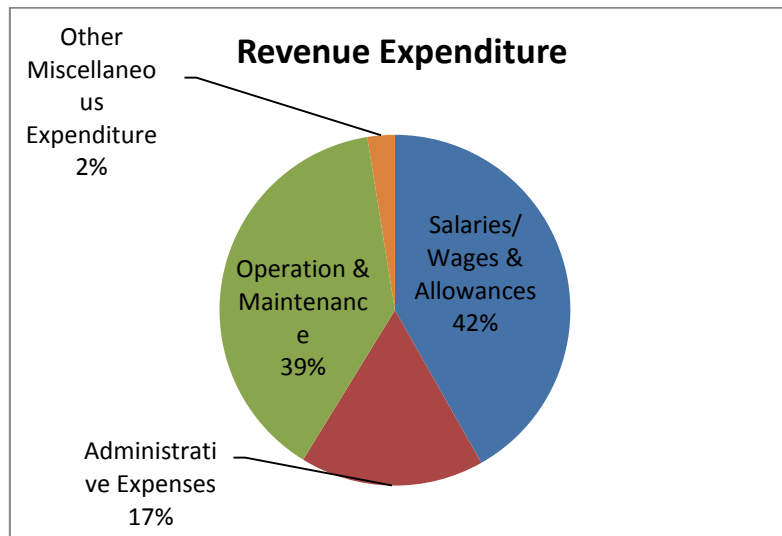
Exhibit 12 Revenue Expenditure – Summary

Items	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	<i>Million BDT</i>				%	%
Salaries/ Wages & Allowances	644.4	755.5	813.8	1120.0	42%	20%
Administrative Expenses	175.9	217.7	245.8	1209.5	17%	90%
Operation & Maintenance	480.3	629.4	692.0	1788.4	39%	55%
Programme Expenses	0.0	0.0	0.0	0.0	0%	-
Repayment of Loans	0.0	0.0	0.0	0.0	0%	-
Other Miscellaneous Expenditure	6.1	8.7	17.4	363.5	3%	291%
Total Revenue Expenditure	1,306.6	1,611.2	1,769.0	4,481.4	100%	51%

Source: North Dhaka City Corporation, IMaCS Analysis

Salaries and Allowances costs have grown at a CAGR of 20% during FY 2012-13 to FY 2015-16. These costs are expected to rise for a few more years as the City Corporation is already having lower number of employees than sanctioned and to adjust the inflation component in the salaries.

Exhibit 13 Revenue Expenditure - Breakup

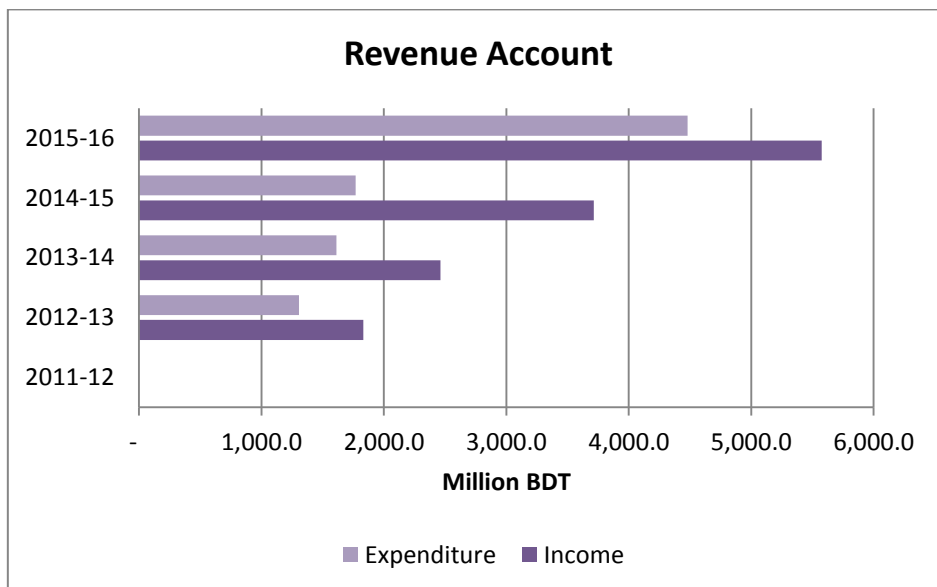


Source: North Dhaka City Corporation, IMaCS Analysis

Operations and Maintenance costs have grown at a CAGR of 55%.

Therefore despite a strong growth in revenue income during this period, revenue expenditure has grown faster but, Revenue surplus has increased from BDT 525.7 million to BDT 1093.9 million during FY 13-16.

Exhibit 14 Revenue Expenditure & Income



Source: North Dhaka City Corporation, IMaCS Analysis

Key Financial Ratios

Key financial ratios have been calculated based on the annual accounts of the North Dhaka Municipal Corporation to highlight the existing position of the municipal finances. Key financial ratios have been presented in Exhibit 15. The average operating ratio is 0.66 indicating that North Dhaka's expenditure levels are less than the revenue income generated.

Average Capital utilization ratio of North Dhaka Municipal Corporation is 1.28 indicating that North Dhaka's capital expenditure is more than its capital income. As stated earlier, the salaries expenses share a very high part of the total revenue income and revenue expenditure.

Exhibit 15 Performance Indicators

Dhaka North Municipal Corporation		2012-13	2013-14	2014-15	2015-16
	Population (2011)	3957302			
A.	Share of own revenues in total receipts				
i.	Own revenue receipts/total revenue receipts	1.00	1.00	1.00	1.00
ii.	Own revenue receipts/revenue expenditure	1.40	1.53	2.10	1.24
iii.	Non-tax revenues/total revenue receipts	0.23	0.23	0.28	0.27
B.	Sources and allocation of capital expenditure				
i.	Revenue surplus/capex	0.19	0.32	0.78	0.37
ii.	Capital expenditure to total expenditure	0.67	0.61	0.56	0.40
iii.	Capital receipts to total receipts	0.57	0.46	0.30	0.35
iv.	Per capita expenditure on education	0.00	0.00	0.00	0.00
v.	Per capita expenditure on health	11.28	13.23	11.86	167.64
C.	Cost recovery of key services				
i.	Per capita expenditure (revenue)	330.19	407.16	447.03	1132.44
ii.	Per capita expenditure (capital)	683.99	672.43	632.92	745.96
iii.	Per capita revenue income	463.04	622.38	938.97	1408.86
iv.	O&M expenditure/total revenue expenditure	0.37	0.39	0.39	0.40
D.	Other Ratios				
i.	Operating Ratio	0.71	0.65	0.48	0.80
ii.	Salaries' Expenditure to Revenue Income	35.2%	30.7%	21.9%	20.1%
iii.	Salaries' Expenditure to Revenue Expenditure	49.3%	46.9%	46.0%	25.0%
iv.	Capital Utilisation Ratio	1.12	1.30	1.71	0.99

Source: North Dhaka City Corporation, IMaCS Analysis

1.1.7. Summary

The rapid growth of Dhaka city also causes high demand for water along with housing, electricity, and gas. Due to tremendous geographical expansion and population growth over the last two decades, the City was developed in a very unplanned manner, and as such the planning for the Dhaka WASA activities is modified time to time to meet Dhaka's fast-growing demand for water, and still this is one of the challenges for Dhaka WASA.

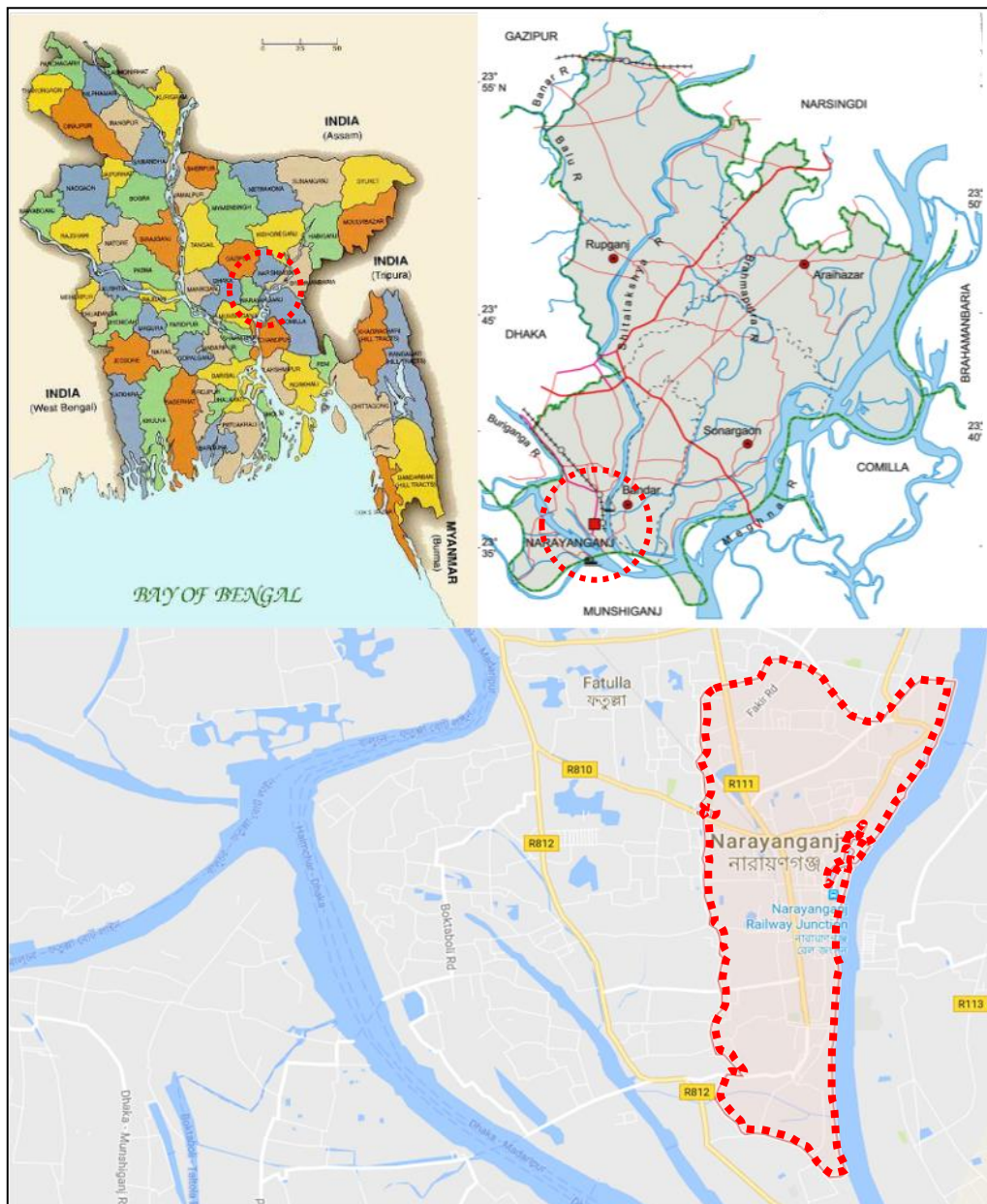
-
- **Water:** Dhaka WASA is also developing a water distribution system model of the city area. This will greatly enhance Dhaka WASA's capacity for system evaluation, operation, and planning.
 - **Transport:** Faulty traffic signalling systems, inadequate manpower, narrow road spaces and overtaking tendency of drivers create prolonged traffic congestions. Because of large number of population and unplanned growth, the traffic problem would be a serious matter and overcrowding of roads would be a common feature. However, recently measures have been taken to ease the traffic jams by building diverse roads and flyovers. If these are more successfully carried out, road transport would be much easier.
 - **Slums:** The problem with slums are that slum dwellers considered illegal residents and, therefore, we are not entitled to any government facilities like health, education, water, sanitation and so on.
 - **Financial performance:** Salaries of the employees account for 42% of the total revenue expenditure (averaged over five years), which is very high. Per capita revenue income shows an increasing trend but stands at a very low number. Also, per capital expenditure and O&M expenditure/total revenue expenditure is low as the Municipal Corporation doesn't provide all basic services.

1.2. Narayanganj City Corporation

1.2.1. Background of the City

Narayanganj is located at a distance of 17 Kms in the southeast of Dhaka- capital city of Bangladesh. It lies on the bank of the river Shitalakhya and at the confluence of Shitalakhya and Buriganga River. Narayanganj is situated in Zone-2 which is prone to moderate earthquakes. It is an important business center for industries especially jute trade, processing plants, and the textile sector of the country. It covers an area of 72.43 sq. Kms. with 27 wards having a total population of 14,18,782 (Census 2011).

Exhibit 16 Narayanganj- Regional Setting



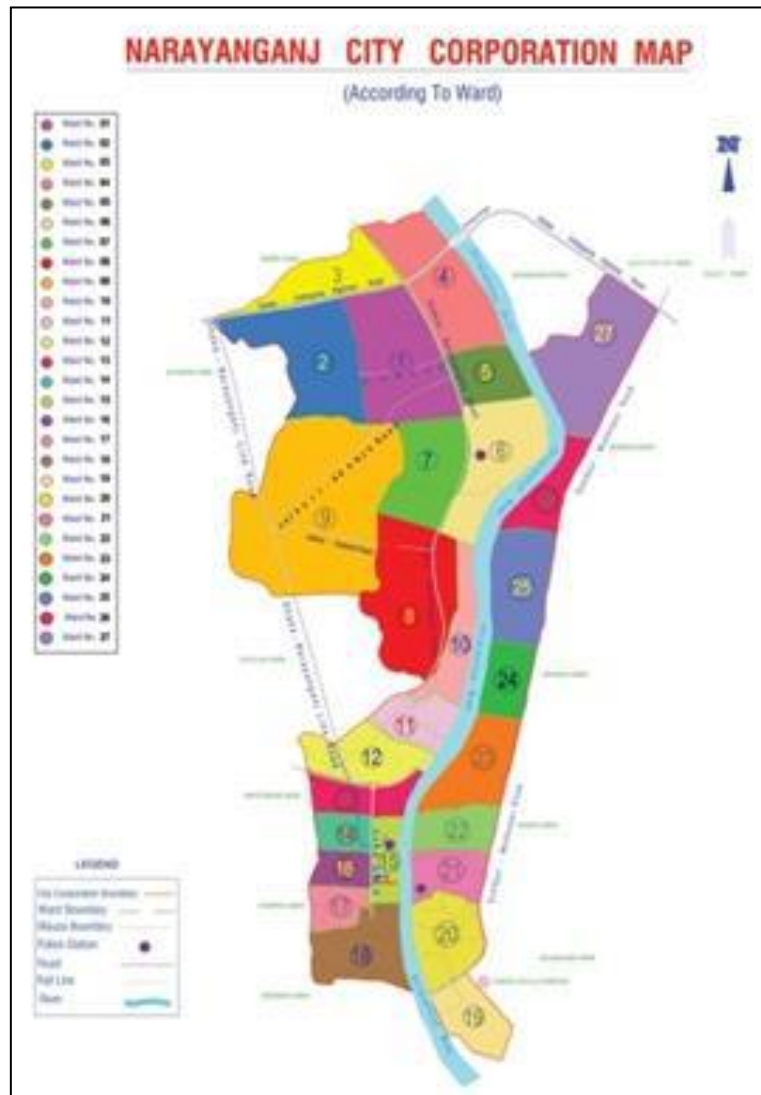
Source: Google Maps

1.2.2. Demographic Profile

Population

As per Census 2011, the total population of Narayanganj City Corporation is 14,18,782. The total numbers of households in Narayanganj are 46,016 and there are 32 slums within the corporation limits.

Exhibit 17 Narayanganj City Corporation Area Map



Source: Narayanganj City Corporation

1.2.3. Institutional/ Organizational Structure

Narayanganj is the 7th City Corporation of the Country which was formed after the unification of Narayanganj Municipality, Siddhirganj Municipality and Kadam Rasul Municipality. It was established in May 2011 and is functional from June 2011. Narayanganj City Corporation is divided into nine departments namely administrative department, revenue department, estate department, social welfare department, accounts department,

engineering department, town planning department, health and family planning department and conservancy department. All these departments are further divided into sub sections.

Total 683 positions have been approved by the government, out of which only 158 positions are occupied showing a huge gap of 77%. Refer exhibit below for staff details in Narayanganj City Corporation.

Exhibit 18 Existing Manpower - Narayanganj City Corporation

Heads	Positions
Organogram wise requirement	793
Approved by Govt.	683
Present	158
Vacant	525

Source: Narayanganj City Corporation

1.2.4. Service Delivery

Water Supply

Water Supply and Sewerage Authority is the agency responsible for providing and managing water supply in Narayanganj City Corporation. Currently, it is operating three separate piped water supply systems extracting water from Sitalakhya River and deep tube wells. A large number of individuals are also extracting water from private tube wells. Distribution pipe lines covered almost all the major roads of the city.

Sewerage

Narayanganj area is not covered by any sewerage network though the only Sewerage Treatment plant in the metropolitan area is located here in the Pagla Area. People mostly depend on on-site sanitary latrines in the urban area and pit latrine in rural and semi-urban areas. The use of hanging latrine is shrinking gradually. However, there are areas where people use khal and open spaces for defecation². Septic tank/soak well of on-site sanitary latrines are often connected to nearby drains, canals and water body.

Sanitation

NCC has many factories, and many workers live in slums within the city. In order to establish a clean, environment friendly city, NCC requires a number of public toilets. In addition, twin pit latrine, slaughter house, transfer station for sludge disposal etc. are required.

Solid Waste Management

With the increase in population and rapid urbanization, it is natural for the generation of solid waste to increase. In the NCC area, though a solid waste collection and disposal system exist but, a substantial amount of solid waste daily is not collected and disposed of. Out of the total waste generated only 88% is collected the rest 12% waste eventually finds its way into roadside drains, canals, incidental spaces, or in vacant plots in between settlements, making urban living hazardous.

² Source: NCC

Exhibit 19 Narayanganj City Corporation Solid waste Management details

SWM (Existing)	Existing
Daily Generation (MT)	120 MT
Daily Collection (MT)	103 MT

Source: Narayanganj City Corporation, Bangladesh

Street Lights

The provision and maintenance of the streetlights is the responsibility of Narayanganj City Corporation. At present, there are 7,247 streetlights which cover 182.5 kms of roads with streetlights.

Exhibit 20 Narayanganj City Corporation Street light details

Streetlights	Existing
Total No. of Streetlights	7,247
Coverage Roads	182.49 KM
Total No. of Street Light Poles	4,549

Source: Narayanganj City Corporation, Bangladesh

1.2.5. Financial Performance of NCC

The financial analysis has been carried out to understand the current financial status of the Narayanganj Municipal Corporation. The Financial statements have been reviewed for the last 4 years commencing from 2012-13 to 2015-16.

