Public Accountability of Urban Local Government's Water Service Delivery: A Case of the Cumilla City Corporation

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Statement of the Candidate

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I hereby recommend and Certify that this dissertation entitled, "Public Accountability of Urban Local Government's Water Service Delivery: A Case of the Cumilla City Corporation" has been prepared by Azma Mahmuda, Student ID- 17172001, MAGD, Batch-8, under my supervision for particular fulfillment of the requirements for the degree of MA in Governance and Development (MAGD), BIGD, BRAC University, Dhaka, Bangladesh.

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Abstract

For human development water is fundamental. A city local government such as the City Corporation can play a key role to ensure this fundamental public service of safe water supply to the citizens. The SDG goal-16 focuses on access to water and sanitation for all by the year 2030, and emphasizes achieve universal and equitable access to safe and affordable drinking water for all. In the world in 2015, 3.78 billion people get at least basic drinking water, while 156.66 million people get this service in Bangladesh. In Bangladesh, 55.67% population gets a safely managed drinking water service, which is defined as one located on-premises, available when needed, and free from contamination (WHO/UNICEF, 2018). Local government institutions have often been a major stakeholder in public water service and management. In this context, this study focuses on the Cumilla City Corporation's (CUCC) water supply services. The general objective of the study is to identify and examine the prevailing status, nature, and problems as regards ensuring public accountability and service delivery in the water supply to the citizens by the City Corporation as a unit of urban local government. As urban governance management, its administration works in a very dynamic environment (political and administrative) and it is a part of the public sector so have to maintain public goods like water supply. If urban governance is a relationship between government and governed than urban management is the relationship between the servers and the served in service delivery.

For the collection and analysis of data, a combination of both qualitative and quantitative methods has been used in this research. To understand whether water supply services of the City Corporation are accountable to the citizens, a strategic analysis has been done. To capture the opinion and views of councilors and citizens regarding water supply services, a survey has been performed with a structured questionnaire. Qualitative analysis has also been used to examine the performance of the existing policy and to find gaps with the water services of the CUCC. For this purpose, in-depth interviews were conducted on key informants.

The findings of the study, inter alia, reveal that as a new city corporation, the CUCC has very weak institutional capacity regarding water supply. Cumilla is a very old municipality with an archaic water supply infrastructure. With its up gradation to a full-fledged ‘city corporation’, there has been no corresponding capacity enhancement in its water supply facilities. Thus the present water supply infrastructure of the CUCC is not demand-driven, and has not been able to

respond to the growing need of the citizens. Citizens remain generally dissatisfied with the quality of water and the associated water supply services that they receive. The CUCC authority and councilors do not maintain any effective monitoring on water service delivery and ensure their services. The councilors were found to be generally reluctant about the water supply issues; they did not feel responsible for water-related matters in any way, and noted that water supply should be the exclusive responsibly (they used the term, 'headache') of the CUCC administration. Accordingly, the councilors were not accountable and committed to the citizens for ensuring one of the basic needs. As evident from a critical review of the document, the National Water Policy 1999 stipulates that water resource management requires the involvement of the public and private sectors, communities, and individuals that benefit from the delivery of water-related services. This policy prescription has practically no reflection in the working of the CUCC water management regime. Among others, two major recommendations of the study include: (i) provisioning for a specialized water service agency (such as WASA) within the regular organizational structure of the CUCC; and (ii) developing the culture of regular community-based urban planning for overall development including water supply.

Keywords: Urban Local Governance, Public Accountability, Service Delivery .

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Chapter – I: Introduction

1.1 Introduction:

"Government is a trust, and the officers of the government are trustees. And both the trust and the trustees are created for the benefit of the people." - Former US president John Quincy Adams'

Bangladesh has a great past of the nearby government organization framework with a since quite a while ago written history of a few thousand years. Our constitution completely accentuates the requirement for setting up a neighborhood government with an agent character (Chapter 3, Article 59). It likewise infers the immediate interest of the individuals in establishing the nearby body and dealing with the undertakings of such bodies. Truly, however basically the local government framework in each level is not practicing appropriately. The administration of Dhaka experienced a few modifications since freedom. The Act of 1974 (Act 56), assigned Dhaka as the Municipal Corporation and in 1982 Chittagong as the Municipal Corporation. However, in 1983 (Dhaka) and in 1989 (Chittagong) were upstretched to become a City Corporation. In 1984, Khulna Municipal Corporation and in 1990 Rajshahi Municipal Corporation were declared as City Corpoation. In 1999, the women ward councilors selection for reserved seats was presented.

Researcher selected the Cumilla City Corporation. Cumilla is one amongst the invasive town settled beside the Dhaka-Chittagong road ninety seven km south to Dhaka 167 km north to urban center. Cumilla, one amongst the oldest cities of the sub-continent was declared municipality (pourashava) within the year 1864 and Cumilla Sadar Dakshin Pourashava was declared in 2003. Abolishing these 2 pourashavas and consisting of their areas, the historical event, declaration of Cumilla City Corporation was occurred on ten July 2011. These City Corporation was consisting of twenty seven wards of Cumilla Adarsha Sadar and Cumilla Sadar Dakshin Paurashava. The first-ever politician election of Cumilla City Corporation was survived on 05 January 2012. Currently, its population is five lakhs and therefore the space is 53.04 sqm or thirty three km.

Bangladesh was administered by martial systems during 1975-1990. In 1991, after a extensive civil movement legislative decmocracy of majority rule government was reestablished. In 1994 through the Local Government Act 1993, in Dhaka the ballot based procedure of choosing the Mayor and Ward Commissioners were democratically move towards training, and Mohammad

Hanif was elected as Mayor. A comparable improvement occurred in the other City Corporations and Pourashavas. In 2008, all Pourashava Chairmen changed as Mayors like City Corporation Mayors and Ward Commissioners as Councilors. Prior to the 1997 Gazette notice (The Pauroshova Ordinance 1997, Ordinance no. XXVI of 1997& 1998, July, and Gazetted in 22/03/1999) for districts and city governments separately, female ward councilors used to be assigned by decision (Islam, 2013).

City Corporation is especially accountable to produce services like waste management, maintenance of system, street lighting, water system, communication, birth, and death registration, provision of trade license, non-motorized vehicle license, and recreation. CUCC has a website provides basic data regarding Cumilla City Corporation (CUCC), its vision, programme, organogram, history, activities, and helpful link to the assorted offices. As a citizen of Cumilla town or the other person will get data from this website simply to satisfy the curiosity and for the other functions. This website will facilitate the user to know the manner CUCC is functioning and its efforts towards fulfilling the aspirations of the residents of Cumilla town by providing numerous quality services. In section 119 of City Corporation Act 2009, Mayor, Chief Executive officer, Councilors, and other different level officers acted as public servants.

In Urban local governance, ward councilors are the active part of the development activities. They have the fundamental responsibilities to appear CC general meeting, organizing standing committee meetings,etc. They have the right to convey improvement planning with projects of their area with the support of the CC administration and give in to the CC improvement package.

In a issue which will be tested what reasonably performance indicators the findings obtained represent and the way qualitative such answerability data is from the angle of strategic management. The mix of results orientation and public accountability from the angle of management and civic values emphasizes that the high-level strategic objectives and structure outcomes are in alignment. Strategic objectives articulated at the governmental level are effective in observe, and members of the general public will assess the success of public services. High-level strategic objectives will be discovered and centered on employing a voluntary ‘bottom-up’ method rather than the obligatory ‘top-down’ approach. This is often a matter of compressing people’s ideas, expectations, and interpretations into a strategic statement of intent, for the political decision-making level, of external performance data. The paper emphasizes a necessity for transformation from an excessively pragmatic tone to the particular quality-oriented performance and moral thinking.

The basic components of the discussion on public accountability or answerability are regarding the organization, the powers, and therefore the ethics of public authority. Once meeting citizens' expectations, the main target of answerability discussion has been transferred to the realm of extended answerability that's illustrated through the construct of public answerability (Kayhko, 2011).

A shift from vertical answerability to public answerability provides a giant boost to capacities in state establishments. People who have larger and direct access to shopper feedback, respond quicker, modify higher throughout crises and are supported additional by the general public throughout such downturns. The creation of national charters in vital public services, legislation to facilitate the public's right to data, and experiments in e-governance in sectors and departments serving business and voters, in general, were among the initiatives taken by India to stimulate public answerability. The Philippines' investment in authorities units additionally shows the government's effort to enhance the effectiveness of those units in providing and managing local public service (UNDP, 2009).

Finally, to qualify as public accountability, there should be public accessibility of the account giving and not purely internal, discrete informing. The study focuses on the fact that the role of City Corporation in water supply with ensuring public accountability and service delivery.

1.2 Statement of the problem

Albeit city administration in Bangladesh depends on the immediate ballot, the urban local governments (City Corporations and Municipalities) hate satisfactory force, authority, or self-sufficiency. These are likewise intensely reliant on the focal government for assets and work force. Their functional work is additionally restricted. Topographical or territory centered decentralization is actually few. All-City Corporations and Municipalities are self-possessed of Wards however the Wards don't have any constructive fiscal strength. Regarding one of the major need water supplies in Cumilla city corporation area is very limited (53 km.). Before 2011, Cumilla Sadar Upazila was under the municipality, that time most of the households had water supply line but the water supply was not adequate. After 2011, Cumilla City Corporation gets a bigger responsibility to ensure services including water supply to the people of that area but the water supply facilities are very limited and get water supply two times a day. So, Peoples are avoiding this supply service and they took deep tube well by themselves (with permission of the city corporation) for getting regular and good quality water. Forth while it is a big environmental

effect for the ground surface water level and extra pressure on electricity. For this reason, it is necessary to find out the actual problem to ensure water supply with public accountability and service delivery in the City Corporation area.

1.3 Objectives

The general objective of the study is, to identify the prevailing status, nature, and problems as regards ensuring public accountability and service delivery in the water supply to the citizens by the City Corporation as a unit of urban local government. In more specific terms the objectives are;

a) to review the concept, historical evolution and features of urban local government in Bangladesh;

b) to review the existing water supply system and associated public accountability mechanism in the urban local government practiced in the case study institution (The Cumilla City Corporation).

c) to conduct a strategic analysis (focusing on SWOT) of the water supply system in terms of the service providers accountable to the local citizens.

d) based on the overall observation of the study to make some recommendations for public accountability and water supply.

1.4 The Rationale of the Study

There is very little authentic quantifiable data available regarding the performance of Bangladeshi water and sewer services with their productivity. In 2005 World Bank were done there first systematic performance benchmarking for water and sewerage services in Bangladesh with the program of water and sanitation as a part of regional project that also assess other two countries –India and Pakistan with selecting 11 services in Bangladesh. The benchmarking project internalise that information were not very authentic, that benchmarking was "largely externally driven than internally motivated" and that the administrative values of services was "often slow to accept performance measurement, accountability to customers and government, and improved service outcomes" (WSP, February 2010). Two common indicators of the productivity of services are non-revenue water and labor productivity. According to these pointers, the efficiency of Bangladeshi services is poor, despite some recent developments. In Dhaka, the share of non-revenue water (NRW) has been significantly reduced from 54% in 2003 to 29% in 2010. About municipalities, the ADB estimates 33–40% regarding non- revenue water

(Kuroda, 2007). Only about 15 km³ yearly, or about 1% of total water resources, is being reserved for human use. Out of the total extractions, 86% is for agriculture, 12% for domestic water supply, and 2% for industry (WSP, 2009). It is predictable that Bangladesh's population will increase from 129 million people in 2000 to 181 million by 2025 and 224 million by 2050, go along with by an enlarged response for water.

Piped installation, as calculable by the utility, was regarding one hundred liters per capita per day in capital city Dhaka of Bangladesh in 2007 for those with access to the piped installation. This quantity is slightly but per capita water use in Federal Republic of Germany. Given the low share of metering, estimates of per capita water use aren't reliable. In an especially sample of eleven cities, eight didn't have any client metering in any respect. In capital of Bangladesh and Chittagong, seventy and eighty six percent of consumers have metered the town of Rajshahi, that has no metering, the municipal utility calculable per capita water use at ninety eight liters per day. However, a client satisfaction survey meted out at the side of the NGO Forum on Drinking Water Supply and Sanitation meted out among 600 respondents in 2008 found that the common was solely seventy eight liters. Water use varied considerably counting on financial gain, with the poor intense forty three liters and also the poorest solely twenty eight liters. The survey additionally showed that 0.5 the respondents drank water straight from the tap while not filtering or boiling it, whereas twenty seventh rated the water quality as poor. The calculable quantity of water consumed varies considerably between cities. For instance, in 2006–07 it absolutely was calculable at over 250 liters in Manikganj, however at solely thirty three liters in Chapai Nawabganj and Gazipur. The common for eleven cities was eighty eight liters (MOWR, 2019).

Numerous ministries in People's Republic of Bangladesh have responsibilities regarding water and sanitation services. The Ministry of Local Government, Rural Development and Cooperatives have overall responsibility for observance and governing the arena, moreover as policy formulation through its government Division. Among the Division, the Department of Public Health Engineering (DPHE) assists municipalities and communities in building installation infrastructure altogether components of the country, except the three largest urban areas, Dhaka, Khulna, and Chittagong. Aalternative ministries with competencies inside the areas of water and sanitation embrace those of education, health, and family welfare; water resources; atmosphere and forests; finance; and also the Planning Commission. The National Water Management arrange (NWMP) lists no however 13 ministries involved inside the sector

(Ministry of Water Resources 2001). So, as a citizen of the Cumilla City Corporation, they have the right to get the appropriate water facilities by the city corporation. The scenario is not up to the mark.

1.5 Scope of the Study

Measurement and scope of the study are furnished below:

Study objectives	**Dimensions**	**Data Collection Techniques**	**Important Variable**
a) To review the concept, historical evolution and features of urban local government (LG) in Bangladesh;	i. Describe concepts **ii.** Historical Evolution of LG	i. Collect information from the related government acts, books, journals, and related websites.	Knowledge of Local governance, urban LG, accountability, and water supply disseminate the evolution of LG to Urban LG.
b) to review the existing water supply system and associated public accountability mechanism in the urban local government practiced in the case study institution (The Cumilla City Corporation).	i. Existing policies ii. Nature of government service iii. Public accountability	i. Collect information from the related government acts and books. ii. Collect information from government officials. iii. Participation of the councilors regarding public accountability.	• Types of programs and activities, • Knowledge of service • no. of service receiver • Participation • Observation • Percentage
c) To conduct a strategic analysis (focusing on SWOT) of the water supply system in terms of the service providers accountable to the local citizens.	i. Nature of receiving services ii. Satisfactions of the citizens iii. Willingness to participate iv. SWOT analysis v. Service delivery by the service providers	i. The Strengths, Weaknesses, opportunities, and threats of CC/ councilor's activity and service delivery. ii. Access to get the service from the CC through KII iii. Questionnaire survey iv. MS Excel	• Age • Education • Occupation of the respondents • Participation, • Access • Cooperation • Service Delivery • Content analysis

1.6 Methodology of the study:

Exploration work is expected to get society and its concern. Be that as it may, it relies upon the point of view from which the exploration is directed, by whom it is led, and who it is about (Vernon, 1997). This research work is academic research. Regarding the selection of my research area, I have to think about the short time and easy access. On this consideration, I have selected Cumilla City Corporation area. Based on primary and secondary sources of data the research was prepared. The detailed methods that were followed by the study were mentioned below;

i. Primary & Secondary Data review

Regarding the primary data compilation, I tried to collect data from my 69 interviewees which were 9 councilors (including 3 female) of 09 wards of Cumilla City Corporation and 60 citizens of this City Corporation area. Out of 27 wards, I have selected 09 wards based on access to water supply facilities by the Cumilla City Corporation. Sixty citizens were within the nine wards of the research area. Secondary Data reviewed from the different publications of Government, statistical and historic documents from books, journals, online reports, etc.

ii. Questionnaire survey

In my study, I try to collect data with the questionnaire method with a single interview of each respondent. Within this, I try to collect some information with some observation method to the actual scenario of water supply.

iii. Focus Group Discussion

In my study, I have done two focused group discussions with the councilors and citizens of the Cumilla City Corporation.

iv. Key informant interview

Within a short time, in my research, there was three key informant interviewee. Those were Chief Executive Officer of Cumilla City Corporation, Executive Engineer of DPHE, Cumilla, and Assistant Engineer of CUCC. They tried to give me the actual scenario of the administrative and water supply facilities of Cumilla City Corporation.

1.7 Limitation of the Study

The Dissertation research is focused and based on 09 (nine) wards within 27 wards of Cumilla City Corporation. Due to budget, time, and resource constraints, it was not possible to cover some other wards of Cumilla City Corporation (CUCC). As a researcher, it creates some difficulties to collect data from the ward councilors' who were very busy. This has happened for

time limitations and some other relevant causes. Most of the respondents specially the public representatives did not able give stipulated time for their busy schedule. Within short period of time the study need to be completed that's why the sample size were very small. The study was in nine wards within 27 wards under CUCC, the findings might not be mirrored in the genuine situation in all the City Corporations or urban local governance system of the country. The researcher also faced some problems due to a shortage of necessary and relevant books, journals, and written documents in various libraries and educational institutions regarding the issue. There was also a lack of reliable, up-to-date, and publicly accessible information on many aspects of the Bangladesh water supply system.

