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# *Access to Water in Urban Poor Settlements: Addressing Crisis through Good Governance*

*Jannatul Fardosh*

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**Access to Water in Urban Poor Settlements: Addressing Crisis  
through Good Governance**

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## **List of Acronyms**

ADB	Asian Development Bank
BBS	Bangladesh Bureau of Statistics
CSOs	Civil Society Organisations
CUS	Centre for Urban Studies
DCC	Dhaka City Corporation
DSK	Dustha Shastha Kendro
DWASA	Dhaka Water Supply and Sewerage Authority
FGDs	Focused Group Discussions
IGS	Institute of Governance Studies
MDGs	Millennium Development Goals
NGOs	Non-governmental Organisations
OECD	Organization for Economic Co-operation and Development
RTI	Right to Information
UN	United Nations
UNDP	United Nations Development Programme
WHO	World Health Organisation

## 1. Introduction

Access to safe water is a basic right for human being (Concern Worldwide 2008). Though the Millennium Development Goals (MDGs) include the target to halve the fraction of the world's population with access to water by 2015; dwellers everywhere bear immense costs due to water crisis, not only economically and socially but also politically. Globally, around 1.1 billion people do not have access to improved water supply sources<sup>2</sup> where most of them are the poor urban dwellers of the developing countries (World Health Organisation [WHO] 2012). According to the World Bank website,<sup>3</sup> in South Asia around 20 percent of the population has no access to water services which can be considered as one in every five people and lacks the practice of equal distribution of water and (in the urban areas) water never distributed for more than a few hours a day (The World Bank 2012). Some of the reasons have already identified to this limitation of water access including lack of priority given to the water sector, lack of financial resources and sustainability of water supply (WHO 2012). This is no exception in case of Dhaka.

Dhaka is one of the fastest growing megacities with a growth rate of 3.48 percent. During the last decade Dhaka's population became almost doubled from 8.5 million in 2001 to about 14.74 million in 2011 (Bangladesh Bureau of Statistics [BBS] 2011). Since its independence in 1971 Dhaka is experiencing a huge urban population growth. Titumir and Hossain (2004) quoted in Islam (2007) gave an estimate that about 56% of the population of Dhaka city lives in unregistered land which is about the area of 420 hectares in the different parts of the city (Centre for Urban Studies [CUS] 1996 quoted in Islam 2007) (see Map I). In the year 1996 slum population was 1.5 million however it increased to 5.3 million in 2011 (Ahmed ca2008 and economicsbd 2011). In Dhaka, Dhaka Water Supply and Sewerage Authority (DWASA) is the solo formal authority to provide water to this huge number of population of Dhaka city start working since 1963 and all its activities has been performed by the Dhaka WASA Act of 1996 (Khan ca2012). The service area of Dhaka WASA (see Map II) covers about 360 square km with a population of 12.5 million (ibid.). It operates in 11 geographic zones includes 1 (Narayanganj) outside Dhaka for water service delivery. Though one third of Dhaka's population live in informal settlements DWASA's system provides no plan for allocating pipe water connections to

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<sup>2</sup> Available at [http://www.who.int/water\\_sanitation\\_health/hygiene/en/](http://www.who.int/water_sanitation_health/hygiene/en/) accessed in 1 November, 2012

<sup>3</sup> Available at <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:21652275~pagePK:146736~piPK:146830~theSitePK:223547,00.html> accessed in 17 January, 2013

