

# Final Report

## Ensuring Services to Slum Dwellers

Dhaka WASA Organisation for Low Income and Slum Community Water  
Service Delivery

**Commissioned by:**

**Water and Sanitation for Urban Poor (WSUP)  
London, UK**

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## Acronyms

ADB	Asian Development Bank
CBO	Community Based Organization
CM	Commercial Manager
CUS	Centre for Urban Studies
DCC	Dhaka City Corporation
DMA	Dhaka Metropolitan Areas
DMD	Deputy Managing Director
DPHE	Department of Public Health Engineering
DSK	Dustha Shastha Kendra
DTW	Deep Tube Well
DWASA	Dhaka Water and Sanitation Authority
GIS	Geographic Information System
JICA	Japan International Cooperation Agency
LGED	Local Government Engineering Department
LIC	Low Income Community
MD	Managing Director
MLD	Million Litre per Day
MLSS	Support Service staff
MODS	Maintenance Operations Development Services
MOU	Memorandum of Understanding
NGOs	Non Government Organizations
O&M	Operations and Maintenance
PPI	Programme Performance Improvement
PSTC	Population Services and Training Centre
RAJUK	Rajdhani Unnan Kartipakho
RDA	Rural Development Academy
SE	Superintendent Engineer
SIM	Social Intimidation Model
SME	Small and Medium Enterprise
SO	Service Organization
SWTP	Surface Water Treatment Plant
ToR	Terms of Reference
Watsan	Water Sanitation
WSS	Water Supply and Sanitation
WSTF	Ward Sanitation Task Force
WSUP	Water Supply for Urban Poor

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## WATER & SANITATION FOR THE URBAN POOR – WSUP

WSUP is a not for profit company, with members from both private sector and civil society, that exists to support local service providers (LSPs) and communities in developing countries to design and implement water and sanitation solutions that improve the lives of the urban poor and are economically, socially and environmentally sustainable. It aims to reach 3.5 million people by 2015 through an approach that is both effective and replicable.

LSPs include water utilities responsible for water and sewerage, municipalities, small scale private suppliers, the smaller scale masons and builders that support communities to construct and operate on-site sanitation services, and the community based organisations that manage and operate this infrastructure.

The strategy to achieve these benefits is to assist LSPs to improve services to the poor, while fully involving the local community in the process. In short: “stronger service providers, better services”. WSUP achieves this by a series of steps designed to build capacity:

**Needs assessment:** careful needs assessment including identifying the staff teams, structures and systems needed to provide services to the urban poor.

**Expertise:** providing a broad range of expertise economically covering relevant aspects of water, sanitation and hygiene, including social, technical, financial and environmental. This expertise gives service providers the know-how to design lasting solutions for water, sanitation and hygiene, working alongside communities.

**Environment:** WSUP sees water as an increasingly scarce resource and helps LSPs to offer services that are in tune with the water catchment and will therefore last over time.

**Ownership:** building ownership of the process of reaching low income consumers so that successful approaches can be embedded in national policy and repeated on a larger scale.

**Partnership:** providing consistent support to LSPs and community organisations through long term partnership.

**WSUP Vision:** Strong local service providers providing affordable, clean water, improved sanitation and good hygiene sustainably to the whole city; investment in urban poor service delivery mainstreamed into national government plans and budgets

## EXECUTIVE SUMMARY

Dhaka has a population of about 12 million people and is one of the fastest growing cities in the world, with an estimated 300,000 to 400,000 migrants, mostly poor, arriving in the city each year. Estimates suggest that about 28% of the population of the city is poor and 12% are extremely poor. DWASA is striving hard to keep pace with the rapid expansion of the city. A recent DSK report mentioned that roughly 30% families in slums suffer from acute water shortage for their daily requirements. Currently, there are number of public and private agencies involved in providing services to city dwellers. Public sector agencies like DWASA, DCC, DPHE, RAJUK, LGED and NGOs are the main service providers in the slums.

WaterAid Bangladesh and its partners DSK and PTSC, have worked intensively over the last ten years to promote the improvement of water and sanitation services for slum residents in Dhaka. They pioneered the NGO mediated delivery model (SIM), which created a workable link between DWASA and the slum communities. Beside these, there are also some informal service providers active in the slums areas.

WSUP is working in Dhaka to support urban poor communities improve their access to safe and fair cost water and sanitation services.

WSUP is working at two levels. **Firstly, through institutional capacity building** of the mandated service providers - DWASA and DCC - formalised through MoUs and **secondly, through its implementation work** in Mirpur area (Zone 4) within Dhaka by working with communities to deliver improved water & sanitation services.

There is now a realisation within DWASA that proactive service provision to Low income and slum communities presents a valuable opportunity to:

- have a positive impact on the operations of DWASA, by increasing revenue, reducing NRW, and being seen as a caring provider of services;
- have a positive impact of the lives of the urban poor in Dhaka, by significantly reducing the costs they pay for water, improving the access to and quality of water they receive with the associated health and economic benefits this brings.

This institutional review of DWASA has been commissioned by WSUP as a part of their capacity building initiatives with DWASA and aims to serve as a discussion document supporting DWASA's proactive approach focusing on institutionalising pro poor service delivery.

### Key issues with current service delivery mechanisms

1. **Fragmented approach to service delivery:** The organisation review has revealed that there is a confused remit between agencies (DCC, DWASA, RAJUK) for certain aspects of service delivery, in particular sanitation, within slum areas which is a block to effective and co-ordinated provision of all services.
2. **Absence of an incentive framework within DWASA to improve services:** DWASA local level officials have little or no incentive to support service provision to low income and slum communities nor to coordinate service delivery with other programs of DCC.
3. **Limited Integration within the Existing Organisational Approach:** Currently, water supply to the slum areas is coordinated by the Commercial Manager as an additional function through DWASA's new division - the "Community Programme & Consumer Relation Division". The function is managed on ad hoc basis. The new division is under the Commercial Manager due to historical practice, however the Commercial Manager does not have any direct link with or authority over the MODS

zones which are responsible for service delivery. The division, based in the headquarters, is headed by a Senior Community Officer under the Commercial Manager and has total staff strength of 7. Thus, while the new organogram has made an attempt to formalize the existing ad hoc institutional procedures for the slum dwellers to get access to DWASA services, coordination between HQ and zone level remains difficult. In its current state, it is feared that in practice, this division will function as a post office to receive applications from the slum dwellers, to be forwarded to the working divisions concerned for action without enhancing or adding value to the service process.

4. **Scalability issues with other institutional structures:** DWASA has very recently launched an experimental project with the support of World Bank (WB) to provide water supply to selected LICs. DWASA prepared and proposed a new organogram to the Government, which was approved by the Government in November 2007. However, the newly established community division is to be headed by a mid level executive who might not have the necessary access and influence on policy matters including the on going LIC project. In parallel, DWASA has established a separate institutional set up outside the community division to manage and implement the WB loan LIC component in Khilgaon, Badda and Kamrangirchor with a Project Director in the rank of a Superintendent Engineer. The WB supported initiative creates an opportunity for Dhaka WASA to reorganize and integrate its community division with the LIC project.
5. **No mechanism to co-ordinate the work of DWASA and DCC in slums:** Presently there is little or no coordination between DWASA and DCC service provision in the slums. Under Statute, both DWASA and DCC have a specific mandate to provide water and sanitation services to the slums. DCC has a relatively long established mechanism for provision of services to slum areas through the Slum Development Unit. DWASA on the other hand has only recently established a mechanism to provide services to slums. Coordination between these two organizations remains ad hoc with little effectiveness.
6. **Issues with the existing legal-policy framework:** It should be noted that DWASA is making progress towards more equitable service delivery notably it has achieved limited delinking of service delivery with tenure and has established mechanisms whereby even slum dwellers without land titles can apply for water connection through CBOs/ Water and Sanitation Task Force. However, there are specific issues within the existing policy-legal framework, which needs to be addressed to enable DWASA to serve the urban poor more effectively. These are
  - a) **DWASA rules and procedures** do not allow private participation in water production and sale. This can prove to be a hindrance in regulating the quality of service and pricing of informal (and presently illegal) water vendors.
  - b) **The National sanitation policy** advocates for single pit latrine even for urban areas which is not an appropriate technology for high-density urban areas.
7. **Sustainability of WSS services:** WSS services in the slum areas are at risk of not being sustainable, mainly due to the dwellers lack of tenancy rights and associated high risk of eviction. As a result of this DWASA as well as other potential service providers are hesitant to invest in the slum areas. Until now investment made in the slum areas has been relatively low in scale and very minimal in scope. Most of this investment comes from a variety of donor funded grant projects. Though there is interest from NGO's to invest in the slums, the risk of investment sustainability demotivates them from investing at the necessary scale. The dwellers themselves are not motivated to invest for WSS services, as they are concerned about the

sustainability of their investments. However, they are willing to pay for WSS services including investment costs over time in monthly instalment payments once the infrastructure is operational.

There is a need for clear and proactive policy on slum dwelling including rehabilitation measures in case of unavoidable slum eviction from the public land. A pro poor slum policy is a key factor in facilitating investments from NGOs, donors and even the private sector to improve WSS service in these neglected areas.

## STUDY RECOMMENDATIONS

In view of the above, WSUP recommends that specific measures are adopted by DWASA in the short-term that will help it to serve its low income and urban slum customers more effectively. The study recommendations are based on the following principles:

- ✓ **Improved services to poor, better revenues for DWASA**  
*Developing Win-Win situation for DWASA and its customers*
- ✓ **Ensuring greater accountability within DWASA while servicing the poor**  
*LIC targets and performance monitoring*
- ✓ **An effort to streamline DWASA's and DCCs work with LIC**  
*Increased coordination and role clarity*
- ✓ **Starting with small steps**  
*Actionable steps with maximum impact*

**The recommendations of the study are that DWASA should:**

- 1. Assert its policy of an equitable approach to water service provision for all inhabitants of DWASA service area** Recognising that all inhabitants of DWASA service area have a right to water service connection with the same level of service and ensuring a single tier service with clear processes for requesting connections for consumers irrespective of economic status.
- 2. Introduce a Low Income & Slum Community Services Support Cell at the Head Office** – The proposed cell will provide support to Zonal/MODS managers in proactively supporting the delivery of services to low income and slum communities providing connections and in planning and developing specific programs for low income and slum community expansion. The cell will facilitate common policy and process across DWASA and support MODS zones in the delivery process.