Chapter – II: A Literature Review on

Local Governance, Urban Local Government, Public Accountability and Water Supply

2. Introduction

Local government is the fundamental street to vote based system. Pandit Nehru quoted that "*Local self-government is and should be the premise of any obvious arrangement of majority rule government. Vote based system may not be prevailing until it is based on the establishment from beneath*"(Siddique, 2008). Urban local governance means all the ward councilors including reserved seats will be empowered with straightforwardness, answerability, awareness, authority, rule of law, equitable support, decentralization, coordination, effectiveness, and management exercises. Accountability refers to the process of holding actors responsible for their actions. When the councilor's service delivery will more responsive and transparent to the citizens the CUCC will be ensured more governance in the water supply.

2.1 The key concepts:

2.1.1 Urban Local Governance

"Local governance" signifies the utilization of different administration standards (responsibility, straight forwardness, decentralization, proficiency, money related uprightness, support, value, and so on) to immensely significant and applicable advancement situated regional associations/endeavors, for example, nearby government bodies, regional organization, Local NGOs, CBOs, cooperatives, localized media, and so forth.

"The principal dimensions of governance or institutional quality may include voice and accountability, political stability and absence of violence, government effectiveness, regulatory quality, rule of law, and control of corruption. From a pragmatic point of view, the quality of governance depends on the quality of institutions "(Planning Commission, 2012).

Ensuring governance in urban areas (local, regional and national) dependns on how government in every tier and stakeholders adopt how to plan, resource mobilize and manage urban areas. It is a constant procedure of cooperation and management over the allocation of social and resources and physical resources and political power. The aforementioned, then intensely

political, unfair formation and action of political organization, capability to take and appliance decisions for the interest of the poor. It includes the all economic and social services, organizations and relations. All these incorporates markets with goods and services; domestic, families and community relations; and major substructure, land, services and mass protection (Devas, 2004).

Urban Governance is enormous holes regularly exist among poor and happier urban inhabitants as far as admittance to social, financial, and political chances (especially policy formulation) and the capacity to take an interest in, and influence, the advantages related with urban living. As per (Slack, 2014) urban administration:

- plays a basic job in forming the physical and social character of urban locales;
- influences the amount and nature of neighborhood administrations and proficiency of conveyance;
- determines the sharing of expenses and circulation of assets among various gatherings; and
- affects occupants' capacity to get to neighborhood government and participate in dynamic, affecting nearby government responsibility, and responsiveness to resident requests.

Urban administration includes a scope of entertainers and foundations; the connections among them figure out what occurs in the city. In overseeing urban changes, the legislature (at all levels) need to assume a key job in fashioning organizations with and among key partners (UNESCAP, 2015).

2.1.2 Water Supply

City Corporation has one of the major function is to ensure safe drinking water to the citizens. That’s why water supply is one of the major roles of CC. In Dhaka (North) and Dhaka (South), Sylhet, Chittagong, and Rajshahi have different water supply bodies like WASA, but the other CC including Cumilla City Corporation (CUCC) did not have this type of body. They have a small department name water supply & sanitation branch under the CUCC engineering department with very few officers and staff.

2.1.3 Public Accountability

On social basis in public governance, for ensuring common responsibility with lawfulness is necessary, and also "new public managers' are basically public's servants. Yet, rising the new condition with a moral problem, especially relating to the point that the ultimate nature of public administration is not unstated with the vital goal line of public and private actions.

Besides, the shift from traditional public administration to performance-based public management has had thoughtful values of essential arrangements in institutional beliefs. On these perspectives public accountability can be considered in a theoretical wisdom has given below:

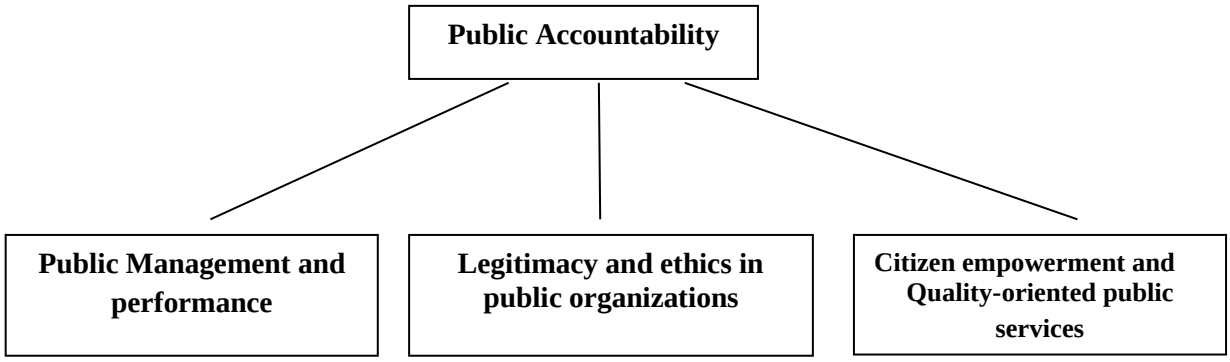


Figure I: public accountability (three secondary questions) (Kayhko: 2011)

In a broad sense, accountability is a replacement of various evaluation but basically opposed thoughts, specially responsiveness, responsibility and effectiveness. On democratic perspective, public accountability is tremendously essential, it will happen when ensure the constitutionally account of the civic workplaces (March & Mulgan, 1995; 2003). These approach is a doctrine of Rousseau and Weber which academically distinct by the principal-agent model.

"*Each principal in the chain of delegation seeks to monitor the execution of the delegated public tasks by calling the agent to account. At the end of the accountability, the chain is the citizens, who pass judgment on the conduct of the government and who indicate their displeasure by voting for other popular representatives. Hence, public accountability is an essential condition for the democratic process, as it provides the people's representation and the voters with the information needed for judging the propriety and effectiveness of the conduct of the government"* (Przeworski, 1999).

2.1.4 Service delivery

Regarding service delivery, Whitaker (1980) observes that depending on the sort of service being offered, every service features a primary intervention of reworking the client which the consumer himself/herself is that the principal beneficiary. As a vital responsibility of state and government establishments, the general public service ought to deliver services that society needs to keep up and improve its welfare. to try and do this, government institutions need structure structures and befittingly qualified those who should be supported to deliver the services they're accountable for. (Whitaker, 1980).

According to the Organization for Economic Cooperation and Development (OECD, 2010), throughout the world, cities face the foremost acute challenges of service delivery as a result of aggressive populations. In several countries, developing countries, in particular, the difficulty of service delivery could be a challenge that must be self-addressed given the quality of service provision and therefore the pressing desires of the poor. (Besley & Ghatak, 2007). Khalid (2010) supports this read once he states that local councils in Asian nation(Malaysia) still face pressure to enhance their service delivery. The inflated level of education of the population has led to a additional vocal and more discerning grouping that expects higher services and responsibility from its local government. Moreover, speedy industrialisation and urbanization of states have created a difficult setting for the local government. (Khalid, 2010).

Besley and Ghatak (2007) indicates, rising public service delivery is one among the largest challenges worldwide. To date, there are restricted studies that have formally investigated the causes of poor service delivery and therefore the methods that may be enforced to enhance service delivery in native authorities.

Municipal Research and Services Centre (MRSC, 1993) defines service delivery because the actual production of a service similar to collection refuse and disposing it or lighting the streets. Whitaker (1980) concurs with this argument and observes that reckoning on the type of service being offered, every service features a primary intervention of remodeling the client which the consumer himself or herself is that the principal beneficiary.

As an important responsibility of presidency and government institutions, the general public service ought to deliver services that society needs to keep up and improve its welfare. In the present around the world serious condition, the administration business assumes an undeniably

significant job in the economy of various nations, consequently, conveying quality assistance is considered as a fundamental system for progress and continued exixtence (Parasuraman, Zeithaml, & Berry, 1985).

Aminuzzaman (2010) claims that though public representatives are the forefront of local government institutions and also nearer tho the public, opportunity and quality of service delivery is the most serious areas which ensures their efficiency and organizational appearance.

A study conducted on Local Government in Bangladesh revealed that there are some institutional barriers in service delivery by local level authority with very few manpower and resources in consideration with their workload. The author further clarifies that local authorities also have lack managerial capability and resources to design and run innovative service delivery in areas like employment generation, health, and education (Aminuzzaman M. S., 2013).

Aminuzzaman's study additional mentioned that there's a scarcity of coordination between native authorities and addition service delivery staff of the govt at the sphere level. The author thinks that lack of acceptable rules and regulation, ineffective monitoring, lack of answerableness and transparency, political manipulation, non-cooperation from central-government based mostly bureaucracy, restricted community understanding, exclusion of women, limited and insecure revenue base, extremely centralized project and program design, poor relationship between the administration and elective representatives.

2.2 Local Government in Bangladesh

2.2.1. The Composition & Situation of LG

Bangladesh developed as an sovereign country in 1971. Since Independence, Bangladesh has encountered deviations in socio-political and monetary arenas. In political aware, it has transformed from combined party popular government to a single-party framework with martial autocracy and again moves to multi-party majority rule government. The environment of government has additionally been variable as far as straight forwardness, responsibility, responsiveness, effectiveness, and value. In spite of the fact that another nation, Bangladesh has a since quite a while ago written history. In the ongoing past, it went under British rule, which went on for almost two centuries, from 1757 to 1947. During that period Bangladesh was a piece of the British Indian territories of Bengal and Assam. Toward the finish of British principle in

August 1947, the subcontinent was divided into India and Pakistan. Bangladesh turned into a piece of Pakistan and came to be known as East Pakistan. It remained so till 1971. It showed up on the world guide as an autonomous and sovereign state on 16 December 1971, following a nine-month-long war of freedom against Pakistan (CLGF, 2018). A unitary type of government oversees Bangladesh and until 1991 it was of the presidential sort. In August 1991, a parliamentary type of government was presented. The Prime Minister is presently the Chief leader of the nation. She has a chamber of ministers that help her in the release of her obligations. For authoritative comfort, the nation is partitioned into eight regulatory divisions, each positioned under a Divisional Commissioner.

Every division is further sub-isolated into Zilas (Districts). After the managerial rearrangement did in 1984, the region is currently isolated into 64 Zilas, 485 Upazilas. Each Zila comprises of a few Upazilas. Beneath Upazilas comprise of a few Unions. At present, there are two kinds of nearby government establishments exist in Bangladesh --

a) Rural Local Government

b) Urban Local Government

a) Rural local government

The rural local government bodies are-

i. Zila Parishad.

ii. Upazila Parishad and

iii. Union Parishad

The Upazila Parishads were disassembled in 1991. The Zila Parishad is in a doomed state. Another expansion has been the gram Sarker at the ward level as a supporting association of the Union Parishad. However, as will be contended later, it's anything but an undeniable nearby government body.

b)Urban local government

The Urban Local administration bodies are the majority rule establishments at the fundamental level. Urban Local government or Municipal Government is a type of policy implementation

which is a greater part of setting, exists as the most minimal level of organization inside a given state. The term is utilized to diverge from workplaces at the state level, which are alluded to as the focal government or national government which manages overseeing establishments between states. Nearby governments for the most part act inside forces assigned to them by enactment or mandates of the more elevated level of government. The different tier of local government are the most effective forces than any other major level of authoritative divisions. The population in urben areas increased and within next two decades it will 8% of the total population but from the data shows after independence in 1971 it was increased rapidly to 19% by 1991, 26% by 2005, and 28% by 2011. 2.8% growth rate in urban areas population and it is more than doublein entire population(1.1%). By 2035, the countries urban population will be 79 million or 42%. In Bangladesh, urban migration has been fast cause of high rate of increasing population, expansion of urban territories and for job security shift to rural to urban areas. More than 60% population lives in city corporations, where as 40% live in pourashavas (LGED, 2017).

The urban local government bodies are-

i. Paurashavas (Municipalities)

ii. City Corporation

Paurashavas (Municipalities)

Urban zones have a different arrangement of local governments. The twelve biggest urban areas have City Corporation status, while the rest are known as Pourashavas or Municipalities, which again are clustered by monetary related (**See table 1**). Presently, we have 318 pourashavas or regions.

Table 1: Category of Pourashavas

Category of Pourashahva	Annual income level
Class A Pourashavas	6 million +
Class B Pourashavas	2 million
Class C Pourashavas	Less than 2.5 million

City Corporation

As the City Corporation and pourashavas are the genuine urban local governments, their capacity, organization, and monetary structure will be additionally explained on underneath. City Corporations are commonly so perceived and set up in light of their authoritative significance (for instance, for being Divisional Headquarters) and now in 2018, we have 12 City Corporations. These are Dhaka North, Dhaka South, Chittagong, Khulna, Rajshahi, Barisal, Sylhet, Gazipur, Narayanganj, Rangpur, Cumilla and Mymensingh City Corporation.

2.3. Evolution of Urban Local Government in Bangladesh

The evolution of local government in Bangladesh may be characterized as follows:

2.3.1 Local Government in ancient Bengal

2.3.2 Local Government in medieval Bengal

2.3.3 Local Government in Bengal during the British period

2.3.4 Local Government in Bangladesh during the basic democracy period

2.3.5 Local Government in Bangladesh period (1971- present)

2.3.1 Local Government in ancient Bengal

There were three sorts of Local Governments in antiquated social orders. In the first place, the nearby government was the main type of government where no focal authority existed. Second, in cases where the central government was strong, the local government assumed an supplementary job. Ultimately, at times, the local government contended with the middle for force and authority.

Nonetheless, it is normally expected that Local Government was the fundamental type of Government in the subcontinent till the sixth century B.C. These governments in some structure have been in presence in the Indian subcontinent for a considerable length of time. Two assortments of self-government establishments 'the headman' and 'Panchayats' have all the earmarks of being operational in provincial zones since early occasions. The headman was not a chosen official but rather originated from the most dominants family in the town. His significance was because of two factors: all contacts, be it political or managerial, between the resident and specialists must be steered through him and he was associated with assortment of

charges from the town. The Panchayat was a chosen body with chief and legal capacities. In any case, regularly the headman controlled the Panchyat (Siddique, 2008). During the Mughal rule of India, the Panchayat framework vanished inside and out.

2.3.2 Local Government in medieval Bengal

Mughal's commitment to the improvement of urban local government was surprising as Mughals gave extensive significance to towns. Every town incorporated a few wards or Mohallas. A Mir Mahalla was selected to go about as a representative for each Mahalla. The Kotwal, or CEO of the town, used wide-going forces including authoritative, police, financial and city power. Two authorities helped him in playing out his obligations: a Kazi who was a legal official and a Mahatasib, who was allocated to forestall illicit practices (Siddique, 2008). The Mughal framework with every one of its peculiarities of no systems for involvement by the residents. It was just a top-down various leveled authoritative framework that was expected to be an augmentation of the focal authority into the neighborhoods.

2.3.3 Local Government in Bengal during the British period

During very nearly 200 years of British Regulation (1765-1947) over the Indian subcontinent, numerous examinations were made with the local government framework. All the tests were planned to develop a framework that would serve British majestic interests. The significant target of the British in India was twofold, boost of land income assortment and upkeep of peace. Normally, the British as a royal force had small comprehension of, and enthusiasm for, indigenous nearby self-administering establishment.

In the field of urban local governments, British arrangement brought about the setting-up of a metropolitan organization in the Presidencies and offering duties to city boards of trustees for some municipal luxuries. Until the 1870s, authorities, or their assigned delegates, ran urban local government bodies. Slowly, Municipalities become delegate bodies with the declaration of a few demonstrations somewhere in the range of 1860 and 1947, beginning with the Municipal Development Act of 1864. These demonstrations, in addition to other things, presented election as a mode picking one's delegate. The Chairman and Vice-Chairman of the Municipalities, notwithstanding, kept on being chosen in a round about way by the famously chosen Commissioners. The Bengal Municipal Act of 1932 reinforced the Municipalities in imposing rates and taxes and utilization of resources (Siddique, 2008). In any case, a similar act gave

significant forces, to the government and local authorities, to investigate, regulate and control municipalities and invalidated the forces of tax assessment from nearby level bodies to an enormous degree.

During this prior period, Union boards comprised of two-thirds elected members while the rest were named. The chairman was chosen among individuals from the Union boards. The boards were given some particular duties including the power to demand charges or levy taxes. Before the end of the 1920s, District boards were working under the stewardship of non-official administrator or chairman.

2.3.4 Local Government in Bangladesh during the Basic Democracy Period

During the early stages after Pakistan's autonomy administration of East Pakistan started some significant changes. General Ayub Khan, who held onto power in 1958, presented an arrangement of local government known as fundamental vote based system which was calles basic democracy. This four-level framework sealed originality and improvement and bore an away from of the Union councilors and Municipal committees of the british days (Khan, 1999).

Table-2: Local government under Basic Democracies Order, 1959 in East Pakistan

Tier of Basic Democracy	**Number**
Rural Areas	
Union Councils	4036
Thana Councils	393
District Councils	17
Divisional Councils	4
Urban Areas	
Union Committees	37
Municipal Committees	29

(Siddique, 2008. P-55)

2.3.5 Local Government in Bangladesh since 1971 to present

Since autonomy in 1971, a few endeavors have been made to play with the local government framework in Bangladesh. While changes have been produced using time to time as far as the game plan of levels of local government, basically nothing has been done to reinforce them. In this manner, the structure of the local government framework has stayed pretty much unaltered.

Following freedom, the name of the Union Council was changed to Union Panchayat and a chairman was named to deal with the matters of the Panchayat. The name of the Thana Council was changed to Thana Development Committee while the District Council was named Zila Board or District Board. Again in 1973, Union Panchayat's name returned to Union Parishad.