Financial Status at a Glance

Exhibit 21 provides a summary of the Revenue and Capital Accounts of Narayanganj Municipal Corporation during FY 2012-13 to FY 2015-16. Key points to note are summarised below:

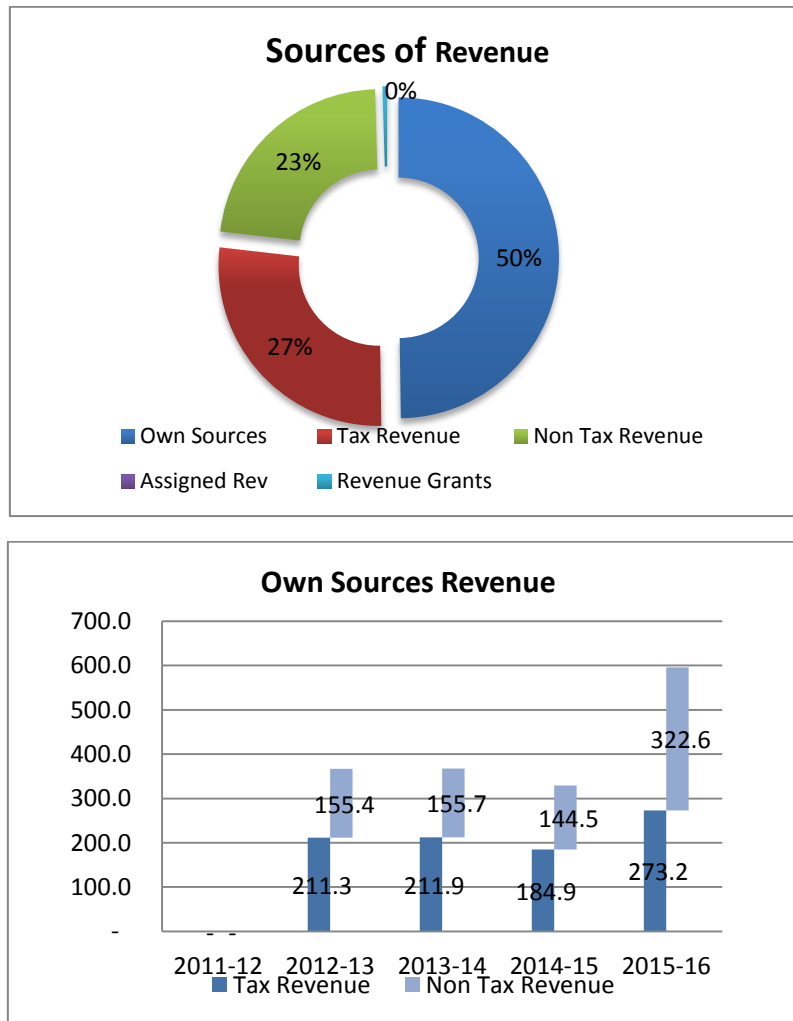
Exhibit 21 Summary – Revenue and Capital Account

Financial Status at a Glance	2012-13	2013-14	2014-15	2015-16	CAGR
	Million BDT				%
Revenue Account					
Income	366.7	367.6	337.4	603.8	18.1%
Expenditure	78.7	110.2	966.3	869.1	122.7%
Surplus/ Deficit	288.0	257.3	(628.9)	(265.3)	
Capital Account					
Receipts	292.9	212.5	534.5	1,565.2	74.8%
Payments	575.3	499.8	396.8	1,030.6	21.4%
Surplus/ Deficit	(282.4)	(287.3)	137.8	534.6	
Overall Status incl. O.B.	5.6	183.1	(229.1)	516.1	

Source: Narayanganj Municipal Corporation, iMaCS Analysis

1. **Revenue Income grew** at a CAGR of 18.1% between FY 2012-13 and FY 2015-16, with own income growing at a CAGR of 17.6%. The revenue base of Narayanganj Municipal Corporation is very low with revenue income per capita at BDT 258.46 (FY 2012-13). Own source revenue constitutes for 99.1% of its total revenues, which largely comprises of Land and Residence Tax and Land Transfer Tax. Exhibit 22 highlights the different sources of revenue for the Municipal Corporation.

Exhibit 22 Sources of Revenue



Source: Narayanganj Municipal Corporation, IMaCS Analysis

2. **Revenue Expenditure** has grown faster at a CAGR of 93.4% during FY 2012-13 and FY 2015-16, driven by a 433.3% (CAGR) jump in O&M costs.
3. Operating surplus has increased from BDT 5.6 million to BDT 516.1 million during FY 11-15 as a result of the huge chunk of capital receipts.

Revenue Account

The following section provides an in-depth review of the revenue account, in order to assess the municipal fiscal status. The revenue account comprises of two components - revenue income and revenue expenditure.

Revenue Income

Exhibit 23 provides a snapshot of growth in various heads under Revenue Income. Revenue Income broadly comprises **Own source income** (including property taxes, professional taxes and other non-tax income including fees, charges and rentals) and **Devolution and Transfers** (including Devolution income, Assigned revenues and Grants, investment income).

Exhibit 23 Revenue Income-Composition

Revenue Income	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT				%	%
Own Sources	366.7	367.6	329.4	595.8	99.1%	17.6%
Tax Revenue	211.3	211.9	184.9	273.2	53.8%	8.9%
Non Tax Revenue	155.4	155.7	144.5	322.6	45.2%	27.6%
Revenue Grants	-	-	8.0	8.0	0.9%	-
Total	366.7	367.6	337.4	603.8	100.0%	18.1%

Source: Narayanganj Municipal Corporation, iMaCS Analysis

Own Source income

Income from own sources grew at a CAGR of 17.6% during FY 2012-13 to FY 2015-16 to reach BDT 595.8 million in FY 2015-16. Own source income accounted for nearly 99.1% of the Revenue Income. Taxes including Land and Residence Tax, Fixed Asset Transfer Tax, Water Tax, Advertisement Tax, etc. grew at 8.9% CAGR during FY 2012-13 to FY 2015-16 to touch BDT 273.2 million in FY 2015-16. Non Tax Income has also increased to BDT 322.6 million.

Tax revenues constituted about 53.8% of total revenue receipts in FY 2015-16. In case of Narayanganj, the tax revenue comprises of Land and Residence Tax, Land Transfer Tax, Occupation/ Business Tax, Advertisement Tax, Water Tax and Transportation Tax. Exhibit 24 shows the details of the Tax revenue income of Narayanganj Municipal Corporation.

Non Tax revenue constituted 45.2% of Narayanganj Municipal Corporation's income in FY 2015-16. Non tax revenue consists of rental income from municipal properties and assets, water charges, license and fees, development charges, building permission, sanitation fee, daily market fee etc.

Exhibit 24 Revenue Income - Composition

Revenue Income		Narayanganj				Share	CAGR
		2012-13	2013-14	2014-15	2015-16	%	
<i>Tax Revenue</i>							
1	Land and Residence Tax	87.1	92.5	54.7	107.0	18%	7%
2	Fixed Asset Transfer Tax	95.8	96.7	85.5	100.0	17%	1%
3	Occupation / Business Tax	18.4	20.9	22.5	45.0	7%	35%
4	Water Tax	0.0	0.0	0.0	0.0	0%	-
6	Transportation Tax	10.0	0.1	20.8	1.0	0%	-54%

Revenue Income		Narayanganj				Share	CAGR
		2012-13	2013-14	2014-15	2015-16	%	
7	Advertisement Tax	0.0	1.5	1.2	20.0	3%	-
8	Other Taxes	0.0	0.2	0.1	0.2	0%	-
	<i>Sub-Total (Tax Revenue)</i>	211.3	211.9	184.9	273.2	45%	9%
<i>Non Tax Revenue</i>							
1	Rental Income from Municipal Properties / Assets	33.6	36.2	9.9	35.7	6%	2%
2	License and Fees	19.3	20.7	26.0	17.9	3%	-2%
3	Rates	0.0	0.0	21.8	83.7	14%	-
4	Other Income from Water	0.0	0.0	0.0	0.0	0%	-
5	Others	102.5	98.7	86.8	185.4	31%	22%
	<i>Sub Total (Non Tax)</i>	155.4	155.7	144.5	322.6	53%	28%
Total Own sources		366.7	367.6	329.4	595.8	99%	18%
Total Revenue Income		366.7	367.6	337.4	603.8	100%	18%

Source: Narayanganj Municipal Corporation, IMaCS Analysis

Revenue Expenditure and Surplus

Revenue expenditure has grown faster (CAGR 93.4% during FY 12-16) than revenue income and has resulted in a decline in revenue surplus, and ultimately a deficit in FY 2014-15 and FY 2015-16.

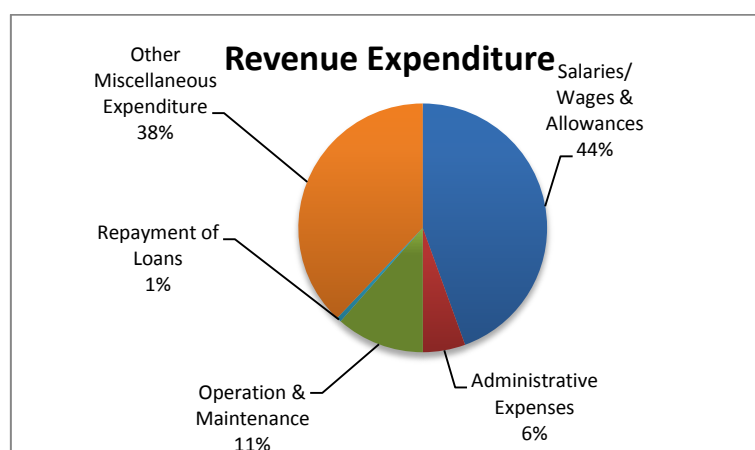
Exhibit 7-25 Revenue Expenditure-Summary

Revenue Expenditure	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	<i>Million BDT</i>				%	%
Salaries/ Wages & Allowances	60.7	75.7	81.3	106.6	44.5%	20.6%
Administrative Expenses	1.6	11.7	29.2	26.2	5.5%	153.8%
Operation & Maintenance	0.8	3.2	126.5	121.4	11.5%	433.3%
Repayment of Loans	1.5	0.0	0.0	3.2	0.6%	28.7%
Other Miscellaneous Expenditure	14.1	19.6	372.7	311.8	37.9%	180.7%
Total Revenue Expenditure	78.7	110.2	609.7	569.1	100.0%	93.4%

Source: Narayanganj Municipal Corporation, IMaCS Analysis

Salaries and Allowances costs have grown at a CAGR of 20.6% during FY 2012-13 to FY 2015-16. These costs are expected to rise for a few more years as the Municipal Corporation is already having lower number of employees than sanctioned and to adjust the inflation component in the salaries.

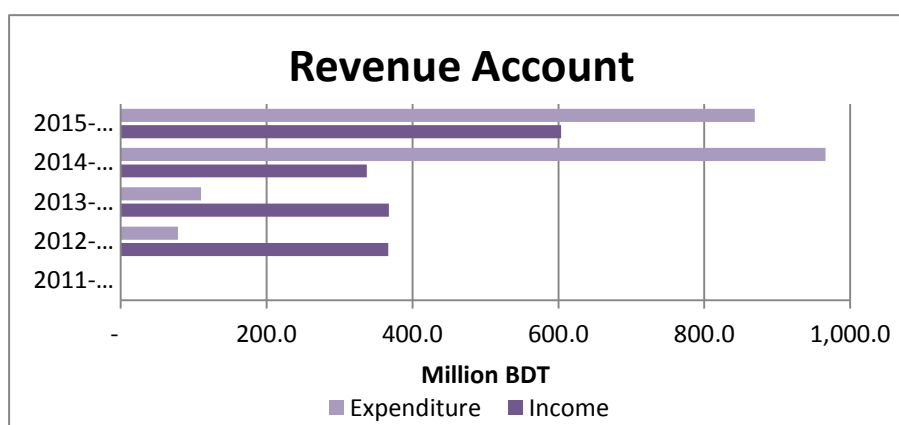
Exhibit 26 Revenue Expenditure-Breakup



Source: Narayanganj Municipal Corporation, IMaCS Analysis

Operations and Maintenance costs have surged at a CAGR of 433.3% largely on account of repairs and other maintenance expenses. Therefore despite a strong growth in revenue income during this period, revenue expenditure has grown faster and as a result, Revenue surplus has declined from BDT 288 million to a deficit of BDT 265.3 million during FY 13-16.

Exhibit 27 Revenue Expenditure & Income



Source: Narayanganj Municipal Corporation, IMaCS Analysis

Exhibit 28 Cash Balances

Cash Balances (BDT) as on June 30 th	FY12-13	FY13-14	FY14-15	FY15-16
Opening	391,980,95	365,541,65	247,487,77	4250,80,185
Closing	588,428,07	432,094,06	152,585,18	3622,77,331

Source: Narayanganj Municipal Corporation

Exhibit 29 Properties in Town

Properties in Town	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16
Total	32,178	49,461	50,056	50,056	52,010

Source: Narayanganj Municipal Corporation

Collection Efficiency: Property / Holding Tax collection against demand in FY 2015-16 was 69.5%.

Key Financial Ratios

Key financial ratios have been calculated based on the annual accounts of the Narayanganj Municipal Corporation to highlight the existing position of the municipal finances. Key financial ratios have been presented in Exhibit below. The average operating ratio is 0.82, indicating that Narayanganj expenditure levels are less than the revenue income generated. Average Capital utilization ratio of Narayanganj Municipal Corporation is 1.43, indicating that Narayanganj capital expenditure is more than its capital income.

Exhibit 30 Performance Indicators

Narayanganj Municipal Corporation		2012-13	2013-14	2014-15	2015-16
	Population (2011)	1418782			
A.	Share of own revenues in total receipts				
i.	Own revenue receipts/total revenue receipts	1.00	1.00	0.98	0.99
ii.	Own revenue receipts/revenue expenditure	4.66	3.33	0.34	0.69
iii.	Non-tax revenues/total revenue receipts	0.42	0.42	0.43	0.53
B.	Collection efficiency				
i.	Property / Holding Tax collection against demand	57.8%	62.2%	64.8%	69.5%
C.	Sources and allocation of capital expenditure				
i.	Revenue surplus/capex	0.50	0.51	-1.59	-0.26
ii.	Capital expenditure to total expenditure	0.88	0.82	0.29	0.54
iii.	Capital receipts to total receipts	0.44	0.37	0.61	0.72
iv.	Per capita expenditure on education	0.00	0.02	0.02	0.00
v.	Per capita expenditure on health	9.09	21.43	21.06	19.13
D.	Cost recovery of key services				
i.	Per capita expenditure (revenue)	55.47	77.70	681.05	612.57
ii.	Per capita expenditure (capital)	405.49	352.25	279.66	726.36
iii.	Per capita revenue income	258.46	259.07	237.80	425.57
iv.	O&M expenditure/total revenue expenditure	0.01	0.03	0.13	0.14
E.	Other Ratios				
i.	Operating Ratio	0.21	0.30	1.81	0.94
ii.	Salaries' Expenditure to Revenue Income	16.6%	20.6%	24.1%	17.7%
iii.	Salaries' Expenditure to Revenue Expenditure	77.1%	68.7%	13.3%	18.7%
iv.	Capital Utilisation Ratio	1.96	2.35	0.74	0.66

Source: Narayanganj Municipal Corporation, IMaCS Analysis

1.2.6. Summary

- **Water Supply:** Dhaka WASA is responsible for the supply of water in the urban areas. Distribution pipe lines covered almost all the major roads of the city.
- **Manpower:** There is a huge shortfall of staff in the corporation, about 77% of the positions are vacant.
- **Sewerage:** Narayanganj area is not covered by any sewerage network though the only Sewerage Treatment plant in the metropolitan area is located here in the Pagla area.
- **Solid Waste Management:** Out of the total waste generated, 14% of the waste remains uncollected which finds its way on the roads and into the drains thus clogging them.
- **Streetlights:** Around 182 kms of the roads are covered with streetlights. There are a total of 7,247 streetlights spread across the NCC area.
- Salaries of the employees account for 44% of the total revenue expenditure (averaged over five years), which is very high.
- Per capita revenue income shows an increasing trend but stands at a very low number. Also, per capital expenditure and O&M expenditure/total revenue expenditure is low as the Municipal Corporation doesn't provide all the basic services.
- Low Collection Efficiency in the corporation has resulted in lower revenues altogether. The corporation should work to increase the collections.

1.3. Chandpur Pourashava

1.3.1. Background of the City

Chandpur Pourashava lies in Chandpur district and is bounded by Munshiganj zila, a part of Comilla zila in the north, Noakhali zila, Lakshmipur zila, Barisal zila in the south and by Shariatpur zila, a part of Munshiganj zila and River Meghna in the west. It lies between 23° 00' and 23° 30' north latitude and between 90° 32' and 91° 02' east longitudes. Chandpur Pourashava extends up to 22.9 sq. km. and has a population of 1,79,000.

Exhibit 31 Chandpur- Regional Setting



Source: Google Maps

1.3.2. Demographic Profile

Population

The total population of Chandpur Pourashava is 179,000 which include 79,799 males and 79,222 females. The total numbers of households residing in Chandpur Pourashava are 24,500 in 2011. Density of Chandpur is 69441.14 person per sq.km. The average literacy rate in Chandpur is 57.12% (Males 58.81%, Females 55.43%)

Urban Poor

There are 60 slum settlements in Chandpur Pourashava having a population of 50,000; constituting 28% of total population of city as per 2011 census. The total numbers of households residing in slums are 3,844 as per Census 2011.

1.3.3. Economic Base

The economy of Chandpur is predominantly agricultural. Chandpur produces variety of crops such as rice, wheat, vegetables, cash crops, spices, pulses and others. Fish of different varieties are abundant in this district. More varieties of fish are caught from river, channels and creeks and paddy fields during rainy season. Hilsha, a popular fish of the country, is abundantly available in the city. Catching fish is an important source of income to the fishermen of this city.

1.3.4. Institutional/ Organisational structure

Chandpur Pourashava has three departments namely Administration, Engineering and Health. These departments are segregated into 10 sections. There are currently 232 permanent employees in Chandpur against 256 sanctioned positions which show a gap of 24 vacant positions. Besides this, Chandpur Pourashava also has 452 contractual employees majorly involved in solid waste management.

1.3.5. Service Delivery

Water Supply

It is observed that only 65% of households are connected with tap water supply, though a separate 11.5 MLD water supply project has been proposed to cater the remaining population. A major share of water i.e. 80% of water is supplied from surface water and the remaining 20% is through ground water. Currently the water supply network covers only 63% area of the city.

Exhibit 32 Chandpur Pourashava- Water Supply

Water Supply	Existing	Proposed
Sources Total (MLD)	6.42	11.65
Source 1 (MLD) (River)	5.13	11.65
Source 2 (MLD) (Deep Tube well)	1.29	-
Supply (MLD)	6.42	11.65
Treatment (MLD)	5.68	18.93
Storage Capacity (MLD)	2.27	2.27

Water Supply	Existing	Proposed
Water Mains (km)	130	25
Distribution (km)	115	25
Covered Area (sq. km.)	14.3	22.0
Tap water coverage (% of households)	65%	100%

Source: Chandpur Municipality, Bangladesh

At present there is no sewerage system in Chandpur.

Roads and Storm Water Drains

Refer Exhibit 33 for existing roads and storm infrastructure in Chandpur. 97% of the roads in Chandpur are under the purview of the Pourashava and the remaining 3% of roads fall under the category of national highways. 14% of the Pourashava roads are constructed from cement concrete and the remaining 86% of the roads are made from asphalt. The city has a drainage network which includes 28.5 km of drains and covers 10 sq. km of the Pourashava area.

Exhibit 33 Chandpur Pourashava- Roads & Storm Water Details

Roads (km)	Existing	Proposed
Corporation Roads	177	16.3
National Highway	5	-
Cement Concrete (CC) road	24.75	16.3
Asphalt road	152.25	-
Drains		
Drain Network (KM)	28.5	65.4
Area Coverage by SWD	10 Sq. km	22 Sq. km

Source: Chandpur Municipality, Bangladesh

Solid Waste Management

Chandpur Pourashava generates 40 MT of waste per day which comprises of biodegradable and non-biodegradable components. The Pourashava is responsible for segregation, door to door collection from house, markets and offices, collection from points, cleaning of roads, night cleaning on busy and important roads, market areas, and transportation of waste from different areas up to the disposal site. The collection of waste is done with the help of 35 rickshaw vans, 40 trolleys having a capacity of 36 MT per trip and 12 trucks having a capacity of 3.0 MT each. These trucks collect SW from the collection points and dump it in the land fill site of 4 acres without any treatment.

Exhibit 34 Chandpur Pourashava Solid Waste Management System

SWM (Existing)	Existing	Proposed
Daily Generation (MT)	40+	80+
Daily Collection (MT)	40+	-
Collection points	6	15
Household Segregation (Y/N)	N	N

SWM (Existing)	Existing	Proposed
Vehicle Capacity (Cu. M)	36MT/per trip	-
Landfill site (Hectare)	4 acre	-
Waste Treatment (MT)	N	-
Total Staff in SWM	430	Need more

Source: Chandpur Municipality, Bangladesh

Street Lights

Currently there are 5,000 streetlights which cover 70% of the roads and 70% of the city area. The Pourashava has a plan to install another 2000 streetlights to cover the remaining portions of the city.

Exhibit 35 Chandpur Municipality Street light details

Streetlights	Existing	Proposed
Total No. of Streetlights	5,000	2,000
Coverage Area (%)	70%	100%
Coverage Roads (%)	70%	100%

Source: Chandpur Municipality, Bangladesh

Building Permission

Chandpur Municipality has an established system under which building permission is granted. Refer Exhibit below for the details of application received and approved along with income received from building permission.

Exhibit 7-36 Chandpur Municipality-Building Permission Details

Building Permission	FY2015	FY2016
No. of applications received	417	357
No. of applications approved	400	403
Income (BDT. Lac)	10.82	10.93

Source: Chandpur Municipality, Bangladesh

1.3.6. Financial Performance

The financial analysis has been carried out to understand the current financial status of the Chandpur Pourashava. The Financial statements have been reviewed for the last 5 years commencing from 2011-12 to 2015-16.