Specific tasks of the cell will include to determine DWASA policy and process vis a vis slum service delivery (e.g. for application processes, bulk supply contract mechanisms, connection times, etc.); coordinate and monitor implementation across the whole of DWASA service area; set zonal targets for connecting low income and slum areas; monitor zone operational performance against connection targets; act as a focal point for funding and implementation agencies interested in supporting urban poor service delivery; determine communication and awareness messages to encourage connection; set policy for eradication of illegal connections within DWASA network; regulation of small scale service providers; etc.



Their support will also include appropriate advocacy at the policy level to ensure regular budget for service delivery for the slum population. They will develop a targeted advocacy strategy focusing on donors, international development partners, DWASA board and policy level officials at the ministry. Specific measures also need to be taken at the slum level to create awareness on the rights as well as responsibilities of the slum dwellers with regard to WSS services. A special communication and advocacy strategy should be developed by the cell for the low-income communities.

The cell should be properly integrated and engaged with the Zonal/MODS organisation, the mainstream service delivery organ of DWASA. Therefore, we propose that the cell is operationally linked to the Zonal/Mods organisation by means of a direct reporting line to the Chief Engineer. /The cell will be headed by an Executive Engineer and include staff with planning, communications, engineering, finance, and operational experience.

It is also suggested that for the first two years of operation the cell is overseen by a steering committee chaired by the Managing Director and comprised of key staff from the head office and Zonal/MODS.

3. **Empower the Zonal/MODS Managers to support connection provision to low income and slum communities through proven mechanisms** – the Zonal/MODS organisation is the interface for service delivery for all customers irrespective of economic status. Full authority and responsibility should be given to the Zonal/Mods Managers to accept applications from and provide connections to low income and slum communities in line with the appropriate DWASA policy.
4. To support the anticipated increase in connection activity at the Zonal/MODS level it is suggested that DWASA re-assign three staff in each MODS (one Sub-Assistant Engineer and two Community Organisers) to support its current structure to ensure WSS services to the slums. These three will form a small “**Community Wing**” within the MODS zone and will work under the direct supervision of the concerned MODS Executive Engineer. These positions may be created from the approved zonal level human resources by redesigning their job description and work responsibilities.
5. **Incentivise the Performance of the Zonal/MODS Organisations:** Increasing water provision to the low income and slum communities has benefits for customers and DWASA alike. For DWASA the benefits are increased revenues and reduction in NRW levels through the conversion of illegal to legal connections.

Zonal/MODS Managers can be incentivised through performance indicators such as number of connections made; revenue collected from low income and slum community connections; The incentive programs could be structured such that the cost of the incentives is met from additional revenues generated through the new connections.

6. **Promote initiatives for private participation in the distribution of water in low income and slums communities.** It is well established that slum dwellers in Dhaka pay much more than other residential counterparts for water supply through private vendors. Specific regulatory measures need to be in place to safeguard slum dwellers from any monopolistic water-pricing tendency by the private sector. DWASA should clarify the policy environment vis a vis connection provision to low

income and slum communities and the support they will provide to the development and formalisation of small scale independent providers in low income and slum areas and how they will regulate the quality of service (particularly water quality) and pricing.

- 7. Undertake Appropriate Capacity Building:** A comprehensive and targeted capacity building will be necessary to make the proposed cell functional and effective. The elements of the capacity building will include: Organizing appropriate logistics, providing orientation to central as well as Zonal committees; training to the professional staff of the proposed circle based on a needs assessment.
  
- 8. Undertake a tariff study** to review alternative tariff structures including progressive tariff and different tariffs for different groups of consumers in different consumer areas. This will help rationalize water use and saving from the high end users will allow DWASA to bring water to low supply areas. The tariff rate for the bulk connections in slums should also be considered in the study in terms of the socio economic condition of the slum people and the commercial interest of DWASA.
  
- 9. Instigate an action learning program** to understand urban sanitation and hygiene behaviour, in particular to determine what motivates people to follow proper sanitation practices and rational use of water resources. Based on the learning, appropriate action plans should be prepared for sanitation and hygiene promotion in Dhaka.

## **1 Introduction and Background**

### **1.1 Introduction to the Review**

WSUP are engaged in a project to support DWASA in the provision of water and sanitation services to the slums in the Mirpur area of Dhaka. An important component of this work is building capacity within DWASA to improve its ability and efficiency to proactively deliver services to low income and slum areas. During the first phase of the project, which started in June 2008, emphasis has been given to a review of slum service delivery mechanisms and efficiency within DWASA (reported on here); and financial modelling of the Mirpur Zone of DWASA (reported on separately).

### **1.2 Purpose and objective**

The main purpose of the institutional review of DWASA is to review the organizational structures and resources within Dhaka WASA responsible for delivery of water and sanitation to low income and slum communities in the Mirpur area and, where appropriate, make recommendations for improvements that facilitate a proactive approach to service delivery.

Scope of the work

- Review the current organization of DWASA in Mirpur area identifying links between zonal and head office functions and linkage with other service providers and stakeholders;
- Review the centrally based organization of DWASA in relation to service provision in low income communities;
- Propose an organizational structure within DWASA Mirpur zone to facilitate efficient and effective water and sanitation service provision to the slum areas in Mirpur taking into account the role of the centrally based working group on low income communities and the linkages to other agencies involved in water and sanitation related service provision in slum areas in Mirpur;
- Support discussions with DWASA, DCC and other external stakeholders in establishing modifications to organizations as appropriate to achieve more effective service delivery to slum areas;
- Identify communication and training requirements for DWASA to improve service delivery provision;

### **1.3 Methodology**

The review team had adopted a participatory and interactive method throughout the process. Participation was ensured right from finalizing the TOR, to collection of information, and to finalize the report. Following are some of the methods adopted for specific purposes of the review.

- Conduct inception meeting with senior management of DWASA including the Managing Director, Deputy Managing Directors, and other officials of Dhaka WASA
- Prepare an inception report based on the initial discussion with various stakeholders, which had outlined the scope of the work and the major information requirement for the assignment.

- Review and consult various relevant reports, project documents, existing literature (documents, reports, government rules on water supply, ADB, and World bank documents etc).
- Interviews/discussions with important stakeholders within DWASA and other stakeholders including NGOs, development partners, and Government Officials.
- Intensive discussion with the officials of DWASA Mirpur zone and PPI officials
- Visited slums at Mirpur namely Lalmat and Kazipara, where WSUP is currently working and had intensive discussion with the dwellers of those slums and conducted number of semi-structured interviews with the key informants

#### **1.4 Limitations**

Dhaka WASA is a huge public utility and a very complex organization with multi faceted functions and services. It is quite difficult to have a comprehensive understanding of the whole organization in such a short period of time.

However, the consultants have made every attempt to get as much information as possible within this time period. DWASA people were extremely helpful in providing information and sharing their views, this has helped to close some of the information gaps and strengthened the study as a result.

## **2 BRIEF INTRODUCTION TO DHAKA WASA**

DWASA is a public service institution, operating on a commercial footing. It is mandated to cater to the water supply, sewerage and storm water drainage services to the dwellers of metropolitan Dhaka City and Narayanganj town through 10 (ten) Maintenance Operations Development Services (MODS) Zones and Narayanganj MODS. DWASA is obliged to extend its service to the poor enclaves and slums, which conforms to the poverty reduction aspirations of the Government. The major services including standards, quality and time frame and how/where to get them specifically includes but not limited to the following:

### **2.1 Water Supply:**

Production of both surface (18%) and groundwater (82%) with conjunctive use and supply of potable water on a round the clock basis in conforming to the country's acceptable health standards through about 2,500 Km of distribution mains to the domestic, commercial and institutional entities within its service area of about 400 sq km and services provided to the population of about 10 million.

Ensure proper operation and maintenance of the total water supply system including 490 DTW, three SWTP one at Saidabad, other at Chandnighat and one at Narayanganj. About 60% of the DTW are installed with standby generators and almost 100% DTW are equipped with chlorination facilities.

In case of any emergency breakdown disrupting the supply due to technical or any other reasons, organize supply of water to meet the demand of the consumers at a specific rate by using the tank lorries belonged by DWASA.

### **2.2 Sewerage:**

In specific areas (covering about 20% of the city dwellers), collect and transmit liquid wastes from domestic, commercial and industrial units through piped sewer of about 881 Km and undertake their pre-disposal treatment before final disposal

Ensure continuous monitoring of the O&M aspects of the system and keep it fully operational and functional.

### **2.3 Storm Water Drainage:**

Install, operate and maintain about 233 Km of underground conduits of storm water drainage & 65 Km of open channel and 8 Km of Box culvert in an efficient manner for timely collection and disposal of storm water and non-sanitary waste water generated by households and other units

Organize and manage prompt disposal of stagnated water from any area under its domain by using direct pumping

DWASA deals with the Primary Storm Water Drainage facilities and whereas the DCC deals with the Secondary & Tertiary drainage works within the Metropolis.

### **3 REVIEW OF THE CURRENT SCENARIO**

#### **3.1 LIC population and the growth trend**

Dhaka has a population of about 12 million people and is one of the fastest growing cities in the world, with an estimated 300,000 to 400,000 migrants, mostly poor, arriving in the city each year. Estimates suggest that about 28% of the population of the city are poor and 12% are extremely poor. A recent survey indicates that around 35% of Dhaka's population live in slums. They can be defined as low-income community.

The Low Income Communities are defined as a neighbourhood or residential area with a minimum of 10 households or a mess unit with at least 25 members with four of the following five conditions prevailing within it:

- Predominantly very poor housing
- Very high population density and room crowding
- Very poor environmental services, particularly water and sanitation facilities
- Very low socio-economic status
- Lack of security of tenure

This definition is widely used in Bangladesh (e.g. by the Centre of Urban Studies- CUS) and may be termed as "traditional slums". It is estimated by CUS that the traditional slum population in Dhaka Metropolitan Areas (DMA) is about 3.4 million. The number of people in the low-income communities is estimated to be 4.1 million in Dhaka and Narayanganj and would increase to 5.4 million in the next 5 years. These people are mostly deprived of water and sanitation services affecting their health and productivity. Providing water supply and sanitation services to these people is a huge challenge.

Recent surveys suggest that between 65% and 80% of slums are on private land – but these data are derived from householders' own perception and are therefore unreliable CUS (2006), Dev consultants (2007). In general the conditions in 'private' slums appear to be slightly better than those in slums on 'public' land.

#### **3.2 Urban service condition in slums**

DWASA is striving hard to keep pace with the rapid expansion of the city both horizontally and vertically. But due to limited resources of DWASA both financial and human, many of its development initiatives are being restricted. In order to meet the increasing demand of Dhaka City, many development partners have been showing their interest to assist DWASA to overcome the situation and improve the utility services.