2.3.6 Evolution of the Cumilla City Corporation and Municipalities as Urban Local governance

The British required presenting a type of municipal local governance even in the mid 1820s, however a conventional start was made with the foundation of one of the principal municipalities in the current day Bangladesh area in Dhaka and Cumilla in 1864 (158 years back), through the Bengal Metropolitan Act 1864. The municipal council was anyway prevalently made out of authorities. An intriguing improvement with regards to municipalization was the holding of an open gathering in Cumilla in 1882. Since 1884, there have been numerous progressions in municipal administration or governance.

The 1932 Bengal Municipal Act was a milestone advancement as it accommodated more noteworthy involvement of chose councils in the municipal bodies and furthermore in enlarging the forces and elements of municipal bodies. The framework proceeded with well into the main decade of the Pakistan time frame in the 1958 Ward Committee and Union Committee.

The administration of the Capital City Dhaka experienced a few changes since independence. The Act of 1974 (Act 56), planned Dhaka as the Dhaka Municipal Corporation.

Bangladesh, in 1971, on the other hand giving more significance to menbers from the National Parliament, littler urban areas and towns are known as Porashavas or Municipalities. Prior to 1994, the City Corporations were overseen by Mayors designated by the legislature. On account of Dhaka frequently the Clergyman responsible for Minister in charge of the Local Government was given the extra obligation of the Mayor. A fundamental component in a popularity based procedure if the appointment of political representatives to lead and administer the residents.

Municipal elections are similarly mainstream and participatory. The Mayor of DCC appreciates the status of a Cabinet Minister. While the other city corporations (Narayangonj and Gazipur) Mayors have an State Minister’s status. The quantity of Pourashvas (single or in the mix of two or three) have been moved up to the status of city corporations. These incorporate Narayanganj (with Siddirganj and Kadam Rasul Poroshavas amalgamated) and Cumilla, Gazipur (with Tongi

Pourashava amalgamated) and Rangpur are probably going to be announced City Corporations. Recently in 2018, Mymensingh is proclaimed as City Corporstion.

The majority rule process in Bangladesh has accomplished a sensible degree of development is obvious from the way that all races held in 2008 have been viewed as free and reasonable. In spite of the fact that the urban local administration (Cumilla city corporation) political decision has completed two terms (2012 and 2016). In 2003 Cumilla Sadar Dakshin Upazila was pronounced as municipalities. In 2012, with two upazilla (Cumilla Sadar and Sadar Dakshin Upazila) zone turns into the Cumilla City Corporation zone (53 sq. km.). In any case, the residents of Cumilla didn't acknowledge properly the ward of the city corporation territory and they have faith in, later on, the zone ought to be expanded in 30 to 85 sq. km. more (Ahmed and Paul, 2018).

The municipality and City Corporation are chosen legitimately by the individuals. Each Poura Parishad is to have an Mayor and Councilors for each Ward, while a City Corporation is to have a Mayor as top of the Parishad (Committee) and Councilors for each ward. The quantity of Wards relies upon the size of the city. In spite of the fact that ladies can challenge for direct political decision, there are likewise saved seats for them, one for each three wards. These are filled through direct political race since 2001. The residency of a chosen urban local government is five years. The fair procedure of choosing the Mayor and Ward Councilors through direct democratic came into excercise just in 1994, in Cumilla through the Local Government Act 1993. A comparative improvement occurred in the City Corporations and Pourashavas. Further advancement in the democratization procedure was accomplished in 1999 when the immediate appointment of female ward councilors for saved seats was presented. In 2008, all Pourashava Chairman came to be known as City Corporation Mayor and Ward commissioners as councilors.

The urban local government in Bangladesh is on the immediate vote (City Corporation and Pouroshava) doing not appreciate satisfactory force, authority, or self-governance. These are additionally intensely reliant on the central government for finance and workforce. Their serviceable jurisdiction is likewise constrained. This is valid for the enormous City Corporation, for example, Dhaka and Chittagong since such capacities as town arranging and urban planning and development, water supply and power supply flexibly benefits have been undermined from them and given to isolate self-governing yet delegated government specialists under the central government. In any case, the other including Cumilla city corporations water and sanitation services, town, and urban planning, etc. were under the city corporation jurisdiction with very

limited officials and stuff. Geological or territory based decentralization is restricted. All City Corporations and Municipalities are made out of Wards yet the Wards do not have any advantageous money related influence. They truly need staff. The ward councilors must be address requests and facilitate of a huge voting demographic (more than 70,000 individuals, in Cumilla) practically but they were unaccompanied with very limited stuffs (one computer operator and one peon). He doesn't have a council to prompt him. Good urban administration requests thoughtfulness regarding various key pointers, for example, straightforwardness, responsibility, responsiveness, authority, rule of law, popularity based investment, decentralization, coordination, productivity and initiative in urban administration decentralization, from focal Government to the city level and furthermore from the city level to the ward or network level. Support all things considered, explicitly the residents in urban advancement arranging, monetary administration, and administration conveyance is significant.

Cumilla and Cumilla City Corporation: A snapshot

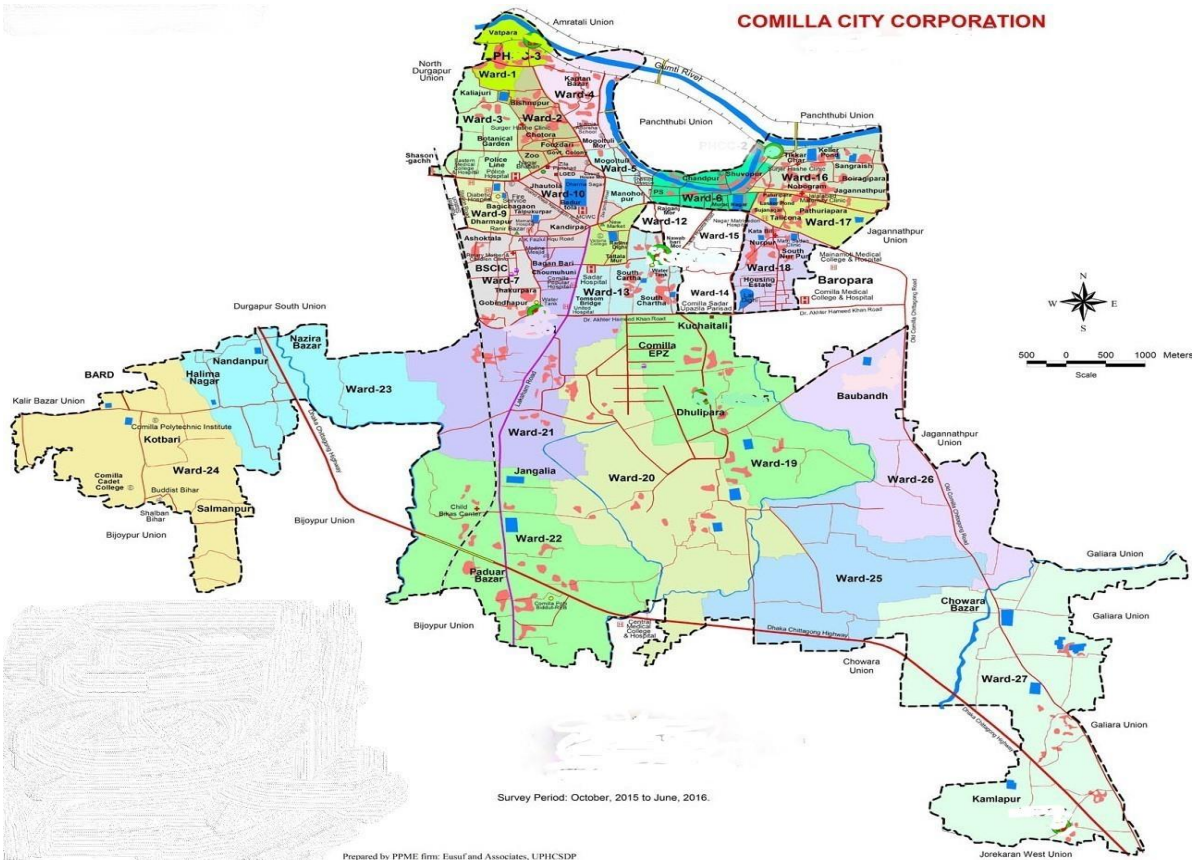
Cumilla locale was once under old Samatat and was gotten together with Tripura State. The historical backdrop of Cumilla town returns to the ninth and tenth century A.D. at the point when the old strengthened town "Salban Vihars, Mainamati", the focal point of Buddist human progress thrived. This area went under the reign of the rulers of the Harikela in the ninth century Advertisement. Lalmai Mainamati was governed by Deva tradition (eighth century Promotion), and (during the tenth and mid-eleventh century Advertisement). In 1732 it turned into the focal point of the Bengal-upheld area of Jagat Manikya. The Peasants Movement against the lord of Tripura in 1764, which initially shaped under the authority of Shamsher Gazi, is a remarkable recorded occasion in Cumilla. It went under the standard of East India Company in 1765. This region was built up as Tippera district in 1790. On the first of October, 1960 the name of the locale was changed from Tripura to the more broadly utilized Comilla. Chandpur and Brahmanbaria developments of this region were changed into districts in 1984. Cumilla city as common is the biggest city of Cumilla zilla in regard of both populace and region. Nothing is certainly thought about the starting point of the city name. There is a prevalent view that the word 'Comilla' may have been gotten from the word Kamalanka, the old realm of Samatat during the initial segment of the sixth century A.D (www.comillacitycorporation.org, n.d.).

Cumilla confronted numerous significant authentic occasions. Collective pressure spread over Cumilla when a Muslim was shot in the town during the division of Bengal in 1905. On 21 November 1921, Kazi Nazrul Islam created energetic melodies and attempted to stir the town individuals by opposing the Prince of Wales's visit to India. During this time, Ovoy Ashram, as a progressive establishment, assumed a noteworthy job. Writer Rabindranath Tagore and Mahatma Gandhi visited Cumilla around then. In 1931, roughly 4000 laborers in Mohini village in Chauddagram Upazilla rebelled against a land income charge. The English Gurkha fighters terminated unpredictably on the group, slaughtering four individuals. In a significant worker assembling, the police terminated at Hasnabad of Laksham Upazila in 1932. Two individuals were executed and many were injured.

The Cumilla district was framed in the mid-1890s and the city stayed as a municipality for more than 125 years however the populace has been ascending with time. Cumilla Sadar Dakshin Paurashava was nearly a recently shaped Class "A‟ Paurashava. It was announced as a Pourashava on 22/07/2003.

Cumilla City Corporation was pronounced on 10 July 2011 containing the territory of Cumilla Sadar pourasava and Cumilla Sadar Dhakshain Pourashava. First-since forever appointment of City Corporation was hung on fifth January 2012 and 2016 (second time) chose Mayor Md. Monirul Hoque Shakoo with 27 councilors and 9 female councilors of reserved seats.

Map of Cumilla City Corporation Area



2.4. Strengths, weaknesses, and problems of Urban Local Governance

Local Government can help accelerate the dynamic procedure and offer brief support information, direct contact with residents, and more noteworthy capacity to beat correspondence issues. It can likewise better accomplish compelling coordination and modest administration.

Local Governments encourage two-route correspondence among higher and lower levels of government. In any case, national governments can't play out all the diverse elements of an advanced state. It tends to be assumed as a supporting job to figure and execute by and large national plans and policies.

Local Government has a few shortcomings. Contrasted with the central government they are not appealing, little in size, they may not pull in capable and dadicated person thus it might get relaxed, incompetent, and overpriced. Local Governments may particularly be inclined to defilement and misbehavior contrasted with the central government. There are additionally lacks

in innovation, assets, and abilities at this level. In addition, Local Government bodies can practiced become commanded by unrepresentative theocracies, regardless of the proper activity of the political decision framework. In such a circumstance, these will in general serve the restricted and childish interests of the leaders.

The local government maybe has no substitute. So it has qualities, shortcomings, and issues. Be that as it may, with the assistance of public by utilizing local assets through field level arranging local government can be more successful and productive.

2.5. Main Features and Characteristics of Urban Local government

2.5.1 Urban local government hierarchies

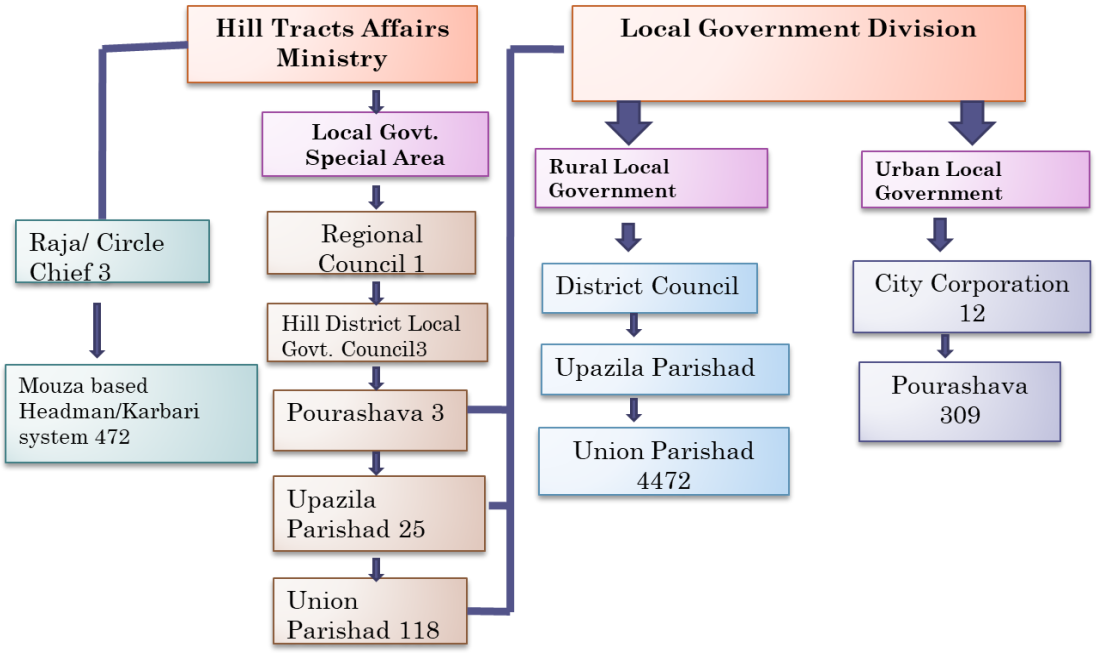
Urban regions have a different arrangement of local governments. The Bangladesh Census Commission perceived 522 urban regions in 1991 (with a base populace of around at least 5000) however just around 269 of the bigger urban zones among these have urban local governments. The decent biggest urban towns have a City Corporation status, while the rest are known as Pourashavas or Municipalities**(Table-3),** which again are ordered by monetary quality (see Table-1).

Table 3: Hierarchy of Urban Local Governments (2018)

City Corporation	Dhaka South, Dhaka North, Chittagong, Khulna, Rajshahi, Barisal, Sylhet, Cumilla, Narayangonj, Rangpur, Gazipur, and Mymensingh (12)
Pourashavas Municipalities)	318

Also, some urban areas are under military Cantonment Boards. The enormous quantities of little urban areas are managed under the Union Parishad arrangement of (rural) local government. Some urban areas have a genuinely enormous populace however have not yet been proclaimed a Municipality and consequently likewise stay under Union Parishad Management. As the City Corporation and Municipalities are genuine urban local governments, their capacity, organization, and monetary structure will be additionally explained on underneath.

Table 4 Local Government System in Bangladesh



Source: Tofael Ahmed, 2002.

2.6 Structure and Functions of Urban Local Governance (City Corporation)

The city corporation is go past a joint workers of electoral public representatives and government officials. Officers each come back from departmental recruitment and therefore the administrative cadre service of the country. The Cumilla City Corporation has 37 members, containing 27 councilors, 9 woman councilor's 27 wards led by the Mayor. Urban local government bodies are endowed with an enormous number of tasks and duties identifying with municipal and other government assistance just for ensuring wellbeing for the people and also for development.

2.6.1 Urban Local Government's (CUCC) functions

The elements of Municipalities and City Corporations are comparative, with one significant distinction: the 1997 Pourashavas Ordinance sorted the elements of Pourashavas as mandatory and discretionary. This order doesn't make a difference to City Corporations. In any case, practically speaking capacities keep on being viewed as obligatory and discretionary for both. The functional and mandatory activities of City Corporation/ Pourashavas are mentioned in ***Appendix-I***.