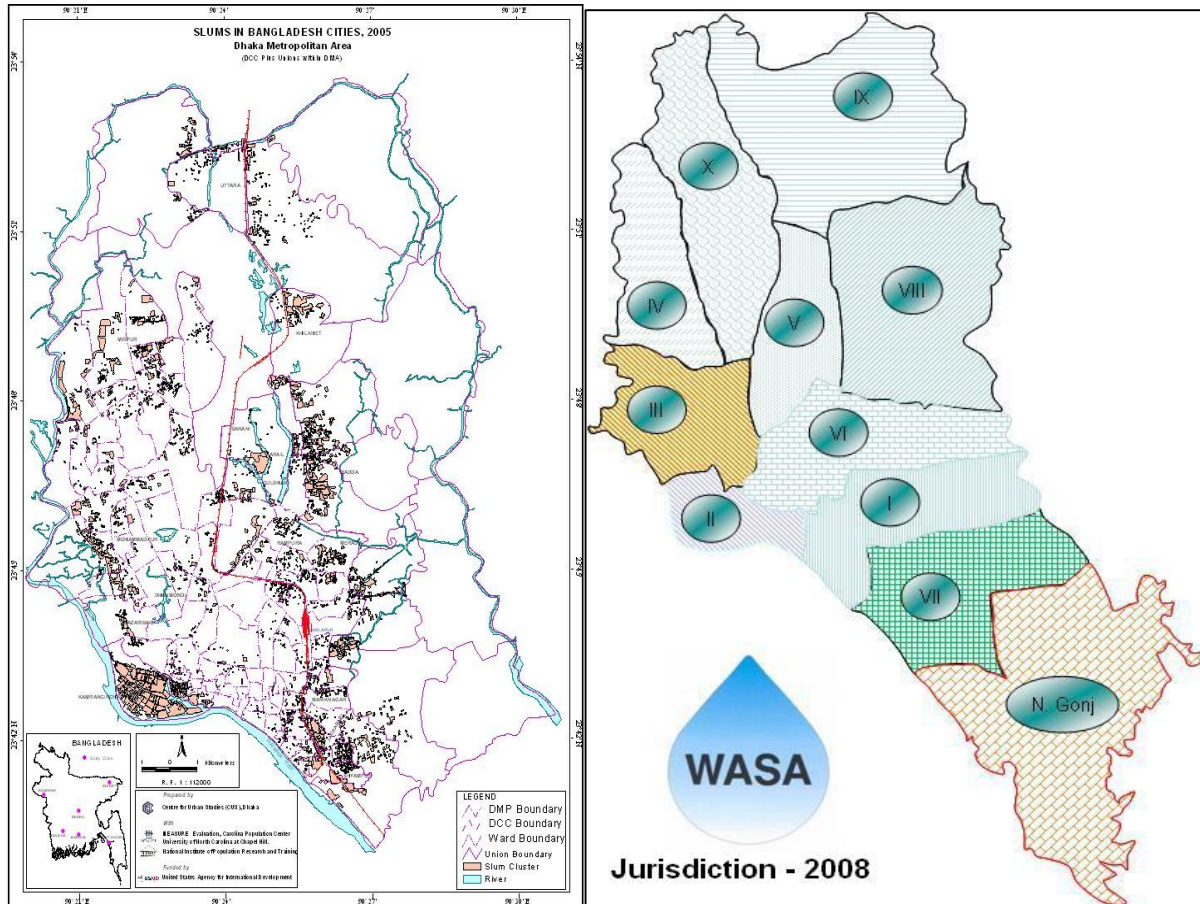
the slum households due to existing national policies which prohibit government connections in illegal lands (Khan ca2012). DWASA's policy is to supply water connections only to those households which have Dhaka City Corporation (DCC) holding numbers (Ahmed ca 2008). According to a World Bank study (2008), 37 per cent of the urban population lives in slum and have no formal piped distribution water networks or access and depend on municipal water connected taps and tube wells which managed informally. In Dhaka all the slums manage access to water through other informal channels and networks leading to informal governance in water and this informal governance runs around corruption and rent-seeking.

This paper aims to identify the various types of informal water governance arrangements existing in urban slum and squatter areas of Dhaka city. It tries to look into the evolvement and constant (re-) negotiation processes that take place in the water sector with its distinct stakeholders. Accordingly, this paper is divided into three sub sections. In the first section a conceptual framework has developed. Then Korail slum has taken as a case study to understand the present informal governance practices in the poorer settlements. Finally, the paper concludes with possible practical actions for improving water governance in Dhaka.

Both primary and secondary data have been used for analysing water governance. Sources of secondary data include books, journal articles, and online portals. As primary data the survey of the Institute of Governance Studies (IGS) conducted in 2011 has been used. In addition, six Focused Group Discussions (FGDs) and in-depth qualitative interviews were conducted with a range of stakeholders from the slums of Dhaka which were actually done as part of producing a report on urban governance entitled "State of Cities: Urban Governance in Dhaka City".

## Map I and II

### Map I: Slums in Dhaka Metropolitan Area and Map II: The service area of Dhaka WASA



Source: Centre for Urban Studies (CUS) 2005 (Map I) and Khan ca2012 (Map II).

### 1.1 Defining water governance

Governance is a broad concept and has no common definition. Different organisations like the Organization for Economic Co-operation and Development (OECD), World Bank, multiple United Nations (UN) agencies, and the European Union (EU) have defined some common features of governance including accountability, transparency and participatory or decentralised decision making. Moreover, good governance needs to ensure proper and equal allocation of resources or public goods to all citizens irrespective of timeliness and efficiency in the whole process with an acceptable quality. Though the concept of governance has bought into account since 1980, discussion on water governance is a very newcomer (Biswas and Tortajada 2010).



The concept of governance has widely been applied in the water sector through different global water agreements and events. Furthermore, the Mar del Plata conference of 1977 firstly opened the platform to consider water in international political agenda. The other international events which highlighted water as a public good are the Dublin conference on water in 1992, Agenda 21 in 1992, the six World Water Forums since 1997, and the MDGs of 2000 (Pahl-Wostl *et al.* 2008). All these events included governments, the private sectors, civil society, citizens and sometimes individual citizens not to meet the targets (Franks and Cleaver 2007). However the sixth World Water Forum held at Marseille, France in March, 2012 has tried to define water as human right which brings a positive effect on moving towards effective water governance (International Forum Committee 2012).

The Global Water Partnership (2003) has defined water governance as “the range of political, social, economic and administrative systems that are in place to develop and manage water resources, and delivery of water services, at different levels of society” (Rogers and Hall 2003 quoted in Biswas and Tortajada 2010). Mainly water governance is a set of administrative and socio-political arrangements that should be considered depending on the desires and expectations of a particular area for the sake of equal distribution of water (Gupta 2004).