The water supply system is reported to be about 30%<sup>1</sup> below the demand level. At present water abstraction rates about 82% from the main water source (deep tube wells) for Dhaka, the underground aquifer is depleting with a rate of 1 to 3 meter per annum whereas about 18% of the total demand is met from the surface water.

A recent DSK report mentioned that about 30% families in the slum areas get adequate water, which is generally 300 - 350 litre per day per family. Another 50% families normally get about 200-250 litres per day. According to the same report, roughly 30% family suffer from acute water shortage for their daily requirements.

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<sup>1</sup> Population 13 million (ToR DS-7); Design value 180 lpcd and therefore total Demand = 2340 mld (DWASA Strategy Study; Financial Forecast Report, January, 1998) and present water production = 1600 mld (MIS Report, March, 2007), therefore water shortage = 31%

The study team have visited two slums in the Mirpur area to have a first hand experience on the WSS service situation in the slum areas in Dhaka city. The review of two slums<sup>2</sup> suggests that urban services in the slum areas are desperately bad. There is no sanitation in those slums. There is a NGO facilitated water supply systems from DWASA mainline. However, dwellers hardly get water during the day-time. Water is only available in the middle of the night. That too is rather inadequate. Slum dwellers had to collect fetch and reserve water in buckets for the whole day's requirement. Family member particularly women members of the family needs to remain awake in the middle of the night to queue for water. This creates lot of discomfort and agony in their daily life. Shortages of water have a measurable impact on their economic condition and daily life. The review team also witnessed the existence of few illegal DWASA connections in these slums.

WaterAid Bangladesh and its partners DSK and PTSC, have worked intensively over the last ten years to promote the improvement of water and sanitation services for slum residents in Dhaka. They pioneered the NGO mediated delivery model (SIM) which created a workable link between DWASA and the slum communities and they have been instrumental in putting slum service delivery high on the agenda of the service authorities.

### **3.3 Government policies, strategies and initiatives**

While it is often said that slum dwellers are not eligible for DWASA services, there is no basis for this in law. In contrary to the general perception, Government has specific laws and rules on the supply of WSS services to slums. Based on the existing rules, DWASA has developed mechanisms to ensure WSS services in the slums of Dhaka city. Following provides more details:

#### **3.3.1 Service policy**

The Government of Bangladesh has clear policy and rule<sup>3</sup> for the poor slum dwellers to get water from DWASA systems, which are waiting for formal approval. Proposed policies and rules have effectively responded to the specific circumstances of the slum realities in Dhaka city and thus ensure potential access to DWASA water supply to the poor urban slum dwellers as highlighted in the pro-poor strategy on water supply of the Government of Bangladesh.

#### **Specific rules for slums level service delivery**

Low-income communities living in slums established on Government/Semi-government/autonomous bodies or corporation's land are eligible to get DWASA water. The slum dwellers need to form their own CBO to apply for water supply connection on a collective basis. DWASA have specific rules for such water supply and bill collection methods and procedures.

- ☞ Slums established on private land can also access DWASA water. In such case landowner needs to apply for the water connection and thus s/he will be responsible for water bill. However, if the landowner fails to get water connection, slum dwellers can access DWASA water through forming their own CBO. Even if the land ownership (of a slum) remains dubious and unsettled, slum dwellers can get DWASA water through their CBO.

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<sup>2</sup> The study team have thoroughly reviewed the WSS service situation of Lalmath and Kazipara slum at Mirpur where WSUP is currently working to improve the WSS service under a MOU signed between DWASA and WSUP

<sup>3</sup> Draft SRO No: 286/law/2007

- ☞ DWASA is responsible for providing water connection from its main line and do the necessary O&M functions. However, CBO is responsible for all kinds of internal O&M functions. Ward Sanitation Task Force (WSTF) is responsible to monitor the activities of CBOs.

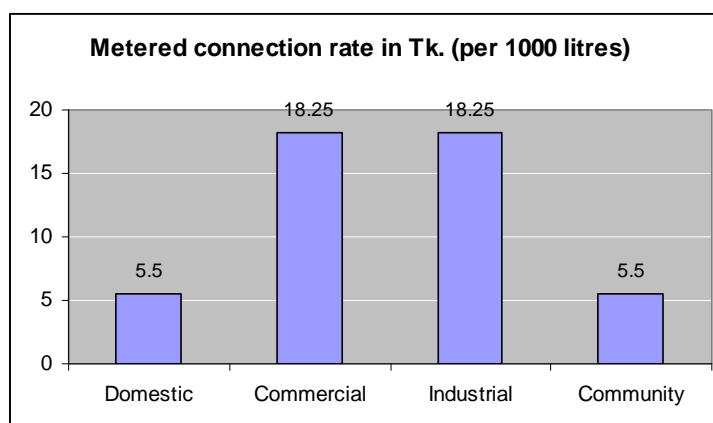
### 3.3.2 DWASA water Pricing policy

The Government of Bangladesh has published the policy guides and rules for water supply and sanitation in 2007. The policy has established specific pricing policy for connection as well as water tariff for various customer categories. Following table provides the details:

Table: Security Deposit for water connection

Connection Type	Security deposit for various customer group		
	Residential/Temporary connection	Commercial Connection	Industrial Connection
¾"	5,000.00	15,000.00	20,000.00
1"	7,500.00	22,000.00	25,000.00
1½"	10,000.00	30,000.00	32,000.00
2"	12,500.00	37,500.00	40,000.00
3"	15,000.00	45,000.00	47,000.00
4"	17,500.00	52,500.00	55,500.00
6"	20,000.00	60,000.00	65,000.00

Security deposit is applicable to all permanent as well as temporary connections in respect of the three different customer group. From the above table it is clearly evident that there is no rate specified for the slum level water connections. In other words, this policy does not provide any specific rate for water connection to the slum or low-income community. However, there is a clear policy direction, which specifies that water connection deposit will be applicable to the connections in the slum areas and that the rate would be changed at the lowest amount applicable among the various customer category of DWASA. In other words, slum connection security amount would be equal to the residential charge applicable, which is the lowest among all categories of DWASA customer group. The policy does not provide any special concession to the slum population as far as connection deposit money is concerned.





Like wise the slum people are also obligated to pay water usage bill similar to the rates applicable to the residential water use. Therefore, the policy directives have ensured the access to water supply for the urban poor in Dhaka, though it does not provide any financial incentives to the poor, perhaps to protect the commercial interest of DWASA.

However, contrary to the view of government policy, the slum population does not seek any concession on water price. Rather, they are ready to pay the regular price provided adequate and timely water supply is ensured to them with legal permission. Most of them have to buy water at a much higher rate from informal sources. Therefore, the current reality provides the necessary incentive for DWASA to extend water services to the slums without compromising its commercial goal.

### 3.4 Coordination among service providers

Currently, there are a number of public and private agencies involved to provide services to city dwellers. Public sector agencies like DWASA, DCC, DPHE, RAJUK, LGED and NGOs are the main service providers in the slums. Besides, there are also some informal services providers active in the slums areas. As far as WSS are concerned, we normally find four main groups who are providing WSS services in the slums and fringe areas. They include but are not limited to:

**Private slum owners-** although not sufficient they provide the bulk of WSS services through installing tube wells, water connections and latrines for their tenants

**Public agencies-** DCC, LGED and DPHE implements projects to provide WSS services to the low-income community. There are few public taps installed by WASA (mostly paid by DCC)

**NGOs-** Several international and national NGOs with donor assistance implement WSS projects in the slums

**Informal providers-** these are mostly local *mastaans* and influential people who possess illegal connections and sell water to slum dwellers on profit motivation

The review has found the following observations on the coordination aspects:

- Confused remit between agencies (DCC, DWASA, RAJUK) – allows each to avoid responsibility for service provision as per their mandates
- Presently there is little or no coordination between DCC and DWASA service provision in the slums. As per the Statute, both DCC and DWASA have a specific mandate to provide water and sanitation services to the slums. An organizational unit of DCC called the Slum Development Unit is responsible for providing DCC services to the slums. On the other hand DWASA until recently did not have any organisational mechanism to provide services to slums. Therefore, coordination between these two organizations remains ad hoc with little effectiveness.
- DWASA local level officials have little or no incentive to coordinate service delivery with other programs of DCC. DCC in turn can disrupt implementation of the SIM model in cases where it does not fit with local priorities or planning (this may be a particular issue for Ward Councillors'). The lack of a formalized agreed plan means there is no method for clarifying such disputes at local level
- Existing and potential new service providers lack a clear policy direction and the potential for disruption from landlords and other local interests renders the 'market' unattractive for new service providers and results in higher costs for the current service providers.
- The current crop of NGO service providers is unanimous in their view that other NGOs and SMEs would enter if the policy environment were clear. The

recognition of a range of further alternative methods of service delivery could also enable current providers (for example DSK) to expand into 'risky' communities and modify the SIM model.

#### **3.4.1 Coordination at the Headquarters level**

Water supply to the slums is coordinated by the Commercial Manager as an add-on function and managed on ad hoc basis. There is no institutional structure in place to manage and coordinate the slum level service delivery function within DWASA. Hence, coordination among relevant stakeholders for efficient functioning of slum WSS facilities and low-income communities is absent in the head office of DWASA. There is also no such forum or body in the DWASA headquarters to conduct such coordination meetings among the stakeholders to assess the present state of affairs in the slums and low-income communities.

In cases where international or national NGO's approach Dhaka WASA with new programmes for LIC, high-level meetings are organized to examine such proposals and decisions are taken after minimal discussion. DWASA senior officials including MD, DMDs, CE, CM and INGO/NGO attend these meetings, however this has never developed as a forum for a regular review of LIC programmes. The past CM personally looked after the slum services in coordination with the respective MODS. In other words, the CM office plays the vital role of interface between HQ and the field level MODS to review and approve slum level service applications and arrange for water connections to the slums.

The existing mechanism essentially functions on an ad hoc basis to provide WSS service to the slums. There is a need for central level coordination mechanism to effectively provide WSS services. All functional departments/units need to be integrated both within the HQ as well as between HQ and MODS zone to ensure effective services to the slums..

#### **3.4.2 Zonal level Coordination**

At the zone level there is an established coordination mechanism with other stakeholders led by the respective Executive Engineer of MODS zone. Zone wise coordination meetings are held on a quarterly basis under the chairmanship of the zone in-charge, the Executive Engineer where concerned Assistant/ Sub-Assistant Engineer, Revenue officer/project manager, NGO representative, CBO representatives, Ward sanitation taskforce member and DCC representative take part. Hence all sorts of problems and difficulties are discussed in the quarterly coordination meetings to find out solution for local problems. But important issues such as new area development or development of existing services are referred to head office for decisions as zone in-charge have limited authority.