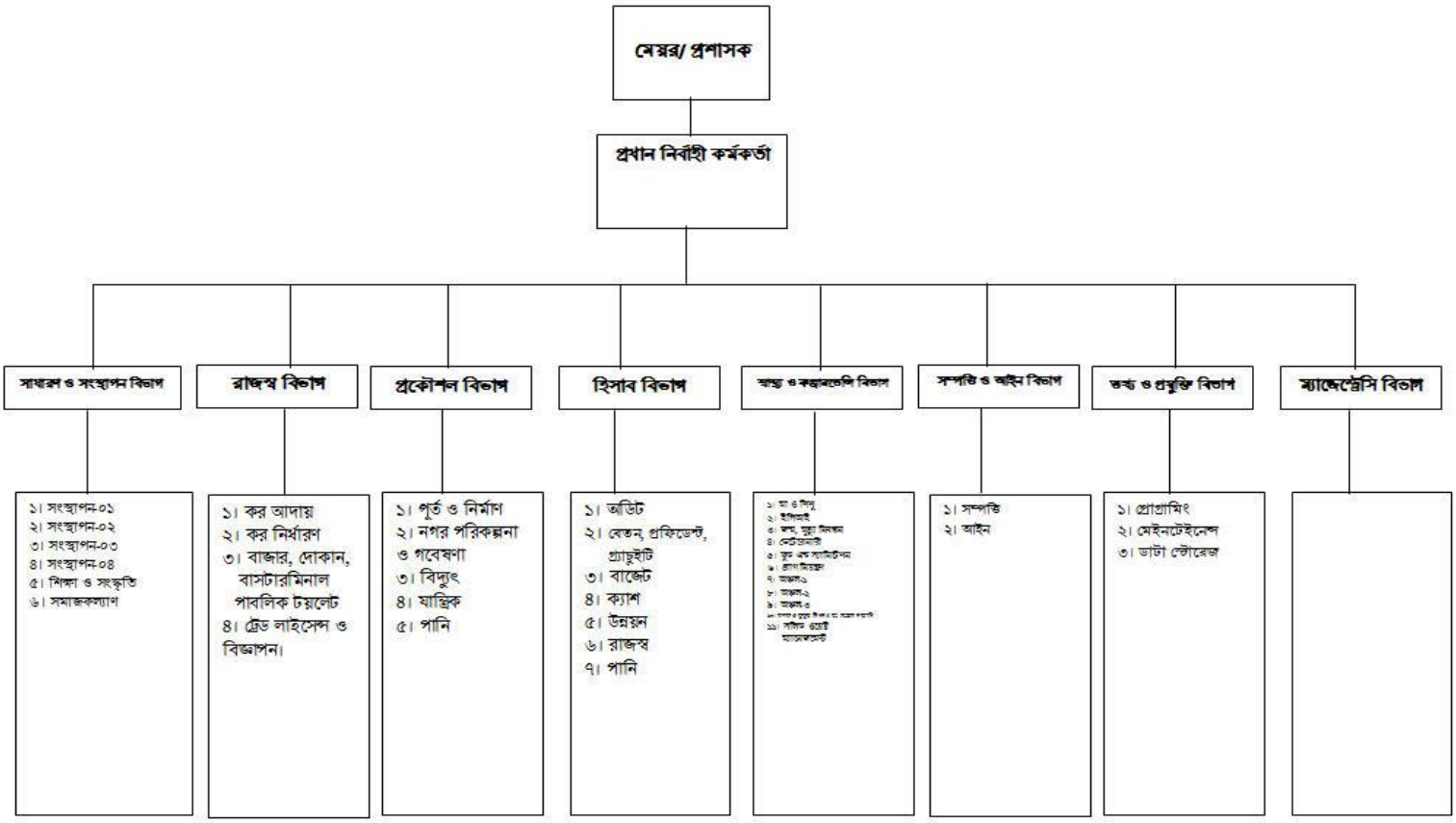
The Pourashavas/City Corporations are engaged to play out an assortment of financial and community capacities, as depicted previously. Practically speaking, be that as it may, they can't play out every one of these capacities attributable to the intense lack of assets brought about by poor people and infrequent assortment of taxations, non-acknowledgment of expenses from the government, semi-government and self-governing organizations for quite a long time together and deficient government awards.

2.6.2 Actual functions are performed by the Urban Local Governance

- Construction and maintenance of roads, bridges, and culverts;
- Removal, collection, and disposal of refuse;
- Provision and maintenance of street lighting;
- Provision of water supply;
- Institution and maintenance of public markets;
- Provision, maintenance, and regulation of graveyards and burning places;
- Registrations of birth, deaths, and marriages;
- Maintenance of slaughterhouses;
- Management over personal markets;
- Provision and maintenance of parks and gardens;
- Naming of roads and listing of houses;
- Provision of nominal stipends to primary education institutions; and
- Slum improvement.

Aside from the proper capacities portrayed over, the Pourashavas/City Corporations play out some extra capacities, for example, the issuance of authentications and settlement of frivolous disagreements about (possession/control of land, houses, and markets). A portion of the more significant declarations are character (which means, especially, that the individual has not been engaged with any movement incendiary to the state or that the individual is not too bad and fair), nationality, birth, deaths, and progression authentications. Character and nationality authentications are required for requests for employment and admission to instructive foundations. Birth, death, and progression authentications are given to lawful beneficiaries demand and are fundamental for change of land proprietorship. Urban-local bodies likewise perform vaccination against a few illnesses.

2.6.3 Organogram of the Cumilla City Corporation



Source: CUCC website

Chapter III

Review of Water Supply System of the Cumilla City Corporation

3. Introduction

Less than three percent of the world's water is contemporary (drinkable), of that 2.5 percent is frozen within the Antarctica, Arctic, and glaciers. Humanity must, therefore, accept 0.5 percent for all of man's ecosystems and fresh needs. In Sustainable Development Goal (SDG) -12, sustainable consumption and production are about doing a lot of and higher with less. Quite one billion individuals still don't have access to freshwater. So, excessive use of water contributes to international water stress (UNSD, 2019). As Urban Local Government, City Corporation is a strong tier to ensure the city as the citizenry. One of the major functions of CUCC is to ensure safe drinking water. The CUCC has no individual water supply body. For ensuring public accountability in water supply service not only the CUCC administration but also the councilors have to play a vital role. The CUCC water supply services are dependent on the water supply and sanitation department. These departments are accountable for ensuring water supply services to the citizens of the CUCC area. In this chapter, the researcher tried to review the existing water supply policies, administration, capacity, and supporting bodies of CUCC. Partially researcher tried to review the other two countries like India and China's city water supply scenario.

3.1 Existing policies and governance of Cumilla City Corporation on Water Supply

On 2001 WARPO made a "National Water Management Plan Development Strategy" were mentioned the access to safe water for the basic needs of the town and rural areas will be ensured 100% within 2005 to 2015 and provision of household piped water in Town will be ensured 50% in 2005, 90% in 2015 and 100% in 2015 (WARPO, 2001). The present structure of water supply is the structure of the previous municipality regarding stuff and water supply infrastructure. In CUCC, the water supply scenario is not so improved, they are just doing their duty as like schedules not for the improvement of the whole city water supply. On thre basis of City Corporation Act 2009, CUCC have 14 standing committees for ensuring governance for their

activities **(Appendix- II).** Within this committees water and electricity committee is one of them. This committees will reforms from the first CUCC meeting. In two and half years period of time every committee wil be reorganized. Each councilor will be the only one committees Chairperson not more than that. Mayor will be the member of every standing committee. But practically very few committee was active in CUCC, especially finance and establishment committee, Waste management committee, City infrastructure development and maintenance committee etc. So, water and electricity committee was reformed but not actively played their role.

3.1.1 CUCC Administration in Water Supply

Regarding governance in Cumilla City Corporation in water supply, CUCC has a water supply section under the engineering department with 1 Superintending Engineer, 2 Executive Engineer (Water, Mechanical and Electric), 06 Assistant Engineer (Electric), 1 Sub Assistant Engineer (Water), 04 Sub Assistant Engineer (Electric & Civil), 1 Bill Checker, 01 Pipeline mechanic with 17 staffs of 13, 14 and 17 grade including 45 contract basis workers. The existing structure of CUCC is the structure of previous municipality stuff. Though, the number of staff and workers were not so small. The organogram of City Corporation is not appropriate with like other city corporations. Also, the monitoring of the water supply department is not satisfactory as per data collection. Another big CC like the Chittagong Water and Sewerage Authority (WASA) is there for domestic water supply and sewerage. Chittagong Development Authority (CDA) was set up for physical planning and development of the urban area. It has so far developed few housing enclaves, roads, and markets. But CUCC has to see all the sectors of water supply, planning, and development. Within this capacity, CUCC has to face very difficulties in ensuring proper services to the citizens as well as city development.

3.1.2 CUCC Water Supply Capacity

According to CUCC Chief Executive Officer's view, this city corporation has almost 5 lakhs population within 27 wards that have needed almost 3.6 crore liter supplied water every day. In 27 wards there are 18 wards people have the water supply service. CUCC has 25 pump stations and of the 18 pump stations were active. Within these pumps, they supplied daily only 1.08 crore liter water whereas they have 2.05 crore liter deficit in the water supply. They will get two times (4 hours in the morning and 3 hours in the afternoon) daily supplied water said by the CUCC

Assistant Engineer. CUCC has 06 water reservoir tanks which capacity has 54 lakh liter in total. Every month CUCC receives tk. 10 lakhs as water supply bill, where tk. 2.4 crore bill was unpaid.

From 1925 to 1984, when Cumilla was municipality the water supply bill was collected as municipal tax, there was no individual billing system. After 1984, the water supply billing system was started. The CEO of CUCC has given the upcoming development activities of Water supply initiatives which they have a GOB funded project "37 District Town Water Supply Projects" FY 2017-18 plan for 06 production tube well construction and under "City Governance Project" of JICA have plan for 09 production tube well construction within CUCC area.

3.2 Urban Local Government & Water Supply body in Cumilla

In urban and rural areas water supply infrastructure constructed by one Government department that is the Department of Public Health Engineering (DPHE). Executive Engineer of Department of Public Health Engineering (DPHE), Cumilla Mr. Md. Khaleduzzaman informed about the water supply body of CUCC. He also mentioned the DPHE work responsibility as well as shared some views of the water supply services of Cumilla City Corporation (CUCC). He served here in the last three years (from 2015). He said water supply facility was established in Cumilla by the "Five district water supply project" in 1990 and "18 District Water Supply Project" in 2000 under DPHE. Now from December 2010-2019 "37 District Towns Water Supply Project (1st Revised)" is going on and the main component of this project are production regeneration, Deep Tube well (DTW) with o6 shallow tube well (STW), Tara Dev STW, overhead tank rehabilitation & water treatment plant. Water source status coverage in June 2017 on Cumilla City Corporation area (Sadar and Sadar Dakshin Upazila) are total 6661 no. of safe public water plant (running) with coverage person per water 219 for the projected 5,93,684 population(2016). A World Bank report estimated that the percentage of the urban population benefiting from access to safe WSS services is only 50% (World Bank, 2008). Here the roles and functions of DPHE mentioned below.

3.2.1 Department of Public Health Engineering (DPHE)

The Department of Public Health Engineering (DPHE) is chargeable for the availability of drink supply management within the country. Established in 1936, DPHE, along side the native urban

institutions, develop infrastructure for water and sanitation in urban areas. In rural areas, DPHE installs water and sanitation facilities, in shut cooperation with the Union Parishads. DPHE conjointly implements a range of environmental improvement projects. In massive cities, separate authorities for installation and sanitation operate. They're the Dhaka Water Supply and Sewerage Authority (WASA), Chittagong WASA, Khulna WASA, and Rajshahi WASA. Functions of DPHE mentioned in **Appendix- III.**

a) The Role of DPHE in Urban Water Supply

Mid-term Goals in the water system (DPHE) are to increasing this coverage of safe drinkable in rural areas by lowering the typical variety of users per tube-well from the present one hundred and five to fifty within the close to future and creating safe drinking water out there to every family in the urban areas.

- Except for Dhaka, Narayanganj, and Chittagong cities the DPHE is responsible for the water and sanitation services of the whole country.
- In urban areas, the DPHE with the participation of urban local bodies is responsible for infrastructure development.
- In rural areas, the WSS facilities are installed by the DPHE in close cooperation with the Union Parishads.
- Besides above, the DPHE collaborates with the private sector, NGOs and CBOs both in urban and rural areas.
- All this water supply facility ensured by DPHE and maintenance are ensured by the Cumilla City Corporation (CUCC).

3.3 National drinking water quality including Cumilla

The special distribution of arsenic agrees there upon found in previous surveys, namely, the National Hydrochemical Survey by the Department of Public Health and Engineering (DPHE) and therefore the British Geologic Survey (BGS) in 1999, and the blanket screening of nearly five million wells between 2000 and 2003, with information maintained by the National Arsenic Mitigation data Centre (NAMIC). Eighteen of the sixty four districts are found to possess quite two hundredth of the drink samples tested to contain more than 0.05 milligrams per litre of arsenic. Nine of them, Cumilla (49%), Gopalganj (48%), Sunamganj (48%), Chandpur (44%), Noakhali (40%), Faridpur (36%), Madaripur (32%), Netrakona (32%) and Brahmanbaria (30%),

are particularly high in arsenic occurrence. Furthermore, in seven of those districts, quite ten of drink samples contained terribly high levels of arsenic (more than 0.2 milligrams per liter). they're Chandpur (27%), Cumilla (25%), Brahmanbaria (17%), Gopalganj (15%), Noakhali (13%), Madaripur (13%), and Faridpur (11%). Targeting villages known by NAMIC as arsenic emergency villages ought to stay a priority as a result of progress created has been low (Bangladesh National Drinking Water Quality Survey of 2009).

3.4 Urban Local Government & Water Supply: Selected Countries experiences

In Europe, urban water frameworks started creating in the seventeenth or eighteenth hundreds of years as a constrained support of well-to-do clients and as open help for fire control. As urban areas developed in the nineteenth and twentieth hundreds of years, the interest for water utilization developed, and general medical problems turned out to be more intense. While the underlying frameworks were typically begun by privately owned businesses, during the nineteenth century, the utilities were decently before long taken over by municipalities in about every single European nation. In addition, municipal governments picked up the option to acquire cash to cost-viably put resources into the advancement of their frameworks. The expansion of water frameworks in European urban communities along these lines as a rule occurred under public operators and gratitude to open fund. A similar procedure happened in the United States. By 1897, 82% of the biggest urban areas were served by city activities. Toward the finish of the twentieth century, the extent was extensively the equivalent and was not expected to change altogether. Today, France and the United Kingdom are the main two OECD nations whose water tasks are for the most part run by privately owned businesses. Be that as it may, even in these two cases, all inclusive inclusion was accomplished distinctly through the overwhelming job of public operators and public finance (Hall, 2010).

The Municipal administrations are water graciously frameworks, the inspiration for the assortment, transmission, treatment, stockpiling, and dissemination of water for homes, business foundations, industry, and water system, even as for such open wants as firefighting and road flushing. of each single civil help, the arrangement of expendable water is probably the foremost fundamental. people rely on water for drinking, cooking, washing, fun disposals, and alternative native needs. Water flexibly frameworks ought to likewise meet conditions for open, business,

and fashionable exercises. all told cases, the water should satisfy each quality and quantity preconditions.

Commercial and industrial demands incorporate water for stores, workplaces, inns, laundries, cafés, and most assembling plants. There is typically a wide variety in all out water request among various networks or communities. This variety relies upon populace, geographic area, atmosphere, and the degree of local business and manufacturing movement and the expense of water.

Water use or request is communicated numerically by normal day by day utilization per capita (per individual). In the United States, the normal is 380 liters (100 gallons) per capita every day roughly for household and civic needs. By and large, the normal complete interest is around 680 liters (180 gallons) per capita every day, when business and water for manufacturing utilizes are incorporated. Water utilization in some developing countries may average as insufficient as 15 liters (4 gallons) per capita every day. The world normal is assessed to be roughly 60 liters (16 gallons) per individual every day (Nathanson, 2018).

In any community, water request differs on an occasional, every day, and hourly premise. On a burning summer day, for instance, it isn't surprising for absolute water utilization to be as much as 200 percent of the normal interest. The pinnacle requests in local locations typically happen in the first part of the day and early night hours (not long when the ordinary workday). Water needs in business and industrial areas, however, are generally uniform during the workday. Least water requests normally happen in the early or predawn morning hours. Here researcher referenced two nations (India and China) urban water gracefully situation.

India

The water flexibly in most Indian urban communities is just accessible for a couple of hours of the day, the pressure is unpredictable, and the water is of sketchy quality. The Asian Development Bank reviewed for correlation purposes with certain pointers is additionally accommodated Lahore, Kathmandu, Bangkok, Beijing, and a normal of 50 urban areas (ADB, 1997). There have no 24 hours of water gracefully in India, normally 4 to 5 hours of water flexibly every day. On the other route normal of 19 hours out of each day water provided in the Asian Pacific. These midpoints spread a lot of dissimilarity inside urban areas. A review done (Zérah & McIntosh, 2000; 2003) of Delhi family units with in-house associations, finds that

"40% had 24 hour gracefully of water, while over 25% had under 4 hours every day of service". The review referenced that "customers without 24-hour flexibly will in general utilize more water than those with ceaseless gracefully in light of the fact that purchasers store water, which they at that point discard to supplant with new supplies every day".

In India, we note considerable disparity in water conveyance. Piped water supplies were 69% of households in enormous urban communities, 45% in minor urban areas and towns, and just 9% of rural households. Hand pumps are as yet the transcendent source of drinking water in rural areas. Generally speaking, 80% of family units are in 1998-99 were evaluated to get their drinking water from improved sources. Improved sources are family unit connections, open standpipes, ensured wells, rain water collection, boreholes, and secured springs. 'Not improved' sources incorporate unprotected wells and springs, merchant gave water, and big hauler truck water. 'Improved' sources may not contain water that is fundamentally liberated from illness causing microbes (McKenzie, Ray, & Mookherjee, 2003).

The observing of water quality in Indian urban areas is disorganized. While municipal boards guarantee to direct standard trial of water gracefully, the consequences of these tests are commonly not made open. The Sukthankar Committee report to the Government of Maharashtra detailed outcomes from 136,000 day by day tests completed on water tests from different municipal corporation in Maharashtra in 1999. 10% of tests were polluted, with 14% of tests from Mumbai being defiled. A 2003 study of 1000 areas in Kolkata found that "87% of water supplies serving private structures and 63% of taps had significant levels of fecal pollution. Indeed, even filtered water isn't totally protected." A recent report (thusly revised in 2006) by the Center for Science and Environment in Delhi found that "most well known brands of filtered water had elevated levels of pesticides"(CSE, 2003). Guidelines for drinking water that are implemented could have colossal positive effects on general wellbeing, yet for this to happen, the systems for water testing and information sharing must be made customary, normalized, and open.