Financial Status at a Glance

Exhibit 37 provides a summary of the Revenue and Capital Accounts of Chandpur Pourashava during FY 2011-12 to FY 2015-16. Key points to note are summarised below:

Exhibit 37 Details Summary – Revenue and Capital Account

Financial Status at a Glance	2011-12	2012-13	2013-14	2014-15	2015-16	CAGR
	Million BDT					%
Income	170.2	192.6	169.2	197.8	249.1	10.0%
Expenditure	134.5	160.6	151.1	173.8	212.1	12.1%
Surplus/ Deficit	35.8	32.0	18.1	24.0	37.0	
Capital Account						
Receipts	152.1	196.0	132.6	81.7	105.0	-8.9%
Payments	150.4	200.8	138.0	102.8	137.1	-2.3%
Surplus/ Deficit	1.7	(4.8)	(5.4)	(21.1)	(32.1)	
Overall Status incl. O.B.	43.6	34.0	17.6	21.0	26.2	

Source: Chandpur Pourashava, IMaCS Analysis

1. **Revenue Income** grew at a CAGR of 10% between FY 2011-12 and FY 2015-16, with devolution income and own income growing at a CAGR of 9.7% and 10% respectively. The revenue base of Chandpur Pourashava is very low with revenue income per capita at BDT 951 (FY 2011-12). Own source revenue constitutes only 99.9% of its total revenues, which largely comprises of Land and Residence Tax, Land Transfer Tax, Water Tax and Licence and Fees Income. Exhibit 38 highlights the different sources of revenue for the Pourashava.

Exhibit 38 Sources of Revenue

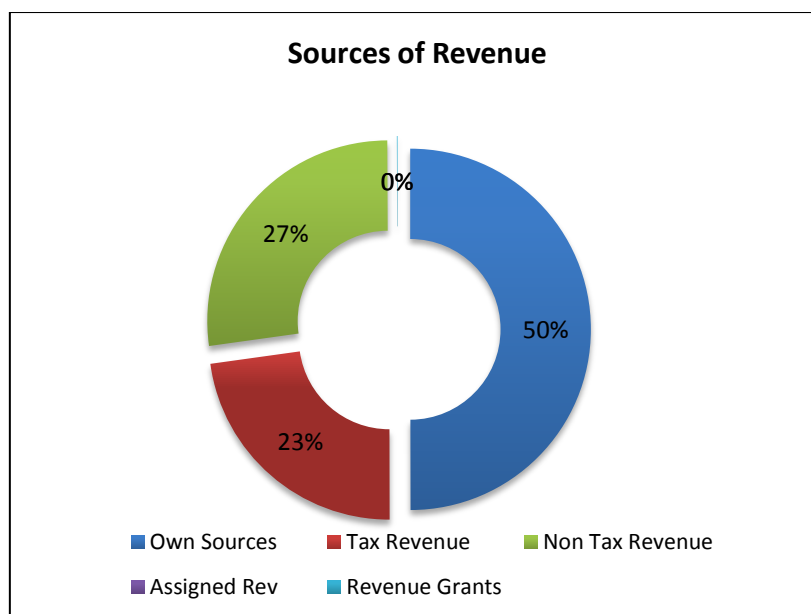
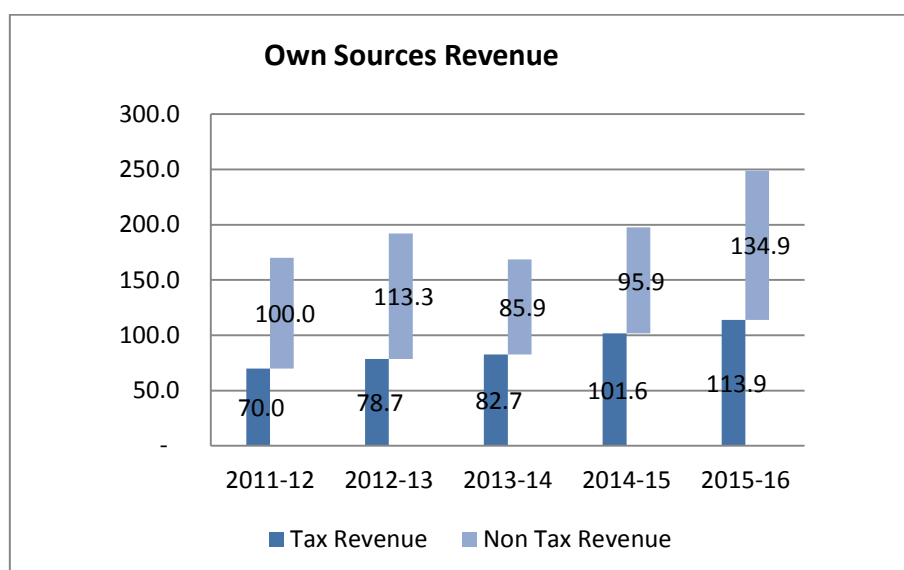


Exhibit 39 Tax and Non Tax Revenues


- Revenue Expenditure** has grown faster at a CAGR of 12.1% during FY 2011-12 and FY 2015-16, driven by a 46.3% (CAGR) jump in O&M costs.
- Operating surplus** declined from BDT 43.6 million to BDT 26.2 million during FY 11-15 as a result of this faster expenditure growth and meagre growth in revenues.

Revenue Account

The following section provides an in-depth review of the revenue account, in order to assess the municipal fiscal status. The revenue account comprises of two components - revenue income and revenue expenditure.

Revenue Income provides a snapshot of growth in various heads under Revenue Income. Revenue Income broadly comprises **Own source income** (including holding taxes, professional taxes and other non-tax income including fees, charges and rentals) and **Devolution and Transfers** (including Devolution income, Assigned revenues and Grants, investment income).

Exhibit 40 Revenue Income

Revenue Income	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Own Sources	170.0	191.9	168.5	197.5	248.8	99.9%	10.0%
Tax Revenue	70.0	78.7	82.7	101.6	113.9	45.6%	12.9%
Non Tax Revenue	100.0	113.3	85.9	95.9	134.9	54.2%	7.8%
Revenue Grants	0.2	0.2	0.2	0.3	0.3	0.1%	9.7%
Total	170.2	192.1	168.7	197.8	249.1	100.0%	10.0%

Source: Chandpur Pourashava, IMaCS Analysis

Own Source Income

Income from own sources grew at a CAGR of 10% during FY 2011-12 to FY 2015-16 to reach BDT 248.8 million in FY 2015-16. Own source income accounted for nearly 99.9% of

the Revenue Income. Taxes including Land and Residence Tax, Fixed Asset Transfer Tax, Water Tax, Advertisement Tax, etc. grew from BDT 70 million in FY 2011-12 to touch BDT 113.9 million in FY 2015-16. Non Tax Income also grew from BDT 100 million in FY 2011-12 to BDT 134.9 million in FY 2015-16.

Tax revenues constituted about 45.6% of total revenue receipts in FY 2015-16. In case of Chandpur, the tax revenue comprises of Land and Residence Tax, Land Transfer Tax, Occupation/Business Tax, Advertisement Tax, Water Tax and Transportation Tax. Exhibit 41 shows the details of the tax revenue income of Chandpur Pourashava.

Non Tax revenue constituted 54.2% of Chandpur Pourashava income in FY 2015-16. Non Tax revenue is the major source of revenue. Non tax revenue consists of rental income from municipal properties and assets, water charges, license and fees, development charges, building permission, sanitation fee, daily market fee etc. It can be observed that licence and fees income holds the maximum share of non-tax revenue in all the years.

Exhibit 41 Revenue Income - Composition

Revenue Income		Chandpur					Share	CAGR
		2011-12	2012-13	2013-14	2014-15	2015-16		
<i>Tax Revenue</i>								
1	Land and Residence Tax	9.0	10.1	10.1	11.2	11.5	5%	6%
2	Fixed Asset Transfer Tax	33.0	36.7	31.6	35.0	40.0	16%	5%
3	Occupation / Business Tax	2.2	2.7	2.7	5.0	5.0	2%	23%
4	Water Tax	24.3	27.2	35.9	47.0	49.5	20%	19%
6	Transportation Tax	1.5	1.5	1.7	2.0	6.0	2%	43%
7	Advertisement Tax	0.1	0.4	0.7	1.0	1.5	1%	97%
8	Other Taxes	0.0	0.0	0.0	0.4	0.4	0%	-
	<i>Sub-Total (Tax Revenue)</i>	70.0	78.7	82.7	101.6	113.9	46%	13%
<i>Non Tax Revenue</i>								
1	Rental Income from Municipal Properties / Assets	8.3	8.4	9.9	11.4	13.4	5%	13%
2	License and Fees	75.9	84.5	54.5	60.9	97.0	39%	6%
3	Rates	13.6	14.6	14.1	15.9	16.2	7%	4%
4	Others	2.1	5.8	7.4	7.7	8.3	3%	40%
	<i>Sub Total (Non Tax)</i>	100.0	113.3	85.9	95.9	134.9	54%	8%
Total Own sources		170.0	191.9	168.5	197.5	248.8	100%	10%
Total Revenue Income		170.2	192.6	169.2	197.8	249.1	100%	10%

Source: Chandpur Pourashava, IMaCS Analysis

Revenue Expenditure and Surplus

Revenue expenditure has grown faster (CAGR 12.1% during FY 12-16) than revenue income and has resulted in a decline in operating surplus.

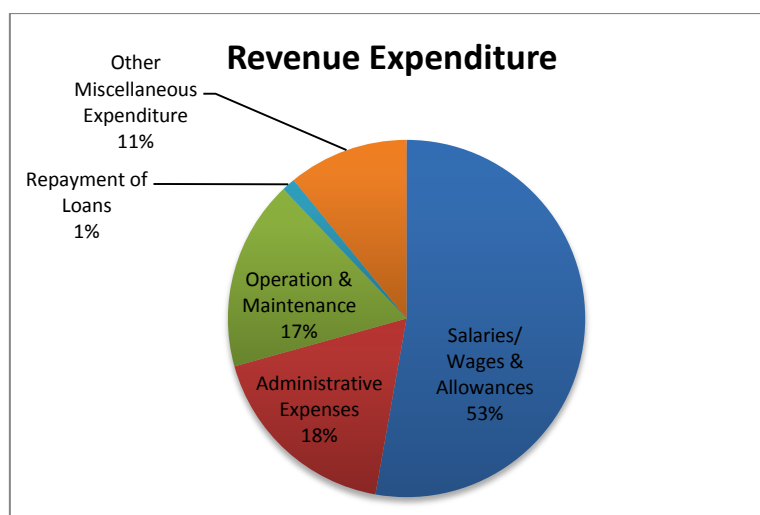
Exhibit 42 Revenue Expenditure – Summary

Revenue Expenditure	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Salaries/ Wages & Allowances	68.4	77.4	79.9	97.7	109.0	53.4%	12.4%
Administrative Expenses	43.2	25.8	24.3	18.5	27.2	18.0%	-10.9%
Operation & Maintenance	11.5	22.1	19.6	34.3	52.8	16.4%	46.3%
Repayment of Loans	0.6	2.7	2.1	2.7	1.9	1.2%	33.5%
Other Miscellaneous Expenditure	8.7	27.0	18.7	16.6	17.2	11.0%	18.6%
Total Revenue Expenditure	132.4	155.0	144.6	169.8	208.1	100.0%	12.0%

Source: Chandpur Pourashava, IMaCS Analysis

Salaries and Allowances costs have grown at a CAGR of 12.4% during FY 2011-12 to FY 2015-16. These costs are expected to rise for a few more years as the Pourashava is already having lower number of employees than sanctioned and to adjust the inflation component in the salaries.

Exhibit 43 Revenue Expenditure - Breakup

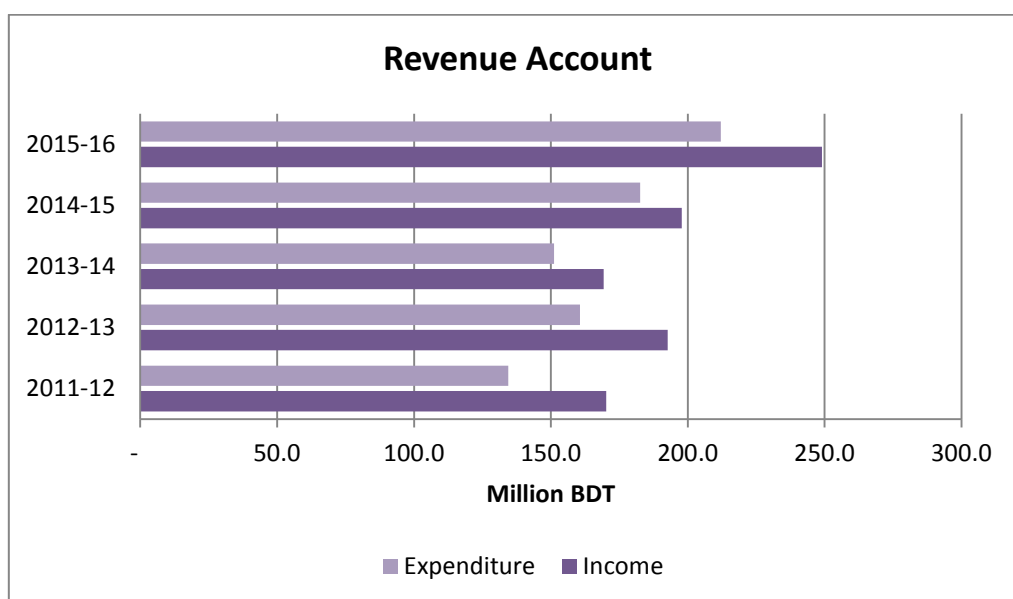


Source: Chandpur Pourashava, IMaCS Analysis

Operations and Maintenance costs have surged at a CAGR of 46.3% largely on account increase in electricity bill of water related components, road repairs/maintenance and drainage repairs amongst others.

Therefore despite a strong growth in revenue income during this period, revenue expenditure has grown faster and as a result, Revenue surplus has increased marginally from BDT 35.8 million to BDT 37 million during FY 12-16.

Exhibit 44 Revenue Expenditure & Income



Source: Chandpur Pourashava, IMaCS Analysis

Exhibit 45 Cash Balances

Cash Balances (BDT) as on June 30 th	FY12-13	FY13-14	FY14-15	FY15-16
Opening	12,137,453	4,952,073	18,128,526	21,322,928
Closing	15,905,591	3,985,674	21,322,928	19,003,007

Source: Chandpur Pourashava

Exhibit 46 Properties in Town

Properties in Town	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16
Total	24,500	25,000	25,700	26,000	26,300

Source: Chandpur Pourashava

Collection Efficiency: It has been observed that the collection efficiency has been good in the Chandpur Pourashava. Property / Holding Tax collection against demand in FY 2015-16 was 96.5% while Other Revenue Sources collection against demand stood at 96.8%.

Key Financial Ratios

Key financial ratios have been estimated based on the annual accounts of the Chandpur Pourashava to highlight the existing position of the municipal finances. Key financial ratios have been presented in Exhibit below. The average operating ratio is 0.83, indicating that Chandpur's expenditure levels are less than the revenue income generated. Average Capital utilization ratio of Chandpur Pourashava is 1.12, indicating that Chandpur's capital expenditure is more than its capital income.

Exhibit 47 Performance Indicators

Chandpur Pourashava		2011-12	2012-13	2013-14	2014-15	2015-16
	Population	179000				
A. Share of own revenues in total receipts						
i.	Own revenue receipts/total revenue receipts	1.00	1.00	1.00	1.00	1.00
ii.	Own revenue receipts/revenue expenditure	1.26	1.19	1.12	1.14	1.17
iii.	Non-tax revenues/total revenue receipts	0.59	0.59	0.51	0.48	0.54
B. Collection efficiency						
i.	Property / Holding Tax collection against demand	96.5%	98.8%	91.1%	93.6%	96.5%
ii.	Other Revenue Sources collection against demand	-	97.7%	107.8%	92.0%	96.8%
C. Sources and allocation of capital expenditure						
i.	Revenue surplus/capex	0.24	0.16	0.13	0.23	0.27
ii.	Capital expenditure to total expenditure	0.53	0.56	0.48	0.37	0.39
iii.	Capital receipts to total receipts	0.47	0.50	0.44	0.29	0.30
iv.	Per capita expenditure on education	66.12	76.32	62.11	114.25	124.86
v.	Per capita expenditure on health	9.06	20.39	19.33	35.47	48.88
D. Cost recovery of key services						
i.	Per capita expenditure (revenue)	751.18	897.46	844.37	970.95	1185.03
ii.	Per capita expenditure (capital)	840.46	1121.75	770.89	574.25	766.03
iii.	Per capita revenue income	951.00	1073.39	942.72	1104.92	1391.55
iv.	O&M expenditure/total revenue expenditure	0.09	0.14	0.13	0.20	0.25
E. Other Ratios						
i.	Operating Ratio	0.78	0.81	0.86	0.86	0.84
ii.	Salaries' Expenditure to Revenue Income	40.2%	40.3%	47.3%	49.4%	43.8%
iii.	Salaries' Expenditure to Revenue Expenditure	51.7%	49.9%	55.3%	57.5%	52.4%
iv.	Capital Utilisation Ratio	0.99	1.02	1.04	1.26	1.31

Source: Chandpur Pourashava, IMaCS Analysis

1.3.7. Summary

- **Water Supply:** Only 62% of the city area is covered with water supply which serves 65% of the households with tap water supply.
- 12% of the water supplied in the city is without treatment due to less capacity of the existing water treatment plant.
- **Sewerage:** At present, Chandpur has no sewerage system.

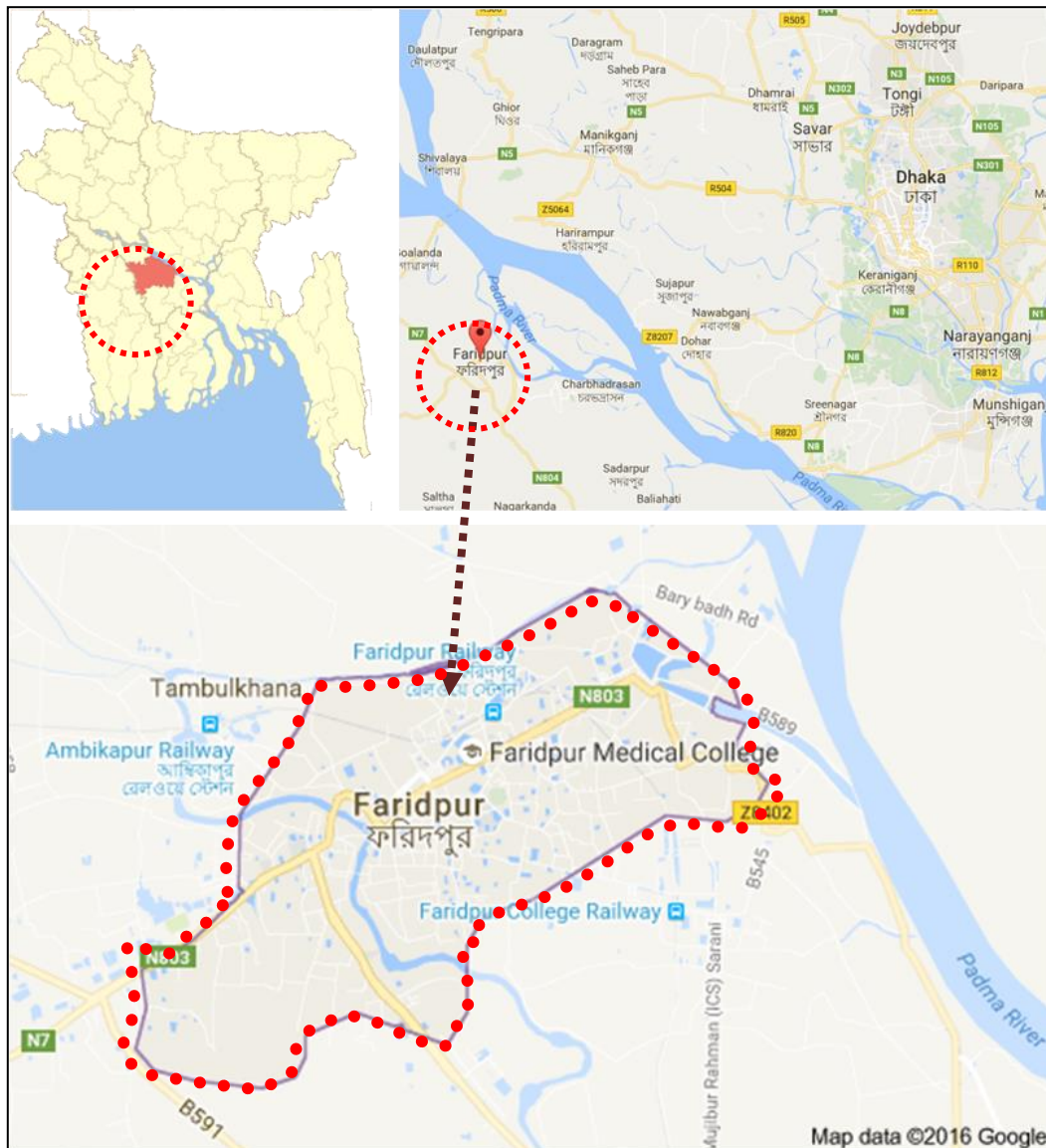
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- **Solid Waste Management:** 100% of the waste generated in Chandpur is collected and disposed off at the landfill site.
 - Currently waste segregation at source is not practiced. The waste collected is disposed directly in the landfill site without any treatment.
 - **Streetlights:** Only 70% area and 70% roads in the city are covered with streetlights whereas the remaining 30% of the city area & city roads remain unserved from streetlights. There is no uniformity in the spacing of the streetlights.
 - **Roads:** The total road length in Chandpur is 182 kms but the condition of roads is bad and most of the roads in the city are encroached
 - **Salaries** of the employees account for 53% of the total revenue expenditure (averaged over five years), which is very high.
 - **Per capita revenue income** shows an increasing trend but stands at a very low number. Also, per capital expenditure and O&M **expenditure/total revenue** expenditure is low as the Pourashava doesn't provide all the basic services.
 - **Collection Efficiency** has been good over the years but in some years, it is recorded at over 100%, which indicates the inefficient billing by the ULB.