For improvement of services in the slums and LIC, the authority of zone Executive Engineer needs to be increased and monthly coordination meeting may be convened for better coordination among the stakeholders. This in turn will help to solve various day-to-day problems and increase service quality for the LIC.

### **3.5 Social Intermediation Model - Evolution and Challenges**

Where service delivery has been successful in the slums it has generally been achieved through the so-called Social intermediation model (SIM) developed by DSK, a local NGO working with the urban poor. In the "Social Intermediation Model" NGOs act as a broker on behalf of the slum dwellers to bring water services into the slum from the nearby DWASA main line. Within the community, services are then delivered through communal water points (usually consisting of a storage tank to collect DWASA water and a hand pump). In successful cases hardware investments are preceded by high

quality social interventions including hygiene promotion, and the development of social capital to support community management of shared resources including part or total repayment of hardware costs and often including cross subsidies between different wealth groups identified by the community.

The SIM model is supported by DWASA through the Commercial Manager although no formal 'program' with consistent contracting/partnering arrangements exists; projects are generally taken up by the NGOs on their own initiative and approved by DWASA on an ad hoc basis.

The SIM model provides an opportunity to show progress in serving low-income communities but the informal nature of the arrangements leaves DWASA free to decide when and where to allow services.

### **3.6 DWASA reach and scope to provide water supply to LIC**

As mentioned earlier, as many as 3.4 million people are living in the slum areas within DWASA command area. Accordingly to DSK estimates, there are about 1000 water points operating under the NGO facilitated SIM approach. Therefore, only a small portion of the burgeoning slum people has effectively covered by DWASA water services. The rest of the slum population are either getting DWASA water through illegal connections or have developed alternative means to obtain water.

Until recently, the NGO facilitated SIM was the only means that DWASA used to provide water supply to the slum people. However, there is growing recognition and desire within DWASA to provide WSS service to LICs through its own institutional mechanism. Towards this, DWASA has very recently launched an experimental project with the support of World Bank to provide water supply to selected LICs. WSS Program for low-income communities will provide Water Supply, Sanitation, Drainage, Solid Waste, and Community facility, etc.

The project aims to provide 304,000 people with improved water supply and 509,000 people with adequate sanitation facilities. The total population of the 20 wards/union estimated to be about 980,000 would receive hygiene education and improved solid waste management facilities under the project. Generally there will be one community scheme for one ward or one union (full or partial coverage).

However the effective reach of DWASA will still be less than 25%<sup>4</sup> of the total LIC after the completion of the project. If we consider the population growth, the actual reach will be even less. Thus the government policy to ensure water services to all the urban poor will not be fully realised through the present level of achievement of SIM and the LIC project.

Some important data on the slums have been collected from a study named "Slums of Urban Bangladesh: mapping and Census, 2005. These data are available with the GIS section of Dhaka WASA. The data shows that more than 50% of slum dwellers are living in less than 5% slums. These slums are big in size with a high concentration of population. DWASA must bring these slums within its WSS service system if it wants to effectively cover the majority of the slum population. The following table gives a detail data of slum population in Dhaka city.

Table: House and population statistics in slums in Dhaka

Range of Slums	Households	Total Population
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<sup>4</sup> The figure discussed is rather guesswork by the consultant.

	Number	% of total slums	Number	% of total households	Number	% of total populations
Upto 10	499	10.0	3,217	0.5	35,642	1.0
11-20	1,429	28.8	21,353	3.2	105,623	3.1
21-30	710	14.3	18,293	2.7	91,689	2.7
31-40	410	8.3	14,783	2.2	71,794	2.1
41-50	287	5.8	13,502	2.0	68,403	2.0
51-100	598	12.0	43,852	6.5	228,460	6.7
101-150	270	5.4	34,913	5.2	173,197	5.1
151-200	159	3.2	29,210	4.3	148,600	4.3
201-250	93	1.9	21,750	3.2	108,966	3.2
251-500	255	5.1	94,535	14.0	486,879	14.2
501-750	79	1.6	49,514	7.3	243,197	7.1
751-1000	61	1.2	54,722	8.1	290,745	8.5
1000 plus	116	2.3	274,239	40.7	1,367,326	40.0
Total	4,966	100.0	673,883	100.0	3,420,521	100.0

A further analysis shows that WASA water services are available within the close proximity of most of the slum population. More specifically, over 90% of the slums are within a reasonable distance (250 meter) from a water pipeline.

Table: Distance of slum from the nearest DWASA water line in meters

Distance in meter	Total Population	%
0	1,867,357	54.6
0 to 5	402,605	11.8
5 to 10	151,120	4.4
10 to 25	171,752	5.0
25 to 50	176,344	5.2
50 to 100	254,991	7.5
100 to 250	125,383	3.7
250 to 500	90,956	2.7
500 plus	180,013	5.3
Total	3,420,521	100.0

Source: Output from GIS database

The above table highlights the paradox that whilst water is so close to the poor community is also so far from them. The review<sup>5</sup> found some of fundamental

<sup>5</sup> These views do not all represent the experience of WSUP – water is available in many areas albeit not always continuously; DWASA currently do recognize the revenue and operational performance incentives of providing legal connections to low income and slum communities.

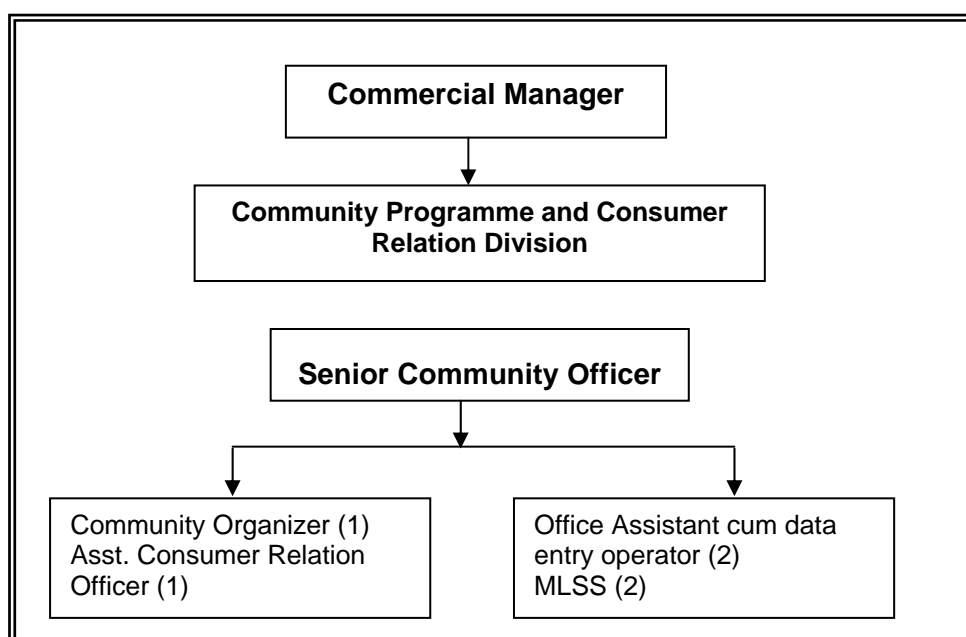
drawbacks for the low coverage of DWASA in the low income and slum communities. These are but not limited to the following:

- DWASA main lines are physically present near the close proximity of the LIC; but in reality water flow/pressure remains far from adequate to effectively provide water to the community.
- Water demand outpaced supply throughout the system on a regular basis. Giving legitimate connection to the slum will put further dent on the already high demand supply gap situation.
- DWASA has little incentive to deliver water services to the poorest at scale and in a sustained manner assuming that water supply to the poor will not be commercially viable. Thus, delivering water to the poorest does not feature among DWASA's top priorities.
- On the demand side slum dwellers living in apparent insecurity and with little access to information are dis-empowered to demand the basic services to which they are entitled; powerful interest at the slum level (landlords and/or mastaans) conspire to keep them so.

### 3.7 Institutional Structure of DWASA to serve Low Income & Slum Communities

Historically DWASA did not have any institutional structure and human resources designated for the services of low-income and slum communities. Until recently the Commercial Manager played an informal but catalytic role to provide water to the slums. Recently DWASA prepared and proposed a new organogram to the Government, which was approved in November 2007. A new division called "Community Programme & Consumer Relation Division" has been created in the new organogram to cater to the particular needs of the Low Income and Slum community population in Dhaka city – a step towards formalizing the previous DWASA arrangement. In that, DWASA for the first time has taken institutional measures to respond to the needs of LIC with pro-active measures.

Figure: Organogram of the newly created Community Programme and Consumer Relation Division



As highlighted in the above organogram, the division is based in the headquarters under the Commercial Manager. The division to be headed by Senior Community Officer will report to the Commercial Manager. Thus the new organogram has made an attempt to formalize the existing ad hoc institutional procedures for the slum people to get access to DWASA services. The new organogram provides for five posts with a total staff strength of seven. The sanctioned post and present status of manpower for the Community Programme & Consumer Relation Division is shown below:

Table1: Sanctioned manpower of the existing Community Programme & Consumer Relation Division, DWASA.

SL. No	Name of Post	Number of Post	Present Staff	Remarks
1	Senior Community Officer	1	Nil	Soon to be filled
2	Community Organizer	1	Nil	Do
3	Assistant Consumer relation Officer	1	Nil	Do
4	Office Assistant cum Data Entry operator	2	Nil	Do
5	MLSS	2	Ni	Do
	<b>Total</b>	<b>07</b>	<b>Nil</b>	<b>Do</b>

The new organogram also reviewed human resource position of the MODS zones. Accordingly new posts have been created at the MODS level. As per the new approved organogram, MODS Mirpur zone will have 259 posts against 18 positions. As of December 2008, 180 posts were filled leaving 79 posts still vacant in Mirpur Zone. The following table provides the staff position of Mirpur zone as of December 2008.