Wastefulness in water supply, the money related expenses to the water utility, significant levels of unaccounted for water are likewise a significant explanation behind discontinuity in the flexibly of water since leaks and illegal connection lower water pressure in the water supply framework. The uncounted for water represents 25-40% of the water created by utilities in the

principle urban territories in India. Wastefulness is staffing levels that show a decent utility will have two staff for each 1000 connections (McIntosh, 2003). The Asian-Pacific (Taipei, Kuala Lumpur, Singapore, and Seoul) territorial normal is 12 staff for each 1000. Hyderabad and Bangalore are around this level, yet staffing levels are twofold this in Chennai and Delhi, higher still at 33 for each 1000 in Mumbai. It ought to be recalled that the quantity of connections isn't an intermediary for the quantity of individuals served. An in-home connection can serve 5 - 15 individuals; a yard connection can serve 50. The staffing levels are high, the normal efficiency of laborers in numerous utilities is low. In view of visits to water utilities across Maharashtra, the Sukthankar Committee revealed that "the vast majority of the working staff was not qualified worked in waterworks establishment.'

State Governments in India are answerable for picking urban levy structures, and the outcome is a wide assortment of evaluating rehearses. Normal duties in India are low comparative with costs. A cross-area concentrate by the Asian Development Bank (ADB, 1997) discovered normal rates in Calcutta and Delhi of 1-3 US pennies/kilolitre (KL), 6 pennies/KL in Mumbai and 25 US pennies/KL in Chennai. In correlation, rates were 9 pennies/KL in Dhaka and Karachi, 20 pennies/KL in Lahore, and 34 pennies/KL in Kuala Lumpur. With the exception of Chennai, Indian urban areas, in this way, will in general have a lot of lower costs than other Asian cities.

China

The Ministry of Water Resources (MWR) of the People's Republic of China is the office inside China's Central People's Government answerable for overseeing water assets in China. In China water was overseen by numerous government agencies at various authoratative levels. Absence of viable coordination and collaboration among them prompted a divided framework that couldn't oversee water assets successfully. China's water assets organization was isolated between the State Environmental Protection Administration (SEPA) and the Ministry of Water Resources (MWR). SEPA was answerable for controlling water contamination, while the MWR was liable for water assets arranging, including assigning water practical zones for various uses and building up comparing water quality guidelines.

The coordination between them was seriously lacking which means water amount and water quality were overseen by various specialists which hindered productive water asset supervision. Integrated water resources management based on river basins has been regularly acknowledged

as a powerful methodology for overseeing water assets. In China, in spite of the fact that have commissions for significant streams and lakes were built up to advance incorporated administration, they had constrained capacity to designate water assets, arrange water asset misuse, and protection, and authorize water asset arranging at the basin level. The power and duties among these government agencies were not satisfactory enough, and this subverted their capacity to control water assets management, which drove legitimately to a water assets management to a great extent dependent on political limits as opposed to on watersheds, which enhances these issues.

In 2017, around 98.3 percent of the urban Chinese populace approached tap water (Shu H., 2018). There are three pointers of amount related water shortage in China: water deficiencies, water assets overexploitation, and the impact of water asset overexploitation on the earth. China's water deficiencies go back to the 1980s since the quick financial turn of events and fast urbanization began and various scales and degrees of water lack issues have been rising and expanding up to this point (WB, 2007). As the populace is as yet expanding and the urbanization procedure is as yet going quickly, the anticipated water deficiency issues will be far more serious if this issue was not paid attention to. Almost every one of the (30 of 32) metropolitan urban communities (more than 1 million populace) experience issues in satisfying their water needs (Li, 2006). China's complete water shortage could arrive at 40-50 billion m3 by 2030.

China's progressed financial changes changed the country into urbanization just as monetary advancement which makes opening for work and furthermore it assists with activating individuals to move from center and west to east and south. This financial cluster of community makes immense difficulties for water management, for example, freshwater utilization from industrial and domestic clients (Guan & Hubacek, 2008).

Tending to China's water asset management difficulties requires an all encompassing, incorporated, logical (counting social and financial science) approach with long-term, composed actions. As of late the Chinese government has declared a command for integrated water management to transform the nation and tackle the enormous difficulties for water in China.

Comments on two countries water supply systems

India and China two big countries water management scenario is quite similar and not well organized. India’s city water supply is managed by the State government and China’s water

managed by the Ministry of Water Resources and other several organizations. Though both countries have lots of problems of appropriate clean water supply for the citizen, low price of water, lack of well-integrated water management plan, and lack of coordination with other similar organizations work plan. In Bangladesh, water supply facilities maintained by sometimes City Corporation with the help of DPHE and other big city corporations specially Dhaka, Chittagong, and Rajshahi City Corporation have water supply authority that is WASA.

Chapter IV

Strategic Analysis from the Water Supply Situation in Bangladesh and Cumilla City Corporation

4. Introduction

In urban governance, it needs to be a strong and visionary leadership of City Corporation Mayor as well as councilors including reserved seats. Water supply is one of the major basic needs of the citizens of the country. The CUCC mayor has good leadership in the renovation of the whole city drainage system. The water supply is a very fewer priority issue of the CUCC authority. When we ask the councilor's about the water supply issue, they were not aware and thinks that it is CUCC authority concern not them. But they never think that they are fragments of the authority.

4.1 Result and Discussion

In this study, the researcher tried to collect data from 09 councilors and 60 citizens of different 09 wards of CUCC. The average population of nine wards was 1, 15,630 lakhs from a total of 05 lakhs according to the CUCC statement.

4.1.1 Socio-Economic status of the respondents

In **Appendix-IV** (Table 4, figure 1, 2.a & 2.b)**,** on the female councilors there 67% male and 33% were respondents, on the other side 68% of citizens were male and 32% of citizens were female respondents. From the Councilors, 90% of respondent's profession was in contractor businessman and only 10% of respondents were done their job as a counselor. On *annexure 3*, 33% Citizen's profession was business and only 02 percent were foreign earners.

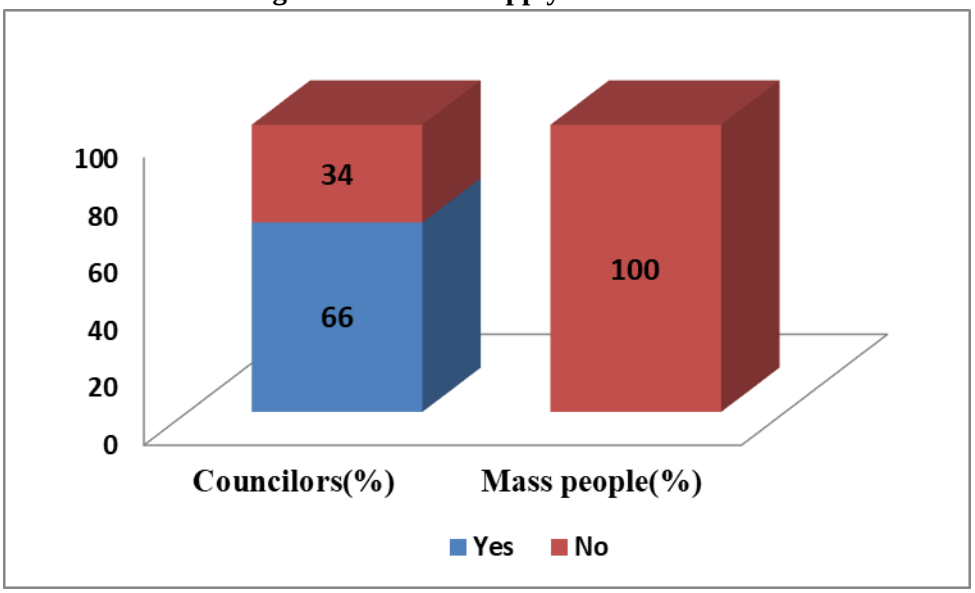
According to the level of education of 34% is Graduate, 22% are HSC and 22% are SSC level of education. From o9 councilors there are 03 councilors are female their education level is 01 female councilor is under SSC but she is 18 years of elected as councilor of the municipality and then CUCC. The other two female councilors' education level is HSC passed. Of 28% of citizens' education level on I-V classes, 20% were IX-SSC, 12% Graduate/Masters, and only 2% illiterate.

4.2 Problems and Challenges of Water Supply with Strategic Analysis

According to National Water Policy 2001 (Section 2), as water is crucial for human survival, socio-economic development of the country and preservation of its natural environment, it's the policy of the govt. of Bangladesh that each one necessary suggests that and measures are going to be taken to manage the water resources of the country in an exceedingly comprehensive, integrated and equitable manner.

From this study, the researcher tried to find out the service delivery in the water supply of Cumilla City Corporation by ensuring public accountability through citizen's view side by side councilor's view with strategic analysis.

Figure 03: Water supply in household



Field Survey (2018)

On table 03, 66% counselor said that their ward households have a water supply line and 34% counselor said they are not aware of that. On the other side, citizens said there is no individual water supply line in the household. But if they apply for getting water supply with line cost than they will get these facilities. From the observation, we found that the supply line was very narrow and old structured. So, the flow of water is very slow and not sufficient. So, CUCC water supply facilities are very weak and it is a very big threat for CUCC for ensuring service delivery.

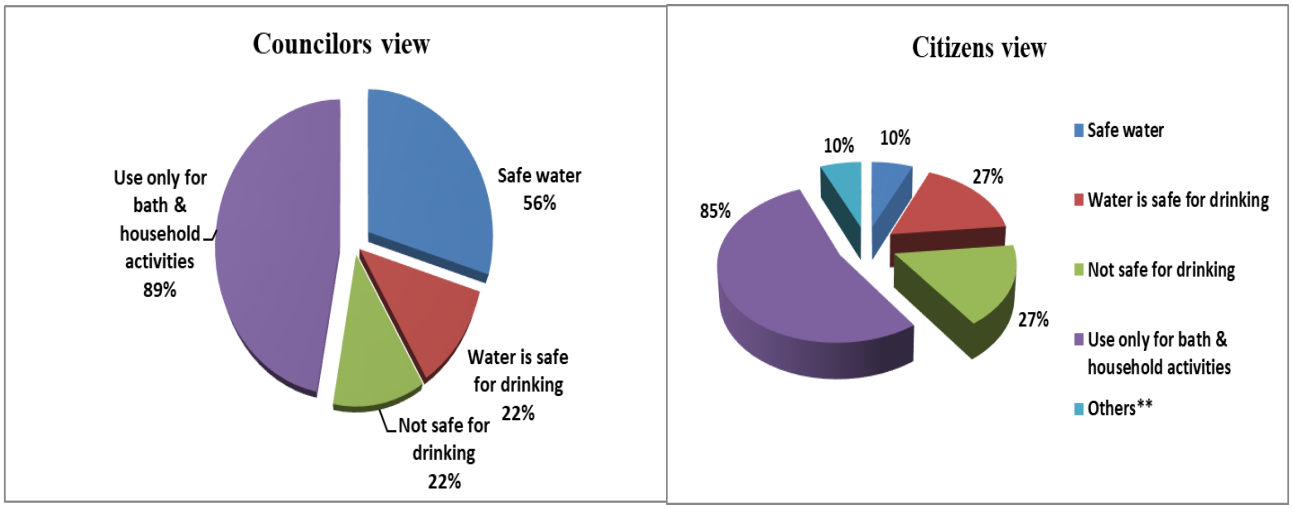
4.2.1 Water supply in Ward area

From the table, we can see that all the selected 09 wards household, slum area, and industry have a supply line of CUCC. For information, BISCIC industrial area is situated in the CUCC area **(Appendix-V).** Regarding the CUCC water supply line or facilities, 33% of citizens household gets this facility and 67% of citizen's households including slum areas do not get this facility directly but they took facilities from the community supply line. But when we go to interview the respondents, most of them express that the water supply and quality of water are very uncomfortable. So the citizens are consciously avoided to pay the water supply bill. For this reason, the CUCC water supply earning is very low than the huge unpaid bill. This was a big question of accountability and service delivery by the councilors as well as CUCC. It is a big weakness as well as threats for the CUCC institutional capacity.

4.2.2 Water Quality and Hygiene

According to National Water Policy 2001 (Section 2), the policies enunciated within the policy are designed to confirm continued progress towards fulfilling the national goals of economic development, impoverishment alleviation, food security, public health and safety, good customary of living for the publics and protection of the natural environment.

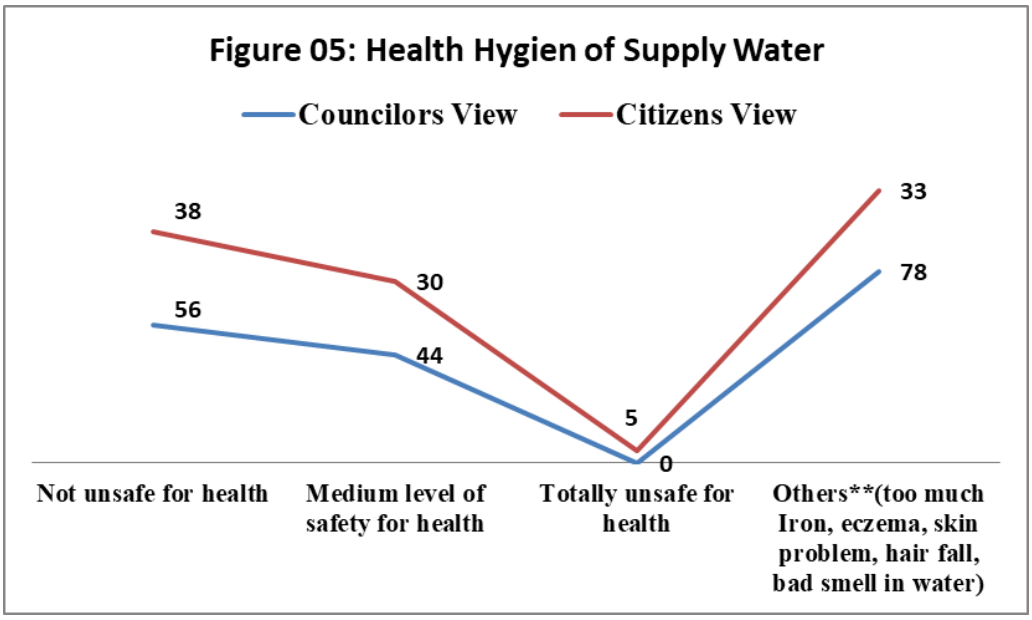
Figure 04: Quality of Supply Water



Field Survey (2018)

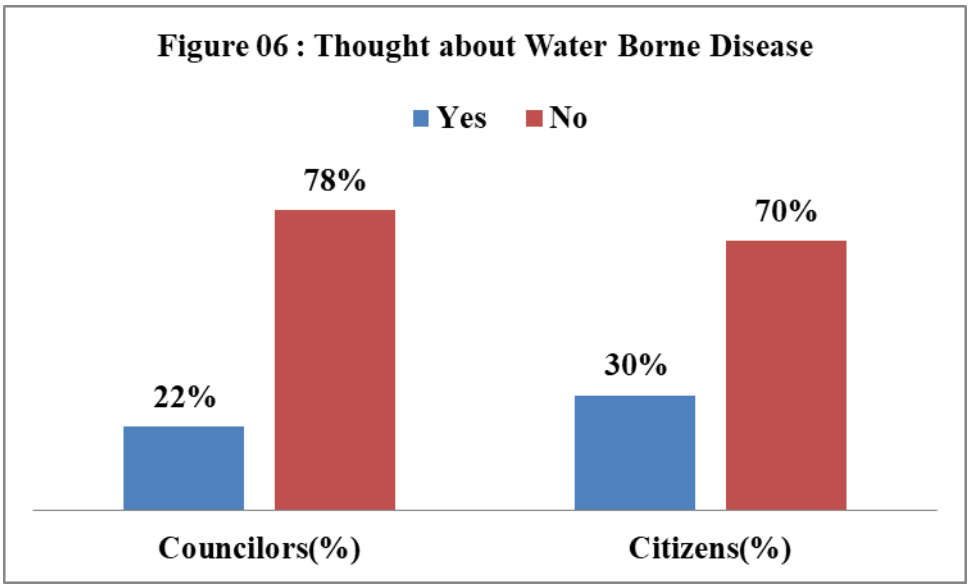
On figure 4, only 89% of councilors said regarding the quality of supplied water of CC was only can use for bath and household activities. 56% councilors opined that the water is safe. 22% equally expressed that the water is safe for drinking on the other side 22% think that CC water not safe for drinking. So, CC supplied water is safe or not safe that is the big question of the strength and weaknesses of CC.

On table 02, 85% of citizens express that the quality of supplied water is only used for bath and household activities. Only 27% of respondents (equally) said that supplied water is safe for drinking and not safe for drinking as like vice versa. When we see the water is safe drinking it is strength and when the water is not safe to drink it is a life risk or threat of water supply of the City Corporation.