Allan and Rieu-Clarke (2010) argued that ‘key principles’ of good water governance are ‘accountability, participation and transparency’ which would ensure achieving principles of IWRM, particularly equity and sustainability. In essence, water governance means a combination of political, social, economic and administrative systems established to develop, manage and distribute water resources effectively and efficiently to the community in question with an accountable and transparent way (United Nations Development Programme [UNDP], 2004; Tortajada, 2010). Improving water governance does not necessarily mean building new institutions or making drastic changes. Rather, it means working towards building institutional linkages, improving policy coherence, and increasing transparency in decision making (Rogers and Hall 2003). Lautze, de Silva, Giordano, and Sanford (2011) attribute ‘Good Water Governance Qualities’ with the characteristics of ‘openness and transparency; broad participation; rule of law (predictability); and ethics, including integrity (control of corruption)’.

## **2. Water access in urban slums and governance**

### **2.1 Framing access to public service: Water**

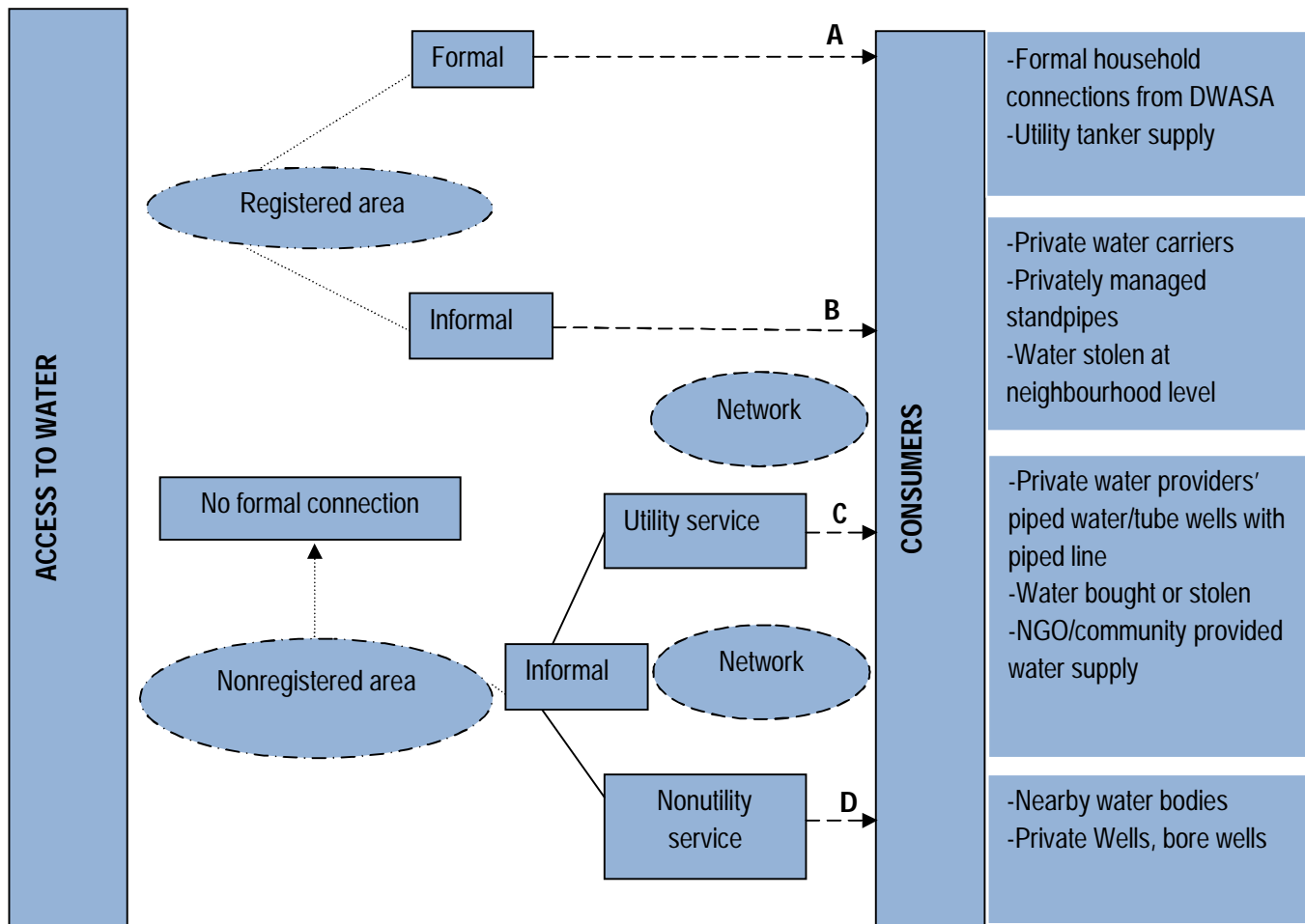
Accessing public service can be formal or informal. However; public service delivery has recognised by definition as formal only where government (local, municipal or large scale) has the sole responsibility for providing public goods and services to the respective citizens through different institutional mechanisms (Humphreys 1998). Formal water and sewerage networks were often designed to cater the interests of elites and have outgrown the demand now coming from poor areas that do not get access through the formal channels as they do have a proof of land registration and resides in informal settlements named slums (Sohail and Cavill 2008). Thus urban poor use other informal networks for accessing water and could have the risk of manipulation (see Figure-1). Considering the limitation of resource and capacity of the local government the pattern of service delivery has changed and it incorporates different private sectors other than government for service delivery (Shah 2005).