Table: Approved Human Resources of Mirpur Zone under the 2007 Organogram

SL	Approved Position	Approved posts	Filled Posts	Vacancy
1	Executive Engineer	1	1	0
2	Sub Divisional Engineer	1	0	1
3	Assistant Engineer	3	2	1
4	Sub Assistant Engineer	8	2	6
5	Upper Division Clark	1	0	1
6	Office Assistant cum data entry operator	3	3	0
7	Wireless operator	2	2	0
8	Store Keeper	1	1	0
9	Line Inspector	6	2	4
10	Pipe line Mistree	12	9	3
11	Assistant pipe line Mistree	24	7	17
12	Sanitation Inspector	8	0	8
13	Driver	6	5	1
14	LMSS	2	2	0
15	Helper	6	3	3
16	Pump Operator	58	59	-1
17	Apprentice pump Operator	116	81	35
18	LDA cum cashier	1	1	0
	<b>Total</b>	<b>259</b>	<b>180</b>	<b>79</b>

An analysis of the composition of various approved positions at the MODS level suggest that DWASA has not made any specific response to the need to increase WSS

services to low income and slum communities in the reorganization plan, rather the new organogram has increased man-power in the existing positions. No positions have been created with the specific responsibility to cater to the WSS needs of the urban poor.

### 3.9 An overview of Sanitation Situation in Dhaka City

The sanitation situation in Dhaka city at large is no better than the water supply situation and in the slum areas the sanitation service is almost non-existent. While the water supply coverage in the slums is about 69%, the sanitary latrines coverage is only 48%.<sup>6</sup> The remaining people use unhygienic latrines or practice open defecation - unhygienic pit latrines (without water-seal or connected to pen drains) coverage is 36% and rest 16% people use hanging latrines or practice open defecation. About 59% slums are poorly drained.

#### 3.9.1 Remit of Dhaka WASA

The first sewer system for Dhaka city was established in 1923. The system now extends to 785 km of sewer lines in Dhaka city, however it serves only 30% of the area and 20% of the people of the city. The majority of the city population use septic tanks with soak away pits, water-seal pit latrines, or unhygienic means. The polluted excreta are disposed in nearby open drains, storm water drains, or water bodies causing environmental pollution and health hazards.

In the slums and squatter areas the situation is even more dangerous, poor sanitation and sewerage disposal facilities exist in these densely populated slum areas. The extremely dense habitation pattern in the slums makes the dwellers highly vulnerable to environmental pollution. Moreover, leaching from the pits may ultimately pollute the ground water of Dhaka.

About 38% of Dhaka city is covered by a storm water drainage network. This is also very limited compared to the volume of waste-water and rain-water in particular when the system is linked with the mostly non-functional city drainage network.

#### Septic Sludge handling by DWASA

DWASA has equipment and organization, which collects septic sludge following request by the public though it works on a very limited scale, and thus can't be said to be a general service provision of DWASA. A number of DWASA zones have facilities and human resources for sludge collection. The following table provide more details about zone wise sludge collection facilities of DWASA.

Zone	Details of Equipment	Level of utilization	Remarks
Zone 1	2 trucks (1 operating)	Up to 30 calls /month	It also covers Zone 5
Zone 2	1 truck operating	Up to 20 calls /month	
Zone 3	1 truck operating	1-5 calls /month	
Zone 4	1 truck operating		
Zone 5	1 truck		Out of order
Zone 6	1 truck operating	About 10 calls /month	

<sup>6</sup> Final Project Document "Low Income Community Water Supply and Sanitation Project in Dhaka City (Package DS 7); Dev Consultants Limited

The sludge collection capacity of each truck is generally seven cubic meters (2,000 Gallons). Collection of septic sludge is carried out only on call from individual houses. The typical number of calls per month is given above. The figure indicates that this service can only cover a small part of the required septic sludge collection. The collection is sometimes made on payment, sometimes free of charge. The main use of these trucks is, however, for cleaning the sewer system including manholes and keeping them functional.

### **3.9.2 Remit of Dhaka City Corporation**

Dhaka City Corporation covers an area of 360 square kilometer area of Dhaka city. DCC is dealing with solid waste, sweeping streets and cleaning the surface drainage network. It has also a separate section for dealing with urban slum development.

#### **Solid Waste Management Department**

DCC established a waste management department in August 2008. The department aims at integrated solid waste management by one department with a unified chain of command. With coordinated annual operations plans and budgets, effective and efficient solid waste management, integrated throughout the waste stream from waste generation to final disposal can be realized.

The Waste Management Department has two operational wings, an engineering wing and a conservancy wing. The engineering wing deals with waste transportation, treatment and disposal while the Conservancy wing deals with public participation, street and drain cleaning. The department is headed by a Chief Waste Management officer with the required number of planning and budgeting staff.

#### **Introduction to Management Cycle**

The Clean Dhaka Master Plan, developed in 2005 with collaboration of JICA study team and DCC counterparts, is the first master plan on solid waste management in Bangladesh. Since the development of the master plan, a repeated management cycle of planning, implementing, monitoring and evaluation has been adopted by DCC. This will allow DCC through the waste management department to gradually and steadily upgrade the level of solid waste management.

#### **Sanitary landfill at Matuail**

Open dumping is a very common waste disposal practice in Bangladesh. The common situation at open dumpsites include obnoxious odours, burning waste, smoke emissions, etc. Waste pickers can be seen scavenging around the dumping loaders and bulldozers. A milestone step has been taken by DCC with the technical assistance and support from JICA as part of the Clean Dhaka Master Plan. Step-by-step improvement measures have been tried out in Matuail sanitary landfill site to transform it from open dumping with odor, smoke, scavenging etc. into a sanitary landfill with simple and locally suitable design, materials and construction methods.

#### **Ward Based Solid Waste Management**

Ward based solid waste management is a demand driven community-managed scheme where community participation, volunteerism and empowerment are ensured. This is one of the best practices of community based solid waste management in Bangladesh. The establishment of ward based solid waste management aims to change the behaviour of waste discharge to a well managed primary collection system. This represents a change in life style, increased awareness and concern for the environment.



### 3.9.3 Involvement of NGOs in Sanitation

In two areas in the north western part of Dhaka, Mirpur and Shamoly, collection of septic sludge is organized and done by DSK (Dushta Shaystha Kendra) and the sludge is disposed in the Dhaka sewer system in accordance with an agreement between DWASA and DSK. PSTC has also a programme of collecting septic sludge from Shampur, Sutrapur and Jatrabari areas. PSTC has applied for permission and procured Vacutag machine for this purpose.

### 3.9.4 Government policy on Sanitation

The National campaign to achieve 100% sanitation coverage by 2010 focuses on the use of single pit latrines in the rural as well as urban areas. However, pit latrines are not an appropriate technology for high-density urban areas. There are examples of other types of technologies like shared latrines connected to septic tanks or to sewers but these are limited in number.

The national policy for safe water supply and sanitation 1998 is the basic policy document governing the water supply and sanitation sector. The policy mentions that the Government's goal is to ensure that all people have access to safe water and sanitation services at an affordable cost. The policy emphasizes elements of behavioural change and sustainability through user participation in planning, implementation, management and cost sharing. In the urban context, the policy objectives are to ensure sanitary latrines within easy access of every urban household through technology options ranging from pit latrines to water borne sewerage. Installation of public latrines in schools, bus stations and important public places and community latrines in densely populated poor communities has been emphasised.

Local Government and communities have been considered very important stakeholders in all activities relating to sanitation. All other stakeholders including the private sector and NGOs shall provide inputs into the development of the sector within the preview of overall government policy with DPHE ensuring the coordination role. A sanitation secretariat has already been constituted in DPHE to monitor sanitation improvement progress and multi-level communication.

Under the policy the City Corporation/Pourashobha is responsible for solid waste management, collection and disposal. Where WASA's exist, they are responsible for sewerage and storm water drainage systems. Except within Dhaka and Chittagong City areas the DPHE is responsible for the water supply and sanitation of the whole country.

### 3.9.5 Major issues and challenges for sanitation

**Inadequate sanitation and hygiene behaviour:** In general the sanitation practice and hygiene behaviour of the general population and particularly the poor community is poor. This can be attributed to lack of awareness and lack of effective infrastructure facilities.

**Scarcity of public toilet facilities:** Unhygienic hanging latrines and open defecation are common which needs to be discouraged. Public toilet facilities are to be increased involving slum dwellers, NGOs and DWASA.

**Absence of hygiene promotion:** Vigorous hygiene education should be imparted to slum dwellers and social mobilization programmes should be undertaken to make people aware of the bad effects of unhygienic situations.

**Institutional Constraints:** There is no clear mandate as to which institution would do what in relation to the slum level services (in particular for sanitation). This allows

agencies to avoid their responsibilities and results in lack of coordination. Besides, there is clear lack of sensitivity amongst most of these agencies to serve the poor.

**Solid waste and sludge disposal:** In accordance with the Clean Dhaka Master Plan DCC are to ensure regular disposal of solid waste and sludge to keep the environment free from pollution. For this, modern technologies are being introduced in Dhaka City and adjoining areas.

**Absence of faecal sludge management (FSM) system:** There is no regular and systematic mechanism for removing the sludge from the pit latrines and septic tanks. As a result city residents are disposing their raw sewage and sludge into the DCC's surface drains and in the storm water drains of DWASA causing havoc to the environment. This is an open threat to the public health.

## 4 MAJOR LIMITATIONS AND CHALLENGES OF DWASA

### 4.1 Water shortage and insufficient distribution network

Dhaka WASA produces about 1800 Mld litre water for more than 13 million people. Per capita water production stands at 138 litres. According to DWASA estimate, an individual requires a minimum of 160 litre of water per day to meet his/her daily requirements. Therefore, there has been serious gap in water production capability of DWASA.

According to DWASA, zone 4 (excluding zone 10 which has been created recently by dividing Zone 4) an estimated 2 million people live within its coverage area. Effective demand for water in zone 4 stands at 320 million litre. However, with the existing production facilities, the zone can produce only 171 million litres per day. This gives a production gap of about 150 million litre in the Mirpur zone - 4 alone. To manage this water supply gap, the zone authority has to ration water through adopting water supply roster.

Low income and slum communities are the group most affected by lack of water as they mostly live at the edge of water supply network and don't generally have access to connections. As a result they are at the mercy of mastaans and landlords who control water connections. Access to water for them is often limited and availability restricted to night-time.

### 4.2 High system loss

DWASA historically suffers from very high rate of water loss generally called "system loss". Once the system loss was about 50%. But this has come down in recent years particularly in the PPI zone due to the result of some management measures from DWASA. Still the most recent data shows that system loss across DWASA stands at 35%. This causes further pressure on the water supply situation. High system losses and poor revenue collection results in very poor level of service at the lower end of the water supply network. Most people have water supplies only on a very intermittent basis - households tend to 'cope' by adding illegal connections, using suction pumps and leaving their taps open all the time.