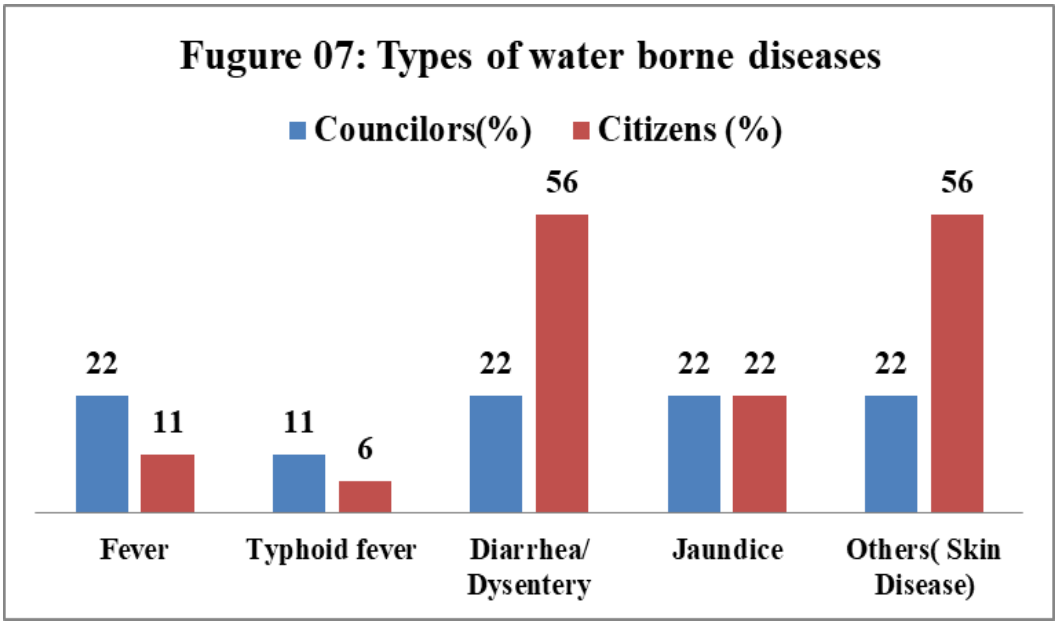
Field Survey (2018)

In figure 05, 78% of councilors expressed they are suffering from different types of waterborne like jaundice, skin disease, etc. 56% said this supplied water is safe for their health. The percentage of weaknesses is more than the percentage of the strength of the water supply of CUCC. 38% citizens express that the water is not unsafe for their health and 33% respondents expressed that they are suffering from eczema, skin problem, hair fall and bed smell in water that is big weaknesses of City Corporation water supply and also a big threat for the public health.



Field Survey (2018)

In figure 06, 78% of councilors expressed that they had no water-borne diseases, 22% opined that they had some water-borne diseases. Here we can say that CC water supply quality is quite good and that is the strength of CC. 70% of citizens opined of no water-borne diseases they face. Only 30% said they suffered from water-borne diseases like fever (11%), Diarrhea/ Dysentery (56%), skin disease (56%), and jaundice (56%), etc.



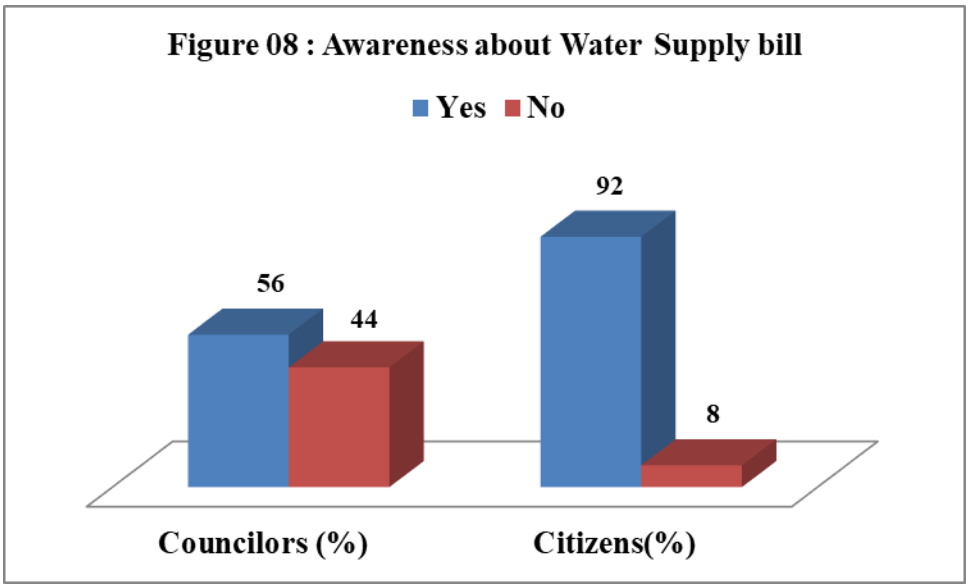
Field Survey (2018)

In figure 07, 22% of councilors and 56% of citizens said they were suffering from fever, diarrhea, and jaundice, etc. different personals. Generally, we know all these diseases happened with water contamination or waterborne. It is a big threat to the water supply quality of CC. On

observation, we see the water has too much iron. In the experts' opinion, in Cumilla zone groundwater has much iron. We know that fever happens on various causes but diarrhea/ dysentery, jaundice, and skin disease will happen on the causes of water. That is a big threat to the City Corporation water supply services.

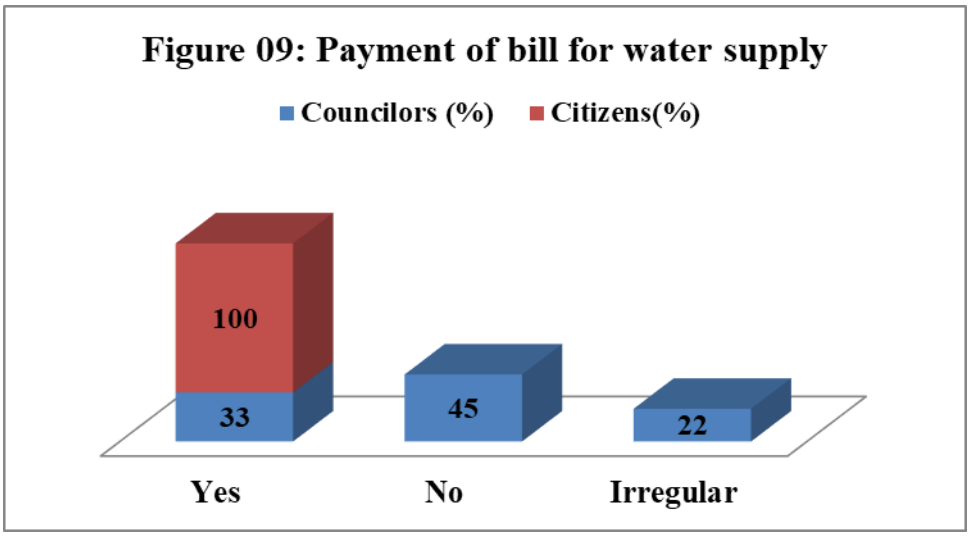
4.2.3 Water Supply Bills and Payment issues

In figure 08, 56% of councilors and almost 92% of citizens agreed that they knew about the regular bill of water supply. 44% of counselors and only 4% of citizens disagree with this issue and said they were not aware of the water supply bill. Water is not only a economic good side by side it has a vlue of social good.



Field Survey (2018)

The policies involving evaluation summarize that pricing structure can match the goals and desires of the water supplier and therefore the population served. For basic consumption, increasing with business and industrial use water rates are lower. In the context of degree of possibility, their actual price of delivery will ensure the actual rates of surface and groundwater (PRSP, 2008).

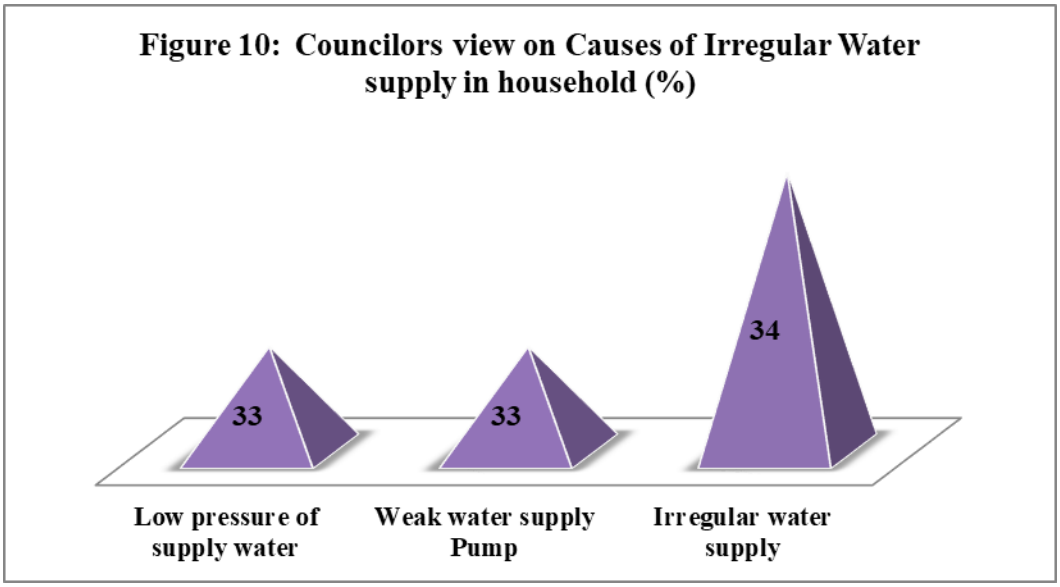


Field Survey (2018)

In figure 09, 33% of the councilor said peoples paid bills regularly. 45% councilor said peoples are not interested to pay the water supply bill regularly and 22% councilors said people paid their bill irregularly. Cause they are not satisfied with the water supply facilities of CUCC and quality of water. That's why CC water supply unpaid bill is huge. On the other side, all the citizens said they pay the bill regularly.

4.2.4 Councilors View on Irregular Water Supply

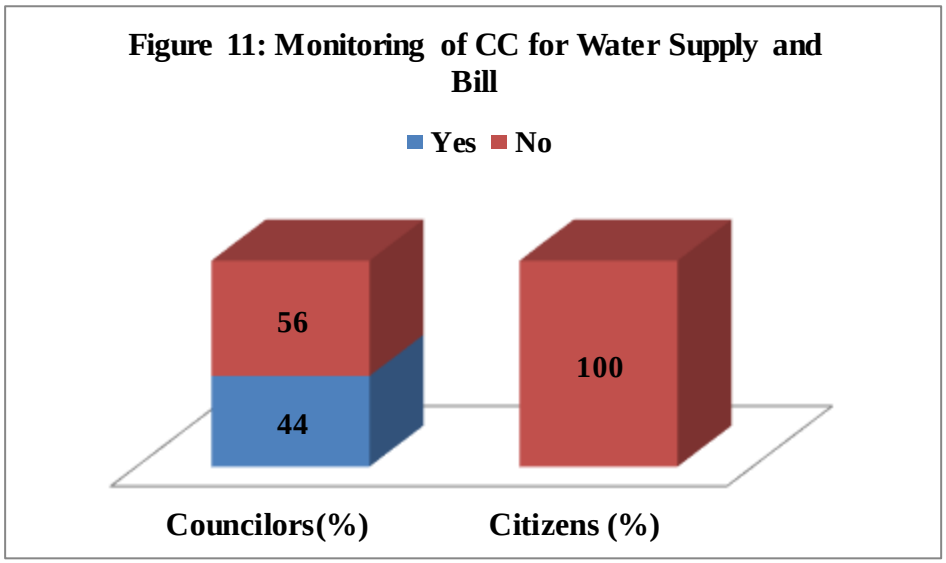
In figure 10, regarding the causes of irregular water supply in households, 34% of councilors said about irregular water supply, 33% said week pump of water supply and low pressure of water.



Field Survey (2018)

So the flow or pressure of water is very low. So, citizens and also councilors use their deep tube well for ensuring regular water supply. It is a great weakness for CUCC.

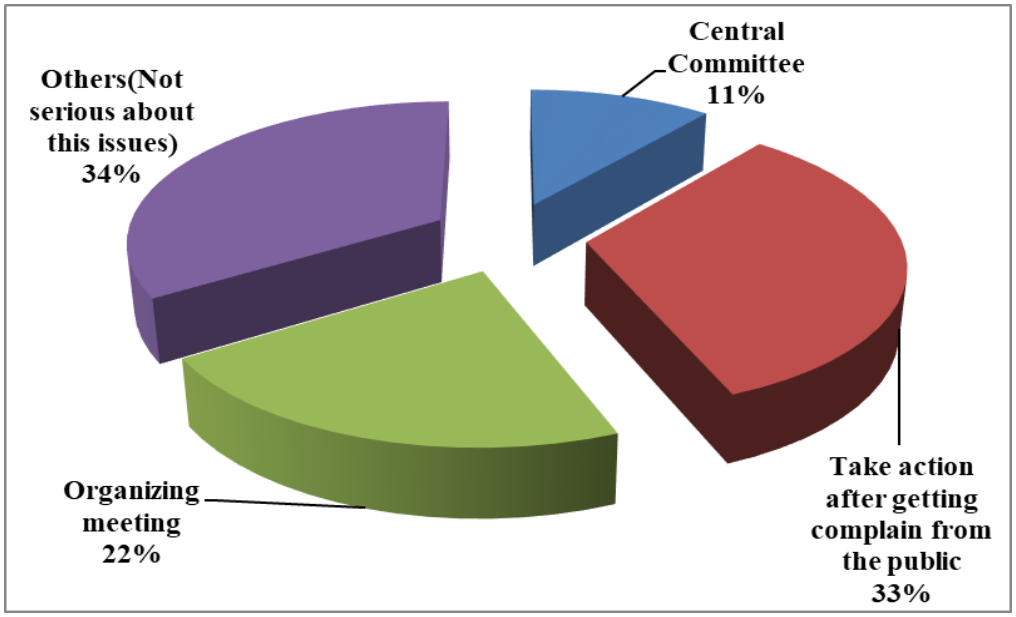
4.2.5 Monitoring of CUCC regarding Water Supply Issues



Field Survey (2018)

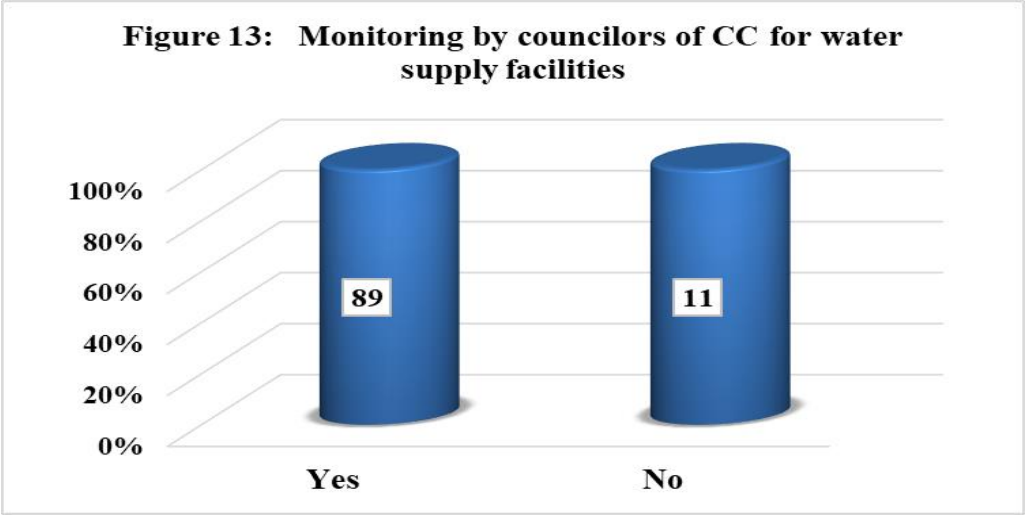
In figure 11, regarding monitoring of CUCC for water supply and bill payment 44% councilor expressed that they are monitored this issue. 56% councilor said they have not monitored this issue if some people come to them and complain than they will see this matter otherwise not. So, this issue undermined by the councilors though this is a basic need of the citizen of CUCC.

Figure 12: Monitoring System of CC for Water Supply & Bill



Field Survey (2018)

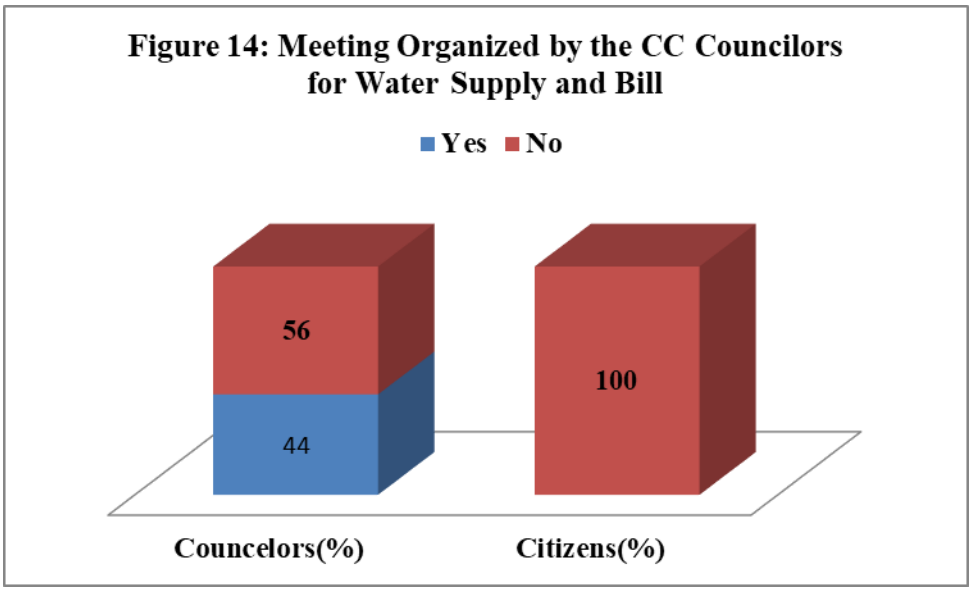
In figure 12, based on councilor's and citizen's view 33% said the councilor will take necessary action after getting complaints from the public. Only 22% of councilors agreed that they have organized some meetings within their wards on water supply and bill payment issues. 34% agreed that councilors as well as CUCC are not serious about ensuring water supply facilities to the citizens and payment of bills. That is a big threat of ensuring public accountability in service delivery.