Private sector municipal service provision is generally rendered as contracting out or going into public-private partnerships. It also considers the dealership, grants for a particular service, volunteers and other non-governmental and non profitable organisations to participate (ibid.). However; Shah (2005) again mentioned that privatisation is not that governments should give up their ownership of municipal services but they have the right to specify the standards and set conditions and should generally retain overall duty through the use of contractual arrangements. Mainly they will conduct a role play for providing services according to the specifications and conditions set up by government (ibid.). And as water one of the major municipal services to deliver can be supplied through these mediums both governmental and privatised.

According to figure-1 access to water is different for registered and unregistered areas in Dhaka. In the registered area there are both formal and informal arrangements and the major proportion is covered by the Dhaka WASA. Sometime they managed water privately by water carriers, water gallons or bottles, stand pipes in times of scarcity. For the unregistered area (where majority are poor) there is no formal water supply from the government or Dhaka WASA. So they have to manage the service through other informal channels including pipe water arranged by the local intermediaries, tube wells, bore wells, local vendors or sometimes Non-

governmental Organisations (NGOs) or Civil Society Organisations (CSOs) provided temporary water lines.

**Figure 1**  
**Citizens' access to water in Dhaka**



Adapted from Plummer and Cross 2007

## 2.2 Access to water for the urban poor

Access to water is a constant critical issue all around the world especially in the urban slums, where poor people face huge challenges to safeguard adequate supplies of water as municipal "services" exclude poorer settlements of the society. Cleaver *et al.* (2005) suggested four channels of resources for accessing water (named institutional, social structures, rights or entitlements and financial) for the poorer citizens of a country. They argued that institutional resource belong to the upper class citizens who enjoy central government (institutional) concern

for accessing water whereas it is difficult for the poor to access through this institutional process as most of them do not have citizen cards. Therefore, poor have to rely on other informal sources for accessing water. About social structure they believe as it is based on power relationship and the poor lacks good hold with political or economic power so they have no access to this source. Their third resource (right based approach) can challenge the power structures and the institutional arrangements to reshape and reorganise the existing structure for ensuring responsiveness and accountability to the poorer section of the society. Finally the financial resource as water is not a free good and directly affects the access of the poor as everyone needs to pay for consuming. Franks and Cleaver (2007) argued that access to water by the poor is hindered by their physical penury and lacks voice. There is a positive correlation between higher levels of access to water and water sectoral reforms. They showed some statistics in few African countries which postulate a positive relation in between water reform and access to water supply (Plummer and Cross 2007).

### **2.3 *Water access and governance***

Decentralisation has become increasingly common in developing countries for over the past 15 years (Shah 2005). However in the face of water crisis, improving water governance has become a crucial need for the developing world. Water governance is a very useful tool to setting the priority and strengthening responsiveness of institutions and its existing processes for accessing water to the users. Accordingly improved governance mechanism will reduce the cost and ensure significant contribution in water access correctly and efficiently (Chiplunkar *et al.* 2012).

Shah (2005) mentioned regulation as a very essential part for concerned water agencies to strengthen and making accountable to the public. And as a part of that, local governments from the developing countries are increasingly required to play larger roles in providing water services. Hence local governments and different development institutions come together to work and improve the existing service delivery system though resources remain limited.

Considering the shortage of resources water is governed by multi-level stakeholders at the urban slums of Bangladesh though for piped water the DWASA (local responsible government body for water) has a public monopoly. Nevertheless; private hand tube wells and groundwater extraction through motorised pumps are common sources of water supply for areas not served by

DWASA or where this supply is unreliable. Also private water provision as a commercial activity is missing, although illegal private water markets through control over use of public stand pipes by *mastaans* are known to exist in the slum areas (IGS 2012).

### ***2.3.1 Managing water through multilevel governance***

Pahl-Wostl *et al.* (2008) highlighted that water as public good needs to be managed with a mobius-web<sup>4</sup> arrangement based governance system. There should be a decentralised system where both state and non-state actors from global to local level in the field of water. They also argued that due to the change of social-scientific paradigm the traditional single decision making authority of state has replaced with multilevel actors (both formal and informal) contribution. Again a report published by OECD mentioned that the present water governance is fragmented and traditional top-down policy based which need to re-organise with the involvement of multi-level actors. It also encourages integrating all level actors from policy design to implementation phase. The report also identified seven coordination gaps in the policy for managing water governance at multilevel including administrative, information, policy, capacity, funding, objective and institutional accountability and select one proxy indicator for each gap (see Table 1)(Akhmouch 2012) . The OECD report argued that it is important to establish a strong integrity framework among all the stakeholders to overcome these gaps at the policy level of water governance (OECD 2010). Akhmouch (2012) postulated some governance tools for the upper horizontal coordination and vertical and lower horizontal coordination. As the horizontal coordination tools he proposed multi-sectoral conferences in between central government actors and between sub-national players, coordination among group of experts and inter-agencies programmes. For the vertical and lower horizontal coordination some of the suggested tools are selecting performance indicators and experimentation at the territorial level, initiate shared statistical database and water information systems, encourage citizen engagement and ensure private sector participation (*ibid.*).