1.4. Faridpur Pourashava

1.4.1. Background of the City

Faridpur Pourashava is located 140 km west of Dhaka, across Padma River on the banks of of Kumar River. It has a population of 1,46,921 (2015) and extends up to 17.38 sq. km.

Exhibit 48 Faridpur City - Regional Setting



Source: Google Maps

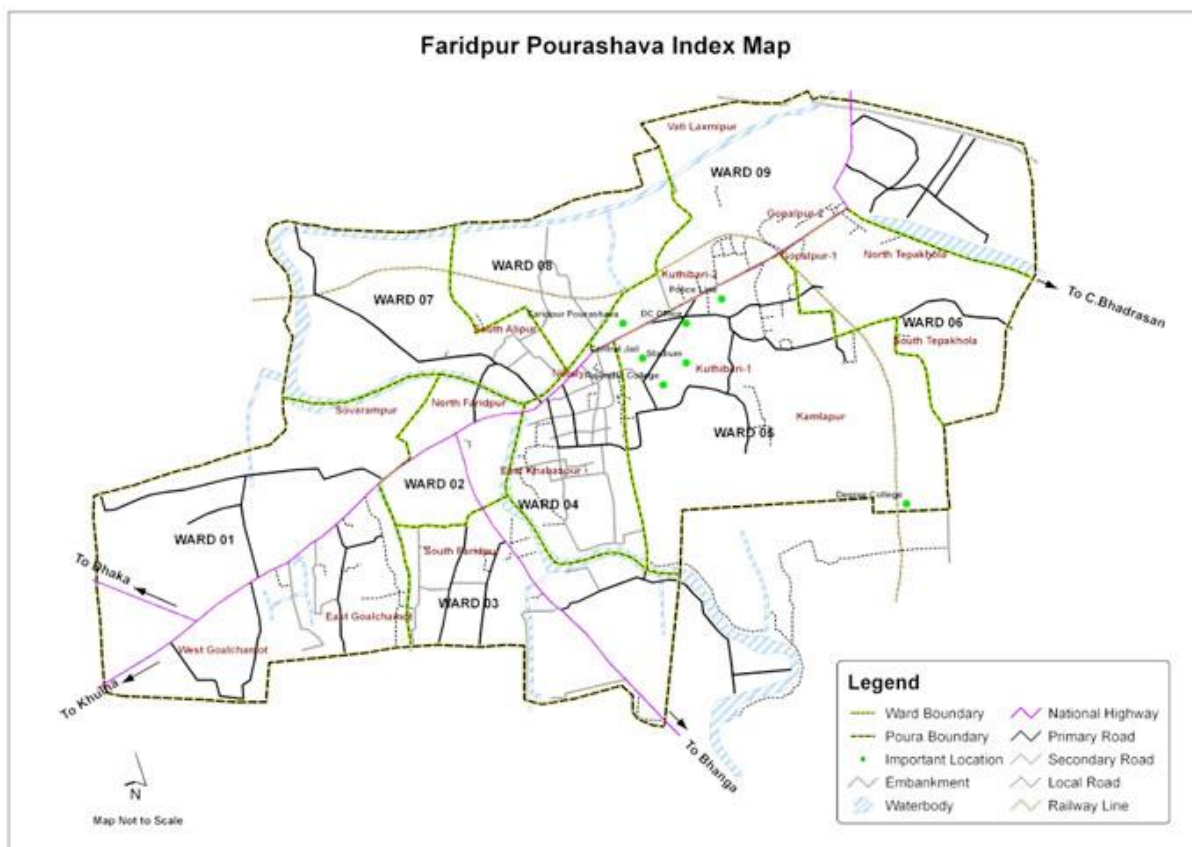
1.4.2. Demographic Profile

Population

Faridpur Pourashava has a total population of 1,46,921 (2015) which has increased at an estimated growth rate of 1.98% (BBS 2011) from a population of 1,21,632 in 2011. The total numbers of households in Faridpur Pourashava are 16,146 (2011). The increase in the population has been due to urbanization and migration from the neighbouring rural areas.

The average literacy rate of Faridpur is 77.3% which is much higher than the national average literacy rate of 51.8%. The literacy rate for males is 80.4 % and for females is 74% as per Census 2011. About 45% of the population of Faridpur falls into the category of below poverty line, 29.24% in low income group, 15.76% in medium income group and remaining 10% belong to the higher income.

Exhibit 49 Faridpur Municipality Area map



Source: Website of Faridpur Municipality, www.faridpurmunicipality.gov

Urban Poor

There are 24 poor settlements in Faridpur Pourashava having a population of 27,465 which constitute 22.58% of the total population of town (Census 2011). The total numbers of households residing in slums are 3,353 (2011).

1.4.3. Economic Base

The municipality is the economic center of the Faridpur district. Industries such as jute mills, cable factories, plastic factories, saw mills, flour mills, bakeries etc. are the major economic base of Faridpur. The income level of the people in Faridpur is very low as about 45% of the population of Faridpur falls into the category of below poverty line, 29.24% in low income group, 15.76% in medium income group and remaining 10% belong to the higher income.

Exhibit 50 Main Occupation

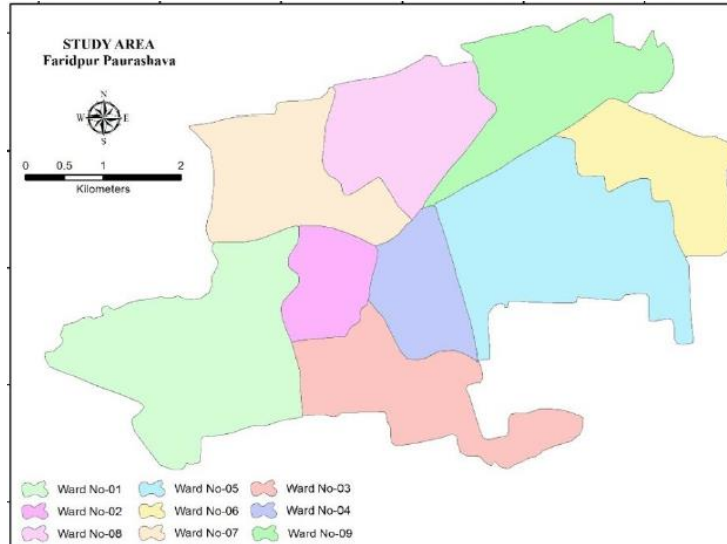
S. No.	Occupational Type	%
1	Business	30.95
2	Employee	21.94
3	Cultivators/Share cropper	11.11
4	Transport	10.71
5	Agriculture labour	5.69
6	Construction	4.32
7	Non- Agriculture labour	3.95
8	Industry	1.67

Source: Sludge Situational Analysis Faridpur Municipality, Bangladesh, June 2014

1.4.4. Institutional/ Organisational structure

Faridpur Pourashava consists of 9 wards having 41 mahallas and its adjoining other urban area comprising of 2 mauzas. It was established in 1869 and was again reconstituted as Faridpur Municipal Committee in 1960 under the Municipal Administration Ordinance of 1960. After Independence, it was renamed as Faridpur Pourashava according to the Bangladesh Local Councils and Municipal Committees (Amendment) Order, 1972.

Exhibit 51 Faridpur Municipality Wards



Source: Sludge Situational Analysis Faridpur Municipality, Bangladesh

Existing manpower scenario of Faridpur Municipality is moderately good. There is some shortage of manpower in each section of the Municipality. It has 148 officials in total against an allocated number of 221 in Municipality organogram. In the Administration Division, there should be 79 officials but there are 61 officials working in that division. In Health & Sanitation, 67 are working against the post of 110 and in Engineering Division, 20 officials are working against the available post of 32. 33% posts of this Municipality/Pourashava are still vacant. From this it can be easily said that there is some lack of staff in this Pourashava and it needs manpower to run its functions efficiently.

Following is the existing regular staff of Faridpur Municipality:

Exhibit 52 Existing Manpower - Faridpur Municipality

Department	Number		
	Sanctioned	Employed	Vacant
Administration	79	61	18
Health & Sanitation	110	67	43
Public Works, Water & Engineering	32	20	12
Total	221	148	73

Source: Faridpur Municipality, Bangladesh

1.4.5. Operational Services

Water Supply

Refer for existing situational analysis of water supply infrastructure / services. The case in Faridpur city a 24-hour water supply pilot system was introduced under the Project. From the analysis only 25% of households got sufficient water before the Project, and, after the Project, 55% of households got enough water. The supply of water is 8-12 hrs. per day. Total connection is 8,537 (active: 7,835) in which 7,427 connections are residential; 408 commercial connections and 1,059 in others. Water is sourced mainly from ground, individual hand pumps and from local ponds at Faridpur. The total supply of water is 8,754 cubic meters / day with storage capacity of water is 1.5 lakh Gallons per tank. There are 2 ground reservoirs and 2 overhead reservoirs.

Exhibit 53 Faridpur Municipality Water Supply Details

Water Supply	Existing
Total connection	8537 (active: 7835) ½" = 3,856, ¾" = 3,815, 1" = 119, 1.5" = 22, 2" = 17, 3" = 6 Residential = 7427, Commercial = 408, Others = 1,059
Sources Total	Mostly ground water Hand pump (individual), Local ponds
Supply (MLD)	8,754 cubic meters / day
Supply hour	8-12 hrs. per day
Storage Capacity (MLD)	1.5 lakh Gallons per tank Total
ESRs (nos)	Ground Reservoir - 2 tank, Overhead Reservoir - 2 tank
Distribution (km)	144
Covered Area (sq. km.)	17.38
Population Covered ('000)	88,866
Tap water coverage (% of households)	55%

Source: Faridpur Municipality, Bangladesh

Sewerage

There is no sewerage network in Faridpur Pourashava.

Sanitation

In Faridpur, access to toilets is 94%. The Exhibit 54 details the different types of toilets.

Exhibit 54 Faridpur Municipality Sewerage details

Types of Toilets	Existing %
Single toilet pit latrine	42.36
Pit toilet with multiple pit	16.43
Twin Pit Latrine	1.59
Twin Pit Latrine with multiple pit	5.33
Single Septic Tank latrine	24.06
Latrine with multiple septic tank	8.21
System missing/wrong	2.02

Source: Faridpur Municipality, Bangladesh

Roads and Storm Water Drains

Refer Exhibit 55 for existing situation analysis of roads and storm infrastructure / services. In Faridpur Municipality, storm water drainage network system covers up to 44% of the total municipality area which will be increased to 66% in future. The total length of the corporation roads under municipality is 189.65 km, National highway is 14.5 km, state highway is 22.23 km. The works department and water resource department maintains all the drains covering a length 75 km of storm water drain, 15 km of natural major drain and 8 km of natural minor drain.

Exhibit 55 Faridpur Municipality Roads & Storm Water Details

Roads (km)	Existing	Proposed
Corporation Roads	189.65	265.0
National Highway	14.5	3.0
State Highway	22.23	-
Cement Concrete (CC) road	18.0	90.0
Asphalt road/ bitumen	99.0	60.0
Other	85.0	115.0
Drains		
Natural Major (Km)	15.0	
Natural Minor (Km)	8.0	
Storm Water Drains (SWD) (Km)	75.0	80.0
Road Side Drains (RSD) (Km)	75.0	80.0
Area Coverage by SWD	44%	66%

Source: Faridpur Municipality, Bangladesh

Solid Waste Management

Faridpur Pourashava generates 54 MT waste per day which comprises of biodegradable and non-biodegradable components. Faridpur Pourashava is responsible for segregation,

collection from points, cleaning of roads, night cleaning on busy and important roads, market areas, transportation of waste from different areas up to the disposal site, collection of waste from through 9 vehicles with capacity of 27 MT. Total collection of waste is 14 MT per day. Total Area of Dumping yard is 3 Acres and only 2 MT waste is treated there. Total staff for the solid waste management under municipality is 4 permanent and 224 daily basis.

Exhibit 56 Faridpur Municipality Solid waste management system

SWM	Existing
Daily Generation (MT)	54
Daily Collection (MT)	14
Collection Points	9
Household Segregation (Y/N)	Nil
Vehicle Capacity (Cu. M)	9 nos. vehicle with 27 MT capacity
Landfill Site (acre)	3
Waste Treatment (MT)	2
Total Staff in SWM	Permanent – 4, Daily basis - 224

Source: Faridpur Municipality, Bangladesh

Street Lights

The provision and maintenance of the streetlights is the responsibility of Faridpur Municipality. At present, there are 7,850 streetlights and 10,000 proposed streetlights in future. The existing streetlights cover 50% of the city area as well as 50% of the city roads.

Exhibit 57 Faridpur Municipality Street light details

Streetlights	Existing	Proposed
Total No. of Streetlights	7,850	10,000
Coverage Area (%)	50%	
Coverage Roads (%)	50%	
Total No. of Street Light Poles	14,000	5,000

Source: Faridpur Municipality, Bangladesh

Building Permission

Faridpur Municipality has an established system under which building permission is granted. Refer exhibit below for the details of application and Income.

Exhibit 58 Building Permission Details

Building Permission	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
No. of applications received	414	490	486	378	401	351
No. of applications approved	384	465	451	358	370	321
Income (BDT. Lac)	13	16	11	14	40	38

Source: Faridpur Municipality, Bangladesh

1.4.6. Financial Performance

The financial analysis has been carried out to understand the current financial status of the Faridpur Pourashava. The Financial statements have been reviewed for the last 5 years commencing from 2011-12 to 2015-16.

Financial Status at a Glance

Exhibit 59 provides a summary of the Revenue and Capital Accounts of Faridpur Pourashava during FY 2011-12 to FY 2015-16. Key points to note are summarised below:

Exhibit 59 Summary – Revenue and Capital Account

Financial Status at a Glance						
Items	2011-12	2012-13	2013-14	2014-15	2015-16	CAGR
	Million BDT					%
Revenue Account						
Income	174.6	129.1	157.0	155.8	187.4	1.8%
Expenditure	124.1	114.7	121.5	141.3	210.4	14.1%
Surplus/ Deficit	50.5	14.4	35.4	14.5	(23.0)	
Capital Account						
Receipts	11.8	125.1	153.8	102.2	217.1	107.2%
Payments	36.3	156.8	174.9	120.2	177.0	48.6%
Surplus/ Deficit	(24.5)	(31.7)	(21.1)	(18.0)	40.1	
Overall Status incl. O.B.	72.7	67.7	82.3	70.5	91.0	

Source: Faridpur Pourashava, IMaCS Analysis

- Revenue Income** grew at a CAGR of 1.8% between FY 2011-12 and FY 2015-16, with devolution income and own income growing at a CAGR of 9.9% and 2.2% respectively. The revenue base of Faridpur Pourashava is low with revenue income per capita at BDT 1258 (FY 2015-16). Own source revenue constitutes only 98.7% of its total revenues, which largely comprises of Land and Residence Tax and Land Transfer Tax. Exhibit 60 highlights the different sources of revenue for the Pourashava.

Exhibit 60 Sources of Revenue

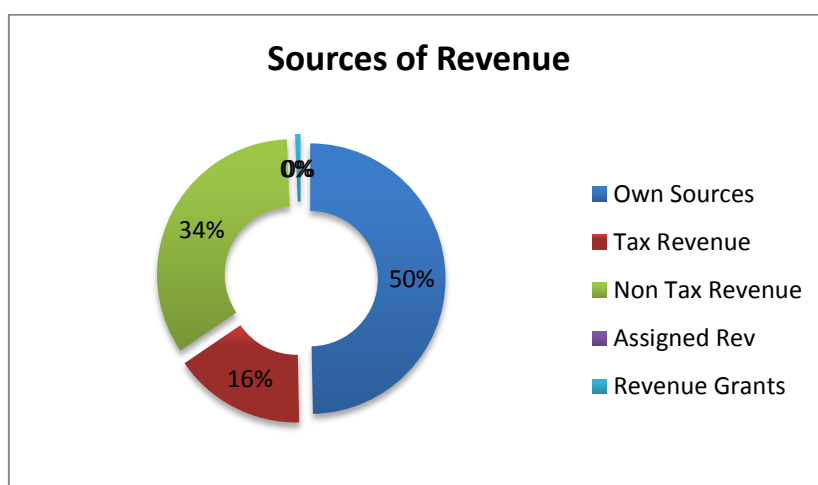
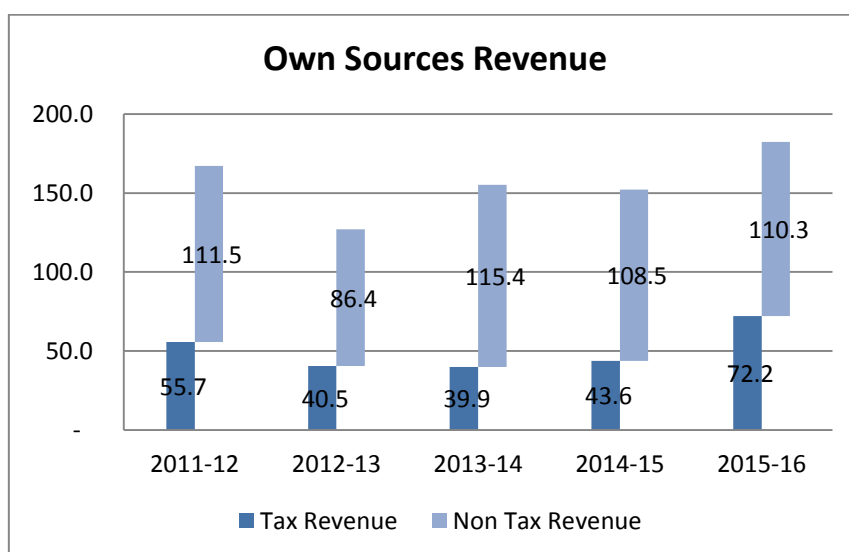


Exhibit 61 Tax and Non Tax Revenues



- Revenue Expenditure** has grown faster at a CAGR of 15.3% during FY 2011-12 and FY 2015-16, driven by a 38.1% (CAGR) jump in O&M costs.
- Operating surplus** increased from BDT 72.7 million to BDT 91 million during FY 12-16 because of increase in capital receipts.

Revenue Account

The following section provides an in-depth review of the revenue account, in order to assess the municipal fiscal status. The revenue account comprises of two components - revenue income and revenue expenditure.

Revenue Income

Exhibit 62 provides a snapshot of growth in various heads under Revenue Income. Revenue Income broadly comprises **Own source income** (including holding taxes, professional taxes and other non-tax income including fees, charges and rentals) and **Devolution and Transfers** (including Devolution income, Assigned revenues and Grants, investment income).

Exhibit 62 Revenue Income

Revenue Income	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Items							
Own Sources	167.2	127.0	155.2	152.1	182.4	98.7%	2.2%
Tax Revenue	55.7	40.5	39.9	43.6	72.2	31.4%	6.7%
Non Tax Revenue	111.5	86.4	115.4	108.5	110.3	67.3%	-0.3%
Revenue Grants	1.7	1.7	1.8	2.6	2.5	1.3%	9.9%
Total	168.9	128.7	157.0	154.7	184.9	100.0%	2.3%

Source: Faridpur Pourashava, IMaCS Analysis

Own Source Income

Income from own sources grew at a CAGR of 2.2% during FY 2011-12 to FY 2015-16 to reach BDT 182.4 million in FY 2015-16. Own source income accounted for nearly 98.7% of the Revenue Income. Taxes including Land and Residence Tax, Fixed Asset Transfer Tax, Water Tax, Advertisement Tax, etc. grew at 6.7% CAGR during FY 2011-12 to FY 2015-16 to touch BDT 72.2 million in FY 2015-16. Non Tax Income has been flat at BDT 110.3 million.