Table: Year wise system loss

FY	Dhaka WASA Zone (s)					PPI Zone(s)				All Zones
	I	II	VI	VII	Total	III	IV	V	Total	
2003-04	56.45	69.81	44.76	57.82	41.60	40.71	47.61	36.59	57.07	49.32
2004-05	47.89	60.05	43.43	65.62	50.84	25.95	32.10	32.77	30.49	40.59
2005-06	39.42	48.47	37.99	67.55	43.04	23.52	26.90	25.65	25.37	34.11
2006-07	41.51	45.08	35.40	73.89	42.52	23.98	28.13	29.62	27.38	34.82
2007-08	47.34	47.19	29.38	72.44	43.66	27.06	25.73	31.14	28.31	35.88

Ref: DWASA MIS Report

High system loss is inhibiting DWASA's ability to supply adequate water to its regular customer groups, let alone to the low income and slum communities. DWASA operates in a reactive mode as a result of inadequate water supply, breakdown of supply system etc. As a result therefore, the field level DWASA management is often not very motivated to provide water supply to the slum areas

Institutional barriers coupled with operational malpractice in some sections of the organisation induce the slum dwellers to resort to illegal water connections. The high level of illegal connections in the slum areas further aggravates the water supply situation through associated leakage and waste of water at the same time DWASA revenues are also reduced as a result of the illegal use of water. Bringing the low income and slum communities into the legal network of DWASA will, by regularising connections and metering supplies, reduce water losses and improve DWASA revenue position.

### **4.3 Infrastructure limitations of WSS system**

DWASA has serious water supply shortages mainly due to lack of infrastructure facilities in water production, distribution and quality control. This is being addressed through ADB and DANIDA medium term investment programs. Low income and slum areas typically do not have distribution network within them, rather illegal connections are taken from the nearest distribution mains and “spaghetti” pipelines are run to the communities or community members have to walk from their areas to the nearest connection point.

DWASA are reluctant to invest in network and individual connections within the low income and slum communities due to lack of land tenure and the threat of eviction faced by these communities, similarly the communities themselves are reluctant to make any up-front contribution to the cost of the internal infrastructure. The NGO facilitated SIM model however provides a feasible and tested mechanism for providing water to low income and slum communities but it requires funding for internal infrastructure (storage, water points, sanitation blocks, etc.).

This SIM model is currently functioning only on a limited scale (in the context of the whole of Dhaka service area) however DWASA support the use of the model and are now actively encouraging NGO’s and community based organizations to connect in this way.

#### **Private participation in water supply to LIC – formalizing small scale independent providers**

DWASA rules and procedures do not allow private participation in water production and sale. Private production is allowed for own consumption of the customers with the payment of royalty only when DWASA is unable to provide adequate water. Industries and bigger private apartments are the typical types of consumer that produce their own water for private consumption - by law they are not allowed to sell this water.

In some slum areas without access to DWASA network a number of private groups are active in water supply these include private slum owners who provide water services through installing tube wells; and NGO’s which work as intermediary to supply water to the slums from DWASA connections. These types of providers generally do not have any profit motivation. They want to provide water services at best on a cost basis.

There are also informal providers - mostly local *mastaans* and influential people who possess illegal connections and sell water to slum dwellers. These informal providers charge a very high price generally around 10 times the usual DWASA tariff – this limits the amount of water that people can afford to take.

Discussions with the slum dwellers reveal that they are ready to pay for water even at a price higher than DWASA, provided services are good and reliable. Given the existing supply condition, DWASA is likely to be unable to provide water to low income and slum communities without adjacent network and/or being supplied by illegal connection in the foreseeable future. On the contrary, water shortages are anticipated to rise in the coming days.

This creates an opportunity for encouraging private participation in the production, distribution and selling water to the slum area based on localised model. The Rural Development Academy (RDA) has developed a private sector water supply model, which could be tested in appropriate slum areas of Dhaka. However, DWASA will need to develop a strong regulatory framework and monitoring mechanism to achieve water supply objectives in the slum areas through private participation. Specific rules and procedures will have to be in place that would safeguard the slum dwellers from any monopolistic water-pricing tendency by the private sector. On the other hand special measures need to be in place to ensure WSS services to the hardcore poor who otherwise might be left out from the private sector services. DCC should have necessary safety net programmes that would ensure equitable access of the hard core poor to the private sector services.

#### **4.4 Inadequate institutional structure and arrangement of DWASA**

The newly approved DWASA organogram has the provision for a community service division called "Community Programme and Consumer Relation Division that will be responsible for WSS services to the low-income and slum communities. This division is attached to the Commercial Manager. One can understand that the division is attached to the commercial manager due to historical reasons. However the commercial manager does not have any direct link and authority over the MODS zone, that are ultimately responsible for the field level service delivery. Therefore, it is likely that coordination between HQs and zone level will continue to have difficulty in the newly approved organogram and thus the objective to ensure easy access of water to low income and slum communities may not be realised with the new organizational reform.

Besides this, the newly approved set up for the community service division has no field level representation and linkages to deliver the services to the low income and slum communities. As a result the division doesn't have the institutional mechanisms to monitor the quality of the services rendered by MODS zone and grievances will be very hard to redress. It is likely that the new set up will work merely as a post office to receive applications from low income and slum communities to be forwarded to the working divisions concerned for action without enhancing or adding value to the service process.

The newly established community division is to be headed by a mid level executive who might not have the necessary access and influence on the policy matters including the on going LIC project.

In spite of the new organization not all low income and slum community service initiatives are handled through the organization. DWASA has established a separate institutional set up outside the community division to manage and implement the LIC component in Khilgaon, Badda and Kamrangirchor under World Bank finance with a Project Director in the rank of a Superintendent Engineer.

DWASA may reorganize and integrate the community division as well as the LIC project to create a synergistic effect on service delivery to the slum people.

The recommendations of this review support discussed in section 5 support the integration of policy and process for all low income and slum community service initiatives across the whole of the business.

#### **4.5 Tariff structure, pricing and sales strategy of water**

DWASA uses a differential tariff structure based on user category i.e. residential and commercial (including industries). However, within the particular customer category the tariff rate is flat regardless of usage level. There is therefore no disincentive to

encourage users to reduce their water consumption. Water use is relatively high among the affluent group of society as the water tariff is relatively low in the present tariff structure. We find excessive use of water by the people residing in the affluent areas for gardening, car washing, swimming and even maintenance of swimming pool etc.

Water needs to be seen as a public commodity and thus its usage has to be rational, equitable and economically viable. DWASA can mitigate water wastages by introducing a tariff regime that charges incremental tariffs for higher usage. The saving from the high end users may then be distributed, subject to hydraulic conditions, to lower supply areas.

Dhaka WASA has undertaken a number of development projects for augmentation of WSS services under World Bank, Asian Development Bank and Danish assistance/credit. When these development projects are implemented DWASA will have to debt service these loans with heavy burden on its finance and its day-to-day operations. In view of above, it is now necessary that a tariff study is made and a stratified and progressive tariff policy is implemented to harness the much-needed finance for effective running of the organization and for timely debt servicing.

The Scope of such a tariff study should cover:

- detailed assessment of the existing financial status of DWASA and projected financial requirements for at least next ten years including capital investment, recurrent cost and determining the tariff levels required to meet the projected financial requirements.
- detailed assessment of the actual quantity of water produced, water sold and quantity of unaccounted for water.
- review of the existing rate structure and examine other fees such as connection and reconnection fees, minimum charges, metering charges etc. for bringing in conformity with the cost of services.
- analysis of the socio economic environment to determine the ability (affordability) to pay by different consumer groups in different consumer areas with special care for the hardcore poor and slum dwellers.
- investigation of alternative tariff structures including progressive tariff and different tariffs for different groups of consumers in different consumer areas of the city and Narayanganj.
- develop and recommend practical tariff strategies including an implementation strategy and recommend procedures for tariff adjustments under the proposed tariff structures.

The study should keep sight of the use of bulk water supply to slum communities. Quantitatively bulk supply is likely to fall into the high tariff regime, but because the water is supplied to a large number of households, actual consumption of water per household would remain significantly lower than most of the regular DWASA customers. Therefore, the tariff rate of the bulk connections in slums need to be rationalized in terms of the socio economic condition of the slum people and the commercial interest of DWASA.

#### **4.6 Awareness Campaigns**

Proper sanitation practices need appropriate behavioural change. People are not generally aware of proper sanitation practice. Therefore, it is important to orient people on appropriate sanitation behaviour. Similarly, water is becoming a scarce commodity day by day. Economic and rational use of water will not only address the issue of water

shortages but also will ensure equitable access to water for all segments of the population.

It is thus very important to organize awareness campaigns among the population to stop misuse of scarce safe drinking water. Similarly they are to be educated about the hygienic sanitation practices and their effective use. For these, a number of delivery mechanisms will be required - e.g. press & electronic media, workshops, specific training courses, etc. Within the education system safe water and sanitation issues should also be included in the primary level syllabus.

Besides mass awareness campaigns, it is important to understand what motivates people to follow proper sanitation practices and rational use of water resources. An action-learning programme can be taken to understand urban behaviour and based on the learning, appropriate action plans should be prepared for mass awareness campaign.

#### **4.7 Investment sustainability**

There is hardly any investment made in the slums to provide WSS services except through a few NGOs which are implementing Watsan programs in the slums. DWASA projects are not designed to meet the especial needs of the slum context. But it requires additional investment to effectively supply water to the slum dwellers including construction of reservoir and supply line. Slum dwellers neither have the financial capability nor the motivation to make necessary investment for water supply. Land tenancy and the threat of eviction are the two major impediments for any investments in the slum area. DWASA per se is also hesitant to make investment in the slum areas because of the reasons mentioned above. Even though water is considered as a basic right for all as highlighted in the MGD as well as DWASA policy; the actual realization of the rights remains far from adequate for the poor. These issues have to be addressed to attract both public and private investments. These will require having clear policy direction with legal support in particular if private sector is to be encouraged to participate in water supply to the slums.

## 5 TOWARDS A DYNAMIC, PROACTIVE AND RESPONSIVE APPROACH

### 5.1 Pro-poor institutional structure of DWASA

#### 5.1.1 Rationale

The Government of Bangladesh (GOB) have made a firm commitment to achieve the Millennium development Goals (MDGs) and consequently the Government has emphasized the need to improve water and sanitation service as a National Priority. For providing WatSan service in the slums and LIC, DWASA has made mechanisms to provide water service to the slums and LIC in Dhaka and Narayanganj through NGOs. In the new organogram, a small division has been created under the overall leadership of Commercial Manager.

Furthermore, DWASA has undertaken a pilot project with the financial assistance from the World Bank to provide water and sanitation services to LIC in three selected areas of Dhaka city. To implement the project a project management office has been set up at DWASA headquarters with a Superintendent Engineer as Project Director.