Field Survey (2018)

On figure 13, we collect this information only from councilors. 89% councilors agree that they monitored the CC water supply facilities and 11% disagree with this. This is a big strategic weakness as well as a threat to the CUCC for ensuring service delivery to the citizens.

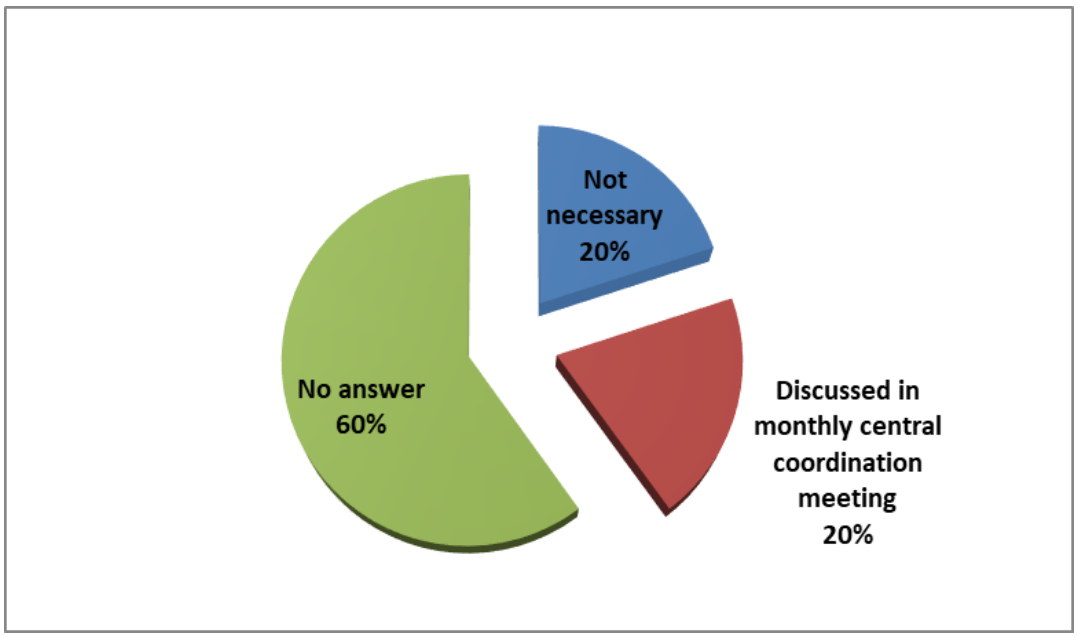
On figure 14, 56% councilor said they never organized any meeting for water supply and bill with the citizen of their wards nor in the CUCC office. Only 44% said they organized some meetings for this issue. So, the ratio of positive notions regarding water supply facilities for the citizen of CC is less and that is a big weakness of CC.



Field Survey (2018)

If they overcome this that will be a great strength and opportunity of CC. From the citizens, 100% said that there is no water supply and bill payment related meeting organized for the citizens by the ward councilors ever. So this area is very much neglected by the City Corporation.

Figure 15: Causes of not organizing a meeting by the Councilors



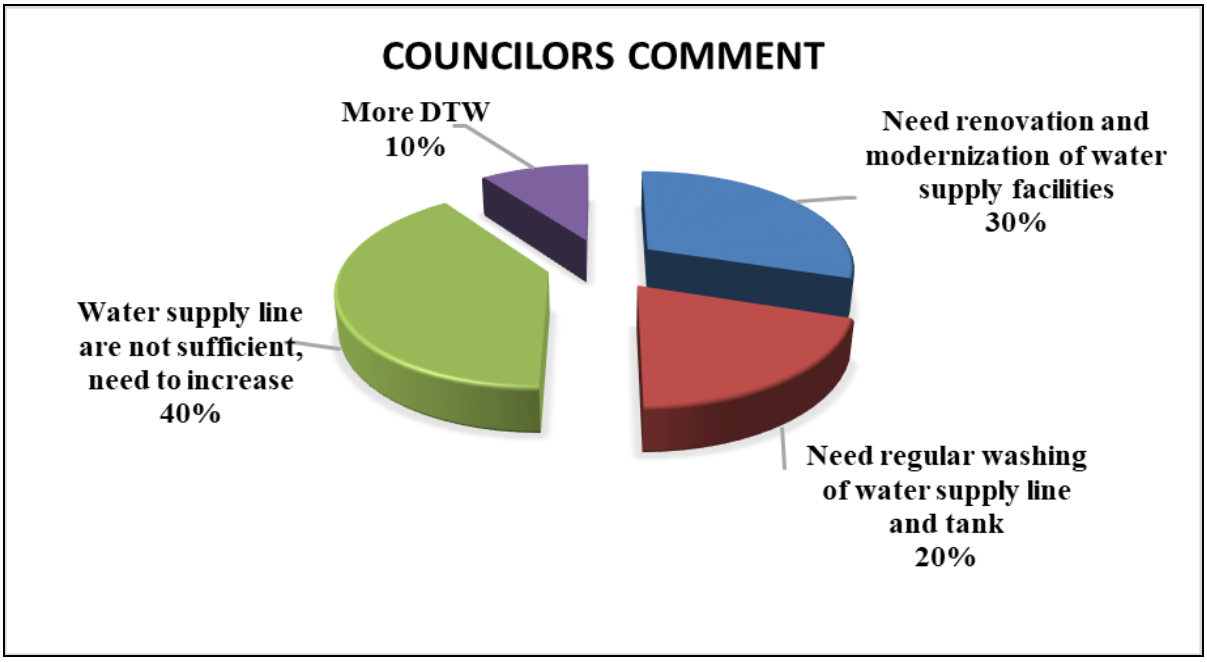
Field Survey (2018)

On figure 15, regarding the causes of not organizing any meeting by the councilors for water supply facility and bill most of them 66% did not answer, 22% think that it is not necessary for CC and only 22% said this matter will be discussed in monthly central coordination meeting. Where this matter should be every councilors concern but that is undermined. Regarding service delivery and accountability with the governance point of view, CUCC ignored this issue. As a new city corporation though it is second time elected body CUCC to overlook this issue and it shows a weak institutional capacity to a major issue like water supply.

4.2.6 Comments of Councilors and Citizens about Water Supply

The CUCC water supply section is very weak as well as the councilors were not very much responsible for ensuring the water supply to the city corporation area. When I urge some comments regarding this issue they have given some comments.

Figure 16: Overall Comments on the Water supply of City Corporation



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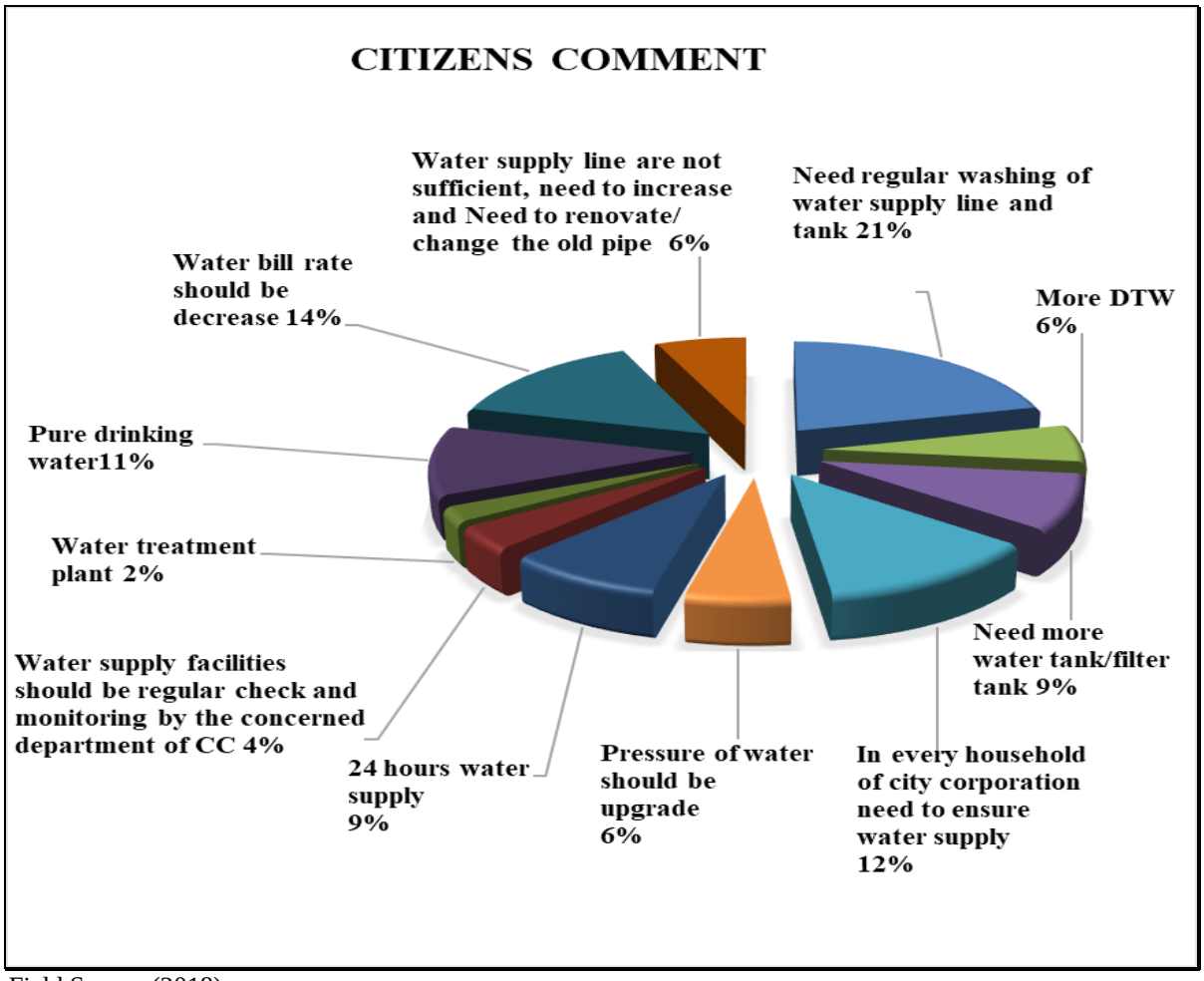

Field Survey (2018)

In figure 16, for ensuring water supply facilities by CUCC, 33% councilor expressed that need renovation and modernization of water supply facilities. 44% councilor expressed about the insufficient water supply line and need to increase the line. From observation the water supply line is very old and narrow, so need to be modernizing for ensuring the water supply facility.

73% of citizens opined that the water tank and supply line need to be wash regularly. 50% expressed the causes of the decrease rate of water supply regarding their quality of service delivery. 43% think that water supply must be ensured in every household of the City Corporation area. 37% desired for safe drinking water by the water treatment plant. 30% said that need more water reservoir tank for ensure their water supply need. Here the Executive Engineer of DPHE, Cumilla expressed his views regarding water supply management that CUCC authority never maintains regular washing the reservoir tank water so the supplied water has too much iron.

Chapter V: Conclusion and Recommendation

5.1 Conclusion

We have to agree that the CUCC activities and development will not be similar to the other big city corporation like Dhaka, Chittagong, and Rajshahi. From 2012 to 2018, CUCC has almost 09 years' experience as City Corporation with the same leadership[1]. CUCC as institutional strengthening and capacity building should be pursued in parallel to efforts of the financial expansion with proper maintenance of infrastructure. Comparatively, as a new City Corporation, it needs to be more effort to develop the water supply sector with citizen-friendly. Public demand will be ensured when the CUCC authority will take necessary actions with public needs. In this chapter, the analytical framework of the study will be revisited, and answers for the research questions will be drawn to reach the research objectives. Based on the findings in the study some recommendations will be made for public accountability with proper service delivery.

To find out the field level reality this study was carried out the following objectives: to identify the prevailing status, nature, and problems as regards ensuring public accountability and service delivery in the water supply to the citizens by the City Corporation as a unit of urban local government; to review the concept, historical evolution and features of urban local government in Bangladesh; existing water supply system and associated public accountability mechanism and strategic analysis of water supply system in terms of service providers accountable to the citizens.

As a new city corporation, the CUCC has very weak institutional capacity regarding water supply facilities. Cumilla is a very old municipality with a very old water supply infrastructure. And now as a city corporation, it also carries its water supply facilities with this old structure and stuffs also. The CUCC has very old 05 reservoirs tanks which are long as six storied building high but now the CUCC area building is 06 to 12 storied high. And also need to mention that within 27 wards only 18 wards citizens have the facilities of water supply. So, the present water supply infrastructure of the CUCC is not appropriate or demand-driven to the citizens.

Ensuring service delivery there must be access side by side ensuring public demand. The CUCC currently has only one Assistant Engineer (water) to supervise and monitor all these water supply

[1] Mr. Monirul Hoq Saqque is two times elected mayor of CUCC.

facilities, it is not sufficient. 89% councilors and 85% of citizens express that the supplied water only for bath and household activities. 22% councilor and 27% of citizens said this water is not safe for drinking and water has too much iron. 78% councilor and 33% citizens said they are suffering from water-borne diseases like skin problems, Jaundice, hair fall, etc. Regarding water supply bill payment 44% councilors not aware of this issue and 45% councilors said peoples are not interested to pay their bills regularly on the other side 100% of citizens said that they pay their bills regularly. The CUCC authority said that there is a huge unpaid bill from 2015 to now. The researcher thinks that citizens were very much dissatisfied with water supply facilities and also water supply quality. Only 22% of councilors agree that they organize meetings on water supply issues, so that is also very unsatisfactory performance and lack quality-oriented public services for ensuring service delivery.

Councilors should be accountable and responsive to the citizens because citizens give a vote to them. Here we see that 34% councilors not serious about the supplied water facilities to the citizens and 33% councilor take necessary action after getting complaints from citizens. 11% Councilor thinks that it is a central committee concern and 22% councilors think that it is not necessary. Ensuring safe water supply is one of the major functions of the CUCC but the councilors are not concern about this issue. All the citizens were disagreeing that they organized any meeting with this issue. So, regarding public management and performance as well as legitimacy and ethics are big weaknesses of the CUCC.

The CUCC's one of the major functions is to ensure safe drinking water that is absent in my findings. Overall results and discussions showed that the importance of the CUCC authority, as well as councilor's willingness, innovativeness, political commitment, and people's participation, is very much essential for ensuring the accountable water supply facility and services.

5.2 Recommendation

Based on the findings and strategic analysis of the study some recommendations will be made for public accountability with proper water service delivery of the CUCC. The recommendations are mentioned below;

1. The capacity of water supply infrastructure needs to be renovated and improved with the modern supply line, water treatment, and more stuff for ensuring proper monitoring and accountable water supply service to the citizens.
2. Water and electricity standing committee need to be activate including other standing committees. Commiittees active participation and monitoring help the public for ensuring their better water supply service with resolve necessary problems in water supply.
3. Need to increase the water supply time from 6 to 10 hours a day though our neighboring country India also supplied water 4 to 5 hours a day.
4. In National Water Policy 1999 mentions water resources management requires the involvement of the public and private sectors, communities, and individuals that benefit from the delivery of water-related services. So, it needs to be implied in CUCC not until the CUCC has an individual water body like WASA.
5. The councilor should be more aware of their duties and more responsive to the citizens for ensuring their demand.
6. Each ward councilors should organize a meeting every three months with the citizens to identify their needs and problems.
7. Give training to the councilors for making capable to think innovatively and responsively about their duties as public representatives.
8. Need to be visionary and community-based urban planning including water supply facilities to build this city more developed and uniformed structure.
9. Need to be ensuring representation of DPHE in the CUCC Central Coordination Committee. Earlier when CUCC under municipality the DPHE had the representation as a member of the central coordination committee but now in CUCC central coordination committee, there is no representation of DPHE. For further improvement of supply water facilities, it is very much essential.
10. For lack capacity of water supply, most of the solvent people of the CUCC area are dependent on their deep tube well for ensuring regular sufficient water supply. It is very damaging for our underground water level as well as the environment also.

Overall, this analysis points to areas of further inquiry to enhance service supplier performance by taking take into accountation (into consideration) variables like investment, grant received from the government, and variables on the institutional structure of the service provider.

However, urban designing can have to be compelled to consider improved facility services and apply a revived specialise in CUCC to deliver this service yet because it will make sure the long run planning for the fastest-growing town like Cumilla. From this perspective, public accountability will be ensure to the citizens regarding ensuring need based service delivery in water supply.

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Appendix-I

Mandatory and Optional Functions of City Corporation

Mandatory functions

- Construction and maintenance of roads, bridges, and culverts;
- Removal, collection and disposal of refuse;
- Provision and maintenance of street lighting;
- Maintenance of public streets, provision of street watering;
- Provision and regulation of water supply;
- Establishment and maintenance of public markets;
- Plantation of trees on roadsides;
- Regulation of unsanitary buildings and prevention of infectious diseases and epidemics;
- Registration of births, deaths, and marriages;
- Provision and maintenance of slaughterhouses;
- Provision and maintenance of drainage;
- Control over the construction and reconstruction of buildings;
- Provision and maintenance of graveyards and burning places;
- Control over traffic and public vehicles.