Tax revenues constituted about 31.4% of total revenue receipts in FY 2015-16. In case of Faridpur, the tax revenue comprises of Land and Residence Tax, Land Transfer Tax, Occupation/Business Tax, Advertisement Tax, Water Tax and Transportation Tax. Exhibit 63 shows the details of the Tax revenue income of Faridpur Pourashava.

Non Tax revenue constituted 67.3% of Faridpur Pourashava income in FY 2015-16 and has actually declined to BDT 110.3 million from a peak of BDT 115.4 in FY 2013-14. Non Tax revenue is the major source of revenue. Non tax revenue consists of rental income from municipal properties and assets, water charges, license and fees, development charges, building permission, sanitation fee, daily market fee etc. It can be observed that rental income from municipal properties/assets for the maximum share of non-tax revenue in all the years.

Exhibit 63 Revenue Income - Composition

Revenue Income		Faridpur					Share	CAGR
		2011-12	2012-13	2013-14	2014-15	2015-16	%	
<i>Tax Revenue</i>								
1	Land and Residence Tax	14.8	5.8	5.7	7.9	15.0	8%	0%
2	Fixed Asset Transfer Tax	25.9	21.3	20.2	19.6	23.3	12%	-3%
3	Occupation / Business Tax	3.0	3.2	3.4	4.5	8.0	4%	28%
4	Water Tax	10.0	8.0	7.6	10.2	21.3	11%	21%
6	Transportation Tax	1.5	1.5	2.5	0.7	0.1	0%	-50%
7	Advertisement Tax	0.1	0.2	0.2	0.4	4.0	2%	130%
8	Other Taxes	0.5	0.7	0.3	0.4	0.5	0%	-1%
	<i>Sub-Total (Tax Revenue)</i>	55.7	40.5	39.9	43.6	72.2	39%	7%
<i>Non Tax Revenue</i>								
1	Rental Income from Municipal Properties / Assets	41.4	50.7	62.7	52.4	45.2	24%	2%
2	License and Fees	35.1	6.8	14.1	10.1	13.1	7%	-22%
3	Rates	12.3	8.2	8.1	10.8	21.0	11%	14%
4	Other Income from Water	15.0	15.8	21.8	22.1	25.8	14%	14%
5	Others	7.7	4.9	8.6	13.1	5.1	3%	-10%
	<i>Sub Total (Non Tax)</i>	111.5	86.4	115.4	108.5	110.3	59%	0%
Total Own sources		167.2	127.0	155.2	152.1	182.4	97%	2%
Total Revenue Income		174.6	129.1	157.0	155.8	187.4	100%	2%

Source: Faridpur Pourashava, IMaCS Analysis

Revenue Expenditure and Surplus

Revenue expenditure has grown faster (CAGR 15.3% during FY 12-16) than revenue income and has resulted in a decline in operating surplus, and ultimately a deficit in FY 2015-16.

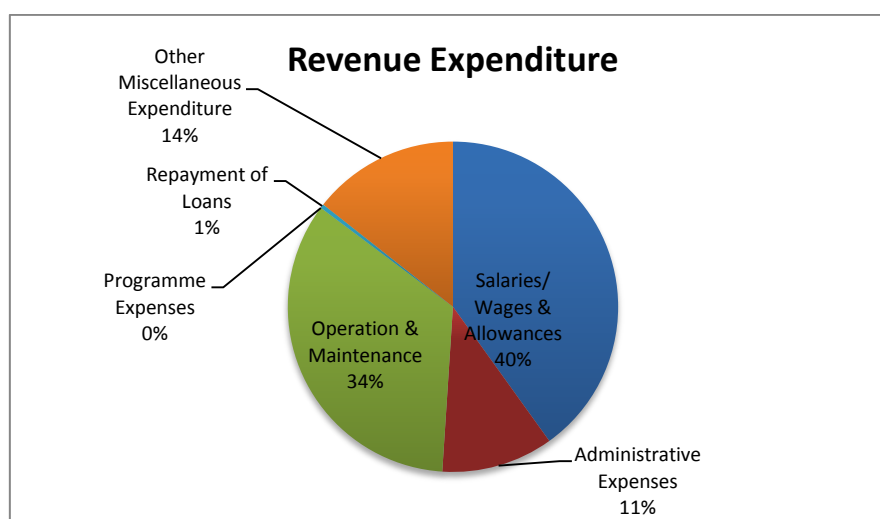
Exhibit 64 Revenue Expenditure – Summary

Revenue Expenditure	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Items							
Salaries/ Wages & Allowances	49.5	47.3	48.2	60.6	69.4	40.1%	8.8%
Administrative Expenses	15.5	13.8	13.2	14.3	17.3	10.9%	2.8%
Operation & Maintenance	29.1	32.9	41.5	44.8	106.0	34.2%	38.1%
Programme Expenses	0.0	0.0	0.0	0.0	0.0	0.0%	-
Repayment of Loans	0.6	0.4	1.0	0.0	0.5	0.4%	-4.1%
Other Miscellaneous Expenditure	23.7	20.0	17.5	16.6	16.2	14.4%	-9.0%
Total Revenue Expenditure	118.4	114.4	121.4	136.3	209.4	100.0%	15.3%

Source: Faridpur Pourashava, IMaCS Analysis

Salaries and Allowances costs have grown at a CAGR of 8.8% during FY 2011-12 to FY 2015-16. These costs are expected to rise for a few more years as the Pourashava is already having lower number of employees than sanctioned and to adjust the inflation component in the salaries.

Exhibit 65 Revenue Expenditure – Breakup

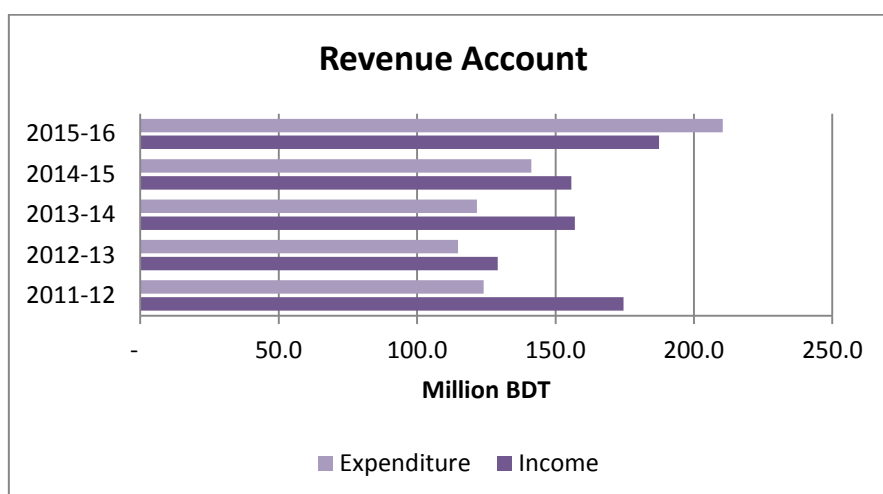


Source: Faridpur Pourashava, IMaCS Analysis

Operations and Maintenance costs have surged at a CAGR of 38.1% largely on account of road repairs and other maintenance expenses.

Therefore despite a strong growth in revenue income during this period, revenue expenditure has grown faster and as a result, Revenue Surplus has declined at from BDT 50.5 million to a deficit of BDT 23 million during FY 12-16.

Exhibit 66 Revenue Expenditure & Income



Source: Faridpur Pourashava, ImaCS Analysis

Key Financial Ratios

Key financial ratios have been estimated based on the annual accounts of the Faridpur Pourashava to highlight the existing position of the municipal finances. Key financial ratios have been presented in Exhibit 67. The average operating ratio is 0.88, indicating that Faridpur expenditure levels are less than the revenue income generated. Average Capital utilization ratio of Faridpur Pourashava is 1.49, indicating that Faridpur capital expenditure is more than its capital income.

Exhibit 67 Performance Indicators

Faridpur Pourashava		2011-12	2012-13	2013-14	2014-15	2015-16
	Population	121632				146921
A.	Share of own revenues in total receipts					
i.	Own revenue receipts/total revenue receipts	0.96	0.98	0.99	0.98	0.97
ii.	Own revenue receipts/revenue expenditure	1.35	1.11	1.28	1.08	0.87
iii.	Non-tax revenues/total revenue receipts	0.64	0.67	0.73	0.70	0.59
B.	Collection efficiency					
i.	Property / Holding Tax collection against demand	N.Av	N.Av	N.Av	N.Av	N.Av
ii.	Other Revenue Sources collection against demand	N.Av	N.Av	N.Av	N.Av	N.Av
iii.	Fees collection against demand	N.Av	N.Av	N.Av	N.Av	N.Av
C.	Sources and allocation of capital expenditure					
i.	Revenue surplus/capex	1.44	0.09	0.20	0.12	-0.13
ii.	Capital expenditure to total expenditure	0.22	0.57	0.59	0.46	0.44
iii.	Capital receipts to total receipts	0.06	0.49	0.49	0.40	0.54
iv.	Per capita expenditure on education	40.08	28.36	33.87	40.94	42.01

Faridpur Pourashava		2011-12	2012-13	2013-14	2014-15	2015-16
v.	Per capita expenditure on health	82.34	114.65	136.61	145.93	183.26
D. Cost recovery of key services						
i.	Per capita expenditure (revenue)	1019.93	943.26	999.25	1161.62	1729.40
ii.	Per capita expenditure (capital)	287.79	1276.55	1436.09	985.51	1399.96
iii.	Per capita revenue income	1388.60	1057.87	1290.50	1271.86	1258.46
iv.	O&M expenditure/total revenue expenditure	0.23	0.29	0.34	0.32	0.50

E. Other Ratios						
i.	Operating Ratio	0.70	0.89	0.77	0.88	1.13
ii.	Salaries' Expenditure to Revenue Income	29.3%	36.7%	30.7%	39.2%	37.5%
iii.	Salaries' Expenditure to Revenue Expenditure	41.8%	41.3%	39.7%	44.5%	33.1%
iv.	Capital Utilisation Ratio	3.08	1.25	1.14	1.18	0.82

Source: Faridpur Pourashava, iMaCS Analysis

1.4.7. Key Observations and Recommendations

- **Water supply:** only 55% of the household covered with tap water connection while 45% of households still lack of tap water supply connection.
 - The increased new plant capacity in Faridpur responded to the increased demand for water that resulted from rapid population growth and the increased concentration of minerals in the groundwater.
 - Instead of adopting a prototype design, water treatment plants should be designed based on water quality, especially when the presence and concentration of iron, arsenic, and other harmful elements are factors. When water quality deteriorates from the increased presence of iron and or arsenic, operating costs and water losses due to frequent backwashing increase.
- **Sewerage:** At present Faridpur city has no sewerage system.
- **Sanitation:** Faridpur is one of the secondary cities in Bangladesh where 146,921 people live; 94% have access to adequate sanitation. There is currently no piped sewerage network and it is unrealistic to expect this in the near or medium term future.
- **Storm water drainage:** only 44% of the area is covered by SWD and 66% of the area has no SWD which will be proposed in the future.
- **Pollution & Wastewater:** Measuring level of environment pollution contributing by the wastewater of latrine facilities is a challenging task. Because in the municipal areas other sources of wastewater are mainly the domestic wastewater, wastewater from butcher shops, markets and surface run off. Considering the level of development and limited light industrial development in the main CBD of Faridpur, wastewater from sanitation facilities and the domestic wastewater are presumed the main sources of pollution of the city's water bodies.

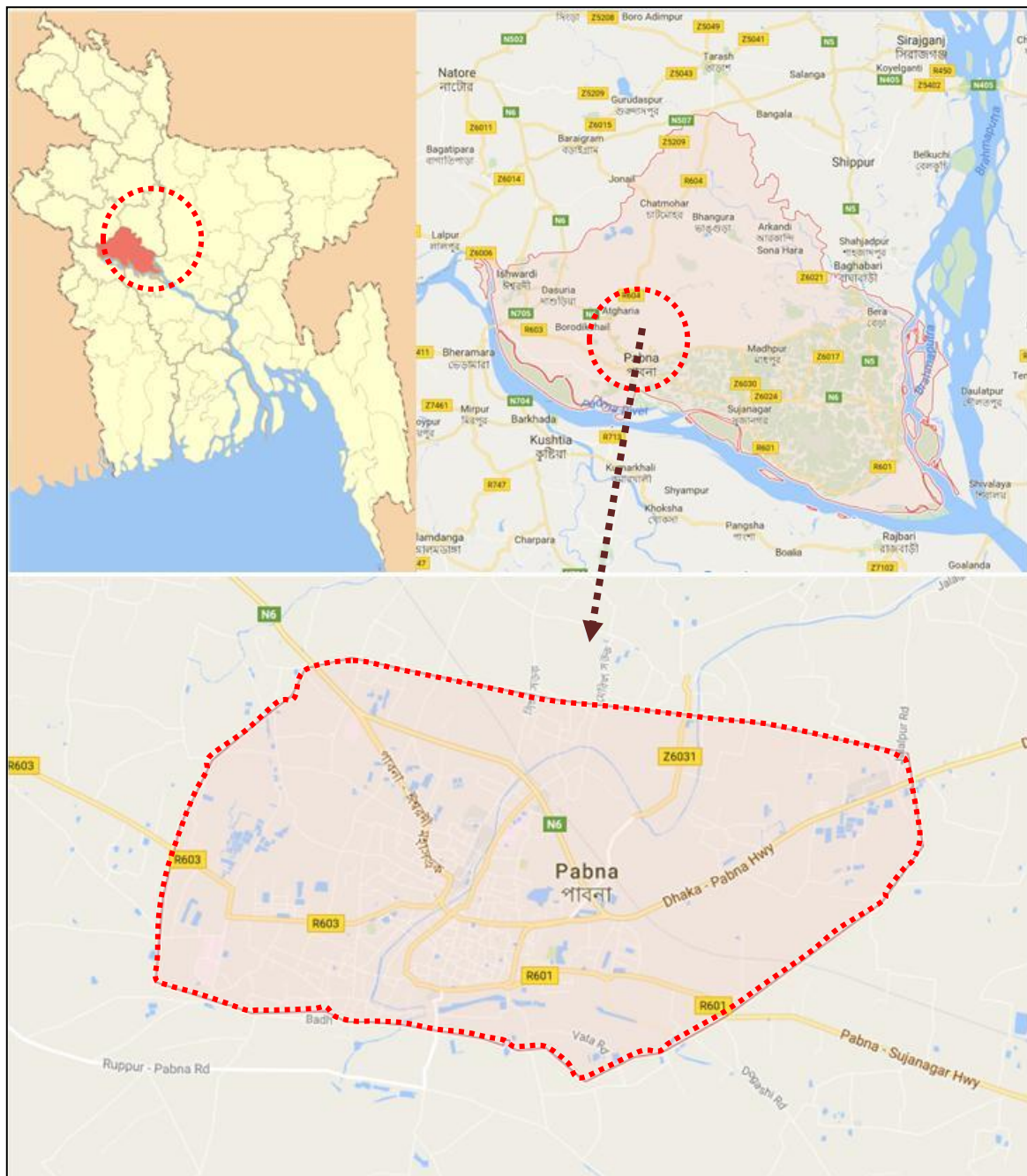
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- Pollution level of wastewater from the drainage system is high levels of presence of BoD, CoD, Total coliform and E.Coli in the drainage system because of discharge more than two thirds wastewater from inappropriate containment which are illegally connected with drainage system along with lack of des-sludging services. Therefore enforcement of standard containment design following the Bangladesh National Building code is necessary by the Pourashava to improve the overall containment standard of the city. Containment standardisation process will help to reduce the overall environment pollution in the city which will also reduce the risk of contamination of ground water of Faridpur.
 - **Solid waste management:** Total generation of solid waste is 54 MT out of which only 14 MT waste is collected and only 2 MT waste is treated.
 - **Street light:** 50% of the area is not covered by street lights.
 - **Manpower of the Municipality:** 33% posts of this Pourashava/Pourashava are still vacant. From this it can be easily said that there is lack of staff in this Pourashava and it needs manpower to run its functions efficiently. Though roles of different organizations in the provisioning of urban services are clearly defined, plans formulated by different organizations suffer because of lack of coordination among various organizations.
 - Meetings at regular intervals should be organized between various governing organizations for effective urban governance.
 - **Slum:** There are many slums in the city and it is an old Pourashava area which doesn't have sufficient water, roads, drainage, health and livelihoods available to the urban poor.
 - **Financial:** Salaries of the employees account for 40% of the total revenue expenditure (averaged over five years), which is very high.
 - Per capita revenue income is very low. Also, per capital expenditure and O&M expenditure/total revenue expenditure is low as the Pourashava doesn't provide all the basic services.

1.5. Pabna Pourashava

1.5.1. Background of the City

Pabna Pourashava lies in Pabna district located in Rajshahi division of Bangladesh. It lies on the northern bank of Padma River (Ganges) between 23°48" and 24°21" north latitudes and between 89°00" and 89°44" east longitudes. It was established in 1832 which makes it one of the oldest districts of the country. The city extends to an area of 27.20 sq. km with 15 wards, 46 mahallas.

Exhibit 68 Pabna City - Regional Setting



Source: Google Maps

1.5.2. Demographic profile

Population

As per Census 2011, the total population of Pabna Pourashava is 144,442 which include 73,665 males and 70,777 females. Total numbers of households in Pabna are 33, 217 (Source: 2011). Urbanization in the city, migration from rural to urban areas has led to increase in population. The average literacy rate of Pabna is 48.2% as per the Census 2011, which is lower than the National literacy rate of 51.8%.

1.5.3. Economic Base

Agriculture is the major economic base of Pabna. It is rich in the cultivation of paddy, jute, wheat, sugarcane, oil seeds, onion, garlic, pulses etc. Besides the crops, Pabna is produces a large amount of fruits such as mango, banana, lychee, coconut, guava, papaya etc. As Pabna is located close to river, it produces large amount of fishes. It has 88 fisheries, 1069 dairies, 714 poultries and 37 hatcheries.

There are a total of 340 industries which include 4 large scale industries, 45 small scale industries and 291 small scale industries. Industries in Pabna include textile industries which comprise of cotton mills and jute mills. Industries such as paper mill, flour mill, agro based industries and pharmaceuticals contribute into major economic share of the region.

1.5.4. Institutional/ Organizational Structure

Pabna Pourashava is headed by a mayor and the Pourashava comprises of 15 wards which are headed by 15 councillors elected by people.

Existing Manpower

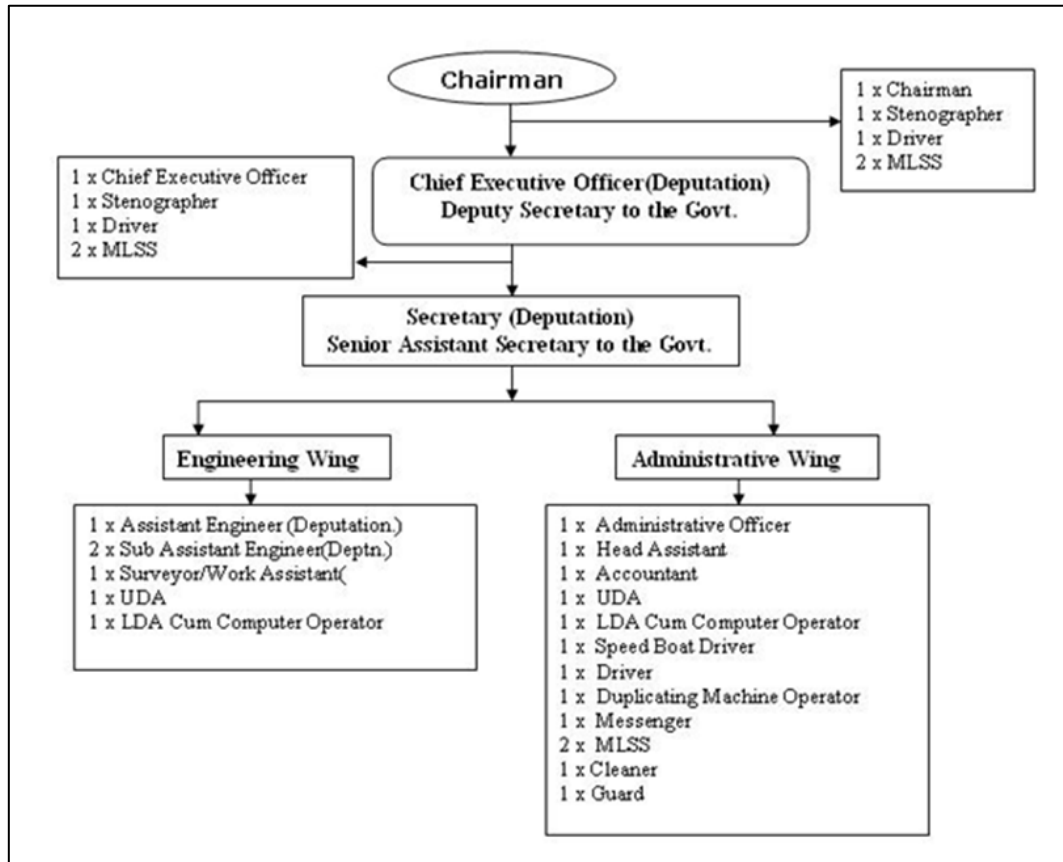
Pabna Pourashava is divided into three departments namely Administration, Health & Sanitation and Public Works, Water & Engineering which have a total of 220 sanctioned positions out of which 125 positions are vacant showing a gap of 57%. A shortfall of 59% in Public Works, Water & Engineering section and a shortfall of 50% in Administration section is hampering infrastructure development and delaying day to day work. Refer Exhibit 69.