DWASA has recognised the need (from a business and social imperative point of view) to provide water to low income and slum communities and has made provision in its structure to address this and project profile to start to address this. As the provision currently stands the responsibility lies at the head office and is not linked to the actual delivery mechanism at the Zonal/MODS level, nor to the related functional teams at the head office such as research planning and design.

To address these gaps in the functional and implementation relationships it is suggested that DWASA re-align, within the existing manpower framework, the support to and implementation of low income and slum community services by the establishment of a **Low Income & Slum Community Services Support Cell** and at the same time empowering Zonal/MODS managers to proactively increase connections to low income and slum communities using the SIM model and others as deemed to be appropriate.

#### 5.1.2 Purpose of the new Cell

The overall purpose of the cell is to provide support to Zonal/MODS managers in proactively supporting the delivery of services to low income and slum communities providing connections and in planning and developing specific programs for low income and slum community expansion. The cell will facilitate common policy and process across DWASA and support MODS zones in the delivery process.

Specific tasks of the cell will include:

- determination of DWASA policy and process vis a vis slum service delivery (e.g. for application processes, bulk supply contract mechanisms, connection times, etc.);
- coordinate and monitor implementation across the whole of DWASA service area;
- set zonal targets for connecting low income and slum areas;
- monitor zone operational performance against connection targets;
- act as a focal point for funding and implementation agencies interested in supporting urban poor service delivery;
- determine communication and awareness messages to encourage connection;
- set policy for eradication of illegal connections within DWASA network;
- regulation of small scale service providers;



- develop alternative options and mechanisms for water and sanitation service provision to low income and slum communities.

Their support will also include appropriate advocacy at the policy level to ensure regular budget for service delivery for the slum population. They will develop a targeted advocacy strategy focusing on donors, international development partners, DWASA board and policy level officials at the ministry. Specific measures also need to be taken at the slum level to create awareness on the rights as well as responsibilities of the slum dwellers with regard to WSS services. A special communication and advocacy strategy should be developed by the cell for the low-income communities.

The cell should be properly engaged with the Zonal/MODS organisation, the mainstream service delivery organ of DWASA. Therefore, we propose that the cell is operationally linked to the Zonal/Mods organisation by means of a direct reporting line to the Chief Engineer.

The cell, based at the head office, will be headed by an Executive Engineer and include staff with planning, communications, engineering, finance, and operational experience. Specific suggestions for the composition of the cell are included below:

SL. No	Name of Post	Number of Post
1.	Executive Engineer	1
2.	Senior Community Officer	2
3.	Advocacy and Capacity Building Officer	1
4.	Monitoring & Documentation Officer	1
5.	Assistant Consumer Relation Officer	1
6.	Planning & Engineering Officer	1

An outline Terms of Reference for the Cell is given in Appendix 1. Suggested job descriptions/roles and responsibilities are given in Appendix 2.

### 5.1.3 Low Income & Slum Community Service Steering Committee

It is also suggested that for at least the first two years of operation the cell is overseen by a steering committee chaired by the Managing Director and comprised of key staff from the head office and Zonal/MODS.

The purpose of the steering committee is to ensure the strategic direction and focus of low income and slum community services is maintained . In particular the committee will

- meet quarterly to review the progress of component work
- Endorse new plans and programme under both development and revenue budget
- Provide guidance in resolving issues that arise with implementation in order to achieve the MDG and government policies and programmes.
- Monitor progress against stated objectives and commit DWASA support to service initiatives.

The suggested composition of the steering committee is:

Managing Director, DWASA	Chairman
Chief Engineer, DWASA	Member
Commercial Manager	Member
Deputy Chief, Planning, DWASA	Member
Representative from RAJUK, DCC & DPHE	Observers/advocates
Representative from NGOs	
Selected MODS Zone Representatives	Member

#### 5.1.4 Role of the Zone/MODS Level

The Zonal/MODS organisation is the interface for service delivery for all customers irrespective of economic status. Full authority and responsibility should be given to the Zonal/Mods Managers to accept applications from and provide connections to low income and slum communities in line with the appropriate DWASA policy.

To support the anticipated increase in connection activity at the Zonal/MODS level it is suggested that DWASA re-assign three staff in each MODS (one Sub-Assistant Engineer and two Community Organisers) to support its current structure to ensure WSS services to the slums. These three will form a small “**Community Wing**” within the MODS zone and will work under the direct supervision of the concerned MODS Executive Engineer. These positions may be created from the approved zonal level human resources by redesigning their job description and work responsibilities.

The roles and responsibilities of the members of the MODS based community wing have to be clearly articulated to avoid any confusion of job responsibilities and reporting relations. Outline job descriptions for the community wing staff are included in Appendix 3.

The Zonal/MODS teams should be incentivized to proactively encourage connection of low income and slum communities using the SIM model. Incentives should be related to indicators such as number of connections made; revenue collected from low income and slum community connections, etc.; The incentive programs could be structured such that the cost of the incentives is met from additional revenues generated through the new connections have a zero net impact of DWASA revenues.

At the field level, coordination meetings are now being held in the MODS Zone on a quarterly basis under the chairmanship of the Zonal Executive Engineer. In this coordination meeting concerned Assistant Engineer, Revenue Officer, Sub Assistant Engineer, NGO representatives, CBO representatives, Ward Sanitation Taskforce member, DCC representative remain present. The coordination meetings provide a forum to discuss difficulties and problems with water services implementation and arrive at solutions – it is proposed that these meetings continue with input from the head office cell as well.

## 5.2 Capacity Building of the proposed LIC Cell and Zonal/MODS Teams

Capacity building of the newly established cell as well as the Zonal/MODS teams will assist them to develop the skills necessary establish proactive delivery of services across the whole of the supply area.

A detailed capacity building plan will need to be drawn in consultation with the proposed team and the management of DWASA. The elements of the capacity building will include but not limited to the following:

- Organize appropriate logistics including office set up, computers, vehicle and communication equipments
- Organize and provide orientation to central as well as Zonal committees
- Conduct a training needs assessment for the professional staff of the proposed circle and accordingly provide training to them (both in-country as well as international training)
- Organize orientation programme for the central as well as Zonal officials to ensure proper understanding and coordination with them

### **5.3 Capacity building of DWASA officials**

In order to provide quality services to the slum dwellers and the low-income community, it is necessary to equip DWASA officials (more widely than the immediate staff involved in the service delivery) and staff with necessary management, communication and technical skills tuned to the particular need of the poor community. Capacity building should also focus on developing sensitivity and understanding on pro poor strategies and programmes among the rank and file of DWASA.

Management training up to the level of sub-assistant engineers covering policy guidelines, leadership, understanding of the plans and programmes, advocacy and networking, staff and SO management, programme management etc. are to be given on a regular basis.

They may also be sent for exposure visit to relevant national and international programmes (particularly regional best practices) to learn good practices. Exposure visits would allow them to gain first hand knowledge of the lessons learned from the experiences of providing water and sanitation services to the slum and low income communities of various cities and would provide opportunities for knowledge sharing on effective and innovative implementation of plans and projects in Urban sanitation and water, as well as understanding policy initiatives in those countries/programmes. Exposure visits would give them an opportunity to interact with policy makers, utility managers and community groups and to see how these cities are prospering.

For community organizers, package training programme on mobilization, Hygiene promotion, CBO promotion, gender issues, poverty reduction strategy and good communication and customer relations are to be undertaken for the successful implementation of the objectives of the proposed cell.

### **5.4 Strengthening DWASA Training Institute**

Although DWASA has got an in-house training centre and training has been organized for the officers and staff from time to time on different subjects there has been no particular training organized on pro poor programme strategies and DWASA policies in relation to slum service delivery. It is strongly advised to include training programme on Low Income and Slum Community issues including pro poor strategies, programme and management approaches. Towards that end we propose to support the strengthening of the existing training institute of Dhaka WASA. This would be with technical support so that the institute can undertake regular training programme on social mobilization and pro poor strategic training programmes for the officials and staff of the community programme and consumer relation circle, MODS officials and for the participants of other training programmes.

## **5.5 Advocacy for especial projects and budgets**

Except for the very recent WB funded LIC project, DWASA do not have any programme or project to serve the urban poor. As yet there is no fund allocated either in the development or revenue budgets to provide WSS service targeted at the low-income and slum communities. Given the large urban slum population within Dhaka City with more than 34% of its population living in slums this seems anomalous. Therefore it is expected that DWASA as the lone WSS service agency in this city will begin to implement targeted measures to serve this segment of the population.

The proposed cell should undertake appropriate advocacy at the policy level to ensure regular budget to undertake especial projects for the low income and slum population. There will also be a need for targeted advocacy strategy focusing on donors, international development partners, DWASA board and the policy level officials at the ministry. It is suggested that a special communication and advocacy strategy is developed for low income and slum communities in order to create awareness of the rights as well as responsibilities of the slum dwellers with regard to WSS services.

## **5.6 Private participation for water service in LIC/ SME**

From the situational analysis, it is clearly evident that DWASA will continue to suffer from a high demand-supply gap in the foreseeable future, as the demand will continue to outpace supply (even after taking into account major capacity enhancement programmes). It is also observed that it is the slum people who suffer most from the shortages of water. Therefore government should encourage private participation for the production and distribution of water particularly for the low-income community to give them a relief from water shortages. RDA has already developed a private sector SME model for the production and distribution of water at the community level. The model ensures high quality services with relatively low cost. The model also ensures necessary incentive to the private sector investor. DWASA may pilot this model in high density, low coverage slums in the outskirts of Dhaka city.

A submersible pump with two-inch diameter can serve up to 600 households with an initial investment of Tk 4.5 lakh (USD 6500 approx.) i.e. only Tk. 750 per household. PSTC, a major SIM player (NGO) has prepared a concept paper with strong argument for submersible pump in the low coverage areas of Dhaka city slums.

As yet there is no policy for private sector involvement in water supply with a commercial motive. This will require having a comprehensive regulatory as well as monitoring mechanism to try and implement private sector water supply system in the slums and LICs. DWASA can pilot this model in collaboration of an NGO and conduct a feasibility survey including financial modelling exercise and learn the necessary lessons to prepare the detail regulatory and monitoring framework.

## **5.7 Sustainability of water supply system in the slums**

WSS services in the slum areas suffer high risk of sustainability, mainly due to high risk of eviction and the dwellers right over land tenancy. DWASA as well as other potential service providers are hesitant to invest in the slum areas due to this. Until now investment made in the slum areas has been relatively low in scale and very minimal in scope. Most of the investment in the slum areas comes from various donor funded grant projects. Though there are interests to invest in the slums from NGOs, the risk of investment sustainability de-motivates them from investing at the necessary scale.