Optional functions

- Checking adulteration of food products;
- Control over private markets;
- Maintenance of educational institutions and provision of stipends to meritorious students;
- Provision of flood and famine relief;
- Provision and maintenance of parks and gardens;
- Establishment of welfare homes, orphanages, prevention of begging and organization of voluntary social welfare services;
- Establishment of public dispensaries, provision of public urinals and latrines;
- Establishment of veterinary hospitals, registration of cattle sale and improvement of livestock;
- Celebration of national holidays;
- Reception of distinguished visitors;
- Establishment of public libraries and reading rooms;
- Promotion of community development schemes; and
- The naming of roads and numbering of houses.

Appendix- II

Name of the Standing Committees of CUCC

1. Finance & Establishment
2. Waste management
3. Education, Health, Family Planning and health safety system
4. Urban planning and development
5. Audit and accounts
6. Water and electricity
7. Social welfare and community centre
8. Environmental development
9. Birth and death registration
10. Communication
11. Market price observe, monitoring and control
12. Disaster management

Appendix- III

Functions of DPHE

Functions of DPHE are as follows:

•Except city areas of Dhaka, Chittagong and Narayanganj, DPHE is responsible for the Water Supply and Sanitation (human excreta and sludge disposal, drainage and solid waste management) of the whole country, both in rural and urban (City Corporation, Pourashava, Upazila HQs, and growth centers) areas;

•In urban areas DPHE solely or jointly with the pourashava is responsible for water supply and sanitation services. Also, DPHE is responsible for assisting the Pourashavas and City Corporations through infrastructure development and technical assistance;

•Assist Local Government Institutions (City Corporations, Pourashavas, Union Parishads, etc.) in the operation and maintenance of the water supply and sanitation infrastructure and services including technical assistance;

•Ensure supply of an adequate number of trained and skilled manpower in the water supply and sanitation sector through HRD of the sector personnel and institutions for proper and sustainable management of infrastructure and services;

•Strengthen water testing facilities through the establishment of laboratories at different levels to institutionalize Water Quality Monitoring and Surveillance program throughout the country both in rural and urban areas to ensure safe water for the people;

•Carry out hydro-geological investigations in search of safe sources (both surface and ground) of water supply;

•Social mobilization for awareness-raising towards proper management of water supply and sanitation infrastructure and promotion of personal hygiene practices;

•Develop safe water supply technologies in the arsenic-affected and other hydro-geologically difficult areas (saline belt, stone problem areas, hilly regions and areas likely to be affected by other micro-pollutants);

•Research and development activities in search of appropriate and affordable options including the indigenous ones of water supply and sanitation in the country;

•Ensure water supply and sanitation services/facilities during and after the natural disasters/ calamities;

•Establish the National Water Supply and Sanitation Information Center as a center of excellence for sectorial information management;

•Capacity building of the community, LGIs, private entrepreneurs and NGOs with technical know-how, information, training, etc. in terms of water supply and sanitation;

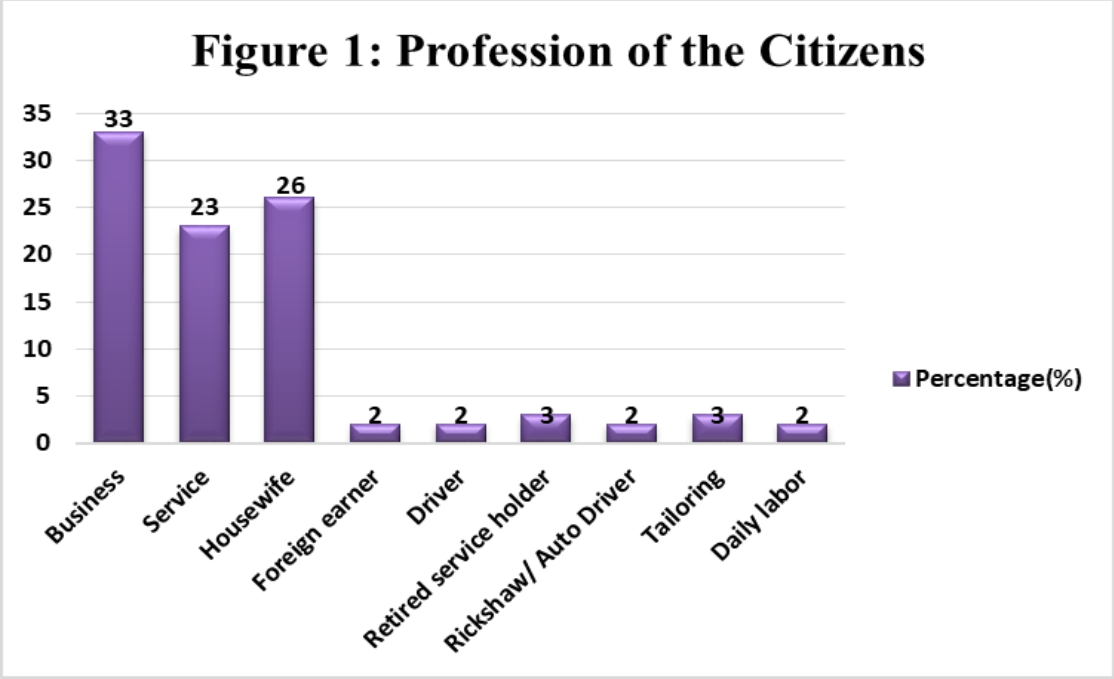
•Monitoring and coordination of activities of the stakeholders including NGOs and private operators working in the water supply and sanitation sector; and

•Overall management of the Water Supply and Sanitation Sector Development Program. (Source: http://www.dphe.gov.bd)

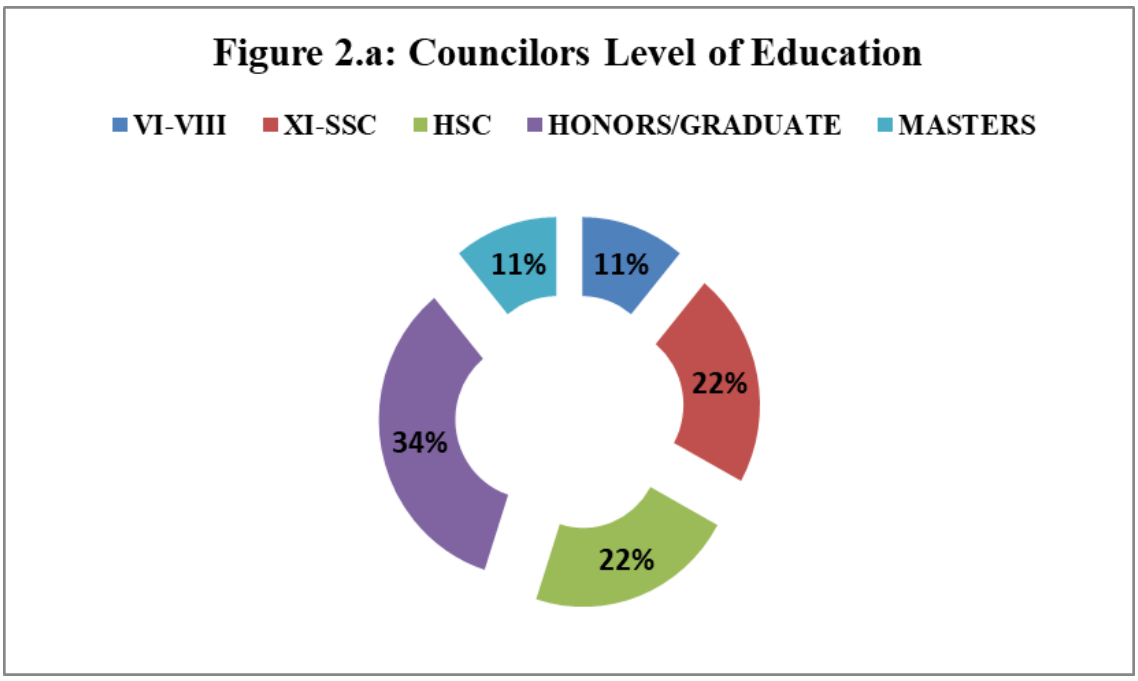
Table 4: Sex ratio of the respondents

Sex	Councilors (%)	Citizens (%)
Male	06(67%)	41 (68%)
Female	03 (33%)	19 (32%)
Total	09 (100%)	60 (100%)

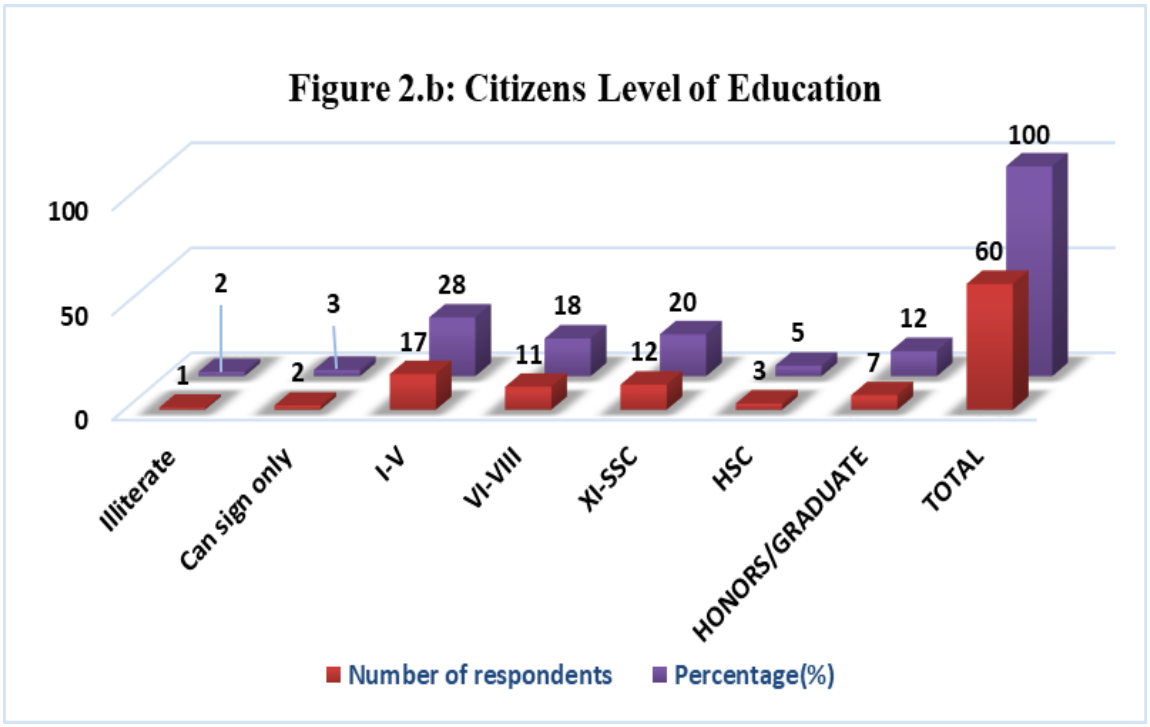
Field Survey (2018)



Field Survey (2018)



(Field Survey 2018)



Field Survey 2018)

Appendix-V

Scenario of Ward level water supply

Ward no	4	5	6	7	10	11	13	15	18	Total
Name of the area	Kaptan Bazar (Bishnupur Choumuhoni)	Old Chowdhury para, Gangchar	Chakbazar Shapla Market	Gobindapur	Bagichagaon & Ranirbazar	Dharmasagar par & Womens College	Nawad Bari Choumuhoni	Chakbazar Bus stand	Godhirp ukur par	**9 wards**
No. of the water supply line	Slum- 07 House- 210 Industrial area- 08	Slum- 09 House- 278 Industrial area- 03	Slum- 12 House- 198 Industrial area- 02	Slum- 05 House- 269 Industrial area- 02	Slum- 07 House- 305 Industrial area- 06	Slum-12 House- 310 Industrial area- 07	Slum- 05 House- 190 Industrial area- 0	Slum- 07 House- 210 Industrial area- 08	Slum- 15 House- 200 Industria l area-0	**S-79 H-2170 I-36**
Populatio n of Ward	8826	10586	11719	13368	18075	9397	18050	10473	15136	**1,15,630**
Amount of monthly/ yearly bill of the citizens	4750	55000	41900	60500	63000	77500	57300	63000	28000	**4,50,95 0 lakh**
Amount of unpaid bill (yearly)of the citizens	1270000 Lakh	1428000 Lakh	1025000 Lakh	1580000 Lakh	900000 Lakh	1850000 Lakh	1200000 Lakh	1300000 Lakh	140000 Lakh	**2.4 Crore**
Depth of the water deep tubewell level (WARD basis)	50 Feet	40 Feet	45 Feet	50 Feet	45 Feet	40 Feet	40 Feet	45 Feet	40 Feet	

* According to Population Survey 2011, Source: Page no. 143 & 144 of Cumilla City Corporation 201967

Appendix- VI

Description About Monthly Water Connection Bill of CUCC

Sl. No.	Size of Pipe	Area	The present rate of monthly bill (2018)
1.	1/2"	Housing Connection	200/-
2.	1/2"	Institutional Area	300/-
3.	1/2"	Commercial Connection	400/-
4.	1/2"	Connection in Industry	500/-
5.	3/4"	Housing Connection	300/-
6.	3/4"	Institutional Connection	600/-
7.	3/4"	Commercial Connection	800/-
8.	3/4"	Connection in Industry	900/-
9.	01”	Housing Connection	600/-
10.	01”	Institutional Connection	2,000/-
11.	01”	Commercial Connection	2,500/-
12.	01”	Connection in Industry	3,000/-
13.	1.1/2”	Housing Connection	5,000/-
14.	1.1/2”	Institutional Connection	6,000/-
15.	1.1/2”	Commercial Connection	6,500/-
16.	1.1/2”	Connection in Industry	7,000/-
17.	2”	Housing Connection	9,500/-
18.	2”	Institutional Connection	10,000/-
19.	2”	Commercial Connection	20,000/-
20.	2”	Connection of Industry	25,000/-
21.	4”	Institutional Connection	1,00,000/-

Source: CUCC authority

Appendix -VII

Public Accountability of Urban Local Government's Water Service Delivery: A Case of the Cumilla City Corporation (Questionnaire for the Coucilors)

1. Name of the Respondents: No. of Ward :
2. Gender: Male/ Female Profession:
3. Educational Qualification:

I – V	
VI-VIII	
IX – SSC	
HSC	
Honors	
Masters	

4. No. of Household Members:
5. How are many family Households getting the water supply facilities?

   Answer:----------
6. What is the quality of the supplied water?
   a. Pure water
   b. Safe for drinking
   c. Not Safe for Drinking
   d. Water only use for bathing and household activities
   e. Others
7. What about the health risk of the beneficiaries' families?
   a. not any risk
   b. Medium risk
   c. Serious risk
   d. Others
8. Are there any waterborne diseases happen in the beneficiary households?

   Answer: Yes / No
9. If Yes, what are these?
   a. Fever
   b. Typhoid
   c. Diarrhea/ Dysentery
   d. Jaundice
   e. Others
10. Do you receive any water bill? Answer: Yes/ No

11. Do you pay your bill regularly? Answer: Yes/ No

12. Did any monitoring mechanism of the CUCC regarding this issue?
    Answer: Yes / No

13. If Yes, what are those? Answer:----------

14. Did the citizens get the water supply regularly within the selected water supply area of the CUCC, the concerned ward councilors even monitored this?
    Answer: Yes/ No

15. Did the water supply facilities ensure in your ward area? Answer: Yes/ No

16. If Yes, Please mention the HH No.? Answer:---------- Household/Slum area

17. If no, Please mention the no. of HH? Answer:---------- Household/Slum area &

18. Did you organize any meeting on water supply issues with different level professionals?
    Answer: Yes/ No

19. If no, what are the causes of not organizing?

20. Did the water supply services ensure in your area households?
    Answer: Yes/ No

21. If No, why does not ensure this water supply service? Answer:

22. Do you have any comments regarding the water supply services of the City Corporation?

Appendix-VIII

Public Accountability of Urban Local Government's Water Service Delivery: A Case of the Cumilla City Corporation (Questionnaire for the Citizens)

1. Name of the Respondents: No. of Ward :
2. Gender: Male/ Female Profession:
3. Educational Qualification:

I – V	
VI-VIII	
IX – SSC	
HSC	
Honors	
Masters	

4. No. of Household Members:
5. Please mention the distance of the water supply line from your household?

   Answer:---------- ----
6. What is the quality of the supplied water?

   a. Pure water
   b. Safe for drinking
   c. Not Safe for Drinking
   d. Water only use for bathing and household activities
   e. Others

7. What about the health risk of the beneficiaries' families?
   a. not any risk
   b. Medium risk
   c. Serious risk
   d. Others

8. Are there any waterborne diseases happen in the beneficiary households?
   Answer: Yes / No
9. If Yes, what are these?
   a. Fever
   b. Typhoid
   c. Diarrhea/ Dysentery
   d. Jaundice

e. Others

10. Do you receive any water bill? Answer: Yes/ No
11. Do you pay your bill Regularly? Answer: Yes/ No
12. Did the citizens get the water supply regularly within the selected water supply area of the CUCC, the councilors even monitored this?
    Answer: Yes/ No
13. If Yes, What type of monitoring? Answer:----------
14. Did the Councilors of concerned wards organized any meeting on water supply issues with different level professionals?
15. Did the water supply services ensure in your area households?
    Answer: Yes/ No
16. Do you have any comments regarding the water supply issues of the City Corporation?