Exhibit 69 Existing Manpower - Pabna Municipality

Department	Number		
	Sanctioned	Employed	Vacant
Administration	82	41	41
Health & Sanitation	33	11	22
Public Works, Water & Engineering	105	43	62
Total	220	95	125

Source: Pabna Pourashava, Bangladesh

Exhibit 70 Organogram - Pabna Municipality



1.5.5. Service Delivery

Water Supply

It is observed that underground water is the major source of water supply in Pabna. The water supply in the city is for duration of 8-12 hours/ day. There are 4 overhead water tanks in the city for water storage. The city has no water treatment plant, underground water is provided to the consumers without treatment.

Exhibit 71 Water Supply- Pabna Pourashava

Water Supply	Existing
Total connection	8,198
Sources Total (MLD)	Mostly ground water , Hand pump (individual), Local ponds
Number of Over-head Tank (OHT)	4 nos
Capacity of OHT	2.5 million liter
Submersible pump	12 nos
Street hydrant	172 nos
Supply hour	8-12 hrs per day
Water Mains (km)	45.00 Km
Distribution (km)	96.00 Km

Water Supply	Existing
Covered Area (sq. km.)	16.86 sq.km
Population Covered ('000)	124000
Tap water coverage (% of households)	62

Source: Pabna Pourashava, Bangladesh

Sewerage

There is no sewerage system in the city

Roads and Storm Water Drains

The total road length of Pabna is 201.4 kms which comprises of cement concrete roads, asphalt/ bitumen roads etc. The storm water drainage network extends to an area of 161 sq.m. This comprises 66.8 sq. km area with brick drain. The drainage network is under the water resource department which maintains all the drains.

Exhibit 72 Roads & Storm Water- Pabna Pourashava

Roads (km)	Existing
National Highway	12.50
Cement Concrete (CC) road	19.1
Asphalt road/ bitumen	151.0
Other	31.3
Total drain area	161.0
Brick Drain	66.8
RCC	31.0
Kaccha (raw) drain	54.4
Primary drain/ canal	8.8

Source: Pabna Pourashava, Bangladesh

Solid Waste Management

The total waste generated in Pabna is 40 MT per day which comprises of biodegradable and non-biodegradable components. The Pourashava is responsible for managing the waste which includes segregation of waste, collection from points, cleaning of roads, night cleaning on busy and important roads, market areas, and transportation of waste from different areas up to the disposal site. Total collection of waste is 27 MT per day from 13 collection points. After collection, the waste is dumped without any treatment at a landfill site having an area of 8.11 acres.

Exhibit 73 Solid Waste Management- Pabna Pourashava

SWM (Existing)	Existing
Daily Generation (MT)	40.00 MT
Daily Collection (MT)	27.00 MT
Collection points	13 Nos.
Household Segregation (Y/N)	N

SWM (Existing)	Existing
Vehicle Capacity (Cu. M)	30.04 Cu. M
Landfill site (acre)	8.11acre
Waste Treatment (MT)	Nil
Total Staff in SWM	175

Source: Pabna Pourashava, Bangladesh

Street Lights

The provision and maintenance of the streetlights is the responsibility of Pabna Municipality. At present, there are 8070 streetlights and 10,000 streetlights have been proposed for future. The existing streetlights cover 78% of the area extending up to 81% of the city roads.

Exhibit 74 Street light- Pabna Pourashava

Streetlights	Existing	Proposed
Total No. of Streetlights	8070	10,000
Coverage Area (%)	78%	
Coverage Roads (%)	81%	
Total No. of Street Light Poles	9962	

Source: Pabna Pourashava, Bangladesh

Building Permission

Pabna Pourashava has an established system under which building permission is granted. Refer the **Exhibit 75** for the details of application submitted/ approved and income received by the Pourashava. It is seen that income from building permission has increased in FY 15-16 as compared to the previous years.

Exhibit 75 Building Permission Details- Pabna Pourashava

Building Permission	FY2012	FY2013	FY2014	FY2015	FY2016
No. of applications received	251	271	245	2300	284
No. of applications approved	247	263	243	226	280
Income (BDT. Lac)	6.26	11.83	35.81	26.18	38.21

Source: Pabna Pourashava, Bangladesh

1.5.6. Financial Performance

The financial analysis has been carried out to understand the current financial status of the Pabna Pourashava. The Financial statements have been reviewed for the last 5 years commencing from 2011-12 to 2015-16.

Financial Status at a Glance

Exhibit 76 provides a summary of the Revenue and Capital Accounts of Pabna Pourashava during FY 2011-12 to FY 2015-16. Key points to note are summarised below:

Exhibit 76 Summary – Revenue and Capital Account

Financial Status at a Glance	2011-12	2012-13	2013-14	2014-15	2015-16	CAGR
	Million BDT					%
Income	60.8	75.6	68.4	73.6	89.5	10.2%
Expenditure	46.3	59.5	62.0	59.8	77.6	13.8%
Surplus/ Deficit	14.4	16.1	6.4	13.8	11.8	
Capital Account						
Receipts	81.4	25.4	4.2	50.9	21.3	-28.5%
Payments	104.9	60.9	99.0	30.9	135.7	6.6%
Surplus/ Deficit	(23.5)	(35.4)	(94.7)	20.0	(114.4)	
Overall Status incl. O.B.	0.1	(14.7)	(76.5)	33.8	(102.6)	

Source: Pabna Pourashava, IMaCS Analysis

1. **Revenue Income** grew at a CAGR of 10.2% between FY 2011-12 and FY 2015-16, with own income growing at a CAGR of 10.2%. The revenue base of Pabna Pourashava is very low with revenue income per capita at BDT 420.69 (FY 2011-12). *Own source revenue* constitutes for about 99.7% of its total revenues, which largely comprises Land Transfer Tax, Water Tax, Occupation/Business Tax etc. Exhibit below highlights the different sources of revenue for the Pourashava.

Exhibit 77 Sources of Revenue

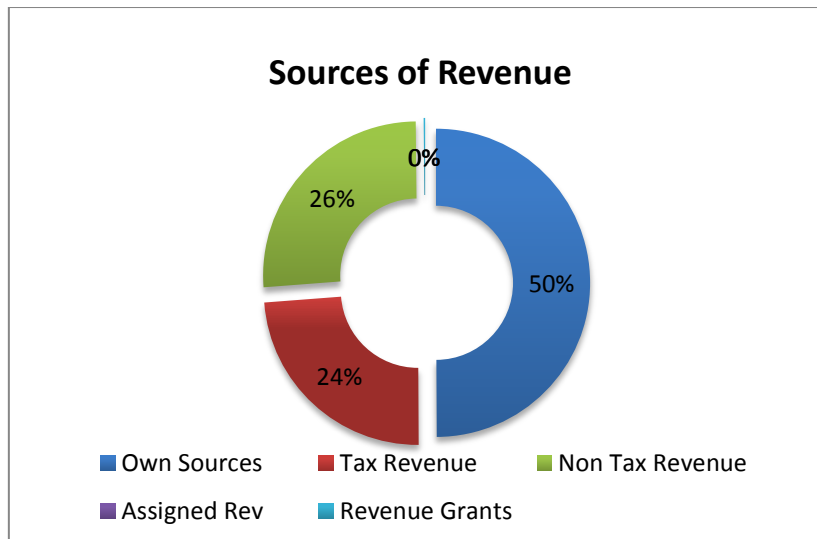
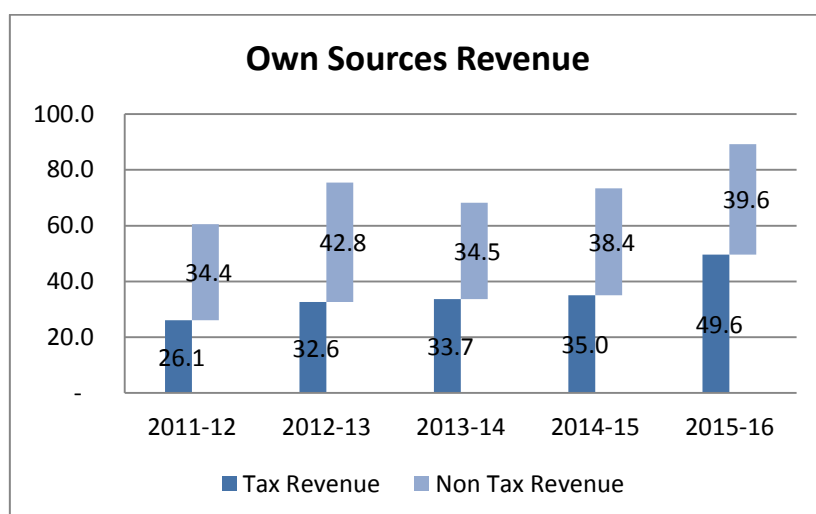


Exhibit 78 Tax and Non Tax Revenues



- Revenue Expenditure** grown faster at a CAGR of 13.8% during FY 2011-12 and FY 2015-16, driven by a combined jump in O&M, Administrative and Miscellaneous costs.
- Operating surplus** declined from BDT 0.1 million to a deficit of BDT 102.6 million during FY 11-15 as a result of this faster expenditure growth and meagre growth in revenues.

Revenue Account

The following section provides an in-depth review of the revenue account, in order to assess the municipal fiscal status. The revenue account comprises of two components - revenue income and revenue expenditure.

Revenue Income

Exhibit 79 provides a snapshot of growth in various heads under Revenue Income. Revenue Income broadly comprises **Own source income** (including holding taxes, professional taxes and other non-tax income including fees, charges and rentals) and **Devolution and Transfers** (including Devolution income, Assigned revenues and Grants, investment income).

Exhibit 79 Revenue Income

Revenue Income	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Own Sources	60.5	75.4	68.2	73.4	89.2	99.7%	10.2%
Tax Revenue	26.1	32.6	33.7	35.0	49.6	47.7%	17.4%
Non Tax Revenue	34.4	42.8	34.5	38.4	39.6	52.0%	3.6%
Revenue Grants	0.3	0.2	0.2	0.2	0.3	0.3%	0.0%
Total	60.8	75.6	68.4	73.6	89.5	100.0%	10.2%

Source: Pabna Pourashava, IMaCS Analysis

Own Source Income

Income from own sources grew at a CAGR of 10.2% during FY 2011-12 to FY 2015-16 to reach BDT 89.2 million in FY 2015-16. Own source income accounted for nearly 99.7% of the Revenue Income. Taxes including Land and Residence Tax, Fixed Asset Transfer Tax, Water Tax, Advertisement Tax, etc. grew from BDT 26.1 million in FY 2011-12 to BDT 49.6 million in FY 2015-16. Non Tax Income has been flat at BDT 39.6 million.

Tax revenues constituted about 47.7% of total revenue receipts in FY 2015-16. In case of Pabna, the tax revenue comprises of Land and Residence Tax, Land Transfer Tax, Occupation/Business Tax, Advertisement Tax, Water Tax and Transportation Tax. Exhibit below shows the details of the Tax revenue income of Pabna Pourashava.

Non Tax revenue constituted 52% of Pabna Pourashava income in FY 2015-16 and has actually declined to BDT 39.6 million from a peak of BDT 42.8 in FY 2012-13. Non Tax revenue is the major source of revenue. Non tax revenue consists of rental income from municipal properties and assets, water charges, license and fees, development charges, building permission, sanitation fee, daily market fee etc. It can be observed that license and fees income and rental income from municipal properties/assets for the maximum share of non-tax revenue in all the years.

Exhibit 80 Revenue Income - Composition

Revenue Income		Pabna					Share	CAGR
		2011-12	2012-13	2013-14	2014-15	2015-16	%	%
<i>Tax Revenue</i>								
1	Land and Residence Tax	4.2	6.0	6.1	5.7	5.6	6%	7%
2	Fixed Asset Transfer Tax	15.6	16.6	16.7	15.9	25.0	28%	13%
3	Occupation / Business Tax	2.0	2.2	2.7	4.0	8.5	10%	43%
4	Water Tax	3.9	7.7	7.6	7.9	7.3	8%	17%
6	Transportation Tax	0.0	0.0	0.0	0.0	0.0	0%	-100%
7	Advertisement Tax	0.2	0.1	0.3	0.7	2.0	2%	75%
8	Other Taxes	0.1	0.1	0.3	0.8	1.3	1%	80%
	<i>Sub-Total (Tax Revenue)</i>	26.1	32.6	33.7	35.0	49.6	55%	17%
<i>Non Tax Revenue</i>								
1	Rental Income from Municipal Properties / Assets	6.0	7.0	6.5	7.1	9.9	11%	13%
2	License and Fees	1.8	3.0	5.3	18.4	20.0	22%	82%
3	Rates	5.4	7.5	7.9	6.7	7.0	8%	7%
4	Other Income from Water	11.4	11.5	9.9	0.0	0.0	0%	-100%
5	Others	9.9	13.9	5.0	6.1	2.8	3%	-27%
	<i>Sub Total (Non Tax)</i>	34.4	42.8	34.5	38.4	39.6	44%	4%
Total Own sources		60.5	75.4	68.2	73.4	89.2	100%	10%
Total Revenue Income		60.8	75.6	68.4	73.6	89.5	100%	10%

Source: Pabna Pourashava, iMaCS Analysis

Revenue Expenditure and Surplus

Revenue expenditure has grown faster (CAGR 13.8% during FY 12-16) than revenue income and has resulted in a decline in operating surplus.

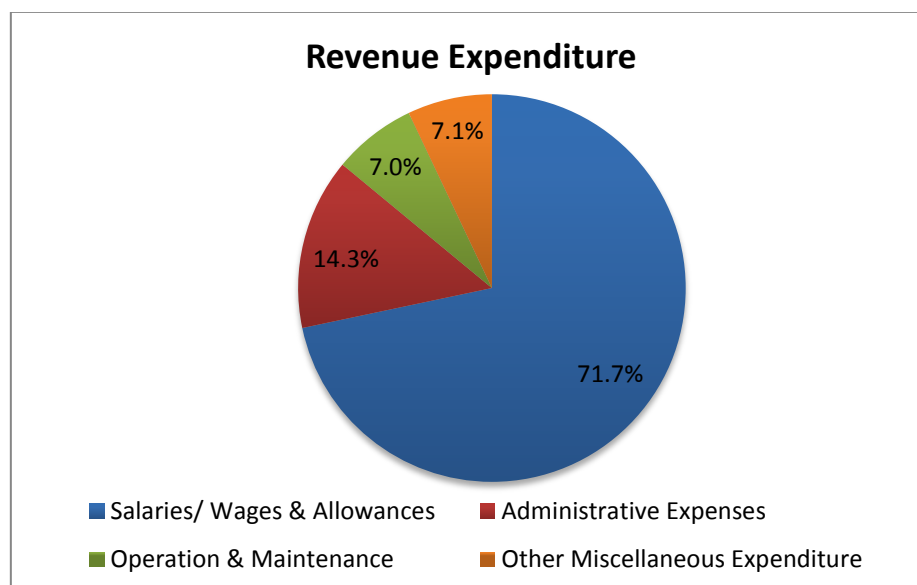
Exhibit 81 Revenue Expenditure – Summary

Revenue Expenditure	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Salaries/ Wages & Allowances	37.0	43.3	38.2	43.7	55.3	71.7%	10.5%
Administrative Expenses	5.9	8.6	7.5	11.7	9.8	14.3%	13.7%
Operation & Maintenance	2.5	4.2	8.1	1.7	5.1	7.0%	19.8%
Programme Expenses	0.0	0.0	0.0	0.0	0.0	0.0%	-
Repayment of Loans	0.0	0.0	0.0	0.0	0.0	0.0%	-
Other Miscellaneous Expenditure	1.0	3.4	8.3	2.7	7.5	7.1%	65.7%
Total Revenue Expenditure	46.3	59.5	62.0	59.8	77.6	100.0%	13.8%

Source: Pabna Pourashava, IMaCS Analysis

Salaries and Allowances costs have grown at a CAGR of 10.5% during FY 2011-12 to FY 2015-16.

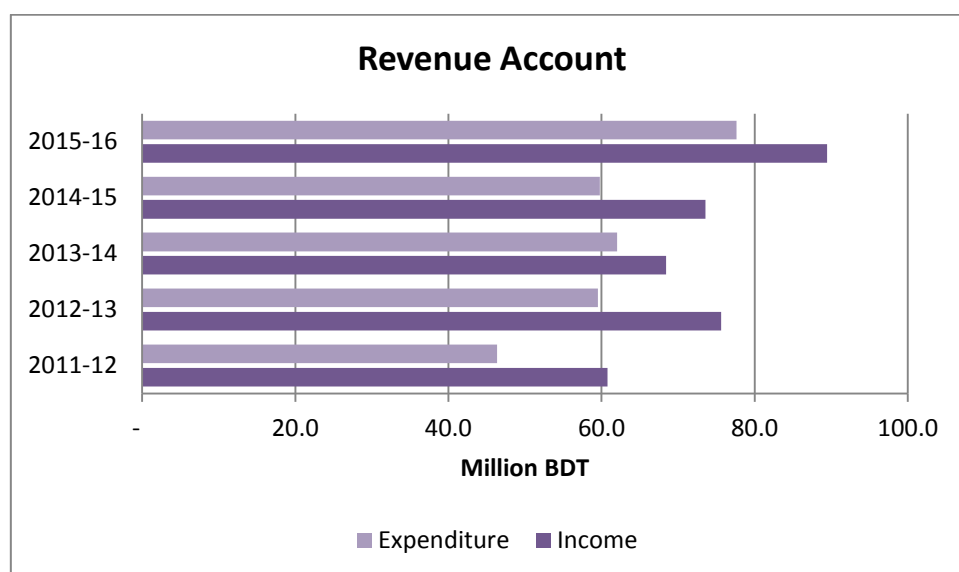
Exhibit 82 Revenue Expenditure - Breakup



Source: Pabna Pourashava, IMaCS Analysis

Operations and Maintenance costs have surged at a CAGR of 19.8% largely on account of road repairs and other maintenance expenses.

Therefore despite a strong growth in revenue income during this period, revenue expenditure has grown faster and as a result, Revenue surplus has declined at from BDT 14.4 million to BDT 11.8 million during FY 12-16.

Exhibit 83 Revenue Expenditure & Income


Source: Pabna Pourashava, IMaCS Analysis

Exhibit 84 Cash Balances

Cash Balances (BDT Lac) as on June 30th	2011	2012	2013	2014	2015	2016
Opening	99.52	92.11	46.56	118.23	72.94	57.37
Closing	352.35	371.11	340.59	323.11	327.39	117.91
ULB's Own Balance	43.64	46.56	46.66	34.92	56.06	14.75

Source: Pabna Pourashava

Collection Efficiency: It has been observed that the collection efficiency has been good in the Pabna Pourashava. Property / Holding Tax collection against demand in FY 2015-16 was 86.8% while Other Revenue Sources collection against demand stood at 100%.

Key Financial Ratios

Key financial ratios have been estimated based on the annual accounts of the Pabna Pourashava to highlight the existing position of the municipal finances. Key financial ratios have been presented in Exhibit below. The average operating ratio is 0.83, indicating that Patna's expenditure levels are less than the revenue income generated. Average Capital utilization ratio of Pabna Pourashava is 6.82, indicating that Patna's capital expenditure is more than its capital income.