The dwellers themselves are not motivated to invest for WSS services, as they are rather concern about the sustainability of their investments. However, they are willing to pay for WSS services including investment costs over time in monthly instalment payments.

Present policy context is not conducive to slum investment. There is a need for clear and proactive policy on slum dwelling including rehabilitation measures in case of unavoidable slum eviction from the public land. Pro poor slum policy will bring lot of investments from NGOs, Donors and even from the private sector to improve WSS service in this neglected areas.

**APPENDIX 1**

**OUTLINE TOR FOR LOW INCOME & SLUM COMMUNITY SERVICES SUPPORT  
CELL**

## **1 INTRODUCTION**

DWASA are mandated to provide water supply connections to all inhabitants of Dhaka irrespective of economic status. Water supply to low income and slum areas is generally controlled illegally and inhabitants of these areas pay up to 10 times the DWASA rate to obtain supply. This means that uptake of water is low (due to high cost) etc...

DWASA want to increase the number of connections to low income and slum communities as this has a positive impact on their business through increased revenues and reduction of illegal losses.

DWASA are looking to proactively increase the number of low income and slum communities connected to their network and intend to establish a cell to support the Zonal/MODS to achieve this

## **2 SCOPE OF ACTIVITY**

The purpose of the Cell is to support the expansion of formal connections to low income and slum communities. The scope of activity of the cell will include:

- determining policy and process vis a vis slum service delivery e.g.,
  - Streamlined application processes;
  - Identifying Zonal/MODS organization roles and authorities;
  - Advising appropriate bulk supply contract mechanisms;
  - Etc.
- coordinate and monitor implementation across the whole of DWASA service area;
- set zonal targets for connecting low income and slum areas;
- monitor zone operational performance against connection targets;
- act as a focal point for funding and implementation agencies interested in supporting urban poor service delivery;
- determine communication and awareness messages to encourage connection;
- set policy for eradication of illegal connections within DWASA network; etc.
- advocacy at the policy level to ensure regular budget for service delivery for the slum population;
- Develop a targeted advocacy strategy focusing on donors, international development partners, DWASA board and policy level officials at the ministry;
- Create awareness within low income and slum communities on the rights and responsibilities of the slum dwellers with regard to Water & sanitation services.

## **3 COMPOSITION OF THE CELL**

The cell should be properly integrated and engaged with the Zonal/MODS organisation, the mainstream service delivery organ of DWASA. Therefore, we propose that the cell is operationally linked to the Zonal/Mods organisation by means of a direct reporting line to the Chief Engineer.

The cell will be headed by an Executive Engineer and include staff with planning, communications, engineering, finance, and operational experience.

**APPENDIX 2 – Job Descriptions of the Officials of Low Income & Slum Community Service Support cell**

**APPENDIX 2**

**JOB DESCRIPTIONS OF THE OFFICIALS OF LOW INCOME & SLUM COMMUNITY SERVICE SUPPORT CELL**



## **APPENDIX 2 – Job Descriptions of the Officials of Low Income & Slum Community Service Support cell**

### **1 Cell Chief (Executive Engineer):**

- To under take Community Programme in the Low Income Community areas in Dhaka and Narayanganj cities and its adjoining areas and to develop Consumer relations among various types of Dhaka WASA consumer.
- To develop good relations with NGOs, INGOs, CBOs and different social groups, Public leaders, DCC, RAJUK, National Housing Authority, Roads and Highways Department, DPHE, PWD, Railways etc.
- To organize meetings with the above-mentioned Departments and Organizations.
- Signing MoU with different Stakeholders and to take follow up measures.
- To supervise the activities of NGOs and CBOs and maintain close liaison with them
- To take initiative for arranging Donor fund and to utilize them properly for the upliftment of LIC.
- To approve Water points, Sewerage facilities to the LIC and Monitor revenue collection.
- Monitoring the activities of INGOs, NGOs and CBOs
- Maintain liaison with WASA MODS Zones, other departments within DWASA and different departments, Public leaders, CBOs
- To arrange meetings, Seminars, Workshops and Conference for redressing different problems on a regular basis with different types of consumers and agencies involvement with providing services to slum areas
- To find out new areas of cooperation with the LIC, so that cent percent WatSan coverage can be achieved.

## **APPENDIX 2 – Job Descriptions of the Officials of Low Income & Slum Community Service Support cell**

### **2 Senior Community Officer:**

- To make communication with the Low Income Community in the vulnerable areas and to organize them and help them to form CBOs.
- To provide WatSan services to the CBOs with the help of NGOs.
- To organize training for the CBOs for smooth functioning of the Water points and Sewerage facilities.
- To coordinate among INGOs, NGOs, CBOs, Donors, DCC and Public and Social leaders.
- To facilitate proper working of the CBOs and set up different ToR for smooth functioning of the CBOs and ensure their proper management.
- To meet with CBOs and community leaders on a regular basis and to have close understanding with them on different issues and problems.
- To help organize Workshops, Seminars and Gatherings with different Stakeholders.
- To Monitor and supervise the activities of CBOs and NGOs with regard to the WatSan services and Hygiene behaviour.
- To keep close liaison with MODS zones, other departments within DWASA and different departments, public leaders, CBOs etc.

## **APPENDIX 2 – Job Descriptions of the Officials of Low Income & Slum Community Service Support cell**

### **3 Advocacy & Capacity building Officer:**

- Involve in Advocating DWASA Plans regarding LIC component and formation of viable groups and building their capacities in the slums and low-income areas.
- Responsible for overall implementation of the LIC component and support CBOs and help them to have WatSan services in accordance with WASA Citizen Charter and rules & Regulations.
- Maintain coordination with Donors, NGOs, LGD, DCC, RAJUK, National Housing Authority, Roads and Highways Department, DPHE, PWD, Railways etc.
- Liaison among stakeholders for program replication and scale-up.
- Reviewing DWASA policies and propose for suitable changes and adjustments.
- To share and gather experiences on the current issues and concepts on WatSan and promote among the stakeholders.
- To prepare semi-annual and annual reports on activities.
- Assist Senior Community Officer and DWASA Management in matters of capacity building.

## **APPENDIX 2 – Job Descriptions of the Officials of Low Income & Slum Community Service Support cell**

### **4 Monitoring and Documentation Officer**

- Preparation of the community demand for new areas through mobilizations of hard-core poor and for processing their case.
- Conduct base line surveys of the project area.
- Get involved in the implementation of the demand based activity plans
- Get involved in the budget preparation.
- Supervise and implement the project works.
- Supervise staff work, follow-up and monitor for hardware (construction) and software activities (mobilization) along with MODS ZONES officials and staffs.
- Develop monitoring tools and prepare guidelines.
- Develop and maintain management information system.
- Networking and coordination with stockholders
- Maintain office records and materials.
- Organize & facilitate different types of training workshops, Focus Group Discussion (FGD),
- Semi Structural Interview (SSI) & meetings.
- Carryout Supervision, Flow up and Monitor
- Prepare monthly, quarterly and annual work progress reports and record documents.

## **APPENDIX 2 – Job Descriptions of the Officials of Low Income & Slum Community Service Support cell**

### **5 Consumer Relation Officer:**

- To have consumer relations with different types of WASA consumers and to form different platform and groups so that all stakeholders can have a say regarding WASA services
- To help Senior Community Officer and Community Organizer in making proper survey with the help of MODS Zones in establishing new services in different LIC
- To help organize regular meetings with the different stakeholders to find out difficulties of DWASA consumers and to suggest ways and means for their redress.
- To help Senior Community Officer in establishing sustainable mechanism so that the problems of different stakeholders are taken proper care off.
- To keep records of problem solving issues and to issue regular press release. Planing
- Immediately after the eviction of slums the remnants of Water Points and other facilities are to be sealed and the concerned Zones are to be informed immediately.
- To help these evicted people, they may be provided with immediate relief

**APPENDIX 2 – Job Descriptions of the Officials of Low Income & Slum Community Service Support cell**

**6 Planning & Engineering Officer**

- Prepare and maintain a register of all low income and slum areas across the whole of DWASA service area;
- Coordinate, with input from Zonal/MODS team, a service delivery plan to increase low income and slum service delivery i line with DWASA targets;
- Coordinate all planning activities in relation to low income and slum service delivery;

**APPENDIX 3**

**JOB DESCRIPTIONS OF THE ZONAL /MDS COMMUNITY WING STAFF**

## **APPENDIX 3 – Job Descriptions of the Zonal /MDS Community Wing Staff**

### **1 Sub Assistant Engineer of MODS Zones (LIC):**

- To assist in joint survey for allowing WatSan services to the LIC
- To give secretarial support to the concerned XEN in issuing CP's and maintaining all records regarding LIC
- He will coordinate among the NGOs, CBOs, DCC, Public and Social Leaders.
- To organize meetings with all stakeholders and help solve their problems and issue notice for meeting, issue minutes of the meeting.
- He will be responsible for keeping all records with regard to WatSan services and keep records of complains of the stakeholders.
- To find out new areas where LIC services can be extended.
- He will hand over all necessary documents to the concerned Revenue Zone for proper billing against the WatSan service facilities.
- Supervise Community organizer to the implementation of programme activities of the assigned area.
- Prepare monthly implementation plan and implement work plan accordingly
- Provide technical support to community organizers
- Coordinate and networking with community, local leaders and others stakeholders.
- Conduct intensive field visits on a regular basis
- Facilitate meeting with community.
- Prepare monthly, Quarterly and annual report, keep progress and financial records.



## **APPENDIX 3 – Job Descriptions of the Zonal /MDS Community Wing Staff**

### **2 Community Organizer:**

- Will work in the communities of LIC to help mobilize and form CBOs.
- He will train the CBOs for their sustainability, so that CBOs can function properly.
- He will help CBOs to have WatSAn services from Dhaka WASA in conjunction with NGOs.
- He will educate CBOs for proper maintenance of records; facilitate training for smooth running of Water Points and Sanitation services on a timely fashion.
- He will conduct regular hygiene sessions among the members of the CBOs and motivate them to pay regular bills to DWASA.
- He will educate the members of the CBOs to minimize water wastage and to make best use of water.
- He will be responsible to Sub Assistant Engineer to concern zones and to the Community Programme Circle.
- Conduct Base line Survey.
- He will form CBOs and/or Slum Management Committee (SMC).
- Ensure CBO/ SMC meeting.
- Conduct hygiene session and campaign.
- Ensure Implementation of hardware (constriction) support.
- Prepare monthly work plan and report ; Maintain relevant records and documents.