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<sup>4</sup> Mobius-web is the sixth form of governance model (given by Rosenao in 2002) happens when interactions occurs across the levels of aggregation among TNCs, INGOs, NGOs, IGOs, states, elites and mass publics which is a web-like process that neither begins nor culminates at any level or at any point in time.

<b>Multi-level governance gaps</b>	<b>Proxy indicator</b>
Policy gap	Overlapping, unclear allocation of roles and responsibilities
Administrative gap	Mismatch between hydrological and administrative boundaries
Information gap	Asymmetries of information between central and sub-national governments
Capacity gap	Lack of technical capacity, staff, time, knowledge and infrastructure
Funding gap	Unstable or insufficient revenues of sub-national governments to effectively implement water policies
Objective gap	Intensive competition between different ministries
Accountability gap	Lack of citizen concern about water policy and low involvement of water users' associations

Source: Akhmouch 2012.

Lundqvist (2004), mentioned about a 'trilemma' as (considers effectiveness, participation and legitimacy-all core values of good governance) an administrative encounter in designing ecologically effective and democratically acceptable multilevel governance. He addressed that issues like super or local participation need to be integrated within the larger web of multilevel water resource governance. He also mentioned that multilevel water governance should have focused to serve the purpose and outcome of providing services rather assessing whether it is driven by formal or informal way (ibid.). However, Bevir (2007a) explained that multilevel governance increases the vertical interdependence of actors at different territorial levels where the horizontal interdependence of actors runs in between government and non-governmental levels.

Thus water as a public good should be managed by multiple actors to ensure access of all citizens.

#### **2.4 Water sector: A story of corruption and rent-seeking<sup>5</sup>**

According to the Klitgaard's (1998) definition what are the major factors related to corruption:  $M$  (monopoly) +  $D$  (discretion) –  $A$  (accountability) –  $T$  (transparency) =  $C$  (corruption) (Klitgaard 1998 quoted in Plummer and Cross 2008).

<sup>5</sup> Rent-seeking is an attempt to gain financial rent by manipulating the social or political environment where economic activities occur by not creating any new wealth.

According to Plummer and Cross (2008), “the story of corruption in the water sector is a story of corruption in resources and services vital for life and development. It is also the story of a sector in crisis”. Plummer (2008) captured a corruption risk map which defined multiple types of corruption in water sector include fraud, embezzlement, bribery, collusion and nepotism. It also highlighted towards the differing incentives of actors and a mixture of instruments required tackling the diverse character of the corruption problem (ibid.).

Plummer (2008) talked about three corrupt interactions in the water sector including the public officials and other public officials the first, public officials and private actors the second and lastly public officials and users/citizens/consumers. These corrupt practices run in between the cycle of policy-making and regulation, budgeting and planning, financing, programme design and management, tendering and procurement, construction, operation and maintenance, and monitoring and enforcement functions.

Notwithstanding Sohail and Cavill (2008) believes lack of access to a formal and legal water supply, inadequate choice and voice, lack of power, and a intense dependence on informal and illicit providers make the poor extremely vulnerable to corruption. Locked into dependency and necessity, they are affected by many types of dishonest practices. Poor people without water are trapped in a desperate, daily fight for survival to access water needs. They again argued that corruption is a major force driving for growing global water crisis. Inadequate access to clean water is a key barrier to progress and development in the world.

The poor have limited ability in terms of power, voice or economic condition so they have to rely on informal water vendors. Most of these informal networks run their businesses which are unauthorised, unregulated and dependent on securing access to bulk water resources through informal means. The informal providers charge many times above the public utility rates outside the law for water access. As a result of the monopolistic nature of service delivery people living under poverty line pay far more than consumers who are connected formally (Sohail and Cavill 2008).

Elshorst and Leary (2005) argued that cultural roots of patronage, clientilism and rent-seeking are typical in the water sector. The elites and the patrons are become the part of an administrative system where politicians serve their clients by offering jobs and services in the informal water

service delivery. The hierarchy of rent-seeking officials and managers are backed by the local politicians. However, the most desirable positions are those which are regularly involved in interactions with contractors and material suppliers. The consequence is worse service and a blockade against attempts to reform the existing malpractice.

Nevertheless, some of the major issues related to the water sector corruption highlighted including un-coordination in fund management among different level of actors starting from donors to local actors, the opacity of or political interference for investment decisions in this sector and the increasing role of the informal market (Plummer and Cross 2008).

### **3. The Conceptual Framework**

The conceptual framework for this study establishes on the Global corruption report's (2008) multiple chapters, Plummer and Cross (2008) and partly from Cleaver *et al.* (2005) and Cleaver and Franks (2007). This study analyses the access pattern of water for the urban poor people lives in slums and squatters by considering the malpractice of service delivery to these poor settlements. Accessing water service is a great challenge for the poor households of Dhaka as most of these informal settlements are located in government owned or private vacant lands. As a result they have to use other informal channels and networks for accessing water. Most of these informal channels maintain strong networks which are highly corrupt. This research will look into the water access pattern of these poor settlements and how the existing informal network works through a process of corruption and poor governance.