Exhibit 85 Performance Indicators

Pabna Pourashava		2011-12	2012-13	2013-14	2014-15	2015-16
	Population	144442				
A.	Share of own revenues in total receipts					
i.	Own revenue receipts/total revenue receipts	1.00	1.00	1.00	1.00	1.00
ii.	Own revenue receipts/revenue expenditure	1.31	1.27	1.10	1.23	1.15
iii.	Non-tax revenues/total revenue receipts	0.57	0.57	0.50	0.52	0.44

Pabna Pourashava		2011-12	2012-13	2013-14	2014-15	2015-16
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B. Collection efficiency						
i.	Property / Holding Tax collection against demand	87.6%	87.1%	138.0%	90.5%	86.8%
ii.	Other Revenue Sources collection against demand	-	88.8%	100.2%	101.6%	100.0%

C. Sources and allocation of capital expenditure						
i.	Revenue surplus/capex	0.14	0.29	0.07	0.52	0.09
ii.	Capital expenditure to total expenditure	0.68	0.45	0.59	0.30	0.61
iii.	Capital receipts to total receipts	0.57	0.25	0.06	0.41	0.19
iv.	Per capita expenditure on education	3.46	3.67	5.82	4.50	5.68
v.	Per capita expenditure on health	8.48	17.45	9.37	9.28	6.44

D. Cost recovery of key services						
i.	Per capita expenditure (revenue)	320.84	412.21	429.33	413.76	537.34
ii.	Per capita expenditure (capital)	713.09	378.49	658.60	185.26	901.40
iii.	Per capita revenue income	420.69	523.48	473.73	509.44	619.31
iv.	O&M expenditure/total revenue expenditure	0.05	0.07	0.13	0.03	0.07

E. Other Ratios						
i.	Operating Ratio	0.76	0.79	0.91	0.81	0.87
ii.	Salaries' Expenditure to Revenue Income	60.9%	57.2%	55.8%	59.4%	61.8%
iii.	Salaries' Expenditure to Revenue Expenditure	79.9%	72.6%	61.5%	73.1%	71.2%
iv.	Capital Utilisation Ratio	1.29	2.39	23.45	0.61	6.37

Source: Pabna Pourashava, IMaCS Analysis

1.5.7. Summary

- **Water Supply-** The current availability of water in Pabna seems to be inadequate as only 63% of the total area is served with water supply which covers 86 % of the total population of the city.
 - Water is supplied for 8-12 hours a day in the city and covers only 62% of the households with tap water.
 - The existing water treatment plant in the city is not under use
- **Sewerage-** At present, Pabna has no sewerage system.
- **Solid Waste Management-** Out of the total waste generated, 33% of the waste remains uncollected which finds its way on the roads and into the drains thus clogging them.
- Currently waste segregation at source is not practiced. The waste collected is disposed directly in the landfill site without any treatment.

-
- **Streetlights**- Only 81% of the roads in the city are covered with streetlights whereas the remaining 19% of the city roads remain unserved from streetlights.
 - **Roads**- The total road length in Pabna is 201.4 kms but the condition of roads is bad.
 - **Salaries of the employees** account for 72% of the total revenue expenditure (averaged over five years), which is very high.
 - **Per capita revenue income** shows an increasing trend but stands at a very low number. Also, per capital expenditure and O&M expenditure/total revenue expenditure is low as the Pourashava doesn't provide all the basic services.
 - The **collection efficiency** has been recorded at over 100% in some of the years, which indicates corporation's inefficiency in billing process.

1.6. Tangail Pourashava

1.6.1. Background of the City

Tangail Pourashava lies in Tangail district in the central region of Bangladesh at a distance of 98km North West of Dhaka. It is located on the banks of River Louhajang and is one of the important cities of Central Bangladesh. The Tangail Pourashava is one of the oldest ULB which was established in July 1887 with five wards.

1.6.2. Demographic profile

Population and Growth Trends

Tangail Pourashava has a total area of 31.99 sq kms having 18 wards. As per the Census 2011, population of Tangail Pourashava is 167,412. The total number of household in Tangail Pourashava is 25,468. The average Literacy rate of Tangail is 71.80% and it is also known for higher educational institutes such as Sheikh Haisna Medical College, Tangail Polytechnic Institute and Mawlana Bhashani Science and Technology University besides other schools and colleges in the city.

1.6.3. Economic Base

Agriculture is the major occupation of the whole district as close to 50% people are involved in agricultural activities. Its major agricultural products are paddy, potato, jute, sugarcane, sesame, linseed, wheat, mustard seeds, pulses, mangoes, jackfruit, bananas, litchis, pineapples etc. The economy of Tangail is also dependent on manufacturing of Tangail saris, fisheries, dairy products, industries, weaving, poultry farms etc.

1.6.4. Institutional/ Organisational structure

Tangail Pourashava has three departments namely Administration, Engineering and Health which have a total of 88 permanent employees and 216 daily based staff. The Mayor has a financial power of BDT 2,500,000 jointly with the CEO.

1.6.5. Service Delivery

Water Supply

Refer the Exhibit below for the existing water supply services in Tangail. It is seen that currently only 10 sq. km of the area is covered and it is proposed to cover 30 sq. km of the area in the future. A total of 4,500,000MLD water from underground source is supplied in the city and the proposed water quantity to be supplied is 15,000,000 MLD. Out of the total water supplied only 900,000 MLD is treated before supply. The existing storage capacity of water in the city is 20, 40,000 MLD whereas 6,800,000 MLD storage capacity has been proposed for the future. The current water distribution lines are 130 kms and the proposed distribution lines are 380 kms. The current water supply system in Tangail covers a very less population of 50,000 out of population of 1,67,412.

Exhibit 86 Location of Tangail



Exhibit 87 Water Supply- Tangail Pourashava

S.No	Water Supply	Existing	Proposed
1	Sources Total (MLD)	4,500,000	15,000,000
2	Source 1 (MLD) underground water	4,500,000	-
3	Supply (MLD)	4,50,000	-
4	Treatment (MLD)	9,00,000	3,000,000
5	Storage Capacity (MLD)	2,040,000	6,800,000
6	Water Mains (km)	130	380
7	Distribution (km)	130	380
8	Covered Area (sq. km.)	10	30
9	Population Covered	50,000	300,000
10	Tap water coverage (% of households)	100%	100%

Source: Tangail Pourashava, Bangladesh

At present the city has no sewerage system.

Roads and Storm Water Drains

Refer the Exhibit below for current road and storm water infrastructure in the city. The total length of the Corporation road is 352.4 kms which comprises of 43.17 km of cement concrete road, 174.32 km of asphalt road and 133.81 km road from other material. Tangail has natural major drains of 23.7 kms and natural minor drains of 145.5 km. The city has roadside drains of 49.9 kms.

Exhibit 88 Roads & Storm Water - Tangail Municipality

Roads (km)	Existing	Proposed
Corporation Roads	352.4	NA
Cement Concrete (CC) road	43.17	-
Asphalt road	174.32	-
Other	133.81	-
Drains		-
Natural Major (Km)	23.7	-
Natural Minor (Km)	145.5	-
Road Side Drains (RSD) (Km)	49.9	-

Source: Tangail Pourashava,, Bangladesh

Solid Waste Management

The current waste generation in Tangail Pourashava is more than 30 MT out of which 21 MT is collected on daily basis and it is expected that the daily waste generation may increase up to 80 MT in the future. There is no household segregation of the waste in the city and currently there are close to 80 collection points in the city. The Pourashava collects and disposes the waste in a 7 acre landfill site but till now there is no practice of waste treatment in the city. There are 42 vans, 6 dumper trucks having a capacity of 3 MT each for collecting household solid waste.

Exhibit 89 Solid Waste Management - Tangail Municipality

S.No	SWM (Existing)	Existing	Proposed
1	Daily Generation (MT)	30+	80+
2	Daily Collection (MT)	21+	80+
3	Collection points	70-80	-
4	Household Segregation (Y/N)	N	-
5	Vehicle Capacity (Cu. M)	18MT	-
6	Landfill site (Hectare)	7 Acre	-
7	Waste Treatment (MT)	N	-
8	Total Staff in SWM	65	130

Source: Tangail Pourashava, Bangladesh

Street Lights

The provision and maintenance of the streetlights is the responsibility of Tangail Pourashava. At present, there are 5,800 streetlights in Pourashava. The existing streetlights cover an area of 20 sq. kms and it has been proposed to cover 35 sq. kms of the area in the future. Currently, the city has 5,800 no. of street light poles in the city.

Exhibit 90 Street light- Tangail Municipality

S.No	Streetlights	Existing	Proposed
1	Total No. of Streetlights	5800	-
2	Coverage Area	20 sq. km	35 sq. km
3	Coverage Roads	20 km	35 km
4	Total No. of Street Light Poles	5800	4000+

Source: Tangail Pourashava, Bangladesh

Building Permission

Tangail Pourashava has an established system under which building permission is granted. Refer the exhibit below for the details of applications received/ approved and income generated by the Pourashava. It is seen that income from building permission has increased in FY 15-16 as compared to the previous years.

Exhibit 91 Building Permission Details

S.No	Heads	FY2013-2014	FY2014-2015	FY2015-2016
1	No. of applications received	480	479	469
2	No. of applications approved	429	429	369
3	Income (BDT. Lac)	4,465,074	5,048,000	6,245,000

Source: Tangail Pourashava, Bangladesh

1.6.6. Financial Performance

The financial analysis has been carried out to understand the current financial status of the Tangail Pourashava. The Financial statements have been reviewed for the last 5 years commencing from 2011-12 to 2015-16.

Financial Status at a Glance

Exhibit below provides a summary of the Revenue and Capital Accounts of Tangail Pourashava during FY 2011-12 to FY 2015-16. Key points to note are summarised below:

Exhibit 92 Summary – Revenue and Capital Account

Financial Status at a Glance	2011-12	2012-13	2013-14	2014-15	2015-16	CAGR
	`Million BDT					%
Revenue Account						
Income	100.0	114.1	163.8	88.2	129.5	6.7%
Expenditure	59.1	83.5	125.3	256.3	282.8	47.9%
Surplus/ Deficit	40.9	30.6	38.5	(168.1)	(153.3)	
Capital Account						
Receipts	56.0	67.3	74.5	1,055.7	2,531.4	159.3%
Payments	70.2	51.8	88.3	866.2	2,702.9	149.1%
Surplus/ Deficit	(14.3)	15.5	(13.8)	189.5	(171.4)	
Overall Status incl. O.B.	85.1	113.5	109.6	195.8	(5.6)	

Source: Tangail Pourashava, IMaCS Analysis

- Revenue Income** grew at a CAGR of 6.7% between FY 2011-12 and FY 2015-16, with devolution income and own income growing at a CAGR of 17.9% and 6.6% respectively. The revenue base of Tangail Pourashava is very low with revenue income per capita at BDT 597 (FY 2011-12). Own source revenue constitutes for about 99.8% of its total revenues, which largely comprises of License & Fees Income, Land and Residence Tax and Land Transfer Tax amongst others.

Exhibit 93 Summary – Sources of Revenue

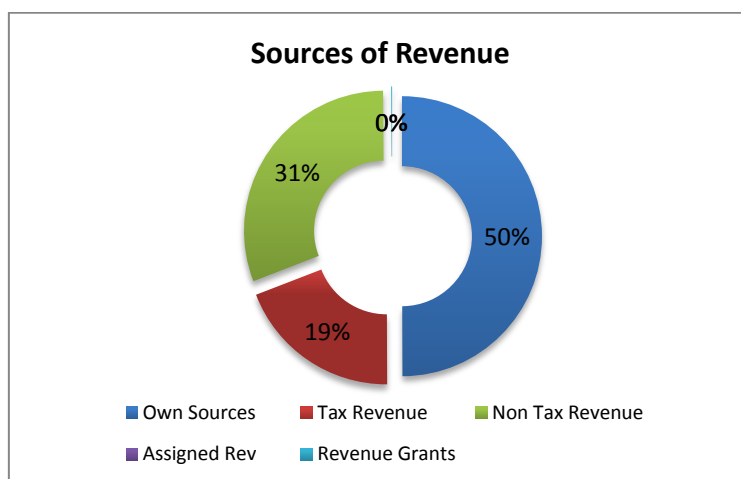
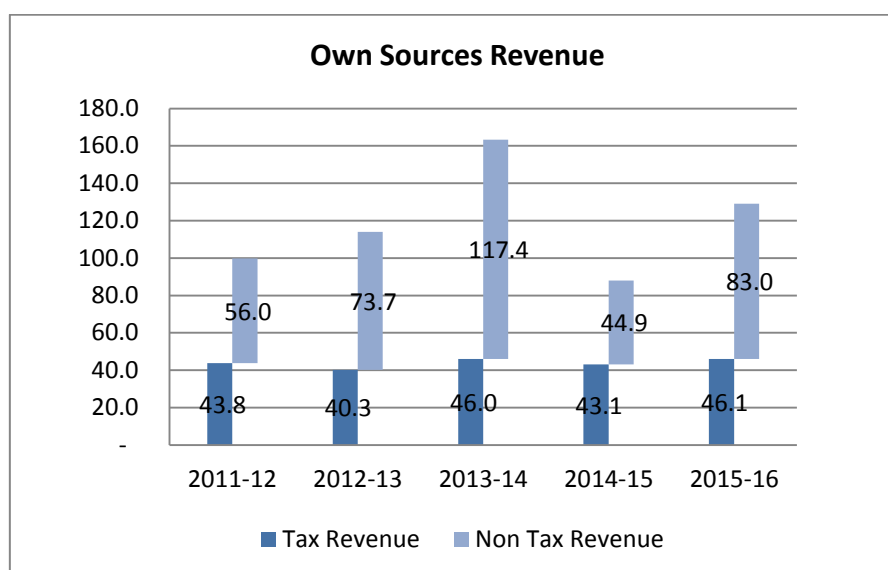


Exhibit 94 Own Source – Tax and Non Tax Revenue


Source: Tangail Pourashava, IMaCS Analysis

- Revenue Expenditure** has grown faster at a CAGR of 41.1% during FY 2011-12 and FY 2015-16, driven by a 61% (CAGR) jump in O&M costs.
- Operating surplus** declined from BDT 85.1 million to a deficit of BDT 5.6 million during FY 11-15 as a result of this faster expenditure growth and meagre growth in revenues.

Revenue Account

The following section provides an in-depth review of the revenue account, in order to assess the municipal fiscal status. The revenue account comprises of two components - revenue income and revenue expenditure.

Revenue Income

Exhibit 95 provides a snapshot of growth in various heads under Revenue Income. Revenue Income broadly comprises **Own source income** (including property taxes, professional taxes and other non-tax income including fees, charges and rentals) and **Devolution and Transfers** (including Devolution income, Assigned revenues and Grants, investment income).

Exhibit 95 Revenue Income - Composition

Revenue Income	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Own Sources	99.8	114.0	163.4	88.0	129.1	99.8%	6.6%
Tax Revenue	43.8	40.3	46.0	43.1	46.1	38.3%	1.3%
Non Tax Revenue	56.0	73.7	117.4	44.9	83.0	61.4%	10.4%
Revenue Grants	0.2	0.2	0.4	0.2	0.4	0.2%	17.9%

Revenue Income	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Total	100.0	114.1	163.8	88.2	129.5	100.0%	6.7%

Source: Tangail Pourashava, IMaCS Analysis

Own Source income

Income from own sources grew at a CAGR of 6.6% during FY 2011-12 to FY 2015-16 to reach BDT 129.1 million in FY 2015-16. Own source income accounted for nearly 99.8% of the Revenue Income. Taxes including Land and Residence Tax, Fixed Asset Transfer Tax, Water Tax, Advertisement Tax, etc. grew at 1.3% CAGR during FY 2011-12 to FY 2015-16 to touch BDT 43.1 million in FY 2015-16. Non Tax Income also grew to BDT 83 million during the period.

Tax revenues constituted about 38.3% of total revenue receipts in FY 2015-16. In case of Tangail, the tax revenue comprises of Land and Residence Tax, Land Transfer Tax, Occupation/Business Tax, Advertisement Tax, Water Tax and Transportation Tax. Exhibit below shows the details of the Tax revenue income of Tangail Pourashava.

Non Tax revenue constituted 61.4% of Tangail Pourashava income in FY 2015-16 and has actually declined to BDT 83 million from a peak of BDT 117.4 in FY 2013-14. Non tax revenue consists of rental income from municipal properties and assets, water charges, license and fees, development charges, building permission, sanitation fee, daily market fee etc. It can be observed that license and fess income for the maximum share of non-tax revenue in all the years.

Exhibit 96 Revenue Income - Composition

Revenue Income		Tangail					Share	CAGR
		2011-12	2012-13	2013-14	2014-15	2015-16	%	
<i>Tax Revenue</i>								
1	Land and Residence Tax	7.9	8.4	10.5	8.7	10.5	8%	7%
2	Fixed Asset Transfer Tax	31.5	27.5	30.0	29.0	27.5	21%	-3%
3	Occupation / Business Tax	2.9	3.9	3.5	4.2	6.5	5%	22%
4	Water Tax	0.0	0.0	0.0	0.0	0.0	0%	-
6	Transportation Tax	0.0	0.0	0.0	0.0	0.0	0%	-
7	Advertisement Tax	1.2	0.4	0.8	0.7	1.0	1%	-5%
8	Other Taxes	0.4	0.1	1.2	0.4	0.6	0%	14%
	<i>Sub-Total (Tax Revenue)</i>	43.8	40.3	46.0	43.1	46.1	36%	1%
<i>Non Tax Revenue</i>								
1	Rental Income from Municipal Properties / Assets	9.7	10.0	9.0	9.7	12.6	10%	7%
2	License and Fees	24.5	29.2	68.2	17.1	53.3	41%	21%
3	Rates	11.3	12.6	16.2	12.0	14.6	11%	7%
4	Other Income from Water	9.5	9.6	17.0	0.0	0.0	0%	-100%

Revenue Income		Tangail					Share	CAGR
		2011-12	2012-13	2013-14	2014-15	2015-16	%	
5	Others	0.9	12.3	7.0	6.0	2.5	2%	29%
	<i>Sub Total (Non Tax)</i>	56.0	73.7	117.4	44.9	83.0	64%	10%
Total Own sources		99.8	114.0	163.4	88.0	129.1	100%	7%
Total Revenue Income		100.0	114.1	163.8	88.2	129.5	100%	7%

Source: Tangail Pourashava, IMaCS Analysis

Revenue Expenditure and Surplus

Revenue expenditure has grown faster (CAGR 41.1% during FY 12-16) than revenue income and has resulted in a decline in operating surplus, and ultimately a deficit in FY 2015-16.

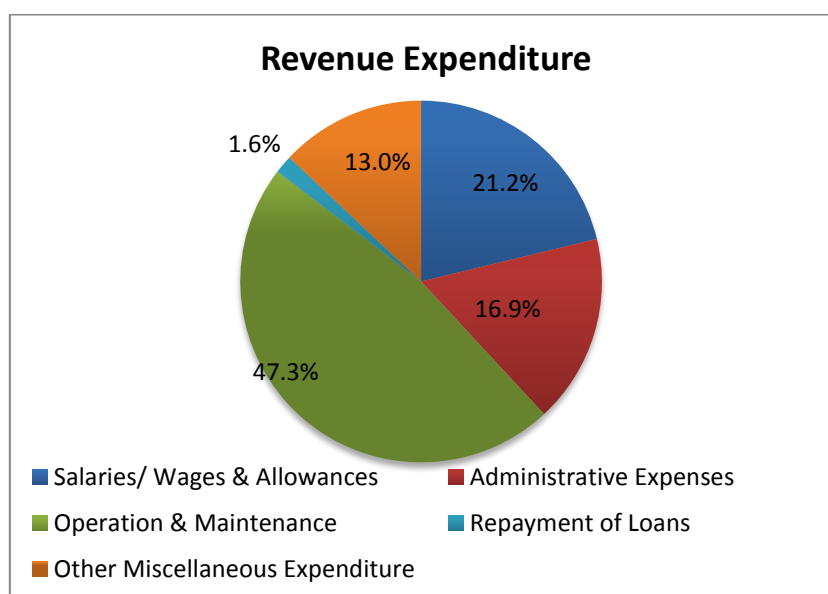
Exhibit 97 Revenue Expenditure - Summary

Revenue Expenditure	2011-12	2012-13	2013-14	2014-15	2015-16	Share	CAGR
	Million BDT					%	%
Tangail Pourashava							
Salaries/ Wages & Allowances	22.0	22.5	27.5	18.2	27.9	21.2%	6.1%
Administrative Expenses	12.7	26.8	20.8	11.5	21.6	16.9%	14.1%
Operation & Maintenance	18.4	27.8	63.6	155.3	123.3	47.3%	61.0%
Programme Expenses	0.0	0.0	0.0	0.0	0.0	0.0%	-
Repayment of Loans	2.2	1.7	1.8	1.0	1.2	1.6%	-13.6%
Other Misc. Expenditure	3.9	4.8	11.7	40.0	60.0	13.0%	98.3%
Total Revenue Expenditure	59.1	83.5	125.3	226.1	233.9	100.0%	41.1%

Source: Tangail Pourashava, IMaCS Analysis

Salaries and Allowances costs have grown at a CAGR of 6.1% during FY 2011-12 to FY 2015-16.