### **4. Case study: Korail slum**

#### **4.1 Background**

Water scarcity is a major concern for the residence of Dhaka city. The only government authority responsible for providing water (i.e. DWASA) could not able to provide water 24 hours per day except some of the rich areas and during summer the scenario becomes worst (Ahmed ca2008). At present 96 per cent of the total residents have some access to piped water where none of the households have municipal water connections and the rest of the population rely on tube wells or other sources (CUS 1996 quoted in Hossain, 2011 and Ahmed ca2008). Though DWASA does not cover the slum areas under its service provision a number of projects are undertaken with the assistance of the local and international NGOs (Khan ca2012). Also there are standpipes for



water sometimes especially during the summer times (Ahmed ca2008). There are around 5000 slums in Dhaka city where about one third of the population lives (Ahmed ca2008). In slums, 75 per cent households are “single room family occupancy” where an average five people live in a single room. A slum is a cluster of settlements which grow unsystematically with a minimum of 10 households or a mess unit with a minimum of 25 members and predominantly very poor housing; very high population density and room crowding; very poor environmental services, especially water and sanitation; very low socio-economic status; lack of security of tenure (economicsbd 2011).

Korail slum is the largest one in Dhaka city sits over 170 acres of government land owned by the Bangladesh Telecommunication Company Limited, the Public Work Department and the Ministry of Information and Communication. It locates near the two wealthy neighbourhoods Banani and Gulshan. According to Kulkarni (2012) there are about 40,000 people live in this largest slum of Dhaka. Korail have fulfilled all the criterias for being a slum including lack of basic municipal services like water or electricity, unhygienic sanitation, high health hazard, high unemployment rate, illiteracy and poverty.

#### **4.2 Water sources, cost and quality**

As Korail slum is occupied by the state property and has no legal authorisation of the land; DWASA is not responsible for supplying water. However, most of its dwellers use pipe water like illegal DWASA pipe lines brought by the local powerful people or *mastaans*. They have set a monthly billing system for supplying water and the money charged on the basis of the duration of water supply everyday. For instance in Korail slum people use a monthly system like 10 mins/per day, 30 mins/per day or one hour/per day which cost BDT 250, BDT 500 or BDT 1000 accordingly. There are also private wells and water houses which sell water either daily or month basis. The money charging system for this service depends on how many pitchers of water are collected everyday; i.e. size of the pitchers or the number of pitchers and it is a daily system. Also there is a monthly billing system for the same type service.

Along with the above sources; there are bore holes, tube wells (most of them are out of order), NGOs/CSOs temporary water supply programme and the lake adjacent to the Korail slum as water sources. However; most of the households use the illegal pipe connection as source of water which is a monthly payment system and the money charged according to the time of water

supply. The second higher source for accessing water to Korail is the private well water where bill is charged according to water collected per pitcher per day and the bill is collected monthly. The supplied water is coloured, badly smelled and different in taste in most of cases. Slum dwellers have to use various water purifiers to use those alternative water sources. In the rainy session they catch rain water for future use. Further the water quality of other sources can hardly use.

**Case Study 1: Local Water Suppliers at Korail Slum**

The inhabitants of Korail slum do not have municipal utility supply such as water or electricity. However, these amenities are brought by local powerful or sometimes politically affiliated persons who are part of an informal network of intermediaries and state officials. These informal water suppliers can manage water connections to the slum dwellers which is costly. These local suppliers, who are usually residents of the slum, tend to assume an influential role over the poor slum dwellers as they are the only parental organisation for providing water service.

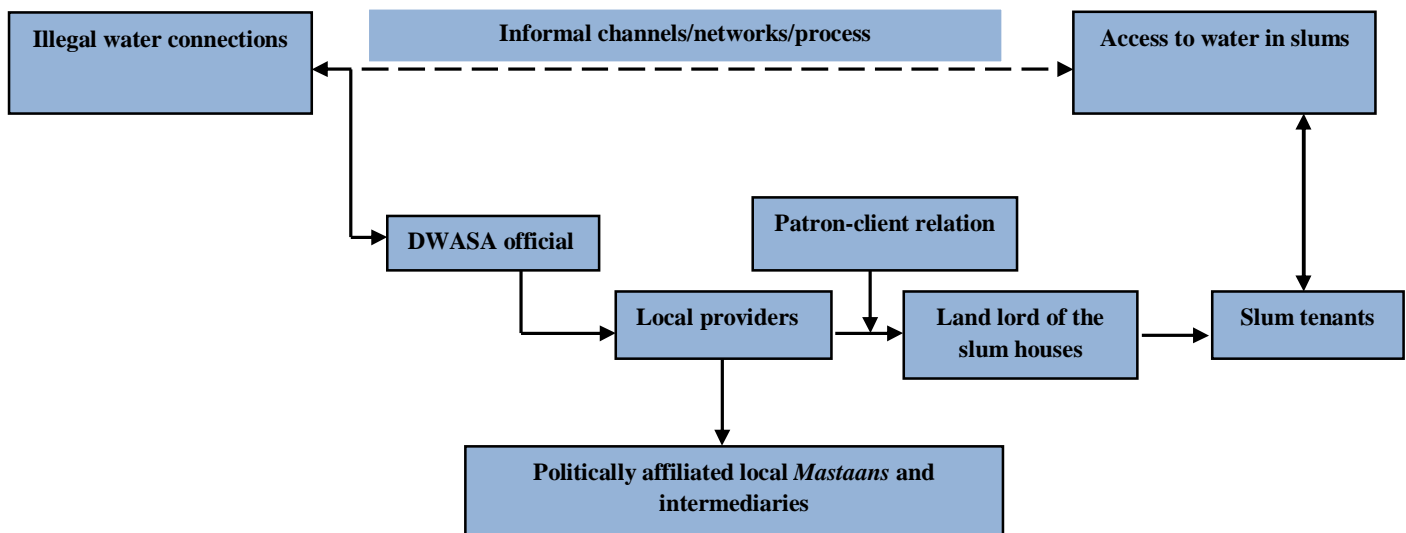
Mr. Kuddus is local water service provider in Korail slum and owned a water house. He sells water with the help of a little boy (of about 10 years) stands as gate keeper next to this water house. This boy is paid a mere sum of Tk. 500 per month (less than \$10) by Mr. Kuddus for his watchful job.

Mr. Kuddus offers families the choice between two payment schemes for selling water. Either sells 4 pitchers per day for a monthly sum of BDT 150 or per-pitcher rated BDT 2 everyday. This water charges a lot compare to the formal government-provided municipal service. However, due to lack of alternatives and available exit options the slum dwellers have to dependent on this service. Mr. Rahim and Sabera Begum are the dwellers of the Korail slum (who are regular consumers of Mr. Kuddus's) said that they use the monthly scheme for water as it is cheaper than the regular service rate. Mr. Rahim pays BDT 150 per month for 4 pitchers/per day with a family consists of 6 members and Sabera Begum pays monthly BDT 200 for 5 pitchers/per day for a family with 8 members. However; it is very important to mention here that the quality of water is not up to the mark and not even regular. Sometimes water is coloured and having bad odour. Thus, people are paying high for getting a less quality service. This entire phenomenon illustrates a poor governance scenario in the water service delivery to the poor Korail slum residence.

### 4.3 Informal service arrangements

As the slums and squatters of Dhaka are not under the legal utility provision of government; household have to access through other informal arrangements. A recent report of Asian Development Bank (ADB) (2010) explores that there are about 15 legal water lines (carried by informal middlemen) in Korail slum by which only 10 percent of the total population can get access to water. The report claims that about 90 percent of the slum dwellers accessing water through other informal channels. A NGO official explained that there are illegal water pipe connections of DWASA and the slum residents have to have BDT 500 to WASA staff to obtain such a line. If a WASA inspector comes to disconnect the line, the same amount is reportedly offered as a carrot for uninterrupted connection (ADB 2010). Most of the households use illegal piped water which bring through an informal channel starting from the corrupt government officials who worked as the gatekeepers of the service and end up with the poor slum dwellers. These illegal water lines are illegally supplying state property without the concern of government and results huge revenue loss of the country. And those earnings go for private interest of some individuals who maintain this illegal network of water supply chain (See figure 2).

**Figure 2**  
**Informal service providing channel in slums**



Source: Adopted from IGS fieldwork 2011

According to the above figure all the slums practice the same channel for accessing water. This informal arrangement has gradually become institutionalised by day to day practice in these poorer settlements. In Korail slum, local providers are very powerful and they maintain strong network with the neighbouring political musclemen and network. Thus, local people lack voice and being loyal to the service providers like a so called patron-client relation.

#### ***4.4 Corruption and rent-seeking***

Bribing is a common practice in Korail slum for accessing water. However there is a common practice of maintaining network starting from government officials to slum dwellers which works as a corruption chain. The informal process of delivering water has become institutionalised. Local water providers charge according to their will which is many times more than the normal rate of the municipal water connection. Plummer and Cross (2008) mentioned about the bureaucratic or petty corruption where a vast number of officials abusing public office extract small bribes and favours; grand corrupt practices and allow misuse of public good like the DWASA officials who help to theft the government water pipe lines and supply water informally at the slum. In Korail people bribe willingly as a daily practice for getting some extra benefits or sometimes for uninterrupted water connection. Even they bribe for maintaining good relations with the local service providers. Sometimes nepotism and kinship works in better water service. Thus, the local service providers in Korail are politically affiliated powerful people and they are doing a very fraud money making business by the embezzlement of national resources.

#### ***4.5 Case conclusion***

Accessing water in Korail is like an everyday fight with the existence of its dwellers. With not having existing government arrangements of delivering water service is a challenge for both the government and its poor citizens. In one hand government is losing its huge revenue and market or source of national earning. And on the other hand poor citizens are paying many times more to the middlemen for accessing water services through an informal channel. Though all the pipe water connection is governmental some informal hands are managing them by informal way for their vested interest. This is an institutionally corrupt practice in Korail slum which has gradually grabbed the voice of the poor and left no other exit option for them.