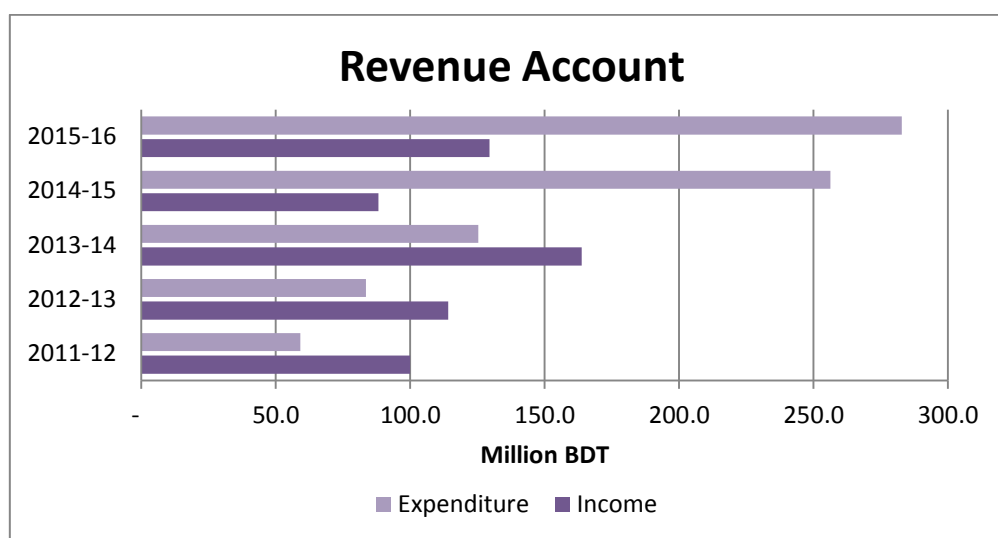
Exhibit 98 Revenue Expenditure - Breakup



Operations and Maintenance costs have surged at a CAGR of 61% largely on account of repairs and other maintenance expenses.

Therefore despite a strong growth in revenue income during this period, revenue expenditure has grown faster and as a result, Revenue surplus has declined from BDT 40.9 million to a deficit of BDT 153.3 million during FY 12-16.

Exhibit 99 Revenue Expenditure & Income



Source: Tangail Pourashava, IMaCS Analysis

Exhibit 100 Cash Balances

Cash Balances (BDT) as on June 30 th	FY12-13	FY13-14	FY14-15	FY15-16
Opening	80,261,323	91,608,980	51,971,348	971,72,624
Closing	95,231,615	58,074,956	97,172,624	435,96,624

Source: Tangail Pourashava

Exhibit 101 Properties in Town

Properties in Town	FY11-12	FY12-13	FY13-14	FY14-15	FY15-16
Total	25,468	25,468	25,897	26,326	26,695

Source: Tangail Pourashava

Collection Efficiency: It has been observed that the collection efficiency has been good in the Tangail Pourashava. Property / Holding Tax collection against demand in FY 2014-15 was 75.8% while Other Revenue Sources collection against demand stood at 72.4%.

Key Financial Ratios

Key financial ratios have been estimated based on the annual accounts of the Tangail Pourashava to highlight the existing position of the municipal finances. Key financial ratios have been presented in Exhibit below. The average operating ratio is 1.29, indicating that Tangail's expenditure levels are more than the revenue income generated. Average Capital utilization ratio of Tangail Pourashava is 1.02, indicating that Tangail's capital expenditure is more than its capital income.

Exhibit 102 Performance Indicators

Tangail Pourashava		2011-12	2012-13	2013-14	2014-15	2015-16
	Population	167412				
A.	Share of own revenues in total receipts					
i.	Own revenue receipts/total revenue receipts	1.00	1.00	1.00	1.00	1.00
ii.	Own revenue receipts/revenue expenditure	1.69	1.36	1.30	0.34	0.46
iii.	Non-tax revenues/total revenue receipts	0.56	0.65	0.72	0.51	0.64
B.	Collection efficiency					
i.	Property / Holding Tax collection against demand	68.5%	88.4%	94.2%	75.8%	-
ii.	Other Revenue Sources collection against demand	86.6%	104.7%	81.7%	72.4%	-
iii.	Fees collection against demand	80.1%	53.1%	47.4%	60.3%	-
C.	Sources and allocation of capital expenditure					
i.	Revenue surplus/capex	0.61	0.74	0.54	-0.20	-0.06
ii.	Capital expenditure to total expenditure	0.52	0.31	0.33	0.75	0.91
iii.	Capital receipts to total receipts	0.36	0.37	0.31	0.92	0.95
iv.	Per capita expenditure on education	5.55	3.31	28.67	3.84	28.67
v.	Per capita expenditure on health	63.15	66.83	100.95	105.55	107.52
D.	Cost recovery of key services					
i.	Per capita expenditure (revenue)	352.90	498.90	748.45	1530.77	1689.25
ii.	Per capita expenditure (capital)	400.72	247.60	422.91	5057.44	16145.08
iii.	Per capita revenue income	597.41	681.69	978.19	526.86	773.48
iv.	O&M expenditure/total revenue expenditure	0.31	0.33	0.51	0.61	0.44
E.	Other Ratios					
i.	Operating Ratio	0.59	0.73	0.77	2.56	1.81
ii.	Salaries' Expenditure to Revenue Income	22.0%	19.7%	16.8%	20.7%	21.5%
iii.	Salaries' Expenditure to Revenue Expenditure	37.2%	26.9%	21.9%	8.1%	11.9%
iv.	Capital Utilisation Ratio	1.25	0.77	1.18	0.82	1.07

Source: Tangail Pourashava, IMaCS Analysis

1.6.7. Summary

- **Water Supply-** The current availability of water in Tangail seems to be very less as only 30% of the total population is served with water supply which covers only 31% of the total area of the city.
 - Only 20% of the water is treated out of the total water supply as the treatment capacity of the water treatment plant is low. It is observed that there will be a shortfall for

treatment of 15,00,000 MLD even after the proposed treatment plant of 30,00,000 MLD capacity is operational.

- **Sewerage-** At present, Tangail has no sewerage system.
- **Solid Waste Management-** Out of the total waste generated, 30% of the waste remains uncollected which finds its way on the roads and into the drains thus clogging them.
- Currently waste segregation at source is not practiced. The waste collected is disposed directly in the landfill site without any treatment.
- **Streetlights-** Only 63% of the area in the city is covered with streetlights whereas the remaining 37% of the city area remains unserved from streetlights.
- **Roads-** The total road length in Tangail is 352.4 kms but the condition of roads is bad and a major percentage of roads in the city are encroached.
- **Per capita revenue income** shows an increasing trend but stands at a very low number. Also, per capital expenditure and O&M expenditure/total revenue expenditure is low as the Pourashava doesn't provide all the basic services.
- **Low Collection Efficiency** in the corporation has resulted in lower revenues altogether. The corporation should work to increase the collections.
- **Operating Ratio** indicates Tangail Pourashava surplus in Revenue Account. The average operating ratio is 1.29, indicating that Tangail's expenditure levels are more than the revenue income generated.

Annexure IV: Factors used in methodologies of select rating agencies

CARE

1. Economic factors
2. Legal set-up
3. Administrative factors
4. Accounting and Auditing Practices
5. Debt Factors
6. Financial Indicators
7. Finances of state government
8. Project Viability
9. Credit enhancement structure

CRISIL

1. Legal and administrative issues
2. Economic base of the service area
3. Current financial position
4. Managerial assessment
5. Project specific issues
6. Credit enhancement structure -

ICRA

1. Credit Quality of the State and Inter-governmental Fiscal Relationship
2. Economy of the Municipal Area
3. Operational Efficiency
4. Municipal Finances
5. Management Quality
6. Credit enhancement structures

Source: Respective websites of credit rating agencies

Annexure V: List of Credit Rating Parameters

S. No.	Credit Rating Parameters/ sub -parameters
A	Policy and Institutional framework
i	Well defined functions and functionary
ii	Democratic Governance
iii	Powers of taxation and levying user charges
iv	Transparency in operations and links with public and other stakeholders
v	Synergising with other schemes to channelize funds through convergence
vi	Disclosures of Citizen charter, Annual Budgets, Service levels, etc. made by ULBs
vii	Billing and collection mechanisms with management of arrears in collection
B	Economic base of the service area
i	Population of ULB
ii	GDP growth rate of the ULB
iii	Per capita income
C	Municipal finances
1	Systems & Powers
i	System of accounting
ii	Financial Reporting
iii	Status of Audit of Annual Accounts
iv	Financial Investment Plan (FIP) for next 5 year
v	Tax base and related trends
vi	Credit enhancement measures, if any
2	Ratios
i	Share of own revenues sources in total receipts
ii	Share of tax revenue to total own revenue sources
iii	Collection efficiency of tax resources
iv	Extent of rule based transfers from the Central Government
v	Cost recovery of key services
vi	Per Capita O&M Expenditure
vii	Trends in surplus/deficit
vii	Operating Ratio
ix	Debt-Service Coverage Ratio (DSCR)
D	Existing operations of the municipal body
i	Coverage water supply
ii	Non-Revenue Water (NRW)
iii	Coverage Sewerage System
iv	MSW Door-to-door collection
v	Treatment of solid waste collected
vi	Road adequacy
vii	Street lights adequacy
E	Management Efficiency
i	Track record in executing projects within stipulated cost and time
ii	Manpower Adequacy
iii	MIS and other IT integrations
iv	Stability of top leadership

Annexure VI(a): Detailing of information w.r.t to the rating paramertes for six ULBs reviewed

S. No.	Credit Rating Criteria (Parameters/ sub - parameters)	Weightage (%)	Dhaka	Narayanganj	Chandpur	Faridpur	Pabna	Tangail	Remarks, if any
A	Policy and Institutional framework	20%							
i	Well defined functions and functionary		Organogram of ULB is available with well-defined structures of departments but not clear on staffing	Organogram of ULB is available with well-defined structures of departments but not clear on staffing	Organogram of ULB is available with well-defined structures of departments but not clear on staffing	Organogram of ULB is available with well-defined structures of departments but not clear on staffing	Organogram of ULB is available with well-defined structures of departments but not clear on staffing	Organogram of ULB is available with well-defined structures of departments but not clear on staffing	
ii	Democratic Governance		Elected Council	Elected Council	Elected Council	Elected Council	Elected Council	Elected Council	
iii	Powers of taxation and levying user charges		Have to take permission from government	Have to take permission from government	Have to take permission from government	Have to take permission from government	Have to take permission from government	Have to take permission from government	
iv	Transparency in operations and links with public and other stakeholders		Only tender notices online	Only tender notices online	N.Av.	N.Av.	N.Av.	N.Av.	
v	Synergising with other schemes to channelize funds through convergence*		N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	
vi	Disclosures of Citizen charter, Annual Budgets etc. made by ULBs		Budget only last year,	Budget only last year, Citizen charter	N.Av.	N.Av.	N.Av.	N.Av.	
vii	Billing and collection mechanisms with management of arrears in collection		Computerised	Computerised	Computerised	Computerised	Computerised	N.Av.	
B	Economic base of the service area	10%							
i	Population of ULB		3957302	1418782	179000	121632	144442	167412	
ii	GDP growth rate of the ULB*		N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	
iii	Per capita income*		N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	
C	Municipal finances	40%							
1	Systems & Powers								
i	System of accounting		Cash Basis	Cash Basis	Cash Basis	Cash Basis	Cash Basis	Cash Basis	
ii	Financial Reporting		Only Budgets/ I&E Statements	Only Budgets/ I&E Statements	Only Budgets/ I&E Statements	Only Budgets/ I&E Statements	Only Budgets/ I&E Statements	Only Budgets/ I&E Statements	
iii	Status of Audit of Annual Accounts		Completed	Completed	Completed	Completed	Completed	Completed	
iv	Financial Investment Plan for next year		No FIP prepared	Prepared	Prepared	No FIP prepared	No FIP prepared	No FIP prepared	
v	Tax base and related trends		Stagnant	Stagnant	Timely Revision	Timely Revision	Stagnant	Stagnant	
vi	Credit enhancement measures, if any*	None	None	None	None	None	None		

S. No.	Credit Rating Criteria (Parameters/ sub - parameters)	Weightage (%)	Dhaka	Narayanganj	Chandpur	Faridpur	Pabna	Tangail	Remarks, if any
2	Ratios								
i	Share of own revenues sources in total revenue receipts		100%	98%	100%	98%	100%	100%	FY 2014-15
ii	Share of tax revenue to total own revenue sources		75%	57%	46%	30%	46%	39%	FY 2014-15
iii	Collection efficiency of tax resources		N.Av.	70%	97%	N.Av.	87%	76%	FY 2015-16
iv	Extent of rule based transfers from the Central Government		0.3%	2.0%	3.8%	4.5%	10.1%	6.0%	Fixed BDT 7 mn by Average Revenue Income
v	Cost recovery of key services		N.Av.	N.Av.	118%	95%	232%	82%	Water Services
vi	Per Capita O&M Expenditure		151.77	22.98	122.35	305.02	28.39	396.03	Average
vii	Trends in surplus/deficit		Surplus in last 5 years	Deficit in last 2 years	Surplus in last 5 years	Deficit in last 1 years out of 5	Surplus in last 5 years	Deficit in last 2 years out of 5	
viii	Operating Ratio		0.61	0.77	0.82	0.81	0.82	1.16	Average
ix	Debt-Service Coverage Ratio (DSCR)*								
D	Existing operations of the municipal body								
i	Coverage water supply	10%	87%	87%	65%	55%	86%	33%	
ii	Non-Revenue Water (NRW)		30%	30%	23%	27%	N.Av.	N.Av.	
iii	Coverage Sewerage system*		30%	No sewerage	No sewerage	No sewerage	No sewerage	No sewerage	
iv	MSW Door-to-door collection*		N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	
v	Treatment of Solid waste collected*		N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	
vi	Road adequacy		16.20	7.85	7.95	13.03	7.40	11.02	
vii	Street lights adequacy		N.Av.	78	36.40	28.84	24.96	60.78	
E	Managerial Assessment								
i	Track record in executing projects within stipulated cost and time*	20%	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	N.Av.	
ii	Manpower Adequacy		N.Av.	77%	N.Av.	33%	57%	N.Av.	
iii	MIS and other IT integrations		No	No	No	No	No	No	
iv	Stability of top leadership		Stable	Stable	Stable	Stable	Stable	Stable	

Note: The above information related to rating criteria is based on the secondary data collected from the respective municipalities. The other secondary sources referred for information are <http://dncc.gov.bd/at-a-glance/> and Infrastructure Development Plan (IDP) for NCC at URL http://www.ncc.gov.bd/wp-content/uploads/2015/12/ICGP_FR_Vol2-NCC_022514.docx

Annexure VI(b): Detailed grading and scoring of ULBs based on the evaluation criteria for rating parameters

S. No.	Credit Rating Criteria (Parameters/ sub - parameters)	Grading of ULBs as per Basis of Evaluation						Weightage	Scoring as per weightage					
		DNCC	NCC	CDR	FDR	PBN	TGL		DNCC	NCC	CDR	FDR	PBN	TGL
A	Policy and Institutional framework							20%						
i	Well defined functions and functionary	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate		2	2	2	2	2	2
ii	Democratic Governance	High	High	High	High	High	High		3	3	3	3	3	3
iii	Powers of taxation and levying user charges	Low	Low	Low	Low	Low	Low		1	1	1	1	1	1
iv	Transparency in operations and links with public and other stakeholders	Moderate	Moderate	Low	Low	Low	Low		2	2	1	1	1	1
v	Synergising with other schemes to channelize funds through convergence*								0	0	0	0	0	0
vi	Disclosures of Citizen charter, Annual Budgets etc. made by ULBs	Moderate	Moderate	Low	Low	Low	Low		2	2	1	1	1	1
vii	Billing and collection mechanisms with management of arrears in collection	Moderate	Moderate	Moderate	Moderate	Moderate	Low		2	2	2	2	2	1
								Score	17.14	17.14	14.29	14.29	14.29	12.86
B	Economic base of the service area							10%						
i	Population of ULB	High	High	Low	Low	Low	Low		3	3	1	1	1	1
ii	GDP growth rate of the ULB*								0	0	0	0	0	0
iii	Per capita income*								0	0	0	0	0	0
								Score	3.33	3.33	1.11	1.11	1.11	1.11
C	Municipal finances													
1	Systems & Powers							10%						
i	System of accounting	Low	Low	Low	Low	Low	Low		1	1	1	1	1	1
ii	Financial Reporting	Low	Low	Low	Low	Low	Low		1	1	1	1	1	1
iii	Status of Audit of Annual Accounts	High	High	High	High	High	High		3	3	3	3	3	3
iv	Financial Investment Plan for next year	Low	Moderate	Moderate	Low	Low	Low		1	2	2	1	1	1
v	Tax base and related trends	Low	Low	High	High	Low	Low		1	1	3	3	1	1
vi	Credit enhancement measures, if any*	Low	Low	Low	Low	Low	Low		1	1	1	1	1	1
								Score	4.44	5.00	6.11	5.56	4.44	4.44
2	Ratios							30%						
i	Share of own revenues sources in total revenue receipts	High	High	High	High	High	High		3	3	3	3	3	3
ii	Share of tax revenue to total own revenue sources	High	Moderate	Moderate	Low	Moderate	Low		3	2	2	1	2	1
iii	Collection efficiency of tax resources	Low	Moderate	High	Low	Moderate	Moderate		1	2	3	1	2	2
iv	Extent of rule based transfers from the Central Government	Low	Low	Low	Low	Moderate	Low		1	1	1	1	2	1

S. No.	Credit Rating Criteria (Parameters/ sub - parameters)	Grading of ULBs as per Basis of Evaluation						Weightage	Scoring as per weightage					
		DNCC	NCC	CDR	FDR	PBN	TGL		DNCC	NCC	CDR	FDR	PBN	TGL
v	Cost recovery of key services	Low	Low	High	High	High	Moderate		1	1	3	3	3	2
vi	Per Capita O&M Expenditure	Low	Low	Low	Low	Low	Low		1	1	1	1	1	1
vii	Trends in surplus/deficit	High	Moderate	High	Moderate	High	Moderate		3	2	3	2	3	2
vii	Operating Ratio	High	High	High	High	High	Low		3	3	3	3	3	1
ix	Debt-Service Coverage Ratio (DSCR)*								0	0	0	0	0	0
								Score	17.78	16.67	21.11	16.67	21.11	14.44
								Total	22.22	21.67	27.22	22.22	25.56	18.89
D	Existing operations of the municipal body							10%						
i	Coverage water supply	High	High	Moderate	Low	High	Low		3	3	2	1	3	1
ii	Non-Revenue Water (NRW)	Moderate	Moderate	Moderate	Moderate	Low	Low		2	2	2	2	1	1
iii	Coverage Sewerage system	Low	Low	Low	Low	Low	Low		1	1	1	1	1	1
iv	MSW Door-to-door collection*								0	0	0	0	0	0
v	Treatment of Solid waste collected*								0	0	0	0	0	0
vi	Road adequacy	Moderate	Low	Low	Moderate	Low	Moderate		2	1	1	2	1	2
vii	Street lights adequacy	Low	Low	Moderate	High	High	Low		1	1	2	3	3	1
								Score	4.29	3.81	3.81	4.29	4.29	2.86
E	Managerial Assessment							20%						
i	Track record in executing projects within stipulated cost and time*								0	0	0	0	0	0
ii	Manpower Adequacy	Low	Low	Low	Low	Low	Low		1	1	1	1	1	1
iii	MIS and other IT integrations	Low	Low	Low	Low	Low	Low		1	1	1	1	1	1
iv	Stability of top leadership	High	High	High	High	High	High		3	3	3	3	3	3
								Score	8.33	8.33	8.33	8.33	8.33	8.33
								Total Score	55.32	54.29	54.76	50.24	53.57	44.05

* In view of the information not available on this parameter across all Municipalities under consideration, this parameter has been awarded zero (0) marks to each of the city while scoring the test rating

Note: Please note while giving scores, if information related to a rating criteria in any particular municipality is not made available where other municipalities have the information then that particular municipality has been graded at low level under that criteria and hence given the lowest score to make comparison at level playing field. Such instances are highlighted in pink colour in above table.

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