## **5. Way forward**

The sixth World Water Forum meeting tried to address the present water governance crisis. Among different guiding principles the forum included some attributes like developing early diagnostic tools to identify the existing governance gaps; establishing participation, consultation and coordination among stakeholders, strengthening national institutional frameworks or regulations and so on (International Forum Committee 2012). Water is a vital element to live in for all people irrespective of social class. Without water it is impossible to imagine a single day. In present time it has become a great challenge to overcome the water crisis through good governance. However it is presumed that practicing good water governance can mitigate the present challenge of water access for the poor. From the above discussion it is clear that accessing water is becoming a great challenge day by day and to mitigate the challenges we need to focus on some major areas to improve.

### **I) Strengthening the existing national policy**

Revising the existing government provision of water service delivery as it allows delivery only in the registered area. For this faulty national policy government is losing its huge source of revenue generation. Though all the poor settlements (slums and squatters) accessing government services through illegal channels they do not pay the service fee to government but the local intermediaries who fetch those connections from informal networks.

### **II) Managing water service delivery at multilevel**

Water is a public good and it should be managed at the different level of the society. Dhaka is experiencing an enormous growth so it's only formal institution (DWASA) lacks the capacity to meet the necessity of water. There are different nongovernmental bodies including civil society, NGOs and donor wings who could contribute to supply water to these poorer settlements. There are NGOs like Dustha Shastha Kendro (DSK) who working with the help of donor agencies for providing water to slum. Also government can go for joint partnership with the private sector to meet the present challenge of water service delivery. Government is not the only responsible authority to blame but all other stakeholders should be included starting from nongovernmental institutions to citizens.

### **III) Mitigate the settlement challenge**

Most of the urban poor settlements stands on unregistered government or private land and they face continues eviction threat. As a consequence of that governmental and nongovernmental agency, donors and other potential stakeholders are not willing to invest for water service delivery in these poorer settlements. As consequences the middlemen and local intermediaries are using that threat as an opportunity for their profit making business. Government needs to address this challenge by acknowledging the unregistered settlements to get the hold of huge revenue loss and open the horizon to other governmental and nongovernmental institutions for delivering water service in these areas.

### **IV) Information sharing and awareness building**

The government of Bangladesh has started the full implementation of the Right to Information (RTI) act from 2009. According to that law, every citizen has the right to information for ensuring their empowerment. It has explained that RTI will help to address the corrupt practices through transparency and accountability and help to establish good governance (The RTI Act 2009). As we have previously seen that water sector is a sector in corruption and rent seeking for the urban poor settlements (slums and squatters), access to information can enhance the voice of these poor people and would empower them to combat the existing system.

### **V) Decentralisation plan**

Dhaka is one of the fastest growing megacity and now facing the demand for more space and opportunities to live in. The flow of urbanisation has fostered the unplanned growth of Dhaka city and is scaling up the unregistered localities day by day. Though Dhaka has become the hub of all activities starting from politics to economics, there should have national plan to create opportunities in terms of political and economic opportunities outside Dhaka. This could help to overcome the present crisis of water in the poorer locality.

### **VI) Tackling water sector corruption**

Government can initiate some anticorruption measures to clean up the existing corrupt practices of servicing water at slums and squatters. They can call for joint venture projects with other non governmental institutions for supplying water. Also the existing informal settings can be addressed by efficient drives like initiating legitimised plans or make changes in the existing

system. Also the local people need to avoid oversights and strengthen monitoring tools as a part of water governance which could enhance the accountability of the service providers by the cooperation of government.

#### **VII) Institutional reform**

According to the mandate of DWASA they are responsible for water supply in the government registered areas. However, the existing administrative setup is not sufficient to meet the present crisis of water service delivery for such a densely populated city like Dhaka. DWASA needs to be strengthened and reformed for better service delivery including extension of area of their coverage.

#### **VIII) Financial cooperation**

Slum dwellers in Dhaka are presumed as poorer community of the city with their very low paid informal employment. Cleaver et al. (2005) propose some financial mechanisms for the poor for accessing water. They think poor people can be considered for subsidies or coupons to pay water charges. Also; other ways like incorporating poor as labour without paying can be another measure of giving them access to water (Cleaver *et al.* 2005). Like these the government could take some initiatives to allocate fund to provide water to the poor. Even some corporate bodies as well as rich people could come forward to contribute to this sector by providing funds as a part of social work or their charity work or corporate social responsibility.

### **6. Conclusion**

Though the challenge in water sector is huge a number of opportunities are emerged over the years. For last few decades good water governance has got an important focus in the policy level of the developing countries. Also the development partners, NGOs and the civil society are now become interested in collective measures to mitigate the present water challenge of the poorer community. Thus, water sector needs to scrutinise its present system of water service delivery in the poorer settlements (as the total procedure is handled through informal networks and channels) to ensure good water governance. Water governance needs a matrix of political, social, economic and administrative systems. Effective water governance requires building institutional linkages with improved accountability and transparency. Environmental, social and economic sustainability of water resources is crucial in achieving MDGs or sustainable water governance.

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